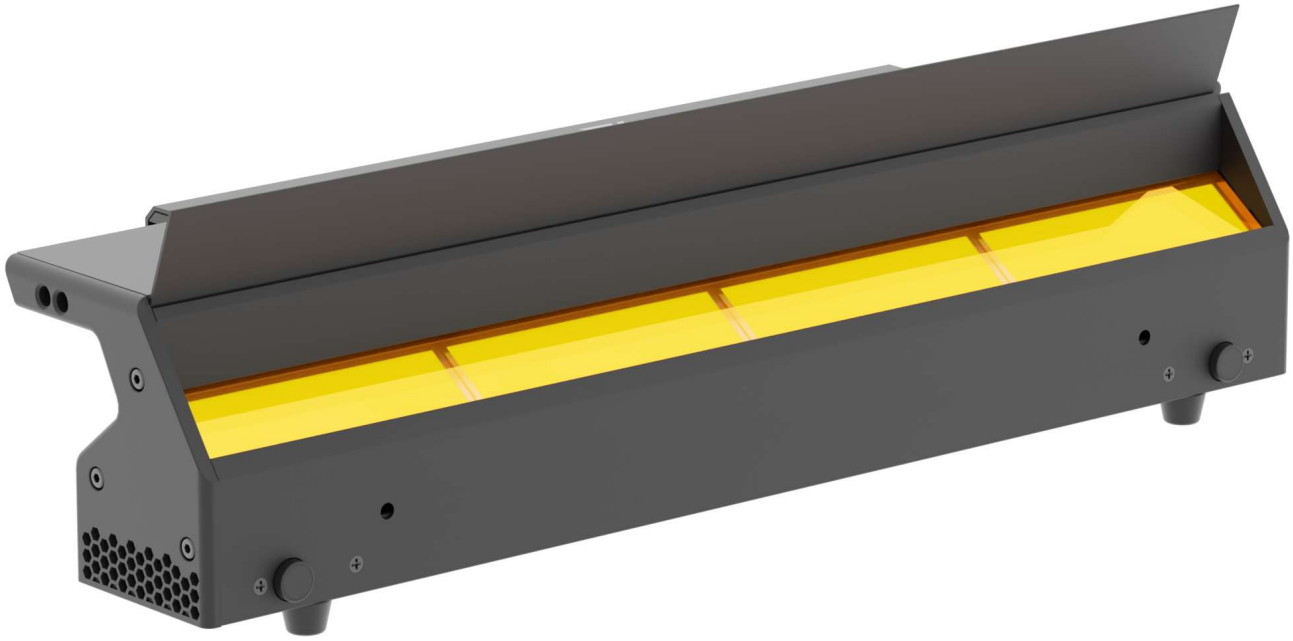
Photometric Test Report



ECLCYC050

170W RGB+W LED cyclorama projector

(filter 40°)

CONTENTS

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:

7131 lm

Peak candela output:

4704 cd

PRODUCT NAME:

ECL CYC050

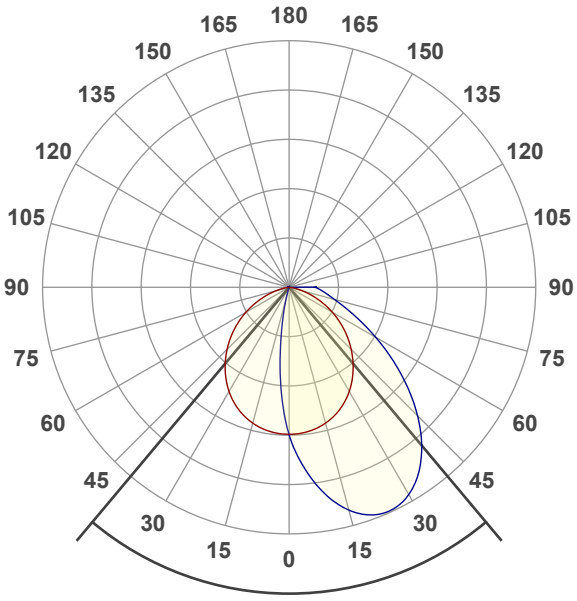
MEASURAMENT CONDITIONS:

Beam angle:
Filter 40

Target:
Full On

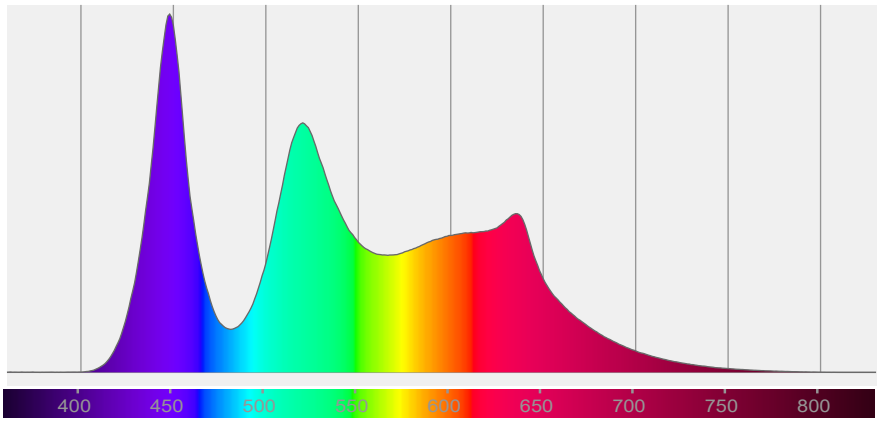
Operator:
Paolo Carvone

Date and time:
13/04/2022 14:51:46



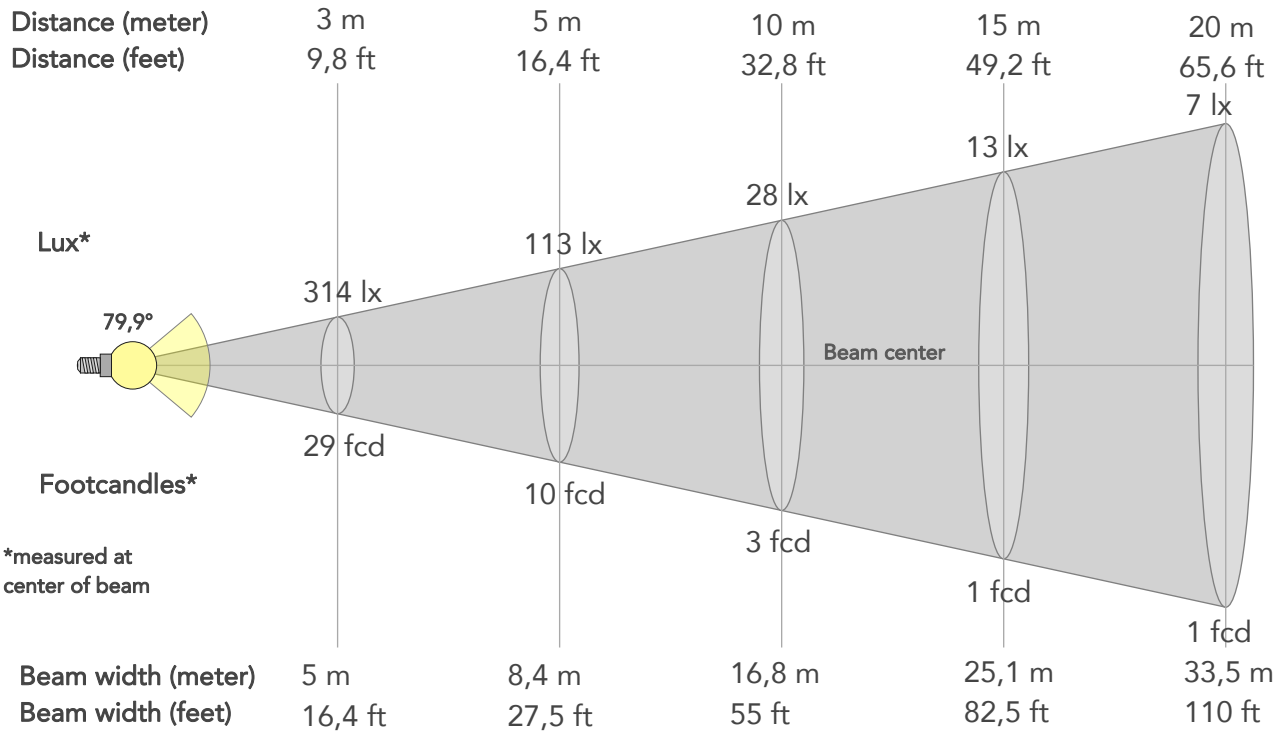
Beam angle 50%: 79,9°
Field angle 10%: 126,1°
Cut off angle 2.5%: 135,2°

Spectra



BEAM DETAILS

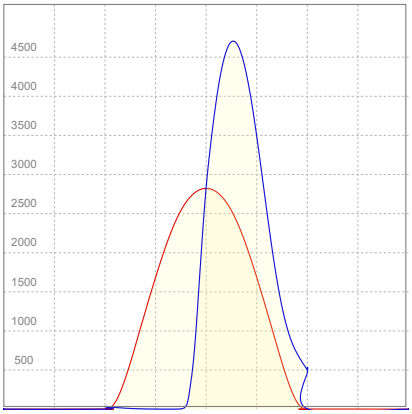
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
79,9°	126,1°	135,2°	81,5%	57,4%



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	2822lx	705lx	314lx	176lx	113lx	50lx	28lx	13lx	7lx	5lx	3lx	2lx	1lx
Footcand.	262fcd	66fcd	29fcd	16fcd	10fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,7m	3,4m	5m	6,7m	8,4m	12,6m	16,8m	25,1m	33,5m	41,9m	50,3m	67,1m	83,8m
Beam wid.	5,5ft	11,1ft	16,4ft	22ft	27,5ft	41,2ft	55ft	82,5ft	110ft	137,5ft	164,9ft	219,9ft	274,9ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,612A	129,7W	55lm/W

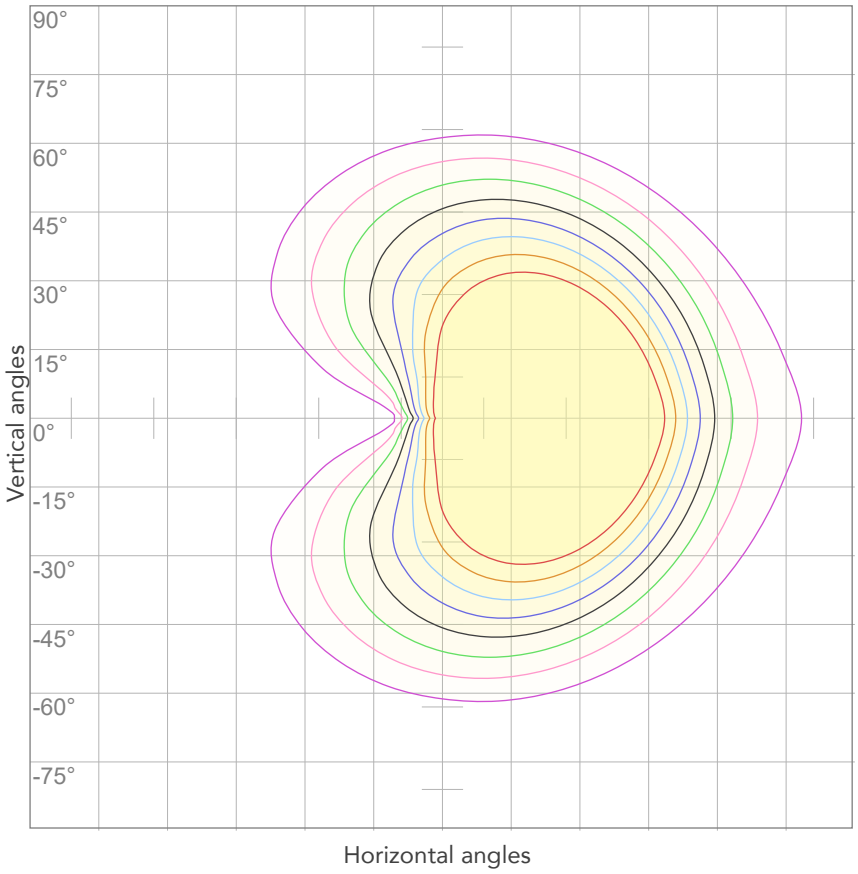
Power FC
0,94

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

ISO DIAGRAMS

ISO CANDELA DIAGRAM



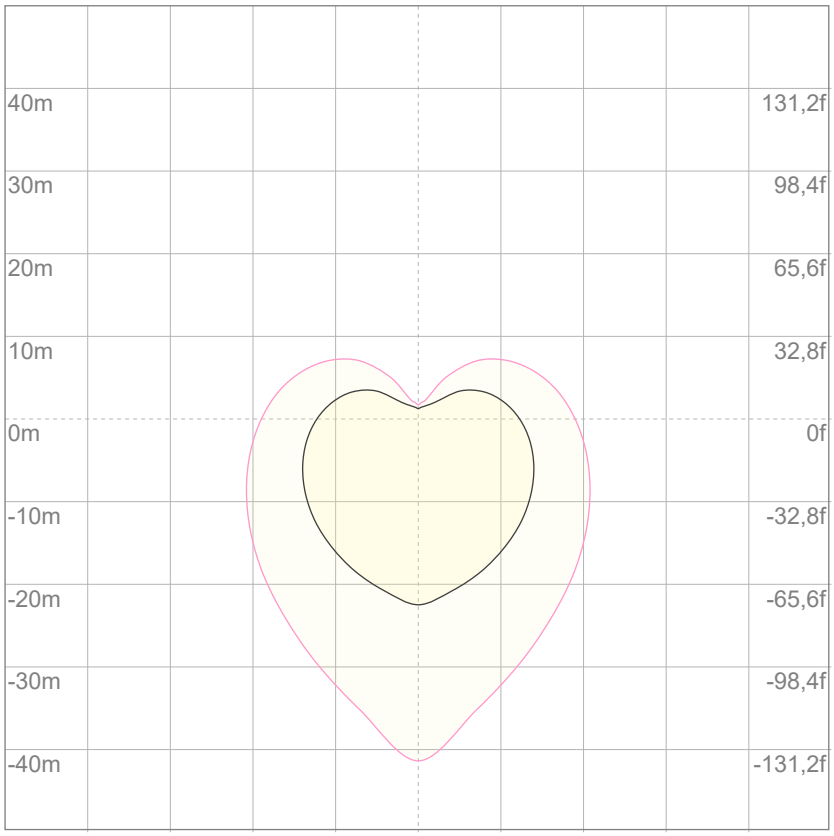
10%	282 cd
20%	564 cd
30%	846 cd
40%	1129 cd
50%	1411 cd
60%	1693 cd
70%	1975 cd
80%	2257 cd

Conditions:

Number of c-planes: 4

Candela at center: 2822 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,846 lx
5%	1,41 lx
10%	2,82 lx
30%	8,46 lx
50%	14,1 lx

Conditions:

Number of c-planes: 4

Lux at center: 28,2 lx

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

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

Total lumen output:

1373 lm

Peak candela output:

950 cd

PRODUCT NAME:

ECL CYC050

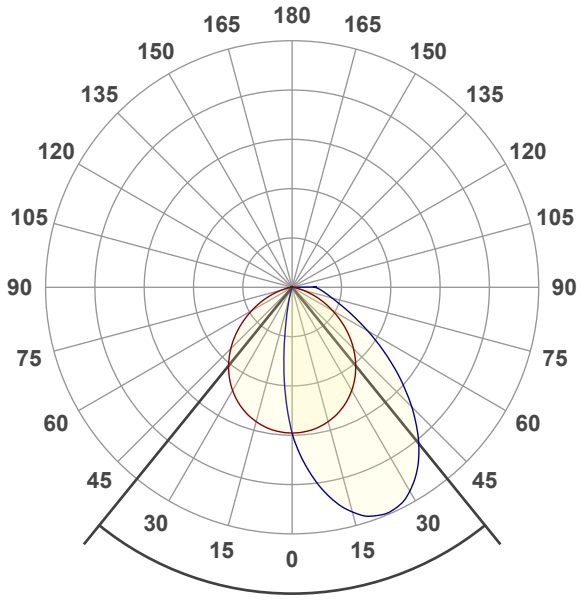
MEASURAMENT CONDITIONS:

Beam angle:
Filter 40

Target:
Red

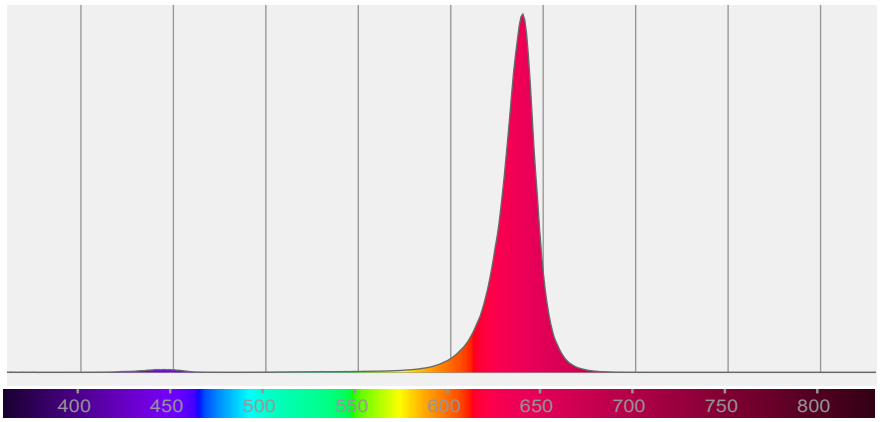
Operator:
Paolo Carvone

Date and time:
13/04/2022 14:55:14



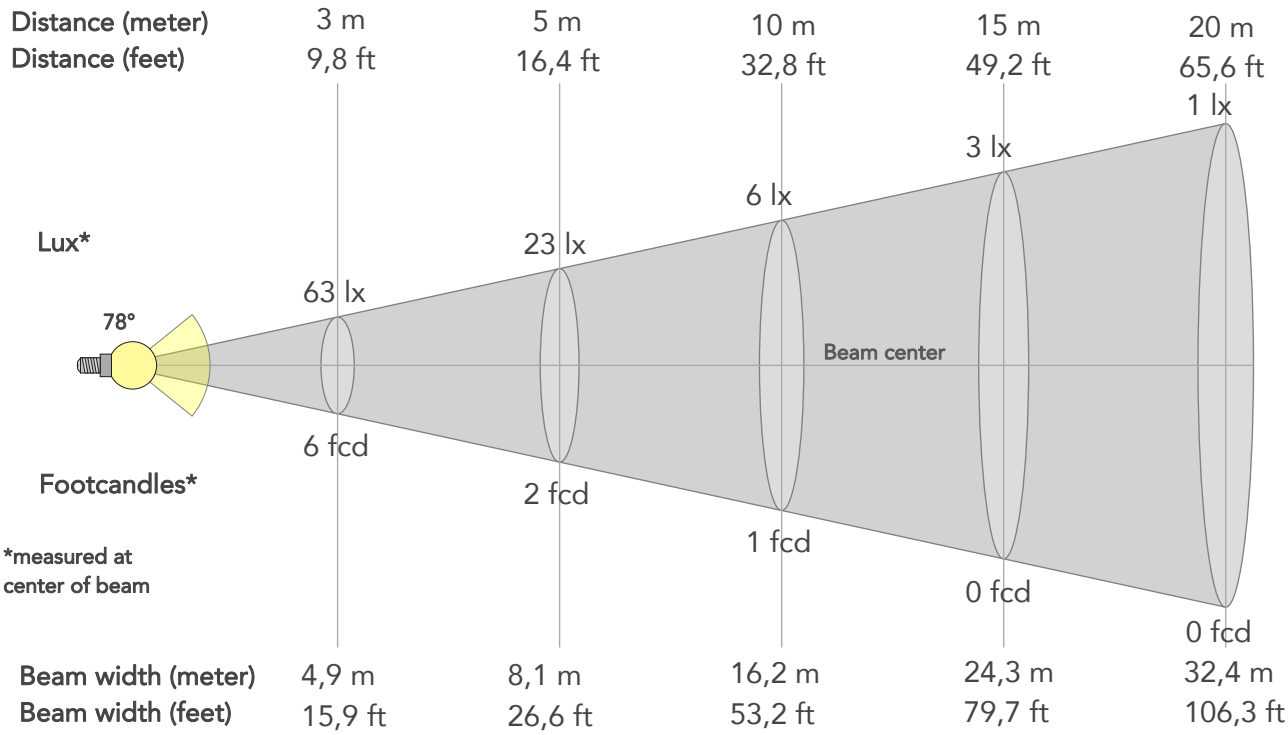
Beam angle 50%: 78°
Field angle 10%: 123,6°
Cut off angle 2.5%: 134,1°

Spectra



BEAM DETAILS

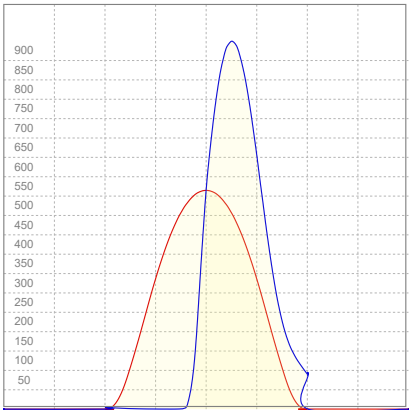
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
78°	123,6°	134,1°	82,9%	59,2%



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	565lx	141lx	63lx	35lx	23lx	10lx	6lx	3lx	1lx	1lx	1lx	0lx	0lx
Footcand.	52fcd	13fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,6m	3,2m	4,9m	6,5m	8,1m	12,2m	16,2m	24,3m	32,4m	40,5m	48,6m	64,8m	81m
Beam wid.	5,3ft	10,7ft	15,9ft	21,2ft	26,6ft	39,9ft	53,2ft	79,7ft	106,3ft	132,9ft	159,5ft	212,6ft	265,8ft

LINEAR DISTRIBUTION DIAGRAM



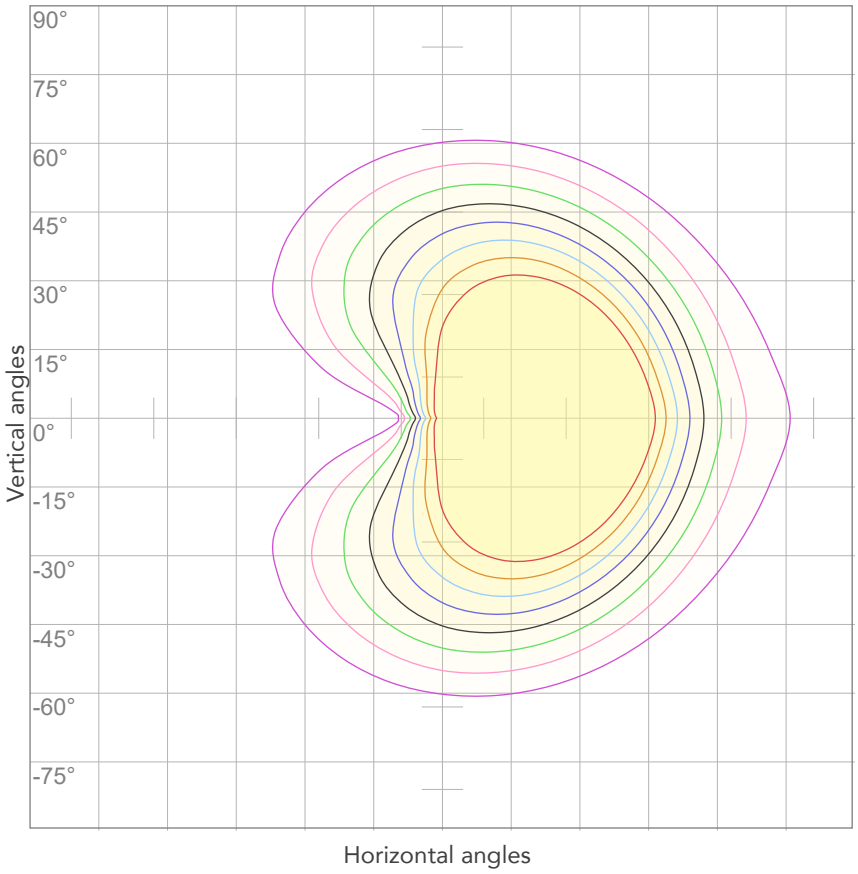
ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,192A	36,4W	38lm/W

Power FC
0,84

ISO DIAGRAMS

ISO CANDELA DIAGRAM



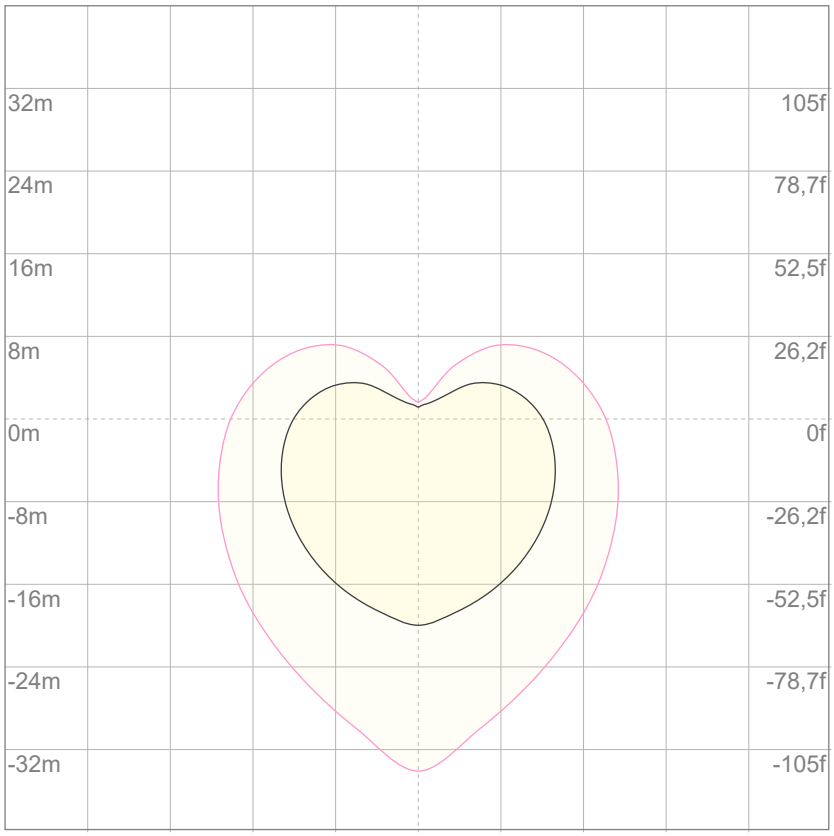
10%	56 cd
20%	113 cd
30%	169 cd
40%	226 cd
50%	282 cd
60%	339 cd
70%	395 cd
80%	452 cd

Conditions:

Number of c-planes: 4

Candela at center: 565 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,169 lx
5%	0,282 lx
10%	0,565 lx
30%	1,69 lx
50%	2,82 lx

Conditions:

Number of c-planes: 4

Lux at center: 5,65 lx

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

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

Total lumen output:

2366 lm

Peak candela output:

1512 cd

PRODUCT NAME:

ECL CYC050

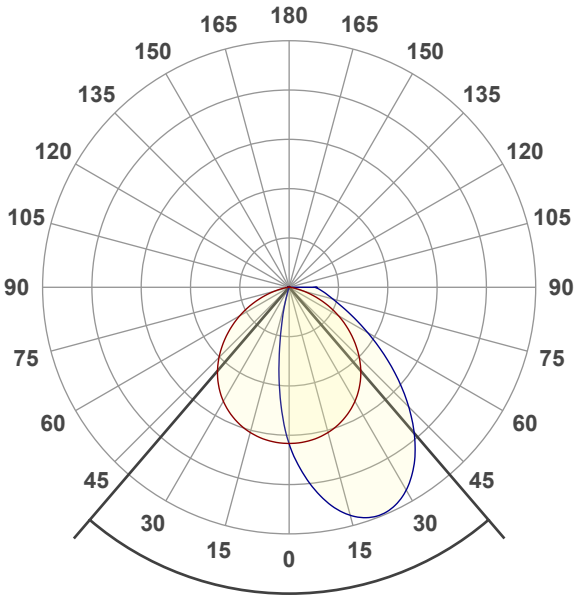
MEASURAMENT CONDITIONS:

Beam angle:
Filter 40

Target:
Green

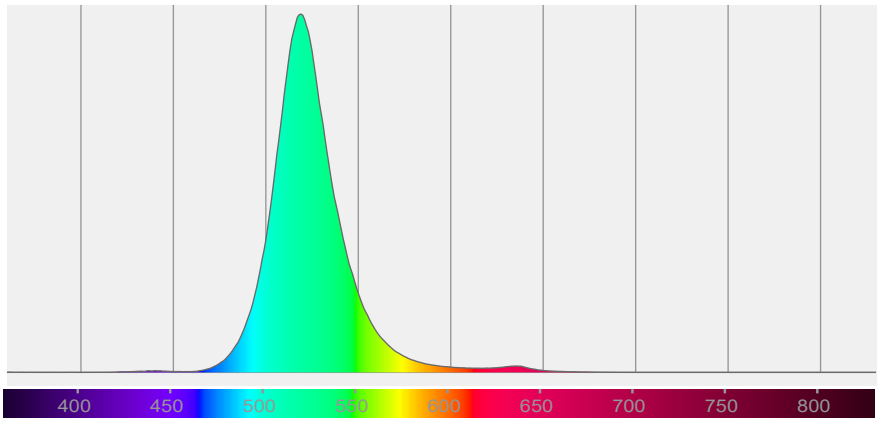
Operator:
Paolo Carvone

Date and time:
13/04/2022 15:04:51



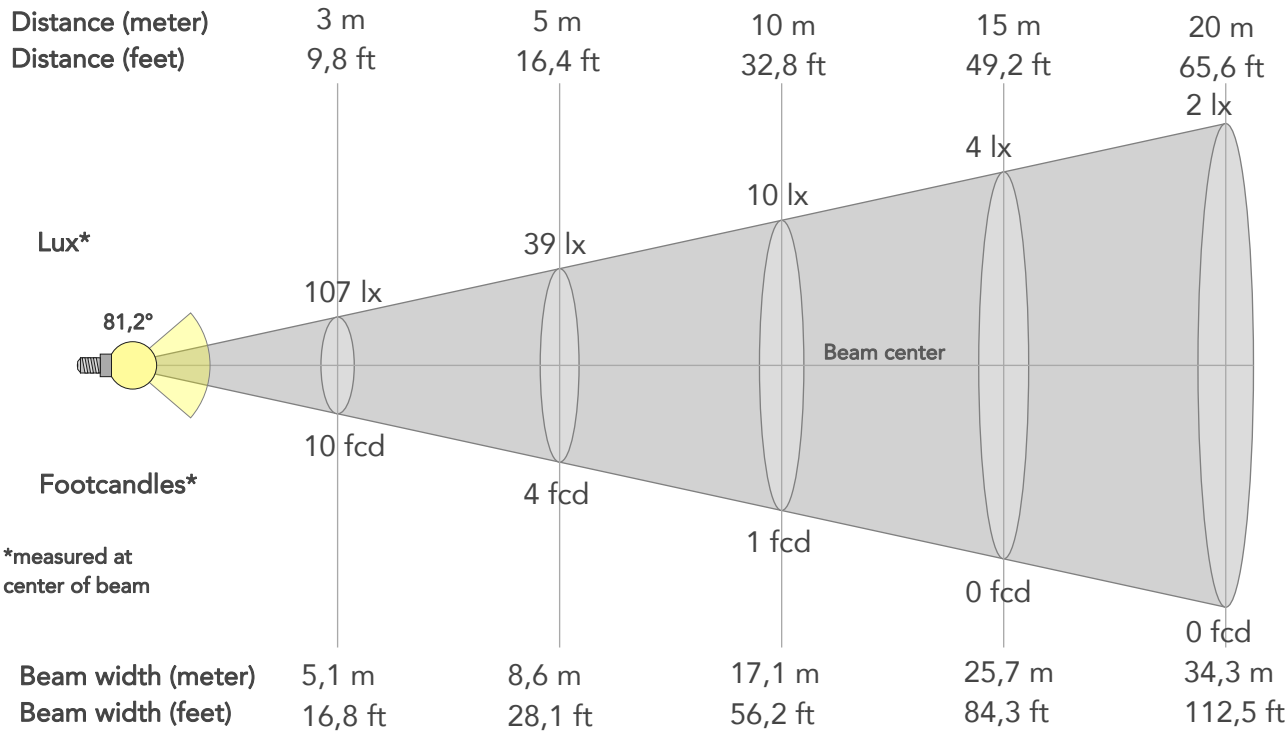
Beam angle 50%: 81,2°
Field angle 10%: 126,7°
Cut off angle 2.5%: 135,3°

Spectra



BEAM DETAILS

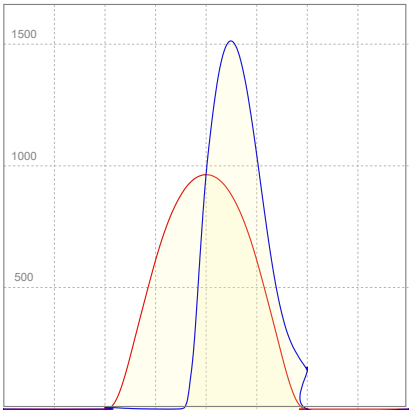
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
81,2°	126,7°	135,3°	81,9%	57,8%



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	963lx	241lx	107lx	60lx	39lx	17lx	10lx	4lx	2lx	2lx	1lx	1lx	0lx
Footcand.	89fcd	22fcd	10fcd	6fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,7m	3,4m	5,1m	6,9m	8,6m	12,9m	17,1m	25,7m	34,3m	42,9m	51,4m	68,6m	85,7m
Beam wid.	5,7ft	11,3ft	16,8ft	22,5ft	28,1ft	42,2ft	56,2ft	84,3ft	112,5ft	140,6ft	168,7ft	224,9ft	281,1ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,233A	45,6W	52lm/W

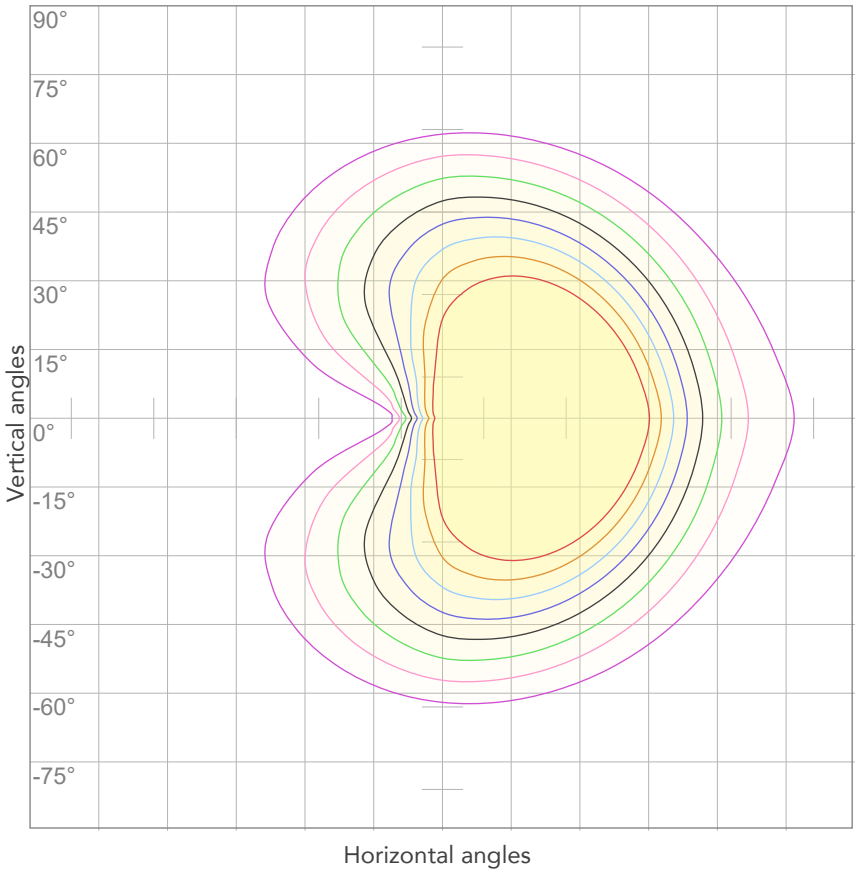
Power FC
0,87

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

ISO DIAGRAMS

ISO CANDELA DIAGRAM



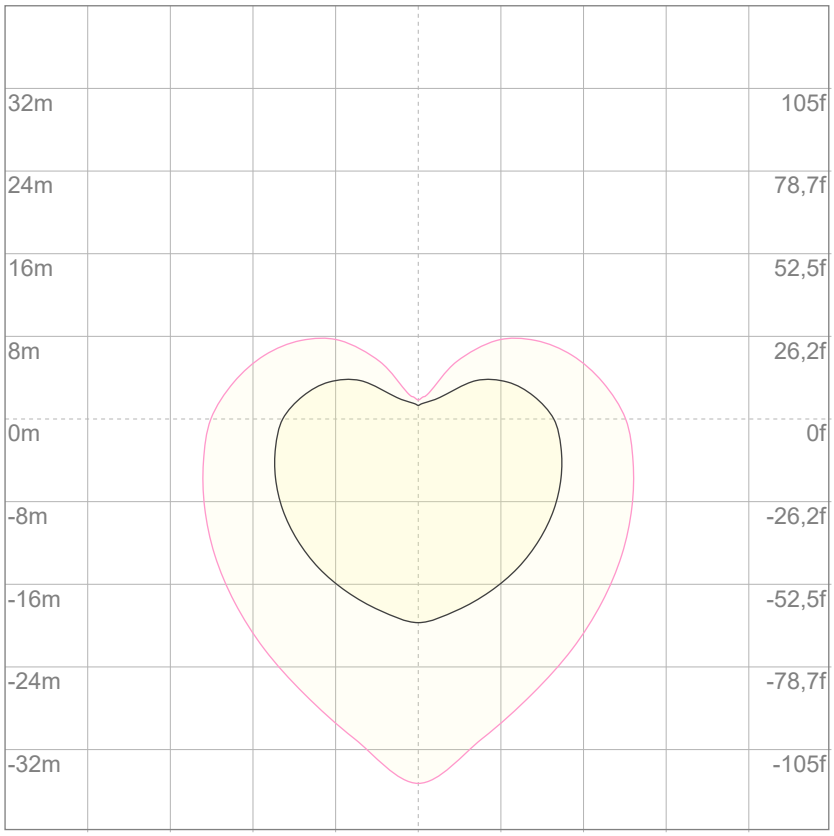
10%	96 cd
20%	193 cd
30%	289 cd
40%	385 cd
50%	482 cd
60%	578 cd
70%	674 cd
80%	771 cd

Conditions:

Number of c-planes: 4

Candela at center: 963 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,289 lx
5%	0,482 lx
10%	0,963 lx
30%	2,89 lx
50%	4,82 lx

Conditions:

Number of c-planes: 4

Lux at center: 9,63 lx

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

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

Total lumen output:

796 lm

Peak candela output:

550 cd

PRODUCT NAME:

ECL CYC050

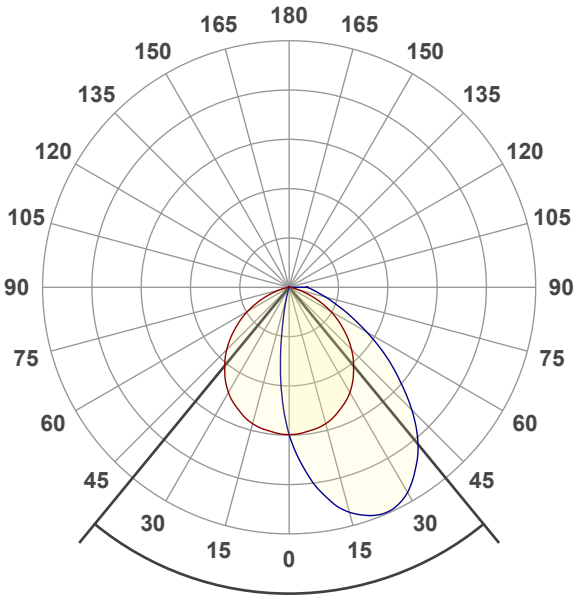
MEASURAMENT CONDITIONS:

Beam angle:
Filter 40

Target:
Blue

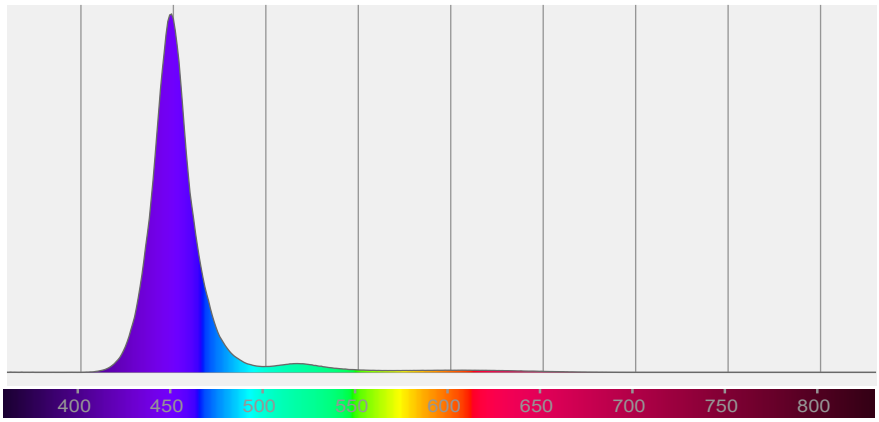
Operator:
Paolo Carvone

Date and time:
13/04/2022 15:07:28



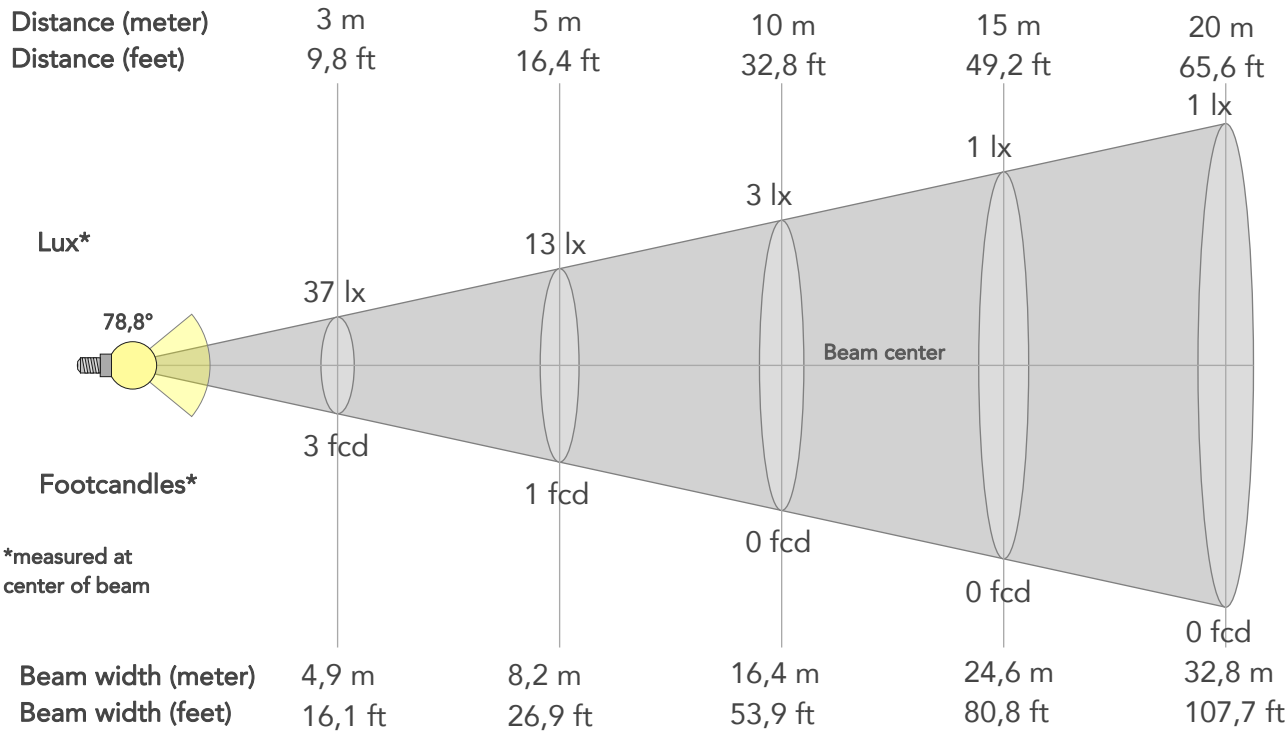
Beam angle 50%: 78,8°
Field angle 10%: 119,9°
Cut off angle 2.5%: 132,3°

Spectra



BEAM DETAILS

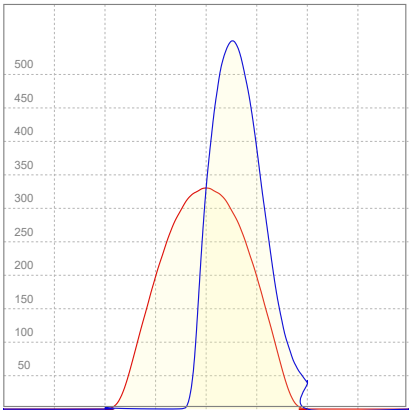
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
78,8°	119,9°	132,3°	84,1%	59,8%



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	330lx	83lx	37lx	21lx	13lx	6lx	3lx	1lx	1lx	1lx	0lx	0lx	0lx
Footcand.	31fcd	8fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,6m	3,3m	4,9m	6,6m	8,2m	12,3m	16,4m	24,6m	32,8m	41,1m	49,3m	65,7m	82,1m
Beam wid.	5,4ft	10,8ft	16,1ft	21,5ft	26,9ft	40,4ft	53,9ft	80,8ft	107,7ft	134,7ft	161,6ft	215,5ft	269,3ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,247A	49,3W	16lm/W

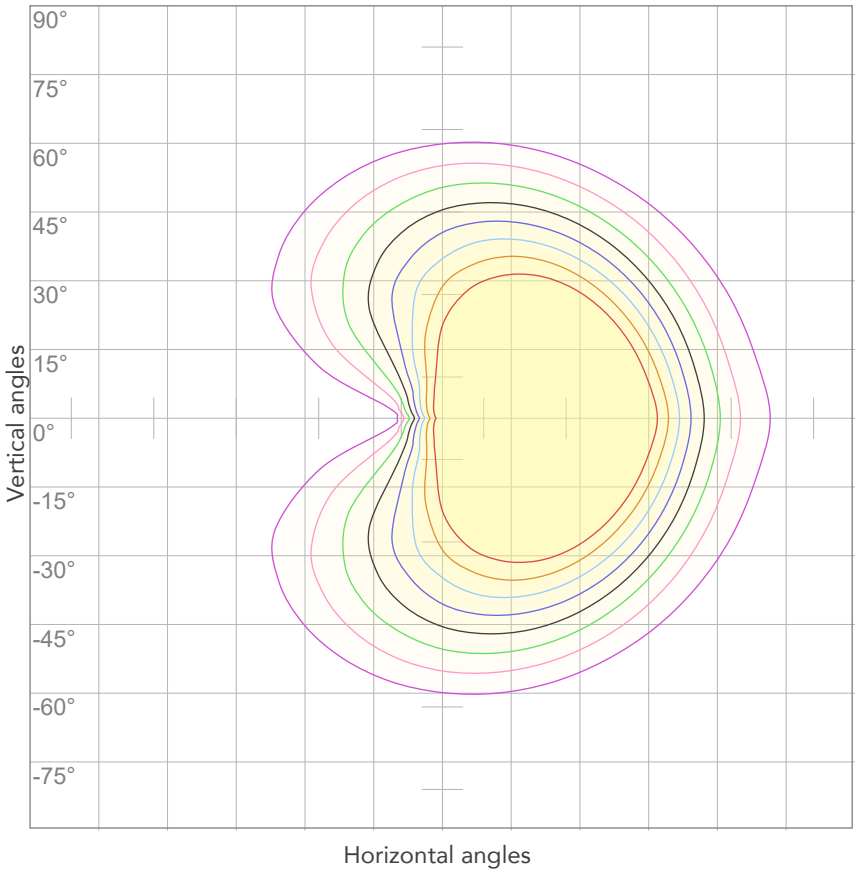
Power FC
0,88

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

ISO DIAGRAMS

ISO CANDELA DIAGRAM



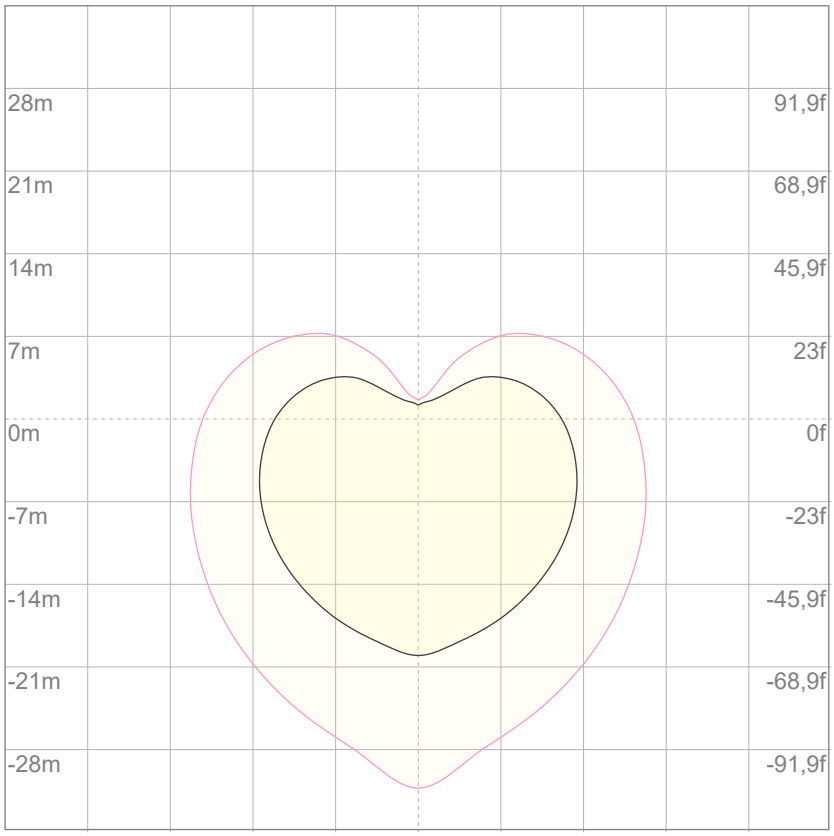
10%	33 cd
20%	66 cd
30%	99 cd
40%	132 cd
50%	165 cd
60%	198 cd
70%	231 cd
80%	264 cd

Conditions:

Number of c-planes: 4

Candela at center: 330 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	99,1m lx
5%	0,165 lx
10%	0,330 lx
30%	0,991 lx
50%	1,65 lx

Conditions:

Number of c-planes: 4

Lux at center: 3,30 lx

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

Total lumen output:

8191 lm

Peak candela output:

5473 cd

PRODUCT NAME:

ECL CYC050

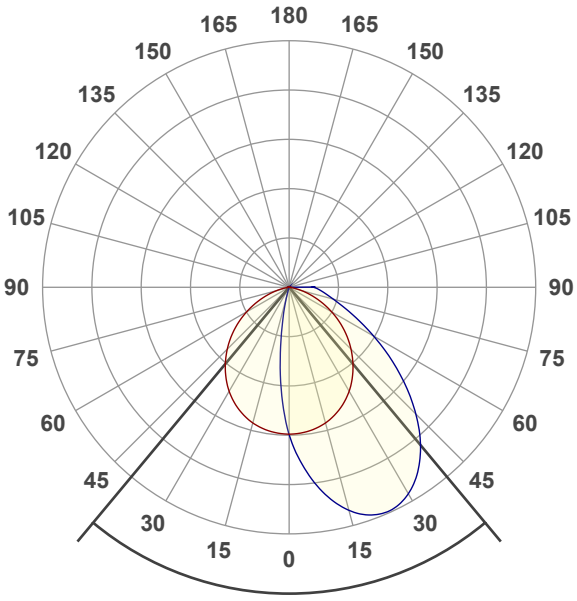
MEASURAMENT CONDITIONS:

Beam angle:
Filter 40

Target:
White

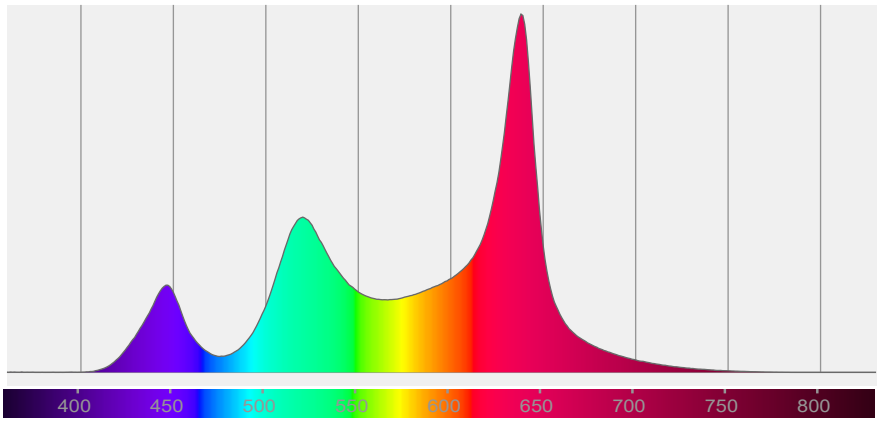
Operator:
Paolo Carvone

Date and time:
13/04/2022 15:09:43



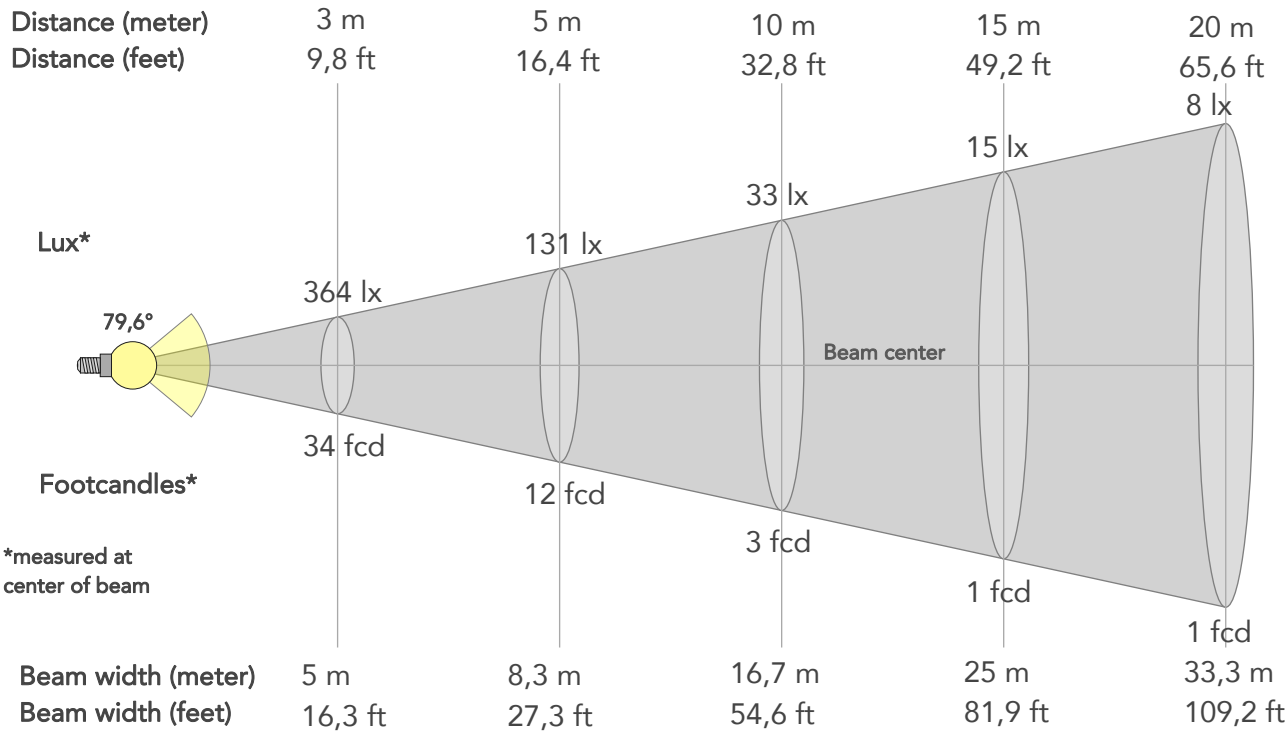
Beam angle 50%: 79,6°
Field angle 10%: 125,5°
Cut off angle 2.5%: 134,3°

Spectra



BEAM DETAILS

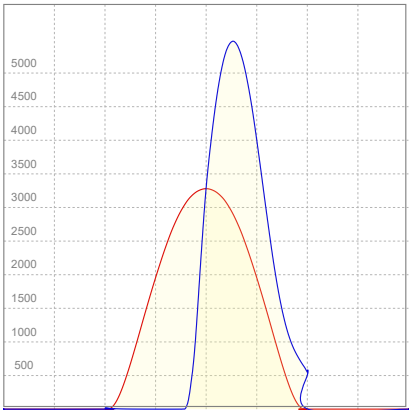
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
79,6°	125,5°	134,3°	82,1%	57,9%



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	3280lx	820lx	364lx	205lx	131lx	58lx	33lx	15lx	8lx	5lx	4lx	2lx	1lx
Footcand.	305fcd	76fcd	34fcd	19fcd	12fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,7m	3,3m	5m	6,7m	8,3m	12,5m	16,7m	25m	33,3m	41,6m	50m	66,6m	83,3m
Beam wid.	5,5ft	11ft	16,3ft	21,8ft	27,3ft	41ft	54,6ft	81,9ft	109,2ft	136,5ft	163,9ft	218,5ft	273,1ft

LINEAR DISTRIBUTION DIAGRAM



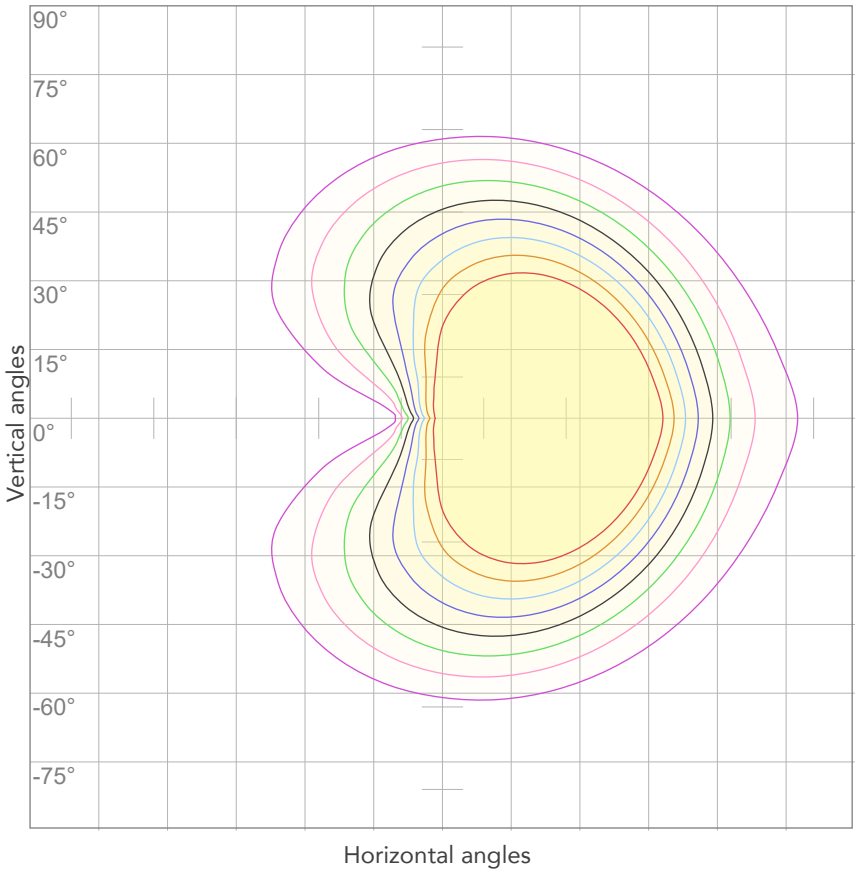
ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,680A	145,5W	56lm/W

Power FC
0,95

ISO DIAGRAMS

ISO CANDELA DIAGRAM



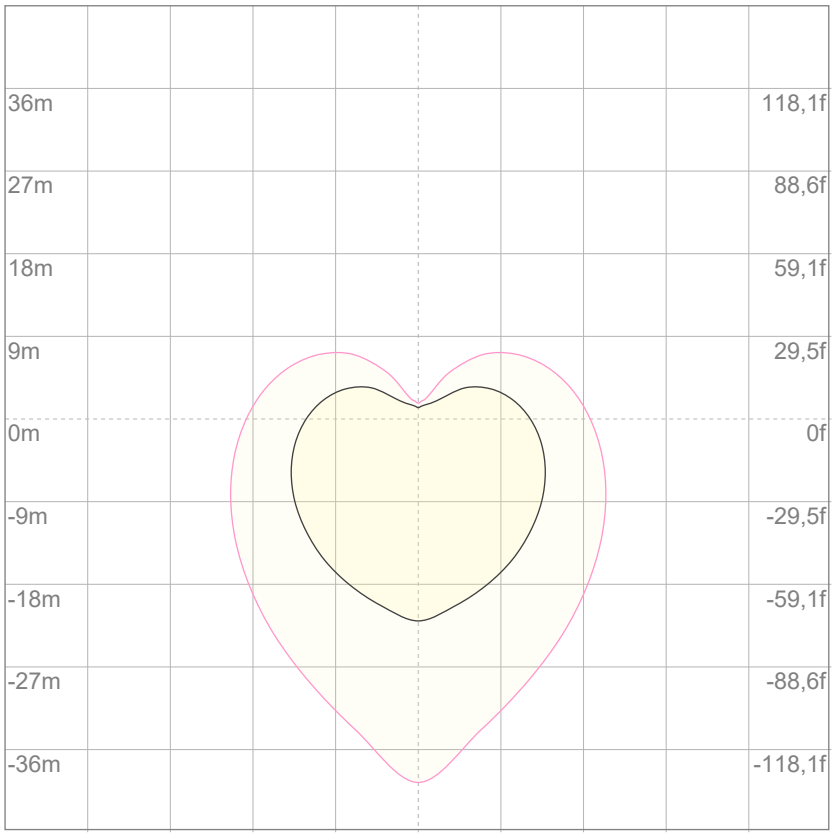
10%	328 cd
20%	656 cd
30%	984 cd
40%	1312 cd
50%	1640 cd
60%	1968 cd
70%	2296 cd
80%	2624 cd

Conditions:

Number of c-planes: 4

Candela at center: 3280 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,984 lx
5%	1,64 lx
10%	3,28 lx
30%	9,84 lx
50%	16,4 lx

Conditions:

Number of c-planes: 4

Lux at center: 32,8 lx

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

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

Total lumen output:

4803 lm

Peak candela output:

3230 cd

Light quality:

CRI: 89,0

Color temperature:

2751 K

PRODUCT NAME:

ECL CYC050

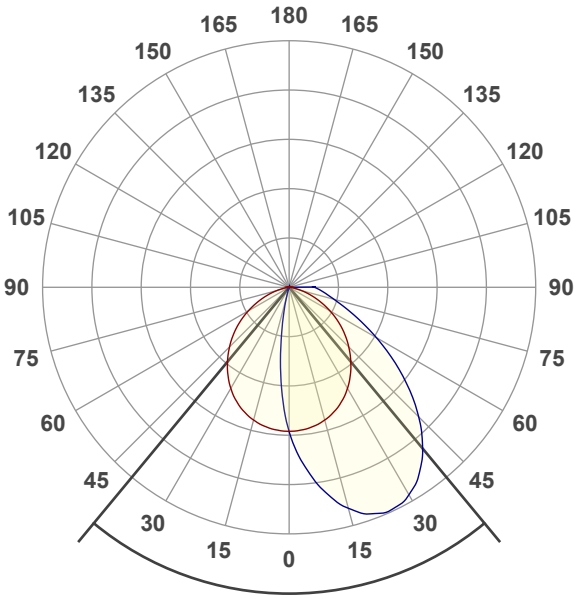
MEASURAMENT CONDITIONS:

Beam angle:
Filter 40

Target:
2800K

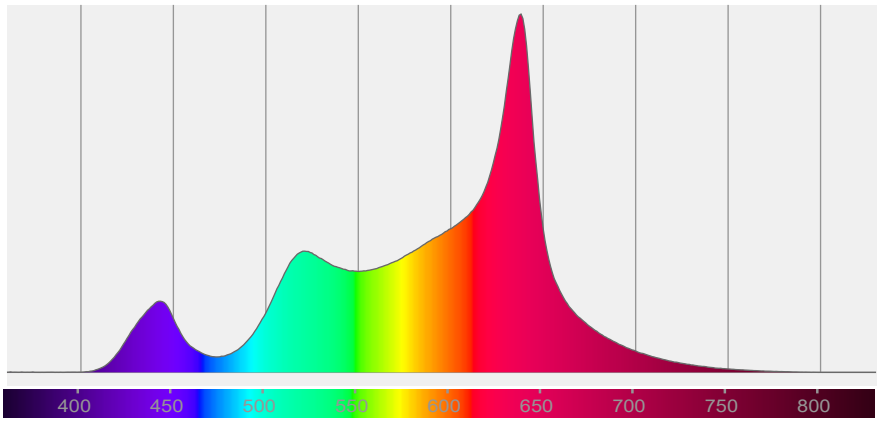
Operator:
Paolo Carvone

Date and time:
13/04/2022 15:13:30

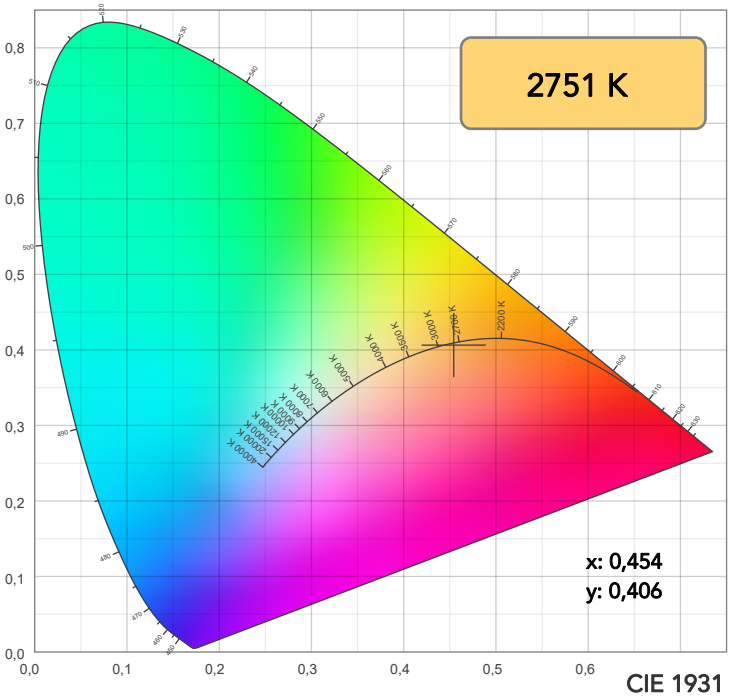


Beam angle 50%: 79,3°
Field angle 10%: 125,6°
Cut off angle 2.5%: 134,7°

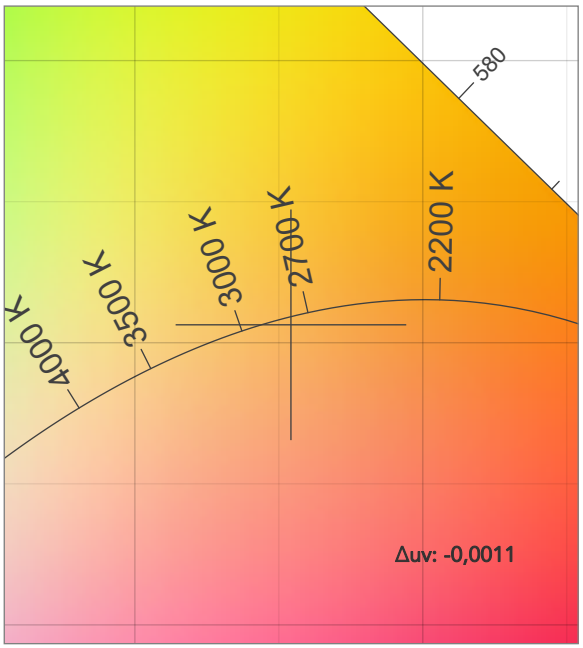
Spectra



COLOR DETAILS

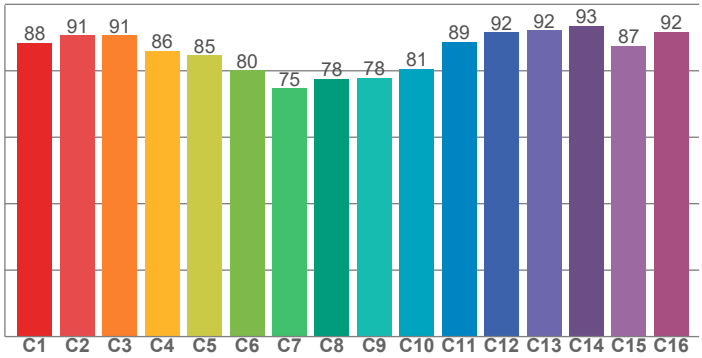


CIE 1931

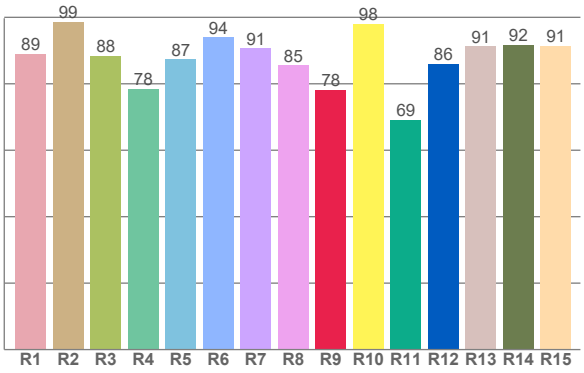


CIE 1931 ZOOM

TM30: 86,4



CRI: 89,0 (R1-R8)



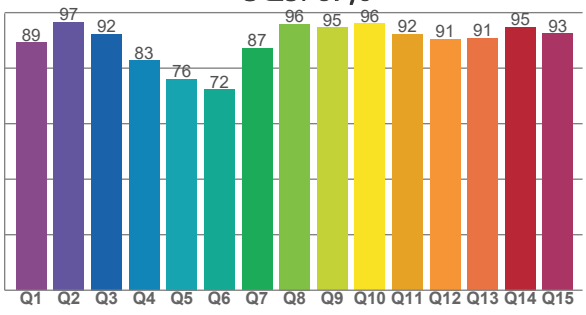
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
89,0	98,7	88,5	78,5	87,3	94,1	90,7	85,5	78,2	98,0	69,1	86,0	91,4	91,8	91,4

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
88,4	90,7	90,7	85,9	84,7	80,1	74,8	77,6	77,8	80,6	88,8	91,5	92,2	93,5	87,4	91,8

CQS: 87,0



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89,2	96,6	92,4	82,8	76,1	72,3	87,1	95,9	94,6	96,1	92,2	90,5	90,8	94,8	92,5

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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2751 K	89,0	78,2	86,4	110,2	87,0	65	0,454	0,406	-0,0011

TM30 DETAILS

PROLiGHTS

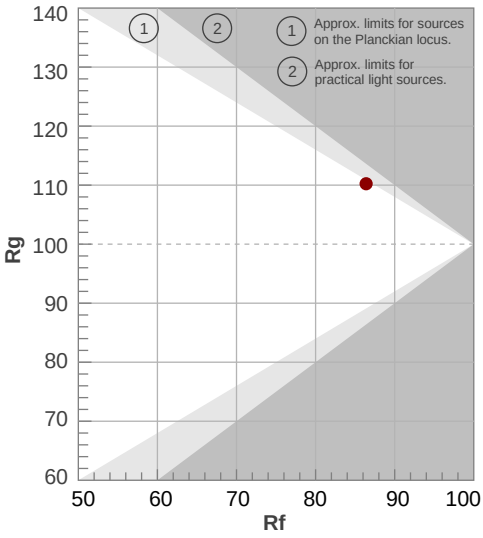
Rf 86,4

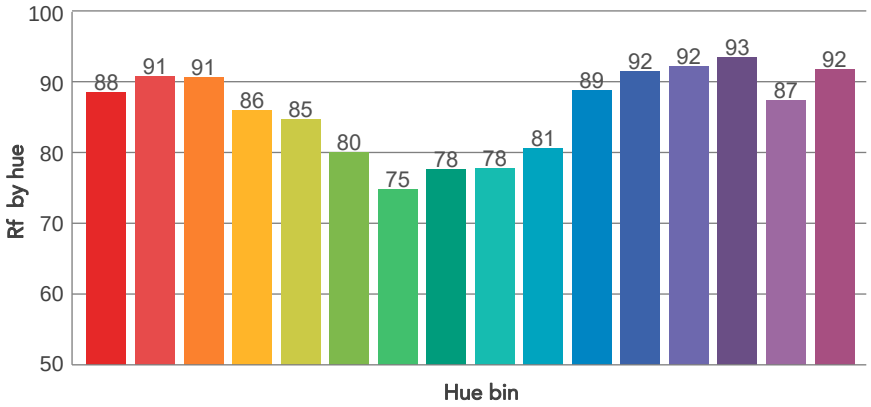
Fidelity index Rf

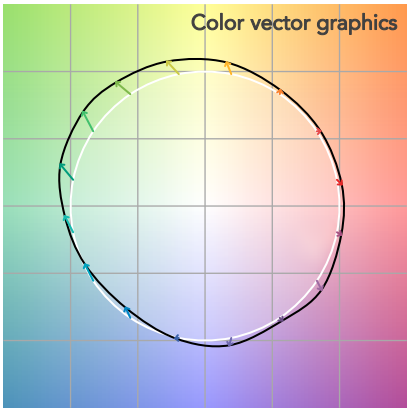
Rg 110,2

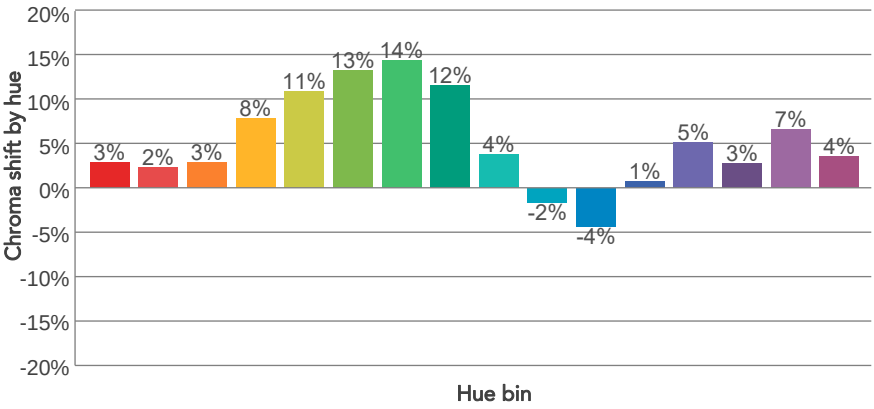
Gammut index

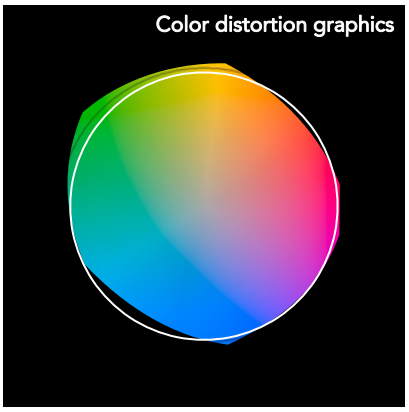
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	88	3%	-4%
2	91	2%	-1%
3	91	3%	1%
4	86	8%	5%
5	85	11%	7%
6	80	13%	4%
7	75	14%	-8%
8	78	12%	-9%
9	78	4%	-13%
10	81	-2%	-13%
11	89	-4%	-7%
12	92	1%	-3%
13	92	5%	-3%
14	93	3%	0%
15	87	7%	-4%
16	92	4%	-1%

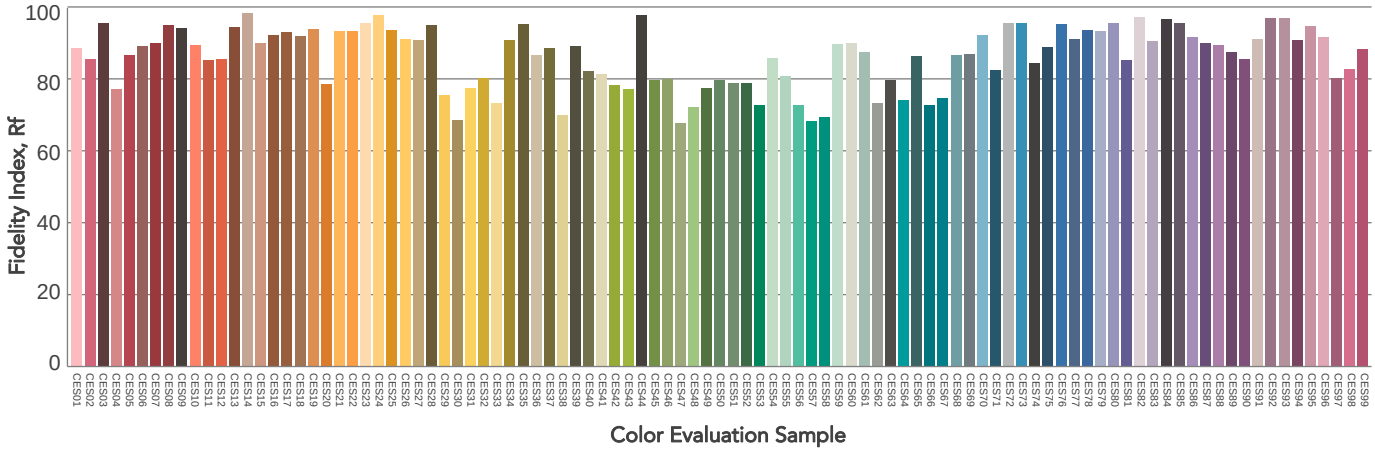












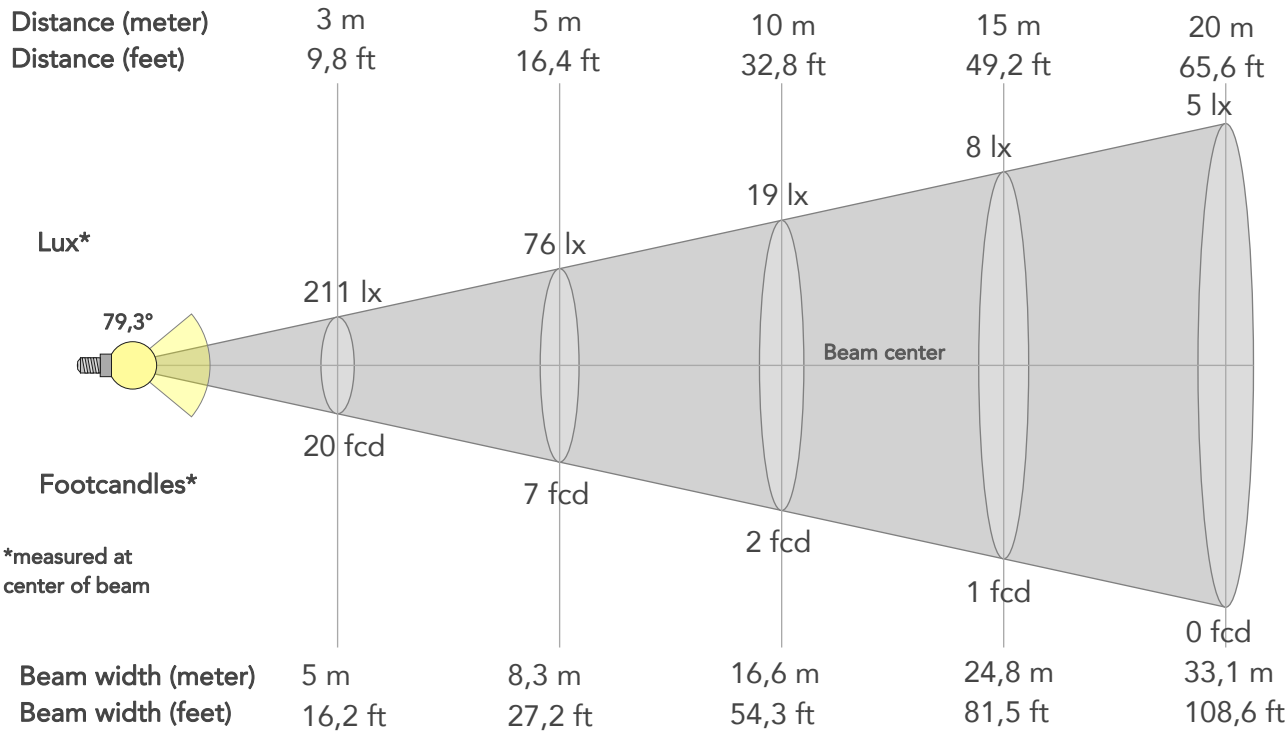
PROLIGHTS is a trademark of **MUSIC & LIGHTS** S.r.l.
musiclights.it

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

BEAM DETAILS

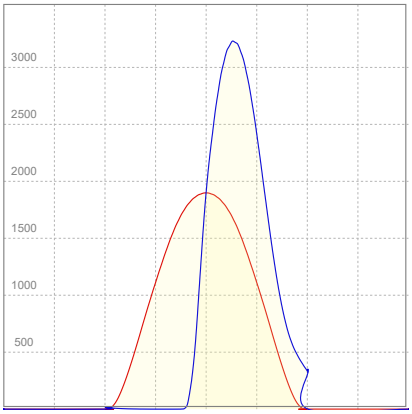
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
79,3°	125,6°	134,7°	81,8%	57,6%



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	1897lx	474lx	211lx	119lx	76lx	34lx	19lx	8lx	5lx	3lx	2lx	1lx	1lx
Footcand.	176fcd	44fcd	20fcd	11fcd	7fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,7m	3,3m	5m	6,6m	8,3m	12,4m	16,6m	24,8m	33,1m	41,4m	49,7m	66,2m	82,8m
Beam wid.	5,5ft	10,9ft	16,2ft	21,7ft	27,2ft	40,7ft	54,3ft	81,5ft	108,6ft	135,8ft	163ft	217,3ft	271,6ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

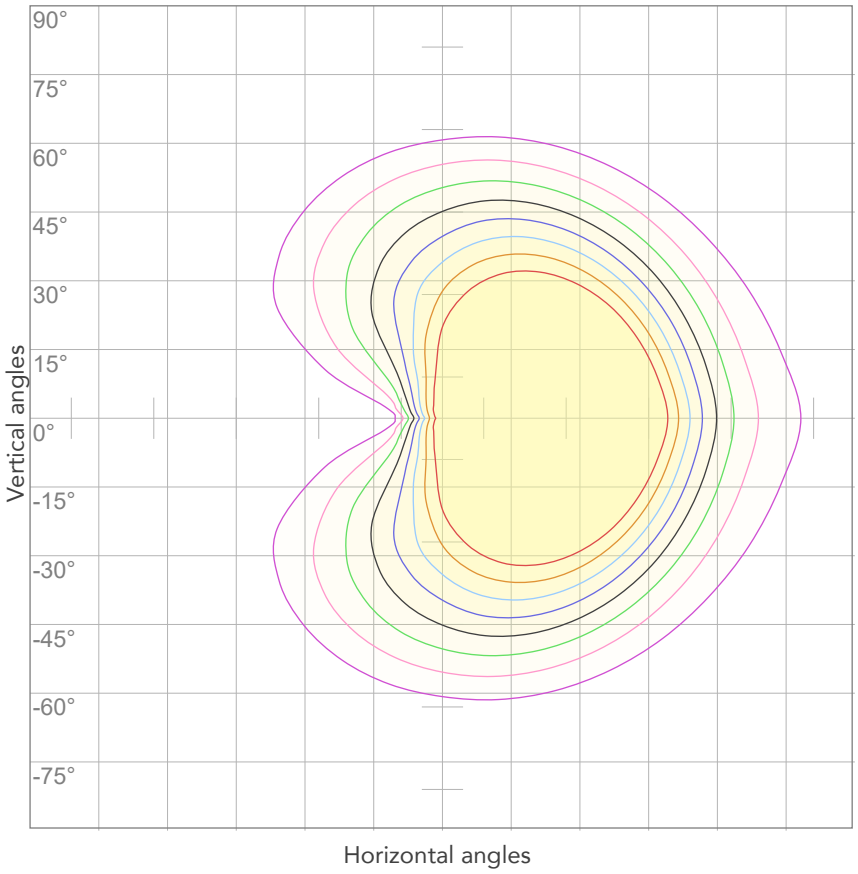
Input voltage	Input current	Input power	Effeciency
227V	0,376A	78,3W	61lm/W

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

ISO DIAGRAMS

ISO CANDELA DIAGRAM



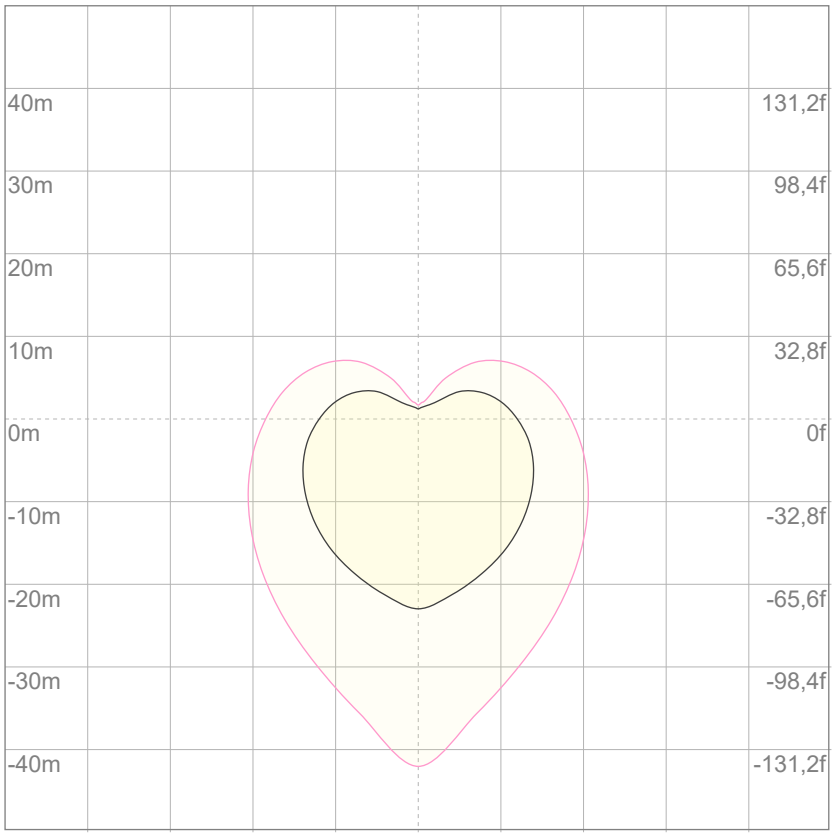
10%	190 cd
20%	379 cd
30%	569 cd
40%	759 cd
50%	949 cd
60%	1138 cd
70%	1328 cd
80%	1518 cd

Conditions:

Number of c-planes: 4

Candela at center: 1897 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,569 lx
5%	0,949 lx
10%	1,90 lx
30%	5,69 lx
50%	9,49 lx

Conditions:

Number of c-planes: 4

Lux at center: 19,0 lx

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

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

Total lumen output:

4796 lm

Peak candela output:

3211 cd

Light quality:

CRI: 91,0

Color temperature:

3160 K

PRODUCT NAME:

ECL CYC050

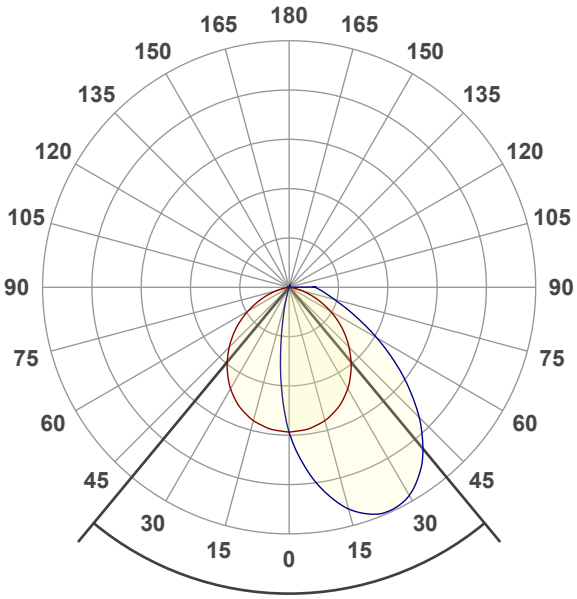
MEASURAMENT CONDITIONS:

Beam angle:
Filter 40

Target:
3200K

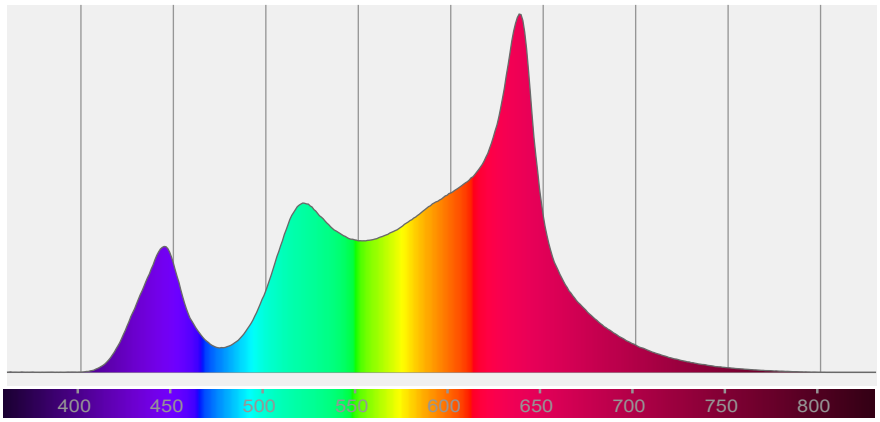
Operator:
Paolo Carvone

Date and time:
13/04/2022 15:15:38

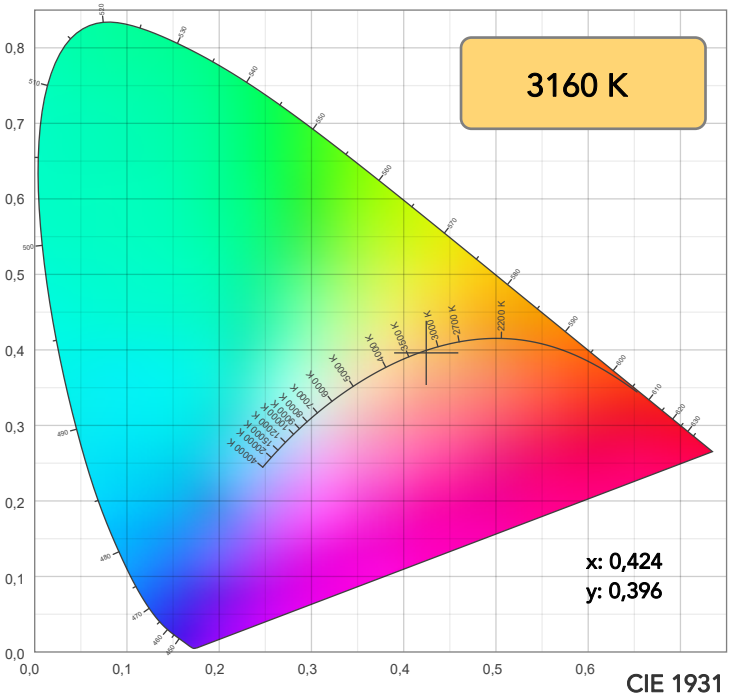


Beam angle 50%: 79,3°
Field angle 10%: 125,7°
Cut off angle 2.5%: 134,7°

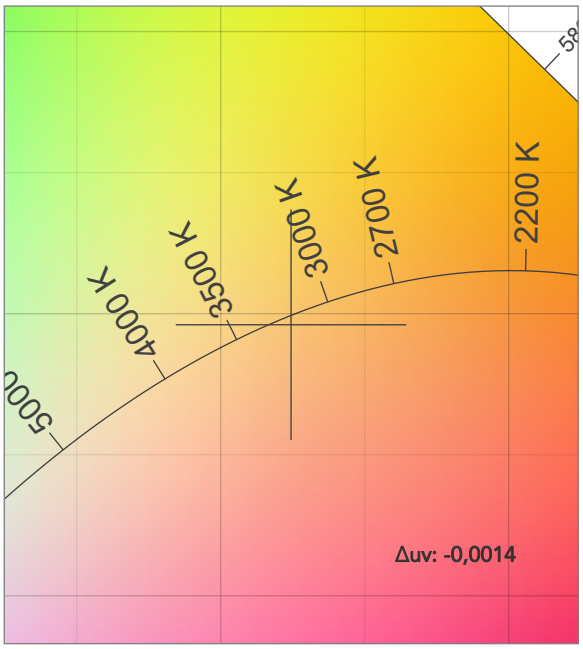
Spectra



COLOR DETAILS

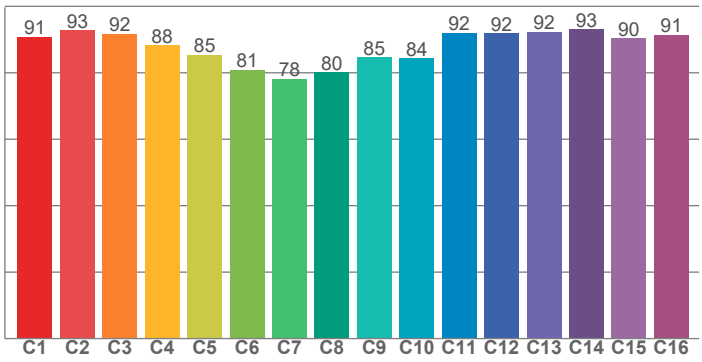


CIE 1931

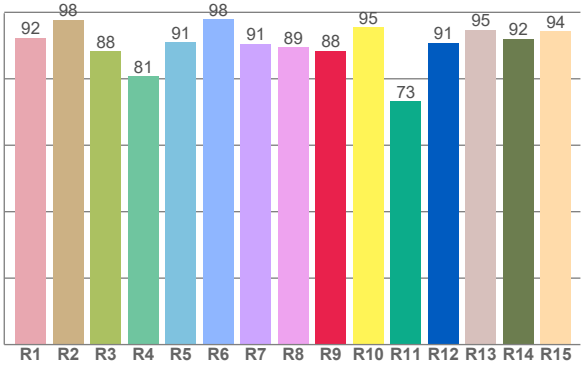


CIE 1931 ZOOM

TM30: 88,4



CRI: 91,0 (R1-R8)



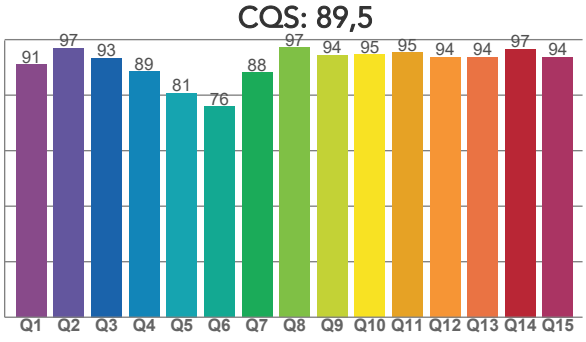
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
92,4	97,7	88,3	80,8	90,9	97,9	90,5	89,5	88,4	95,4	73,2	90,9	94,7	92,0	94,4

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
90,9	92,8	91,7	88,3	85,4	80,9	78,2	80,2	84,6	84,4	92,1	91,8	92,3	93,0	90,3	91,5

CQS: 89,5



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,1	97,0	93,3	88,5	80,7	75,9	88,1	97,2	94,5	94,7	95,3	93,8	93,7	96,6	93,8

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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3160 K	91,0	88,4	88,4	109,4	89,5	70	0,424	0,396	-0,0014

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

TM30 DETAILS

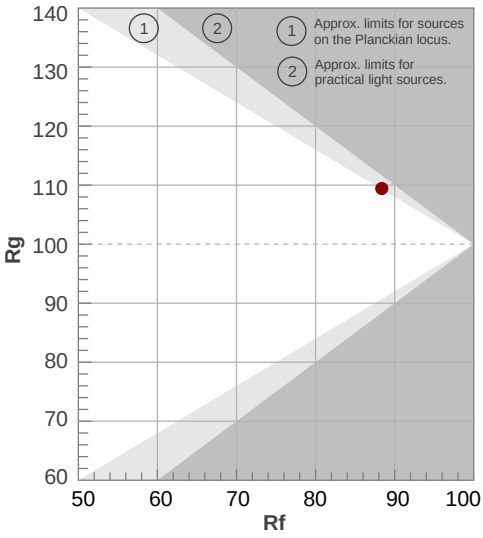
Rf 88,4

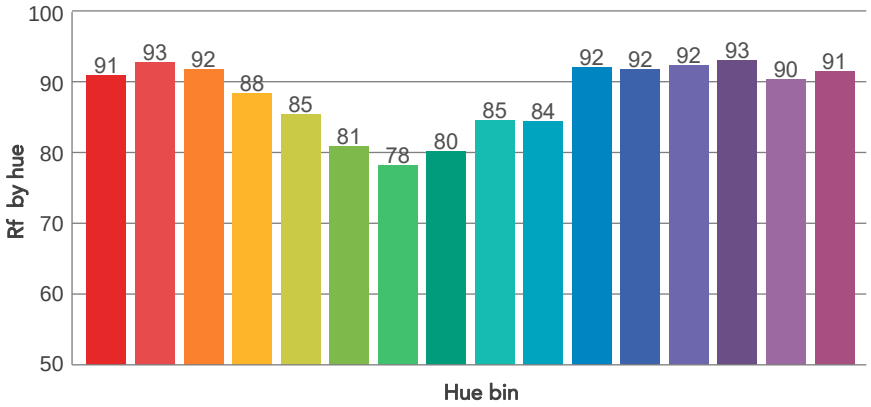
Fidelity index Rf

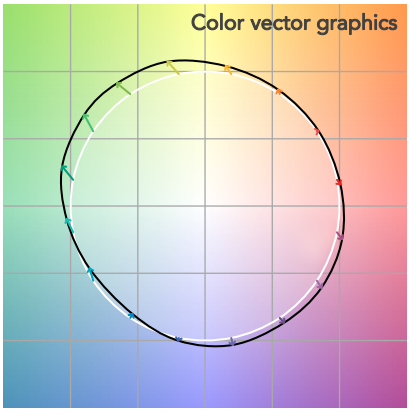
Rg 109,4

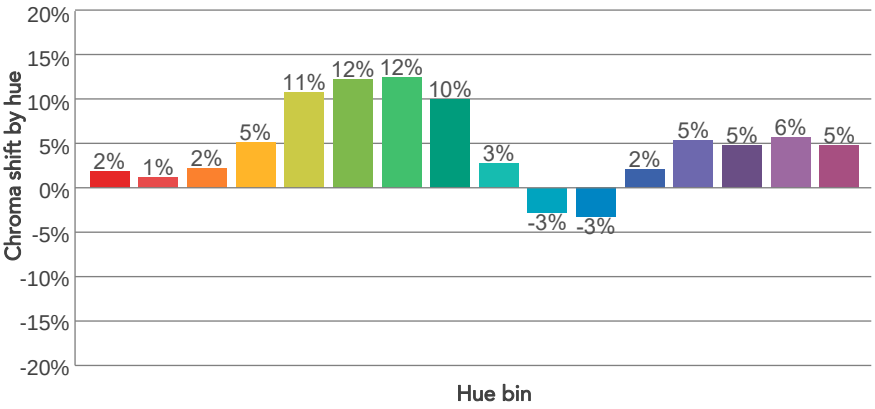
Gammut index

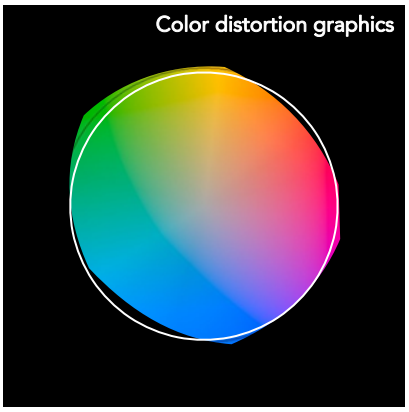
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	91	2%	-4%
2	93	1%	0%
3	92	2%	3%
4	88	5%	5%
5	85	11%	6%
6	81	12%	4%
7	78	12%	-7%
8	80	10%	-8%
9	85	3%	-10%
10	84	-3%	-9%
11	92	-3%	0%
12	92	2%	0%
13	92	5%	0%
14	93	5%	1%
15	90	6%	-2%
16	91	5%	-4%

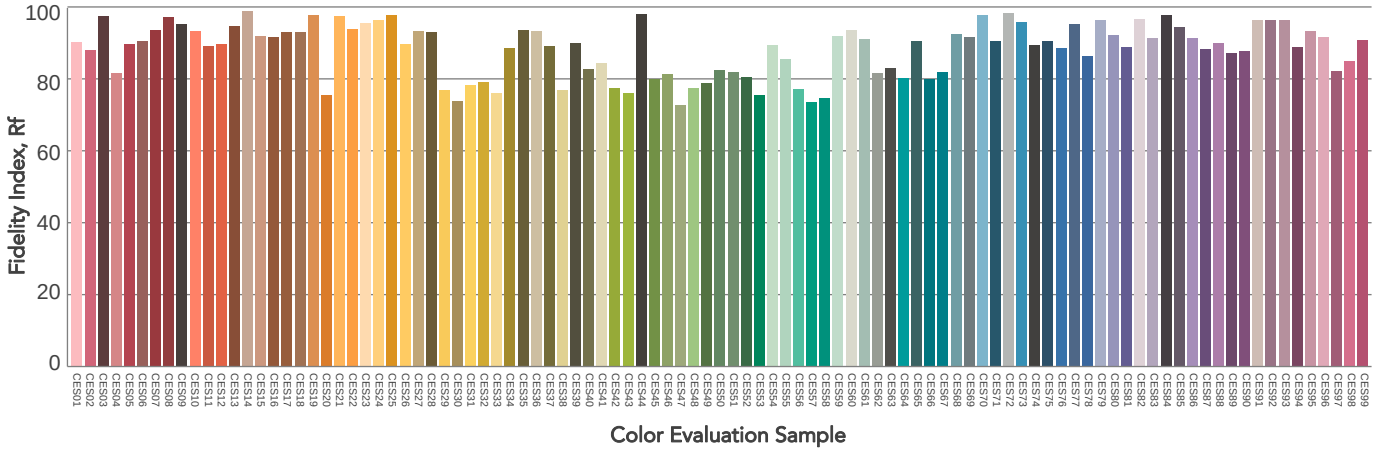












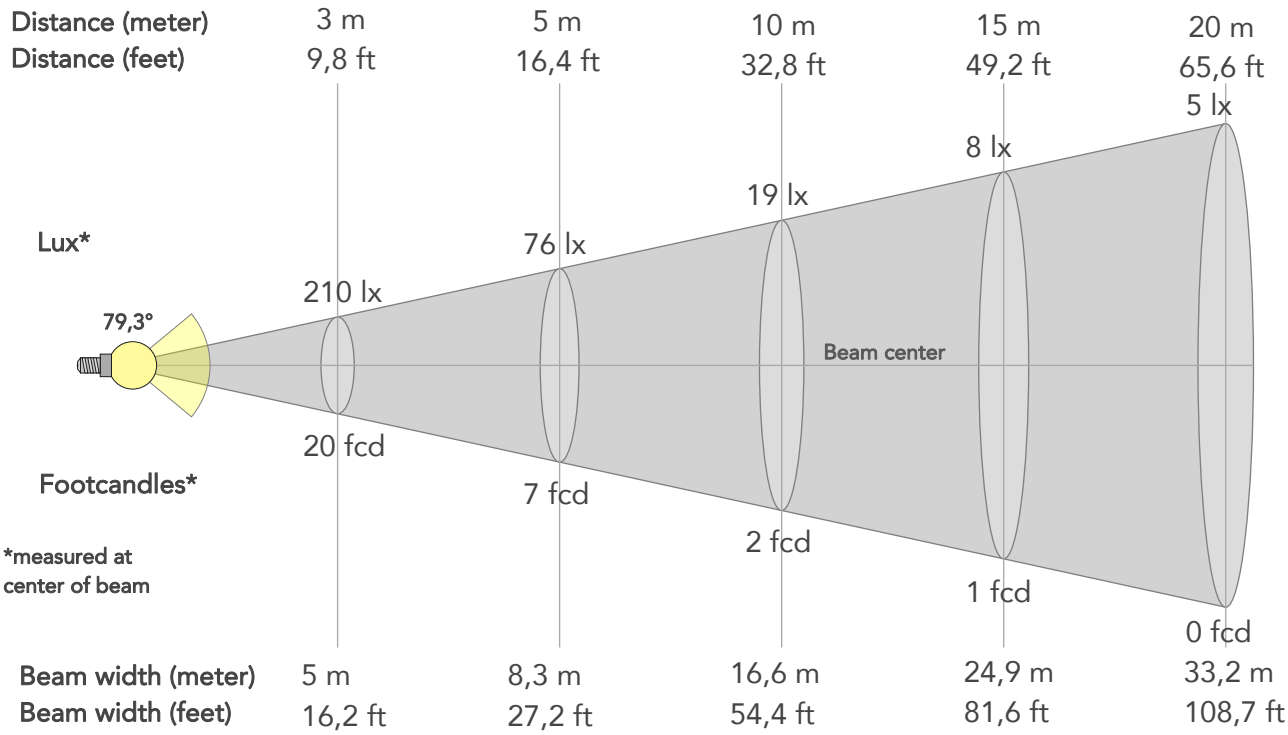
PROLIGHTS is a trademark of **MUSIC & LIGHTS** S.r.l.
musiclights.it

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

BEAM DETAILS

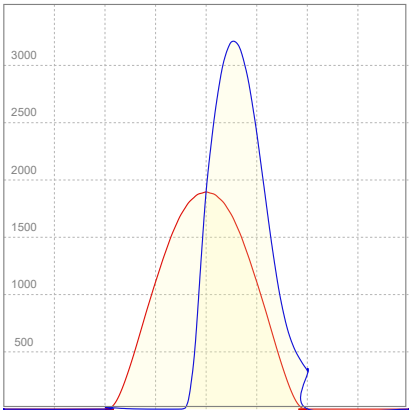
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
79,3°	125,7°	134,7°	81,7%	57,5%



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	1894lx	474lx	210lx	118lx	76lx	34lx	19lx	8lx	5lx	3lx	2lx	1lx	1lx
Footcand.	176fcd	44fcd	20fcd	11fcd	7fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,7m	3,3m	5m	6,6m	8,3m	12,4m	16,6m	24,9m	33,2m	41,4m	49,7m	66,3m	82,9m
Beam wid.	5,5ft	10,9ft	16,2ft	21,7ft	27,2ft	40,8ft	54,4ft	81,6ft	108,7ft	135,9ft	163,1ft	217,5ft	271,8ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

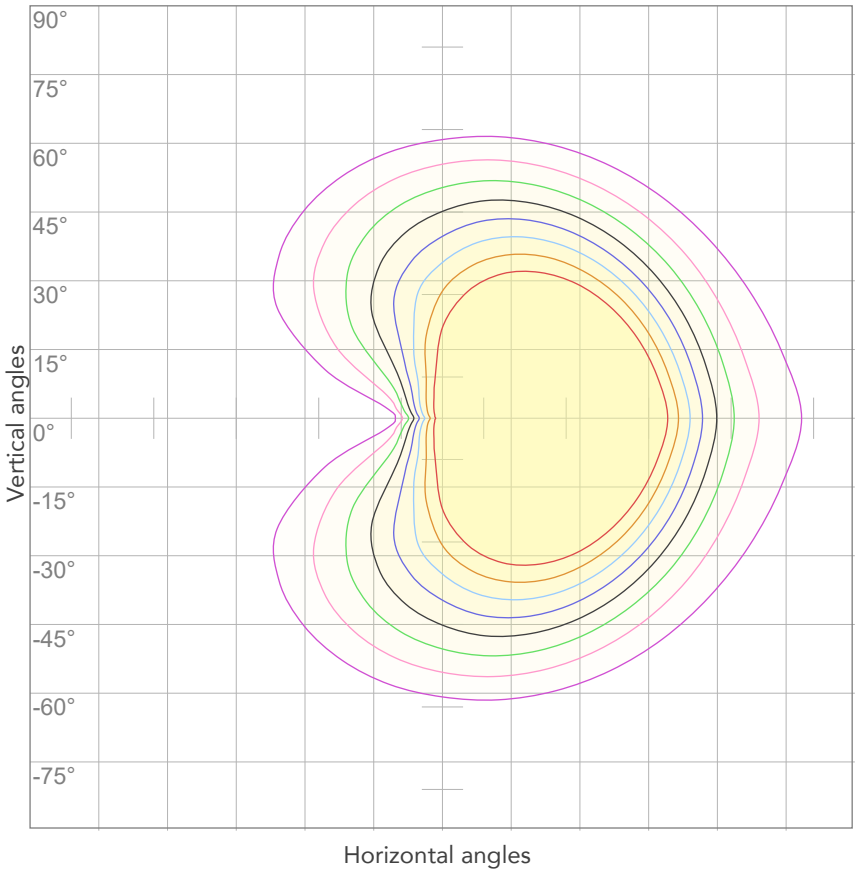
Input voltage	Input current	Input power	Effeciency
227V	0,383A	79,9W	60lm/W

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

ISO DIAGRAMS

ISO CANDELA DIAGRAM



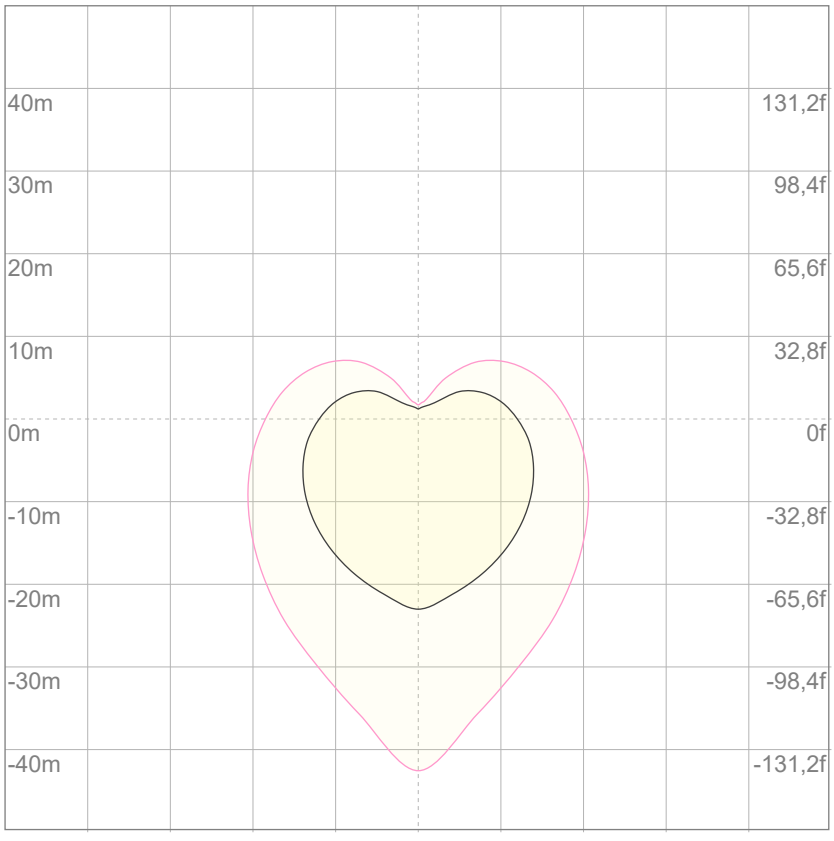
10%	189 cd
20%	379 cd
30%	568 cd
40%	758 cd
50%	947 cd
60%	1136 cd
70%	1326 cd
80%	1515 cd

Conditions:

Number of c-planes: 4

Candela at center: 1894 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,568 lx
5%	0,947 lx
10%	1,89 lx
30%	5,68 lx
50%	9,47 lx

Conditions:

Number of c-planes: 4

Lux at center: 18,9 lx

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

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

Total lumen output:

4905 lm

Peak candela output:

3270 cd

Light quality:

CRI: 90,5

Color temperature:

3971 K

PRODUCT NAME:

ECL CYC050

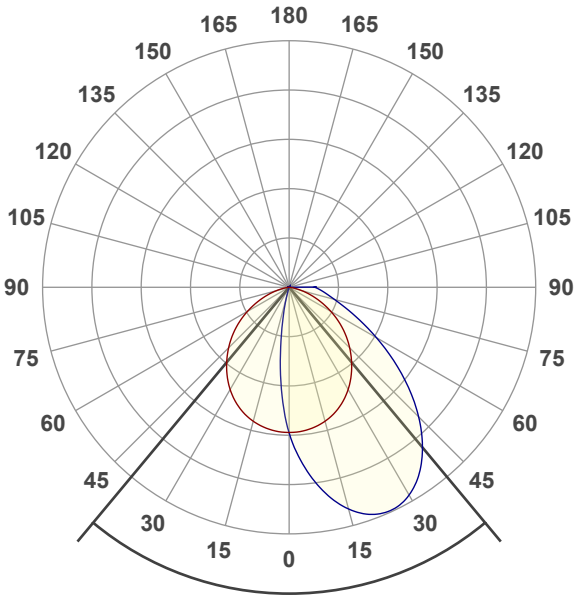
MEASURAMENT CONDITIONS:

Beam angle:
Filter 40

Target:
4000K

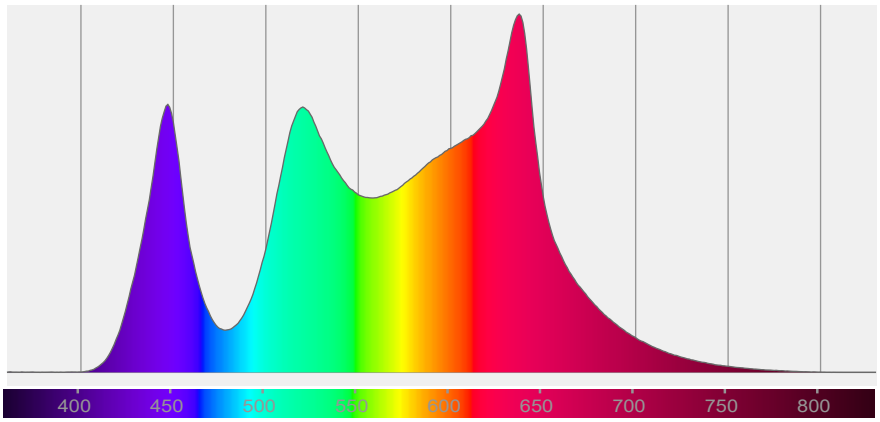
Operator:
Paolo Carvone

Date and time:
13/04/2022 15:18:01

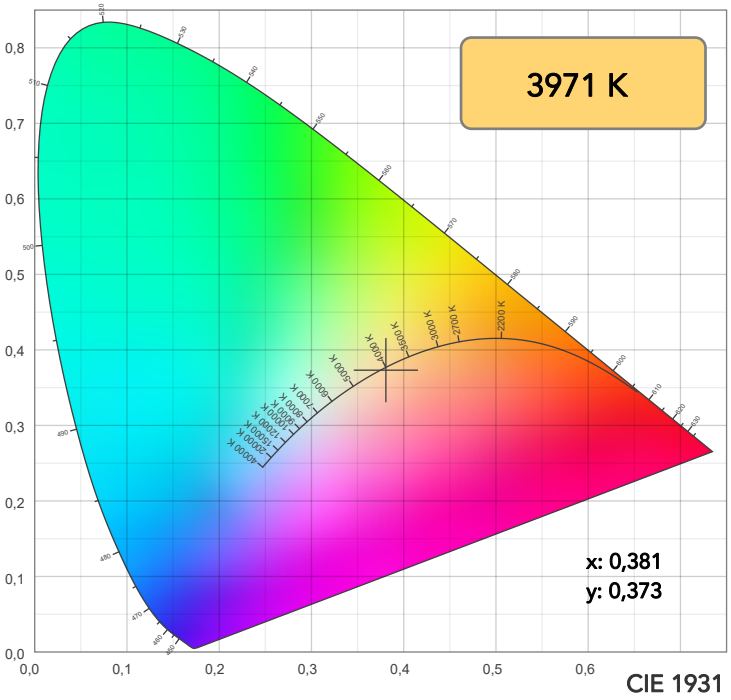


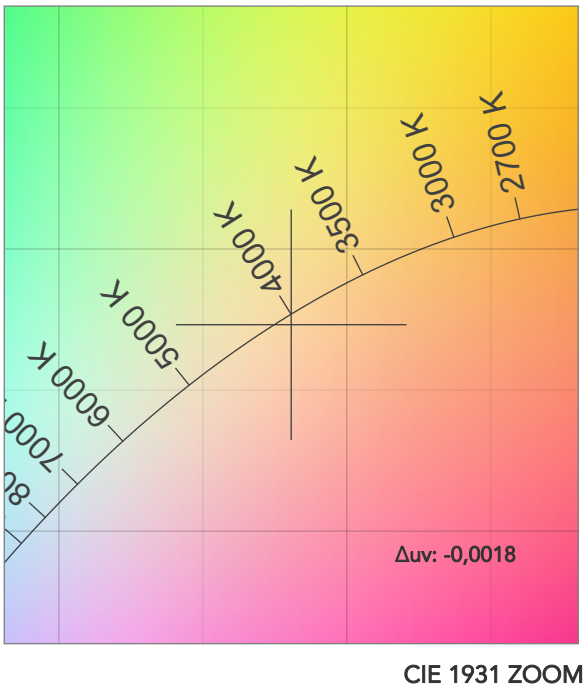
Beam angle 50%: 79,6°
Field angle 10%: 125,9°
Cut off angle 2.5%: 134,9°

Spectra

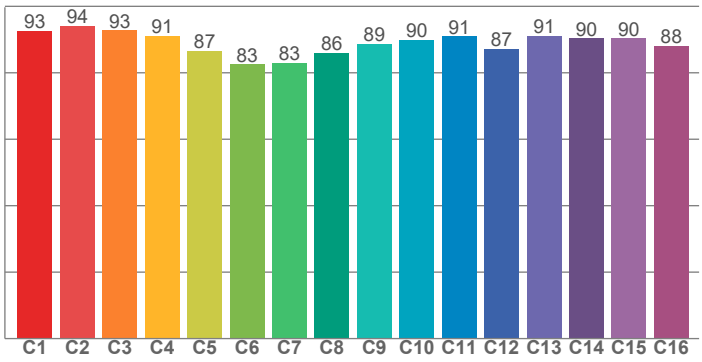


COLOR DETAILS

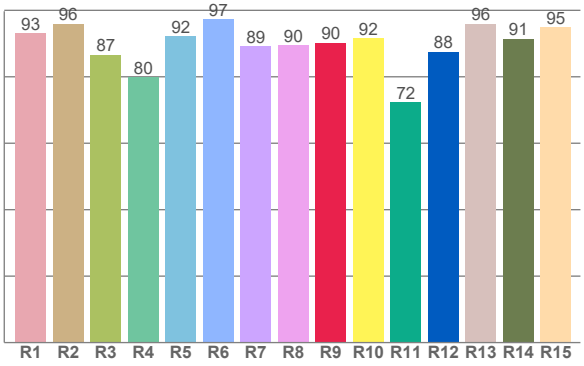




TM30: 89,3



CRI: 90,5 (R1-R8)



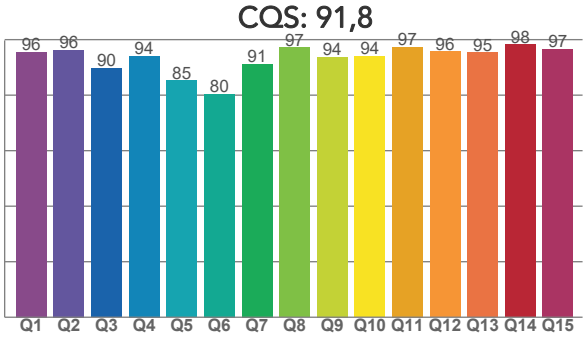
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93,2	95,9	86,6	79,8	92,2	97,3	89,2	89,5	90,3	91,6	72,4	87,6	95,9	91,4	94,9

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
92,7	94,1	92,8	91,1	86,6	82,6	82,9	85,9	88,6	89,9	90,9	87,2	91,1	90,4	90,3	88,1

CQS: 91,8



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,6	96,2	89,6	94,1	85,3	80,5	91,2	97,1	93,7	94,0	97,4	95,7	95,3	98,2	96,7

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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3971 K	90,5	90,3	89,3	108,9	91,8	73	0,381	0,373	-0,0018

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

TM30 DETAILS

PROLiGHTS

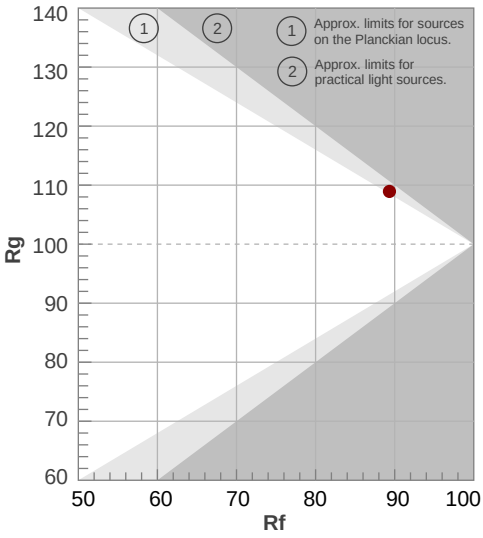
Rf 89,3

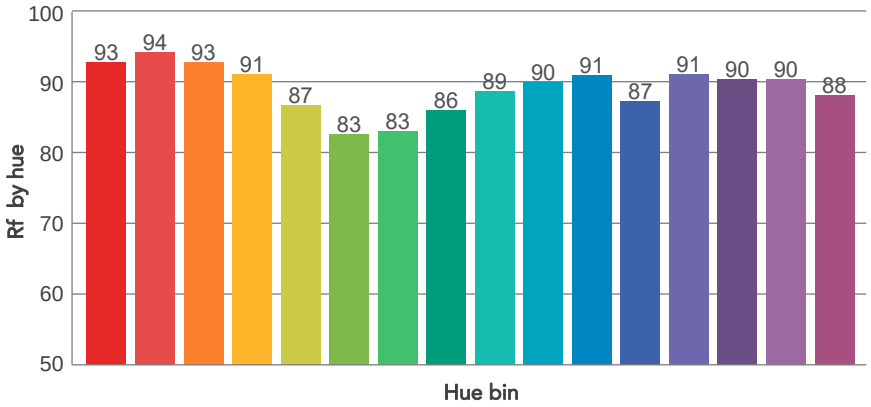
Fidelity index Rf

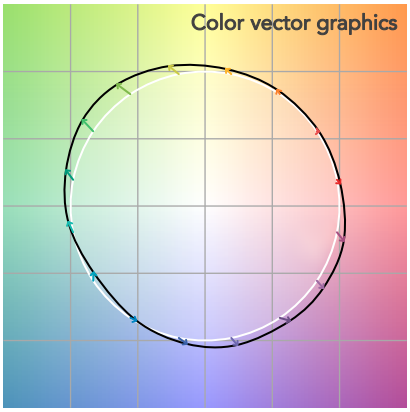
Rg 108,9

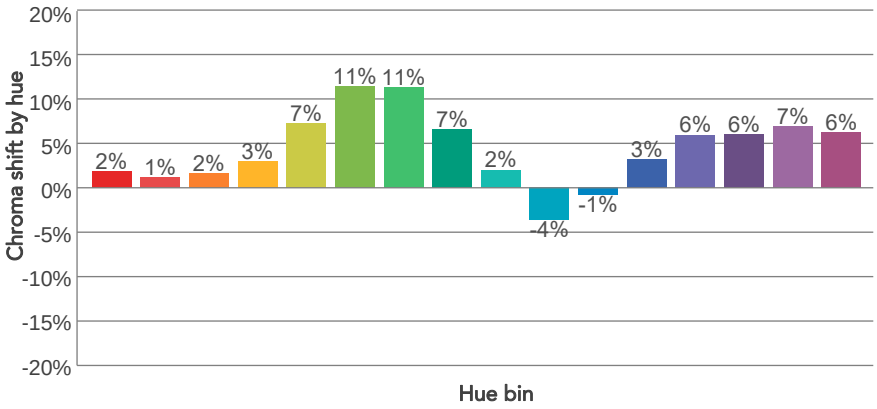
Gammut index

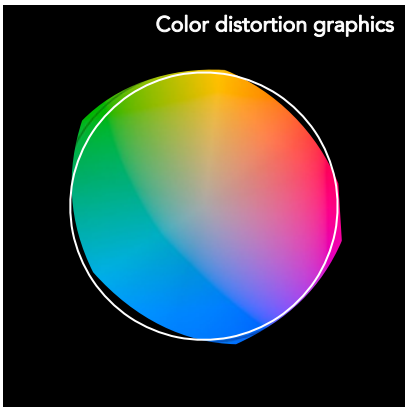
Hue Bin	R_f	Graphic shifts (%) Chroma	Hue
1	93	2%	-3%
2	94	1%	-1%
3	93	2%	3%
4	91	3%	5%
5	87	7%	6%
6	83	11%	4%
7	83	11%	-3%
8	86	7%	-6%
9	89	2%	-8%
10	90	-4%	-5%
11	91	-1%	5%
12	87	3%	7%
13	91	6%	3%
14	90	6%	5%
15	90	7%	-2%
16	88	6%	-5%

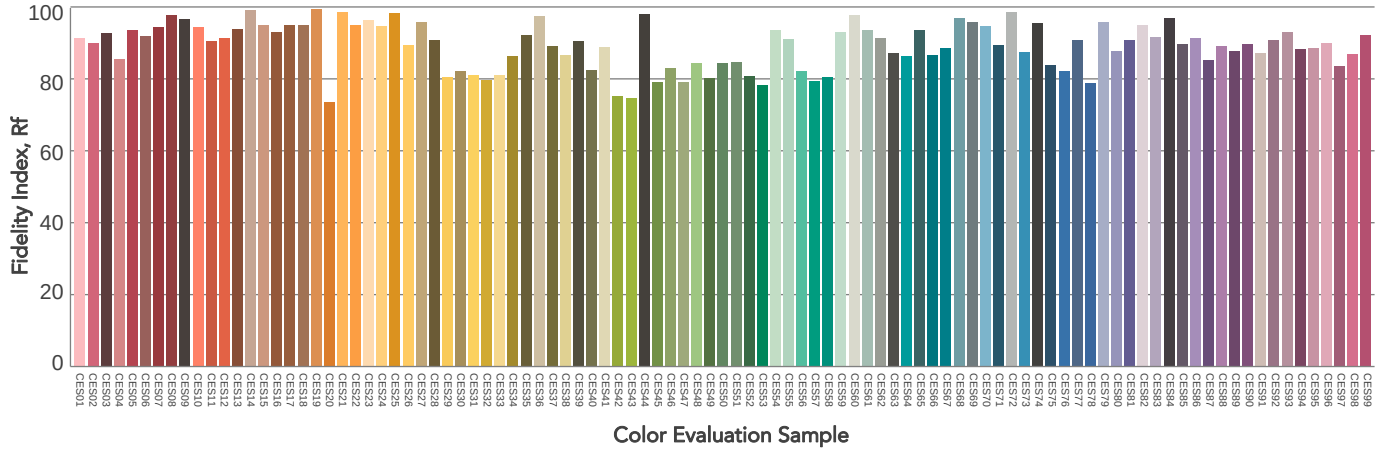












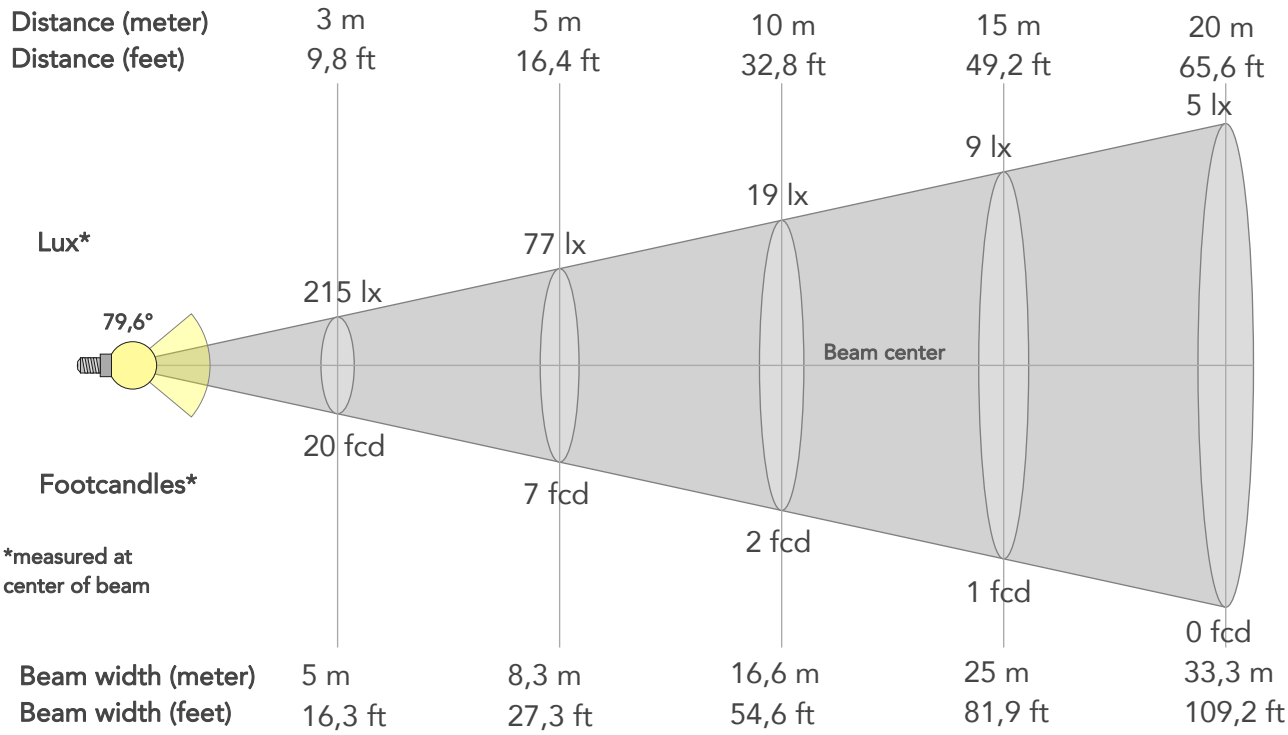
PROLIGHTS is a trademark of **MUSIC & LIGHTS** S.r.l.
musiclights.it

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

BEAM DETAILS

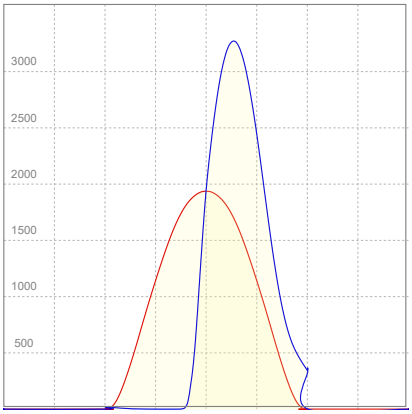
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
79,6°	125,9°	134,9°	81,7%	57,5%



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	1937lx	484lx	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.	1,7m	3,3m	5m	6,7m	8,3m	12,5m	16,6m	25m	33,3m	41,6m	49,9m	66,6m	83,2m
Beam wid.	5,5ft	11ft	16,3ft	21,8ft	27,3ft	41ft	54,6ft	81,9ft	109,2ft	136,5ft	163,8ft	218,4ft	273,1ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

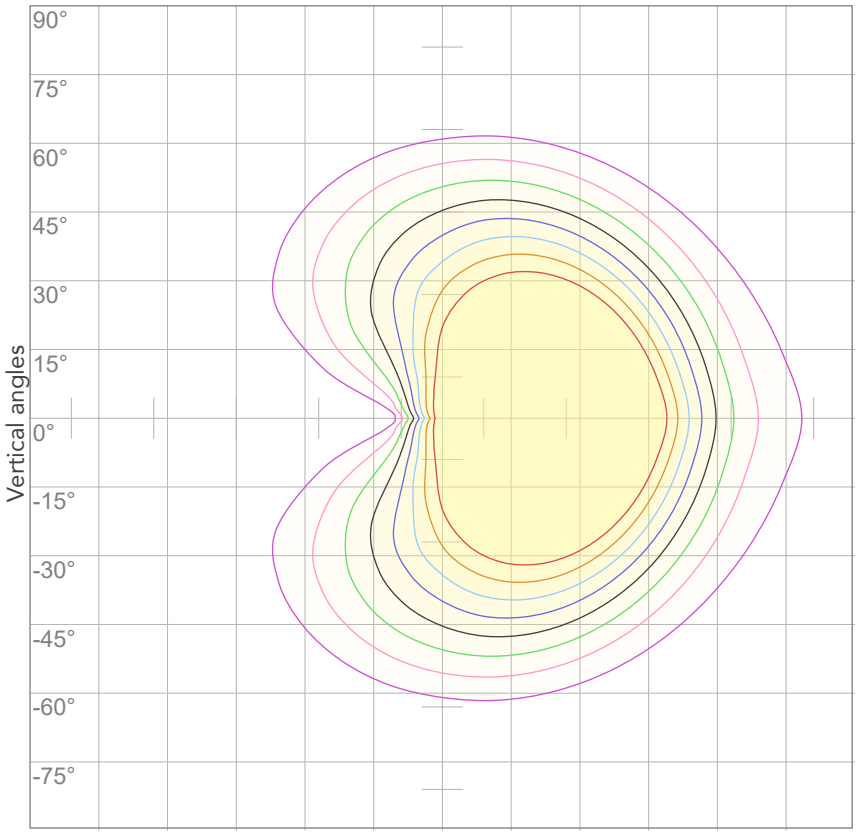
Input voltage	Input current	Input power	Effeciency
228V	0,406A	85,1W	58lm/W

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

ISO DIAGRAMS

ISO CANDELA DIAGRAM



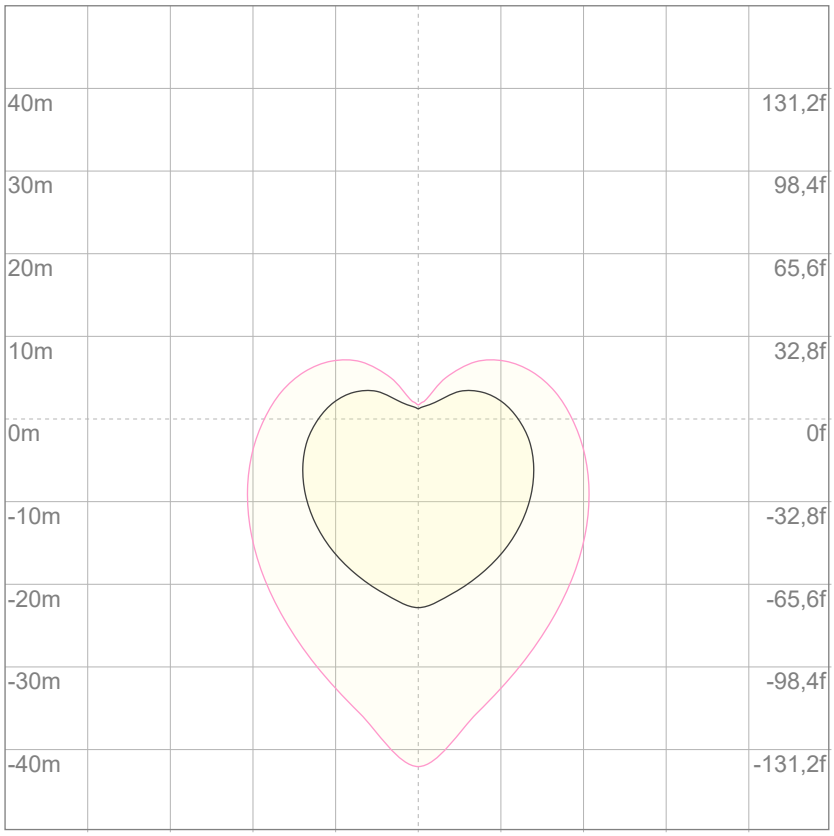
10%	194 cd
20%	387 cd
30%	581 cd
40%	775 cd
50%	968 cd
60%	1162 cd
70%	1356 cd
80%	1549 cd

Conditions:

Number of c-planes: 4

Candela at center: 1937 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,581 lx
5%	0,968 lx
10%	1,94 lx
30%	5,81 lx
50%	9,68 lx

Conditions:

Number of c-planes: 4

Lux at center: 19,4 lx

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

Total lumen output:

5294 lm

Peak candela output:

3508 cd

Light quality:

CRI: 88,4

Color temperature:

5596 K

PRODUCT NAME:

ECL CYC050

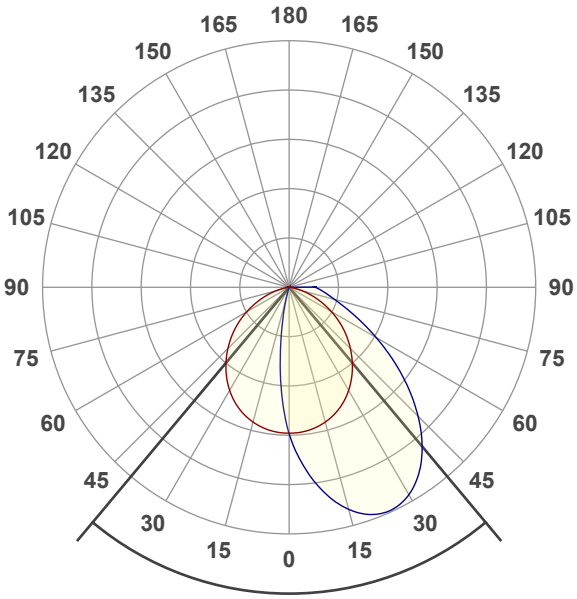
MEASURAMENT CONDITIONS:

Beam angle:
Filter 40

Target:
5600K

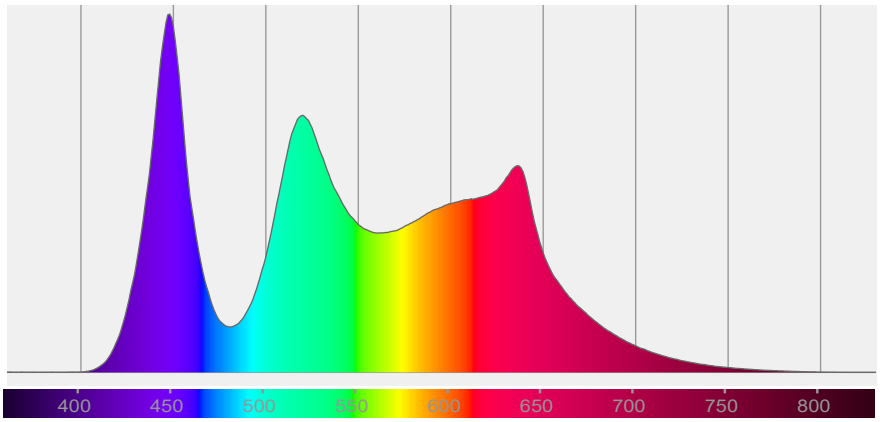
Operator:
Paolo Carvone

Date and time:
13/04/2022 15:21:09



Beam angle 50%: 79,8°
Field angle 10%: 126,1°
Cut off angle 2.5%: 135,1°

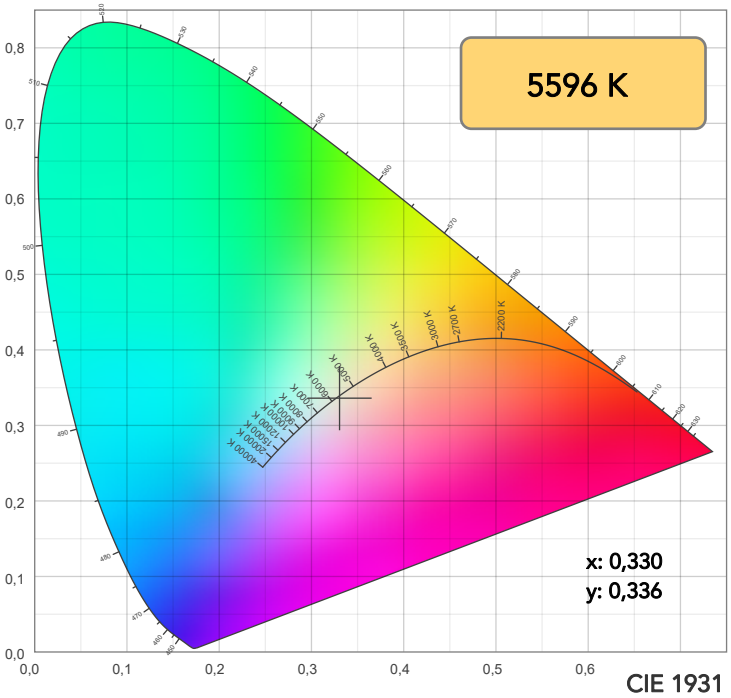
Spectra



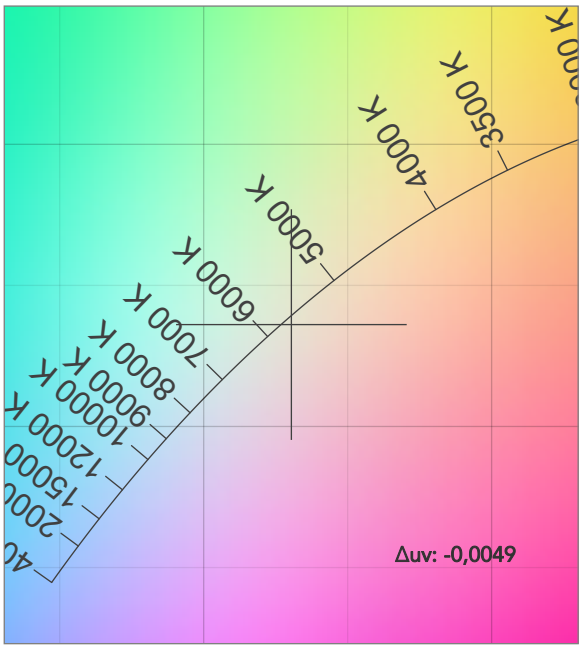
Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

COLOR DETAILS

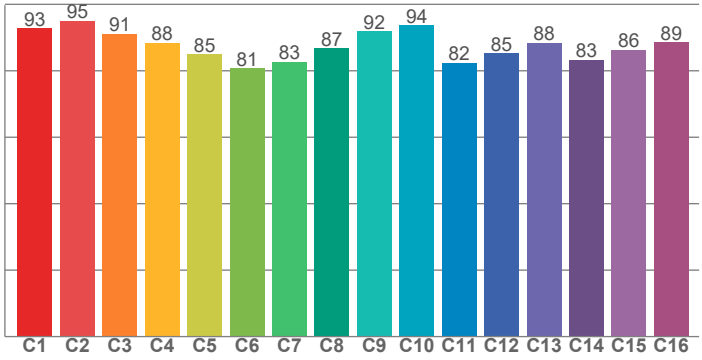


CIE 1931

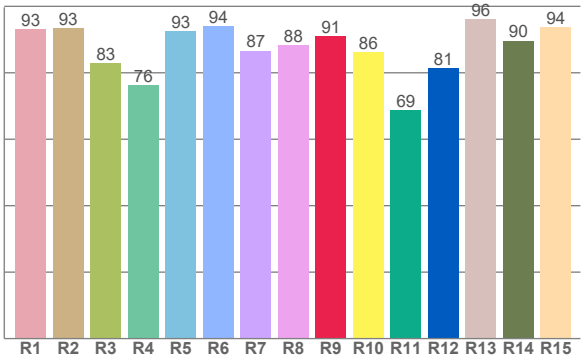


CIE 1931 ZOOM

TM30: 87,6



CRI: 88,4 (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
93,2	93,4	82,9	76,3	92,6	94,1	86,6	88,4	91,1	86,2	68,7	81,4	96,1	89,6	93,7

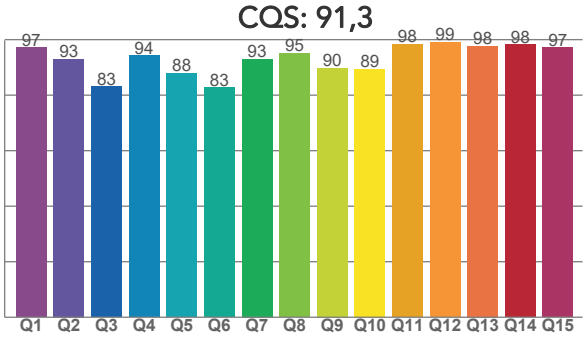
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,7	95,0	91,1	88,4	85,0	80,8	82,7	86,8	91,8	93,6	82,3	85,3	88,5	83,2	86,2	88,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,1	93,0	83,0	94,3	87,9	82,7	93,0	95,1	89,9	89,4	98,3	99,1	97,6	98,2	97,1

CQS: 91,3



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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5596 K	88,4	91,1	87,6	109,7	91,3	79	0,330	0,336	-0,0049

TM30 DETAILS

PROLiGHTS

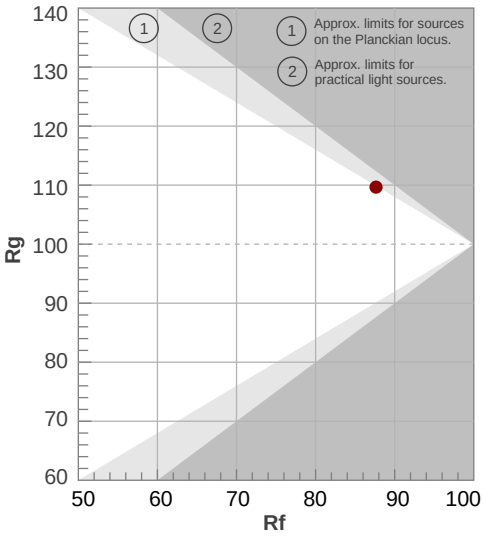
Rf 87,6

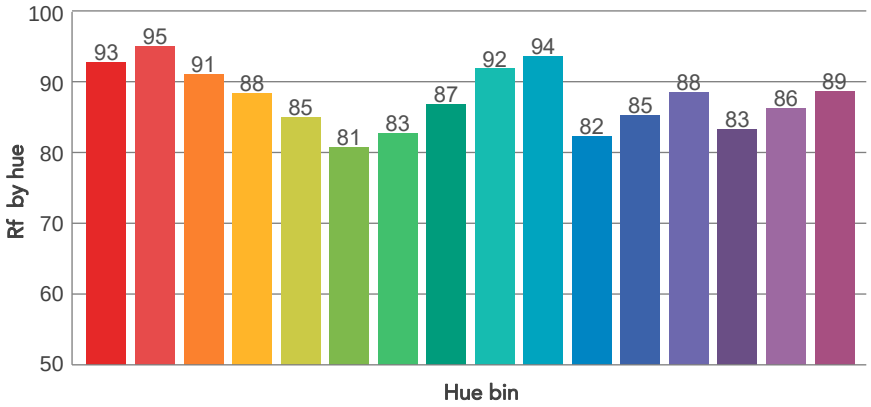
Fidelity index Rf

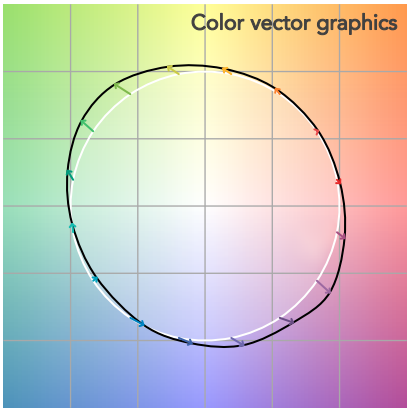
Rg 109,7

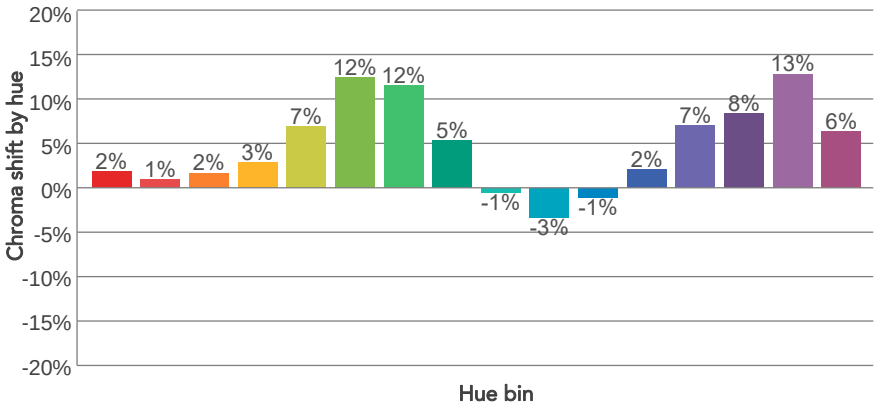
Gammut index

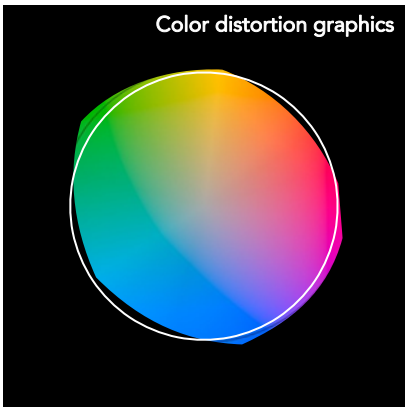
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	93	2%	-3%
2	95	1%	0%
3	91	2%	5%
4	88	3%	7%
5	85	7%	7%
6	81	12%	5%
7	83	12%	-2%
8	87	5%	-6%
9	92	-1%	-6%
10	94	-3%	-1%
11	82	-1%	11%
12	85	2%	10%
13	88	7%	8%
14	83	8%	6%
15	86	13%	-2%
16	89	6%	-3%

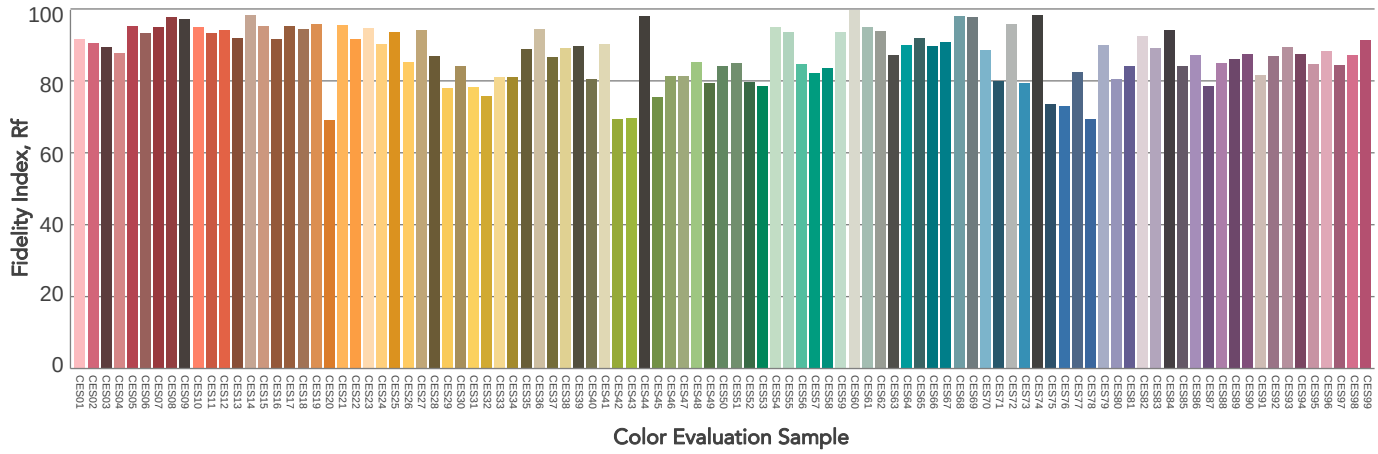












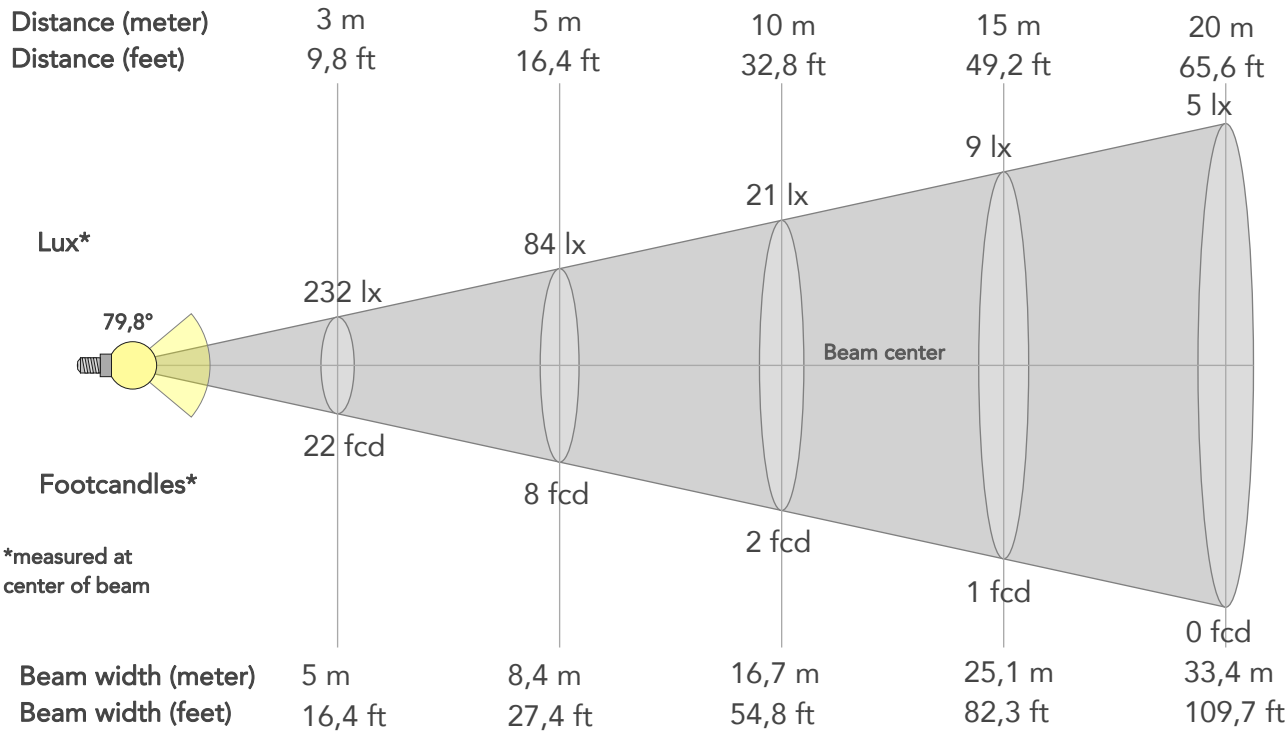
PROLIGHTS is a trademark of **MUSIC & LIGHTS** S.r.l.
musiclights.it

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

BEAM DETAILS

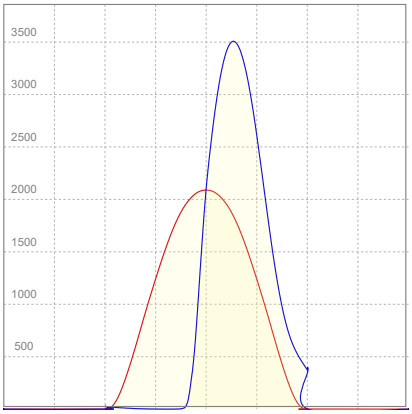
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
79,8°	126,1°	135,1°	81,5%	57,4%



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	2089lx	522lx	232lx	131lx	84lx	37lx	21lx	9lx	5lx	3lx	2lx	1lx	1lx
Footcand.	194fcd	49fcd	22fcd	12fcd	8fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,7m	3,3m	5m	6,7m	8,4m	12,5m	16,7m	25,1m	33,4m	41,8m	50,2m	66,9m	83,6m
Beam wid.	5,5ft	11ft	16,4ft	21,9ft	27,4ft	41,1ft	54,8ft	82,3ft	109,7ft	137,1ft	164,5ft	219,4ft	274,2ft

LINEAR DISTRIBUTION DIAGRAM

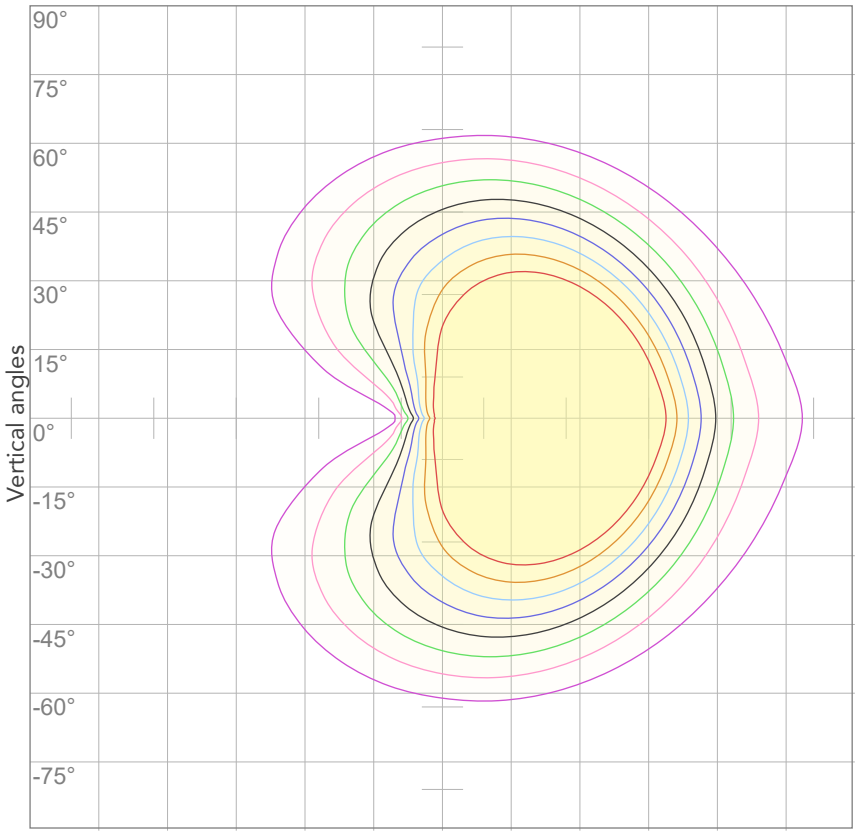


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
228V	0,440A	93,1W	57lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



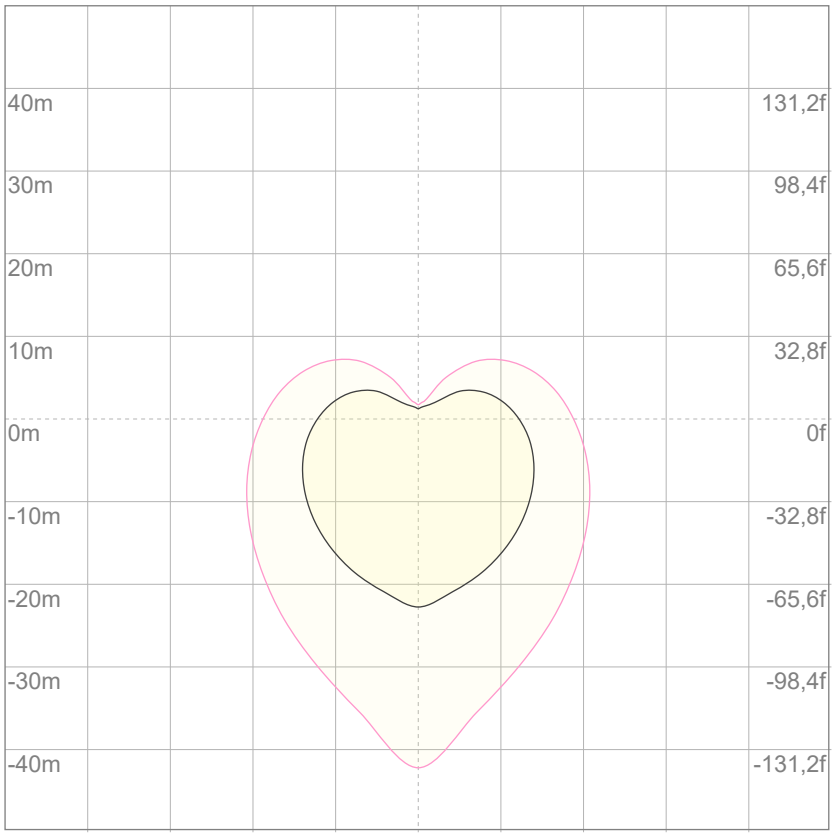
10%	209 cd
20%	418 cd
30%	627 cd
40%	835 cd
50%	1044 cd
60%	1253 cd
70%	1462 cd
80%	1671 cd

Conditions:

Number of c-planes: 4

Candela at center: 2089 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,627 lx
5%	1,04 lx
10%	2,09 lx
30%	6,27 lx
50%	10,4 lx

Conditions:

Number of c-planes: 4

Lux at center: 20,9 lx

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

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

Total lumen output:

5188 lm

Peak candela output:

3434 cd

Light quality:

CRI: 88,2

Color temperature:

6017 K

PRODUCT NAME:

ECL CYC050

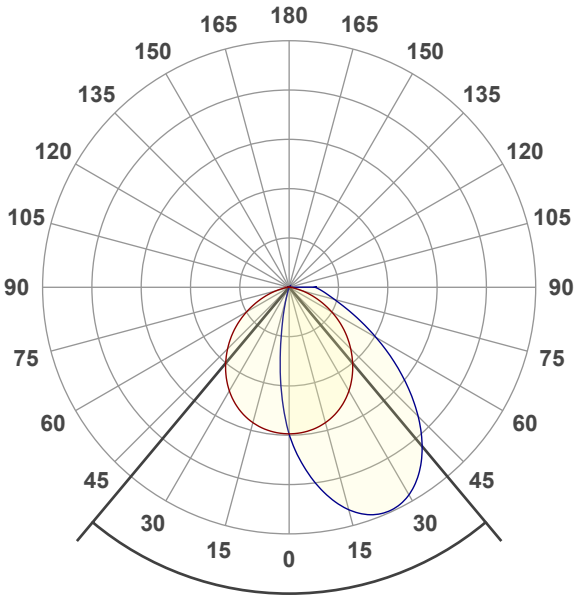
MEASURAMENT CONDITIONS:

Beam angle:
Filter 40

Target:
6000K

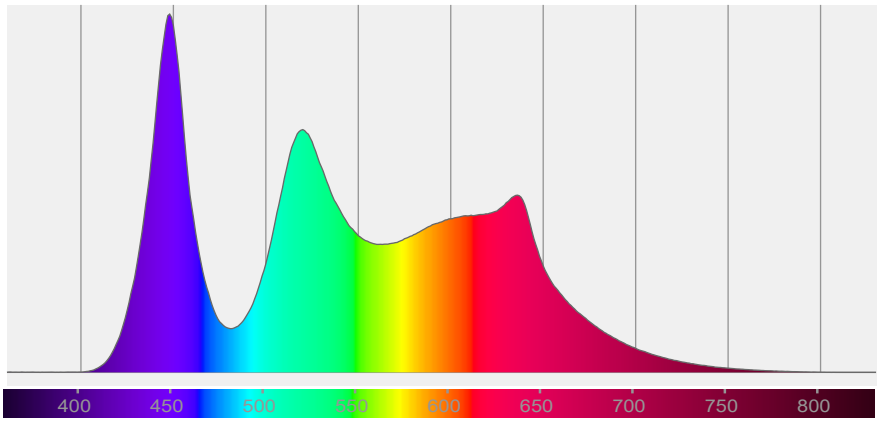
Operator:
Paolo Carvone

Date and time:
13/04/2022 15:23:38

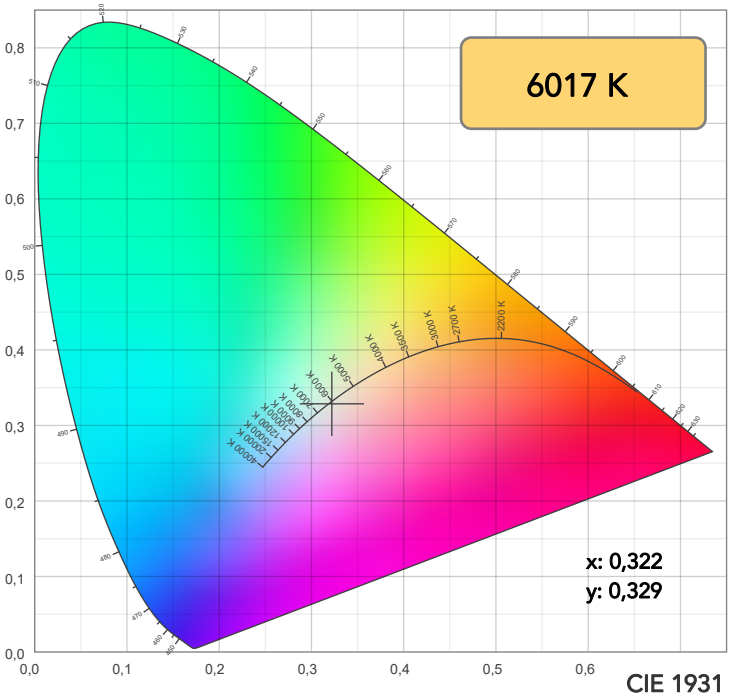


Beam angle 50%: 79,8°
Field angle 10%: 126°
Cut off angle 2.5%: 135,1°

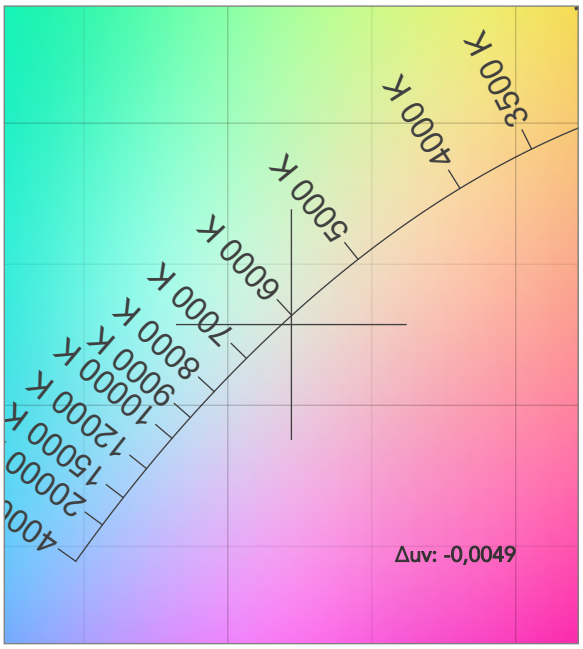
Spectra



COLOR DETAILS

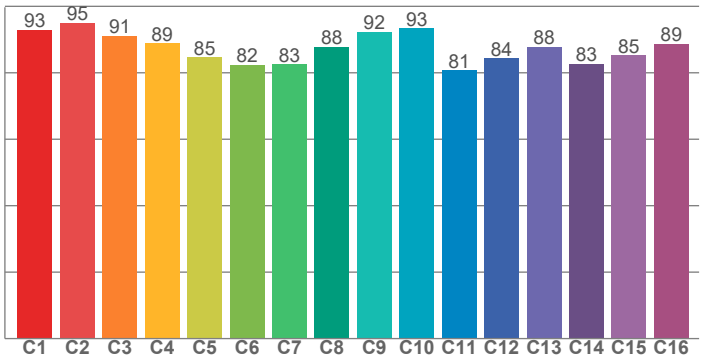


CIE 1931

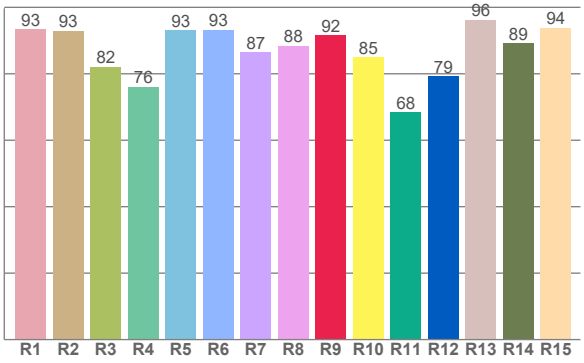


CIE 1931 ZOOM

TM30: 87,5



CRI: 88,2 (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
93,3	92,9	82,2	76,1	93,0	93,3	86,5	88,4	91,5	84,9	68,5	79,2	96,3	89,3	93,9

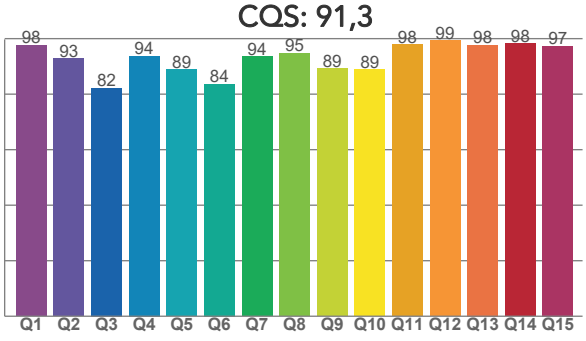
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,9	95,1	91,2	88,9	84,6	82,4	82,5	87,8	92,4	93,4	80,7	84,3	87,8	82,7	85,3	88,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,6	92,8	82,2	93,7	88,9	83,7	93,6	94,7	89,3	88,8	97,8	99,3	97,7	98,2	97,4

CQS: 91,3



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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6017 K	88,2	91,5	87,5	109,5	91,3	80	0,322	0,329	-0,0049

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

TM30 DETAILS

PROLiGHTS

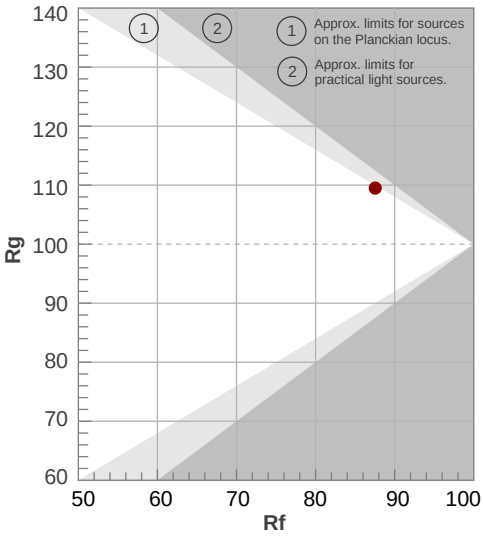
Rf 87,5

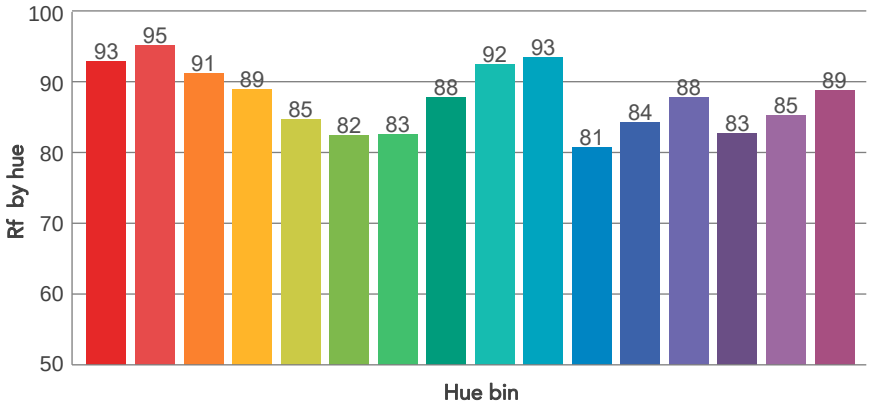
Fidelity index Rf

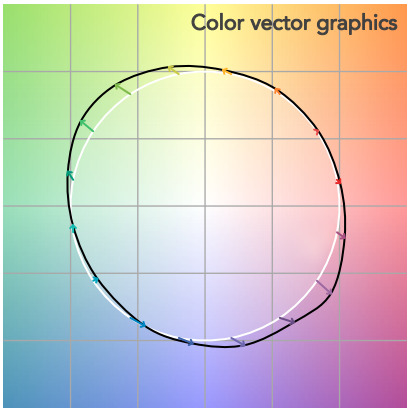
Rg 109,5

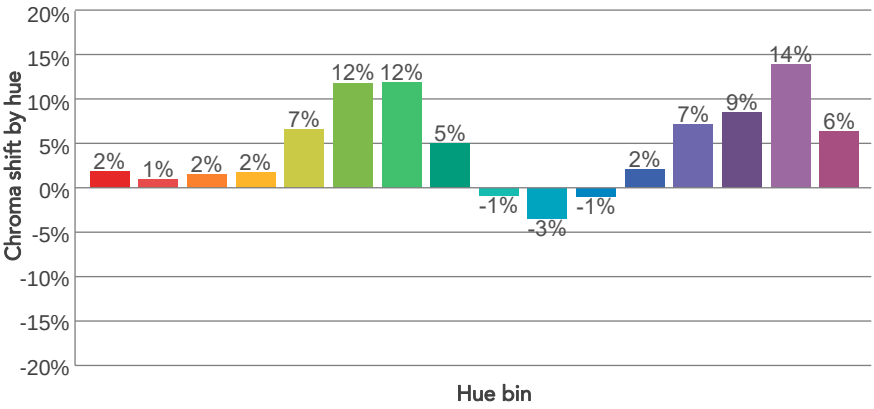
Gammut index

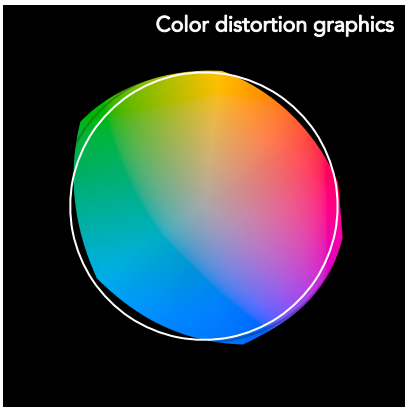
Hue Bin	R_f	Graphic shifts (%) Chroma	Hue
1	93	2%	-3%
2	95	1%	0%
3	91	2%	5%
4	89	2%	7%
5	85	7%	6%
6	82	12%	5%
7	83	12%	-1%
8	88	5%	-5%
9	92	-1%	-5%
10	93	-3%	0%
11	81	-1%	12%
12	84	2%	11%
13	88	7%	8%
14	83	9%	7%
15	85	14%	-2%
16	89	6%	-3%

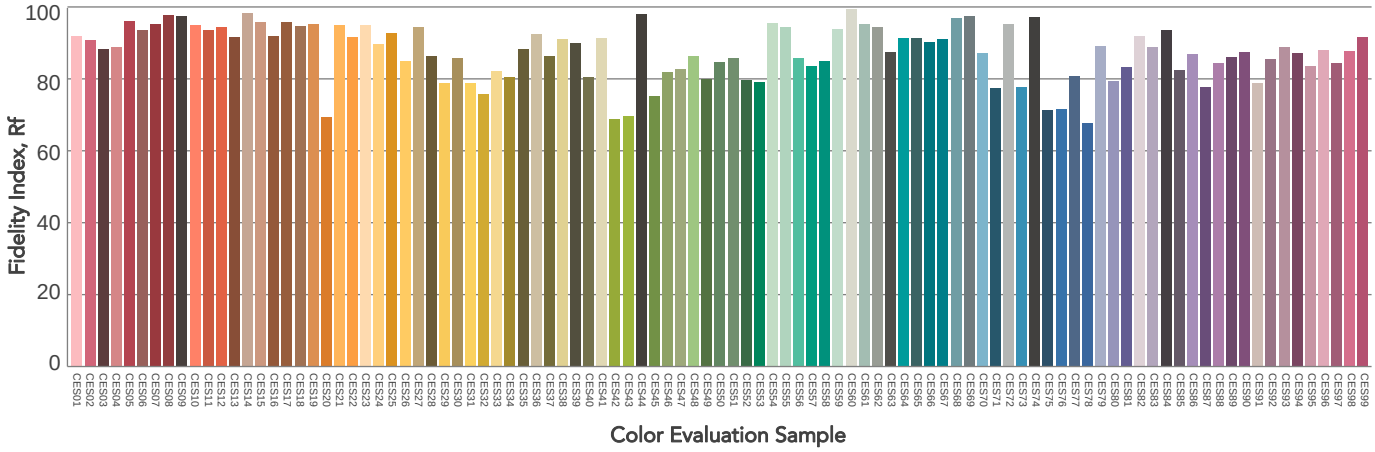












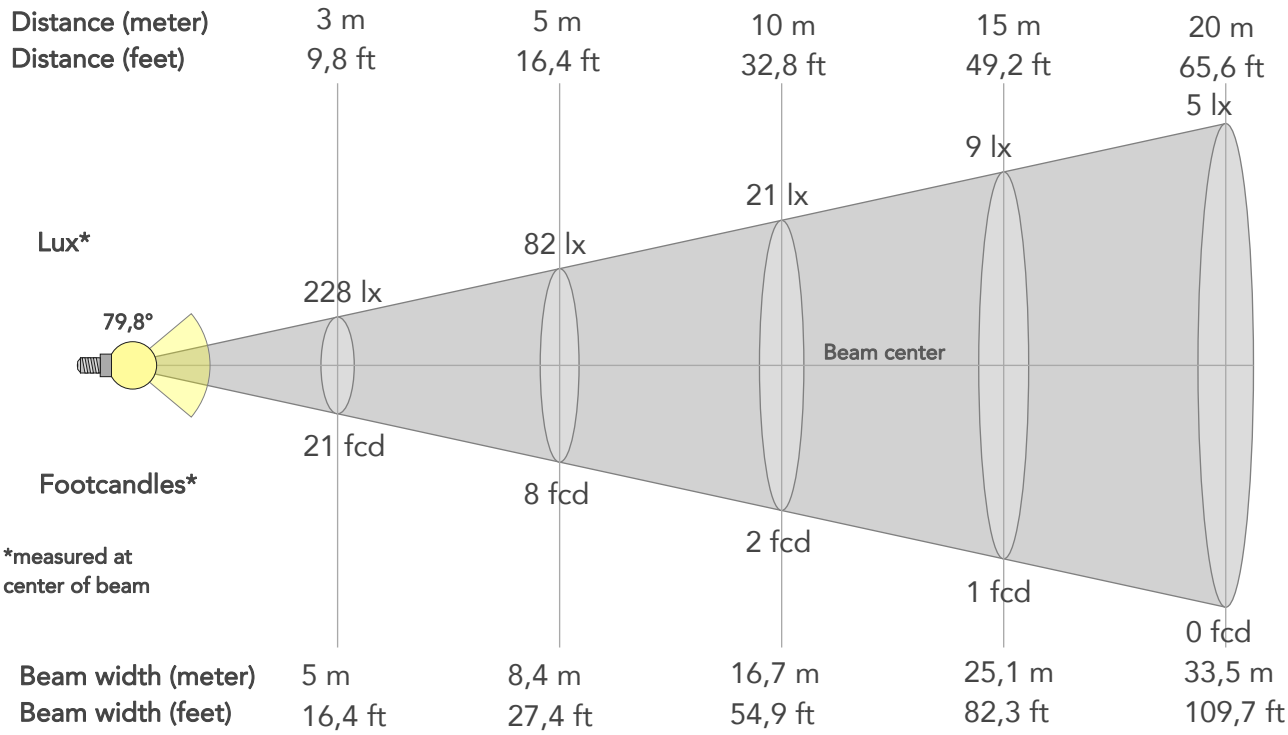
PROLIGHTS is a trademark of **MUSIC & LIGHTS** S.r.l.
musiclights.it

Via A. Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
info@prolights.it

BEAM DETAILS

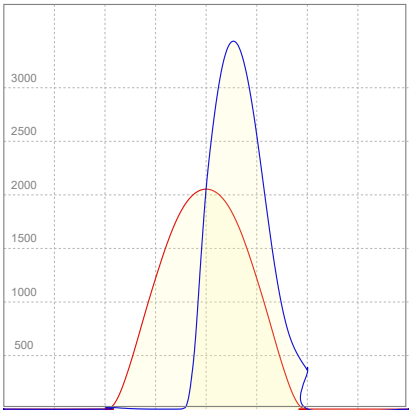
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
79,8°	126°	135,1°	81,6%	57,4%



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	2053lx	513lx	228lx	128lx	82lx	36lx	21lx	9lx	5lx	3lx	2lx	1lx	1lx
Footcand.	191fcd	48fcd	21fcd	12fcd	8fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,7m	3,3m	5m	6,7m	8,4m	12,5m	16,7m	25,1m	33,5m	41,8m	50,2m	66,9m	83,6m
Beam wid.	5,5ft	11ft	16,4ft	21,9ft	27,4ft	41,1ft	54,9ft	82,3ft	109,7ft	137,2ft	164,6ft	219,5ft	274,3ft

LINEAR DISTRIBUTION DIAGRAM

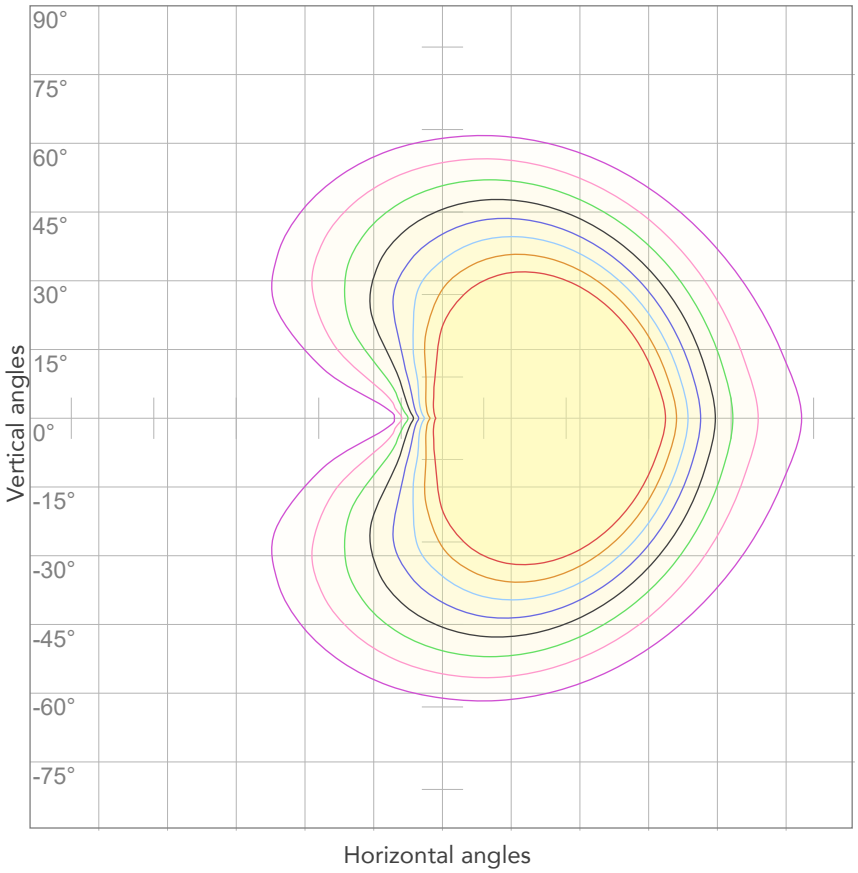


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,442A	92,5W	56lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



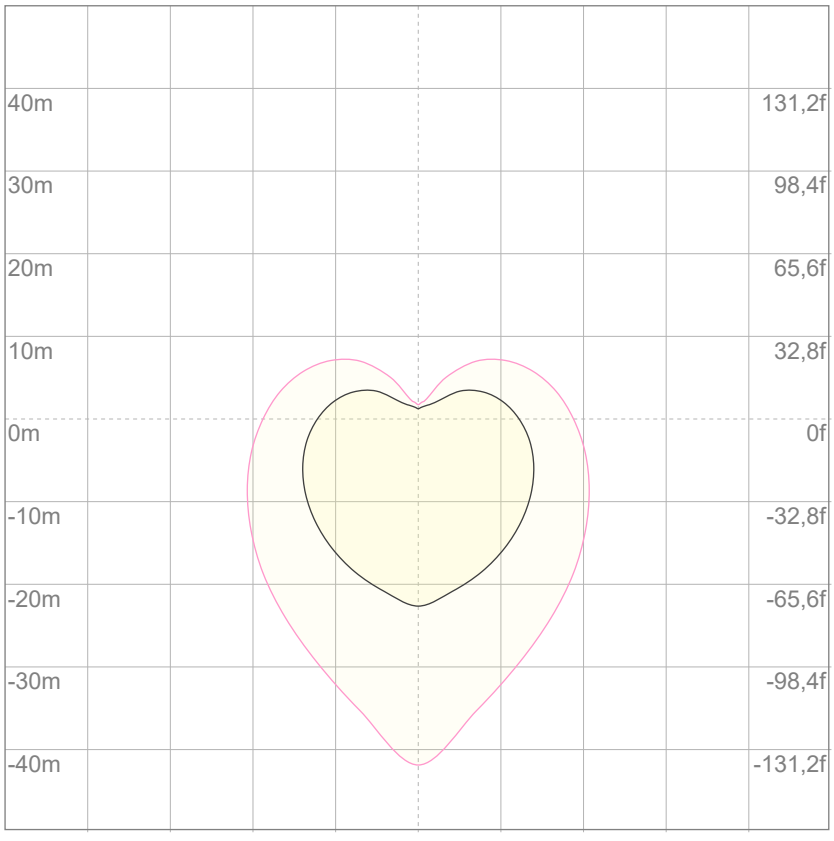
10%	205 cd
20%	411 cd
30%	616 cd
40%	821 cd
50%	1027 cd
60%	1232 cd
70%	1437 cd
80%	1642 cd

Conditions:

Number of c-planes: 4

Candela at center: 2053 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,616 lx
5%	1,03 lx
10%	2,05 lx
30%	6,16 lx
50%	10,3 lx

Conditions:

Number of c-planes: 4

Lux at center: 20,5 lx

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