

Photometric Test Report



SMARTBATWASH

15x20W LED Wash Light IP65 rated with
an RGB+Warm White LED source
wirelessly controlled with battery or wired with
mains power

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No Filter	105
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No Filter	125
Filter 25°	130
Filter 40°	135
Filter 10° - 60°	140

Color temperature 6000K

No Filter	145
Filter 25°	150
Filter 40°	155
Filter 10° - 60°	160

TESTING PROCESS

Prolights has its own optical testing laboratory in order to provide accurate photometric reports for its lighting products. The testing laboratory contains certain variety of precise lighting measurement systems that ensure an optimal reading of all the characteristic parameters of the lighting devices. All measurements are made at a controlled room temperature of 20°C without any external light sources. This photometric report is obtained through the data measured by a high precision measurement system and analyzed by a dedicate software.

Prolights measurement instrument

Prolights measurement instrument is a complete measurement system for any light source. It's equipped with two-axis goniometer, that enables to measure the full 3D distribution field of the light source. This instrument measures the light intensity, the beam angle and the most significative colors parameters, like color temperature, spectral distribution, CRI, CQS, TM-30 with a very high accuracy rate.

Please Note: All measurements are made with light source at operating temperature. Before starting the measurement, the instrument analyzes the process of the light source during the heating phase. The measuring process of all the parameters begins only when the light emission is stable, that is with a variation of less than 0.5% in a 15 minutes time frame.

Prolights measurement software

The software provides user friendly interface for the operator who does the measurements, and it also analyzes and processes all the collected data by the instrument. With this software it is possible to see the measured data in real-time and it is possible to examine all the measured data and graphics afterwards as well. All information is collected in a specific Prolights template, and the software creates also IES and LDT files, which are widely used to transfer the photometric data, and to develop lighting system.

Additionally, the fixtures are rechecked using various hand-held instruments like Sekonic C-700 and Gossen Mavospec Base, this is done to ensure, that the data in the photometric report are as accurate as possible.



Total lumen output:

6282 lm

Peak candela output:

111280 cd

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic (No Filter)

Target:

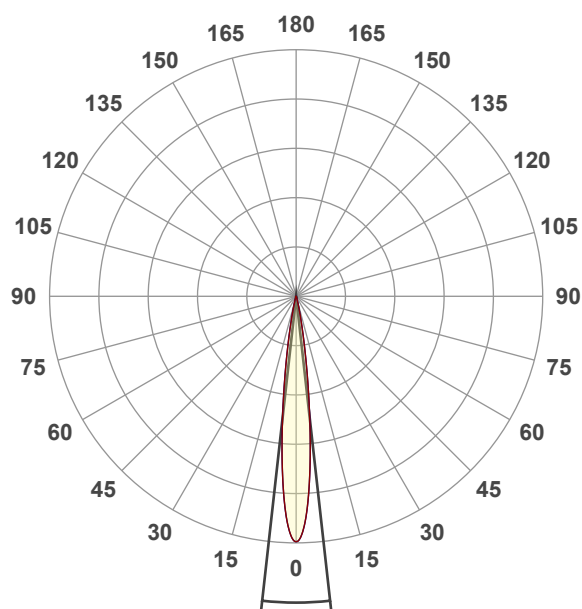
Full On

Operator:

Paolo Carvone

Date and time:

12/10/2022 15:34:45

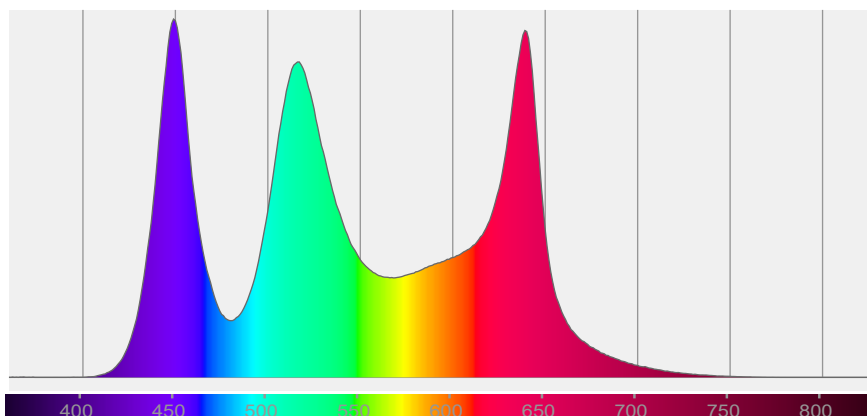


Beam angle 50%: 12,7°

Field angle 10%: 22,9°

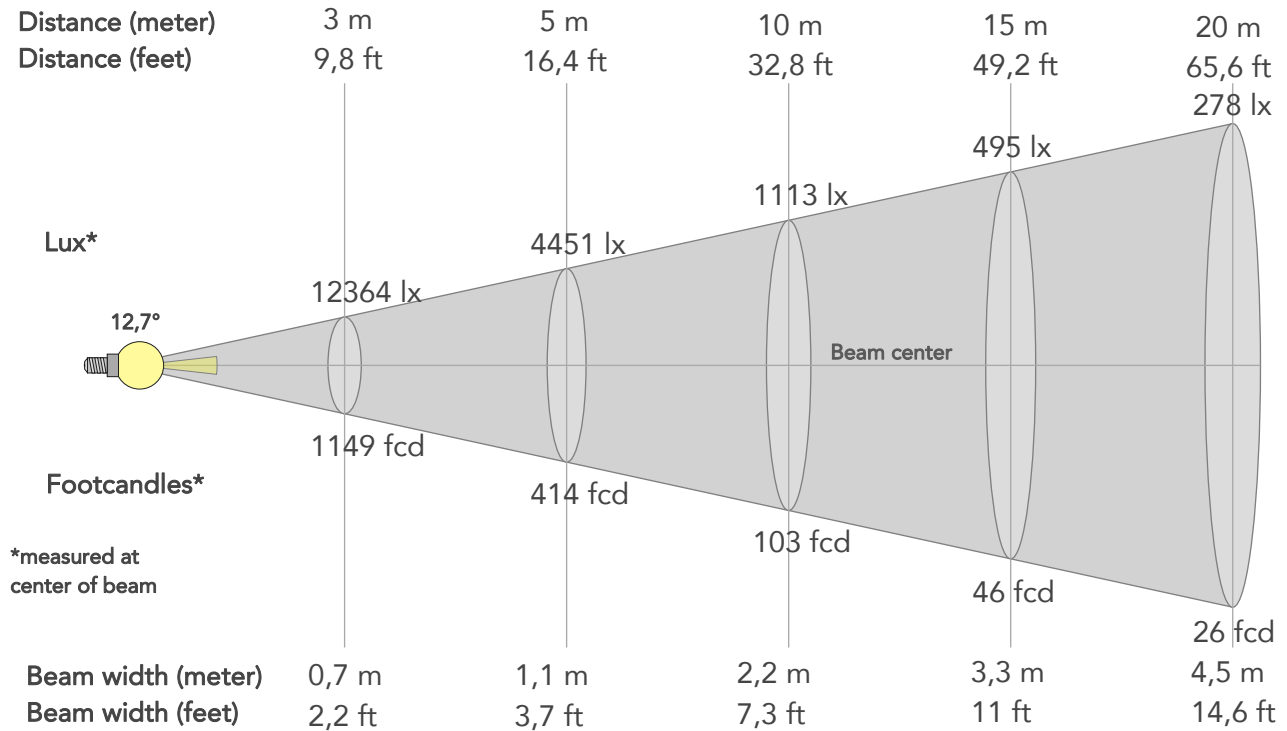
Cut off angle 2.5%: 29,8°

Spectra



BEAM DETAILS

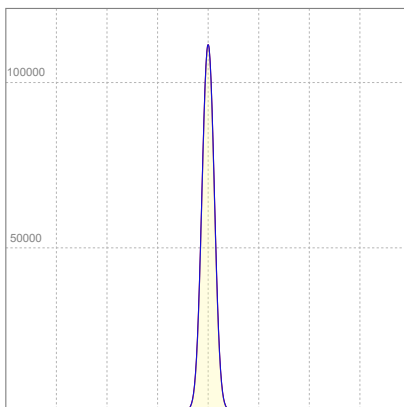
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
12,7°	22,9°	29,8°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	111280lx	27820lx	12364lx	6955lx	4451lx	1978lx	1113lx	495lx	278lx	178lx	124lx	70lx	45lx
Footcand.	10338fcd	2585fcd	1149fcd	646fcd	414fcd	184fcd	103fcd	46fcd	26fcd	17fcd	11fcd	6fcd	4fcd
Beam wid.	0,2m	0,4m	0,7m	0,9m	1,1m	1,7m	2,2m	3,3m	4,5m	5,6m	6,7m	8,9m	11,2m
Beam wid.	0,7ft	1,5ft	2,2ft	2,9ft	3,7ft	5,5ft	7,3ft	11ft	14,6ft	18,3ft	22ft	29,3ft	36,6ft

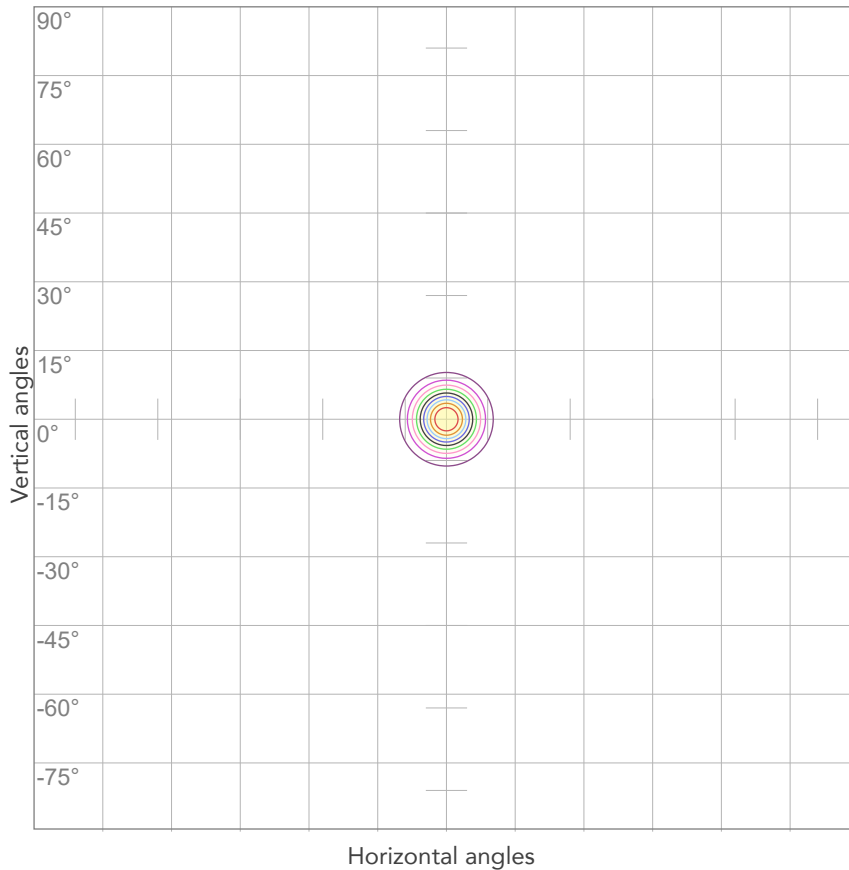
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
222V	0,795A	166W	38lm/W
Power FC			
0,94			

ISO CANDELA DIAGRAM



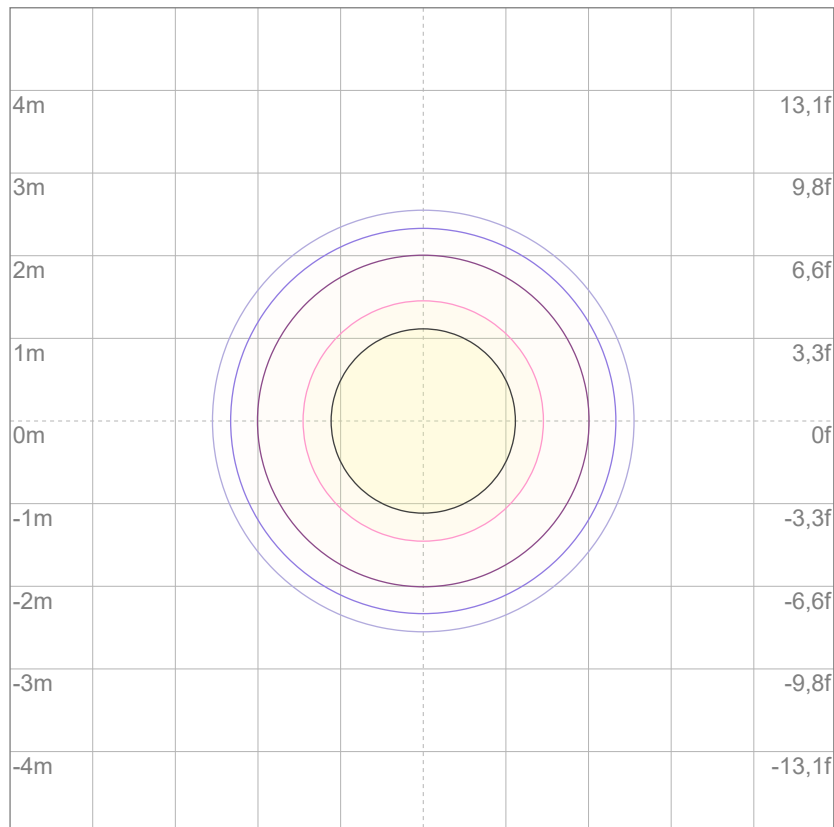
10%	11128 cd
20%	22256 cd
30%	33384 cd
40%	44512 cd
50%	55640 cd
60%	66768 cd
70%	77896 cd
80%	89024 cd

Conditions:

Number of c-planes: 4

Candela at center: 111280 cd

ISO LUX DIAGRAM



3%	33,4 lx
5%	55,6 lx
10%	111 lx
30%	334 lx
50%	556 lx

Conditions:

Number of c-planes: 4

Lux at center: 1113 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

6223 lm

Peak candela output:

18506 cd

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic + 25° Filter

Target:

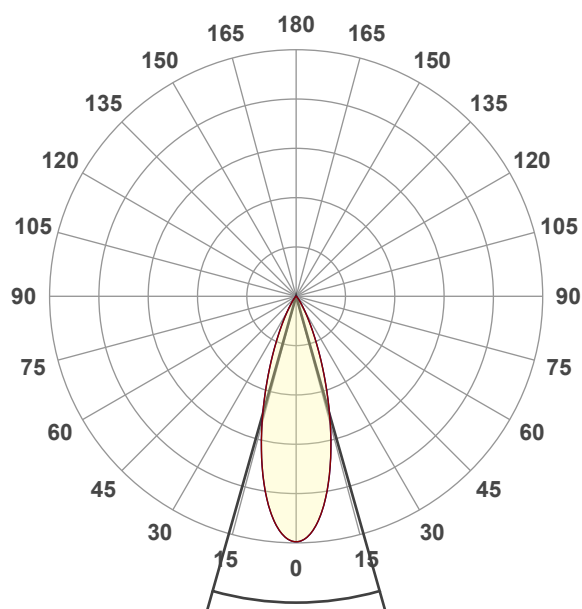
Full On

Operator:

Paolo Carvone

Date and time:

12/10/2022 15:38:10

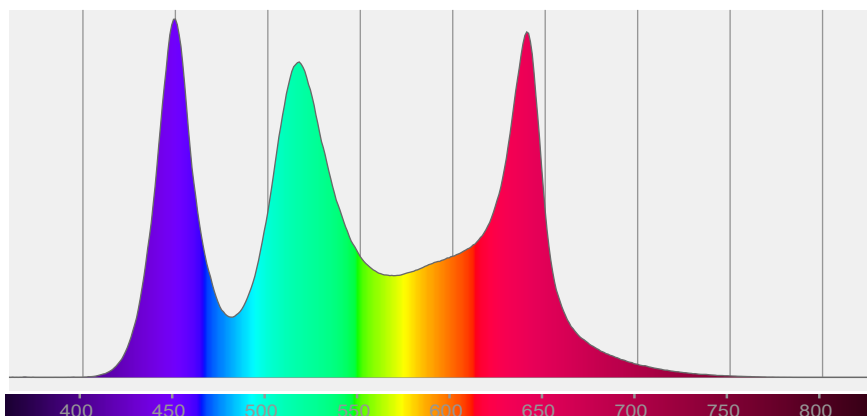


Beam angle 50%: 31,6°

Field angle 10%: 56,4°

Cut off angle 2.5%: 72,6°

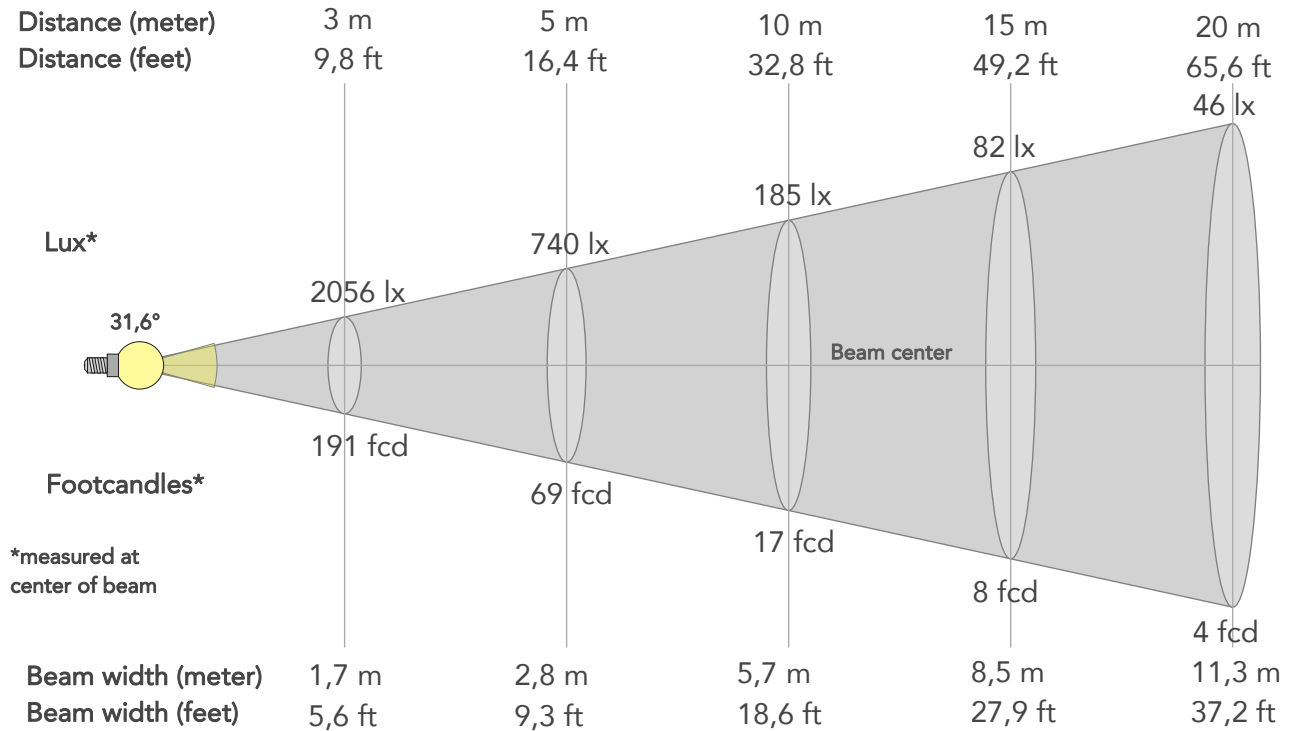
Spectra



BEAM DETAILS



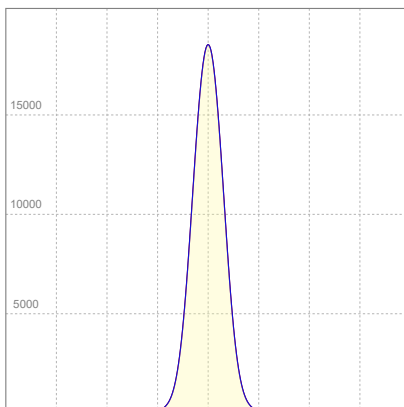
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,6°	56,4°	72,6°	100,0%	99,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	18506lx	4627lx	2056lx	1157lx	740lx	329lx	185lx	82lx	46lx	30lx	21lx	12lx	7lx
Footcand.	1719fcd	430fcd	191fcd	107fcd	69fcd	31fcd	17fcd	8fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,6m	1,1m	1,7m	2,3m	2,8m	4,3m	5,7m	8,5m	11,3m	14,2m	17m	22,7m	28,3m
Beam wid.	1,9ft	3,7ft	5,6ft	7,4ft	9,3ft	13,9ft	18,6ft	27,9ft	37,2ft	46,5ft	55,8ft	74,4ft	92,9ft

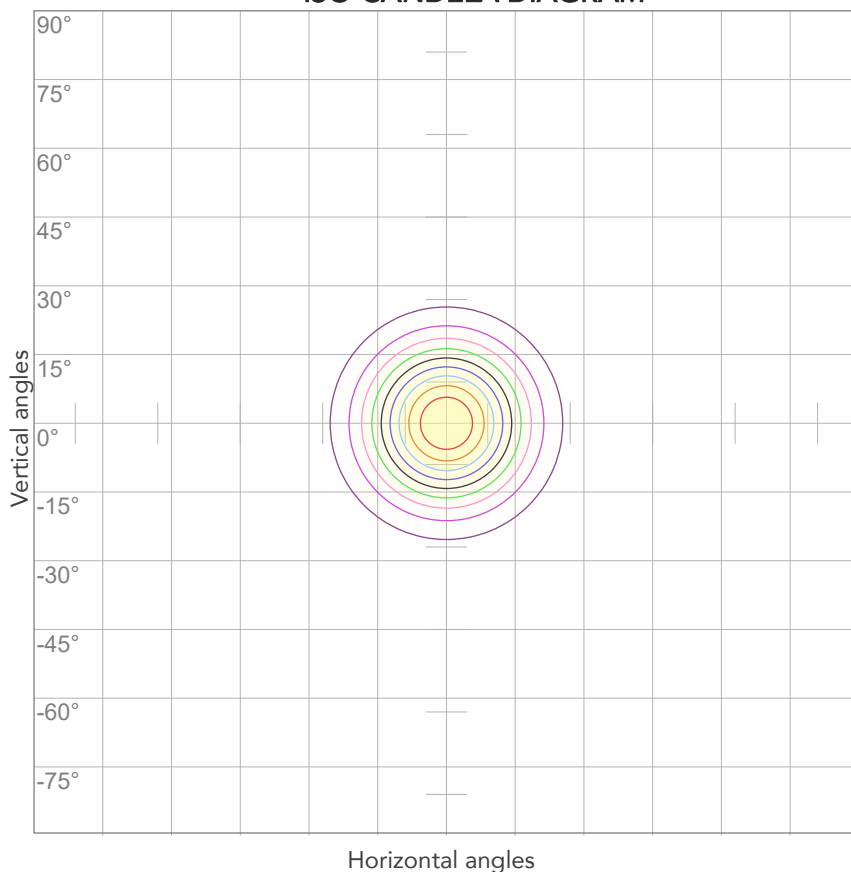
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	0,785A	164,4W	38lm/W
Power FC			
0,94			

ISO CANDELA DIAGRAM



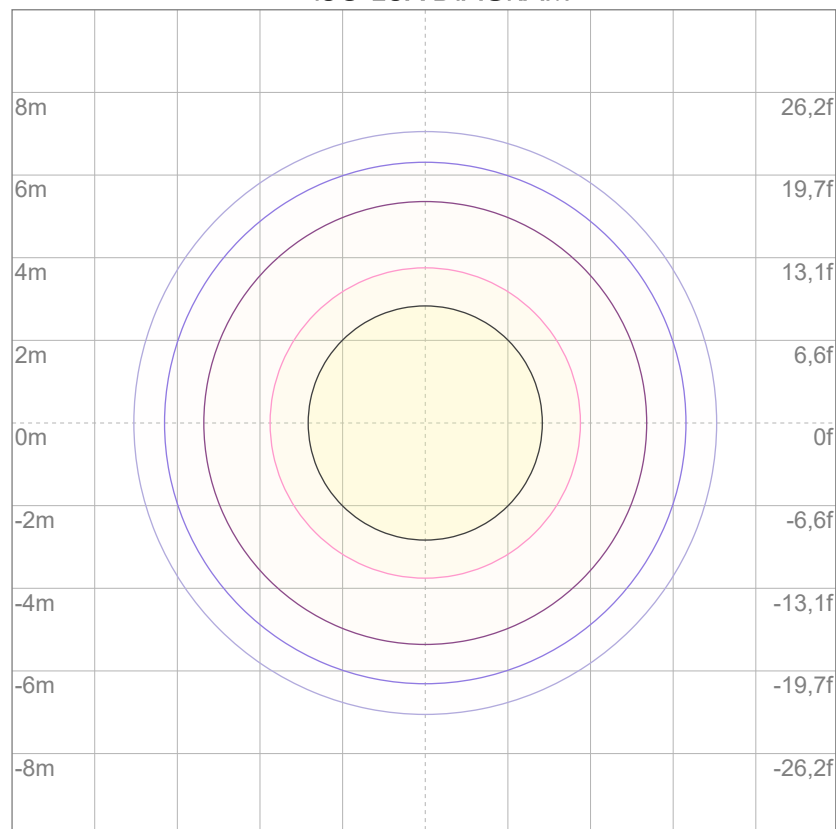
10%	1851 cd
20%	3701 cd
30%	5552 cd
40%	7402 cd
50%	9253 cd
60%	11104 cd
70%	12954 cd
80%	14805 cd

Conditions:

Number of c-planes: 4

Candela at center: 18506 cd

ISO LUX DIAGRAM



3%	5,55 lx
5%	9,25 lx
10%	18,5 lx
30%	55,5 lx
50%	92,5 lx

Conditions:

Number of c-planes: 4

Lux at center: 185 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

6315 lm

Peak candela output:

9218 cd

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic + 40° Filter

Target:

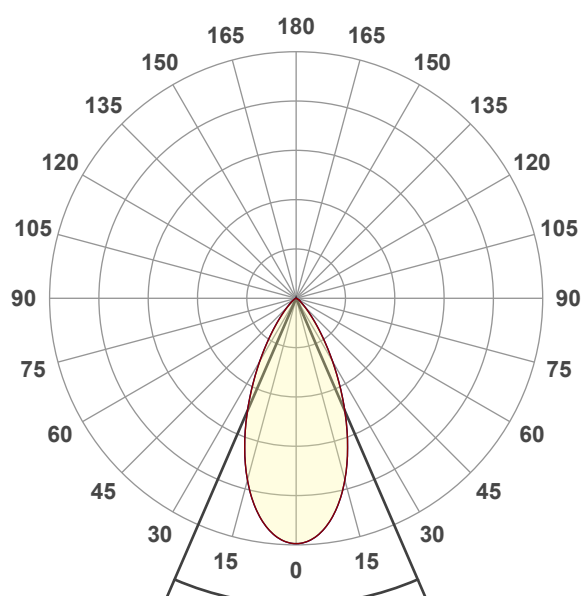
Full On

Operator:

Paolo Carvone

Date and time:

12/10/2022 15:46:47

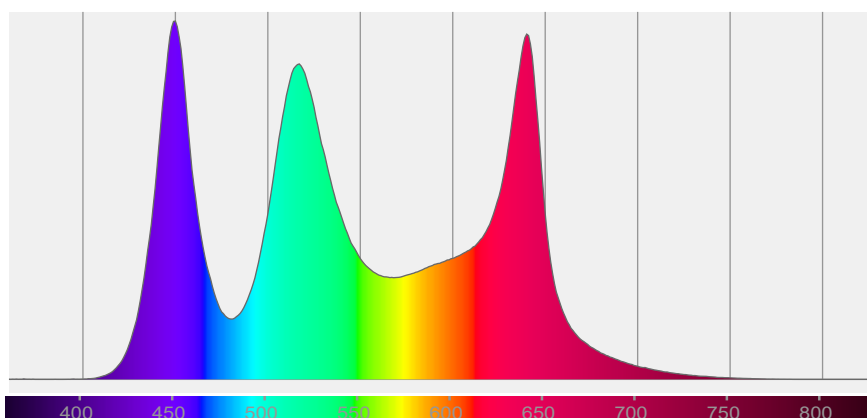


Beam angle 50%: 46,8°

Field angle 10%: 79,9°

Cut off angle 2.5%: 102,6°

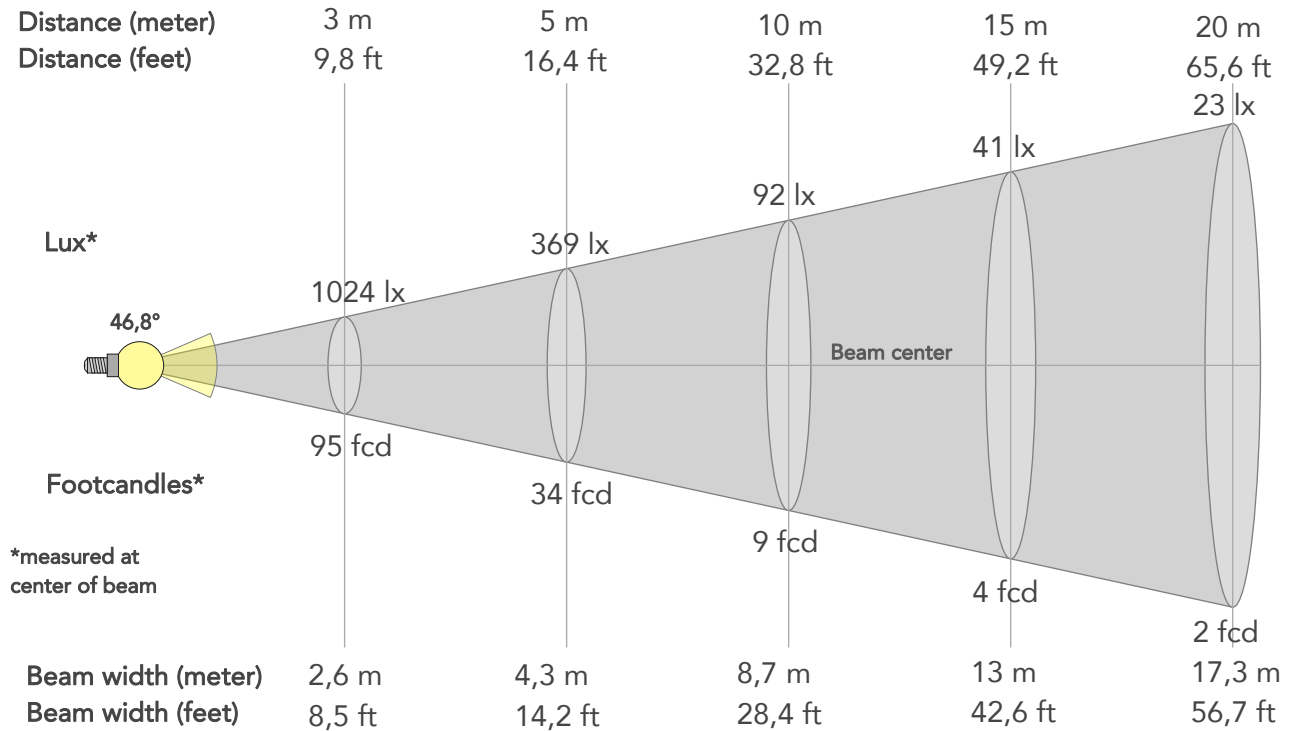
Spectra



BEAM DETAILS



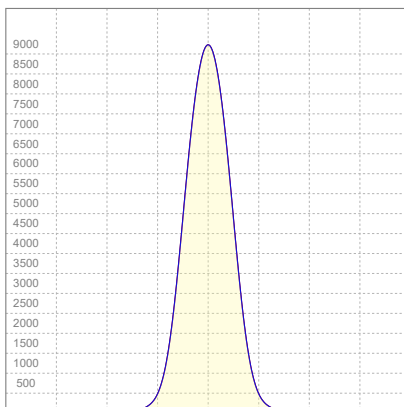
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
46,8°	79,9°	102,6°	99,0%	94,3%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	9218lx	2305lx	1024lx	576lx	369lx	164lx	92lx	41lx	23lx	15lx	10lx	6lx	4lx
Footcand.	856fcd	214fcd	95fcd	54fcd	34fcd	15fcd	9fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,9m	1,7m	2,6m	3,5m	4,3m	6,5m	8,7m	13m	17,3m	21,6m	26m	34,6m	43,3m
Beam wid.	2,9ft	5,7ft	8,5ft	11,3ft	14,2ft	21,3ft	28,4ft	42,6ft	56,7ft	70,9ft	85,1ft	113,5ft	141,9ft

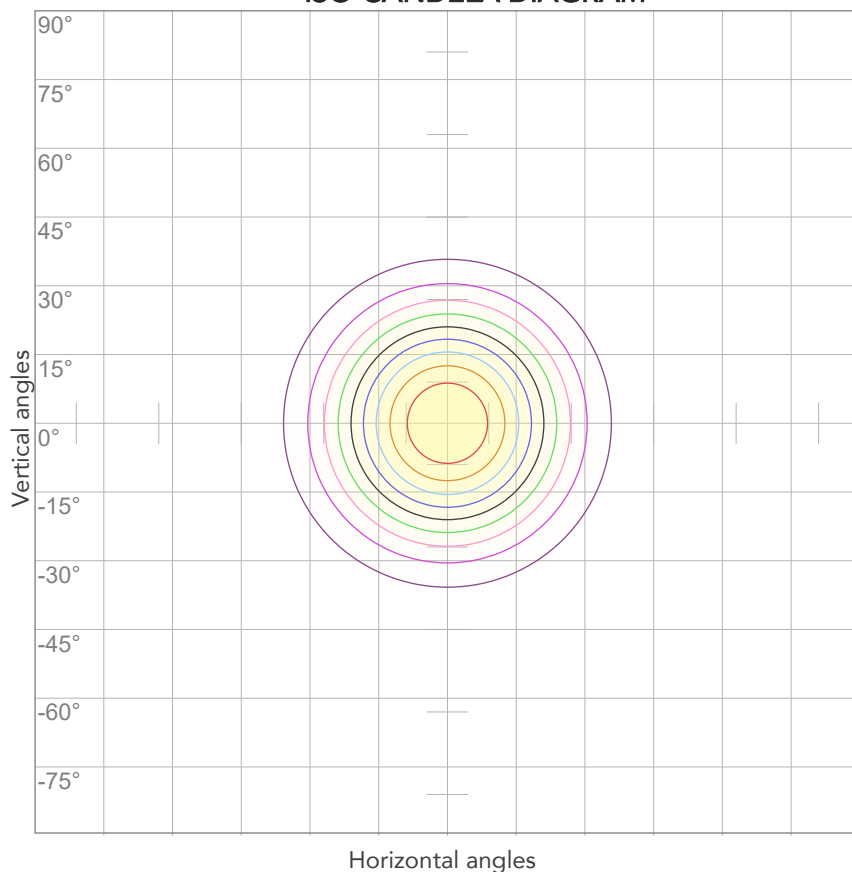
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
222V	0,789A	164,8W	38lm/W
Power FC			
0,94			

ISO CANDELA DIAGRAM



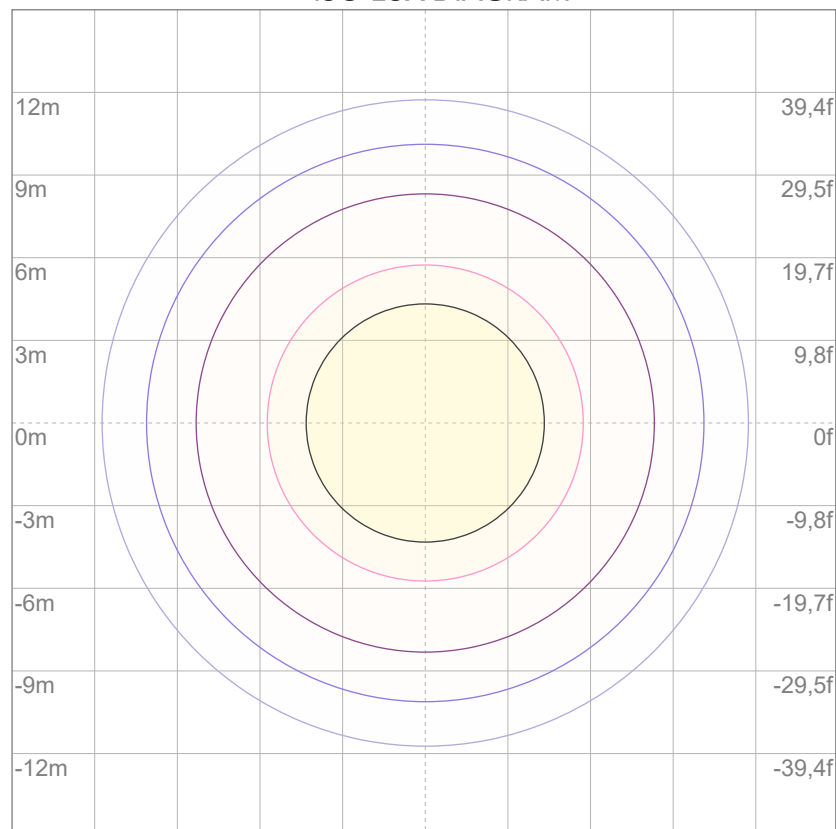
10%	922 cd
20%	1844 cd
30%	2766 cd
40%	3687 cd
50%	4609 cd
60%	5531 cd
70%	6453 cd
80%	7375 cd

Conditions:

Number of c-planes: 4

Candela at center: 9218 cd

ISO LUX DIAGRAM



3%	2,77 lx
5%	4,61 lx
10%	9,22 lx
30%	27,7 lx
50%	46,1 lx

Conditions:

Number of c-planes: 4

Lux at center: 92,2 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

9747 lm

Peak candela output:

18898 cd

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 10°x60° Filter

Target:

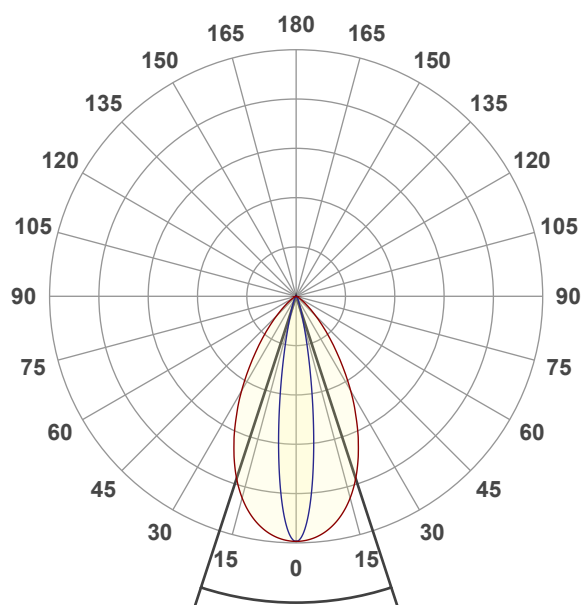
Full On

Operator:

Paolo Carvone

Date and time:

12/10/2022 15:53:03

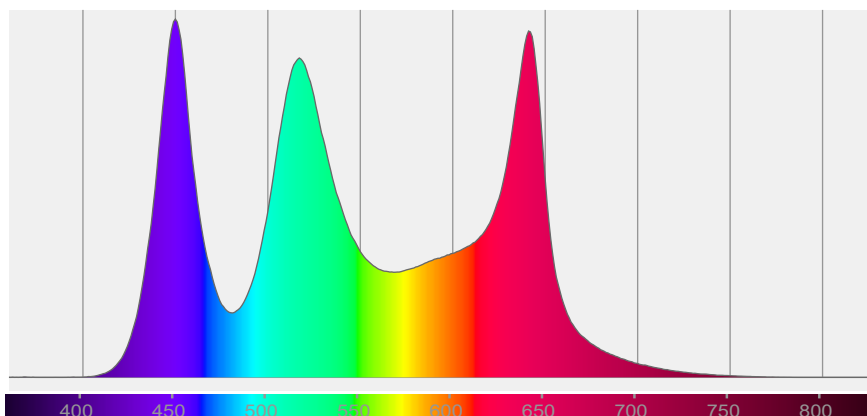


Beam angle 50%: 36,2°

Field angle 10%: 62°

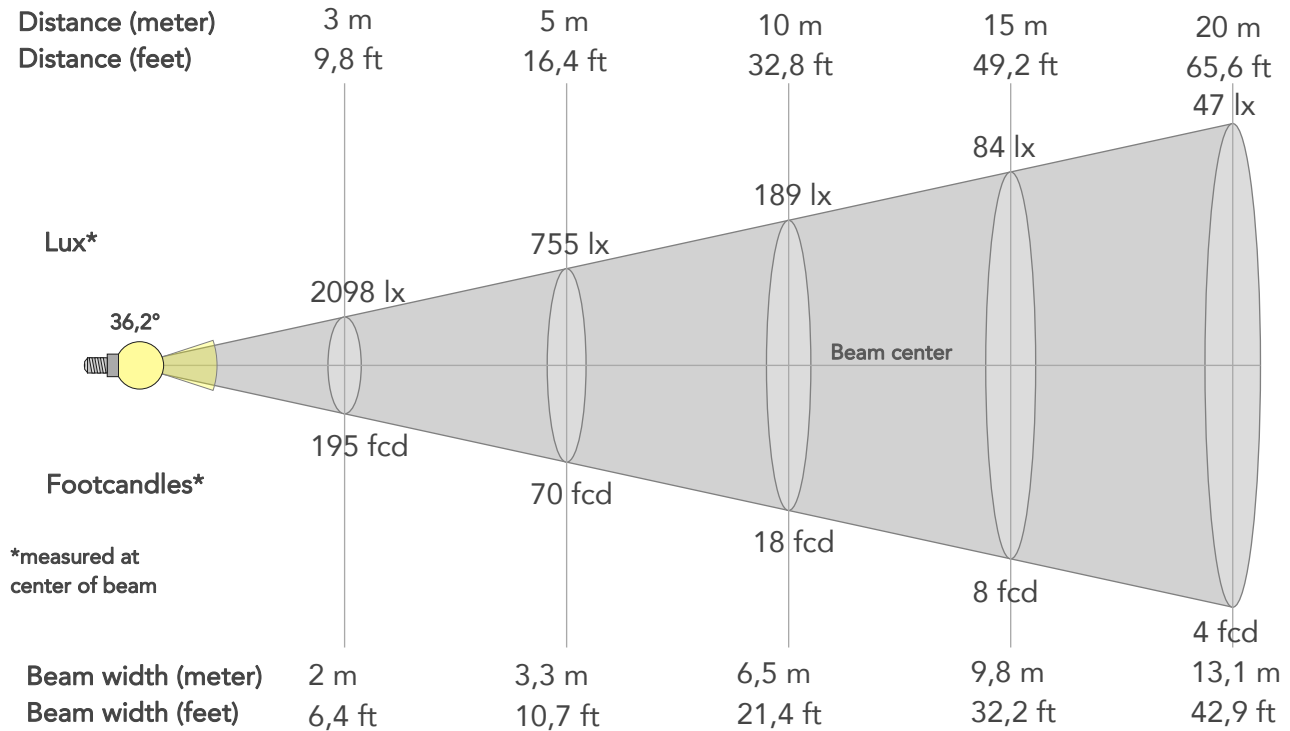
Cut off angle 2.5%: 81,1°

Spectra



BEAM DETAILS

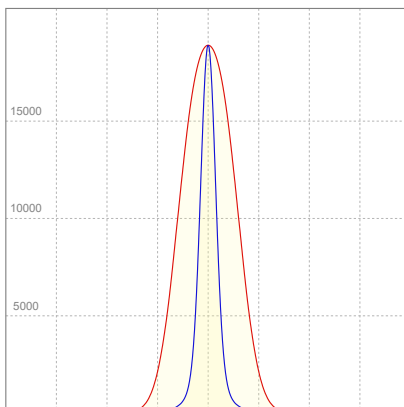
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
36,2°	62°	81,1°	99,3%	93,1%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	18880lx	4720lx	2098lx	1180lx	755lx	336lx	189lx	84lx	47lx	30lx	21lx	12lx	8lx
Footcand.	1754fcd	439fcd	195fcd	110fcd	70fcd	31fcd	18fcd	8fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,7m	1,3m	2m	2,6m	3,3m	4,9m	6,5m	9,8m	13,1m	16,3m	19,6m	26,1m	32,7m
Beam wid.	2,2ft	4,3ft	6,4ft	8,6ft	10,7ft	16,1ft	21,4ft	32,2ft	42,9ft	53,6ft	64,3ft	85,8ft	107,2ft

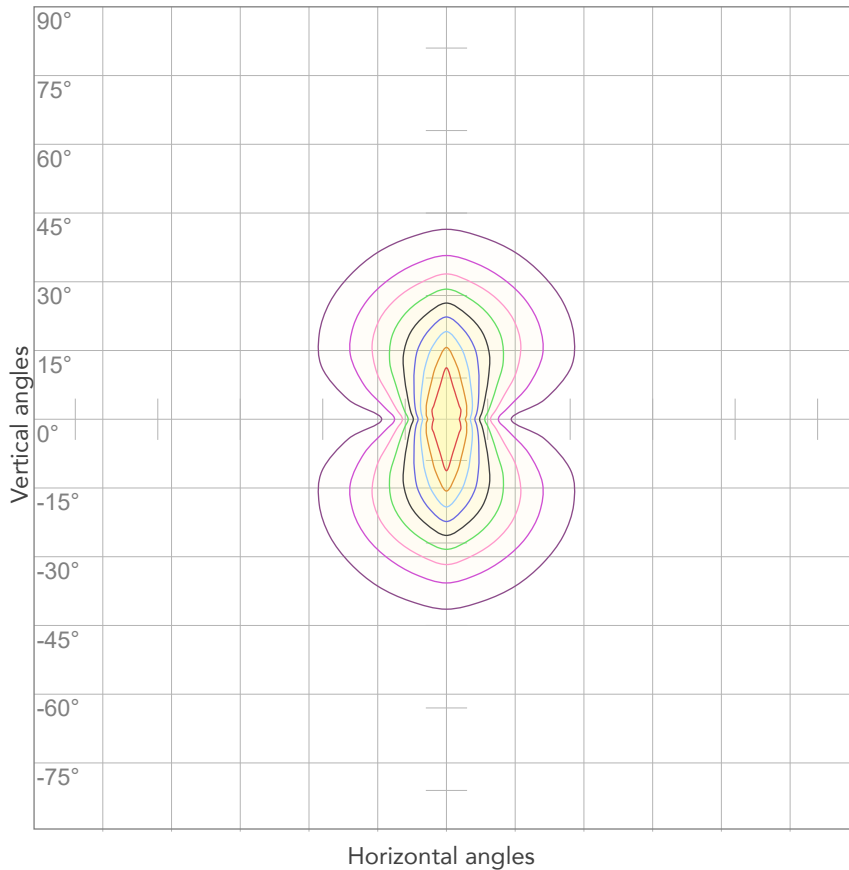
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
222V	0,779A	162,8W	60lm/W
Power FC			
0,94			

ISO CANDELA DIAGRAM



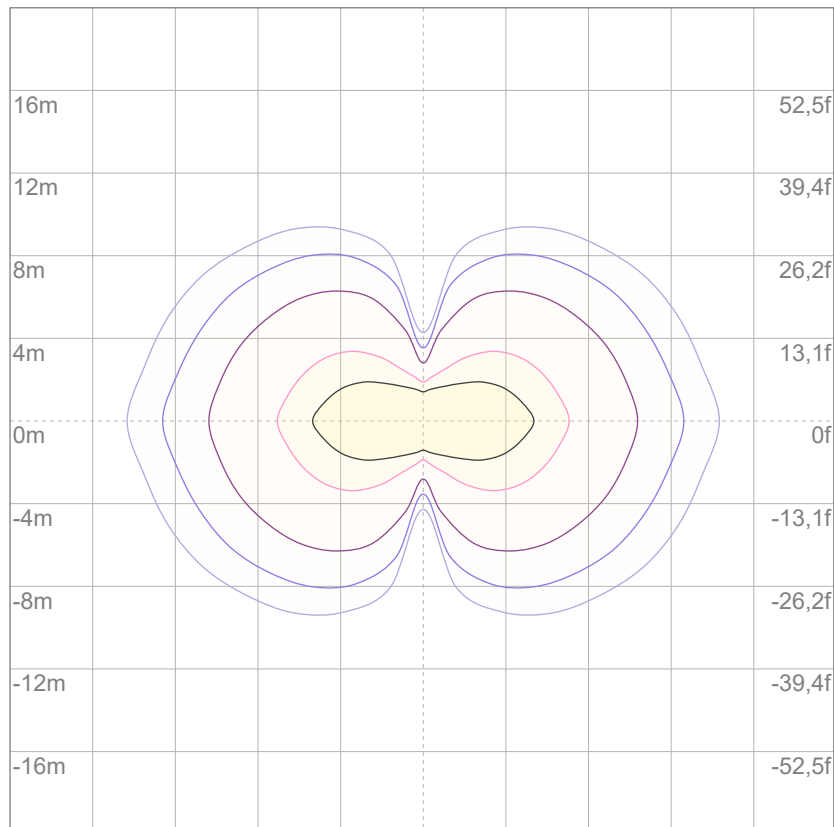
10%	1888 cd
20%	3776 cd
30%	5664 cd
40%	7552 cd
50%	9440 cd
60%	11328 cd
70%	13216 cd
80%	15104 cd

Conditions:

Number of c-planes: 4

Candela at center: 18880 cd

ISO LUX DIAGRAM



3%	5,66 lx
5%	9,44 lx
10%	18,9 lx
30%	56,6 lx
50%	94,4 lx

Conditions:

Number of c-planes: 4

Lux at center: 189 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

1364 lm

Peak candela output:

25346 cd

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic (No Filter)

Target:

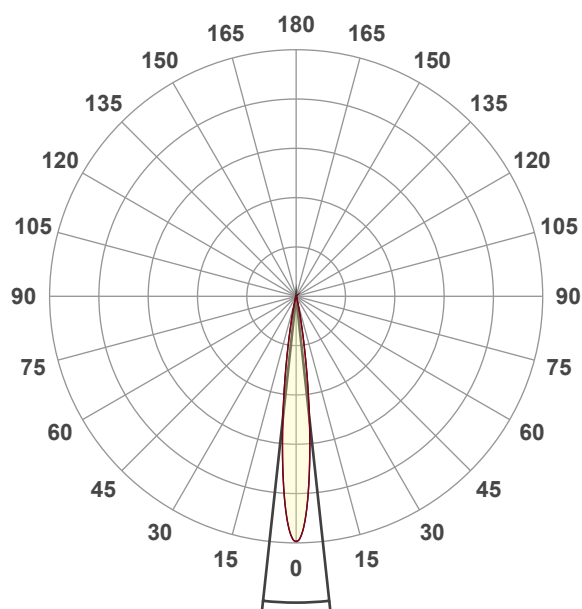
Red

Operator:

Paolo Carvone

Date and time:

12/10/2022 16:10:50

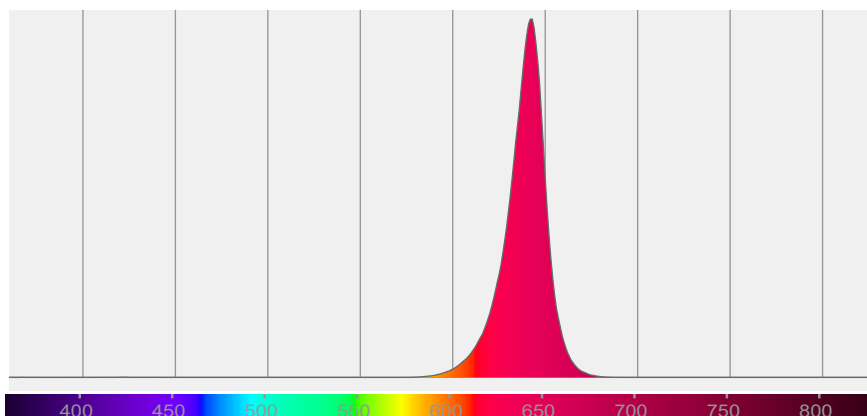


Beam angle 50%: 12,4°

Field angle 10%: 22°

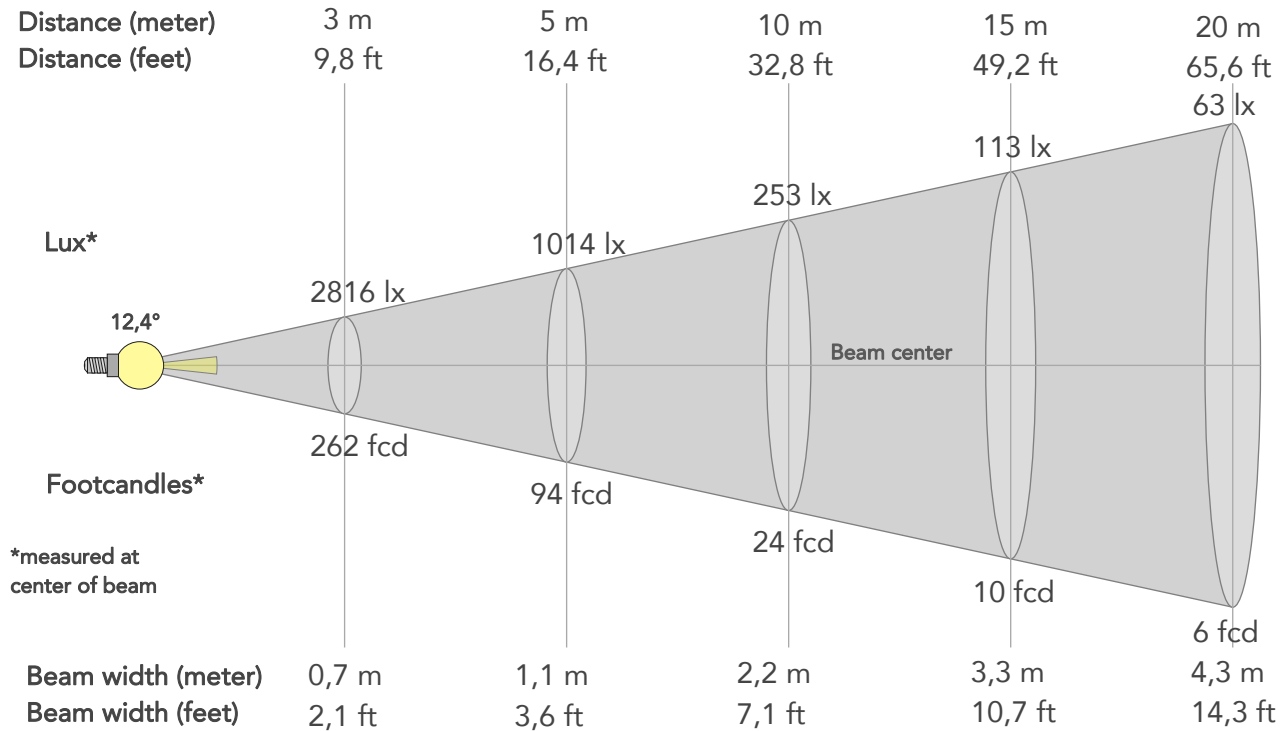
Cut off angle 2.5%: 28,6°

Spectra



BEAM DETAILS

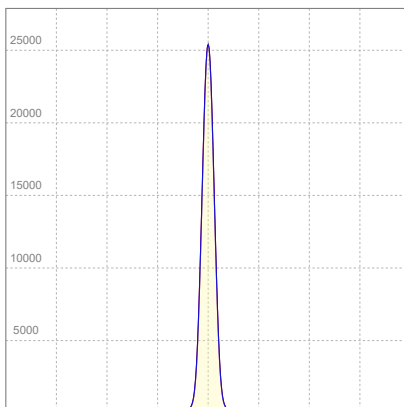
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
12,4°	22°	28,6°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	25346lx	6336lx	2816lx	1584lx	1014lx	451lx	253lx	113lx	63lx	41lx	28lx	16lx	10lx
Footcand.	2355fcd	589fcd	262fcd	147fcd	94fcd	42fcd	24fcd	10fcd	6fcd	4fcd	3fcd	1fcd	1fcd
Beam wid.	0,2m	0,4m	0,7m	0,9m	1,1m	1,6m	2,2m	3,3m	4,3m	5,4m	6,5m	8,7m	10,9m
Beam wid.	0,7ft	1,4ft	2,1ft	2,8ft	3,6ft	5,3ft	7,1ft	10,7ft	14,3ft	17,8ft	21,4ft	28,5ft	35,6ft

LINEAR DISTRIBUTION DIAGRAM

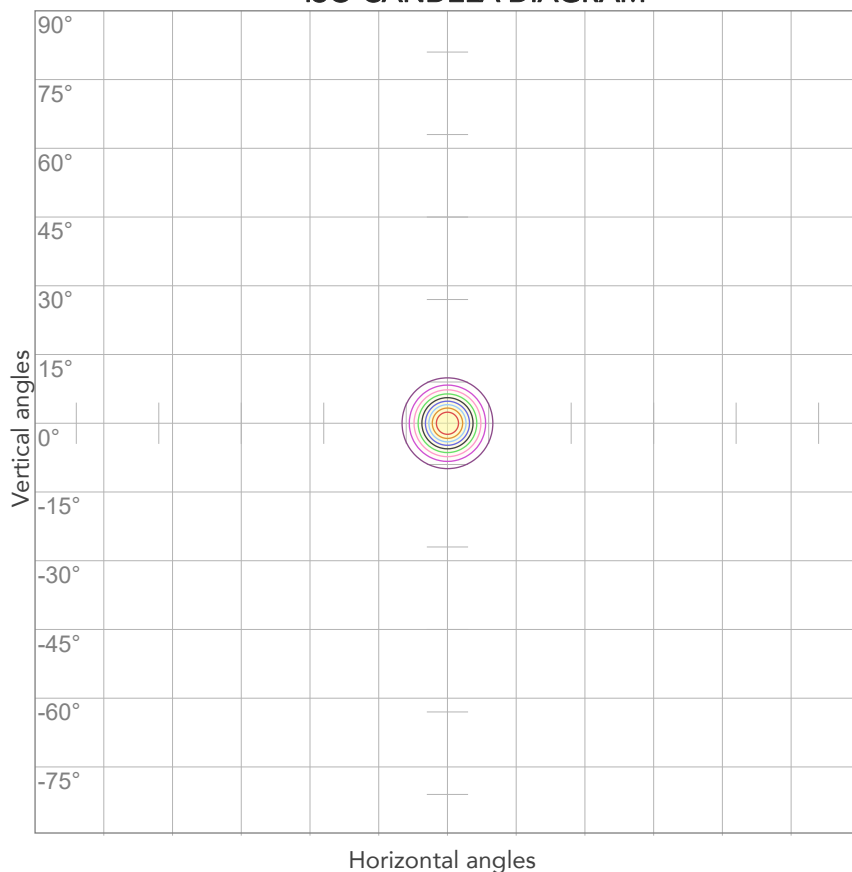


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,250A	49,7W	27lm/W

Power FC
0,88

ISO CANDELA DIAGRAM



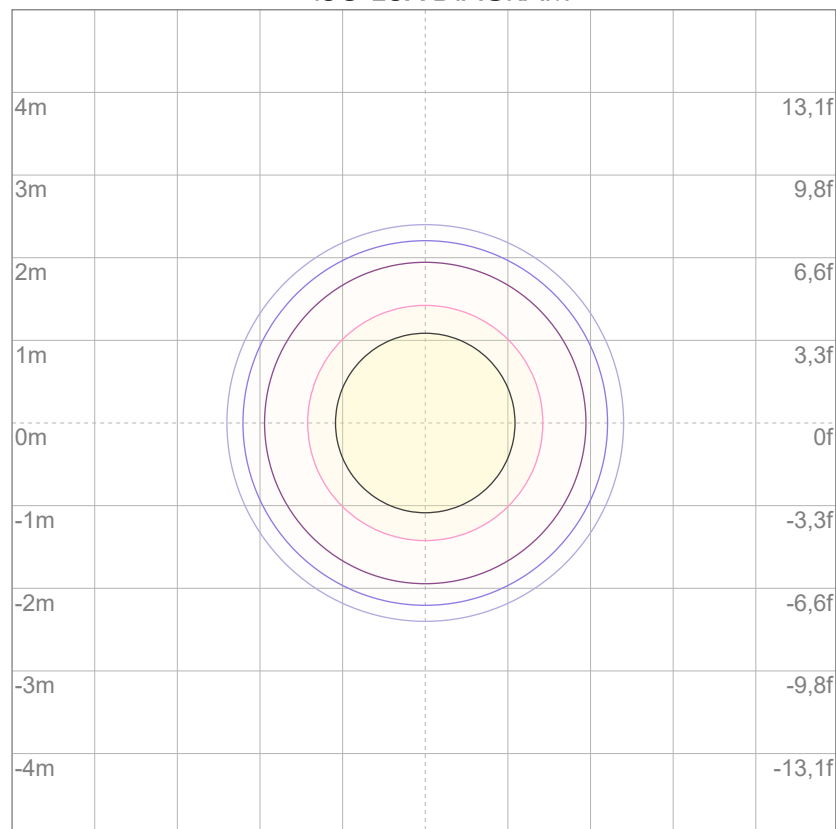
10%	2535 cd
20%	5069 cd
30%	7604 cd
40%	10138 cd
50%	12673 cd
60%	15207 cd
70%	17742 cd
80%	20277 cd

Conditions:

Number of c-planes: 4

Candela at center: 25346 cd

ISO LUX DIAGRAM



3%	7,60 lx
5%	12,7 lx
10%	25,3 lx
30%	76,0 lx
50%	127 lx

Conditions:

Number of c-planes: 4

Lux at center: 253 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

1394 lm

Peak candela output:

4347 cd

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic + 25° Filter

Target:

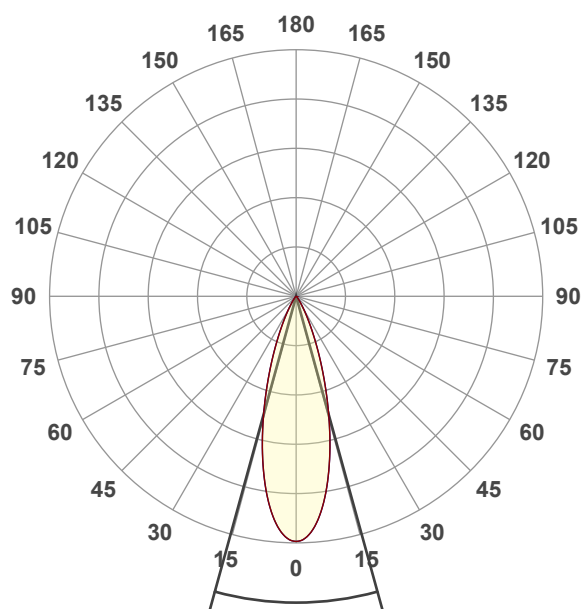
Red

Operator:

Paolo Carvone

Date and time:

12/10/2022 16:16:14

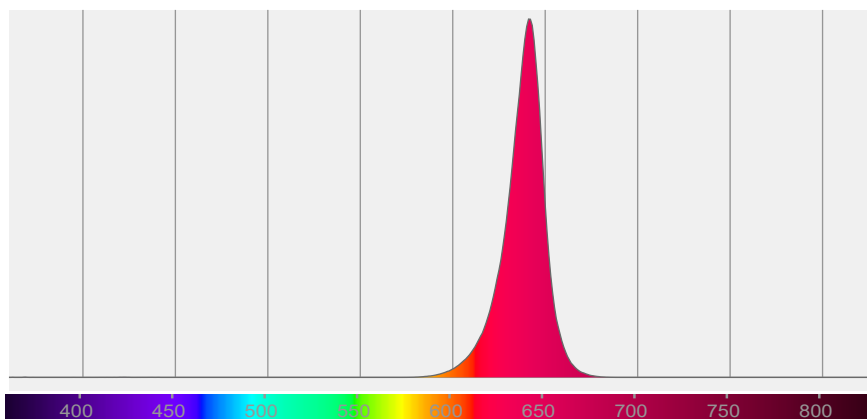


Beam angle 50%: 30,8°

Field angle 10%: 55°

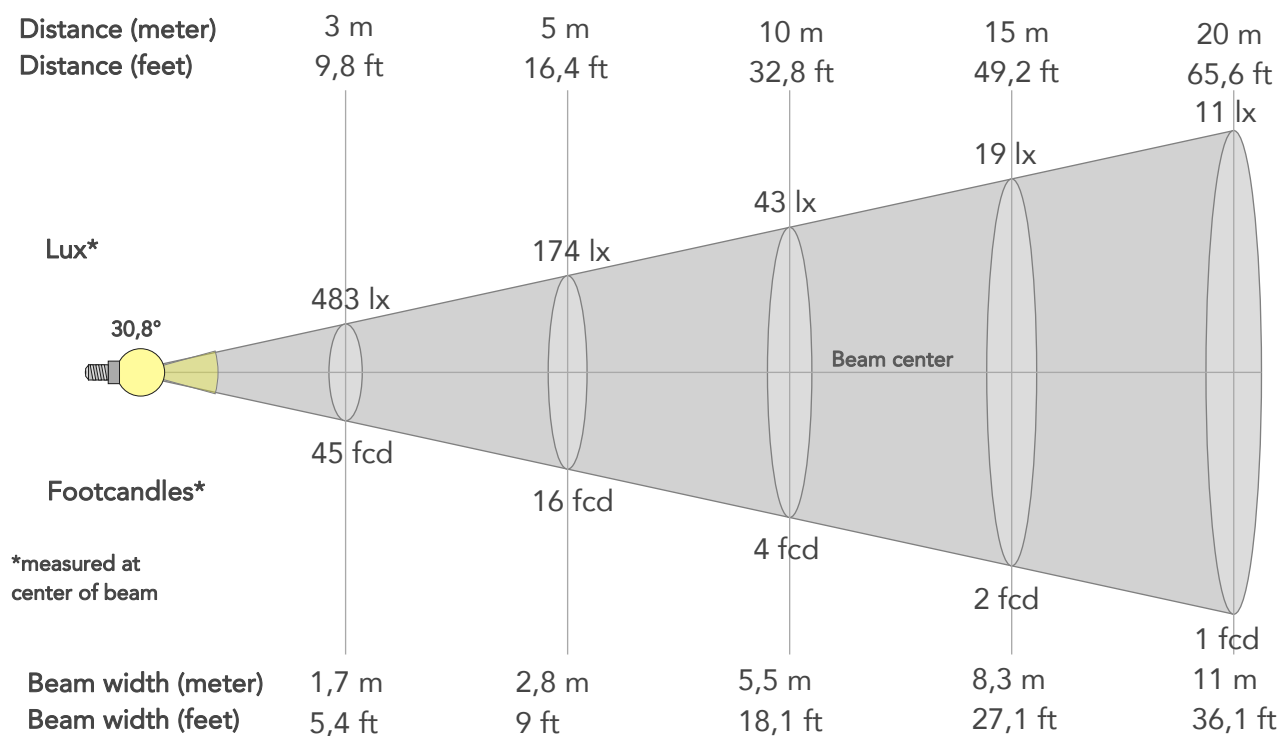
Cut off angle 2.5%: 70,5°

Spectra



BEAM DETAILS

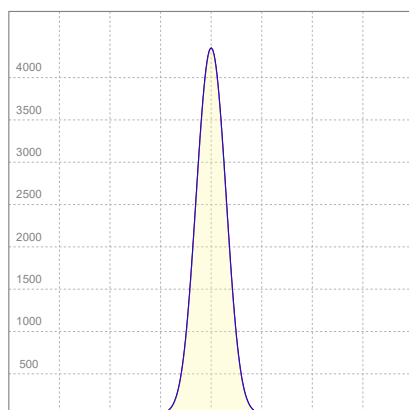
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,8°	55°	70,5°	99,8%	98,6%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	4347lx	1087lx	483lx	272lx	174lx	77lx	43lx	19lx	11lx	7lx	5lx	3lx	2lx
Footcand.	404fcd	101fcd	45fcd	25fcd	16fcd	7fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,1m	5,5m	8,3m	11m	13,8m	16,5m	22m	27,5m
Beam wid.	1,8ft	3,6ft	5,4ft	7,2ft	9ft	13,5ft	18,1ft	27,1ft	36,1ft	45,1ft	54,2ft	72,2ft	90,3ft

LINEAR DISTRIBUTION DIAGRAM

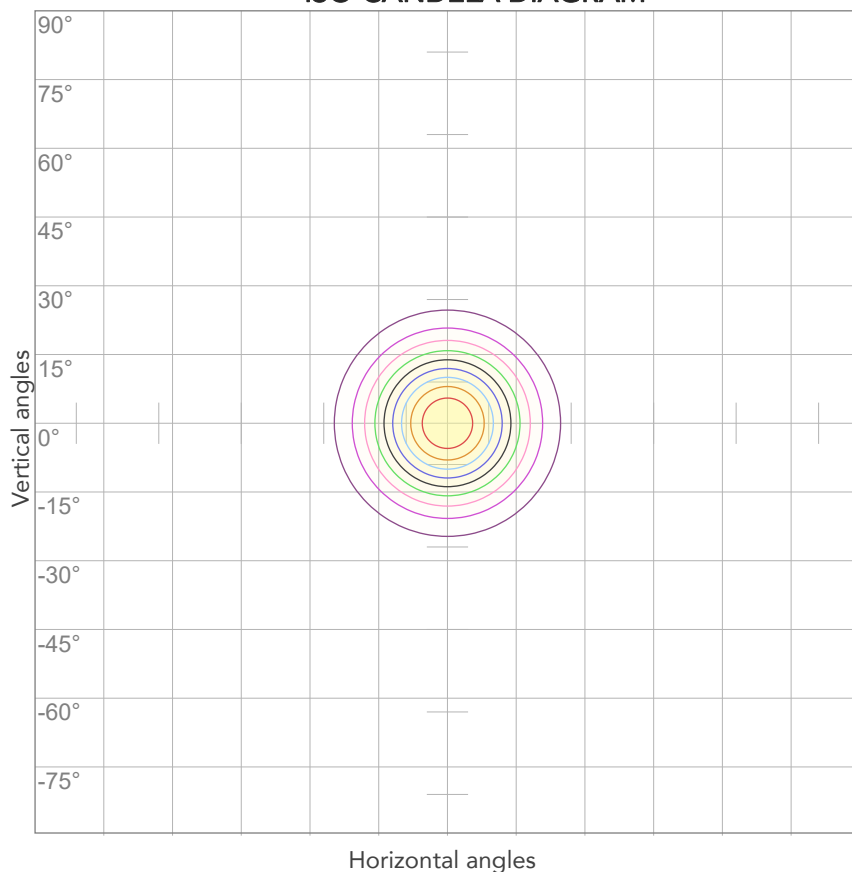


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,251A	50,0W	28lm/W

Power FC
0,89

ISO CANDELA DIAGRAM



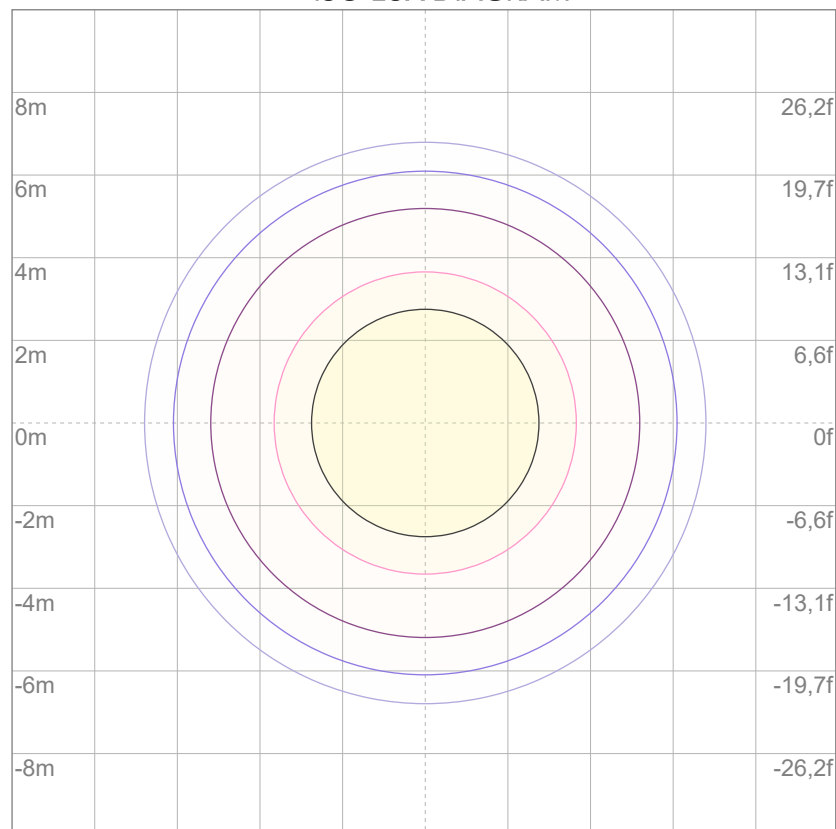
10%	435 cd
20%	869 cd
30%	1304 cd
40%	1739 cd
50%	2173 cd
60%	2608 cd
70%	3043 cd
80%	3477 cd

Conditions:

Number of c-planes: 4

Candela at center: 4347 cd

ISO LUX DIAGRAM



3%	1,30 lx
5%	2,17 lx
10%	4,35 lx
30%	13,0 lx
50%	21,7 lx

Conditions:

Number of c-planes: 4

Lux at center: 43,5 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

1429 lm

Peak candela output:

2143 cd

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 40° Filter

Target:

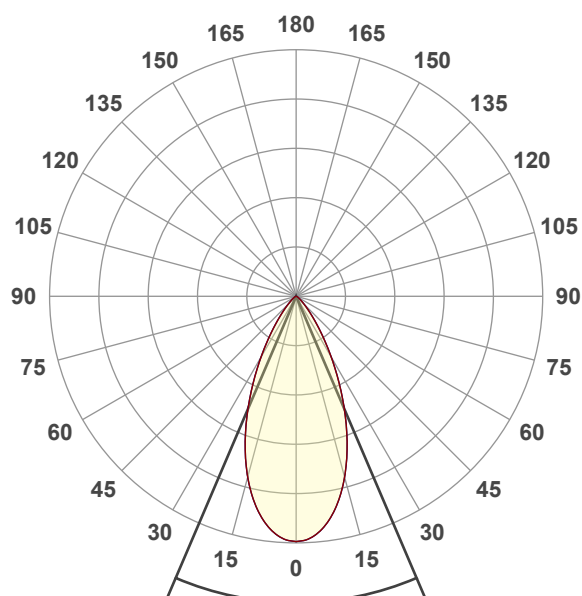
Red

Operator:

Paolo Carvone

Date and time:

12/10/2022 16:18:58

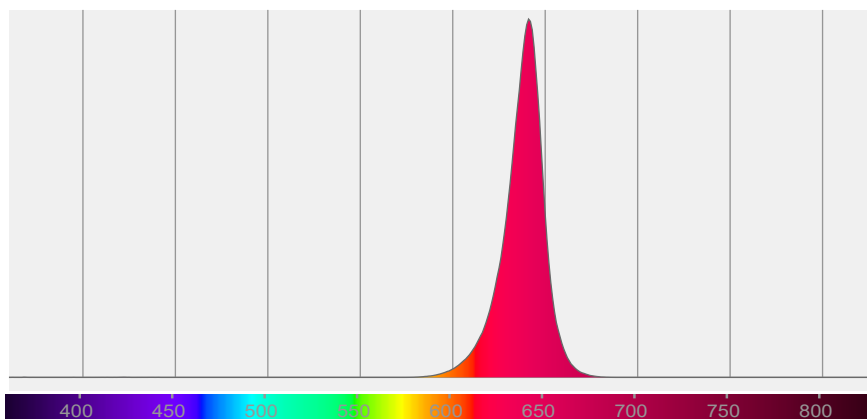


Beam angle 50%: 46,3°

Field angle 10%: 78,4°

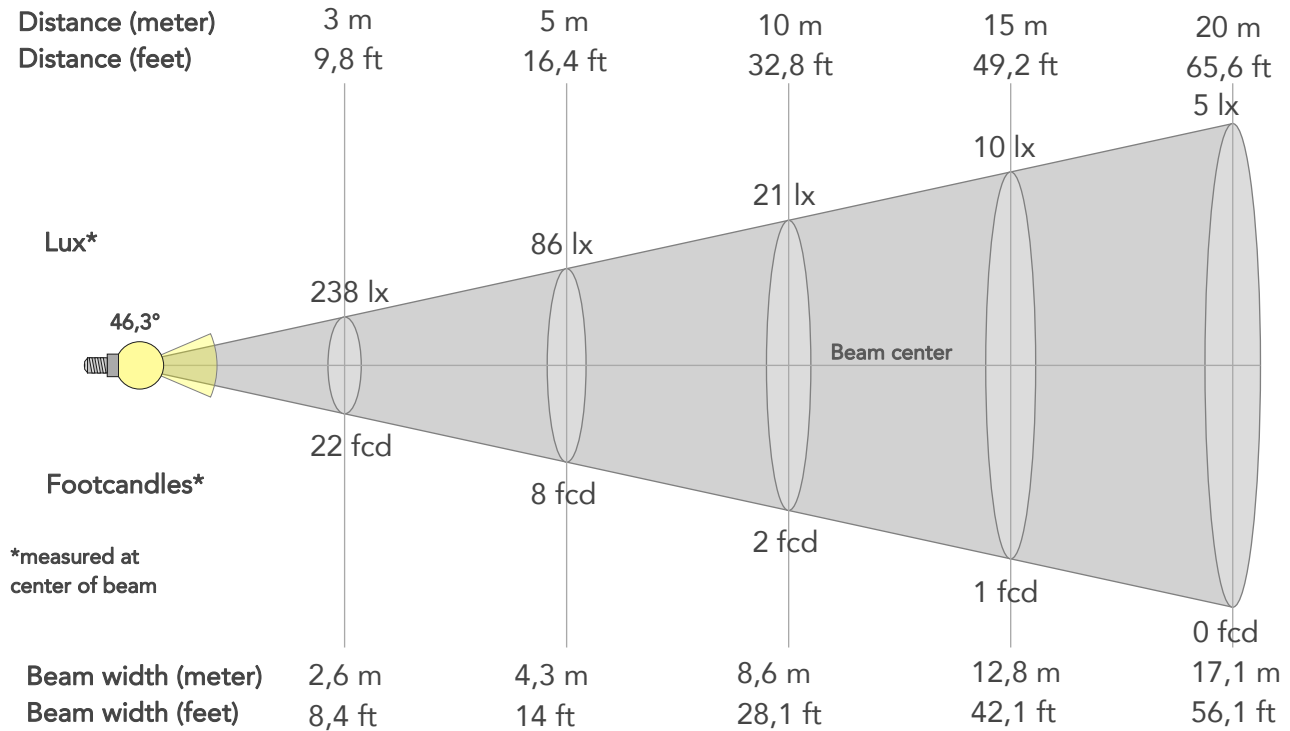
Cut off angle 2.5%: 100,1°

Spectra



BEAM DETAILS

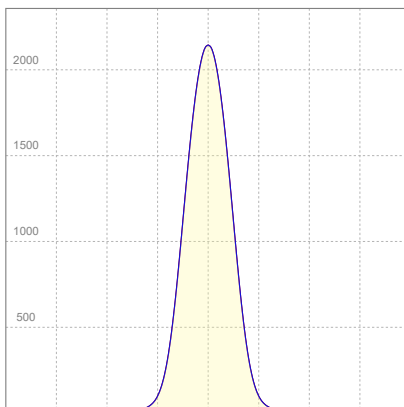
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
46,3°	78,4°	100,1°	98,9%	94,7%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	2143lx	536lx	238lx	134lx	86lx	38lx	21lx	10lx	5lx	3lx	2lx	1lx	1lx
Footcand.	199fcd	50fcd	22fcd	12fcd	8fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,9m	1,7m	2,6m	3,4m	4,3m	6,4m	8,6m	12,8m	17,1m	21,4m	25,7m	34,2m	42,8m
Beam wid.	2,8ft	5,6ft	8,4ft	11,2ft	14ft	21ft	28,1ft	42,1ft	56,1ft	70,1ft	84,2ft	112,2ft	140,3ft

LINEAR DISTRIBUTION DIAGRAM

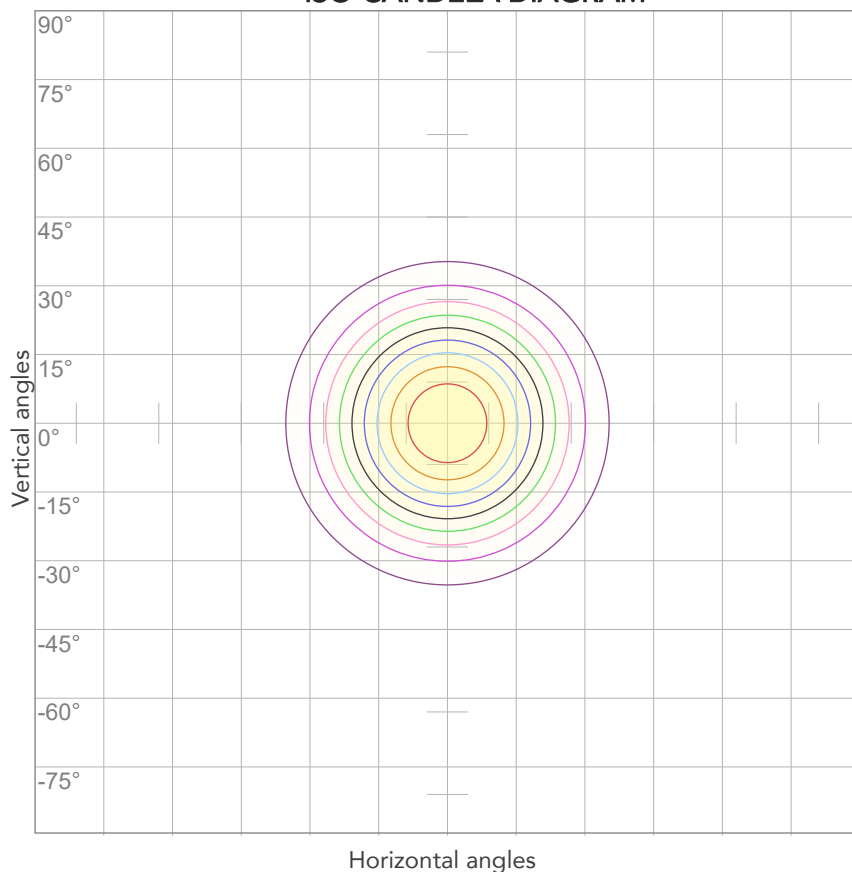


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
228V	0,249A	50,1W	29lm/W

Power FC
0,88

ISO CANDELA DIAGRAM



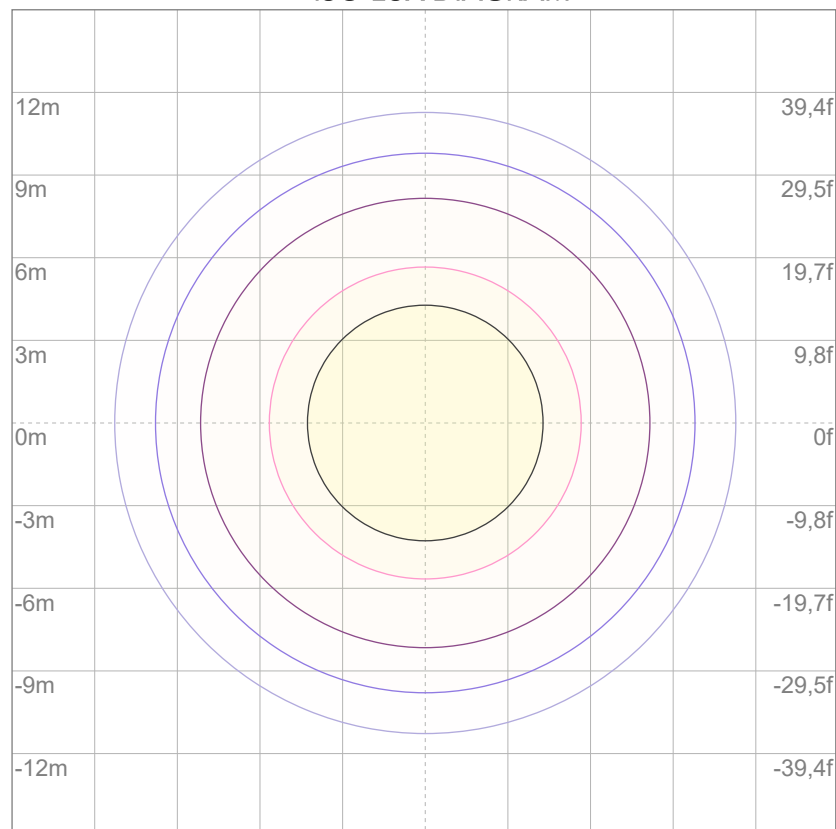
10%	214 cd
20%	429 cd
30%	643 cd
40%	857 cd
50%	1071 cd
60%	1286 cd
70%	1500 cd
80%	1714 cd

Conditions:

Number of c-planes: 4

Candela at center: 2143 cd

ISO LUX DIAGRAM



3%	0,643 lx
5%	1,07 lx
10%	2,14 lx
30%	6,43 lx
50%	10,7 lx

Conditions:

Number of c-planes: 4

Lux at center: 21,4 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

2293 lm

Peak candela output:

4656 cd

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 10°x60° Filter

Target:

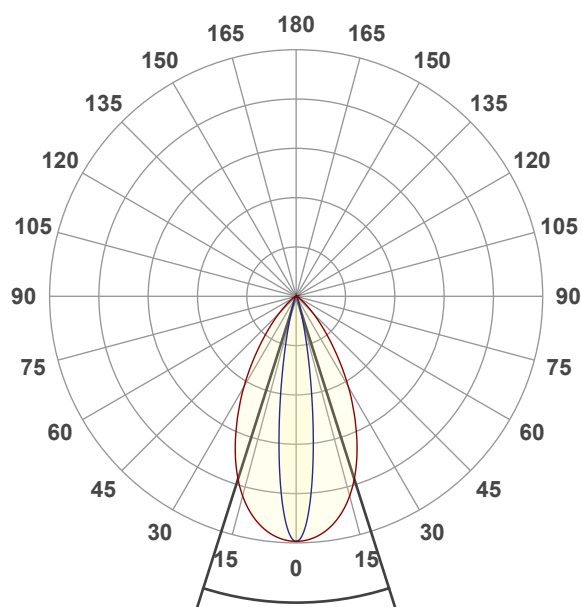
Red

Operator:

Paolo Carvone

Date and time:

12/10/2022 16:22:34

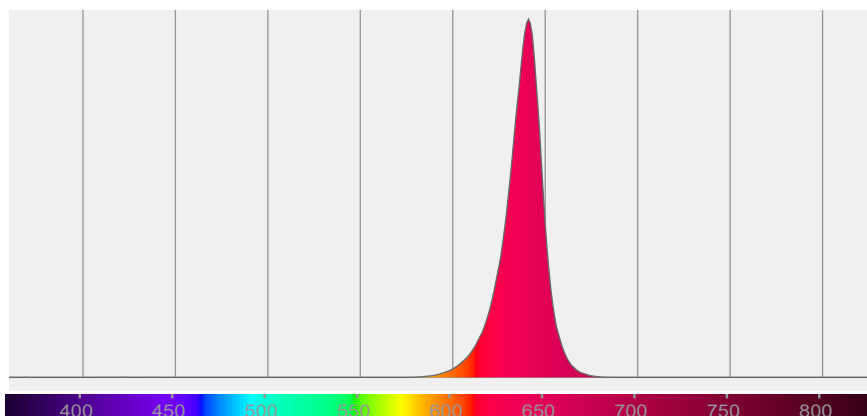


Beam angle 50%: 35,3°

Field angle 10%: 60,2°

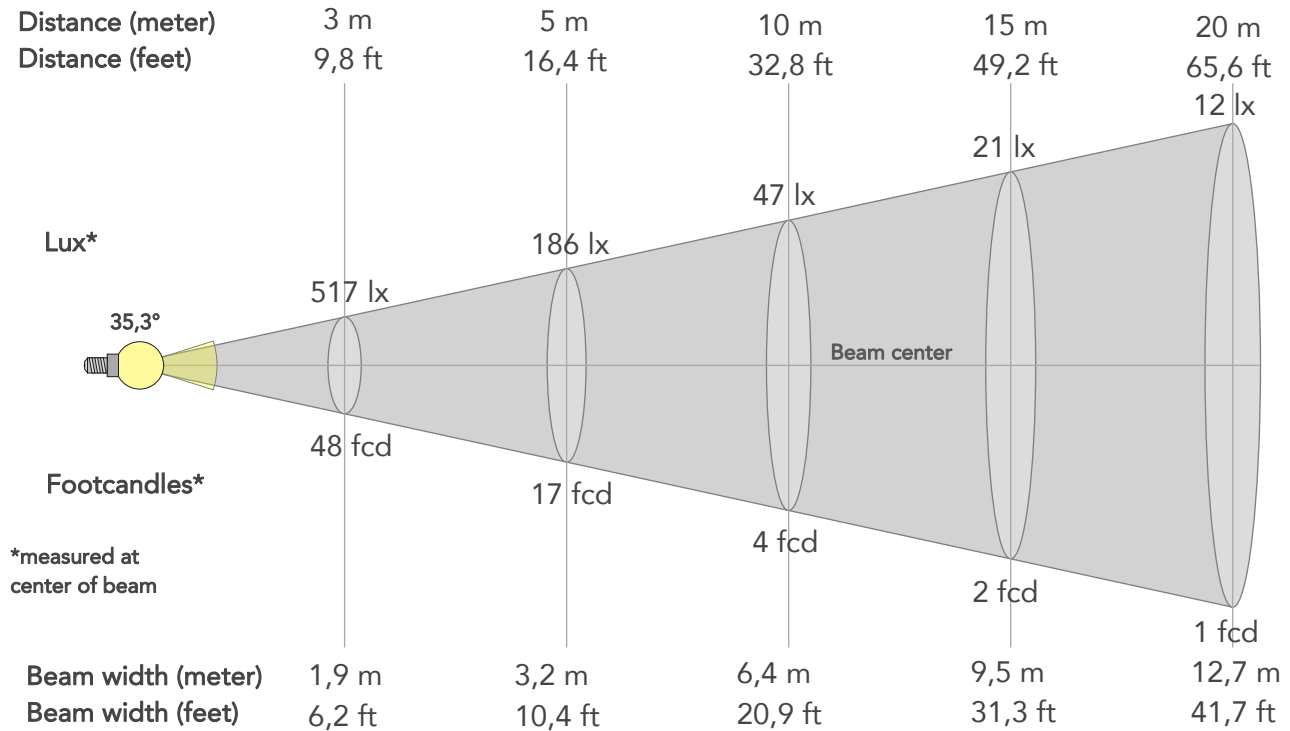
Cut off angle 2.5%: 78,4°

Spectra



BEAM DETAILS

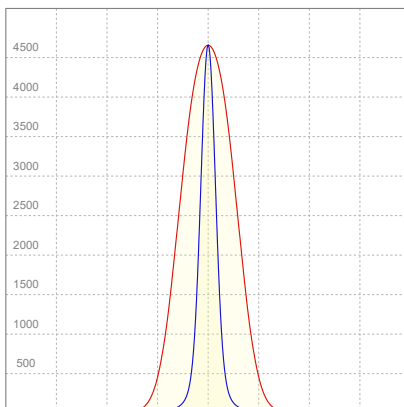
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
35,3°	60,2°	78,4°	99,3%	93,8%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	4655lx	1164lx	517lx	291lx	186lx	83lx	47lx	21lx	12lx	7lx	5lx	3lx	2lx
Footcand.	432fcd	108fcd	48fcd	27fcd	17fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,3m	1,9m	2,5m	3,2m	4,8m	6,4m	9,5m	12,7m	15,9m	19,1m	25,4m	31,8m
Beam wid.	2,1ft	4,2ft	6,2ft	8,3ft	10,4ft	15,7ft	20,9ft	31,3ft	41,7ft	52,2ft	62,6ft	83,5ft	104,3ft

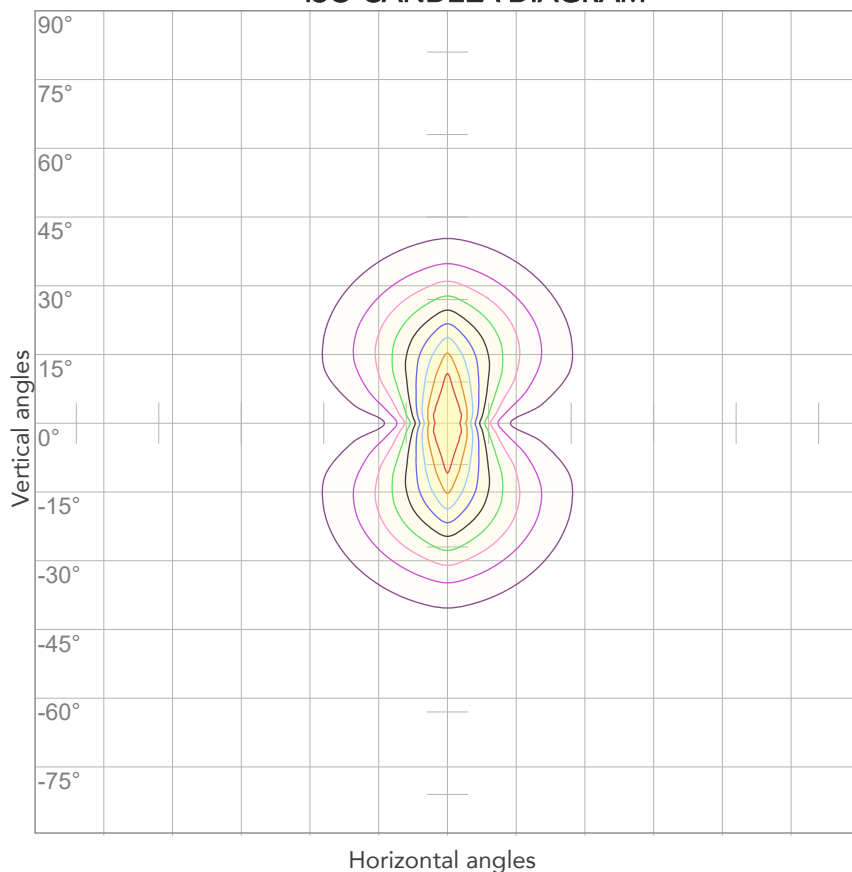
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,250A	50,2W	46lm/W
Power FC			
0,88			

ISO CANDELA DIAGRAM



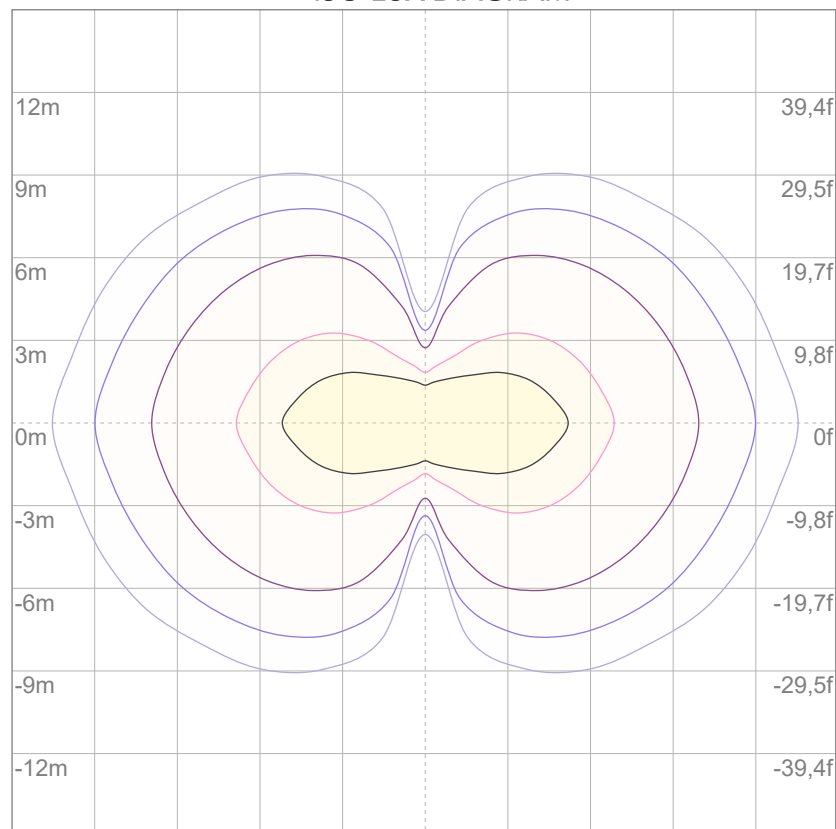
10%	465 cd
20%	931 cd
30%	1396 cd
40%	1862 cd
50%	2327 cd
60%	2793 cd
70%	3258 cd
80%	3724 cd

Conditions:

Number of c-planes: 4

Candela at center: 4655 cd

ISO LUX DIAGRAM



3%	1,40 lx
5%	2,33 lx
10%	4,65 lx
30%	14,0 lx
50%	23,3 lx

Conditions:

Number of c-planes: 4

Lux at center: 46,5 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

3095 lm

Peak candela output:

51878 cd

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic (No Filter)

Target:

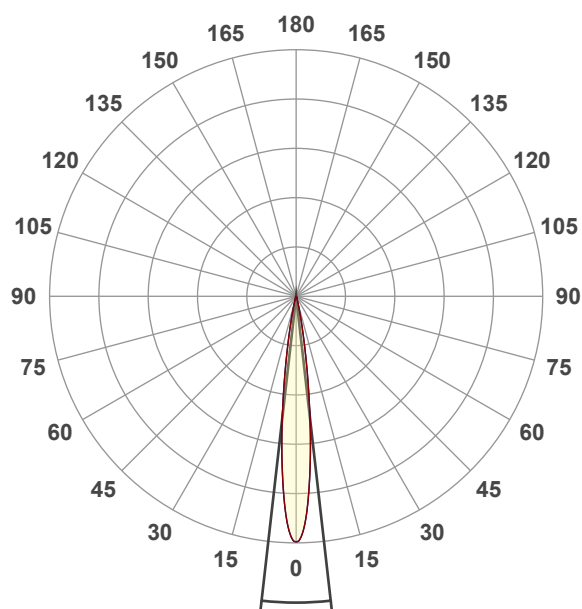
Green

Operator:

Paolo Carvone

Date and time:

12/10/2022 16:41:33

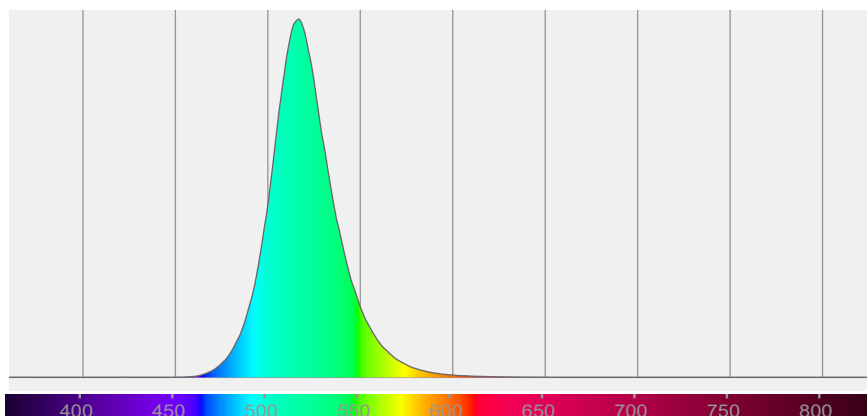


Beam angle 50%: 13°

Field angle 10%: 23,2°

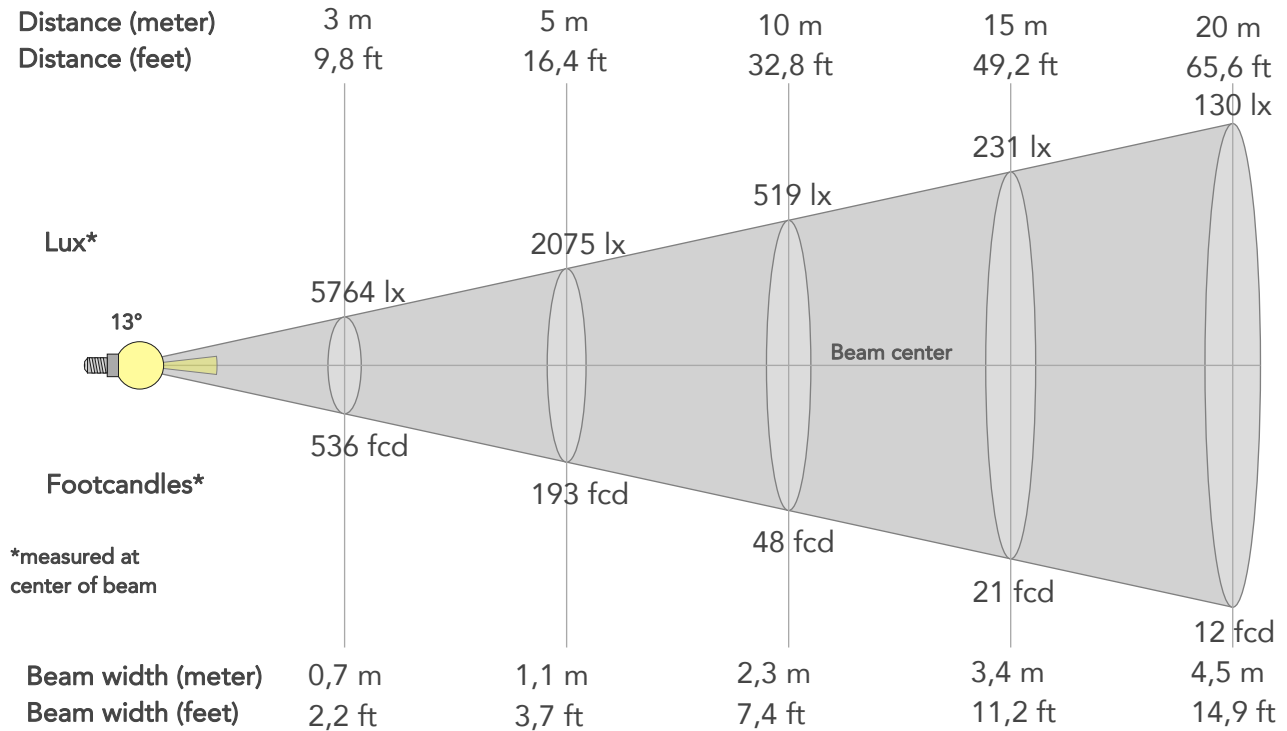
Cut off angle 2.5%: 30,5°

Spectra



BEAM DETAILS

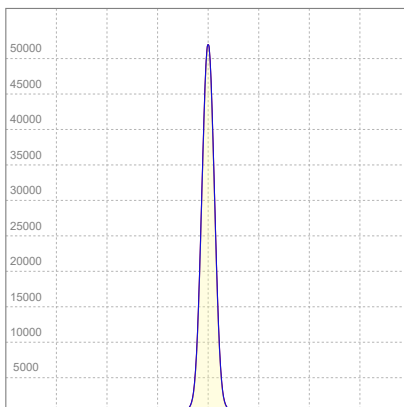
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
13°	23,2°	30,5°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	51878lx	12970lx	5764lx	3242lx	2075lx	922lx	519lx	231lx	130lx	83lx	58lx	32lx	21lx
Footcand.	4820fcd	1205fcd	536fcd	301fcd	193fcd	86fcd	48fcd	21fcd	12fcd	8fcd	5fcd	3fcd	2fcd
Beam wid.	0,2m	0,5m	0,7m	0,9m	1,1m	1,7m	2,3m	3,4m	4,5m	5,7m	6,8m	9,1m	11,4m
Beam wid.	0,7ft	1,5ft	2,2ft	3ft	3,7ft	5,6ft	7,4ft	11,2ft	14,9ft	18,6ft	22,3ft	29,8ft	37,2ft

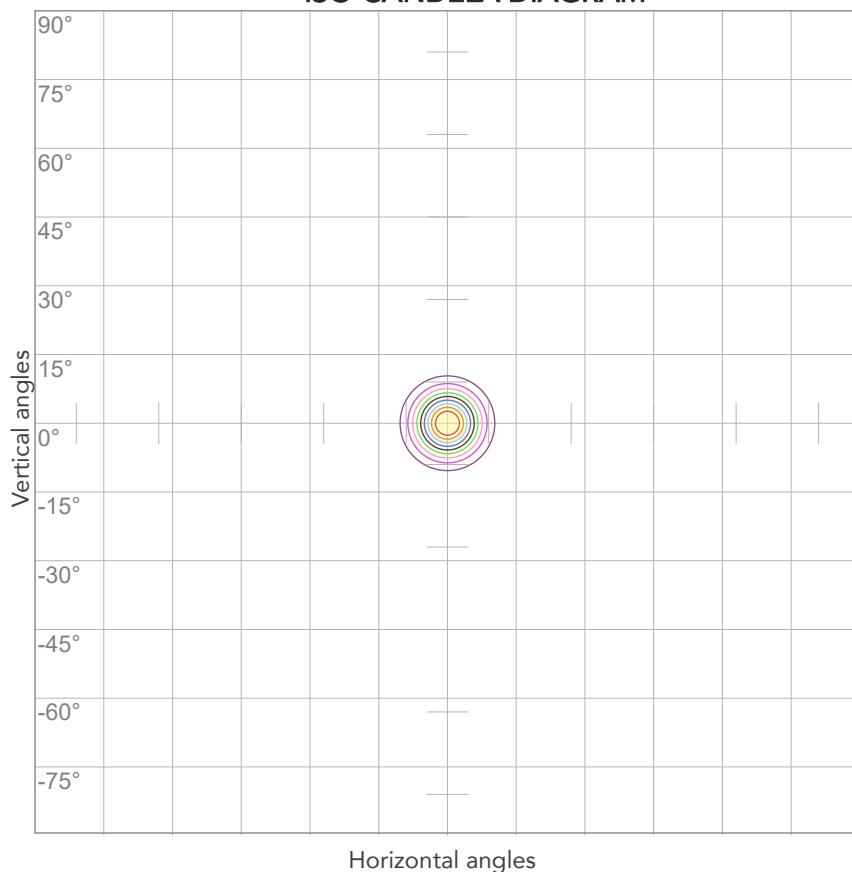
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,347A	71,4W	43lm/W
Power FC			
0,92			

ISO CANDELA DIAGRAM



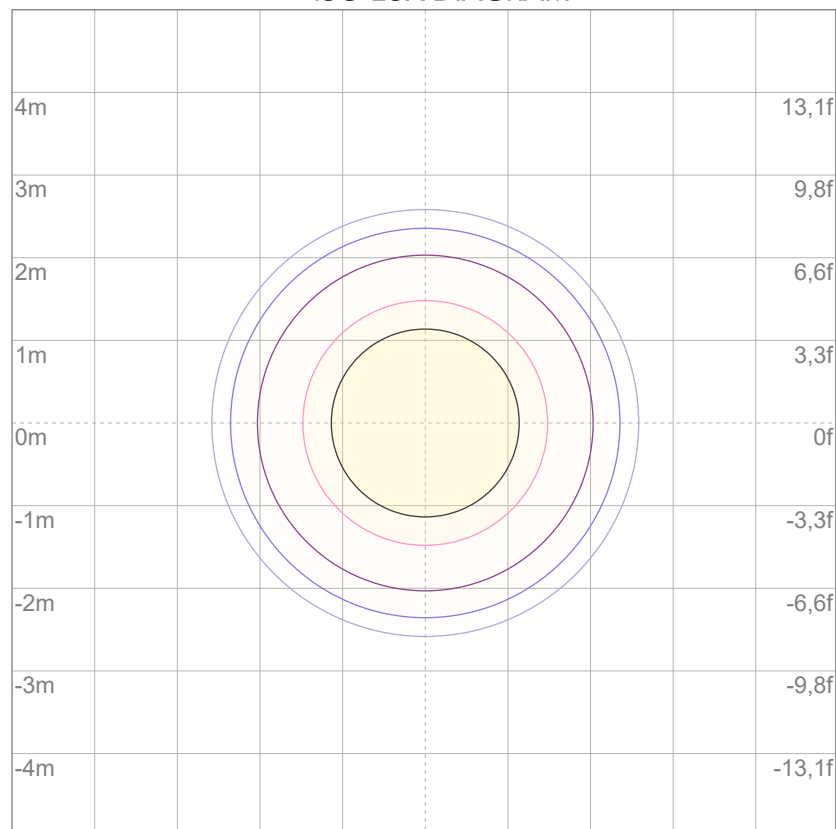
10%	5188 cd
20%	10376 cd
30%	15564 cd
40%	20751 cd
50%	25939 cd
60%	31127 cd
70%	36315 cd
80%	41503 cd

Conditions:

Number of c-planes: 4

Candela at center: 51878 cd

ISO LUX DIAGRAM



3%	15,6 lx
5%	25,9 lx
10%	51,9 lx
30%	156 lx
50%	259 lx

Conditions:

Number of c-planes: 4

Lux at center: 519 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

2992 lm

Peak candela output:

8690 cd

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 25° Filter

Target:

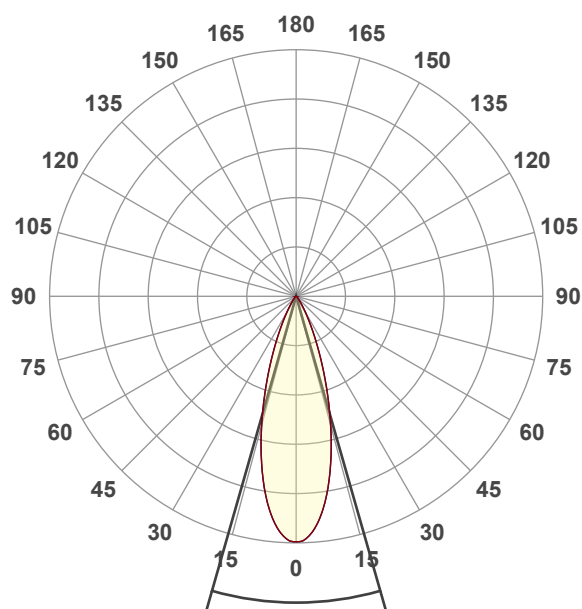
Green

Operator:

Paolo Carvone

Date and time:

12/10/2022 16:33:13

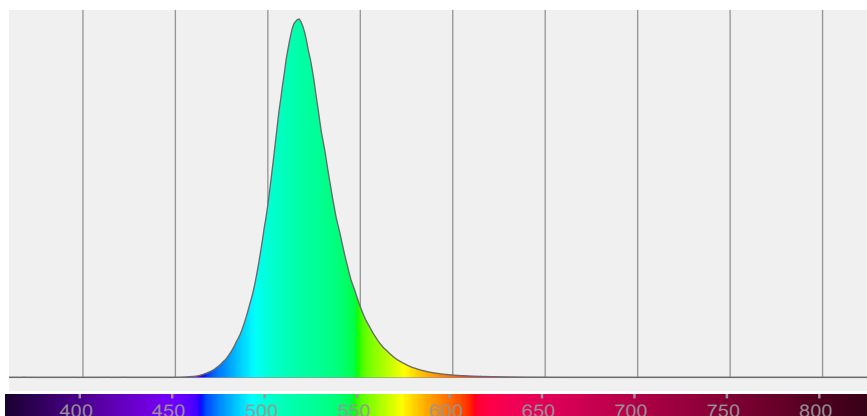


Beam angle 50%: 31,9°

Field angle 10%: 56,7°

Cut off angle 2.5%: 73,3°

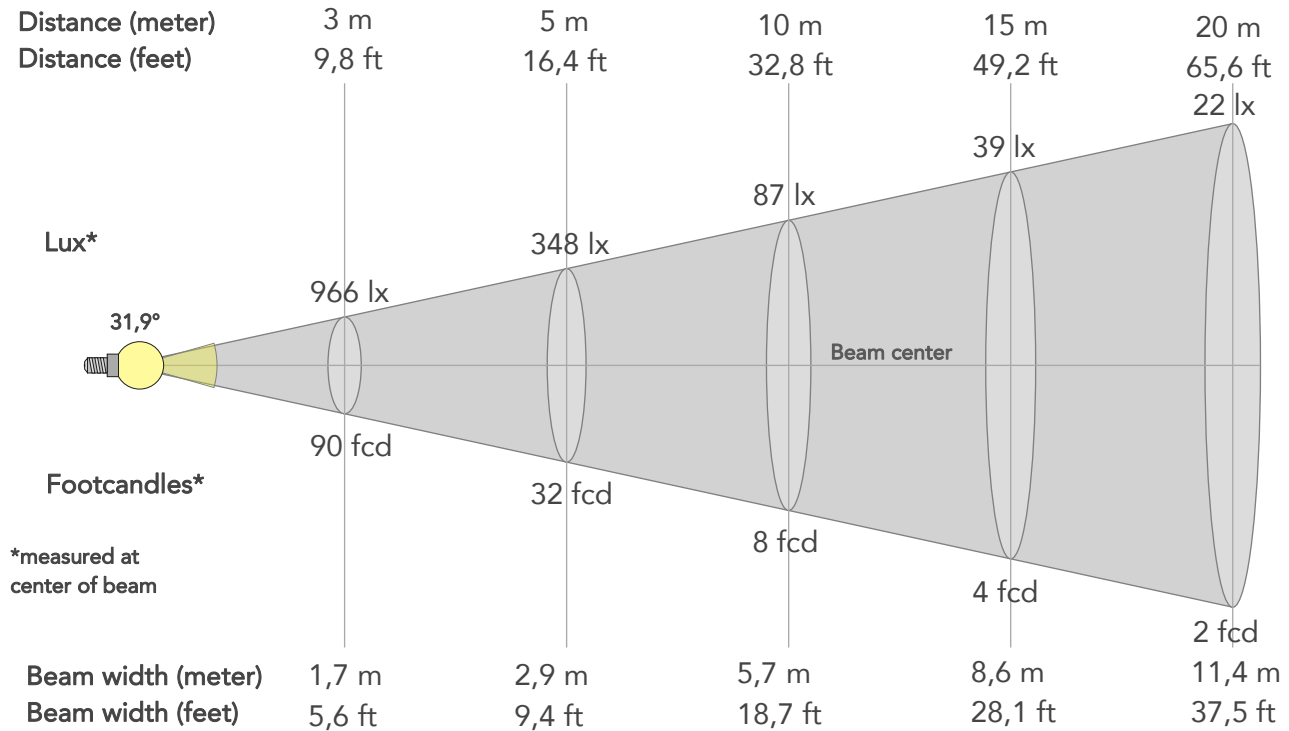
Spectra



BEAM DETAILS



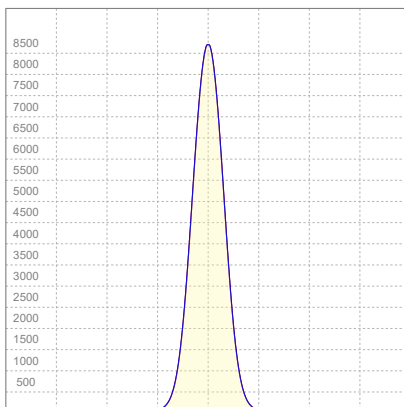
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,9°	56,7°	73,3°	99,7%	98,2%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	8690lx	2172lx	966lx	543lx	348lx	154lx	87lx	39lx	22lx	14lx	10lx	5lx	3lx
Footcand.	807fcd	202fcd	90fcd	50fcd	32fcd	14fcd	8fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,3m	2,9m	4,3m	5,7m	8,6m	11,4m	14,3m	17,1m	22,9m	28,6m
Beam wid.	1,9ft	3,8ft	5,6ft	7,5ft	9,4ft	14,1ft	18,7ft	28,1ft	37,5ft	46,9ft	56,2ft	75ft	93,7ft

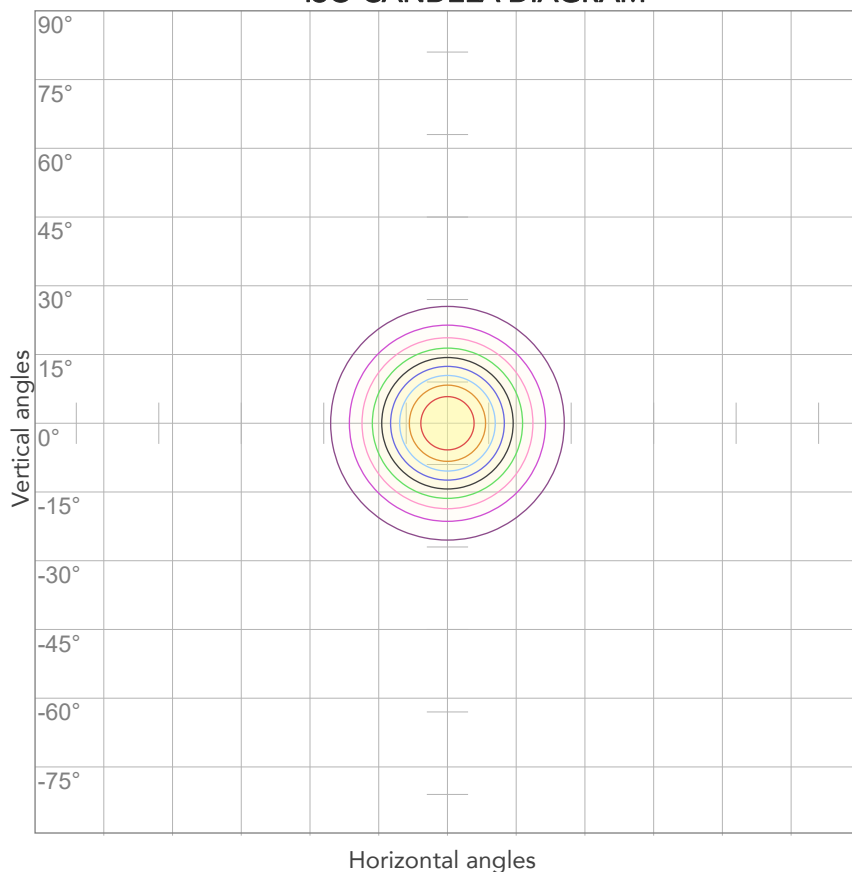
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,348A	71,5W	42lm/W
Power FC			
0,92			

ISO CANDELA DIAGRAM



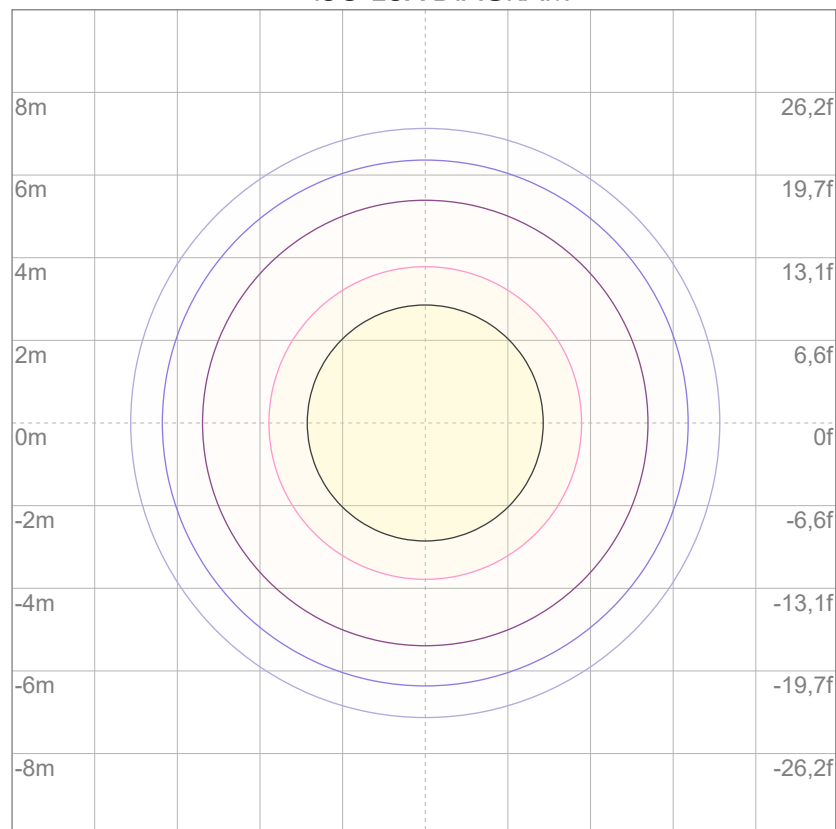
10%	869 cd
20%	1738 cd
30%	2607 cd
40%	3476 cd
50%	4345 cd
60%	5214 cd
70%	6083 cd
80%	6952 cd

Conditions:

Number of c-planes: 4

Candela at center: 8690 cd

ISO LUX DIAGRAM



3%	2,61 lx
5%	4,34 lx
10%	8,69 lx
30%	26,1 lx
50%	43,4 lx

Conditions:

Number of c-planes: 4

Lux at center: 86,9 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

3007 lm

Peak candela output:

4272 cd

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 40° Filter

Target:

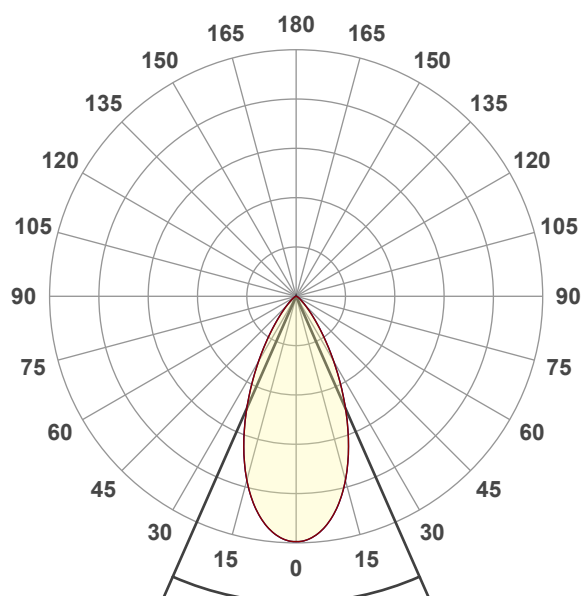
Green

Operator:

Paolo Carvone

Date and time:

12/10/2022 16:38:55

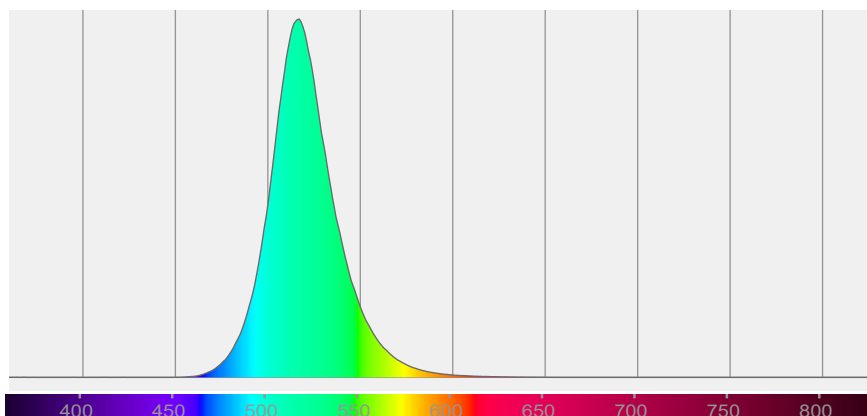


Beam angle 50%: 47,5°

Field angle 10%: 80,5°

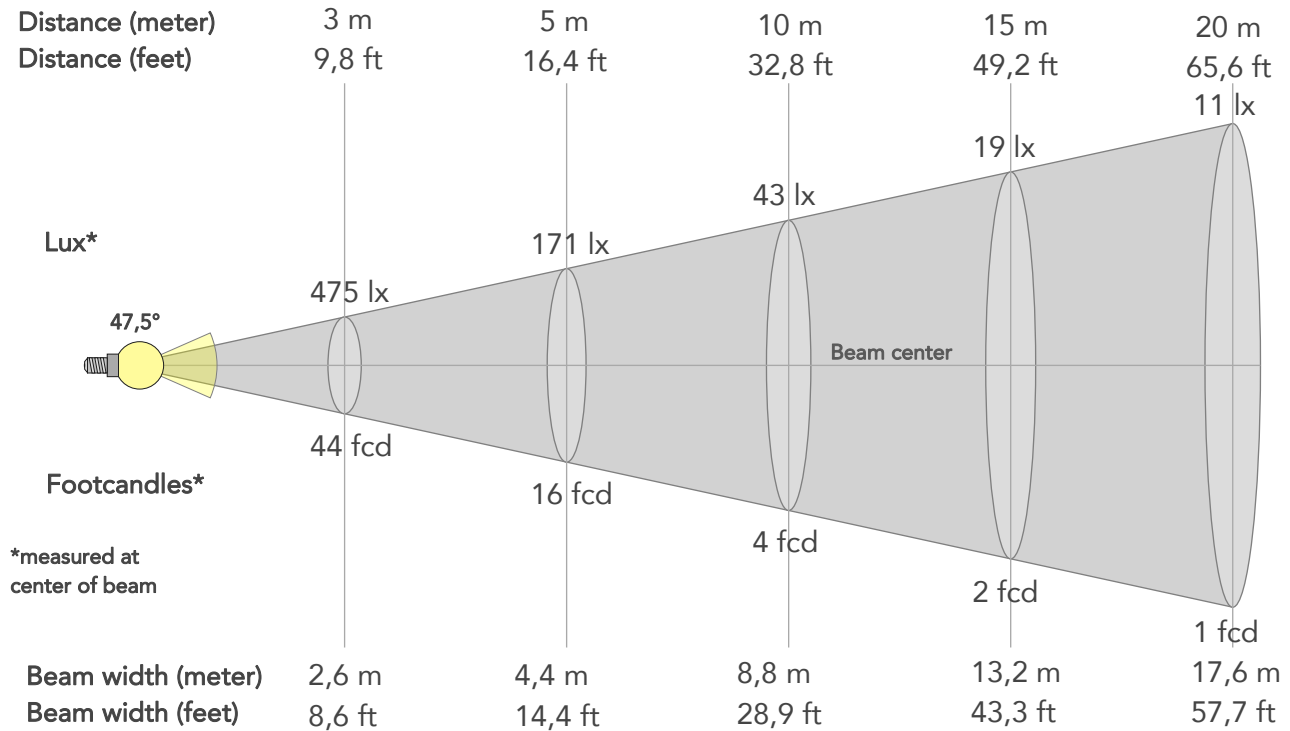
Cut off angle 2.5%: 104,1°

Spectra



BEAM DETAILS

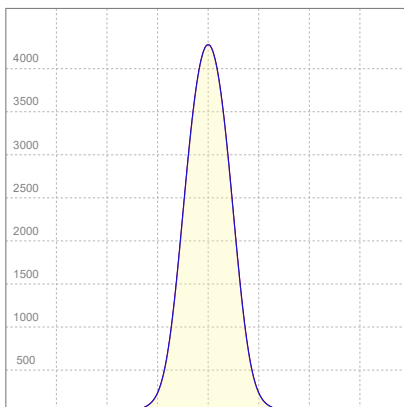
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
47,5°	80,5°	104,1°	98,6%	93,7%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	4272lx	1068lx	475lx	267lx	171lx	76lx	43lx	19lx	11lx	7lx	5lx	3lx	2lx
Footcand.	397fcd	99fcd	44fcd	25fcd	16fcd	7fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,9m	1,8m	2,6m	3,5m	4,4m	6,6m	8,8m	13,2m	17,6m	22m	26,4m	35,2m	44m
Beam wid.	2,9ft	5,8ft	8,6ft	11,5ft	14,4ft	21,7ft	28,9ft	43,3ft	57,7ft	72,2ft	86,6ft	115,5ft	144,3ft

LINEAR DISTRIBUTION DIAGRAM

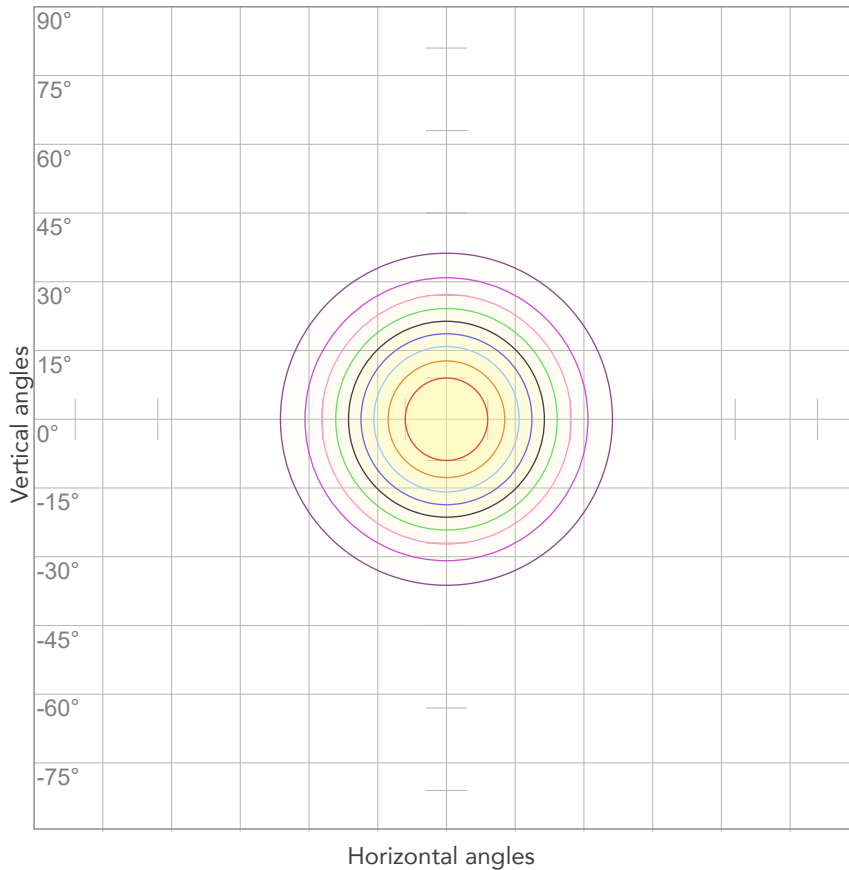


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,346A	71,4W	42lm/W

Power FC
0,91

ISO CANDELA DIAGRAM



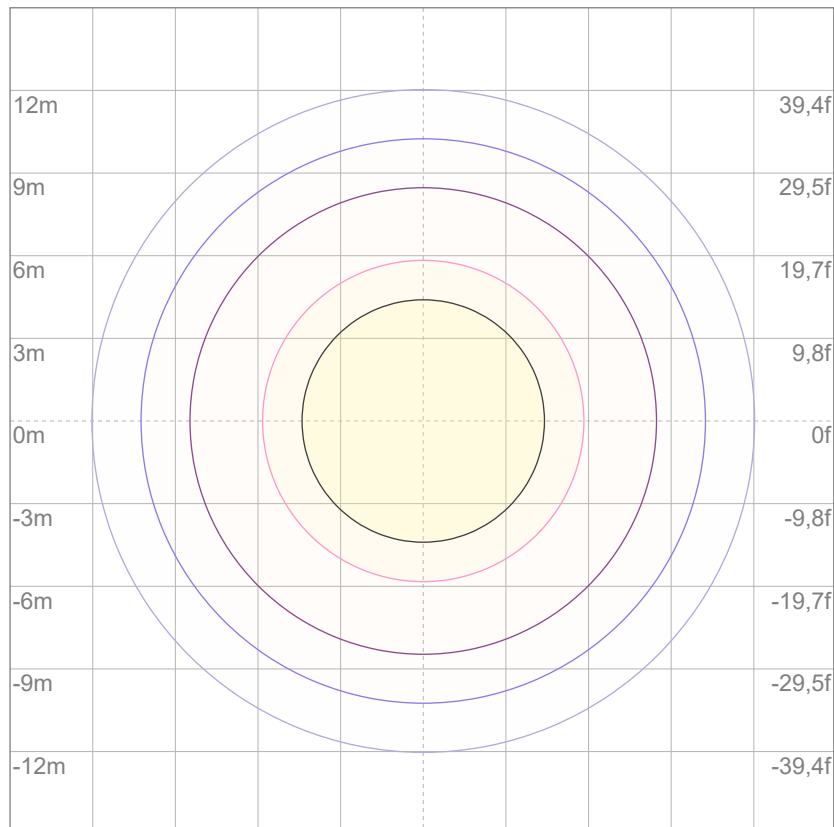
10%	427 cd
20%	854 cd
30%	1282 cd
40%	1709 cd
50%	2136 cd
60%	2563 cd
70%	2990 cd
80%	3418 cd

Conditions:

Number of c-planes: 4

Candela at center: 4272 cd

ISO LUX DIAGRAM



3%	1,28 lx
5%	2,14 lx
10%	4,27 lx
30%	12,8 lx
50%	21,4 lx

Conditions:

Number of c-planes: 4

Lux at center: 42,7 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4698 lm

Peak candela output:

9044 cd

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic + 10°x60° Filter

Target:

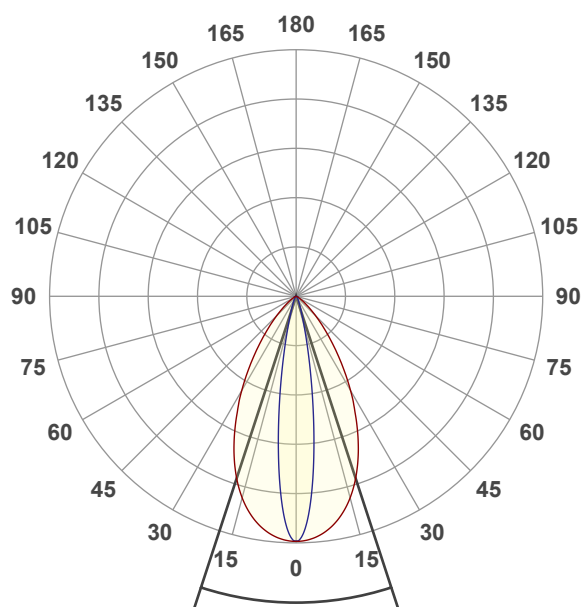
Green

Operator:

Paolo Carvone

Date and time:

12/10/2022 16:26:50

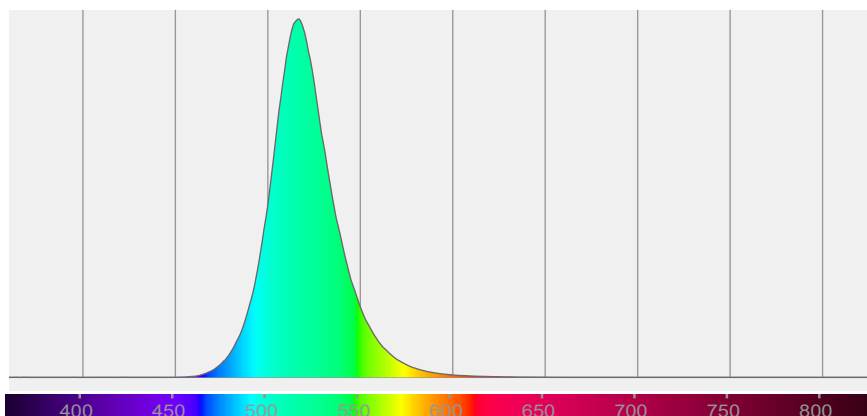


Beam angle 50%: 36,2°

Field angle 10%: 62,2°

Cut off angle 2.5%: 81,7°

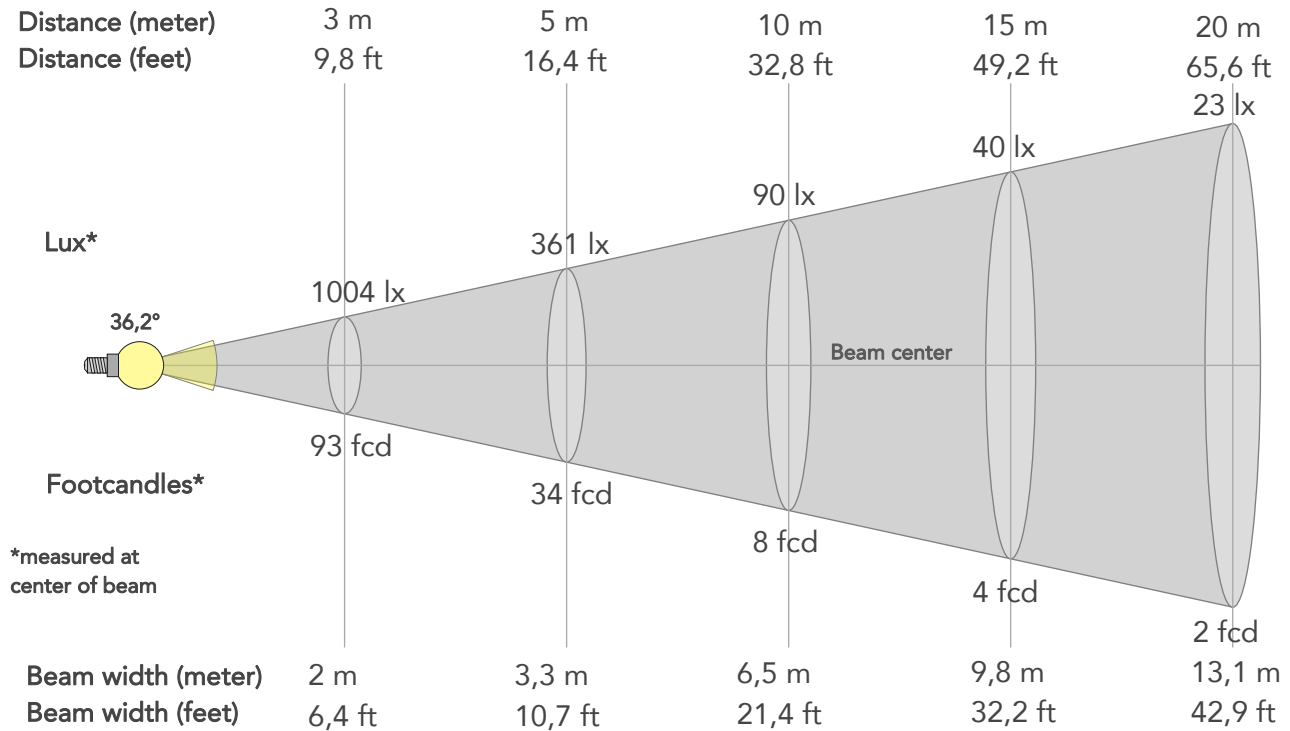
Spectra



BEAM DETAILS



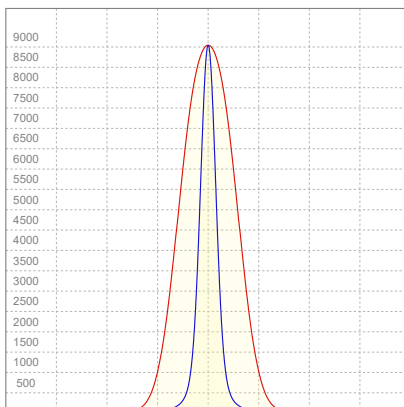
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
36,2°	62,2°	81,7°	99,1%	92,8%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	9033lx	2258lx	1004lx	565lx	361lx	161lx	90lx	40lx	23lx	14lx	10lx	6lx	4lx
Footcand.	839fcd	210fcd	93fcd	52fcd	34fcd	15fcd	8fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,7m	1,3m	2m	2,6m	3,3m	4,9m	6,5m	9,8m	13,1m	16,3m	19,6m	26,1m	32,7m
Beam wid.	2,2ft	4,3ft	6,4ft	8,6ft	10,7ft	16,1ft	21,4ft	32,2ft	42,9ft	53,6ft	64,3ft	85,8ft	107,2ft

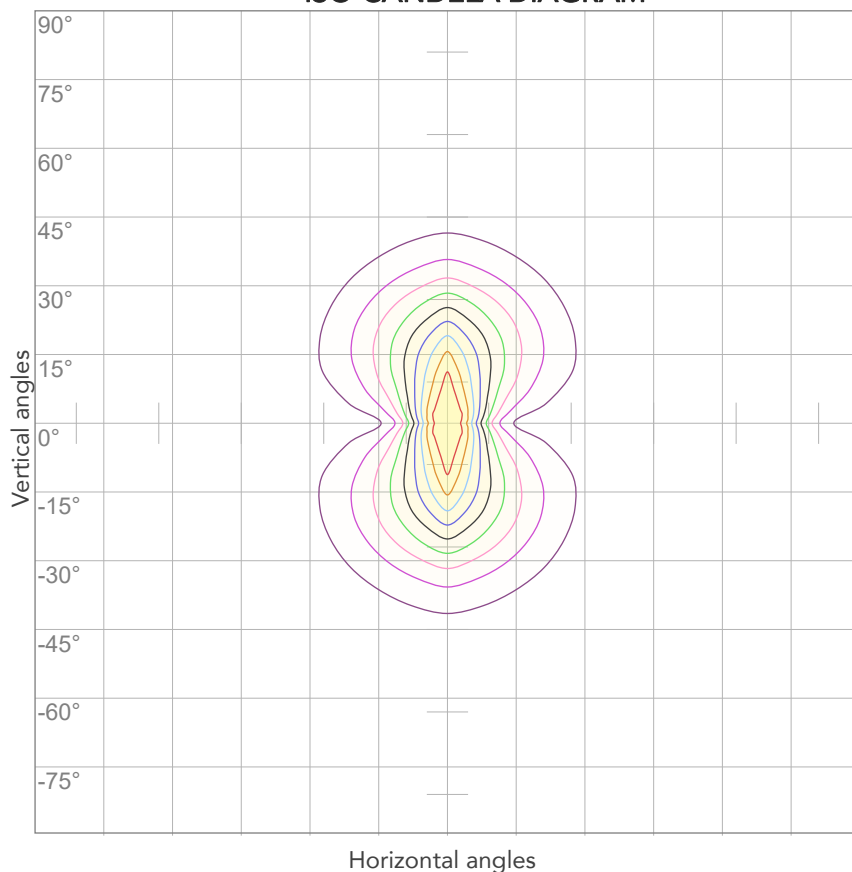
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,345A	71,5W	66lm/W
Power FC			
0,91			

ISO CANDELA DIAGRAM



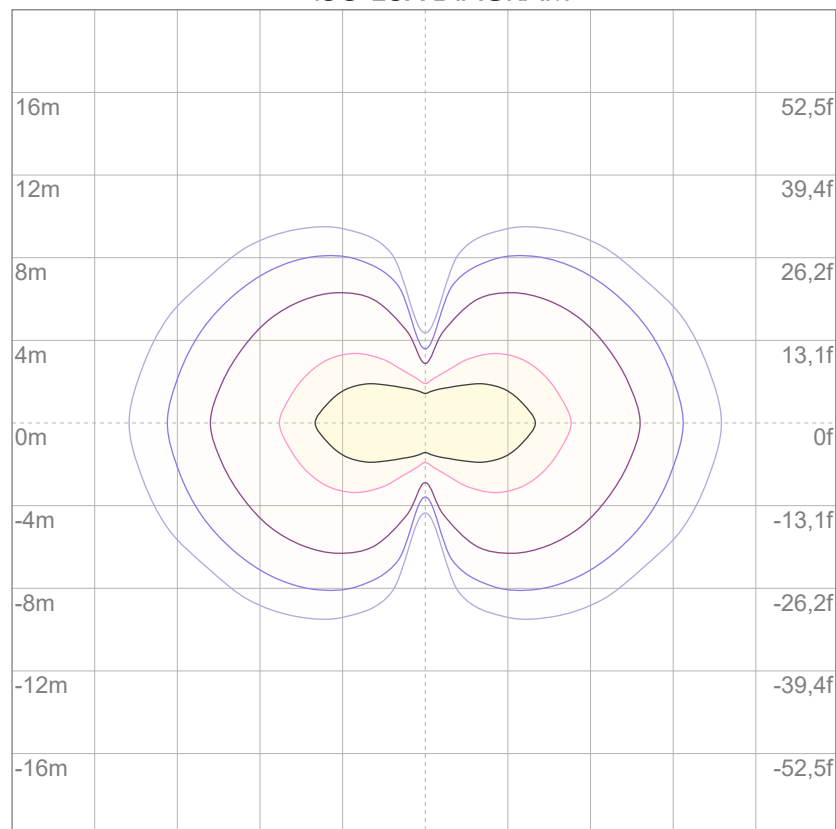
10%	903 cd
20%	1807 cd
30%	2710 cd
40%	3613 cd
50%	4517 cd
60%	5420 cd
70%	6323 cd
80%	7226 cd

Conditions:

Number of c-planes: 4

Candela at center: 9033 cd

ISO LUX DIAGRAM



3%	2,71 lx
5%	4,52 lx
10%	9,03 lx
30%	27,1 lx
50%	45,2 lx

Conditions:

Number of c-planes: 4

Lux at center: 90,3 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

680 lm

Peak candela output:

10935 cd

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic (No Filter)

Target:

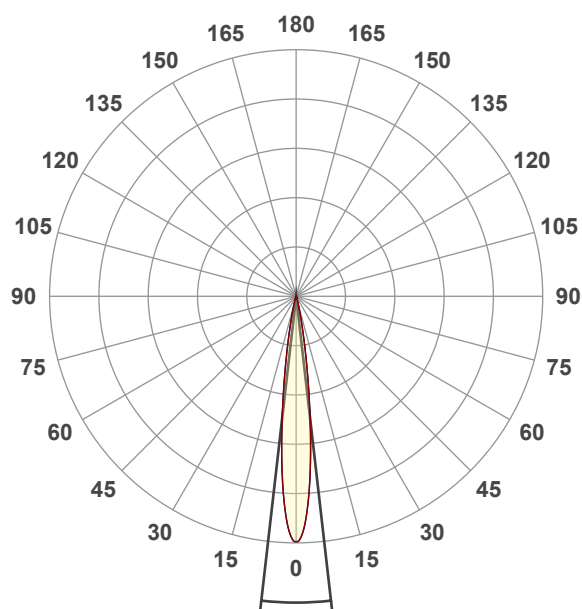
Blue

Operator:

Paolo Carvone

Date and time:

12/10/2022 16:45:47

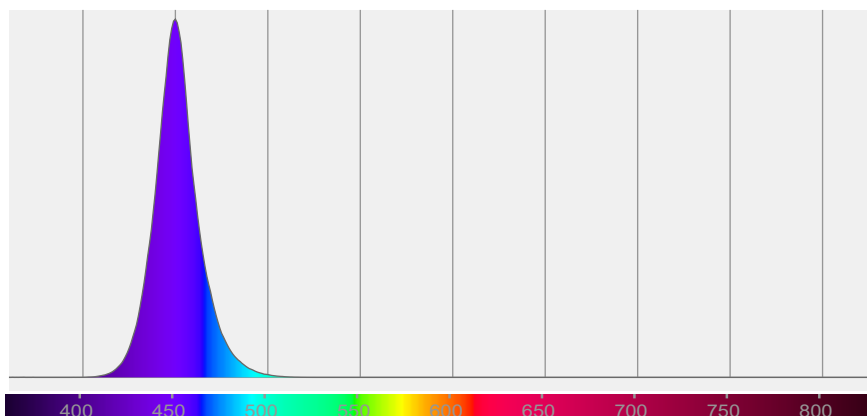


Beam angle 50%: 13,1°

Field angle 10%: 23,7°

Cut off angle 2.5%: 31°

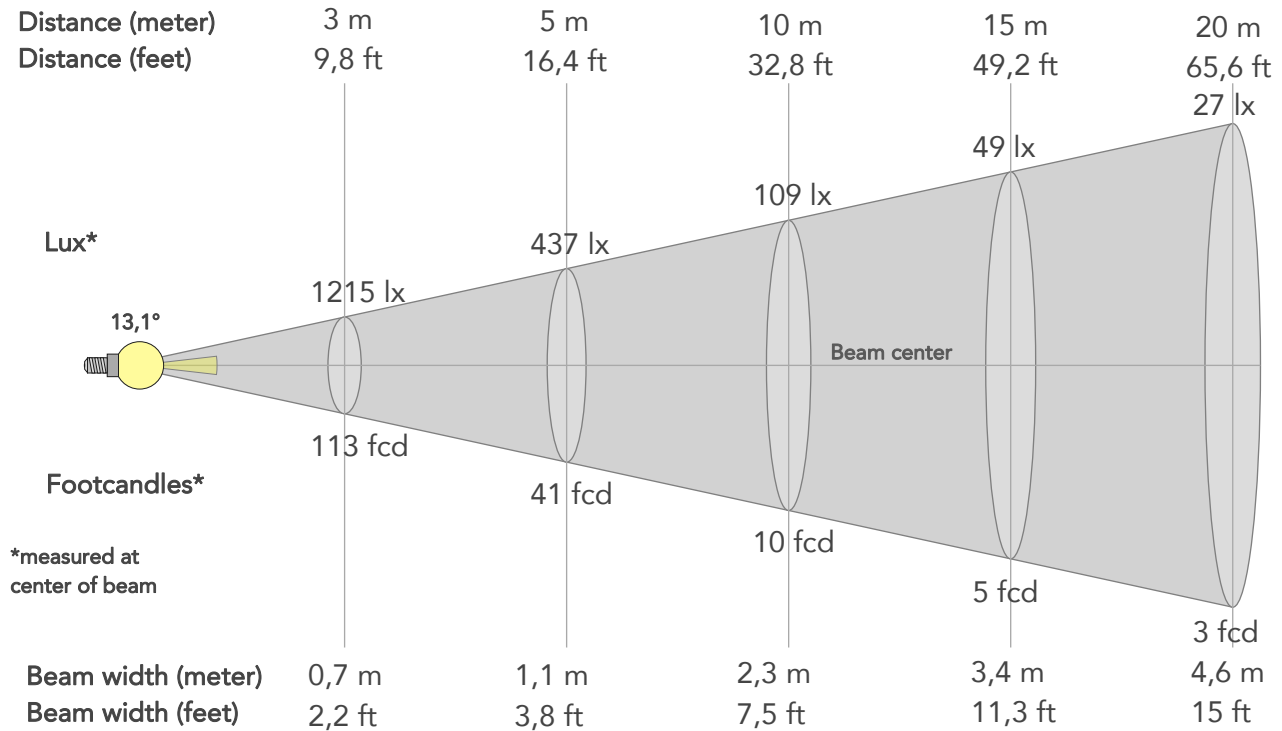
Spectra



BEAM DETAILS



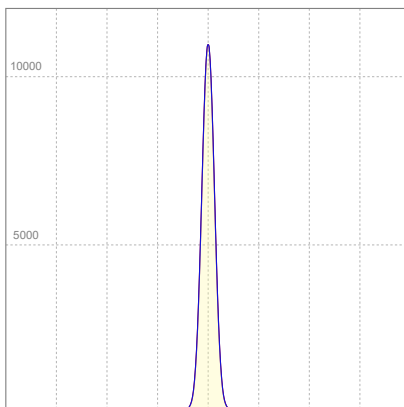
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
13,1°	23,7°	31°	100,0%	99,8%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	10935lx	2734lx	1215lx	683lx	437lx	194lx	109lx	49lx	27lx	17lx	12lx	7lx	4lx
Footcand.	1016fcd	254fcd	113fcd	63fcd	41fcd	18fcd	10fcd	5fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,2m	0,5m	0,7m	0,9m	1,1m	1,7m	2,3m	3,4m	4,6m	5,7m	6,9m	9,2m	11,4m
Beam wid.	0,8ft	1,5ft	2,2ft	3ft	3,8ft	5,6ft	7,5ft	11,3ft	15ft	18,8ft	22,5ft	30ft	37,5ft

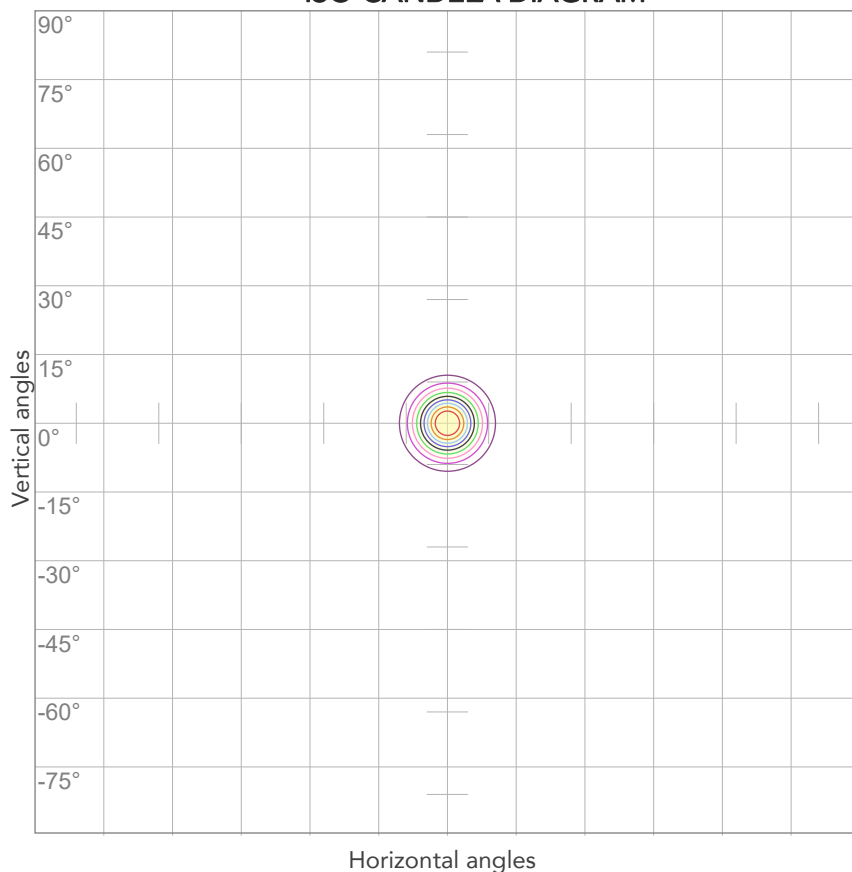
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,343A	70,6W	10lm/W
Power FC			
0,91			

ISO CANDELA DIAGRAM



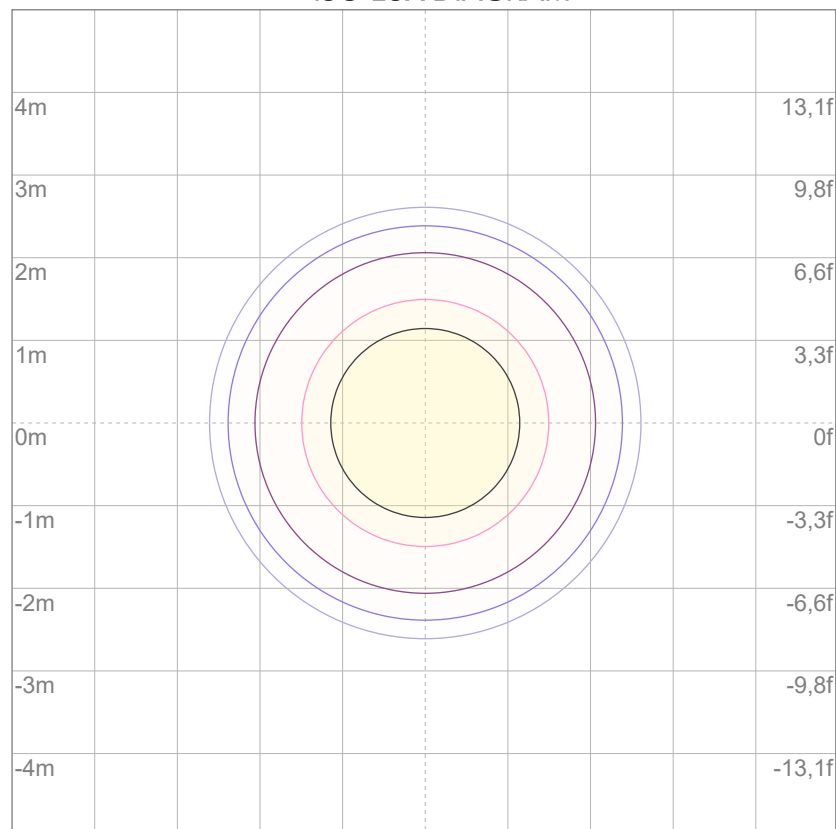
10%	1093 cd
20%	2187 cd
30%	3280 cd
40%	4374 cd
50%	5467 cd
60%	6561 cd
70%	7654 cd
80%	8748 cd

Conditions:

Number of c-planes: 4

Candela at center: 10935 cd

ISO LUX DIAGRAM



3%	3,28 lx
5%	5,47 lx
10%	10,9 lx
30%	32,8 lx
50%	54,7 lx

Conditions:

Number of c-planes: 4

Lux at center: 109 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

659 lm

Peak candela output:

1865 cd

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic + 25° Filter

Target:

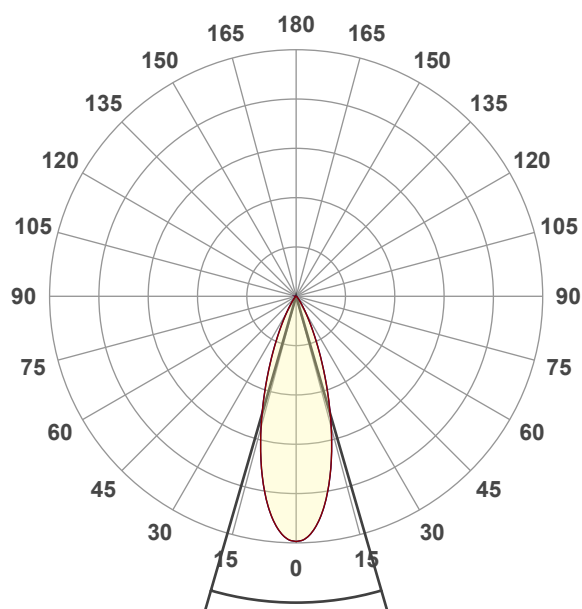
Blue

Operator:

Paolo Carvone

Date and time:

12/10/2022 16:51:44

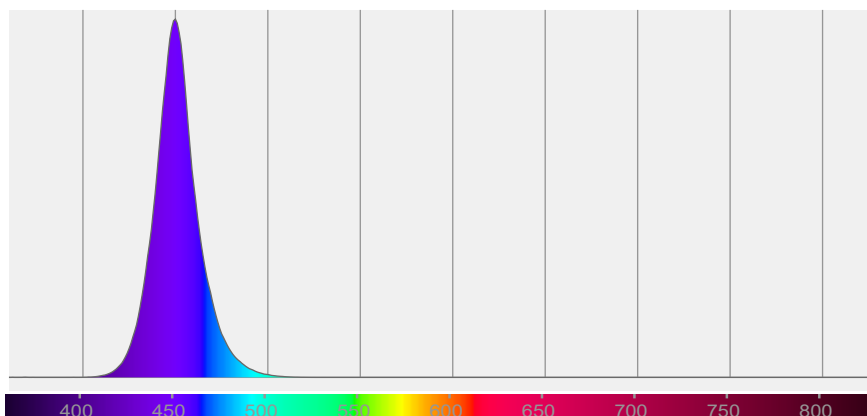


Beam angle 50%: 32,3°

Field angle 10%: 57,2°

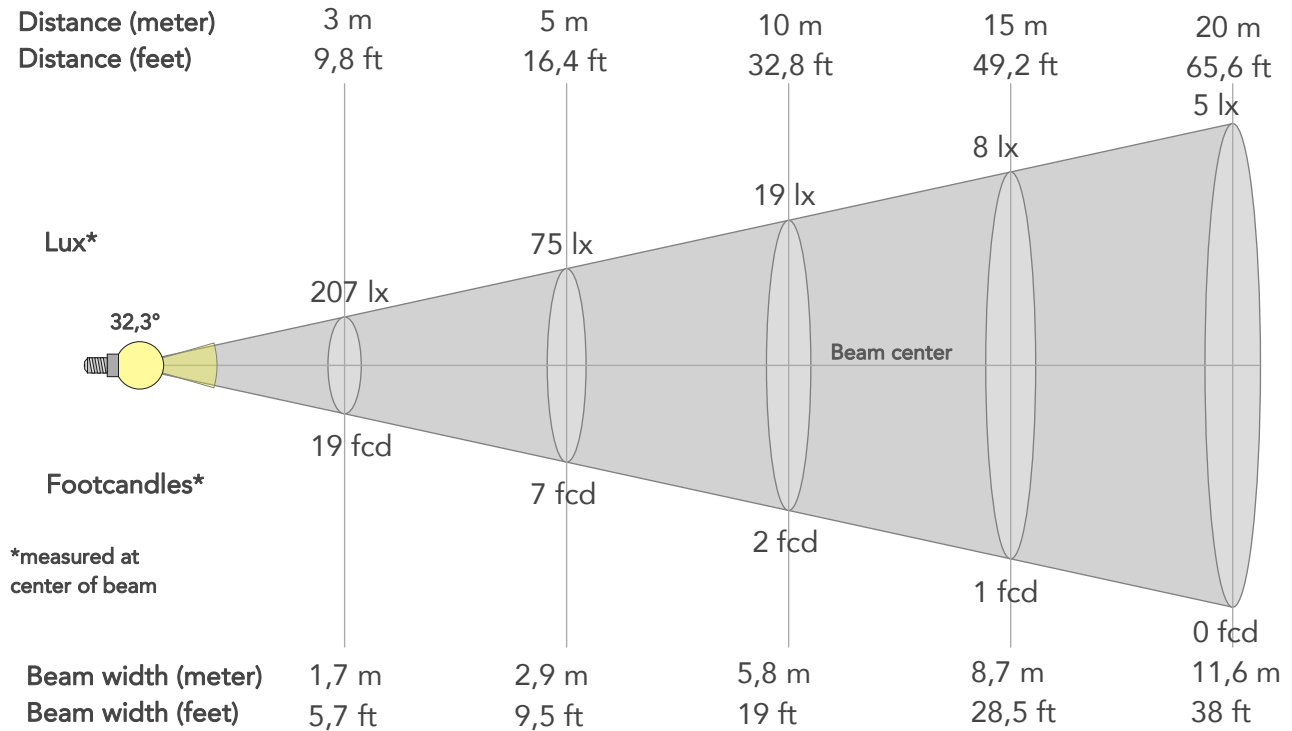
Cut off angle 2.5%: 74,1°

Spectra



BEAM DETAILS

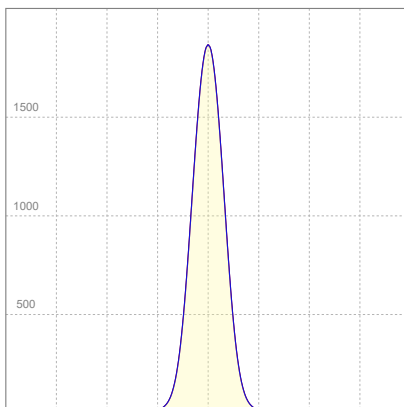
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
32,3°	57,2°	74,1°	99,5%	97,7%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	1865lx	466lx	207lx	117lx	75lx	33lx	19lx	8lx	5lx	3lx	2lx	1lx	1lx
Footcand.	173fcd	43fcd	19fcd	11fcd	7fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,2m	1,7m	2,3m	2,9m	4,3m	5,8m	8,7m	11,6m	14,5m	17,4m	23,2m	29m
Beam wid.	1,9ft	3,8ft	5,7ft	7,6ft	9,5ft	14,3ft	19ft	28,5ft	38ft	47,5ft	57ft	76ft	95ft

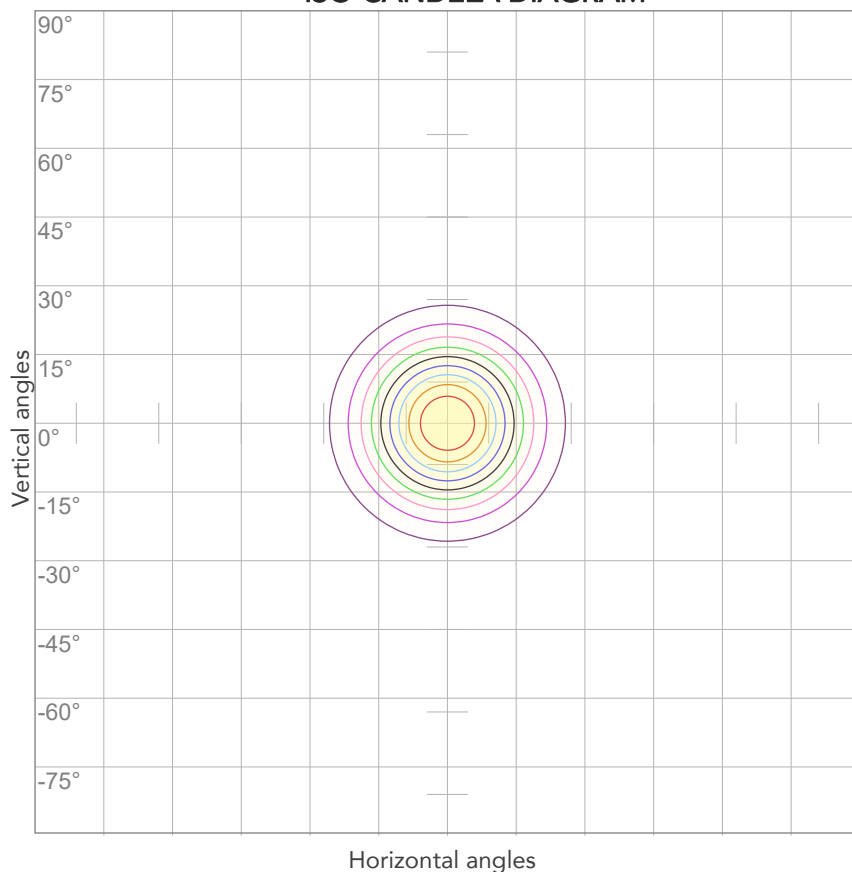
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,343A	70,6W	9lm/W
Power FC			
0,91			

ISO CANDELA DIAGRAM



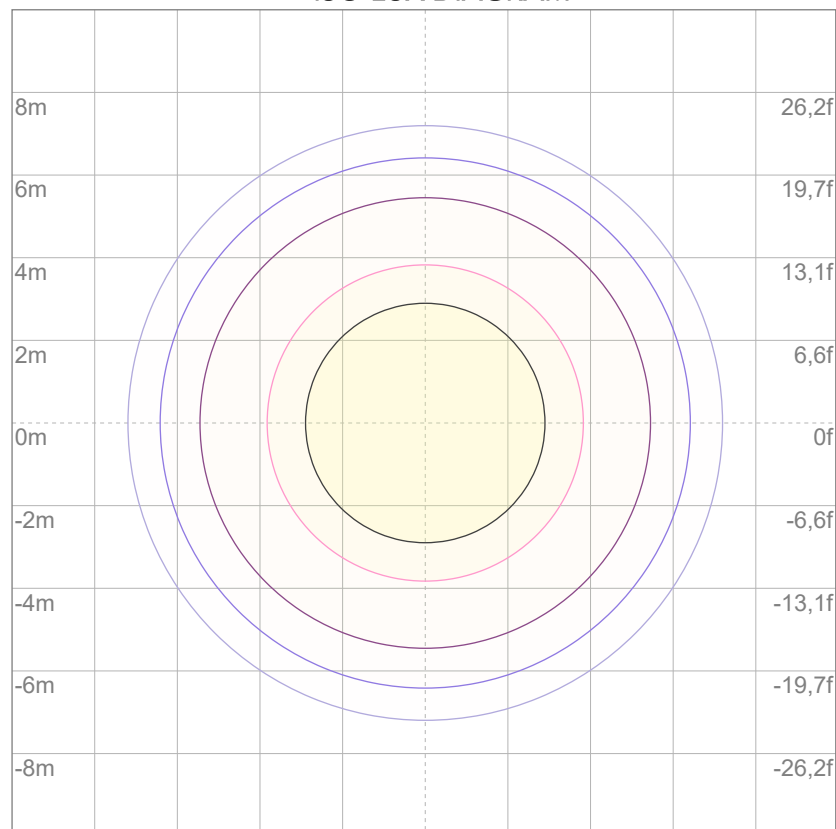
10%	186 cd
20%	373 cd
30%	559 cd
40%	746 cd
50%	932 cd
60%	1119 cd
70%	1305 cd
80%	1492 cd

Conditions:

Number of c-planes: 4

Candela at center: 1865 cd

ISO LUX DIAGRAM



3%	0,559 lx
5%	0,932 lx
10%	1,86 lx
30%	5,59 lx
50%	9,32 lx

Conditions:

Number of c-planes: 4

Lux at center: 18,6 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

658 lm

Peak candela output:

919 cd

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic + 40° Filter

Target:

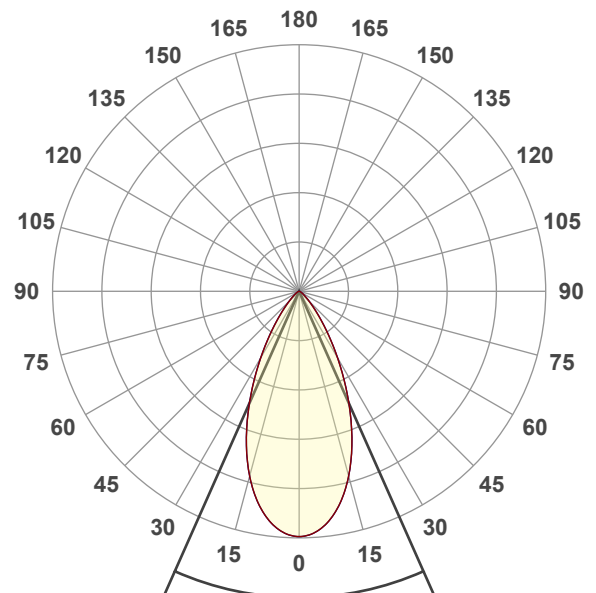
Blue

Operator:

Paolo Carvone

Date and time:

12/10/2022 16:48:26

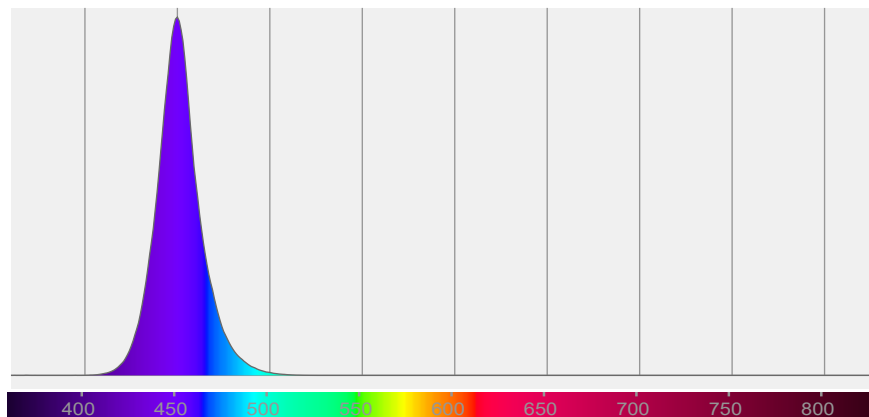


Beam angle 50%: 47,9°

Field angle 10%: 81,2°

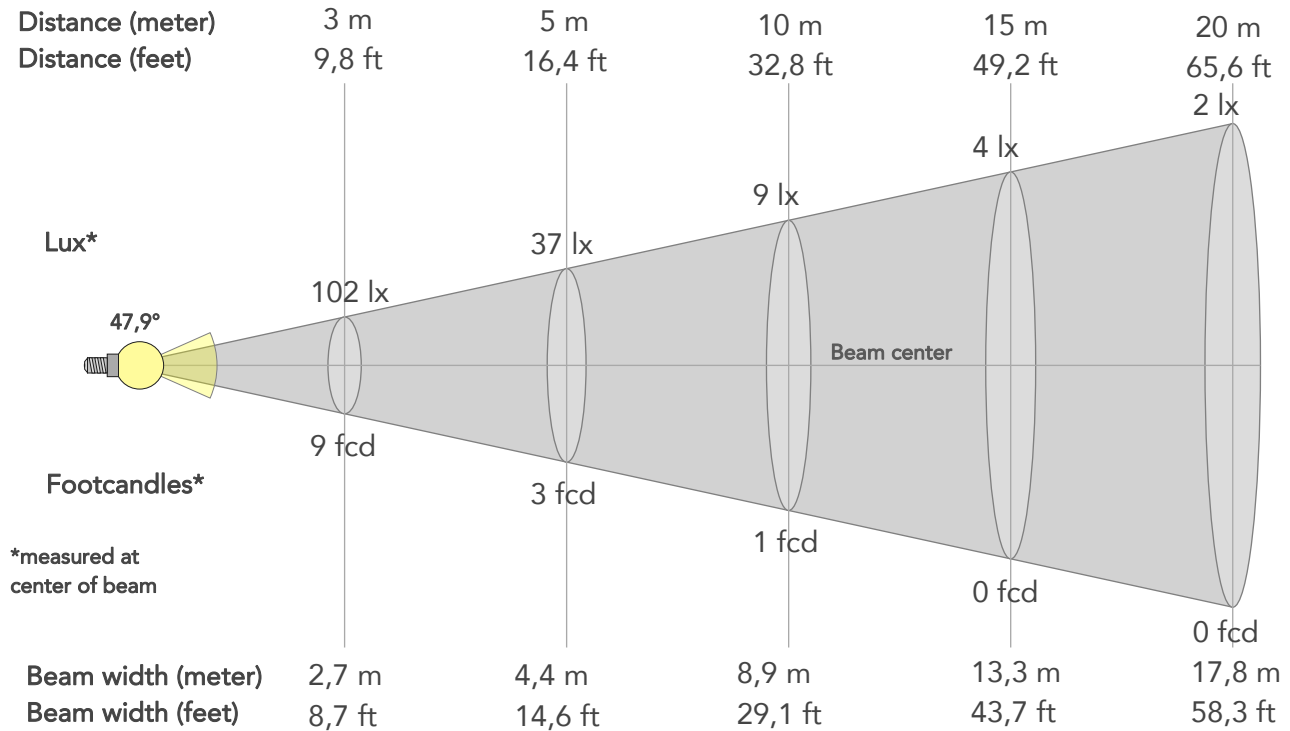
Cut off angle 2.5%: 104,9°

Spectra



BEAM DETAILS

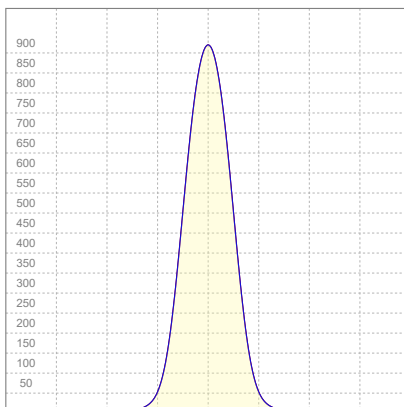
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
47,9°	81,2°	104,9°	98,4%	93,4%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	919lx	230lx	102lx	57lx	37lx	16lx	9lx	4lx	2lx	1lx	1lx	1lx	0lx
Footcand.	85fcd	21fcd	9fcd	5fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,9m	1,8m	2,7m	3,6m	4,4m	6,7m	8,9m	13,3m	17,8m	22,2m	26,6m	35,5m	44,4m
Beam wid.	2,9ft	5,9ft	8,7ft	11,6ft	14,6ft	21,8ft	29,1ft	43,7ft	58,3ft	72,8ft	87,4ft	116,5ft	145,6ft

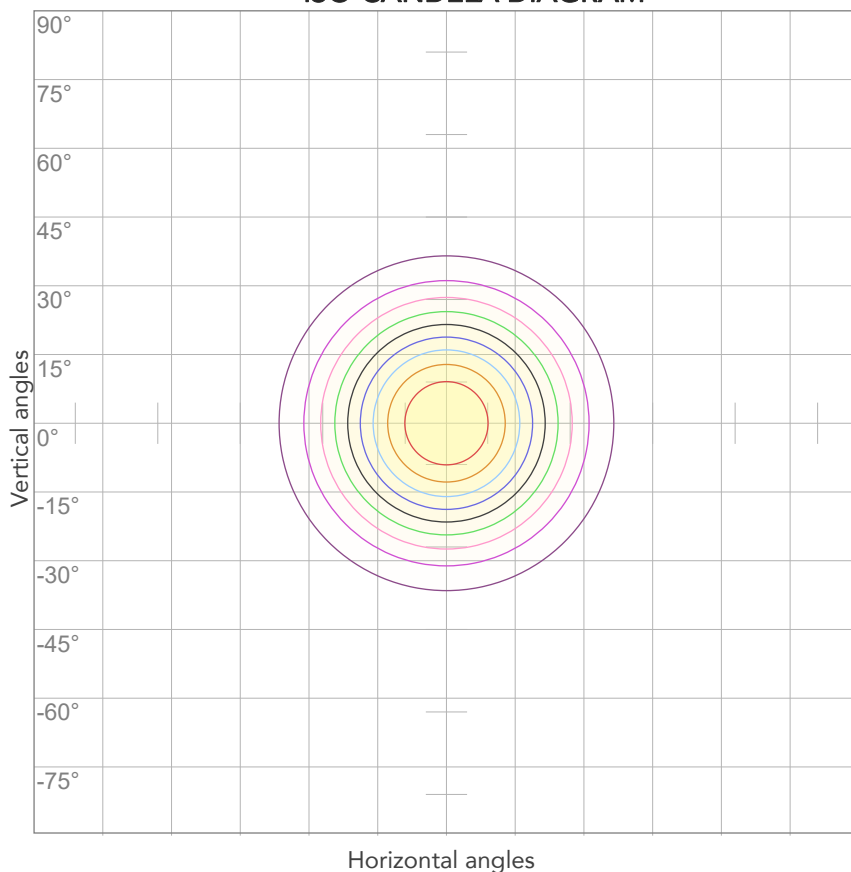
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,343A	70,6W	9lm/W
Power FC			
0,91			

ISO CANDELA DIAGRAM



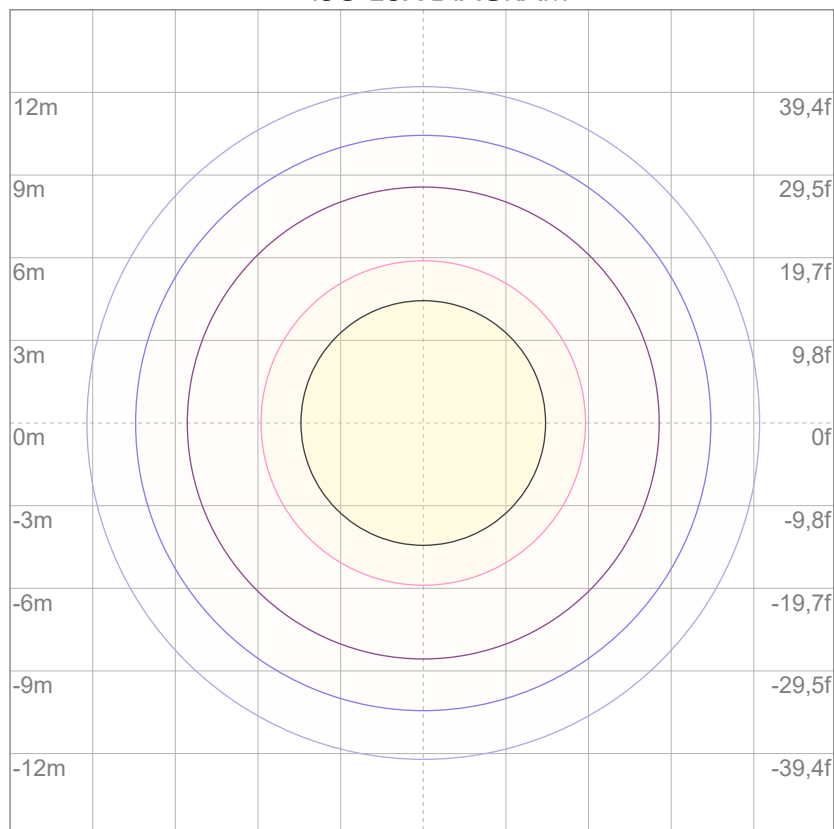
10%	92 cd
20%	184 cd
30%	276 cd
40%	368 cd
50%	460 cd
60%	552 cd
70%	643 cd
80%	735 cd

Conditions:

Number of c-planes: 4

Candela at center: 919 cd

ISO LUX DIAGRAM



3%	0,276 lx
5%	0,460 lx
10%	0,919 lx
30%	2,76 lx
50%	4,60 lx

Conditions:

Number of c-planes: 4

Lux at center: 9,19 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

1020 lm

Peak candela output:

1934 cd

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 10°x60° Filter

Target:

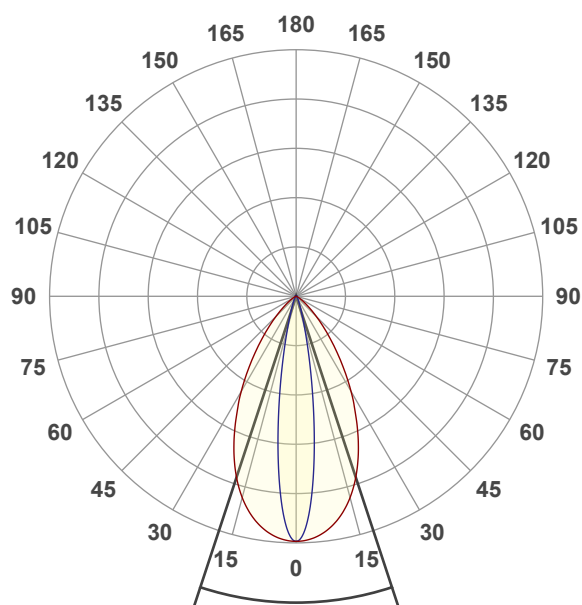
Blue

Operator:

Paolo Carvone

Date and time:

12/10/2022 16:54:58

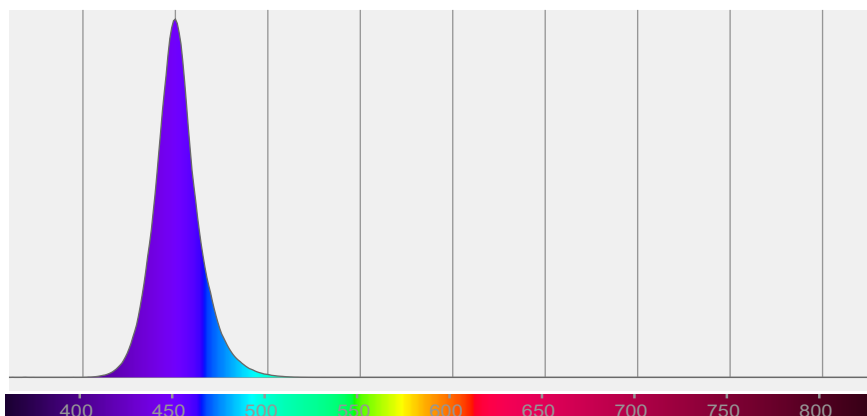


Beam angle 50%: 36,5°

Field angle 10%: 62,8°

Cut off angle 2.5%: 82,5°

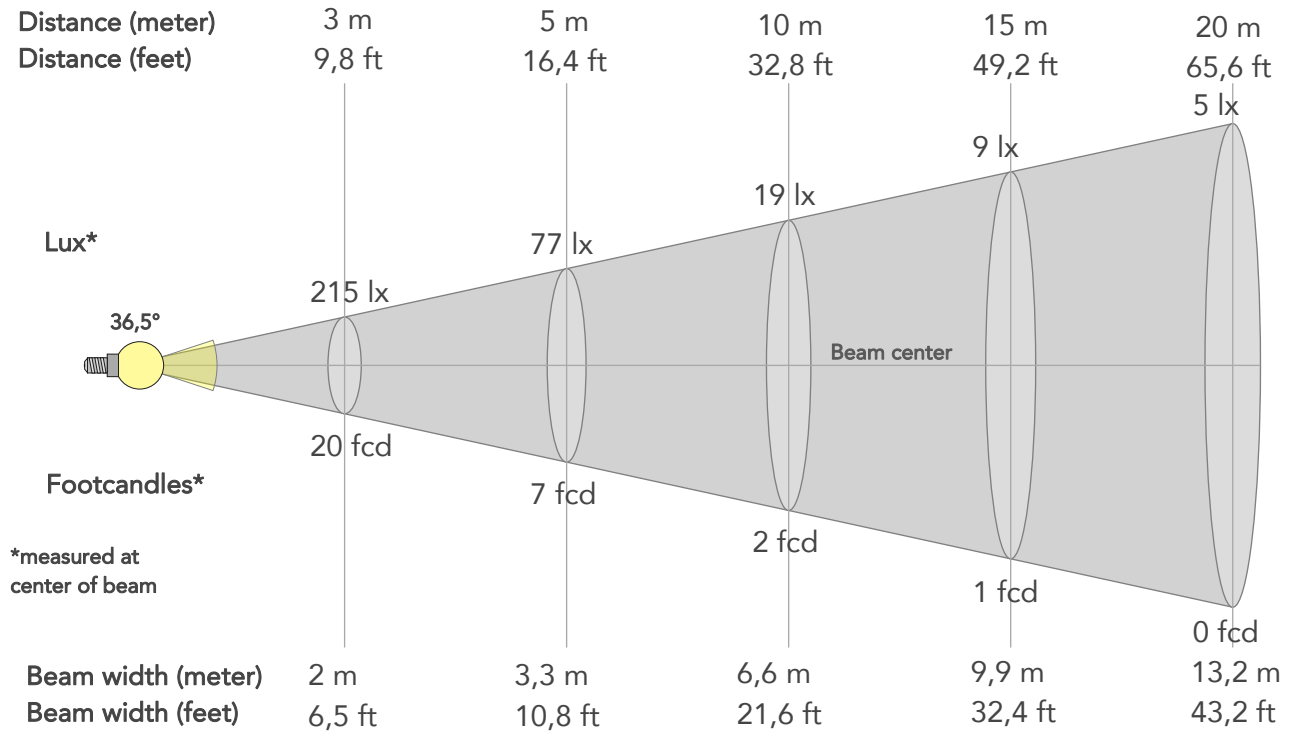
Spectra



BEAM DETAILS



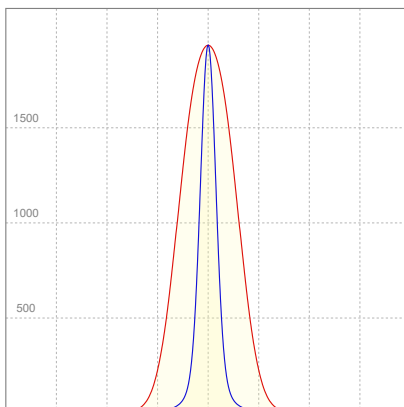
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
36,5°	62,8°	82,5°	98,9%	92,2%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	1933lx	483lx	215lx	121lx	77lx	34lx	19lx	9lx	5lx	3lx	2lx	1lx	1lx
Footcand.	180fcd	45fcd	20fcd	11fcd	7fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,7m	1,3m	2m	2,6m	3,3m	4,9m	6,6m	9,9m	13,2m	16,5m	19,8m	26,3m	32,9m
Beam wid.	2,2ft	4,3ft	6,5ft	8,6ft	10,8ft	16,2ft	21,6ft	32,4ft	43,2ft	54ft	64,8ft	86,4ft	108ft

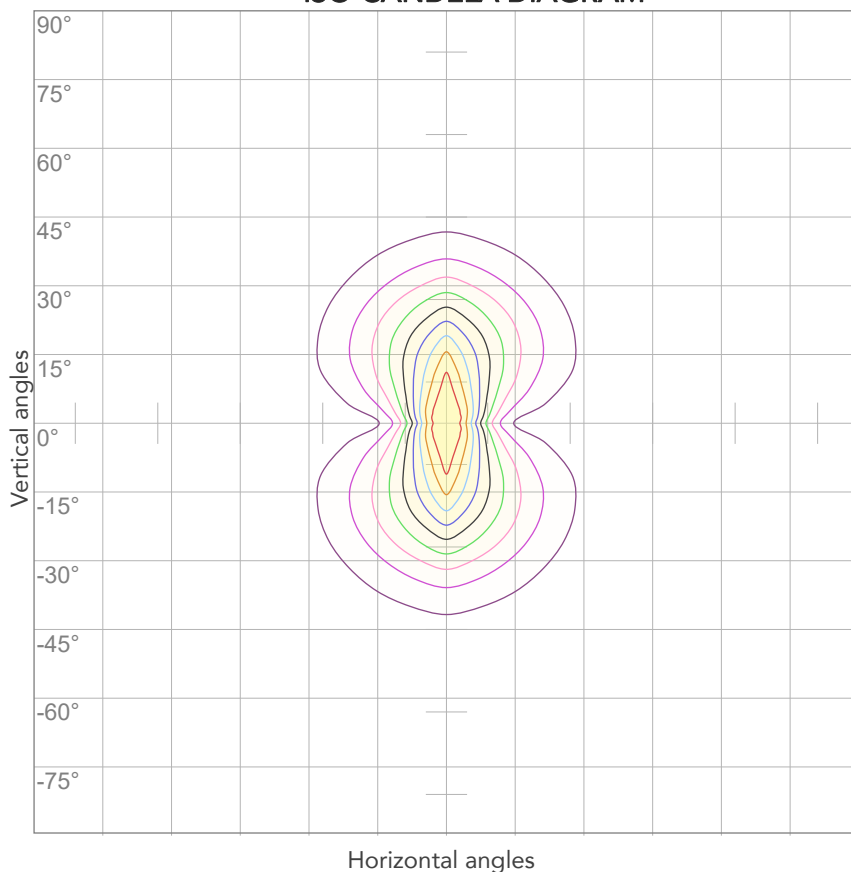
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,343A	70,7W	14lm/W
Power FC			
0,91			

ISO CANDELA DIAGRAM



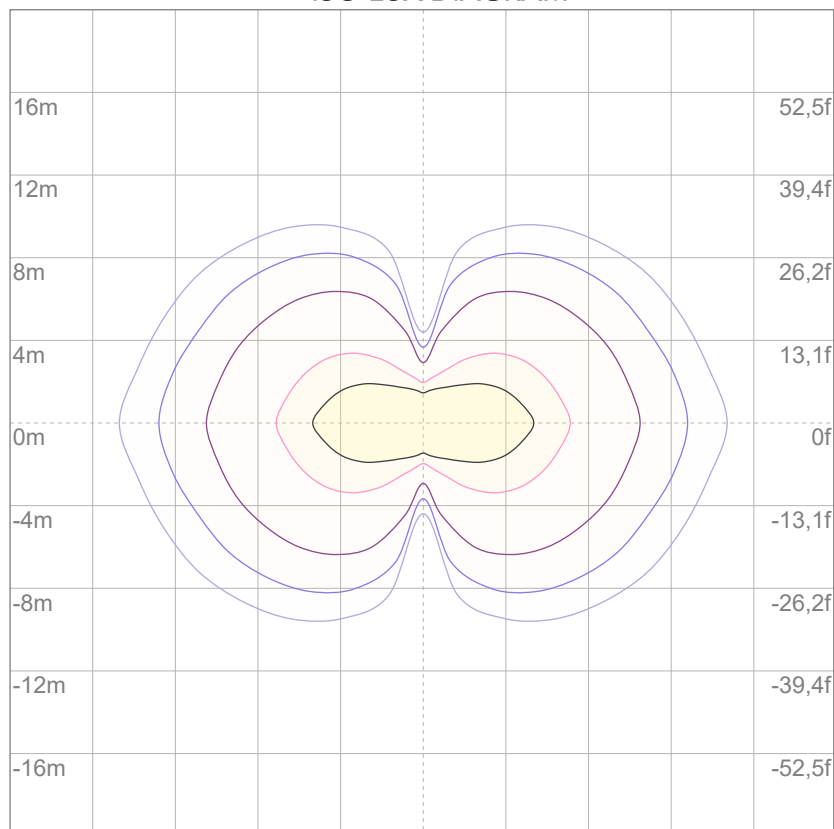
10%	193 cd
20%	387 cd
30%	580 cd
40%	773 cd
50%	967 cd
60%	1160 cd
70%	1353 cd
80%	1547 cd

Conditions:

Number of c-planes: 4

Candela at center: 1933 cd

ISO LUX DIAGRAM



3%	0,580 lx
5%	0,967 lx
10%	1,93 lx
30%	5,80 lx
50%	9,67 lx

Conditions:

Number of c-planes: 4

Lux at center: 19,3 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

3762 lm

Peak candela output:

64829 cd

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic (No Filter)

Target:

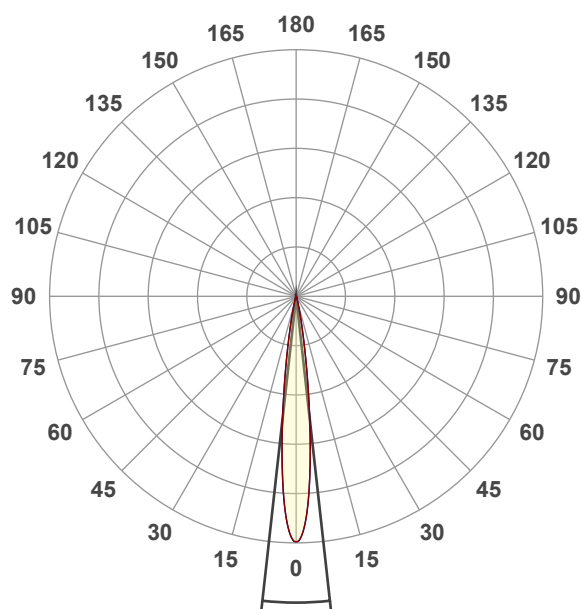
White

Operator:

Paolo Carvone

Date and time:

12/10/2022 18:52:54

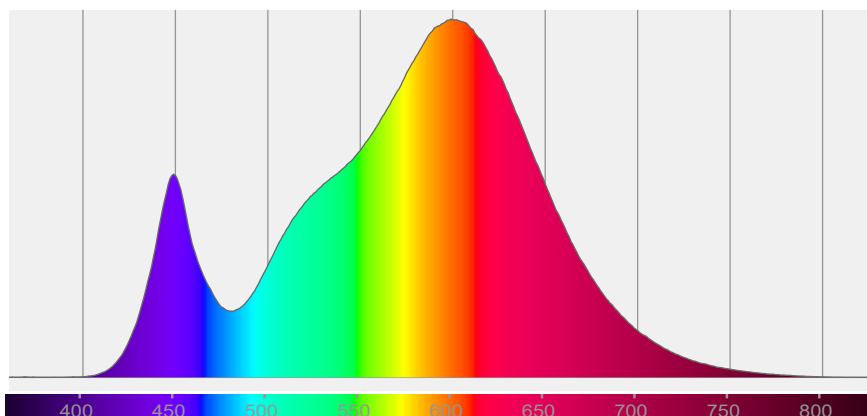


Beam angle 50%: 12,7°

Field angle 10%: 22,7°

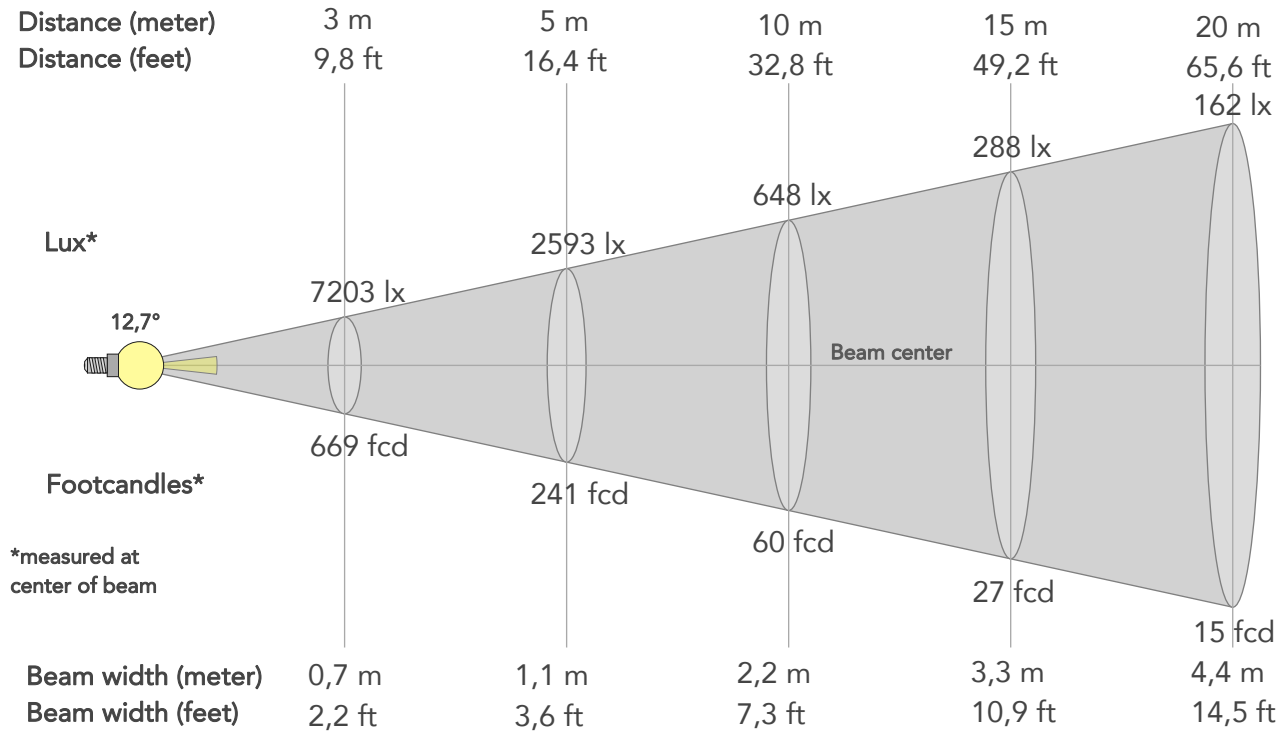
Cut off angle 2.5%: 30,4°

Spectra



BEAM DETAILS

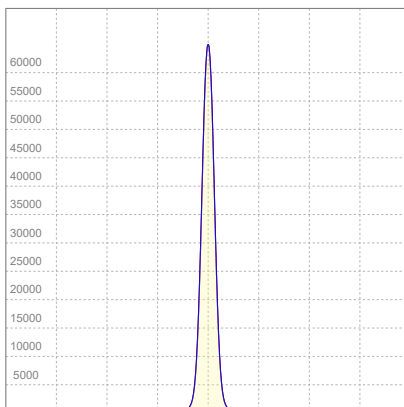
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
12,7°	22,7°	30,4°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	64829lx	16207lx	7203lx	4052lx	2593lx	1153lx	648lx	288lx	162lx	104lx	72lx	41lx	26lx
Footcand.	6023fcd	1506fcd	669fcd	376fcd	241fcd	107fcd	60fcd	27fcd	15fcd	10fcd	7fcd	4fcd	2fcd
Beam wid.	0,2m	0,4m	0,7m	0,9m	1,1m	1,7m	2,2m	3,3m	4,4m	5,5m	6,7m	8,9m	11,1m
Beam wid.	0,7ft	1,5ft	2,2ft	2,9ft	3,6ft	5,5ft	7,3ft	10,9ft	14,5ft	18,2ft	21,8ft	29,1ft	36,4ft

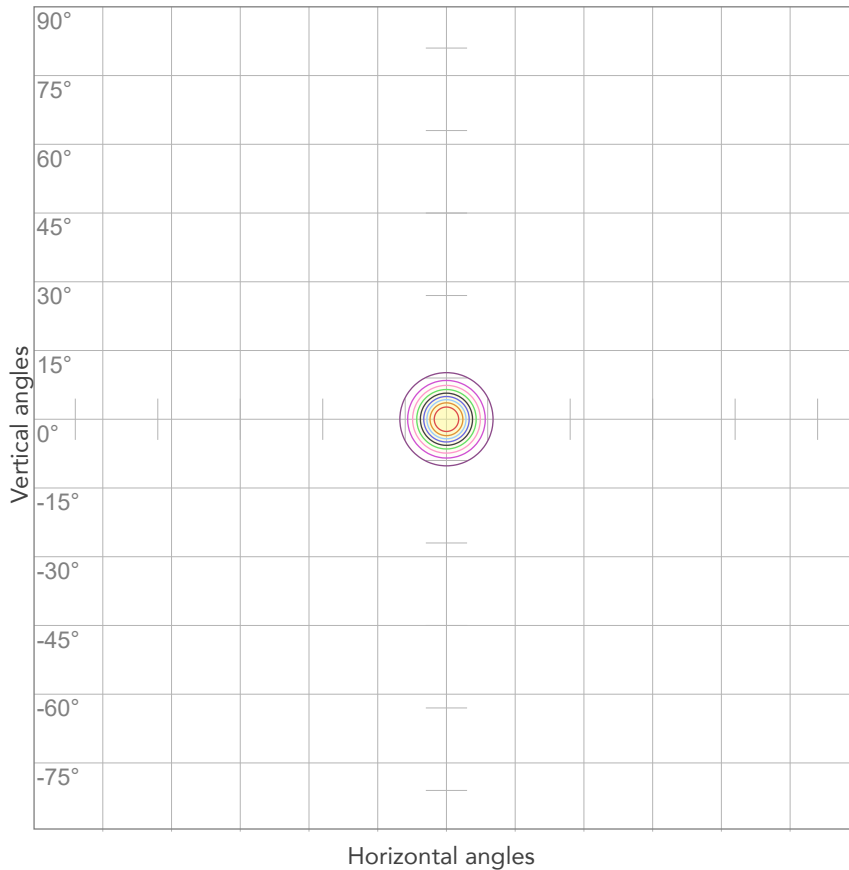
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,404A	84,5W	45lm/W
Power FC			
0,93			

ISO CANDELA DIAGRAM



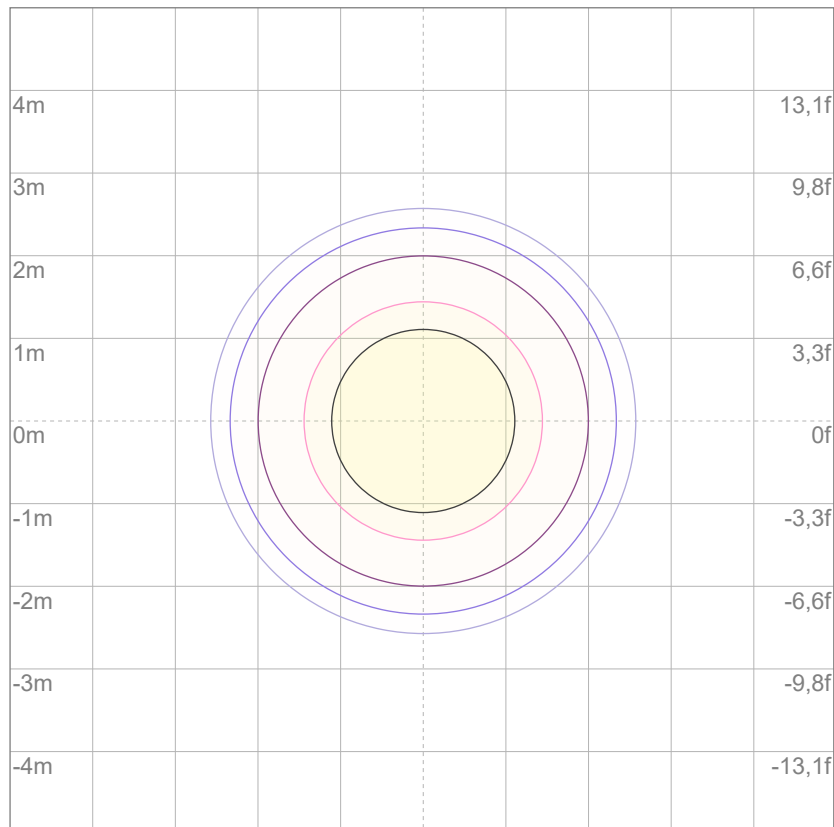
10%	6483 cd
20%	12966 cd
30%	19449 cd
40%	25932 cd
50%	32414 cd
60%	38897 cd
70%	45380 cd
80%	51863 cd

Conditions:

Number of c-planes: 4

Candela at center: 64829 cd

ISO LUX DIAGRAM



3%	19,4 lx
5%	32,4 lx
10%	64,8 lx
30%	194 lx
50%	324 lx

Conditions:

Number of c-planes: 4

Lux at center: 648 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

3671 lm

Peak candela output:

10837 cd

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 25° Filter

Target:

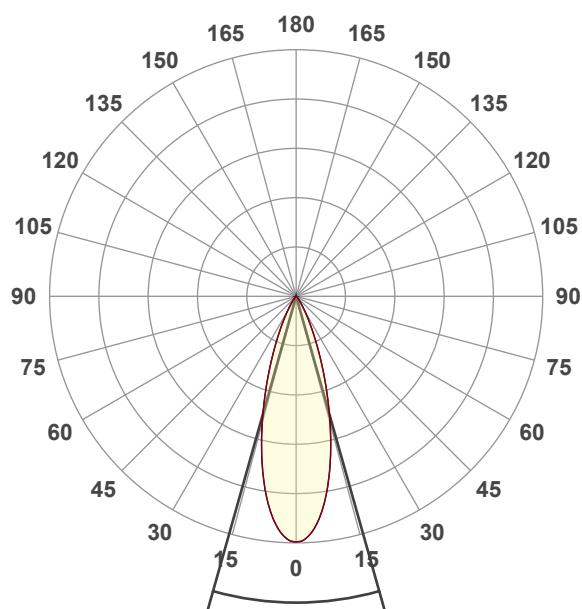
White

Operator:

Paolo Carvone

Date and time:

12/10/2022 18:55:15

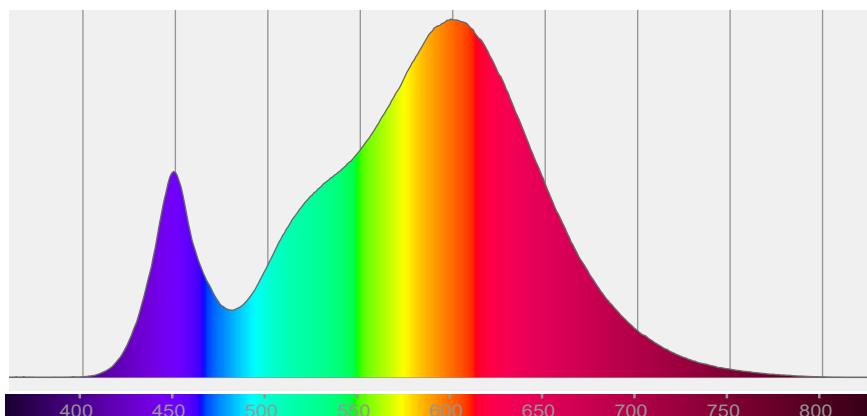


Beam angle 50%: 31,5°

Field angle 10%: 56,3°

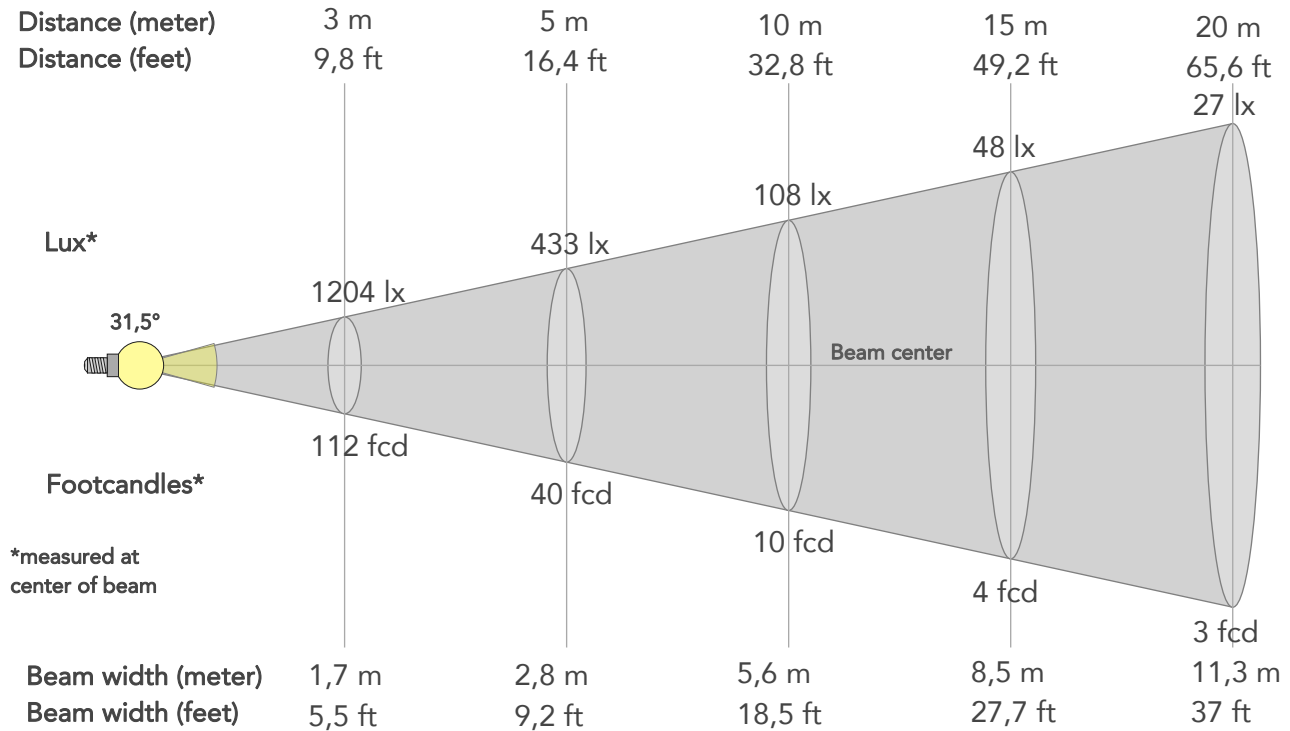
Cut off angle 2.5%: 73,3°

Spectra



BEAM DETAILS

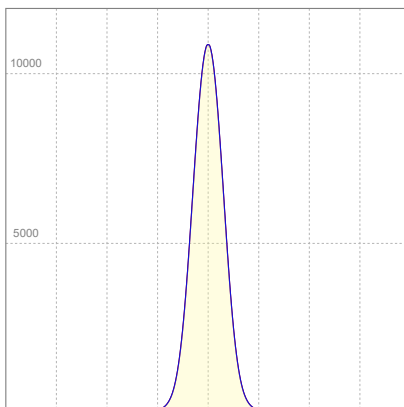
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,5°	56,3°	73,3°	99,8%	98,1%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	10837lx	2709lx	1204lx	677lx	433lx	193lx	108lx	48lx	27lx	17lx	12lx	7lx	4lx
Footcand.	1007fcd	252fcd	112fcd	63fcd	40fcd	18fcd	10fcd	4fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,3m	2,8m	4,2m	5,6m	8,5m	11,3m	14,1m	16,9m	22,5m	28,2m
Beam wid.	1,9ft	3,7ft	5,5ft	7,4ft	9,2ft	13,9ft	18,5ft	27,7ft	37ft	46,2ft	55,5ft	74ft	92,4ft

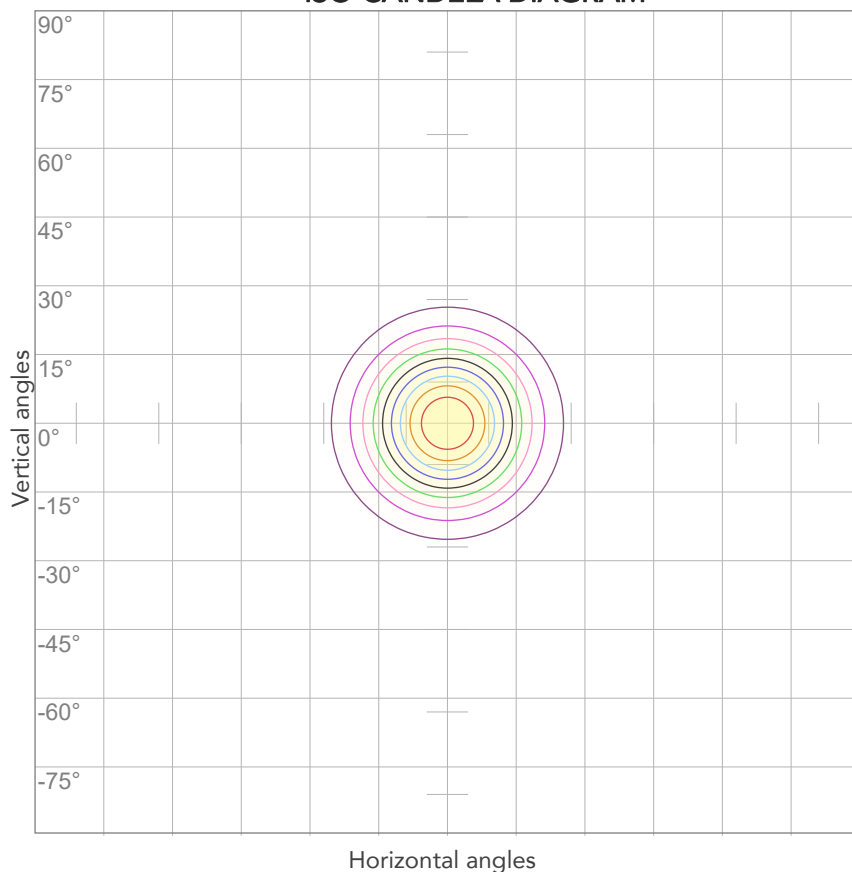
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,406A	84,8W	43lm/W
Power FC			
0,92			

ISO CANDELA DIAGRAM



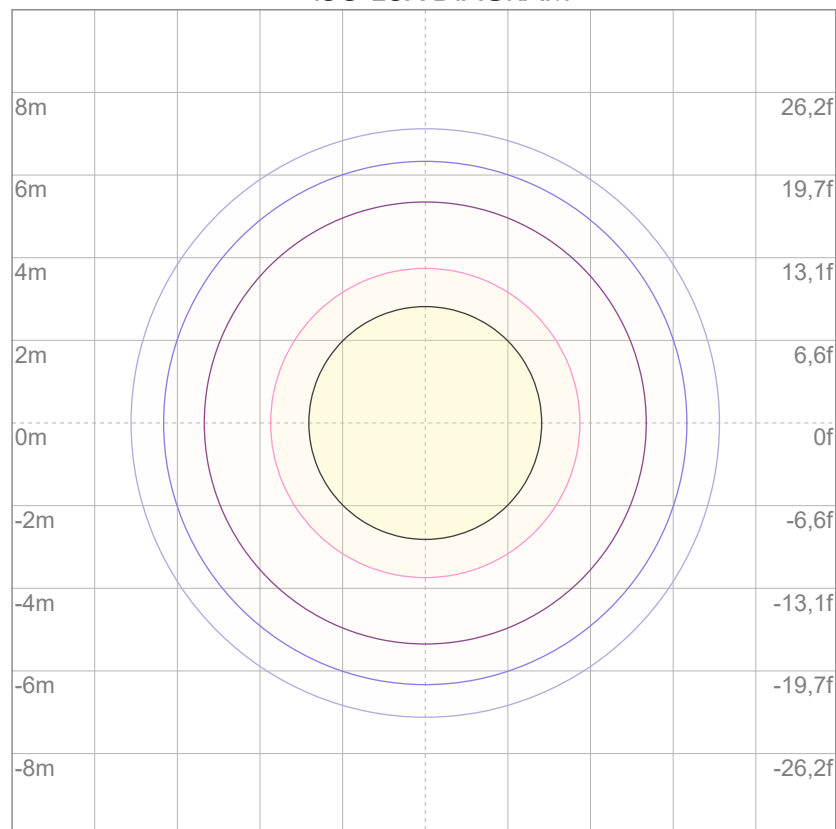
10%	1084 cd
20%	2167 cd
30%	3251 cd
40%	4335 cd
50%	5418 cd
60%	6502 cd
70%	7586 cd
80%	8669 cd

Conditions:

Number of c-planes: 4

Candela at center: 10837 cd

ISO LUX DIAGRAM



3%	3,25 lx
5%	5,42 lx
10%	10,8 lx
30%	32,5 lx
50%	54,2 lx

Conditions:

Number of c-planes: 4

Lux at center: 108 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

3689 lm

Peak candela output:

5354 cd

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 40° Filter

Target:

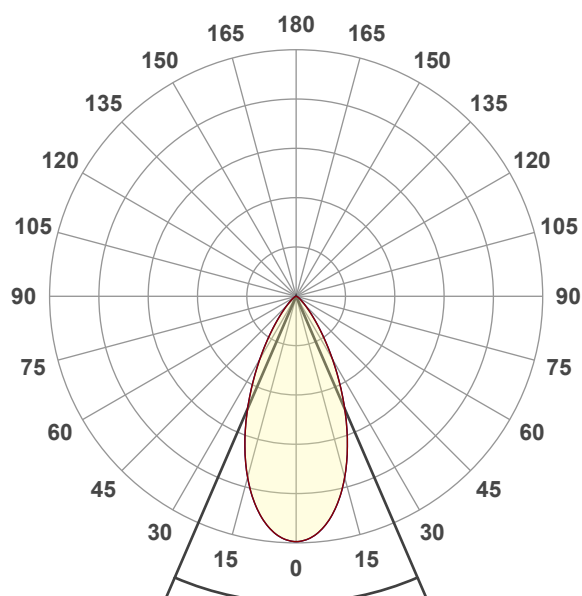
White

Operator:

Paolo Carvone

Date and time:

12/10/2022 18:57:37

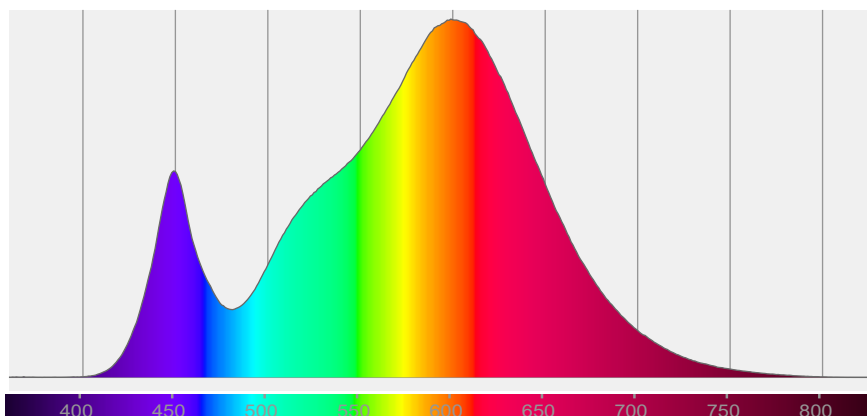


Beam angle 50%: 46,7°

Field angle 10%: 80°

Cut off angle 2.5%: 103,9°

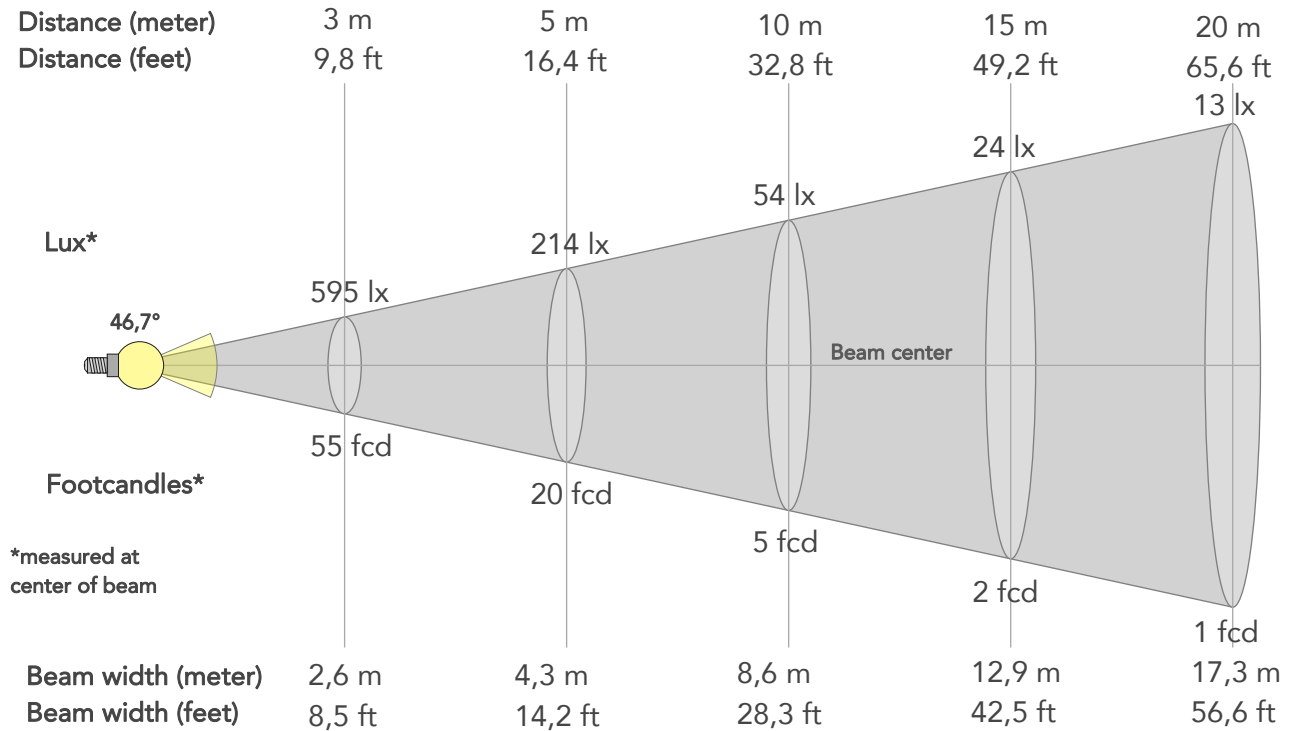
Spectra



BEAM DETAILS



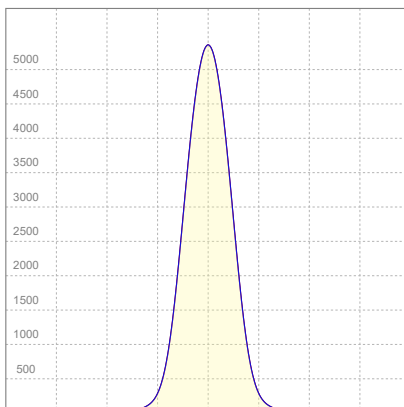
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
46,7°	80°	103,9°	98,6%	93,6%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	5354lx	1339lx	595lx	335lx	214lx	95lx	54lx	24lx	13lx	9lx	6lx	3lx	2lx
Footcand.	497fcd	124fcd	55fcd	31fcd	20fcd	9fcd	5fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,9m	1,7m	2,6m	3,5m	4,3m	6,5m	8,6m	12,9m	17,3m	21,6m	25,9m	34,5m	43,2m
Beam wid.	2,8ft	5,7ft	8,5ft	11,3ft	14,2ft	21,2ft	28,3ft	42,5ft	56,6ft	70,8ft	84,9ft	113,3ft	141,6ft

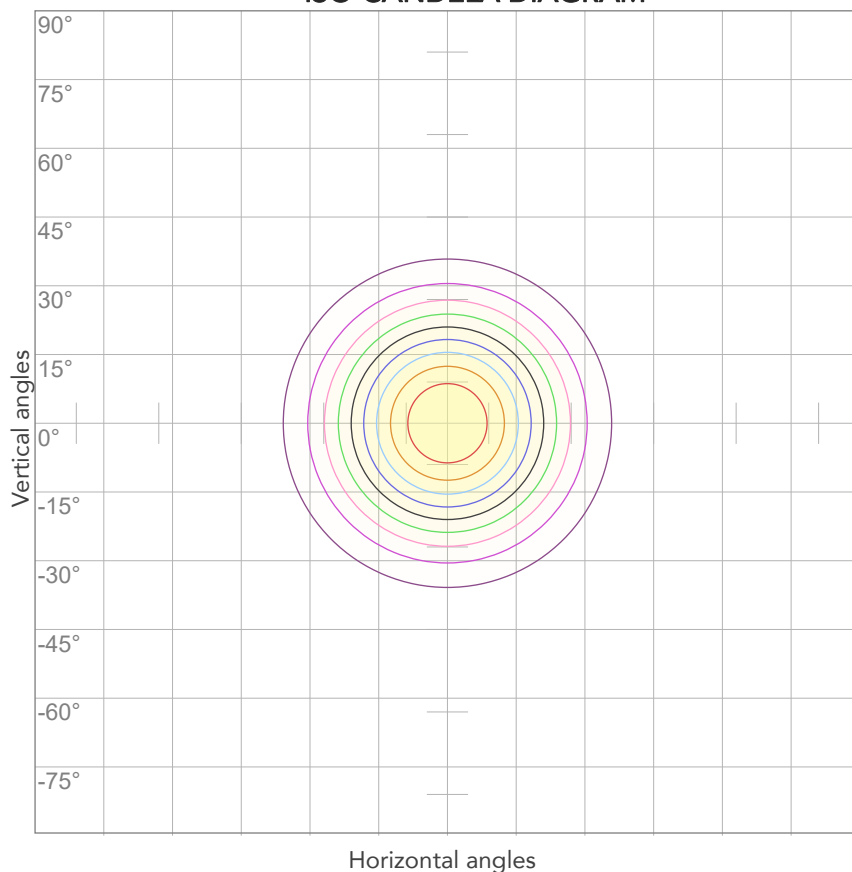
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,404A	84,5W	44lm/W
Power FC			
0,93			

ISO CANDELA DIAGRAM



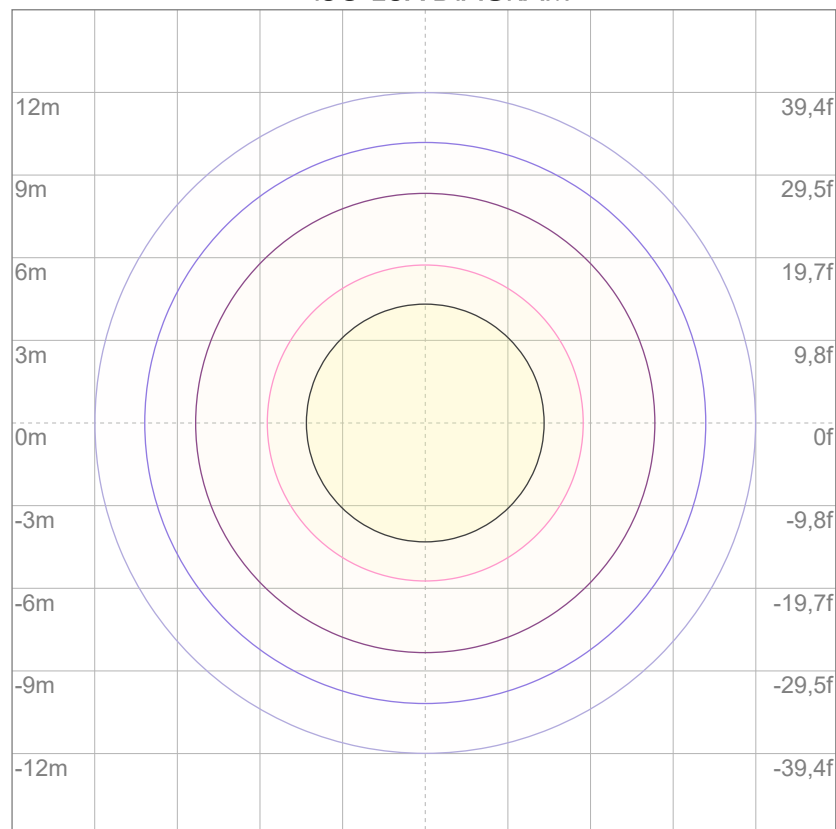
10%	535 cd
20%	1071 cd
30%	1606 cd
40%	2142 cd
50%	2677 cd
60%	3212 cd
70%	3748 cd
80%	4283 cd

Conditions:

Number of c-planes: 4

Candela at center: 5354 cd

ISO LUX DIAGRAM



3%	1,61 lx
5%	2,68 lx
10%	5,35 lx
30%	16,1 lx
50%	26,8 lx

Conditions:

Number of c-planes: 4

Lux at center: 53,5 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

5736 lm

Peak candela output:

11213 cd

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic + 10°x60° Filter

Target:

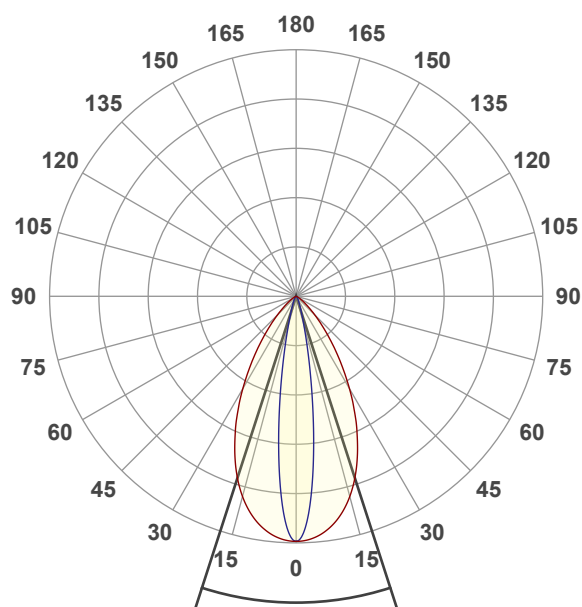
White

Operator:

Paolo Carvone

Date and time:

12/10/2022 19:00:30

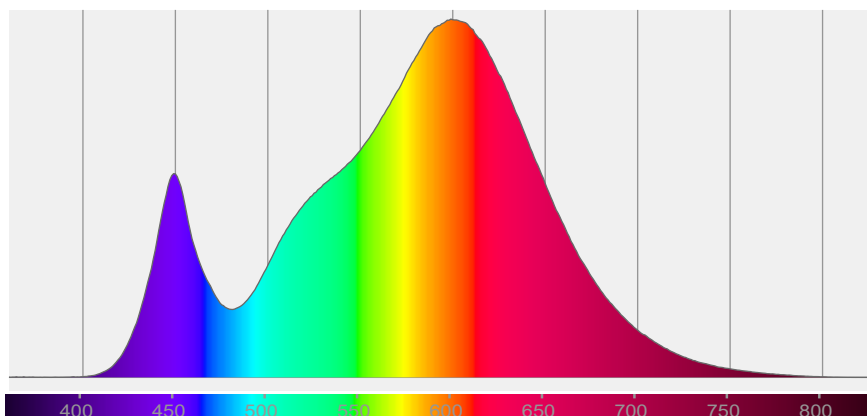


Beam angle 50%: 35,8°

Field angle 10%: 61,7°

Cut off angle 2.5%: 81,5°

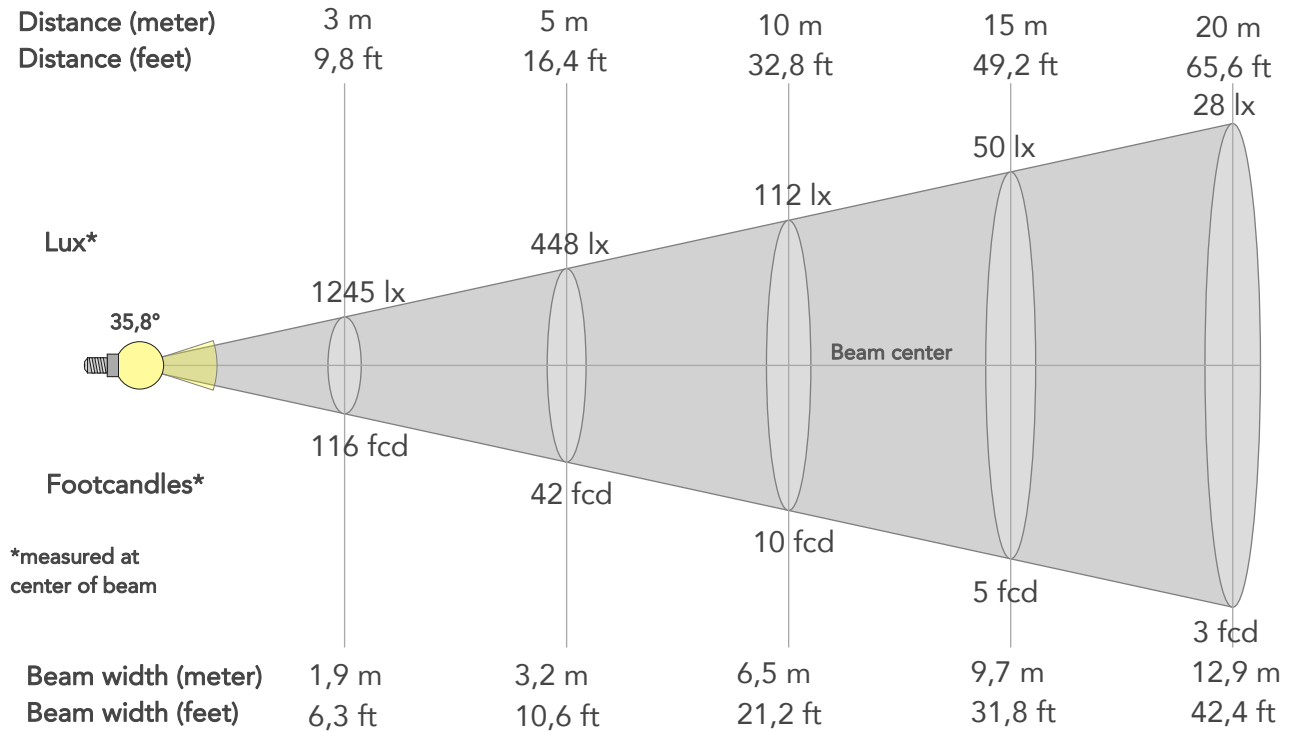
Spectra



BEAM DETAILS



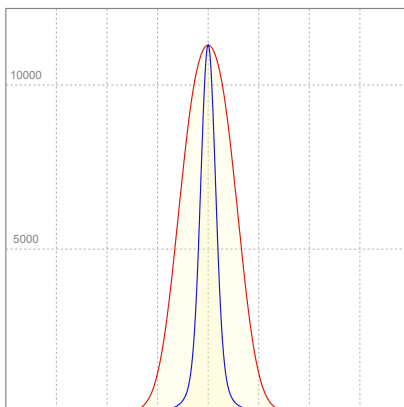
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
35,8°	61,7°	81,5°	99,1%	92,8%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	11208lx	2802lx	1245lx	700lx	448lx	199lx	112lx	50lx	28lx	18lx	12lx	7lx	4lx
Footcand.	1041fcd	260fcd	116fcd	65fcd	42fcd	19fcd	10fcd	5fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,6m	1,3m	1,9m	2,6m	3,2m	4,8m	6,5m	9,7m	12,9m	16,2m	19,4m	25,8m	32,3m
Beam wid.	2,1ft	4,3ft	6,3ft	8,5ft	10,6ft	15,9ft	21,2ft	31,8ft	42,4ft	53ft	63,6ft	84,8ft	106ft

LINEAR DISTRIBUTION DIAGRAM

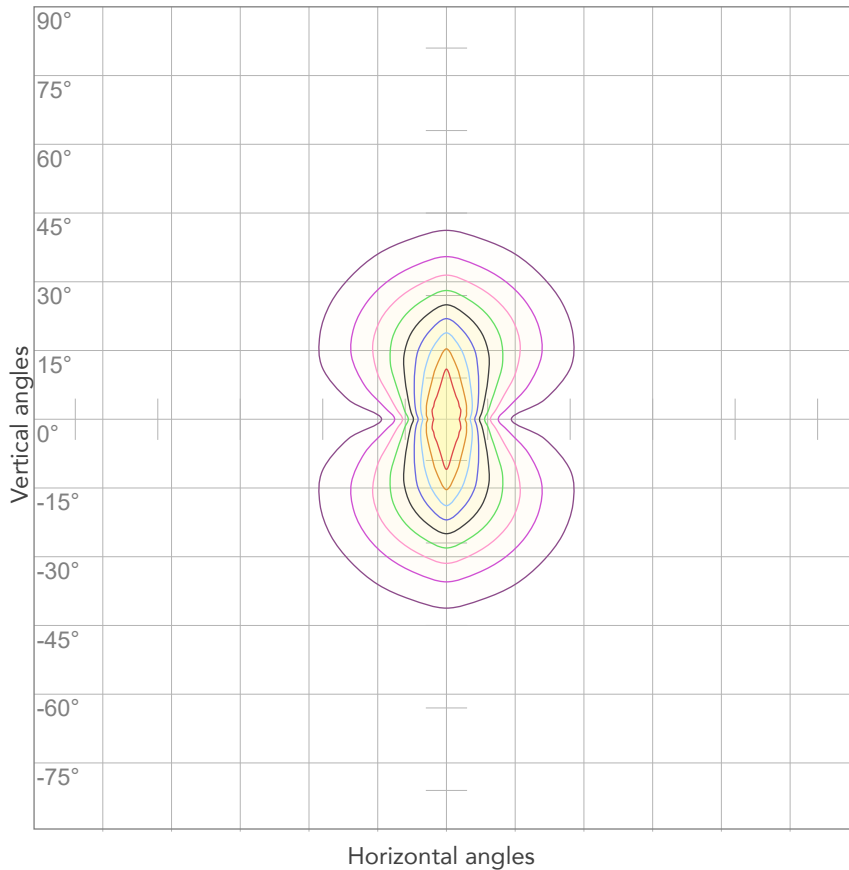


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,404A	84,3W	68lm/W

Power FC
0,93

ISO CANDELA DIAGRAM



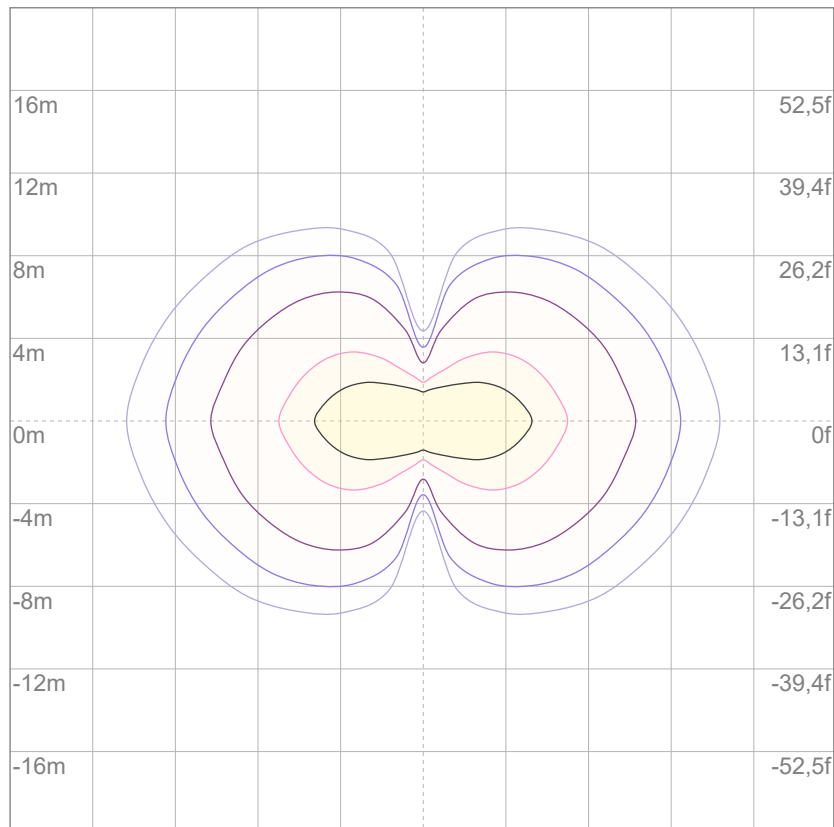
10%	1121 cd
20%	2242 cd
30%	3362 cd
40%	4483 cd
50%	5604 cd
60%	6725 cd
70%	7845 cd
80%	8966 cd

Conditions:

Number of c-planes: 4

Candela at center: 11208 cd

ISO LUX DIAGRAM



3%	3,36 lx
5%	5,60 lx
10%	11,2 lx
30%	33,6 lx
50%	56,0 lx

Conditions:

Number of c-planes: 4

Lux at center: 112 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

5129 lm

Peak candela output:

93664 cd

Light quality:

CRI: 76,6

Color temperature:

2818 K

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic (No Filter)

Target:

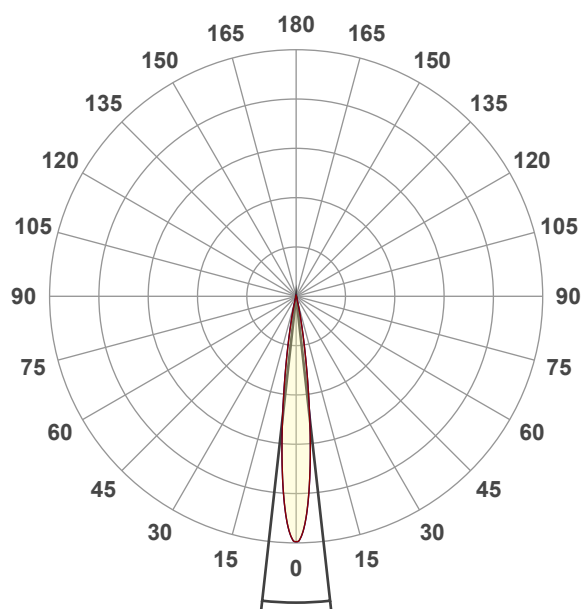
2800K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:00:36

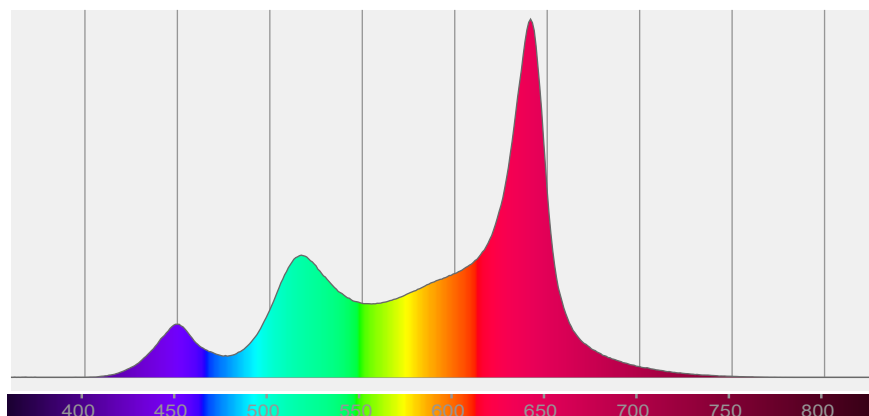


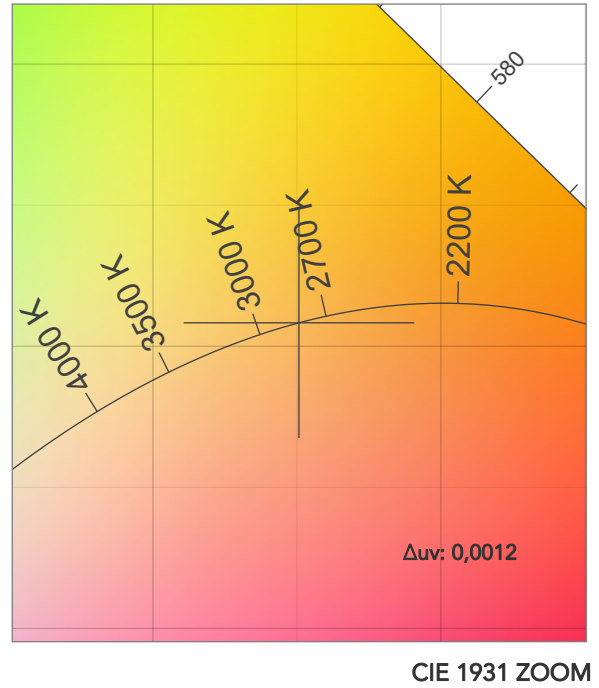
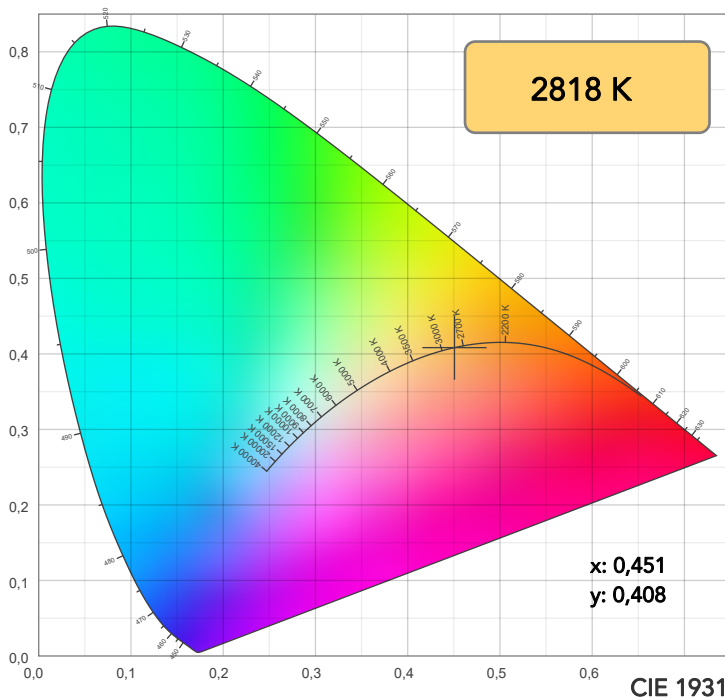
Beam angle 50%: 12,7°

Field angle 10%: 22,5°

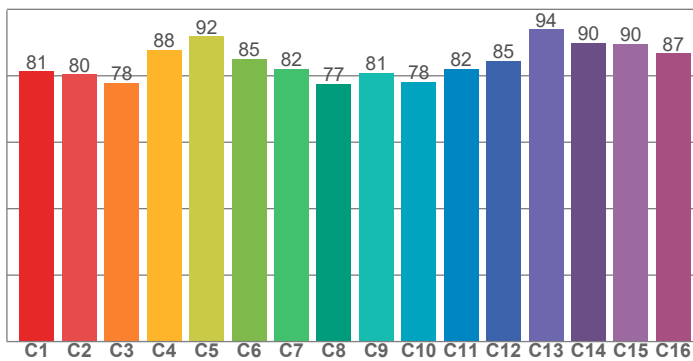
Cut off angle 2.5%: 28,9°

Spectra

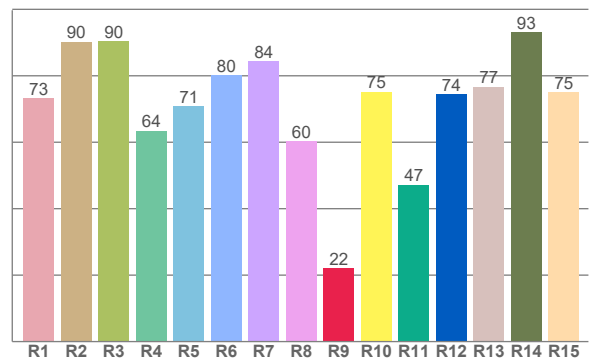




TM30: 84,2



CRI: 76,6 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
73,2	90,2	90,4	63,5	70,8	80,1	84,4	60,3	22,0	75,2	47,2	74,4	76,7	93,1	75,0

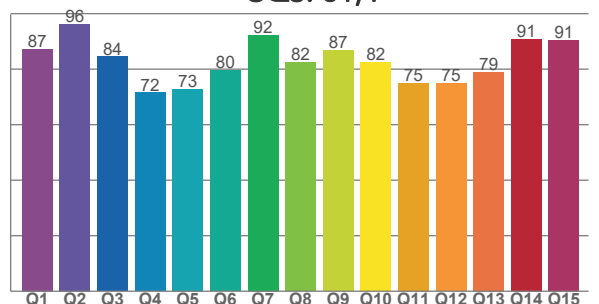
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
81,4	80,4	77,9	87,8	91,8	85,0	82,2	77,5	80,8	78,1	82,1	84,5	93,9	90,0	89,7	86,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87,2	96,4	84,5	71,5	72,9	79,6	92,3	82,5	86,8	82,5	74,9	74,9	79,0	90,9	90,6

CQS: 81,4



COLOR PARAMETERS

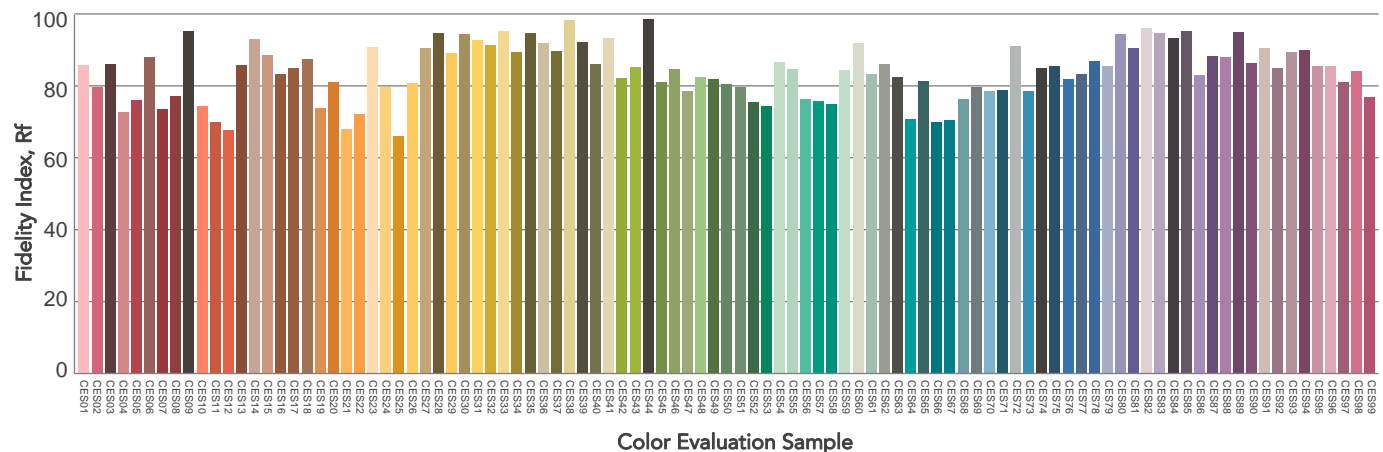
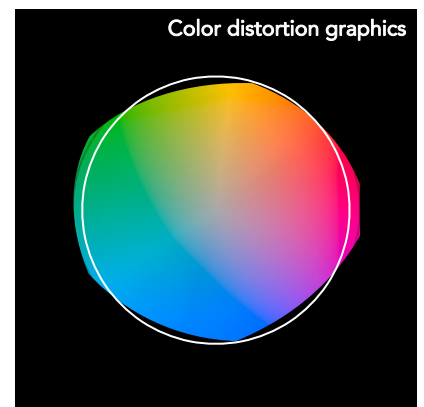
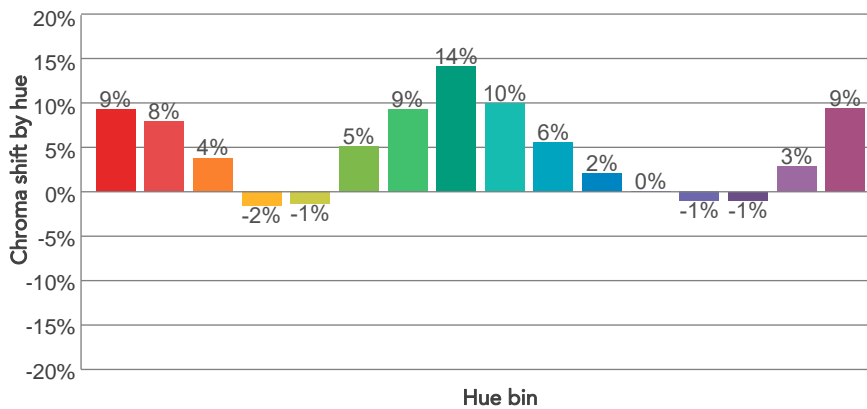
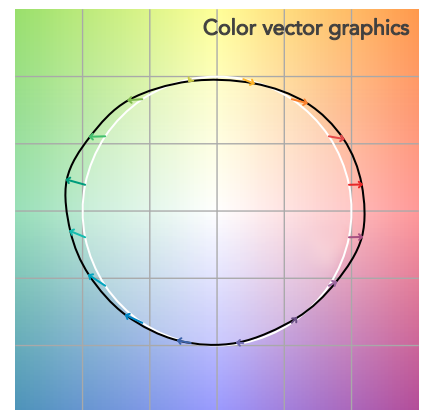
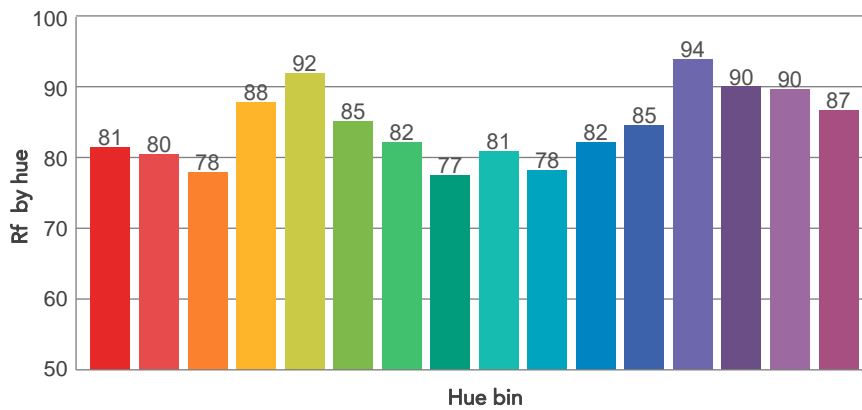
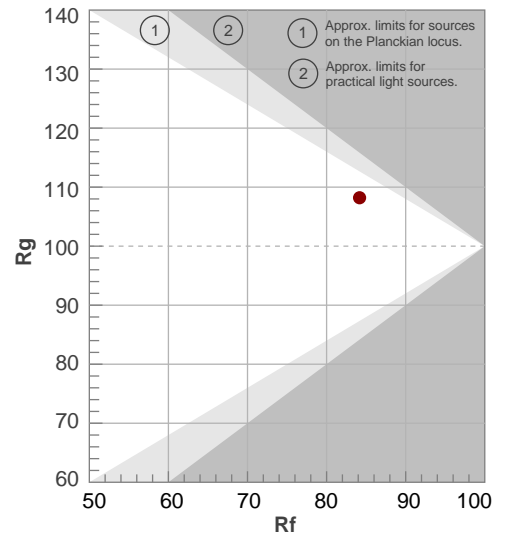
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2818 K	76,6	22,0	84,2	108,2	81,4	56	0,451	0,408	0,0012

TM30 DETAILS

Rf 84,2
Fidelity index Rf

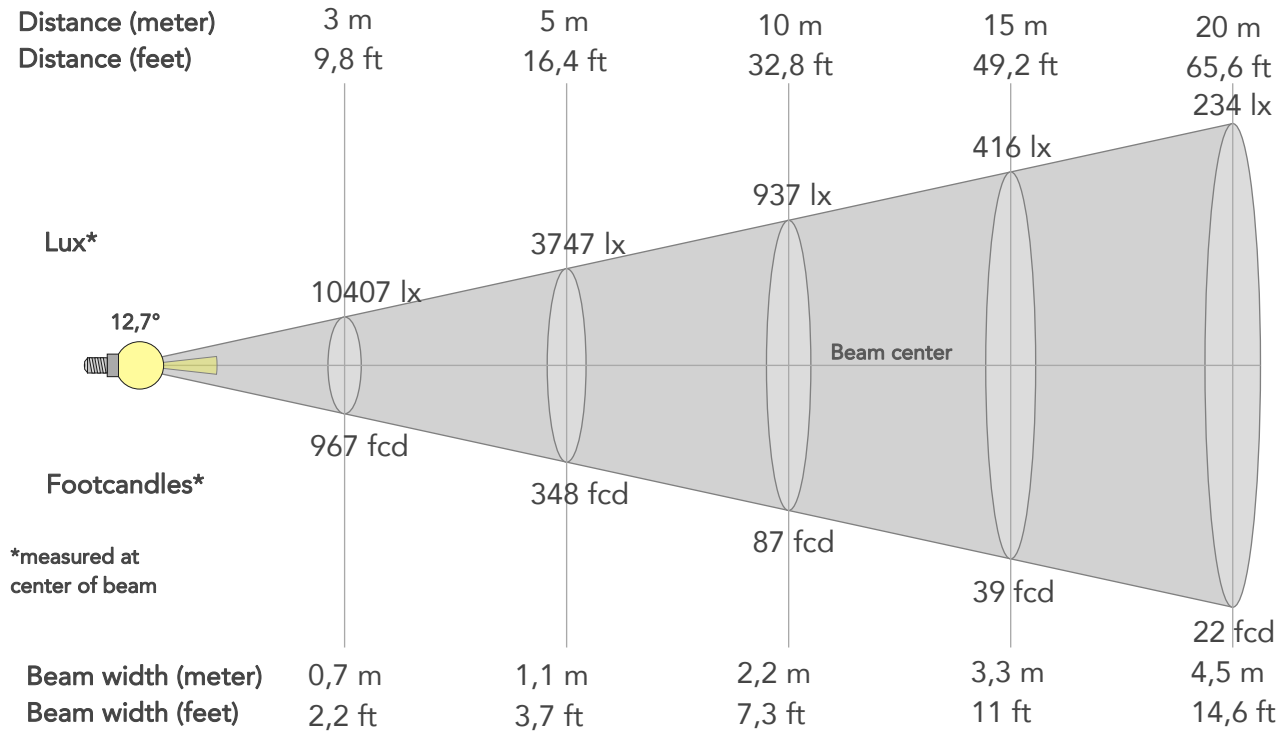
Rg 108,2
Gammut index

		Graphic shifts (%)	
Hue Bin	R _f	Chroma	Hue
1	81	9%	-2%
2	80	8%	-8%
3	78	4%	-11%
4	88	-2%	-8%
5	92	-1%	1%
6	85	5%	9%
7	82	9%	7%
8	77	14%	-1%
9	81	10%	-7%
10	78	6%	-13%
11	82	2%	-13%
12	85	0%	-10%
13	94	-1%	-4%
14	90	-1%	5%
15	90	3%	5%
16	87	9%	2%



BEAM DETAILS

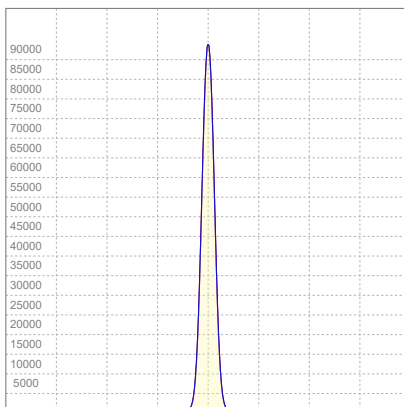
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
12,7°	22,5°	28,9°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	93664lx	23416lx	10407lx	5854lx	3747lx	1665lx	937lx	416lx	234lx	150lx	104lx	59lx	37lx
Footcand.	8702fcd	2175fcd	967fcd	544fcd	348fcd	155fcd	87fcd	39fcd	22fcd	14fcd	10fcd	5fcd	3fcd
Beam wid.	0,2m	0,4m	0,7m	0,9m	1,1m	1,7m	2,2m	3,3m	4,5m	5,6m	6,7m	8,9m	11,2m
Beam wid.	0,7ft	1,5ft	2,2ft	2,9ft	3,7ft	5,5ft	7,3ft	11ft	14,6ft	18,3ft	21,9ft	29,3ft	36,6ft

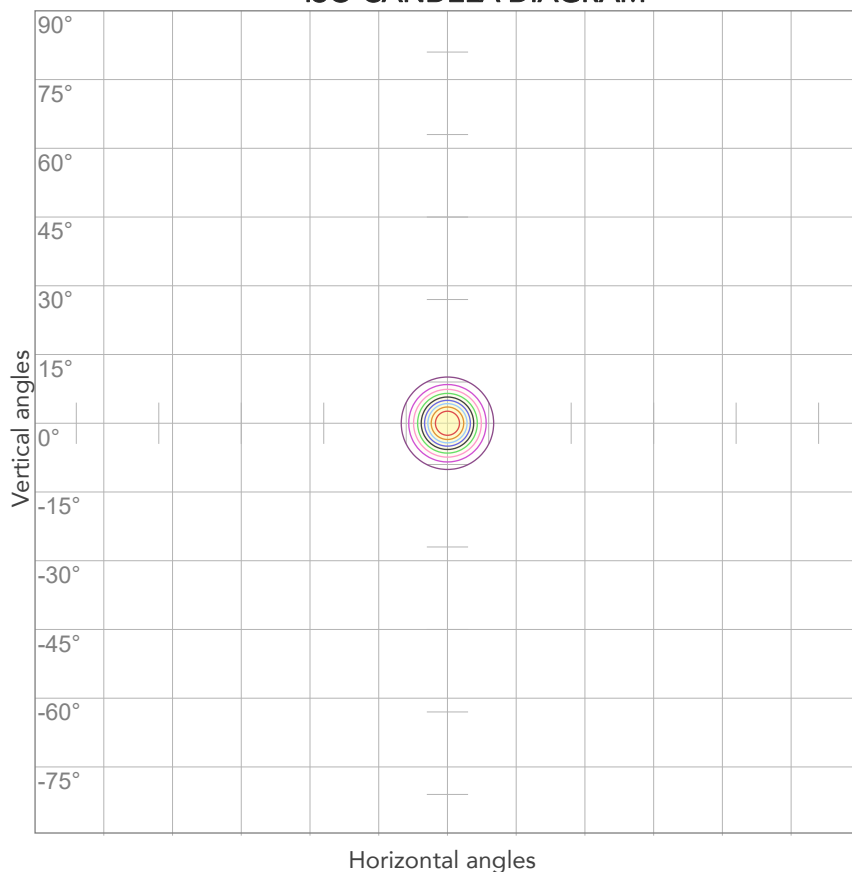
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,619A	130,4W	39lm/W

ISO CANDELA DIAGRAM



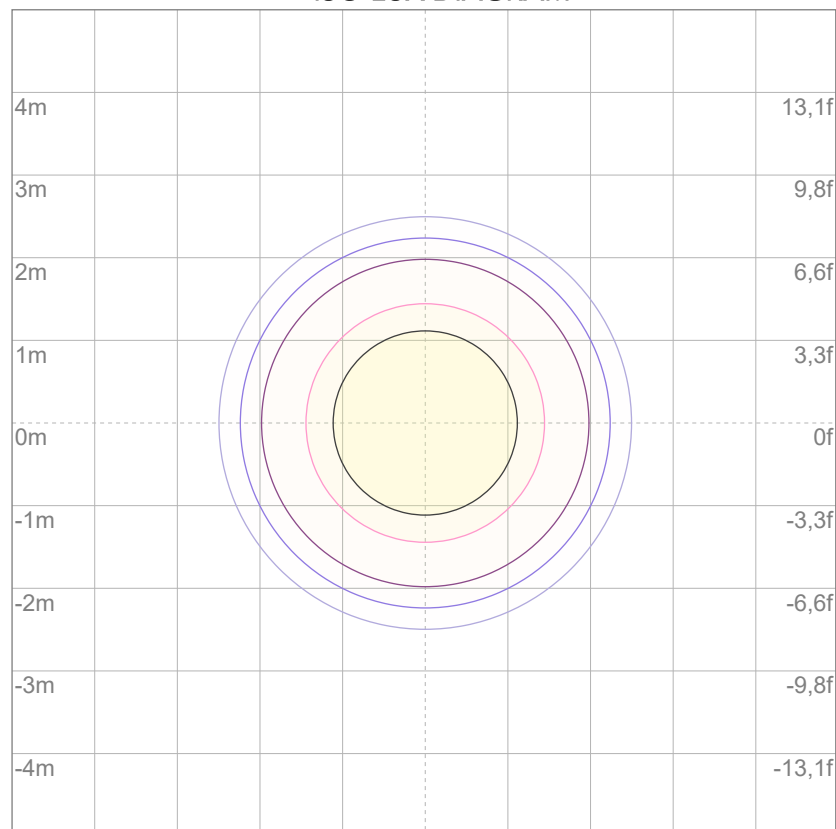
10%	9366 cd
20%	18733 cd
30%	28099 cd
40%	37466 cd
50%	46832 cd
60%	56198 cd
70%	65565 cd
80%	74931 cd

Conditions:

Number of c-planes: 4

Candela at center: 93664 cd

ISO LUX DIAGRAM



3%	28,1 lx
5%	46,8 lx
10%	93,7 lx
30%	281 lx
50%	468 lx

Conditions:

Number of c-planes: 4

Lux at center: 937 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4924 lm

Peak candela output:

15436 cd

Light quality:

CRI: 76,6

Color temperature:

2819 K

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic + 25° Filter

Target:

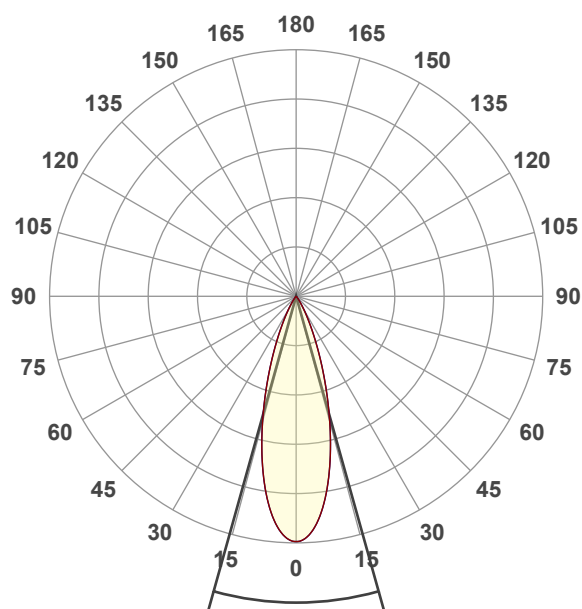
2800K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:03:21

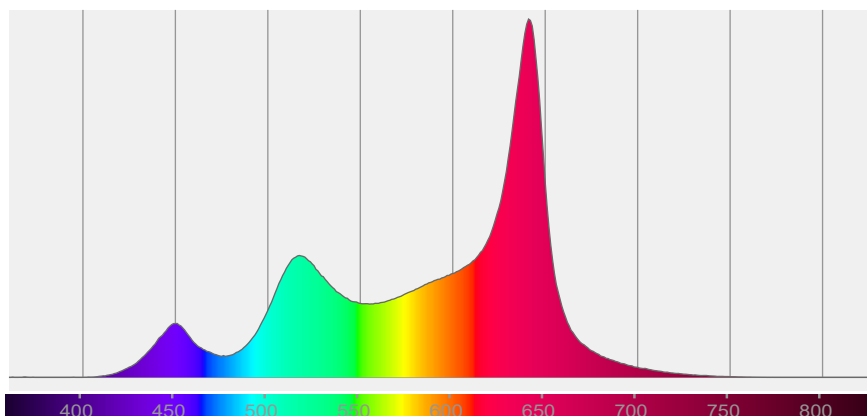


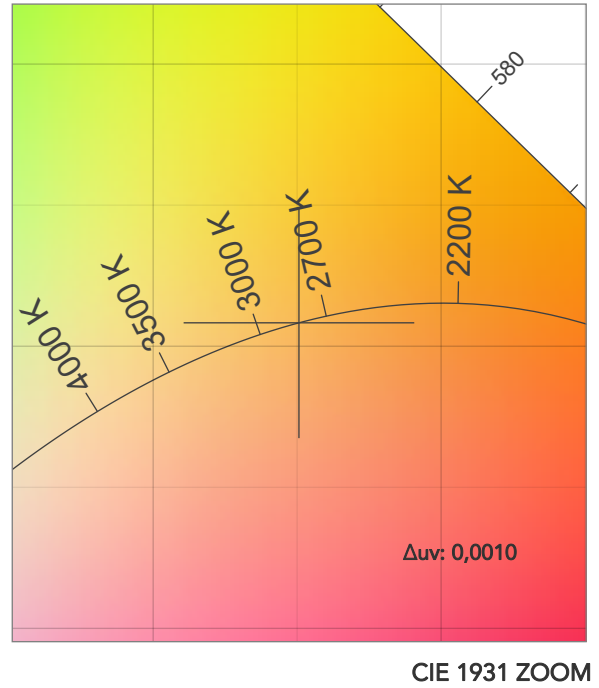
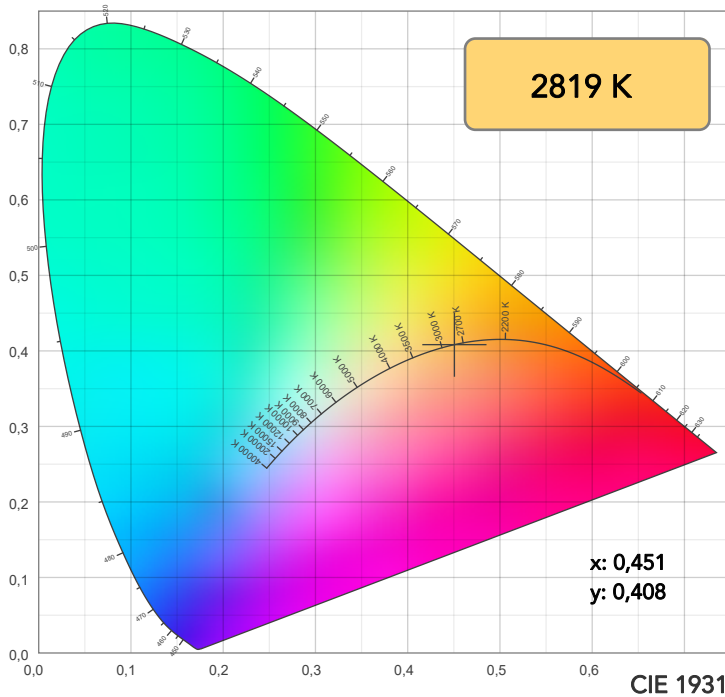
Beam angle 50%: 31,2°

Field angle 10%: 55,3°

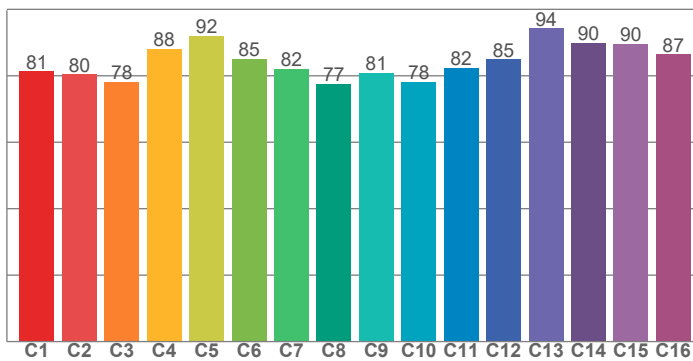
Cut off angle 2.5%: 69,3°

Spectra

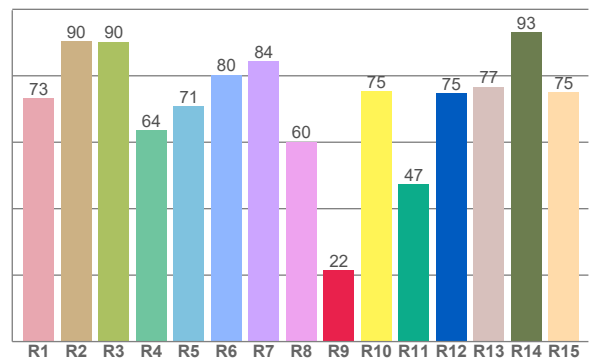




TM30: 84,3



CRI: 76,6 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
73,3	90,3	90,3	63,6	70,9	80,3	84,3	60,1	21,6	75,4	47,3	74,7	76,7	93,0	75,0

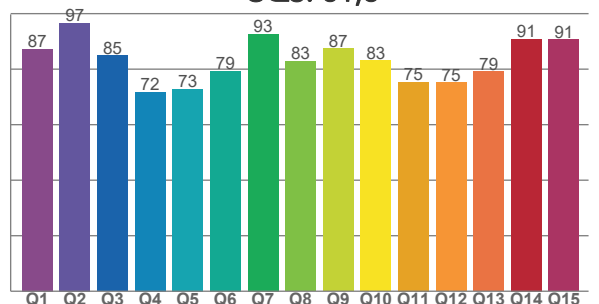
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
81,3	80,4	78,1	88,1	92,0	85,0	82,1	77,5	80,8	78,2	82,3	84,9	94,3	89,9	89,7	86,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87,3	96,5	84,8	71,8	72,9	79,4	92,6	82,8	87,4	83,1	75,3	75,2	79,2	90,9	90,6

CQS: 81,6



COLOR PARAMETERS

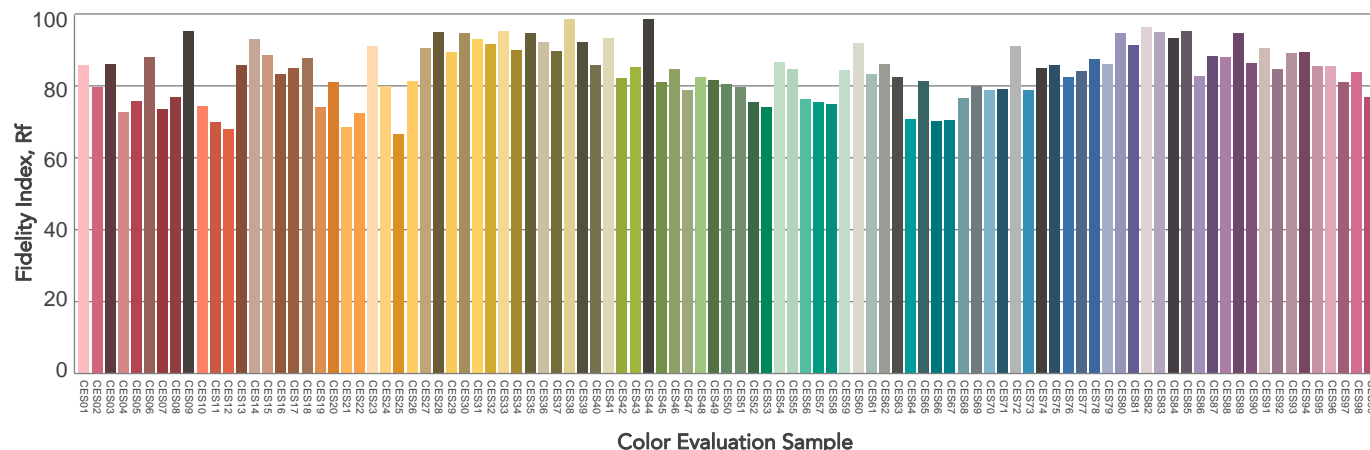
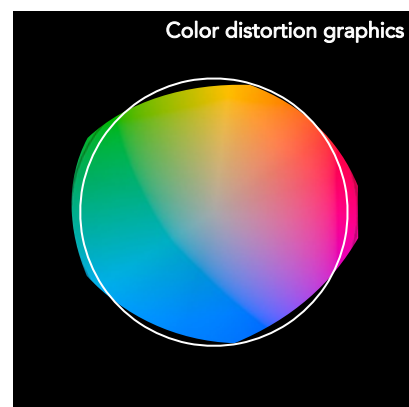
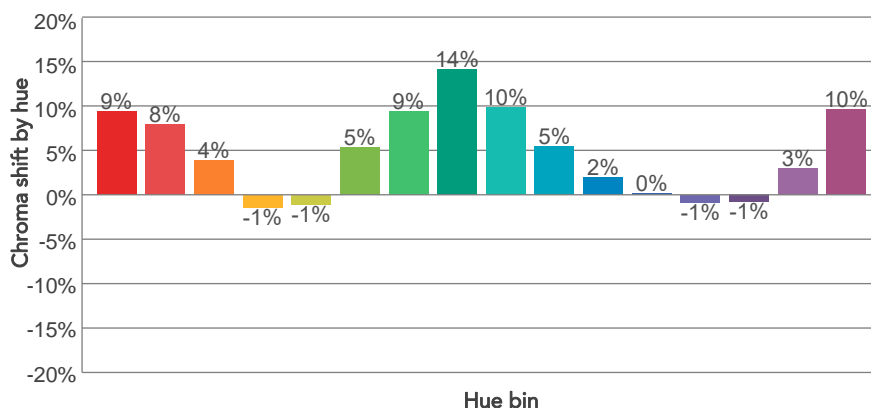
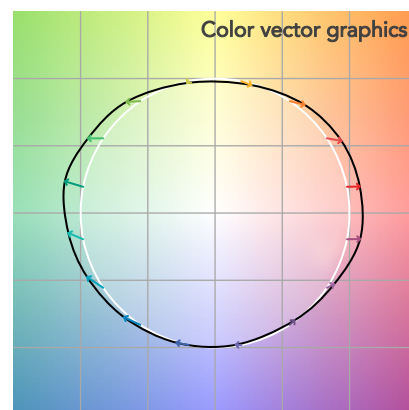
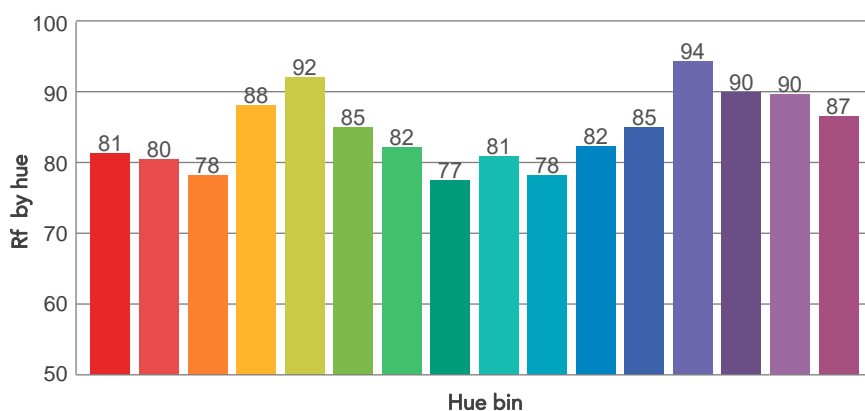
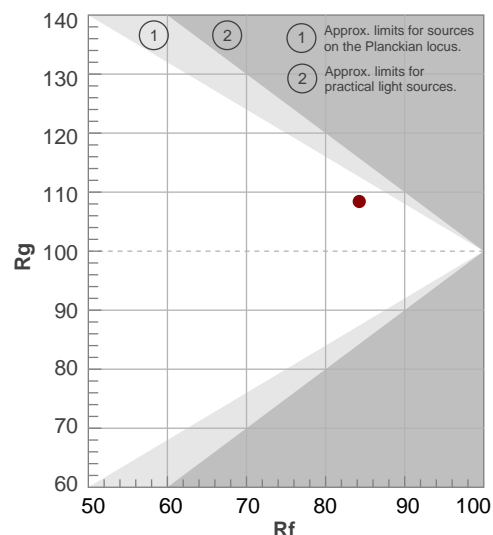
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2819 K	76,6	21,6	84,3	108,4	81,6	56	0,451	0,408	0,0010

TM30 DETAILS

Rf 84,3
Fidelity index Rf

Rg 108,4
Gammut index

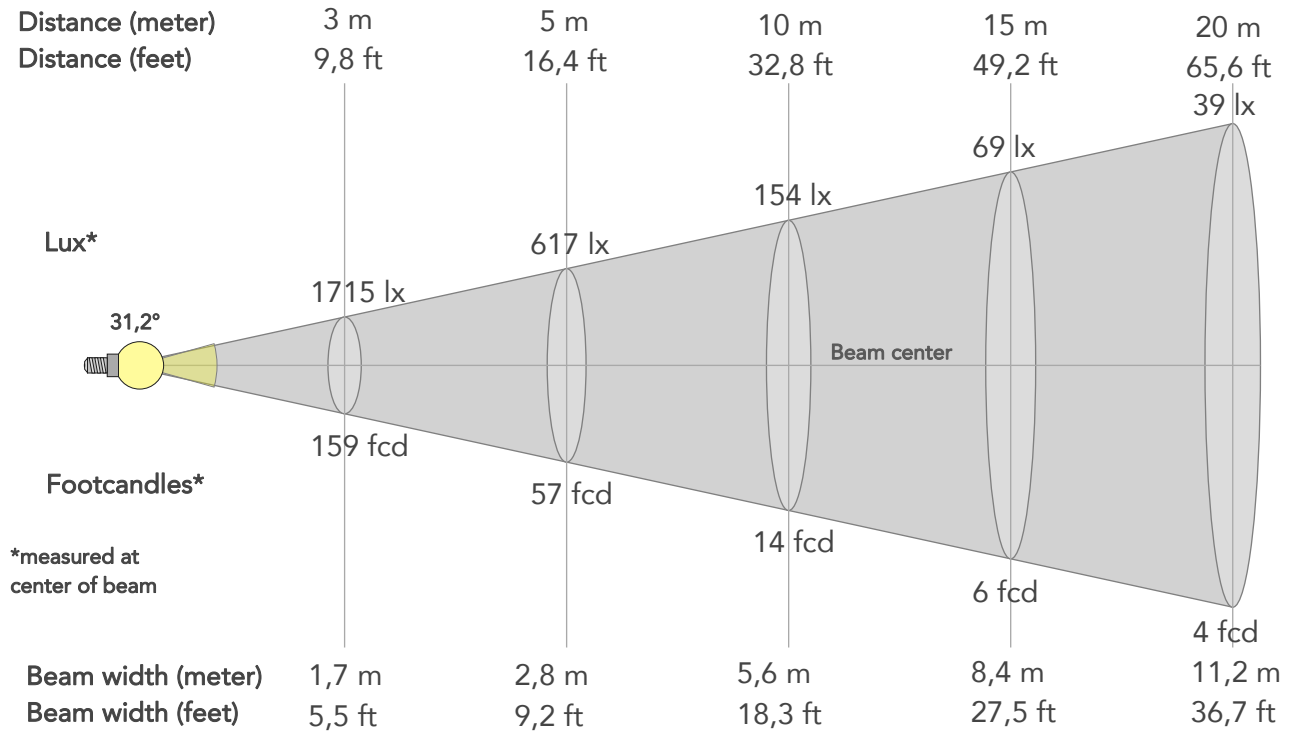
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	81	9%	-2%
2	80	8%	-8%
3	78	4%	-11%
4	88	-1%	-8%
5	92	-1%	1%
6	85	5%	9%
7	82	9%	6%
8	77	14%	-1%
9	81	10%	-7%
10	78	5%	-13%
11	82	2%	-13%
12	85	0%	-9%
13	94	-1%	-4%
14	90	-1%	5%
15	90	3%	5%
16	87	10%	2%



BEAM DETAILS



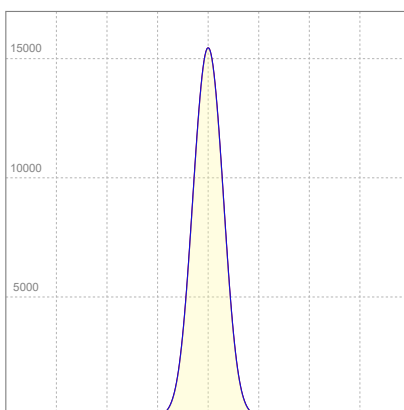
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,2°	55,3°	69,3°	100,0%	99,8%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	15436lx	3859lx	1715lx	965lx	617lx	274lx	154lx	69lx	39lx	25lx	17lx	10lx	6lx
Footcand.	1434fcd	359fcd	159fcd	90fcd	57fcd	25fcd	14fcd	6fcd	4fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,2m	5,6m	8,4m	11,2m	14m	16,8m	22,4m	28m
Beam wid.	1,8ft	3,7ft	5,5ft	7,3ft	9,2ft	13,8ft	18,3ft	27,5ft	36,7ft	45,9ft	55ft	73,4ft	91,7ft

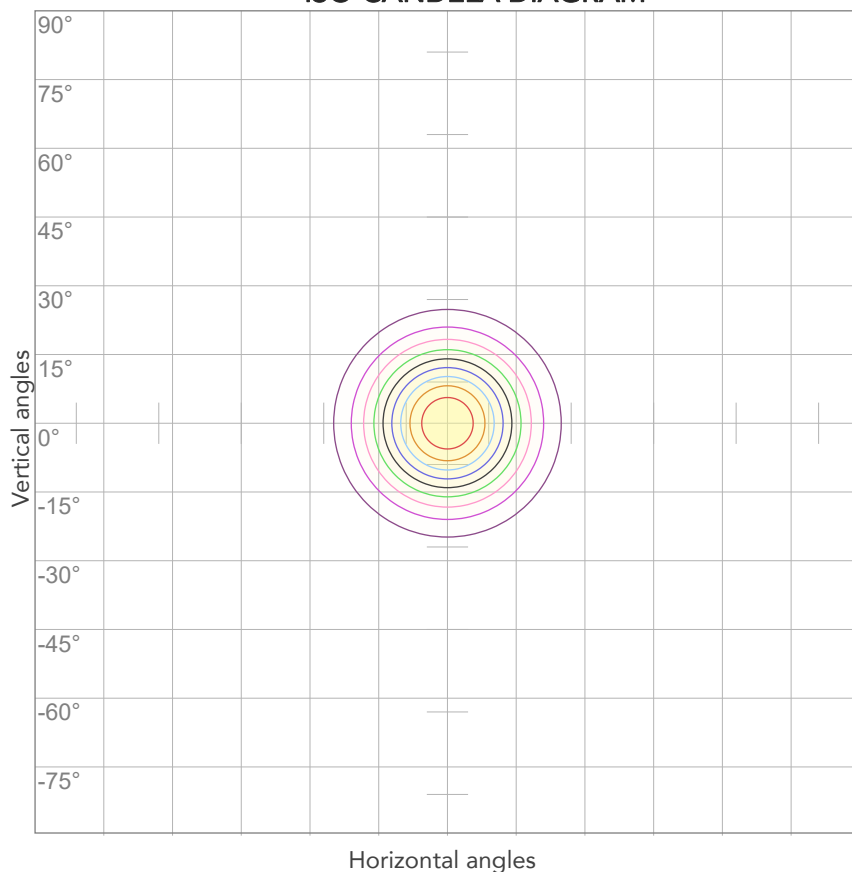
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,615A	129,9W	38lm/W

ISO CANDELA DIAGRAM



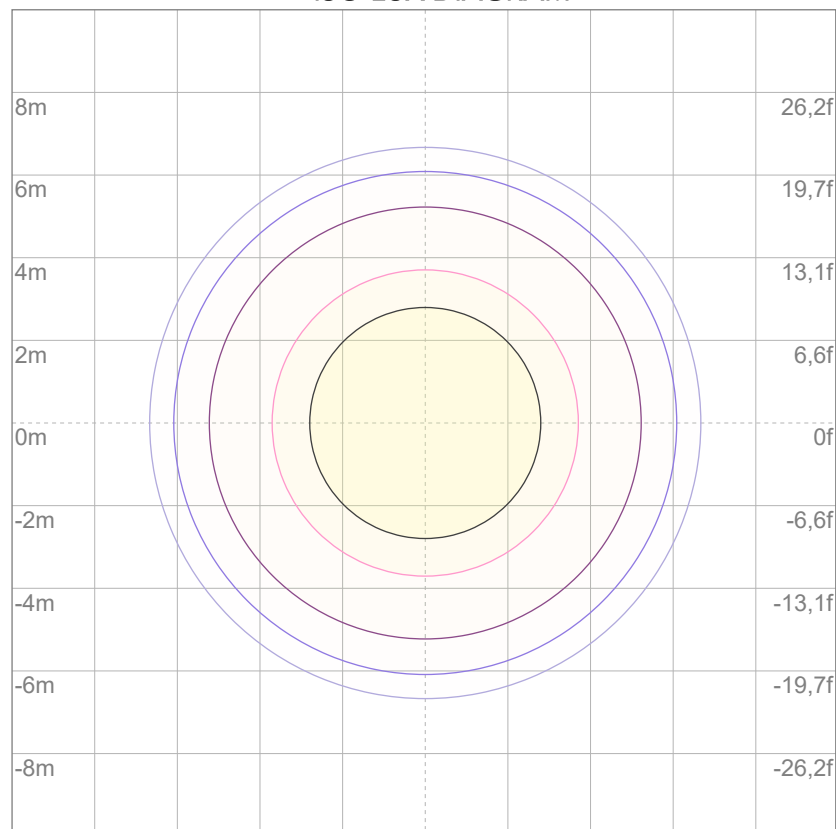
10%	1544 cd
20%	3087 cd
30%	4631 cd
40%	6174 cd
50%	7718 cd
60%	9262 cd
70%	10805 cd
80%	12349 cd

Conditions:

Number of c-planes: 4

Candela at center: 15436 cd

ISO LUX DIAGRAM



3%	4,63 lx
5%	7,72 lx
10%	15,4 lx
30%	46,3 lx
50%	77,2 lx

Conditions:

Number of c-planes: 4

Lux at center: 154 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

5075 lm

Peak candela output:

7505 cd

Light quality:

CRI: 76,9

Color temperature:

2815 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 40° Filter

Target:

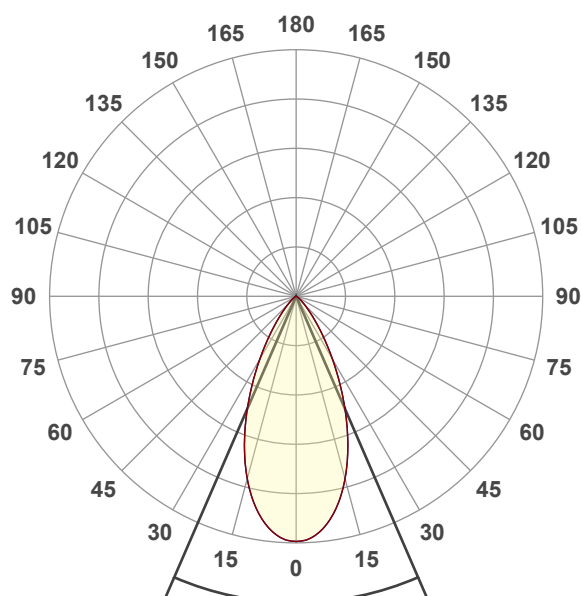
2800K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:05:46

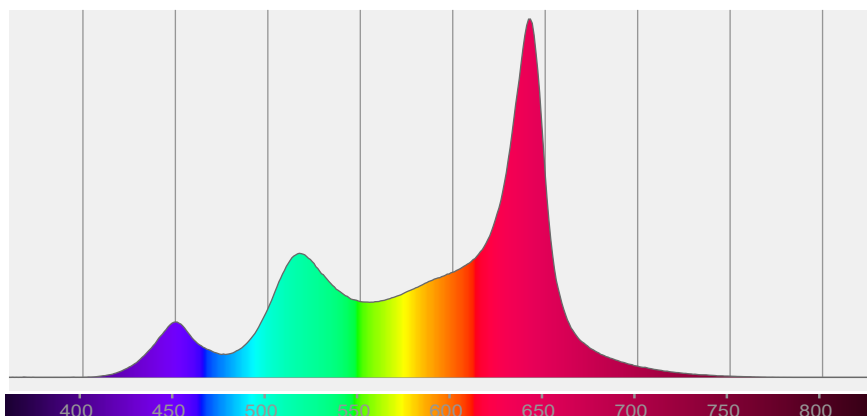


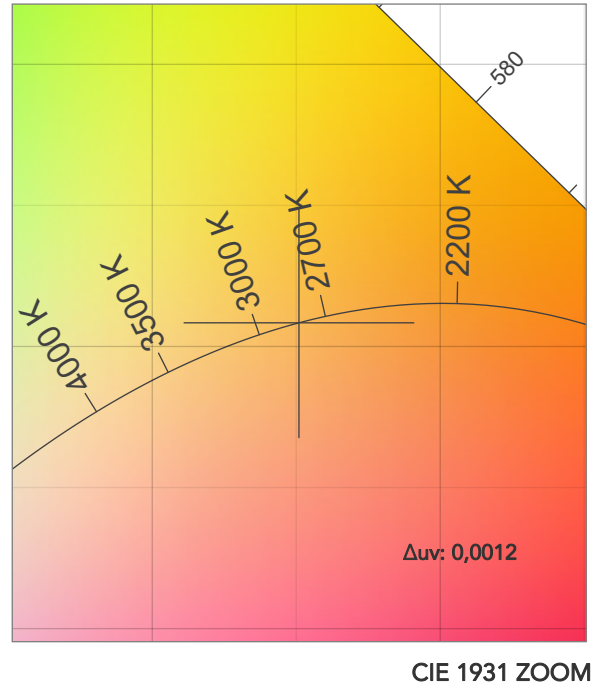
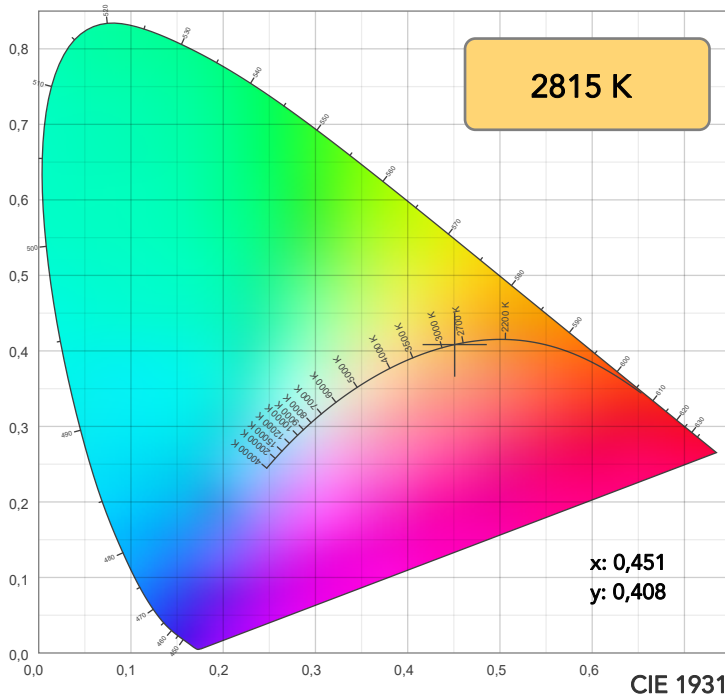
Beam angle 50%: 46,9°

Field angle 10%: 79,3°

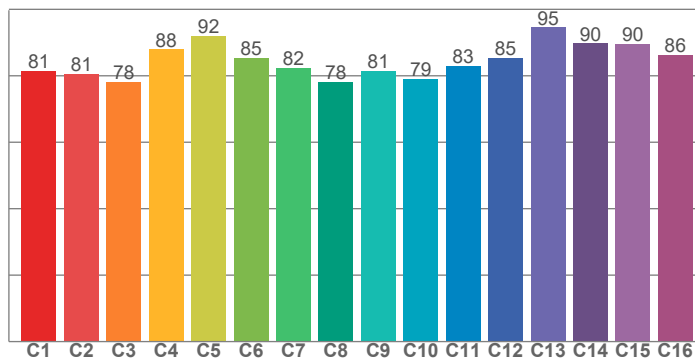
Cut off angle 2.5%: 100,2°

Spectra

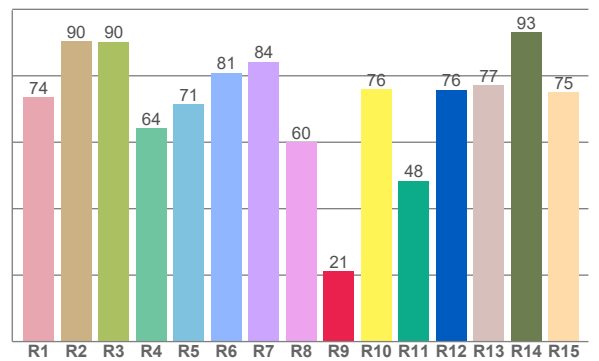




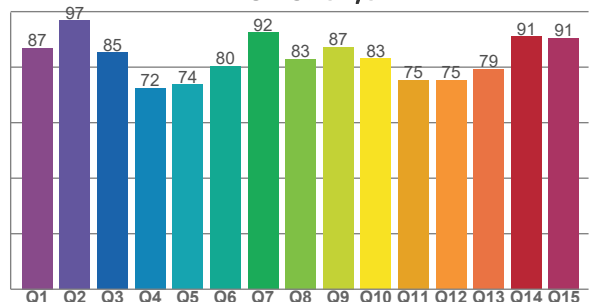
TM30: 84,5



CRI: 76,9 (R1-R8)



CQS: 81,8



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
73,6	90,5	90,2	64,2	71,5	80,9	84,2	60,1	21,1	75,9	48,4	75,8	77,1	93,0	75,0

TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
81,4	80,5	78,2	87,9	92,0	85,4	82,4	78,1	81,5	79,1	83,0	85,4	94,6	89,8	89,6	86,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
86,9	96,7	85,2	72,5	73,7	80,3	92,5	82,9	87,2	83,0	75,4	75,3	79,2	91,0	90,5

COLOR PARAMETERS

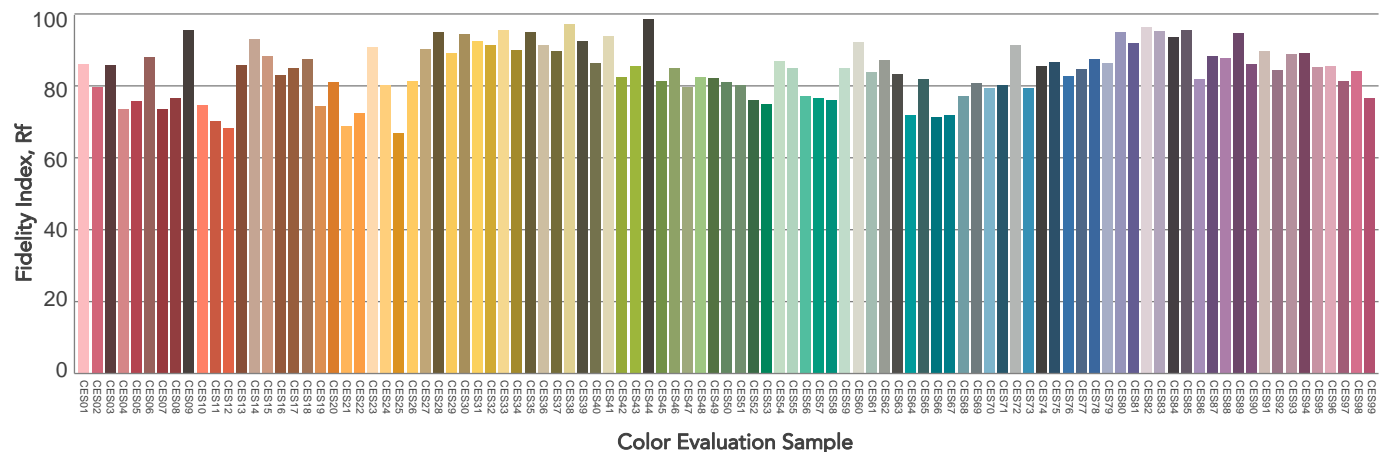
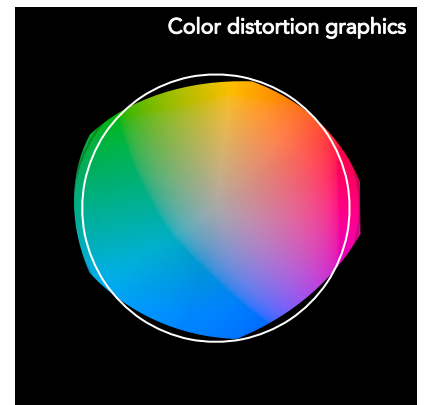
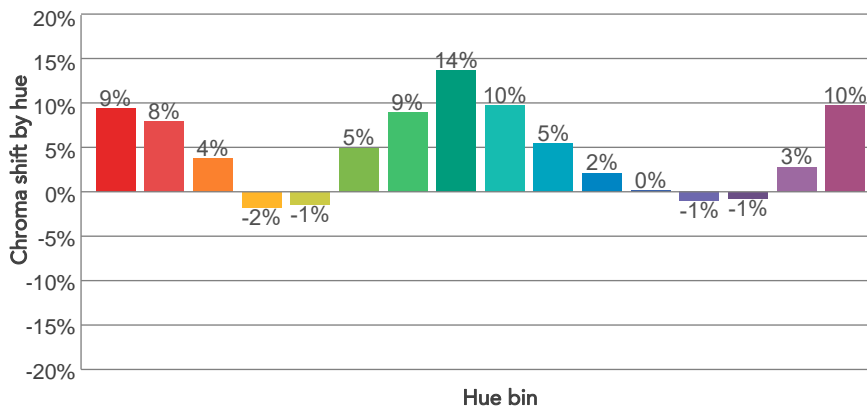
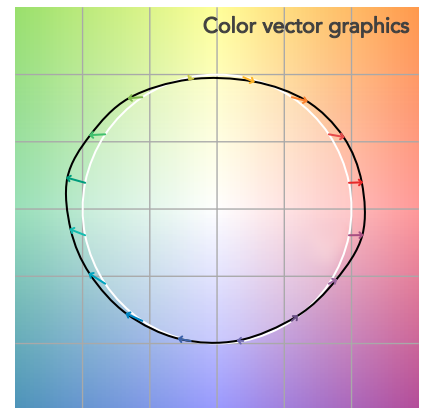
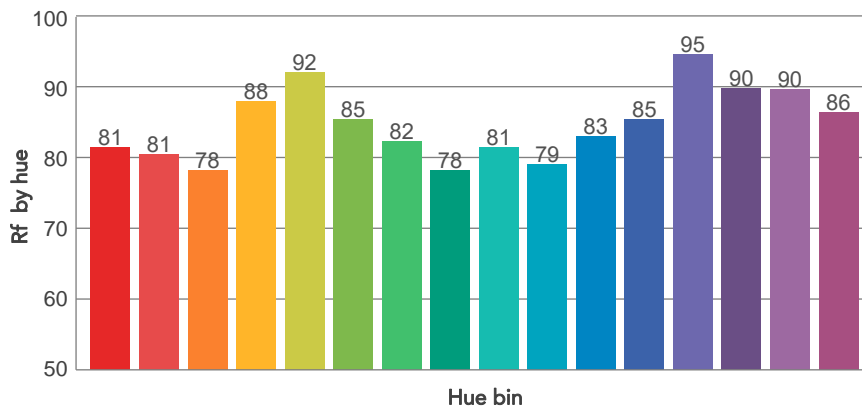
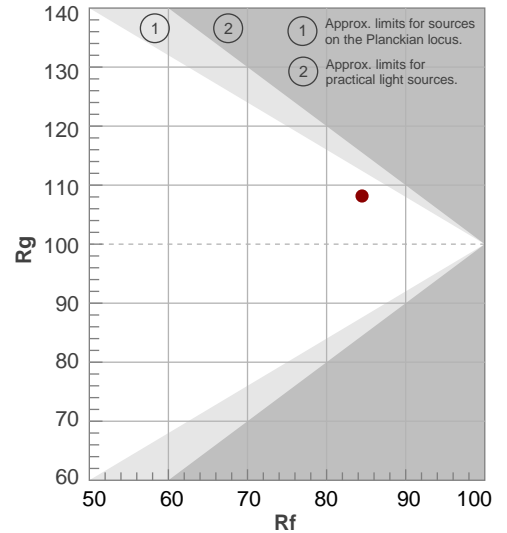
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2815 K	76,9	21,1	84,5	108,2	81,8	56	0,451	0,408	0,0012

TM30 DETAILS

Rf 84,5
Fidelity index Rf

Rg 108,2
Gammut index

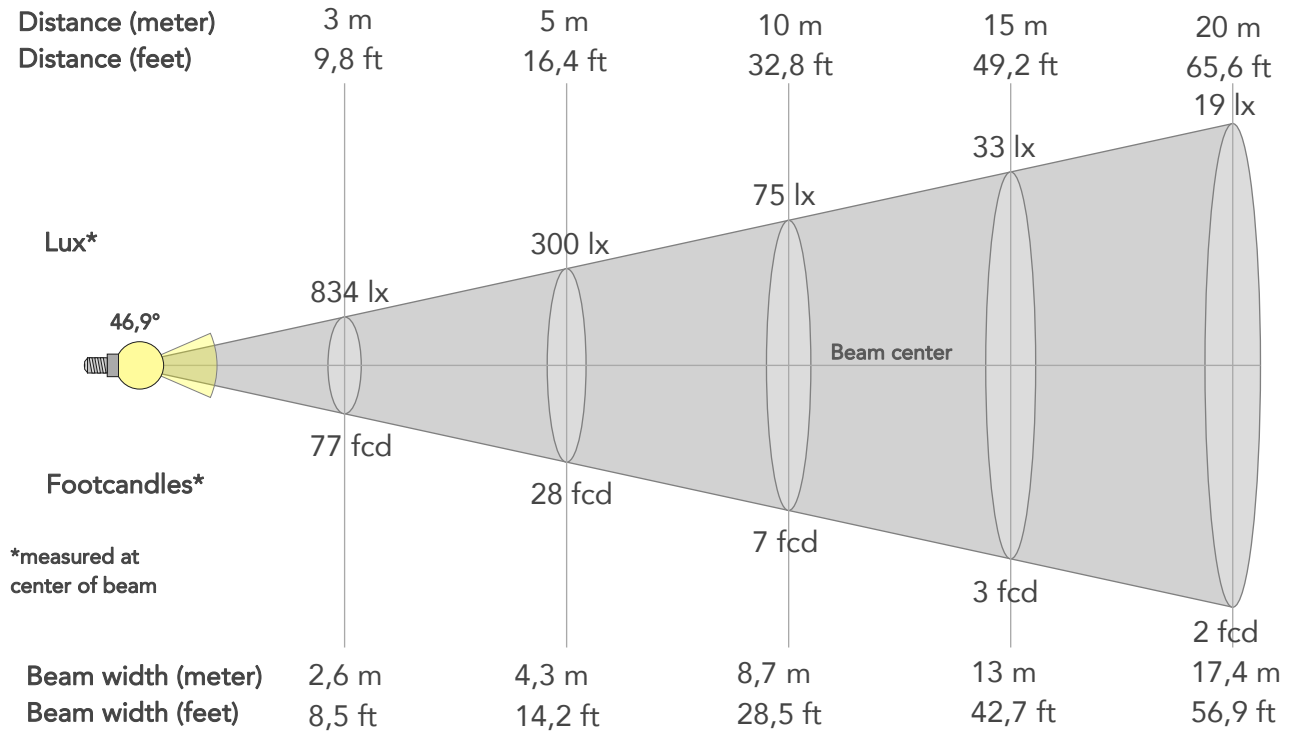
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	81	9%	-2%
2	81	8%	-8%
3	78	4%	-11%
4	88	-2%	-8%
5	92	-1%	1%
6	85	5%	9%
7	82	9%	7%
8	78	14%	-1%
9	81	10%	-6%
10	79	5%	-12%
11	83	2%	-13%
12	85	0%	-9%
13	95	-1%	-4%
14	90	-1%	5%
15	90	3%	5%
16	86	10%	2%



BEAM DETAILS



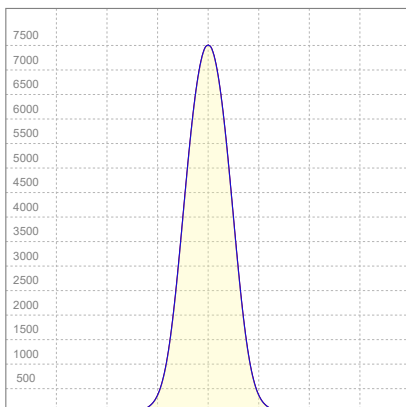
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
46,9°	79,3°	100,2°	99,4%	95,4%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	7505lx	1876lx	834lx	469lx	300lx	133lx	75lx	33lx	19lx	12lx	8lx	5lx	3lx
Footcand.	697fcd	174fcd	77fcd	44fcd	28fcd	12fcd	7fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,9m	1,7m	2,6m	3,5m	4,3m	6,5m	8,7m	13m	17,4m	21,7m	26m	34,7m	43,4m
Beam wid.	2,9ft	5,7ft	8,5ft	11,4ft	14,2ft	21,3ft	28,5ft	42,7ft	56,9ft	71,2ft	85,4ft	113,9ft	142,3ft

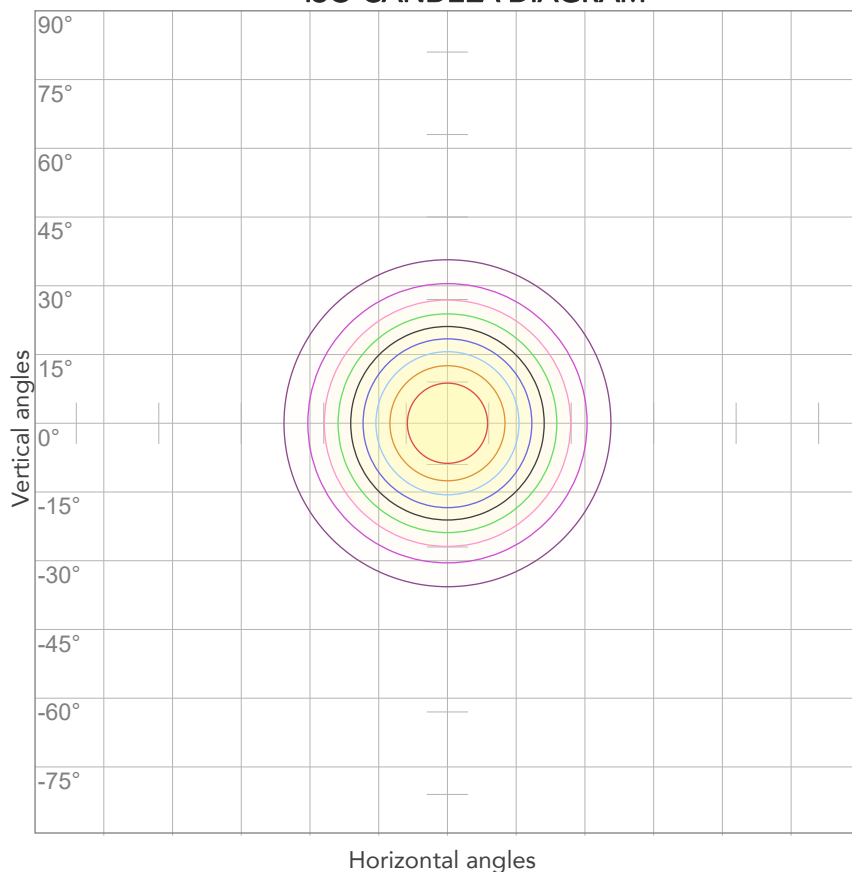
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,614A	129,6W	39lm/W

ISO CANDELA DIAGRAM



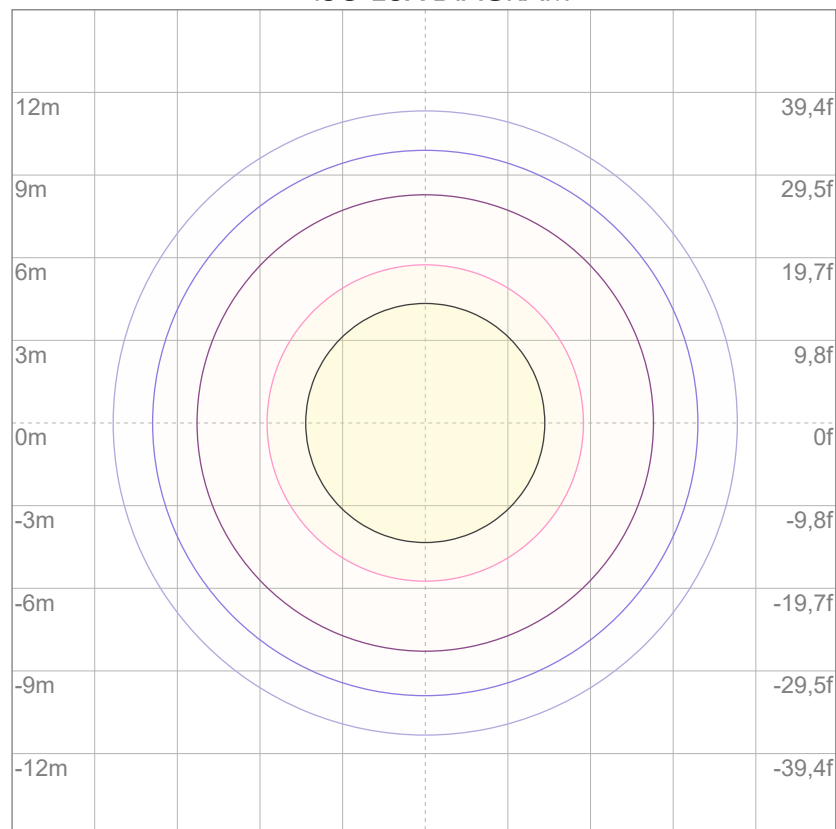
10%	750 cd
20%	1501 cd
30%	2251 cd
40%	3002 cd
50%	3752 cd
60%	4503 cd
70%	5253 cd
80%	6004 cd

Conditions:

Number of c-planes: 4

Candela at center: 7505 cd

ISO LUX DIAGRAM



3%	2,25 lx
5%	3,75 lx
10%	7,50 lx
30%	22,5 lx
50%	37,5 lx

Conditions:

Number of c-planes: 4

Lux at center: 75,0 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

7821 lm

Peak candela output:

15894 cd

Light quality:

CRI: 76,8

Color temperature:

2818 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 10°x60° Filter

Target:

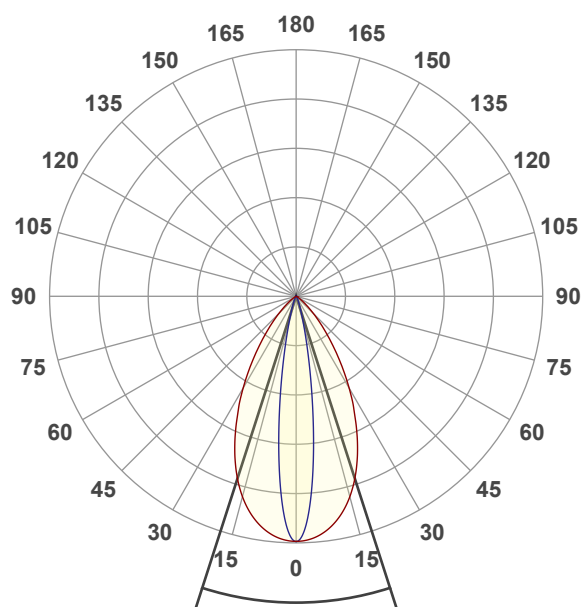
2800K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:08:56

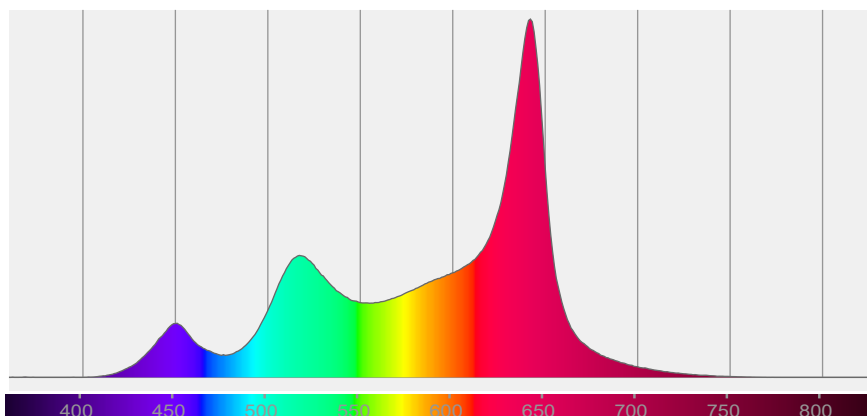


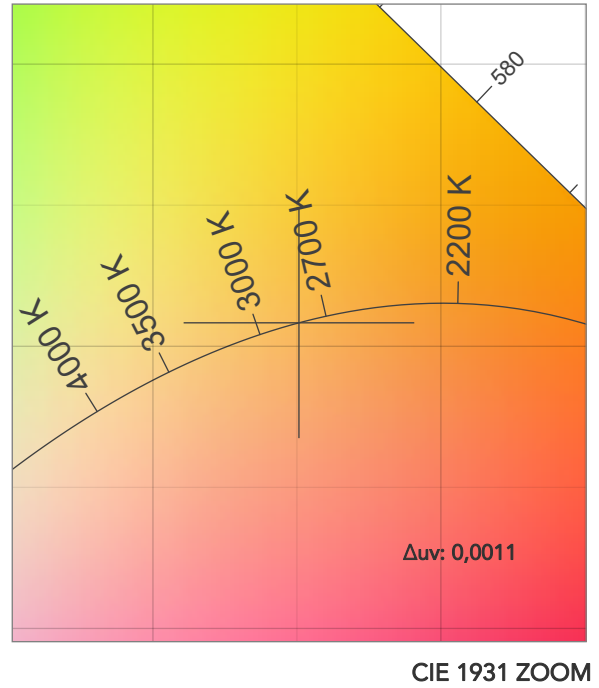
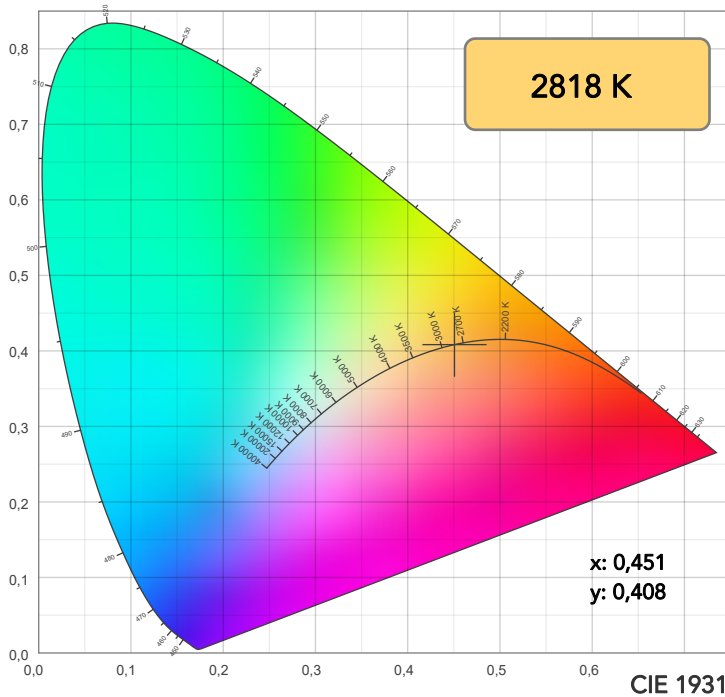
Beam angle 50%: 35,7°

Field angle 10%: 60,7°

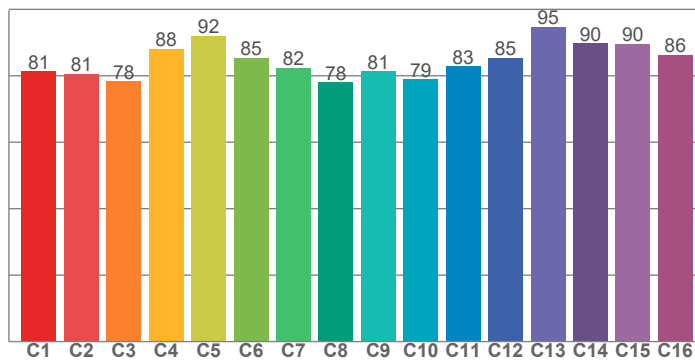
Cut off angle 2.5%: 76,8°

Spectra

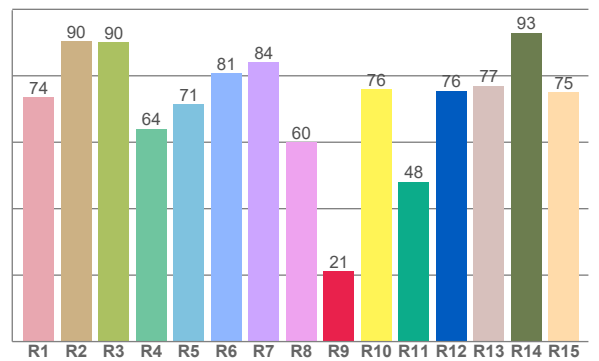




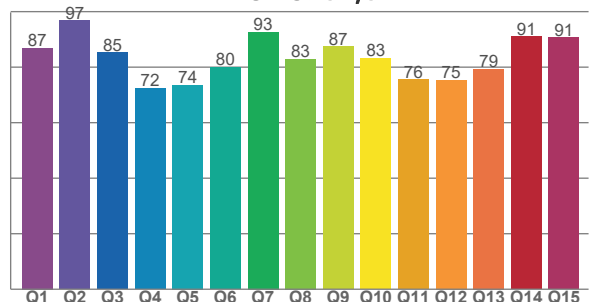
TM30: 84,5



CRI: 76,8 (R1-R8)



CQS: 81,8



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
73,6	90,5	90,2	64,1	71,3	80,8	84,2	60,0	21,2	75,9	48,1	75,5	77,0	93,0	75,0

TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
81,4	80,5	78,3	88,1	92,1	85,4	82,3	78,0	81,3	78,9	82,9	85,4	94,7	89,8	89,7	86,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
86,9	96,7	85,2	72,4	73,5	80,0	92,6	82,9	87,4	83,2	75,5	75,4	79,3	91,0	90,6

COLOR PARAMETERS

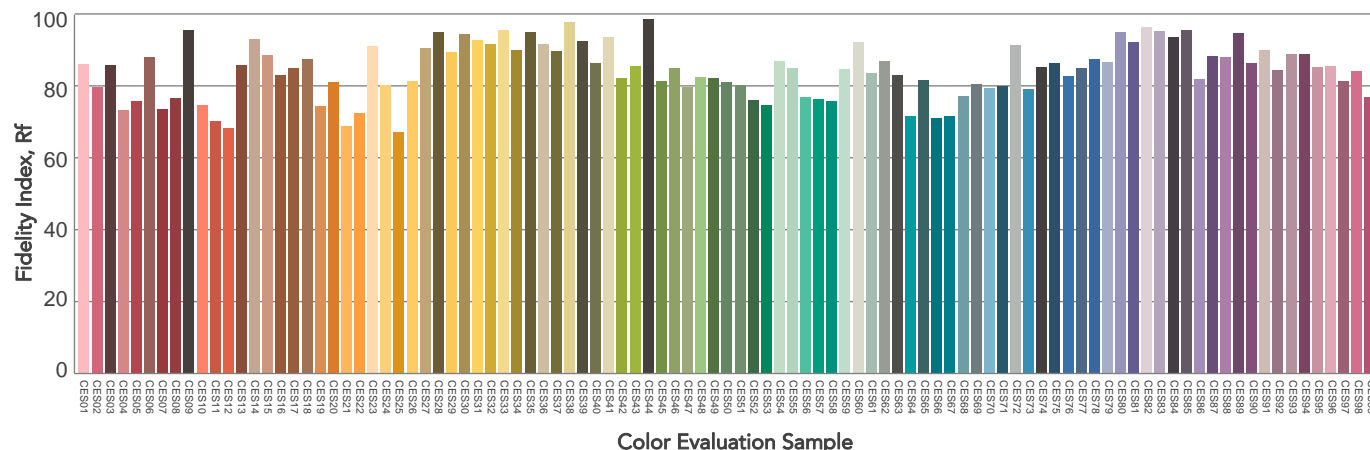
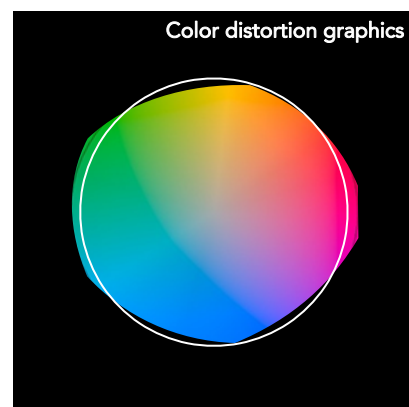
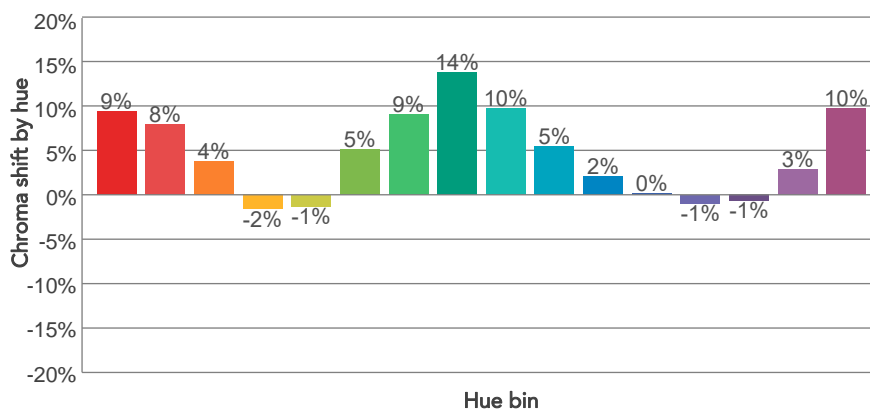
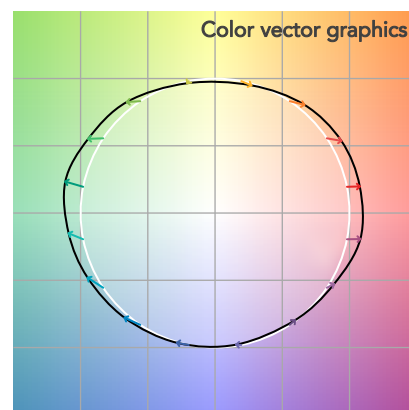
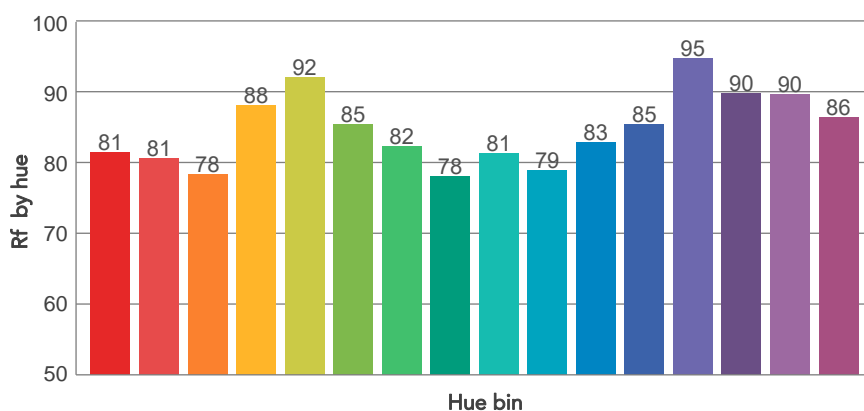
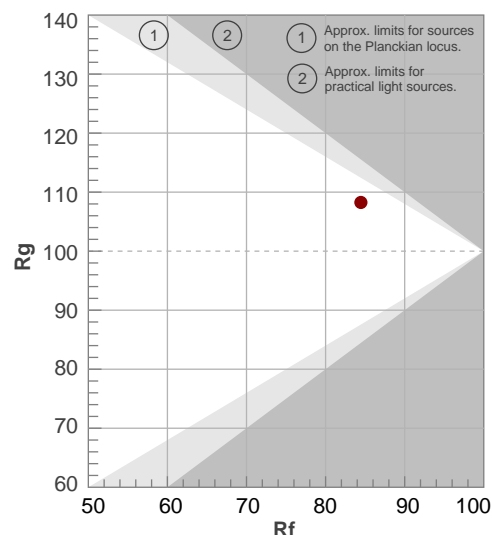
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2818 K	76,8	21,2	84,5	108,3	81,8	57	0,451	0,408	0,0011

TM30 DETAILS

Rf 84,5
Fidelity index Rf

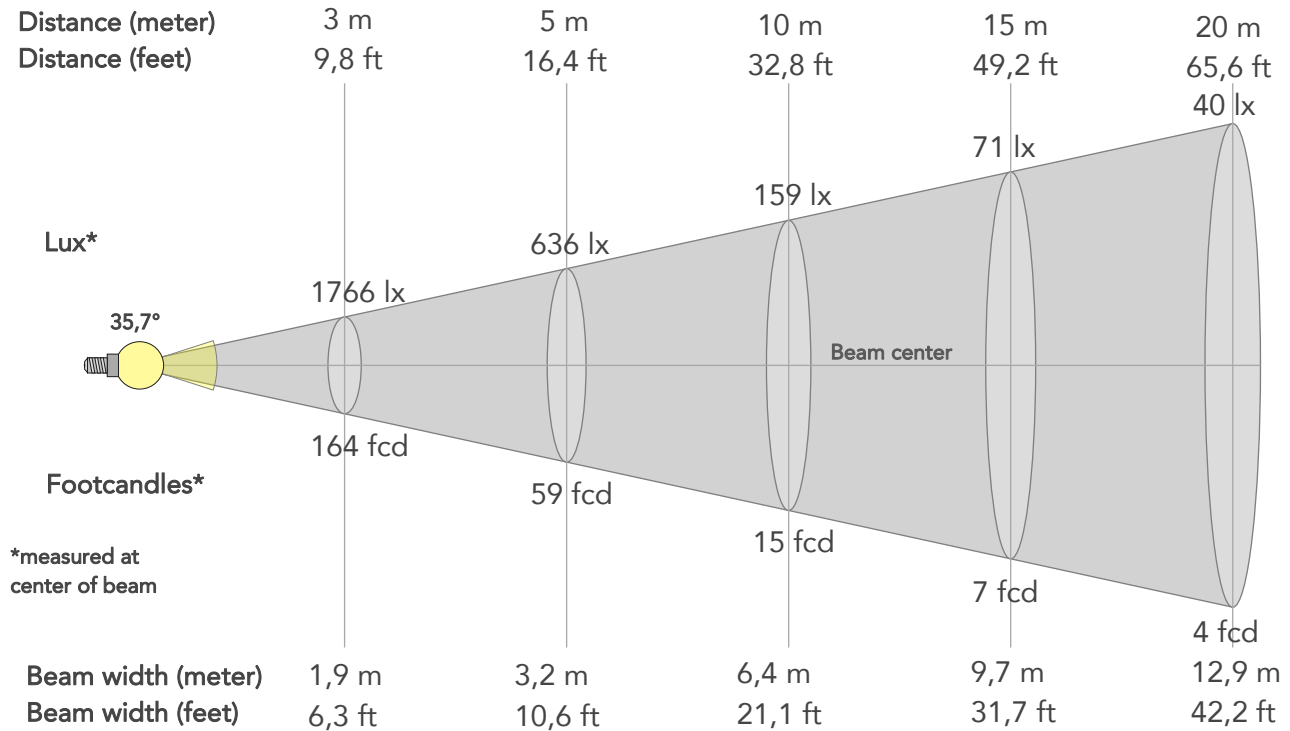
Rg 108,3
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	81	9%	-2%
2	81	8%	-8%
3	78	4%	-11%
4	88	-2%	-8%
5	92	-1%	1%
6	85	5%	9%
7	82	9%	7%
8	78	14%	-1%
9	81	10%	-6%
10	79	5%	-13%
11	83	2%	-13%
12	85	0%	-9%
13	95	-1%	-4%
14	90	-1%	5%
15	90	3%	5%
16	86	10%	2%



BEAM DETAILS

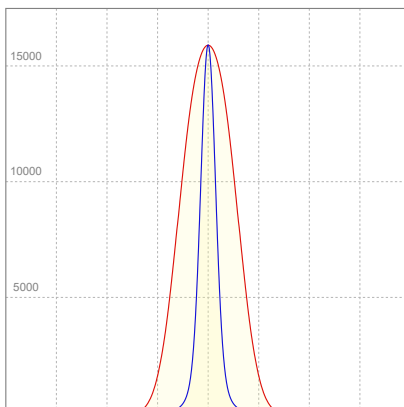
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
35,7°	60,7°	76,8°	99,8%	94,6%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	15893lx	3973lx	1766lx	993lx	636lx	283lx	159lx	71lx	40lx	25lx	18lx	10lx	6lx
Footcand.	1477fcd	369fcd	164fcd	92fcd	59fcd	26fcd	15fcd	7fcd	4fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,6m	1,3m	1,9m	2,6m	3,2m	4,8m	6,4m	9,7m	12,9m	16,1m	19,3m	25,8m	32,2m
Beam wid.	2,1ft	4,2ft	6,3ft	8,4ft	10,6ft	15,8ft	21,1ft	31,7ft	42,2ft	52,8ft	63,4ft	84,5ft	105,6ft

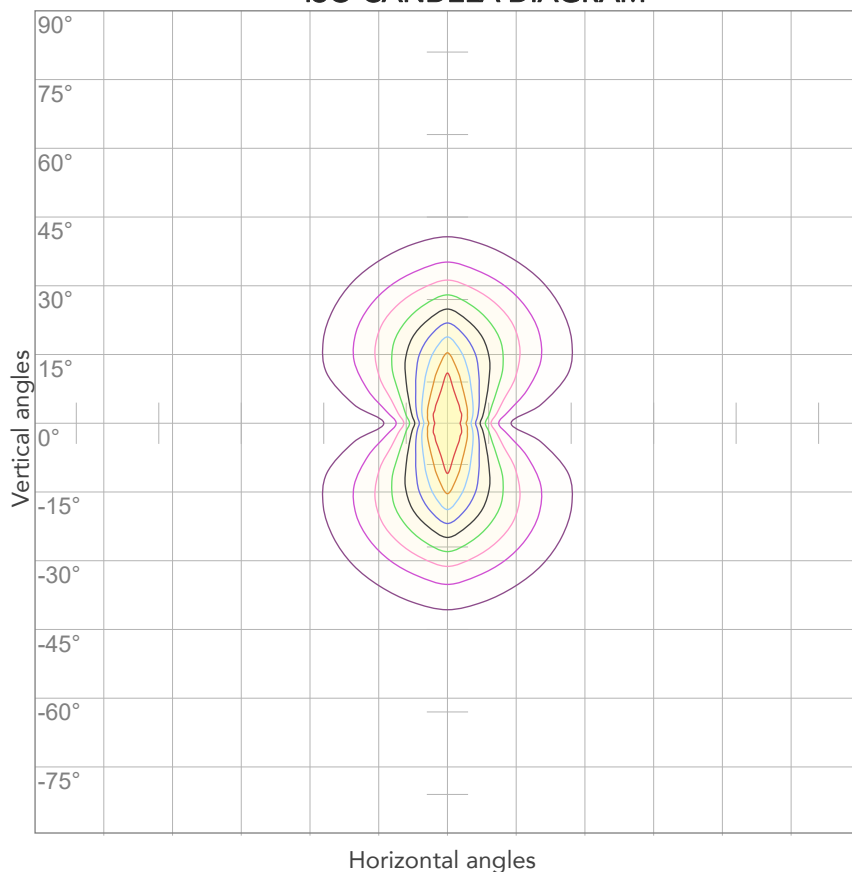
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,614A	129,5W	60lm/W

ISO CANDELA DIAGRAM



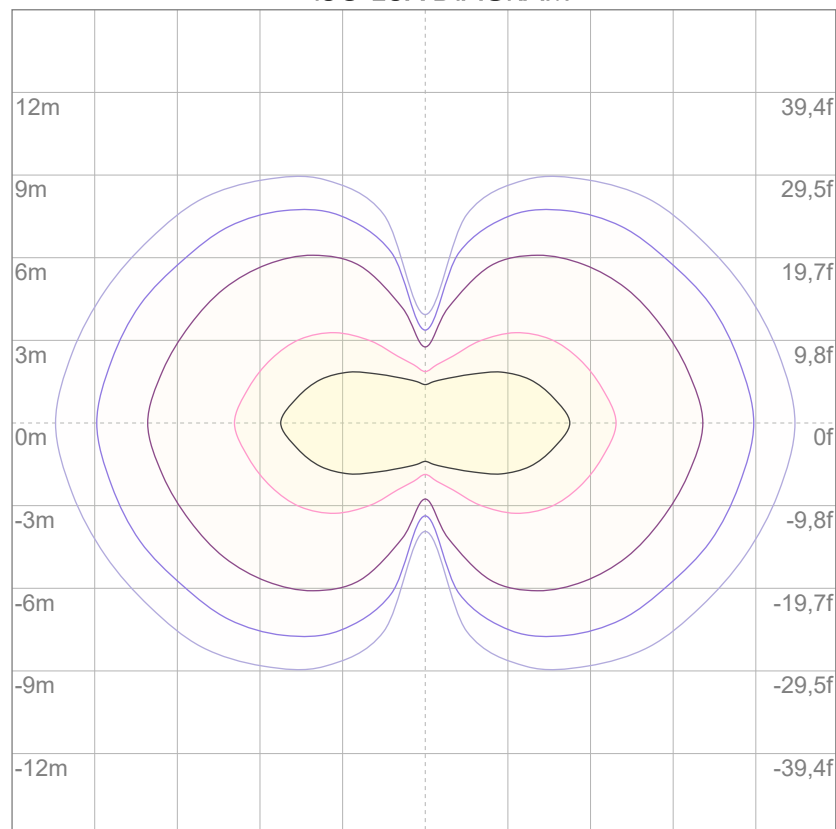
10%	1589 cd
20%	3179 cd
30%	4768 cd
40%	6357 cd
50%	7947 cd
60%	9536 cd
70%	11125 cd
80%	12714 cd

Conditions:

Number of c-planes: 4

Candela at center: 15893 cd

ISO LUX DIAGRAM



3%	4,77 lx
5%	7,95 lx
10%	15,9 lx
30%	47,7 lx
50%	79,5 lx

Conditions:

Number of c-planes: 4

Lux at center: 159 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4180 lm

Peak candela output:

76195 cd

Light quality:

CRI: 95,6

Color temperature:

3213 K

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic (No Filter)

Target:

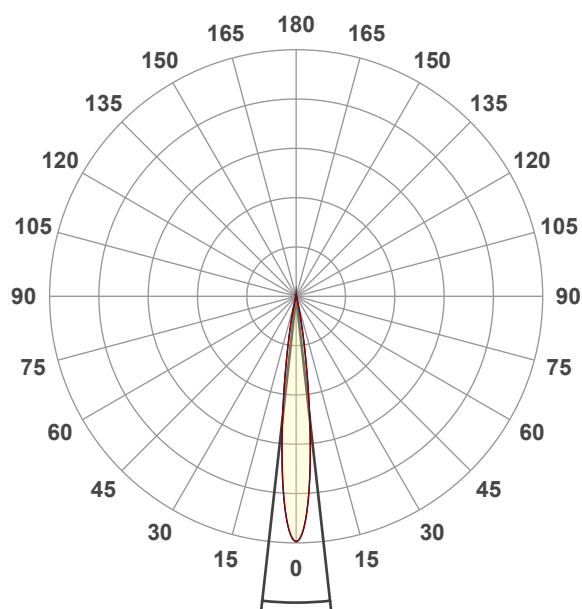
3200K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:13:05

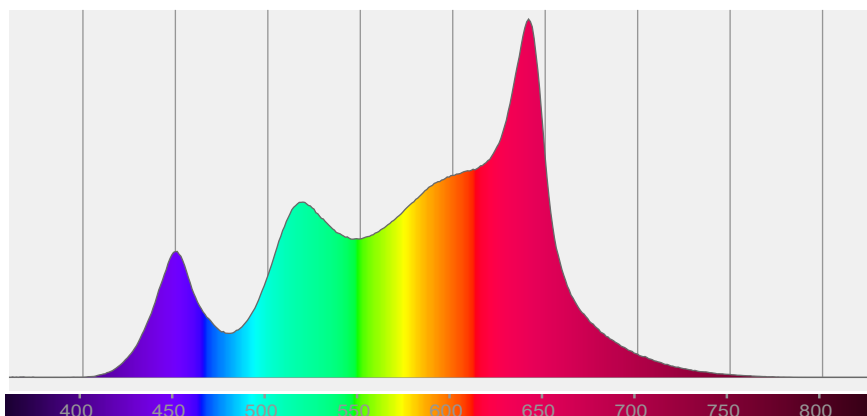


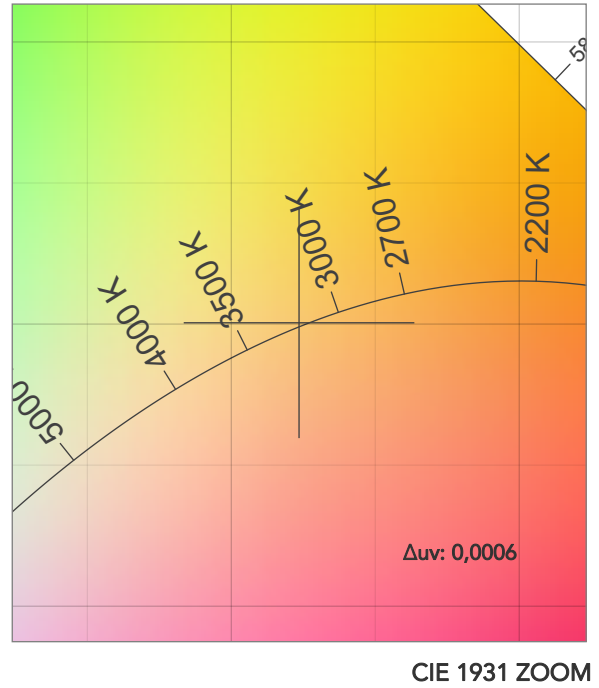
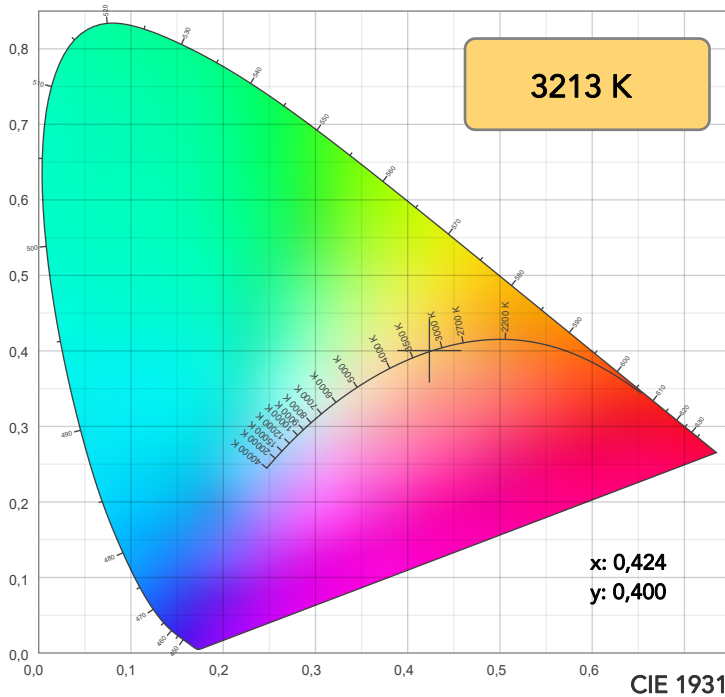
Beam angle 50%: 12,7°

Field angle 10%: 22,5°

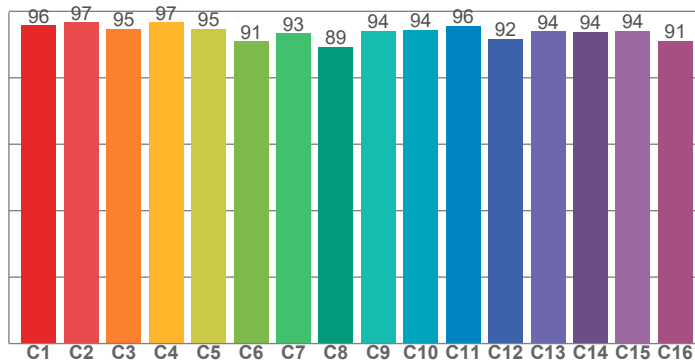
Cut off angle 2.5%: 29,1°

Spectra

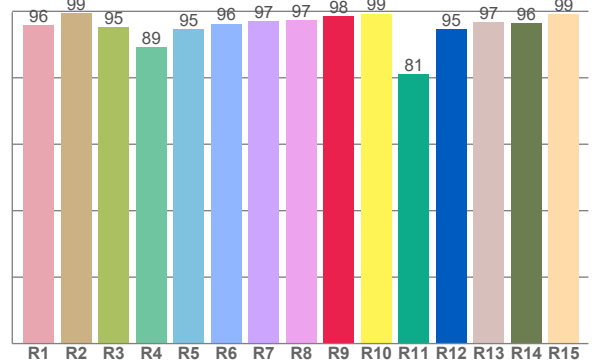




TM30: 94,2



CRI: 95,6 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,8	99,3	95,2	89,2	94,7	96,2	97,1	97,3	98,5	99,3	81,0	94,7	96,8	96,4	99,1

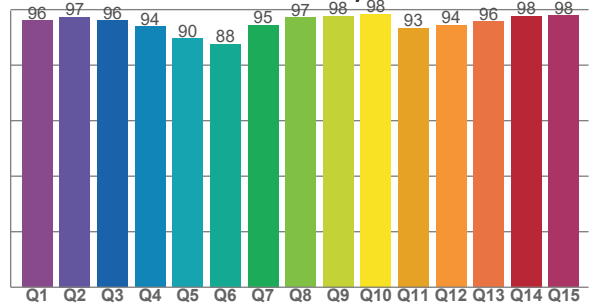
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,8	96,7	94,7	96,6	94,7	90,9	93,3	89,4	94,1	94,4	95,7	91,8	94,0	93,7	94,1	91,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,1	97,3	96,0	94,0	89,5	87,6	94,5	97,1	97,7	98,4	93,4	94,4	95,7	97,8	97,8

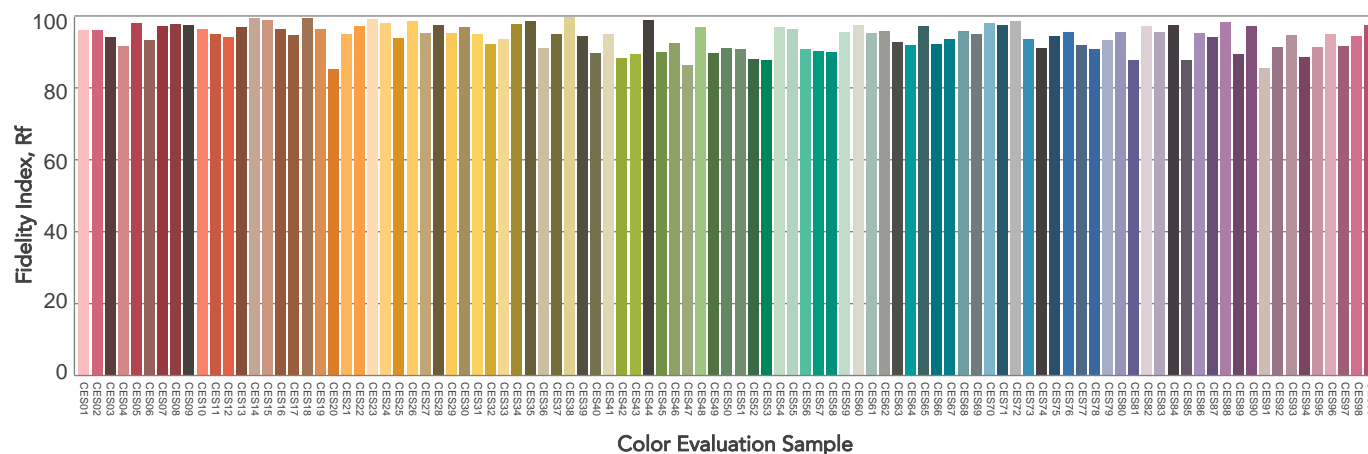
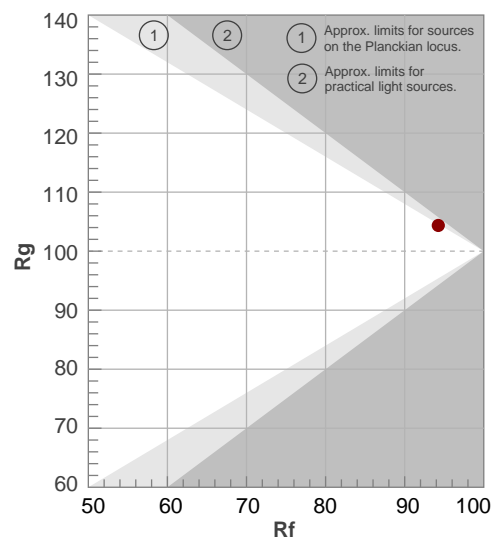
CQS: 94,1



COLOR PARAMETERS

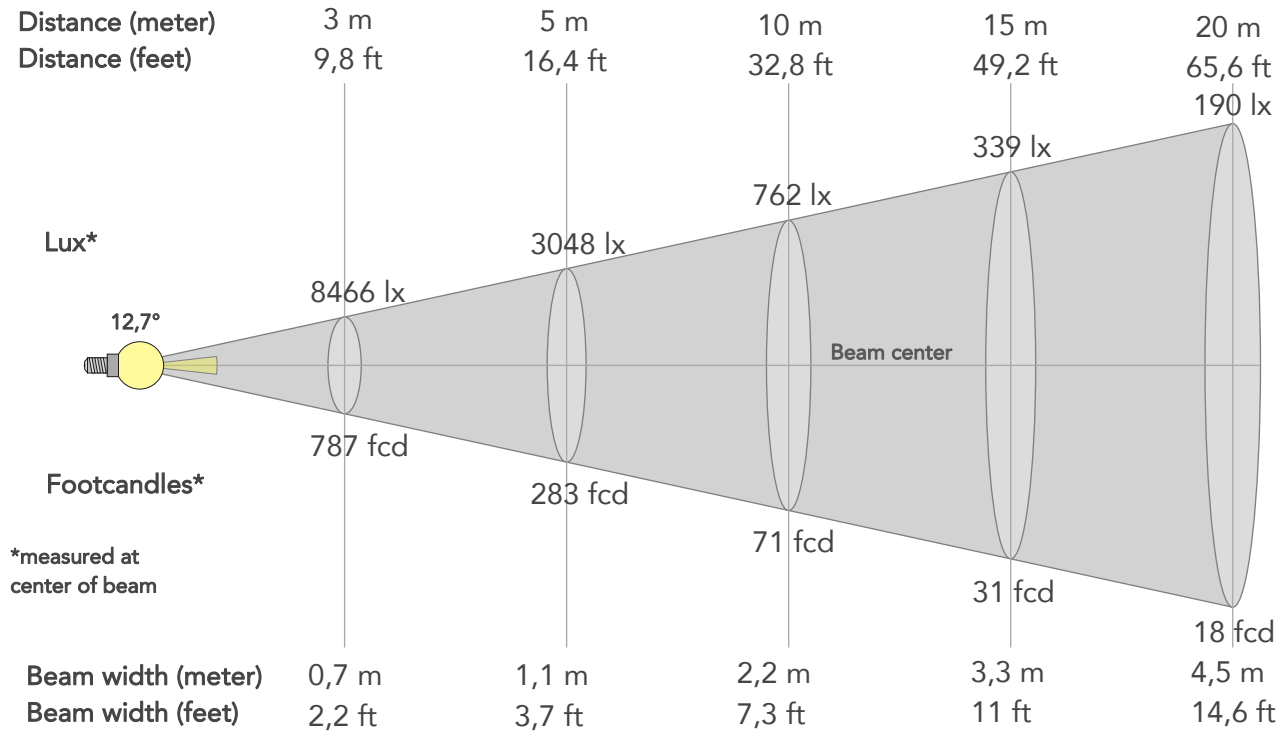
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3213 K	95,6	98,5	94,2	104,4	94,1	87	0,424	0,400	0,0006

Gammut index



BEAM DETAILS

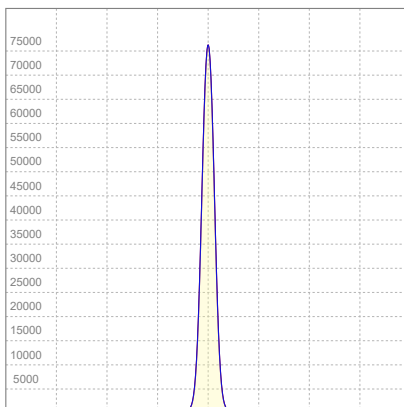
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
12,7°	22,5°	29,1°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	76195lx	19049lx	8466lx	4762lx	3048lx	1355lx	762lx	339lx	190lx	122lx	85lx	48lx	30lx
Footcand.	7079fcd	1770fcd	787fcd	442fcd	283fcd	126fcd	71fcd	31fcd	18fcd	11fcd	8fcd	4fcd	3fcd
Beam wid.	0,2m	0,4m	0,7m	0,9m	1,1m	1,7m	2,2m	3,3m	4,5m	5,6m	6,7m	8,9m	11,1m
Beam wid.	0,7ft	1,5ft	2,2ft	2,9ft	3,7ft	5,5ft	7,3ft	11ft	14,6ft	18,3ft	21,9ft	29,2ft	36,5ft

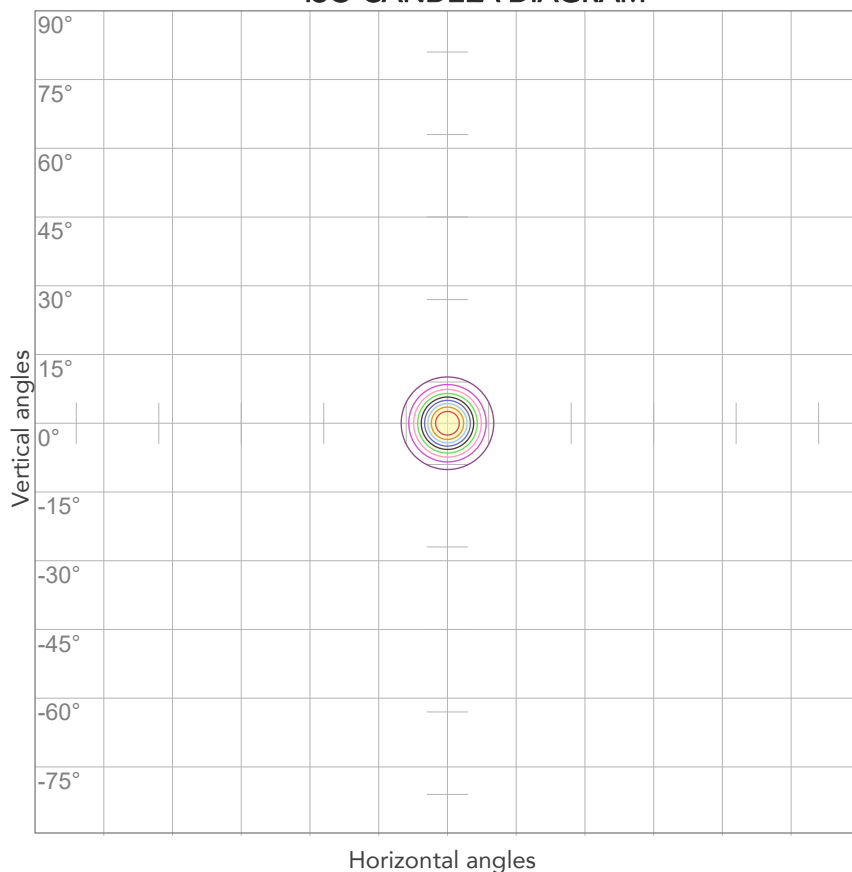
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,500A	105,5W	40lm/W

ISO CANDELA DIAGRAM



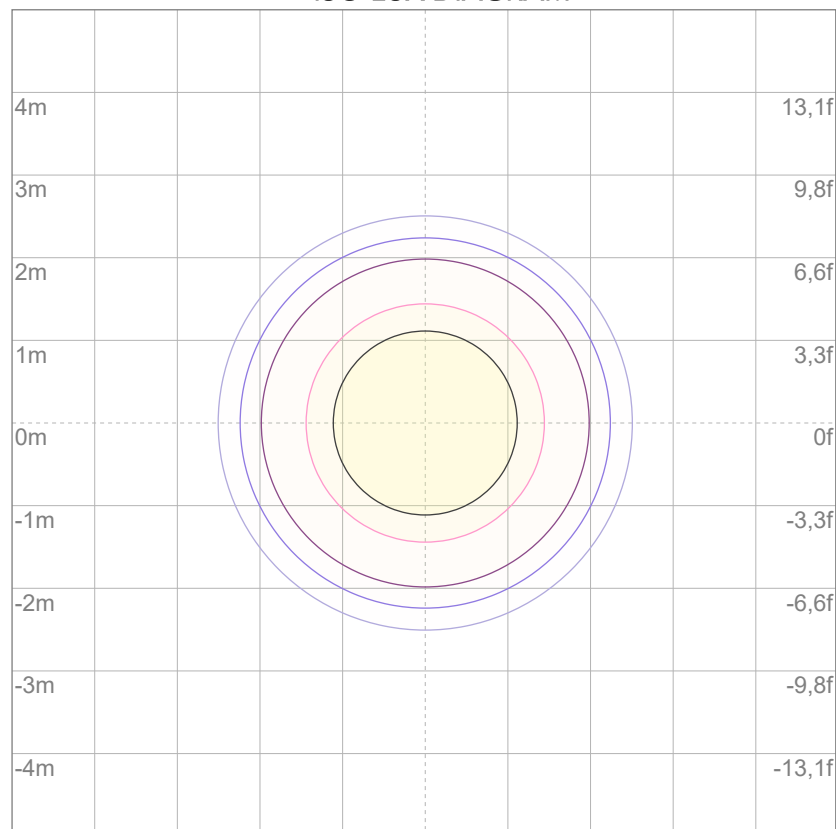
10%	7620 cd
20%	15239 cd
30%	22859 cd
40%	30478 cd
50%	38098 cd
60%	45717 cd
70%	53337 cd
80%	60956 cd

Conditions:

Number of c-planes: 4

Candela at center: 76195 cd

ISO LUX DIAGRAM



3%	22,9 lx
5%	38,1 lx
10%	76,2 lx
30%	229 lx
50%	381 lx

Conditions:

Number of c-planes: 4

Lux at center: 762 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4204 lm

Peak candela output:

12697 cd

Light quality:

CRI: 95,6

Color temperature:

3219 K

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic + 25° Filter

Target:

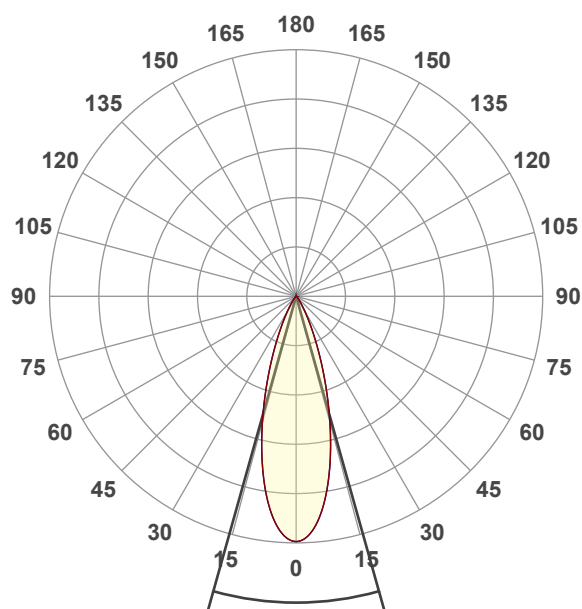
3200K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:18:30

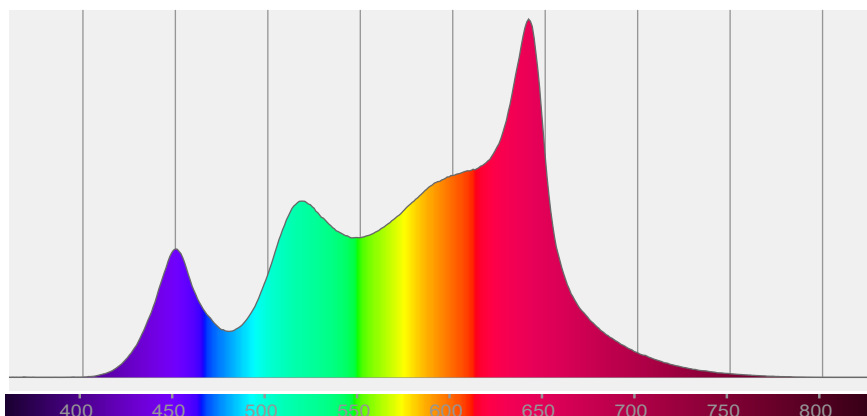


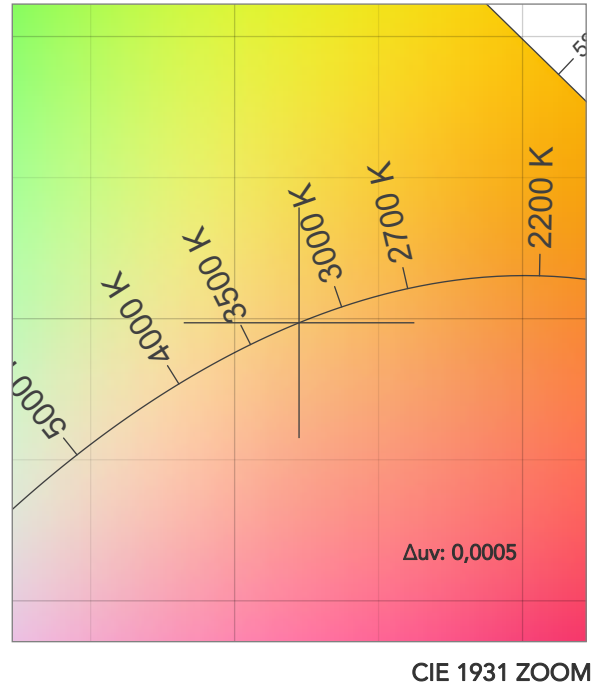
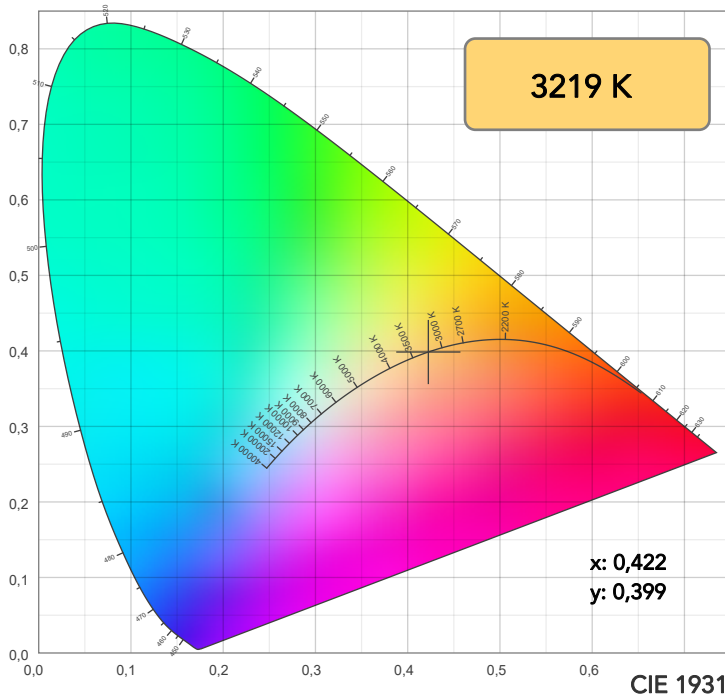
Beam angle 50%: 31,4°

Field angle 10%: 56°

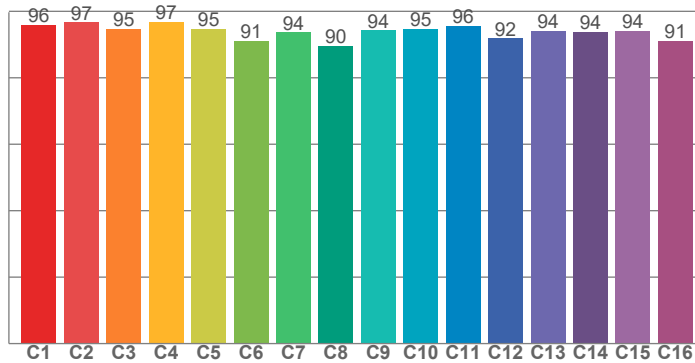
Cut off angle 2.5%: 72,1°

Spectra

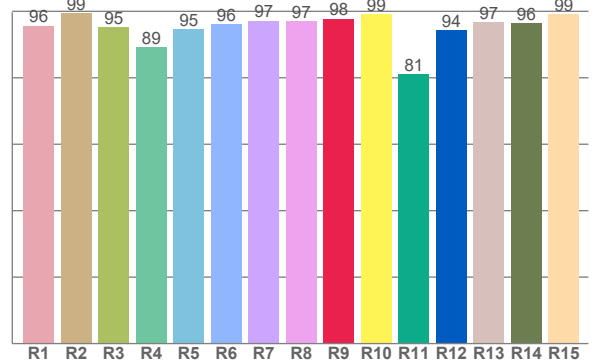




TM30: 94,3



CRI: 95,6 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,7	99,4	95,2	89,2	94,6	96,2	97,1	97,1	97,7	99,1	81,1	94,4	96,6	96,4	99,2

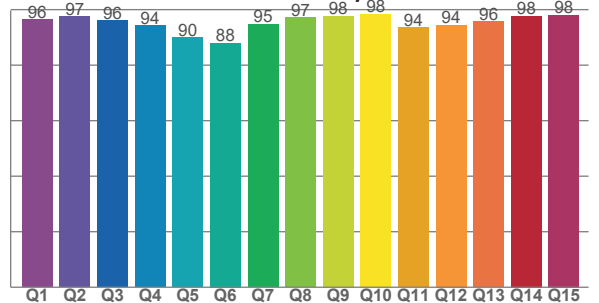
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,9	96,7	94,7	96,8	94,7	91,1	93,6	89,6	94,2	94,7	95,7	91,9	94,1	93,9	94,2	91,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,5	97,4	96,0	94,2	89,9	88,0	94,7	97,1	97,8	98,5	93,5	94,4	95,7	97,8	98,1

CQS: 94,3



COLOR PARAMETERS

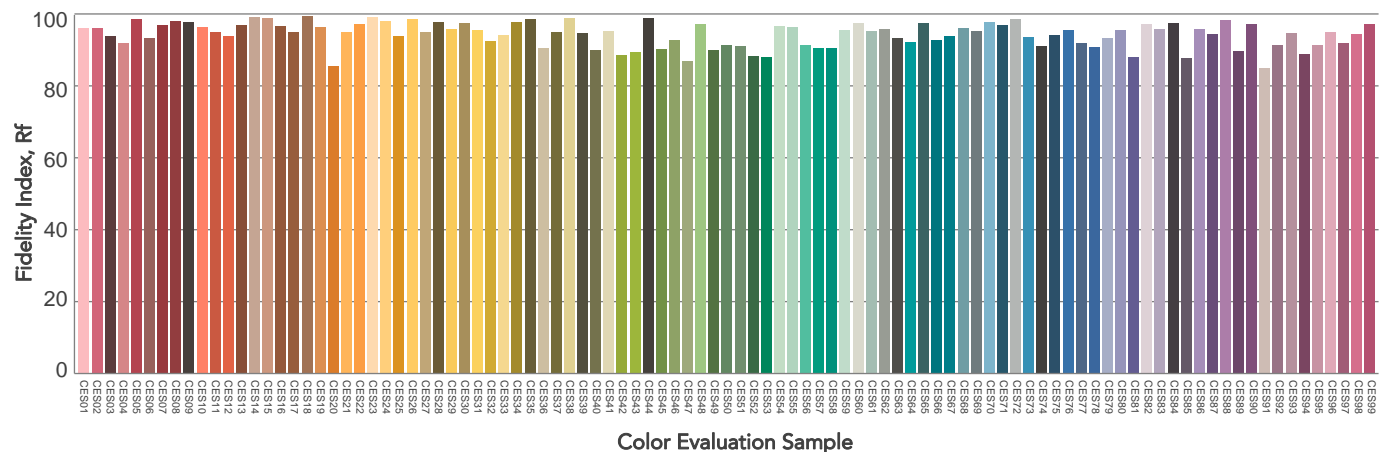
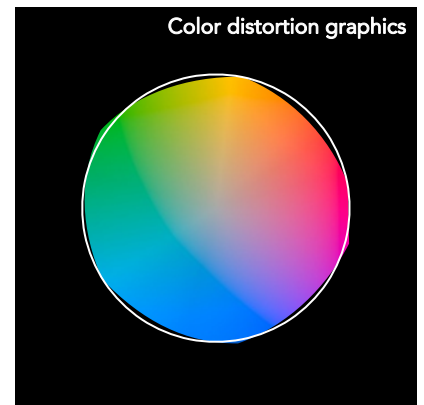
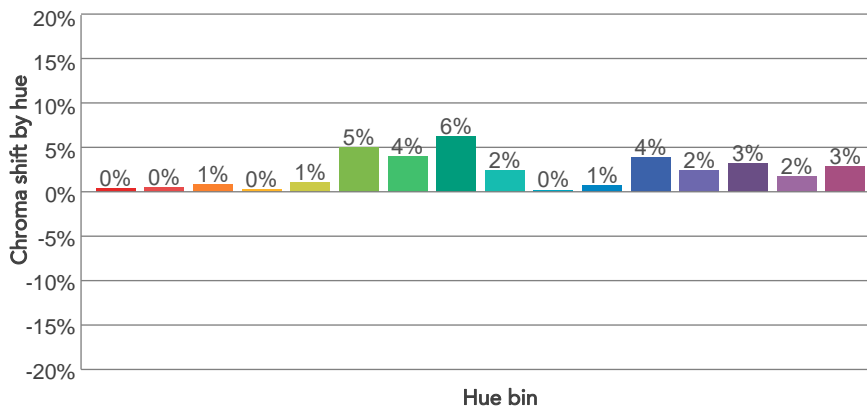
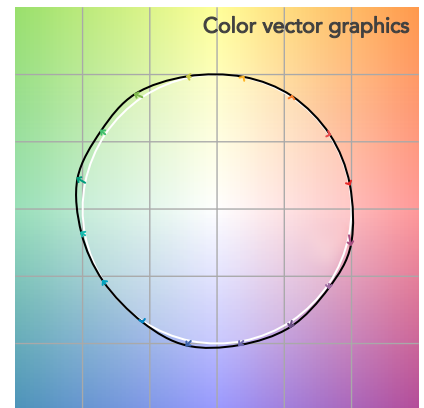
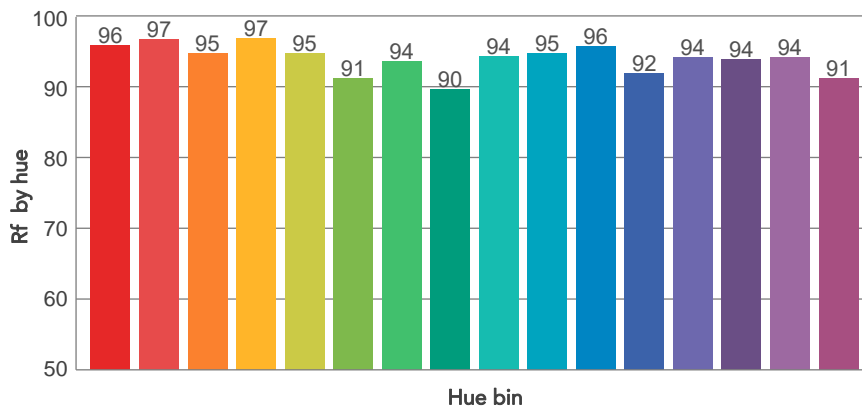
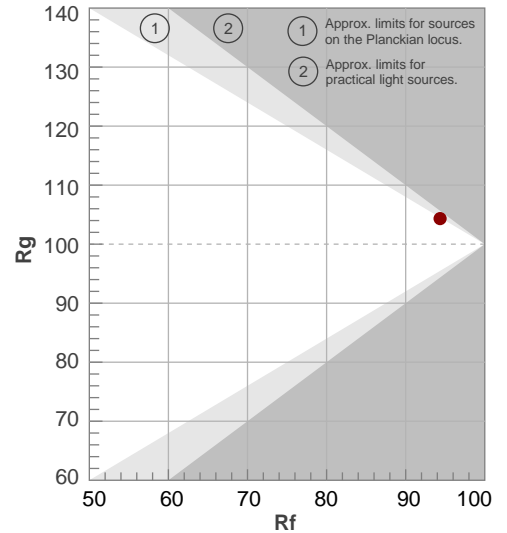
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3219 K	95,6	97,7	94,3	104,3	94,3	87	0,422	0,399	0,0005

TM30 DETAILS

Rf 94,3
Fidelity index Rf

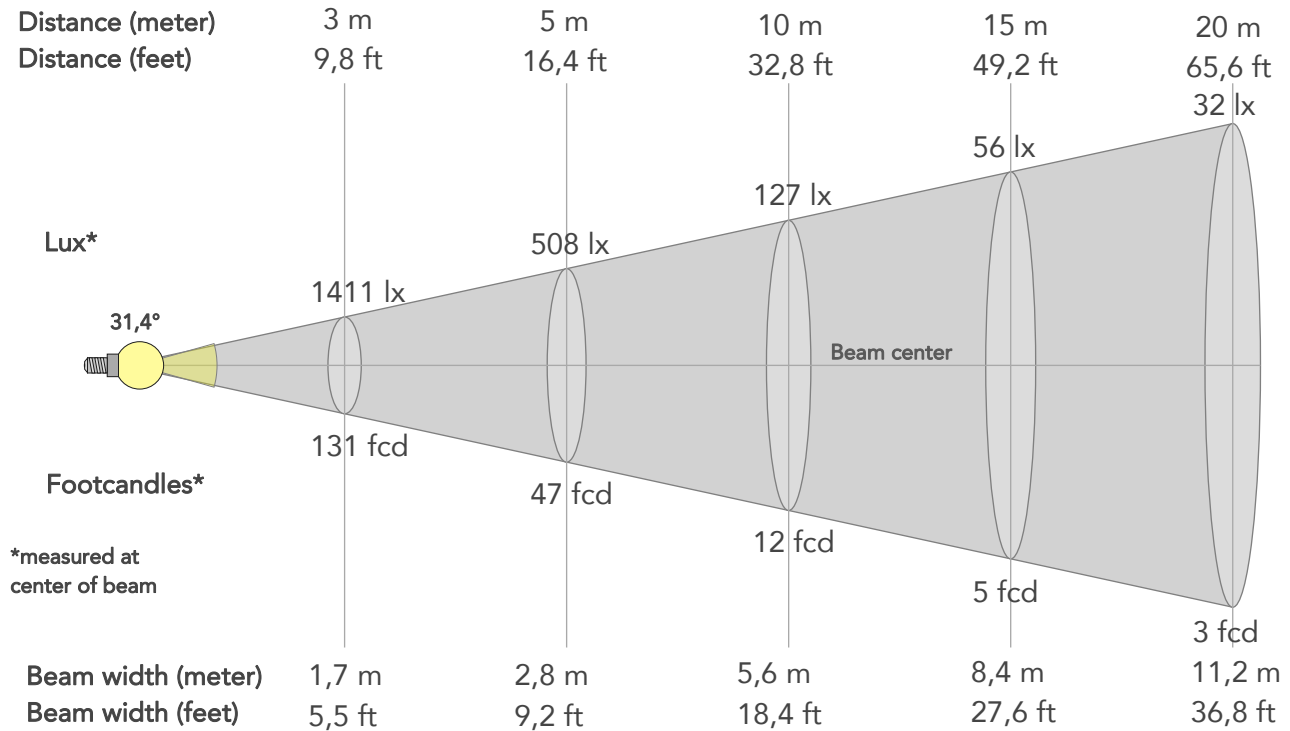
Rg 104,3
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	0%	-1%
2	97	0%	-1%
3	95	1%	0%
4	97	0%	0%
5	95	1%	3%
6	91	5%	3%
7	94	4%	-1%
8	90	6%	-2%
9	94	2%	-3%
10	95	0%	-3%
11	96	1%	1%
12	92	4%	-2%
13	94	2%	-4%
14	94	3%	-4%
15	94	2%	-3%
16	91	3%	-7%



BEAM DETAILS

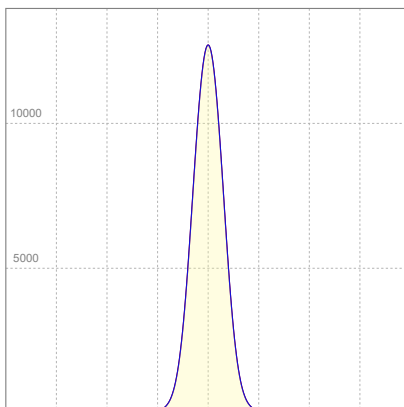
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,4°	56°	72,1°	100,0%	99,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	12697lx	3174lx	1411lx	794lx	508lx	226lx	127lx	56lx	32lx	20lx	14lx	8lx	5lx
Footcand.	1180fcd	295fcd	131fcd	74fcd	47fcd	21fcd	12fcd	5fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,2m	5,6m	8,4m	11,2m	14m	16,8m	22,5m	28,1m
Beam wid.	1,9ft	3,7ft	5,5ft	7,4ft	9,2ft	13,8ft	18,4ft	27,6ft	36,8ft	46ft	55,3ft	73,7ft	92,1ft

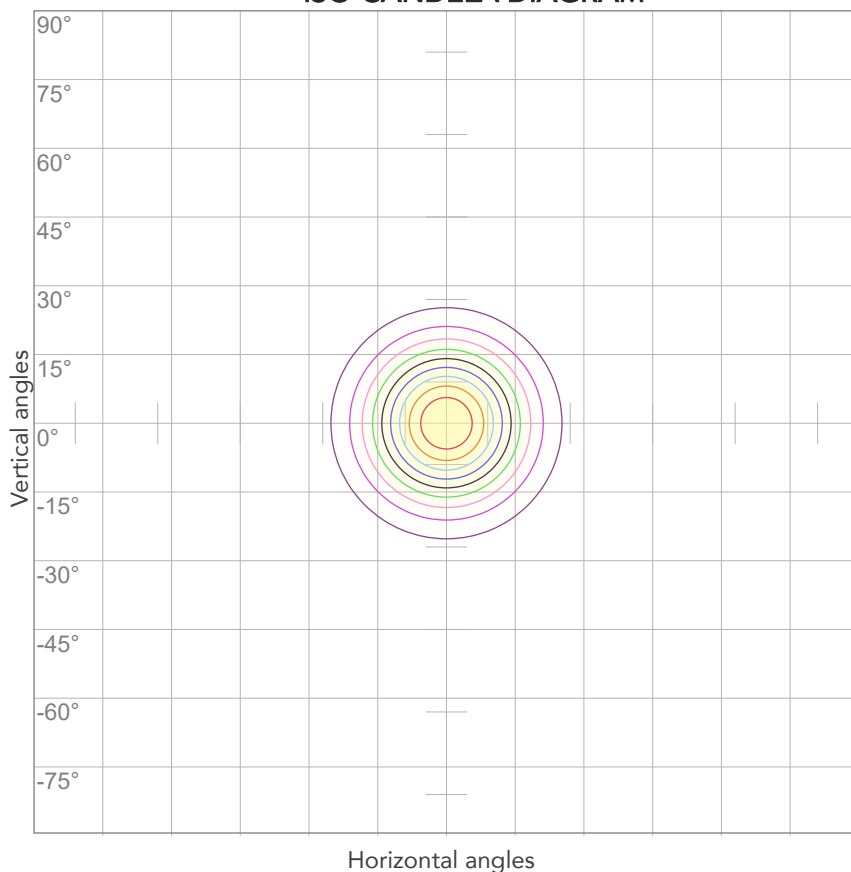
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,499A	105,4W	40lm/W

ISO CANDELA DIAGRAM



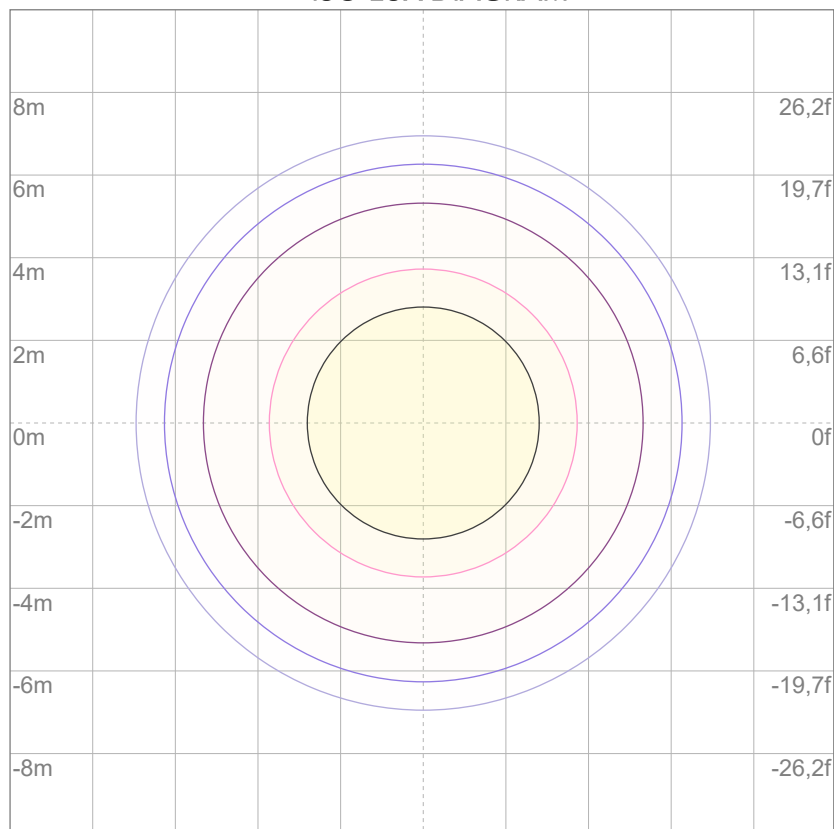
10%	1270 cd
20%	2539 cd
30%	3809 cd
40%	5079 cd
50%	6349 cd
60%	7618 cd
70%	8888 cd
80%	10158 cd

Conditions:

Number of c-planes: 4

Candela at center: 12697 cd

ISO LUX DIAGRAM



3%	3,81 lx
5%	6,35 lx
10%	12,7 lx
30%	38,1 lx
50%	63,5 lx

Conditions:

Number of c-planes: 4

Lux at center: 127 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4277 lm

Peak candela output:

6197 cd

Light quality:

CRI: 95,5

Color temperature:

3210 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 40° Filter

Target:

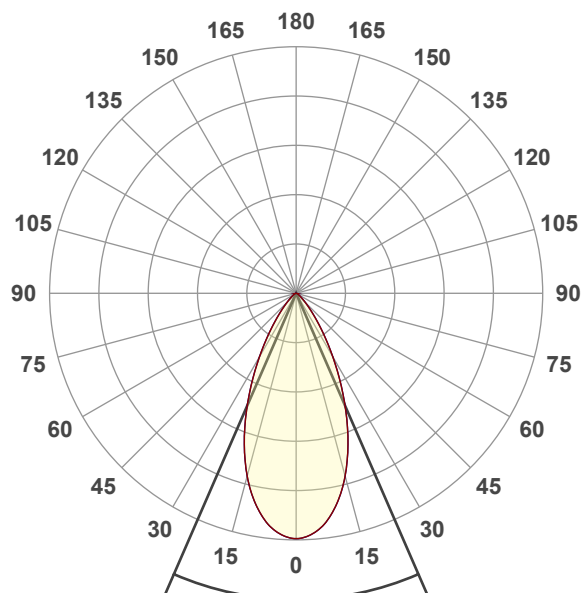
3200K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:15:48

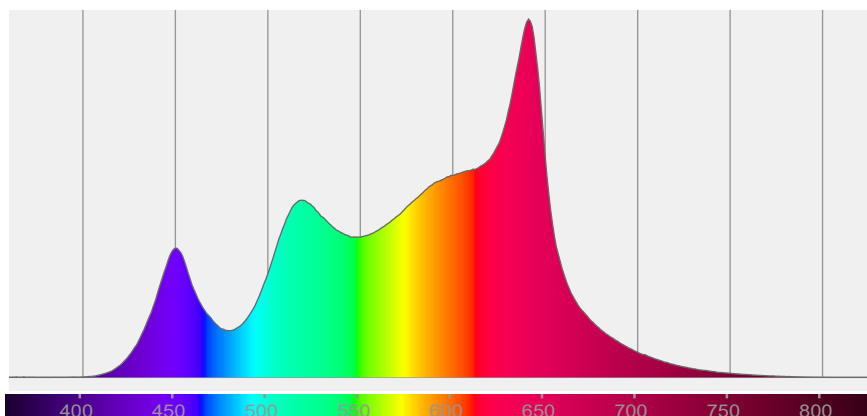


Beam angle 50%: 47°

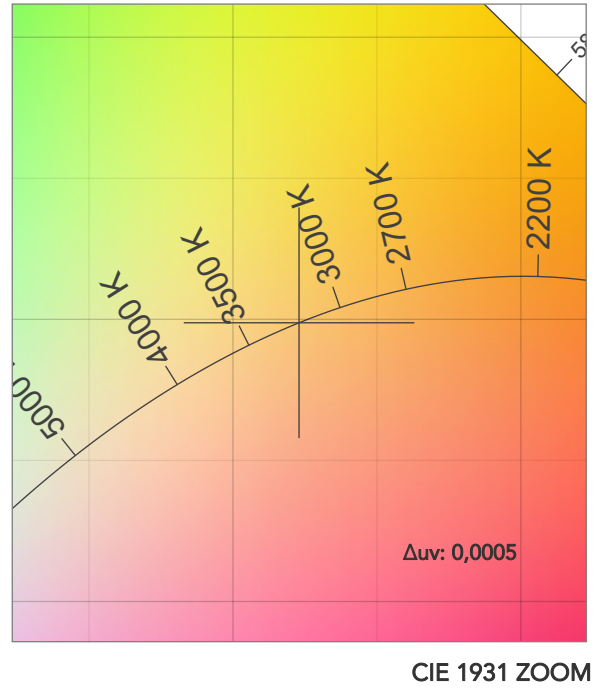
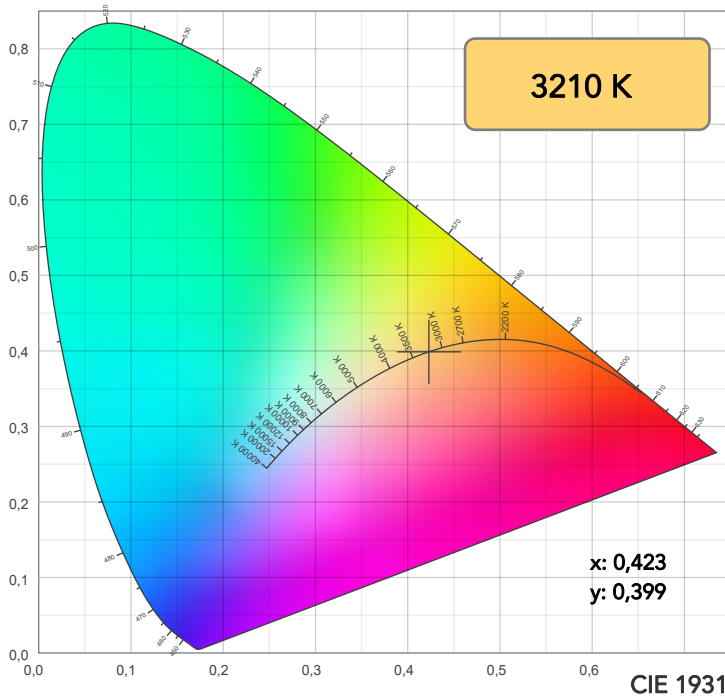
Field angle 10%: 79,9°

Cut off angle 2.5%: 103°

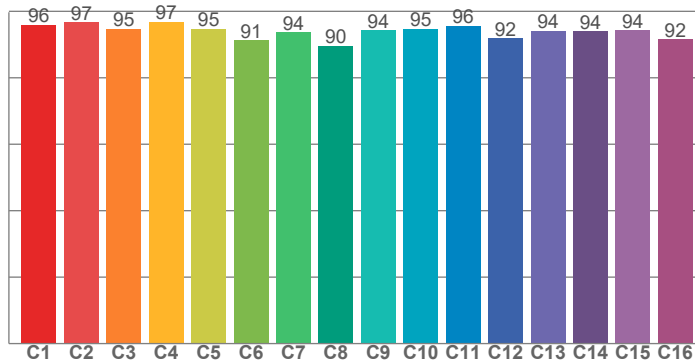
Spectra



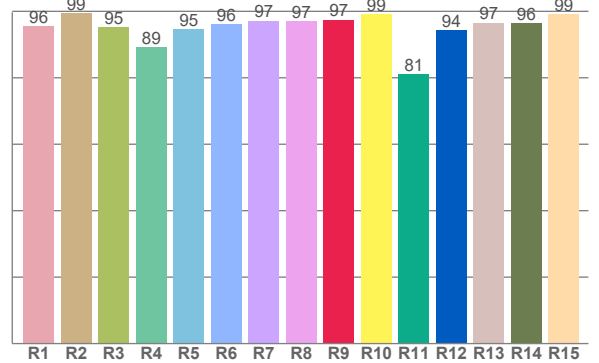
COLOR DETAILS



TM30: 94,4



CRI: 95,5 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,6	99,5	95,2	89,2	94,5	96,2	97,2	97,0	97,4	99,1	81,1	94,3	96,6	96,4	99,1

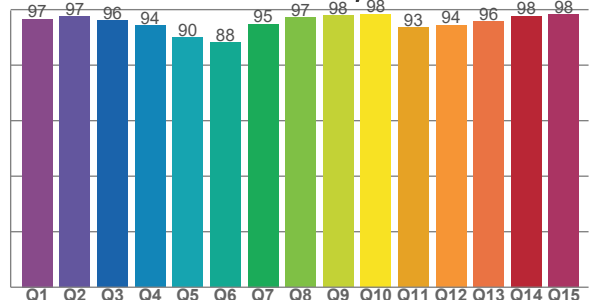
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96,0	96,7	94,7	96,8	94,7	91,2	93,7	89,7	94,3	94,8	95,7	91,9	94,2	93,9	94,2	91,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,6	97,5	96,1	94,3	90,0	88,1	94,9	97,1	97,8	98,5	93,5	94,4	95,7	97,8	98,2

CQS: 94,3



COLOR PARAMETERS

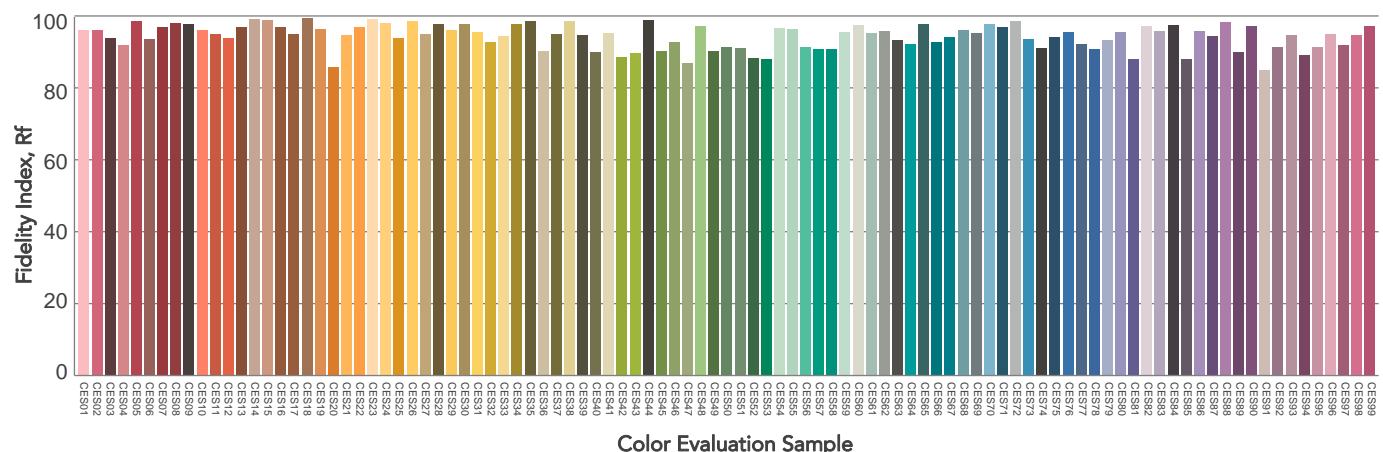
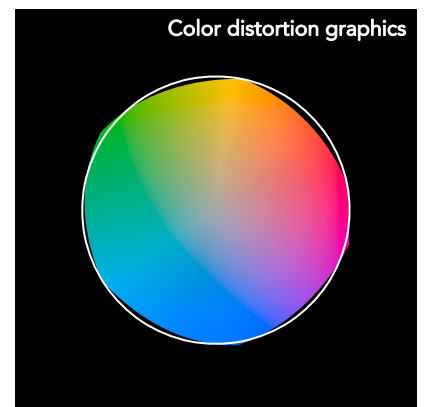
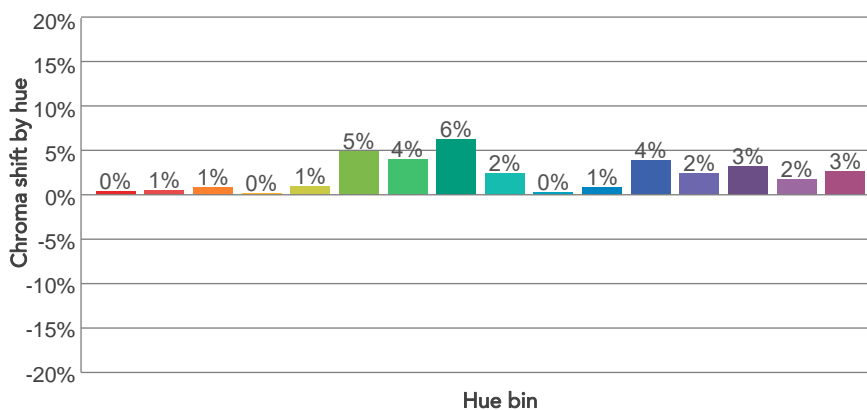
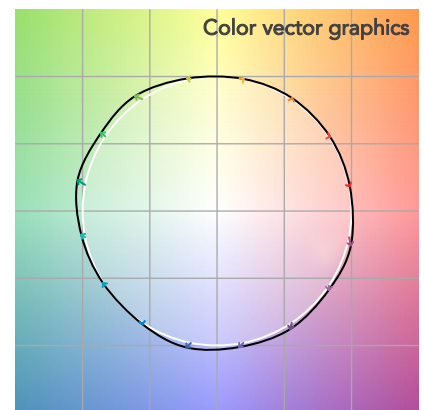
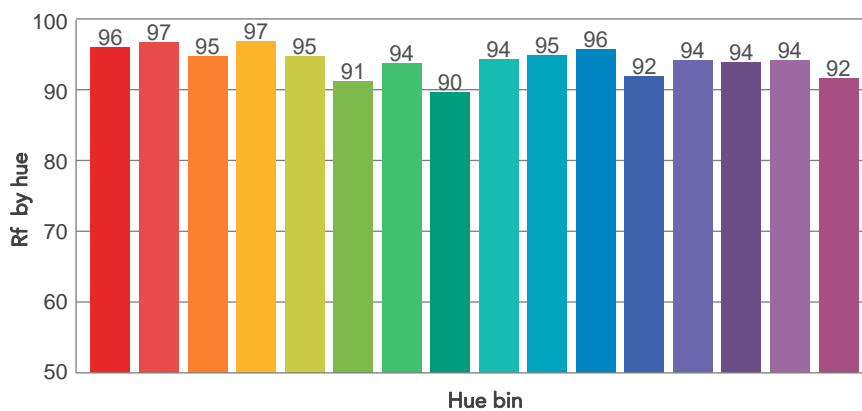
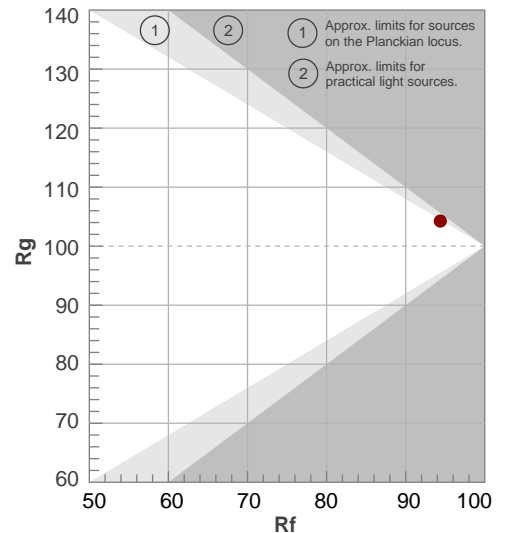
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3210 K	95,5	97,4	94,4	104,3	94,3	87	0,423	0,399	0,0005

TM30 DETAILS

Rf 94,4
Fidelity index Rf

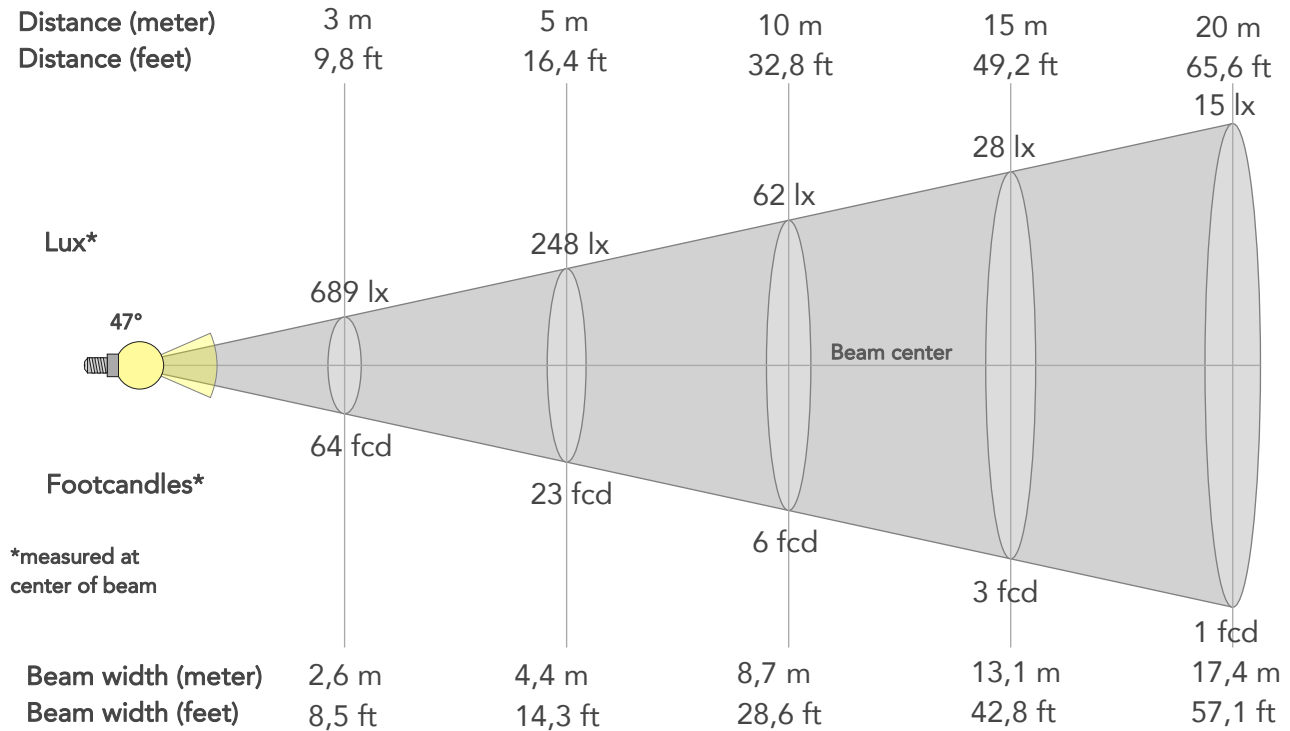
Rg 104,3
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	0%	-1%
2	97	1%	-1%
3	95	1%	0%
4	97	0%	0%
5	95	1%	2%
6	91	5%	3%
7	94	4%	0%
8	90	6%	-2%
9	94	2%	-2%
10	95	0%	-3%
11	96	1%	1%
12	92	4%	-2%
13	94	2%	-4%
14	94	3%	-3%
15	94	2%	-3%
16	92	3%	-6%



BEAM DETAILS

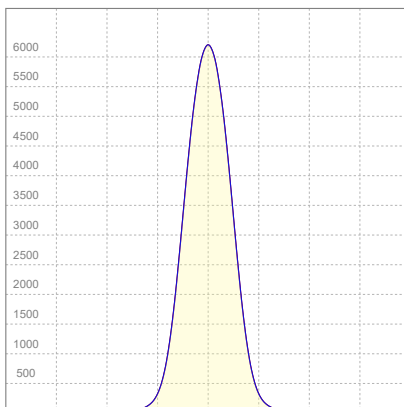
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
47°	79,9°	103°	98,8%	94,1%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	6197lx	1549lx	689lx	387lx	248lx	110lx	62lx	28lx	15lx	10lx	7lx	4lx	2lx
Footcand.	576fcd	144fcd	64fcd	36fcd	23fcd	10fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,9m	1,7m	2,6m	3,5m	4,4m	6,5m	8,7m	13,1m	17,4m	21,8m	26,1m	34,8m	43,5m
Beam wid.	2,9ft	5,7ft	8,5ft	11,4ft	14,3ft	21,4ft	28,6ft	42,8ft	57,1ft	71,4ft	85,7ft	114,2ft	142,8ft

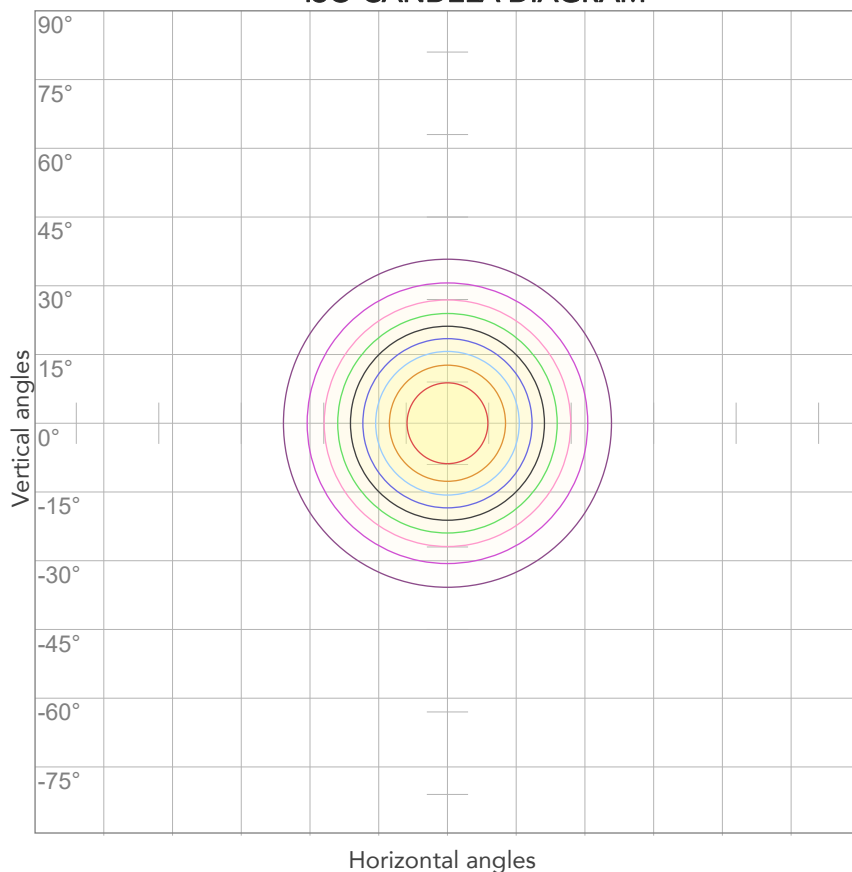
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,500A	105,5W	41lm/W

ISO CANDELA DIAGRAM



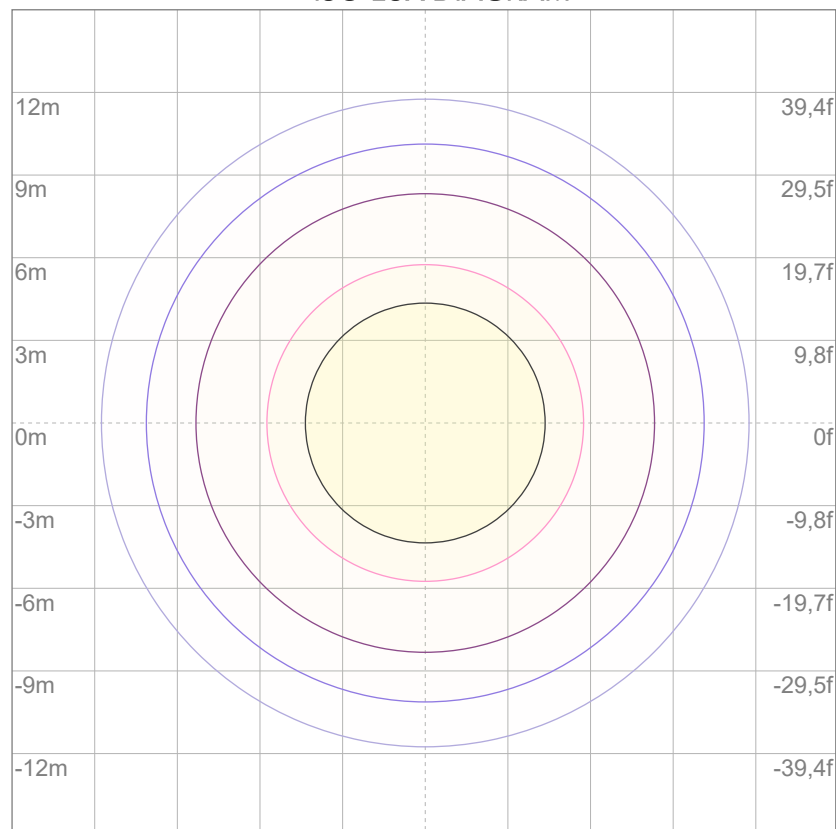
10%	620 cd
20%	1239 cd
30%	1859 cd
40%	2479 cd
50%	3099 cd
60%	3718 cd
70%	4338 cd
80%	4958 cd

Conditions:

Number of c-planes: 4

Candela at center: 6197 cd

ISO LUX DIAGRAM



3%	1,86 lx
5%	3,10 lx
10%	6,20 lx
30%	18,6 lx
50%	31,0 lx

Conditions:

Number of c-planes: 4

Lux at center: 62,0 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

6688 lm

Peak candela output:

13216 cd

Light quality:

CRI: 95,6

Color temperature:

3216 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 10°x60° Filter

Target:

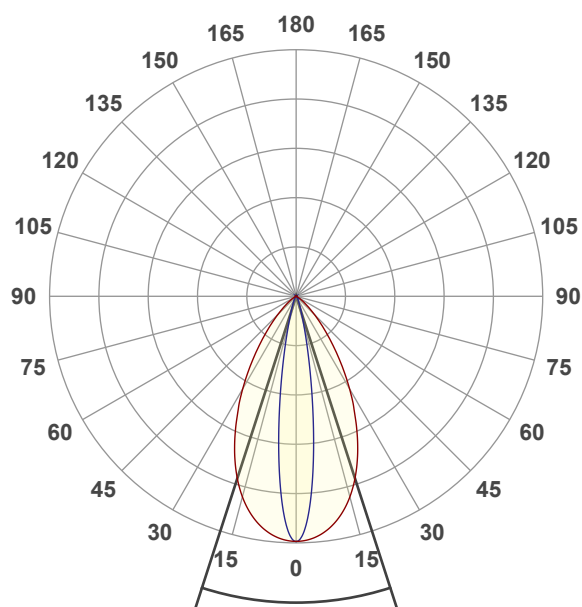
3200K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:21:34

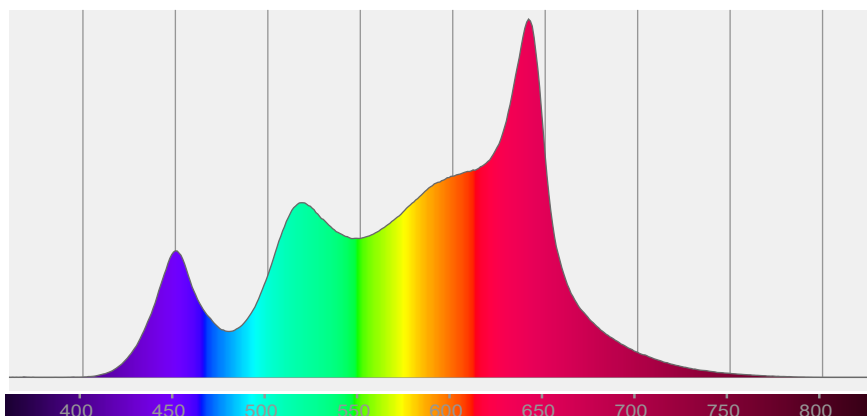


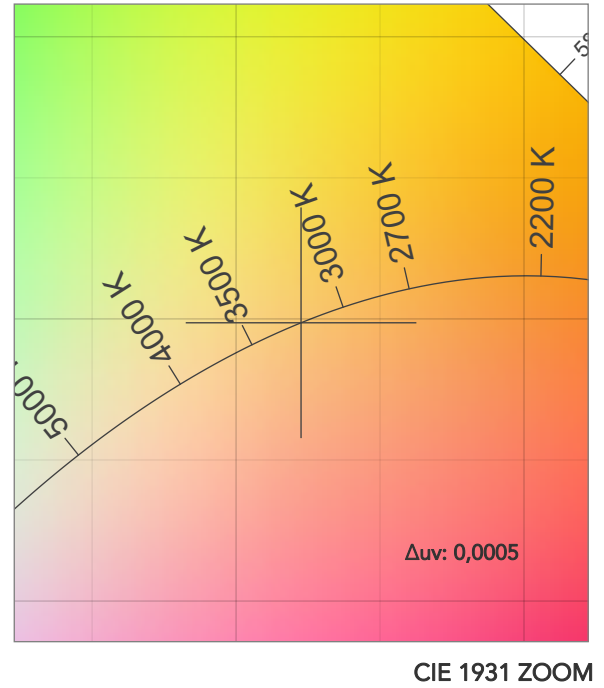
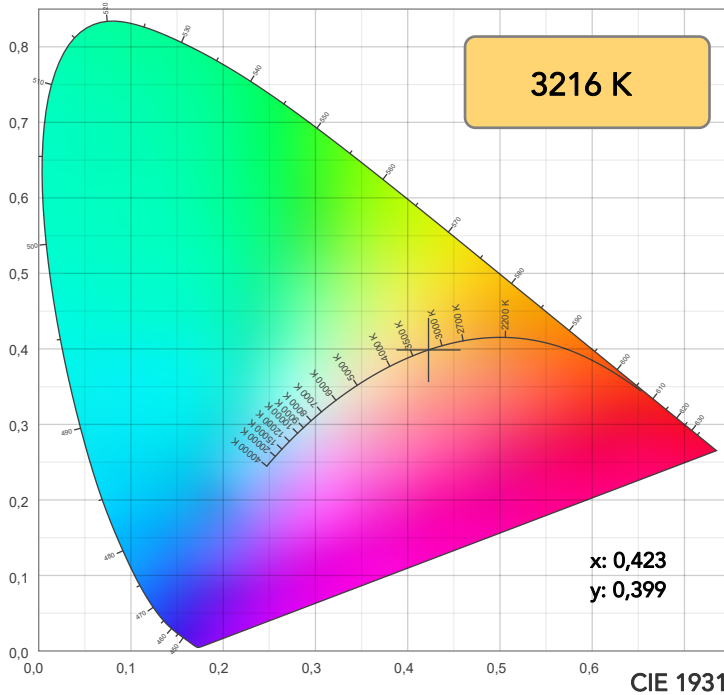
Beam angle 50%: 35,8°

Field angle 10%: 61,4°

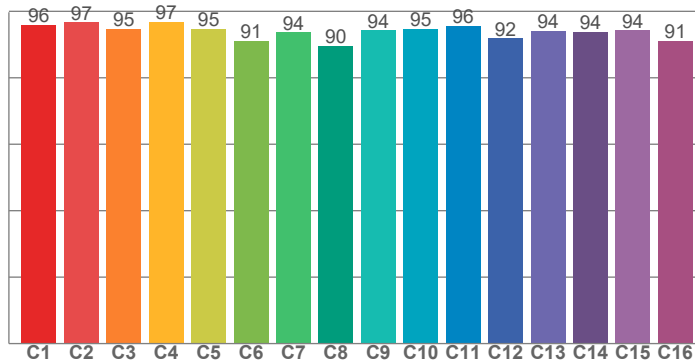
Cut off angle 2.5%: 80,3°

Spectra

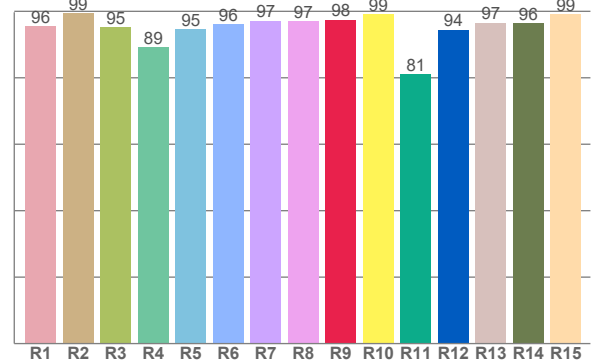




TM30: 94,4



CRI: 95,6 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,6	99,5	95,3	89,3	94,5	96,1	97,2	97,0	97,5	99,1	81,1	94,5	96,6	96,4	99,1

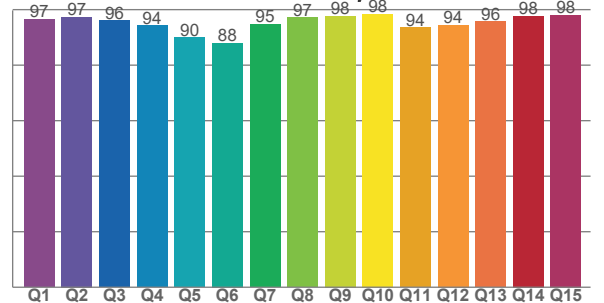
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,9	96,7	94,7	96,8	94,7	91,2	93,7	89,7	94,2	94,7	95,7	91,9	94,1	93,9	94,2	91,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,5	97,4	96,0	94,2	89,9	88,0	94,7	97,1	97,8	98,4	93,5	94,4	95,7	97,7	98,1

CQS: 94,2



COLOR PARAMETERS

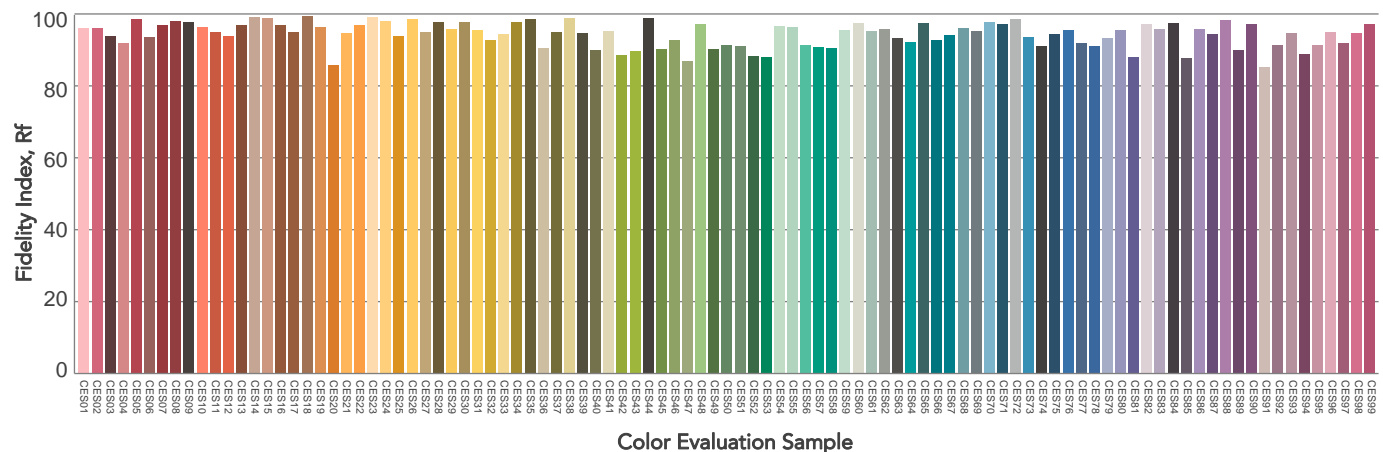
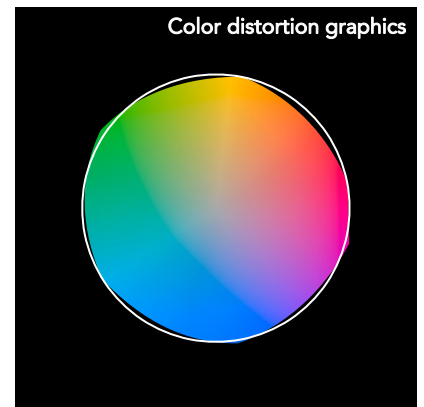
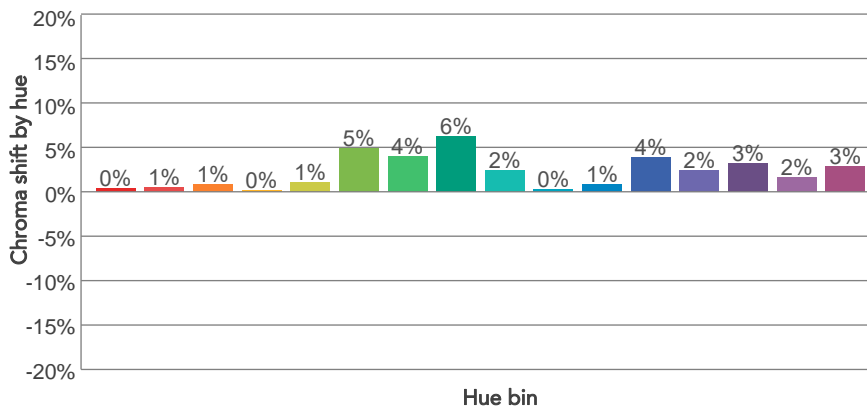
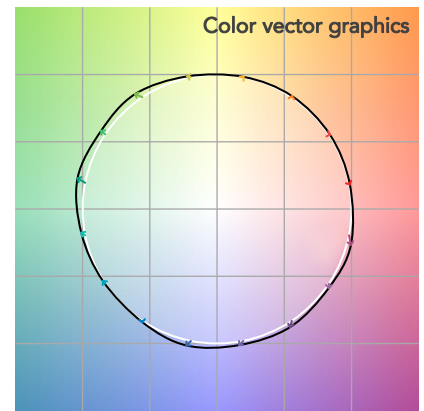
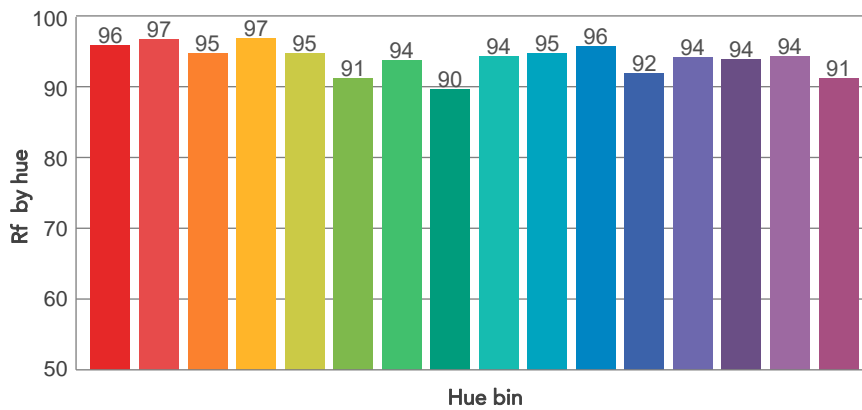
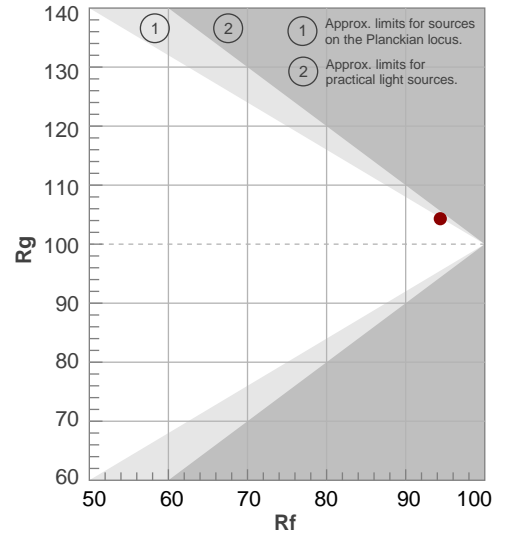
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3216 K	95,6	97,5	94,4	104,3	94,2	88	0,423	0,399	0,0005

TM30 DETAILS

Rf 94,4
Fidelity index Rf

Rg 104,3
Gammut index

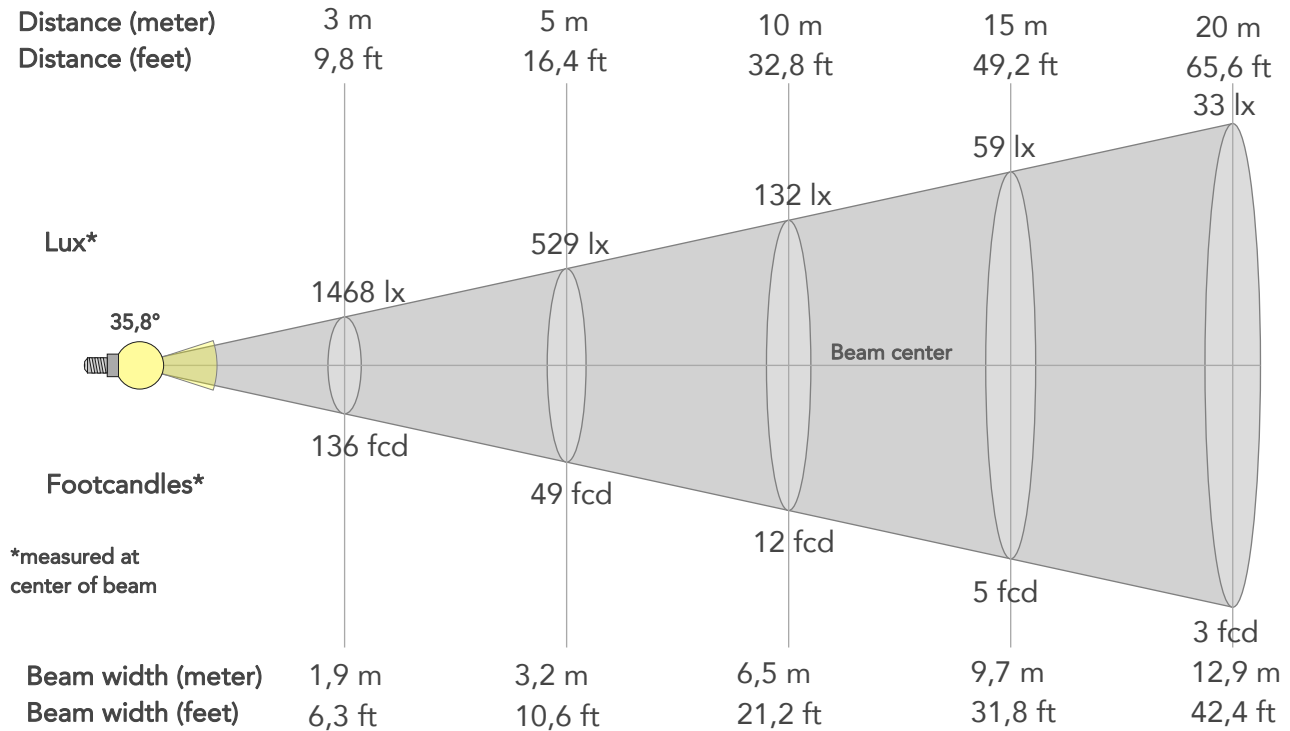
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	0%	-1%
2	97	1%	-1%
3	95	1%	0%
4	97	0%	0%
5	95	1%	2%
6	91	5%	3%
7	94	4%	0%
8	90	6%	-2%
9	94	2%	-2%
10	95	0%	-3%
11	96	1%	1%
12	92	4%	-3%
13	94	2%	-4%
14	94	3%	-4%
15	94	2%	-3%
16	91	3%	-7%



BEAM DETAILS



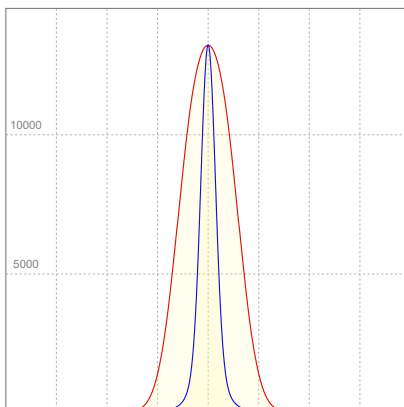
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
35,8°	61,4°	80,3°	99,3%	93,5%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	13216lx	3304lx	1468lx	826lx	529lx	235lx	132lx	59lx	33lx	21lx	15lx	8lx	5lx
Footcand.	1228fcd	307fcd	136fcd	77fcd	49fcd	22fcd	12fcd	5fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,6m	1,3m	1,9m	2,6m	3,2m	4,8m	6,5m	9,7m	12,9m	16,2m	19,4m	25,8m	32,3m
Beam wid.	2,1ft	4,3ft	6,3ft	8,5ft	10,6ft	15,9ft	21,2ft	31,8ft	42,4ft	53ft	63,6ft	84,8ft	106ft

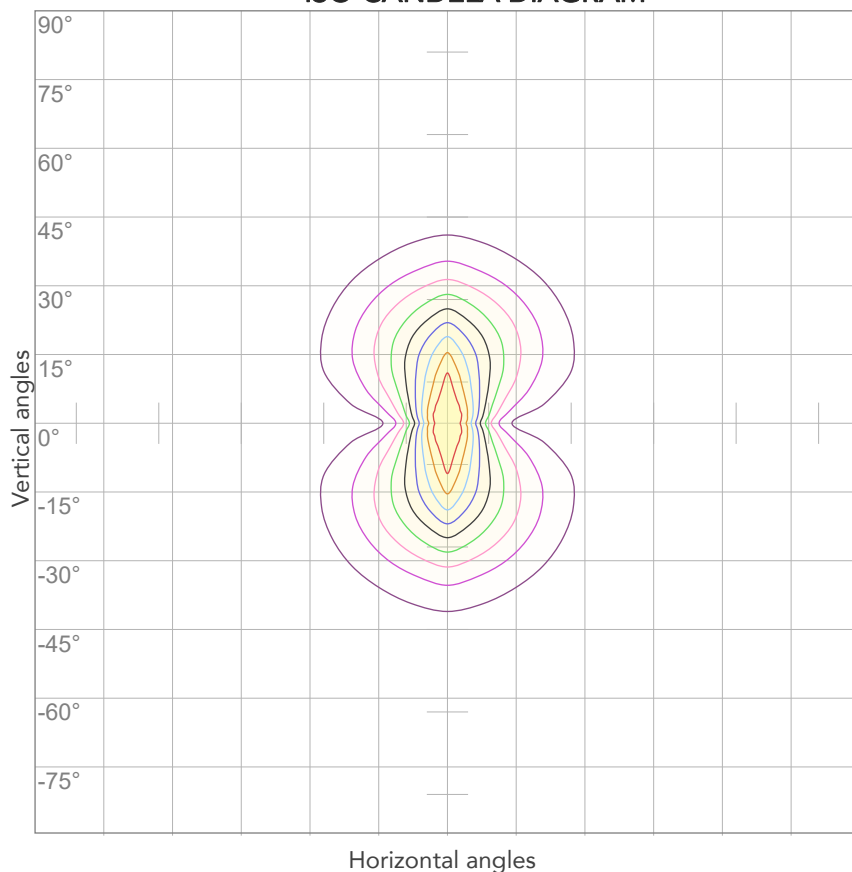
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,499A	105,4W	63lm/W

ISO CANDELA DIAGRAM



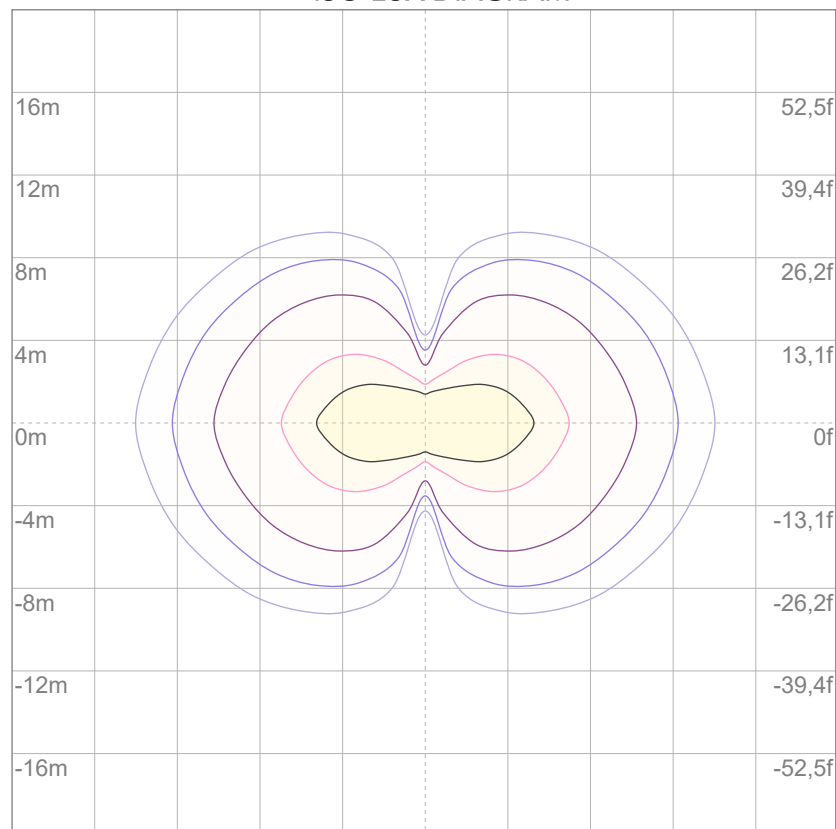
10%	1322 cd
20%	2643 cd
30%	3965 cd
40%	5286 cd
50%	6608 cd
60%	7930 cd
70%	9251 cd
80%	10573 cd

Conditions:

Number of c-planes: 4

Candela at center: 13216 cd

ISO LUX DIAGRAM



3%	3,96 lx
5%	6,61 lx
10%	13,2 lx
30%	39,6 lx
50%	66,1 lx

Conditions:

Number of c-planes: 4

Lux at center: 132 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4521 lm

Peak candela output:

81226 cd

Light quality:

CRI: 95,1

Color temperature:

4045 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic (No Filter)

Target:

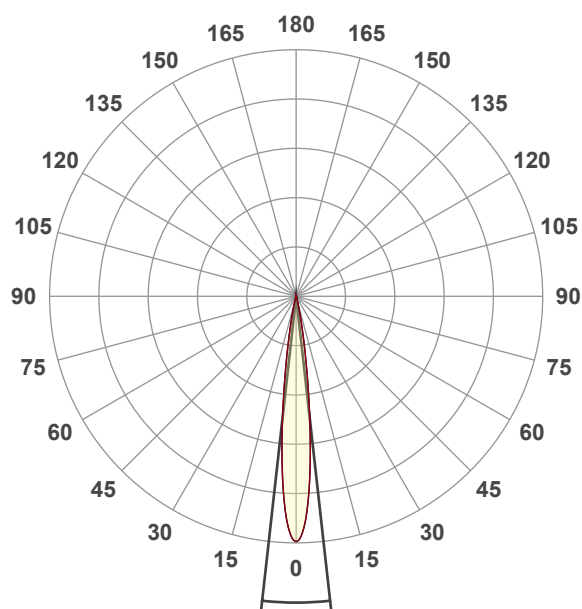
4000K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:25:09

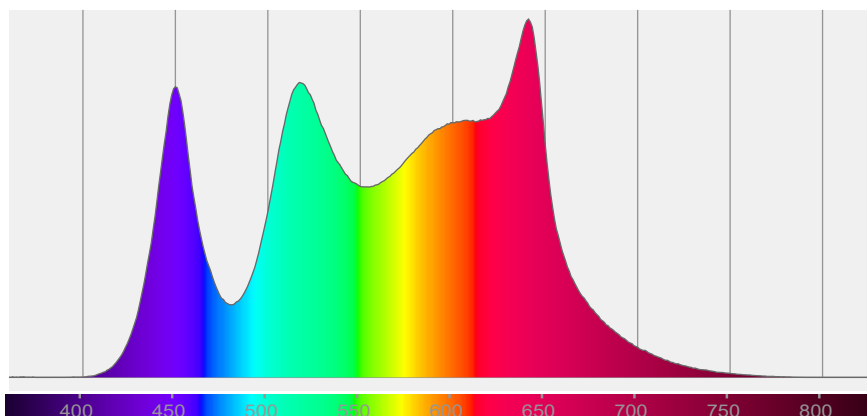


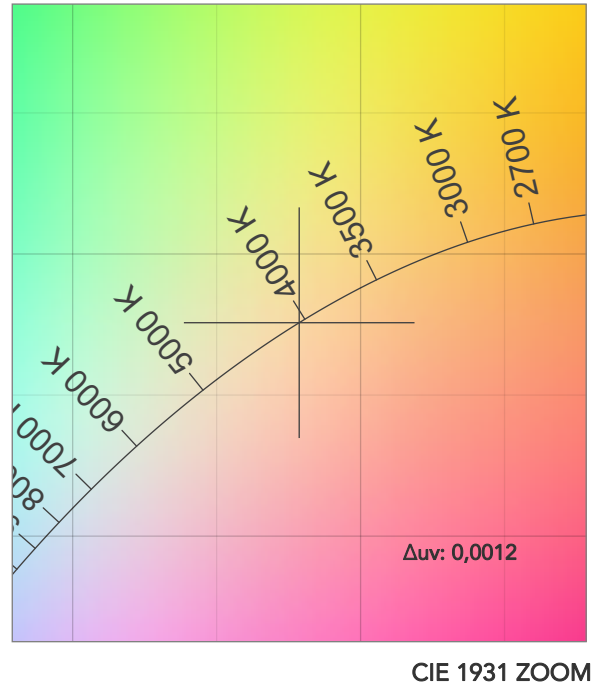
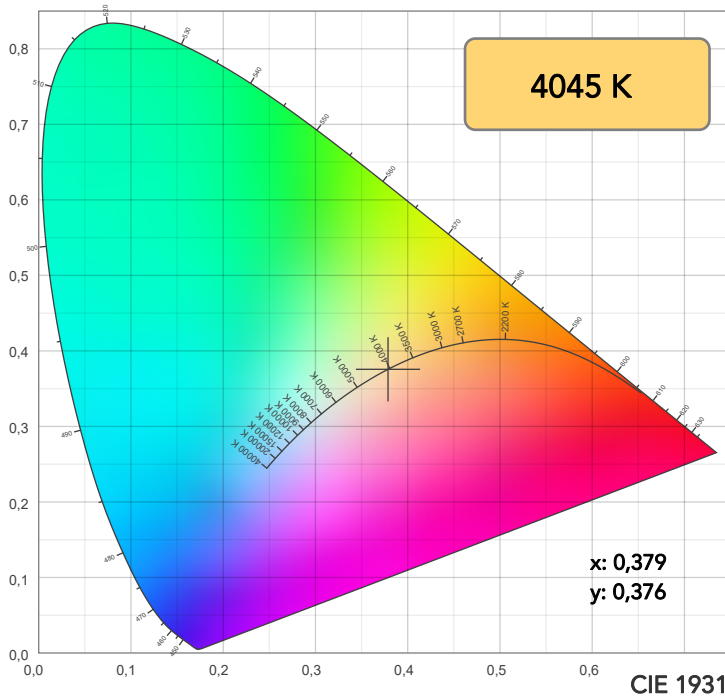
Beam angle 50%: 12,7°

Field angle 10%: 22,7°

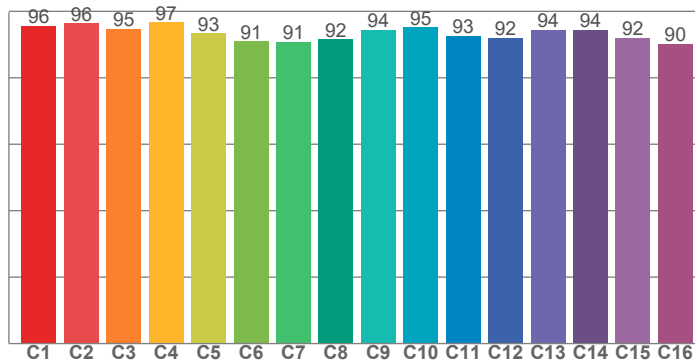
Cut off angle 2.5%: 29,4°

Spectra

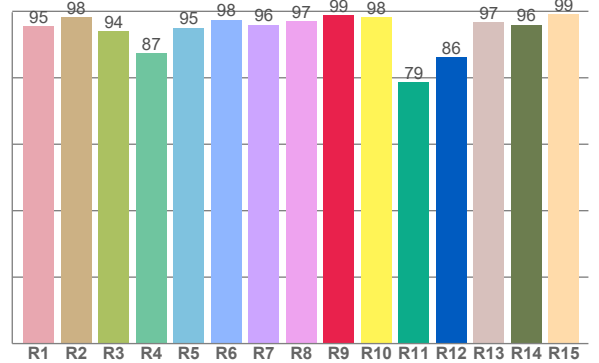




TM30: 93,7



CRI: 95,1 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,5	98,2	94,1	87,5	95,1	97,5	96,0	97,0	98,9	98,2	78,6	86,1	96,8	96,0	99,2

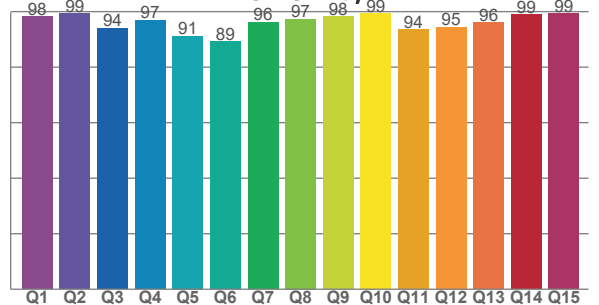
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,6	96,3	94,8	96,7	93,4	91,0	90,8	91,6	94,4	95,2	92,6	92,1	94,5	94,4	92,0	90,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,2	99,3	94,0	96,9	91,2	89,3	96,1	97,3	98,2	99,4	93,6	94,5	96,1	98,9	99,4

CQS: 95,1



COLOR PARAMETERS

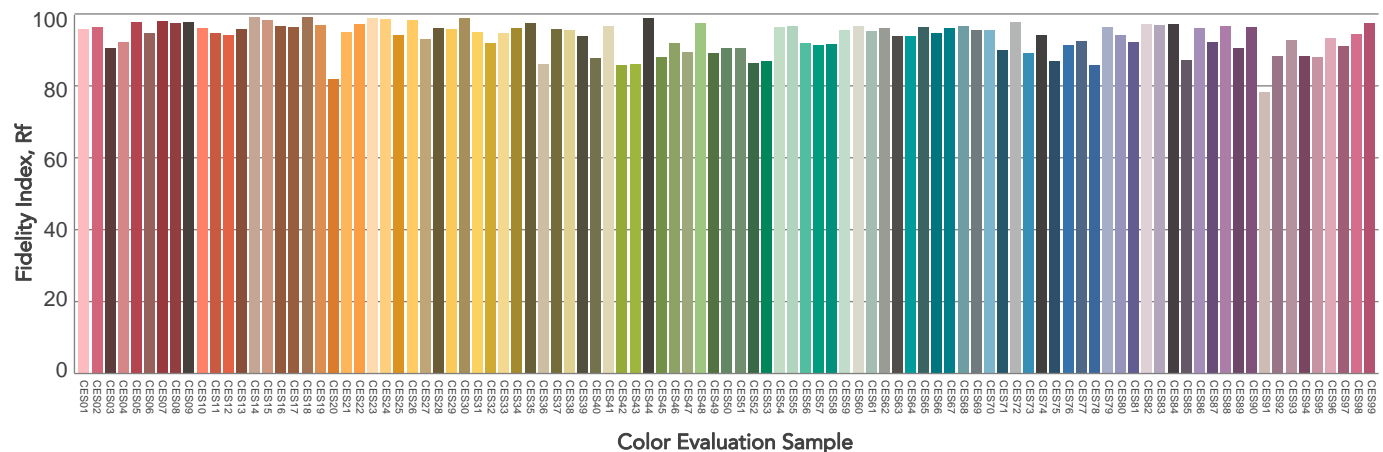
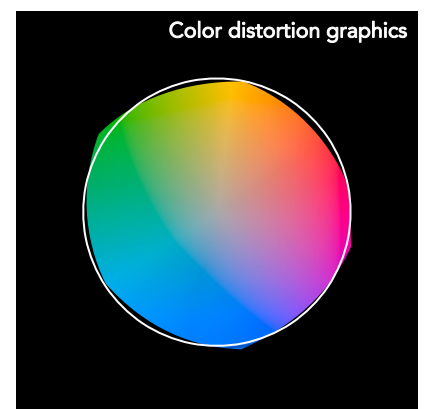
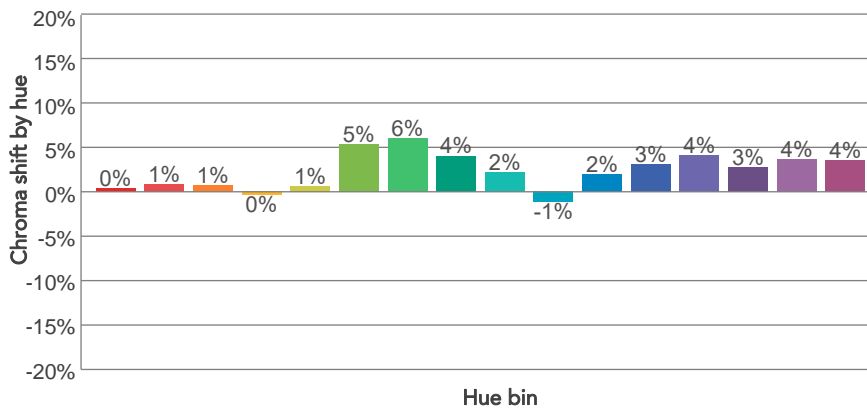
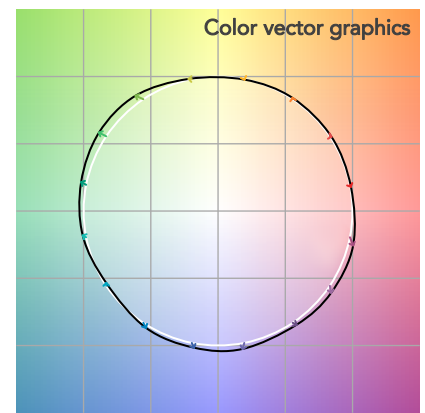
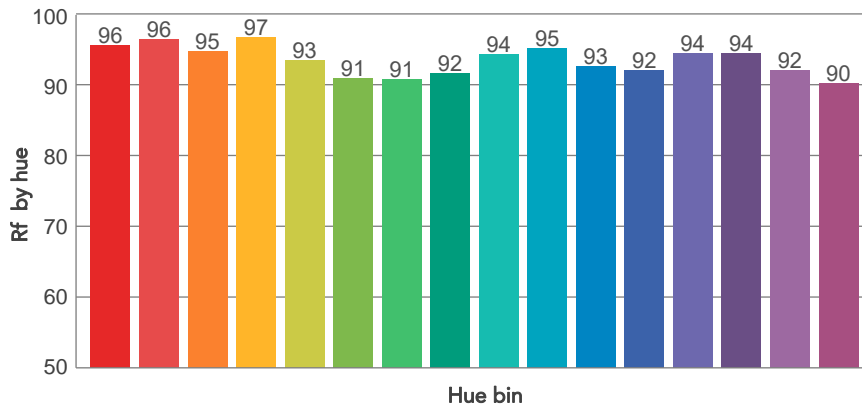
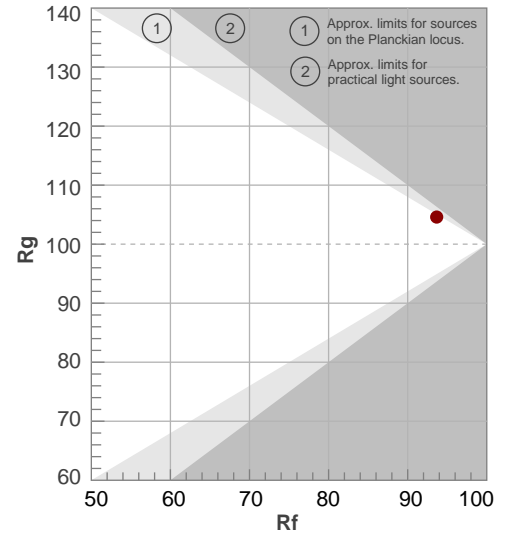
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4045 K	95,1	98,9	93,7	104,6	95,1	83	0,379	0,376	0,0012

TM30 DETAILS

Rf 93,7
Fidelity index Rf

Rg 104,6
Gammut index

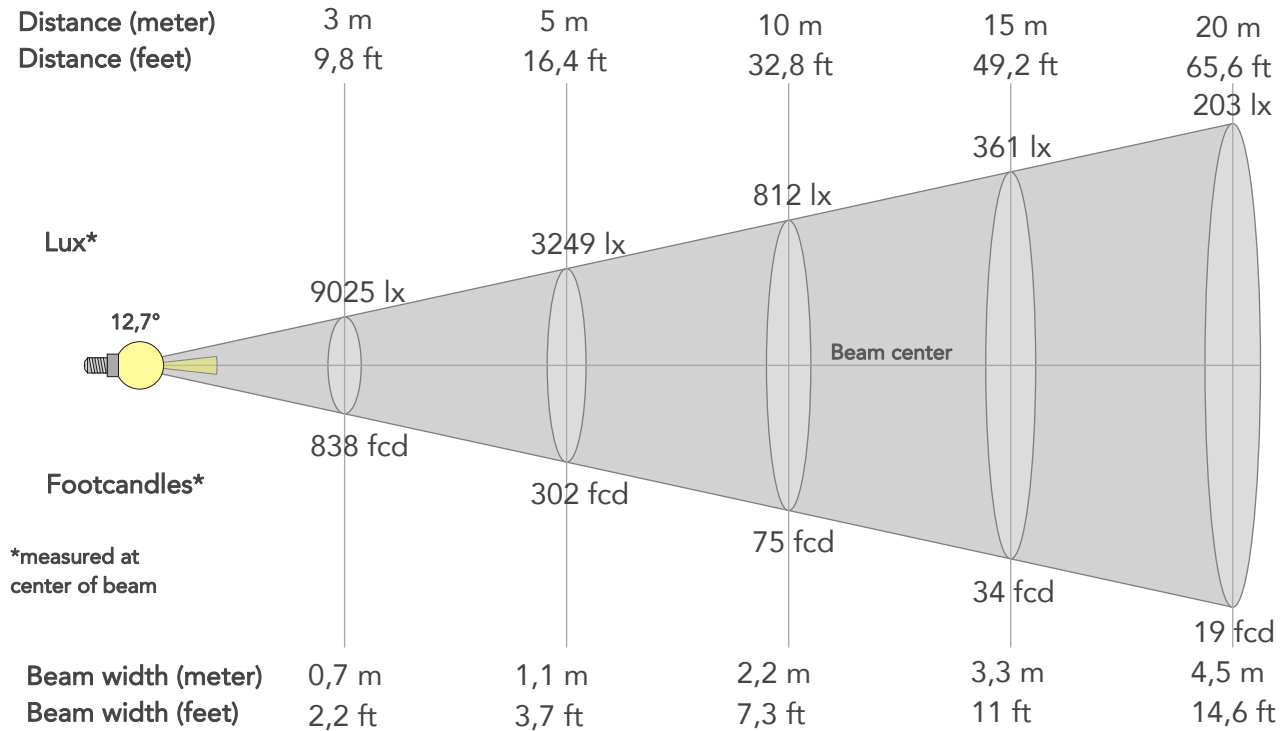
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	0%	-2%
2	96	1%	-1%
3	95	1%	1%
4	97	0%	0%
5	93	1%	2%
6	91	5%	3%
7	91	6%	1%
8	92	4%	-1%
9	94	2%	-2%
10	95	-1%	-2%
11	93	2%	4%
12	92	3%	2%
13	94	4%	-2%
14	94	3%	2%
15	92	4%	-4%
16	90	4%	-5%



BEAM DETAILS



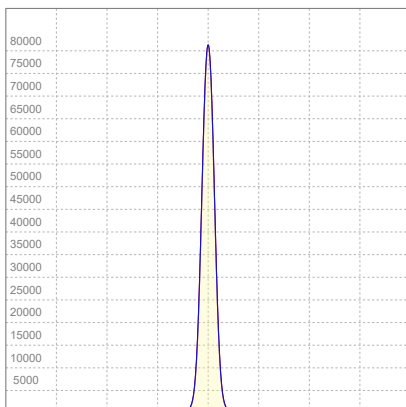
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
12,7°	22,7°	29,4°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	81226lx	20306lx	9025lx	5077lx	3249lx	1444lx	812lx	361lx	203lx	130lx	90lx	51lx	32lx
Footcand.	7546fcd	1887fcd	838fcd	472fcd	302fcd	134fcd	75fcd	34fcd	19fcd	12fcd	8fcd	5fcd	3fcd
Beam wid.	0,2m	0,4m	0,7m	0,9m	1,1m	1,7m	2,2m	3,3m	4,5m	5,6m	6,7m	8,9m	11,2m
Beam wid.	0,7ft	1,5ft	2,2ft	2,9ft	3,7ft	5,5ft	7,3ft	11ft	14,6ft	18,3ft	22ft	29,3ft	36,6ft

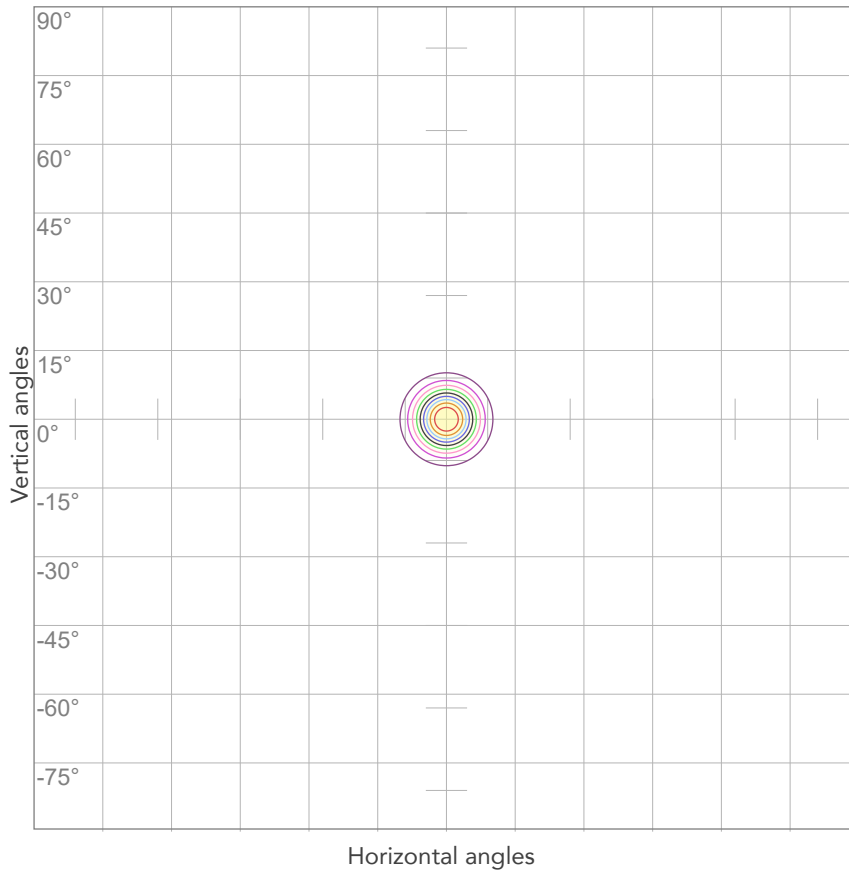
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,542A	114,1W	40lm/W

ISO CANDELA DIAGRAM



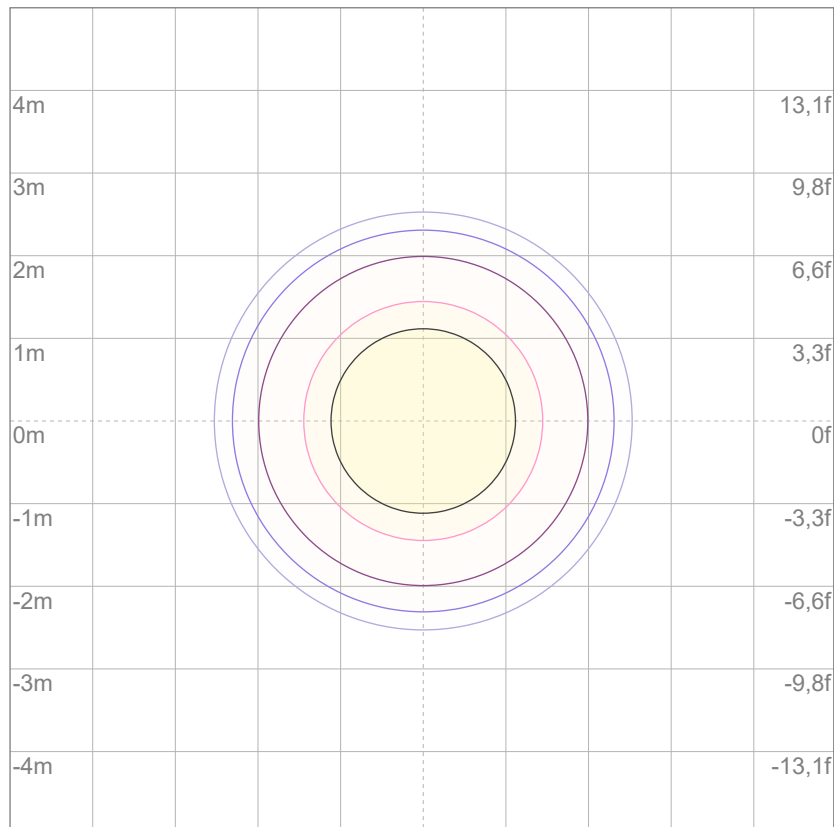
10%	8123 cd
20%	16245 cd
30%	24368 cd
40%	32490 cd
50%	40613 cd
60%	48735 cd
70%	56858 cd
80%	64980 cd

Conditions:

Number of c-planes: 4

Candela at center: 81226 cd

ISO LUX DIAGRAM



3%	24,4 lx
5%	40,6 lx
10%	81,2 lx
30%	244 lx
50%	406 lx

Conditions:

Number of c-planes: 4

Lux at center: 812 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4493 lm

Peak candela output:

13509 cd

Light quality:

CRI: 95,1

Color temperature:

4068 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 25° Filter

Target:

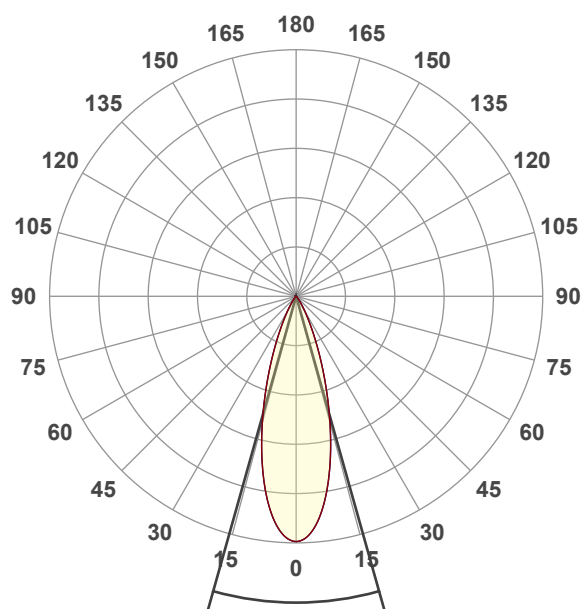
4000K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:27:57

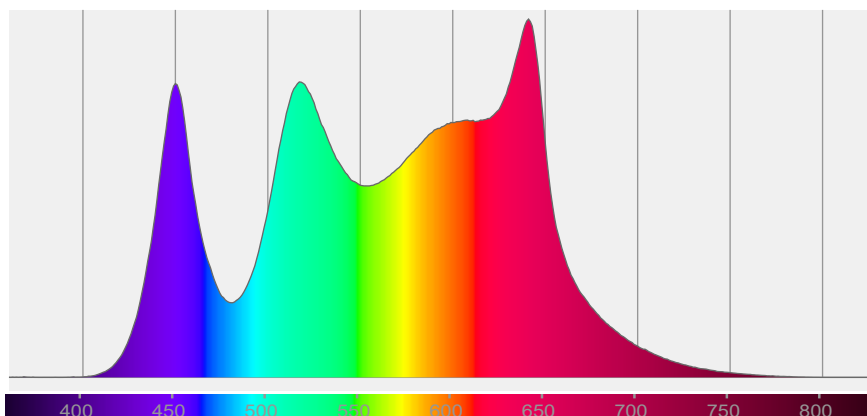


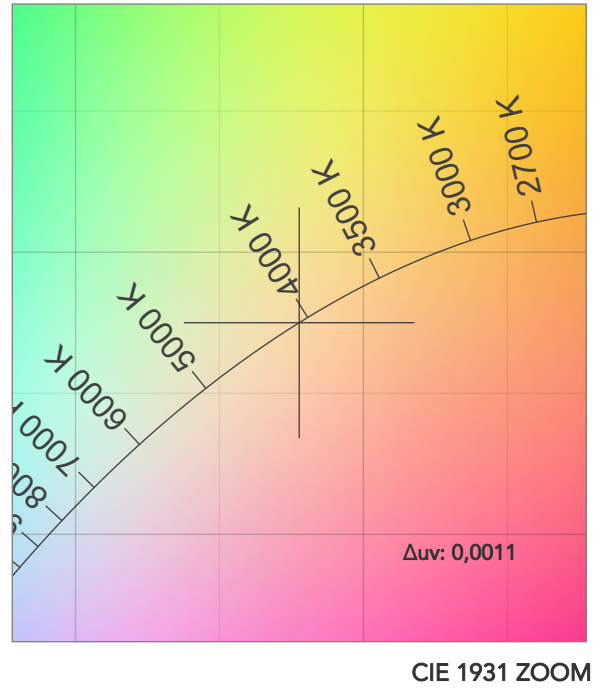
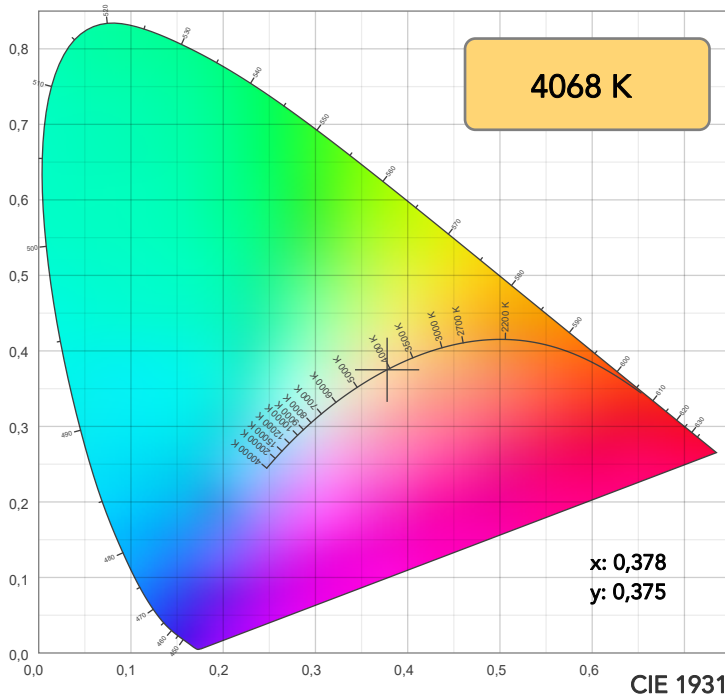
Beam angle 50%: 31,4°

Field angle 10%: 56,1°

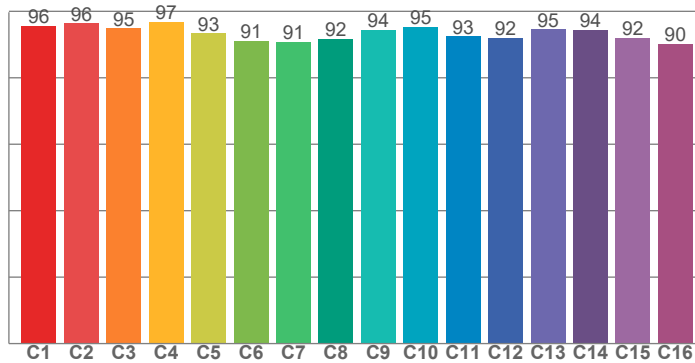
Cut off angle 2.5%: 72,3°

Spectra

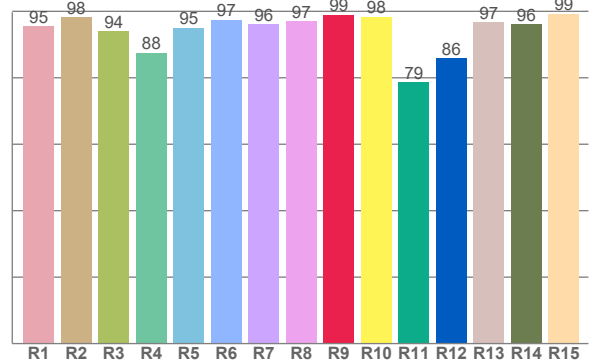




TM30: 93,7



CRI: 95,1 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,4	98,3	94,1	87,6	95,1	97,5	96,1	97,0	98,9	98,3	78,7	85,9	96,7	96,0	99,2

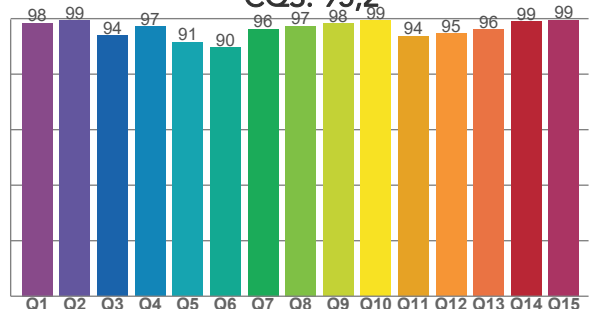
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,7	96,4	94,8	96,8	93,4	91,1	90,9	91,6	94,4	95,4	92,5	92,1	94,5	94,4	92,0	90,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,3	99,3	93,9	97,1	91,5	89,5	96,2	97,3	98,2	99,4	93,7	94,6	96,1	98,9	99,4

CQS: 95,2



COLOR PARAMETERS

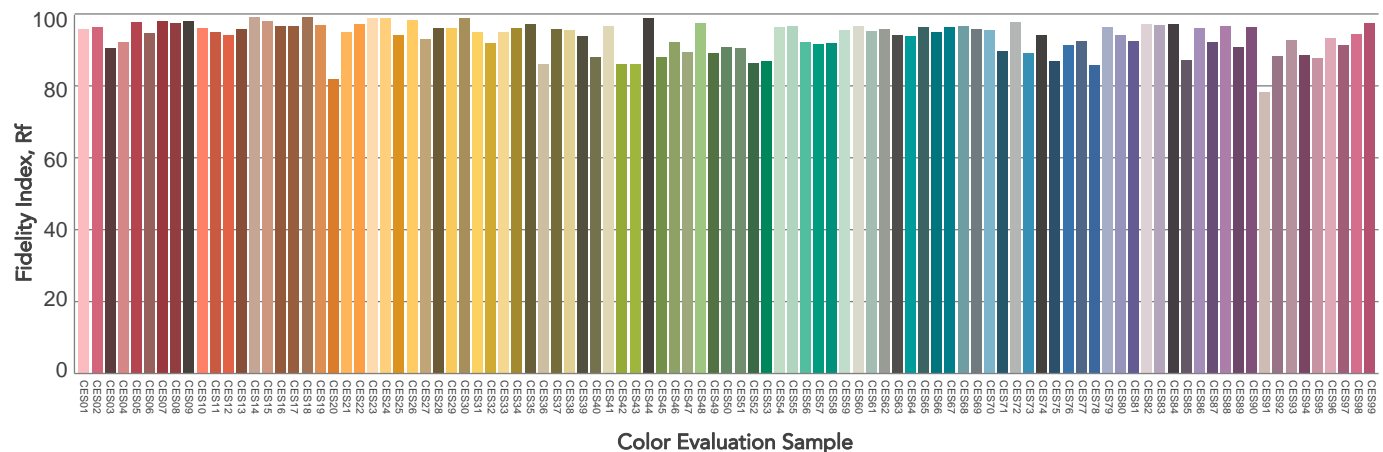
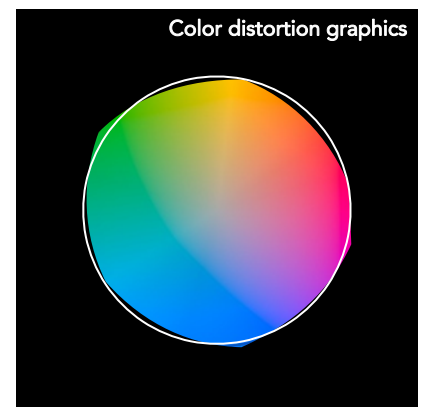
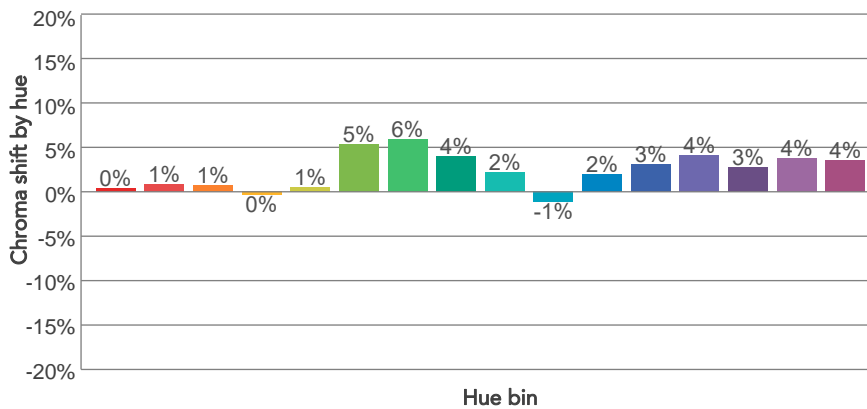
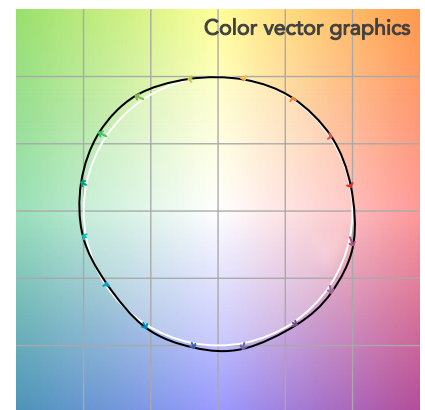
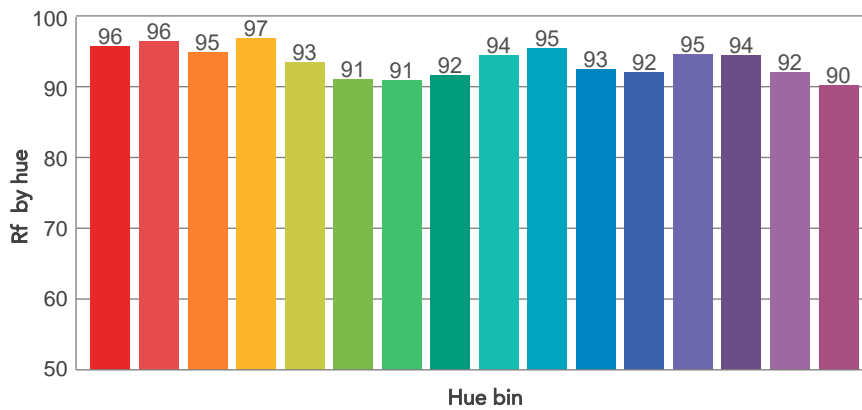
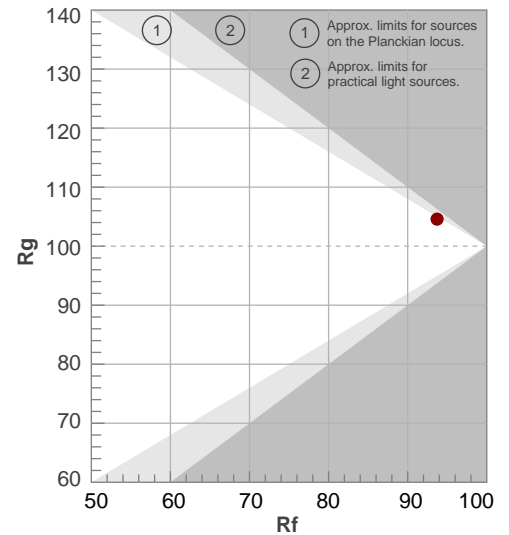
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4068 K	95,1	98,9	93,7	104,6	95,2	84	0,378	0,375	0,0011

TM30 DETAILS

Rf 93,7
Fidelity index Rf

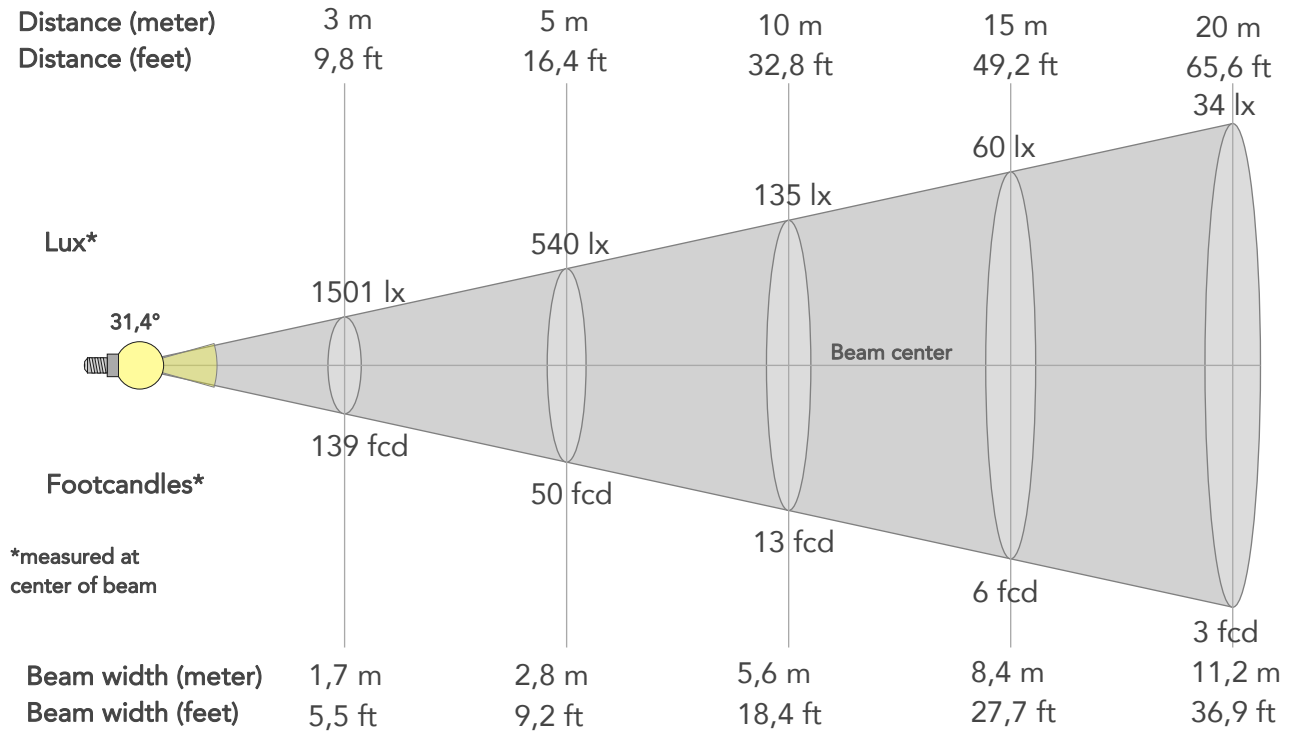
Rg 104,6
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	0%	-2%
2	96	1%	-1%
3	95	1%	1%
4	97	0%	0%
5	93	1%	2%
6	91	5%	3%
7	91	6%	1%
8	92	4%	-1%
9	94	2%	-2%
10	95	-1%	-2%
11	93	2%	4%
12	92	3%	2%
13	95	4%	-2%
14	94	3%	2%
15	92	4%	-4%
16	90	4%	-5%



BEAM DETAILS

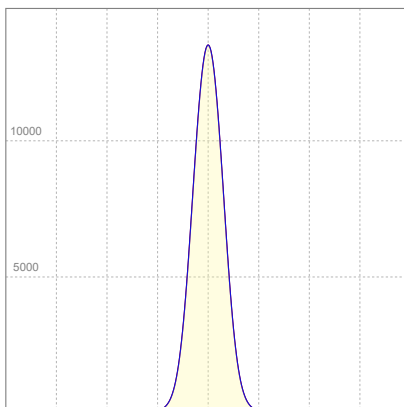
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,4°	56,1°	72,3°	100,0%	98,9%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	13509lx	3377lx	1501lx	844lx	540lx	240lx	135lx	60lx	34lx	22lx	15lx	8lx	5lx
Footcand.	1255fcd	314fcd	139fcd	78fcd	50fcd	22fcd	13fcd	6fcd	3fcd	2fcd	1fcd	1fcd	1fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,2m	5,6m	8,4m	11,2m	14,1m	16,9m	22,5m	28,1m
Beam wid.	1,9ft	3,7ft	5,5ft	7,4ft	9,2ft	13,8ft	18,4ft	27,7ft	36,9ft	46,1ft	55,3ft	73,8ft	92,2ft

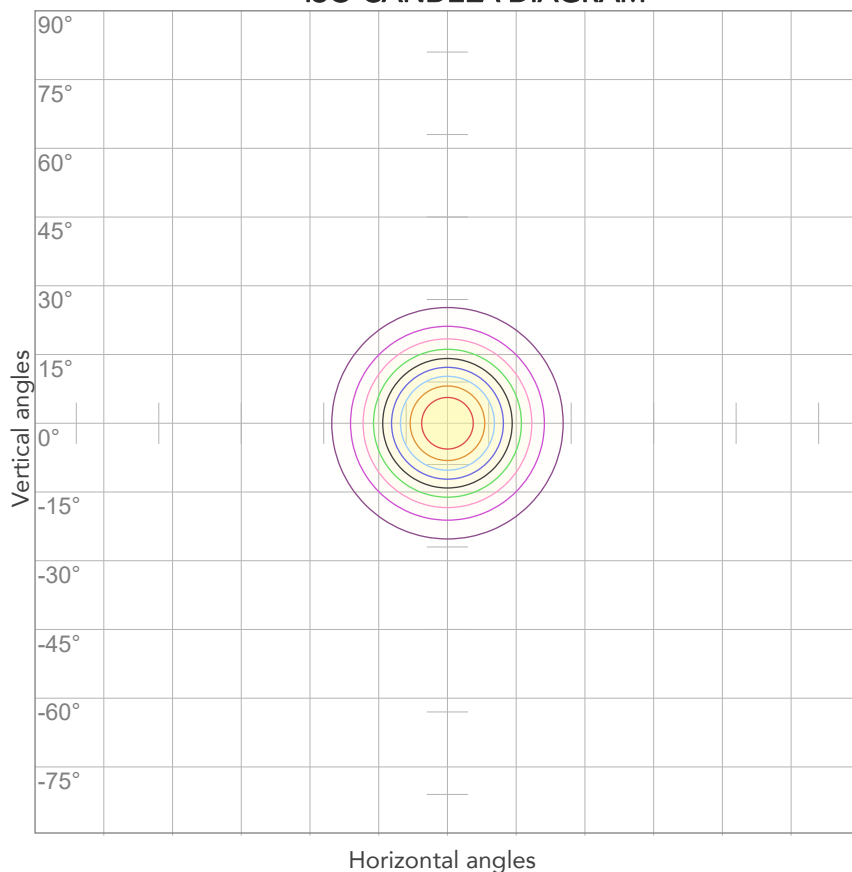
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,540A	113,9W	39lm/W

ISO CANDELA DIAGRAM



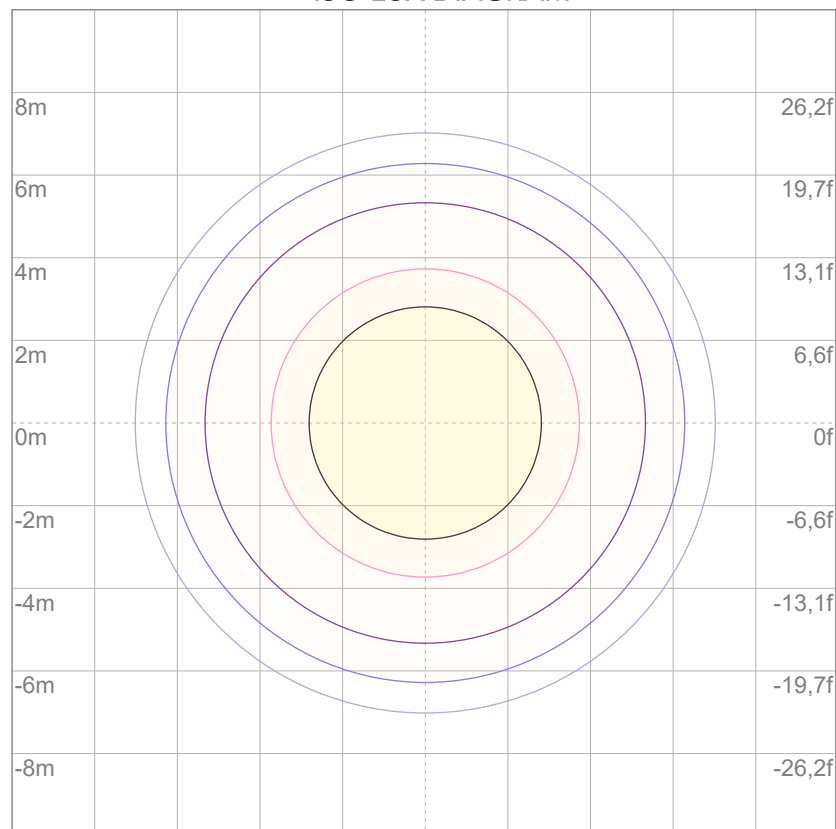
10%	1351 cd
20%	2702 cd
30%	4053 cd
40%	5404 cd
50%	6754 cd
60%	8105 cd
70%	9456 cd
80%	10807 cd

Conditions:

Number of c-planes: 4

Candela at center: 13509 cd

ISO LUX DIAGRAM



3%	4,05 lx
5%	6,75 lx
10%	13,5 lx
30%	40,5 lx
50%	67,5 lx

Conditions:

Number of c-planes: 4

Lux at center: 135 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4531 lm

Peak candela output:

6527 cd

Light quality:

CRI: 95,2

Color temperature:

4078 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 40° Filter

Target:

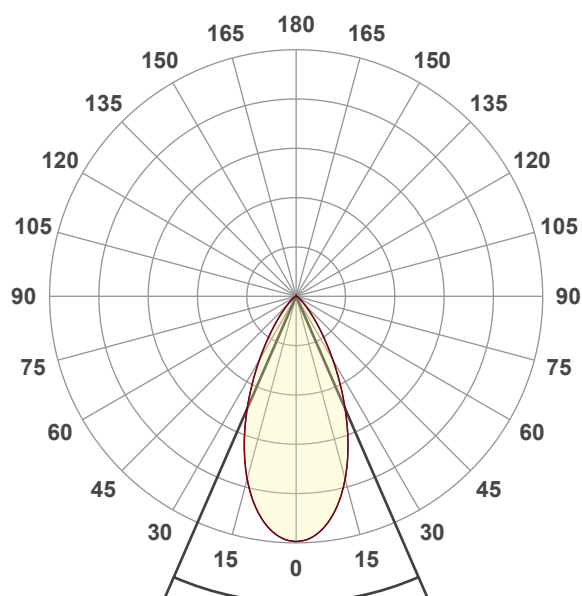
4000K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:30:34

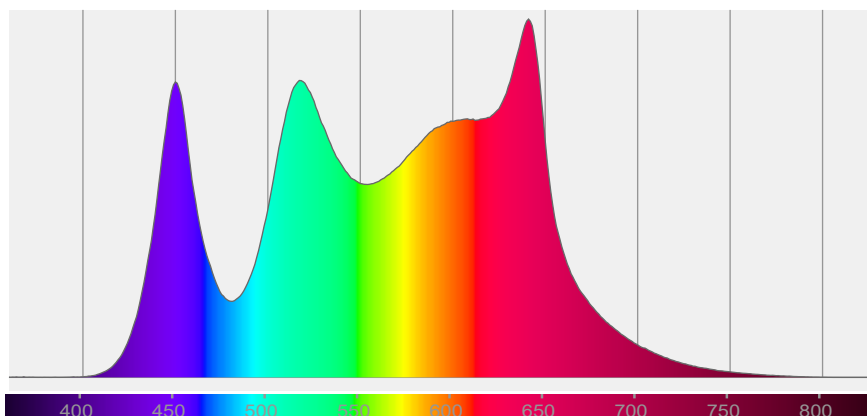


Beam angle 50%: 47,1°

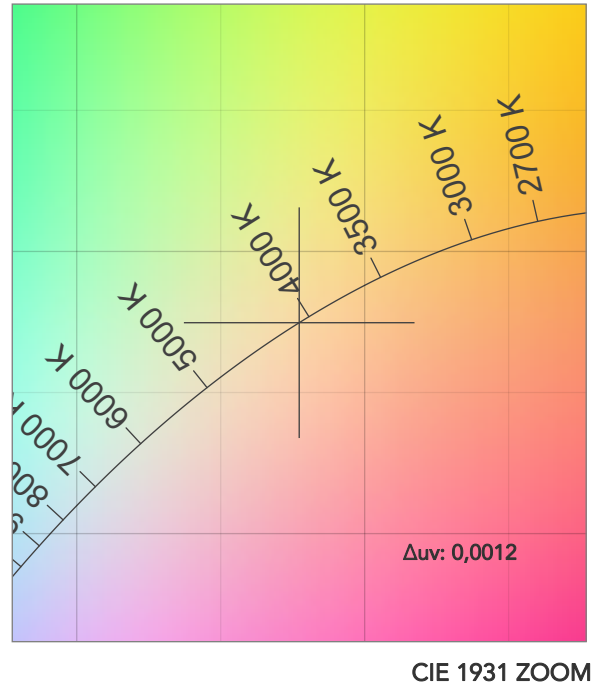
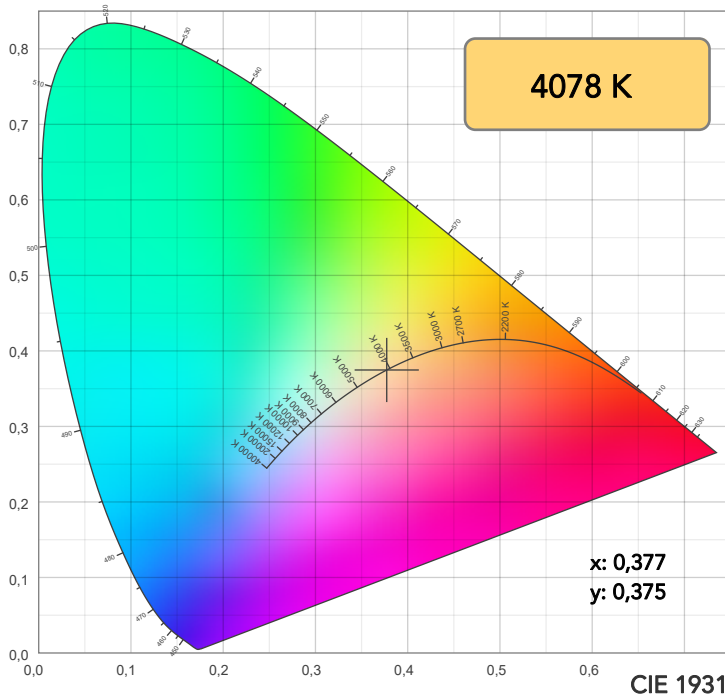
Field angle 10%: 80°

Cut off angle 2.5%: 103,8°

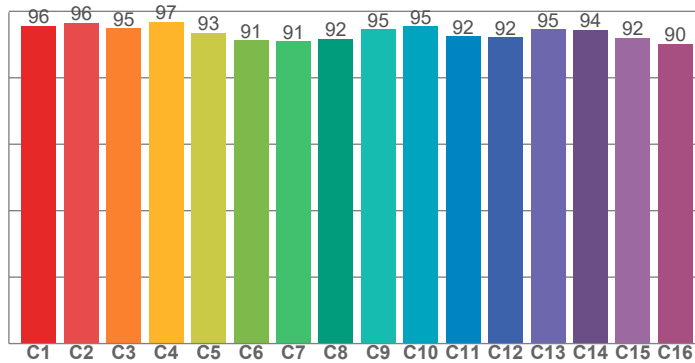
Spectra



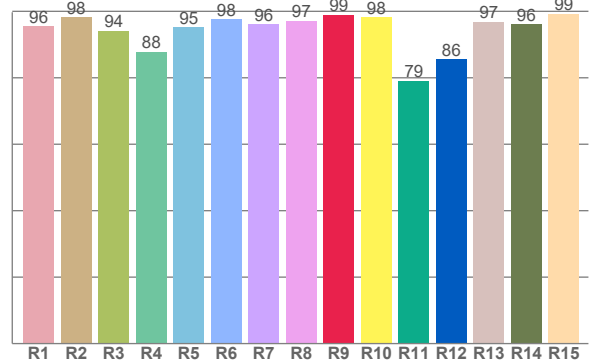
COLOR DETAILS



TM30: 93,8



CRI: 95,2 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,6	98,3	94,1	87,8	95,3	97,5	96,2	97,1	99,0	98,2	79,1	85,7	96,8	96,1	99,2

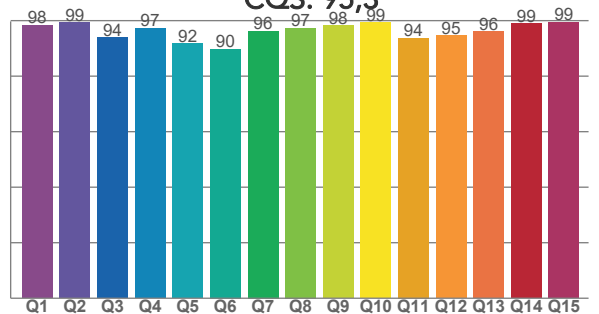
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,7	96,4	94,9	96,8	93,5	91,2	91,0	91,7	94,5	95,5	92,5	92,1	94,5	94,5	92,0	90,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,3	99,3	93,9	97,2	91,7	89,7	96,3	97,4	98,2	99,4	93,7	94,6	96,1	98,9	99,4

CQS: 95,3



COLOR PARAMETERS

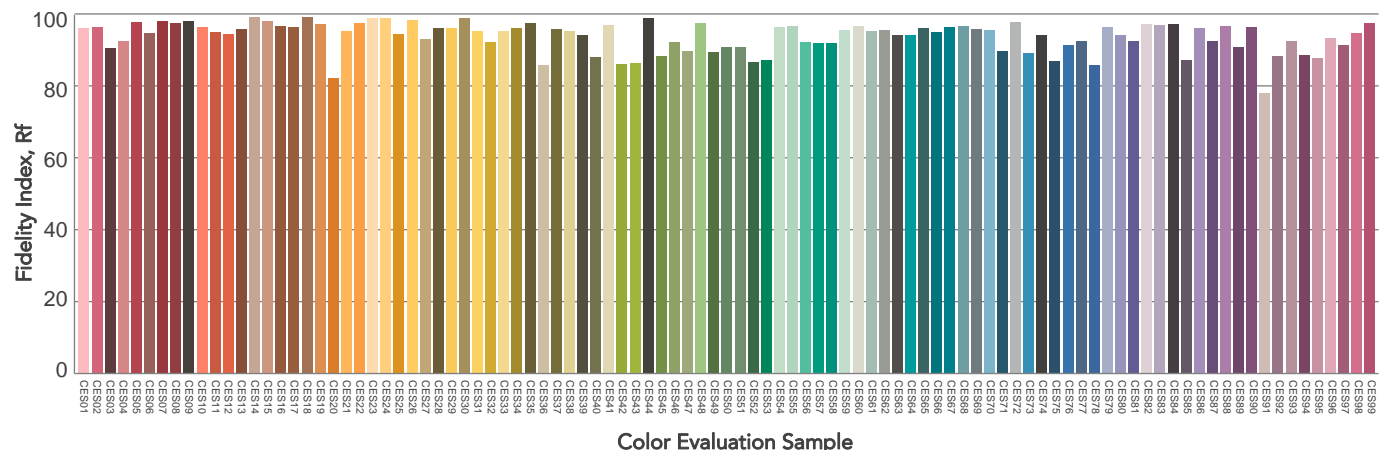
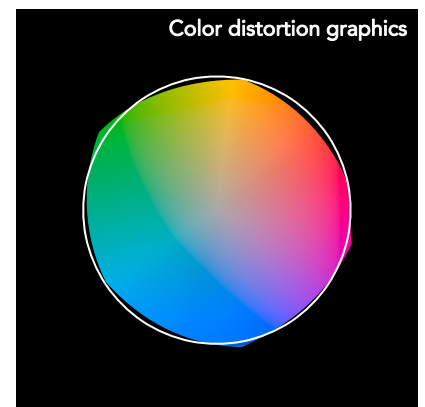
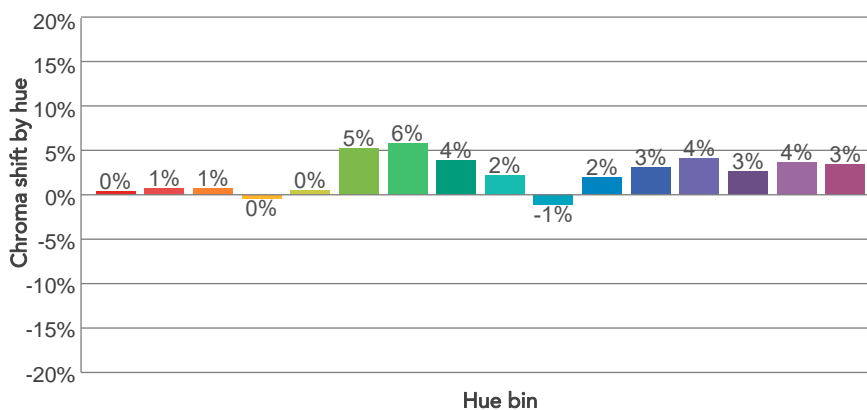
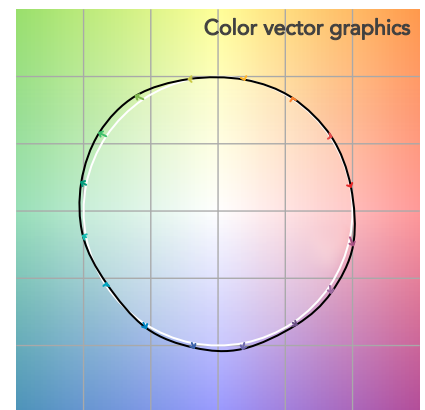
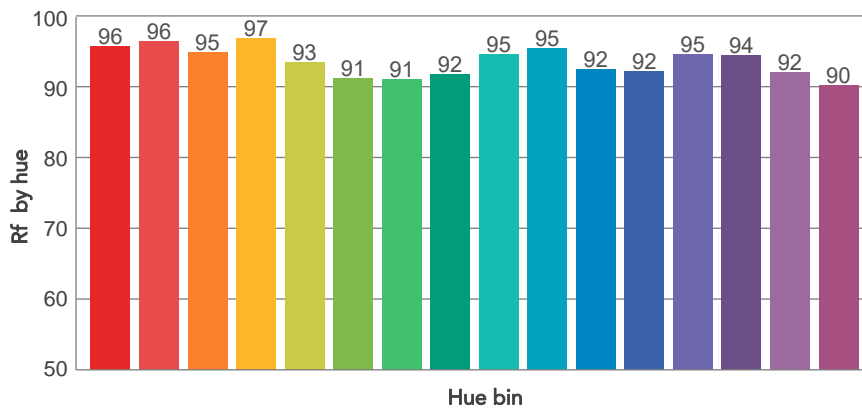
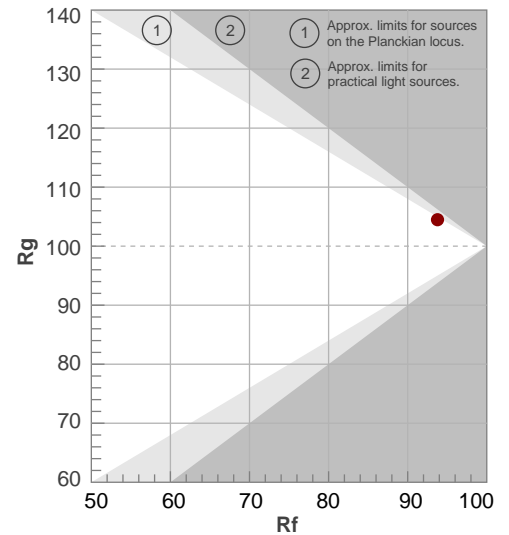
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4078 K	95,2	99,0	93,8	104,5	95,3	84	0,377	0,375	0,0012

TM30 DETAILS

Rf 93,8
Fidelity index Rf

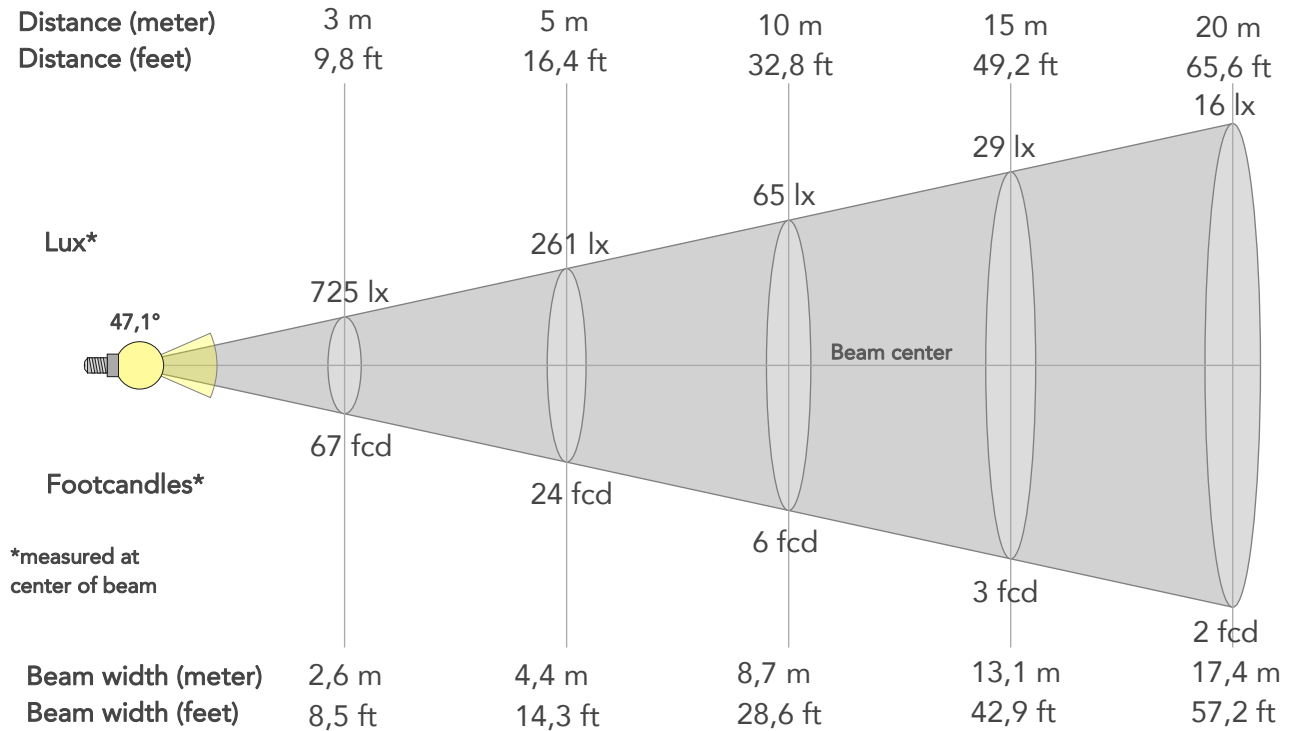
Rg 104,5
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	0%	-2%
2	96	1%	-1%
3	95	1%	1%
4	97	0%	0%
5	93	0%	2%
6	91	5%	3%
7	91	6%	1%
8	92	4%	-1%
9	95	2%	-2%
10	95	-1%	-2%
11	92	2%	4%
12	92	3%	2%
13	95	4%	-2%
14	94	3%	2%
15	92	4%	-4%
16	90	3%	-5%



BEAM DETAILS

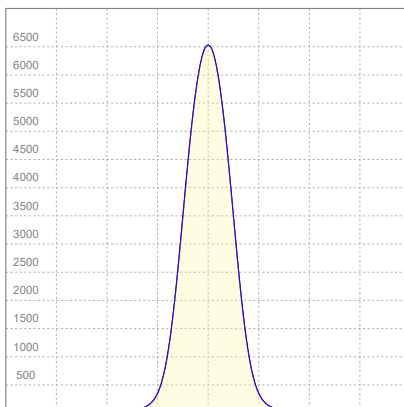
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
47,1°	80°	103,8°	98,6%	93,8%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	6527lx	1632lx	725lx	408lx	261lx	116lx	65lx	29lx	16lx	10lx	7lx	4lx	3lx
Footcand.	606fcd	152fcd	67fcd	38fcd	24fcd	11fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,9m	1,7m	2,6m	3,5m	4,4m	6,5m	8,7m	13,1m	17,4m	21,8m	26,1m	34,9m	43,6m
Beam wid.	2,9ft	5,8ft	8,5ft	11,4ft	14,3ft	21,4ft	28,6ft	42,9ft	57,2ft	71,5ft	85,7ft	114,3ft	142,9ft

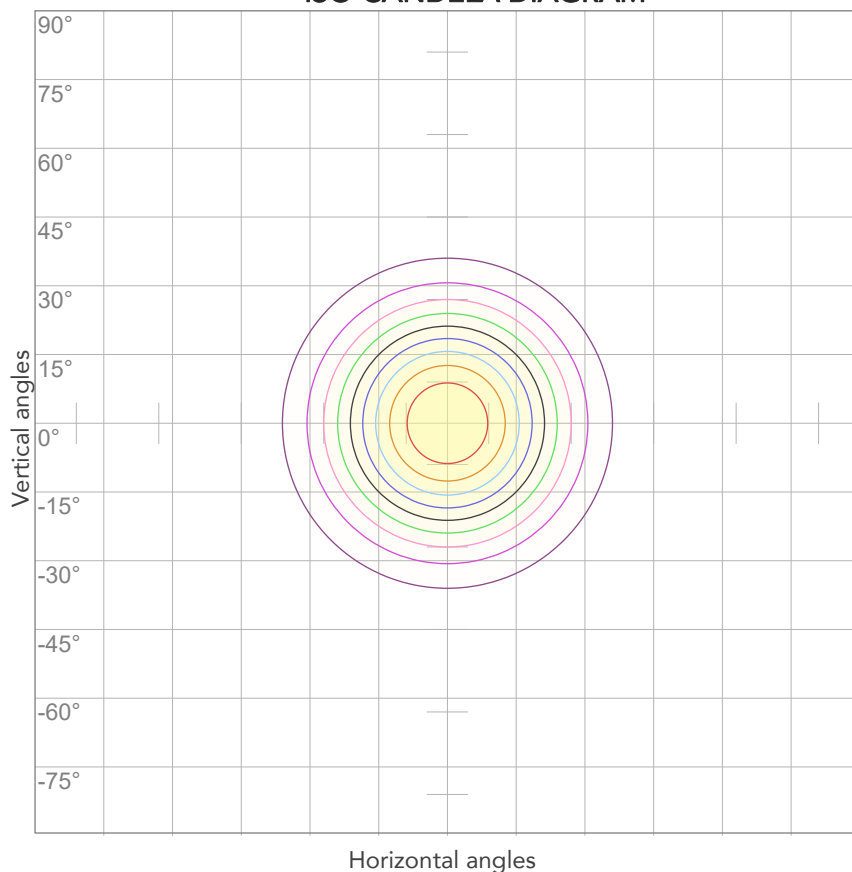
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,537A	113,8W	40lm/W

ISO CANDELA DIAGRAM



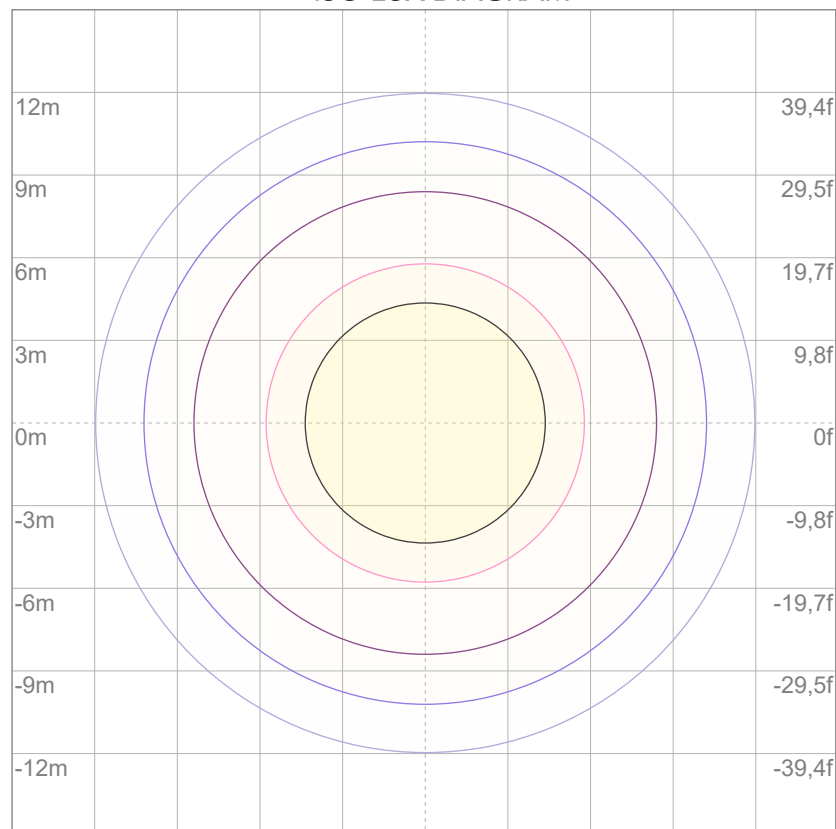
10%	653 cd
20%	1305 cd
30%	1958 cd
40%	2611 cd
50%	3263 cd
60%	3916 cd
70%	4569 cd
80%	5221 cd

Conditions:

Number of c-planes: 4

Candela at center: 6527 cd

ISO LUX DIAGRAM



3%	1,96 lx
5%	3,26 lx
10%	6,53 lx
30%	19,6 lx
50%	32,6 lx

Conditions:

Number of c-planes: 4

Lux at center: 65,3 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

7127 lm

Peak candela output:

14028 cd

Light quality:

CRI: 95,2

Color temperature:

4038 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 10°x60° Filter

Target:

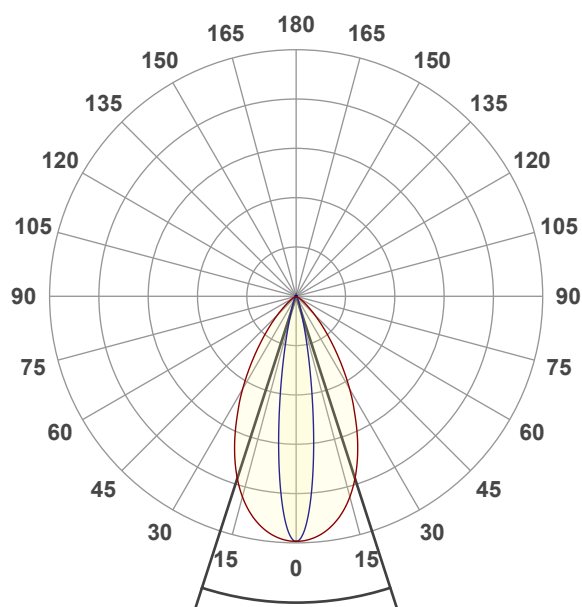
4000K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:34:23

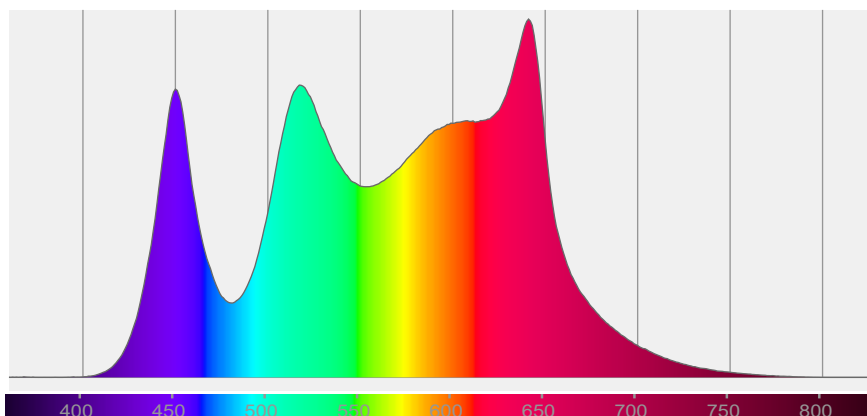


Beam angle 50%: 35,8°

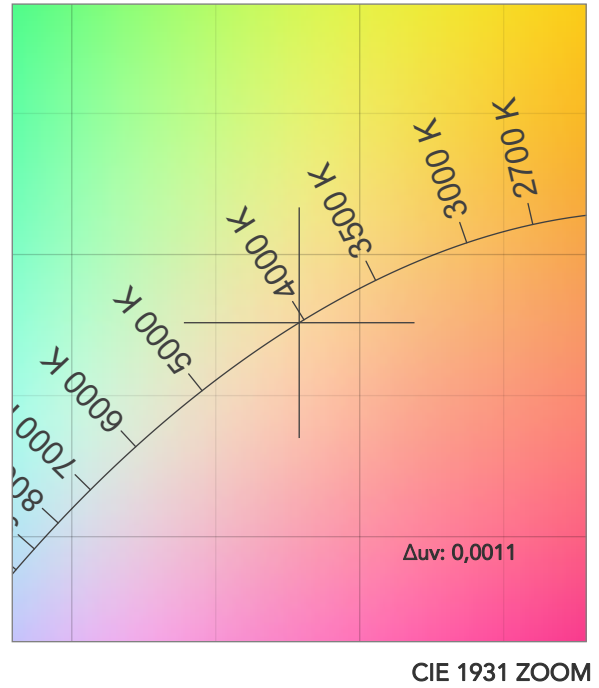
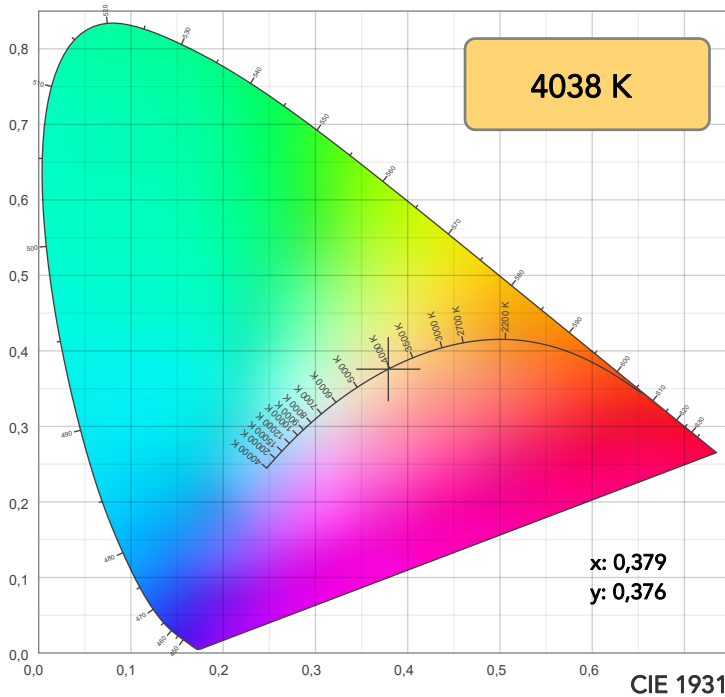
Field angle 10%: 61,7°

Cut off angle 2.5%: 80,7°

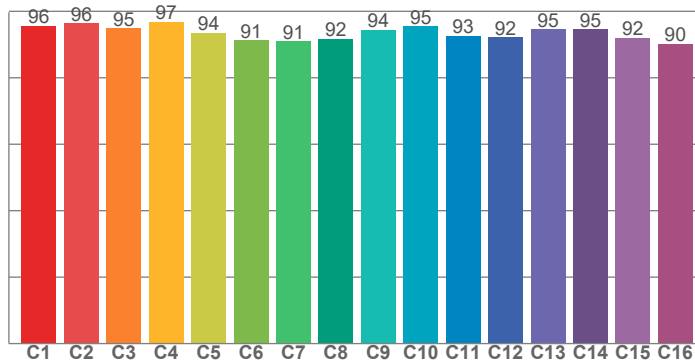
Spectra



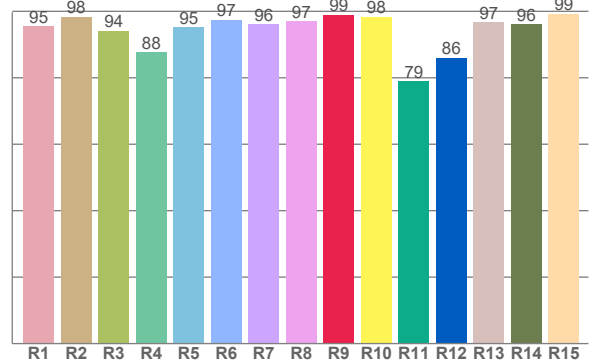
COLOR DETAILS



TM30: 93,8



CRI: 95,2 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,5	98,3	94,2	87,7	95,2	97,5	96,2	97,0	99,0	98,4	78,9	86,0	96,7	96,1	99,2

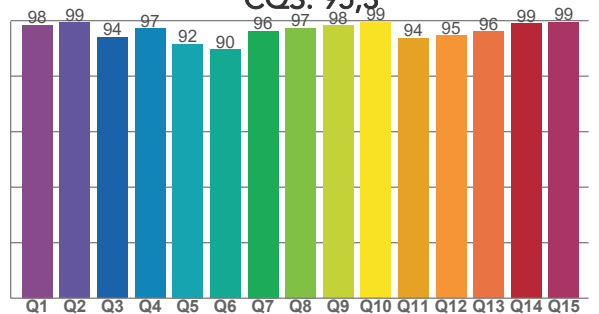
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,7	96,4	94,8	96,8	93,5	91,2	91,0	91,7	94,5	95,5	92,6	92,2	94,5	94,5	92,0	90,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,3	99,3	94,0	97,1	91,5	89,6	96,2	97,4	98,2	99,4	93,7	94,6	96,1	98,9	99,4

CQS: 95,3

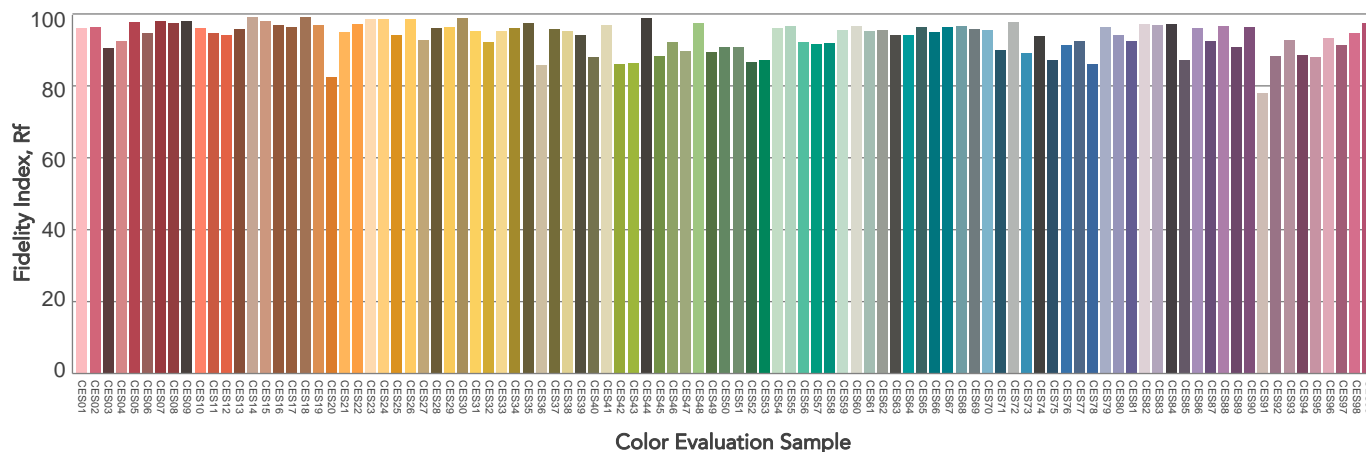
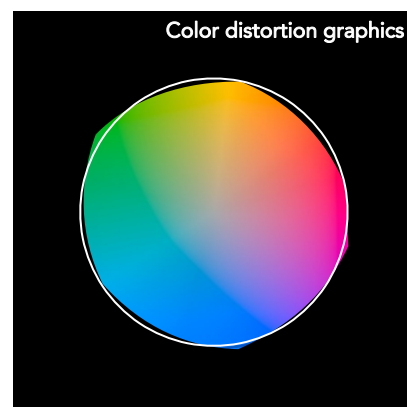
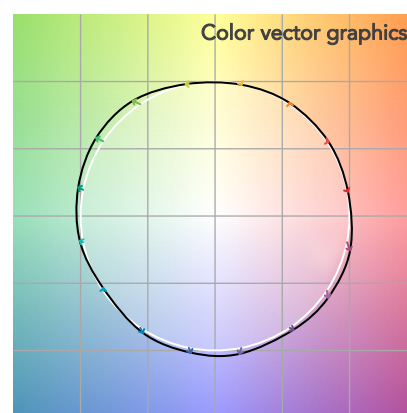
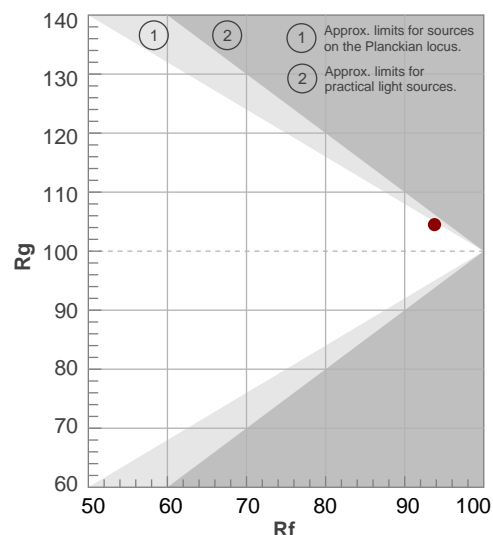


COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4038 K	95,2	99,0	93,8	104,5	95,3	84	0,379	0,376	0,0011

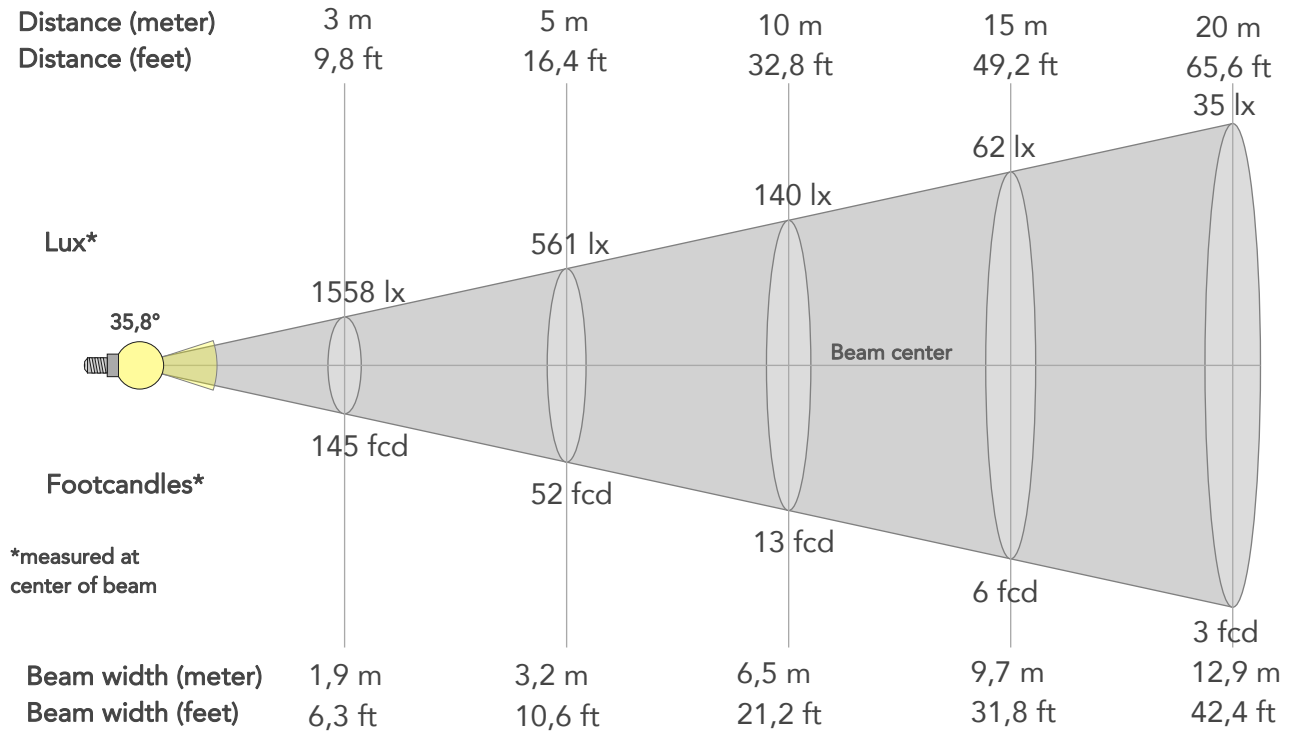
Gammut index

		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	96	0%	-2%
2	96	1%	-1%
3	95	1%	1%
4	97	0%	0%
5	94	0%	2%
6	91	5%	3%
7	91	6%	1%
8	92	4%	-1%
9	94	2%	-2%
10	95	-1%	-2%
11	93	2%	4%
12	92	3%	2%
13	95	4%	-2%
14	95	3%	2%
15	92	4%	-4%
16	90	4%	-5%



BEAM DETAILS

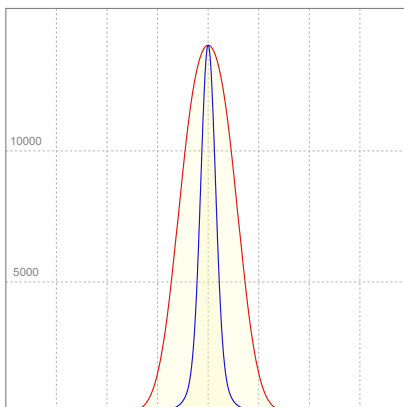
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
35,8°	61,7°	80,7°	99,3%	93,3%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	14018lx	3505lx	1558lx	876lx	561lx	249lx	140lx	62lx	35lx	22lx	16lx	9lx	6lx
Footcand.	1302fcd	326fcd	145fcd	81fcd	52fcd	23fcd	13fcd	6fcd	3fcd	2fcd	1fcd	1fcd	1fcd
Beam wid.	0,6m	1,3m	1,9m	2,6m	3,2m	4,8m	6,5m	9,7m	12,9m	16,2m	19,4m	25,8m	32,3m
Beam wid.	2,1ft	4,3ft	6,3ft	8,5ft	10,6ft	15,9ft	21,2ft	31,8ft	42,4ft	53ft	63,6ft	84,8ft	106ft

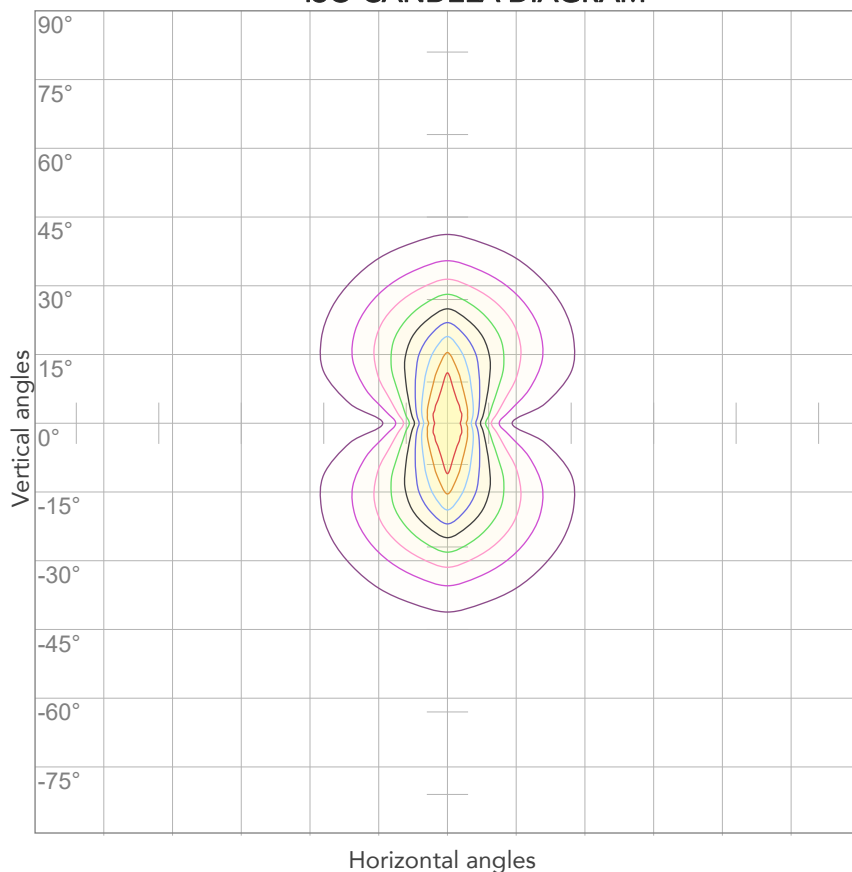
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,537A	113,7W	63lm/W

ISO CANDELA DIAGRAM



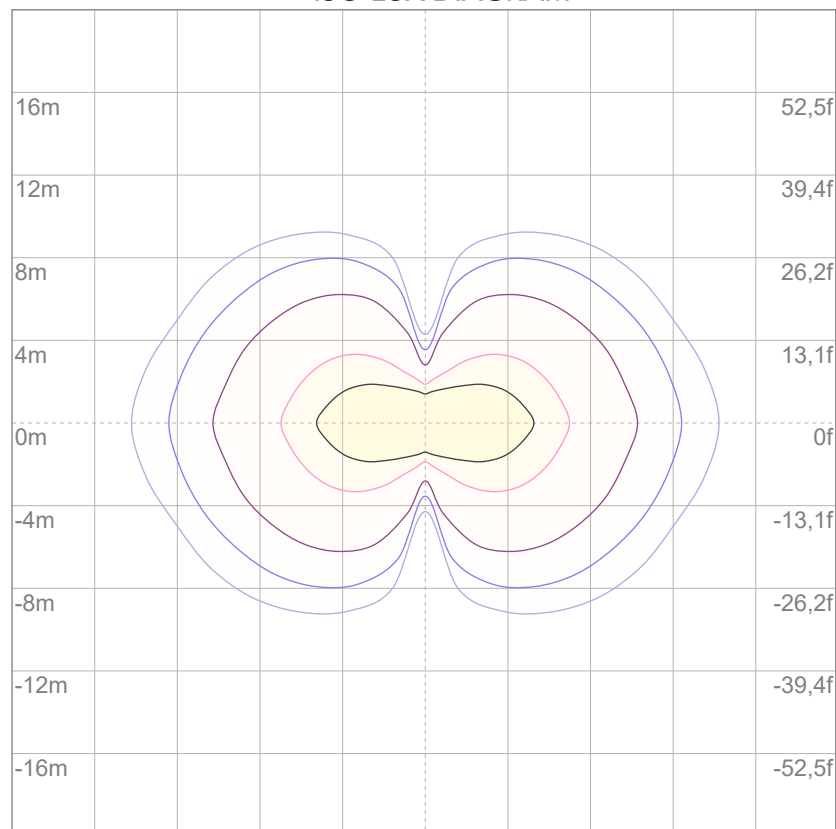
10%	1402 cd
20%	2804 cd
30%	4206 cd
40%	5607 cd
50%	7009 cd
60%	8411 cd
70%	9813 cd
80%	11215 cd

Conditions:

Number of c-planes: 4

Candela at center: 14018 cd

ISO LUX DIAGRAM



3%	4,21 lx
5%	7,01 lx
10%	14,0 lx
30%	42,1 lx
50%	70,1 lx

Conditions:

Number of c-planes: 4

Lux at center: 140 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4991 lm

Peak candela output:

87754 cd

Light quality:

CRI: 93,8

Color temperature:

5609 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic (No Filter)

Target:

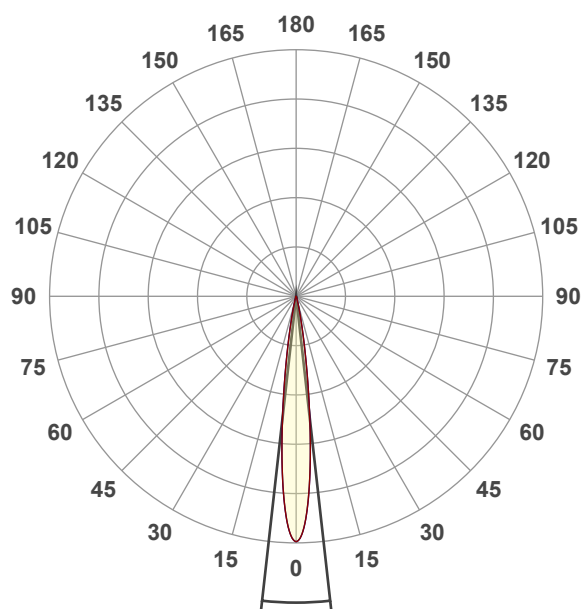
5600K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:38:01

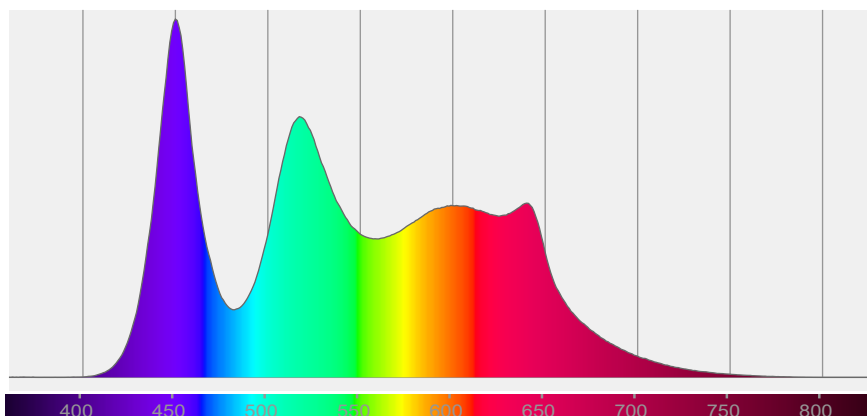


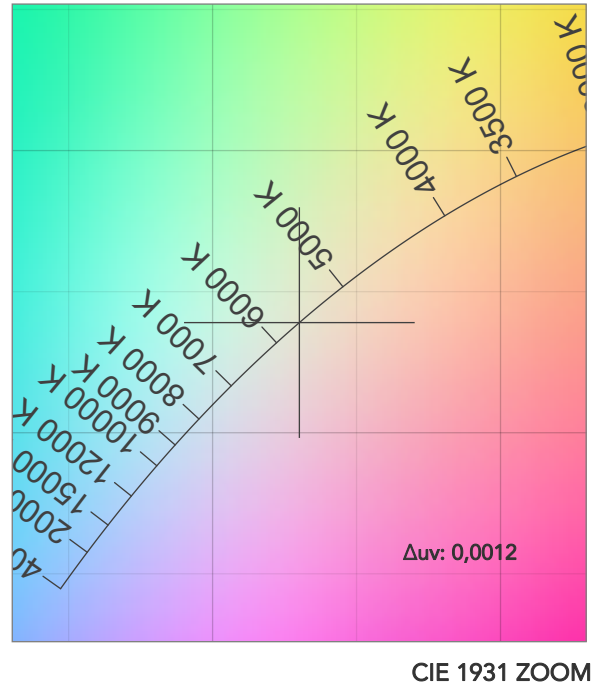
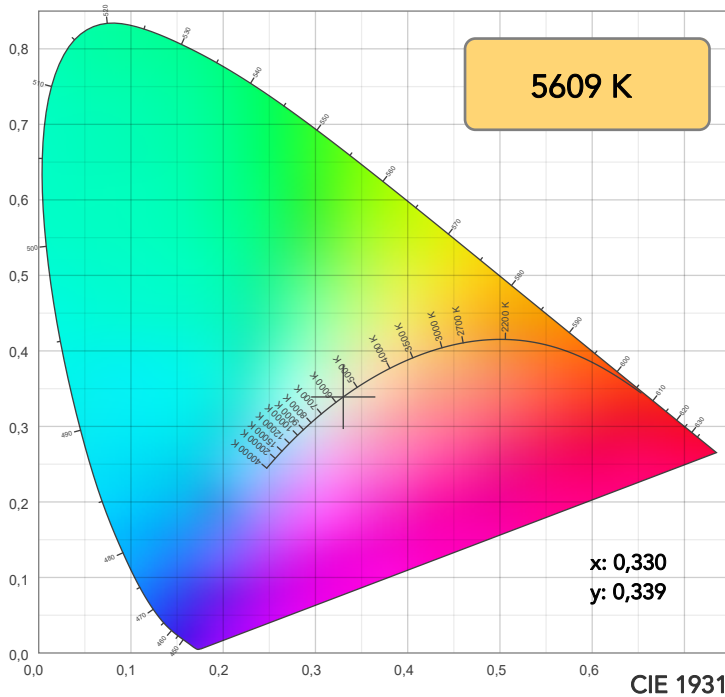
Beam angle 50%: 12,8°

Field angle 10%: 22,8°

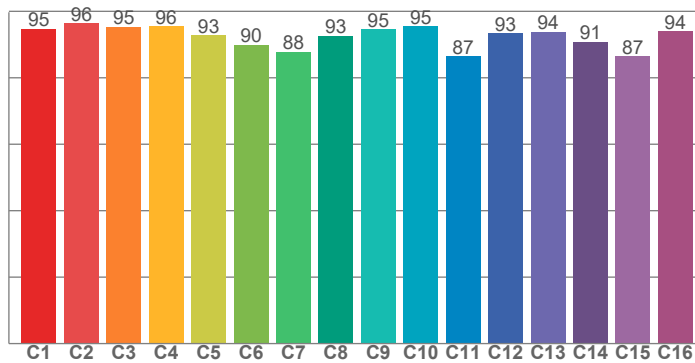
Cut off angle 2.5%: 29,9°

Spectra

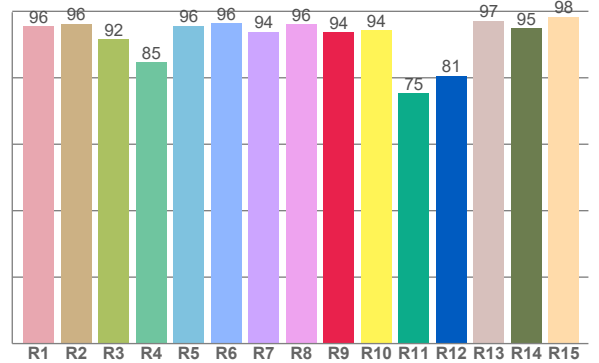




TM30: 92,4



CRI: 93,8 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,6	96,2	91,6	84,7	95,6	96,5	93,9	96,1	93,8	94,3	75,3	80,6	97,1	94,9	98,3

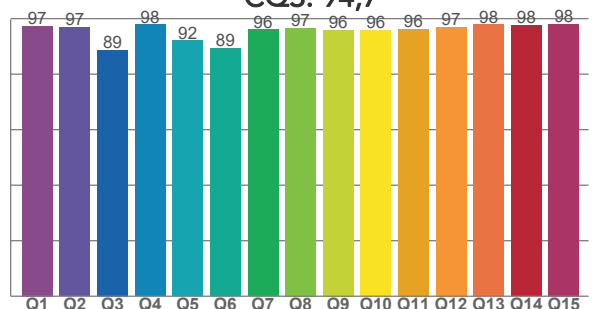
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	96,4	95,4	95,5	92,7	89,9	87,8	92,6	94,5	95,4	86,5	93,3	93,9	90,8	86,5	93,9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,4	96,9	88,7	97,9	92,1	89,3	96,1	96,6	95,9	95,8	96,2	96,9	97,9	97,6	98,0

CQS: 94,7



COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5609 K	93,8	93,8	92,4	105,6	94,7	84	0,330	0,339	0,0012

TM30 DETAILS

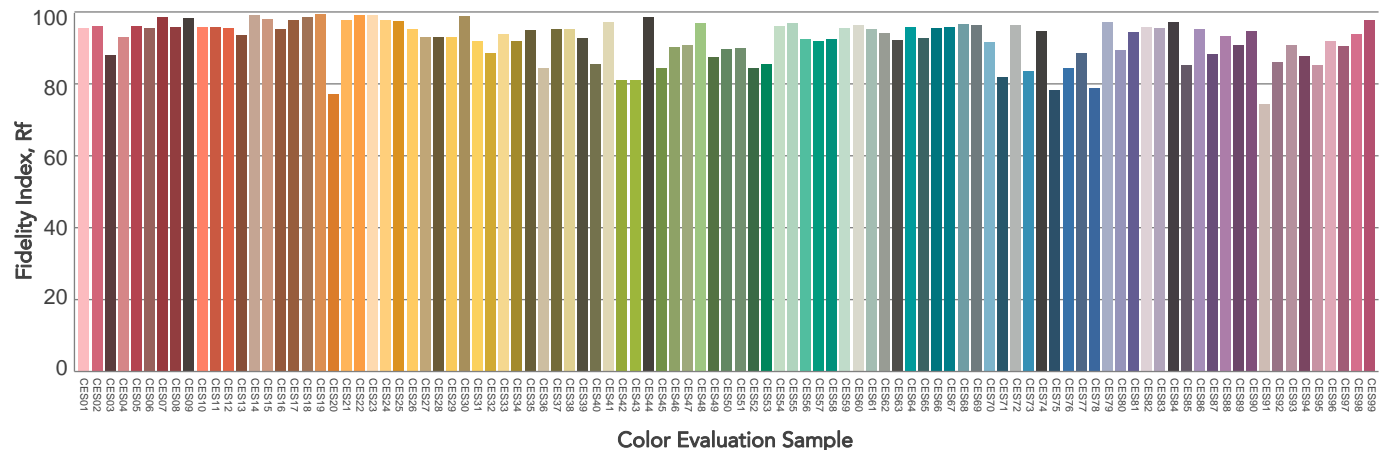
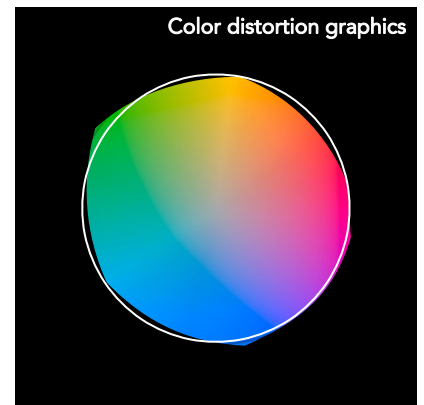
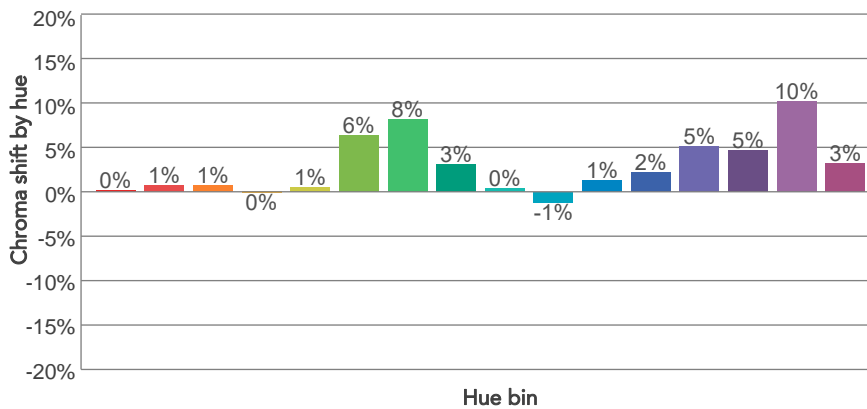
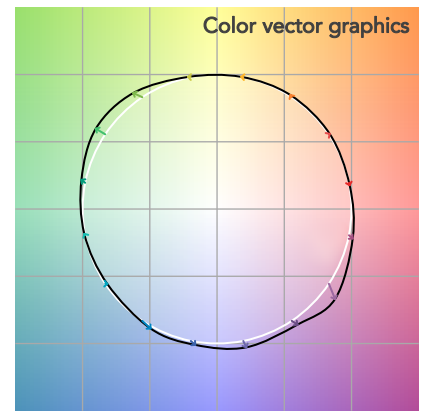
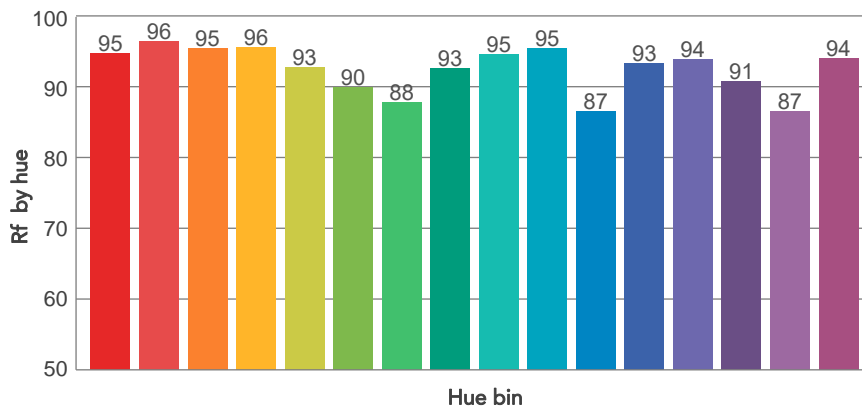
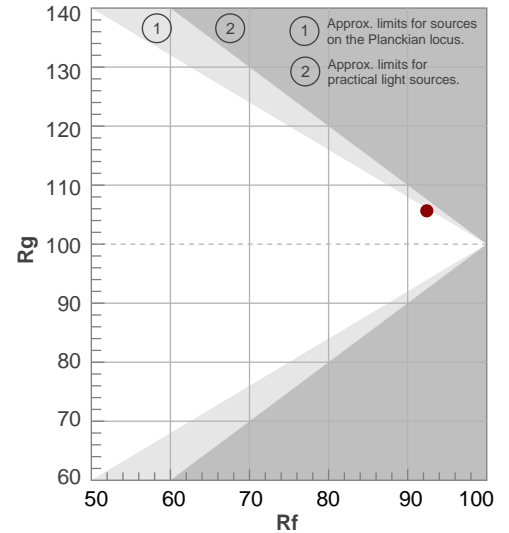
Rf 92,4

Fidelity index Rf

Rg 105,6

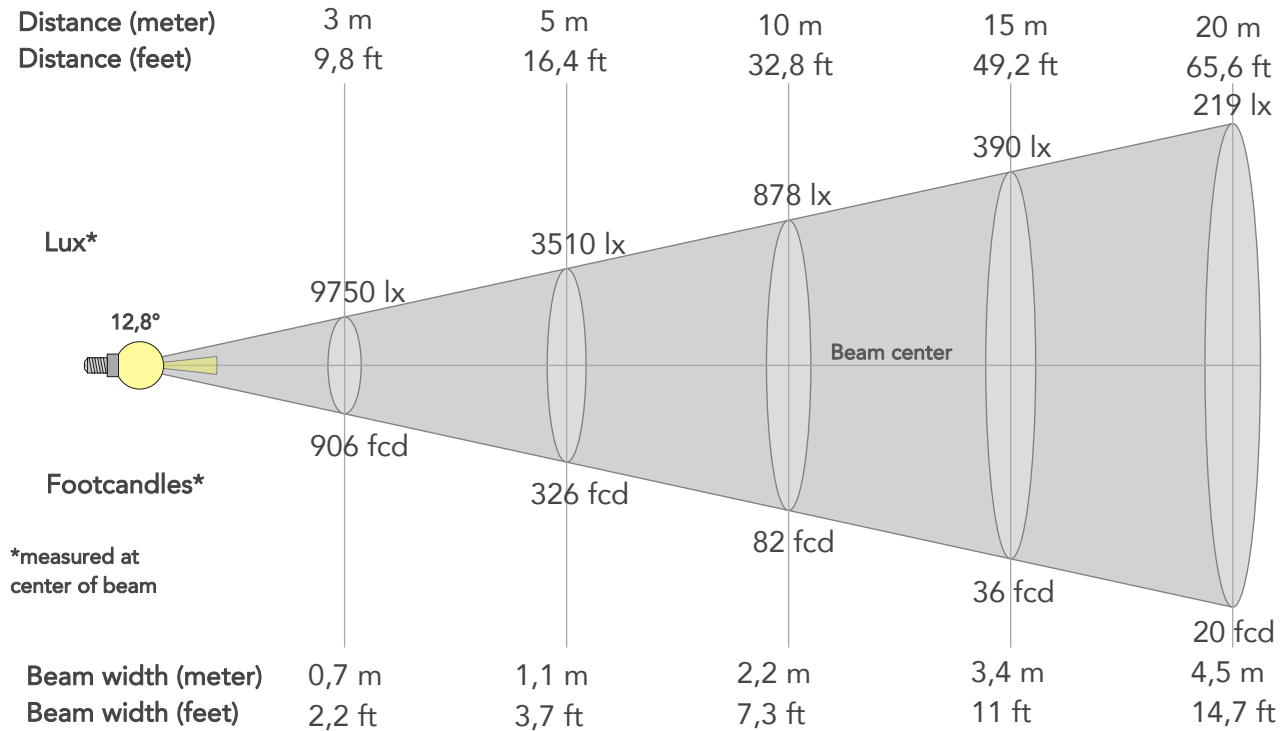
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	0%	-2%
2	96	1%	0%
3	95	1%	2%
4	96	0%	1%
5	93	1%	2%
6	90	6%	4%
7	88	8%	0%
8	93	3%	-2%
9	95	0%	-1%
10	95	-1%	1%
11	87	1%	8%
12	93	2%	4%
13	94	5%	1%
14	91	5%	2%
15	87	10%	-7%
16	94	3%	-2%



BEAM DETAILS

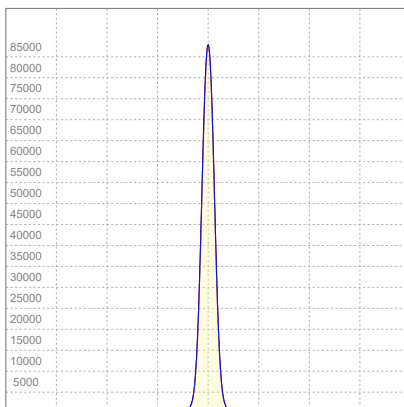
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
12,8°	22,8°	29,9°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	87754lx	21938lx	9750lx	5485lx	3510lx	1560lx	878lx	390lx	219lx	140lx	98lx	55lx	35lx
Footcand.	8153fcd	2038fcd	906fcd	510fcd	326fcd	145fcd	82fcd	36fcd	20fcd	13fcd	9fcd	5fcd	3fcd
Beam wid.	0,2m	0,4m	0,7m	0,9m	1,1m	1,7m	2,2m	3,4m	4,5m	5,6m	6,7m	8,9m	11,2m
Beam wid.	0,7ft	1,5ft	2,2ft	2,9ft	3,7ft	5,5ft	7,3ft	11ft	14,7ft	18,3ft	22ft	29,3ft	36,7ft

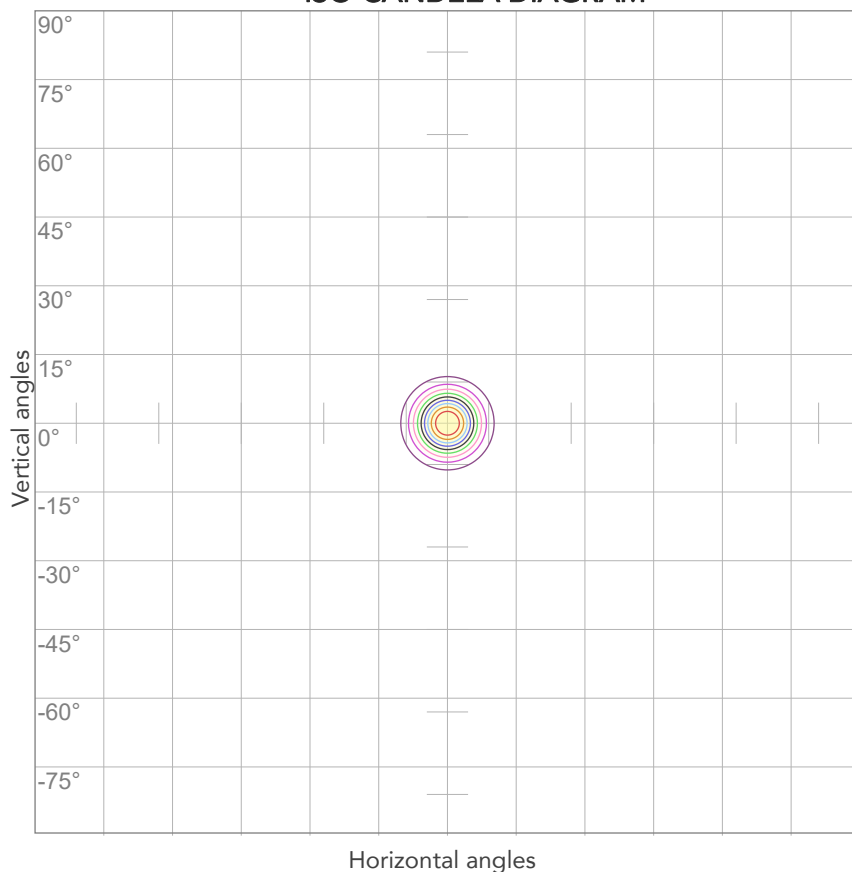
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,601A	127,4W	39lm/W

ISO CANDELA DIAGRAM



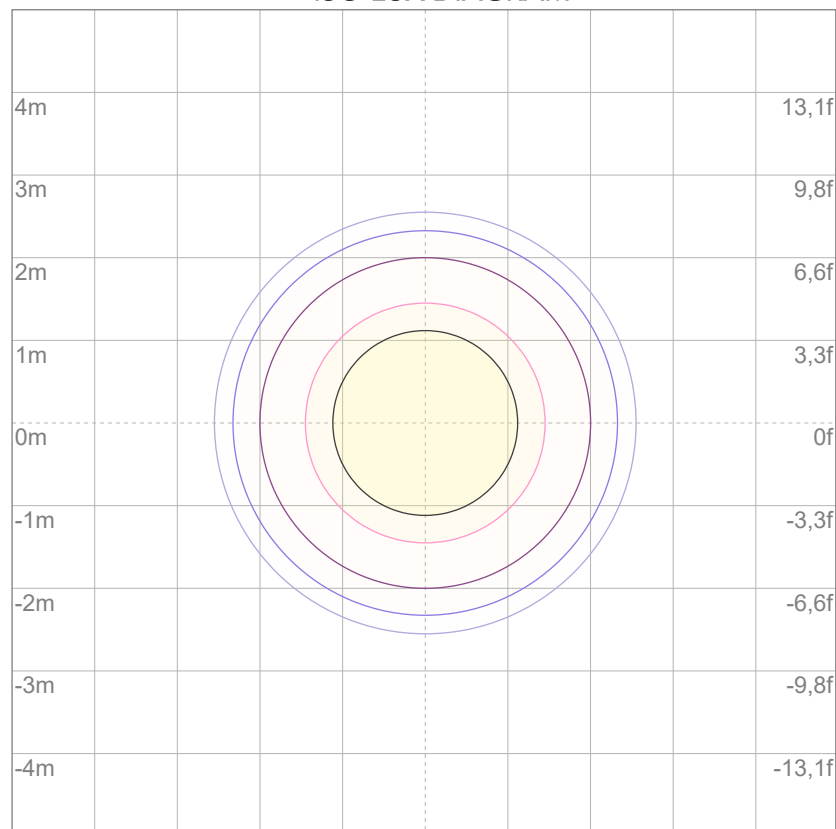
10%	8775 cd
20%	17551 cd
30%	26326 cd
40%	35101 cd
50%	43877 cd
60%	52652 cd
70%	61427 cd
80%	70203 cd

Conditions:

Number of c-planes: 4

Candela at center: 87754 cd

ISO LUX DIAGRAM



3%	26,3 lx
5%	43,9 lx
10%	87,8 lx
30%	263 lx
50%	439 lx

Conditions:

Number of c-planes: 4

Lux at center: 878 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4957 lm

Peak candela output:

14567 cd

Light quality:

CRI: 93,8

Color temperature:

5637 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 25° Filter

Target:

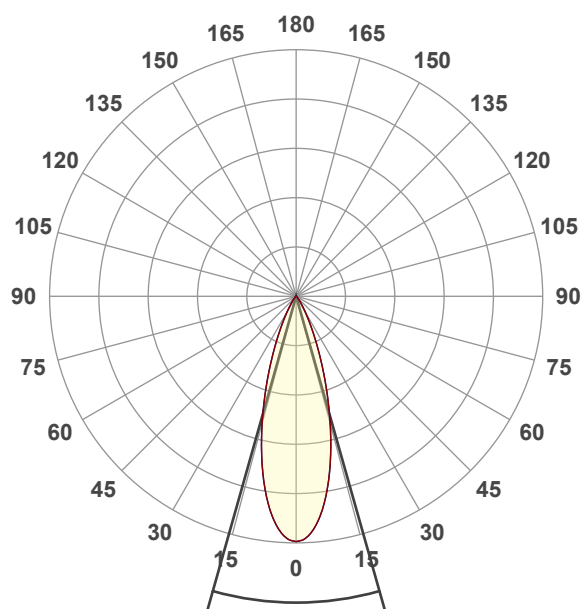
5600K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:40:25

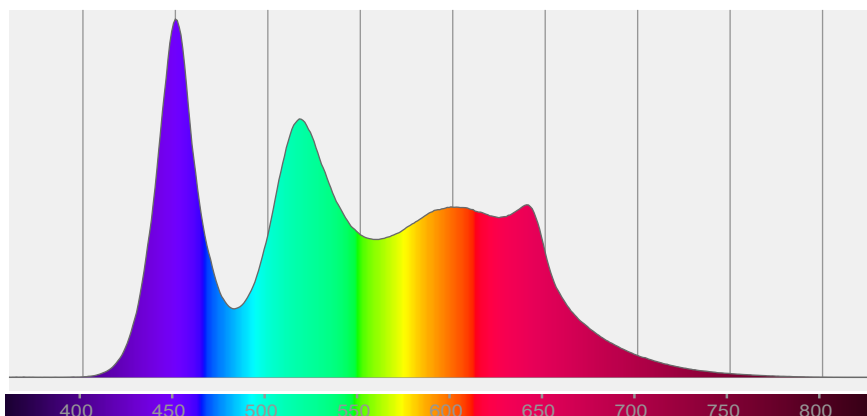


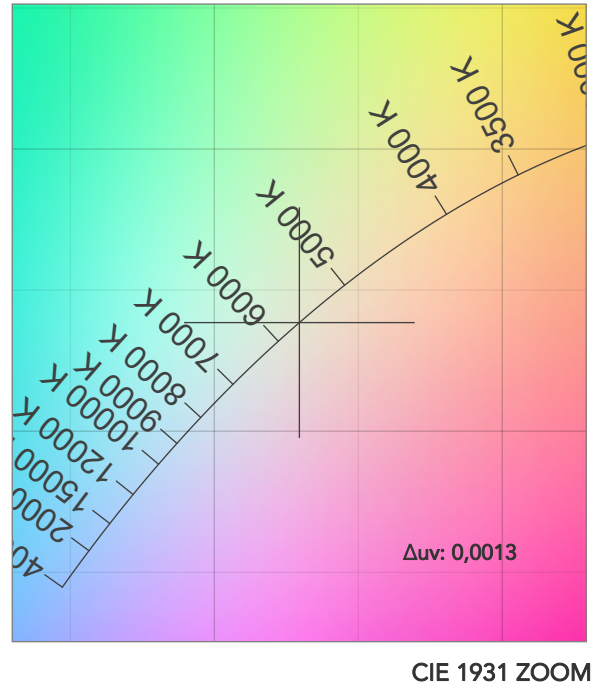
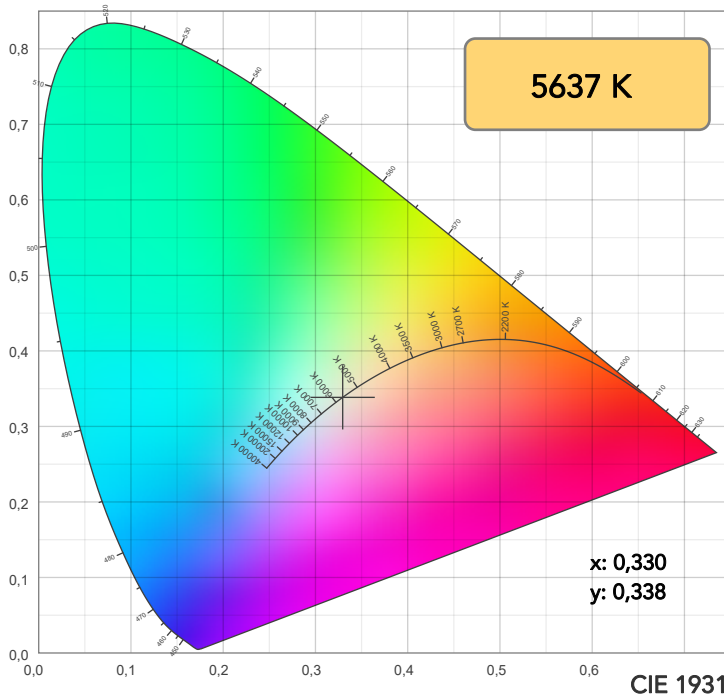
Beam angle 50%: 31,6°

Field angle 10%: 56,5°

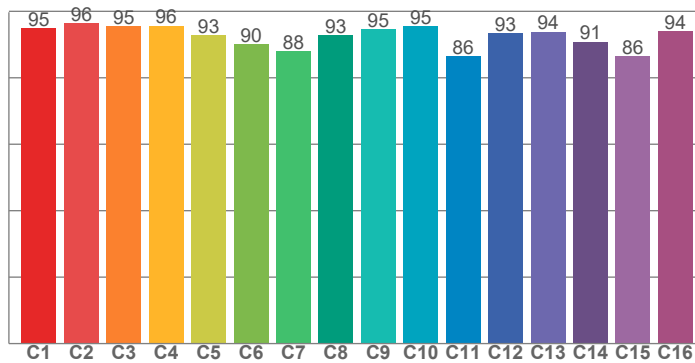
Cut off angle 2.5%: 73,4°

Spectra

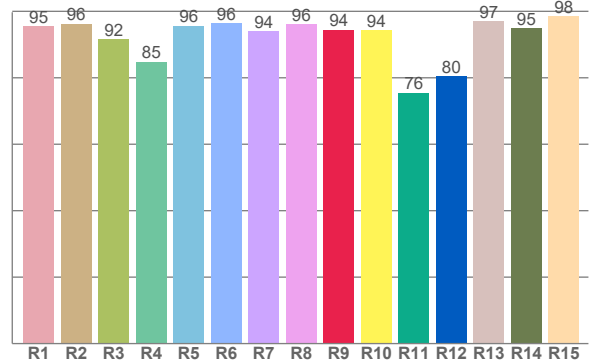




TM30: 92,5



CRI: 93,8 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,5	96,3	91,6	84,9	95,7	96,4	94,0	96,2	94,4	94,4	75,5	80,4	97,0	94,9	98,5

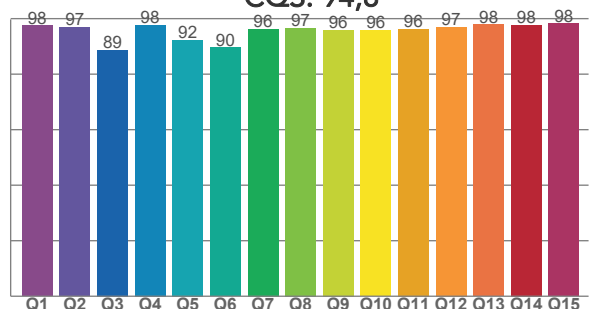
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	96,4	95,4	95,6	92,8	90,0	88,0	92,7	94,6	95,4	86,4	93,3	93,9	90,9	86,5	94,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,5	96,9	88,7	97,8	92,4	89,5	96,2	96,6	95,8	95,8	96,3	97,0	97,9	97,7	98,2

CQS: 94,8



COLOR PARAMETERS

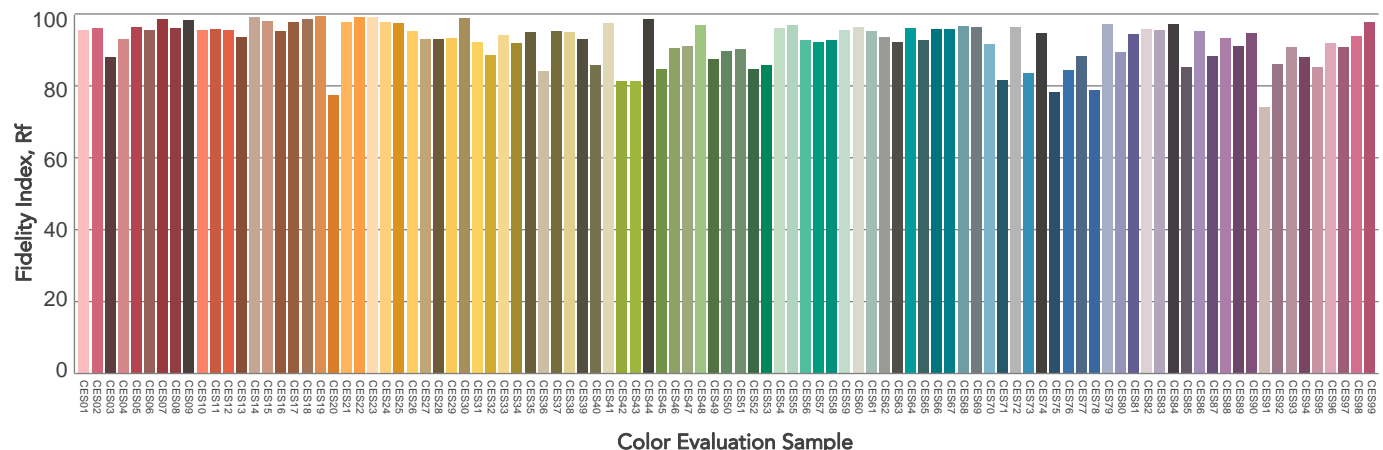
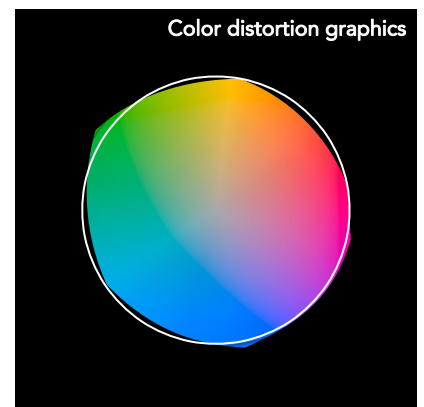
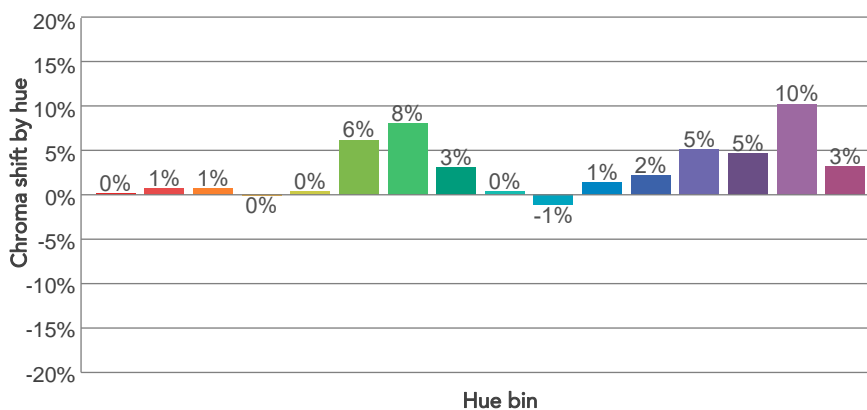
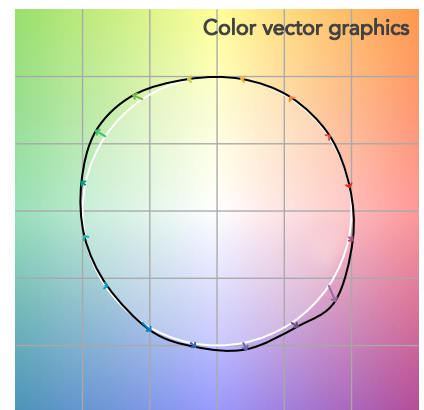
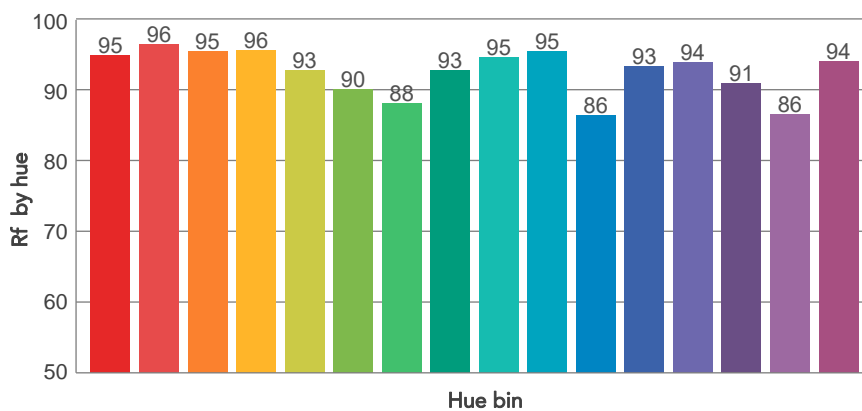
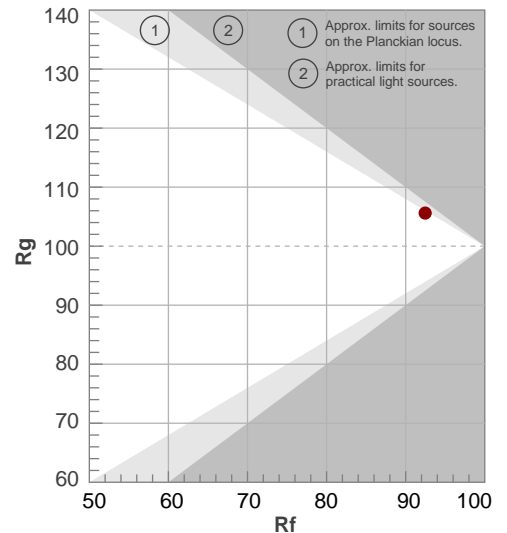
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5637 K	93,8	94,4	92,5	105,6	94,8	85	0,330	0,338	0,0013

TM30 DETAILS

Rf 92,5
Fidelity index Rf

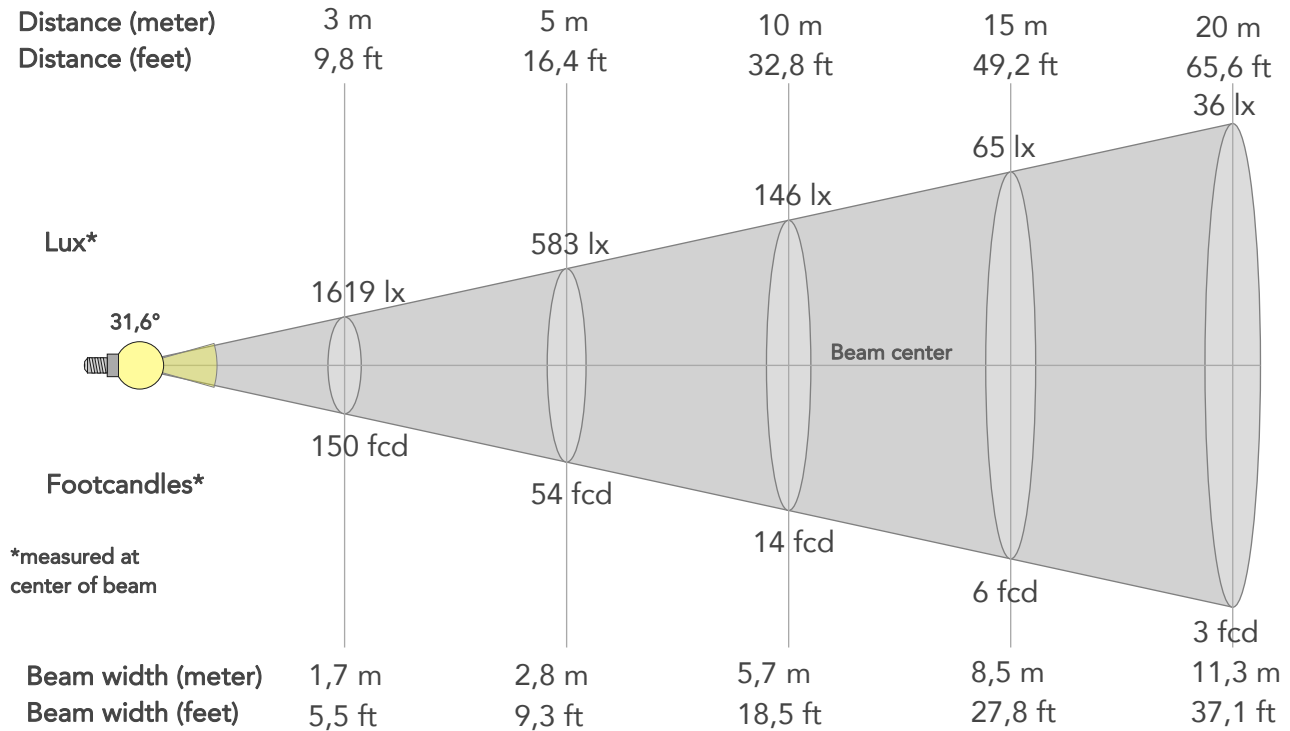
Rg 105,6
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	0%	-2%
2	96	1%	0%
3	95	1%	2%
4	96	0%	1%
5	93	0%	2%
6	90	6%	4%
7	88	8%	0%
8	93	3%	-1%
9	95	0%	-1%
10	95	-1%	1%
11	86	1%	8%
12	93	2%	4%
13	94	5%	1%
14	91	5%	2%
15	86	10%	-7%
16	94	3%	-2%



BEAM DETAILS

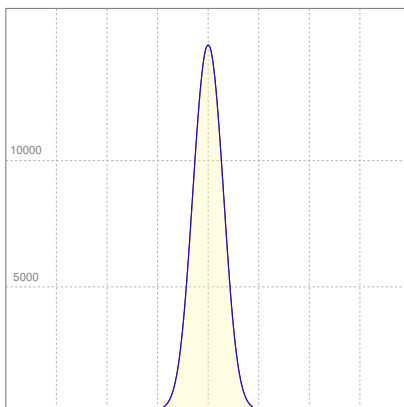
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,6°	56,5°	73,4°	99,8%	98,1%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	14567lx	3642lx	1619lx	910lx	583lx	259lx	146lx	65lx	36lx	23lx	16lx	9lx	6lx
Footcand.	1353fcd	338fcd	150fcd	85fcd	54fcd	24fcd	14fcd	6fcd	3fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,6m	1,1m	1,7m	2,3m	2,8m	4,2m	5,7m	8,5m	11,3m	14,1m	17m	22,6m	28,3m
Beam wid.	1,9ft	3,7ft	5,5ft	7,4ft	9,3ft	13,9ft	18,5ft	27,8ft	37,1ft	46,4ft	55,6ft	74,2ft	92,7ft

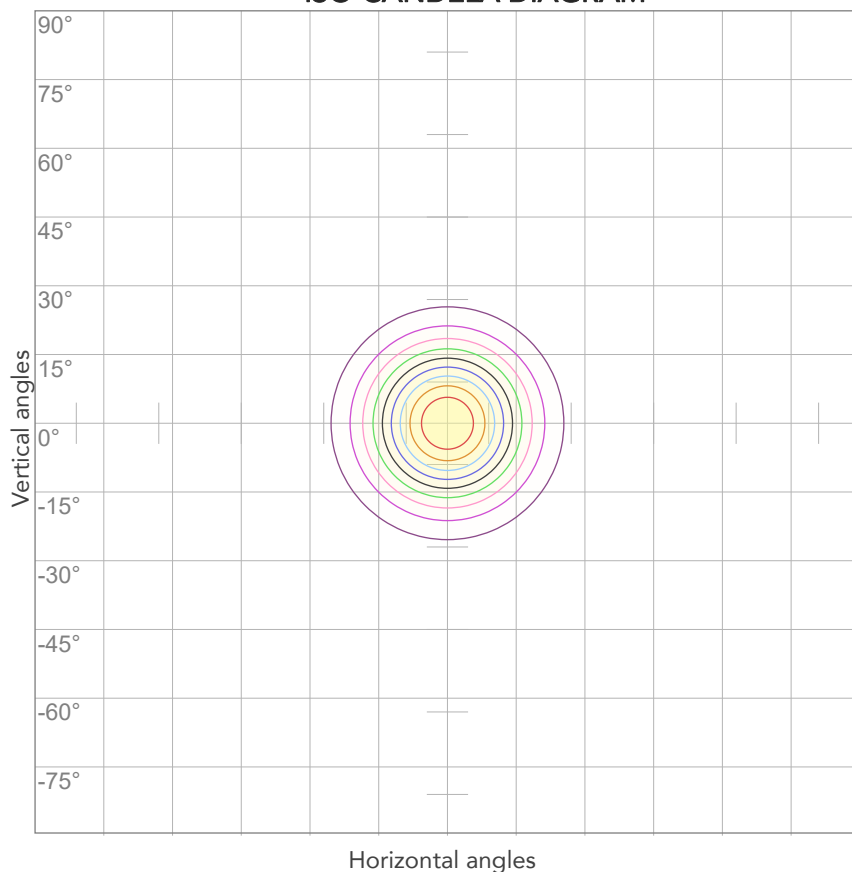
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,599A	127,2W	39lm/W

ISO CANDELA DIAGRAM



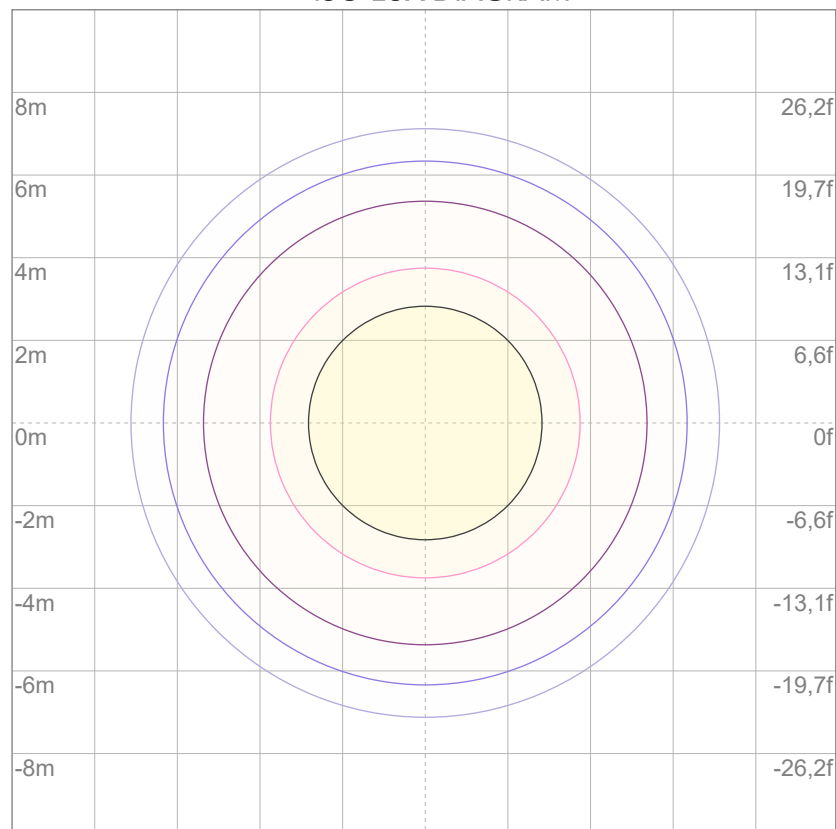
10%	1457 cd
20%	2913 cd
30%	4370 cd
40%	5827 cd
50%	7283 cd
60%	8740 cd
70%	10197 cd
80%	11654 cd

Conditions:

Number of c-planes: 4

Candela at center: 14567 cd

ISO LUX DIAGRAM



3%	4,37 lx
5%	7,28 lx
10%	14,6 lx
30%	43,7 lx
50%	72,8 lx

Conditions:

Number of c-planes: 4

Lux at center: 146 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4965 lm

Peak candela output:

7096 cd

Light quality:

CRI: 93,8

Color temperature:

5616 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 40° Filter

Target:

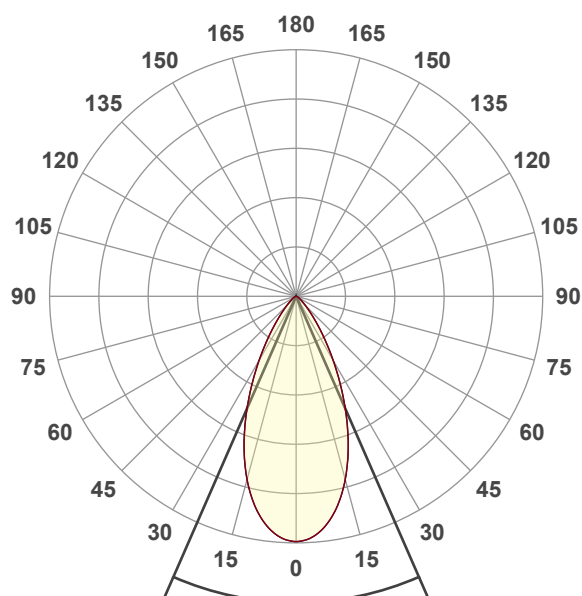
5600K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:42:47

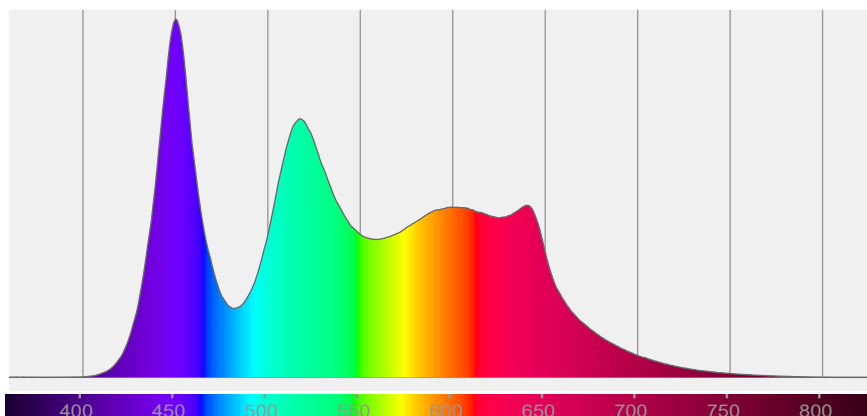


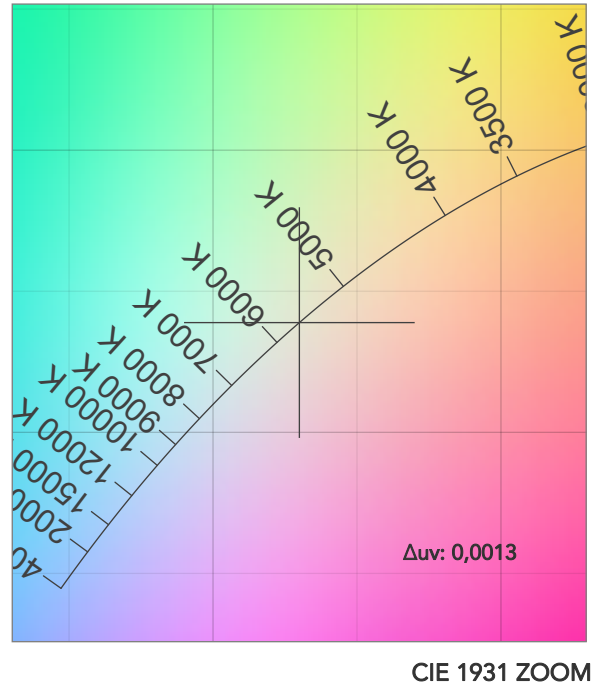
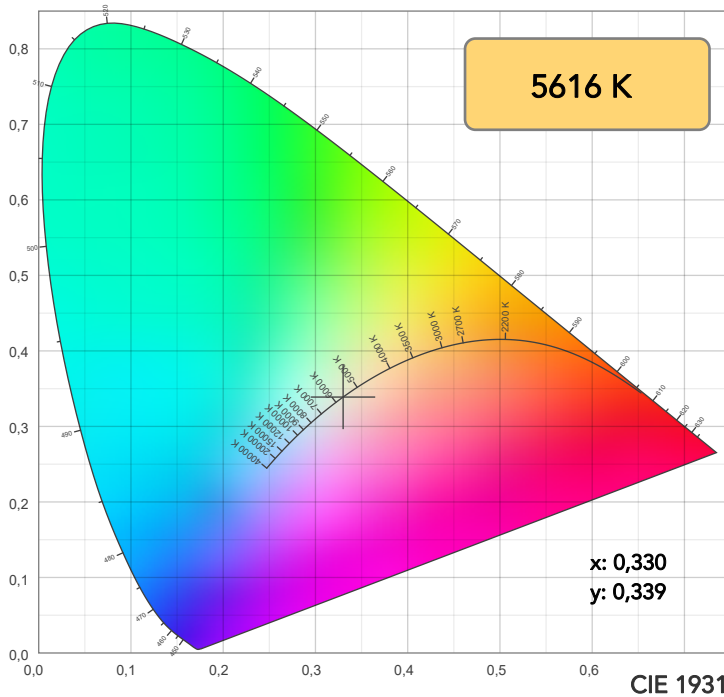
Beam angle 50%: 47,3°

Field angle 10%: 80,2°

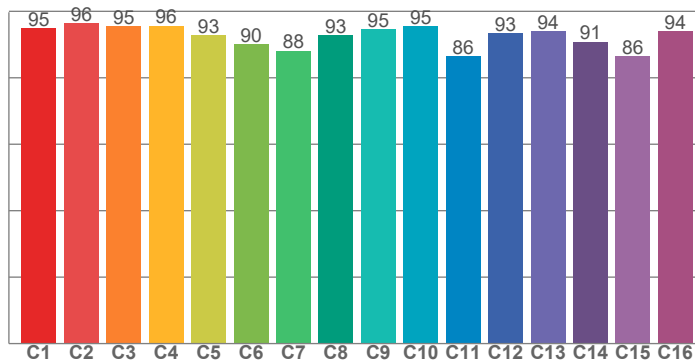
Cut off angle 2.5%: 104,4°

Spectra

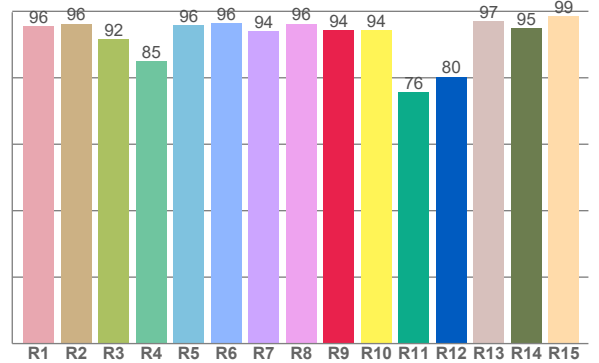




TM30: 92,5



CRI: 93,8 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,5	96,3	91,6	84,9	95,7	96,4	94,0	96,2	94,4	94,3	75,6	80,3	97,1	94,9	98,5

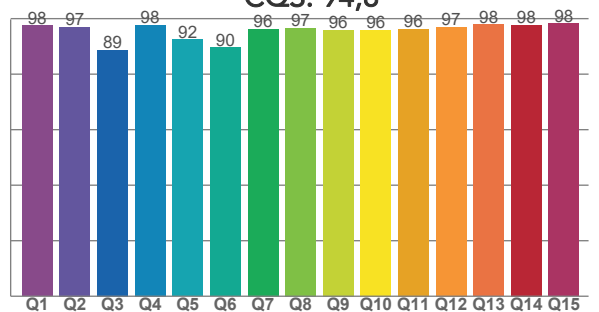
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	96,4	95,5	95,6	92,8	90,1	88,1	92,8	94,6	95,4	86,4	93,3	93,9	90,9	86,4	94,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,5	96,9	88,7	97,7	92,4	89,6	96,2	96,6	95,8	95,8	96,3	96,9	97,9	97,7	98,2

CQS: 94,8



COLOR PARAMETERS

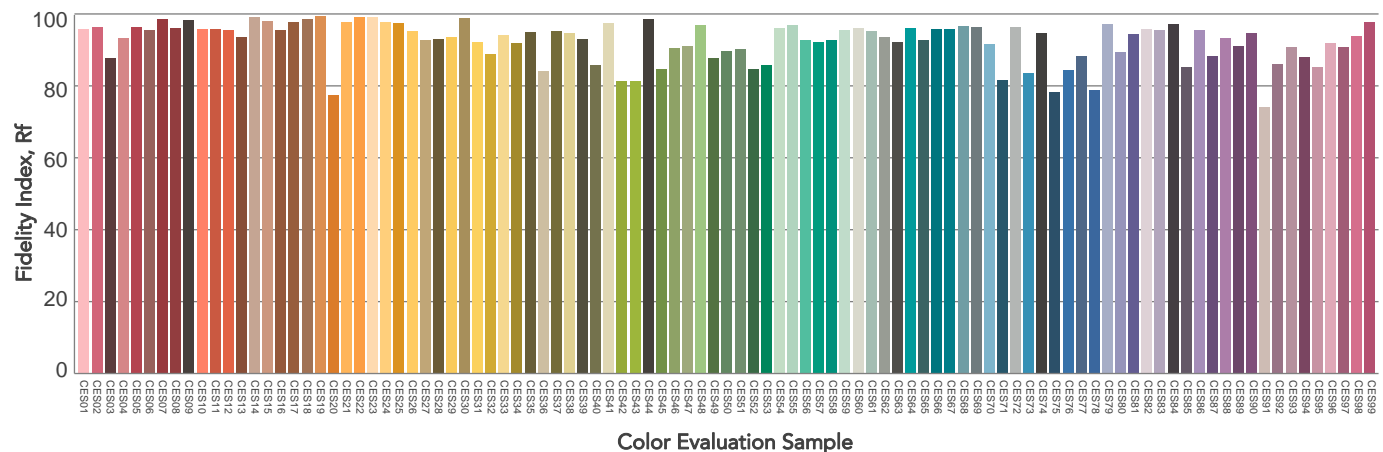
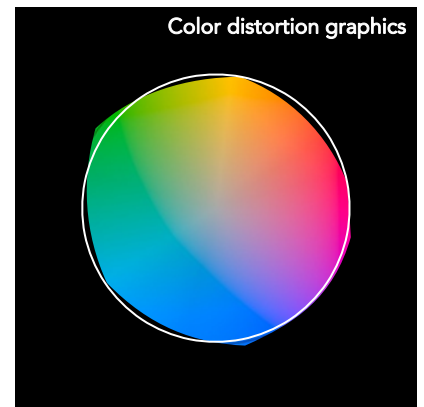
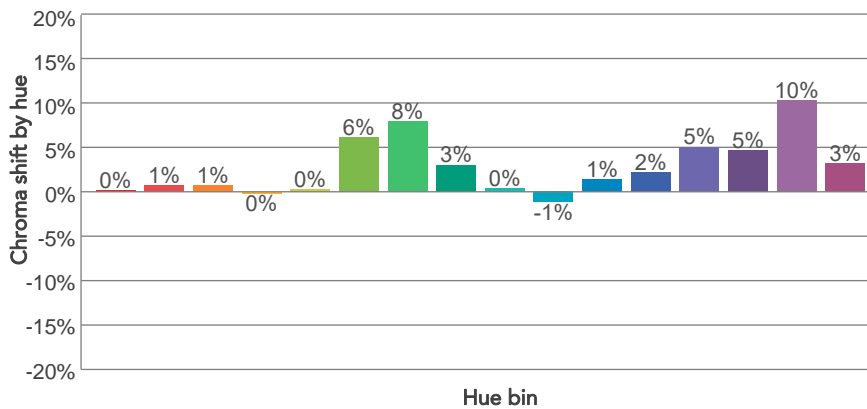
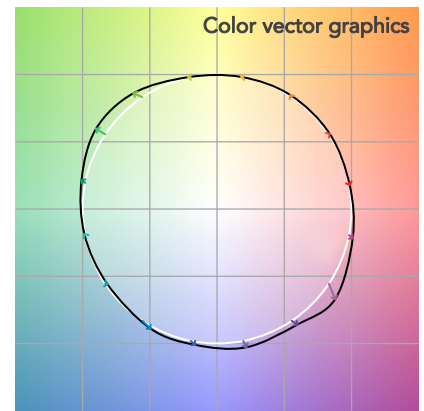
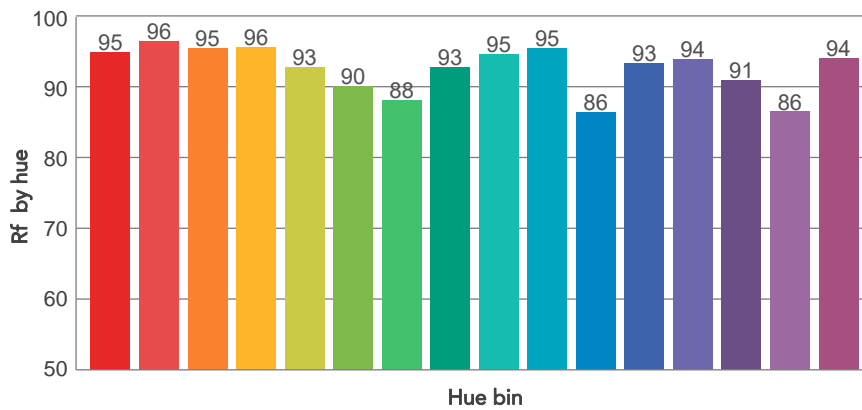
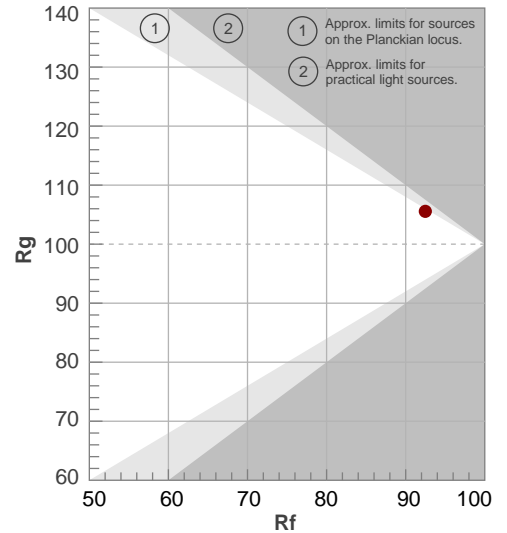
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5616 K	93,8	94,4	92,5	105,6	94,8	85	0,330	0,339	0,0013

TM30 DETAILS

Rf 92,5
Fidelity index Rf

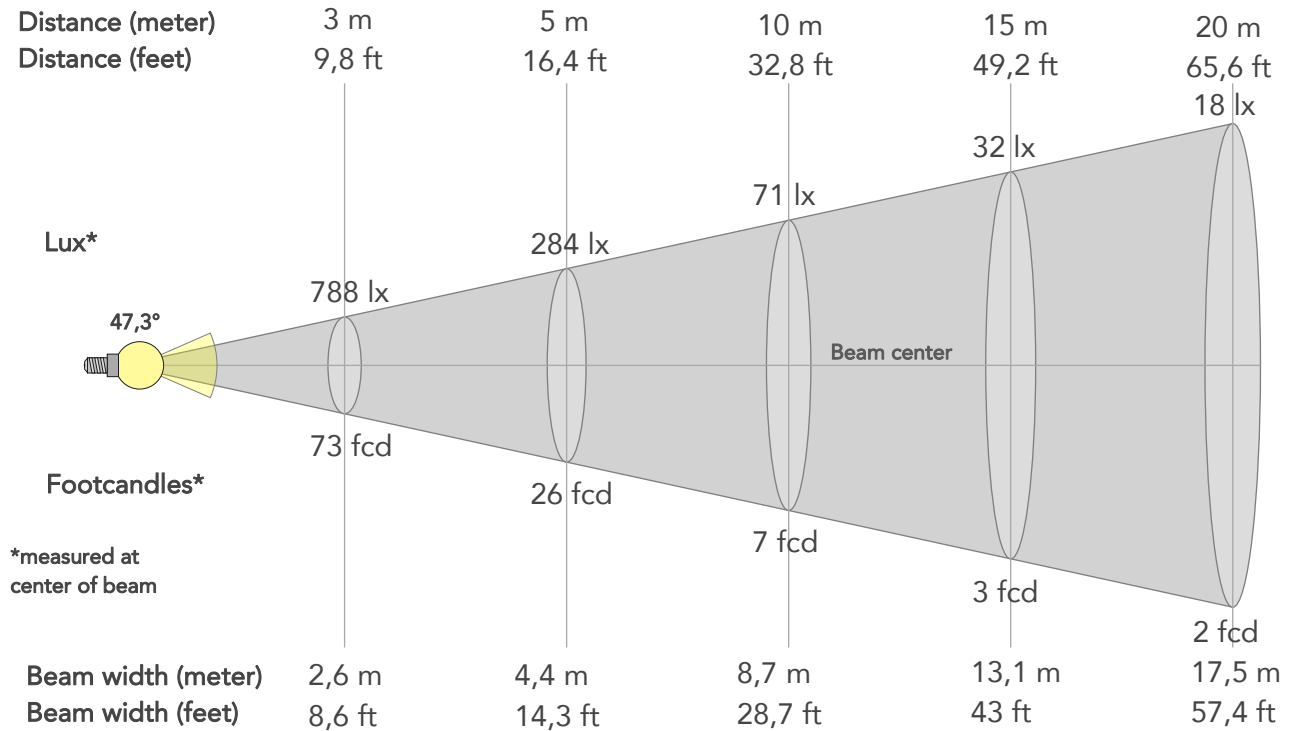
Rg 105,6
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	0%	-2%
2	96	1%	0%
3	95	1%	2%
4	96	0%	1%
5	93	0%	2%
6	90	6%	4%
7	88	8%	0%
8	93	3%	-1%
9	95	0%	-1%
10	95	-1%	1%
11	86	1%	8%
12	93	2%	4%
13	94	5%	1%
14	91	5%	2%
15	86	10%	-7%
16	94	3%	-2%



BEAM DETAILS

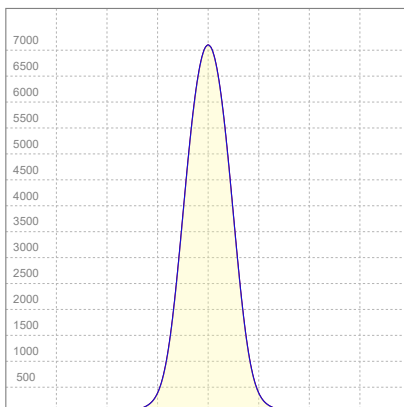
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
47,3°	80,2°	104,4°	98,5%	93,5%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	7096lx	1774lx	788lx	443lx	284lx	126lx	71lx	32lx	18lx	11lx	8lx	4lx	3lx
Footcand.	659fcd	165fcd	73fcd	41fcd	26fcd	12fcd	7fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,9m	1,7m	2,6m	3,5m	4,4m	6,6m	8,7m	13,1m	17,5m	21,9m	26,2m	35m	43,7m
Beam wid.	2,9ft	5,8ft	8,6ft	11,5ft	14,3ft	21,5ft	28,7ft	43ft	57,4ft	71,7ft	86,1ft	114,8ft	143,5ft

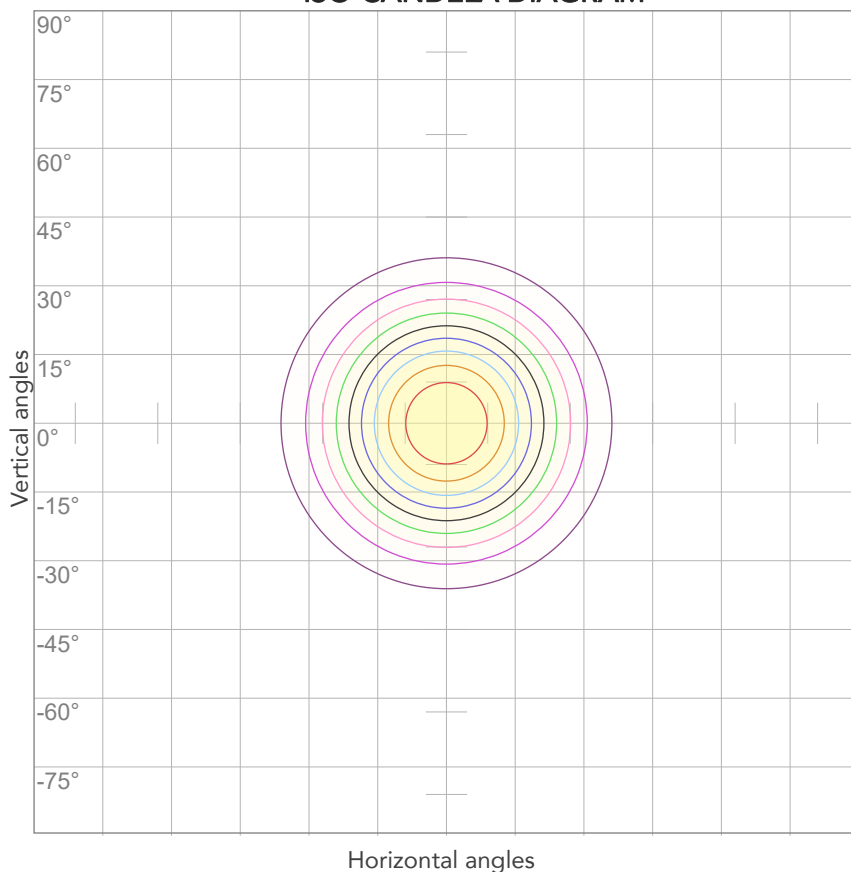
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,598A	127,2W	39lm/W

ISO CANDELA DIAGRAM



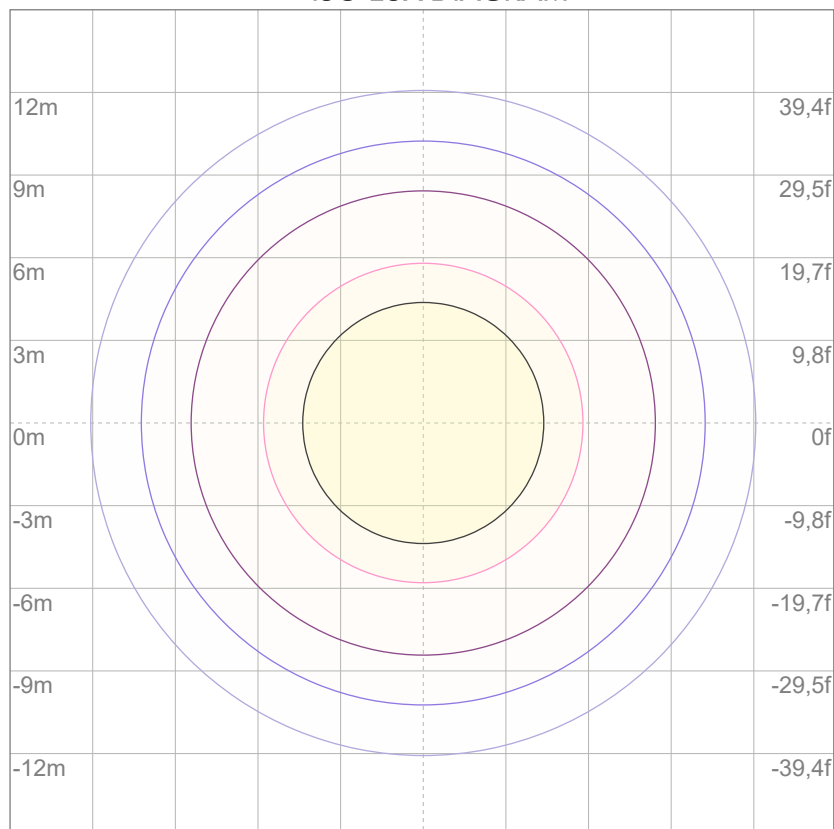
10%	710 cd
20%	1419 cd
30%	2129 cd
40%	2838 cd
50%	3548 cd
60%	4257 cd
70%	4967 cd
80%	5677 cd

Conditions:

Number of c-planes: 4

Candela at center: 7096 cd

ISO LUX DIAGRAM



3%	2,13 lx
5%	3,55 lx
10%	7,10 lx
30%	21,3 lx
50%	35,5 lx

Conditions:

Number of c-planes: 4

Lux at center: 71,0 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

7749 lm

Peak candela output:

15121 cd

Light quality:

CRI: 93,9

Color temperature:

5669 K

PRODUCT NAME:

SMARTBATWASH

MEASUREMENT CONDITIONS:

Beam angle:

Native Optic + 10°x60° Filter

Target:

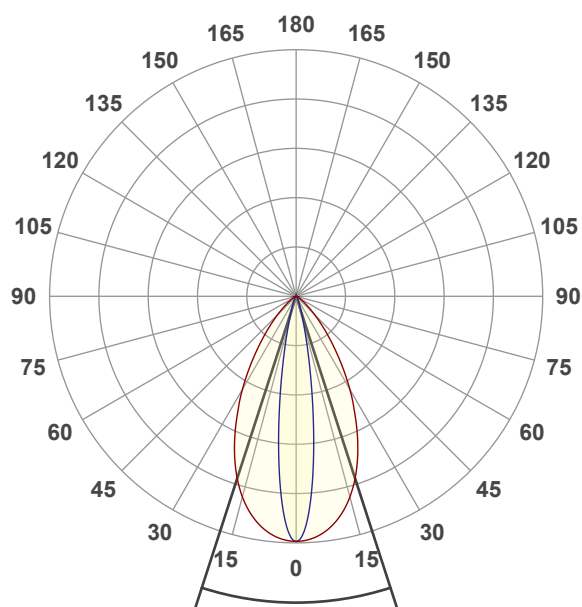
5600K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:47:32

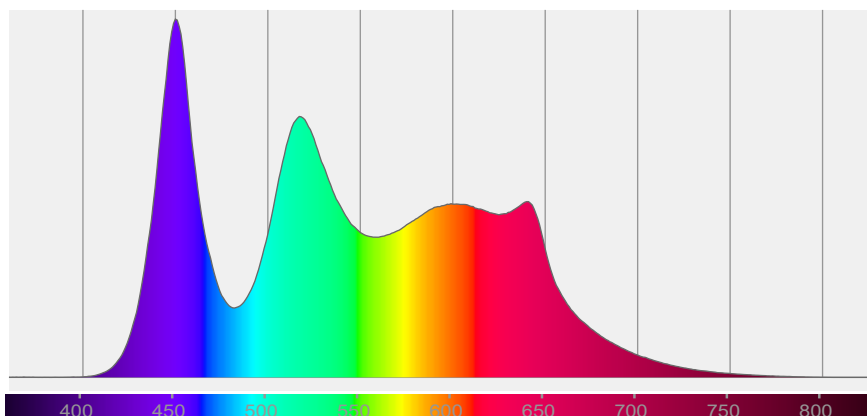


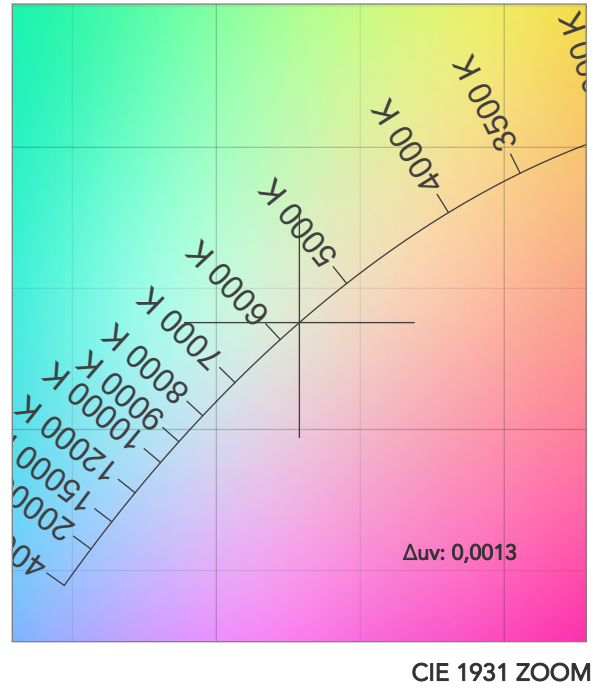
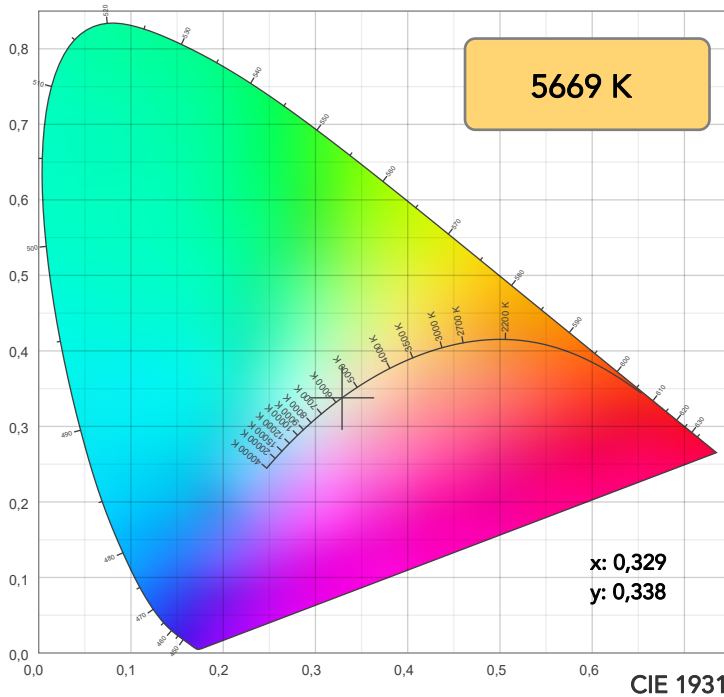
Beam angle 50%: 35,9°

Field angle 10%: 61,7°

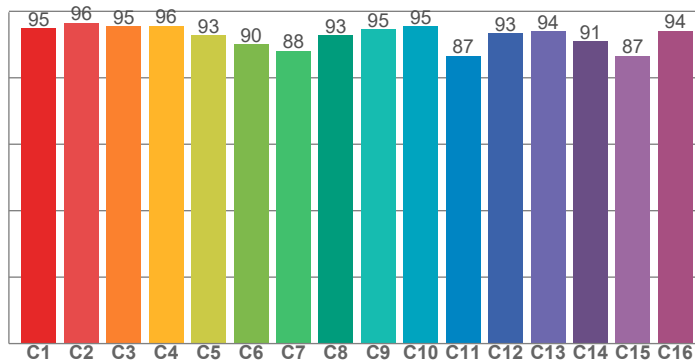
Cut off angle 2.5%: 81,7°

Spectra

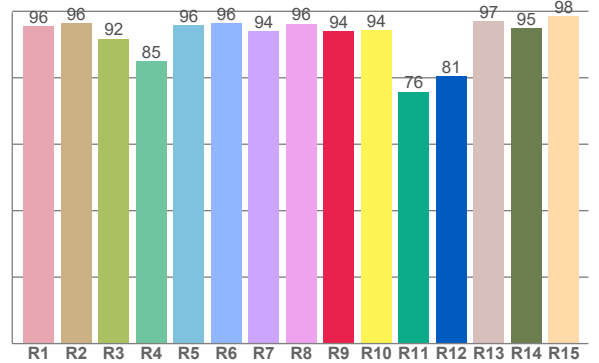




TM30: 92,5



CRI: 93,9 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,6	96,3	91,7	85,0	95,7	96,4	94,1	96,2	94,0	94,4	75,8	80,6	97,1	95,0	98,5

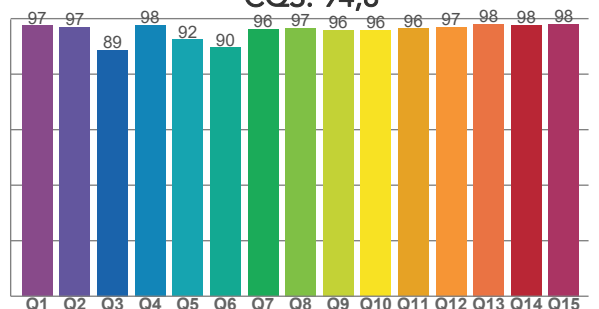
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	96,5	95,4	95,6	92,8	90,1	88,1	92,8	94,6	95,5	86,5	93,4	93,9	91,0	86,5	94,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,4	96,9	88,7	97,8	92,5	89,6	96,2	96,7	95,9	95,8	96,4	97,0	98,0	97,6	98,1

CQS: 94,8



COLOR PARAMETERS

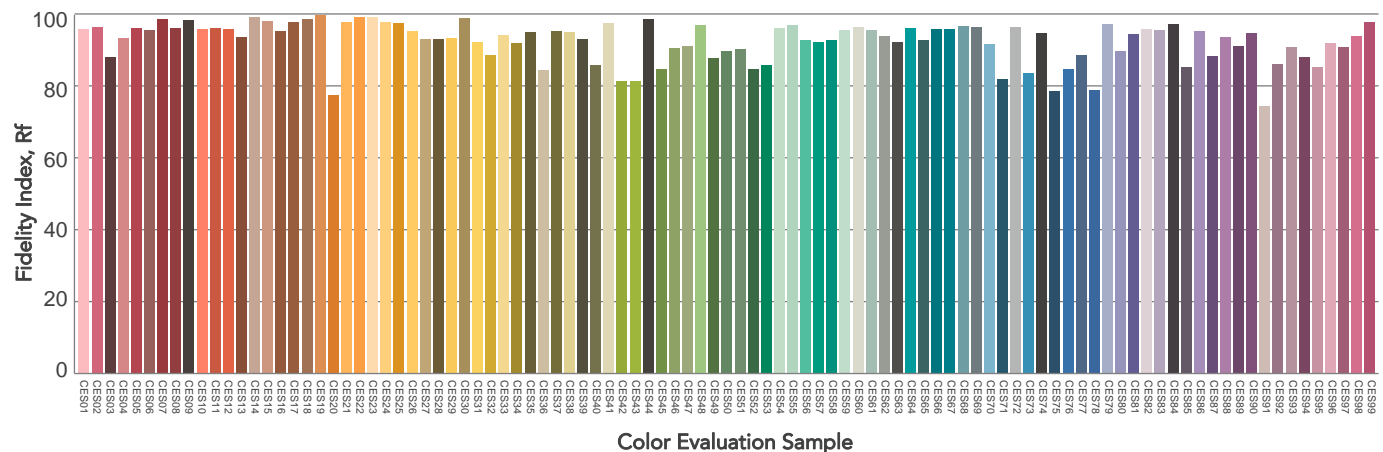
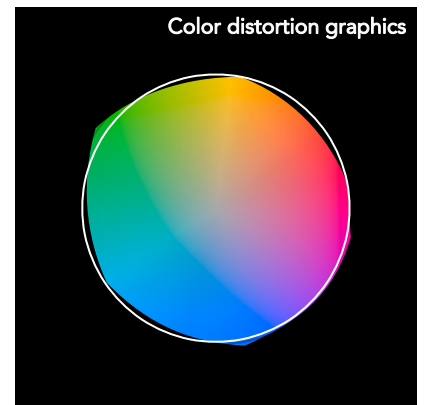
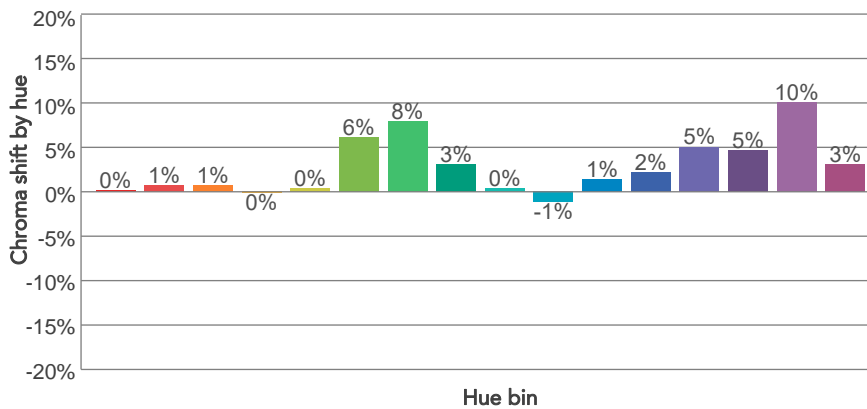
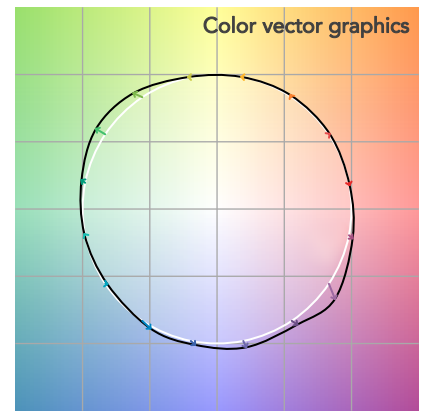
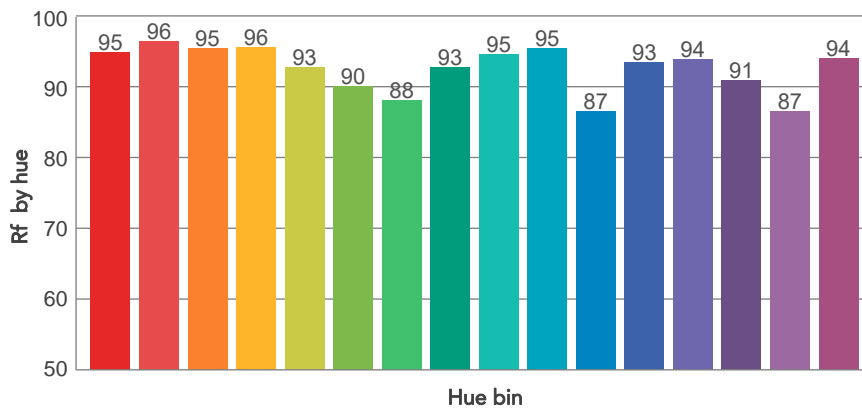
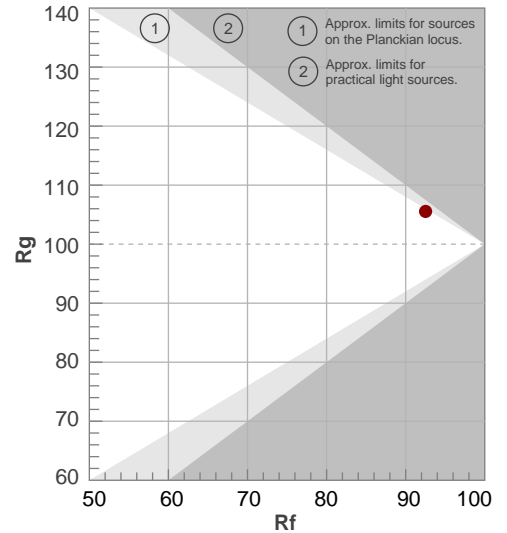
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5669 K	93,9	94,0	92,5	105,5	94,8	85	0,329	0,338	0,0013

TM30 DETAILS

Rf 92,5
Fidelity index Rf

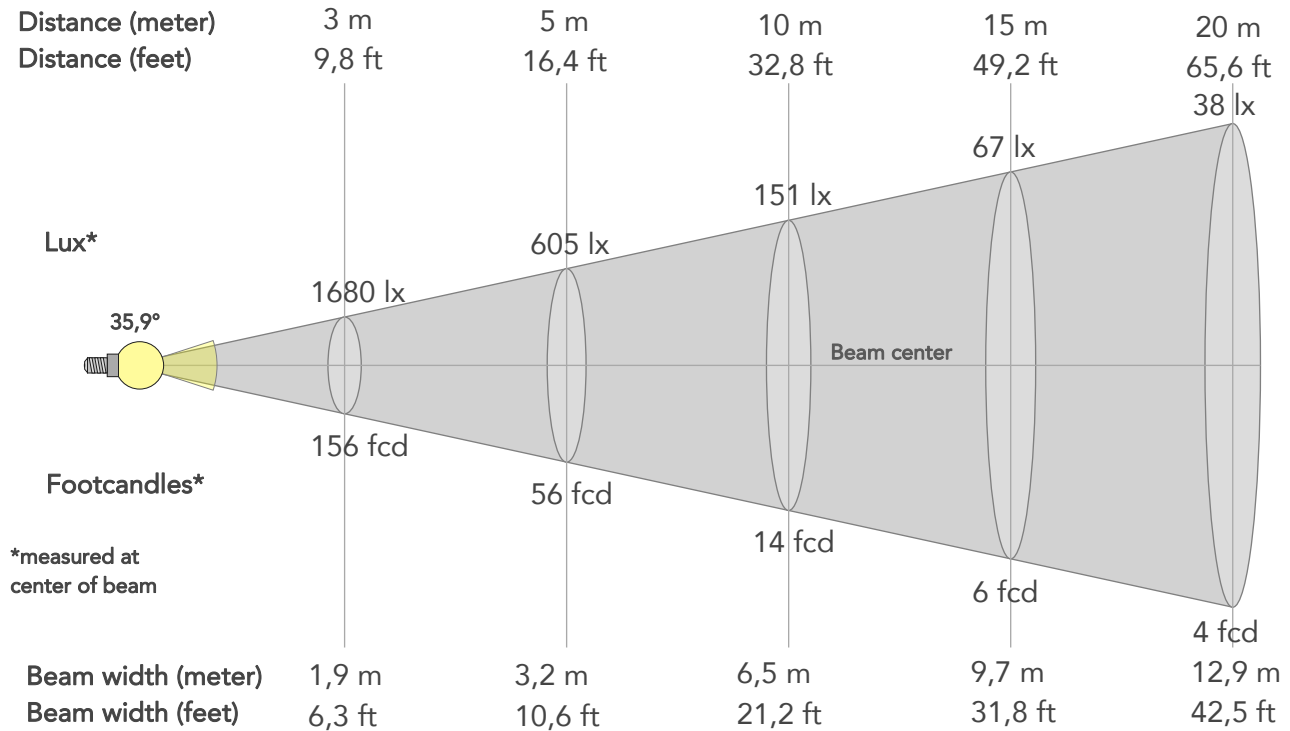
Rg 105,5
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	0%	-2%
2	96	1%	0%
3	95	1%	2%
4	96	0%	1%
5	93	0%	2%
6	90	6%	4%
7	88	8%	0%
8	93	3%	-1%
9	95	0%	-1%
10	95	-1%	1%
11	87	1%	8%
12	93	2%	4%
13	94	5%	1%
14	91	5%	2%
15	87	10%	-7%
16	94	3%	-2%



BEAM DETAILS

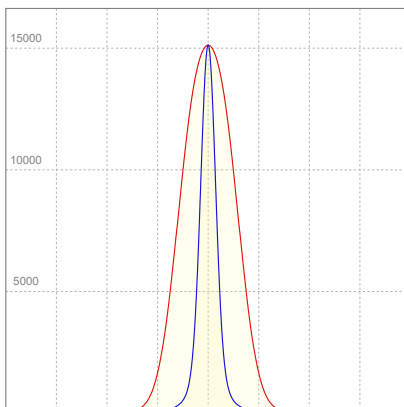
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
35,9°	61,7°	81,7°	99,1%	92,9%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	15120lx	3780lx	1680lx	945lx	605lx	269lx	151lx	67lx	38lx	24lx	17lx	9lx	6lx
Footcand.	1405fcd	351fcd	156fcd	88fcd	56fcd	25fcd	14fcd	6fcd	4fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,6m	1,3m	1,9m	2,6m	3,2m	4,9m	6,5m	9,7m	12,9m	16,2m	19,4m	25,9m	32,4m
Beam wid.	2,1ft	4,3ft	6,3ft	8,5ft	10,6ft	15,9ft	21,2ft	31,8ft	42,5ft	53,1ft	63,7ft	84,9ft	106,2ft

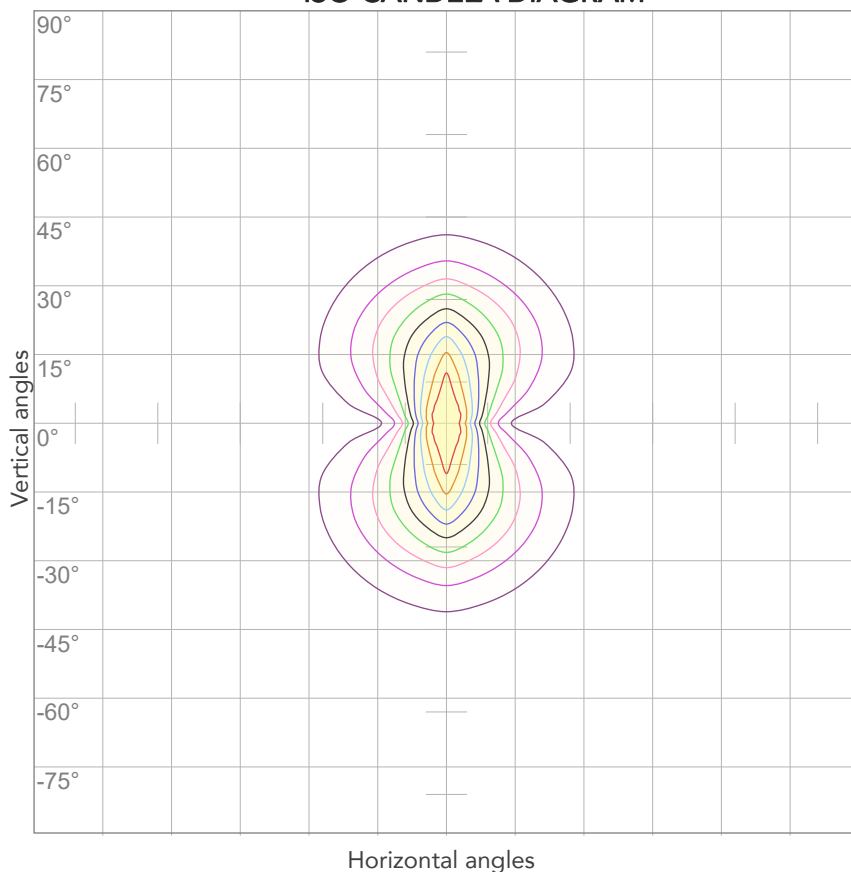
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
228V	0,597A	127,1W	61lm/W

ISO CANDELA DIAGRAM



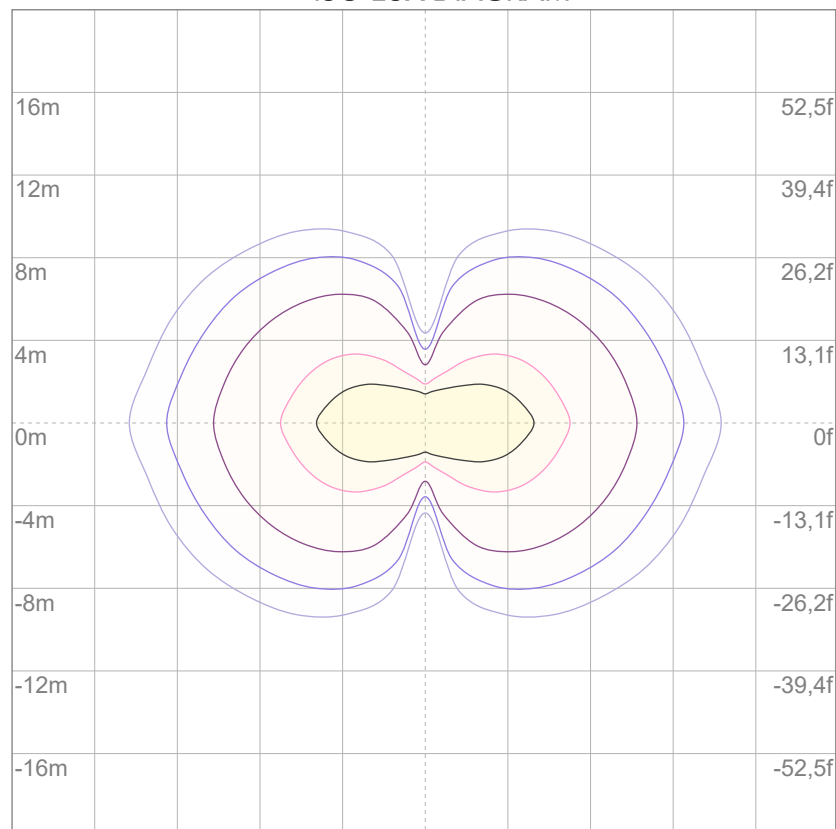
10%	1512 cd
20%	3024 cd
30%	4536 cd
40%	6048 cd
50%	7560 cd
60%	9072 cd
70%	10584 cd
80%	12096 cd

Conditions:

Number of c-planes: 4

Candela at center: 15120 cd

ISO LUX DIAGRAM



3%	4,54 lx
5%	7,56 lx
10%	15,1 lx
30%	45,4 lx
50%	75,6 lx

Conditions:

Number of c-planes: 4

Lux at center: 151 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4951 lm

Peak candela output:

88115 cd

Light quality:

CRI: 93,7

Color temperature:

6003 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic (No Filter)

Target:

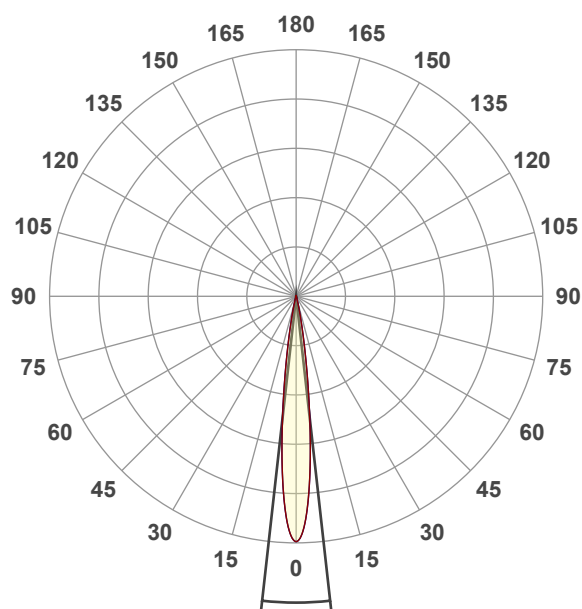
6000K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:50:42

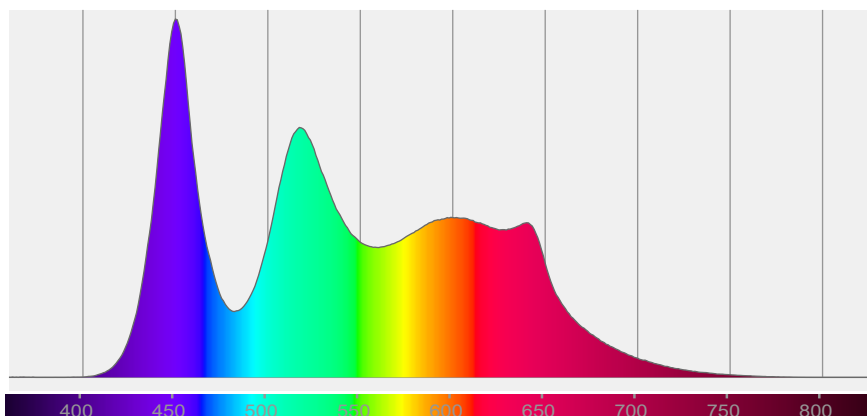


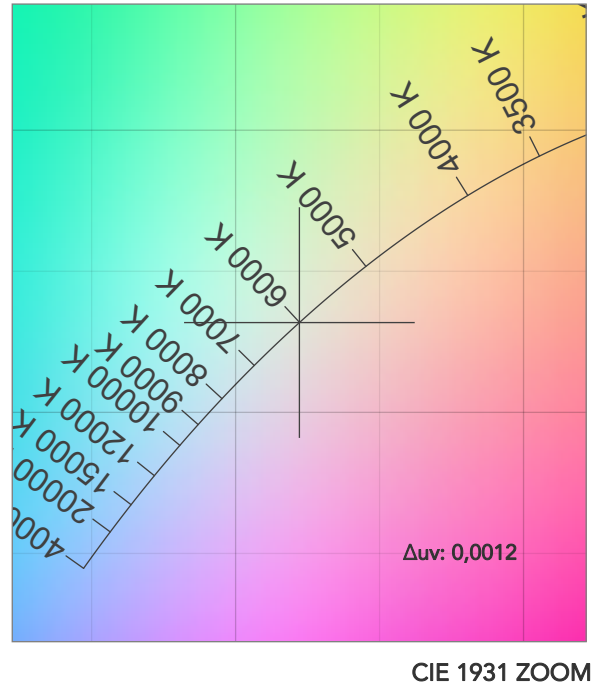
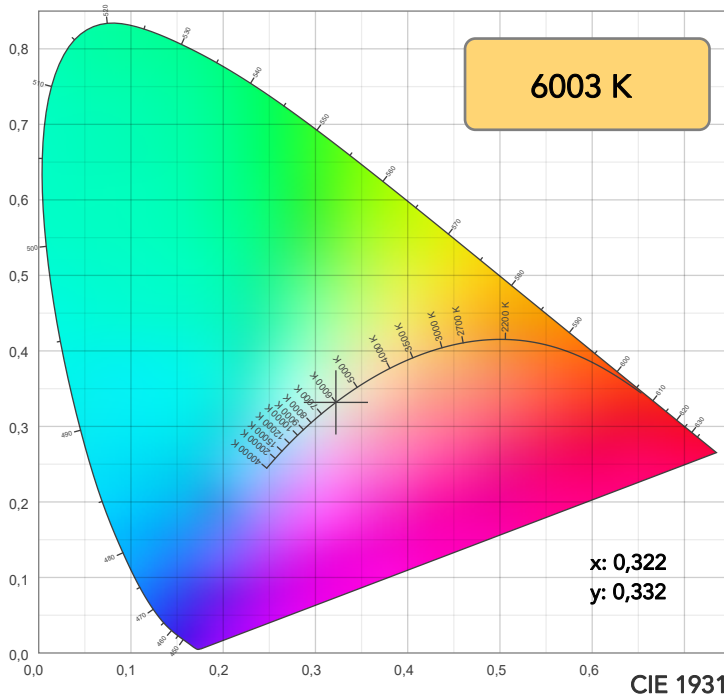
Beam angle 50%: 12,7°

Field angle 10%: 22,7°

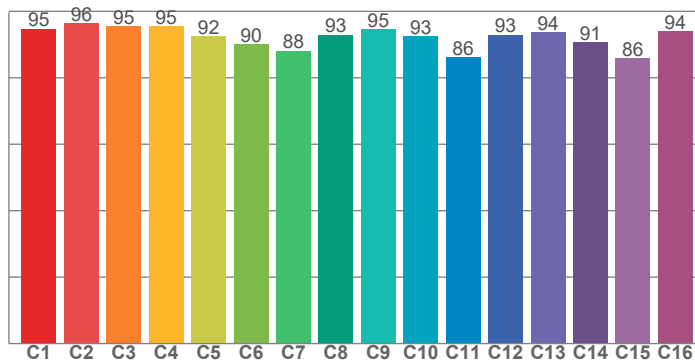
Cut off angle 2.5%: 29,6°

Spectra

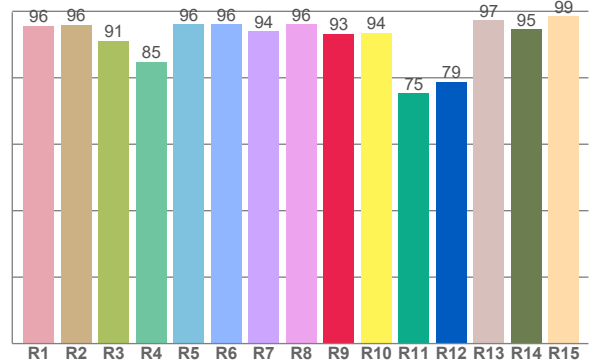




TM30: 92,3



CRI: 93,7 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,6	96,0	91,2	84,8	96,0	96,1	93,9	96,2	93,3	93,5	75,3	78,8	97,2	94,7	98,5

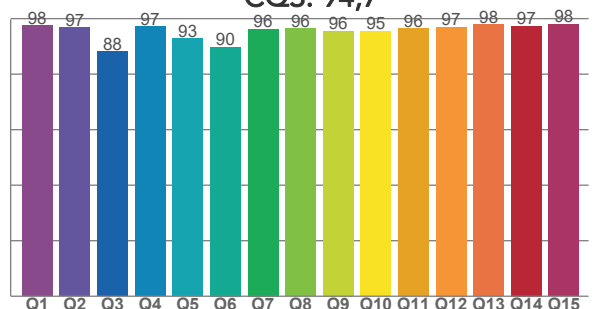
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,7	96,4	95,4	95,4	92,5	90,1	88,1	92,9	94,5	92,5	86,2	92,9	93,7	90,6	85,9	94,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,5	96,8	88,1	97,2	92,8	89,8	96,2	96,5	95,5	95,4	96,4	97,0	97,9	97,4	98,0

CQS: 94,7



COLOR PARAMETERS

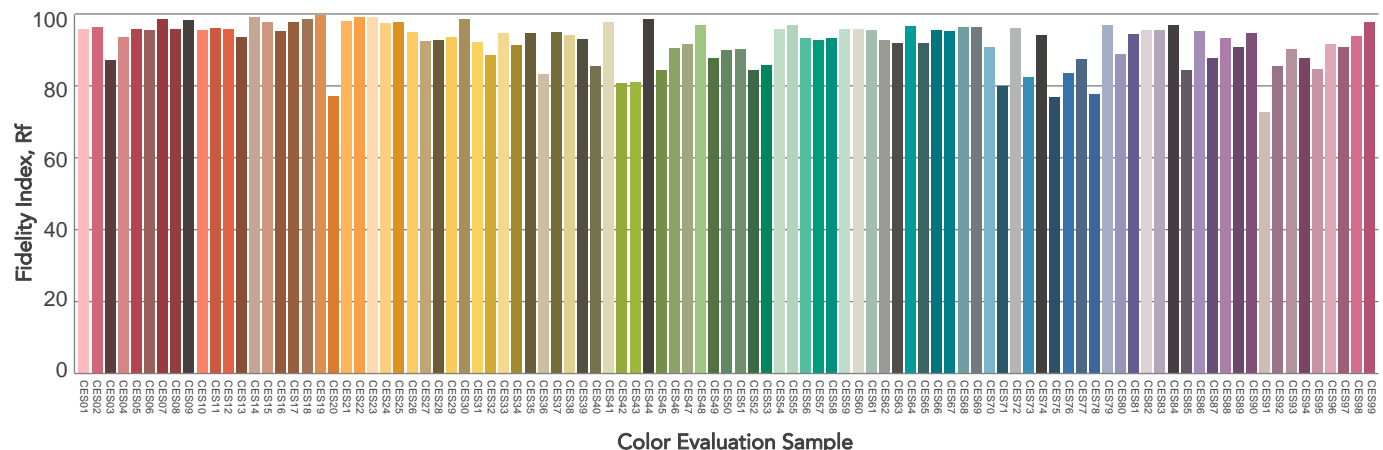
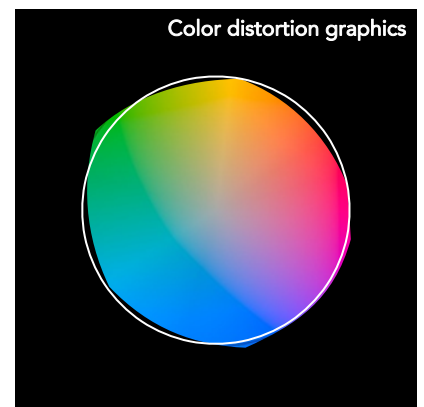
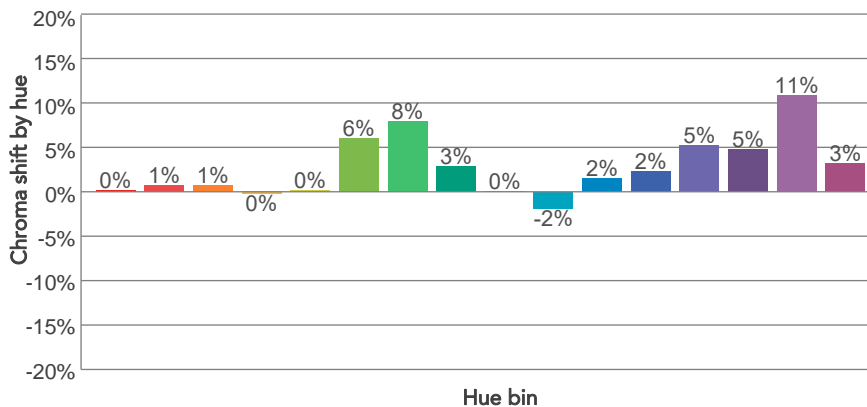
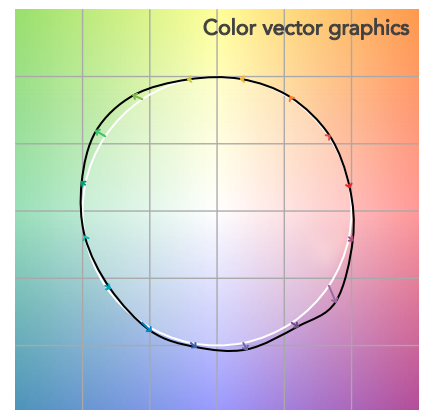
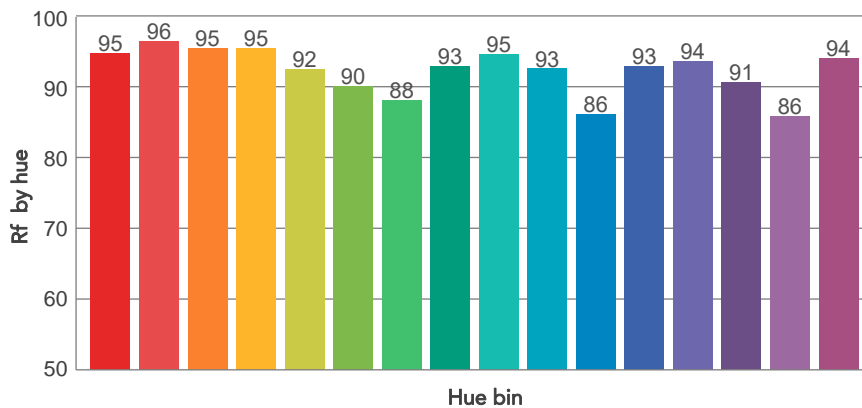
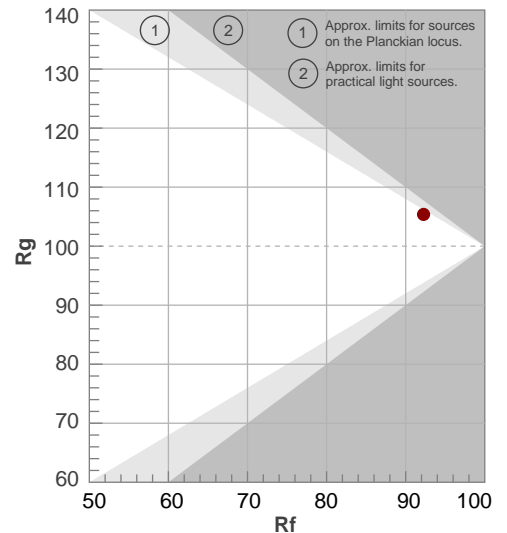
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6003 K	93,7	93,3	92,3	105,4	94,7	85	0,322	0,332	0,0012

TM30 DETAILS

Rf 92,3
Fidelity index Rf

Rg 105,4
Gammut index

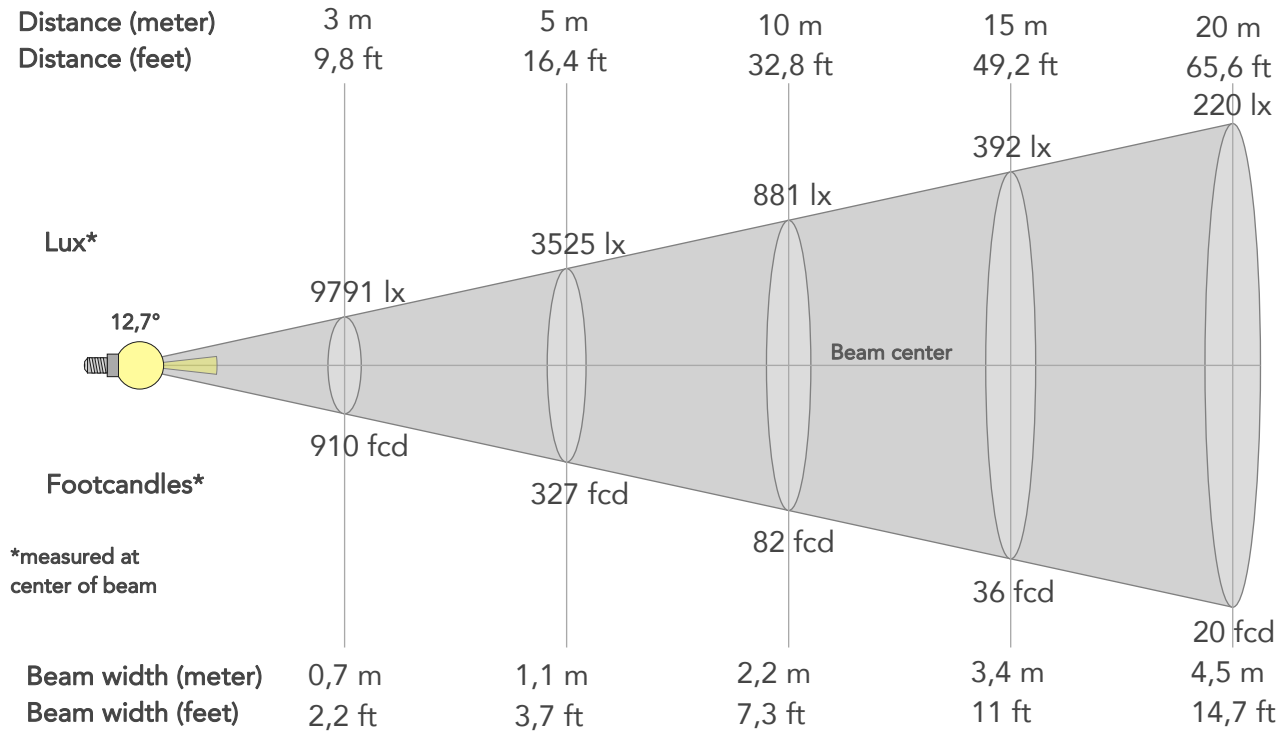
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	0%	-2%
2	96	1%	0%
3	95	1%	2%
4	95	0%	2%
5	92	0%	2%
6	90	6%	4%
7	88	8%	0%
8	93	3%	-1%
9	95	0%	0%
10	93	-2%	3%
11	86	2%	9%
12	93	2%	4%
13	94	5%	2%
14	91	5%	2%
15	86	11%	-7%
16	94	3%	-2%



BEAM DETAILS



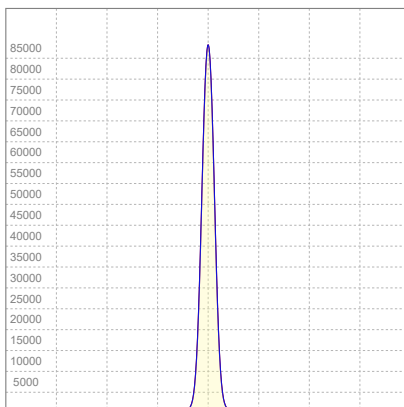
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
12,7°	22,7°	29,6°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	88115lx	22029lx	9791lx	5507lx	3525lx	1566lx	881lx	392lx	220lx	141lx	98lx	55lx	35lx
Footcand.	8186fcd	2047fcd	910fcd	512fcd	327fcd	146fcd	82fcd	36fcd	20fcd	13fcd	9fcd	5fcd	3fcd
Beam wid.	0,2m	0,4m	0,7m	0,9m	1,1m	1,7m	2,2m	3,4m	4,5m	5,6m	6,7m	8,9m	11,2m
Beam wid.	0,7ft	1,5ft	2,2ft	2,9ft	3,7ft	5,5ft	7,3ft	11ft	14,7ft	18,3ft	22ft	29,3ft	36,6ft

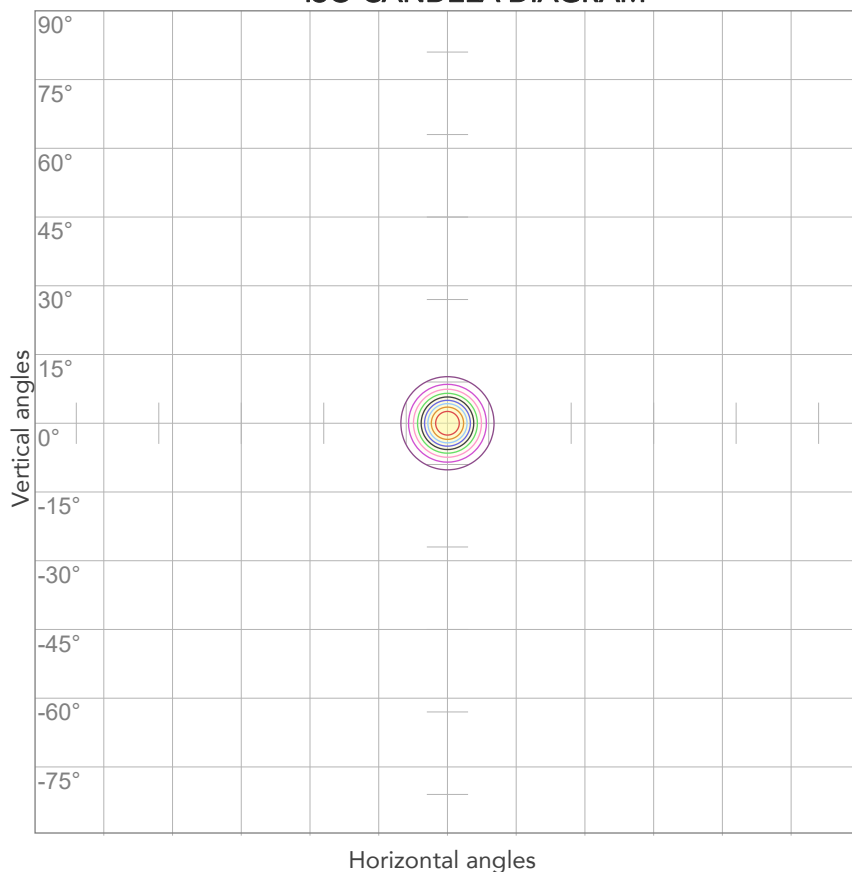
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,609A	129,3W	38lm/W

ISO CANDELA DIAGRAM



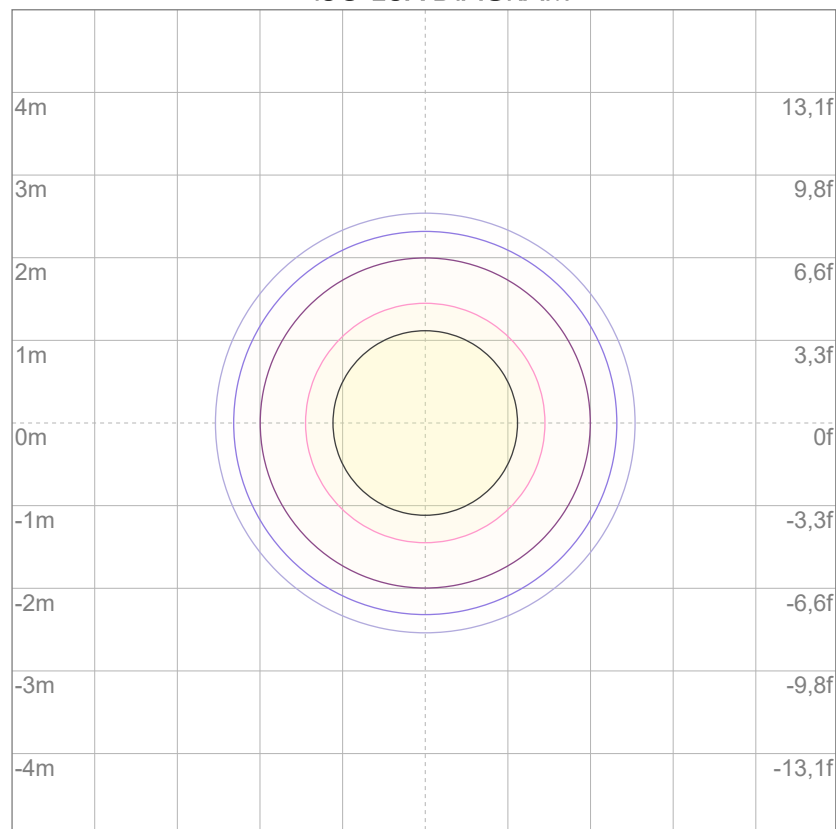
10%	8812 cd
20%	17623 cd
30%	26435 cd
40%	35246 cd
50%	44058 cd
60%	52869 cd
70%	61681 cd
80%	70492 cd

Conditions:

Number of c-planes: 4

Candela at center: 88115 cd

ISO LUX DIAGRAM



3%	26,4 lx
5%	44,1 lx
10%	88,1 lx
30%	264 lx
50%	441 lx

Conditions:

Number of c-planes: 4

Lux at center: 881 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4948 lm

Peak candela output:

14629 cd

Light quality:

CRI: 93,8

Color temperature:

6001 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 25° Filter

Target:

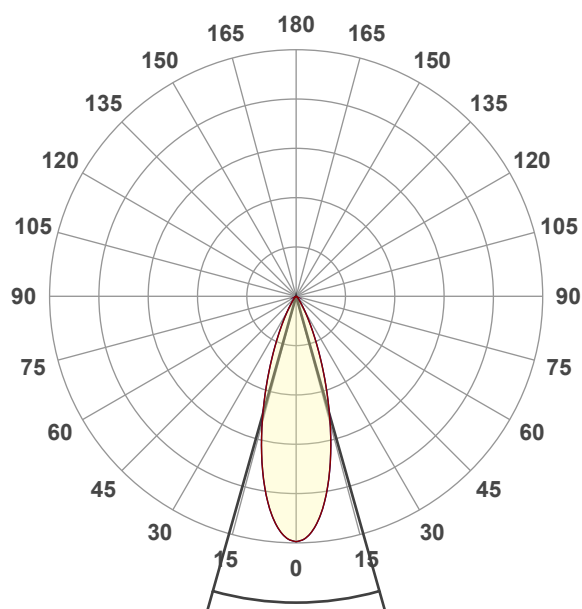
6000K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:53:30

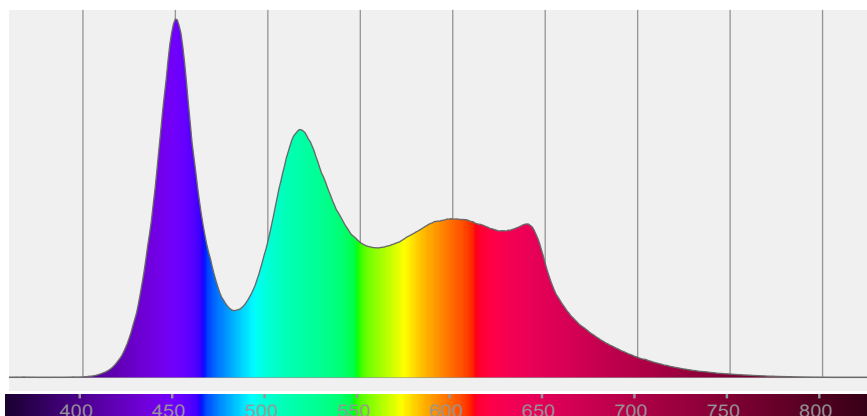


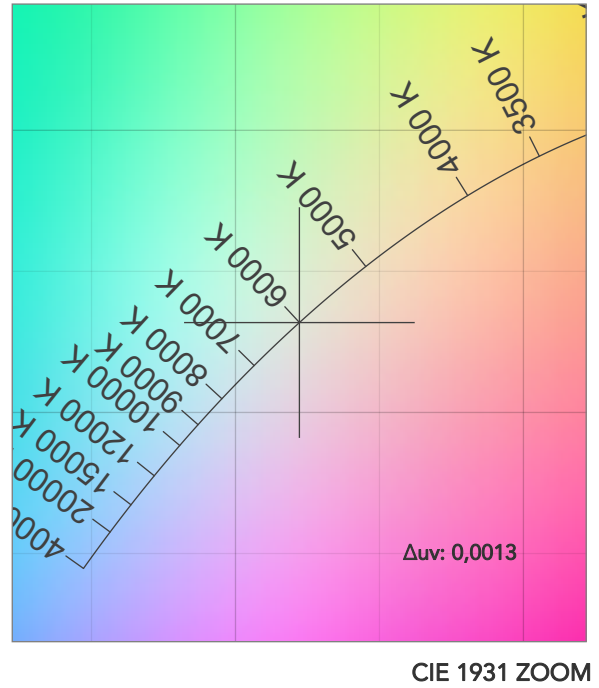
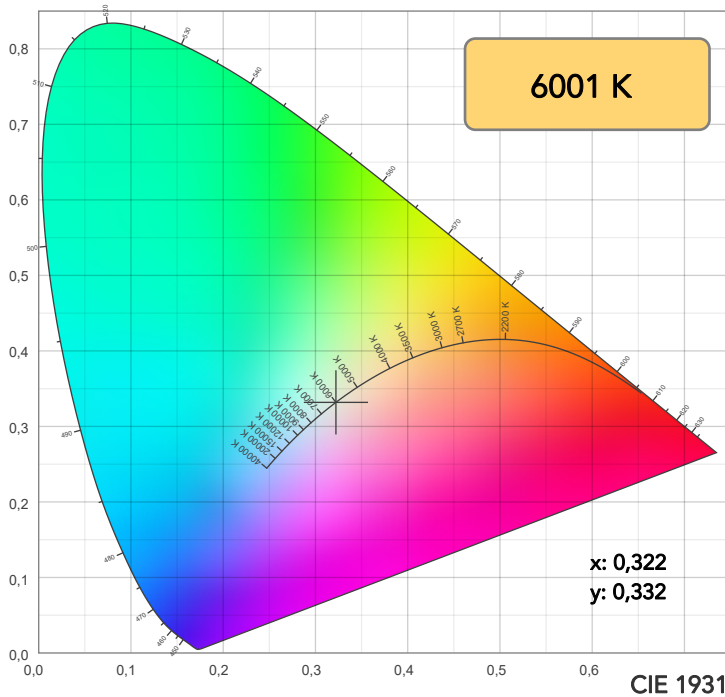
Beam angle 50%: 31,6°

Field angle 10%: 56,4°

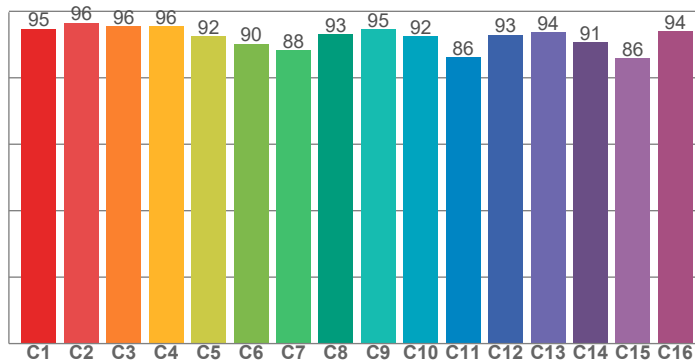
Cut off angle 2.5%: 73,1°

Spectra

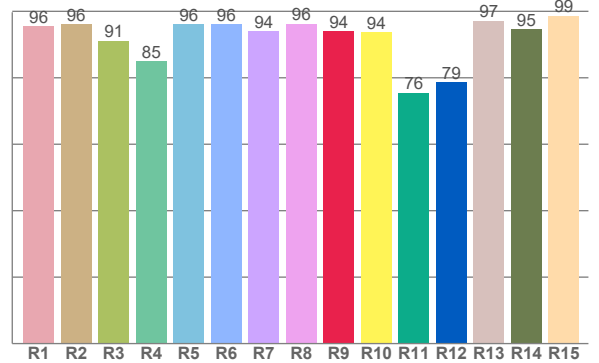




TM30: 92,3



CRI: 93,8 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,5	96,1	91,2	85,0	96,0	96,0	94,0	96,3	94,0	93,7	75,5	78,7	97,1	94,7	98,6

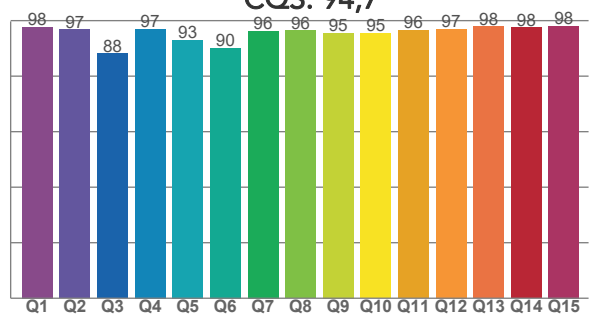
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	96,5	95,5	95,5	92,5	90,2	88,3	93,0	94,6	92,5	86,1	92,9	93,7	90,7	85,8	94,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,7	96,8	88,1	97,1	93,1	90,1	96,3	96,5	95,5	95,5	96,5	97,0	97,9	97,6	98,1

CQS: 94,7

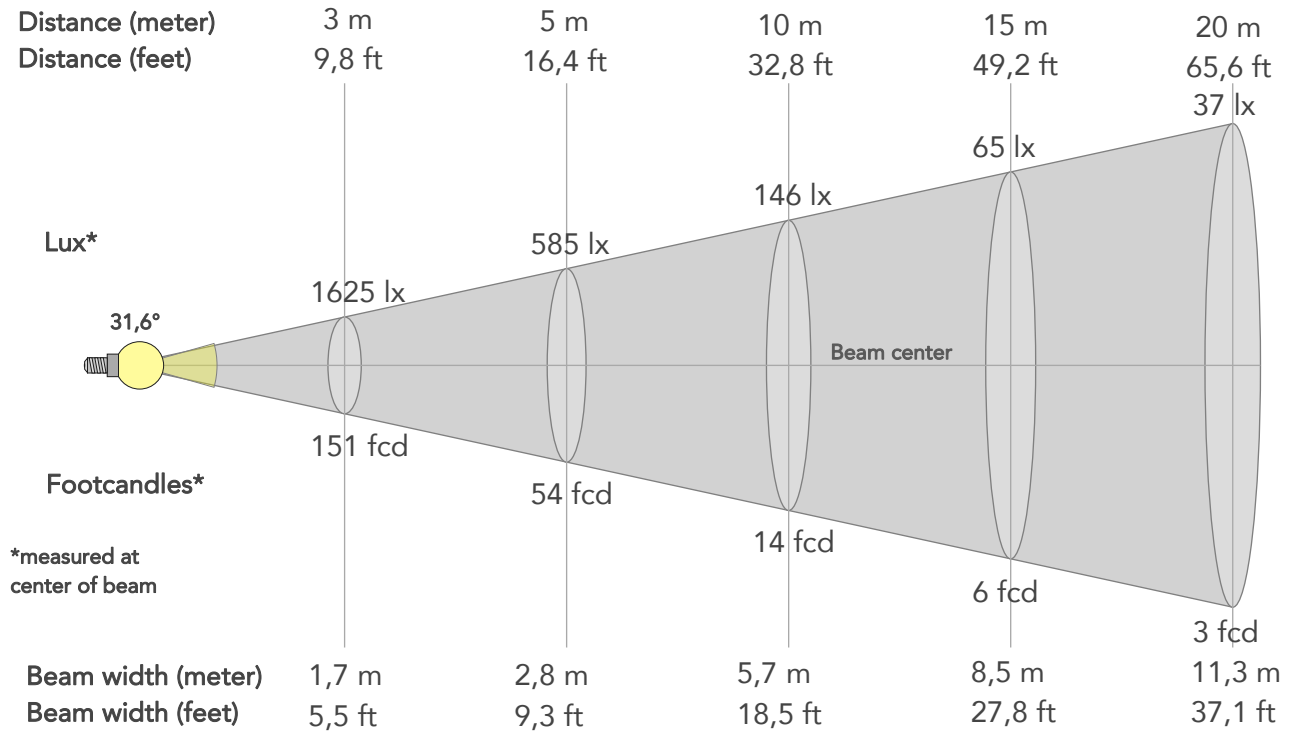


COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6001 K	93,8	94,0	92,3	105,3	94,7	85	0,322	0,332	0,0013

BEAM DETAILS

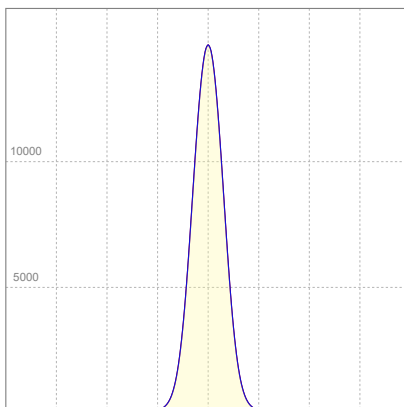
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,6°	56,4°	73,1°	99,9%	98,4%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	14629lx	3657lx	1625lx	914lx	585lx	260lx	146lx	65lx	37lx	23lx	16lx	9lx	6lx
Footcand.	1359fcd	340fcd	151fcd	85fcd	54fcd	24fcd	14fcd	6fcd	3fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,6m	1,1m	1,7m	2,3m	2,8m	4,2m	5,7m	8,5m	11,3m	14,1m	17m	22,6m	28,3m
Beam wid.	1,9ft	3,7ft	5,5ft	7,4ft	9,3ft	13,9ft	18,5ft	27,8ft	37,1ft	46,3ft	55,6ft	74,1ft	92,7ft

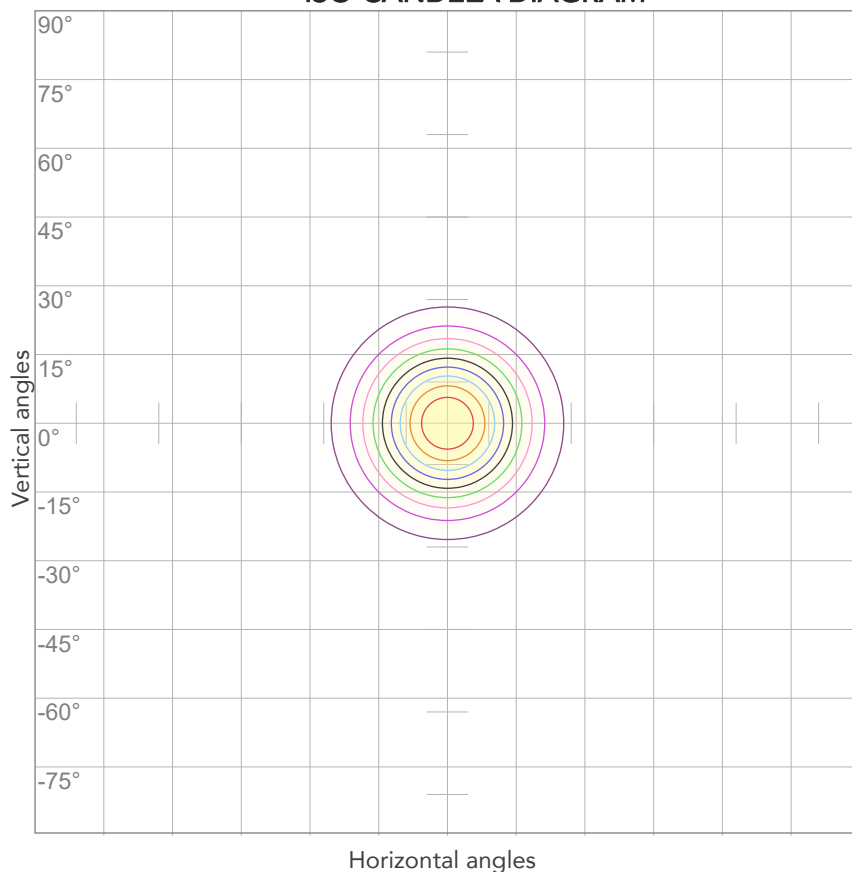
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,609A	129,2W	38lm/W

ISO CANDELA DIAGRAM



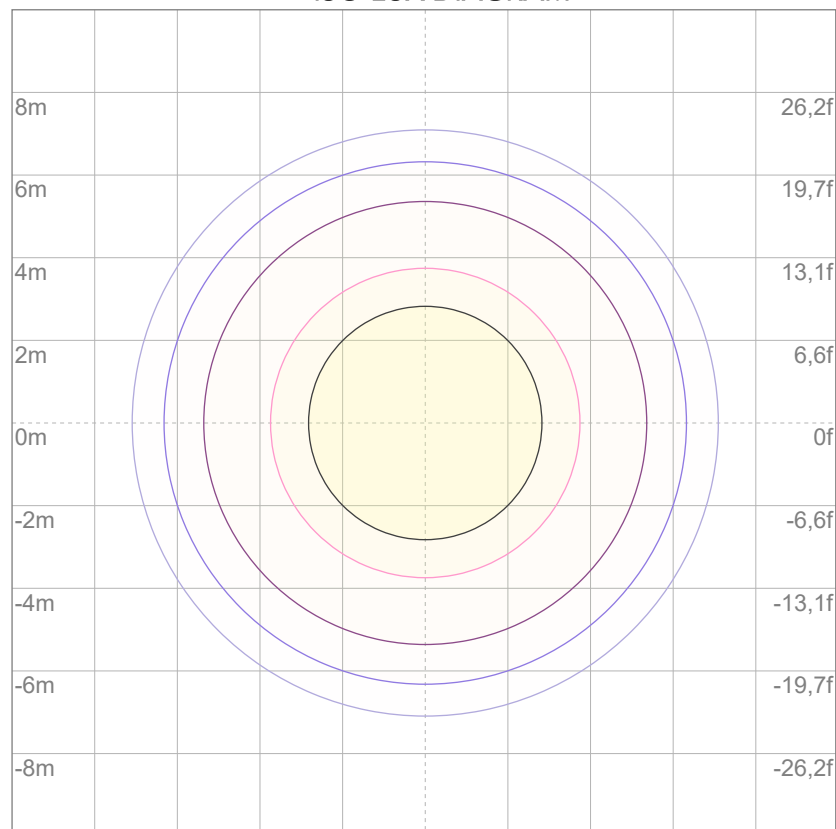
10%	1463 cd
20%	2926 cd
30%	4389 cd
40%	5851 cd
50%	7314 cd
60%	8777 cd
70%	10240 cd
80%	11703 cd

Conditions:

Number of c-planes: 4

Candela at center: 14629 cd

ISO LUX DIAGRAM



3%	4,39 lx
5%	7,31 lx
10%	14,6 lx
30%	43,9 lx
50%	73,1 lx

Conditions:

Number of c-planes: 4

Lux at center: 146 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

4978 lm

Peak candela output:

7128 cd

Light quality:

CRI: 93,8

Color temperature:

6011 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 40° Filter

Target:

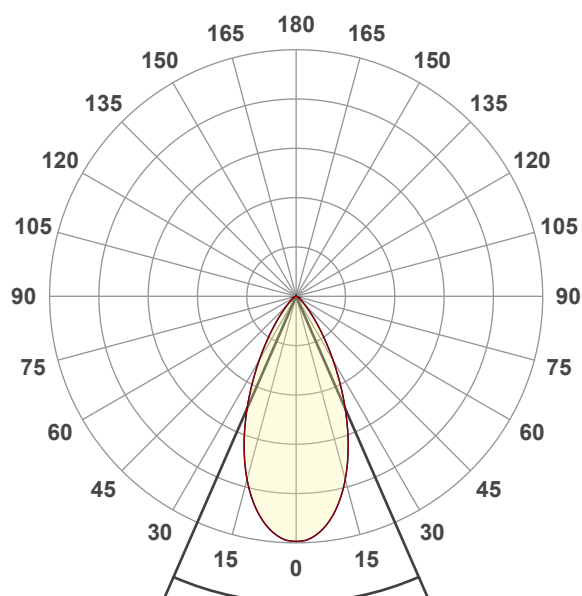
6000K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:56:01

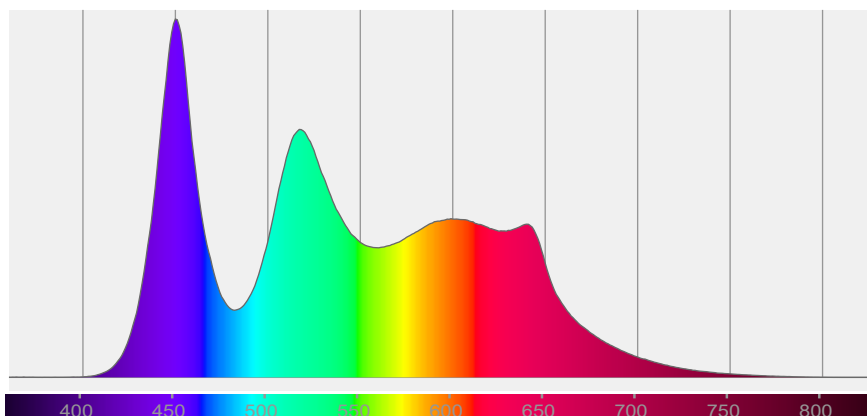


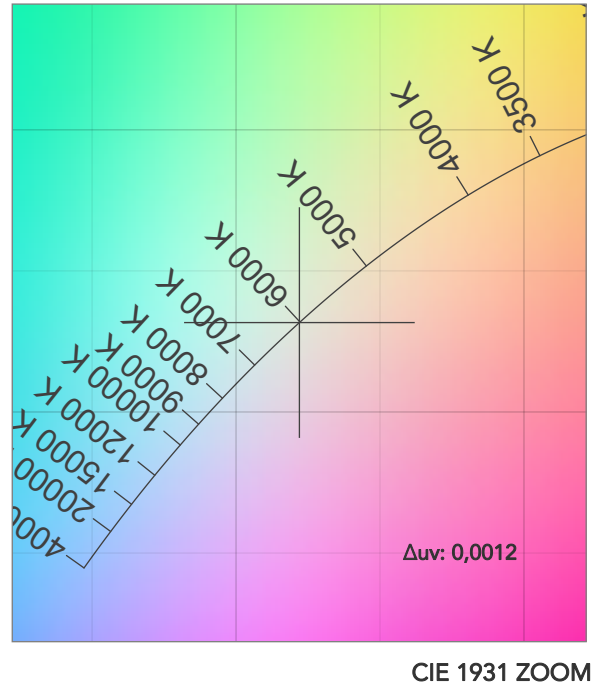
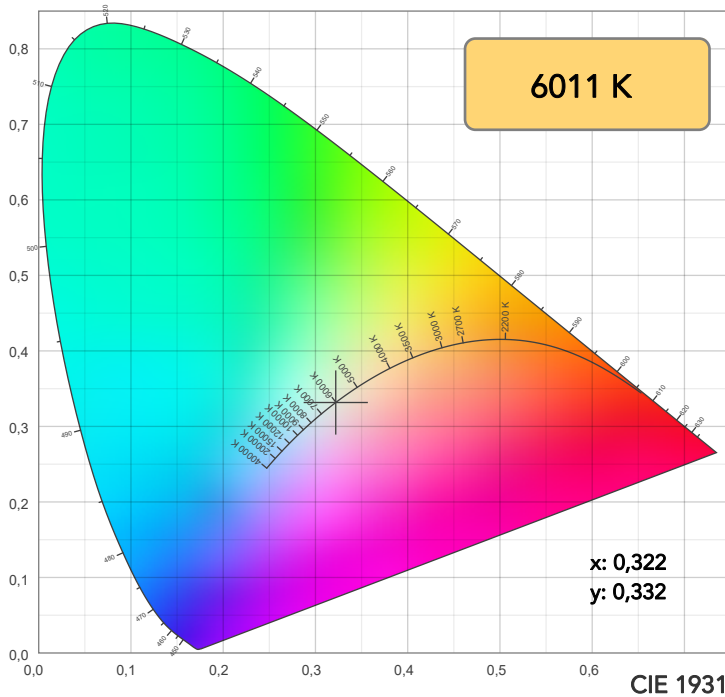
Beam angle 50%: 47,2°

Field angle 10%: 80,1°

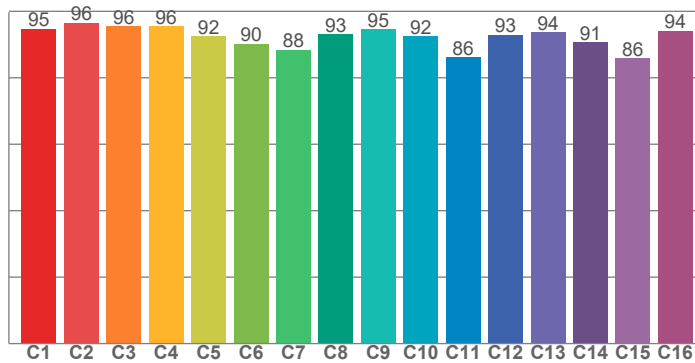
Cut off angle 2.5%: 104,2°

Spectra

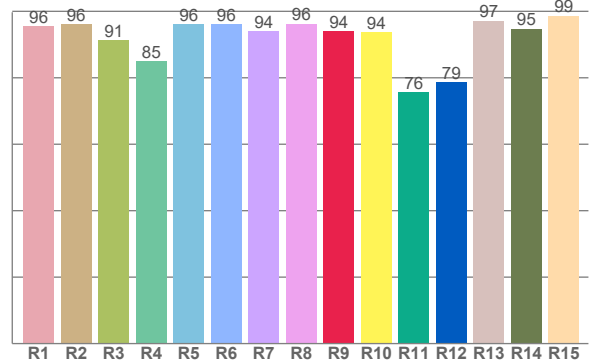




TM30: 92,3



CRI: 93,8 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,6	96,1	91,2	85,1	96,1	96,0	94,1	96,3	94,0	93,6	75,6	78,6	97,2	94,7	98,7

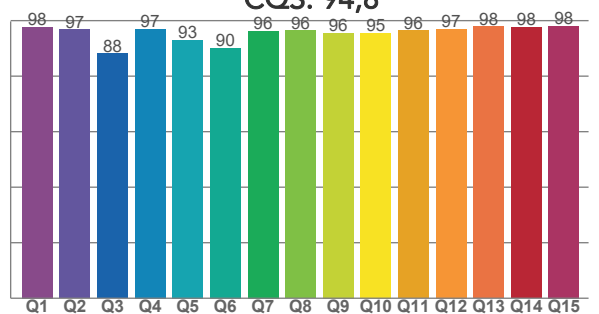
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	96,5	95,5	95,5	92,5	90,3	88,4	93,0	94,6	92,5	86,1	93,0	93,7	90,7	85,8	94,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,7	96,8	88,1	97,0	93,1	90,1	96,3	96,5	95,5	95,5	96,5	97,0	97,8	97,6	98,1

CQS: 94,8

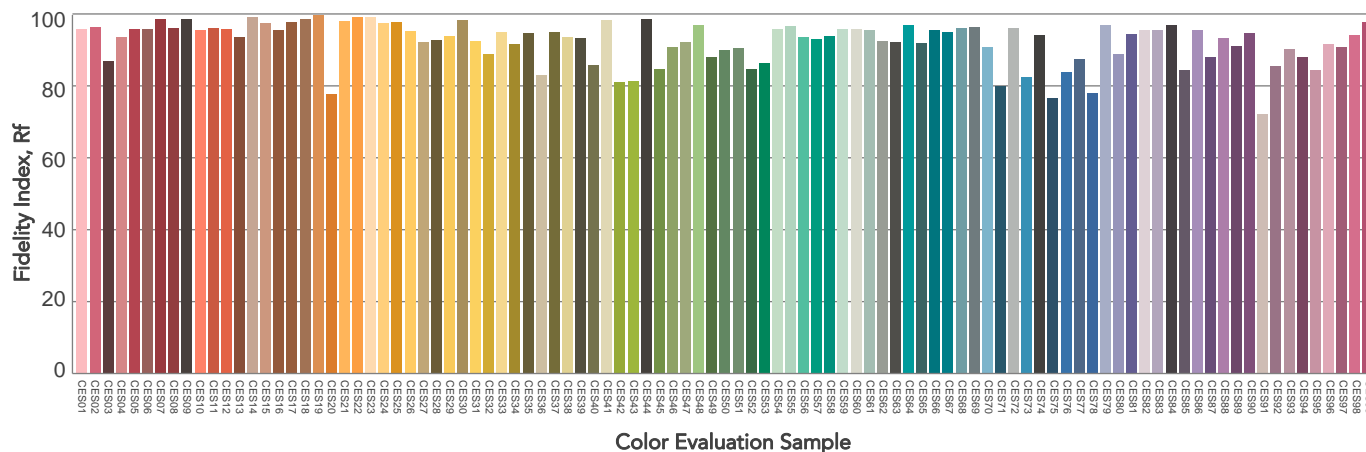
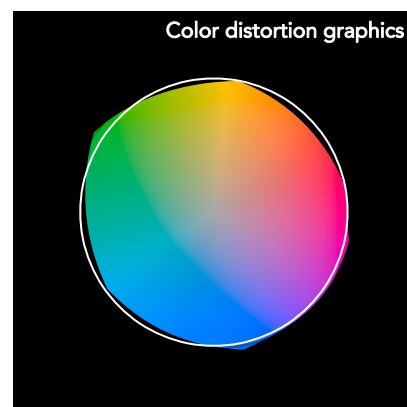
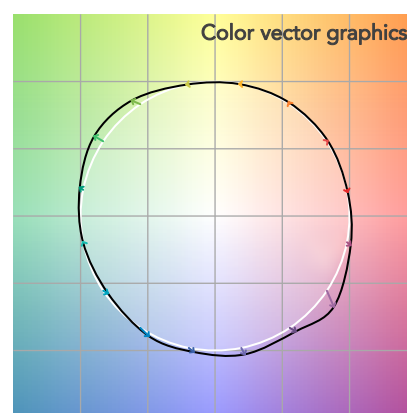
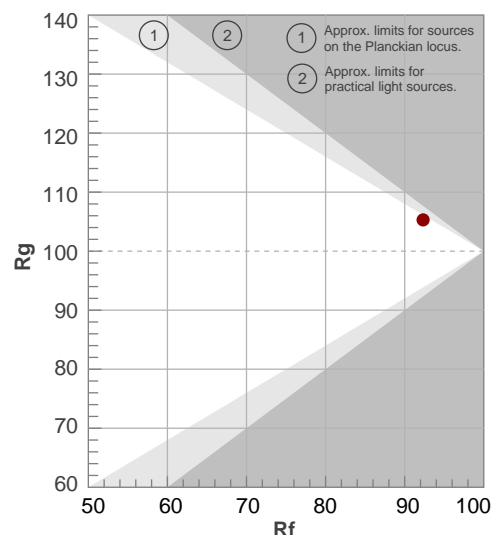


COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6011 K	93,8	94,0	92,3	105,3	94,8	86	0,322	0,332	0,0012

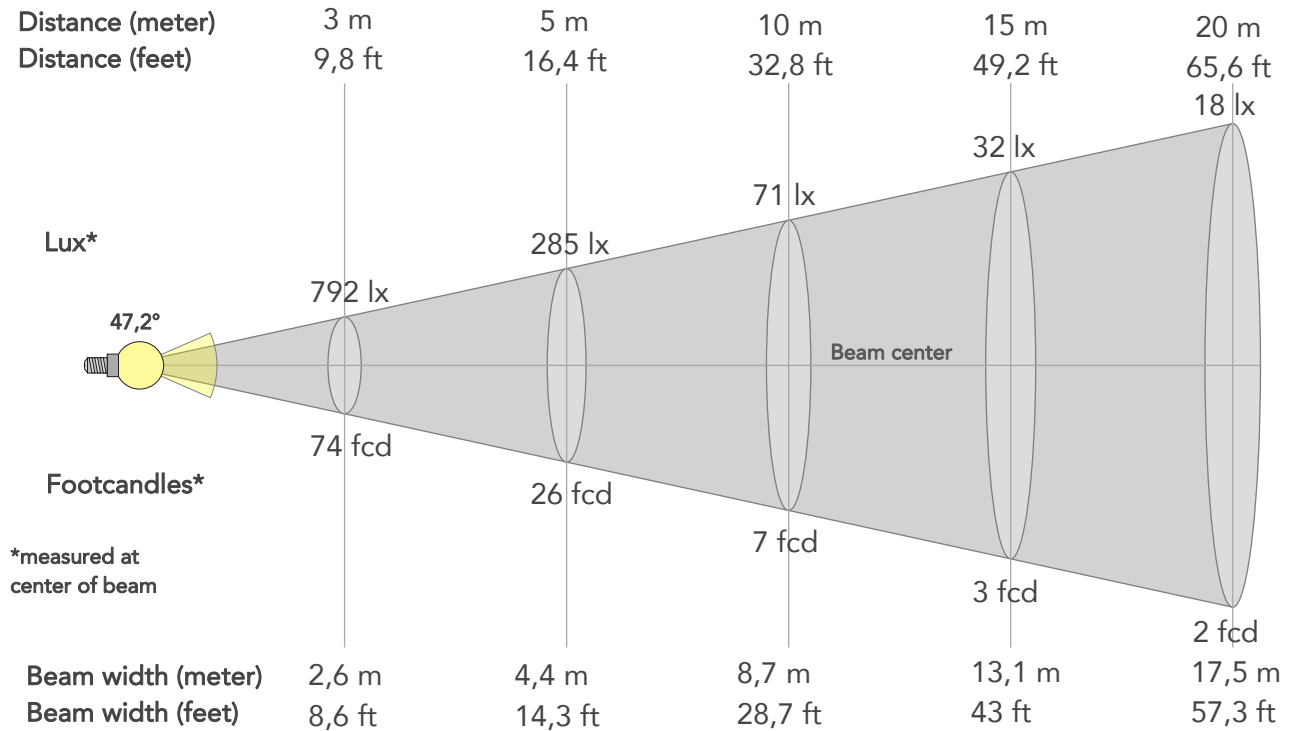
Gammut index

		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	95	0%	-2%
2	96	1%	0%
3	96	1%	2%
4	96	0%	1%
5	92	0%	2%
6	90	6%	4%
7	88	8%	0%
8	93	3%	-1%
9	95	0%	0%
10	92	-2%	4%
11	86	2%	9%
12	93	2%	4%
13	94	5%	2%
14	91	5%	2%
15	86	11%	-7%
16	94	3%	-2%



BEAM DETAILS

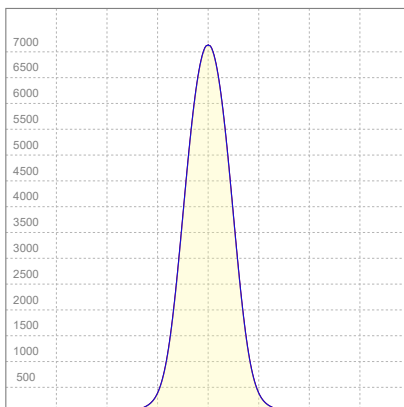
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
47,2°	80,1°	104,2°	98,5%	93,6%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	7128lx	1782lx	792lx	445lx	285lx	127lx	71lx	32lx	18lx	11lx	8lx	4lx	3lx
Footcand.	662fcd	166fcd	74fcd	41fcd	26fcd	12fcd	7fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,9m	1,7m	2,6m	3,5m	4,4m	6,6m	8,7m	13,1m	17,5m	21,8m	26,2m	34,9m	43,7m
Beam wid.	2,9ft	5,8ft	8,6ft	11,4ft	14,3ft	21,5ft	28,7ft	43ft	57,3ft	71,6ft	86ft	114,6ft	143,3ft

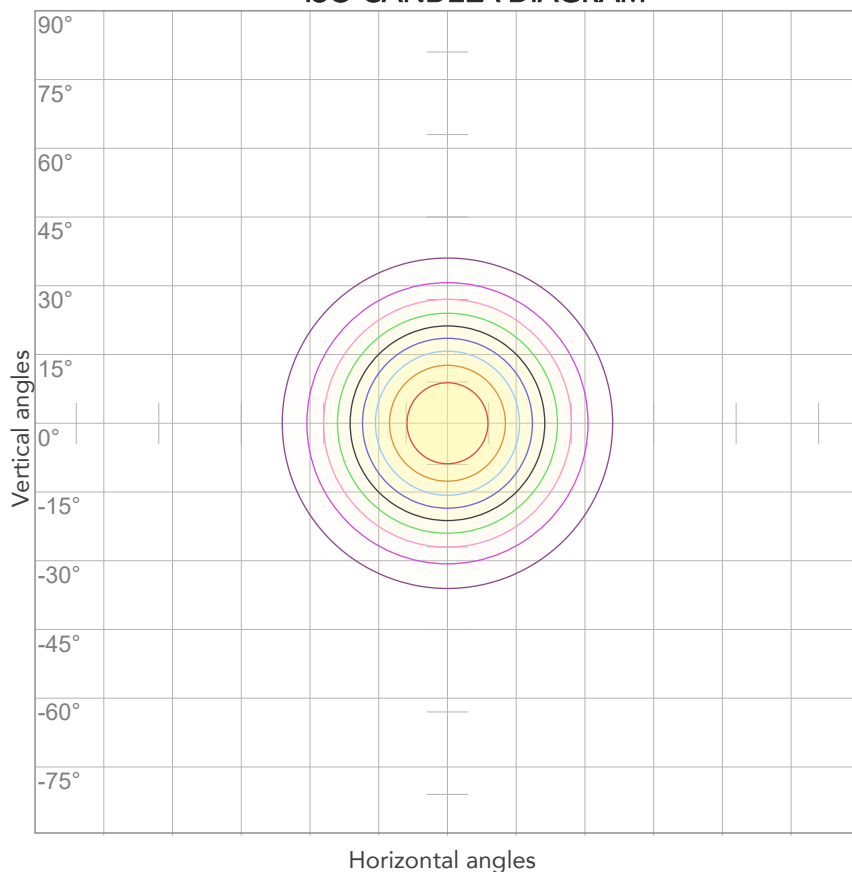
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,607A	128,9W	39lm/W

ISO CANDELA DIAGRAM



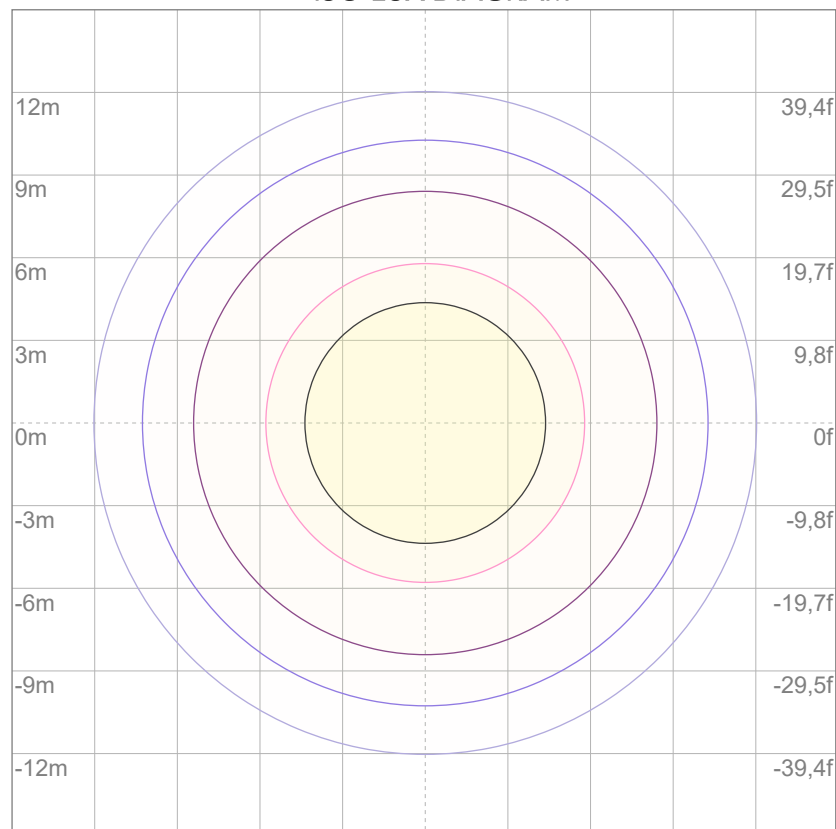
10%	713 cd
20%	1426 cd
30%	2138 cd
40%	2851 cd
50%	3564 cd
60%	4277 cd
70%	4989 cd
80%	5702 cd

Conditions:

Number of c-planes: 4

Candela at center: 7128 cd

ISO LUX DIAGRAM



3%	2,14 lx
5%	3,56 lx
10%	7,13 lx
30%	21,4 lx
50%	35,6 lx

Conditions:

Number of c-planes: 4

Lux at center: 71,3 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

7796 lm

Peak candela output:

15218 cd

Light quality:

CRI: 93,9

Color temperature:

6018 K

PRODUCT NAME:

SMARTBATWASH

MEASURAMENT CONDITIONS:

Beam angle:

Native Optic + 10°x60° Filter

Target:

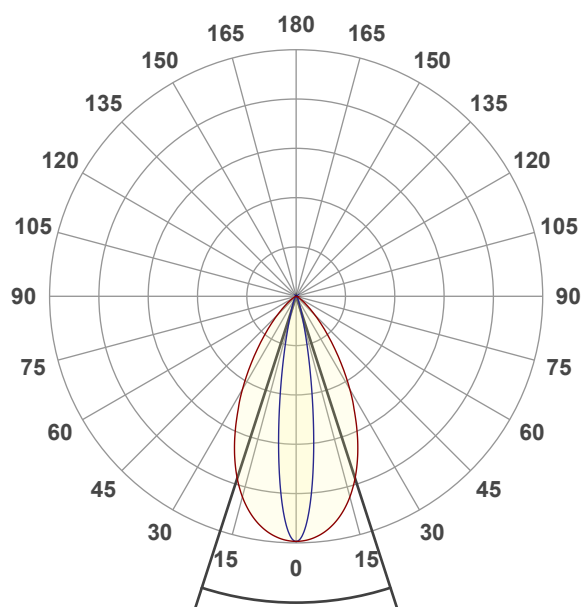
6000K

Operator:

Paolo Carvone

Date and time:

12/10/2022 17:58:56

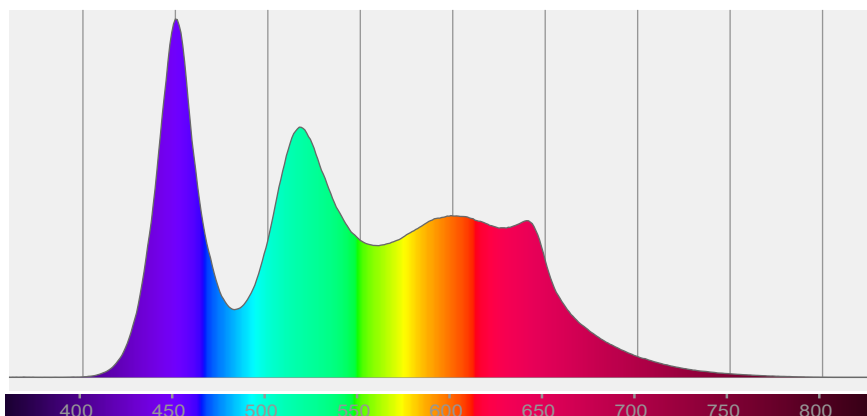


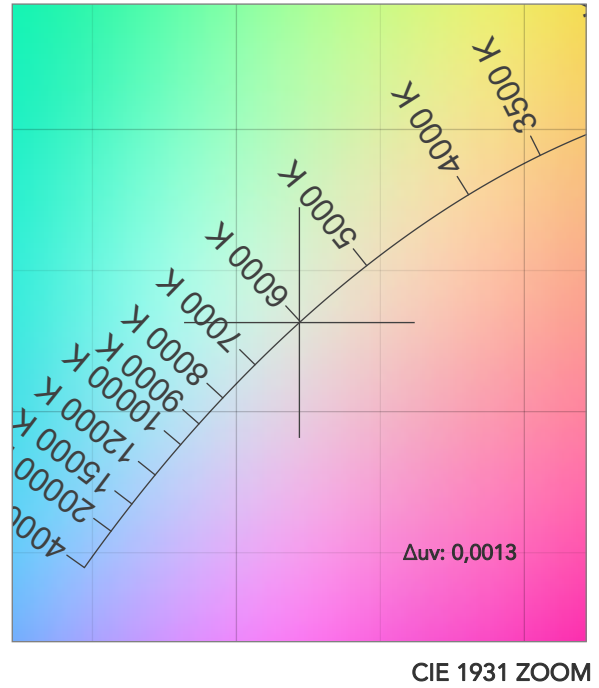
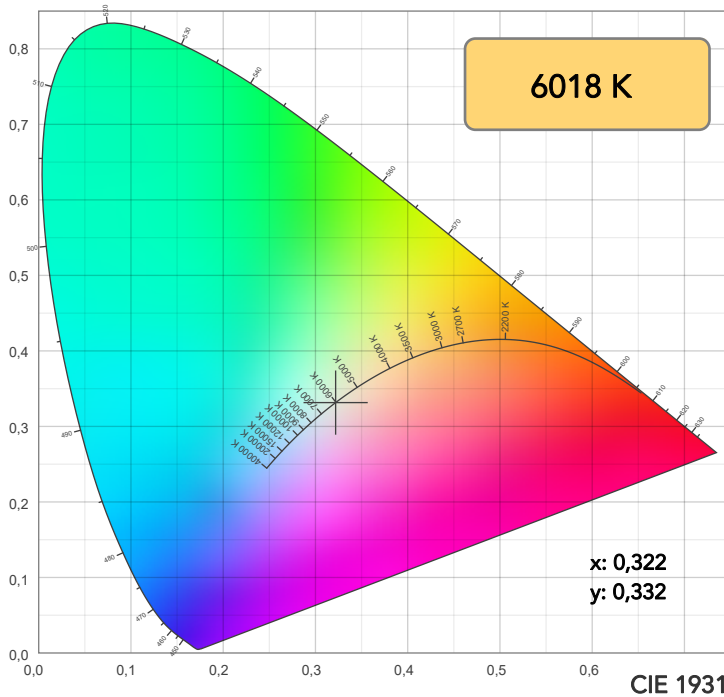
Beam angle 50%: 35,9°

Field angle 10%: 61,7°

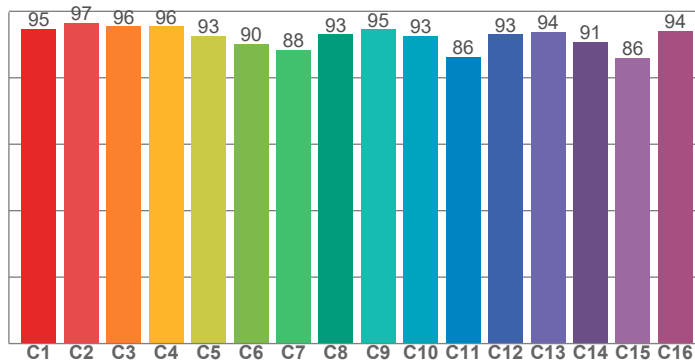
Cut off angle 2.5%: 81,7°

Spectra

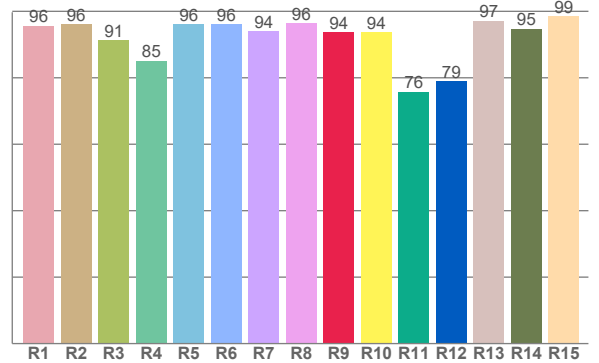




TM30: 92,4



CRI: 93,9 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,6	96,1	91,3	85,2	96,1	96,1	94,1	96,3	93,7	93,7	75,8	78,9	97,2	94,8	98,6

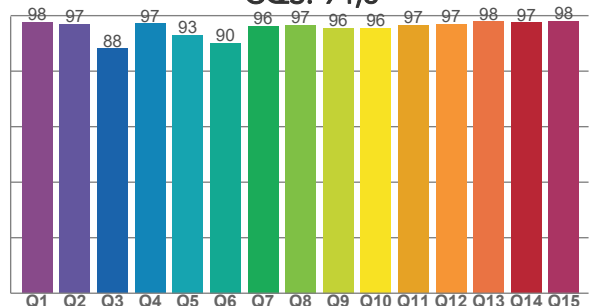
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	96,5	95,5	95,5	92,5	90,3	88,4	93,0	94,6	92,6	86,3	93,0	93,7	90,8	86,0	94,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,6	96,9	88,2	97,1	93,1	90,1	96,3	96,6	95,6	95,5	96,5	97,1	97,9	97,5	98,0

CQS: 94,8

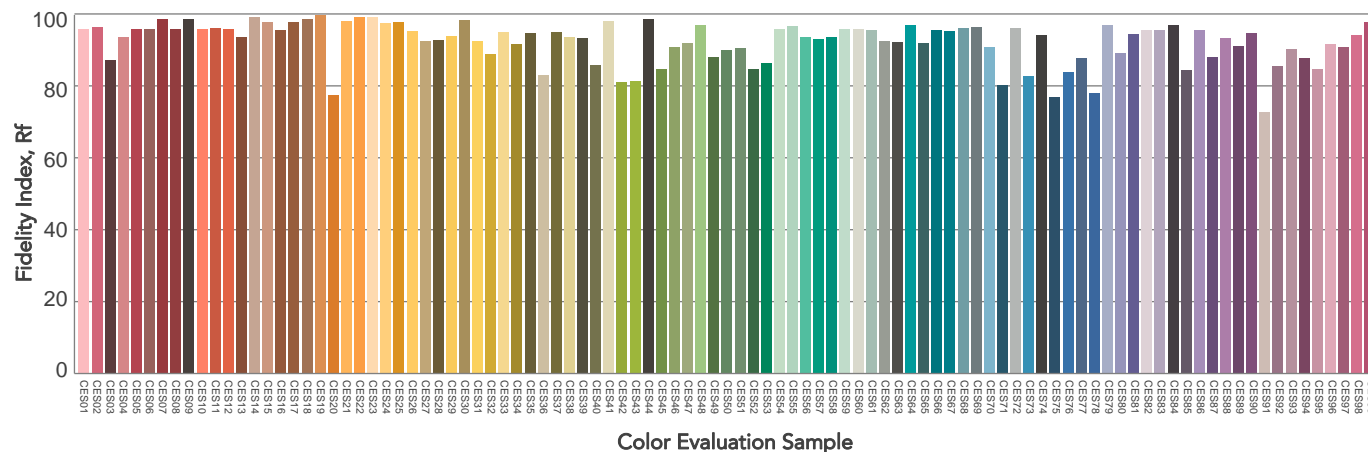
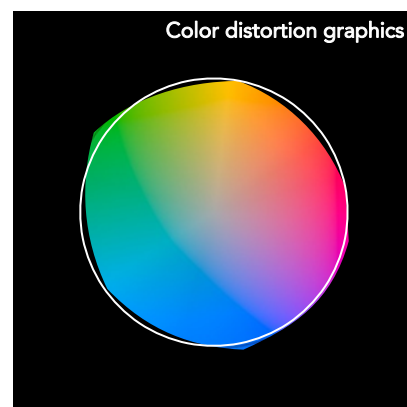
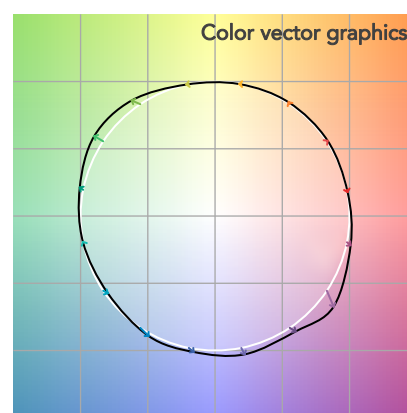
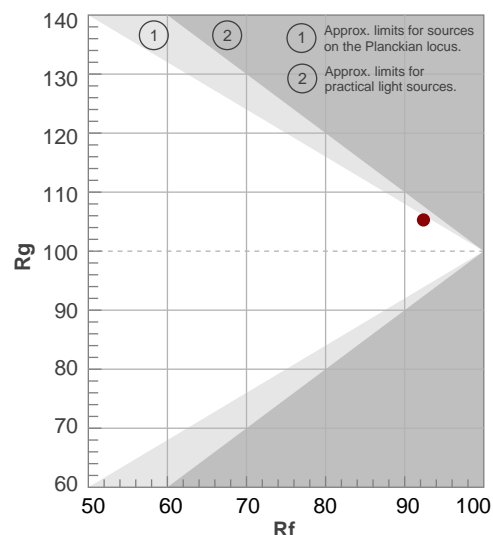


COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6018 K	93,9	93,7	92,4	105,3	94,8	86	0,322	0,332	0,0013

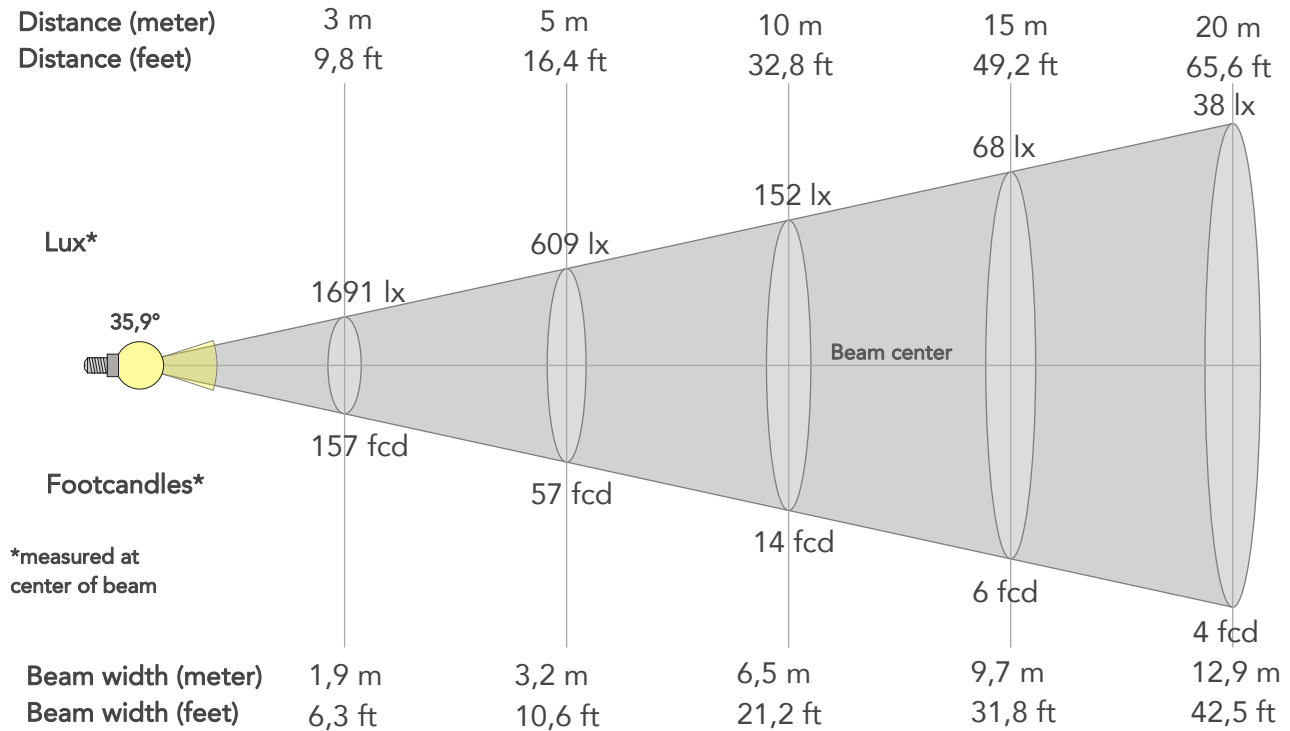
Gammut index

		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	95	0%	-2%
2	97	1%	0%
3	96	1%	2%
4	96	0%	1%
5	93	0%	2%
6	90	6%	4%
7	88	8%	0%
8	93	3%	-1%
9	95	0%	0%
10	93	-2%	3%
11	86	2%	8%
12	93	2%	4%
13	94	5%	2%
14	91	5%	2%
15	86	11%	-7%
16	94	3%	-2%



BEAM DETAILS

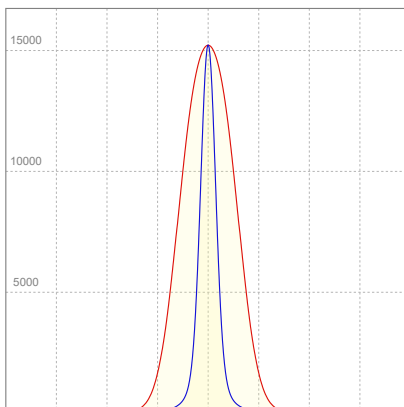
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
35,9°	61,7°	81,7°	99,1%	92,9%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	15217lx	3804lx	1691lx	951lx	609lx	271lx	152lx	68lx	38lx	24lx	17lx	10lx	6lx
Footcand.	1414fcd	353fcd	157fcd	88fcd	57fcd	25fcd	14fcd	6fcd	4fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,6m	1,3m	1,9m	2,6m	3,2m	4,9m	6,5m	9,7m	12,9m	16,2m	19,4m	25,9m	32,4m
Beam wid.	2,1ft	4,3ft	6,3ft	8,5ft	10,6ft	15,9ft	21,2ft	31,8ft	42,5ft	53,1ft	63,7ft	84,9ft	106,2ft

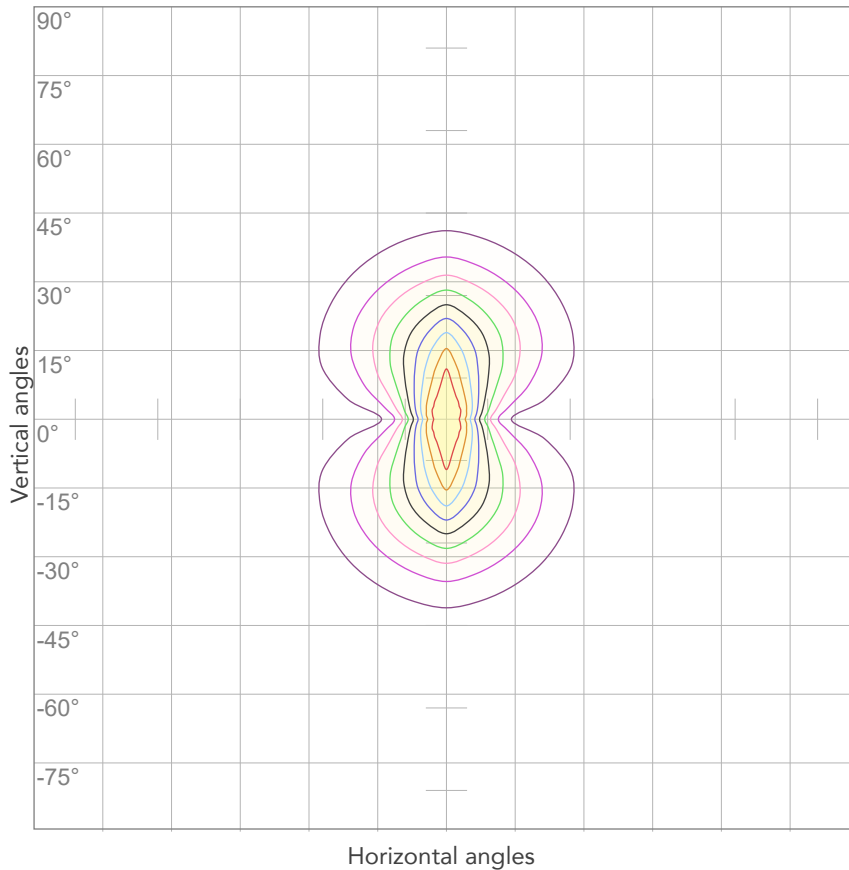
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
228V	0,606A	129W	60lm/W

ISO CANDELA DIAGRAM



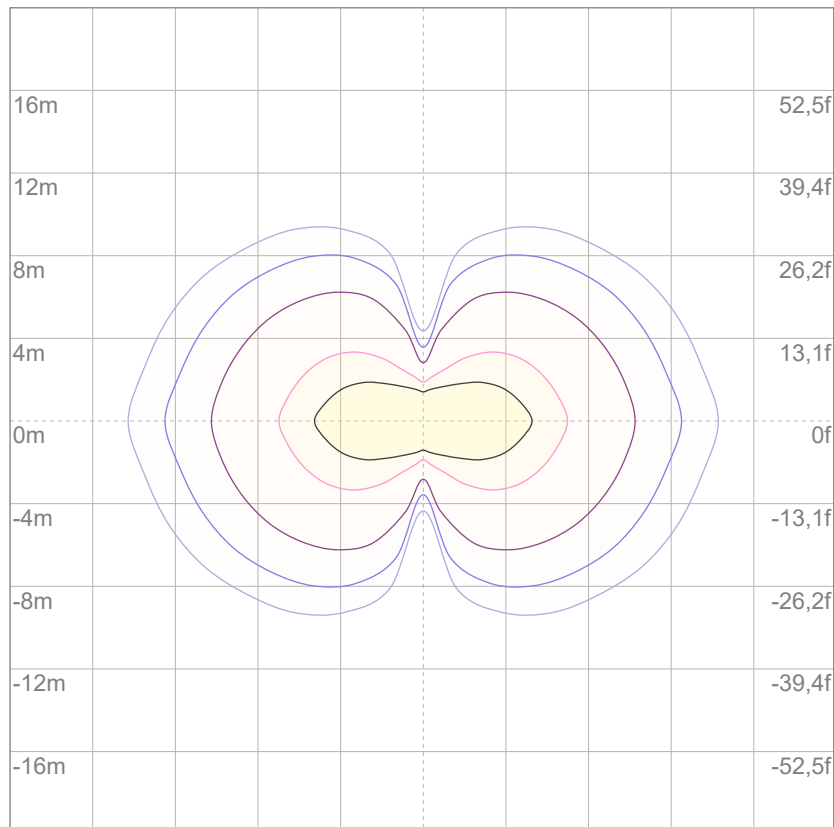
10%	1522 cd
20%	3043 cd
30%	4565 cd
40%	6087 cd
50%	7609 cd
60%	9130 cd
70%	10652 cd
80%	12174 cd

Conditions:

Number of c-planes: 4

Candela at center: 15217 cd

ISO LUX DIAGRAM



3%	4,57 lx
5%	7,61 lx
10%	15,2 lx
30%	45,7 lx
50%	76,1 lx

Conditions:

Number of c-planes: 4

Lux at center: 152 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.