

Photometric Test Report



Astra Profile300LTIP

IP65 300W Moving Profile, with 6500K LED
source, 4° - 44° zoom

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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:

12065 lm

Peak candela output:

32569 cd

Light quality:

CRI: 69,9

Color temperature:

6721 K

PRODUCT NAME:
ASTRAPROFILE300LTIP

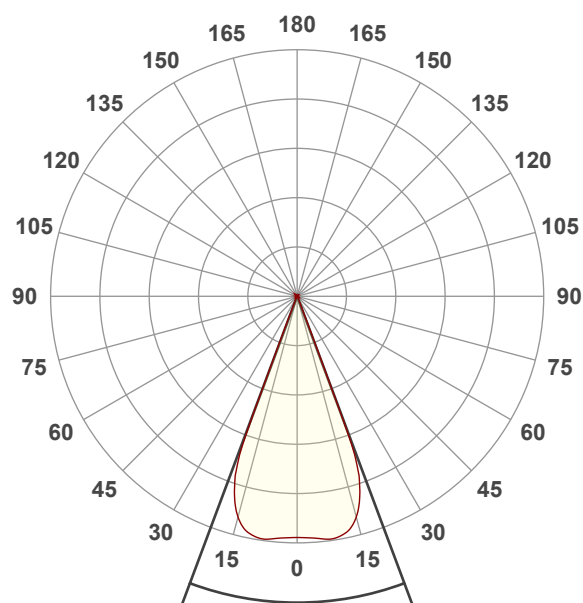
MEASURAMENT CONDITIONS:

Beam angle:
Max Zoom

Target:
Full On

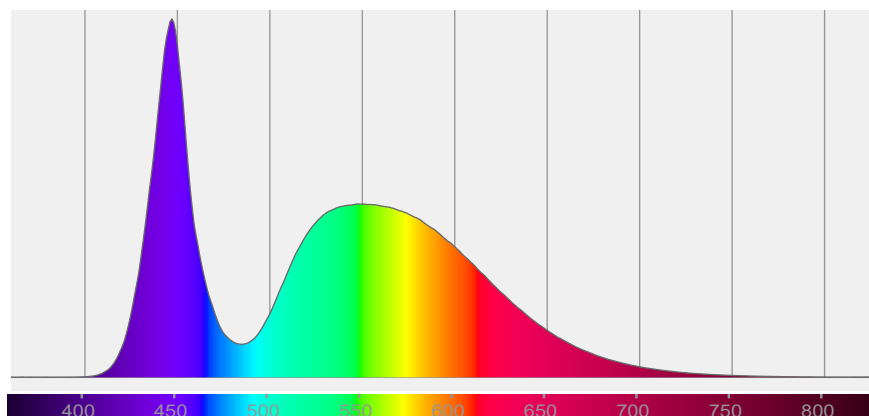
Operator:
Salvatore Giglio

Date and time:
09/01/2025 11:42:12

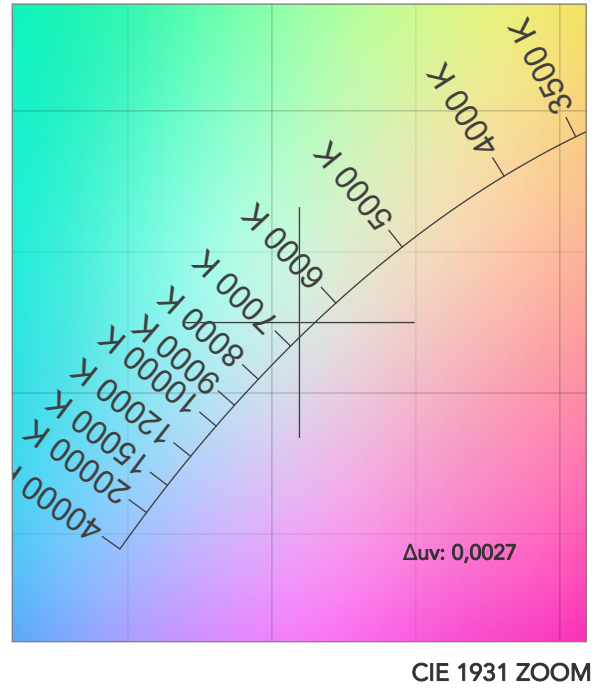
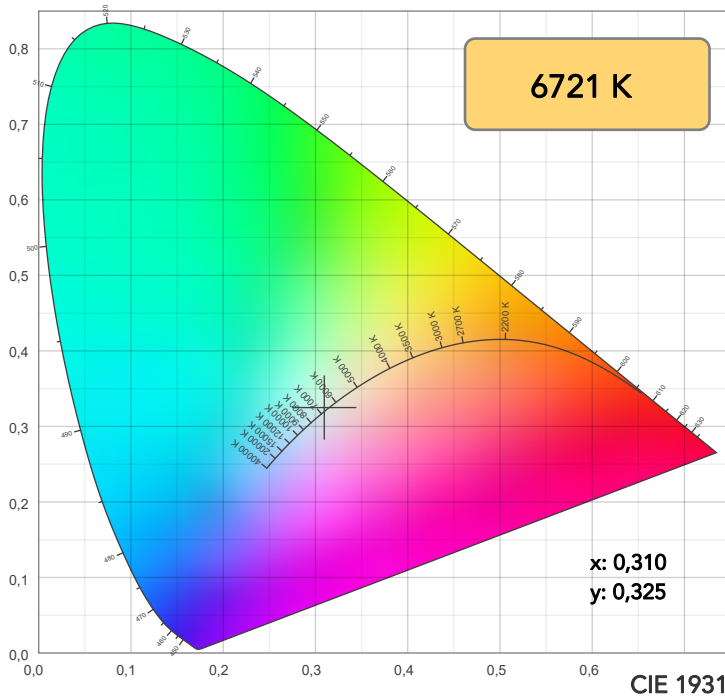


Beam angle 50%: 41°
Field angle 10%: 42,6°
Cut off angle 2.5%: 44,1°

Spectra

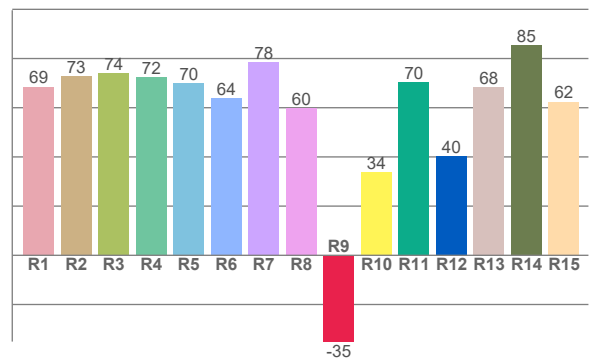
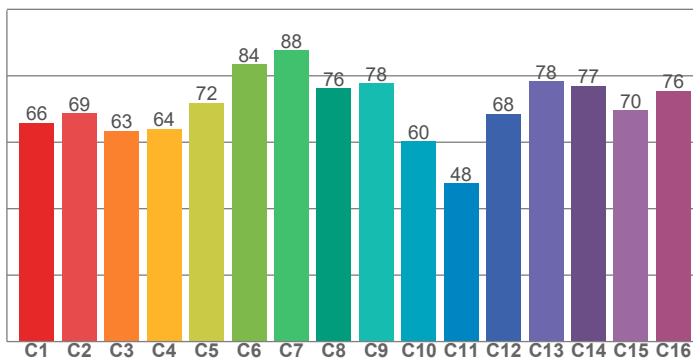


COLOR DETAILS



TM30: 70,4

CRI: 69,9 (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
68,5	72,7	73,9	72,2	70,0	63,7	78,4	59,9	-35,1	33,8	70,5	40,3	68,4	85,3	62,4

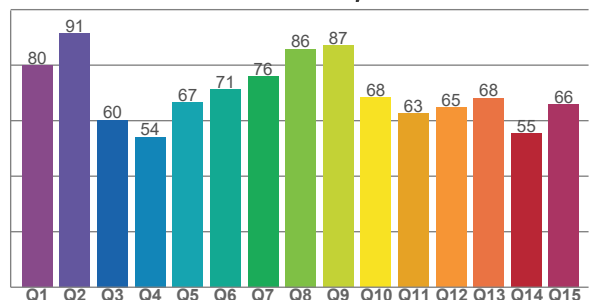
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
65,9	68,8	63,4	64,1	71,9	83,5	87,6	76,3	77,8	60,2	47,7	68,5	78,3	77,0	69,5	75,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
79,9	91,3	60,2	54,1	66,6	71,2	75,8	85,9	87,2	68,3	62,5	64,7	68,2	55,3	65,7

CQS: 68,5



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
6721 K	69,9	-35,1	70,4	93,5	68,5	47	0,310	0,325	0,0027

TM30 DETAILS

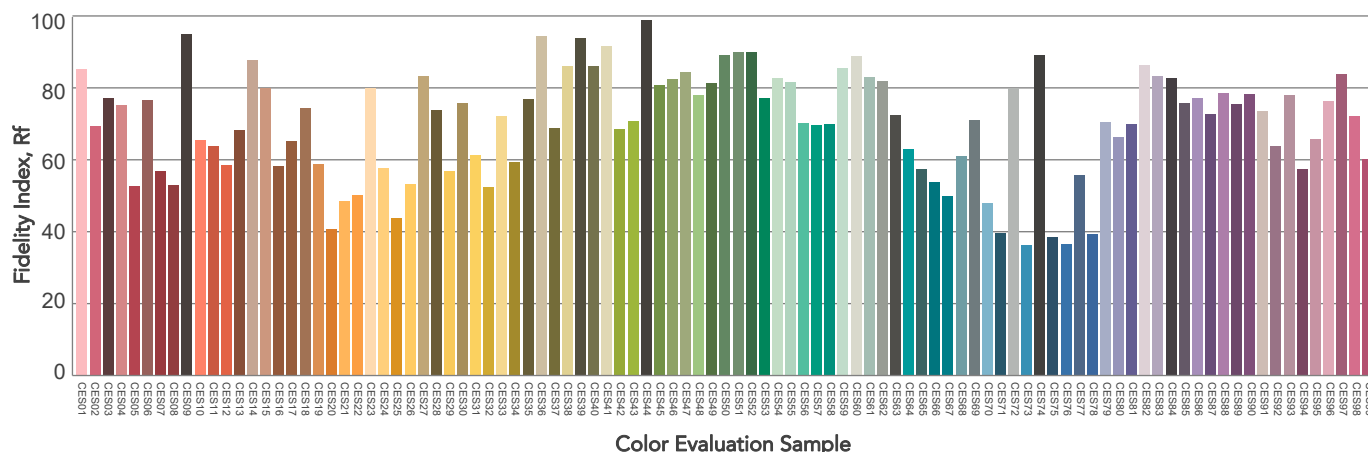
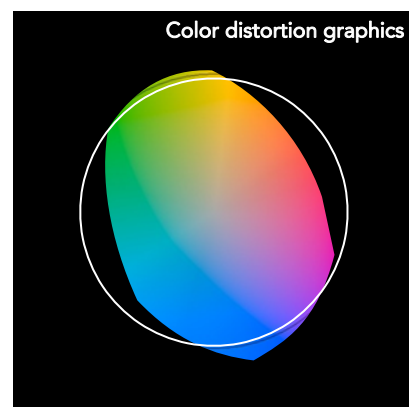
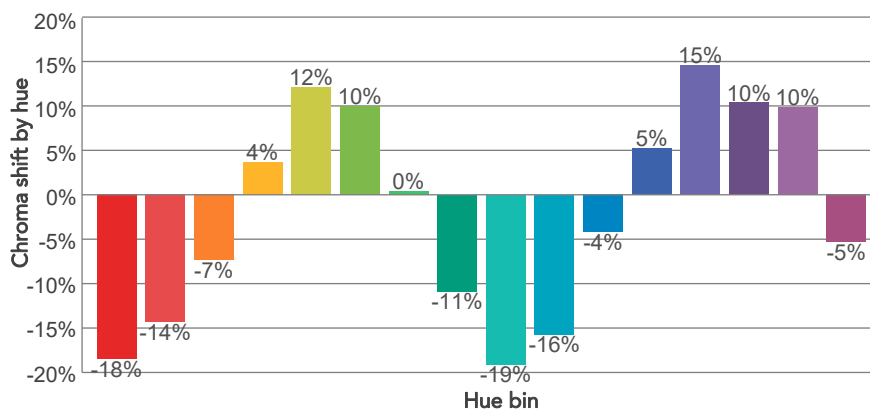
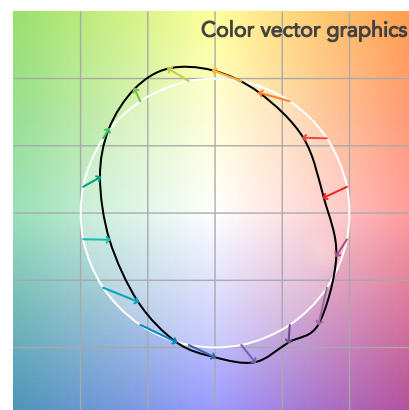
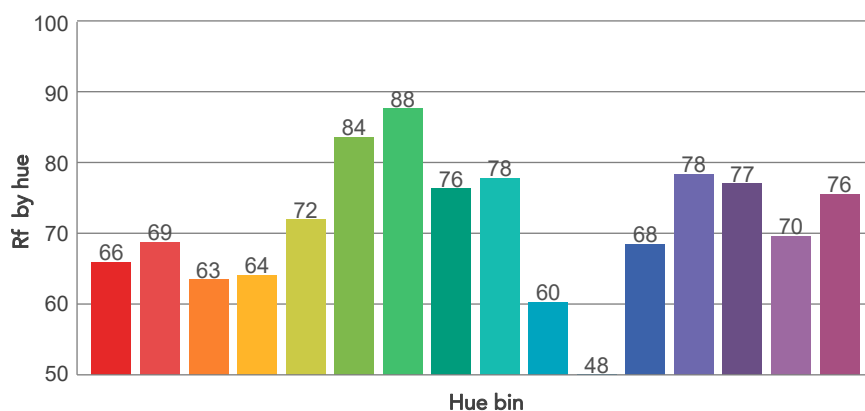
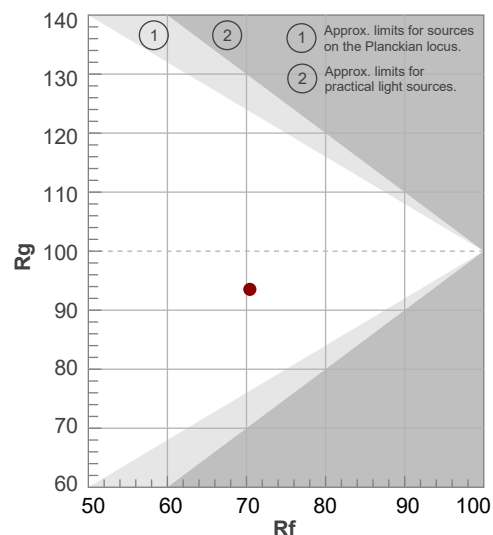
Rf 70,4

Fidelity index Rf

Rg 93,5

Gammut index

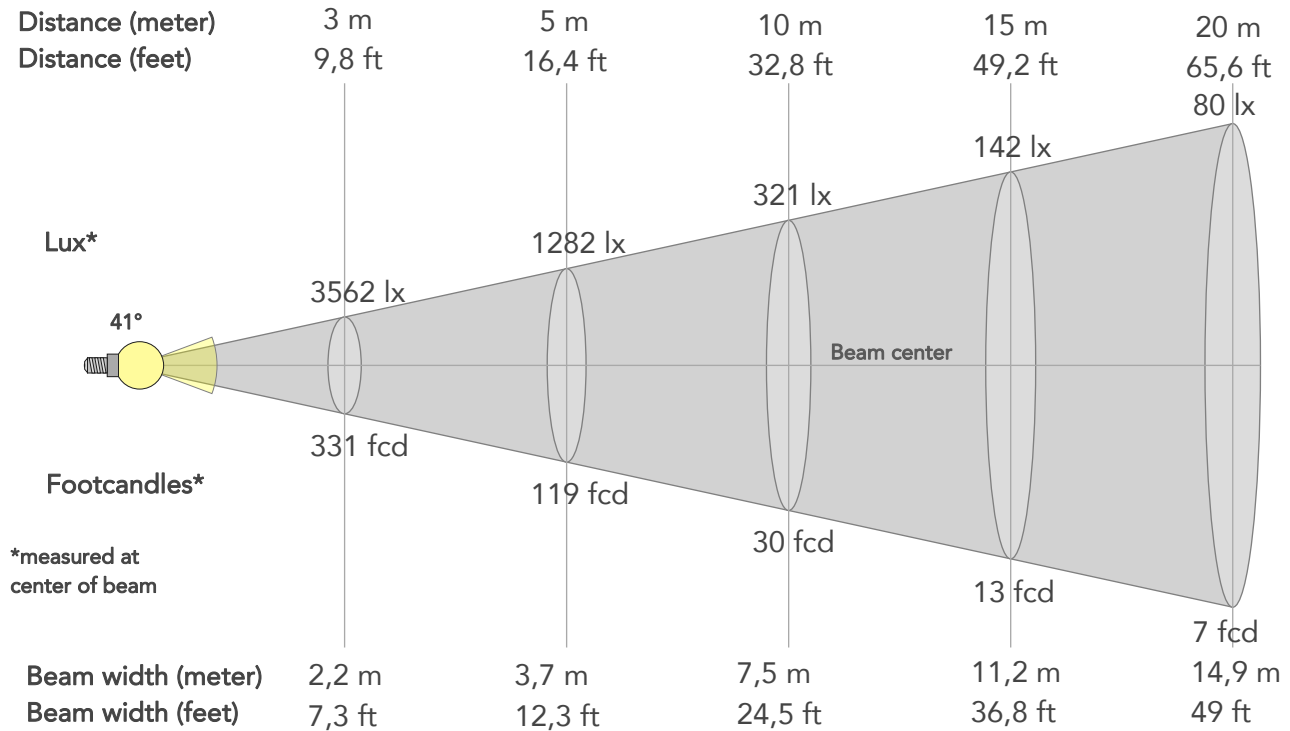
		Graphic shifts (%)	
Hue Bin	R _f	Chroma	Hue
1	66	-18%	-5%
2	69	-14%	10%
3	63	-7%	22%
4	64	4%	22%
5	72	12%	13%
6	84	10%	-1%
7	88	0%	-8%
8	76	-11%	-9%
9	78	-19%	4%
10	60	-16%	23%
11	48	-4%	29%
12	68	5%	21%
13	78	15%	7%
14	77	10%	-8%
15	70	10%	-26%
16	76	-5%	-14%



BEAM DETAILS



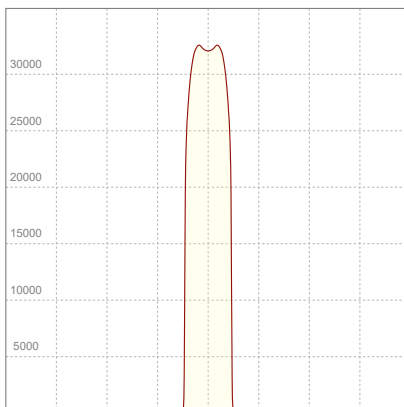
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
41°	42,6°	44,1°	99,8%	99,7%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	32060lx	8015lx	3562lx	2004lx	1282lx	570lx	321lx	142lx	80lx	51lx	36lx	20lx	13lx
Footcand.	2978fcd	745fcd	331fcd	186fcd	119fcd	53fcd	30fcd	13fcd	7fcd	5fcd	3fcd	2fcd	1fcd
Beam wid.	0,7m	1,5m	2,2m	3m	3,7m	5,6m	7,5m	11,2m	14,9m	18,7m	22,4m	29,9m	37,4m
Beam wid.	2,5ft	4,9ft	7,3ft	9,8ft	12,3ft	18,4ft	24,5ft	36,8ft	49ft	61,3ft	73,5ft	98,1ft	122,6ft

LINEAR DISTRIBUTION DIAGRAM

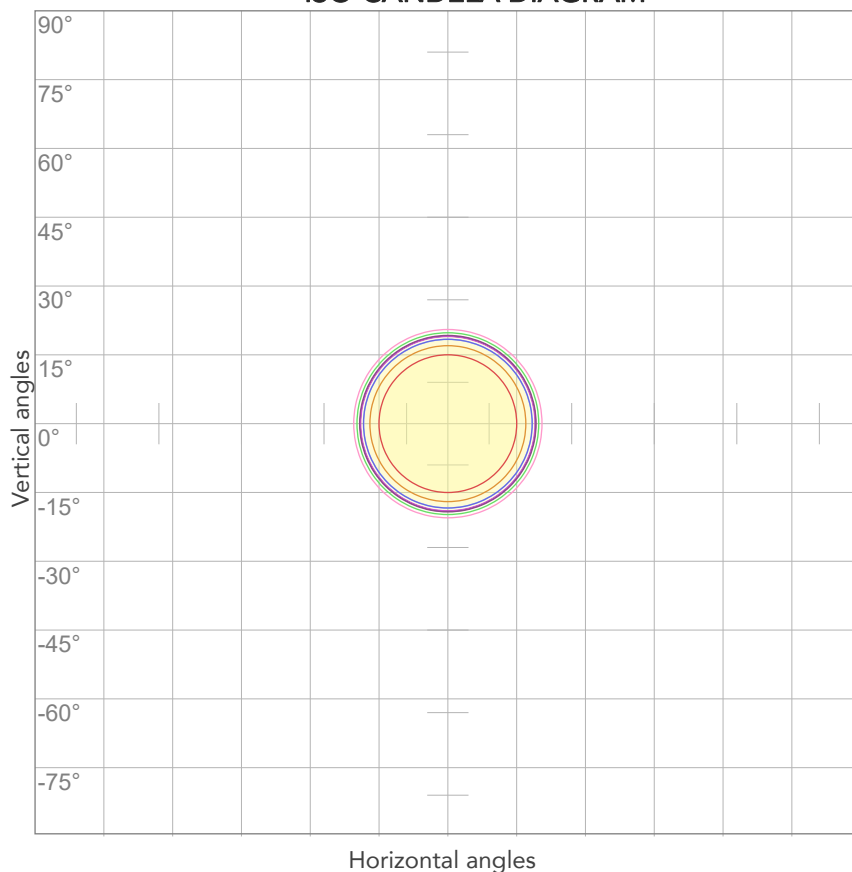


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	1,88A	410,9W	0,97	29lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



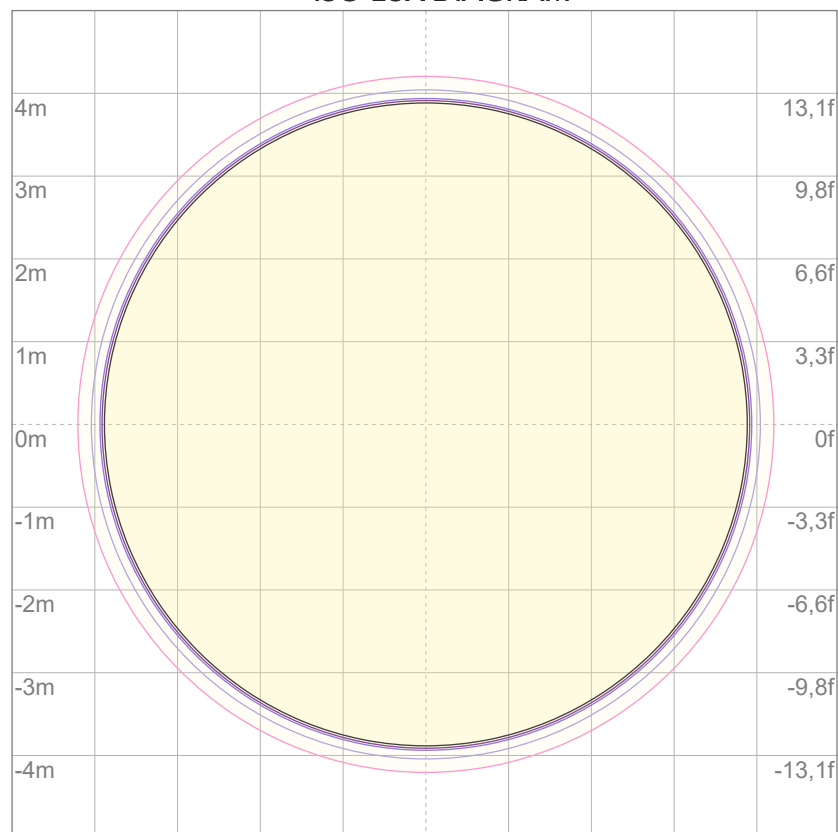
10%	3206 cd
20%	6412 cd
30%	9618 cd
40%	12824 cd
50%	16030 cd
60%	19236 cd
70%	22442 cd
80%	25648 cd

Conditions:

Number of c-planes: 2

Candela at center: 32060 cd

ISO LUX DIAGRAM



3%	9,62 lx
5%	16,0 lx
10%	32,1 lx
30%	96,2 lx
50%	160 lx

Conditions:

Number of c-planes: 2

Lux at center: 321 lx

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



Total lumen output:

11979 lm

Peak candela output:

221482 cd

Light quality:

CRI: 70,3

Color temperature:

6726 K

PRODUCT NAME:

ASTRAPROFILE300LTIP

MEASURAMENT CONDITIONS:

Beam angle:

Med Zoom

Target:

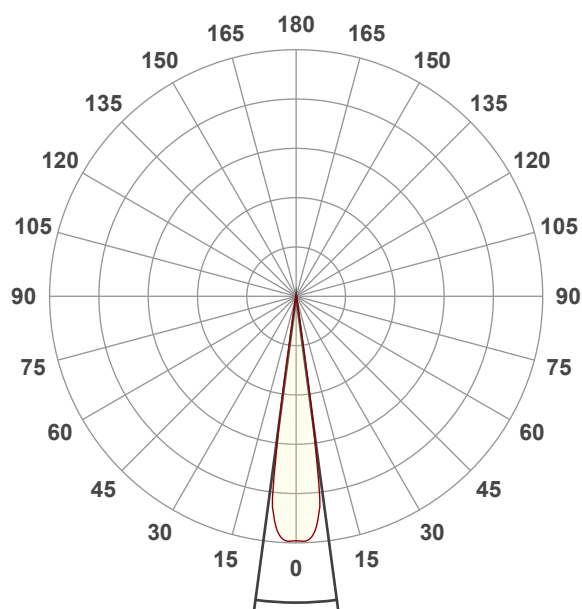
Full On

Operator:

Salvatore Giglio

Date and time:

09/01/2025 13:14:14

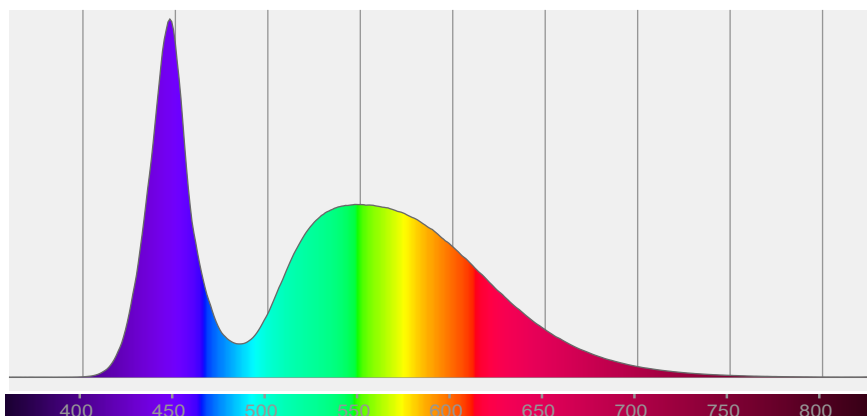


Beam angle 50%: 15,3°

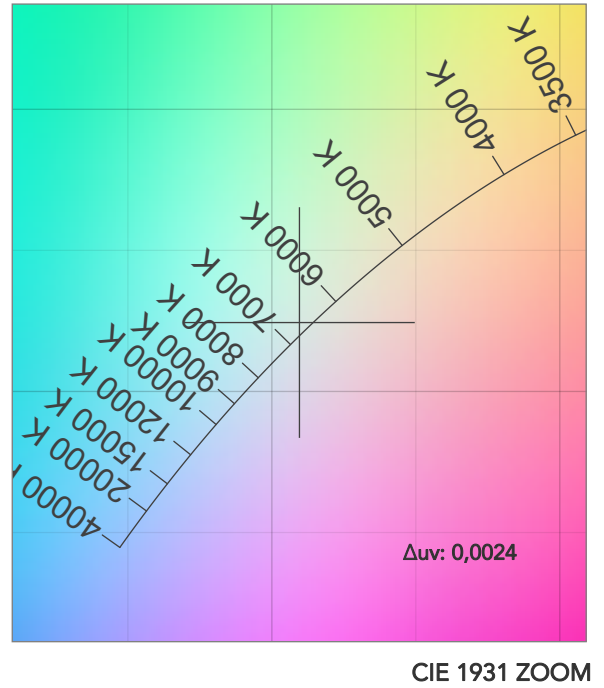
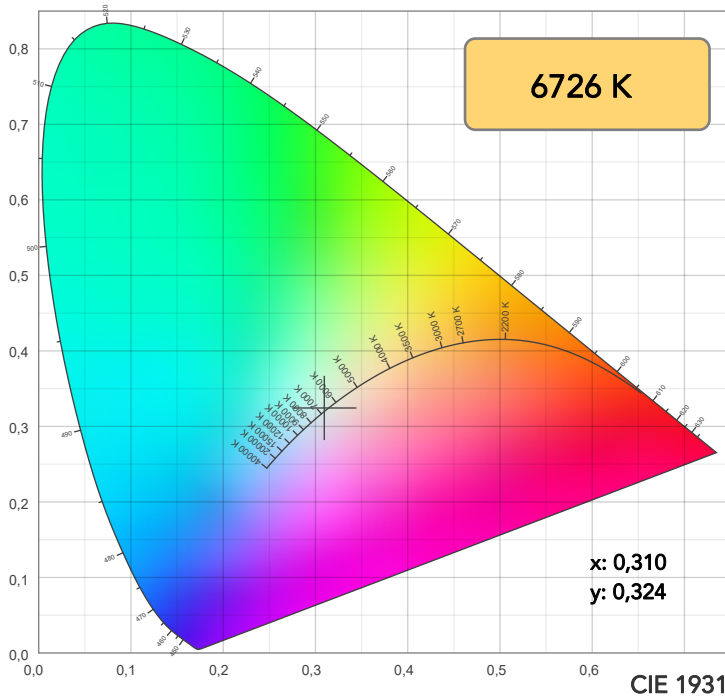
Field angle 10%: 17,3°

Cut off angle 2.5%: 18,7°

Spectra

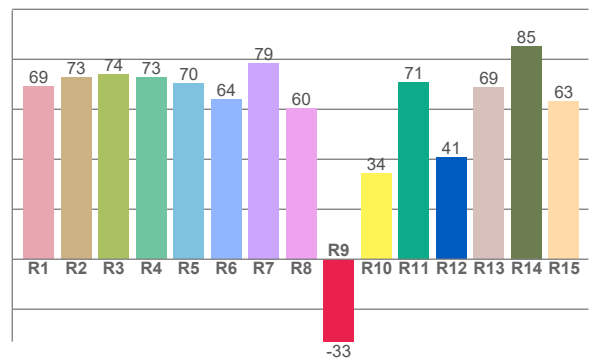
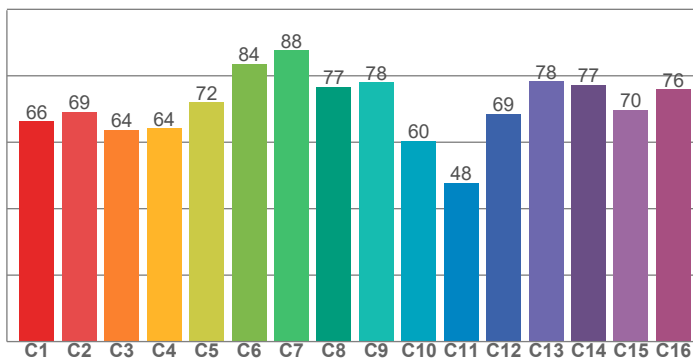


COLOR DETAILS



TM30: 70,6

CRI: 70,3 (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	73,0	74,0	72,6	70,4	64,0	78,6	60,4	-33,0	34,3	70,9	40,7	68,9	85,3	63,1

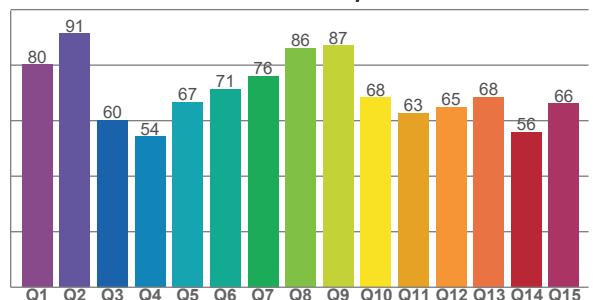
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
66,3	69,1	63,7	64,3	72,1	83,7	87,7	76,6	78,0	60,4	47,8	68,6	78,4	77,3	69,8	75,9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
80,2	91,3	60,2	54,2	66,8	71,5	76,1	86,1	87,1	68,4	62,7	64,9	68,5	55,9	66,2

CQS: 68,7



COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6726 K	70,3	-33,0	70,6	93,7	68,7	47	0,310	0,324	0,0024

TM30 DETAILS

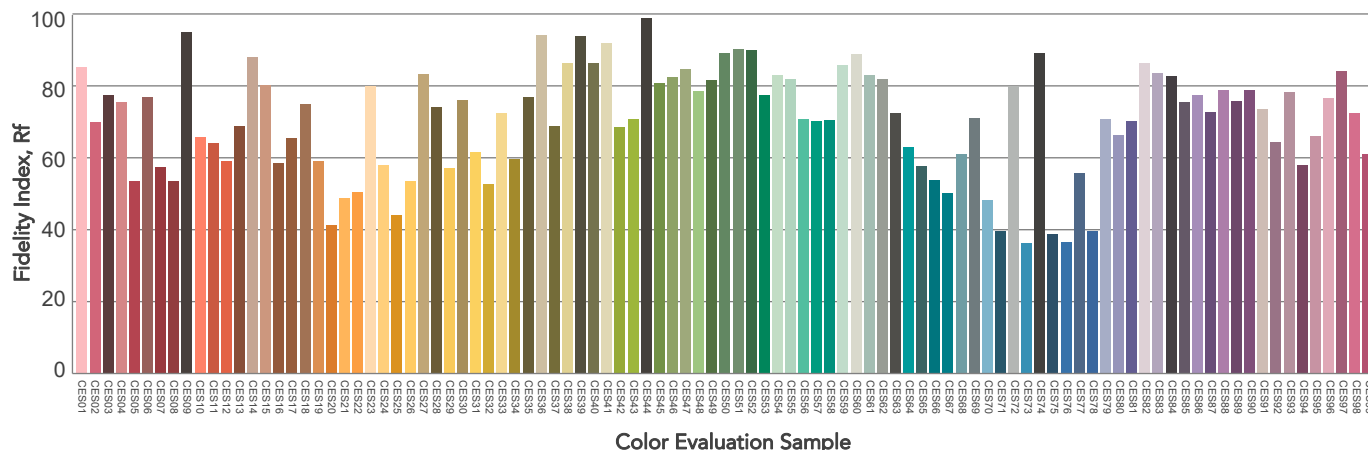
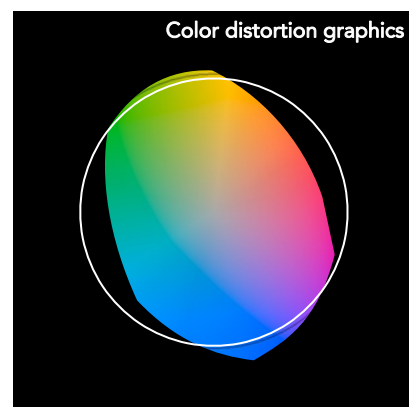
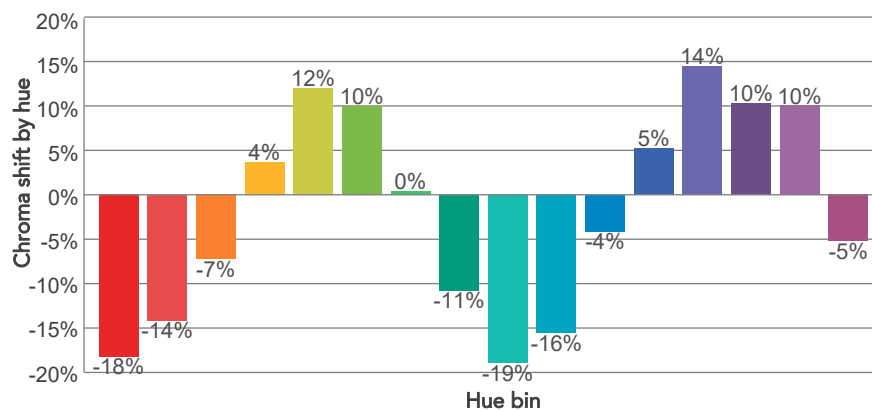
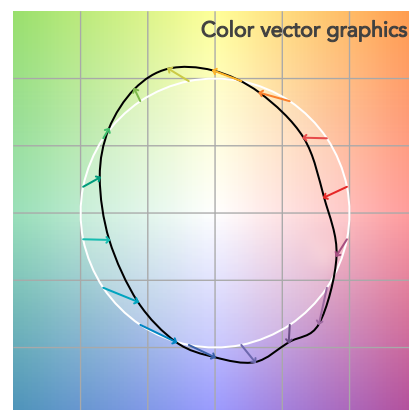
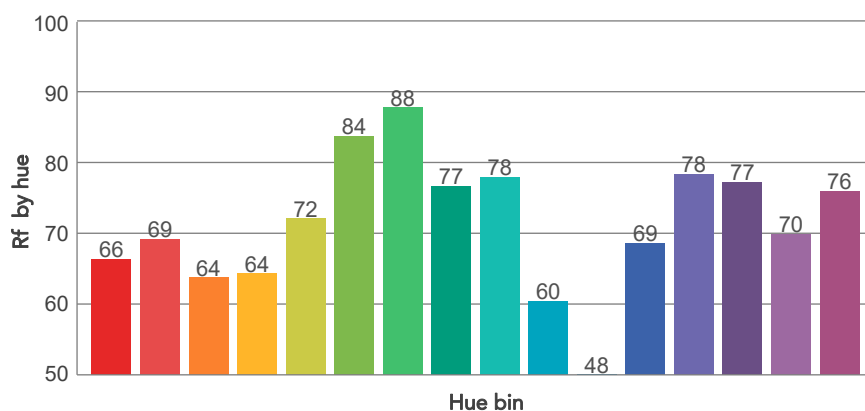
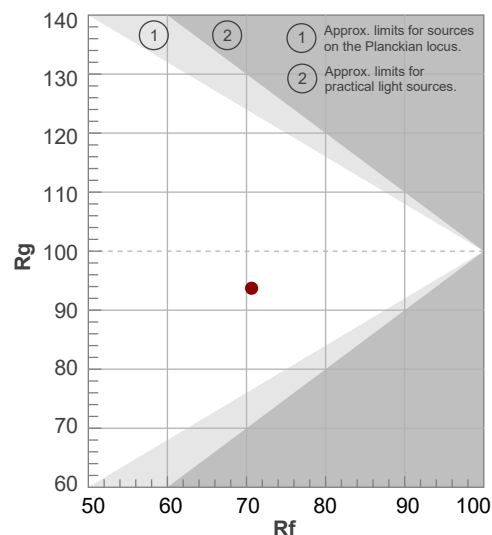
Rf 70,6

Fidelity index Rf

Rg 93,7

Gammut index

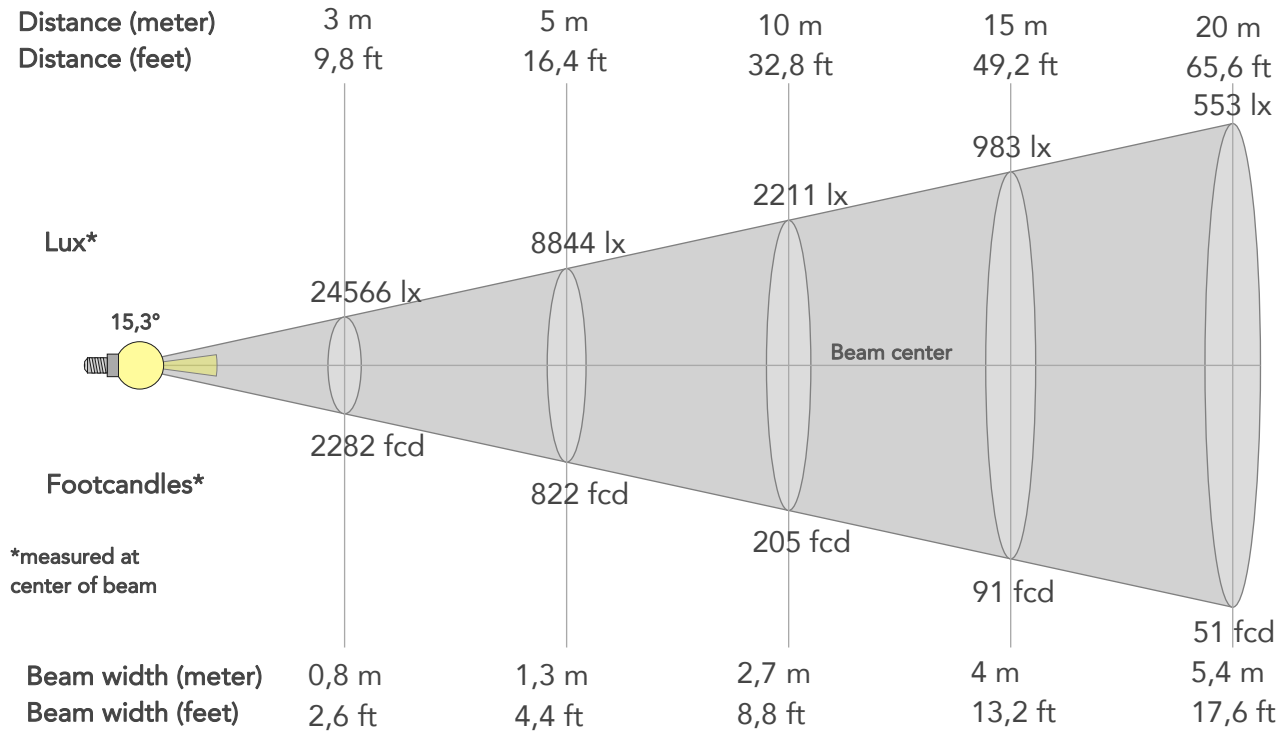
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	66	-18%	-4%
2	69	-14%	10%
3	64	-7%	22%
4	64	4%	22%
5	72	12%	13%
6	84	10%	-1%
7	88	0%	-8%
8	77	-11%	-9%
9	78	-19%	4%
10	60	-16%	23%
11	48	-4%	29%
12	69	5%	21%
13	78	14%	8%
14	77	10%	-8%
15	70	10%	-26%
16	76	-5%	-14%



BEAM DETAILS



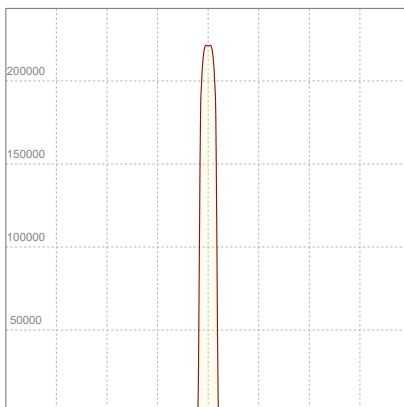
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,3°	17,3°	18,7°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	221093lx	55273lx	24566lx	13818lx	8844lx	3931lx	2211lx	983lx	553lx	354lx	246lx	138lx	88lx
Footcand.	20540fcd	5135fcd	2282fcd	1284fcd	822fcd	365fcd	205fcd	91fcd	51fcd	33fcd	23fcd	13fcd	8fcd
Beam wid.	0,3m	0,5m	0,8m	1,1m	1,3m	2m	2,7m	4m	5,4m	6,7m	8m	10,7m	13,4m
Beam wid.	0,9ft	1,8ft	2,6ft	3,5ft	4,4ft	6,6ft	8,8ft	13,2ft	17,6ft	22ft	26,4ft	35,2ft	43,9ft

LINEAR DISTRIBUTION DIAGRAM

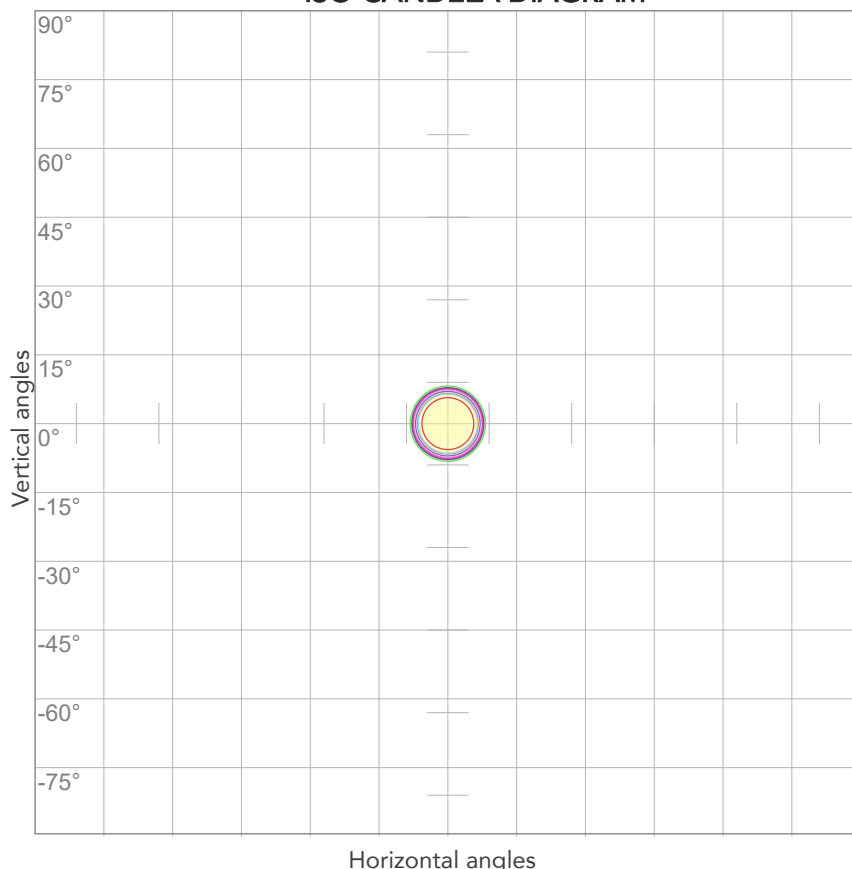


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	1,86A	407,7W	0,98	29lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



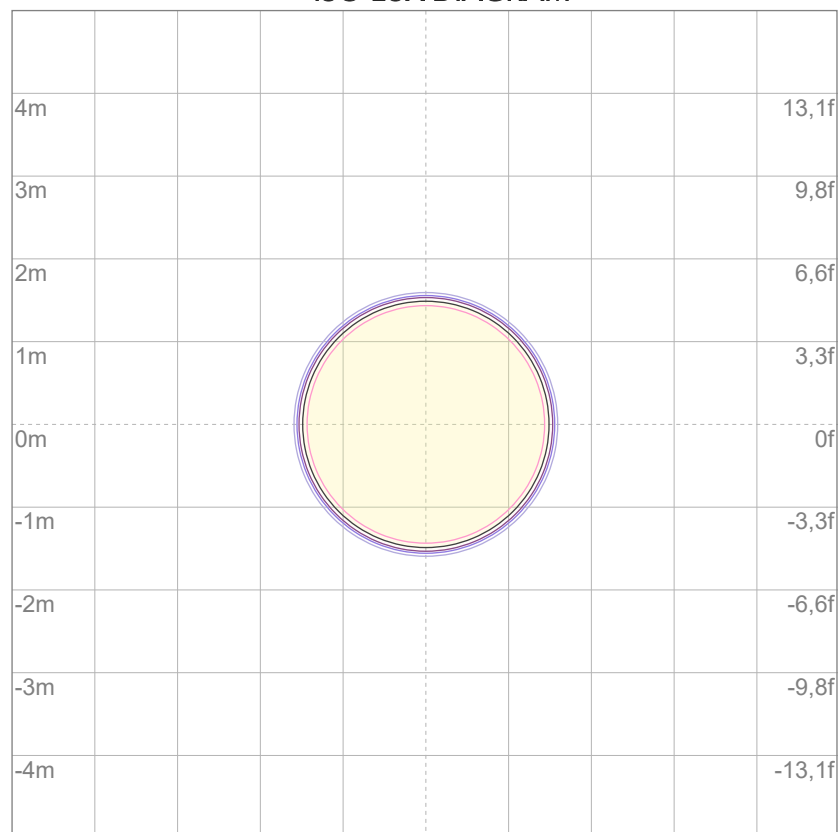
10%	22109 cd
20%	44219 cd
30%	66328 cd
40%	88437 cd
50%	110547 cd
60%	132656 cd
70%	154765 cd
80%	176875 cd

Conditions:

Number of c-planes: 2

Candela at center: 221093 cd

ISO LUX DIAGRAM



3%	66,3 lx
5%	111 lx
10%	221 lx
30%	663 lx
50%	1105 lx

Conditions:

Number of c-planes: 2

Lux at center: 2211 lx

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



Total lumen output:

8314 lm

Peak candela output:

2215008 cd

Light quality:

CRI: 70,4

Color temperature:

6620 K

PRODUCT NAME:
ASTRAPROFILE300LTIP

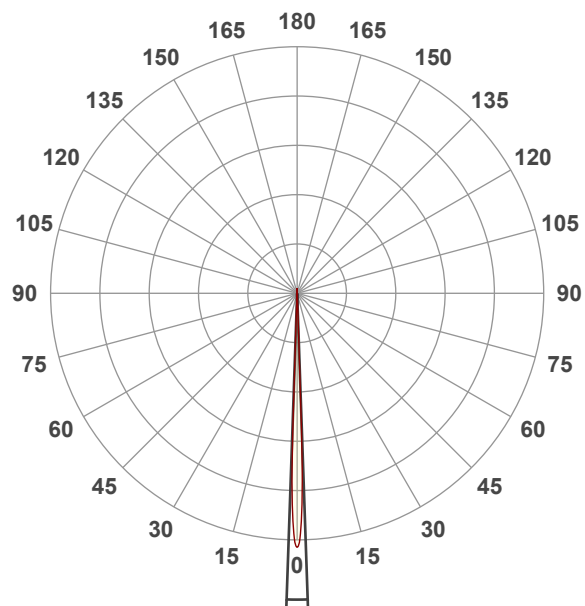
MEASURAMENT CONDITIONS:

Beam angle:
Min Zoom

Target:
Full On

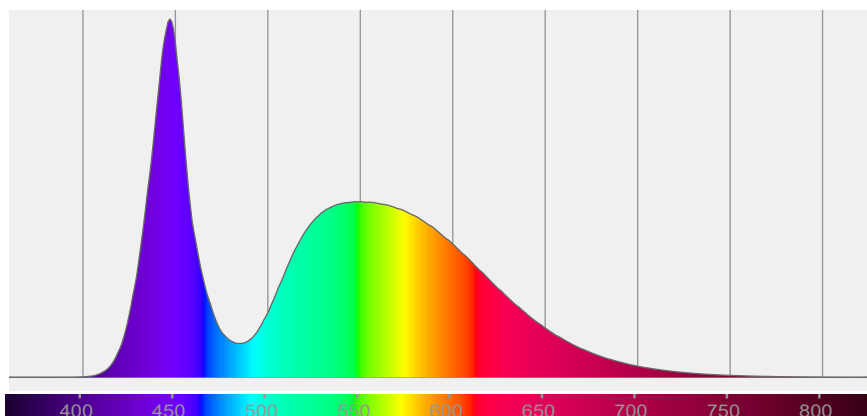
Operator:
Salvatore Giglio

Date and time:
09/01/2025 11:26:02

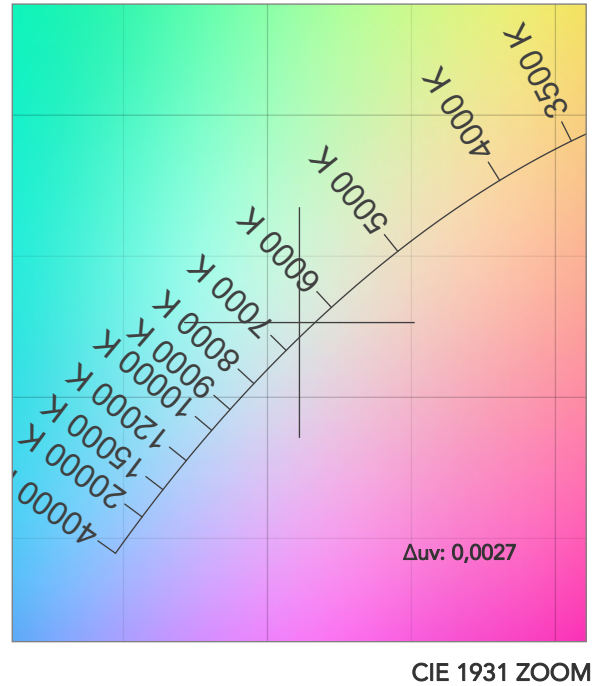
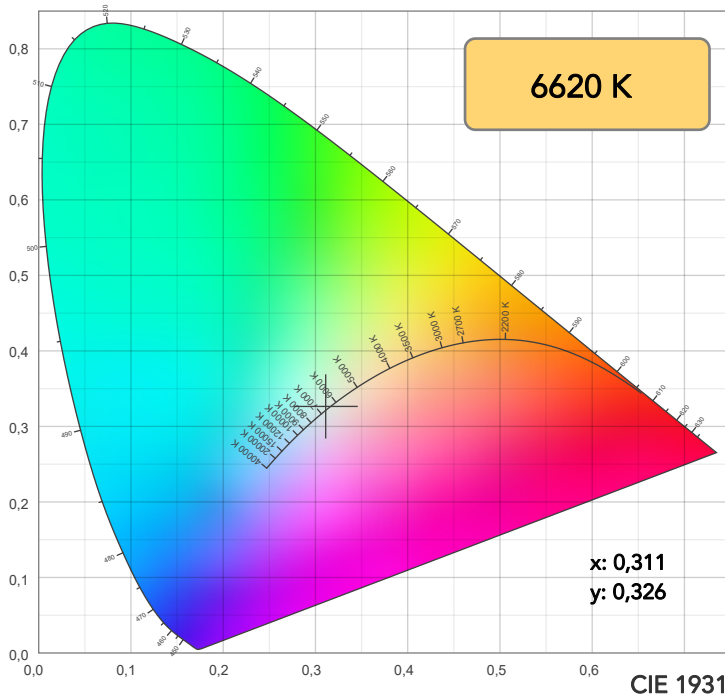


Beam angle 50%: 3,9°
Field angle 10%: 5,1°
Cut off angle 2.5%: 6,1°

Spectra

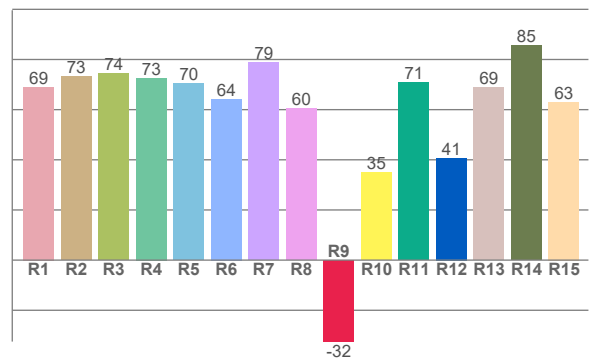
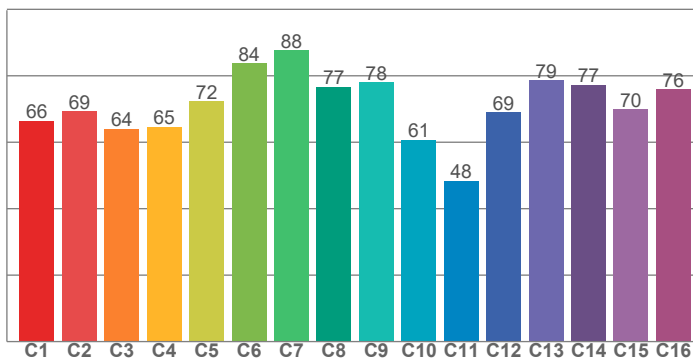


COLOR DETAILS



TM30: 70,9

CRI: 70,4 (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
69,1	73,1	74,4	72,7	70,4	64,2	78,8	60,4	-32,5	34,8	70,8	40,7	68,9	85,5	63,1

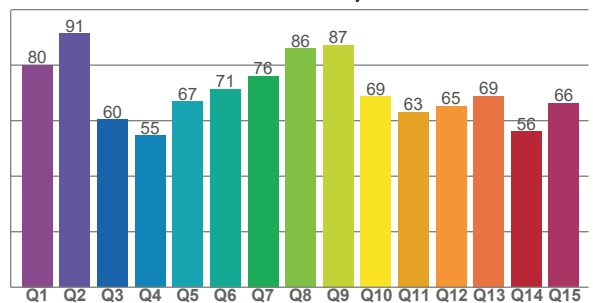
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
66,5	69,4	64,0	64,7	72,4	83,8	87,7	76,7	78,1	60,7	48,4	69,0	78,6	77,3	69,9	76,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
80,1	91,5	60,4	54,6	67,0	71,5	76,0	86,0	87,3	68,8	63,2	65,4	68,8	56,2	66,3

CQS: 68,9



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
6620 K	70,4	-32,5	70,9	93,8	68,9	48	0,311	0,326	0,0027

TM30 DETAILS

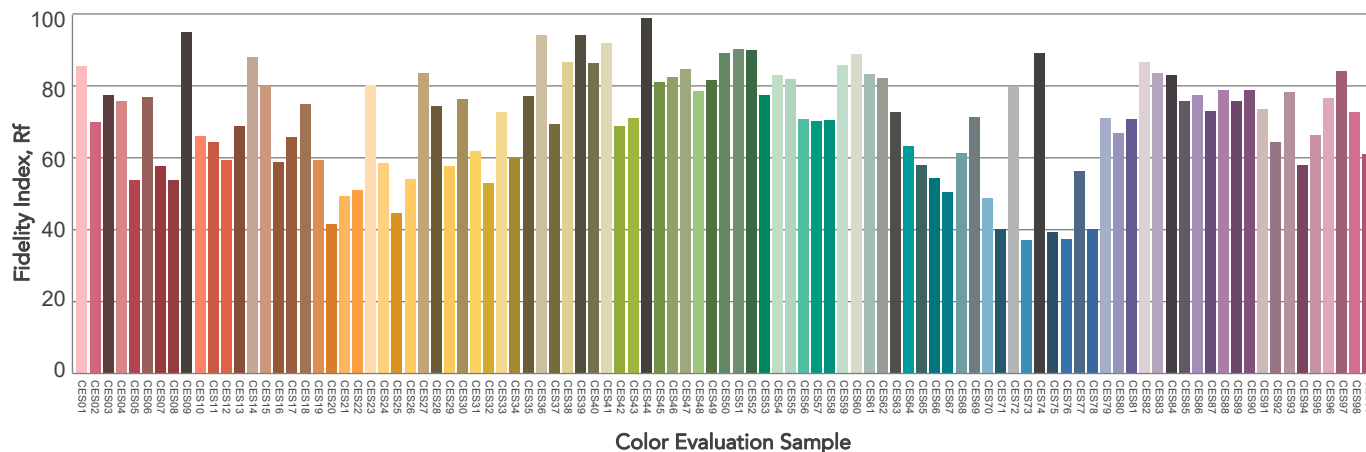
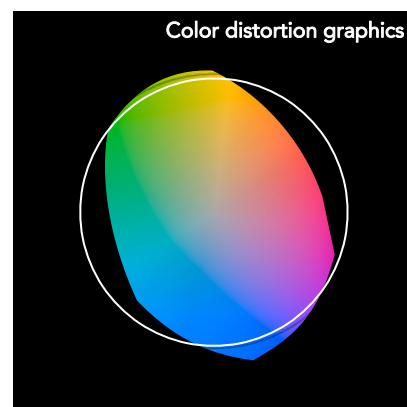
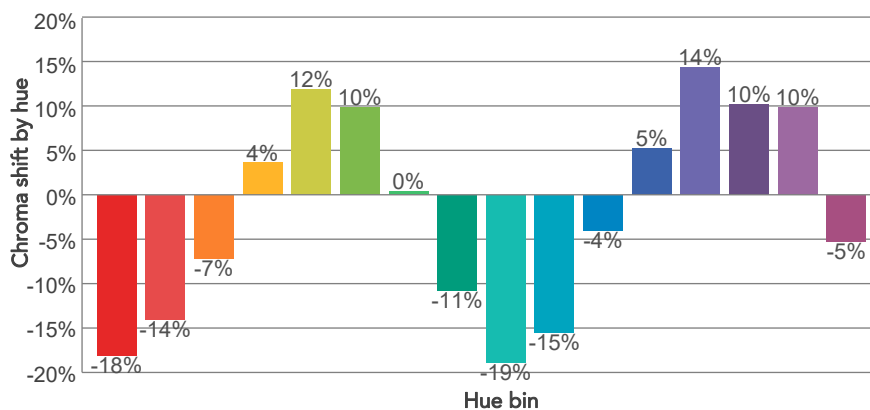
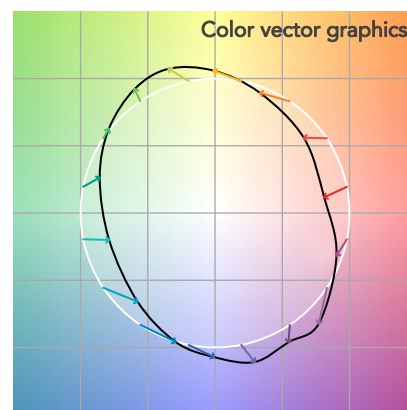
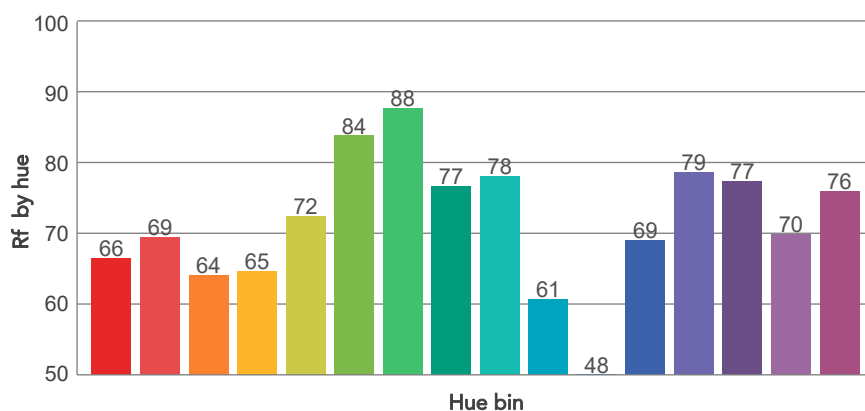
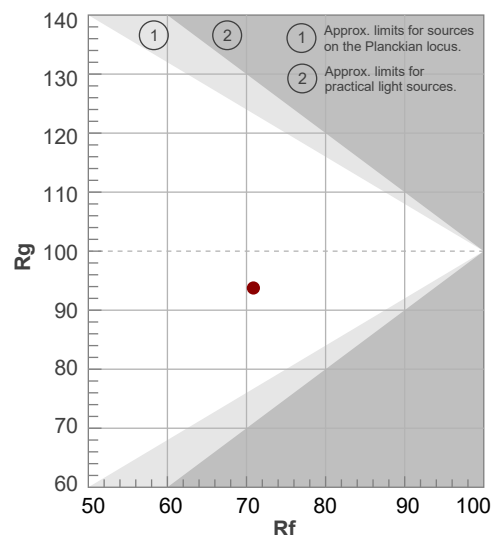
Rf 70,9

Fidelity index Rf

Rg 93,8

Gammut index

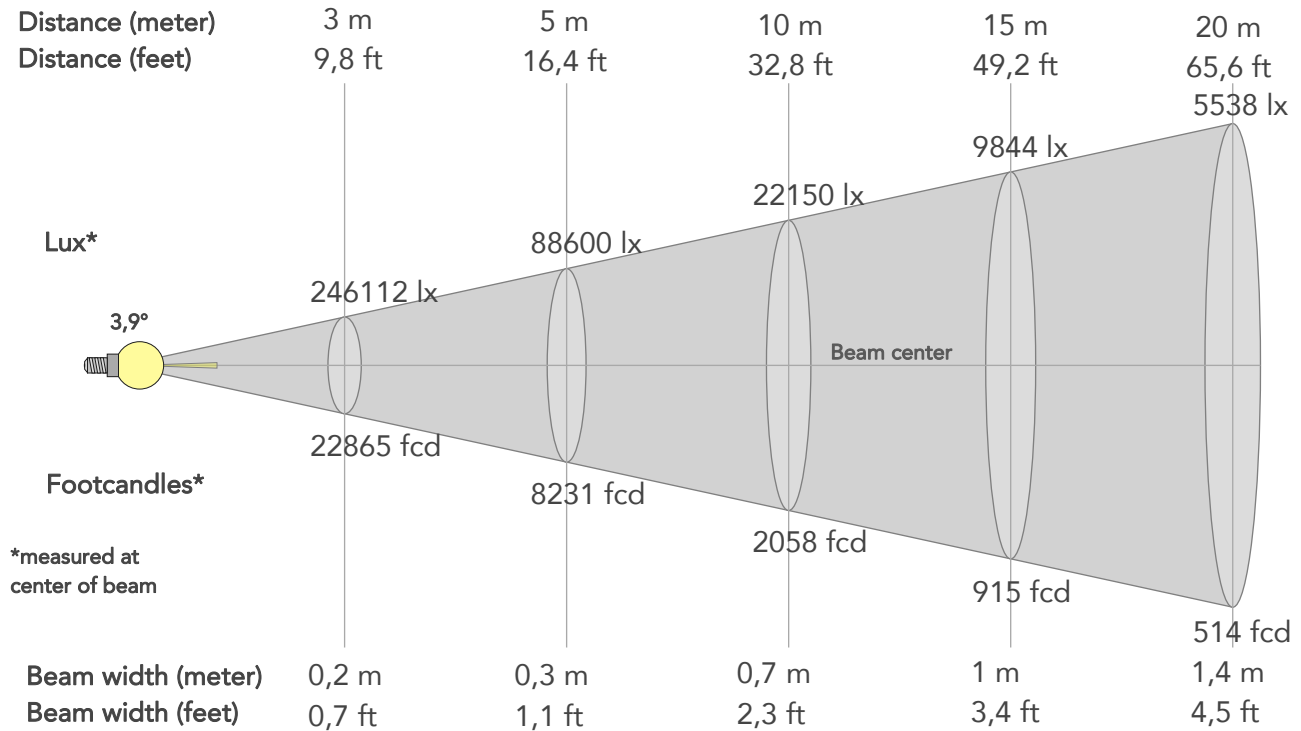
		Graphic shifts (%)	
Hue Bin	R _f	Chroma	Hue
1	66	-18%	-4%
2	69	-14%	10%
3	64	-7%	22%
4	65	4%	22%
5	72	12%	13%
6	84	10%	-1%
7	88	0%	-8%
8	77	-11%	-9%
9	78	-19%	4%
10	61	-15%	23%
11	48	-4%	29%
12	69	5%	20%
13	79	14%	7%
14	77	10%	-8%
15	70	10%	-25%
16	76	-5%	-13%



BEAM DETAILS



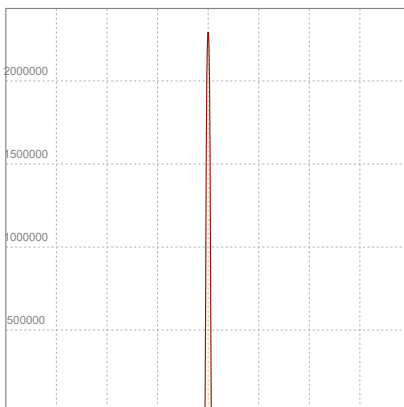
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
3,9°	5,1°	6,1°	99,9%	99,9%



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	2215008lx	553752lx	246112lx	138438lx	88600lx	39378lx	22150lx	9844lx	5538lx	3544lx	2461lx	1384lx	886lx
Footcand.	205781fcd	51445fcd	22865fcd	12861fcd	8231fcd	3658fcd	2058fcd	915fcd	514fcd	329fcd	229fcd	129fcd	82fcd
Beam wid.	0,1m	0,1m	0,2m	0,3m	0,3m	0,5m	0,7m	1m	1,4m	1,7m	2,1m	2,8m	3,4m
Beam wid.	0,2ft	0,5ft	0,7ft	0,9ft	1,1ft	1,7ft	2,3ft	3,4ft	4,5ft	5,6ft	6,8ft	9ft	11,3ft

LINEAR DISTRIBUTION DIAGRAM

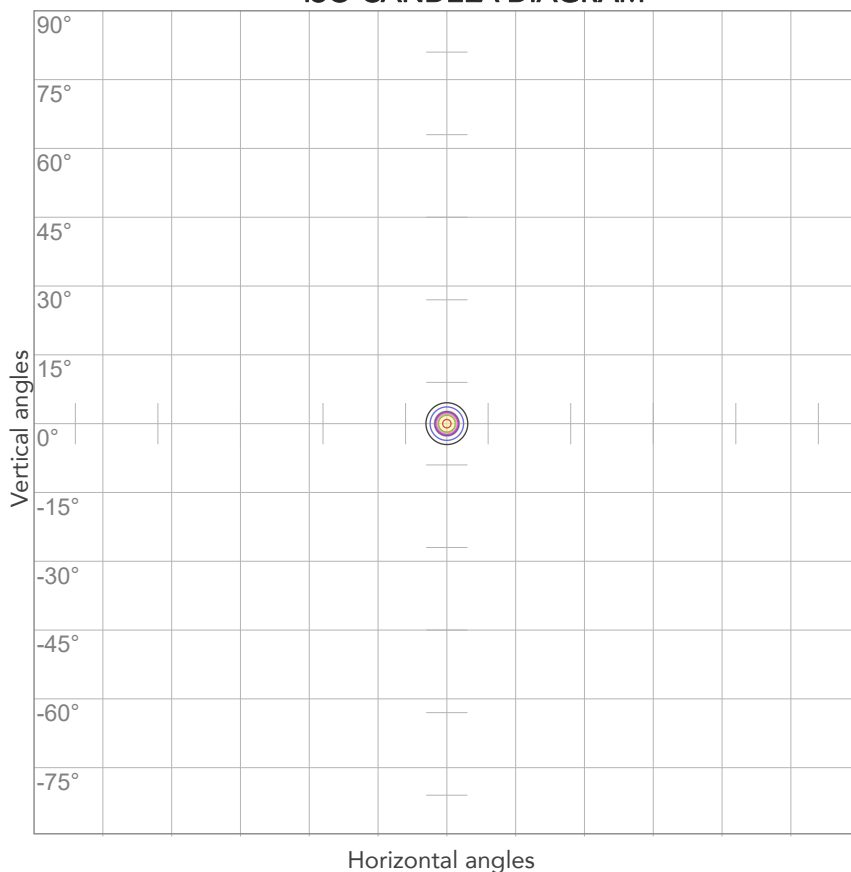


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
224V	1,88A	412,1W	0,98	20lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



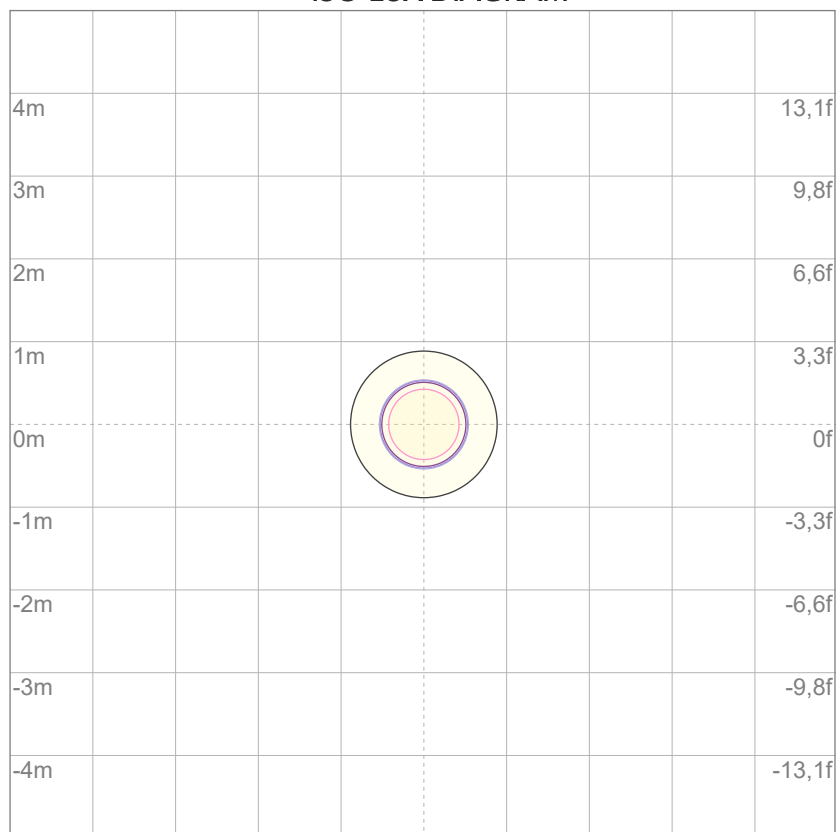
10%	221501 cd
20%	443002 cd
30%	664502 cd
40%	886003 cd
50%	1107504 cd
60%	1329005 cd
70%	1550505 cd
80%	1772006 cd

Conditions:

Number of c-planes: 2

Candela at center: 2215008 cd

ISO LUX DIAGRAM



3%	665 lx
5%	1108 lx
10%	2215 lx
30%	6645 lx
50%	11,1K lx

Conditions:

Number of c-planes: 2

Lux at center: 22,2K lx

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