



Photometric Test Report



ASTRAPROFILE400

Indoor LED Moving Profile, with a
400W White source

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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:

17598 lm

Peak candela output:

42249 cd

Light quality:

CRI: 70,8

Color temperature:

7154 K

PRODUCT NAME:

ASTRAPROFILE400

MEASUREMENT CONDITIONS:

Beam angle:

Max Zoom

Target:

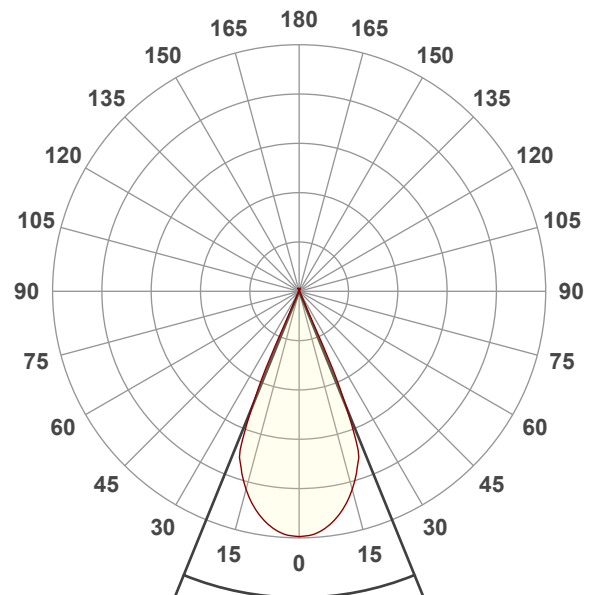
Full On

Operator:

Paolo Carvone

Date and time:

11/11/2022 12:58:39

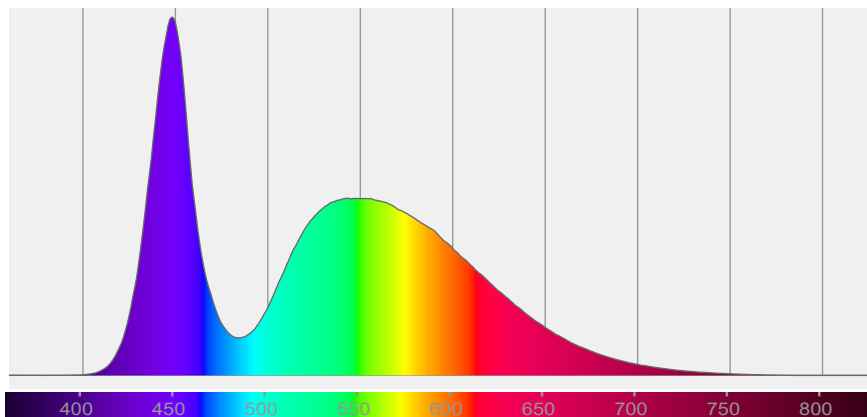


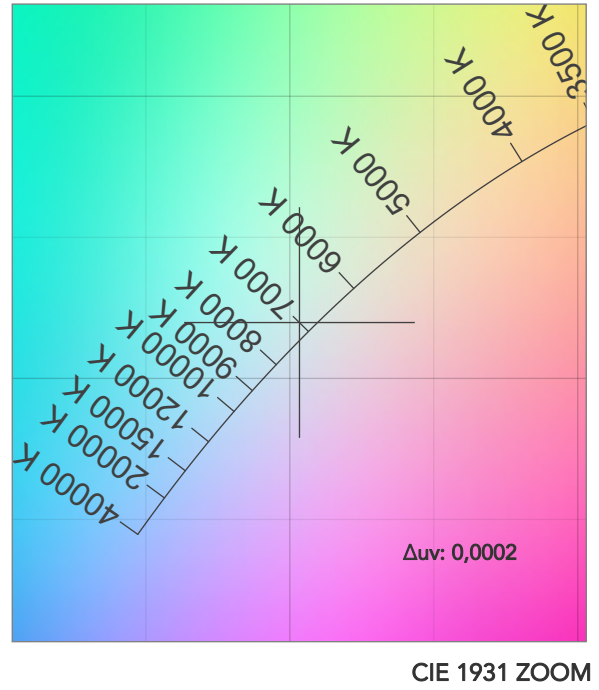
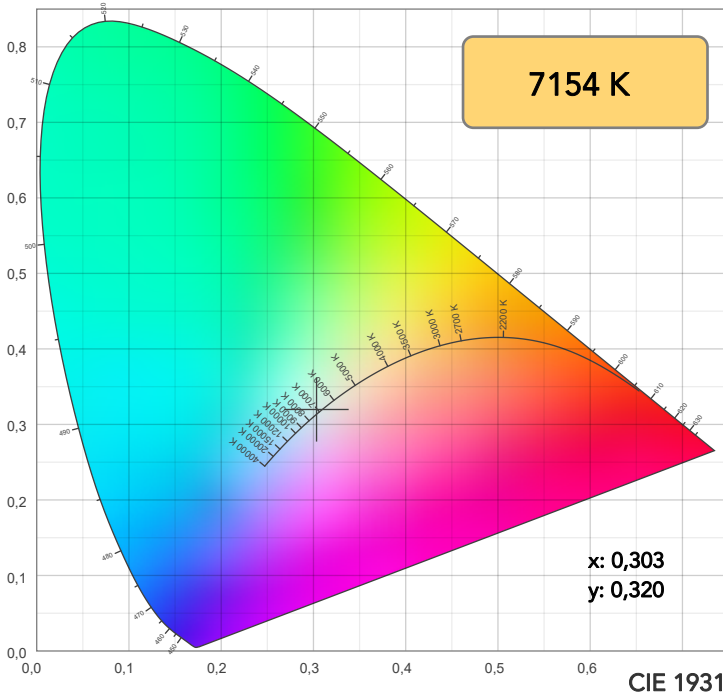
Beam angle 50%: 44,3°

Field angle 10%: 50,1°

Cut off angle 2.5%: 51,2°

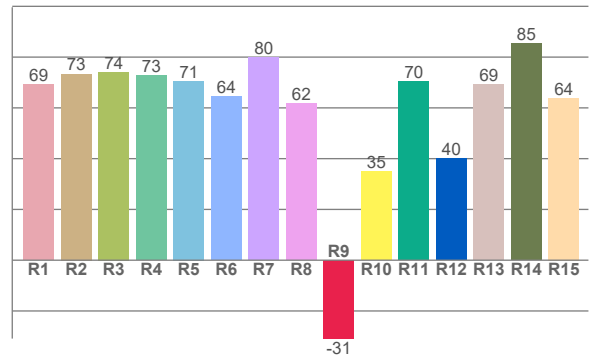
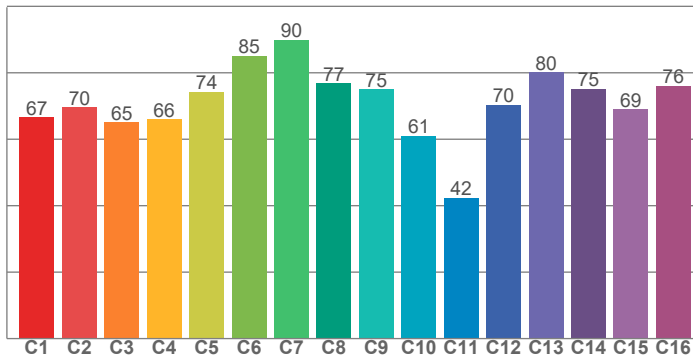
Spectra





TM30: 71,3

CRI: 70,8 (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
69,2	73,4	74,2	72,8	70,5	64,4	79,8	61,8	-30,9	35,0	70,4	40,0	69,2	85,4	63,9

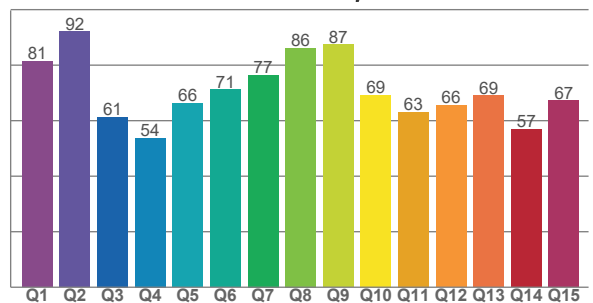
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
66,5	69,6	65,1	66,0	74,3	85,0	89,9	76,8	75,0	61,0	42,3	70,3	80,2	75,2	69,0	76,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81,4	92,1	61,3	53,8	66,2	71,2	76,5	86,1	87,4	69,2	63,2	65,5	69,0	56,9	67,3

CQS: 69,1



COLOR PARAMETERS

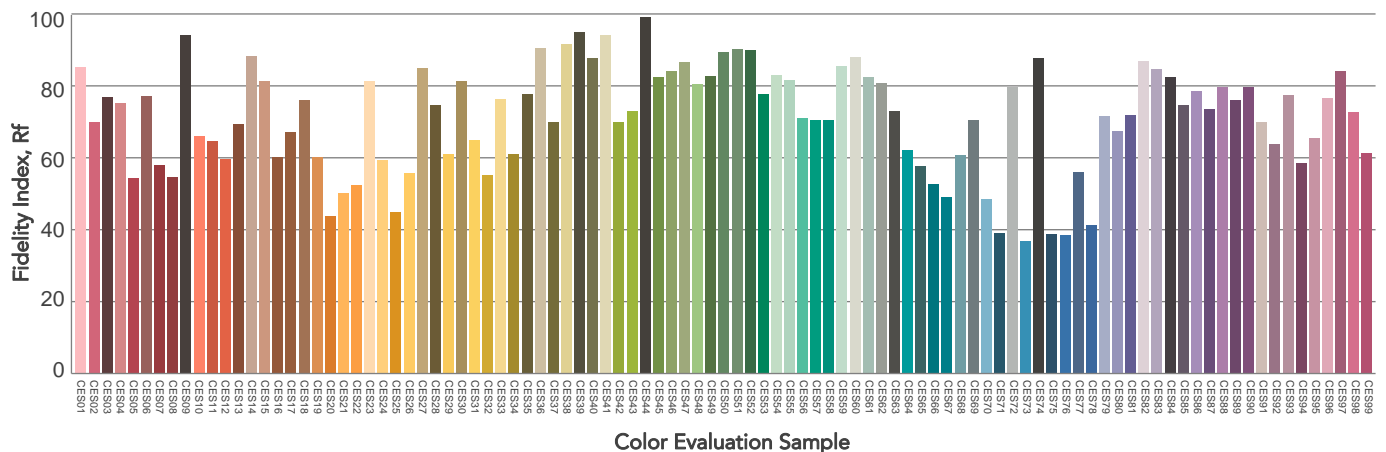
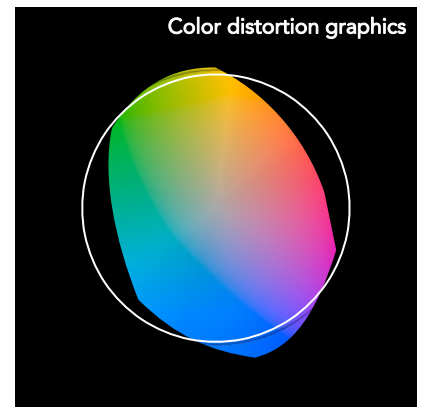
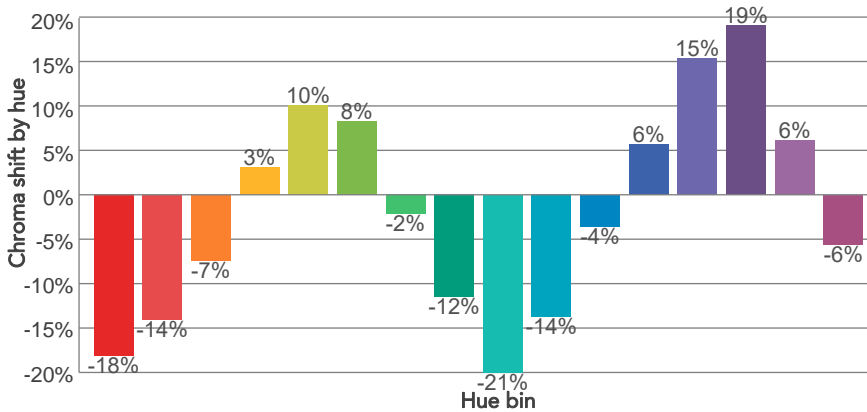
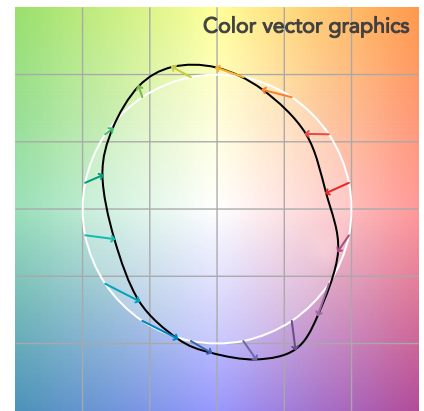
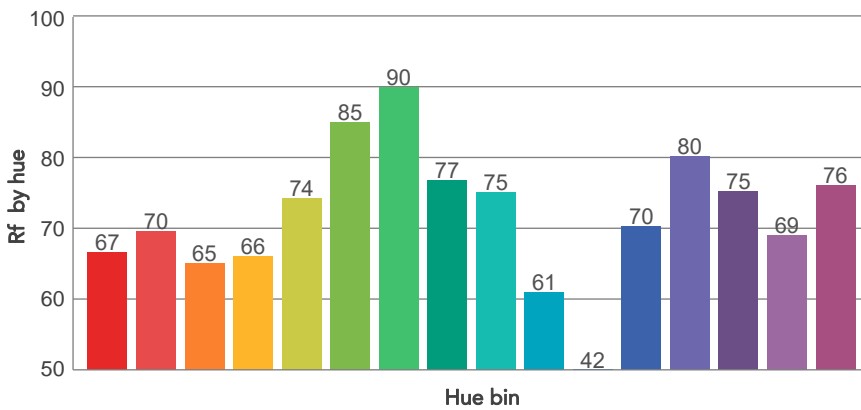
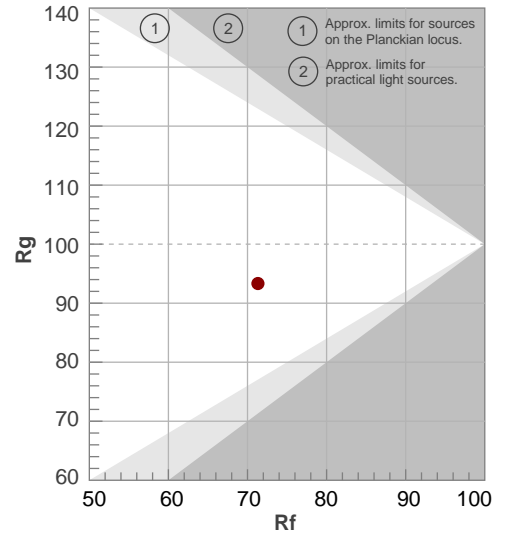
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
7154 K	70,8	-30,9	71,3	93,3	69,1	48	0,303	0,320	0,0002

TM30 DETAILS

Rf 71,3
Fidelity index Rf

Rg 93,3
Gammut index

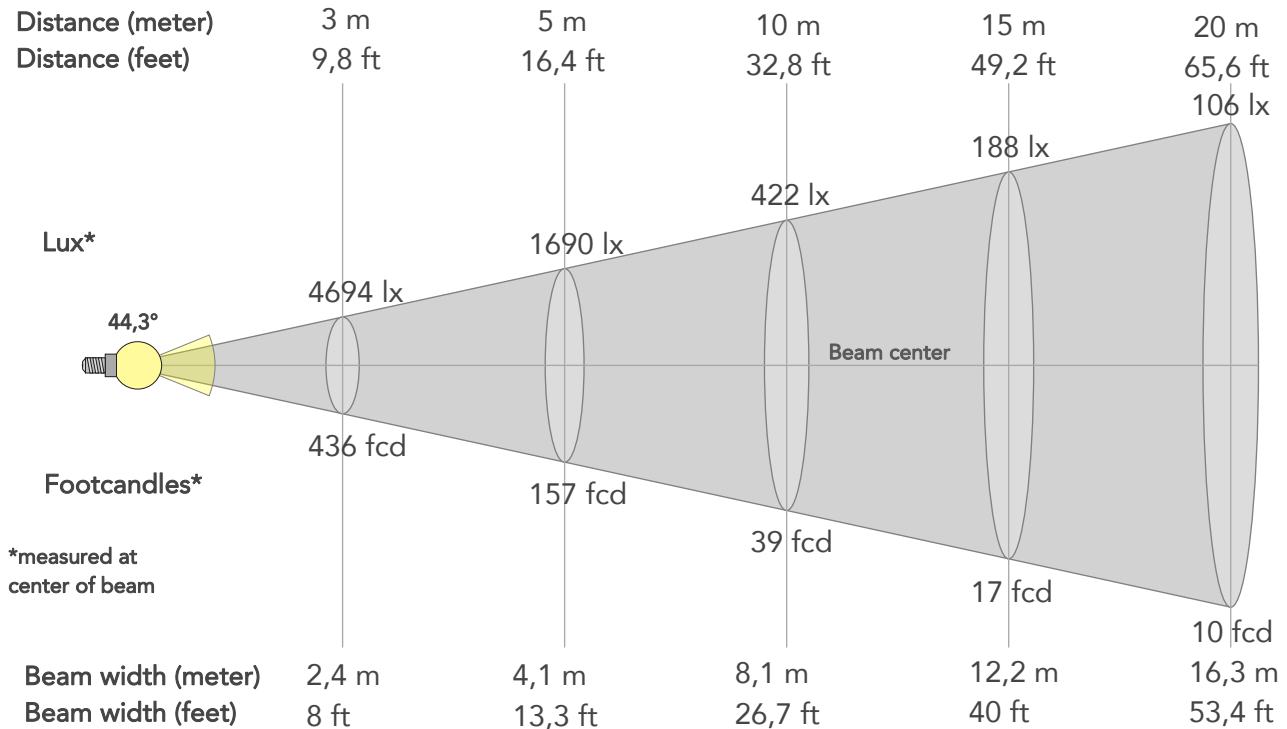
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	67	-18%	-4%
2	70	-14%	10%
3	65	-7%	21%
4	66	3%	21%
5	74	10%	12%
6	85	8%	-2%
7	90	-2%	-7%
8	77	-12%	-8%
9	75	-21%	7%
10	61	-14%	25%
11	42	-4%	29%
12	70	6%	16%
13	80	15%	7%
14	75	19%	-9%
15	69	6%	-24%
16	76	-6%	-13%



BEAM DETAILS



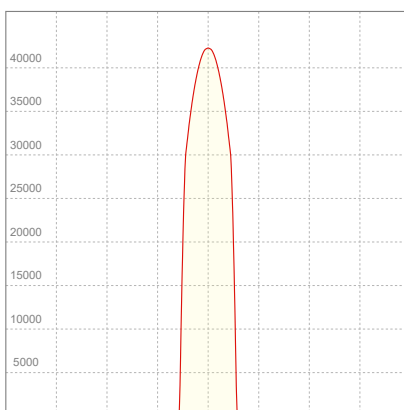
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
44,3°	50,1°	51,2°	100,0%	100,0%



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	42249lx	10562lx	4694lx	2641lx	1690lx	751lx	422lx	188lx	106lx	68lx	47lx	26lx	17lx
Footcand.	3925fcd	981fcd	436fcd	245fcd	157fcd	70fcd	39fcd	17fcd	10fcd	6fcd	4fcd	2fcd	2fcd
Beam wid.	0,8m	1,6m	2,4m	3,3m	4,1m	6,1m	8,1m	12,2m	16,3m	20,3m	24,4m	32,5m	40,7m
Beam wid.	2,7ft	5,4ft	8ft	10,7ft	13,3ft	20ft	26,7ft	40ft	53,4ft	66,7ft	80ft	106,7ft	133,4ft

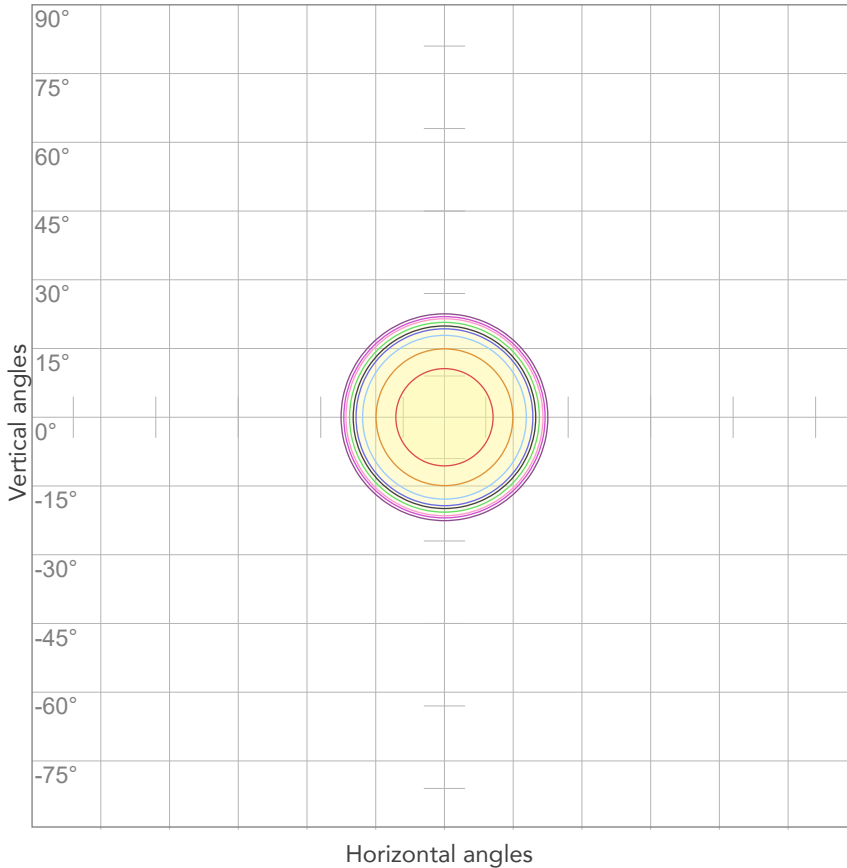
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	2,43A	522,2W	34lm/W
Power Fc			
0,96			

ISO CANDELA DIAGRAM



10%	4225 cd
20%	8450 cd
30%	12675 cd
40%	16900 cd
50%	21125 cd
60%	25349 cd
70%	29574 cd
80%	33799 cd

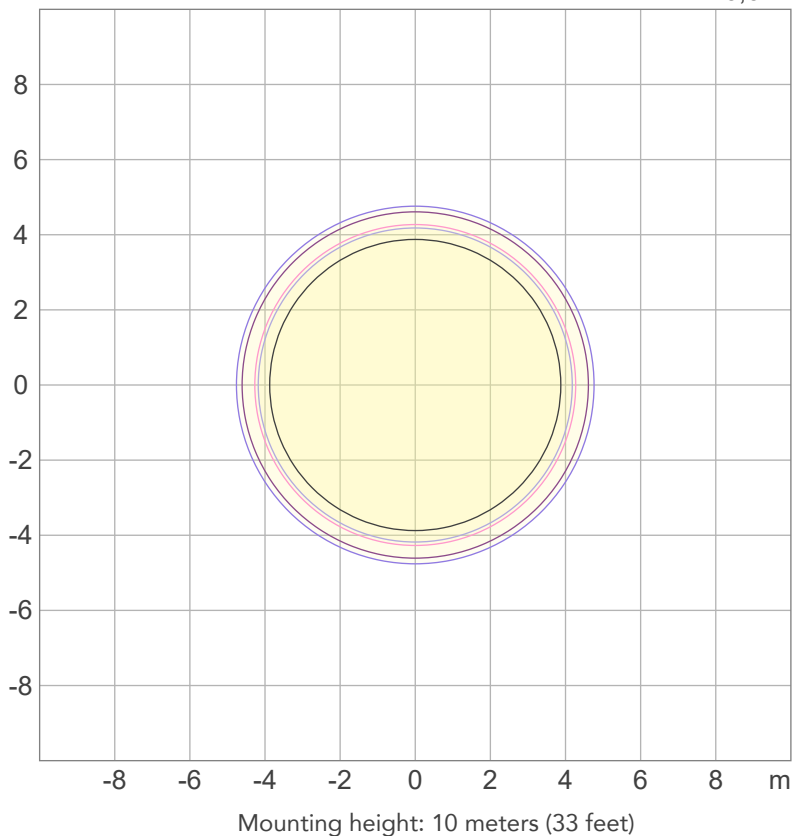
Conditions:

Number of c-planes: 2

Candela at center: 42249 cd

ISO LUX DIAGRAM

MH: 10,0 m



3%	12,7 lx
5%	21,1 lx
10%	42,2 lx
30%	127 lx
50%	211 lx

Conditions:

Number of c-planes: 2

Lux at center: 422 lx

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



Total lumen output:

15914 lm

Peak candela output:

216520 cd

Light quality:

CRI: 70,7

Color temperature:

7121 K

PRODUCT NAME:

ASTRAPROFILE400

MEASURAMENT CONDITIONS:

Beam angle:

Med Zoom

Target:

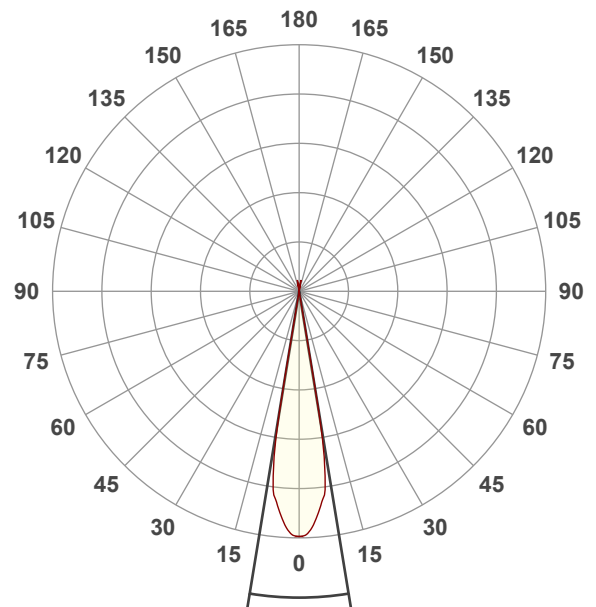
Full On

Operator:

Paolo Carvone

Date and time:

11/11/2022 12:53:05

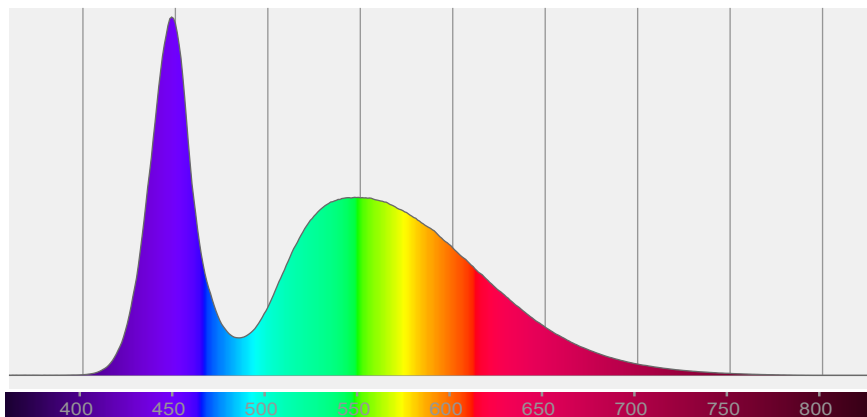


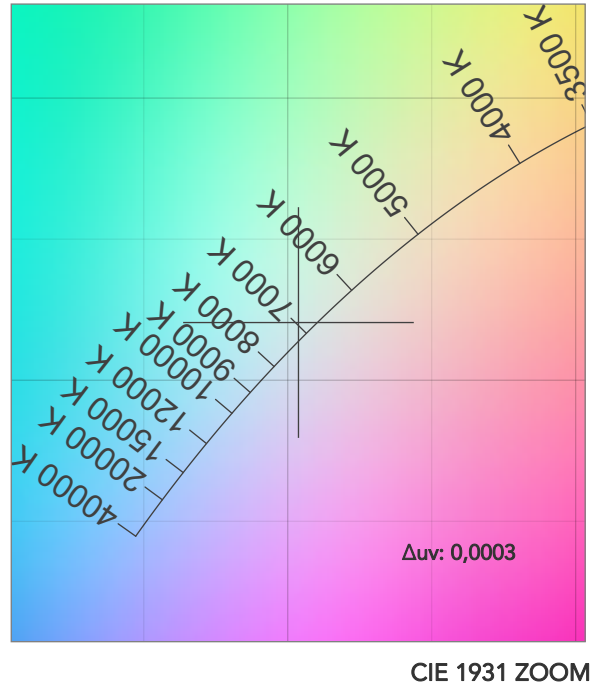
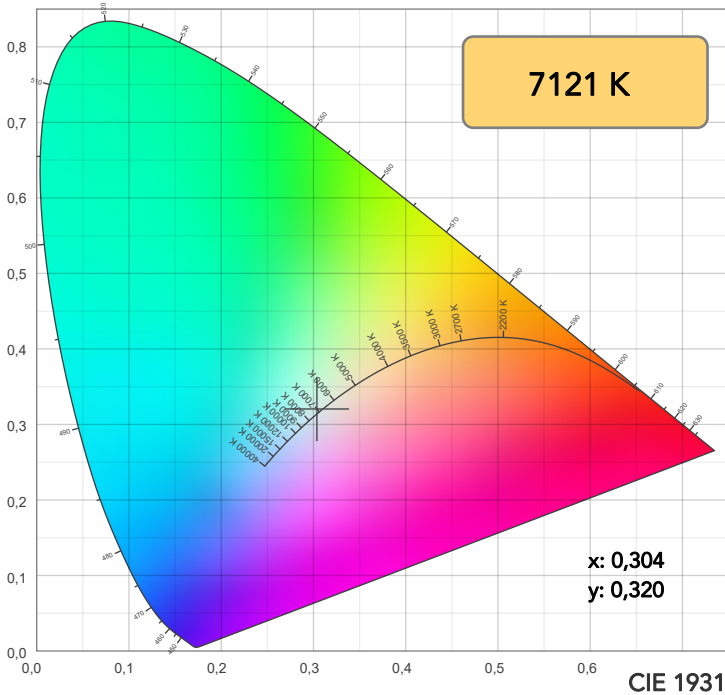
Beam angle 50%: 18,6°

Field angle 10%: 20,7°

Cut off angle 2.5%: 21,1°

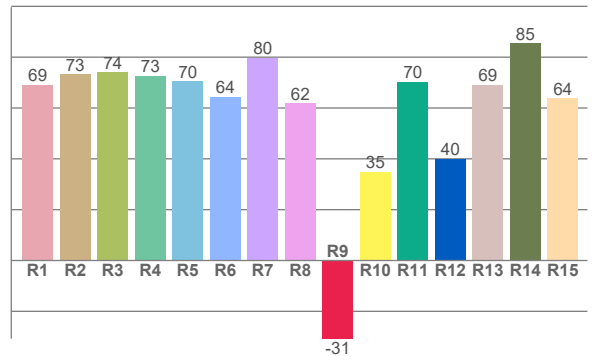
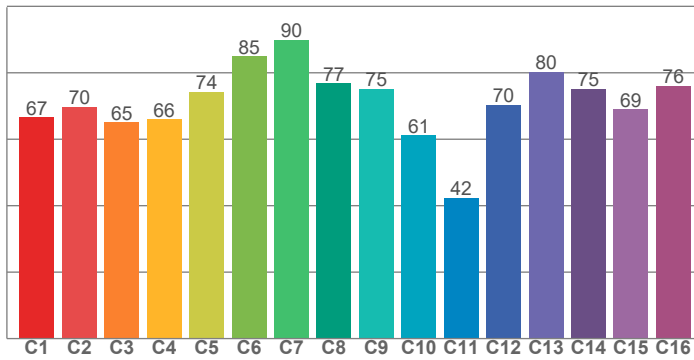
Spectra





TM30: 71,3

CRI: 70,7 (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
69,1	73,4	74,1	72,8	70,5	64,4	79,8	61,8	-30,7	34,9	70,4	40,0	69,2	85,4	63,8

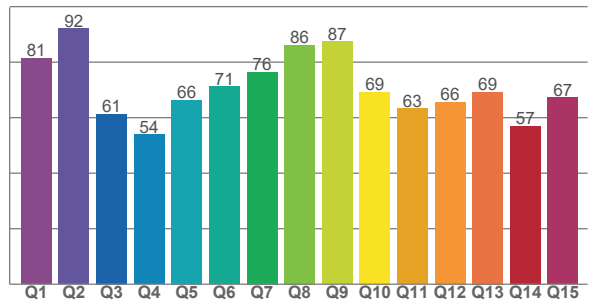
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
66,6	69,7	65,1	66,0	74,3	85,0	89,9	76,8	75,1	61,1	42,4	70,3	80,2	75,2	69,0	76,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81,4	92,1	61,3	53,9	66,4	71,3	76,5	86,1	87,4	69,3	63,3	65,7	69,2	57,0	67,3

CQS: 69,2



COLOR PARAMETERS

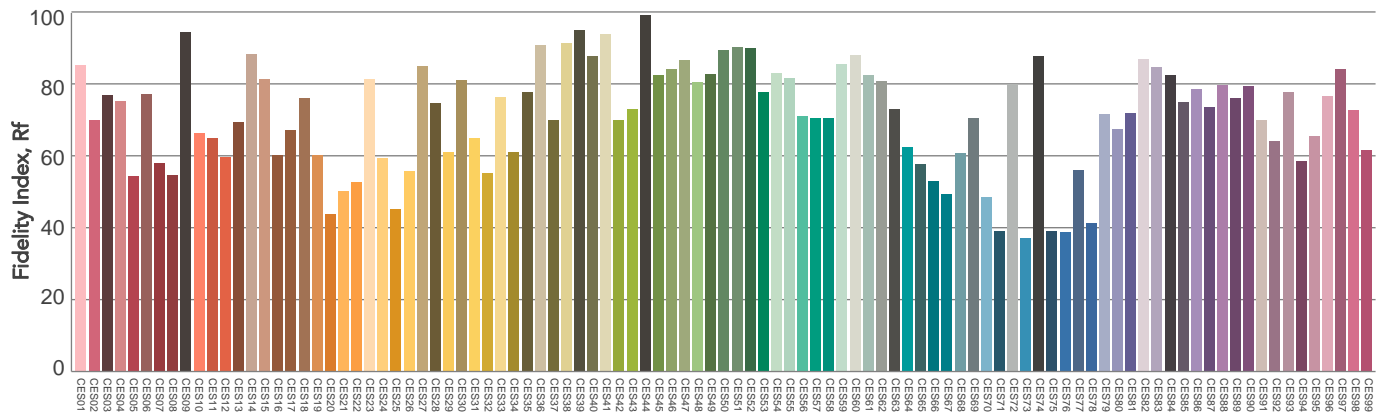
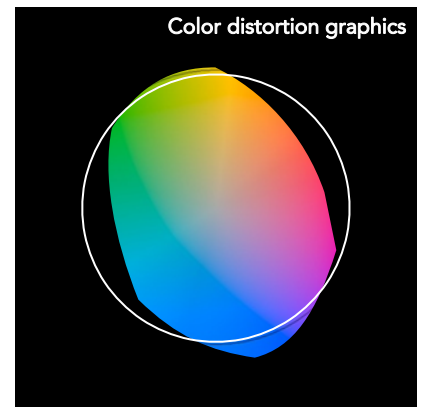
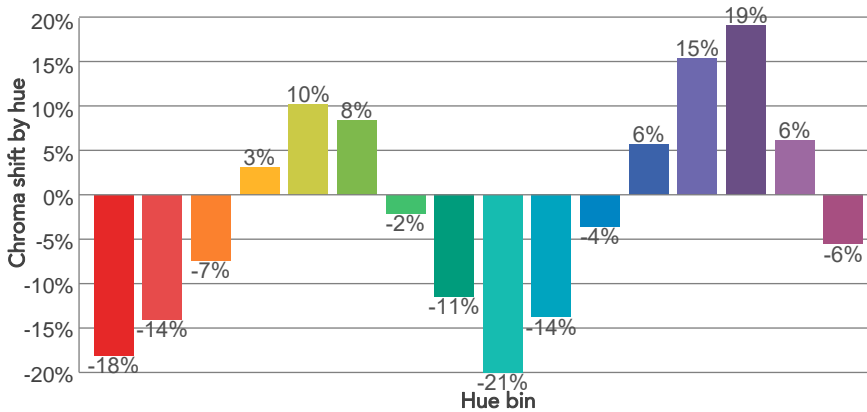
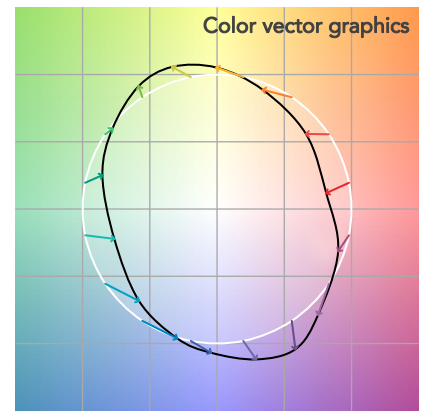
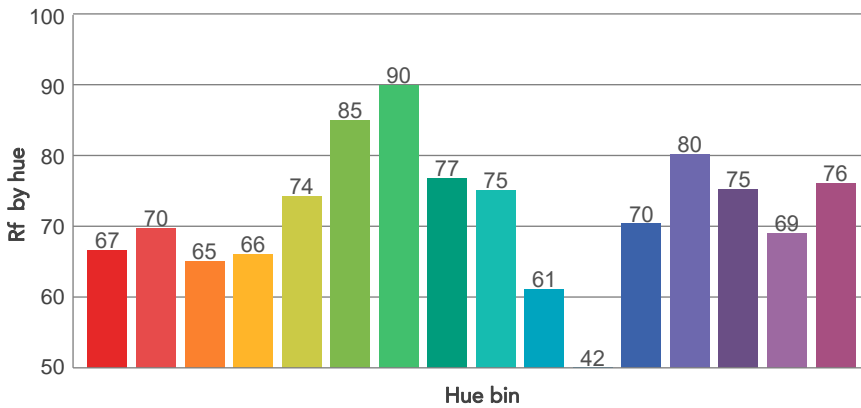
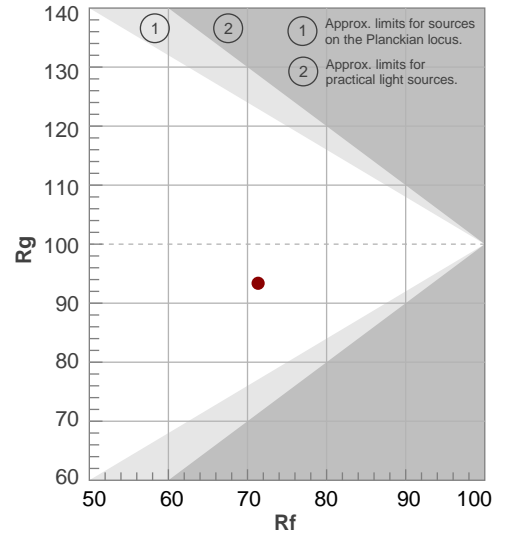
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
7121 K	70,7	-30,7	71,3	93,4	69,2	48	0,304	0,320	0,0003

TM30 DETAILS

Rf 71,3
Fidelity index Rf

Rg 93,4
Gammut index

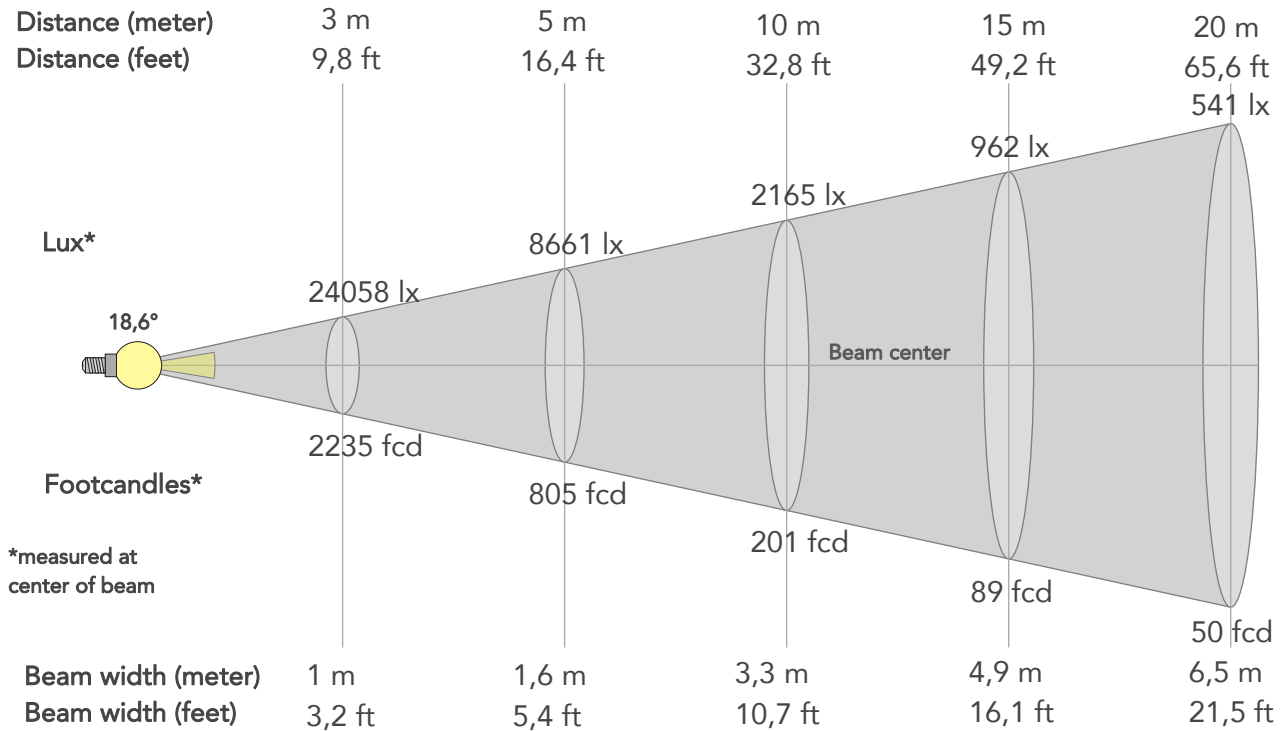
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	67	-18%	-4%
2	70	-14%	10%
3	65	-7%	21%
4	66	3%	21%
5	74	10%	12%
6	85	8%	-2%
7	90	-2%	-7%
8	77	-11%	-8%
9	75	-21%	7%
10	61	-14%	25%
11	42	-4%	29%
12	70	6%	16%
13	80	15%	7%
14	75	19%	-9%
15	69	6%	-24%
16	76	-6%	-13%



BEAM DETAILS



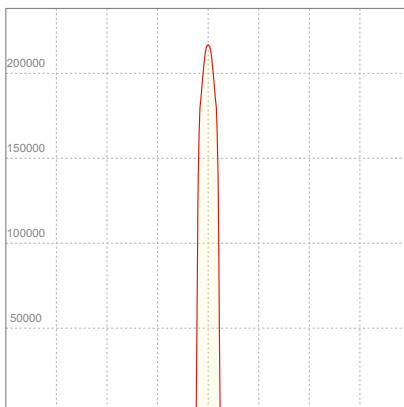
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,6°	20,7°	21,1°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	216520lx	54130lx	24058lx	13533lx	8661lx	3849lx	2165lx	962lx	541lx	346lx	241lx	135lx	87lx
Footcand.	20115fcd	5029fcd	2235fcd	1257fcd	805fcd	358fcd	201fcd	89fcd	50fcd	32fcd	22fcd	13fcd	8fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,6m	2,5m	3,3m	4,9m	6,5m	8,2m	9,8m	13,1m	16,4m
Beam wid.	1,1ft	2,2ft	3,2ft	4,3ft	5,4ft	8ft	10,7ft	16,1ft	21,5ft	26,8ft	32,2ft	42,9ft	53,7ft

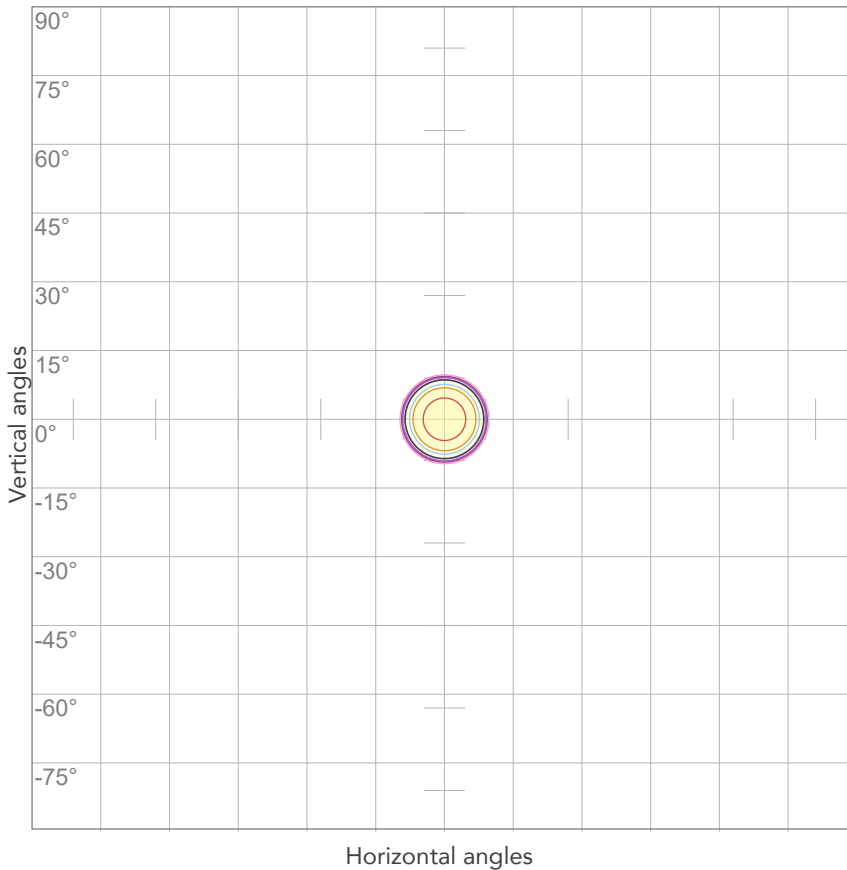
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	2,45A	523,6W	30lm/W
Power Fc			
0,96			

ISO CANDELA DIAGRAM



10%	21652 cd
20%	43304 cd
30%	64956 cd
40%	86608 cd
50%	108260 cd
60%	129912 cd
70%	151564 cd
80%	173216 cd

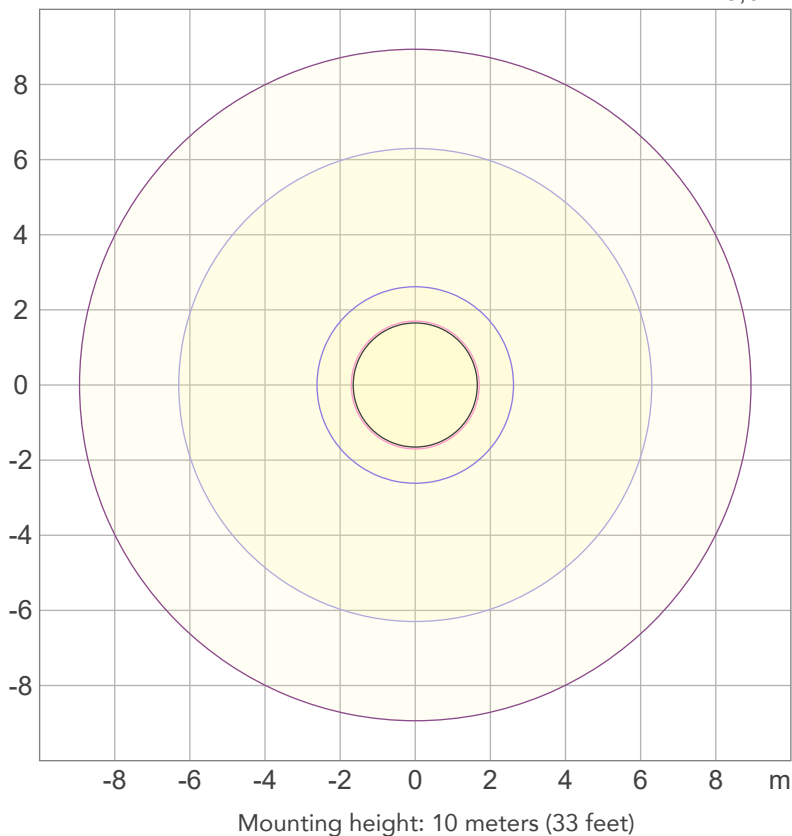
Conditions:

Number of c-planes: 2

Candela at center: 216520 cd

ISO LUX DIAGRAM

MH: 10,0 m



3%	65,0 lx
5%	108 lx
10%	217 lx
30%	650 lx
50%	1083 lx

Conditions:

Number of c-planes: 2

Lux at center: 2165 lx

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



Total lumen output:

9143 lm

Peak candela output:

936702 cd

Light quality:

CRI: 70,6

Color temperature:

7014 K

PRODUCT NAME:

ASTRAPROFILE400

MEASUREMENT CONDITIONS:

Beam angle:

Min Zoom

Target:

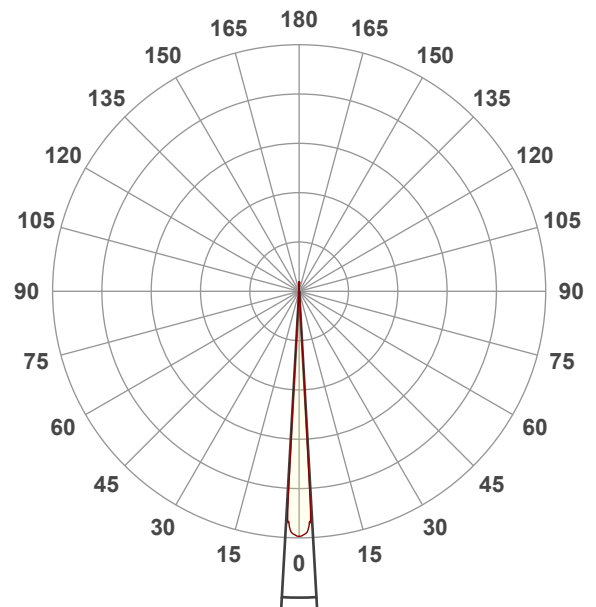
Full On

Operator:

Paolo Carvone

Date and time:

11/11/2022 12:50:26

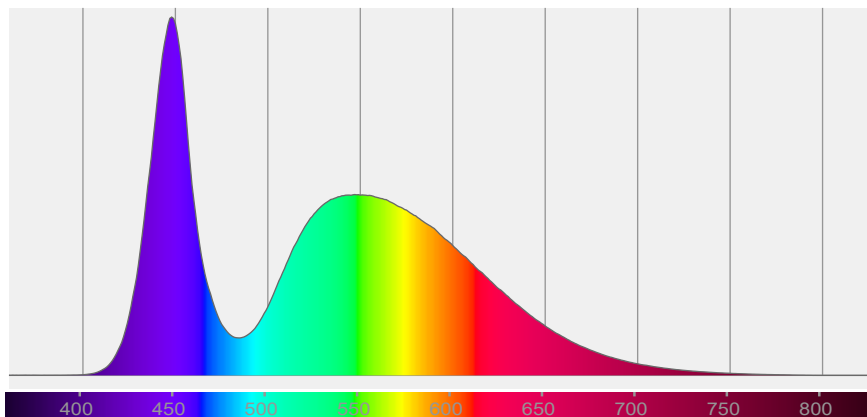


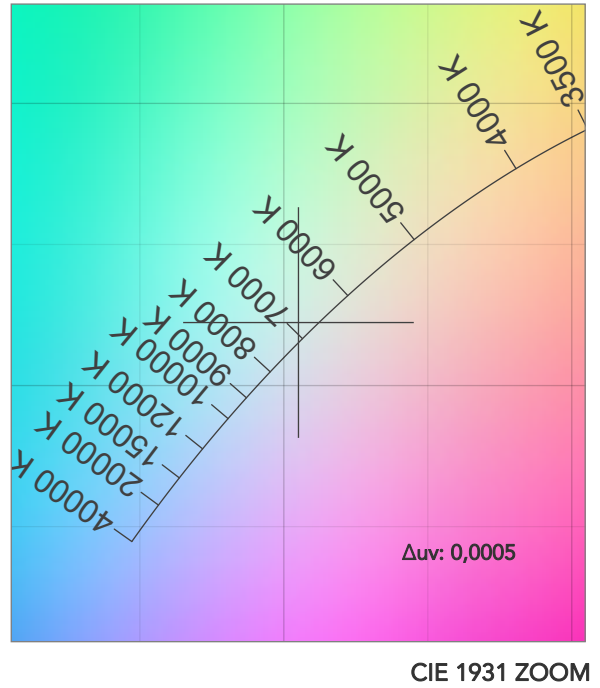
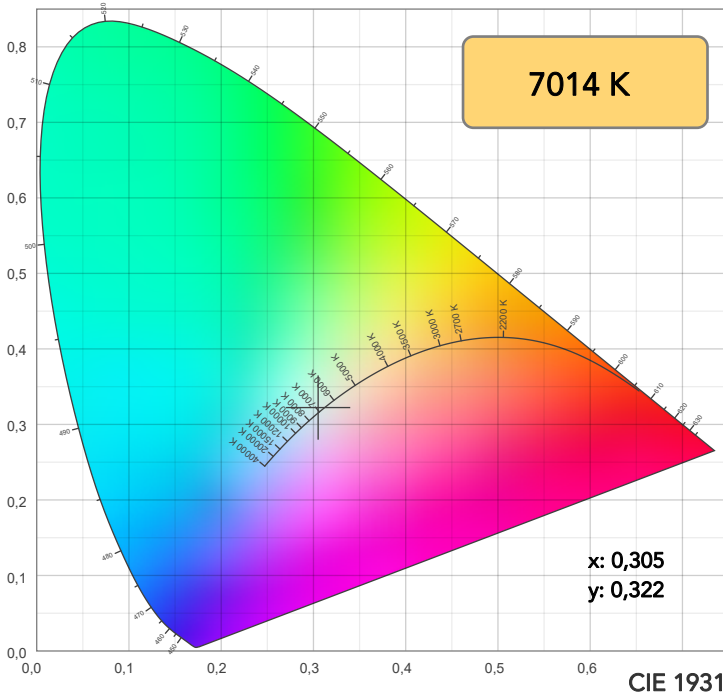
Beam angle 50%: 6,5°

Field angle 10%: 7°

Cut off angle 2.5%: 7,6°

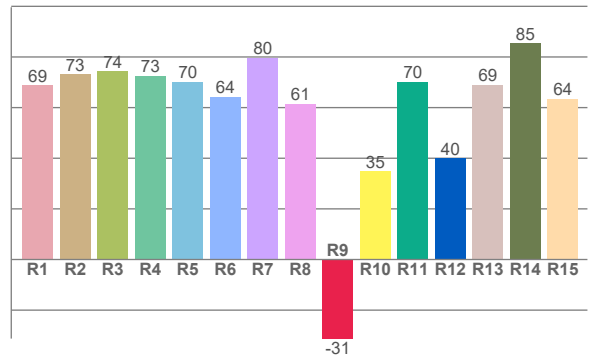
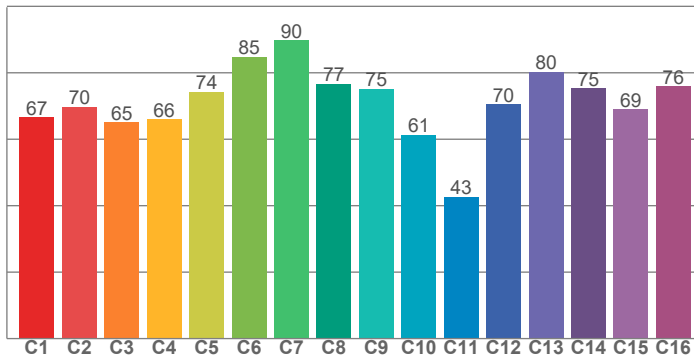
Spectra





TM30: 71,3

CRI: 70,6 (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
68,9	73,3	74,3	72,6	70,3	64,3	79,7	61,5	-31,2	34,9	70,2	39,9	69,0	85,5	63,5

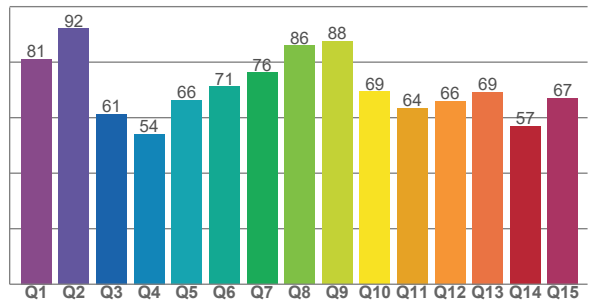
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
66,5	69,7	65,1	66,0	74,2	84,9	89,7	76,7	75,1	61,3	42,6	70,5	80,3	75,3	69,0	75,9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81,2	92,1	61,3	54,2	66,4	71,2	76,2	86,0	87,5	69,4	63,5	65,9	69,3	56,9	67,1

CQS: 69,2



COLOR PARAMETERS

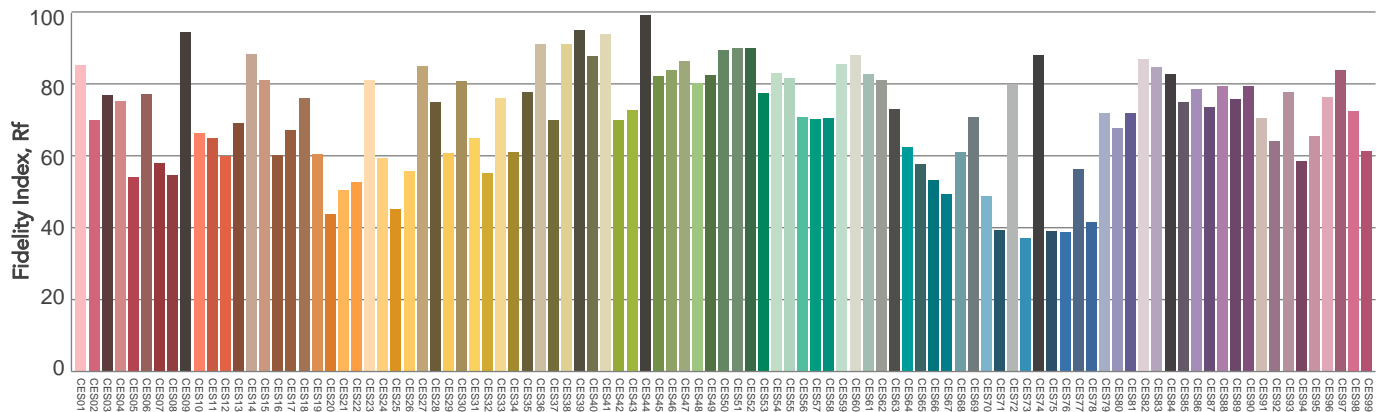
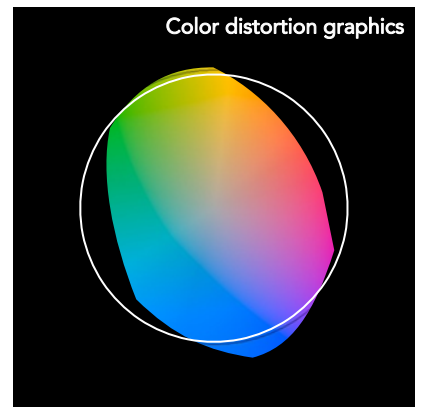
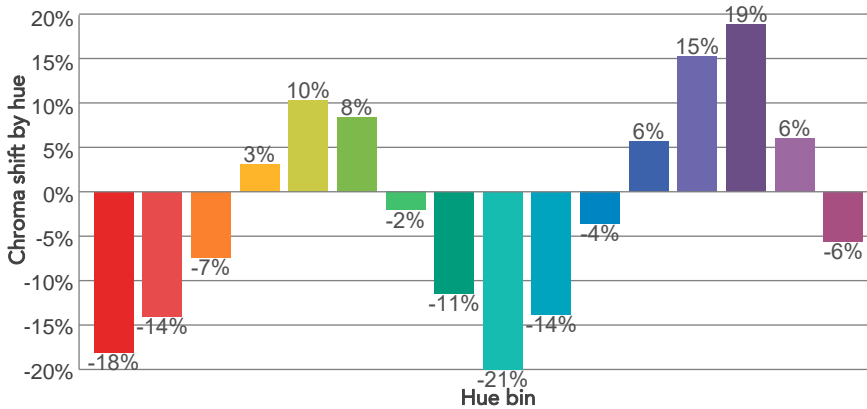
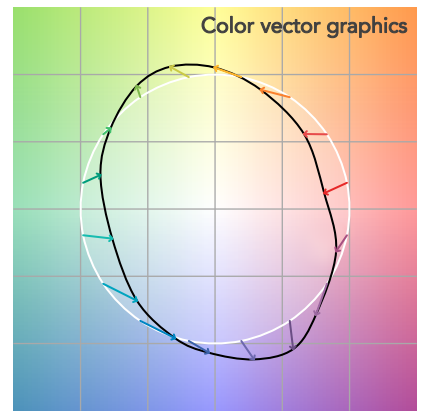
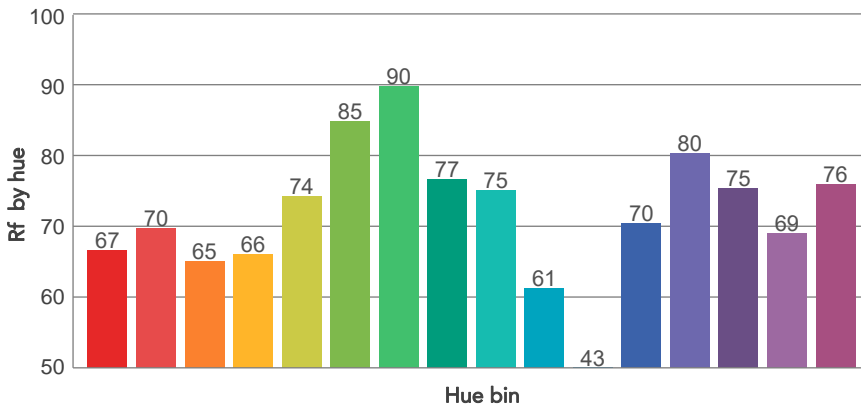
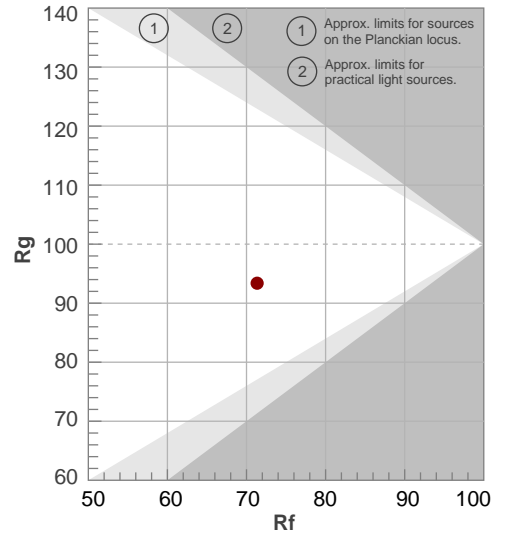
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
7014 K	70,6	-31,2	71,3	93,4	69,2	49	0,305	0,322	0,0005

TM30 DETAILS

Rf 71,3
Fidelity index Rf

Rg 93,4
Gammut index

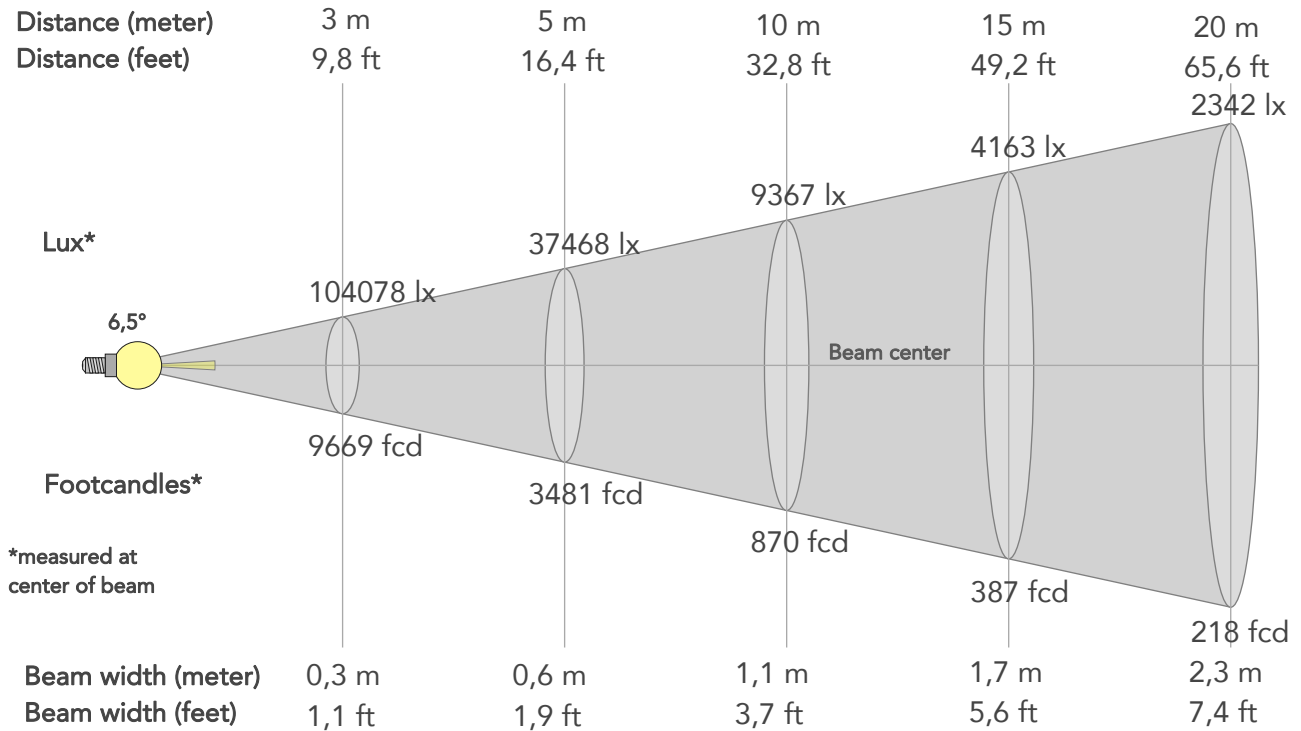
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	67	-18%	-4%
2	70	-14%	10%
3	65	-7%	21%
4	66	3%	21%
5	74	10%	12%
6	85	8%	-2%
7	90	-2%	-7%
8	77	-11%	-8%
9	75	-21%	7%
10	61	-14%	24%
11	43	-4%	29%
12	70	6%	16%
13	80	15%	7%
14	75	19%	-10%
15	69	6%	-24%
16	76	-6%	-13%



BEAM DETAILS



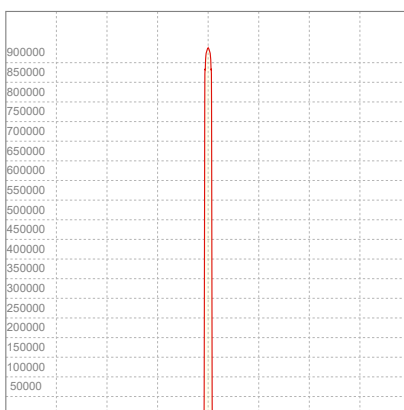
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
6,5°	7°	7,6°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	936702lx	234176lx	104078lx	58544lx	37468lx	16652lx	9367lx	4163lx	2342lx	1499lx	1041lx	585lx	375lx
Footcand.	87022fcd	21756fcd	9669fcd	5439fcd	3481fcd	1547fcd	870fcd	387fcd	218fcd	139fcd	97fcd	54fcd	35fcd
Beam wid.	0,1m	0,2m	0,3m	0,5m	0,6m	0,8m	1,1m	1,7m	2,3m	2,8m	3,4m	4,5m	5,7m
Beam wid.	0,4ft	0,7ft	1,1ft	1,5ft	1,9ft	2,8ft	3,7ft	5,6ft	7,4ft	9,3ft	11,1ft	14,8ft	18,5ft

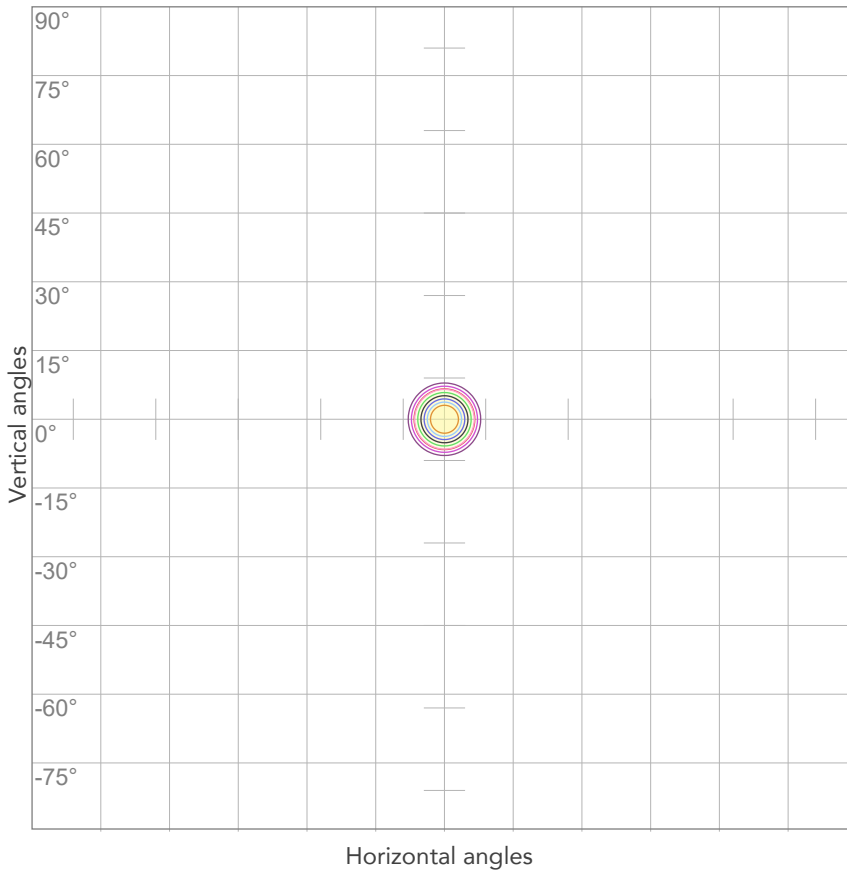
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	2,45A	525,4W	17lm/W
Power Fc			
0,96			

ISO CANDELA DIAGRAM



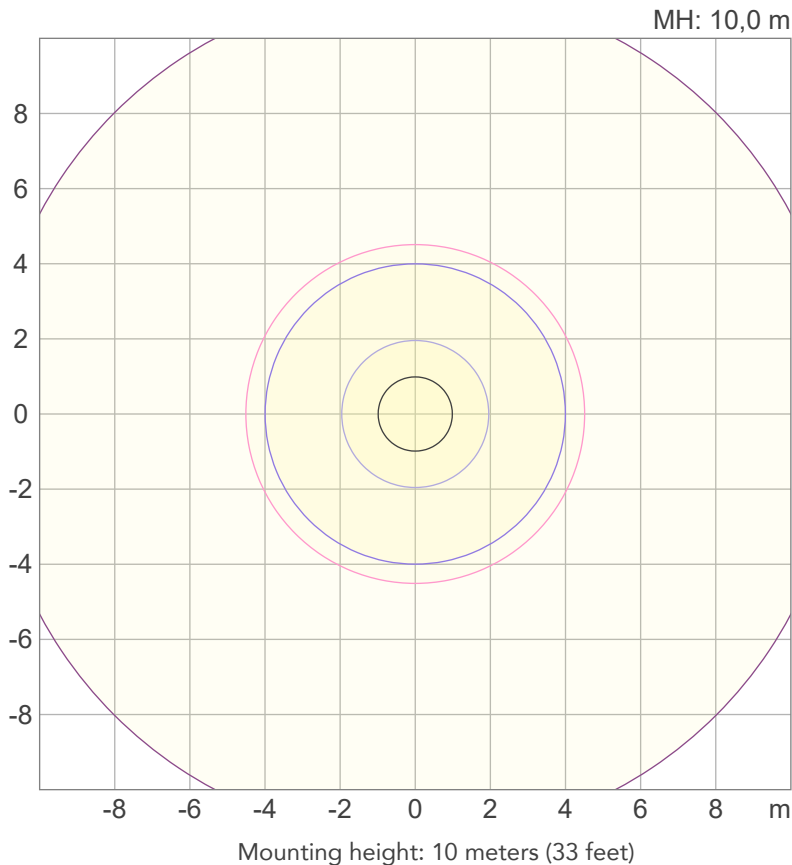
10%	93670 cd
20%	187340 cd
30%	281011 cd
40%	374681 cd
50%	468351 cd
60%	562021 cd
70%	655692 cd
80%	749362 cd

Conditions:

Number of c-planes: 2

Candela at center: 936702 cd

ISO LUX DIAGRAM



3%	281 lx
5%	468 lx
10%	937 lx
30%	2810 lx
50%	4684 lx

Conditions:

Number of c-planes: 2

Lux at center: 9367 lx

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



Total lumen output:

6135 lm

Peak candela output:

16649 cd

Light quality:

CRI: 90,9

Color temperature:

5625 K

PRODUCT NAME:

ASTRAPROFILE400

MEASURAMENT CONDITIONS:

Beam angle:

Max Zoom

Target:

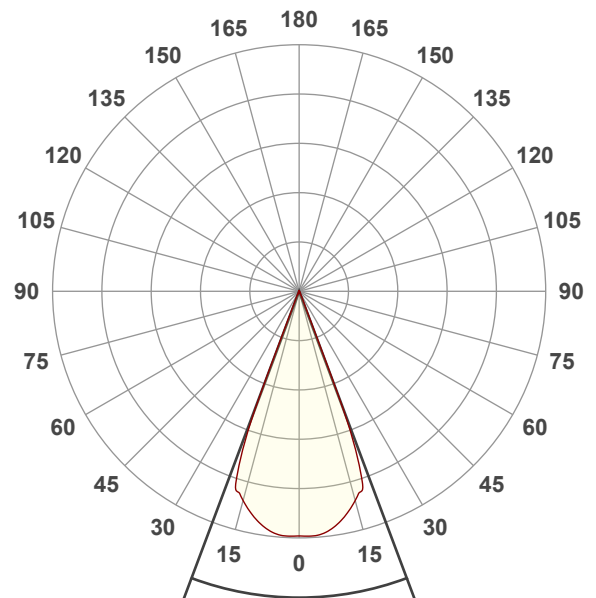
H-CRI Filter

Operator:

Paolo Carvone

Date and time:

11/11/2022 12:55:45

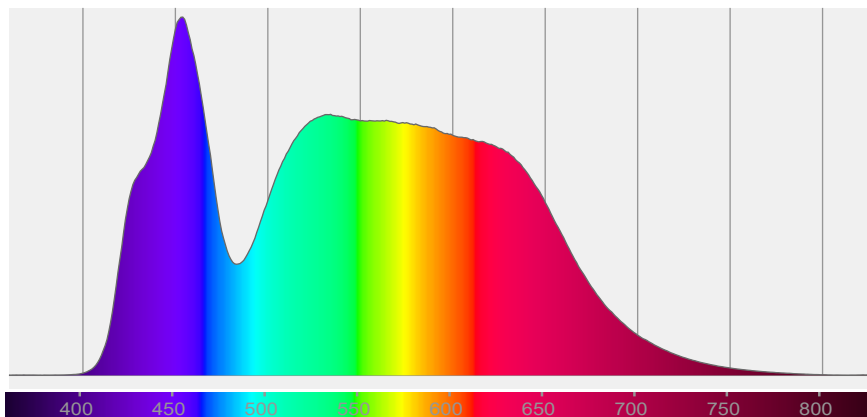


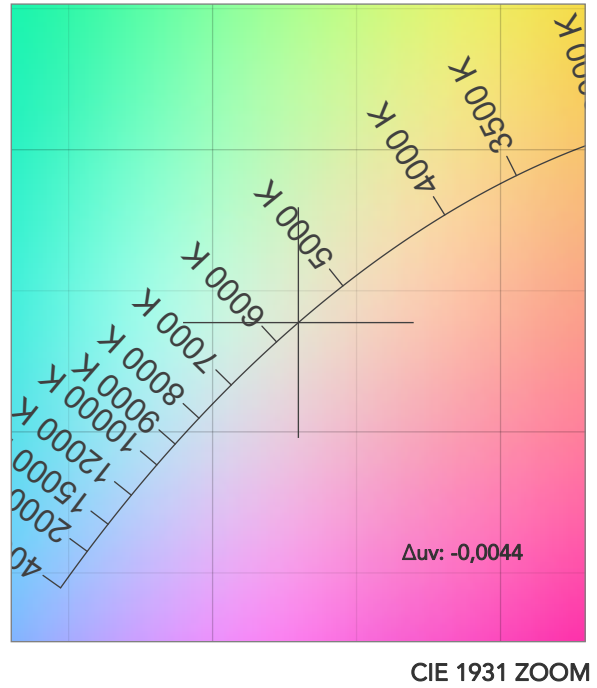
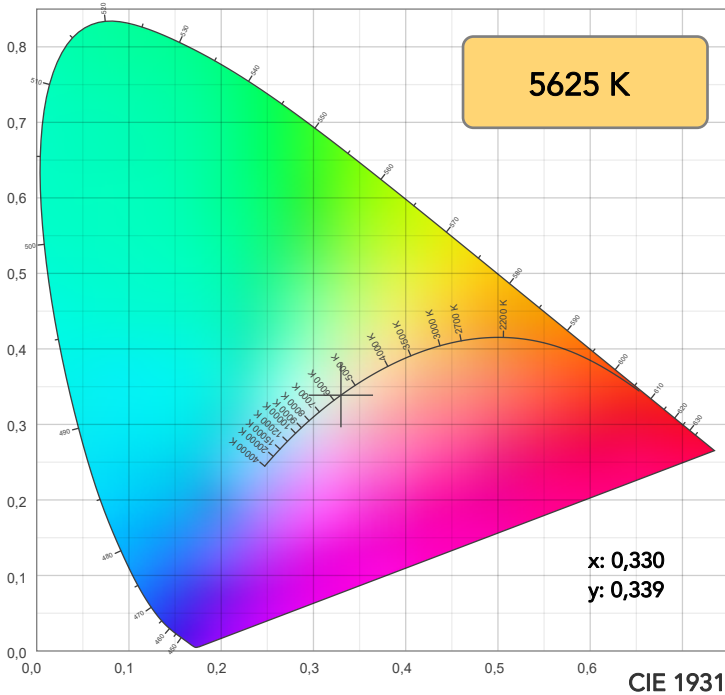
Beam angle 50%: 41,1°

Field angle 10%: 44,3°

Cut off angle 2.5%: 46,9°

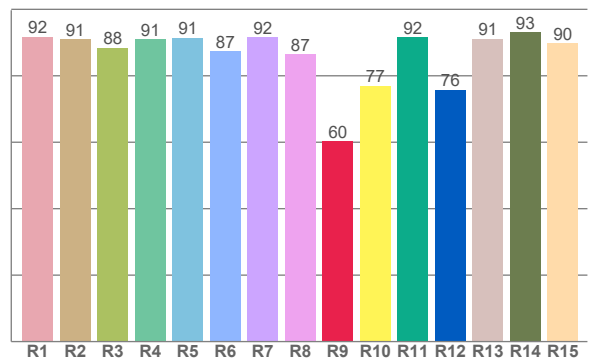
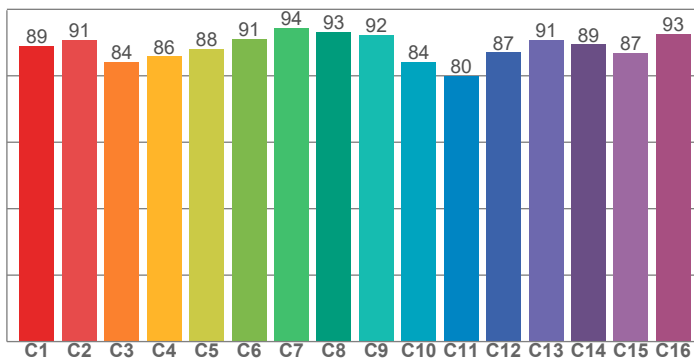
Spectra





TM30: 88,4

CRI: 90,9 (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
91,7	90,9	88,5	91,1	91,4	87,4	91,5	86,6	60,3	77,0	91,6	75,8	91,2	93,1	89,8

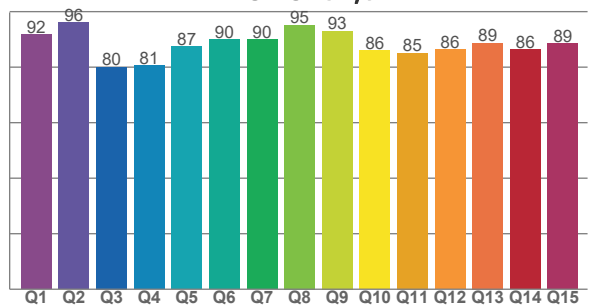
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
89,0	90,8	84,1	85,9	88,1	91,1	94,3	93,1	92,2	84,2	80,0	87,1	90,9	89,4	87,0	92,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,7	96,0	80,0	80,6	87,4	89,9	90,0	95,1	93,1	85,9	85,1	86,3	88,7	86,3	88,5

CQS: 87,5



COLOR PARAMETERS

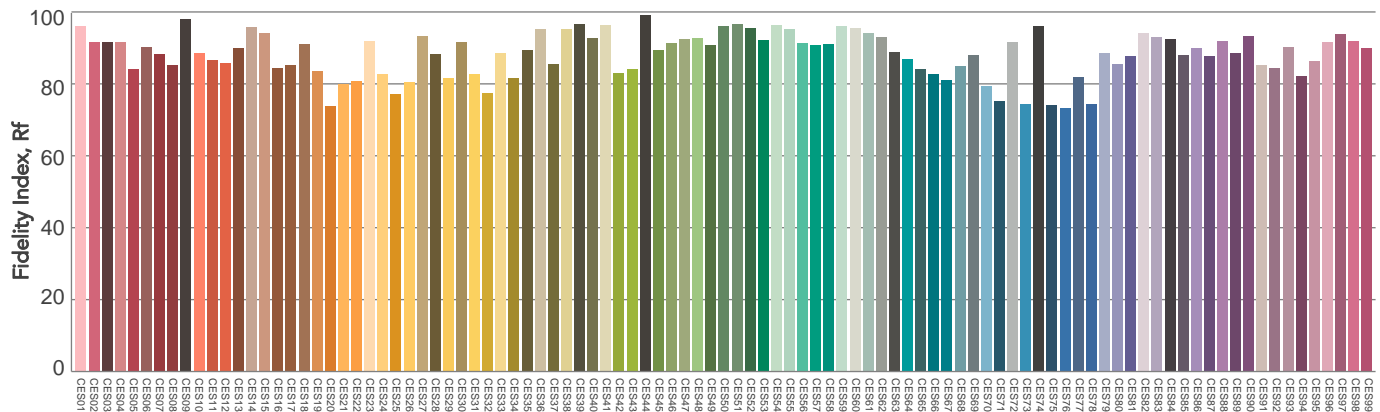
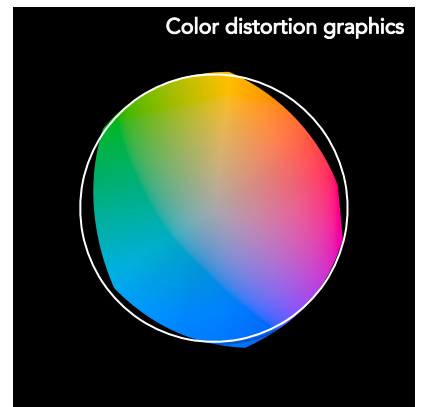
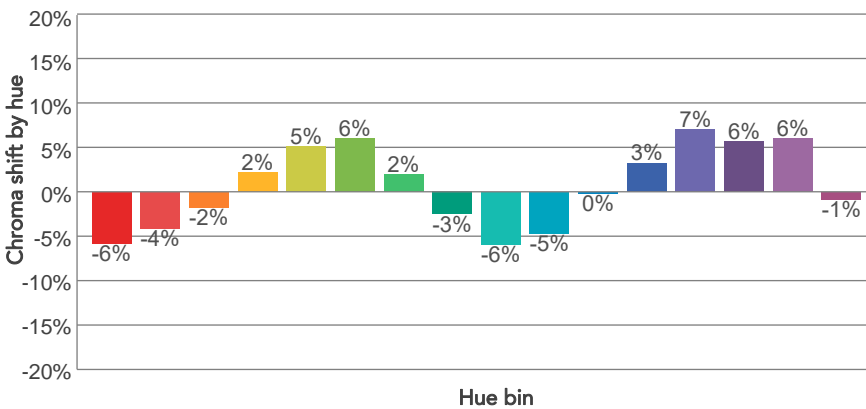
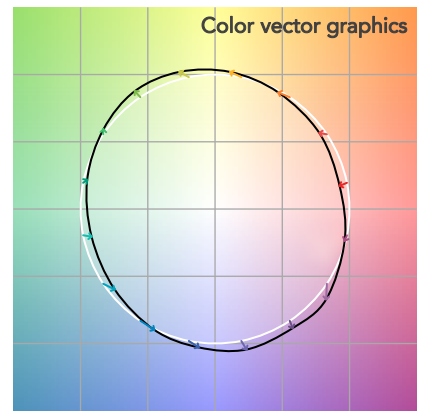
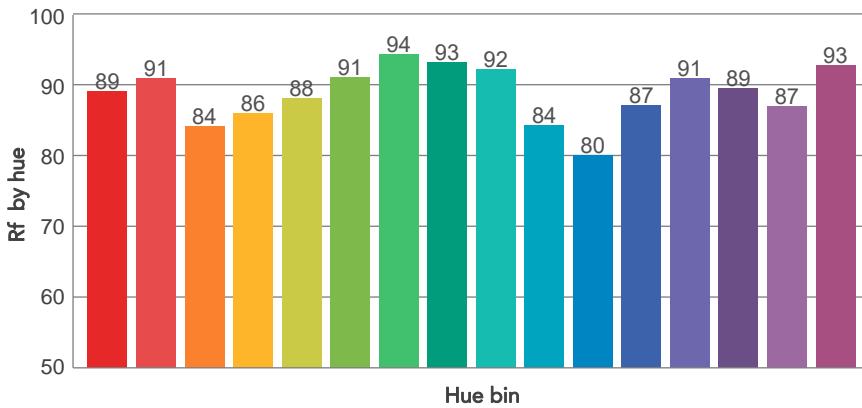
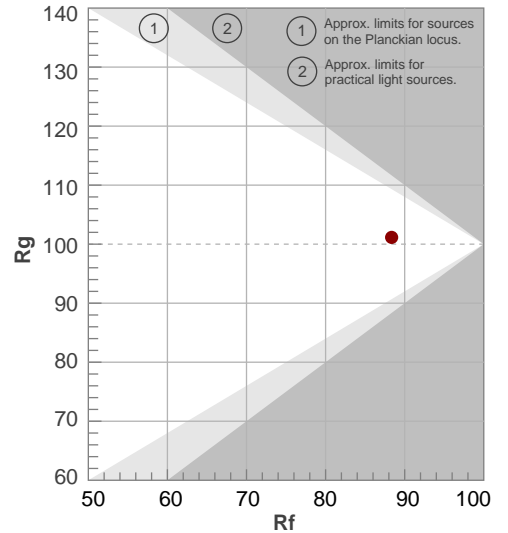
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5625 K	90,9	60,3	88,4	101,1	87,5	90	0,330	0,339	-0,0044

TM30 DETAILS

Rf 88,4
Fidelity index Rf

Rg 101,1
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	89	-6%	-1%
2	91	-4%	4%
3	84	-2%	9%
4	86	2%	9%
5	88	5%	6%
6	91	6%	1%
7	94	2%	-3%
8	93	-3%	-3%
9	92	-6%	2%
10	84	-5%	8%
11	80	0%	12%
12	87	3%	8%
13	91	7%	3%
14	89	6%	-1%
15	87	6%	-10%
16	93	-1%	-4%

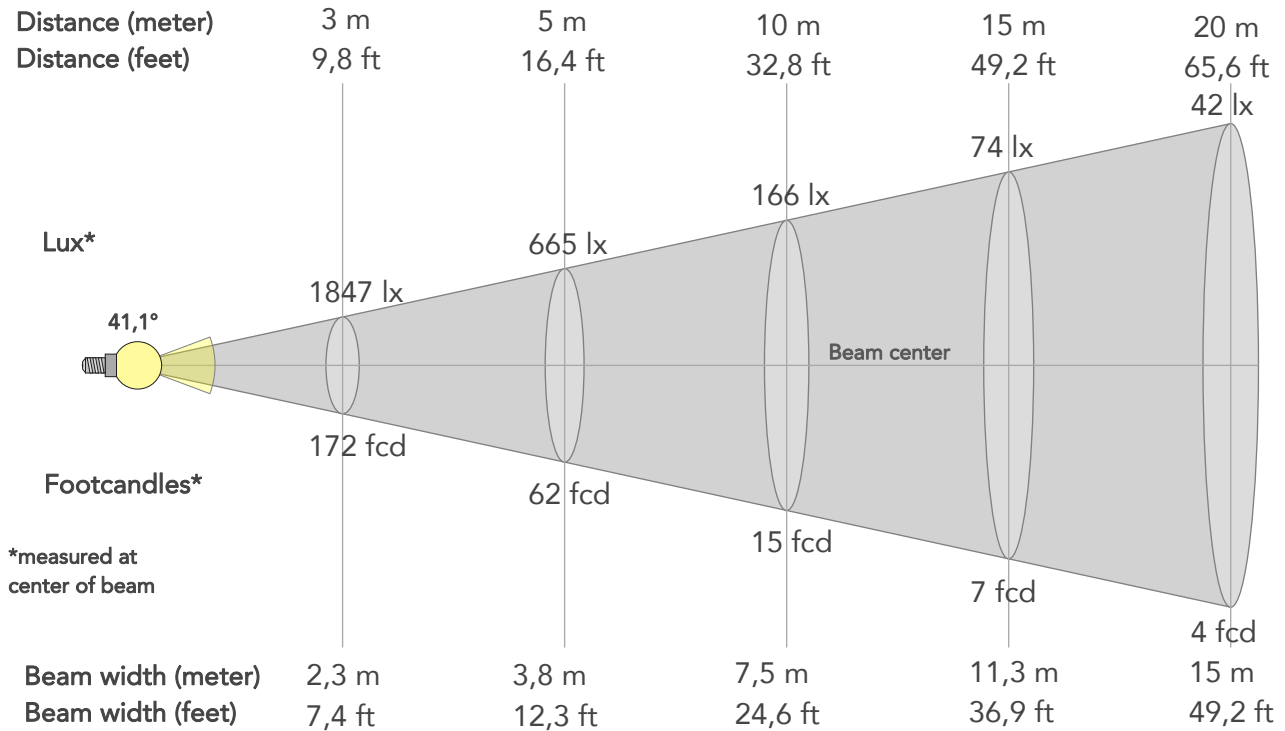


Color Evaluation Sample

BEAM DETAILS



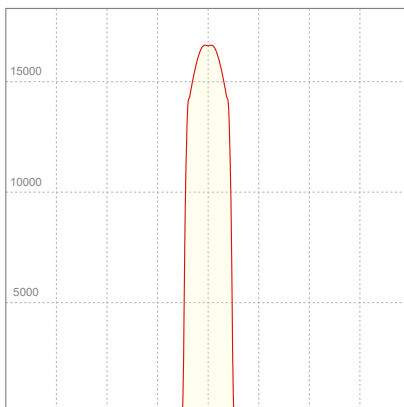
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
41,1°	44,3°	46,9°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	16624lx	4156lx	1847lx	1039lx	665lx	296lx	166lx	74lx	42lx	27lx	18lx	10lx	7lx
Footcand.	1544fcd	386fcd	172fcd	97fcd	62fcd	27fcd	15fcd	7fcd	4fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,8m	1,5m	2,3m	3m	3,8m	5,6m	7,5m	11,3m	15m	18,8m	22,5m	30m	37,5m
Beam wid.	2,5ft	5ft	7,4ft	9,8ft	12,3ft	18,5ft	24,6ft	36,9ft	49,2ft	61,5ft	73,8ft	98,5ft	123,1ft

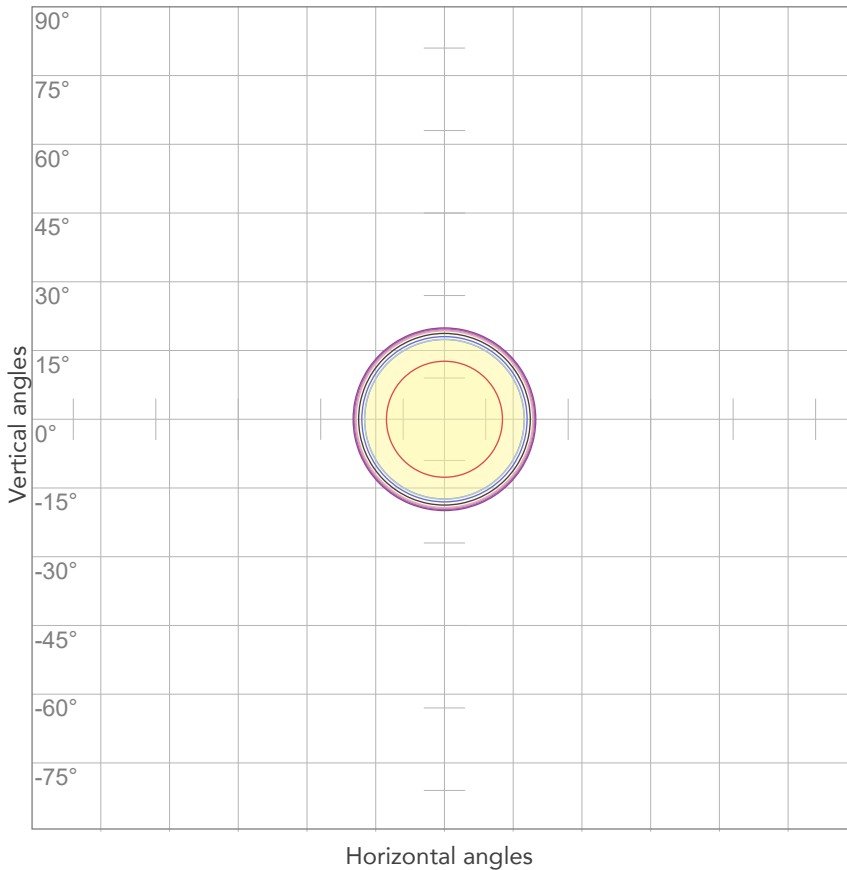
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	2,41A	516,5W	12lm/W
Power Fc			
0,96			

ISO CANDELA DIAGRAM



10%	1662 cd
20%	3325 cd
30%	4987 cd
40%	6649 cd
50%	8312 cd
60%	9974 cd
70%	11637 cd
80%	13299 cd

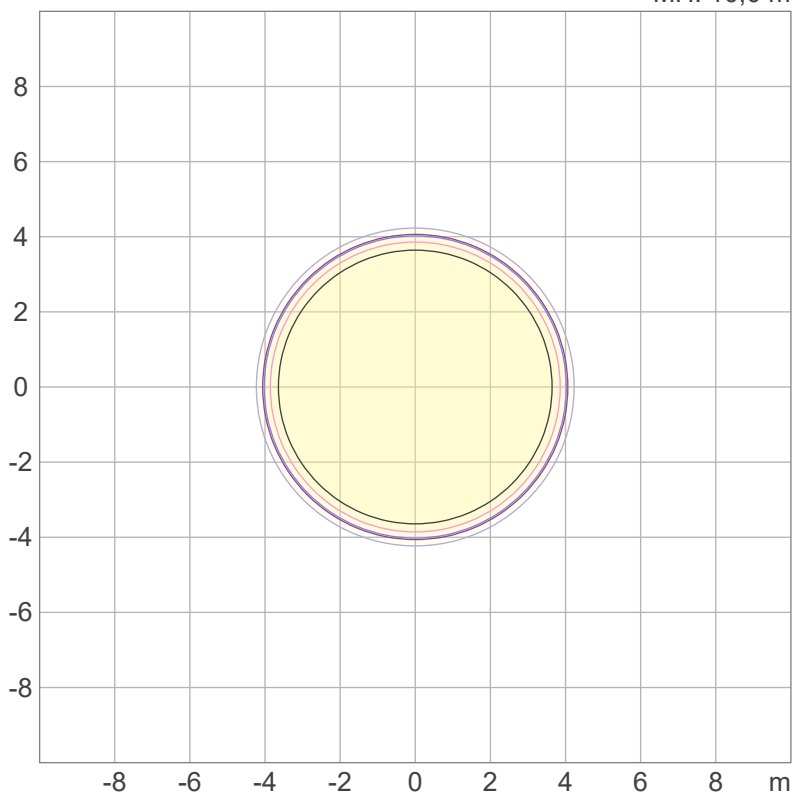
Conditions:

Number of c-planes: 2

Candela at center: 16624 cd

ISO LUX DIAGRAM

MH: 10,0 m



Mounting height: 10 meters (33 feet)

3%	4,99 lx
5%	8,31 lx
10%	16,6 lx
30%	49,9 lx
50%	83,1 lx

Conditions:

Number of c-planes: 2

Lux at center: 166 lx

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



Total lumen output:

6270 lm

Peak candela output:

98942 cd

Light quality:

CRI: 90,5

Color temperature:

5614 K

PRODUCT NAME:

ASTRAPROFILE400

MEASUREMENT CONDITIONS:

Beam angle:

Med Zoom

Target:

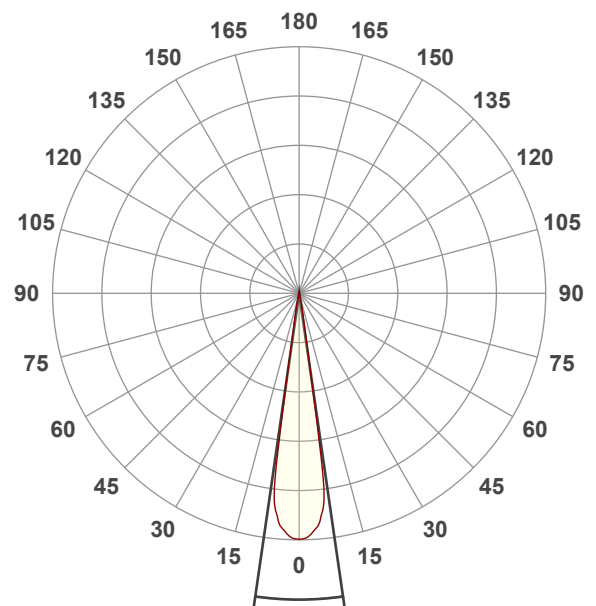
H-CRI Filter

Operator:

Paolo Carvone

Date and time:

11/11/2022 12:58:18

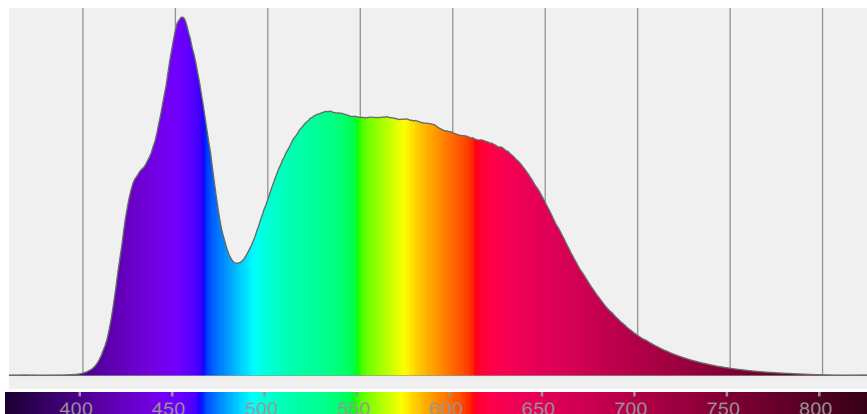


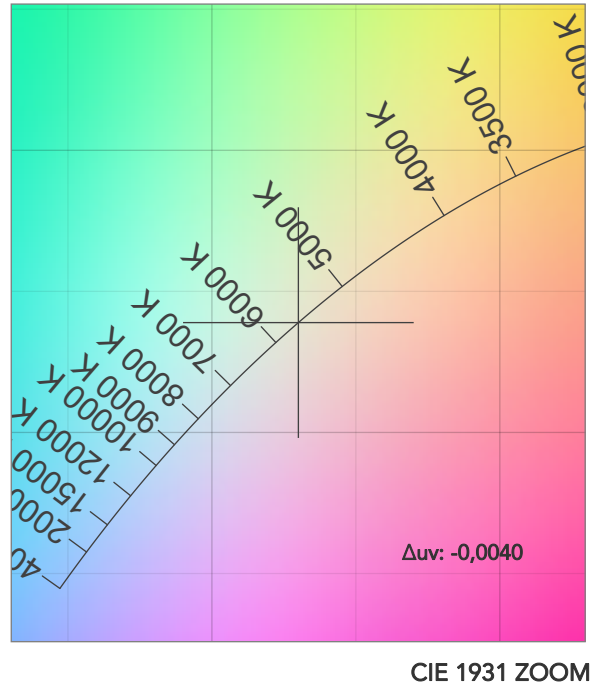
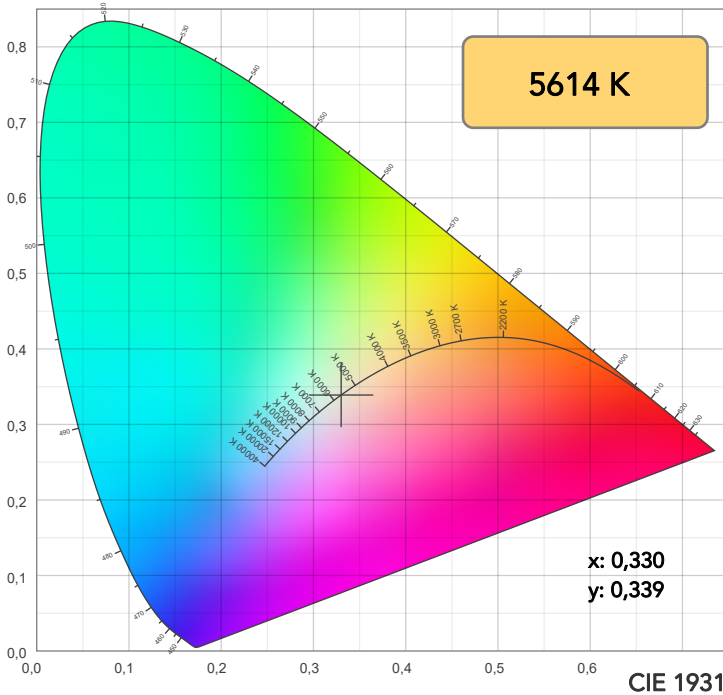
Beam angle 50%: 16,5°

Field angle 10%: 19,6°

Cut off angle 2.5%: 22,1°

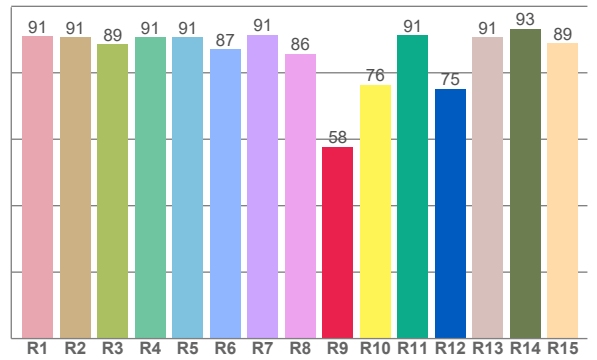
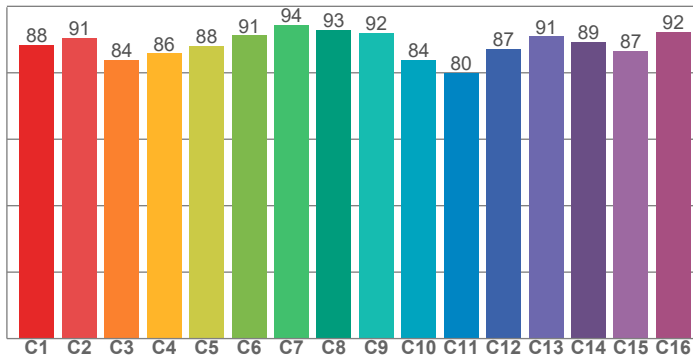
Spectra





TM30: 88,2

CRI: 90,5 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
91,0	90,6	88,6	90,8	90,8	87,1	91,4	85,7	57,7	76,4	91,3	75,2	90,6	93,2	88,9

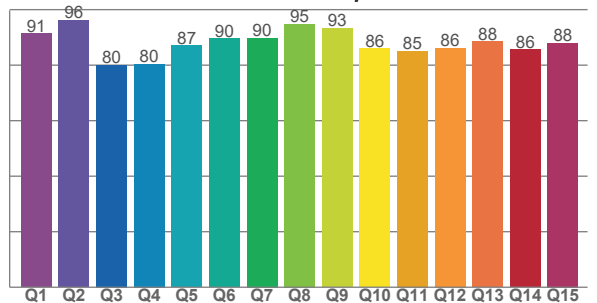
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88,5	90,6	83,9	85,9	88,2	91,3	94,3	92,9	92,0	84,0	80,0	87,2	90,9	89,4	86,7	92,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,4	96,2	80,1	80,4	87,0	89,6	89,8	94,8	93,3	85,9	85,1	86,2	88,5	85,6	87,9

CQS: 87,3



COLOR PARAMETERS

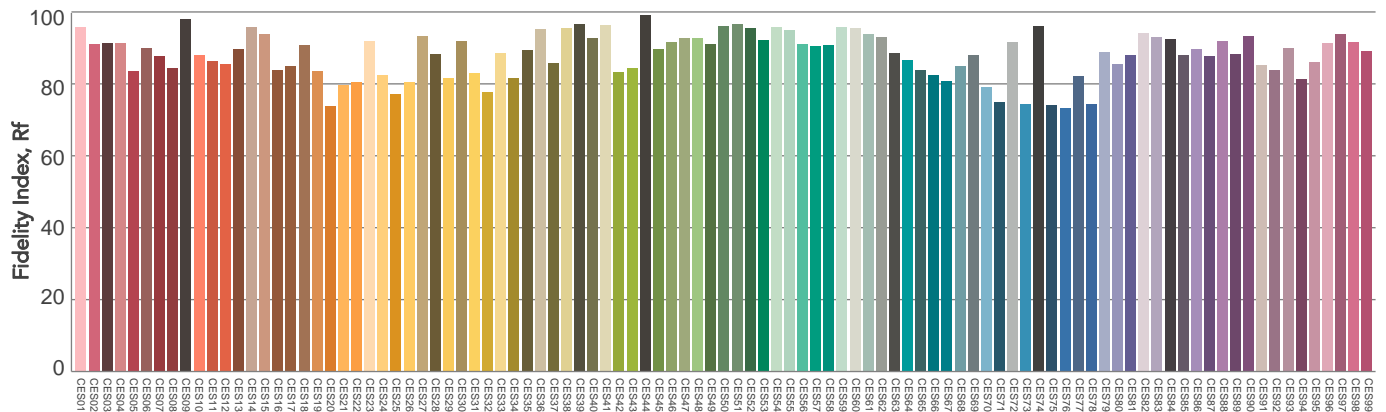
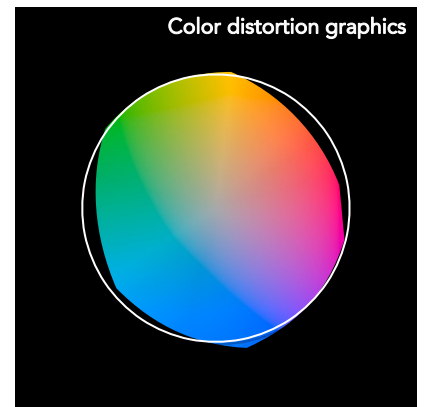
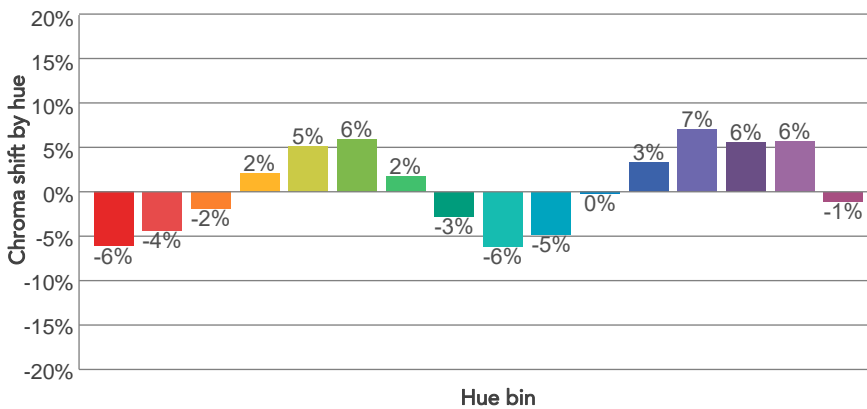
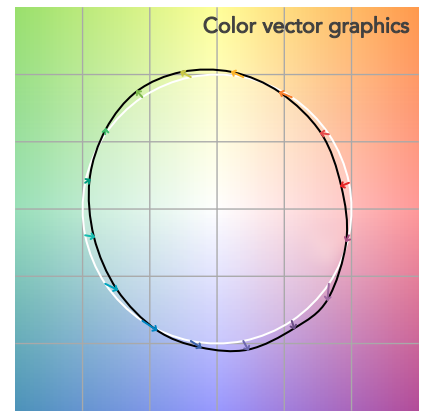
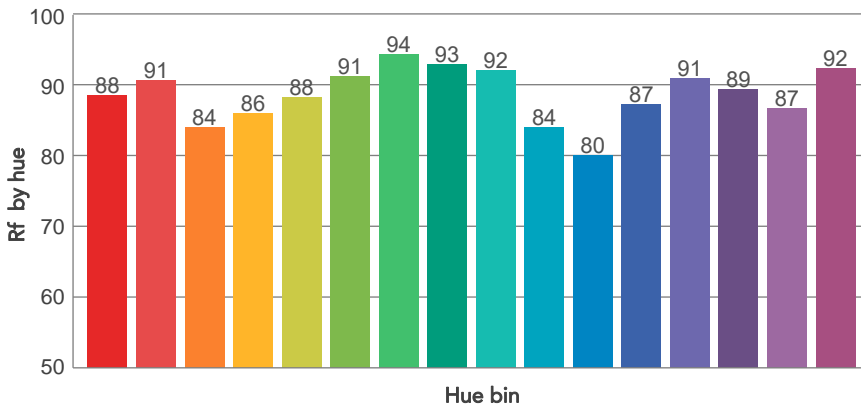
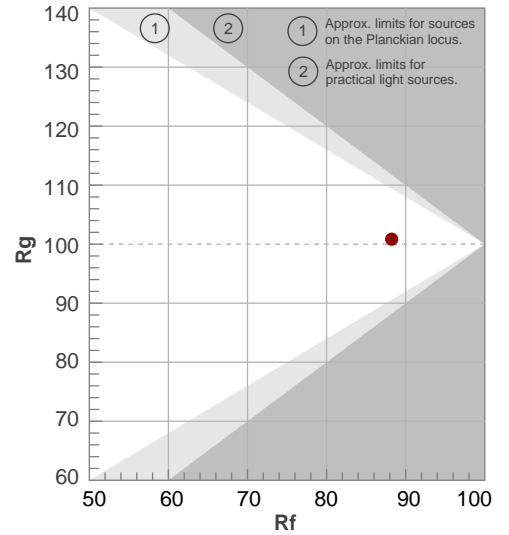
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5614 K	90,5	57,7	88,2	100,8	87,3	90	0,330	0,339	-0,0040

TM30 DETAILS

Rf 88,2
Fidelity index Rf

Rg 100,8
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	88	-6%	-1%
2	91	-4%	4%
3	84	-2%	9%
4	86	2%	9%
5	88	5%	6%
6	91	6%	1%
7	94	2%	-3%
8	93	-3%	-3%
9	92	-6%	2%
10	84	-5%	8%
11	80	0%	12%
12	87	3%	8%
13	91	7%	2%
14	89	6%	-2%
15	87	6%	-10%
16	92	-1%	-4%

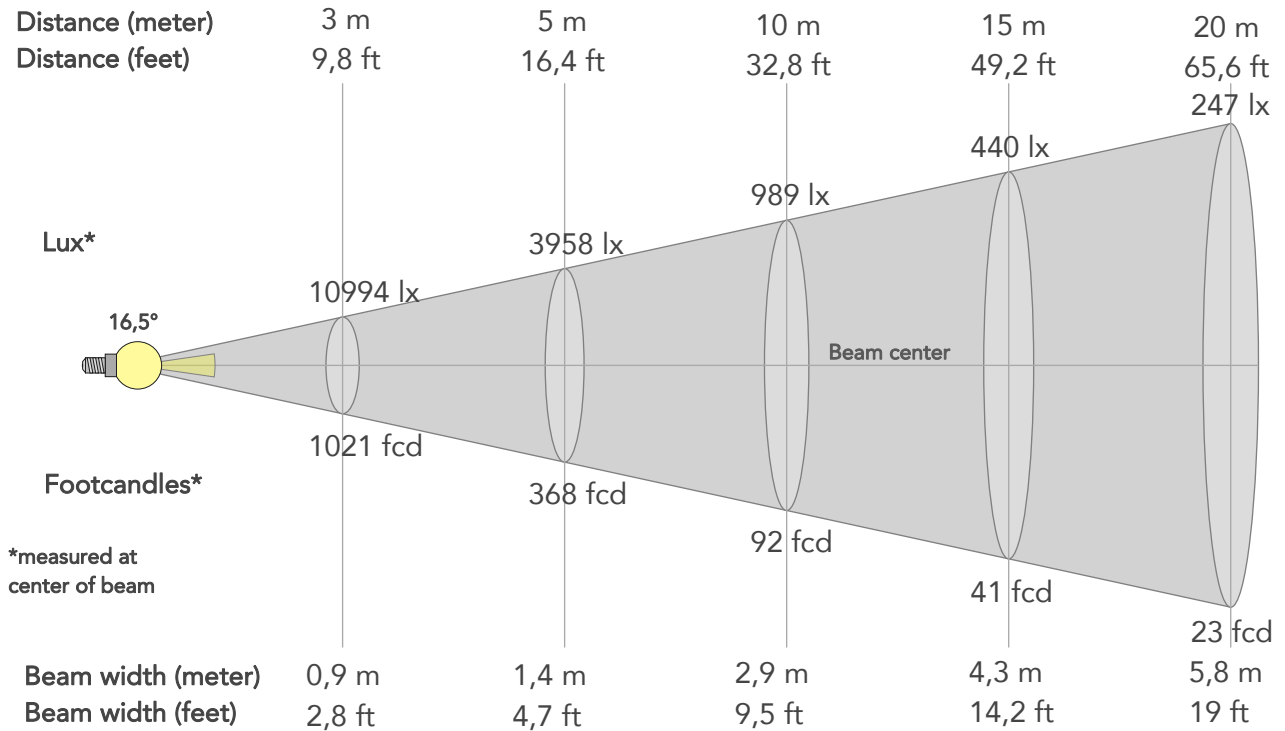


Color Evaluation Sample

BEAM DETAILS



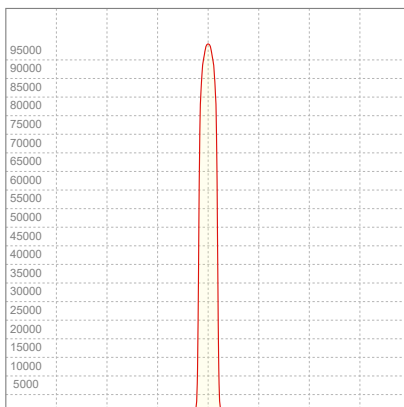
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16,5°	19,6°	22,1°	100,0%	100,0%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	98942lx	24735lx	10994lx	6184lx	3958lx	1759lx	989lx	440lx	247lx	158lx	110lx	62lx	40lx
Footcand.	9192fcd	2298fcd	1021fcd	574fcd	368fcd	163fcd	92fcd	41fcd	23fcd	15fcd	10fcd	6fcd	4fcd
Beam wid.	0,3m	0,6m	0,9m	1,2m	1,4m	2,2m	2,9m	4,3m	5,8m	7,2m	8,7m	11,6m	14,5m
Beam wid.	1ft	1,9ft	2,8ft	3,8ft	4,7ft	7,1ft	9,5ft	14,2ft	19ft	23,7ft	28,5ft	38ft	47,5ft

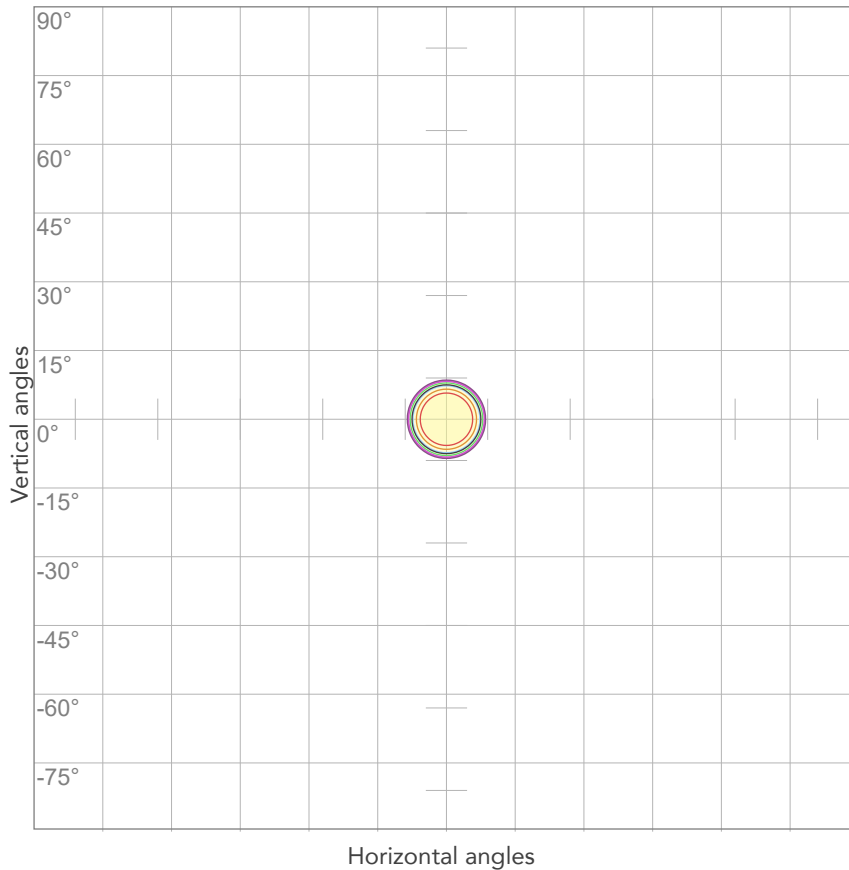
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	2,40A	514,6W	12lm/W
Power Fc			
0,96			

ISO CANDELA DIAGRAM



10%	9894 cd
20%	19788 cd
30%	29683 cd
40%	39577 cd
50%	49471 cd
60%	59365 cd
70%	69259 cd
80%	79153 cd

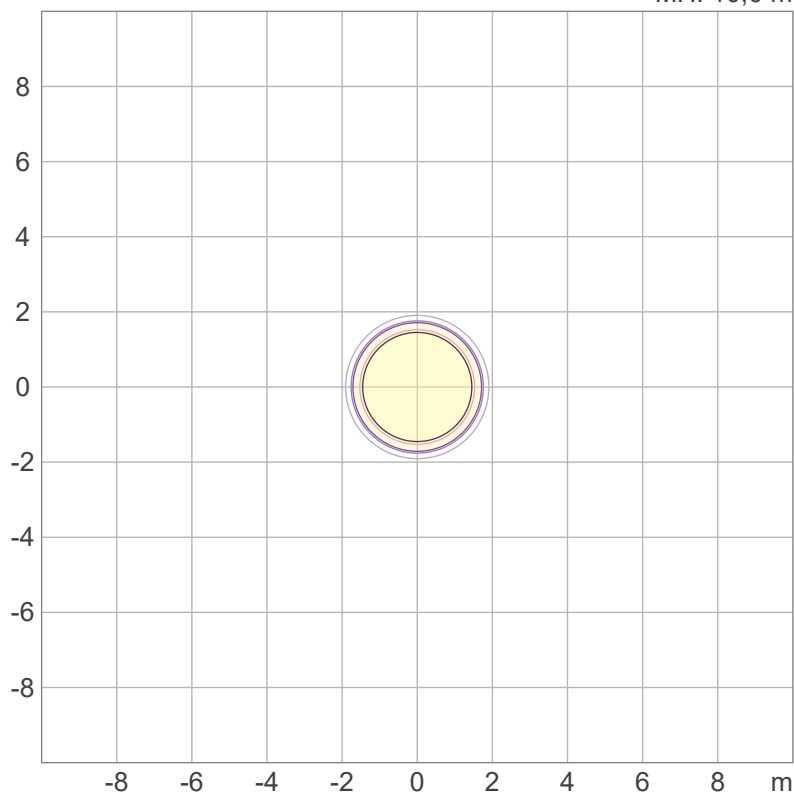
Conditions:

Number of c-planes: 2

Candela at center: 98942 cd

ISO LUX DIAGRAM

MH: 10,0 m



Mounting height: 10 meters (33 feet)

3%	29,7 lx
5%	49,5 lx
10%	98,9 lx
30%	297 lx
50%	495 lx

Conditions:

Number of c-planes: 2

Lux at center: 989 lx

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



Total lumen output:

2742 lm

Peak candela output:

368562 cd

Light quality:

CRI: 90,4

Color temperature:

5613 K

PRODUCT NAME:

ASTRAPROFILE400

MEASURAMENT CONDITIONS:

Beam angle:

Min Zoom

Target:

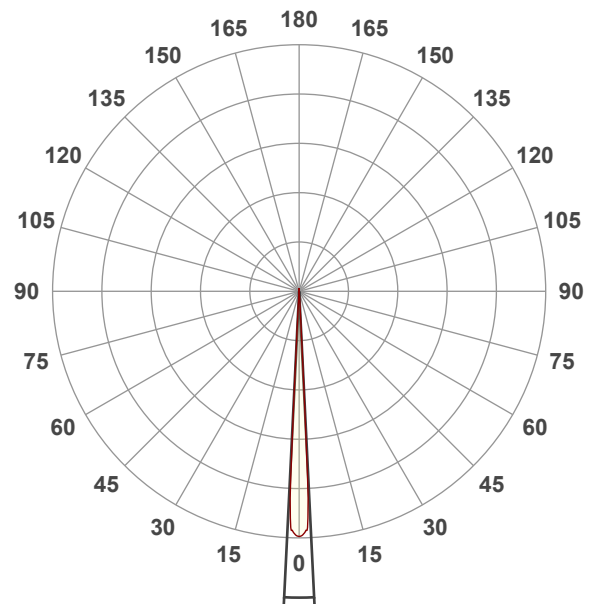
H-CRI Filter

Operator:

Paolo Carvone

Date and time:

11/11/2022 12:53:06

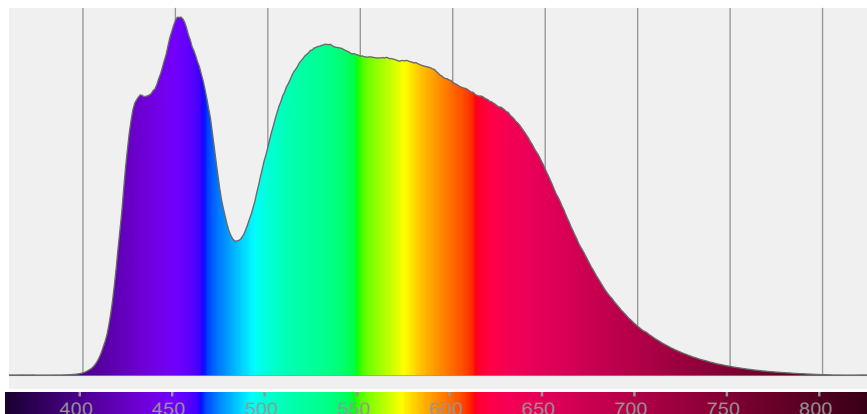


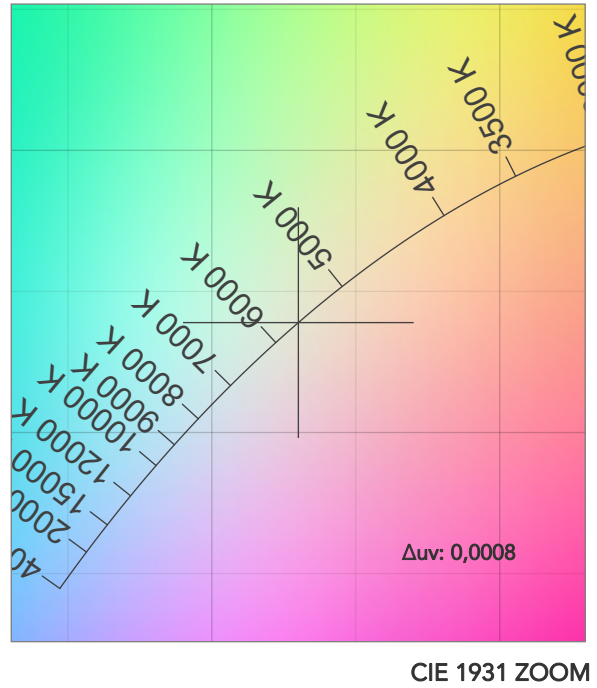
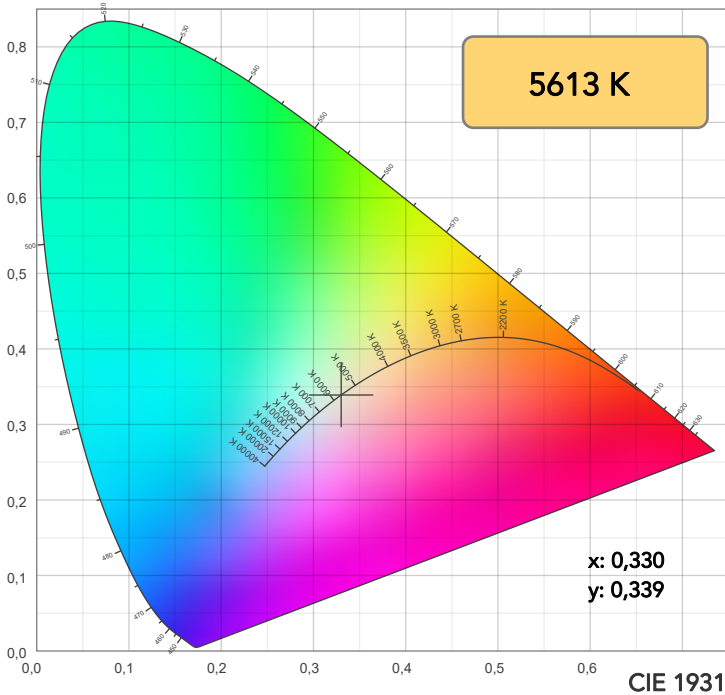
Beam angle 50%: 5,6°

Field angle 10%: 6,5°

Cut off angle 2.5%: 7°

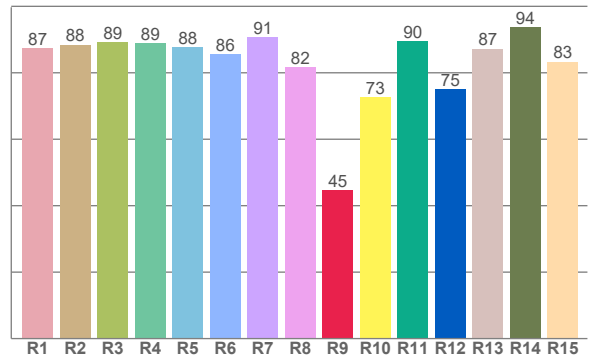
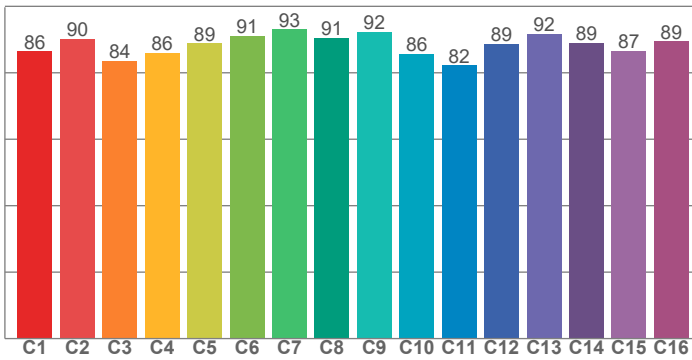
Spectra





TM30: 88,2

CRI: 90,4 (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
87,4	88,4	89,2	88,9	87,7	85,6	90,6	81,7	44,7	72,7	89,5	75,0	87,2	93,8	83,3

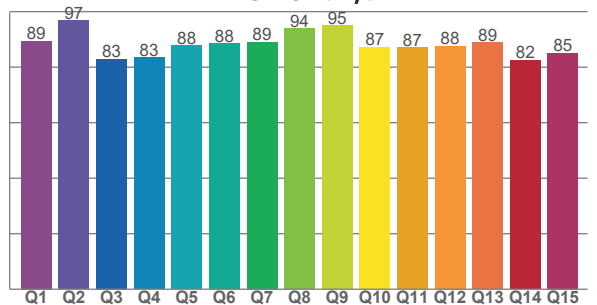
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
86,4	90,3	83,7	86,1	88,9	91,2	93,1	90,6	92,3	85,7	82,2	88,6	91,7	89,0	86,6	89,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89,4	96,8	83,0	83,5	87,7	88,5	89,1	94,0	95,0	87,2	87,0	87,7	88,8	82,5	85,1

CQS: 87,6



COLOR PARAMETERS

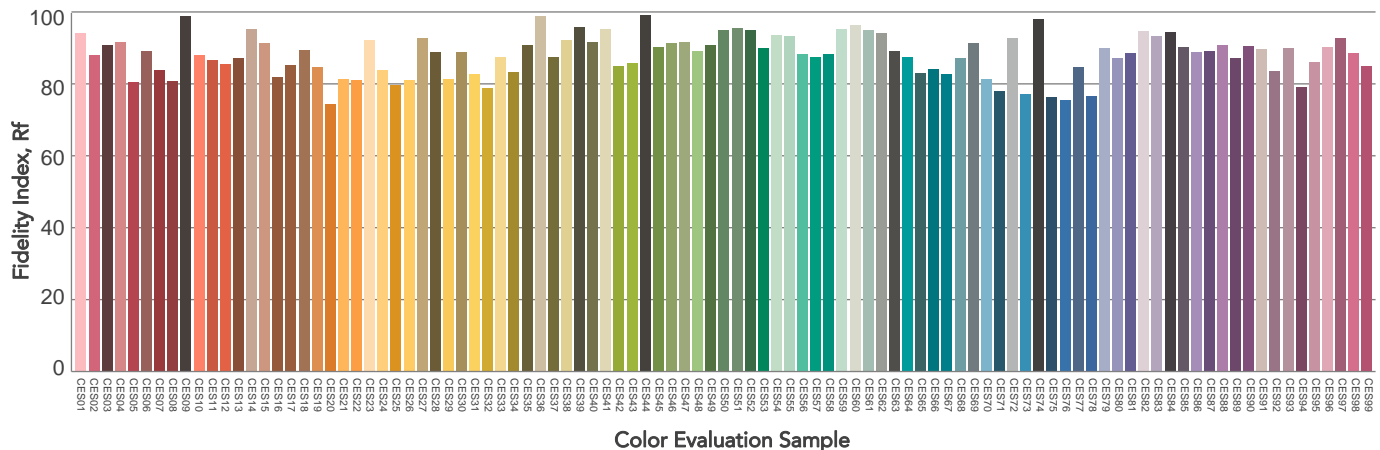
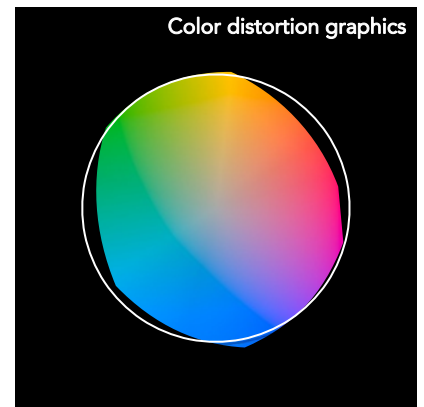
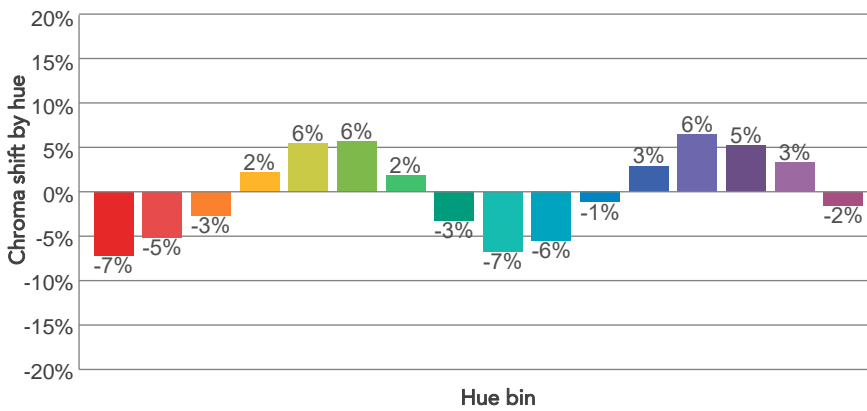
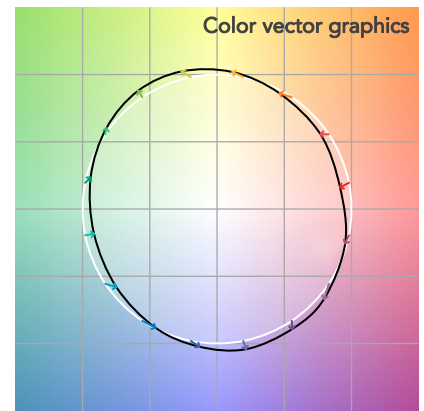
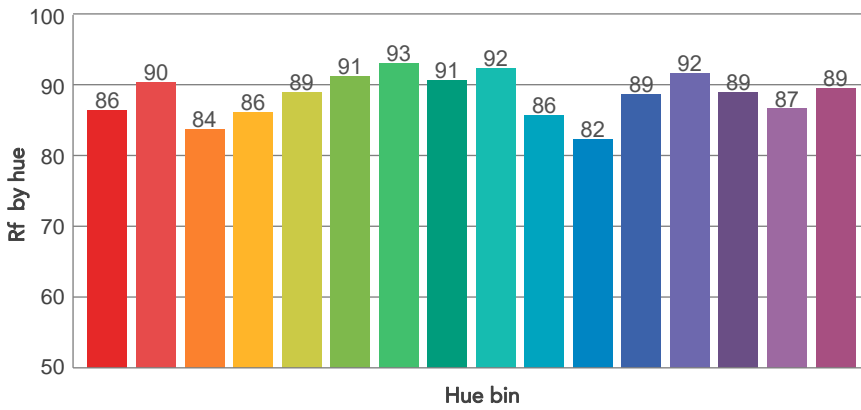
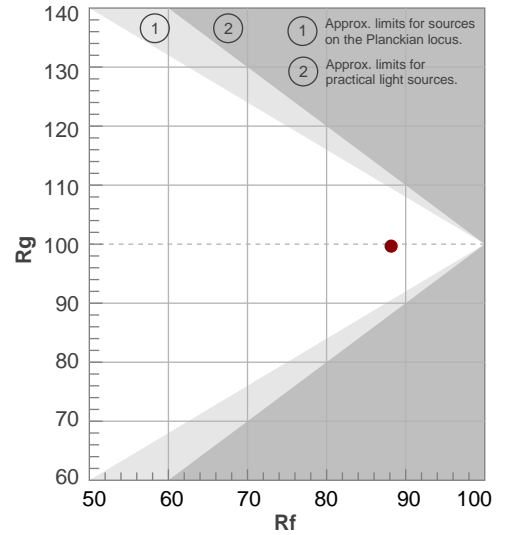
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5613 K	90,4	44,7	88,2	99,7	87,6	90	0,330	0,339	0,0008

TM30 DETAILS

Rf 88,2
Fidelity index Rf

Rg 99,7
Gammut index

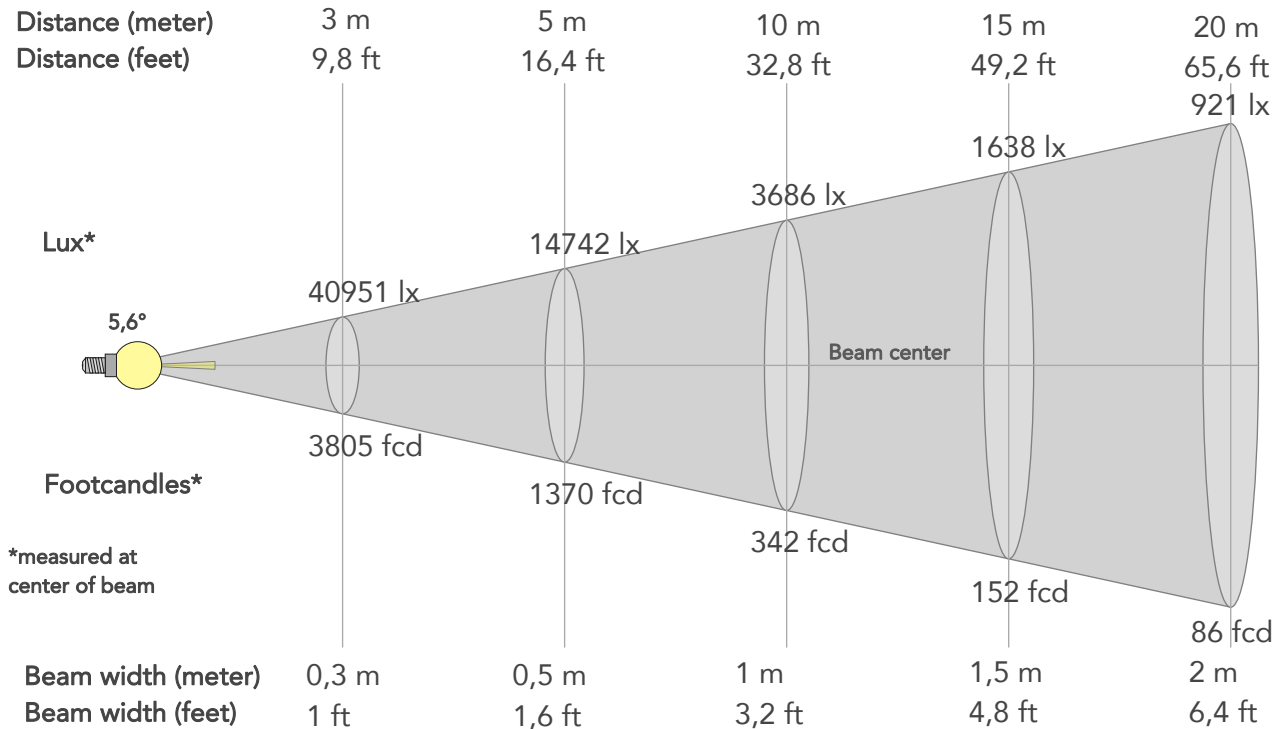
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	86	-7%	-2%
2	90	-5%	3%
3	84	-3%	9%
4	86	2%	9%
5	89	6%	6%
6	91	6%	0%
7	93	2%	-4%
8	91	-3%	-5%
9	92	-7%	0%
10	86	-6%	7%
11	82	-1%	11%
12	89	3%	7%
13	92	6%	1%
14	89	5%	-3%
15	87	3%	-11%
16	89	-2%	-6%



BEAM DETAILS



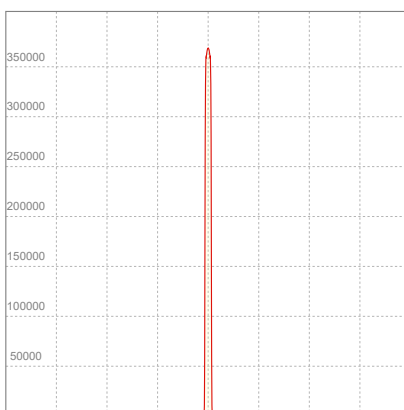
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
5,6°	6,5°	7°	100,0%	100,0%



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	368562lx	92141lx	40951lx	23035lx	14742lx	6552lx	3686lx	1638lx	921lx	590lx	410lx	230lx	147lx
Footcand.	34241fcd	8560fcd	3805fcd	2140fcd	1370fcd	609fcd	342fcd	152fcd	86fcd	55fcd	38fcd	21fcd	14fcd
Beam wid.	0,1m	0,2m	0,3m	0,4m	0,5m	0,7m	1m	1,5m	2m	2,4m	2,9m	3,9m	4,9m
Beam wid.	0,3ft	0,6ft	1ft	1,3ft	1,6ft	2,4ft	3,2ft	4,8ft	6,4ft	8ft	9,6ft	12,9ft	16,1ft

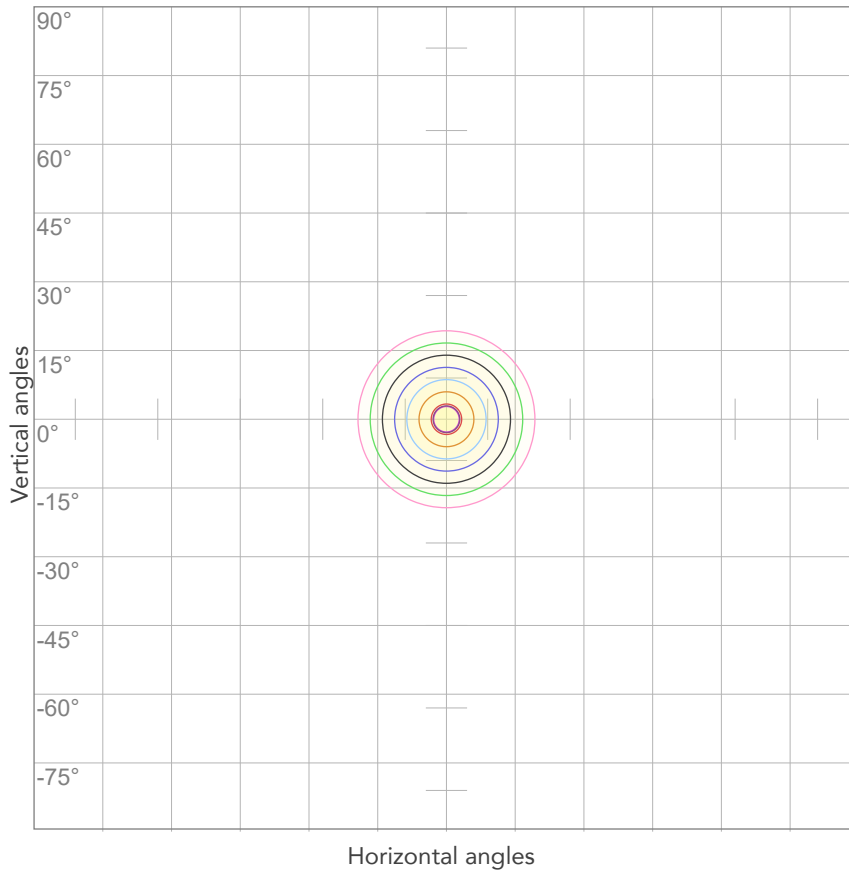
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	2,40A	518,3W	5lm/W
Power Fc			
0,96			

ISO CANDELA DIAGRAM



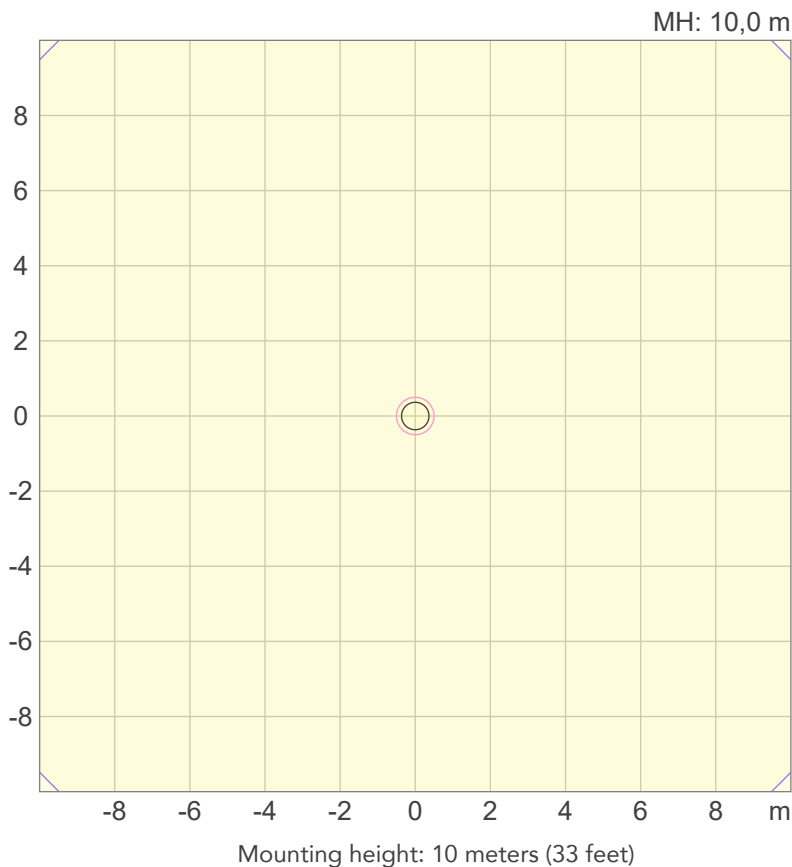
10%	36856 cd
20%	73712 cd
30%	110569 cd
40%	147425 cd
50%	184281 cd
60%	221137 cd
70%	257993 cd
80%	294850 cd

Conditions:

Number of c-planes: 2

Candela at center: 368562 cd

ISO LUX DIAGRAM



3%	111 lx
5%	184 lx
10%	369 lx
30%	1106 lx
50%	1843 lx

Conditions:

Number of c-planes: 2

Lux at center: 3686 lx

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