Photometric Test Report

Astra Profile500LTIP

IP65 500W Moving Profile, with 6500K LED source, 4° - 50° zoom

(PRELIMINARY)

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:

24649 lm

Peak candela output:

48133 cd

Light quality:

CRI: 68,6

Color temperature:

6418 K

PRODUCT NAME:

ASTRAPROFILE500LTIP

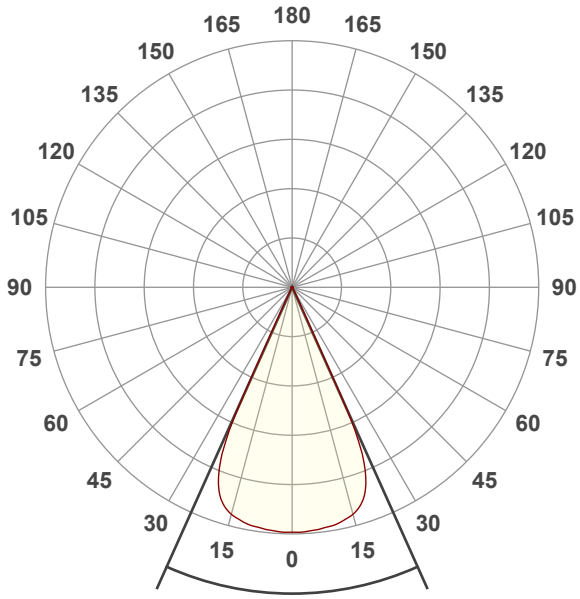
MEASURAMENT CONDITIONS:

Beam angle:
Zoom max

Target:
Full On

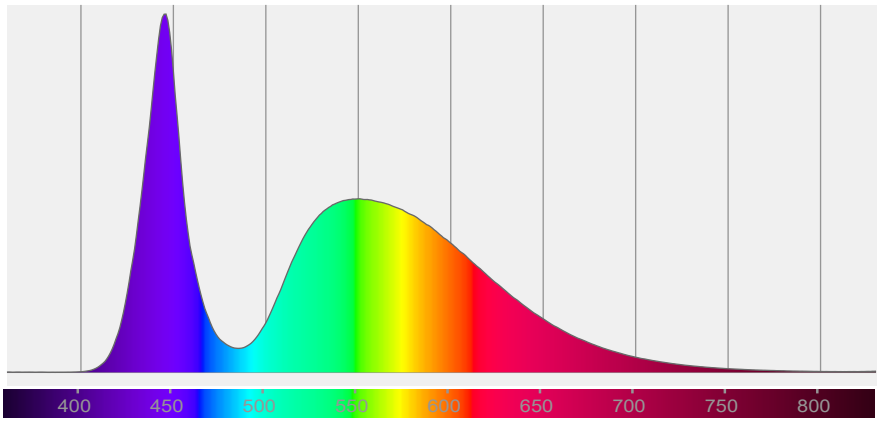
Operator:
Giuseppe della Peruta

Date and time:
31/07/2025 11:08:57

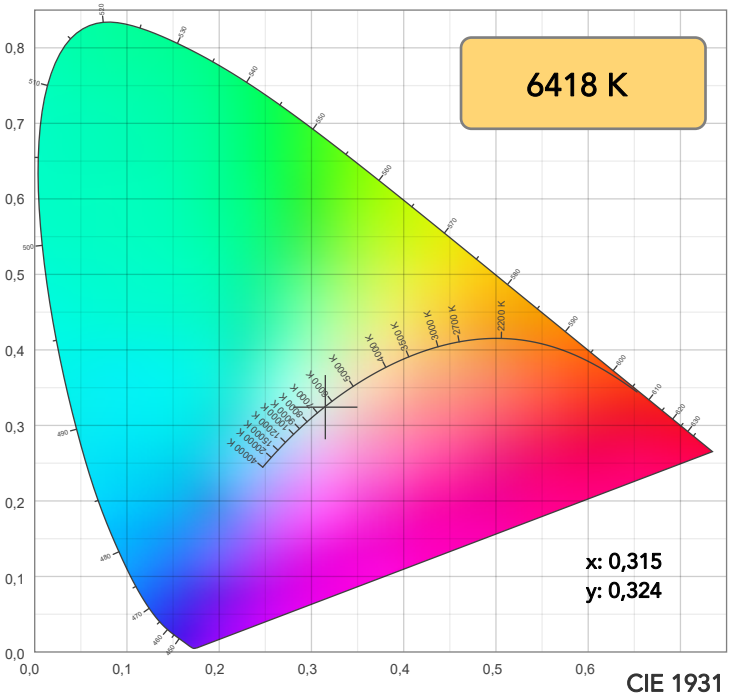


Beam angle 50%: 48,4°
Field angle 10%: 50,1°
Cut off angle 2.5%: 51,7°

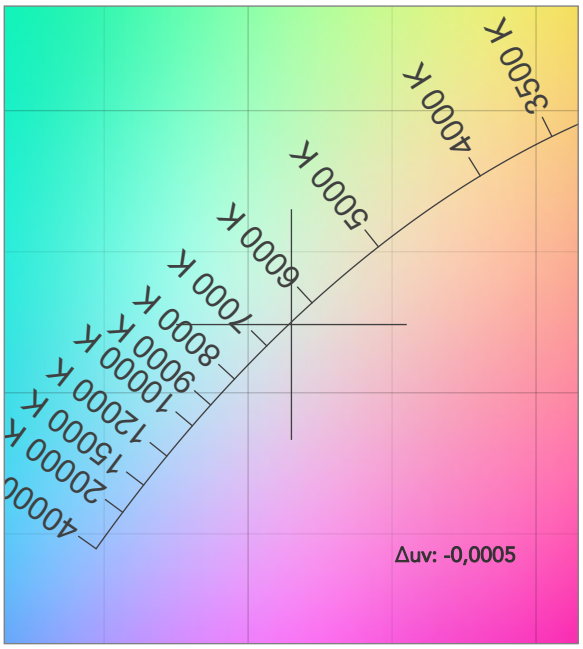
Spectra



COLOR DETAILS

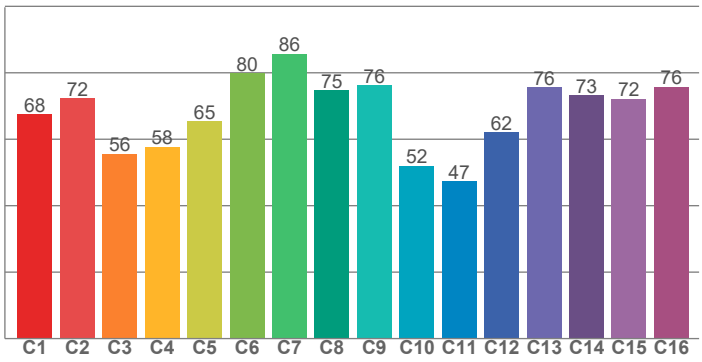


CIE 1931

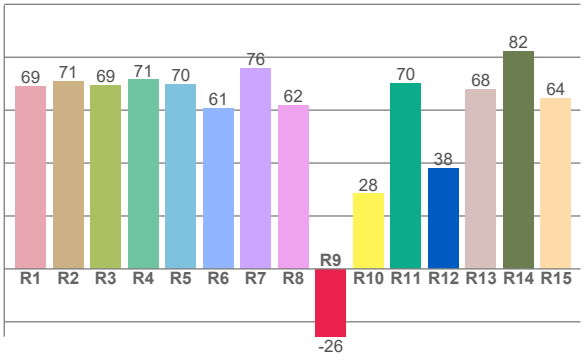


CIE 1931 ZOOM

TM30: 67,6



CRI: 68,6 (R1-R8)



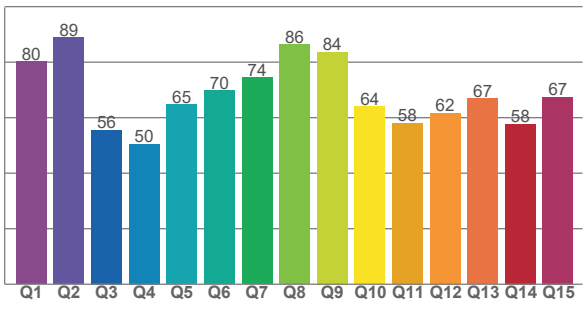
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
69,1	70,8	69,2	71,4	69,8	60,7	75,9	61,8	-25,6	28,4	70,1	38,0	67,8	82,3	64,3

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
67,6	72,3	55,6	57,8	65,4	79,8	85,7	74,7	76,3	52,0	47,3	62,1	75,6	73,3	72,2	75,8

CQS: 66,7



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
80,3	88,8	55,6	50,4	64,8	69,8	74,4	86,4	83,7	64,1	58,2	61,6	66,8	57,6	67,5

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
6418 K	68,6	-25,6	67,6	95,4	66,7	45	0,315	0,324	-0,0005

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TM30 DETAILS

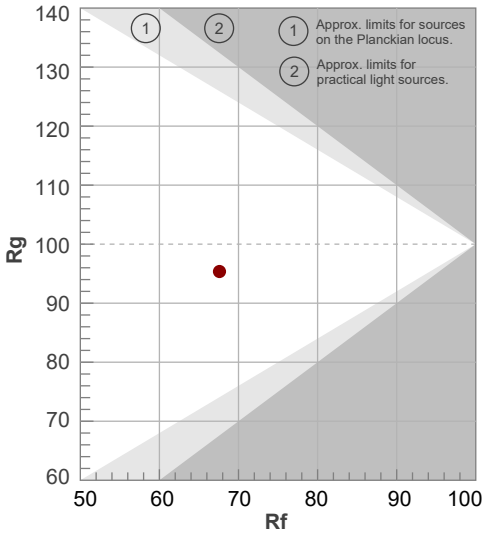
Rf 67,6

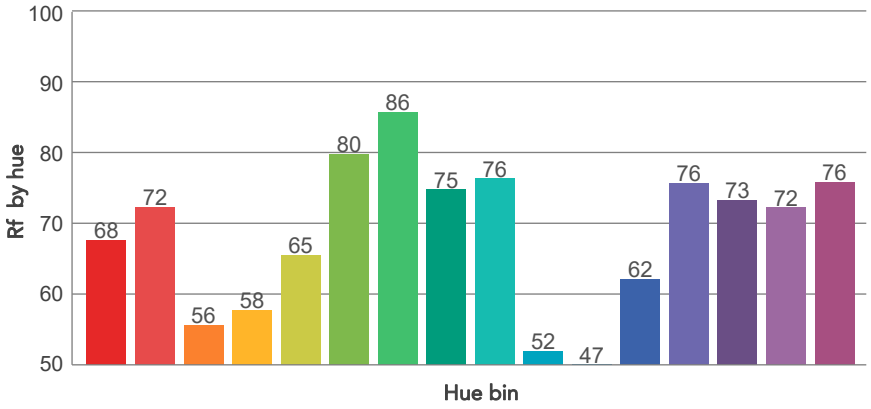
Fidelity index Rf

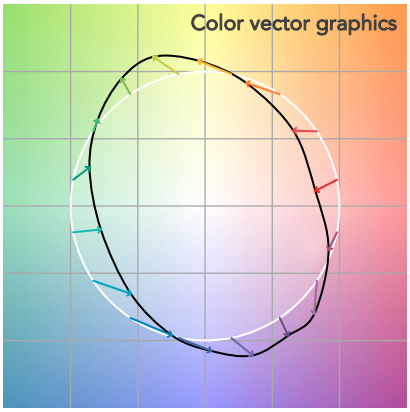
Rg 95,4

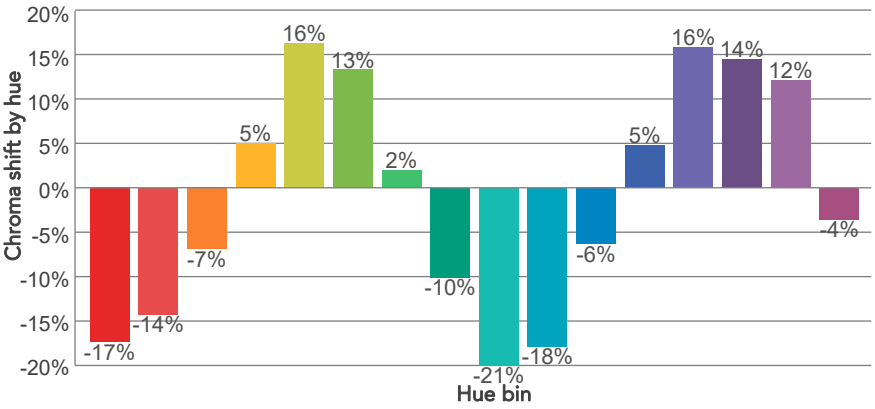
Gammut index

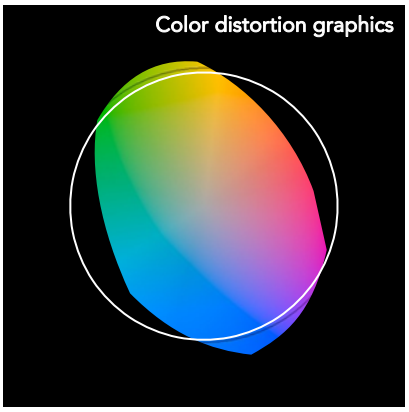
Hue Bin	R_f	Graphic shifts (%) Chroma	Hue
1	68	-17%	-5%
2	72	-14%	10%
3	56	-7%	25%
4	58	5%	26%
5	65	16%	16%
6	80	13%	-1%
7	86	2%	-9%
8	75	-10%	-11%
9	76	-21%	2%
10	52	-18%	24%
11	47	-6%	33%
12	62	5%	25%
13	76	16%	13%
14	73	14%	-2%
15	72	12%	-22%
16	76	-4%	-14%

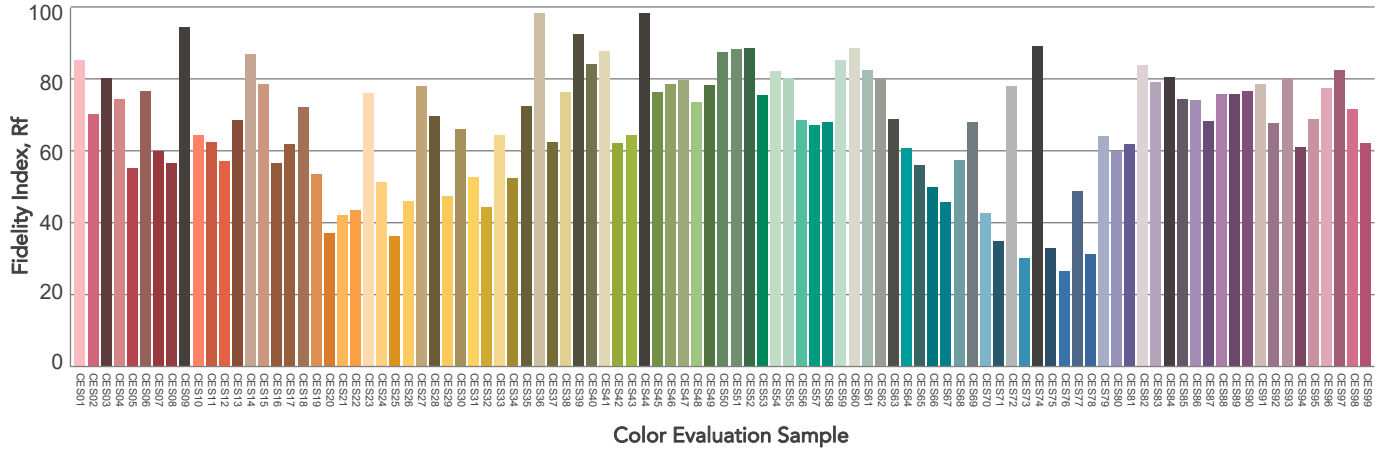












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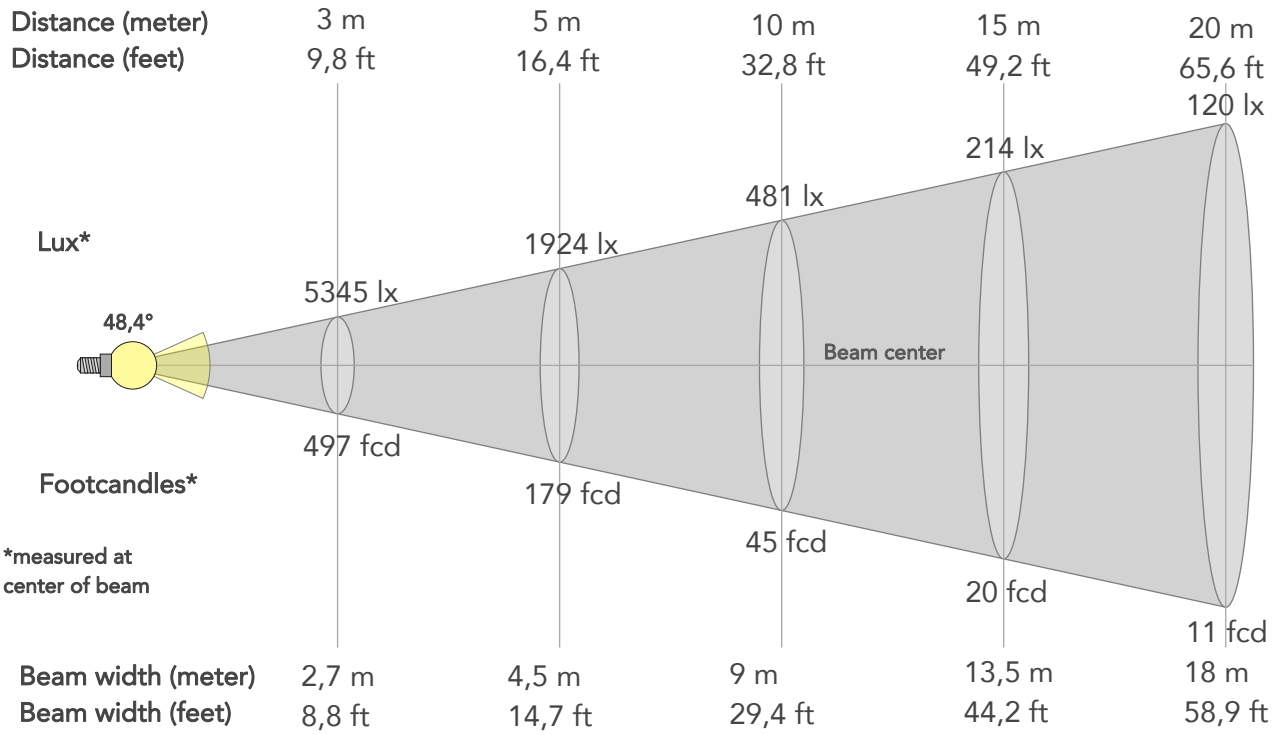
BEAM DETAILS

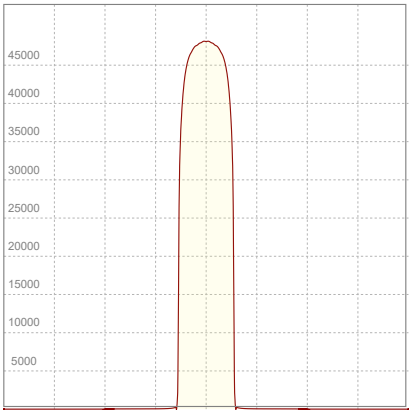
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
48,4°	50,1°	51,7°	99,5%	99,3%



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	48101lx	12025lx	5345lx	3006lx	1924lx	855lx	481lx	214lx	120lx	77lx	53lx	30lx	19lx
Footcand.	4469fcd	1117fcd	497fcd	279fcd	179fcd	79fcd	45fcd	20fcd	11fcd	7fcd	5fcd	3fcd	2fcd
Beam wid.	0,9m	1,8m	2,7m	3,6m	4,5m	6,7m	9m	13,5m	18m	22,4m	26,9m	35,9m	44,9m
Beam wid.	3ft	5,9ft	8,8ft	11,8ft	14,7ft	22,1ft	29,4ft	44,2ft	58,9ft	73,6ft	88,3ft	117,8ft	147,2ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
223V	3,11A	666,5W	0,96	37lm/W

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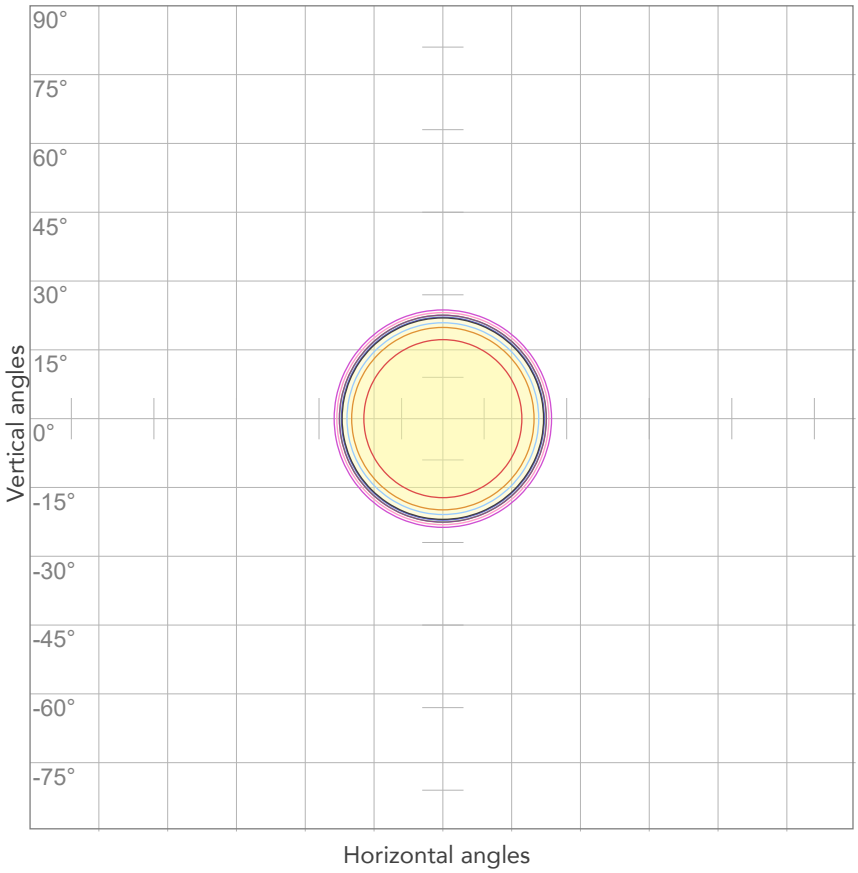
ISO DIAGRAMS

ISO CANDELA DIAGRAM



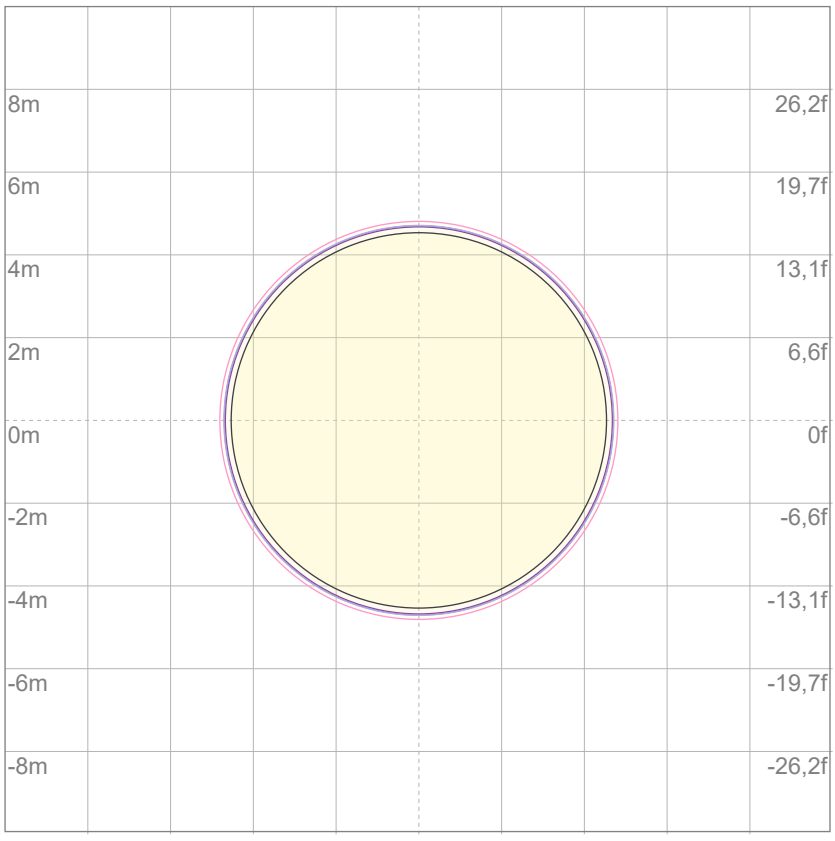
10%	4810 cd
20%	9620 cd
30%	14430 cd
40%	19240 cd
50%	24050 cd
60%	28860 cd
70%	33670 cd
80%	38480 cd

Conditions:

Number of c-planes: 2

Candela at center: 48101 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	14,4 lx
5%	24,1 lx
10%	48,1 lx
30%	144 lx
50%	241 lx

Conditions:

Number of c-planes: 2

Lux at center: 481 lx

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

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Total lumen output:

24747 lm

Peak candela output:

386992 cd

Light quality:

CRI: 68,7

Color temperature:

6412 K

PRODUCT NAME:

ASTRAPROFILE500LTIP

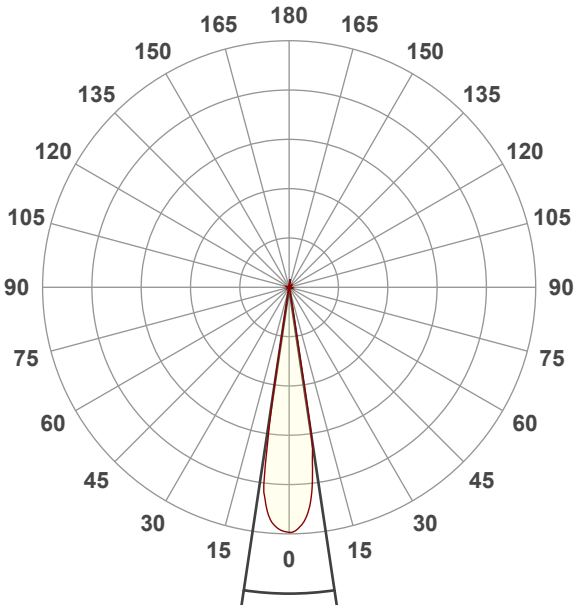
MEASURAMENT CONDITIONS:

Beam angle:
Zoom mid

Target:
Full On

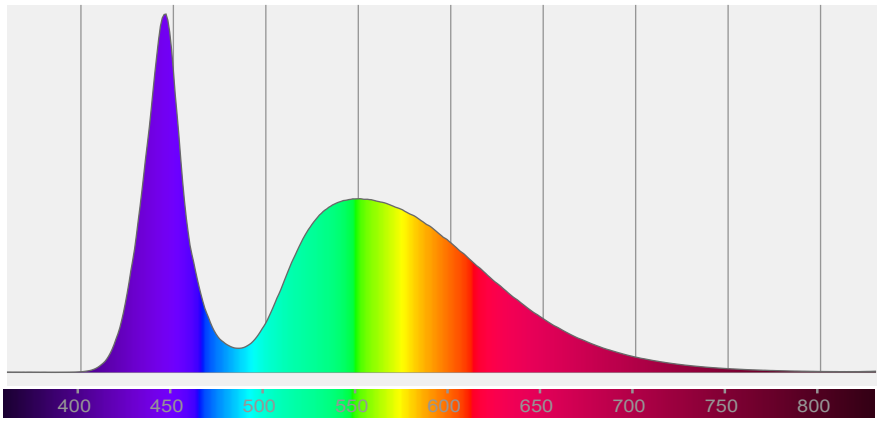
Operator:
Giuseppe della Peruta

Date and time:
31/07/2025 11:04:59

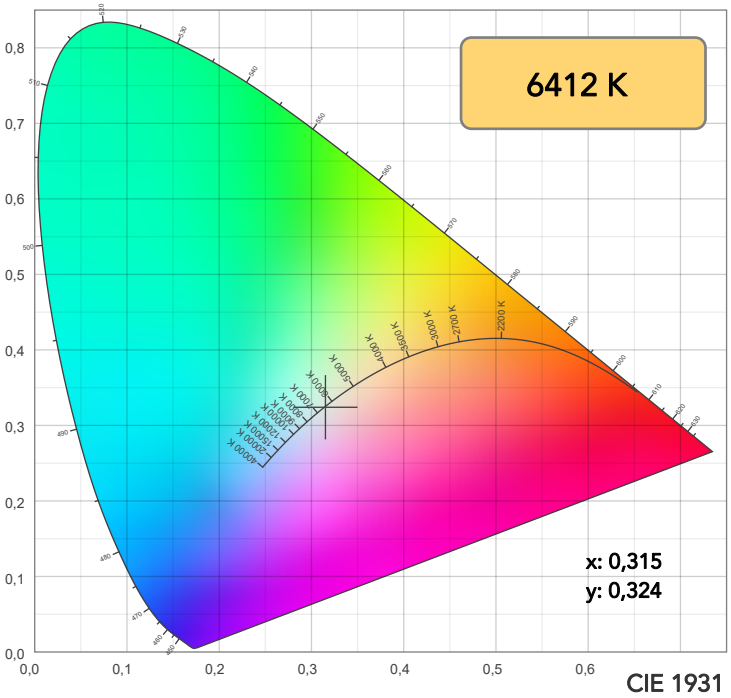


Beam angle 50%: 17°
Field angle 10%: 18,7°
Cut off angle 2.5%: 19,7°

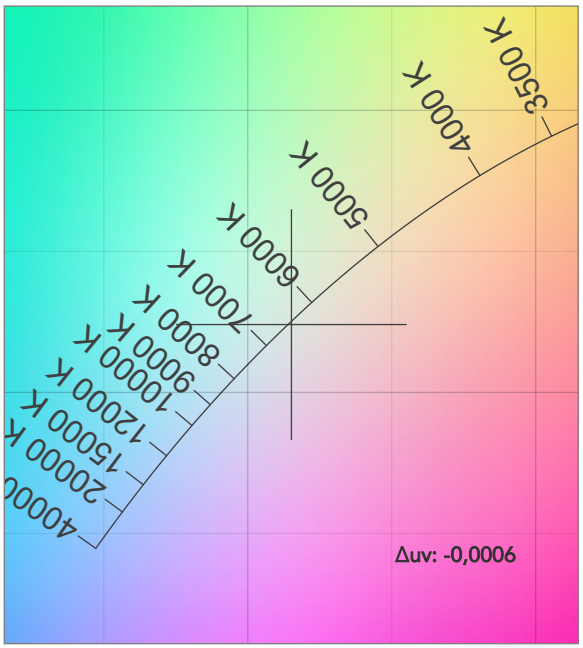
Spectra



COLOR DETAILS

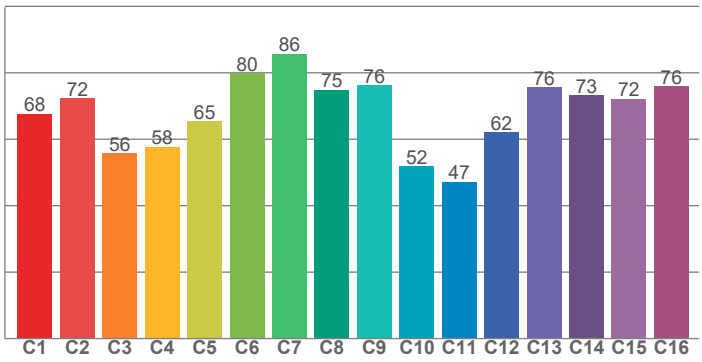


CIE 1931

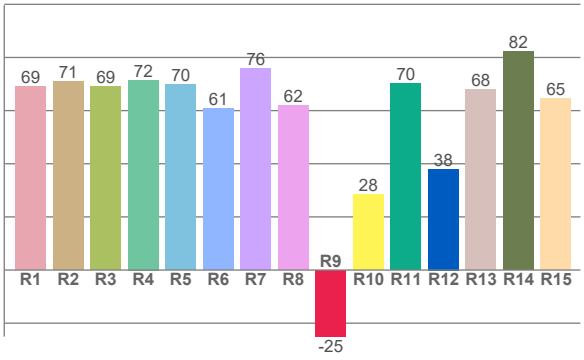


CIE 1931 ZOOM

TM30: 67,6



CRI: 68,7 (R1-R8)



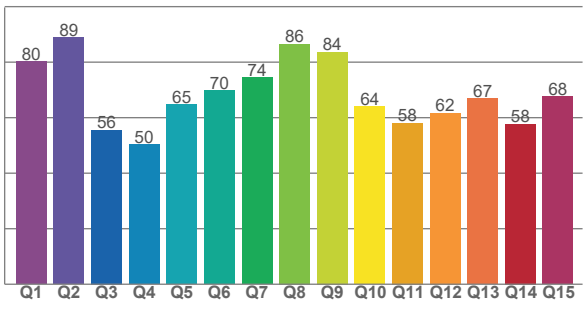
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
69,2	70,9	69,2	71,5	69,9	60,7	75,9	61,9	-25,0	28,5	70,2	38,0	67,9	82,3	64,5

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
67,7	72,3	55,7	57,8	65,5	79,8	85,7	74,8	76,3	51,9	47,3	62,0	75,6	73,3	72,2	75,9

CQS: 66,7



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
80,3	88,8	55,5	50,4	64,8	69,8	74,4	86,5	83,6	64,1	58,1	61,6	66,9	57,8	67,6

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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6412 K	68,7	-25,0	67,6	95,4	66,7	45	0,315	0,324	-0,0006

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TM30 DETAILS

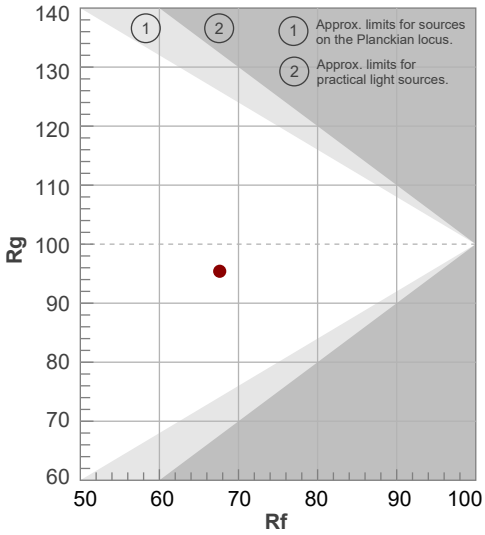
Rf 67,6

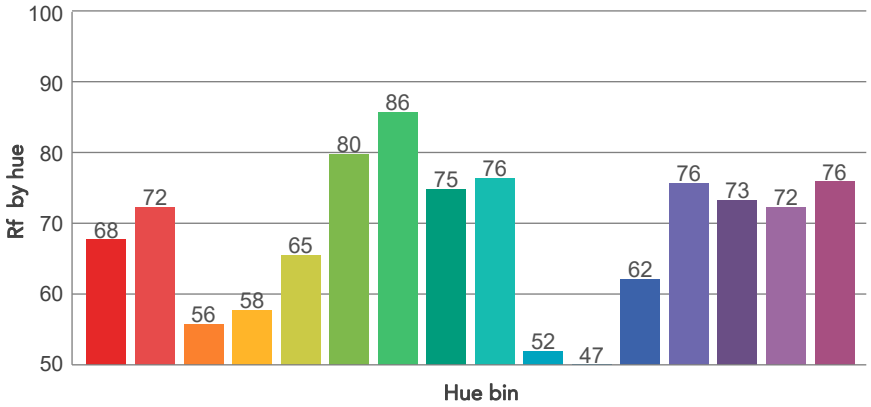
Fidelity index Rf

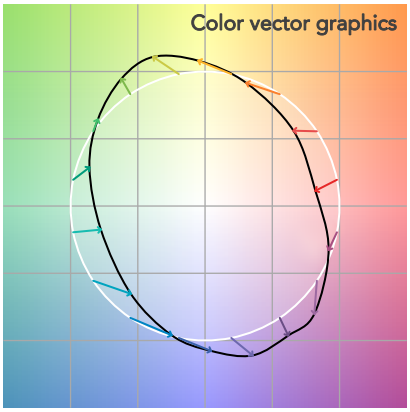
Rg 95,4

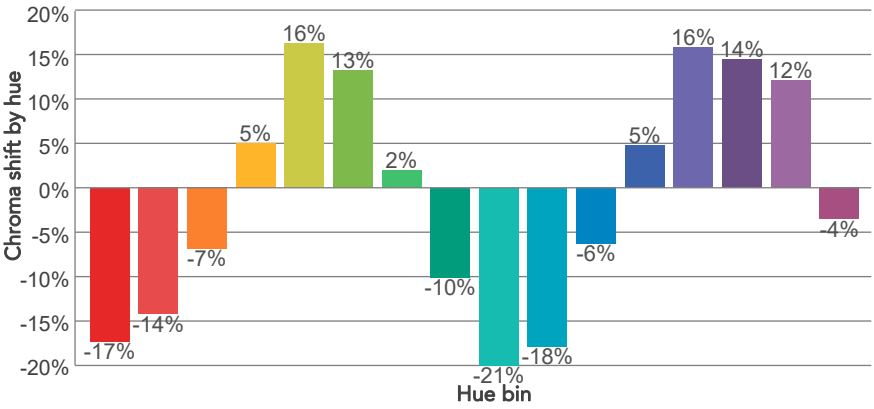
Gammut index

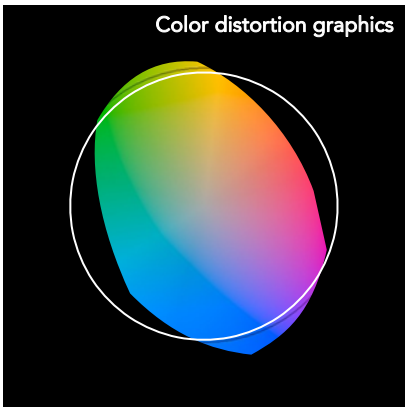
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	68	-17%	-5%
2	72	-14%	10%
3	56	-7%	25%
4	58	5%	26%
5	65	16%	16%
6	80	13%	-1%
7	86	2%	-9%
8	75	-10%	-11%
9	76	-21%	2%
10	52	-18%	24%
11	47	-6%	33%
12	62	5%	25%
13	76	16%	13%
14	73	14%	-2%
15	72	12%	-22%
16	76	-4%	-14%

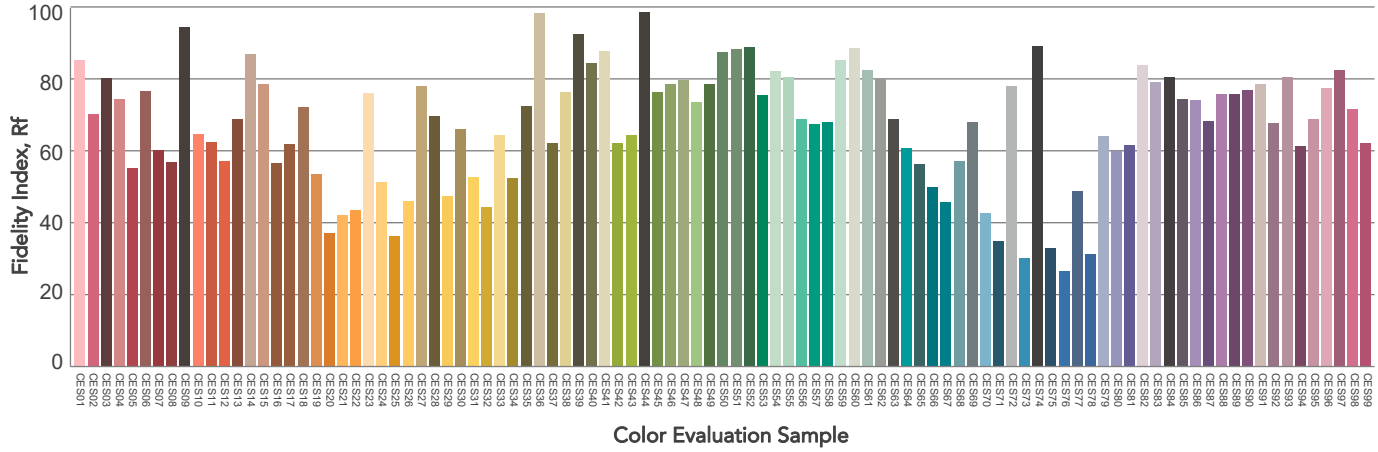












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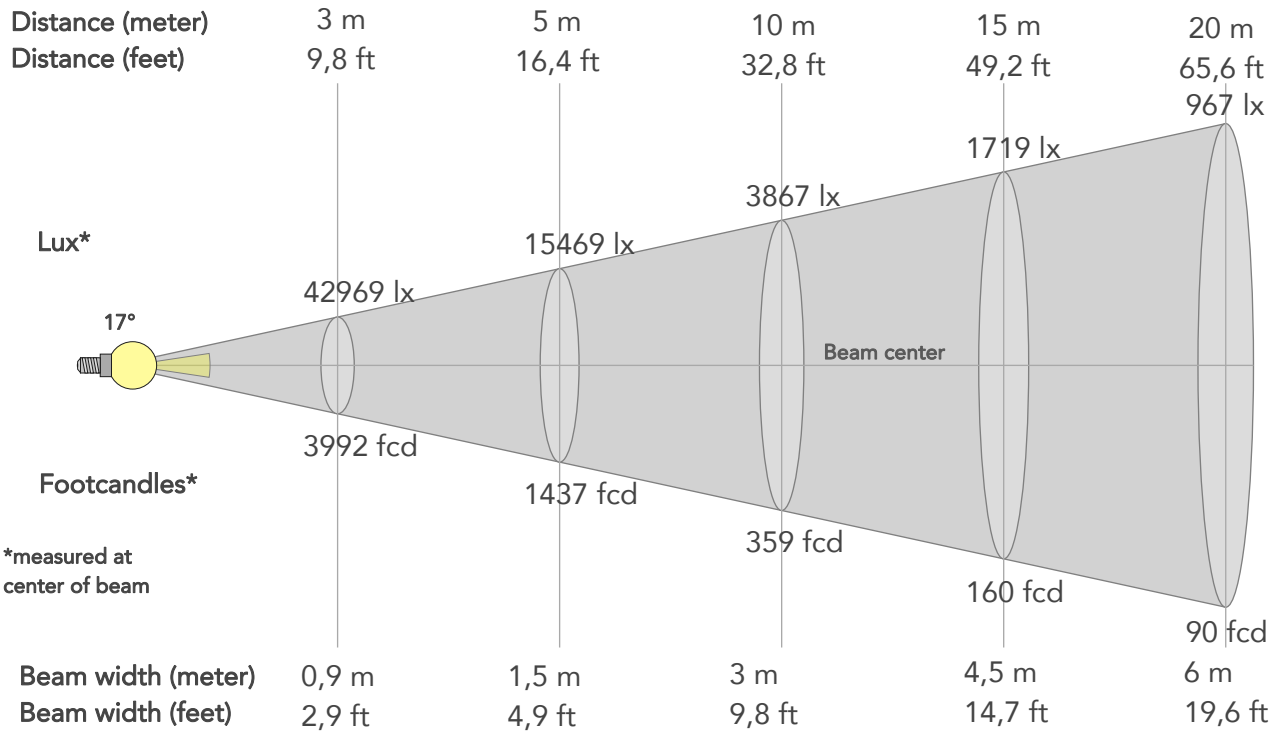
BEAM DETAILS

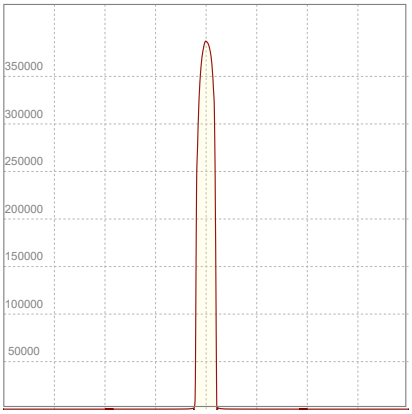
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
17°	18,7°	19,7°	99,6%	99,4%



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	386722lx	96681lx	42969lx	24170lx	15469lx	6875lx	3867lx	1719lx	967lx	619lx	430lx	242lx	155lx
Footcand.	35928fcd	8982fcd	3992fcd	2245fcd	1437fcd	639fcd	359fcd	160fcd	90fcd	57fcd	40fcd	22fcd	14fcd
Beam wid.	0,3m	0,6m	0,9m	1,2m	1,5m	2,2m	3m	4,5m	6m	7,5m	9m	12m	15m
Beam wid.	1ft	2ft	2,9ft	3,9ft	4,9ft	7,4ft	9,8ft	14,7ft	19,6ft	24,6ft	29,5ft	39,3ft	49,1ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	3,09A	666,3W	0,96	37lm/W

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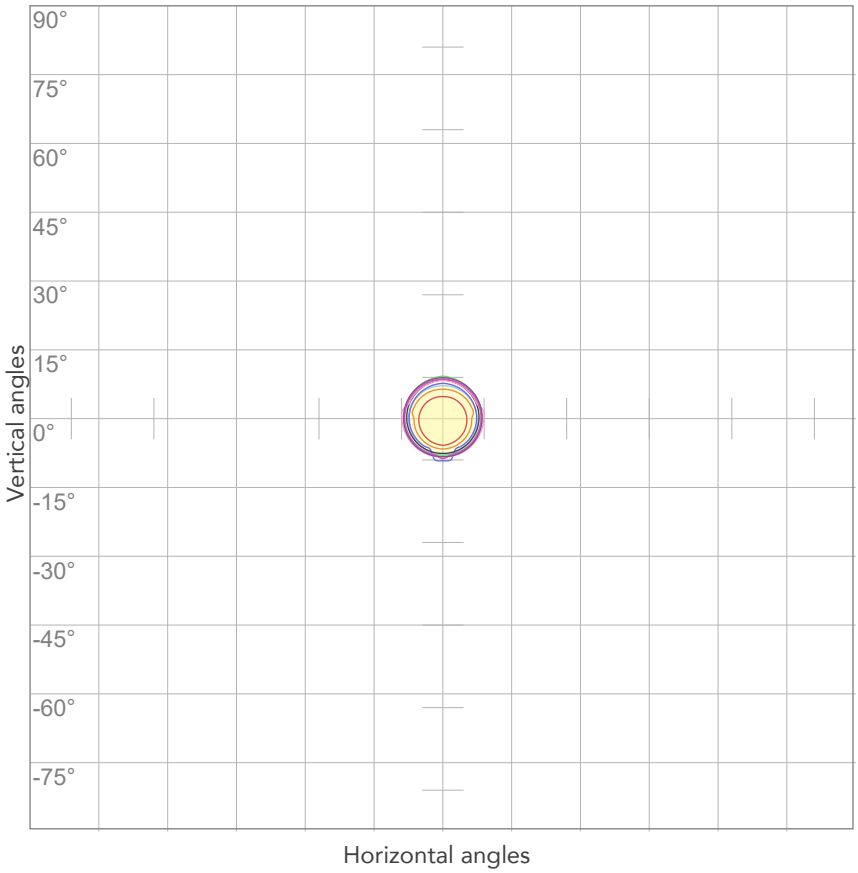
ISO DIAGRAMS

ISO CANDELA DIAGRAM



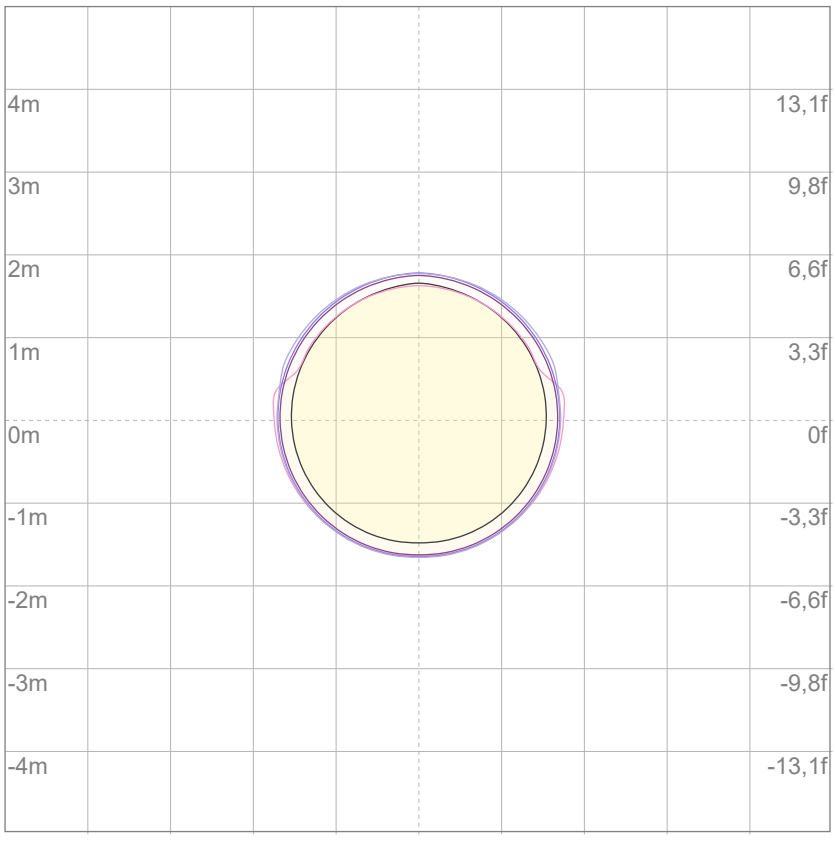
10%	38672 cd
20%	77344 cd
30%	116017 cd
40%	154689 cd
50%	193361 cd
60%	232033 cd
70%	270706 cd
80%	309378 cd

Conditions:

Number of c-planes: 2

Candela at center: 386722 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	116 lx
5%	193 lx
10%	387 lx
30%	1160 lx
50%	1934 lx

Conditions:

Number of c-planes: 2

Lux at center: 3867 lx

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

Total lumen output:

15370 lm

Peak candela output:

3080257 cd

Light quality:

CRI: 69,1

Color temperature:

6370 K

PRODUCT NAME:

ASTRAPROFILE500LTIP

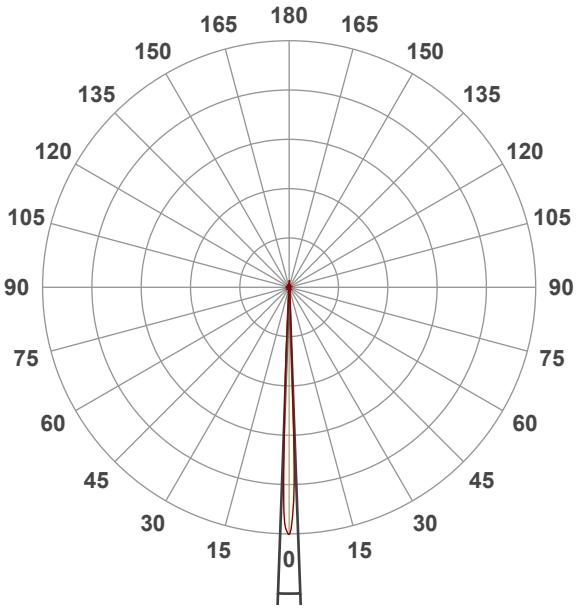
MEASURAMENT CONDITIONS:

Beam angle:
Zoom min

Target:
Full On

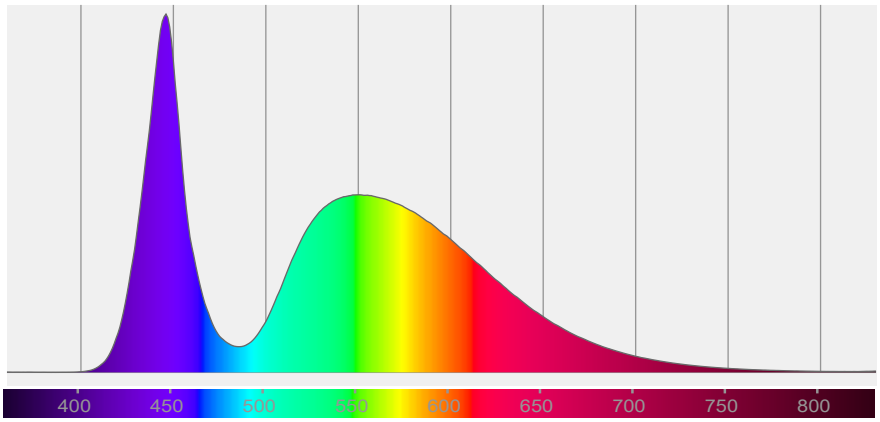
Operator:
Giuseppe della Peruta

Date and time:
31/07/2025 10:54:17

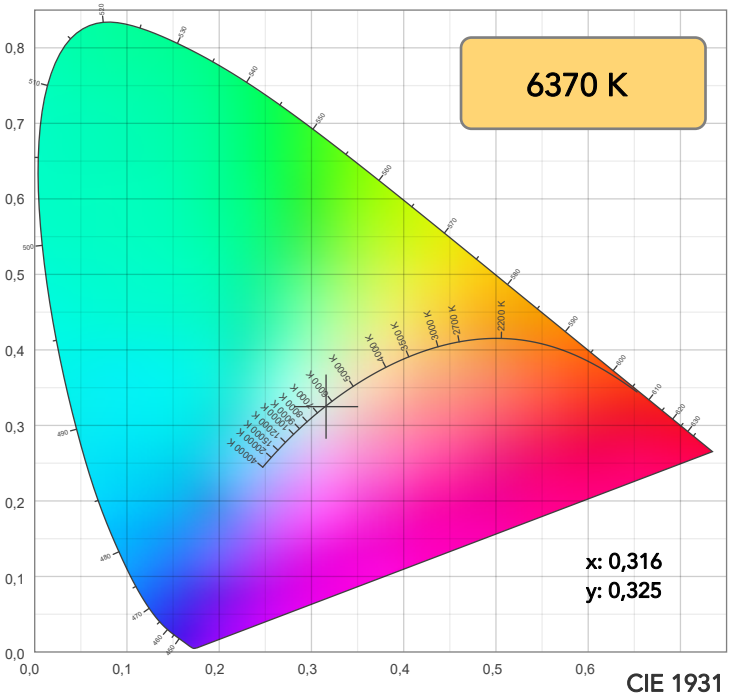


Beam angle 50%: 4,2°
Field angle 10%: 6,1°
Cut off angle 2.5%: 6,8°

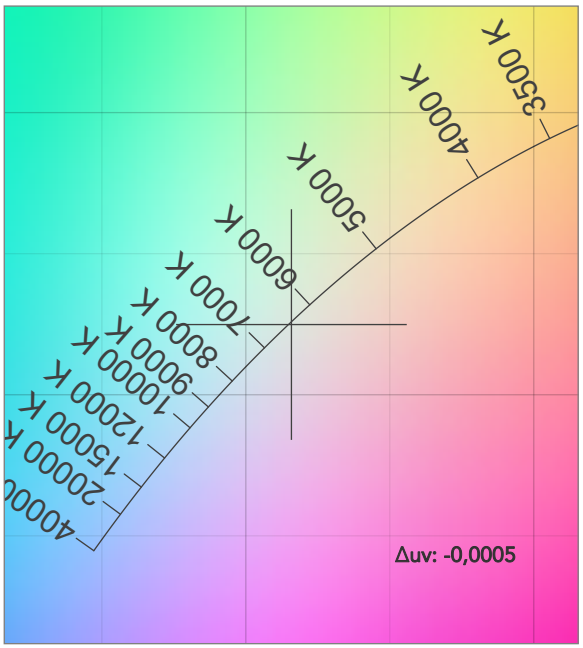
Spectra



COLOR DETAILS

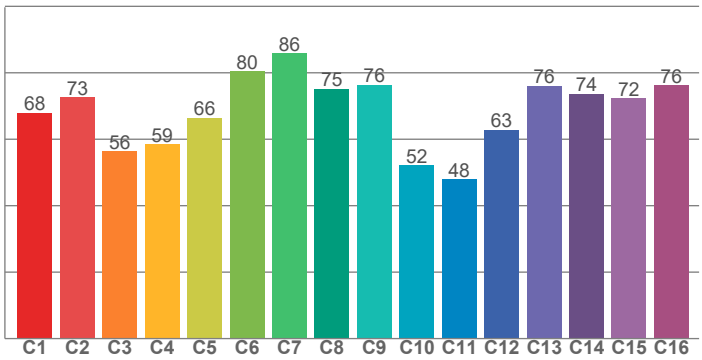


CIE 1931

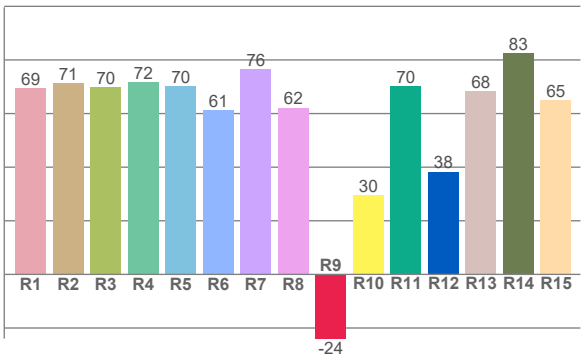


CIE 1931 ZOOM

TM30: 68,1



CRI: 69,1 (R1-R8)



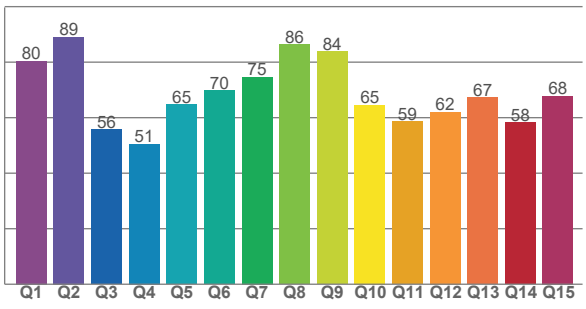
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
69,4	71,4	69,8	71,8	70,1	61,2	76,5	62,2	-23,9	29,5	70,2	38,3	68,3	82,6	64,9

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
67,9	72,6	56,3	58,5	66,4	80,4	85,9	75,2	76,4	52,1	48,0	62,8	76,1	73,7	72,3	76,2

CQS: 66,9



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
80,4	89,1	55,8	50,5	64,8	69,9	74,6	86,4	83,9	64,6	58,6	62,0	67,2	58,2	67,8

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
6370 K	69,1	-23,9	68,1	95,3	66,9	46	0,316	0,325	-0,0005

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TM30 DETAILS

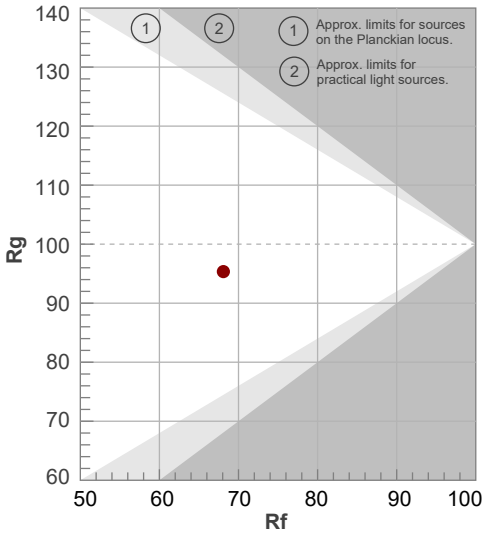
Rf 68,1

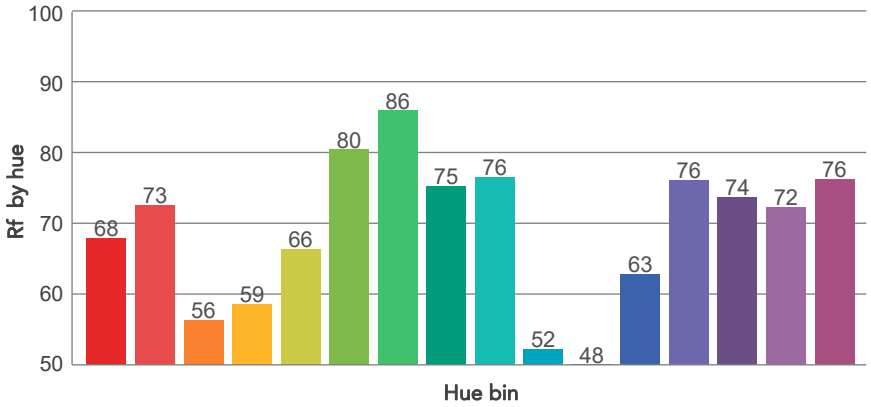
Fidelity index Rf

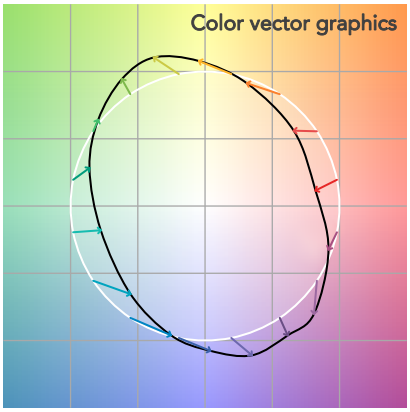
Rg 95,3

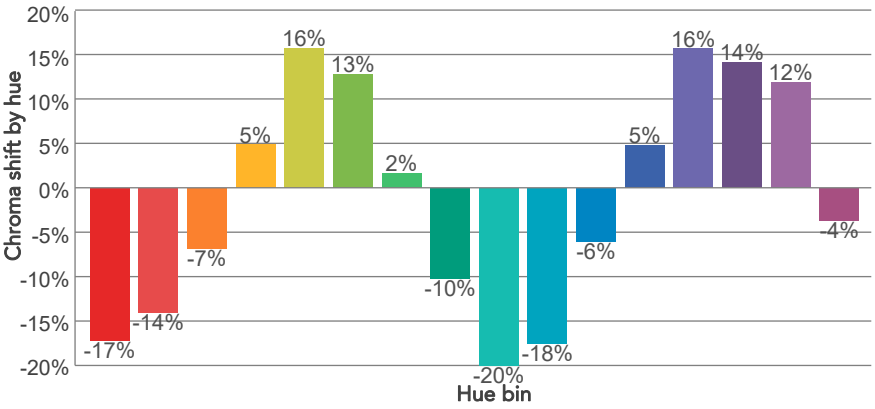
Gamut index

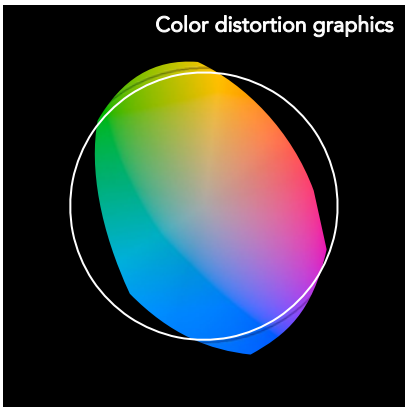
Hue Bin	R_f	Graphic shifts (%) Chroma	Hue
1	68	-17%	-5%
2	73	-14%	10%
3	56	-7%	25%
4	59	5%	26%
5	66	16%	16%
6	80	13%	-1%
7	86	2%	-9%
8	75	-10%	-11%
9	76	-20%	3%
10	52	-18%	24%
11	48	-6%	32%
12	63	5%	25%
13	76	16%	13%
14	74	14%	-2%
15	72	12%	-22%
16	76	-4%	-14%

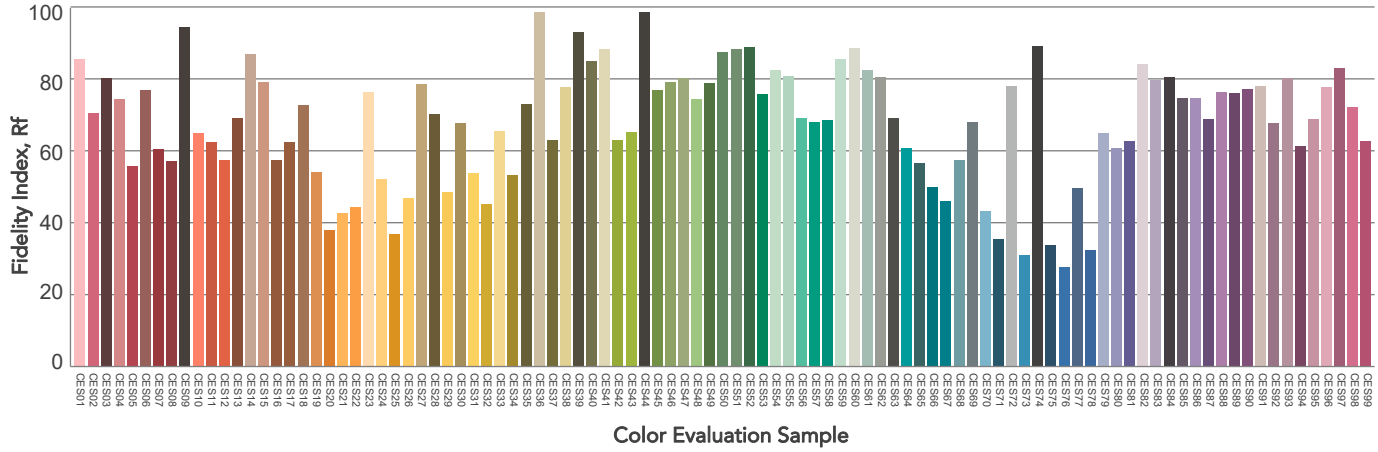












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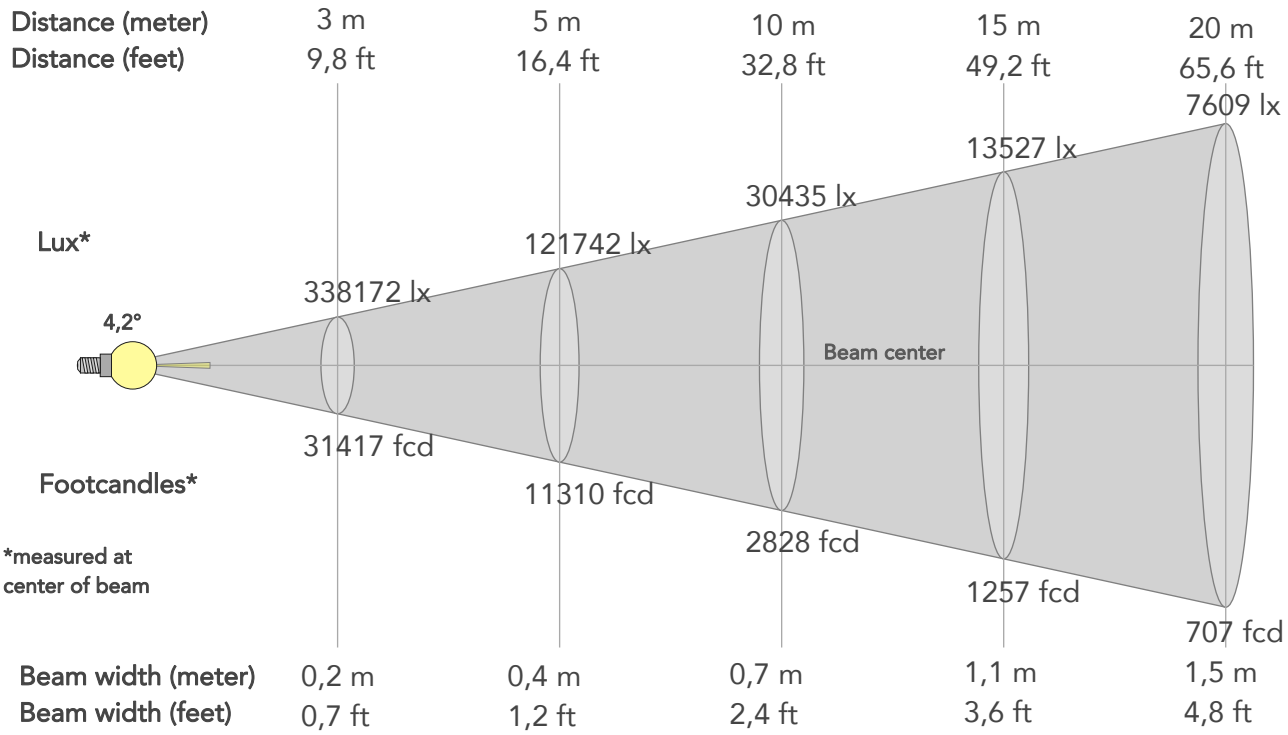
BEAM DETAILS

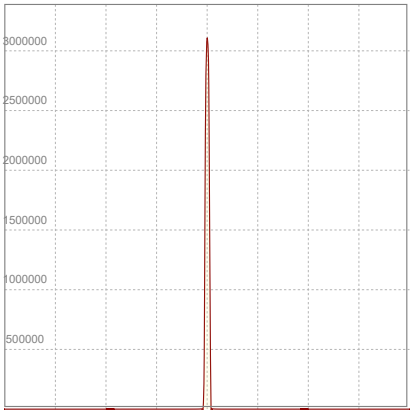
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
4,2°	6,1°	6,8°	96,0%	94,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	3043546lx	760886lx	338172lx	190222lx	121742lx	54107lx	30435lx	13527lx	7609lx	4870lx	3382lx	1902lx	1217lx
Footcand.	282755fcd	70689fcd	31417fcd	17672fcd	11310fcd	5027fcd	2828fcd	1257fcd	707fcd	452fcd	314fcd	177fcd	113fcd
Beam wid.	0,1m	0,1m	0,2m	0,3m	0,4m	0,5m	0,7m	1,1m	1,5m	1,8m	2,2m	2,9m	3,6m
Beam wid.	0,2ft	0,5ft	0,7ft	1ft	1,2ft	1,8ft	2,4ft	3,6ft	4,8ft	6ft	7,2ft	9,5ft	11,9ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
228V	3,04A	663,4W	0,96	23lm/W

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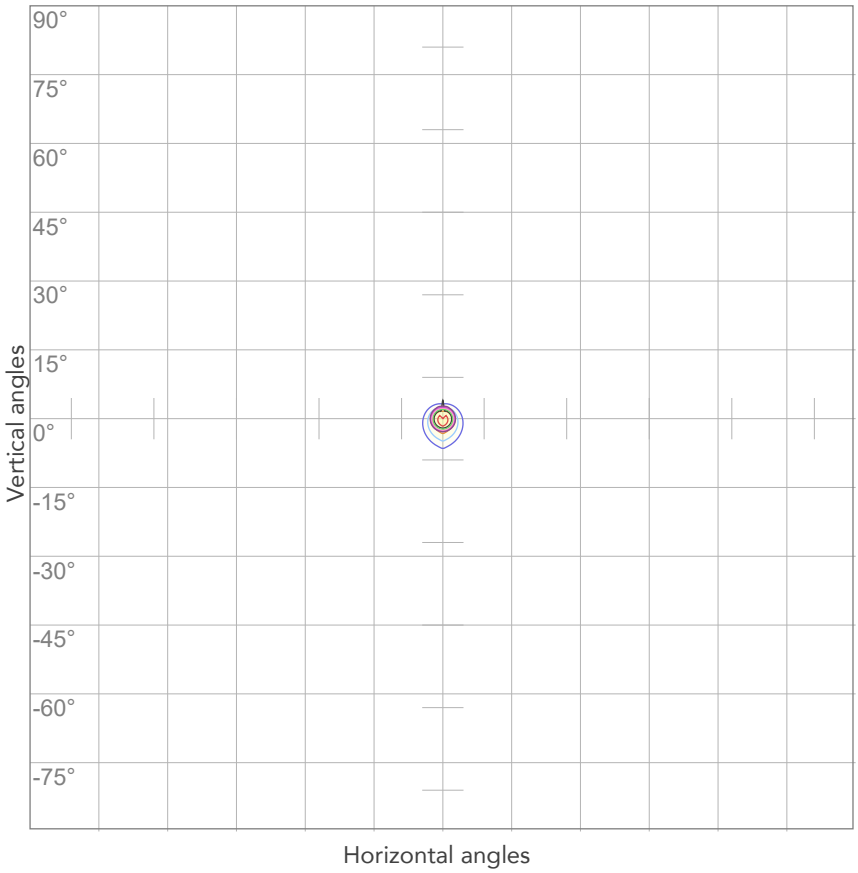
ISO DIAGRAMS

ISO CANDELA DIAGRAM



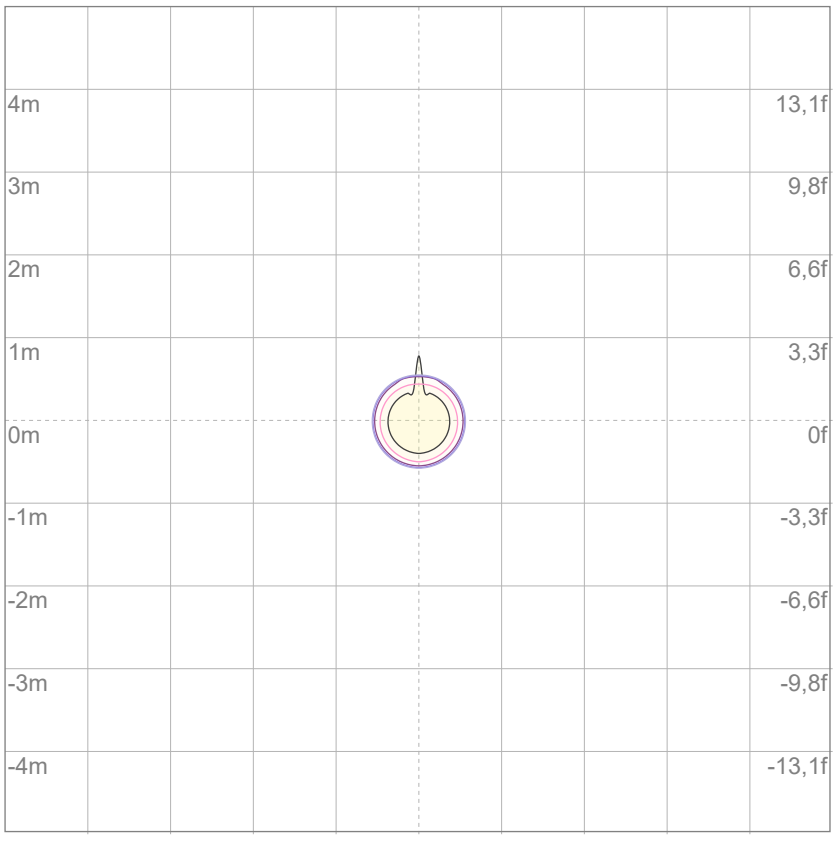
10%	304355 cd
20%	608709 cd
30%	913064 cd
40%	1217418 cd
50%	1521773 cd
60%	1826128 cd
70%	2130482 cd
80%	2434837 cd

Conditions:

Number of c-planes: 2

Candela at center: 3043546 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	913 lx
5%	1522 lx
10%	3044 lx
30%	9131 lx
50%	15,2K lx

Conditions:

Number of c-planes: 2

Lux at center: 30,4K lx

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