

# Photometric Test Report



## ArcSpot MVW

IP66 Spot featuring 4600 lumen with 19x 4W  
Variable White source,  
15° degree lens

## CONTENTS

Table of contents	2
Testing process	3
Color preset:	
Full On	4
Warm White	9
Cold White	14
2700K	19
3200K	24
4000K	29
5600K	34
6500K	39

## 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:

4220 lm

Peak candela output:

36362 cd

Light quality:

CRI: 93,8

Color temperature:

4206 K

**PRODUCT NAME:**

ARCSPOTM VW

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

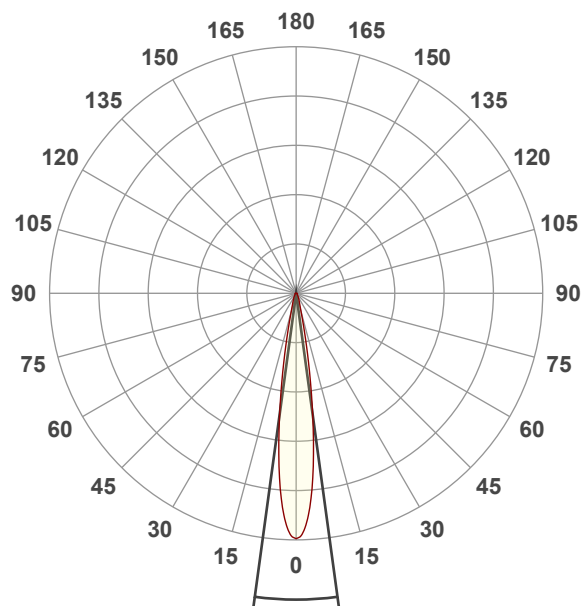
Full On

Operator:

Giacomo Matteo

Date and time:

22/02/2024 12:07:38

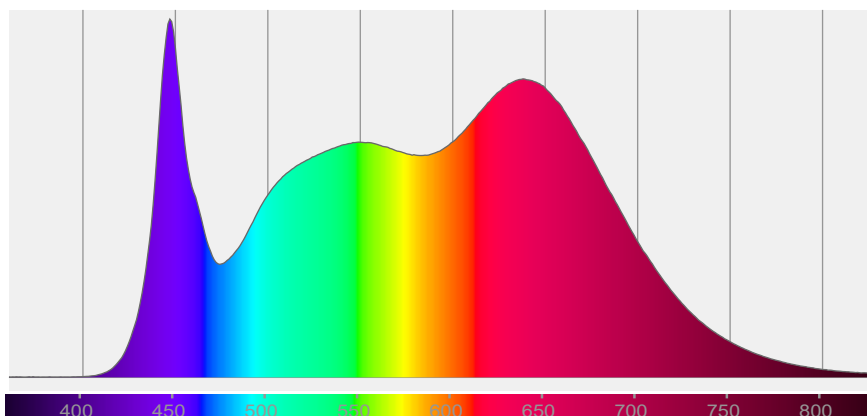


Beam angle 50%: 15,5°

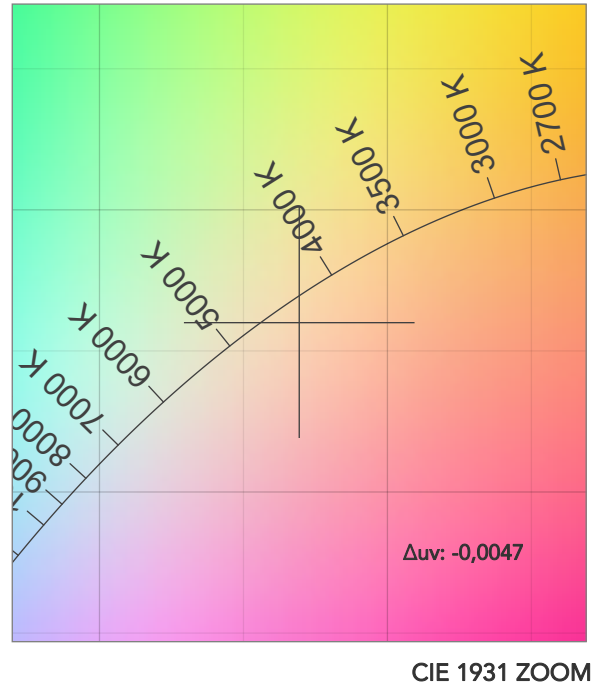
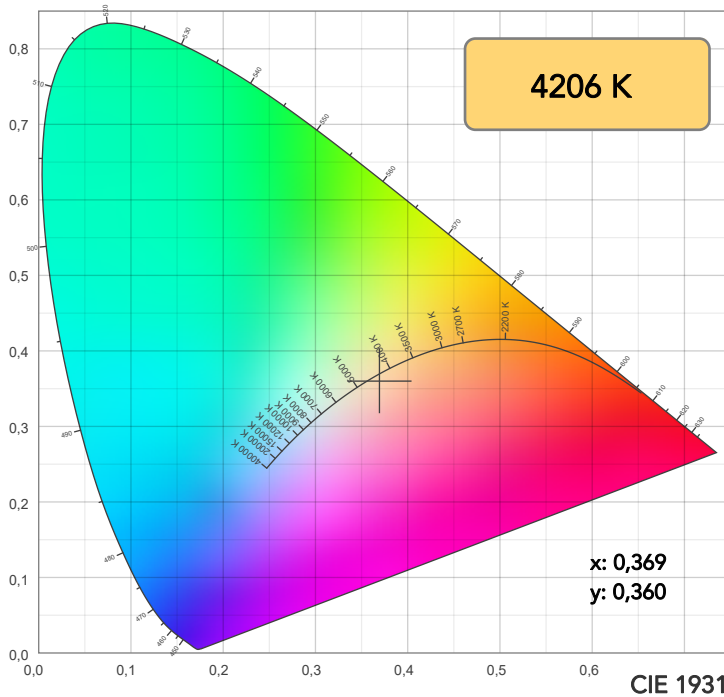
Field angle 10%: 27,9°

Cut off angle 2.5%: 50,7°

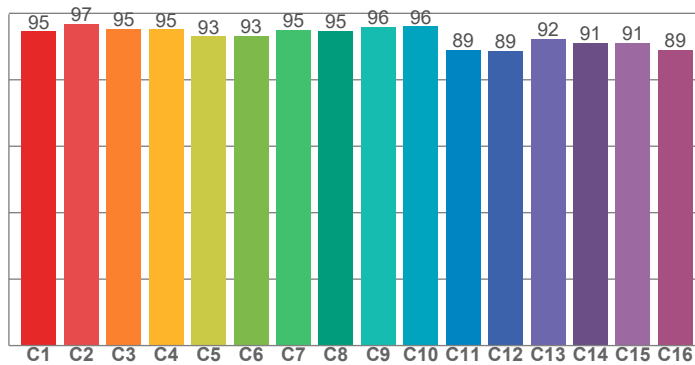
**Spectra**



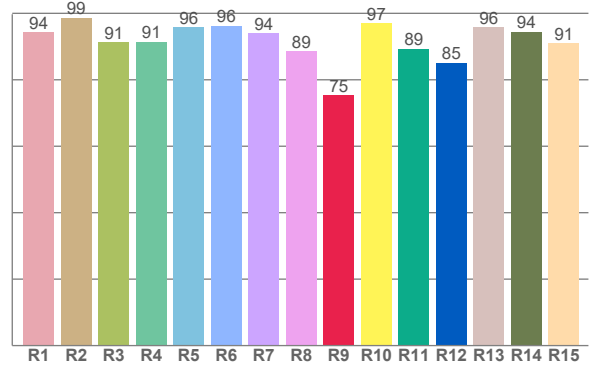
# COLOR DETAILS



TM30: 93,4



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
94,3	98,7	91,3	91,5	95,8	96,2	94,1	88,7	75,3	97,0	89,4	85,1	95,7	94,4	90,9

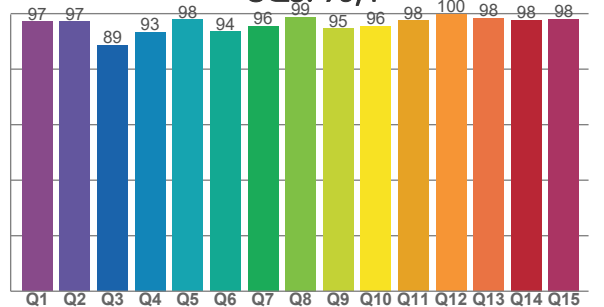
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,6	96,9	95,4	95,2	93,0	93,2	95,1	94,8	96,0	96,0	89,0	88,7	92,3	91,1	91,2	89,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,1	97,1	88,6	93,4	97,9	93,5	95,6	98,8	94,6	95,5	97,6	99,8	98,3	97,8	98,0

CQS: 95,4



## 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	$\Delta uv$
4206 K	93,8	75,3	93,4	105,4	95,4	97	0,369	0,360	-0,0047

## TM30 DETAILS

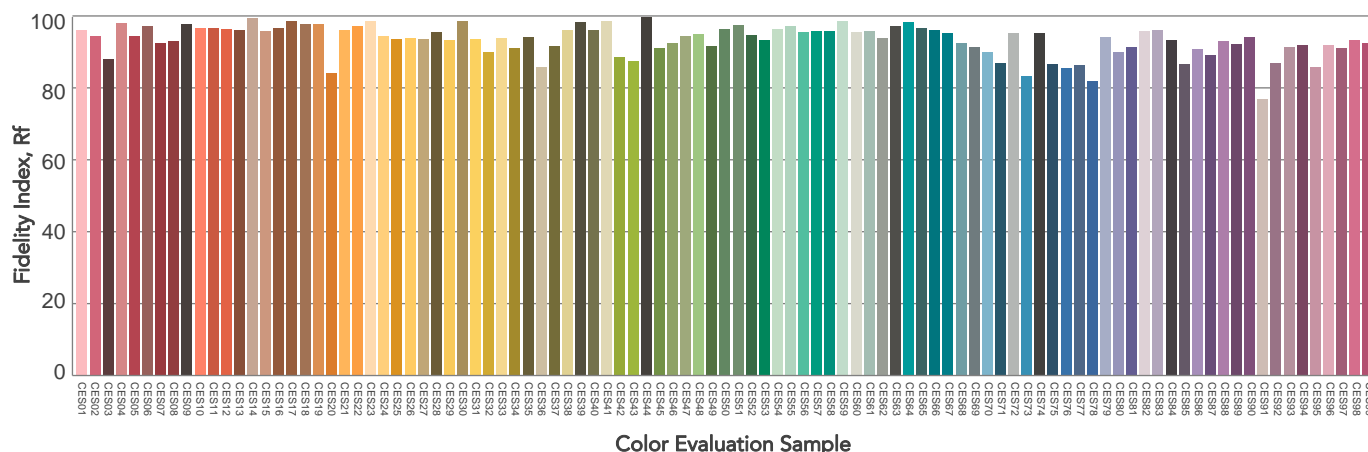
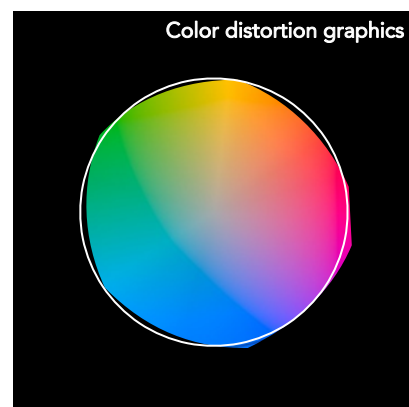
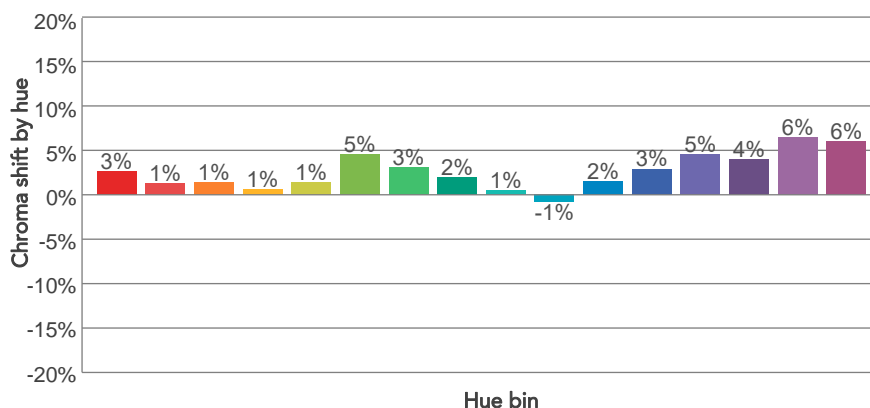
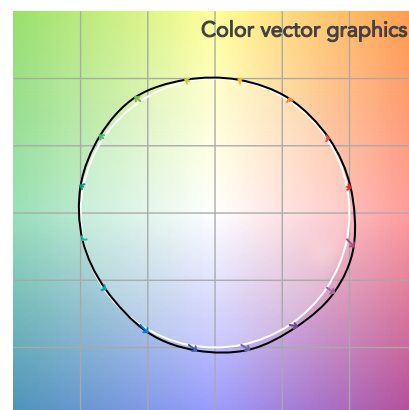
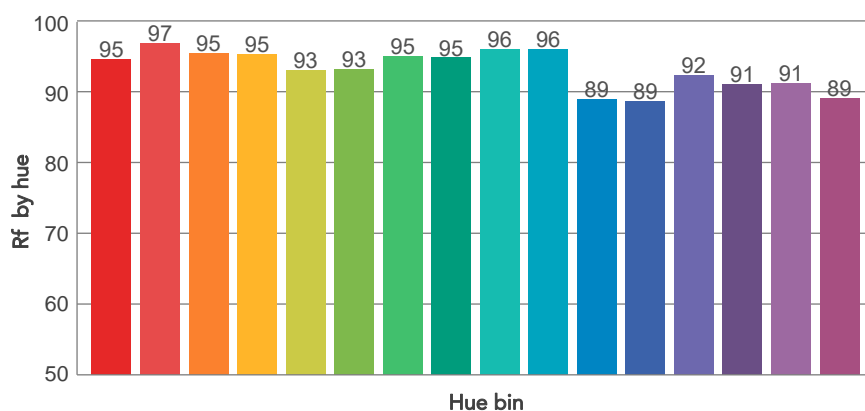
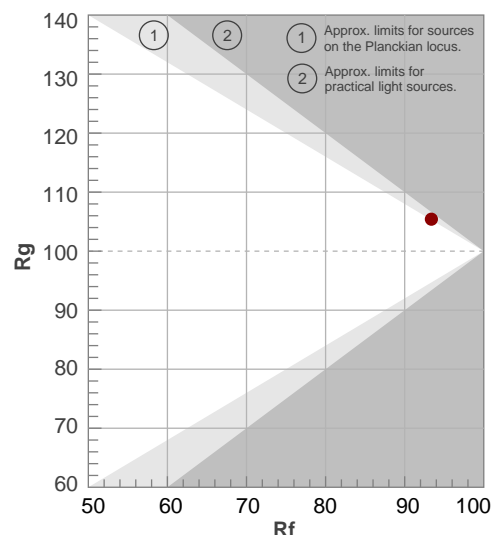
**Rf 93,4**

Fidelity index Rf

**Rg 105,4**

Gammut index

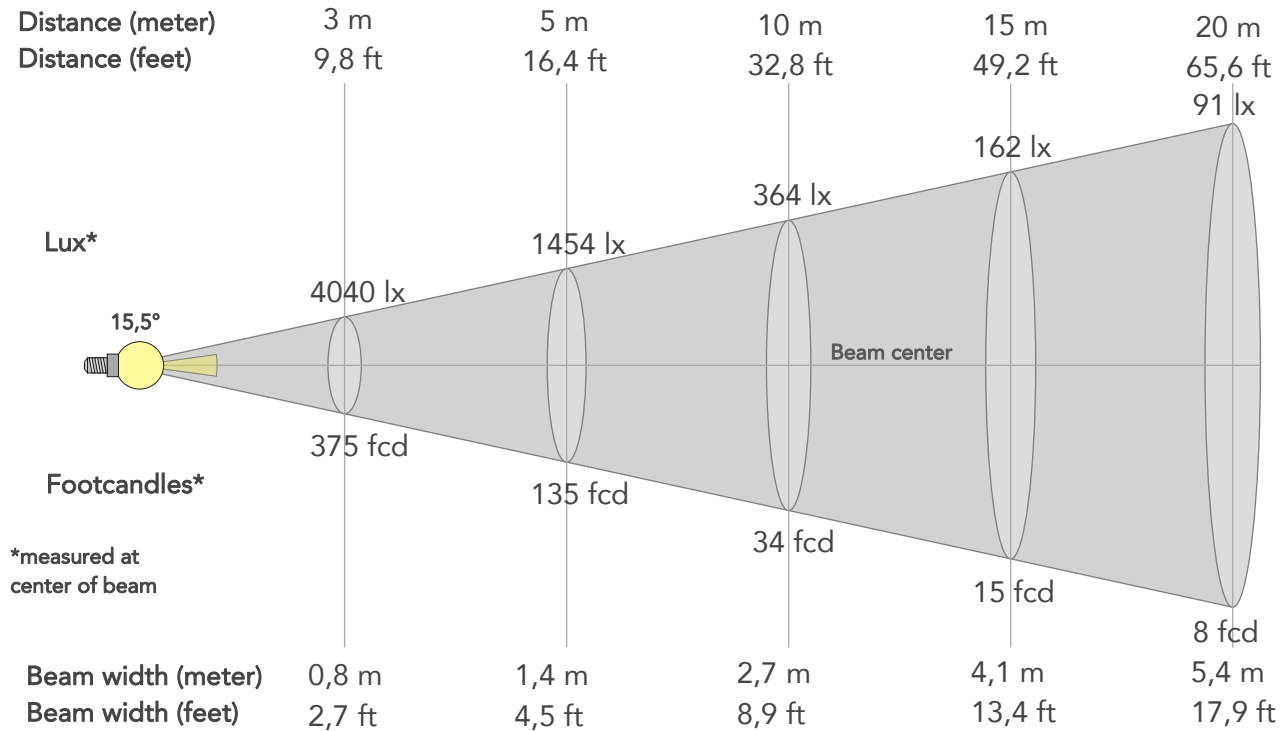
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	3%	-1%
2	97	1%	-1%
3	95	1%	1%
4	95	1%	2%
5	93	1%	2%
6	93	5%	1%
7	95	3%	0%
8	95	2%	-1%
9	96	1%	0%
10	96	-1%	2%
11	89	2%	7%
12	89	3%	6%
13	92	5%	5%
14	91	4%	4%
15	91	6%	0%
16	89	6%	-4%



# BEAM DETAILS



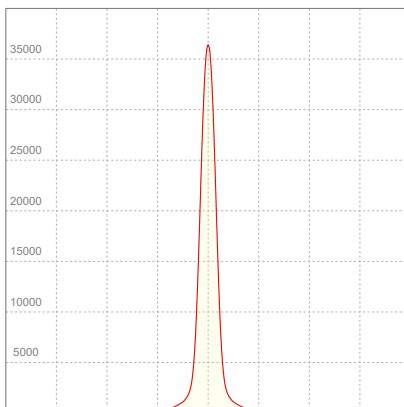
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,5°	27,9°	50,7°	96,8%	91,6%



## 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	36362lx	9091lx	4040lx	2273lx	1454lx	646lx	364lx	162lx	91lx	58lx	40lx	23lx	15lx
Footcand.	3378fcd	845fcd	375fcd	211fcd	135fcd	60fcd	34fcd	15fcd	8fcd	5fcd	4fcd	2fcd	1fcd
Beam wid.	0,3m	0,5m	0,8m	1,1m	1,4m	2m	2,7m	4,1m	5,4m	6,8m	8,2m	10,9m	13,6m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,7ft	8,9ft	13,4ft	17,9ft	22,3ft	26,8ft	35,7ft	44,7ft

## LINEAR DISTRIBUTION DIAGRAM

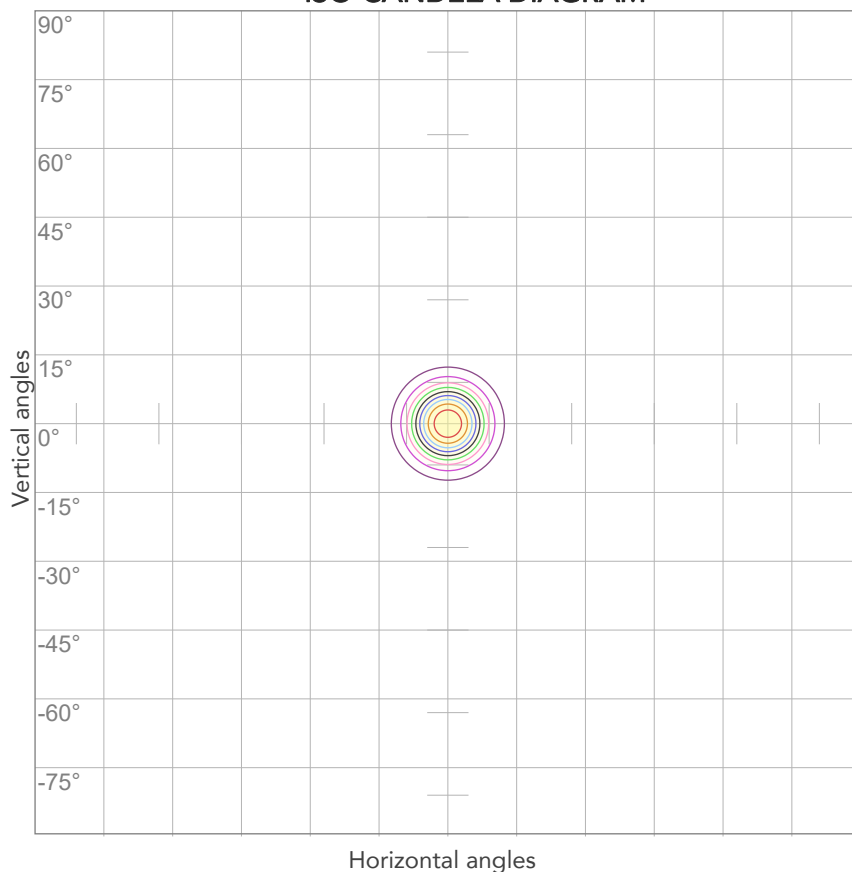


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
227V	0,385A	80,7W	0,92	52lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



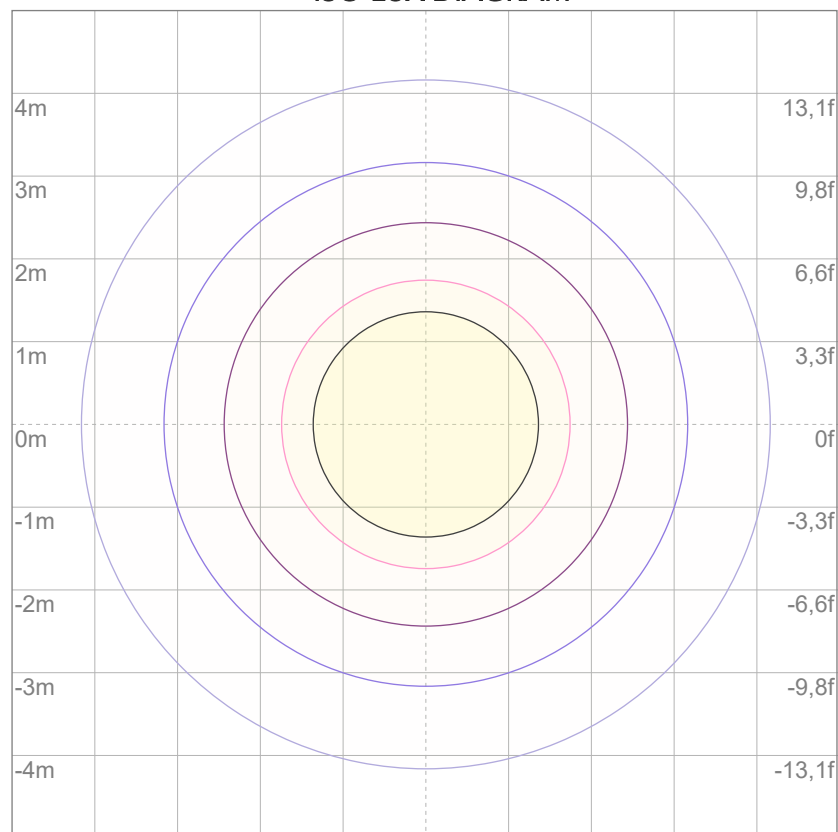
10%	3636 cd
20%	7272 cd
30%	10909 cd
40%	14545 cd
50%	18181 cd
60%	21817 cd
70%	25453 cd
80%	29090 cd

### Conditions:

Number of c-planes: 2

Candela at center: 36362 cd

## ISO LUX DIAGRAM



3%	10,9 lx
5%	18,2 lx
10%	36,4 lx
30%	109 lx
50%	182 lx

### Conditions:

Number of c-planes: 2

Lux at center: 364 lx

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





Total lumen output:

2964 lm

Peak candela output:

25371 cd

Light quality:

CRI: 96,4

Color temperature:

2570 K

**PRODUCT NAME:**

ARCSPOTM VW

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

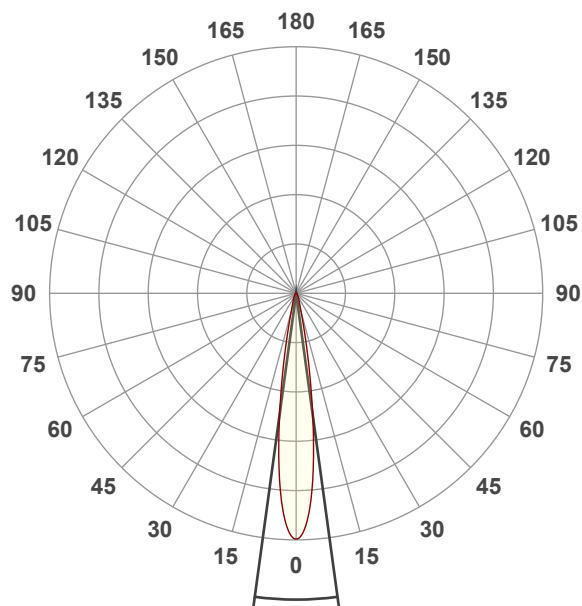
Warm White

Operator:

Giacomo Matteo

Date and time:

22/02/2024 12:04:32

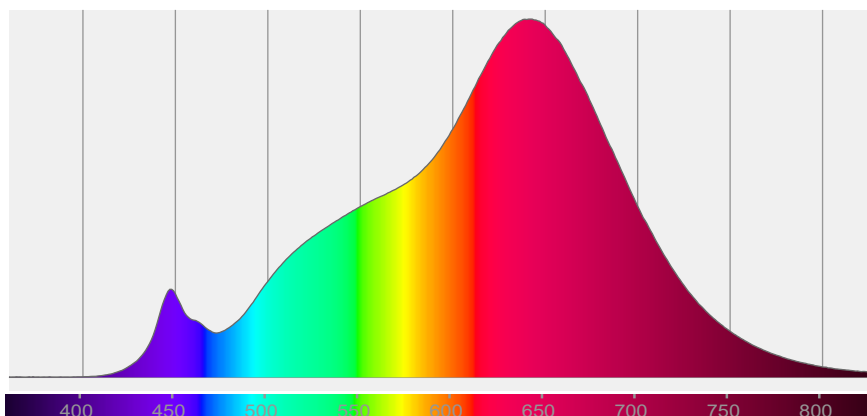


Beam angle 50%: 15,5°

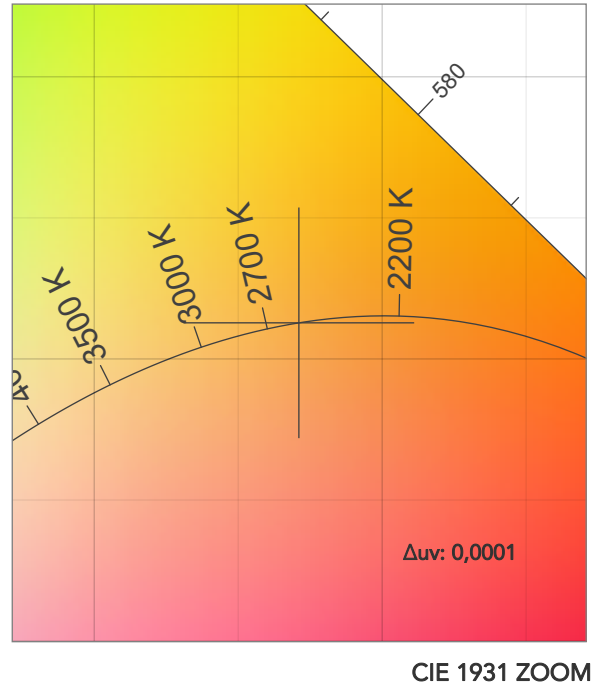
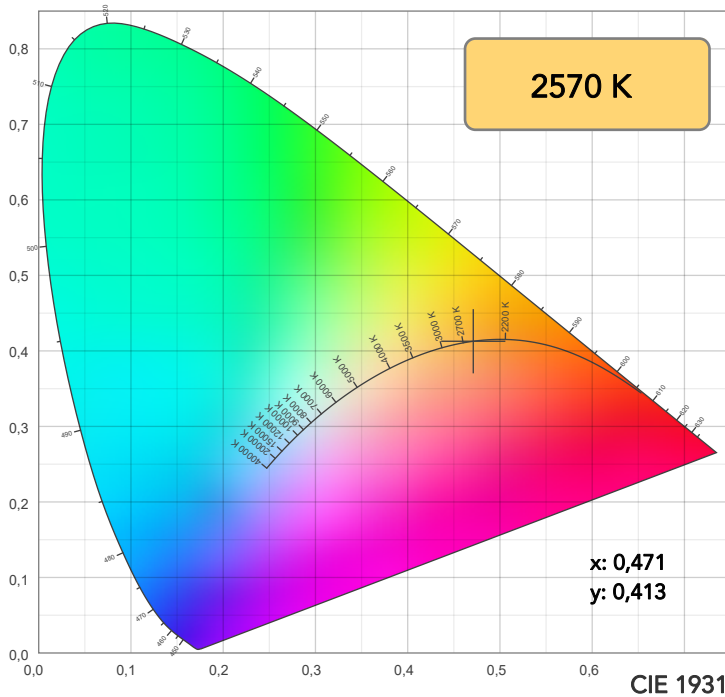
Field angle 10%: 27,9°

Cut off angle 2.5%: 50,6°

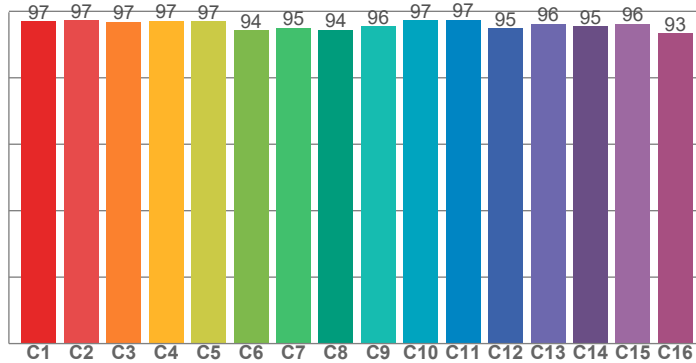
**Spectra**



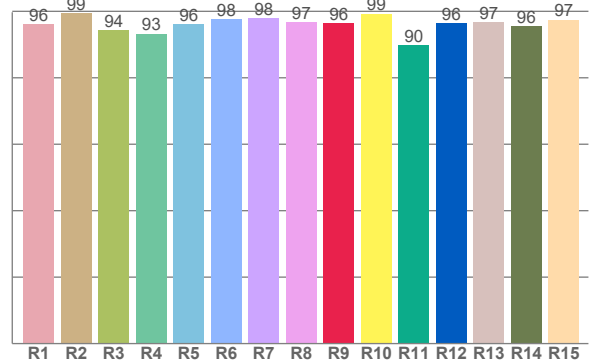
## COLOR DETAILS



**TM30: 96,2**



**CRI: 96,4 (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
96,0	99,4	94,3	93,3	96,1	97,7	97,9	96,8	96,4	99,3	89,8	96,4	96,6	95,6	97,4

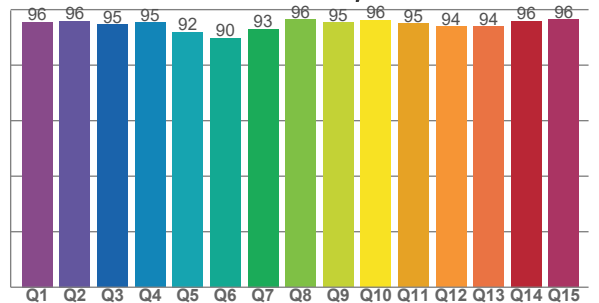
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96,9	97,2	96,9	97,1	97,0	94,2	95,0	94,5	95,5	97,3	97,4	94,9	96,3	95,4	96,2	93,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,5	95,9	94,6	95,4	91,9	89,7	93,1	96,4	95,3	96,3	95,0	93,9	93,9	95,9	96,4

**CQS: 94,0**



## 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	$\Delta uv$
2570 K	96,4	96,4	96,2	103,3	94,0	98	0,471	0,413	0,0001

## TM30 DETAILS

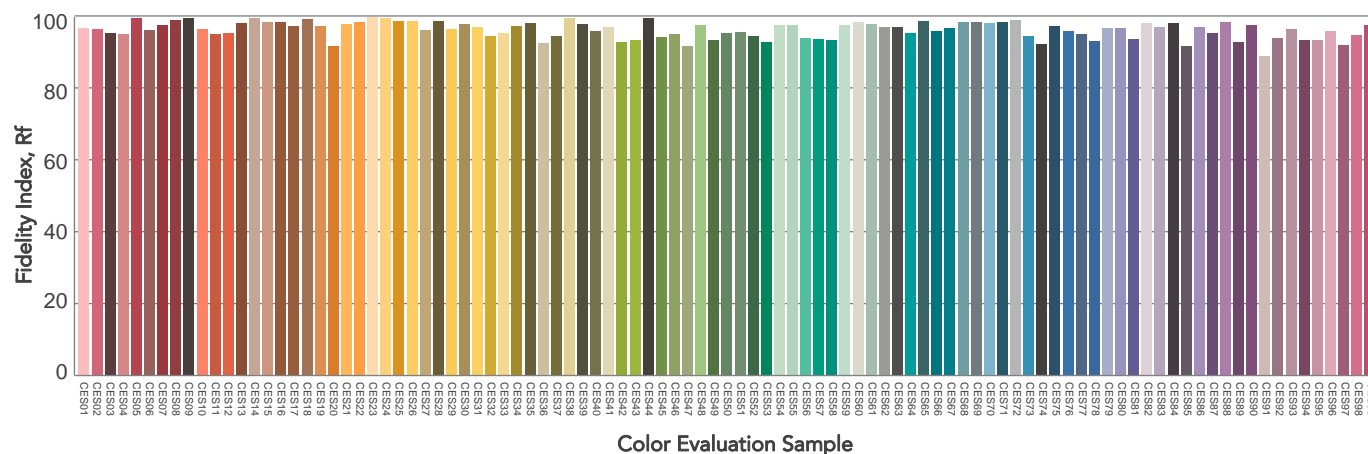
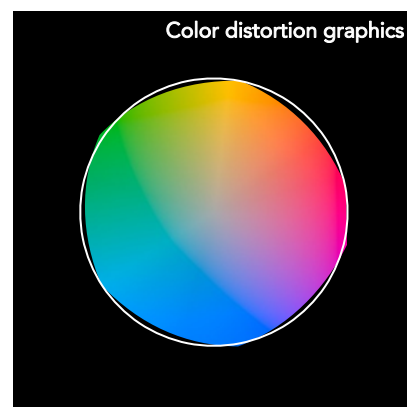
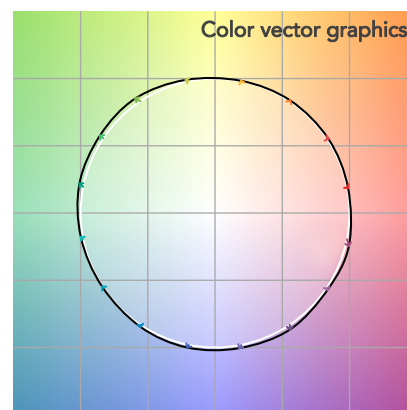
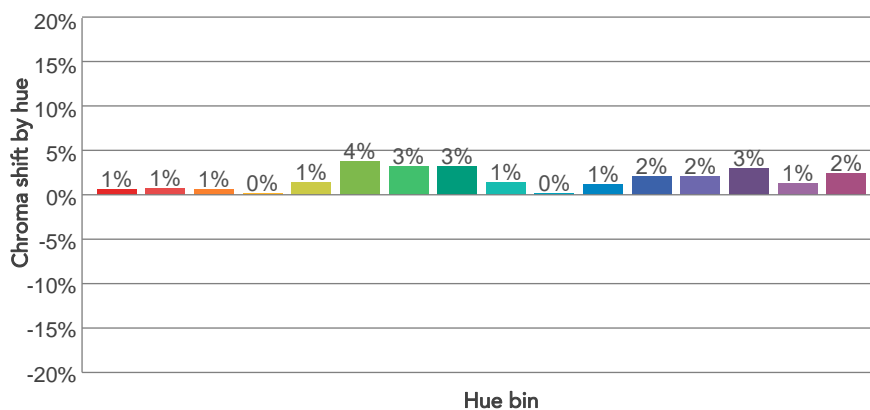
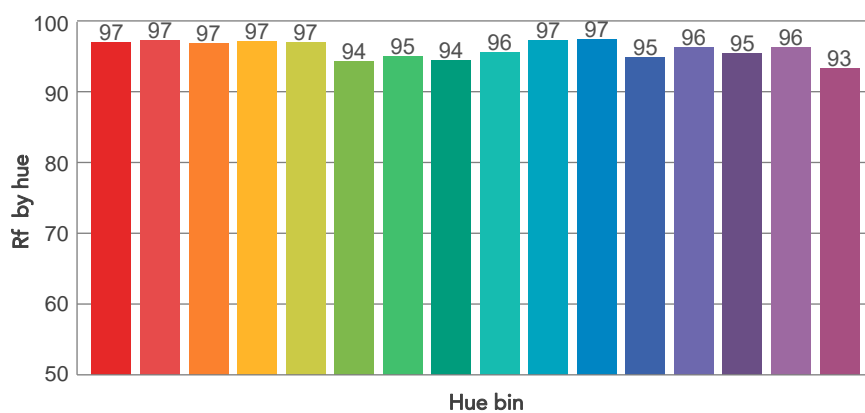
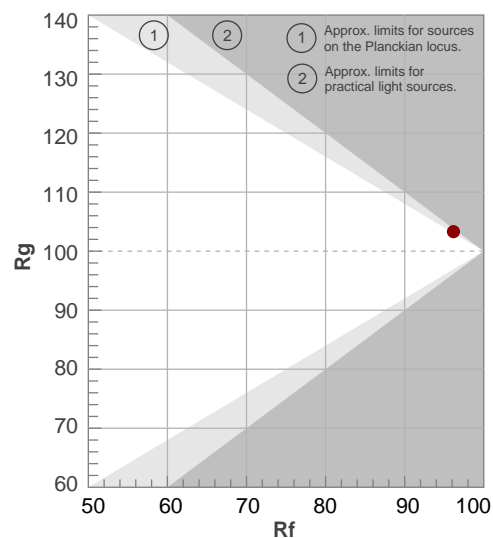
Rf 96,2

Fidelity index  $R_f$

Rg 103,3

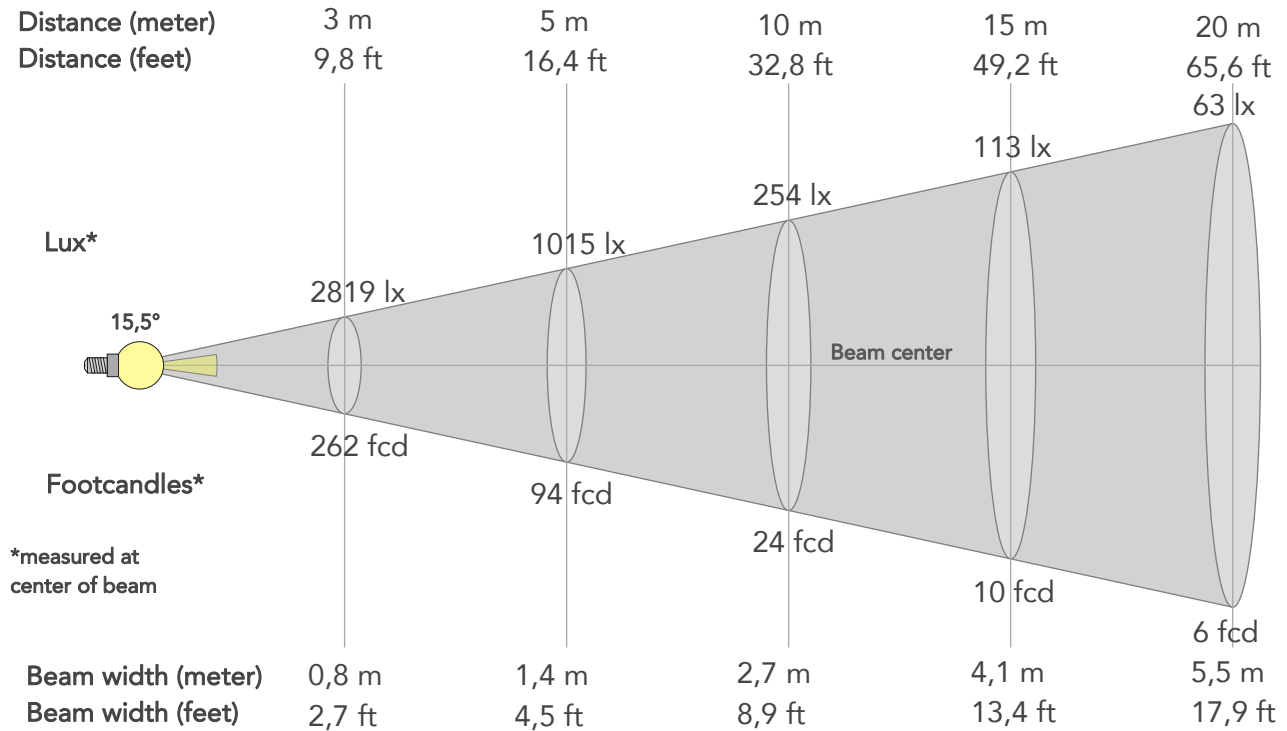
## Gammut index

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



# BEAM DETAILS

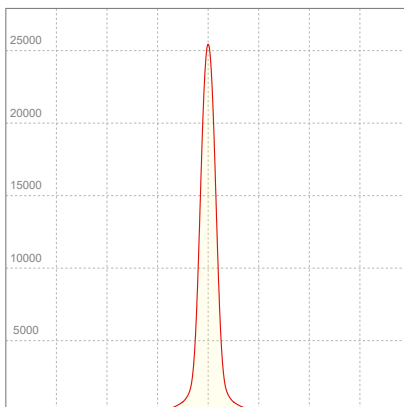
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,5°	27,9°	50,6°	96,2%	91,1%



## 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	25371lx	6343lx	2819lx	1586lx	1015lx	451lx	254lx	113lx	63lx	41lx	28lx	16lx	10lx
Footcand.	2357fcd	589fcd	262fcd	147fcd	94fcd	42fcd	24fcd	10fcd	6fcd	4fcd	3fcd	1fcd	1fcd
Beam wid.	0,3m	0,5m	0,8m	1,1m	1,4m	2m	2,7m	4,1m	5,5m	6,8m	8,2m	10,9m	13,6m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,7ft	8,9ft	13,4ft	17,9ft	22,4ft	26,8ft	35,8ft	44,7ft

## LINEAR DISTRIBUTION DIAGRAM

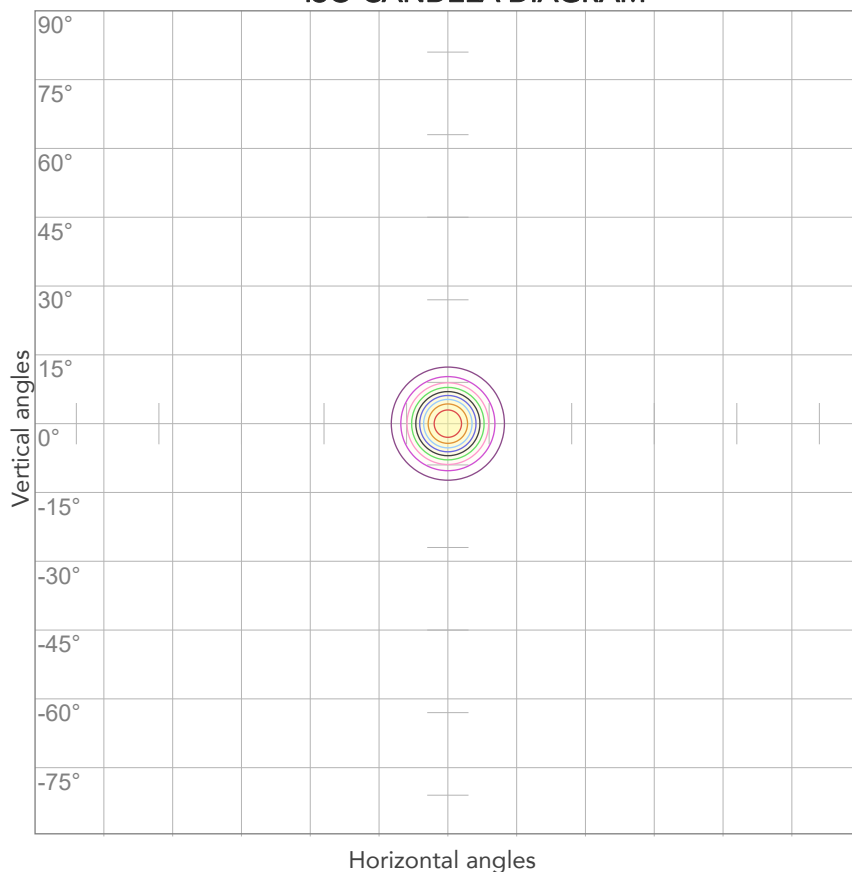


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
227V	0,328A	67,9W	0,91	44lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



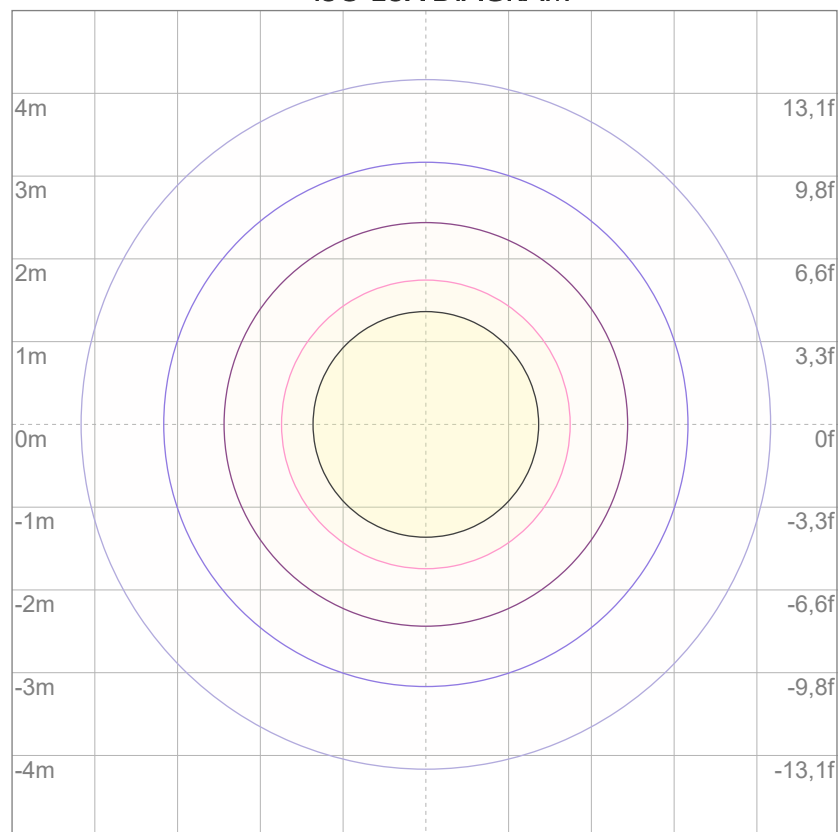
10%	2537 cd
20%	5074 cd
30%	7611 cd
40%	10149 cd
50%	12686 cd
60%	15223 cd
70%	17760 cd
80%	20297 cd

### Conditions:

Number of c-planes: 2

Candela at center: 25371 cd

## ISO LUX DIAGRAM



3%	7,61 lx
5%	12,7 lx
10%	25,4 lx
30%	76,1 lx
50%	127 lx

### Conditions:

Number of c-planes: 2

Lux at center: 254 lx

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



Total lumen output:

4264 lm

Peak candela output:

36438 cd

Light quality:

CRI: 93,4

Color temperature:

6518 K

**PRODUCT NAME:**

ARCSPOTM VW

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

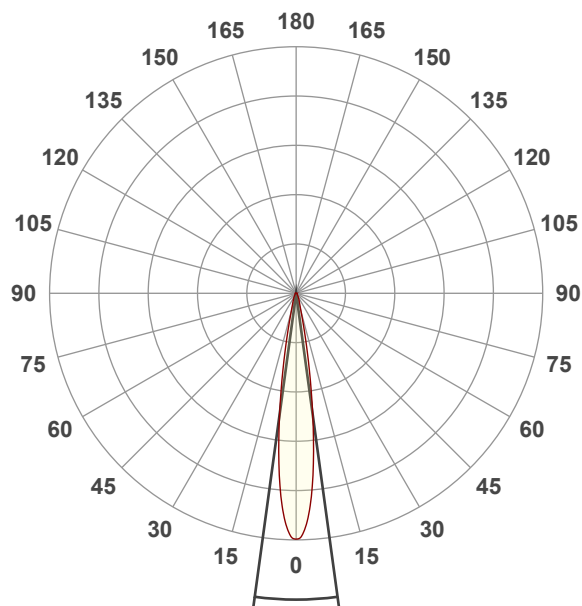
Cold White

Operator:

Giacomo Matteo

Date and time:

22/02/2024 12:06:13

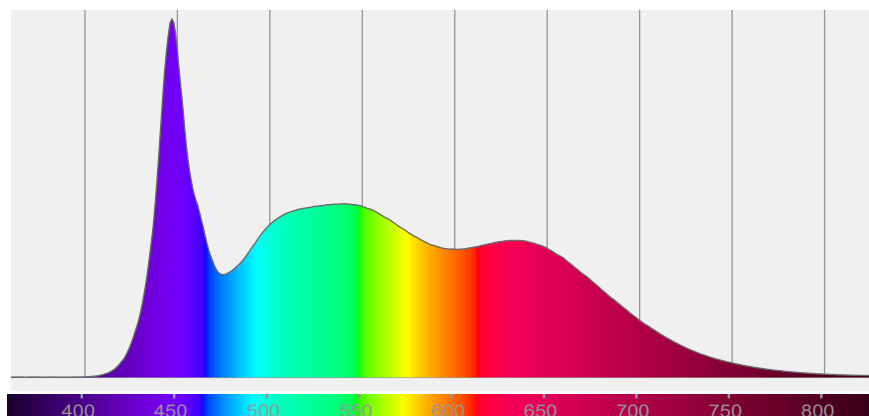


Beam angle 50%: 15,5°

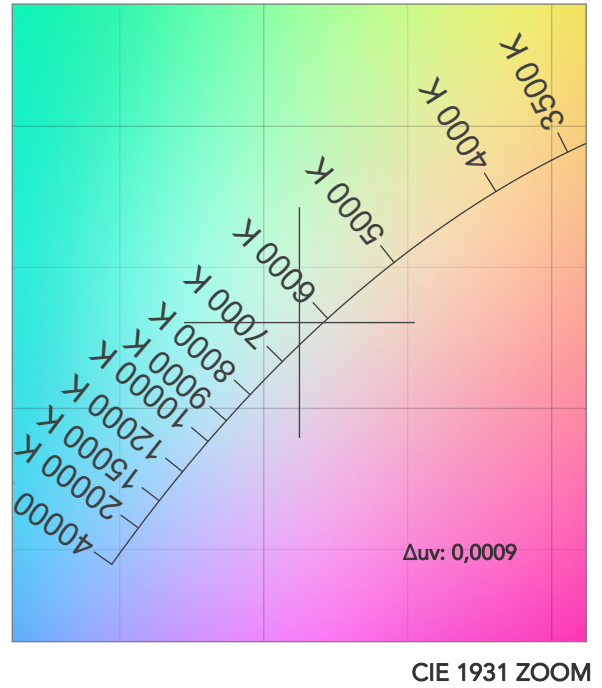
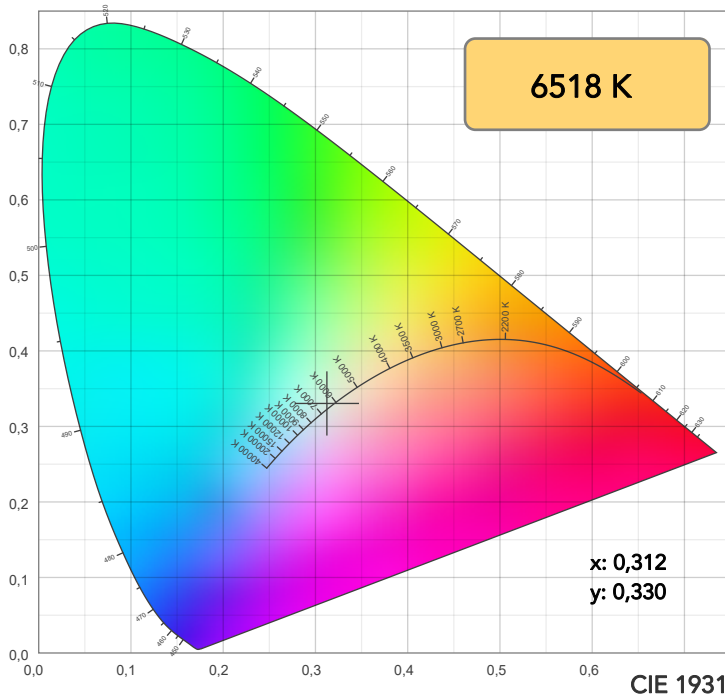
Field angle 10%: 28°

Cut off angle 2.5%: 50,7°

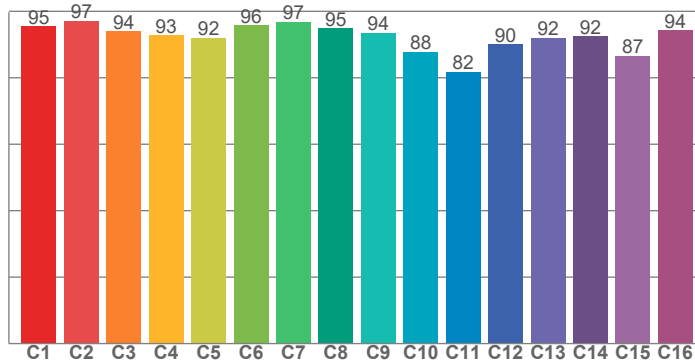
**Spectra**



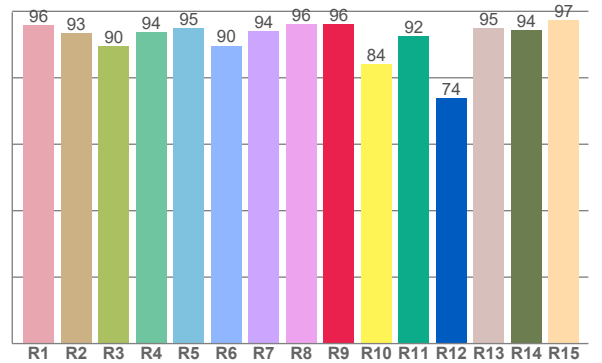
# COLOR DETAILS



**TM30: 92,3**



**CRI: 93,4 (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
95,8	93,5	89,6	93,7	94,9	89,6	94,1	96,1	96,1	84,0	92,5	73,9	94,9	94,3	97,2

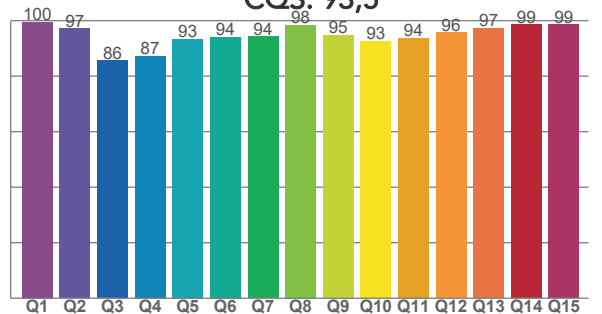
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,4	97,1	94,0	92,8	92,1	95,7	96,9	94,9	93,6	87,8	81,7	90,1	92,1	92,5	86,6	94,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
99,5	97,2	85,6	87,3	93,5	94,1	94,3	98,5	94,9	92,7	93,7	95,8	97,2	98,6	98,6

**CQS: 93,5**



## COLOR PARAMETERS

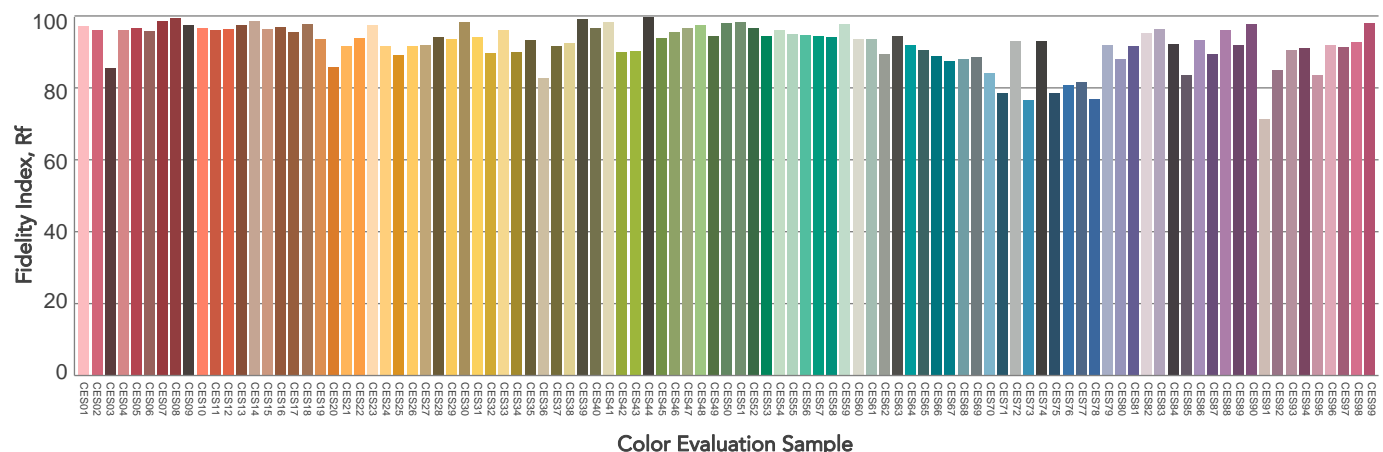
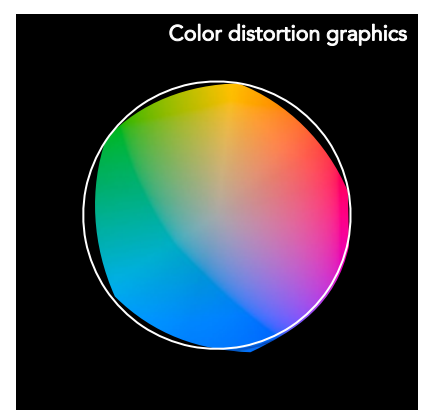
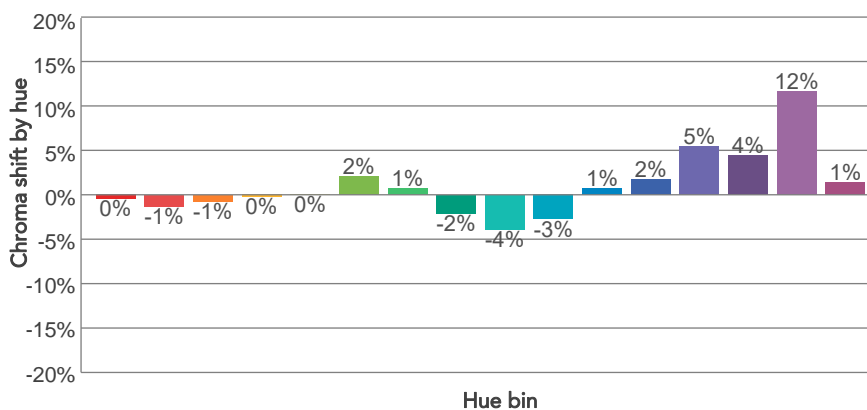
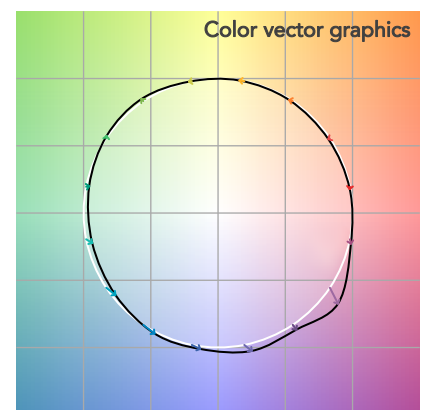
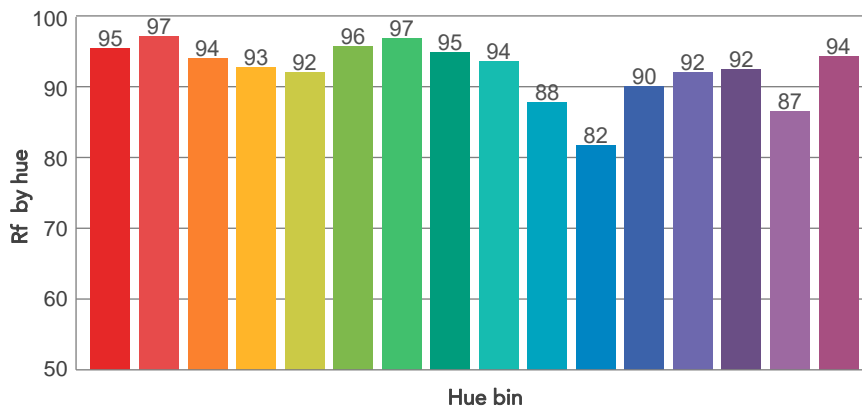
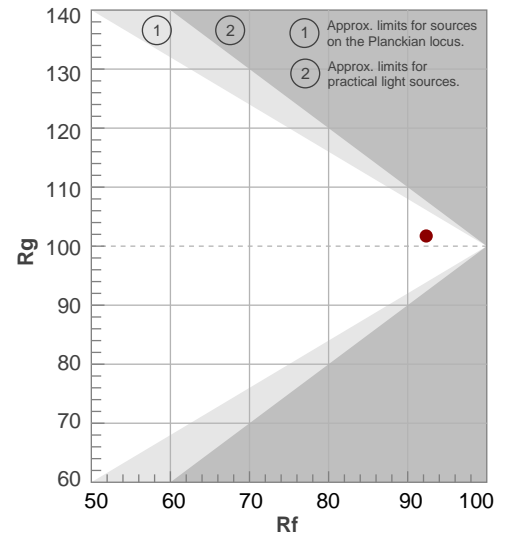
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
6518 K	93,4	96,1	92,3	101,7	93,5	98	0,312	0,330	0,0009

# TM30 DETAILS

**Rf 92,3**  
Fidelity index Rf

**Rg 101,7**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	0%	-2%
2	97	-1%	0%
3	94	-1%	3%
4	93	0%	4%
5	92	0%	2%
6	96	2%	0%
7	97	1%	-2%
8	95	-2%	-1%
9	94	-4%	4%
10	88	-3%	8%
11	82	1%	11%
12	90	2%	7%
13	92	5%	5%
14	92	4%	0%
15	87	12%	-6%
16	94	1%	-3%

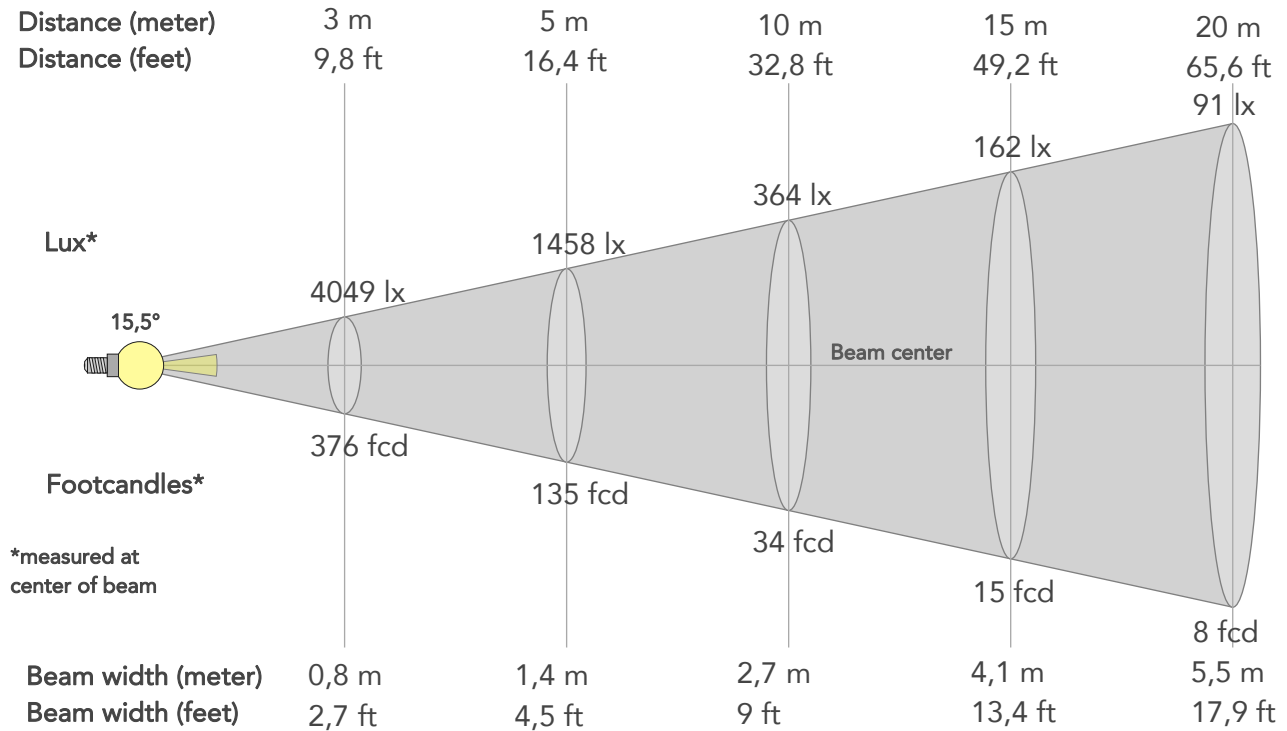




# BEAM DETAILS



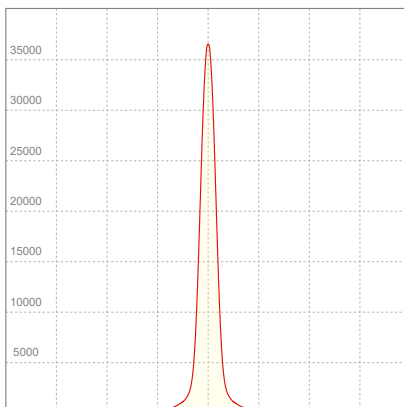
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,5°	28°	50,7°	96,5%	91,3%



## 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	36438lx	9110lx	4049lx	2277lx	1458lx	648lx	364lx	162lx	91lx	58lx	40lx	23lx	15lx
Footcand.	3385fcd	846fcd	376fcd	212fcd	135fcd	60fcd	34fcd	15fcd	8fcd	5fcd	4fcd	2fcd	1fcd
Beam wid.	0,3m	0,5m	0,8m	1,1m	1,4m	2m	2,7m	4,1m	5,5m	6,8m	8,2m	10,9m	13,6m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,7ft	9ft	13,4ft	17,9ft	22,4ft	26,9ft	35,8ft	44,8ft

## LINEAR DISTRIBUTION DIAGRAM

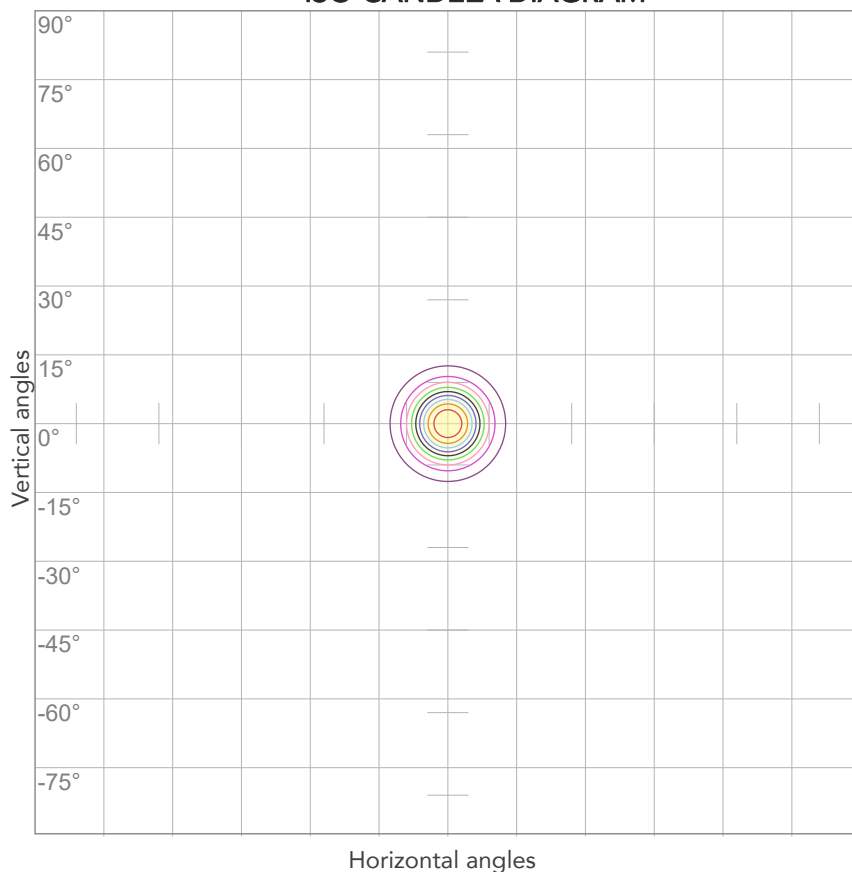


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
227V	0,329A	68,2W	0,91	63lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



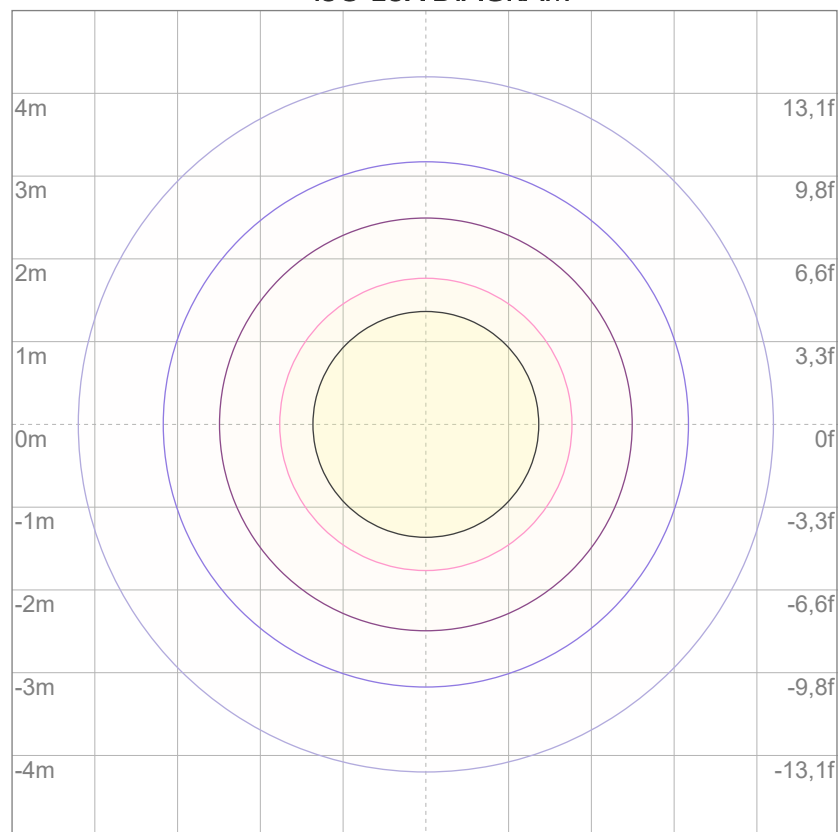
10%	3644 cd
20%	7288 cd
30%	10931 cd
40%	14575 cd
50%	18219 cd
60%	21863 cd
70%	25507 cd
80%	29151 cd

### Conditions:

Number of c-planes: 2

Candela at center: 36438 cd

## ISO LUX DIAGRAM



3%	10,9 lx
5%	18,2 lx
10%	36,4 lx
30%	109 lx
50%	182 lx

### Conditions:

Number of c-planes: 2

Lux at center: 364 lx

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



Total lumen output:

3160 lm

Peak candela output:

27008 cd

Light quality:

CRI: 95,7

Color temperature:

2686 K

**PRODUCT NAME:**

ARCSPOTM VW

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

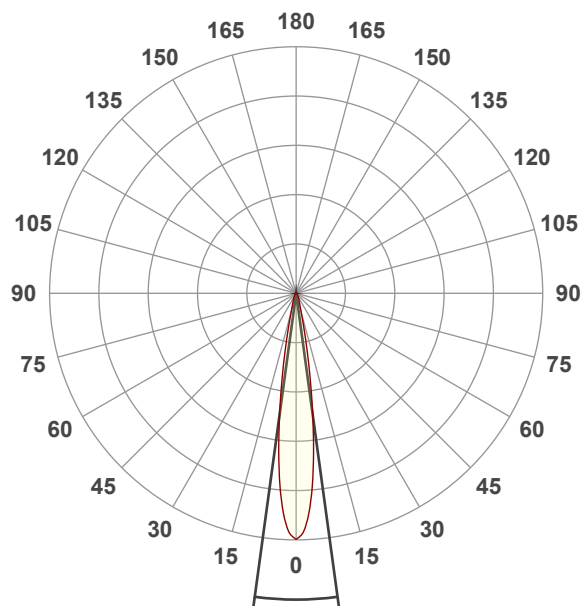
2700K

Operator:

Giacomo Matteo

Date and time:

22/02/2024 12:09:17

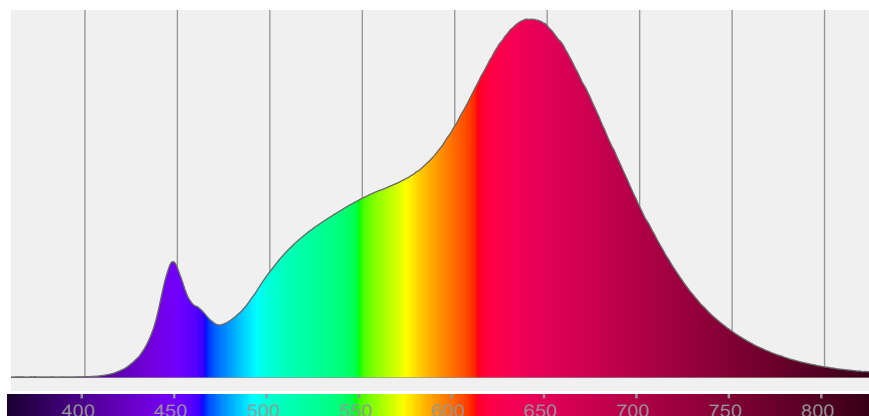


Beam angle 50%: 15,5°

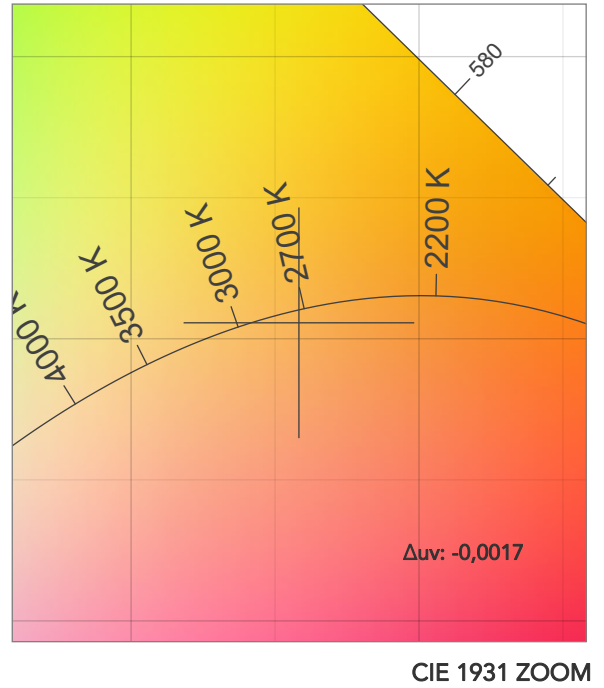
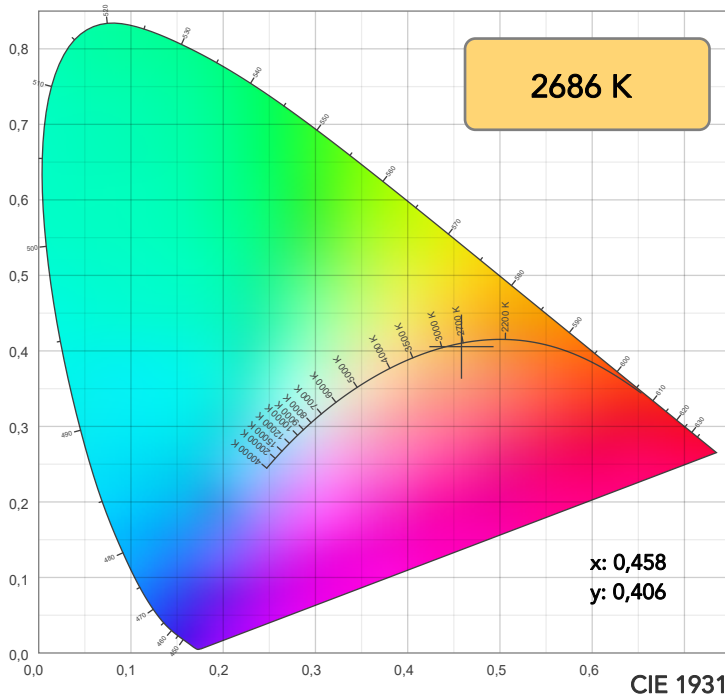
Field angle 10%: 28°

Cut off angle 2.5%: 50,4°

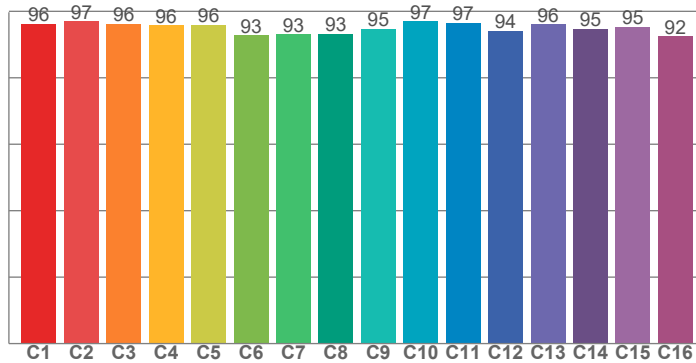
**Spectra**



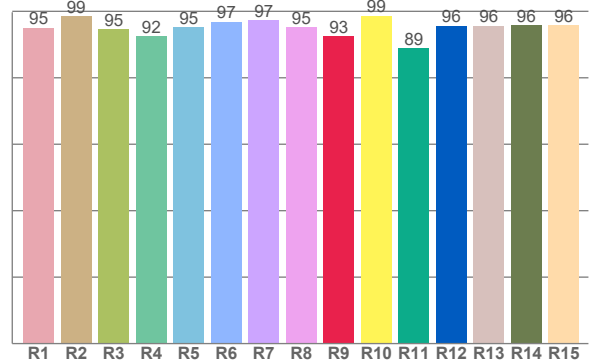
## COLOR DETAILS



TM30: 95,4



CRI: 95,7 (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
95,1	98,6	94,5	92,5	95,2	96,8	97,3	95,3	92,5	98,7	89,0	95,7	95,7	95,8	95,7

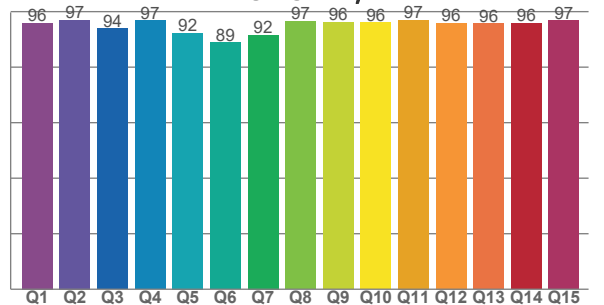
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96,3	97,0	96,2	95,8	95,9	92,8	93,1	93,2	94,7	97,0	96,6	94,1	96,1	94,8	95,4	92,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,9	97,1	93,8	96,8	92,3	88,9	91,6	96,5	96,1	96,1	97,0	95,9	95,7	95,8	96,8

CQS: 94,2



## COLOR PARAMETERS

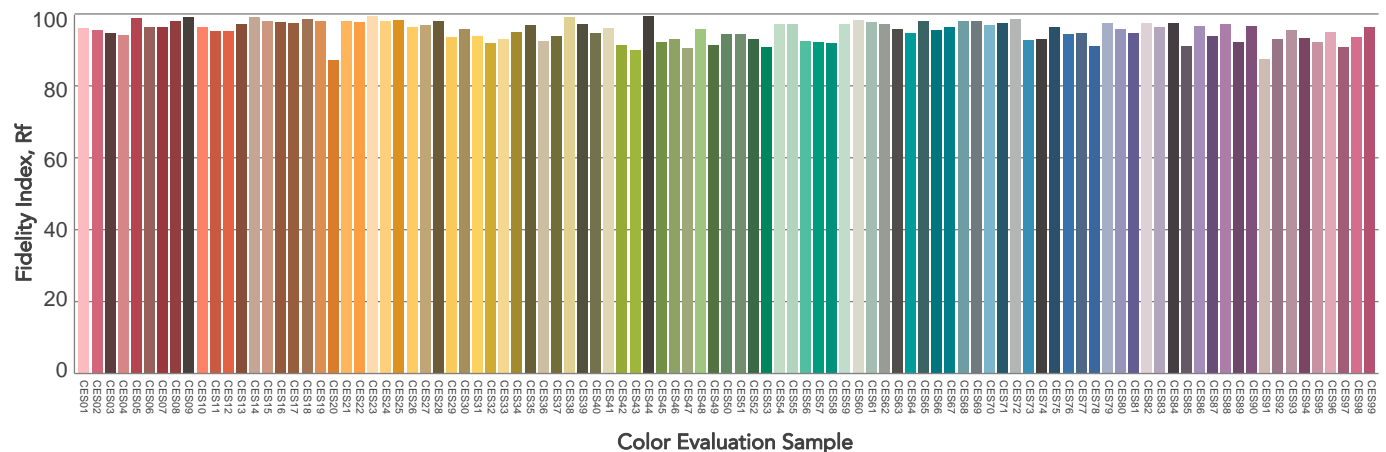
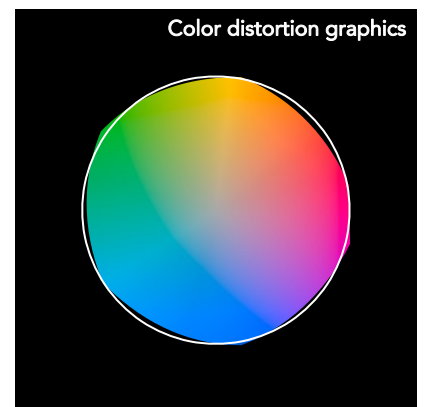
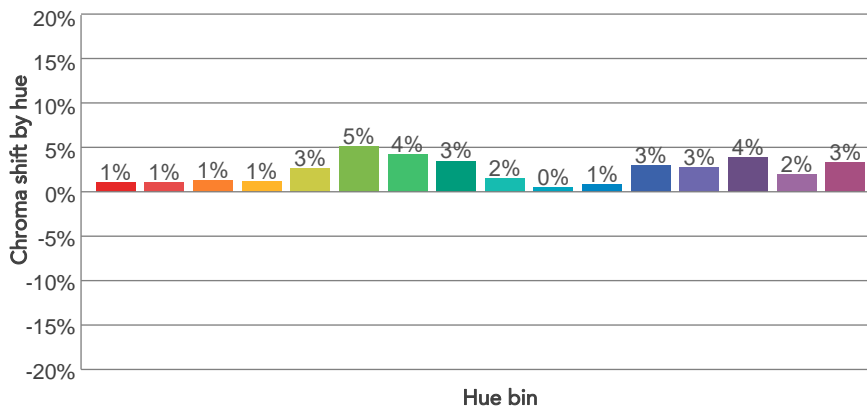
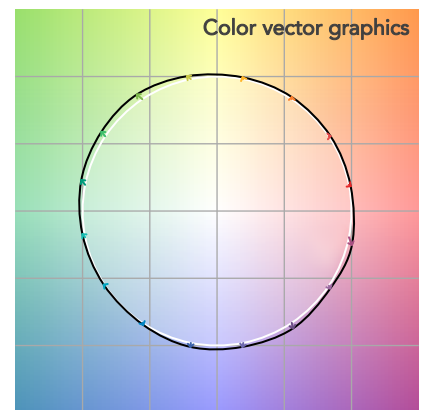
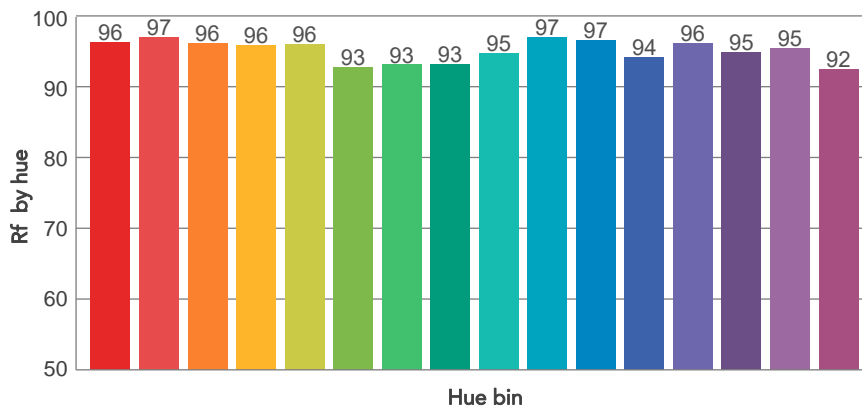
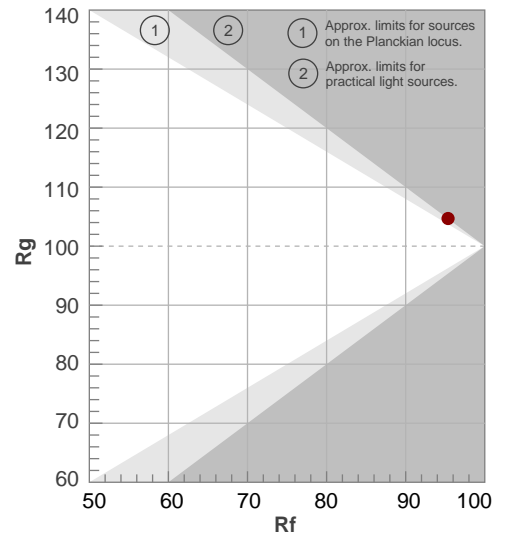
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
2686 K	95,7	92,5	95,4	104,7	94,2	97	0,458	0,406	-0,0017

# TM30 DETAILS

**Rf 95,4**  
Fidelity index Rf

**Rg 104,7**  
Gammut index

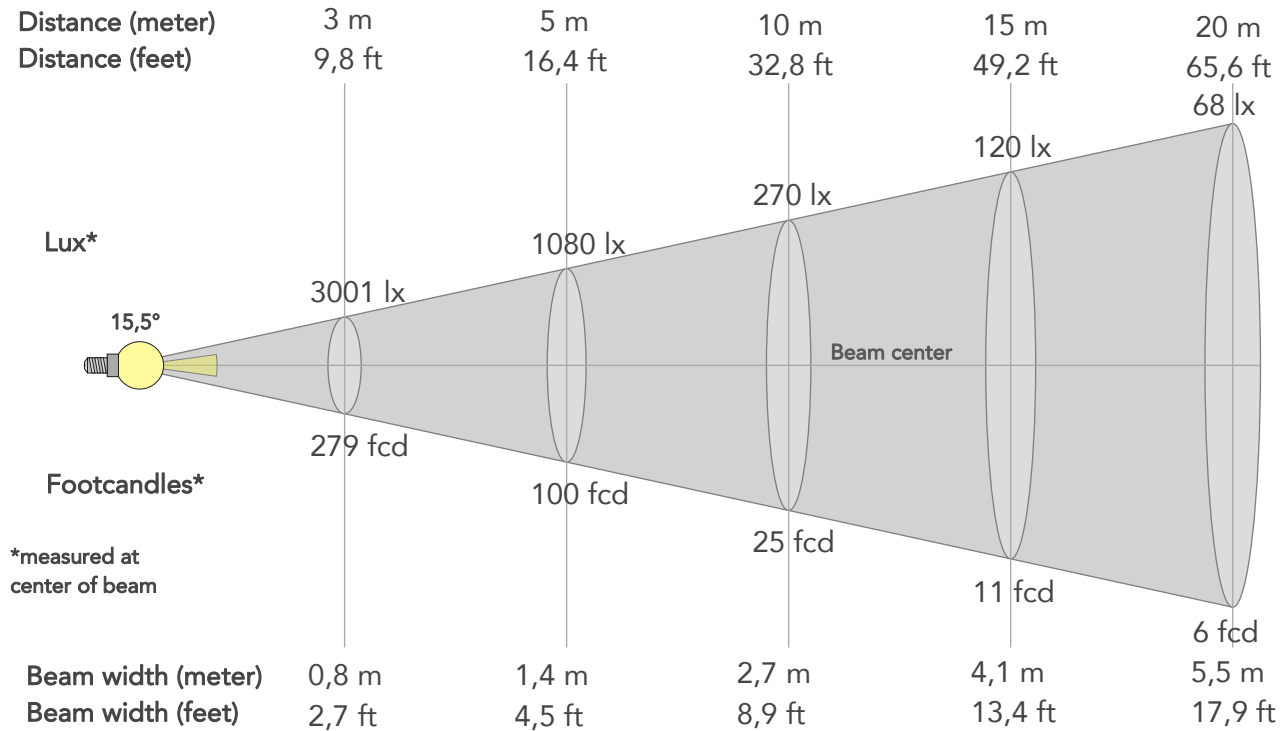
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	96	1%	-1%
2	97	1%	-1%
3	96	1%	1%
4	96	1%	1%
5	96	3%	2%
6	93	5%	1%
7	93	4%	-1%
8	93	3%	-3%
9	95	2%	-3%
10	97	0%	-1%
11	97	1%	1%
12	94	3%	0%
13	96	3%	-1%
14	95	4%	-1%
15	95	2%	-1%
16	92	3%	-5%



# BEAM DETAILS



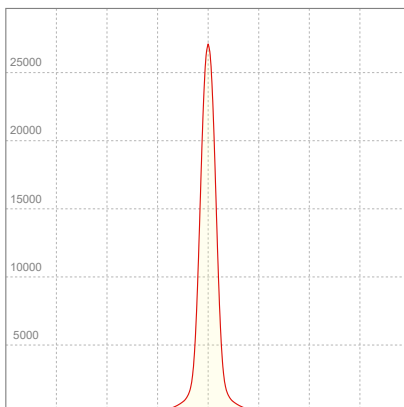
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,5°	28°	50,4°	96,3%	91,1%



## 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	27008lx	6752lx	3001lx	1688lx	1080lx	480lx	270lx	120lx	68lx	43lx	30lx	17lx	11lx
Footcand.	2509fcd	627fcd	279fcd	157fcd	100fcd	45fcd	25fcd	11fcd	6fcd	4fcd	3fcd	2fcd	1fcd
Beam wid.	0,3m	0,5m	0,8m	1,1m	1,4m	2m	2,7m	4,1m	5,5m	6,8m	8,2m	10,9m	13,6m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,7ft	8,9ft	13,4ft	17,9ft	22,4ft	26,8ft	35,8ft	44,7ft

## LINEAR DISTRIBUTION DIAGRAM

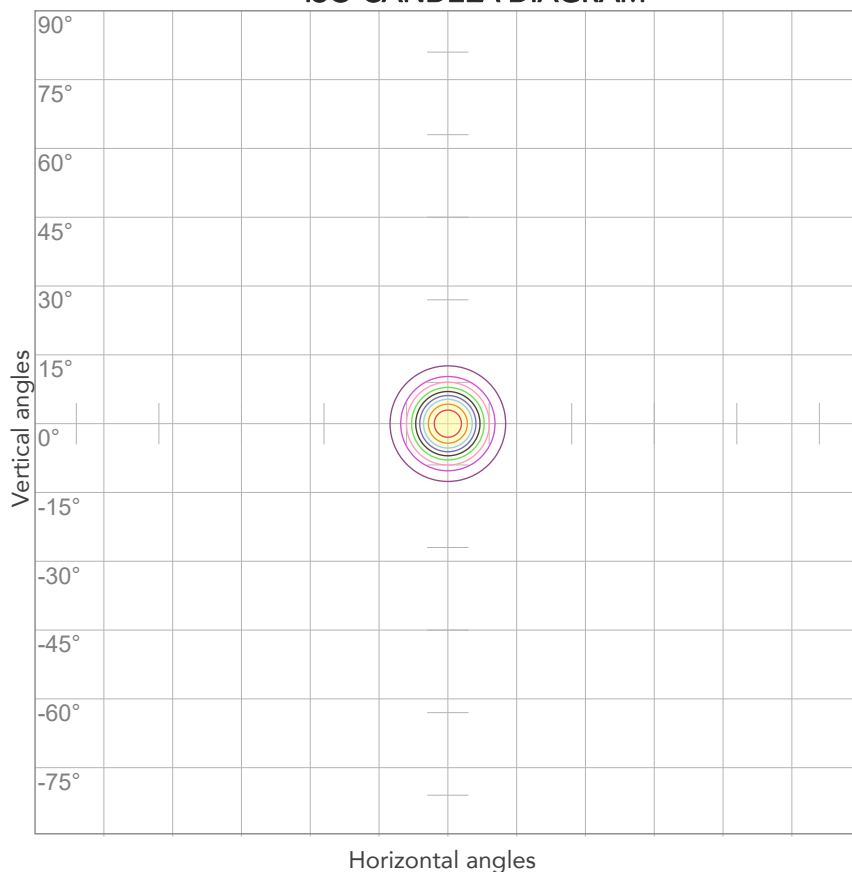


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
227V	0,346A	72,1W	0,92	44lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



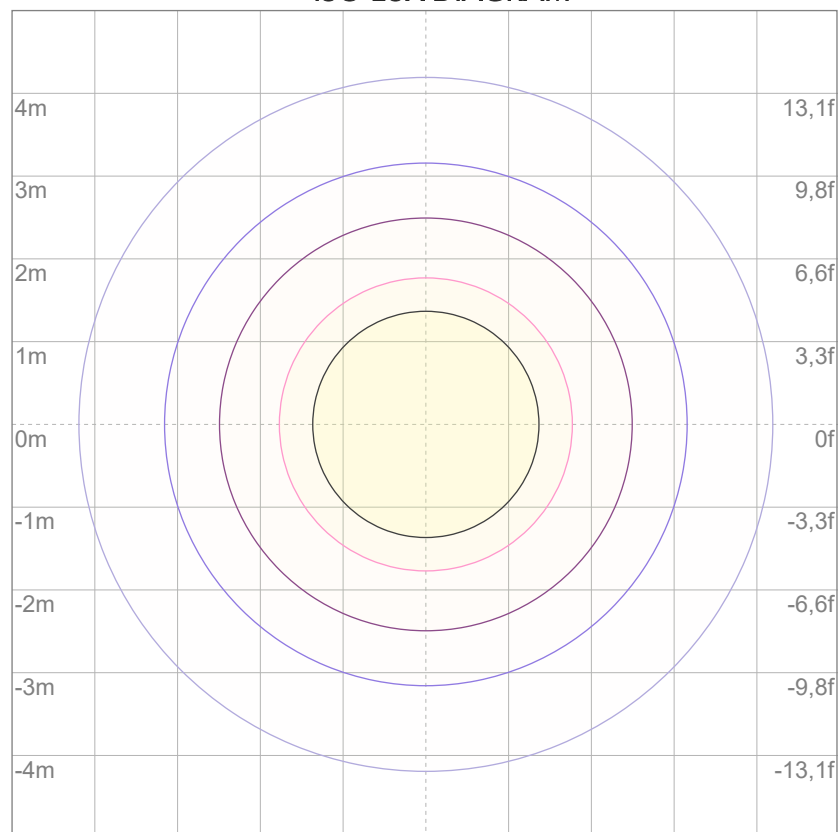
10%	2701 cd
20%	5402 cd
30%	8102 cd
40%	10803 cd
50%	13504 cd
60%	16205 cd
70%	18906 cd
80%	21606 cd

### Conditions:

Number of c-planes: 2

Candela at center: 27008 cd

## ISO LUX DIAGRAM



3%	8,10 lx
5%	13,5 lx
10%	27,0 lx
30%	81,0 lx
50%	135 lx

### Conditions:

Number of c-planes: 2

Lux at center: 270 lx

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



Total lumen output:

3798 lm

Peak candela output:

32797 cd

Light quality:

CRI: 93,9

Color temperature:

3183 K

**PRODUCT NAME:**

ARCSPOTM VW

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

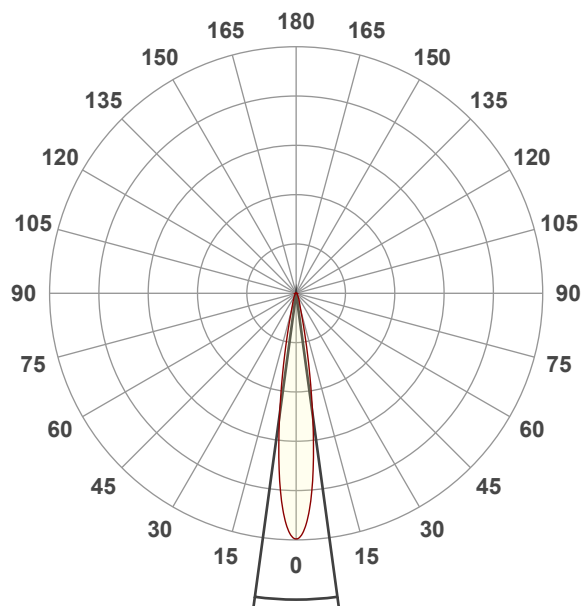
3200K

Operator:

Giacomo Matteo

Date and time:

22/02/2024 12:10:51

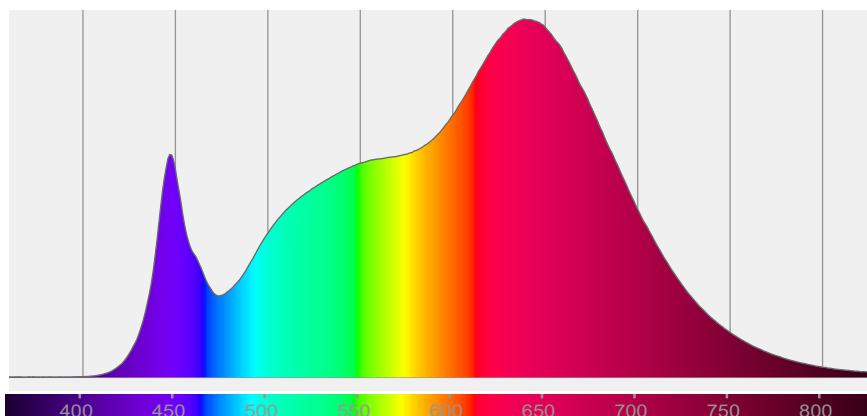


Beam angle 50%: 15,5°

Field angle 10%: 27,9°

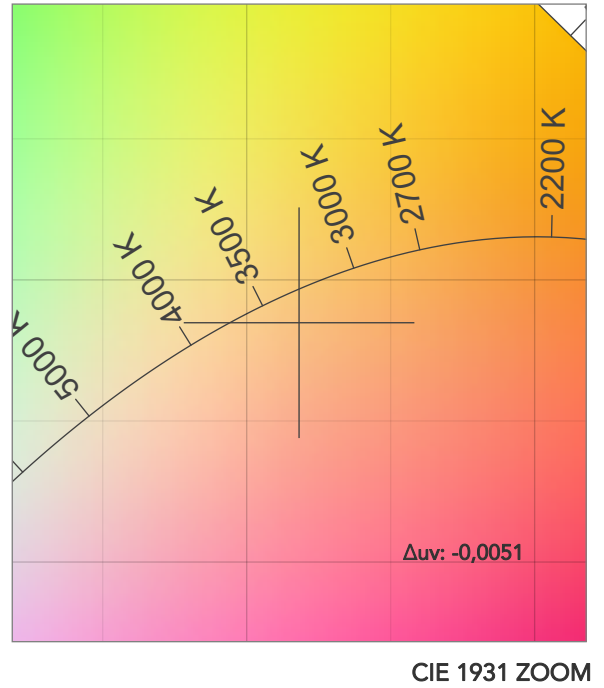
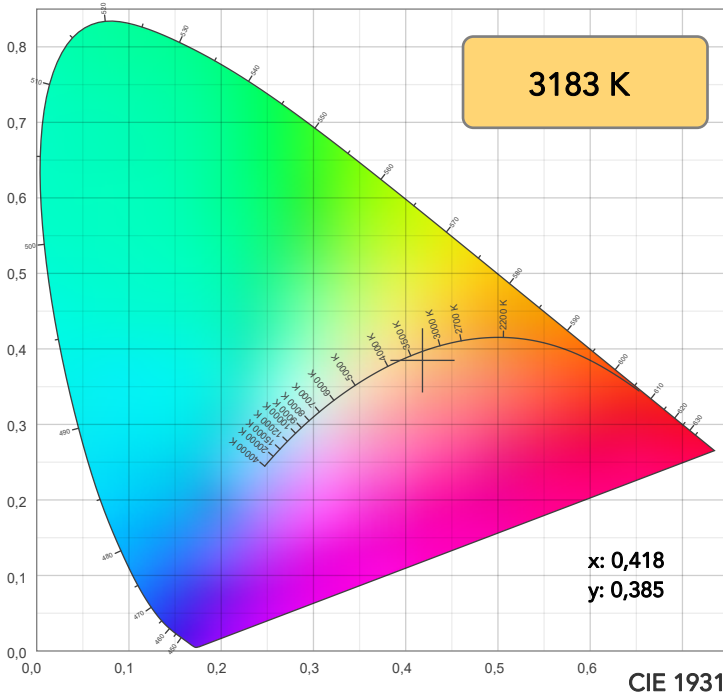
Cut off angle 2.5%: 50,2°

**Spectra**

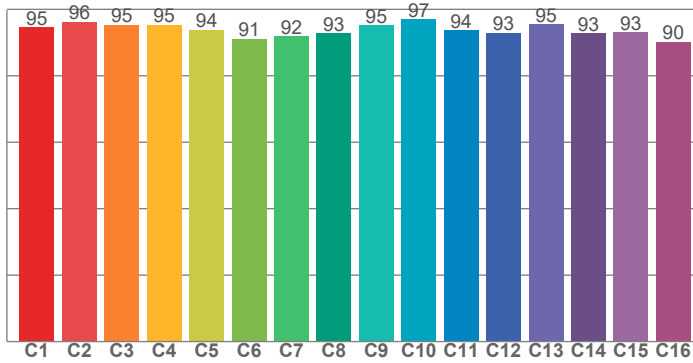




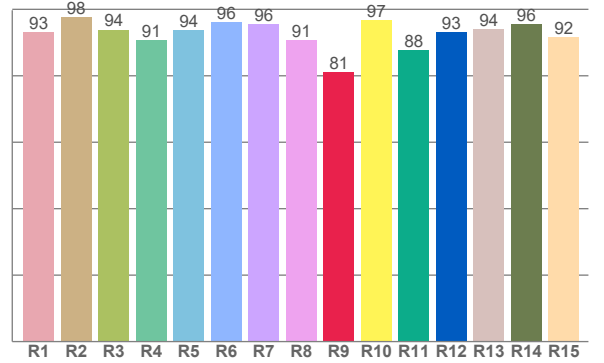
# COLOR DETAILS



**TM30: 94,1**



**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
93,2	97,5	93,8	90,7	93,7	96,2	95,5	90,7	81,1	96,7	87,7	93,1	94,1	95,5	91,5

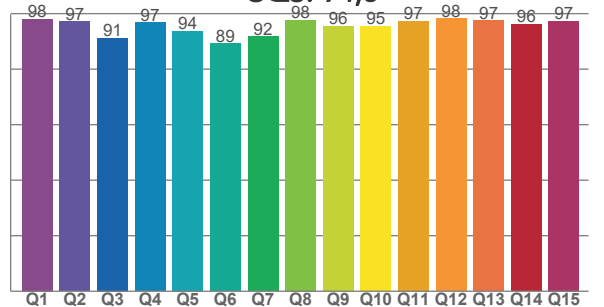
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,6	96,2	95,2	95,3	93,9	91,1	91,9	92,7	95,2	97,0	93,7	92,8	95,4	92,8	93,0	90,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,0	97,1	91,2	96,7	93,8	89,2	91,8	97,8	95,6	95,5	97,3	98,2	97,5	96,2	97,3

**CQS: 94,5**



## COLOR PARAMETERS

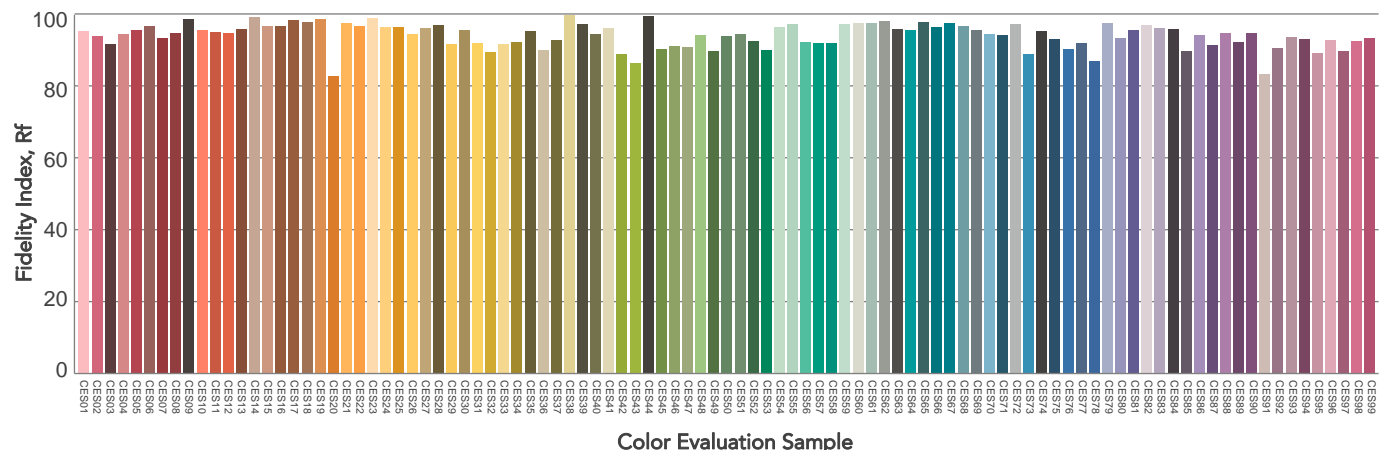
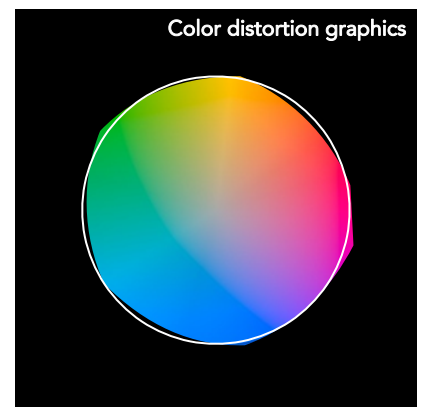
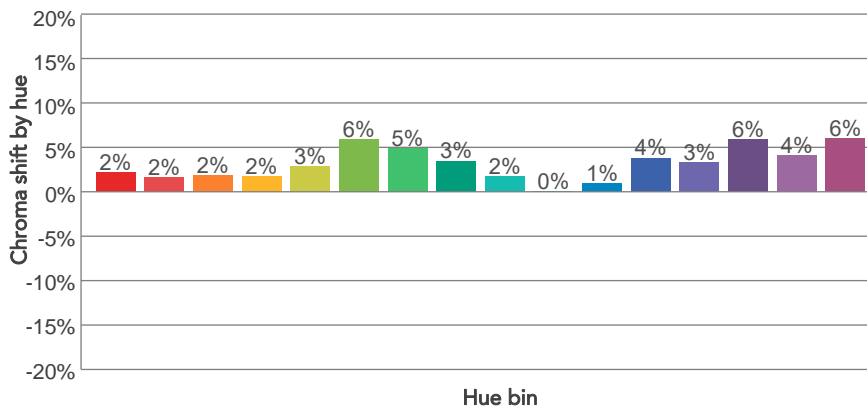
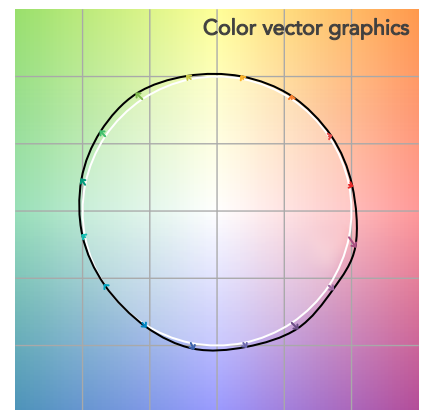
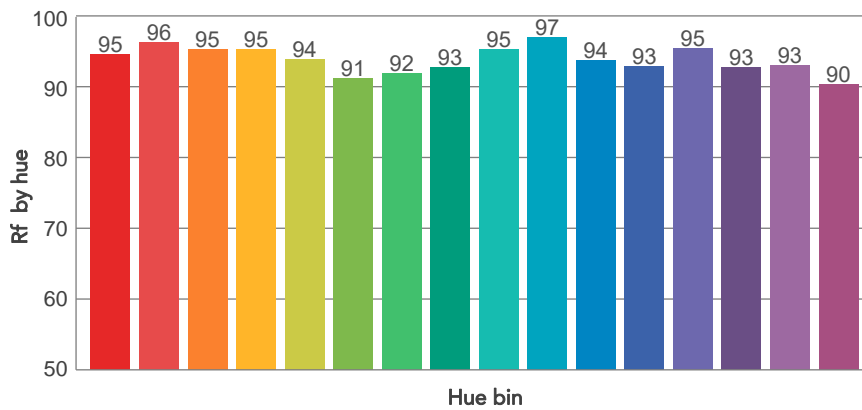
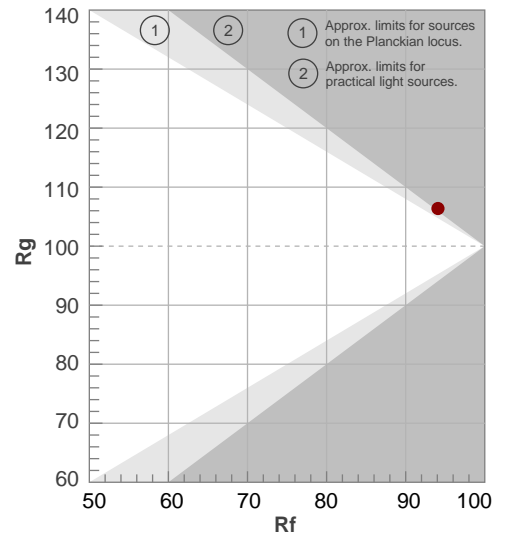
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3183 K	93,9	81,1	94,1	106,4	94,5	96	0,418	0,385	-0,0051

# TM30 DETAILS

**Rf 94,1**  
Fidelity index Rf

**Rg 106,4**  
Gammut index

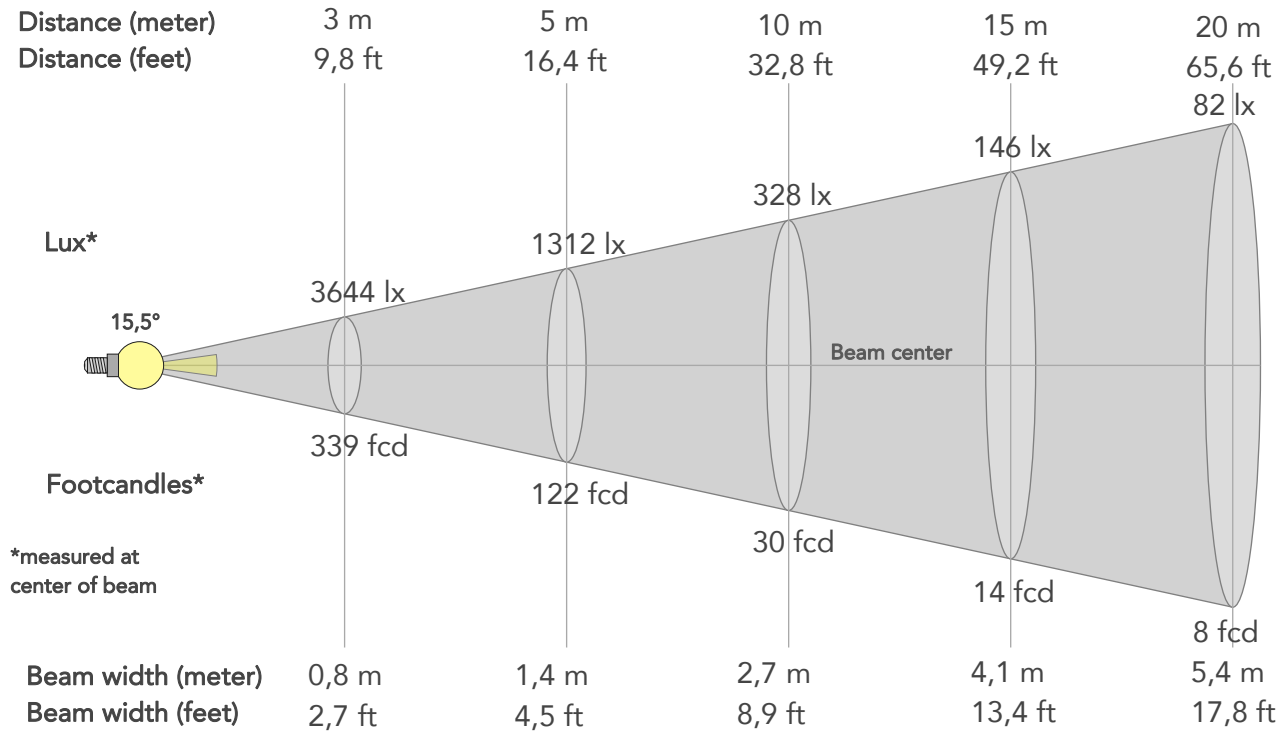
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	2%	-1%
2	96	2%	-1%
3	95	2%	1%
4	95	2%	2%
5	94	3%	2%
6	91	6%	1%
7	92	5%	-1%
8	93	3%	-3%
9	95	2%	-2%
10	97	0%	-1%
11	94	1%	4%
12	93	4%	3%
13	95	3%	2%
14	93	6%	1%
15	93	4%	0%
16	90	6%	-6%



# BEAM DETAILS



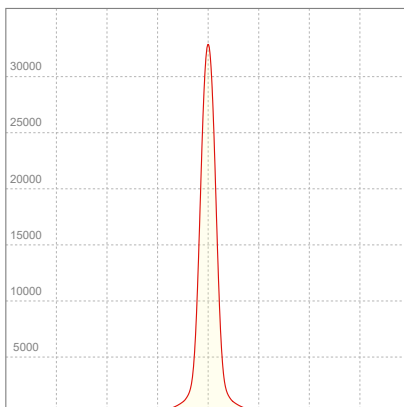
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,5°	27,9°	50,2°	96,5%	91,4%



## 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	32797lx	8199lx	3644lx	2050lx	1312lx	583lx	328lx	146lx	82lx	52lx	36lx	20lx	13lx
Footcand.	3047fcd	762fcd	339fcd	190fcd	122fcd	54fcd	30fcd	14fcd	8fcd	5fcd	3fcd	2fcd	1fcd
Beam wid.	0,3m	0,5m	0,8m	1,1m	1,4m	2m	2,7m	4,1m	5,4m	6,8m	8,2m	10,9m	13,6m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,7ft	8,9ft	13,4ft	17,8ft	22,3ft	26,8ft	35,7ft	44,6ft

## LINEAR DISTRIBUTION DIAGRAM

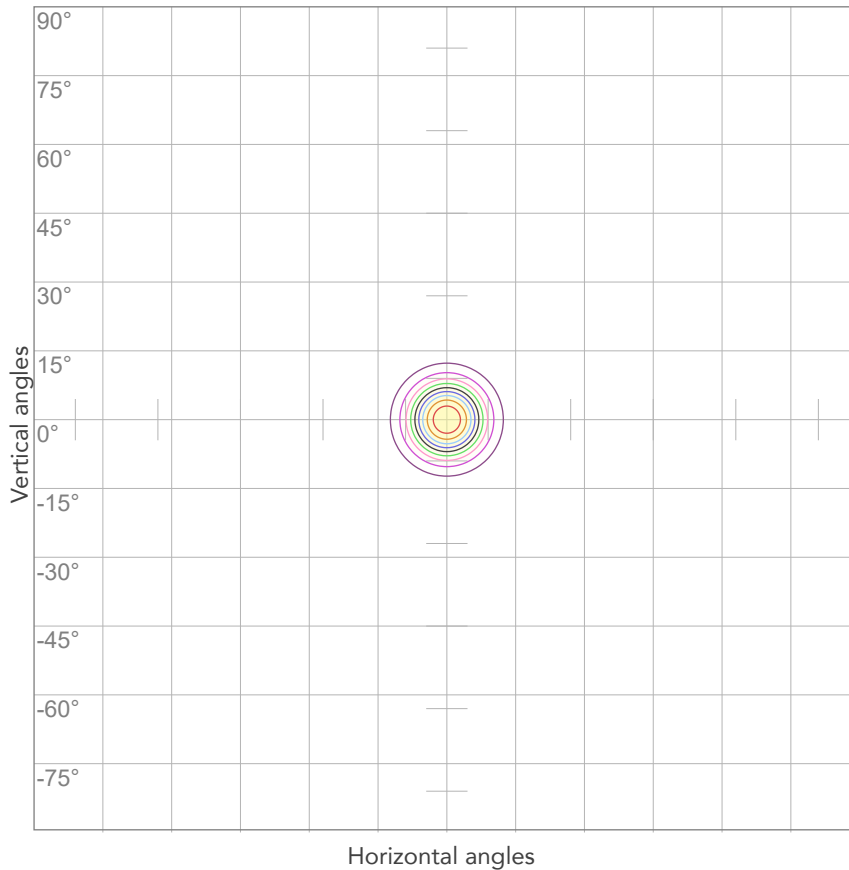


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
227V	0,384A	80,6W	0,92	47lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



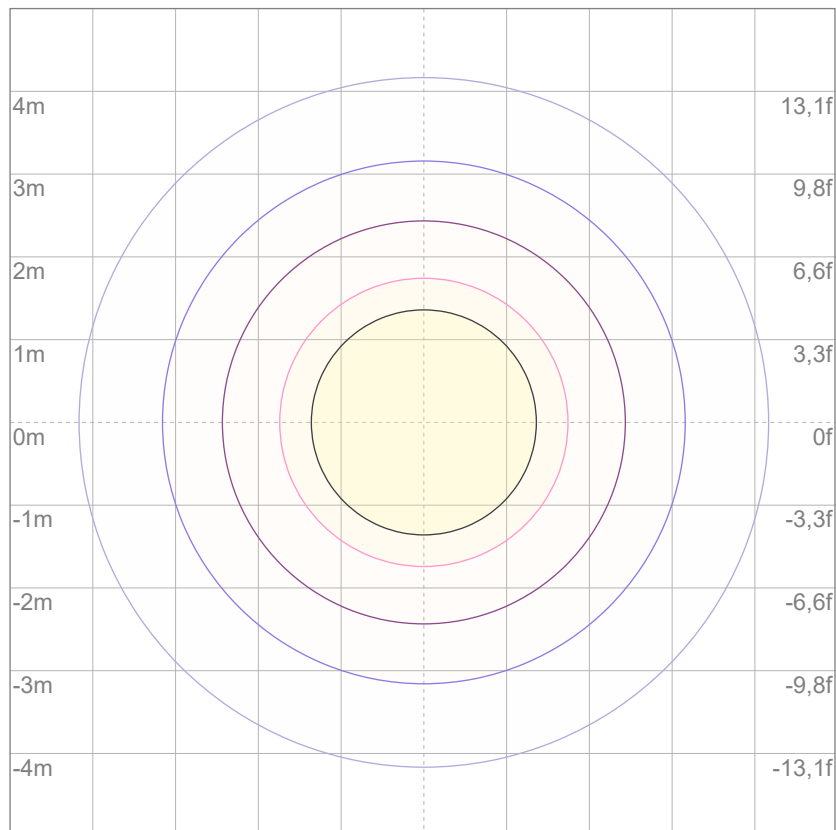
10%	3280 cd
20%	6559 cd
30%	9839 cd
40%	13119 cd
50%	16399 cd
60%	19678 cd
70%	22958 cd
80%	26238 cd

### Conditions:

Number of c-planes: 2

Candela at center: 32797 cd

## ISO LUX DIAGRAM



3%	9,84 lx
5%	16,4 lx
10%	32,8 lx
30%	98,4 lx
50%	164 lx

### Conditions:

Number of c-planes: 2

Lux at center: 328 lx

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



Total lumen output:

4103 lm

Peak candela output:

35344 cd

Light quality:

CRI: 93,6

Color temperature:

3989 K

**PRODUCT NAME:**

ARCSPOTM VW

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

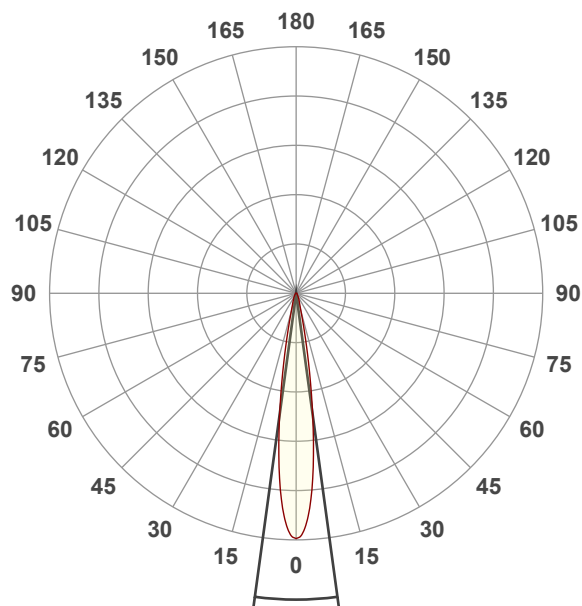
4000K

Operator:

Giacomo Matteo

Date and time:

22/02/2024 12:12:29

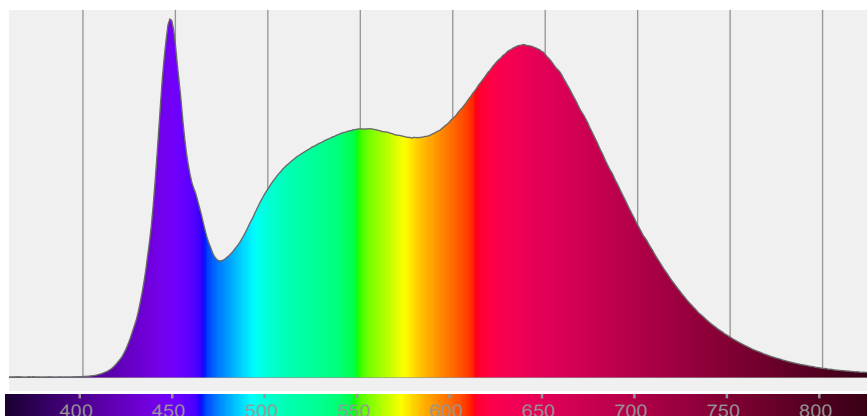


Beam angle 50%: 15,5°

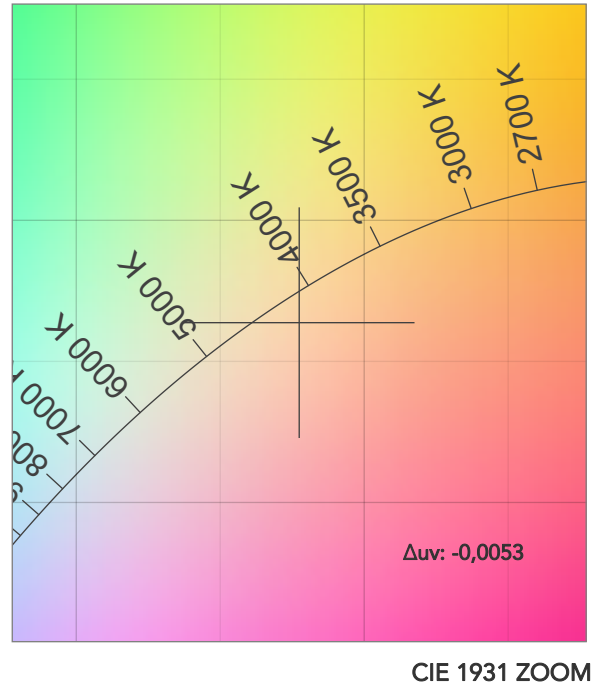
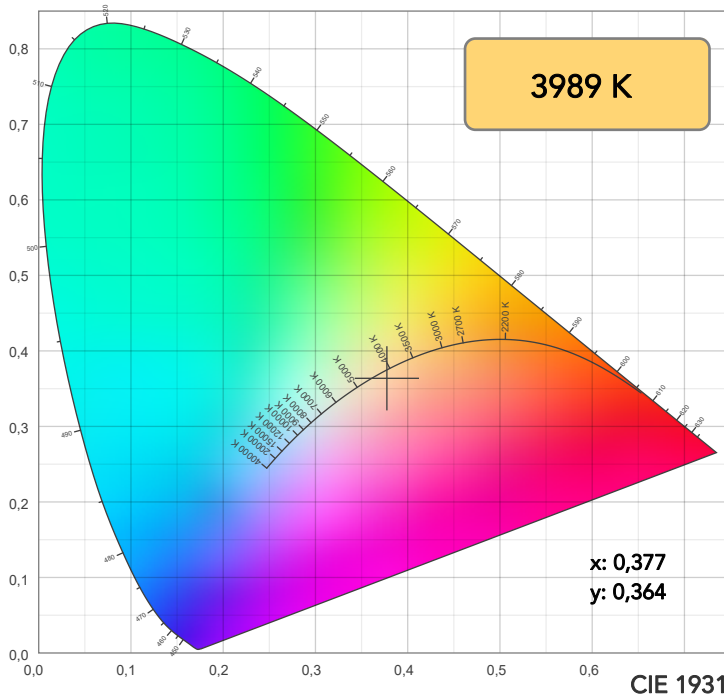
Field angle 10%: 27,9°

Cut off angle 2.5%: 50,4°

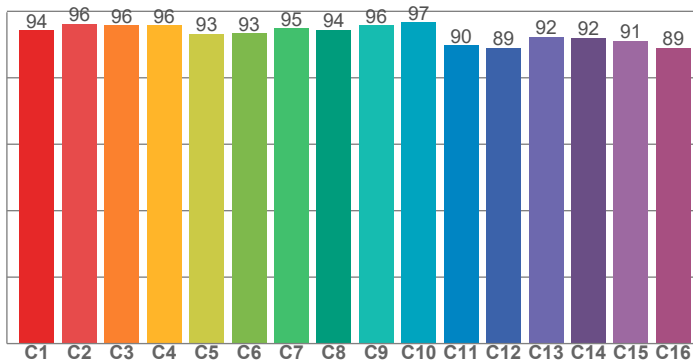
**Spectra**



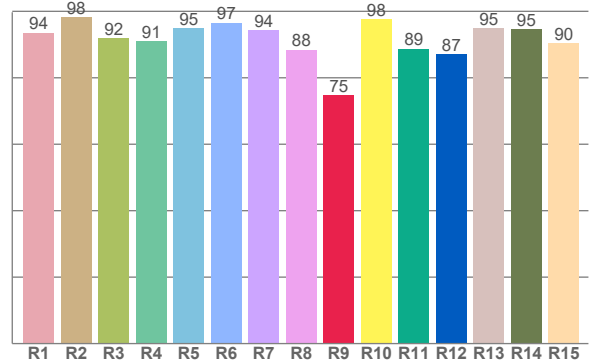
# COLOR DETAILS



**TM30: 93,5**



**CRI: 93,6 (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
93,6	98,3	91,9	91,0	94,9	96,5	94,3	88,4	74,7	97,5	88,7	87,0	94,9	94,6	90,3

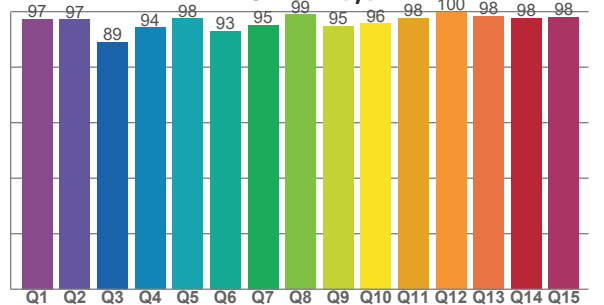
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,2	96,2	95,8	95,8	93,3	93,3	94,8	94,4	95,8	96,6	89,7	88,9	92,3	92,0	91,2	89,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,3	97,1	89,1	94,3	97,5	92,9	95,2	99,0	94,8	95,7	97,7	99,8	98,4	97,6	98,0

**CQS: 95,5**



## 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	$\Delta uv$
3989 K	93,6	74,7	93,5	105,6	95,5	97	0,377	0,364	-0,0053

## TM30 DETAILS

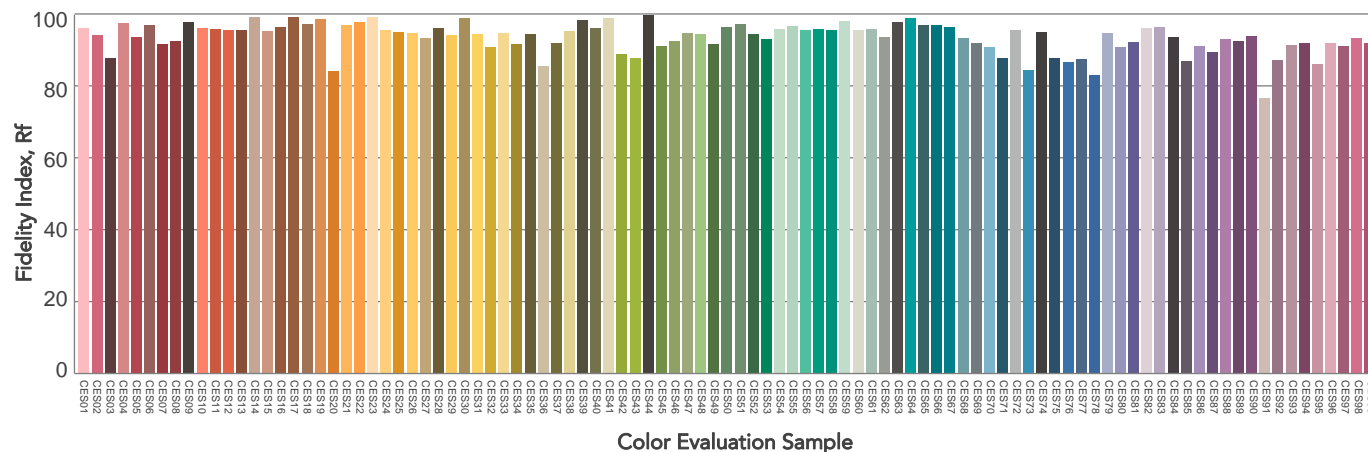
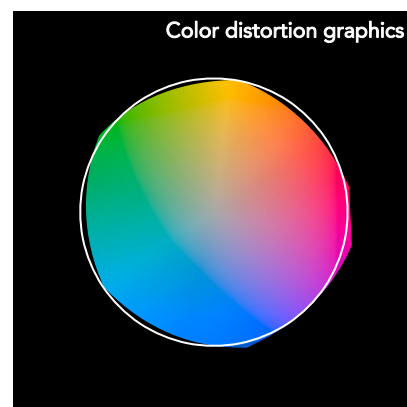
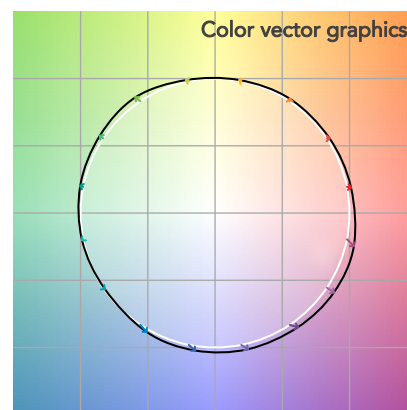
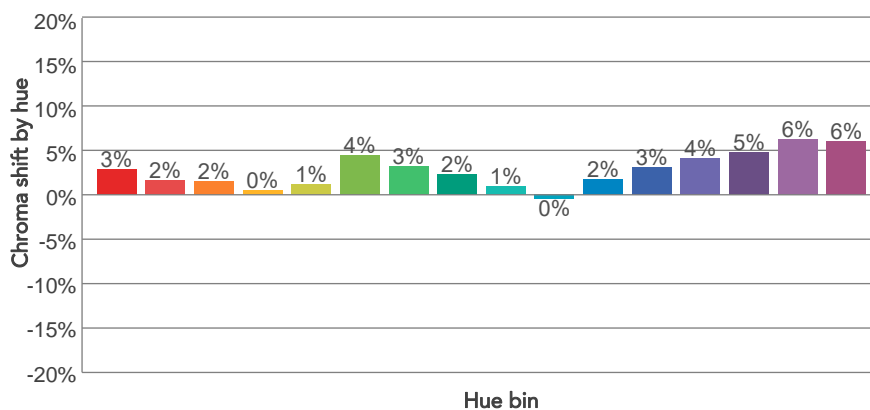
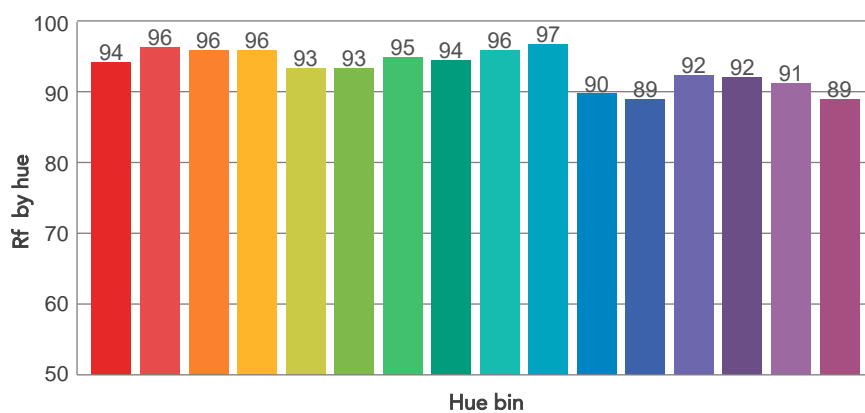
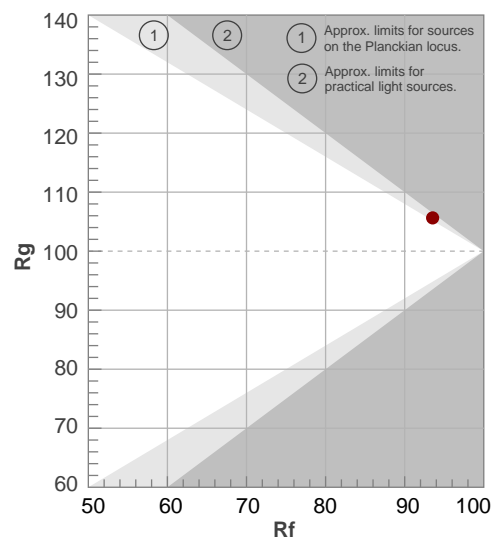
Rf 93,5

Fidelity index  $R_f$

Rg 105,6

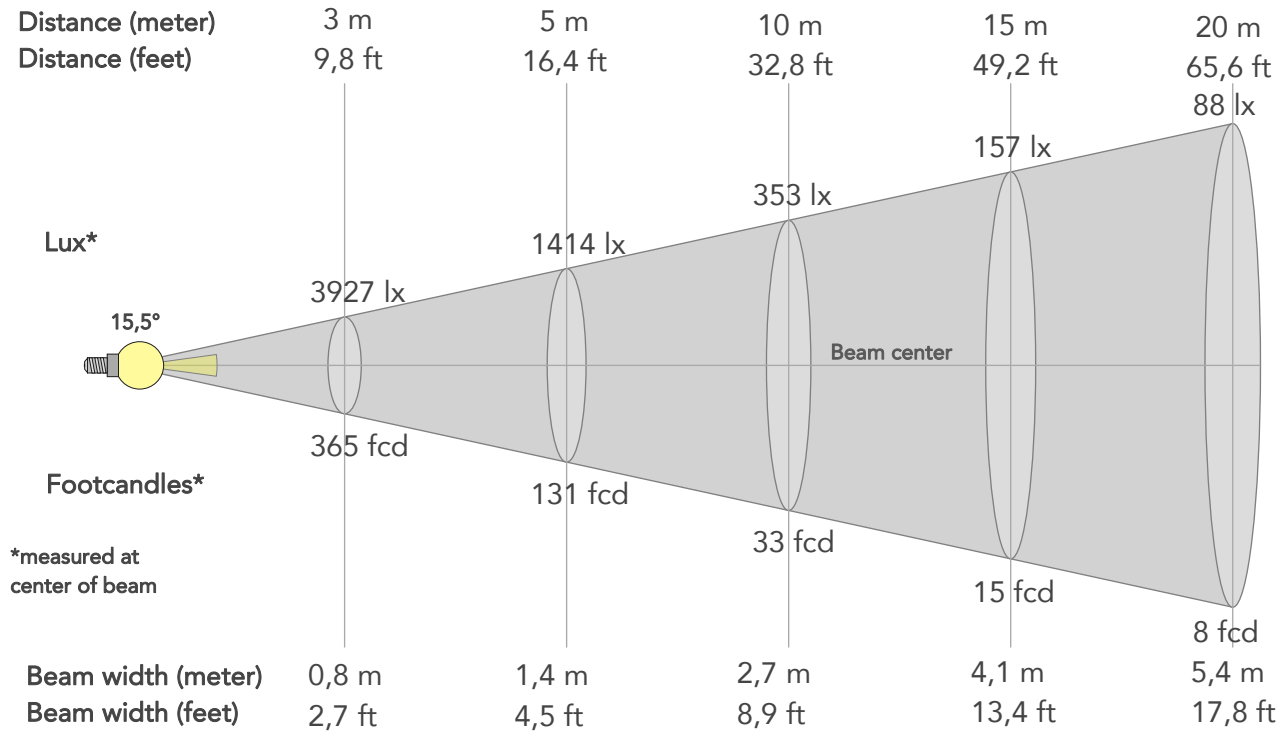
## Gammut index

		Graphic shifts (%)	
Hue Bin	$R_f$	Chroma	Hue
1	94	3%	-1%
2	96	2%	-1%
3	96	2%	1%
4	96	0%	2%
5	93	1%	2%
6	93	4%	1%
7	95	3%	0%
8	94	2%	0%
9	96	1%	1%
10	97	0%	1%
11	90	2%	7%
12	89	3%	5%
13	92	4%	4%
14	92	5%	4%
15	91	6%	0%
16	89	6%	-4%



# BEAM DETAILS

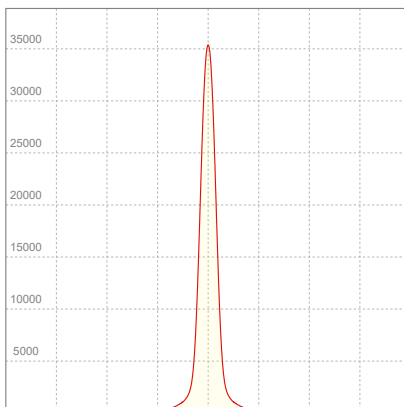
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,5°	27,9°	50,4°	96,4%	91,3%



## 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	35344lx	8836lx	3927lx	2209lx	1414lx	628lx	353lx	157lx	88lx	57lx	39lx	22lx	14lx
Footcand.	3284fcd	821fcd	365fcd	205fcd	131fcd	58fcd	33fcd	15fcd	8fcd	5fcd	4fcd	2fcd	1fcd
Beam wid.	0,3m	0,5m	0,8m	1,1m	1,4m	2m	2,7m	4,1m	5,4m	6,8m	8,2m	10,9m	13,6m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,7ft	8,9ft	13,4ft	17,8ft	22,3ft	26,8ft	35,7ft	44,6ft

## LINEAR DISTRIBUTION DIAGRAM



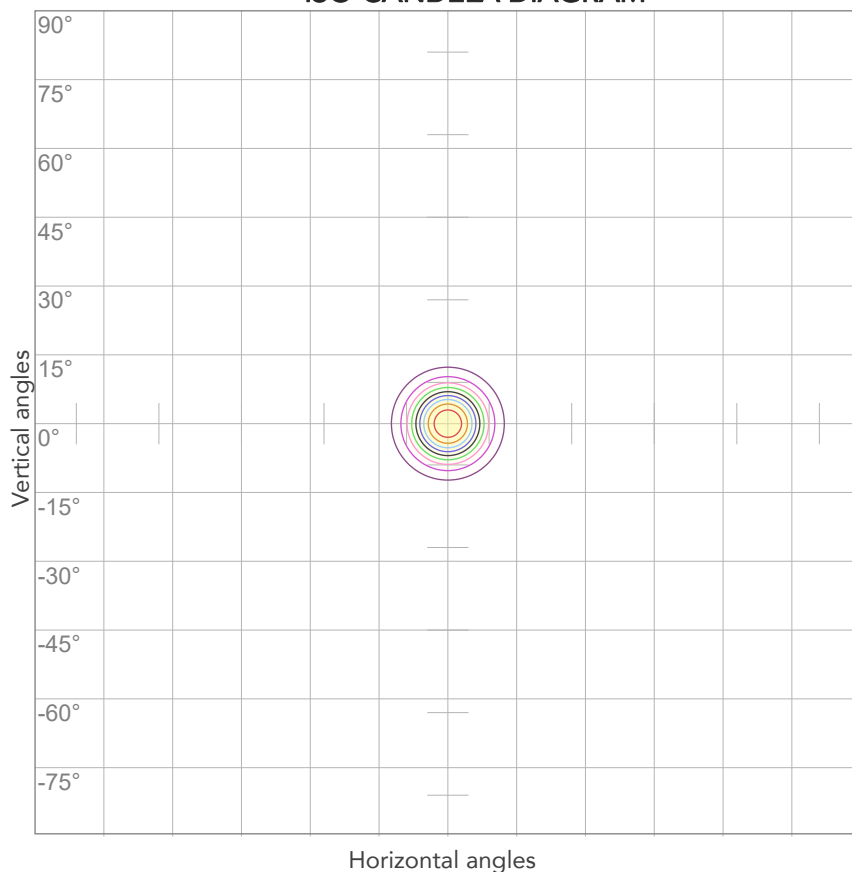
## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
227V	0,381A	79,9W	0,92	51lm/W



# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



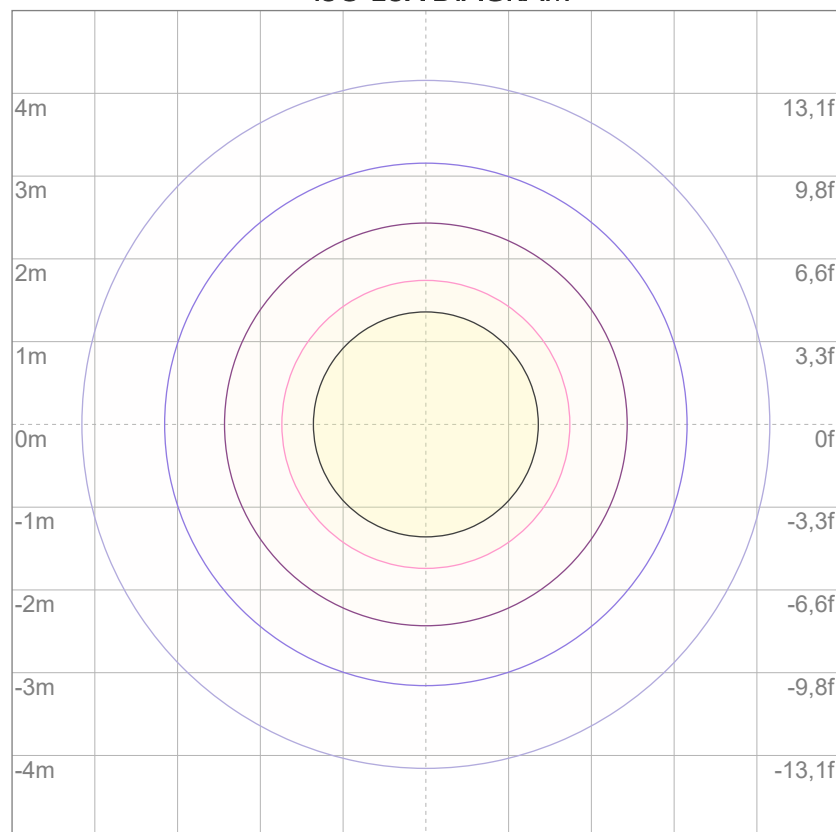
10%	3534 cd
20%	7069 cd
30%	10603 cd
40%	14138 cd
50%	17672 cd
60%	21206 cd
70%	24741 cd
80%	28275 cd

### Conditions:

Number of c-planes: 2

Candela at center: 35344 cd

## ISO LUX DIAGRAM



3%	10,6 lx
5%	17,7 lx
10%	35,3 lx
30%	106 lx
50%	177 lx

### Conditions:

Number of c-planes: 2

Lux at center: 353 lx

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



Total lumen output:

4691 lm

Peak candela output:

40390 cd

Light quality:

CRI: 94,5

Color temperature:

5606 K

**PRODUCT NAME:**

ARCSPOTM VW

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

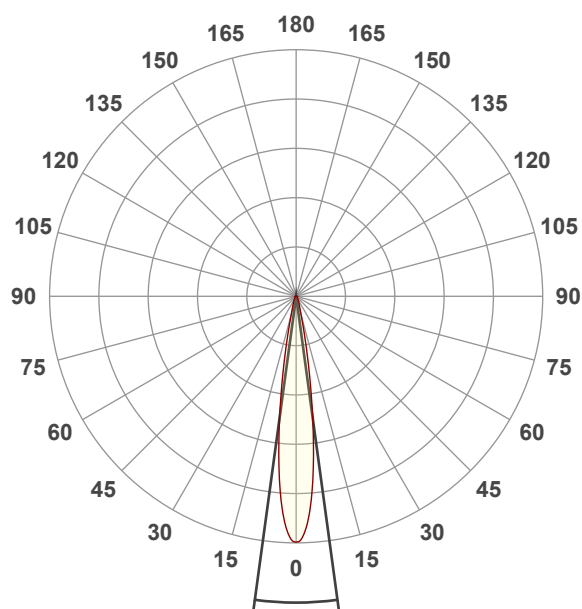
5600K

Operator:

Giacomo Matteo

Date and time:

22/02/2024 12:15:36

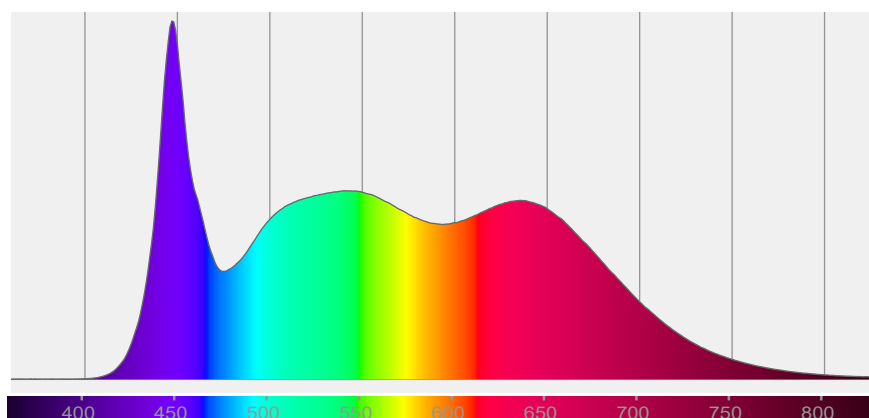


Beam angle 50%: 15,5°

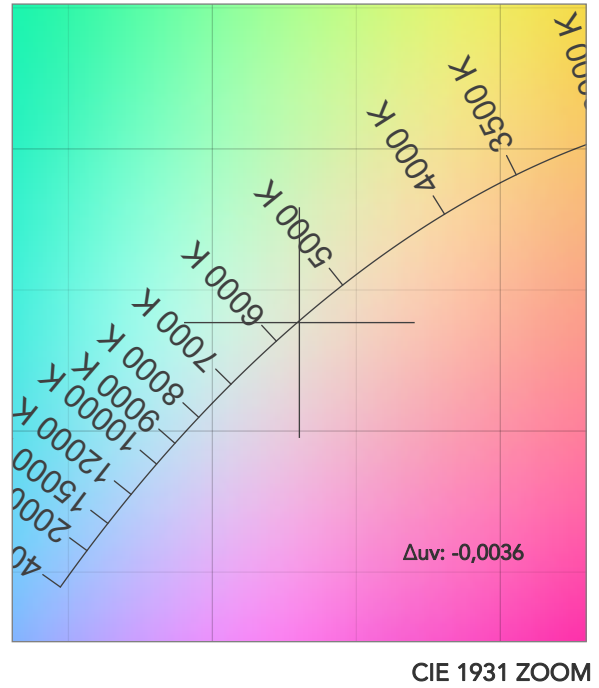
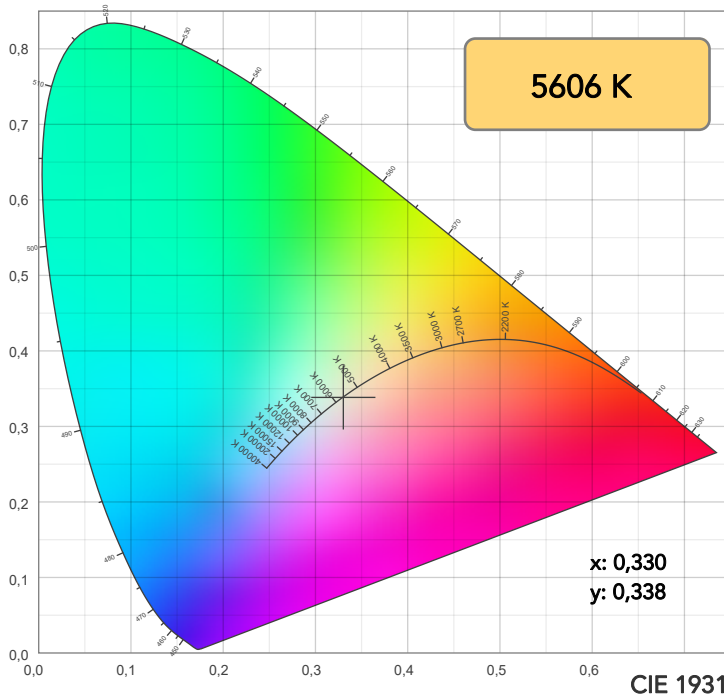
Field angle 10%: 27,9°

Cut off angle 2.5%: 50,4°

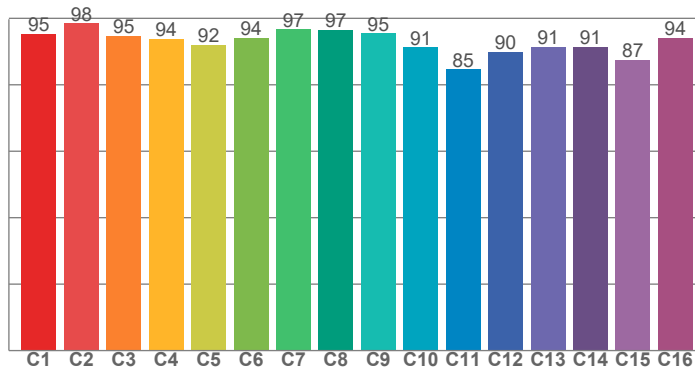
**Spectra**



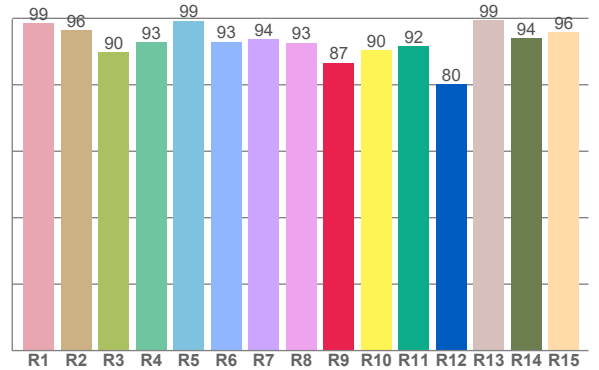
# COLOR DETAILS



TM30: 92,9



CRI: 94,5 (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
98,5	96,5	89,8	92,8	99,2	92,9	93,6	92,7	86,7	90,4	91,5	80,2	99,5	94,0	95,8

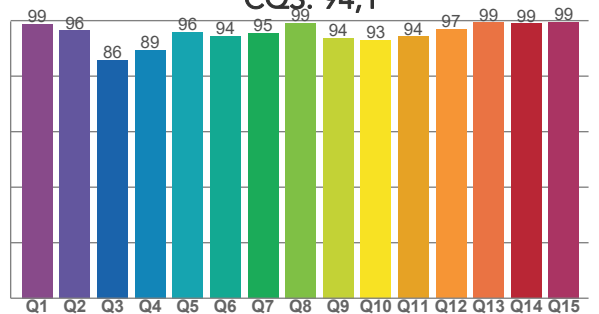
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,3	98,4	94,7	93,8	92,1	94,0	96,6	96,6	95,5	91,3	84,7	90,0	91,4	91,4	87,5	94,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,8	96,4	85,8	89,4	96,0	94,4	95,4	99,1	93,8	93,0	94,3	96,9	99,4	99,0	99,5

CQS: 94,1



## COLOR PARAMETERS

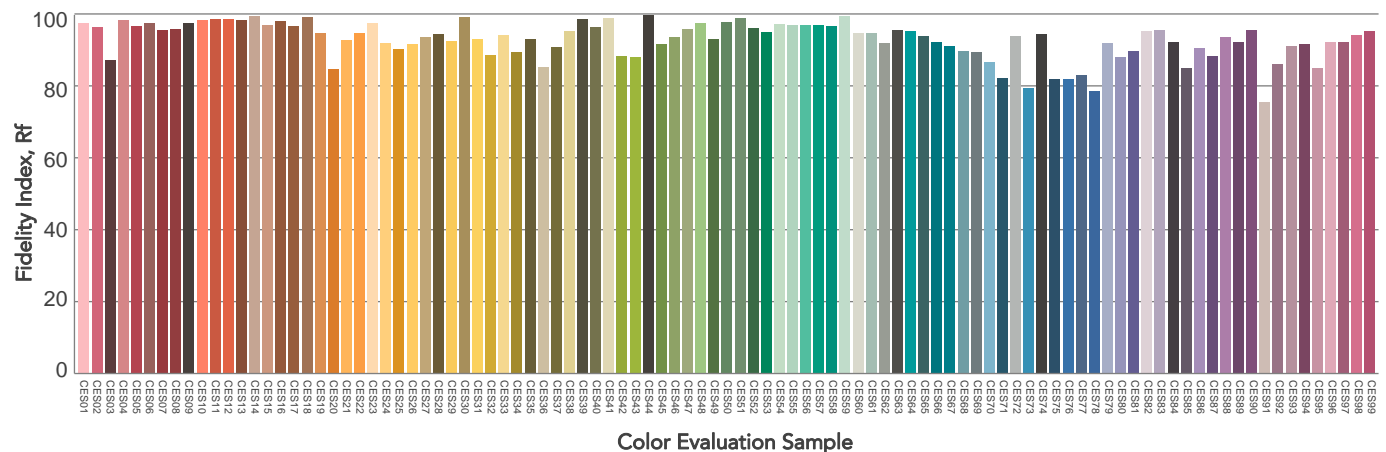
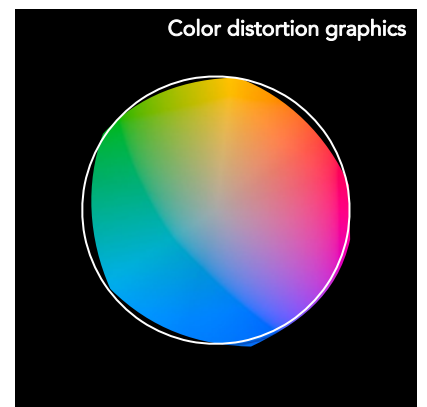
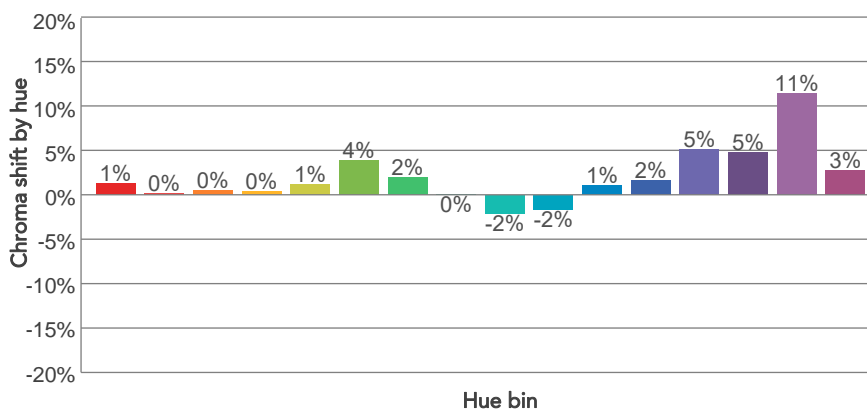
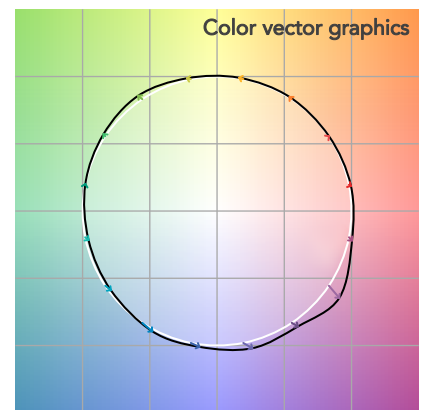
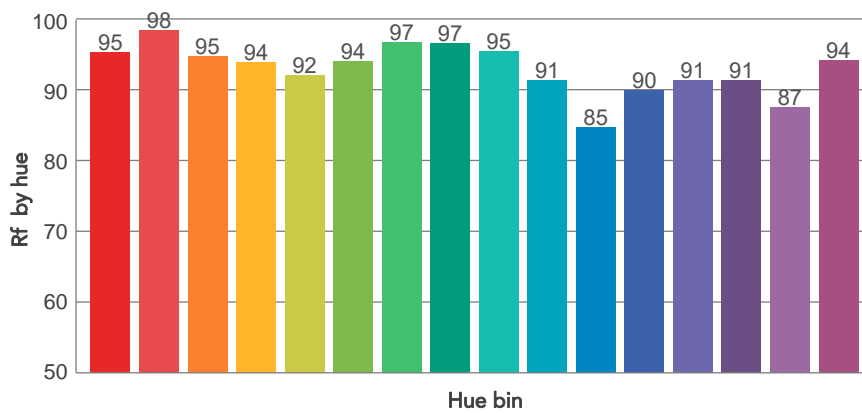
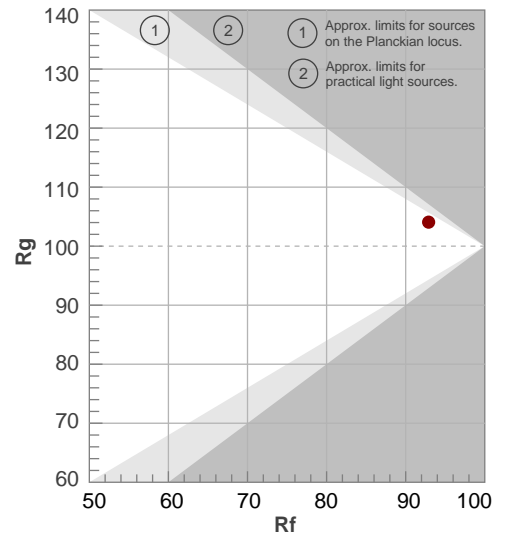
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
5606 K	94,5	86,7	92,9	104,1	94,1	98	0,330	0,338	-0,0036

# TM30 DETAILS

**Rf 92,9**  
Fidelity index Rf

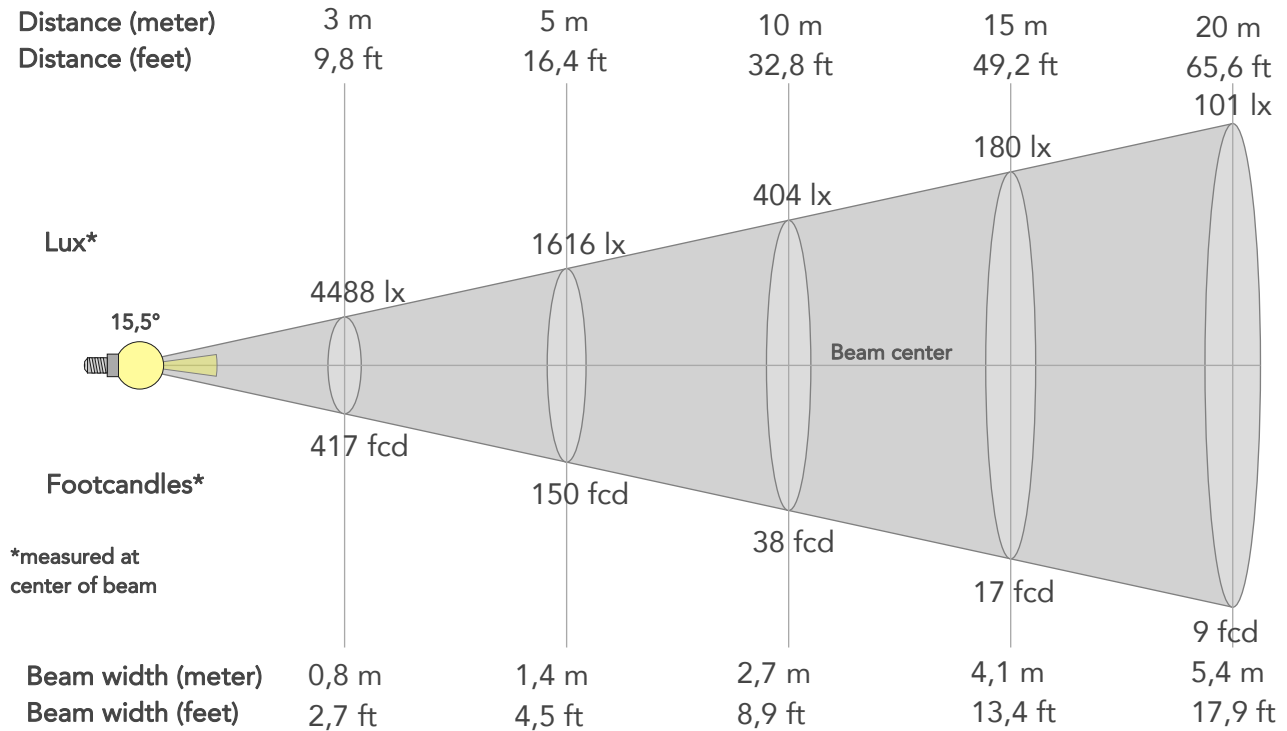
**Rg 104,1**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	1%	-1%
2	98	0%	0%
3	95	0%	2%
4	94	0%	3%
5	92	1%	3%
6	94	4%	1%
7	97	2%	-1%
8	97	0%	-1%
9	95	-2%	2%
10	91	-2%	5%
11	85	1%	10%
12	90	2%	7%
13	91	5%	6%
14	91	5%	2%
15	87	11%	-3%
16	94	3%	-2%



# BEAM DETAILS

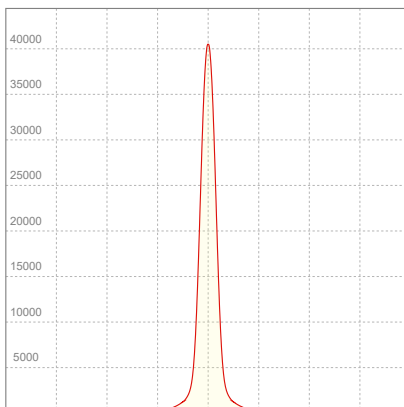
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,5°	27,9°	50,4°	96,5%	91,4%



## 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	40390lx	10098lx	4488lx	2524lx	1616lx	718lx	404lx	180lx	101lx	65lx	45lx	25lx	16lx
Footcand.	3752fcd	938fcd	417fcd	235fcd	150fcd	67fcd	38fcd	17fcd	9fcd	6fcd	4fcd	2fcd	2fcd
Beam wid.	0,3m	0,5m	0,8m	1,1m	1,4m	2m	2,7m	4,1m	5,4m	6,8m	8,2m	10,9m	13,6m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,7ft	8,9ft	13,4ft	17,9ft	22,3ft	26,8ft	35,7ft	44,6ft

## LINEAR DISTRIBUTION DIAGRAM

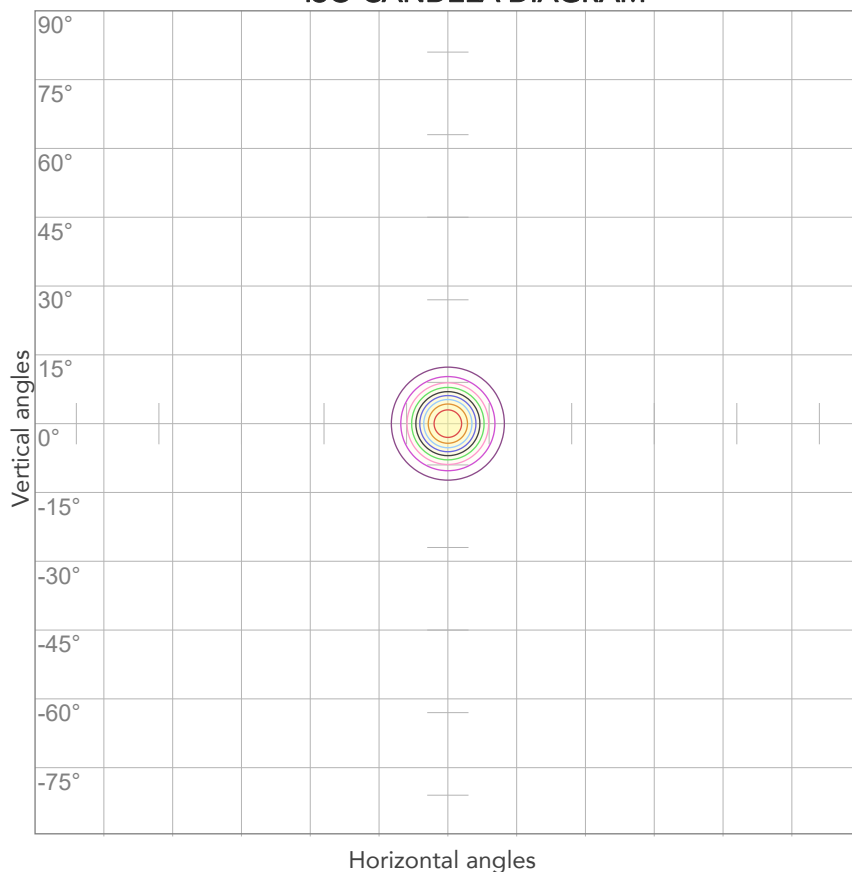


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
227V	0,384A	80,5W	0,92	58lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



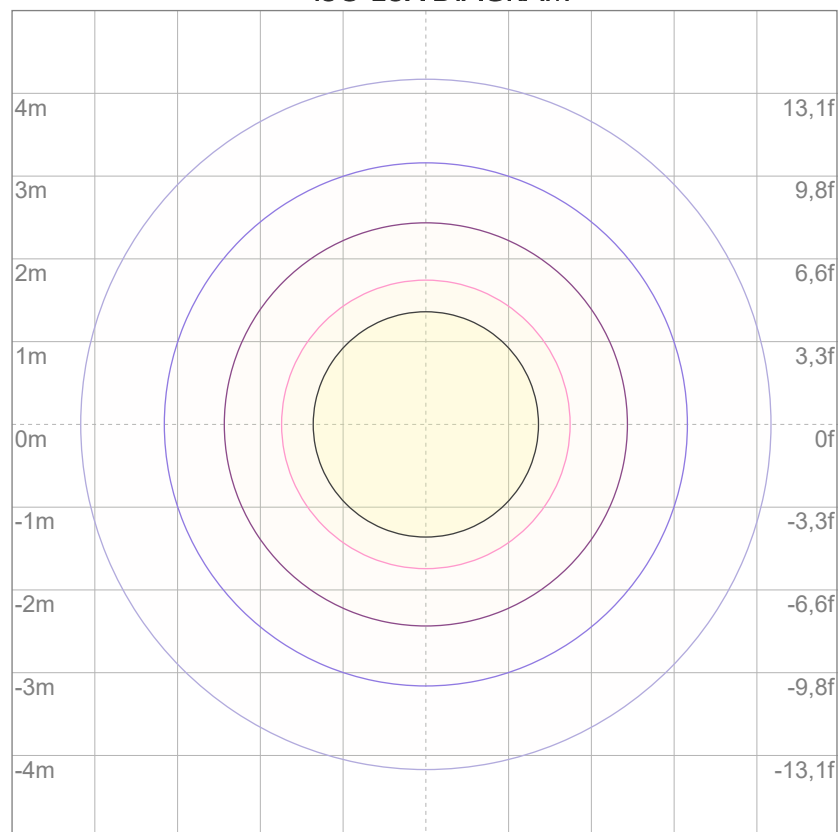
10%	4039 cd
20%	8078 cd
30%	12117 cd
40%	16156 cd
50%	20195 cd
60%	24234 cd
70%	28273 cd
80%	32312 cd

### Conditions:

Number of c-planes: 2

Candela at center: 40390 cd

## ISO LUX DIAGRAM



3%	12,1 lx
5%	20,2 lx
10%	40,4 lx
30%	121 lx
50%	202 lx

### Conditions:

Number of c-planes: 2

Lux at center: 404 lx

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



Total lumen output:

4252 lm

Peak candela output:

36780 cd

Light quality:

CRI: 94,0

Color temperature:

6458 K

**PRODUCT NAME:**

ARCSPOTM VW

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

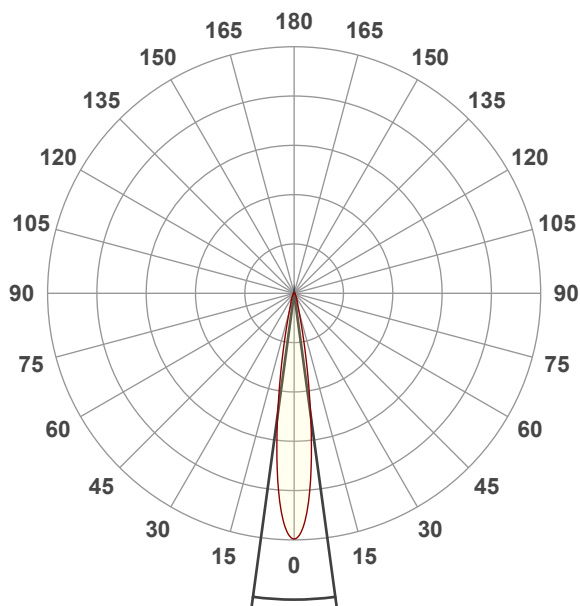
6500K

Operator:

Giacomo Matteo

Date and time:

22/02/2024 12:18:23

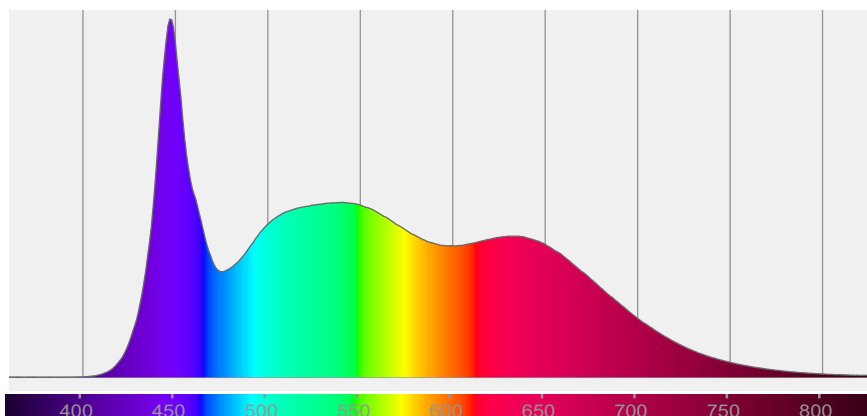


Beam angle 50%: 15,5°

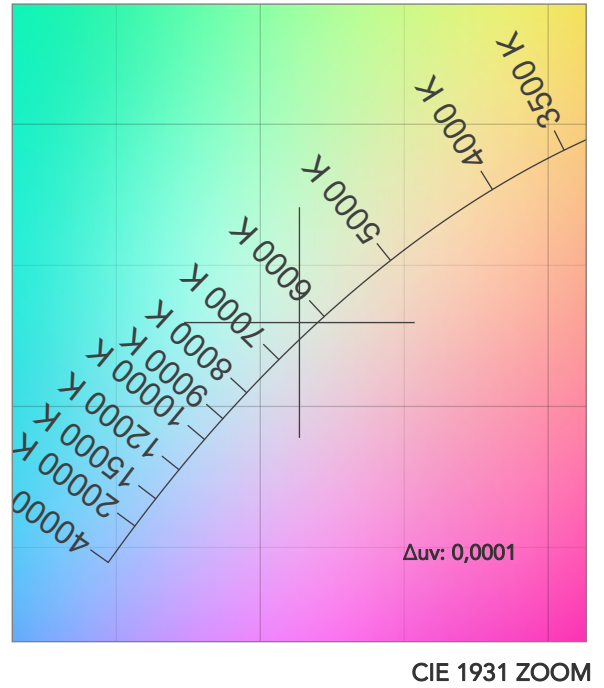
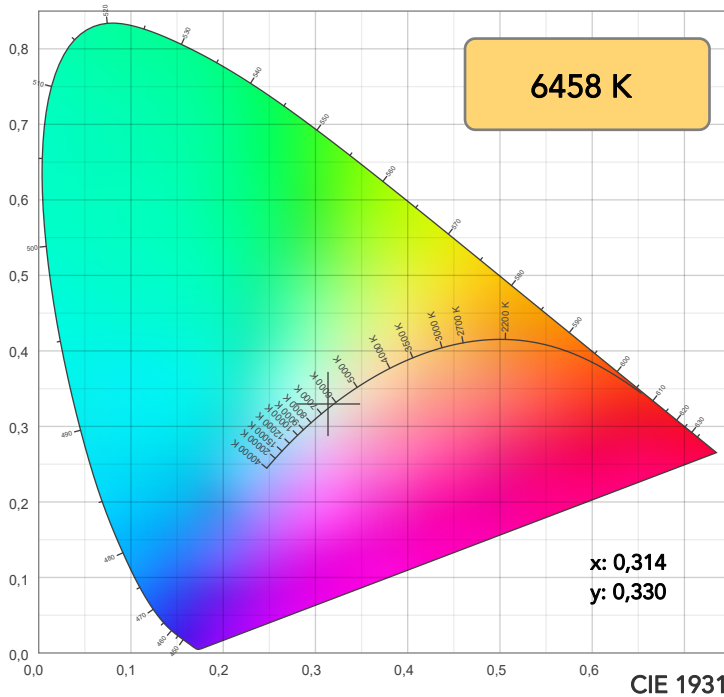
Field angle 10%: 27,9°

Cut off angle 2.5%: 50,2°

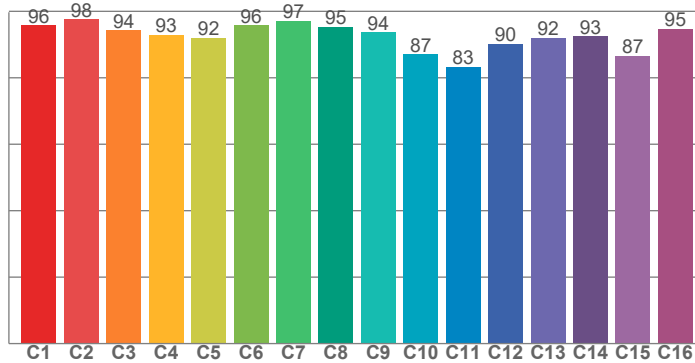
**Spectra**



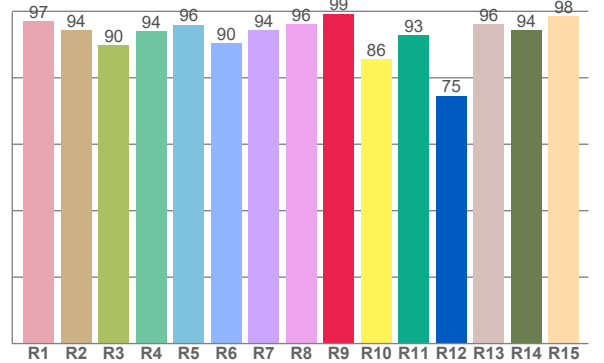
# COLOR DETAILS



**TM30: 92,5**



**CRI: 94,0 (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
97,0	94,3	89,7	94,1	95,9	90,4	94,3	96,1	99,3	85,5	92,8	74,6	96,0	94,3	98,4

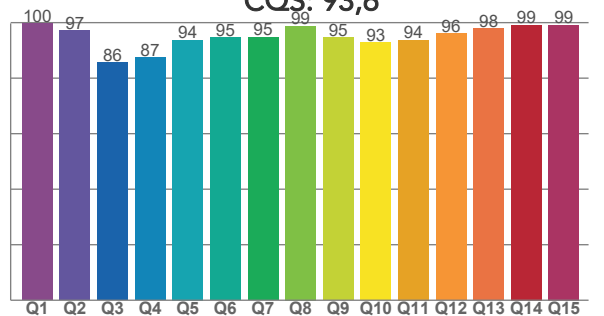
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,7	97,6	94,3	93,0	92,0	95,8	97,1	95,4	93,7	87,1	83,4	90,2	92,0	92,5	86,7	94,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
99,7	97,1	85,6	87,3	93,8	94,6	94,7	98,8	94,7	92,8	93,8	96,1	97,8	99,2	99,1

**CQS: 93,6**



## 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	$\Delta uv$
6458 K	94,0	99,3	92,5	102,1	93,6	98	0,314	0,330	0,0001



## TM30 DETAILS

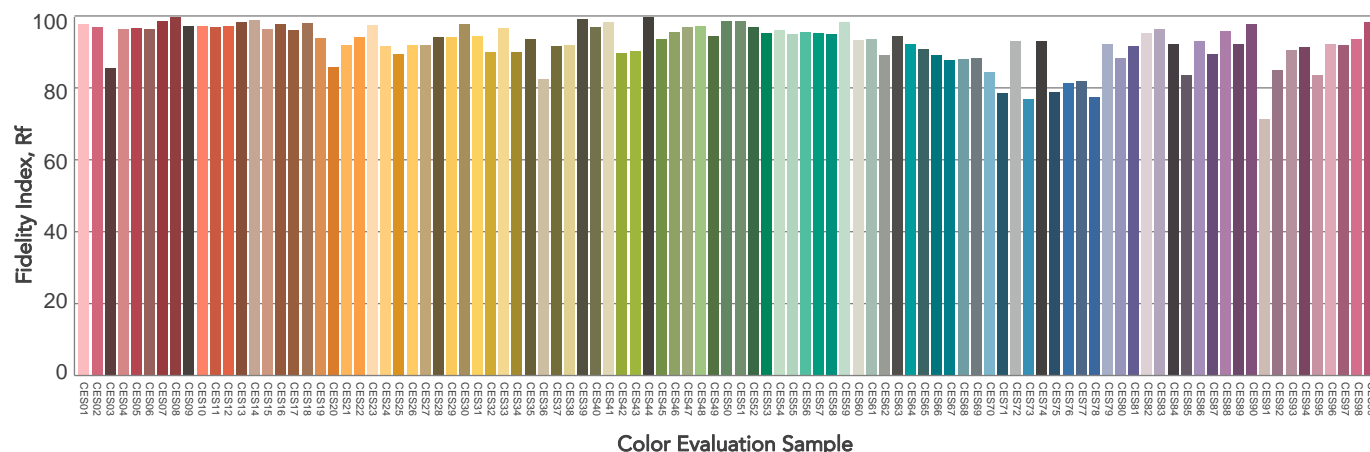
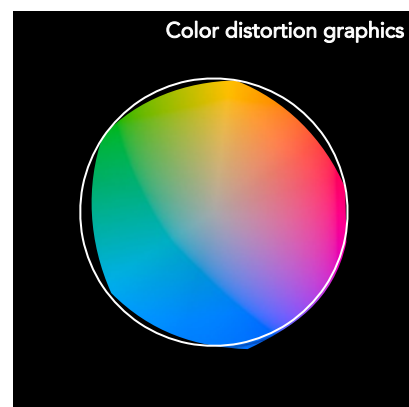
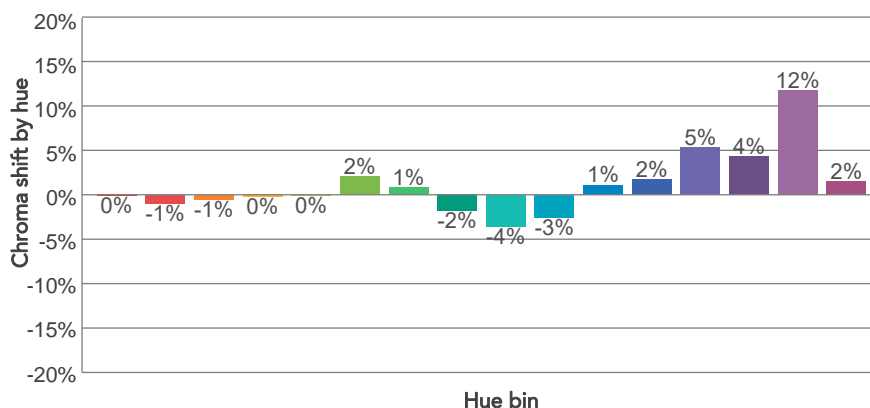
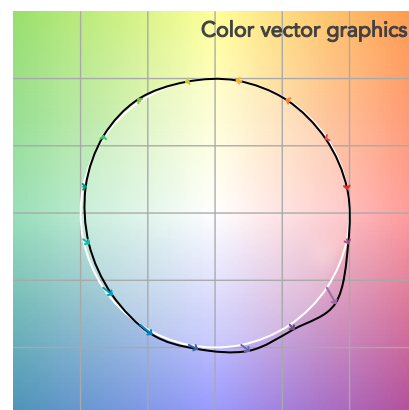
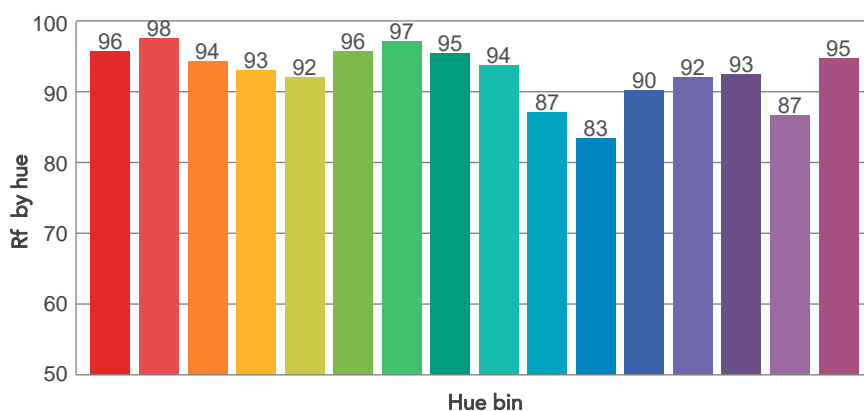
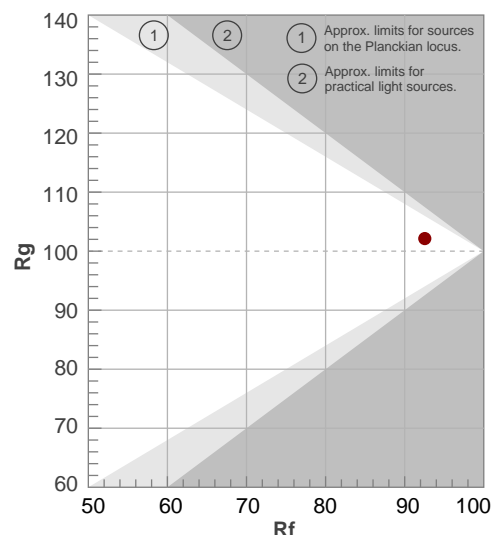
**Rf 92,5**

Fidelity index Rf

**Rg 102,1**

Gammut index

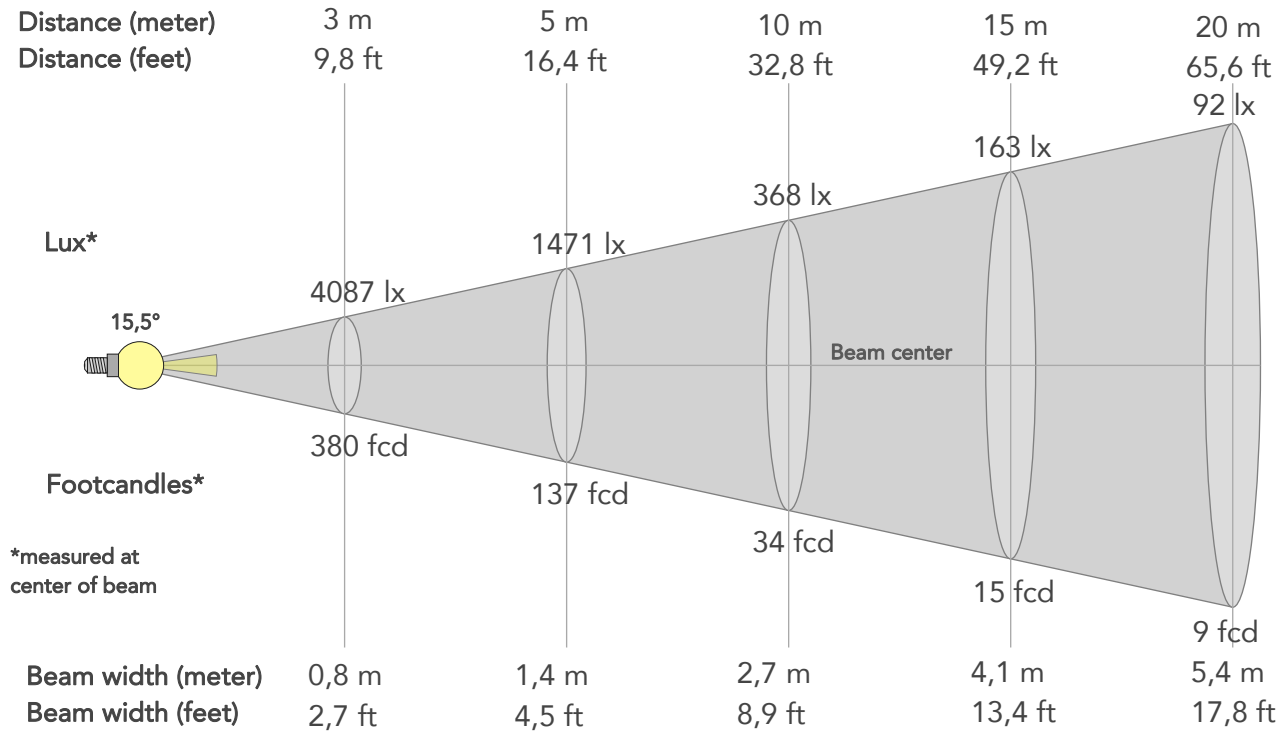
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	96	0%	-1%
2	98	-1%	0%
3	94	-1%	2%
4	93	0%	3%
5	92	0%	2%
6	96	2%	1%
7	97	1%	-1%
8	95	-2%	0%
9	94	-4%	4%
10	87	-3%	8%
11	83	1%	11%
12	90	2%	7%
13	92	5%	5%
14	93	4%	1%
15	87	12%	-6%
16	95	2%	-3%



# BEAM DETAILS



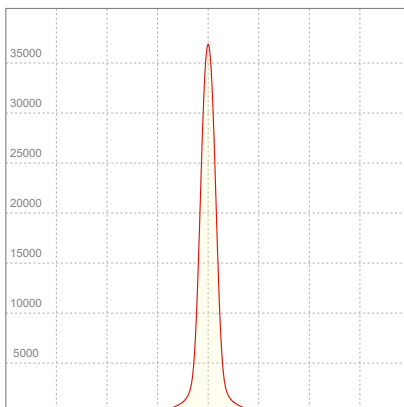
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,5°	27,9°	50,2°	96,4%	91,3%



## 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	36780lx	9195lx	4087lx	2299lx	1471lx	654lx	368lx	163lx	92lx	59lx	41lx	23lx	15lx
Footcand.	3417fcd	854fcd	380fcd	214fcd	137fcd	61fcd	34fcd	15fcd	9fcd	5fcd	4fcd	2fcd	1fcd
Beam wid.	0,3m	0,5m	0,8m	1,1m	1,4m	2m	2,7m	4,1m	5,4m	6,8m	8,1m	10,9m	13,6m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,7ft	8,9ft	13,4ft	17,8ft	22,3ft	26,7ft	35,6ft	44,5ft

## LINEAR DISTRIBUTION DIAGRAM

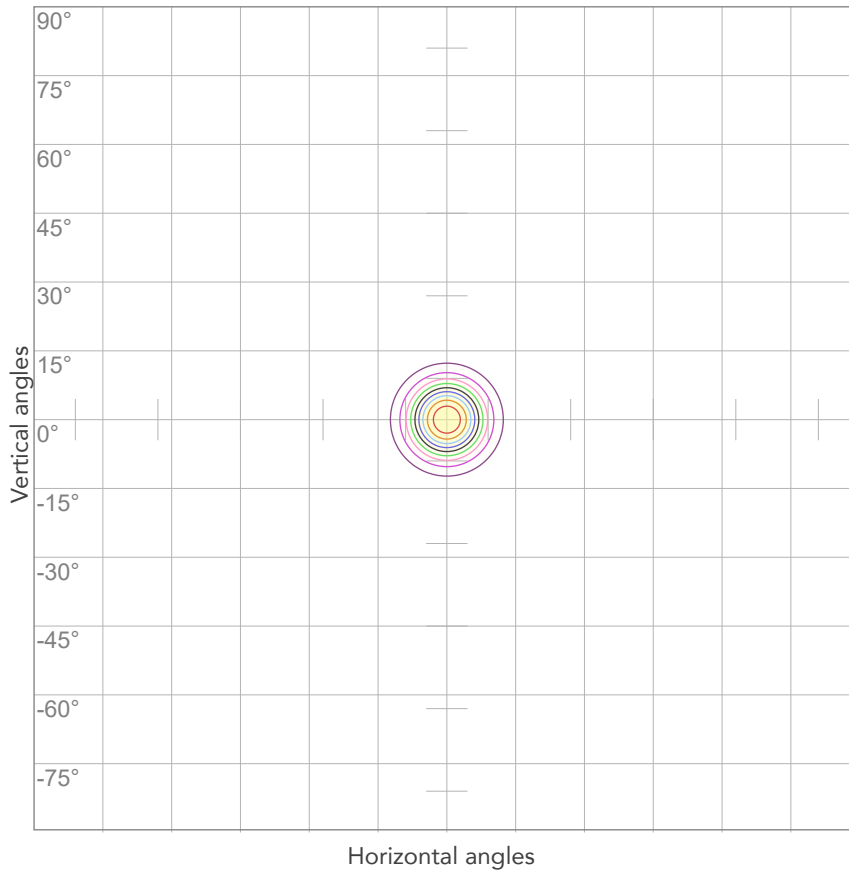


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
227V	0,334A	69,4W	0,91	61lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



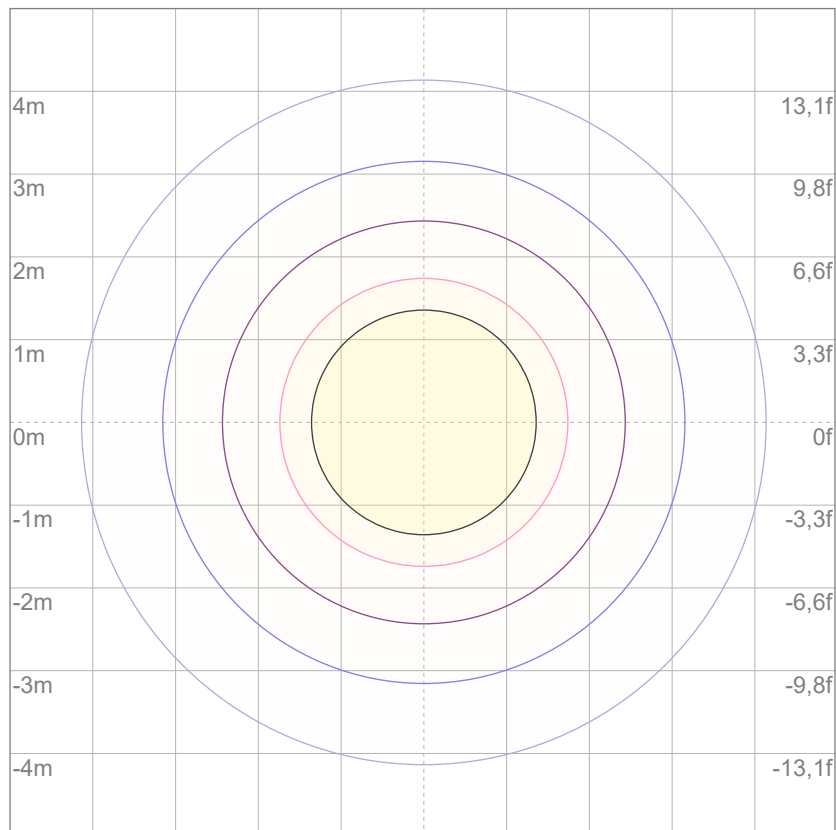
10%	3678 cd
20%	7356 cd
30%	11034 cd
40%	14712 cd
50%	18390 cd
60%	22068 cd
70%	25746 cd
80%	29424 cd

### Conditions:

Number of c-planes: 2

Candela at center: 36780 cd

## ISO LUX DIAGRAM



3%	11,0 lx
5%	18,4 lx
10%	36,8 lx
30%	110 lx
50%	184 lx

### Conditions:

Number of c-planes: 2

Lux at center: 368 lx

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