

Photometric Test Report



ECLDISPLAYCASVW

ZOOMABLE WASH LENS 15-30°

35W variable white LED gallery light,
from 2700K to 5600K

(CASAMBI control on-board)

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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:

1029 lm

Peak candela output:

3460 cd

Light quality:

CRI: 97,7

Color temperature:

3967 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Wash 1530 Max Zoom

Target:

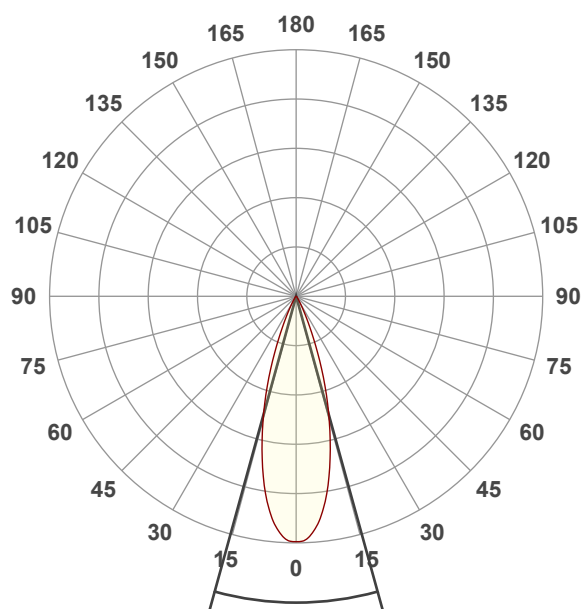
Full On

Operator:

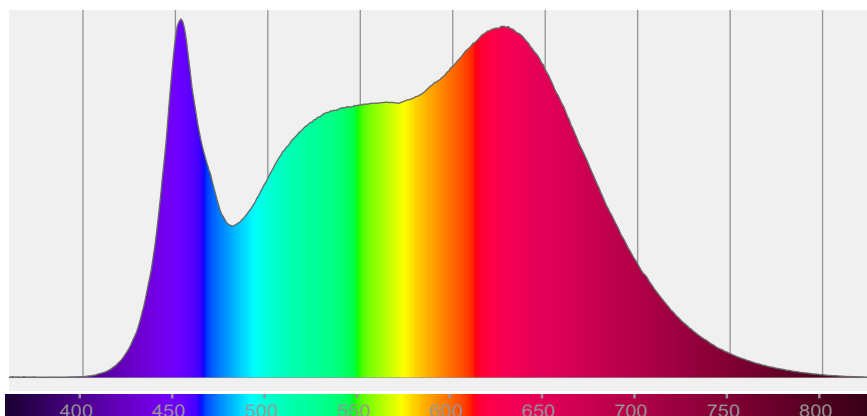
Paolo Carvone

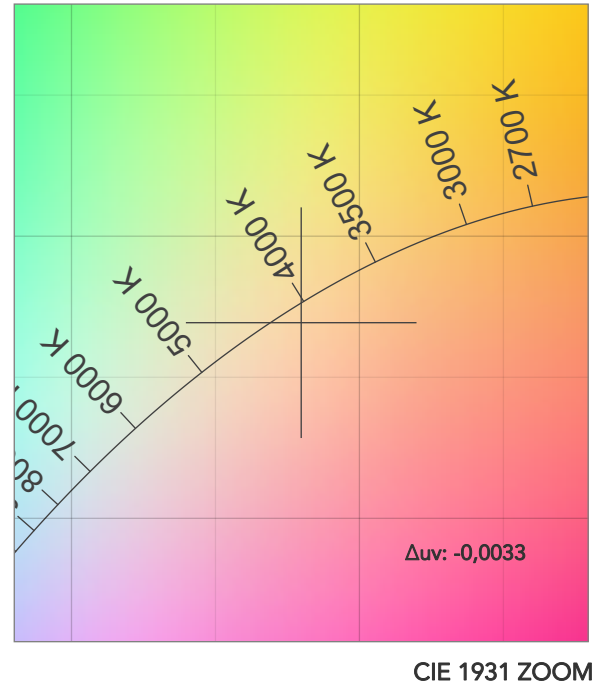
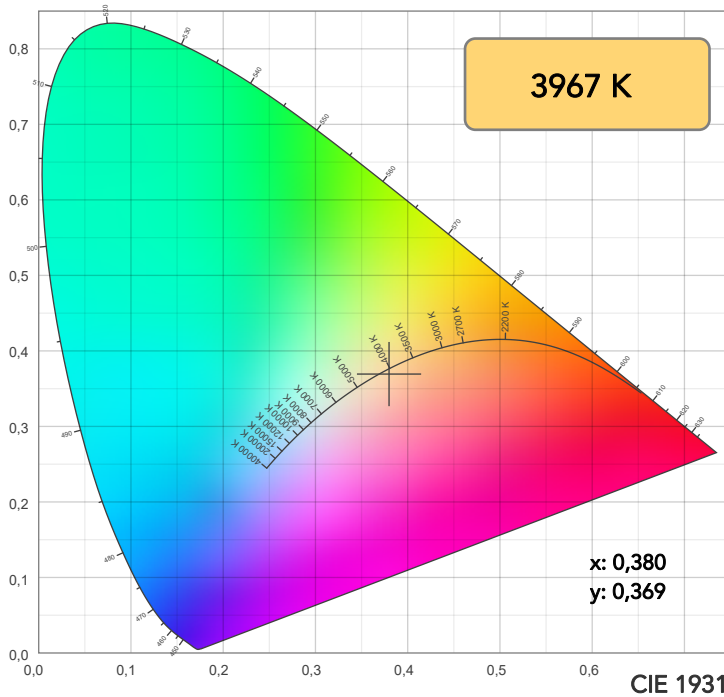
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29/03/2023 11:44:32

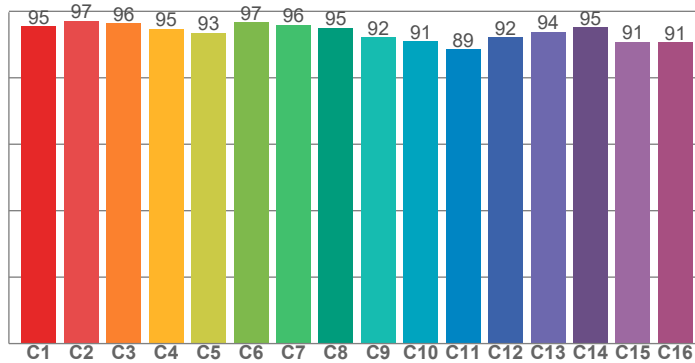


Spectra

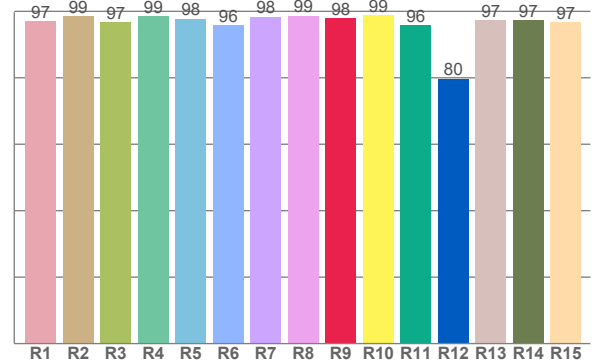




TM30: 93,6



CRI: 97,7 (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
97,1	98,6	96,6	98,6	97,8	95,8	98,3	98,7	97,9	98,7	95,8	79,7	97,3	97,3	96,8

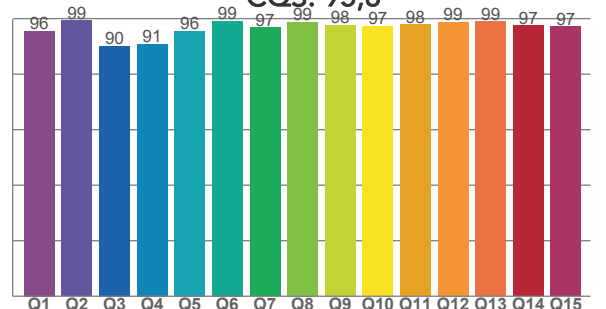
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,5	97,1	96,4	94,8	93,5	96,6	95,9	95,0	92,1	90,9	88,5	92,1	93,9	95,2	90,7	90,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,6	99,2	90,2	90,9	95,6	99,1	96,8	98,7	97,7	97,3	97,8	98,7	99,0	97,5	97,1

CQS: 95,8



COLOR PARAMETERS

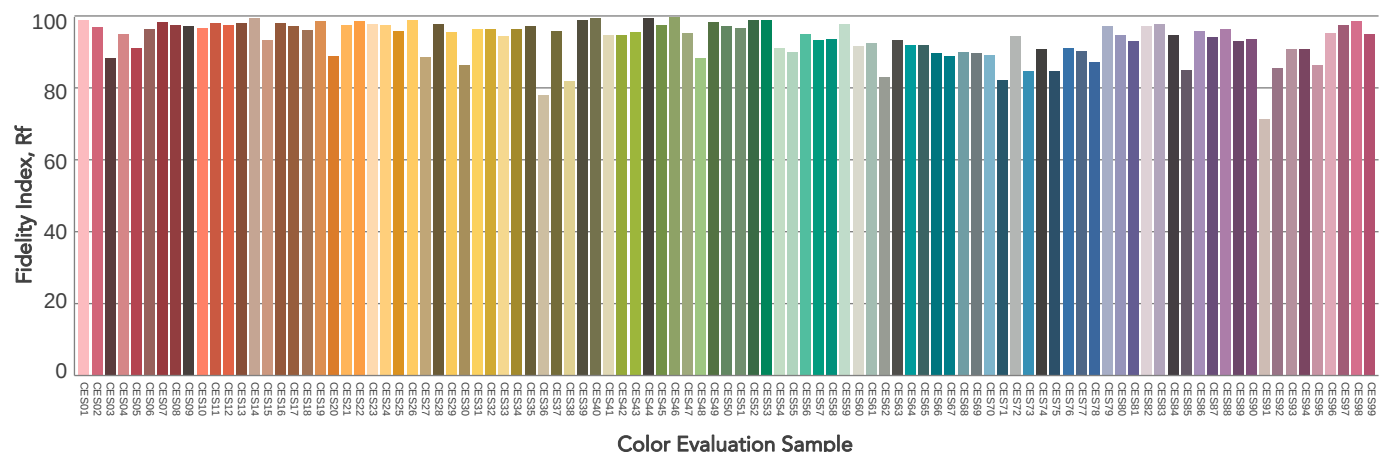
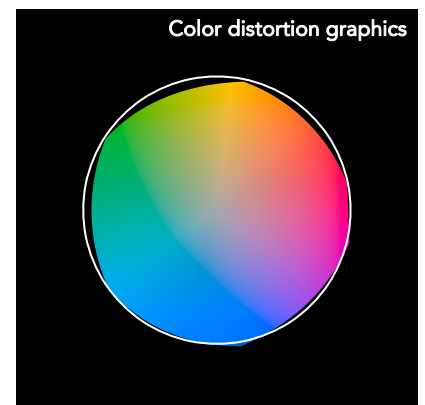
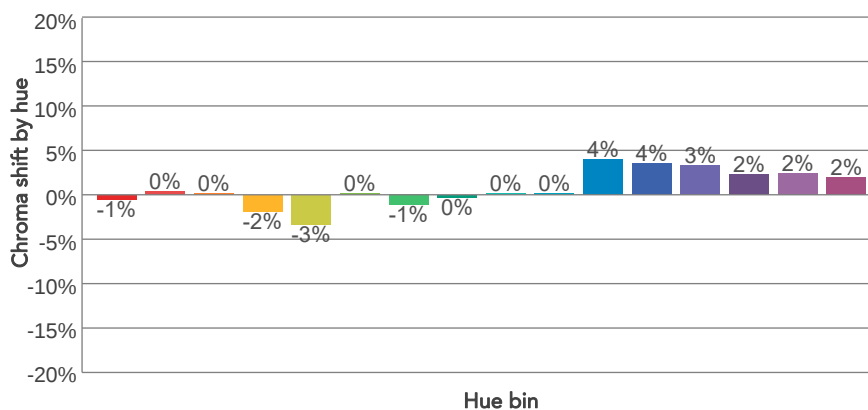
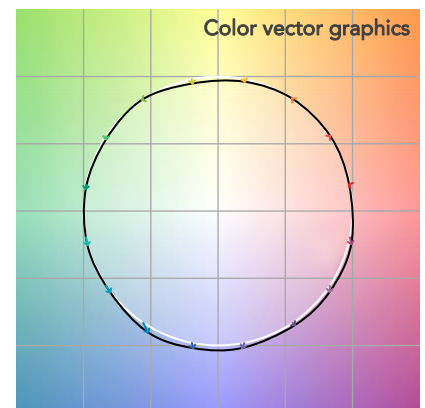
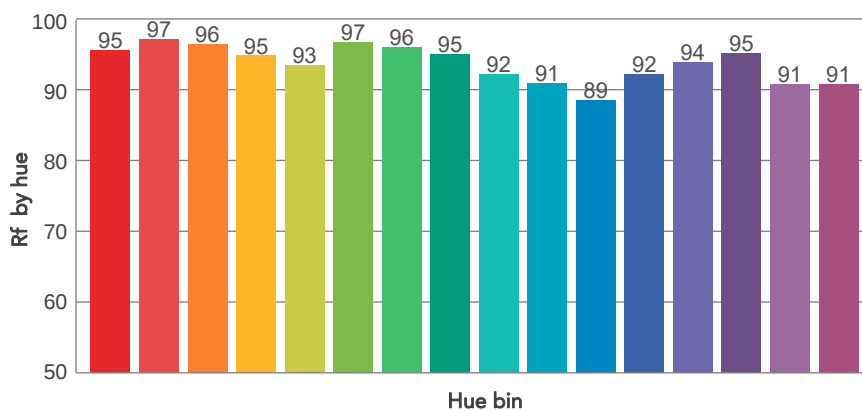
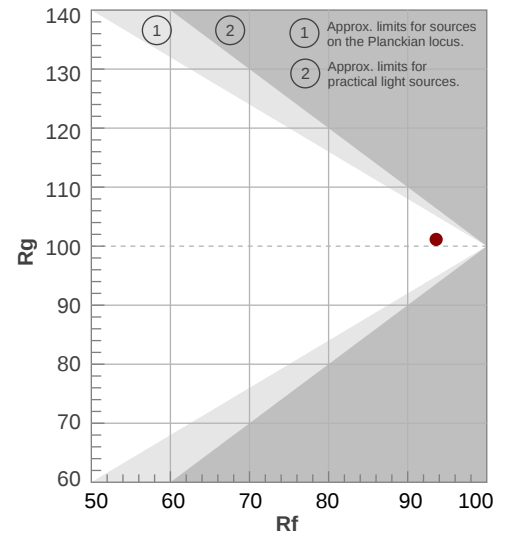
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3967 K	97,7	97,9	93,6	101,1	95,8	98	0,380	0,369	-0,0033

TM30 DETAILS

Rf 93,6
Fidelity index Rf

Rg 101,1
Gammut index

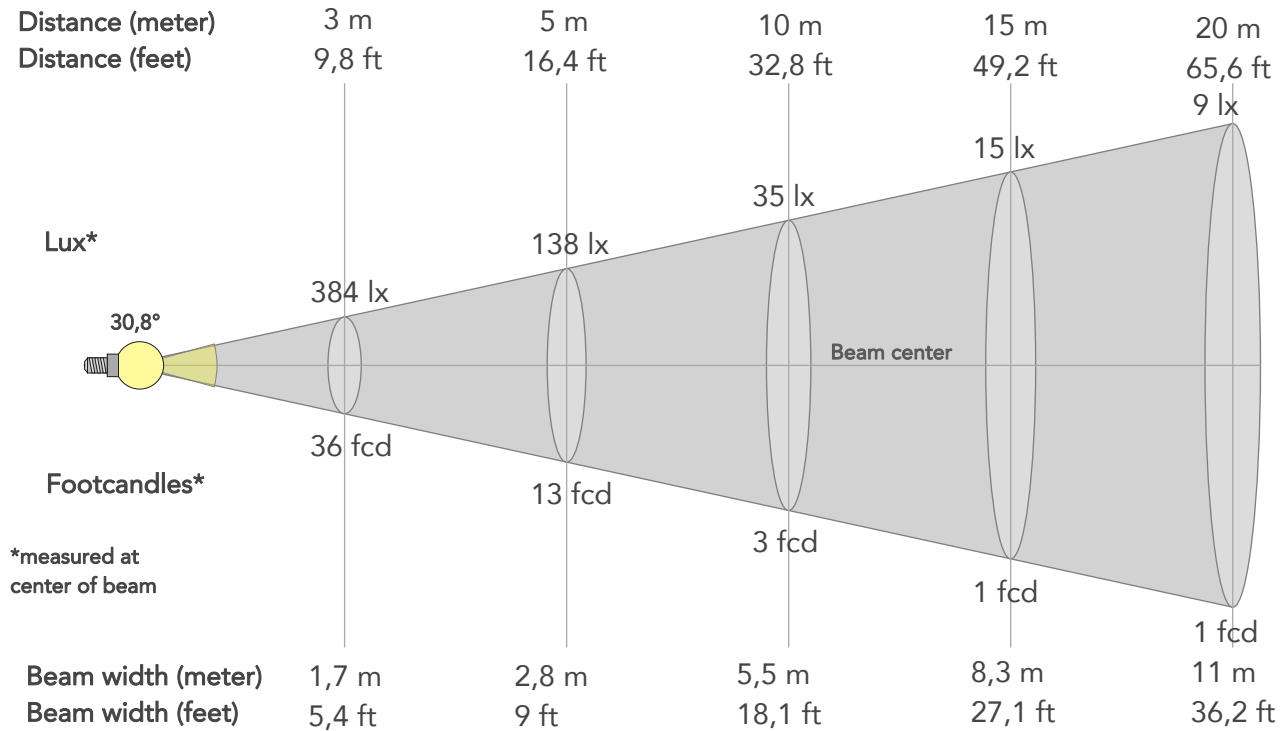
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	0%
2	97	0%	0%
3	96	0%	1%
4	95	-2%	-1%
5	93	-3%	0%
6	97	0%	1%
7	96	-1%	2%
8	95	0%	3%
9	92	0%	6%
10	91	0%	6%
11	89	4%	7%
12	92	4%	2%
13	94	3%	-2%
14	95	2%	0%
15	91	2%	-4%
16	91	2%	-5%



BEAM DETAILS



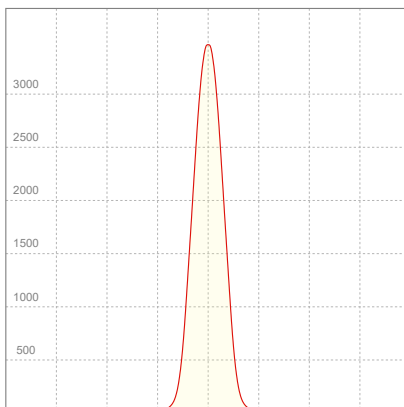
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,8°	50,8°	64,1°	99,8%	98,5%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	3460lx	865lx	384lx	216lx	138lx	62lx	35lx	15lx	9lx	6lx	4lx	2lx	1lx
Footcand.	321fcd	80fcd	36fcd	20fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,1m	5,5m	8,3m	11m	13,8m	16,6m	22,1m	27,6m
Beam wid.	1,8ft	3,6ft	5,4ft	7,2ft	9ft	13,6ft	18,1ft	27,1ft	36,2ft	45,2ft	54,3ft	72,4ft	90,5ft

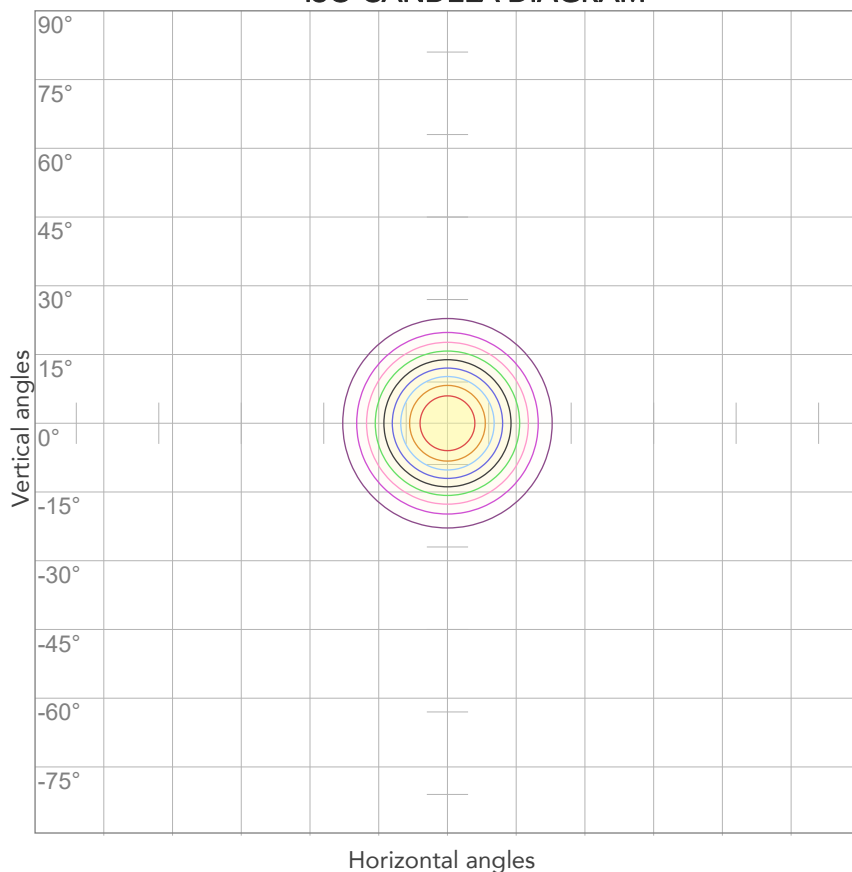
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,147A	30,4W	34lm/W

ISO CANDELA DIAGRAM



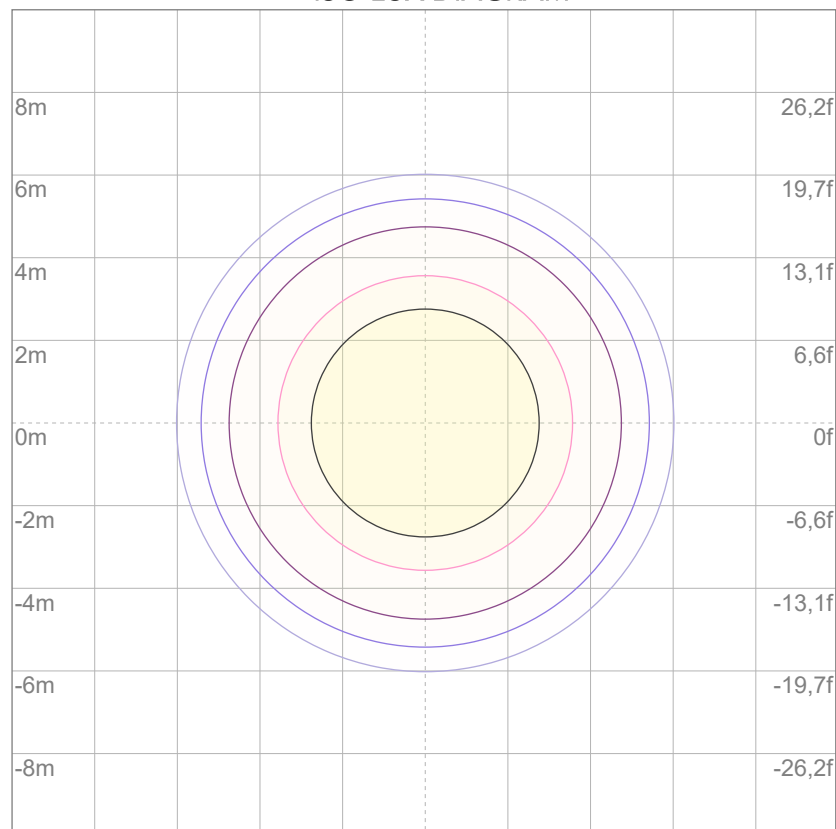
10%	346 cd
20%	692 cd
30%	1038 cd
40%	1384 cd
50%	1730 cd
60%	2076 cd
70%	2422 cd
80%	2768 cd

Conditions:

Number of c-planes: 2

Candela at center: 3460 cd

ISO LUX DIAGRAM



3%	1,04 lx
5%	1,73 lx
10%	3,46 lx
30%	10,4 lx
50%	17,3 lx

Conditions:

Number of c-planes: 2

Lux at center: 34,6 lx

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



Total lumen output:

788 lm

Peak candela output:

9360 cd

Light quality:

CRI: 97,7

Color temperature:

3894 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Wash 1530 Min Zoom

Target:

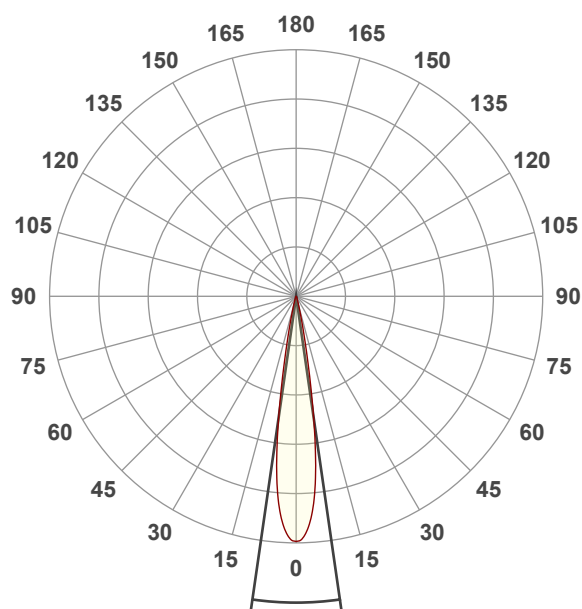
Full On

Operator:

Paolo Carvone

Date and time:

29/03/2023 11:13:30

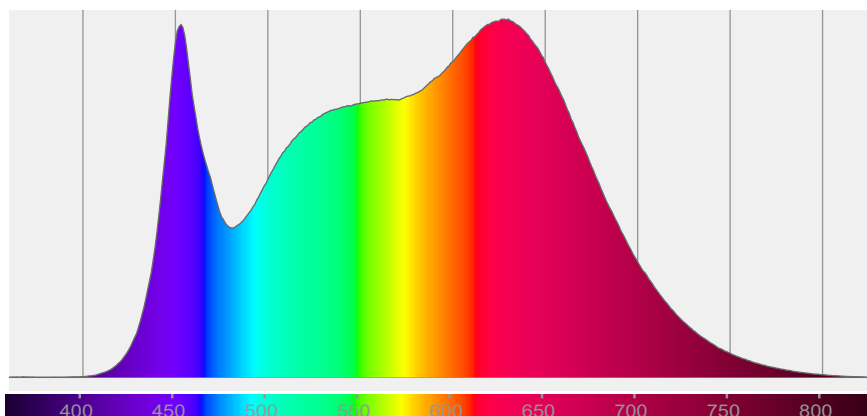


Beam angle 50%: 16,4°

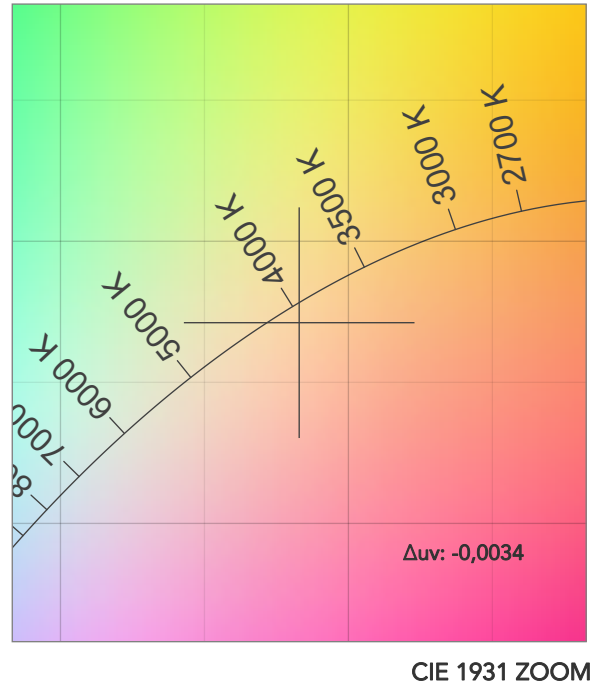
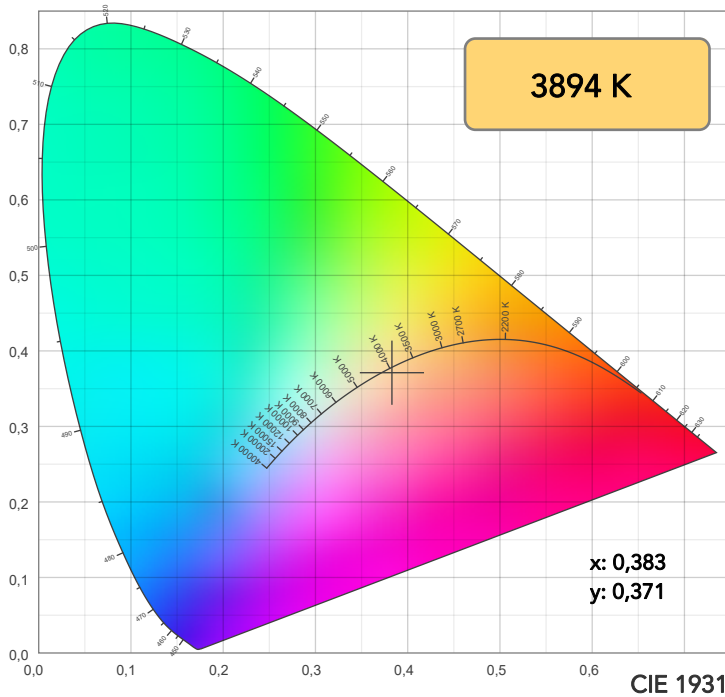
Field angle 10%: 25,6°

Cut off angle 2.5%: 34,3°

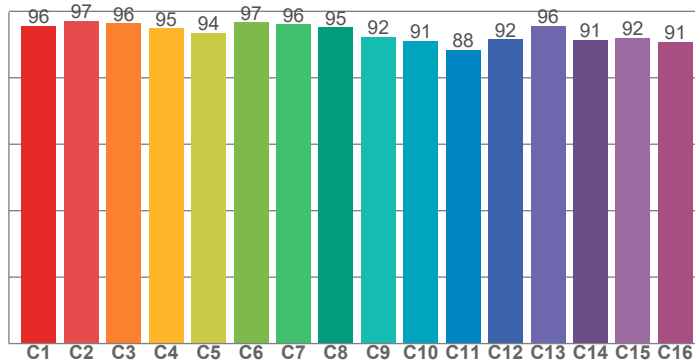
Spectra



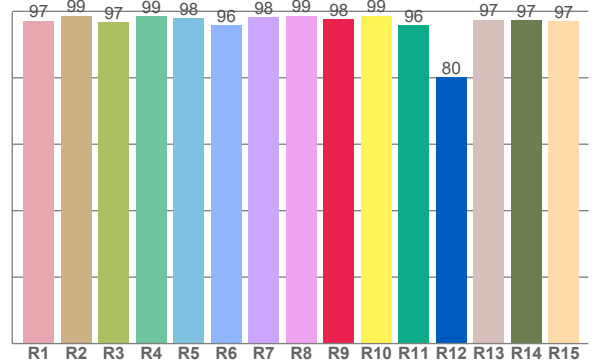
COLOR DETAILS



TM30: 93,7



CRI: 97,7 (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
97,2	98,6	96,6	98,6	97,9	95,8	98,3	98,7	97,6	98,7	95,8	80,1	97,5	97,3	97,0

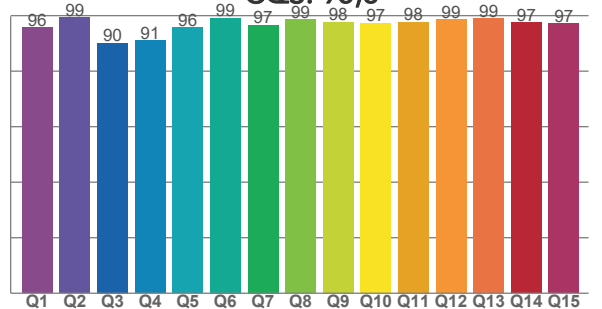
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,6	97,2	96,3	94,9	93,6	96,6	96,0	95,2	92,4	91,1	88,4	91,5	95,6	91,4	91,9	90,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,7	99,2	90,2	91,0	95,7	99,1	96,6	98,6	97,7	97,3	97,7	98,6	98,9	97,5	97,2

CQS: 95,8



COLOR PARAMETERS

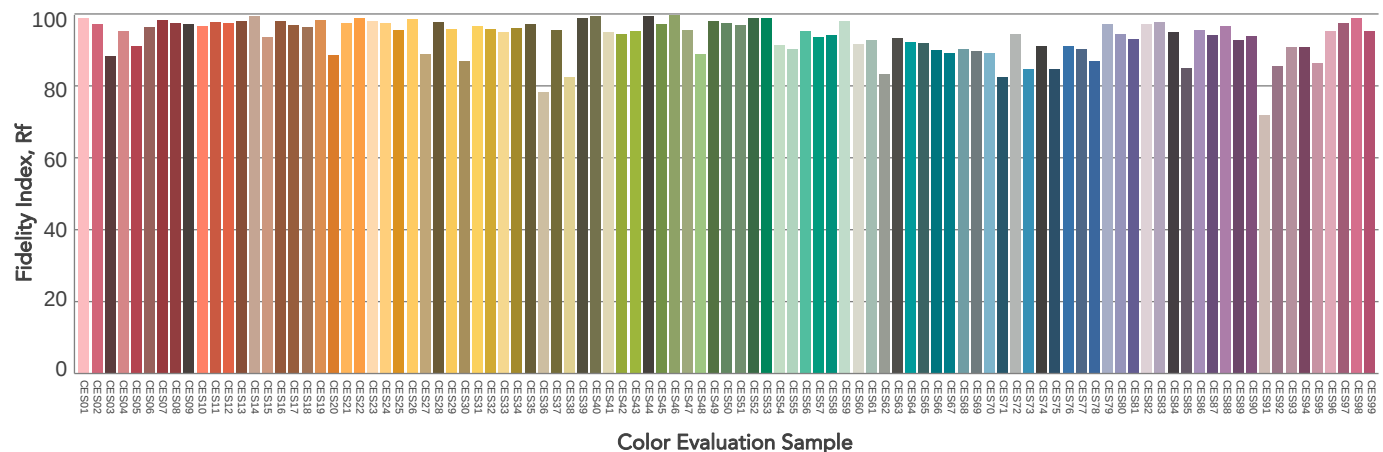
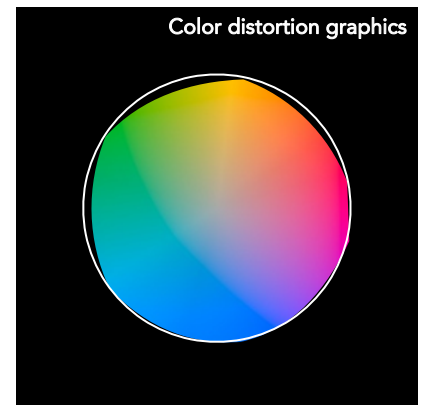
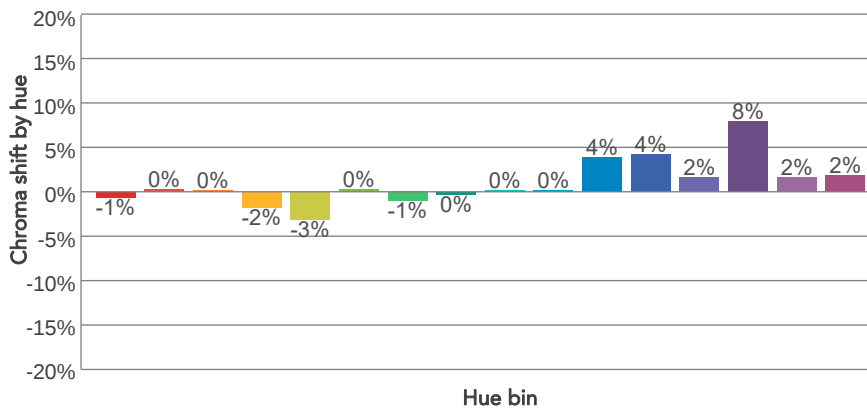
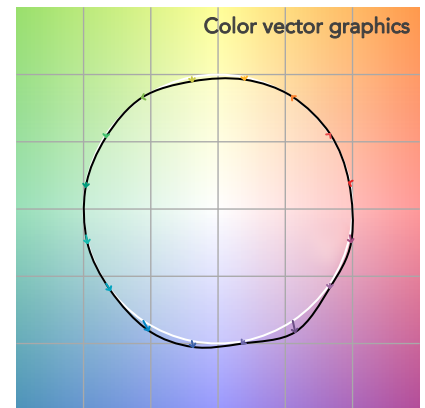
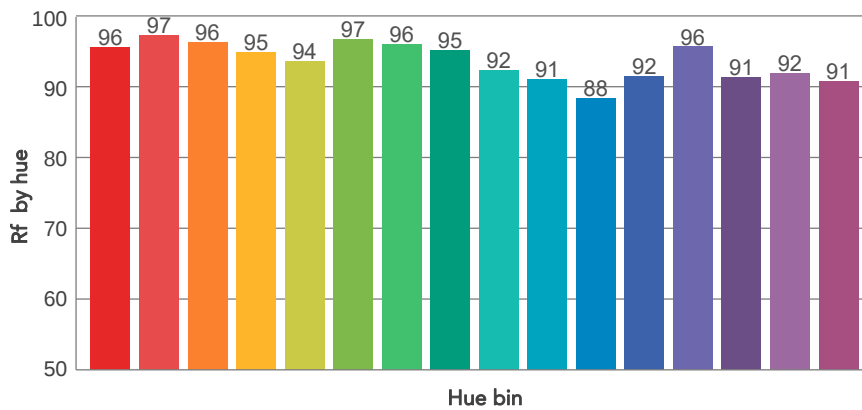
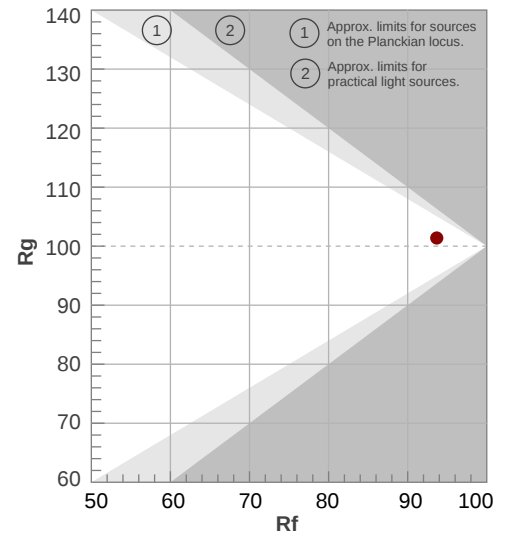
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3894 K	97,7	97,6	93,7	101,4	95,8	98	0,383	0,371	-0,0034

TM30 DETAILS

Rf 93,7
Fidelity index Rf

Rg 101,4
Gammut index

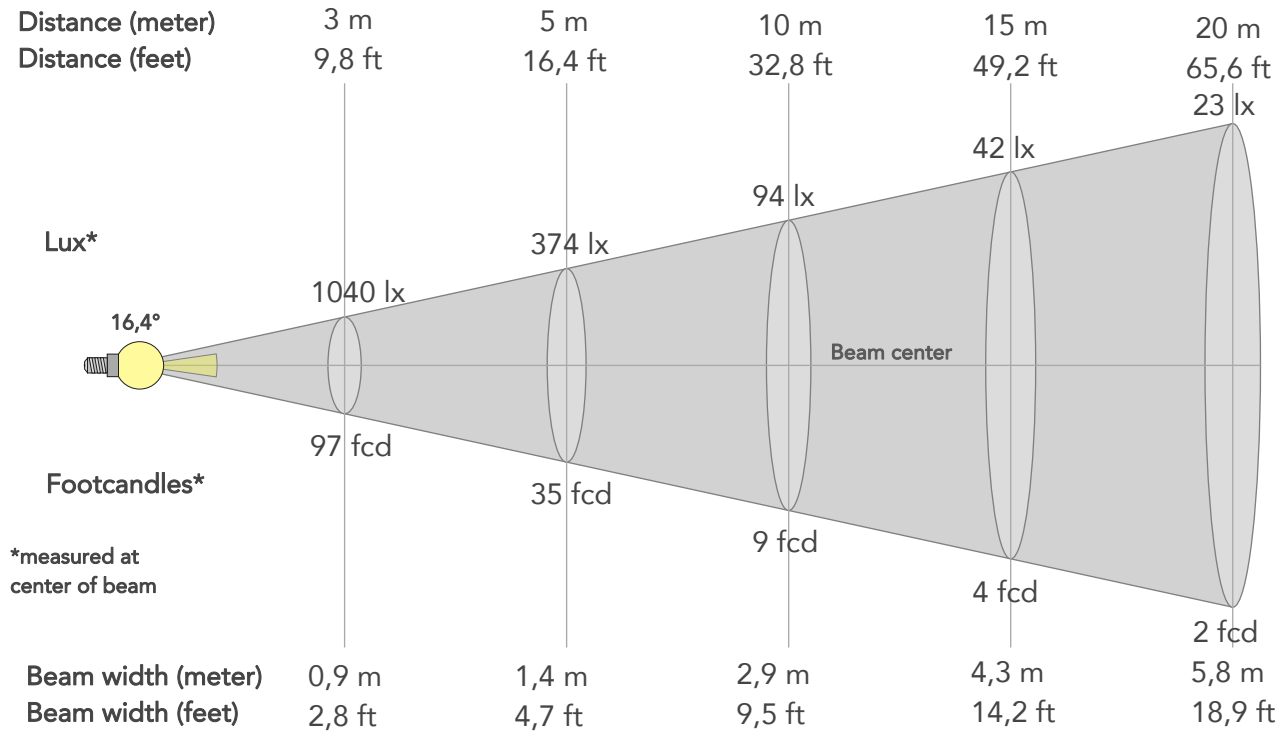
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	0%
2	97	0%	0%
3	96	0%	1%
4	95	-2%	-1%
5	94	-3%	0%
6	97	0%	1%
7	96	-1%	2%
8	95	0%	3%
9	92	0%	6%
10	91	0%	6%
11	88	4%	7%
12	92	4%	2%
13	96	2%	-2%
14	91	8%	-3%
15	92	2%	-3%
16	91	2%	-5%



BEAM DETAILS



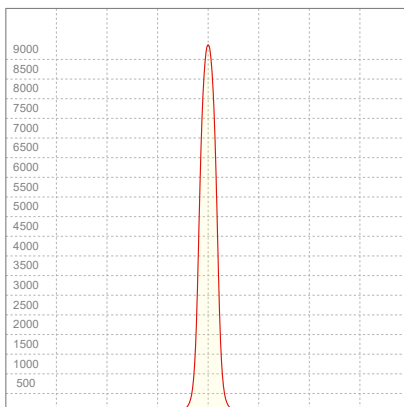
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16,4°	25,6°	34,3°	100,0%	99,8%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	9360lx	2340lx	1040lx	585lx	374lx	166lx	94lx	42lx	23lx	15lx	10lx	6lx	4lx
Footcand.	870fcd	217fcd	97fcd	54fcd	35fcd	15fcd	9fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,3m	0,6m	0,9m	1,2m	1,4m	2,2m	2,9m	4,3m	5,8m	7,2m	8,7m	11,5m	14,4m
Beam wid.	1ft	1,9ft	2,8ft	3,8ft	4,7ft	7,1ft	9,5ft	14,2ft	18,9ft	23,7ft	28,4ft	37,8ft	47,3ft

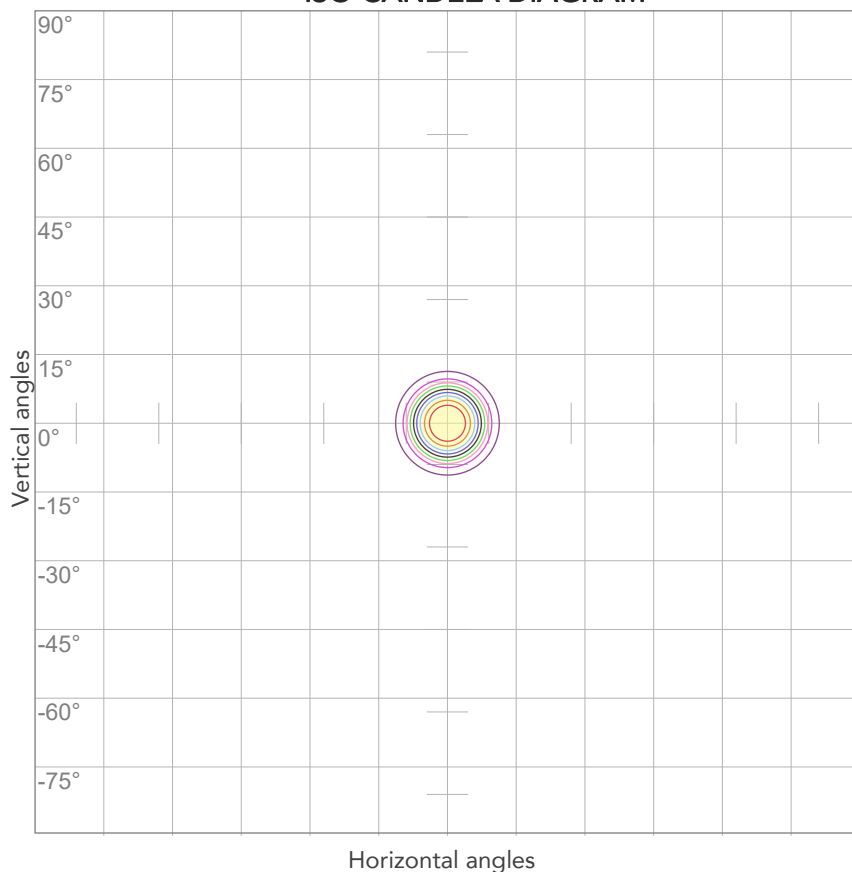
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,154A	32,3W	24lm/W

ISO CANDELA DIAGRAM



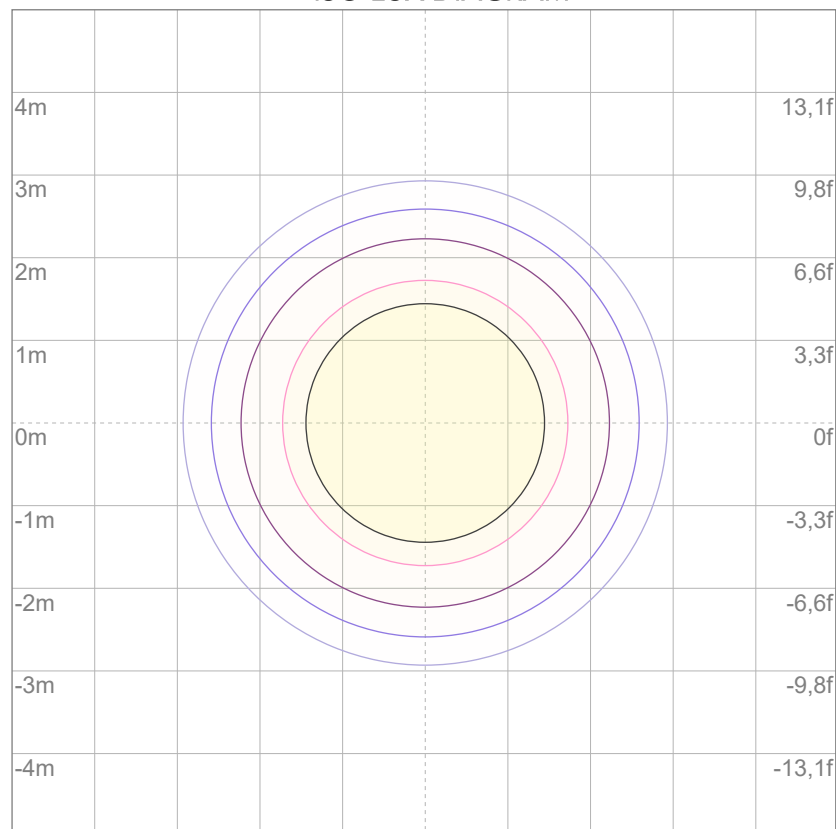
10%	936 cd
20%	1872 cd
30%	2808 cd
40%	3744 cd
50%	4680 cd
60%	5616 cd
70%	6552 cd
80%	7488 cd

Conditions:

Number of c-planes: 2

Candela at center: 9360 cd

ISO LUX DIAGRAM



3%	2,81 lx
5%	4,68 lx
10%	9,36 lx
30%	28,1 lx
50%	46,8 lx

Conditions:

Number of c-planes: 2

Lux at center: 93,6 lx

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



Total lumen output:

802 lm

Peak candela output:

2729 cd

Light quality:

CRI: 96,3

Color temperature:

2755 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Wash 1530 Max Zoom

Target:

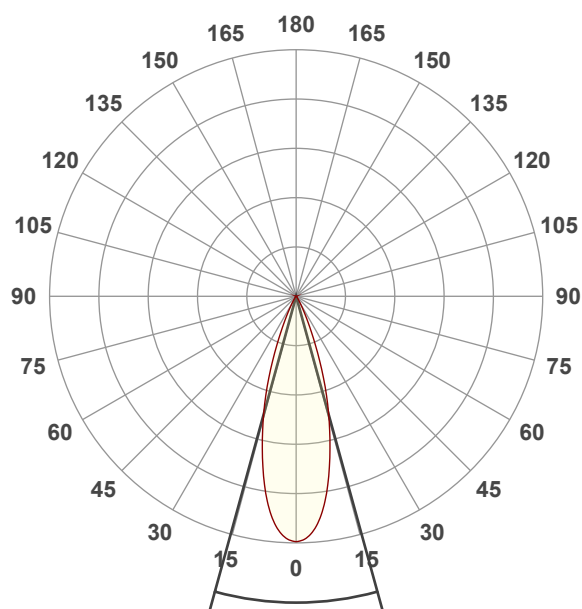
Warm White

Operator:

Paolo Carvone

Date and time:

29/03/2023 11:42:13

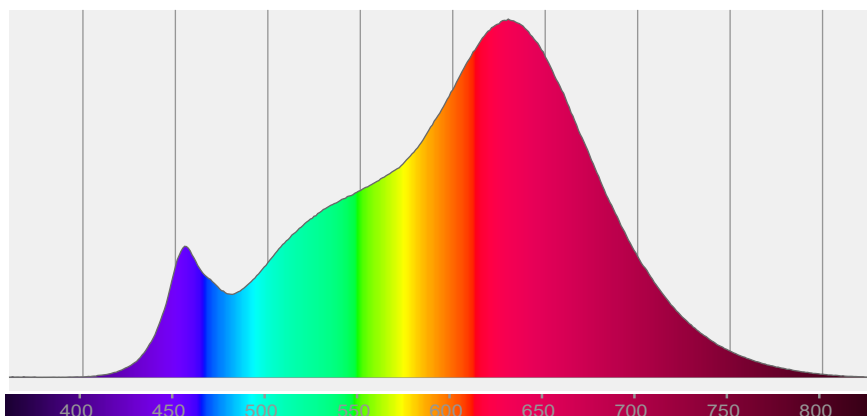


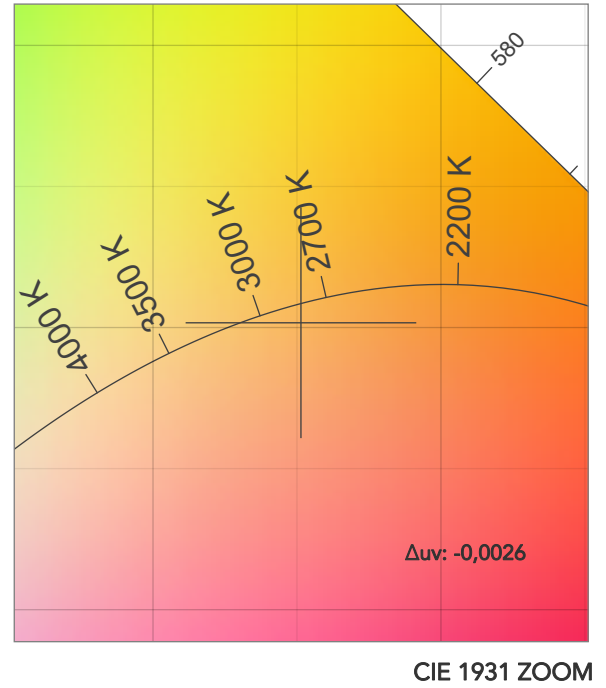
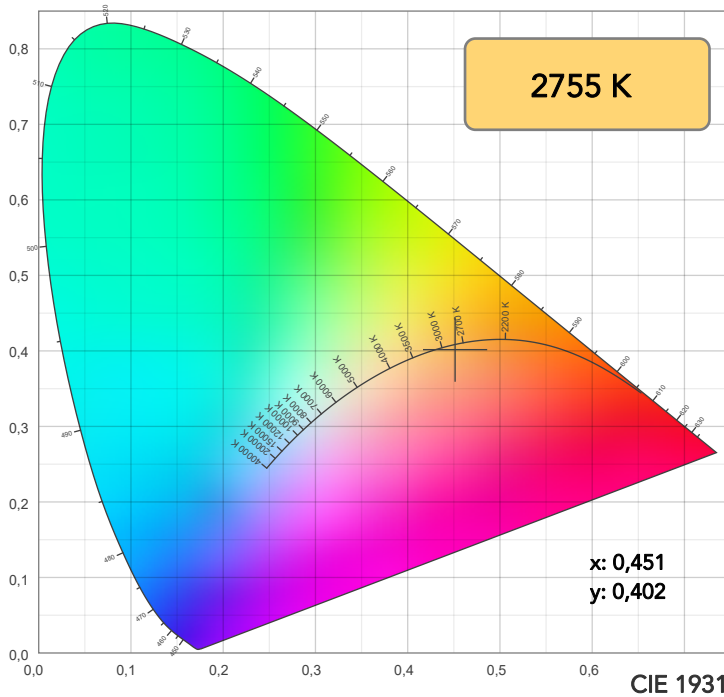
Beam angle 50%: 30,8°

Field angle 10%: 50,8°

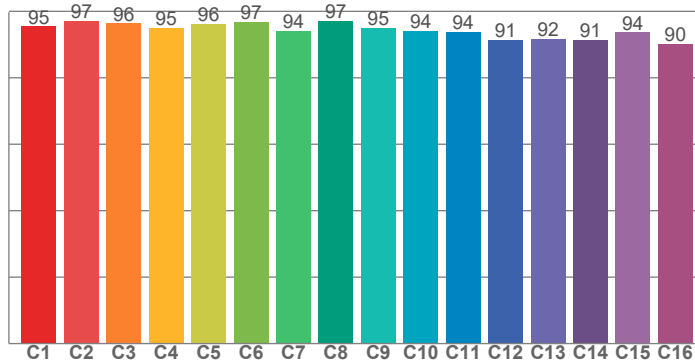
Cut off angle 2.5%: 63,6°

Spectra

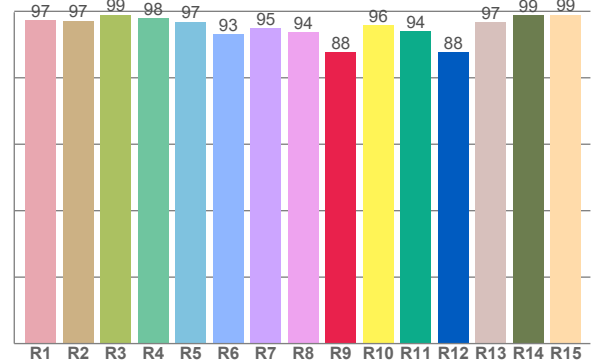




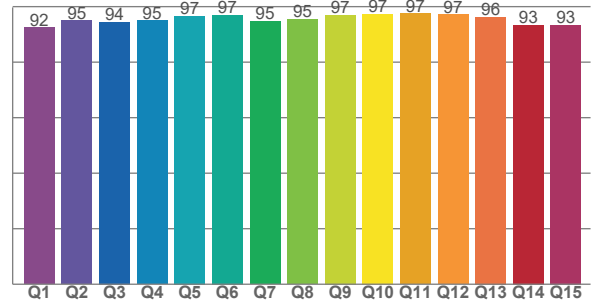
TM30: 94,6



CRI: 96,3 (R1-R8)



CQS: 95,0



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
97,3	97,2	99,0	97,9	96,9	93,2	95,0	93,7	87,7	95,7	94,0	87,6	96,6	98,8	98,9

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
95,4	97,1	96,3	95,0	96,2	96,8	94,2	97,1	95,0	94,1	93,9	91,3	91,7	91,4	93,7	90,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,5	95,0	94,5	95,0	96,6	97,1	94,7	95,4	97,0	97,3	97,5	97,1	96,2	93,4	93,4

COLOR PARAMETERS

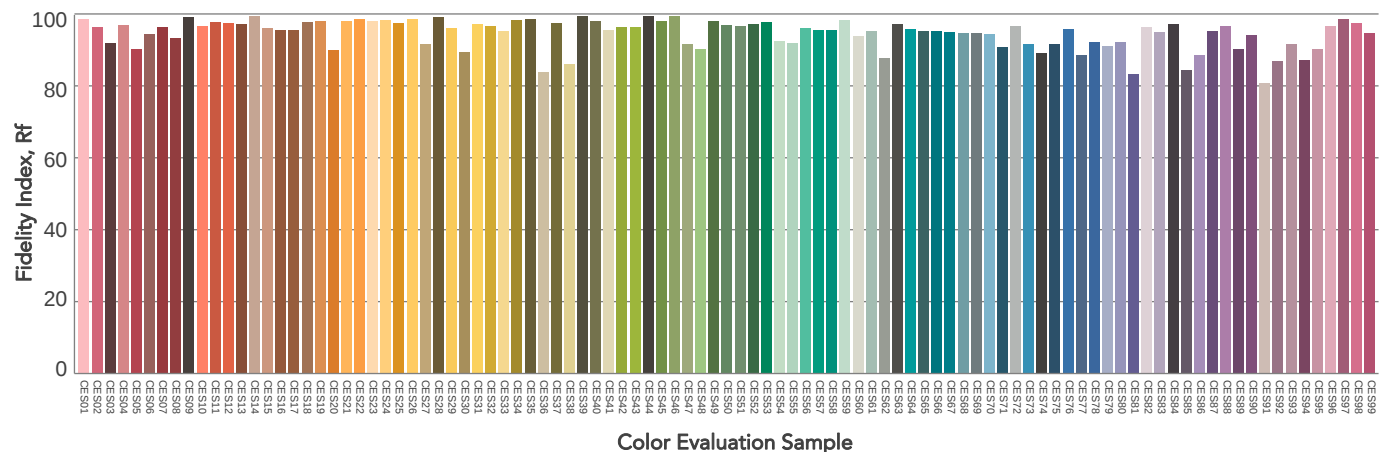
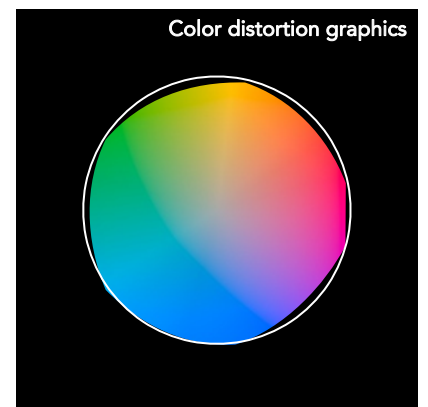
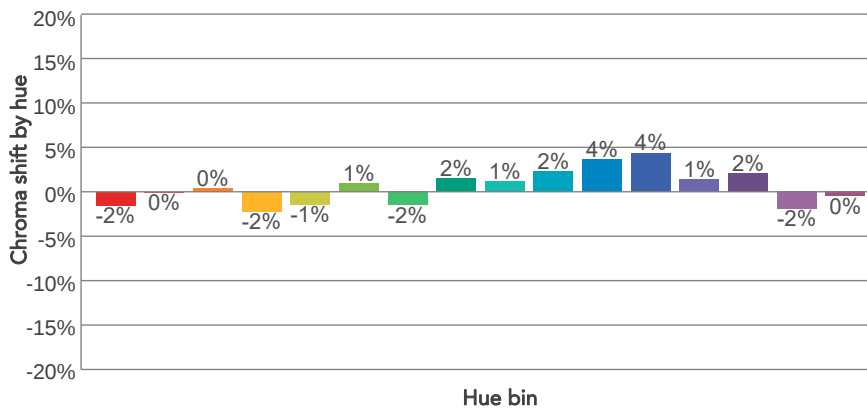
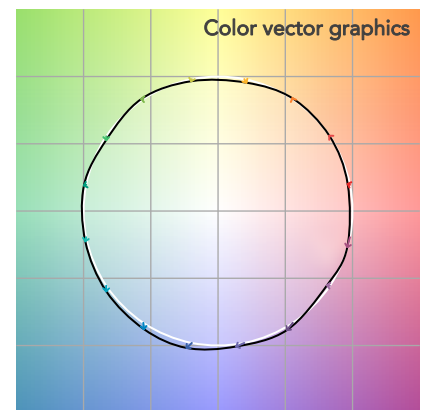
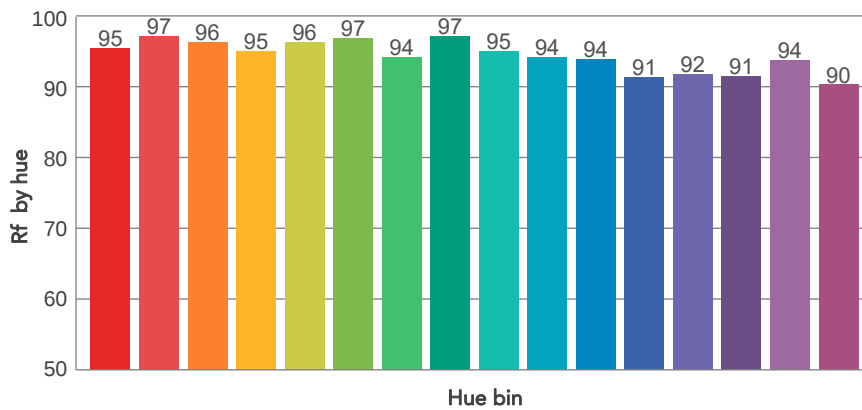
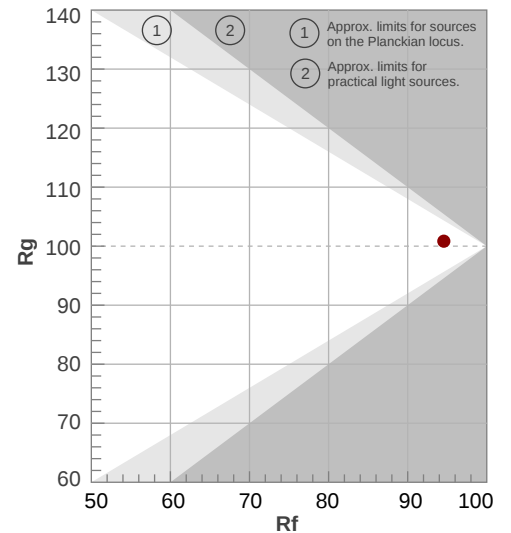
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2755 K	96,3	87,7	94,6	100,8	95,0	96	0,451	0,402	-0,0026

TM30 DETAILS

Rf 94,6
Fidelity index Rf

Rg 100,8
Gammut index

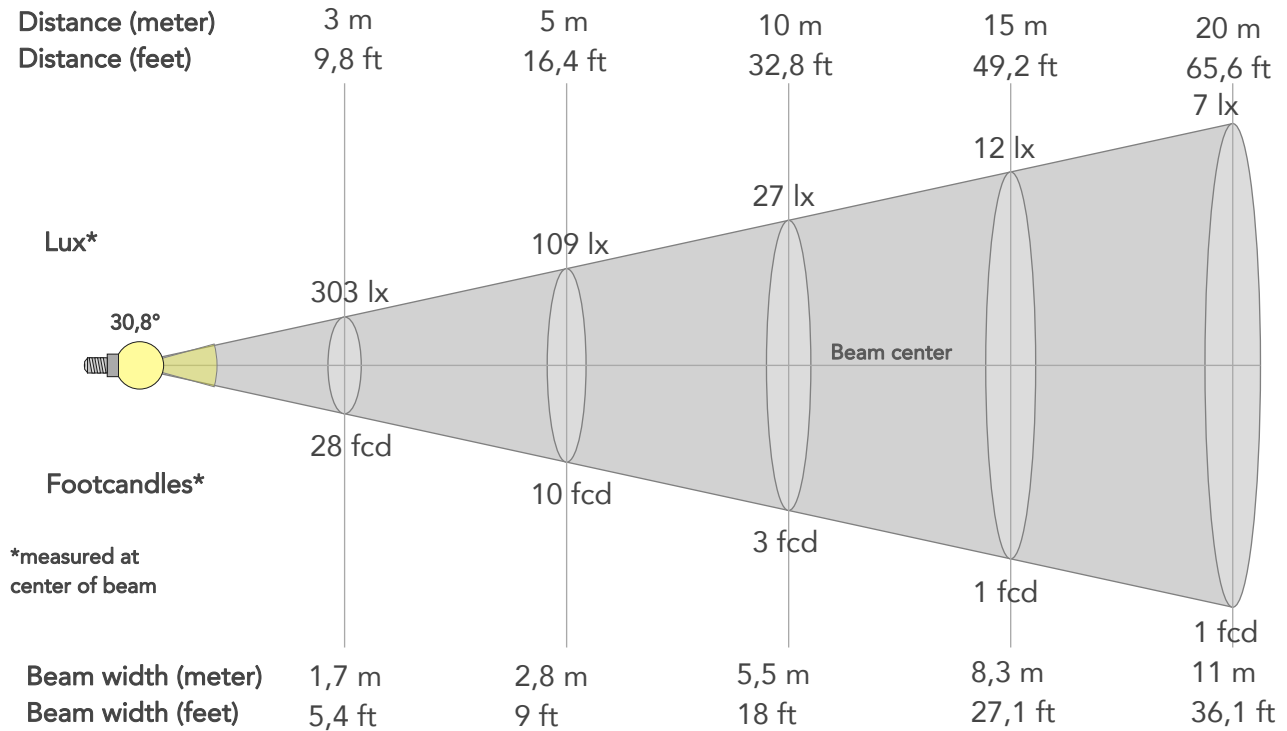
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-2%	1%
2	97	0%	1%
3	96	0%	1%
4	95	-2%	-2%
5	96	-1%	1%
6	97	1%	1%
7	94	-2%	2%
8	97	2%	1%
9	95	1%	3%
10	94	2%	3%
11	94	4%	3%
12	91	4%	-3%
13	92	1%	-6%
14	91	2%	-7%
15	94	-2%	-1%
16	90	0%	-8%



BEAM DETAILS



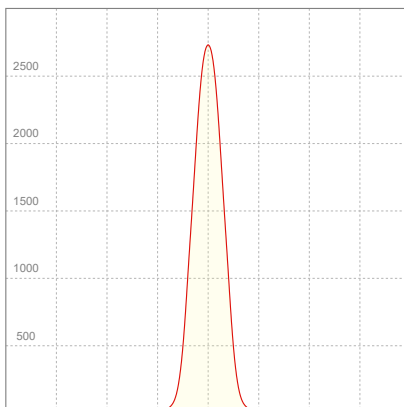
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,8°	50,8°	63,6°	99,8%	98,9%



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	2729lx	682lx	303lx	171lx	109lx	49lx	27lx	12lx	7lx	4lx	3lx	2lx	1lx
Footcand.	254fcd	63fcd	28fcd	16fcd	10fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,1m	5,5m	8,3m	11m	13,8m	16,5m	22m	27,5m
Beam wid.	1,8ft	3,6ft	5,4ft	7,2ft	9ft	13,5ft	18ft	27,1ft	36,1ft	45,1ft	54,1ft	72,2ft	90,2ft

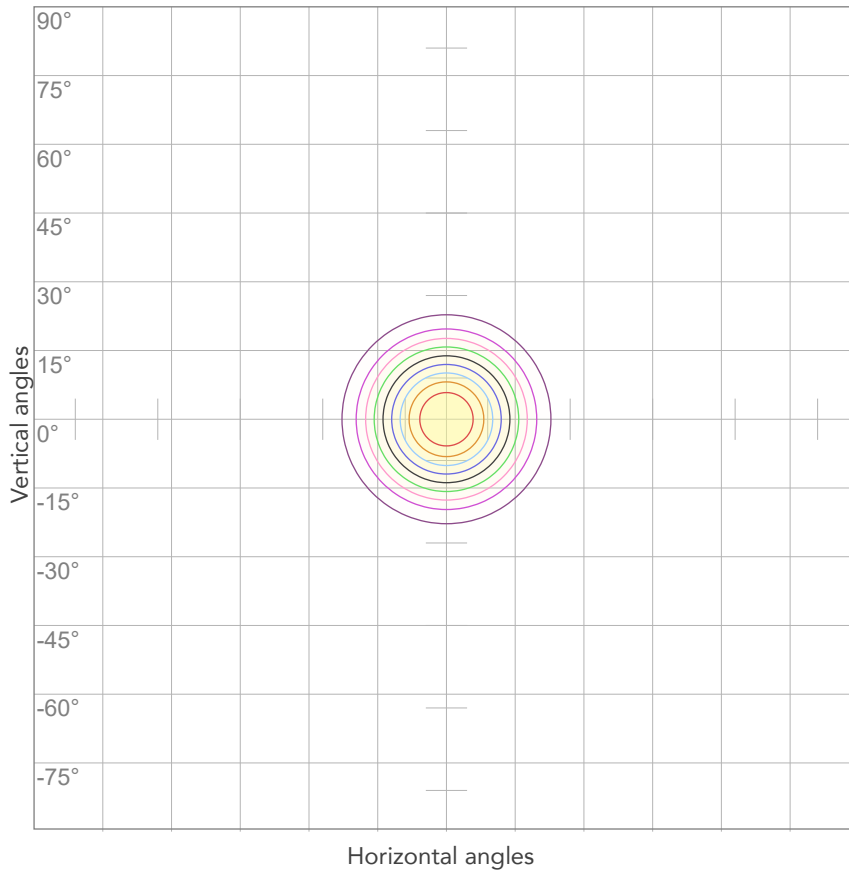
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,157A	32,9W	24lm/W

ISO CANDELA DIAGRAM



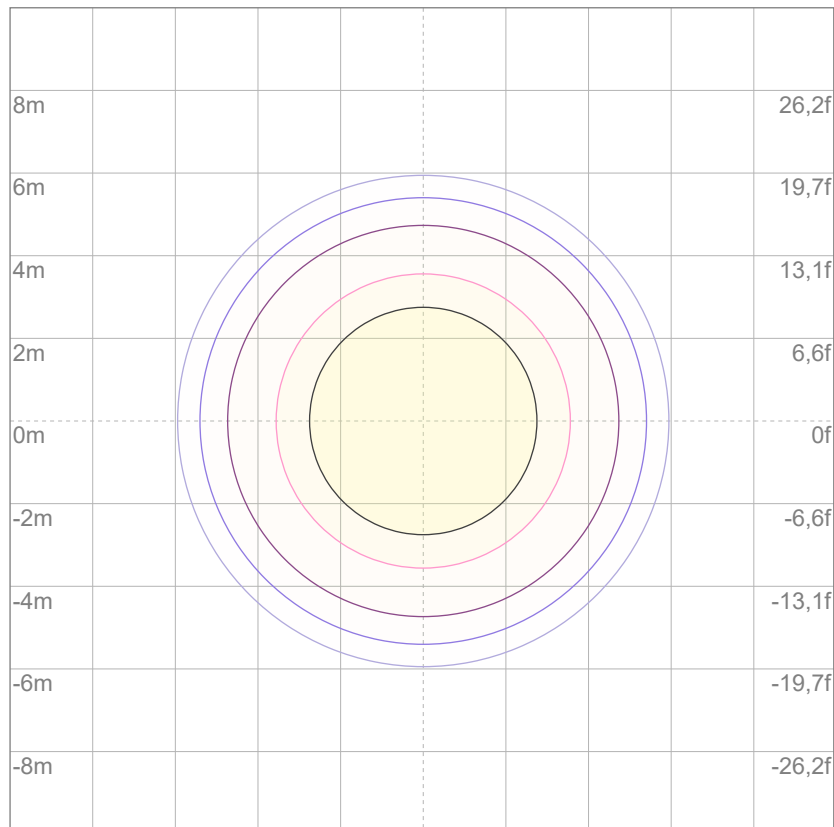
10%	273 cd
20%	546 cd
30%	819 cd
40%	1092 cd
50%	1365 cd
60%	1638 cd
70%	1911 cd
80%	2183 cd

Conditions:

Number of c-planes: 2

Candela at center: 2729 cd

ISO LUX DIAGRAM



3%	0,819 lx
5%	1,36 lx
10%	2,73 lx
30%	8,19 lx
50%	13,6 lx

Conditions:

Number of c-planes: 2

Lux at center: 27,3 lx

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



Total lumen output:

602 lm

Peak candela output:

7303 cd

Light quality:

CRI: 96,3

Color temperature:

2706 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Wash 1530 Min Zoom

Target:

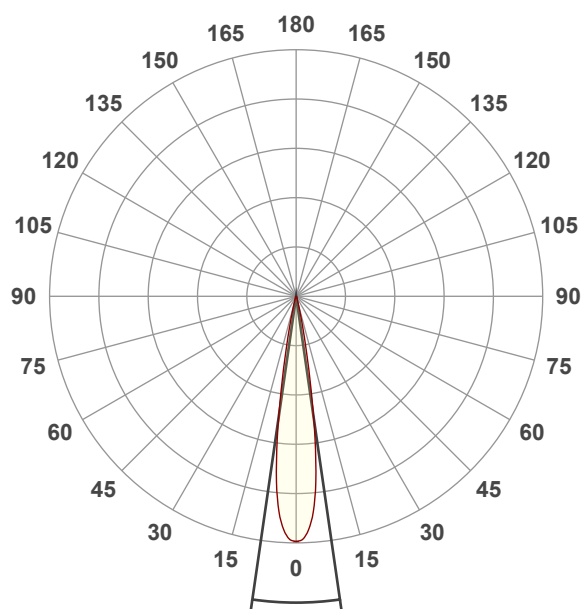
Warm White

Operator:

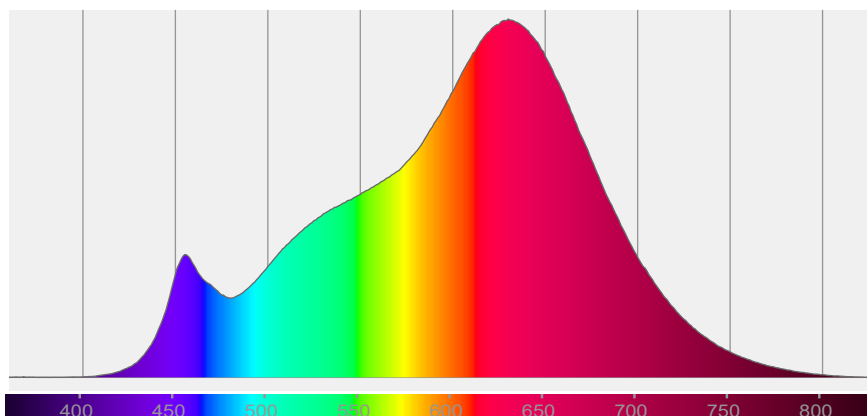
Paolo Carvone

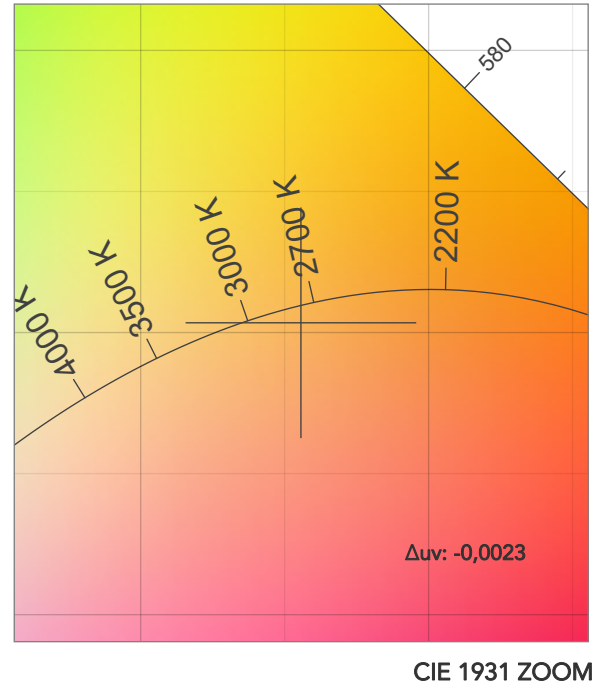
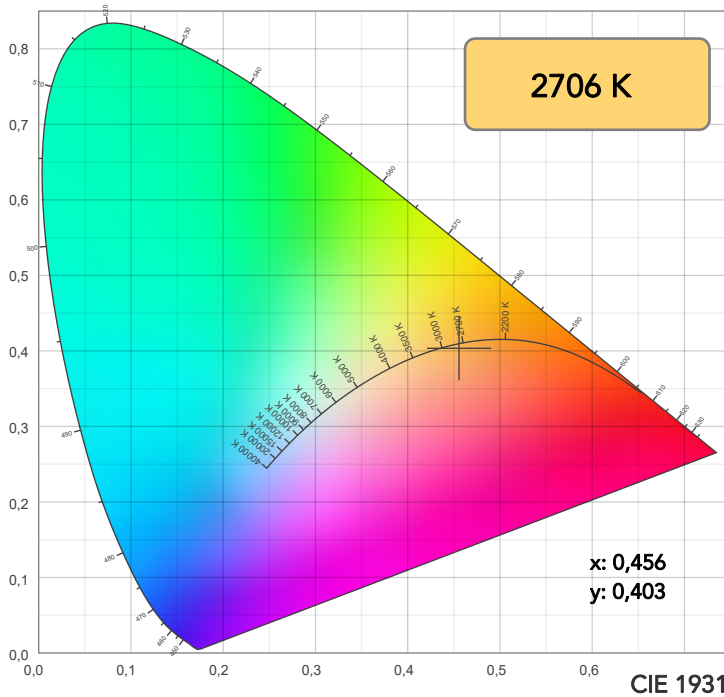
Date and time:

29/03/2023 11:24:30

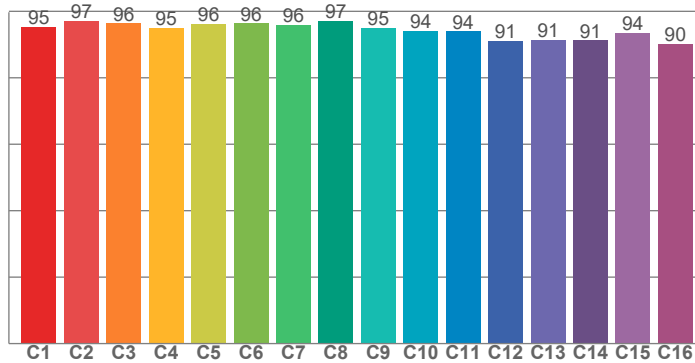


Spectra

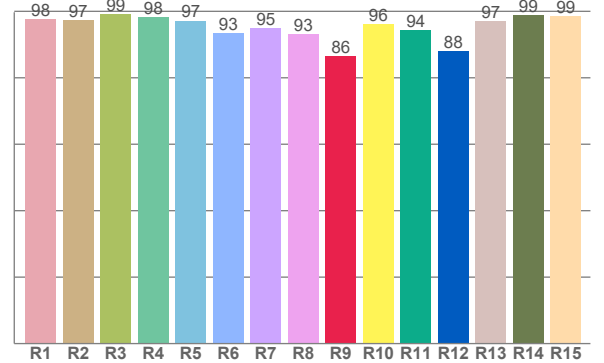




TM30: 94,5



CRI: 96,3 (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
97,6	97,4	99,0	98,1	97,2	93,3	94,8	93,1	86,4	96,1	94,2	87,9	97,0	98,8	98,6

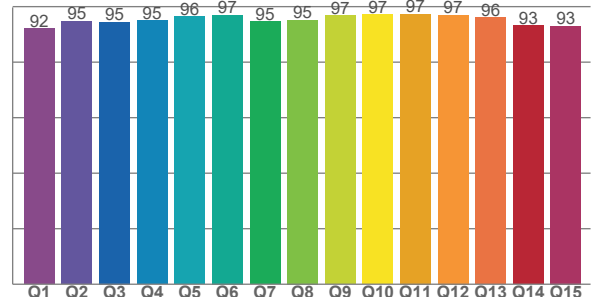
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,3	97,1	96,4	95,0	96,2	96,4	96,0	97,2	95,0	94,1	94,0	91,2	91,5	91,3	93,6	90,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,1	94,7	94,5	94,9	96,4	97,0	94,7	95,2	96,7	97,1	97,3	96,9	96,0	93,1	93,0

CQS: 94,8



COLOR PARAMETERS

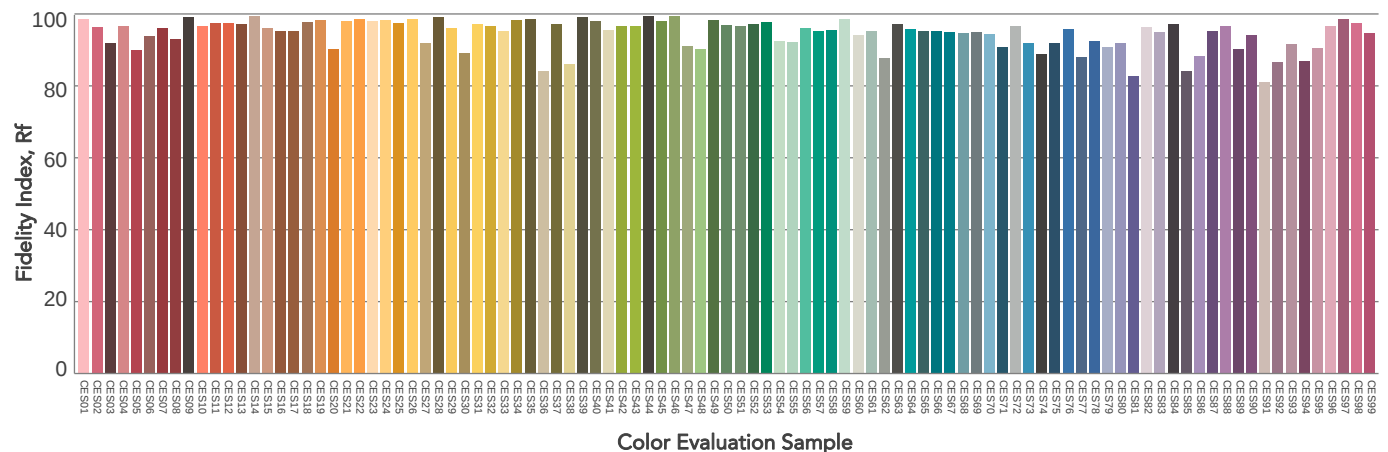
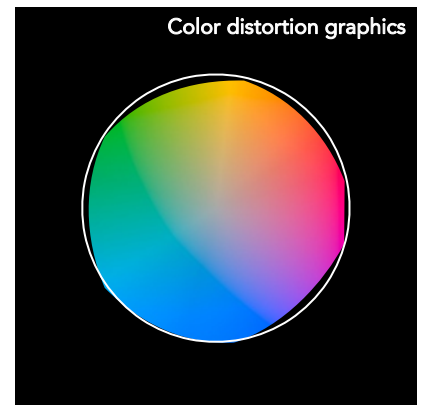
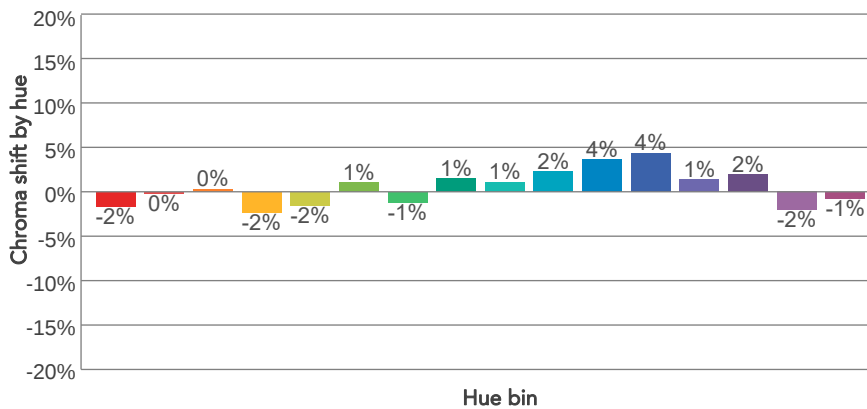
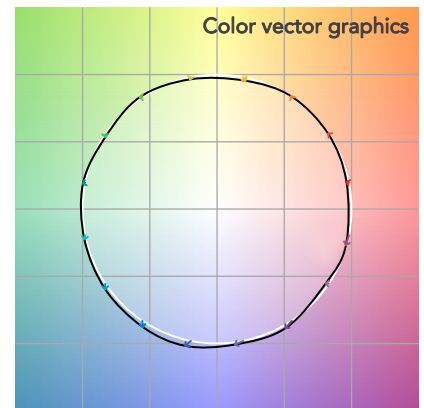
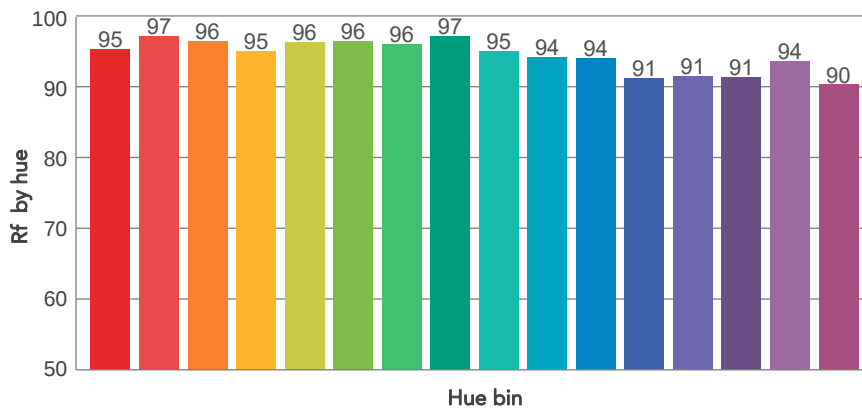
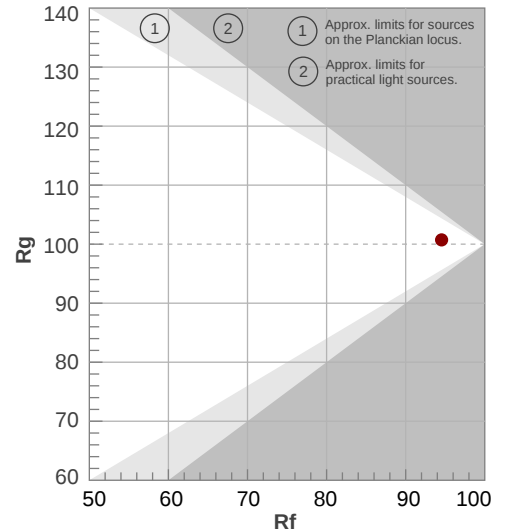
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2706 K	96,3	86,4	94,5	100,7	94,8	96	0,456	0,403	-0,0023

TM30 DETAILS

Rf 94,5
Fidelity index Rf

Rg 100,7
Gammut index

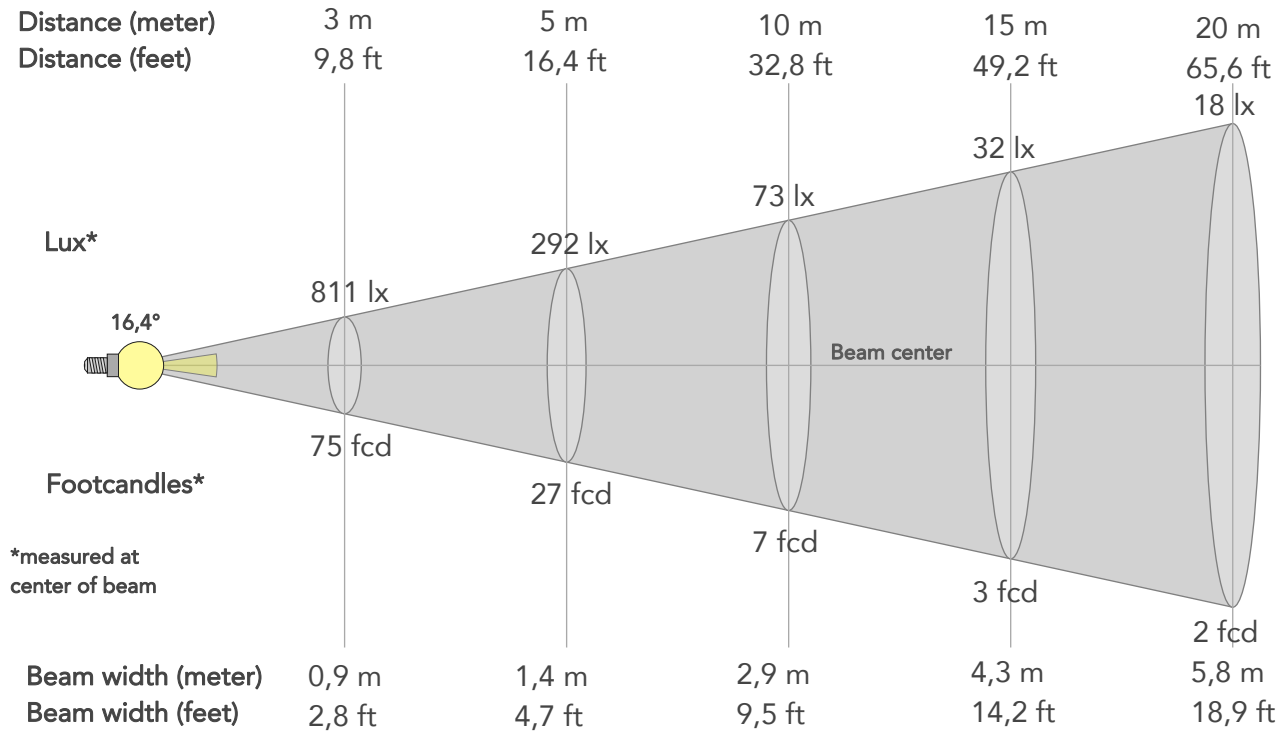
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-2%	1%
2	97	0%	1%
3	96	0%	1%
4	95	-2%	-2%
5	96	-2%	1%
6	96	1%	1%
7	96	-1%	2%
8	97	1%	1%
9	95	1%	3%
10	94	2%	3%
11	94	4%	3%
12	91	4%	-3%
13	91	1%	-7%
14	91	2%	-7%
15	94	-2%	-1%
16	90	-1%	-7%



BEAM DETAILS



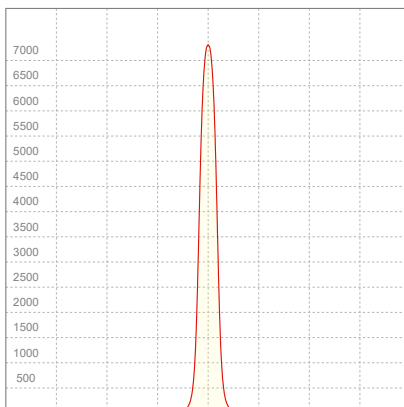
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16,4°	25,6°	33,6°	100,0%	100,0%



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	7303lx	1826lx	811lx	456lx	292lx	130lx	73lx	32lx	18lx	12lx	8lx	5lx	3lx
Footcand.	678fcd	170fcd	75fcd	42fcd	27fcd	12fcd	7fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
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	14,4m
Beam wid.	1ft	1,9ft	2,8ft	3,8ft	4,7ft	7,1ft	9,5ft	14,2ft	18,9ft	23,7ft	28,4ft	37,9ft	47,4ft

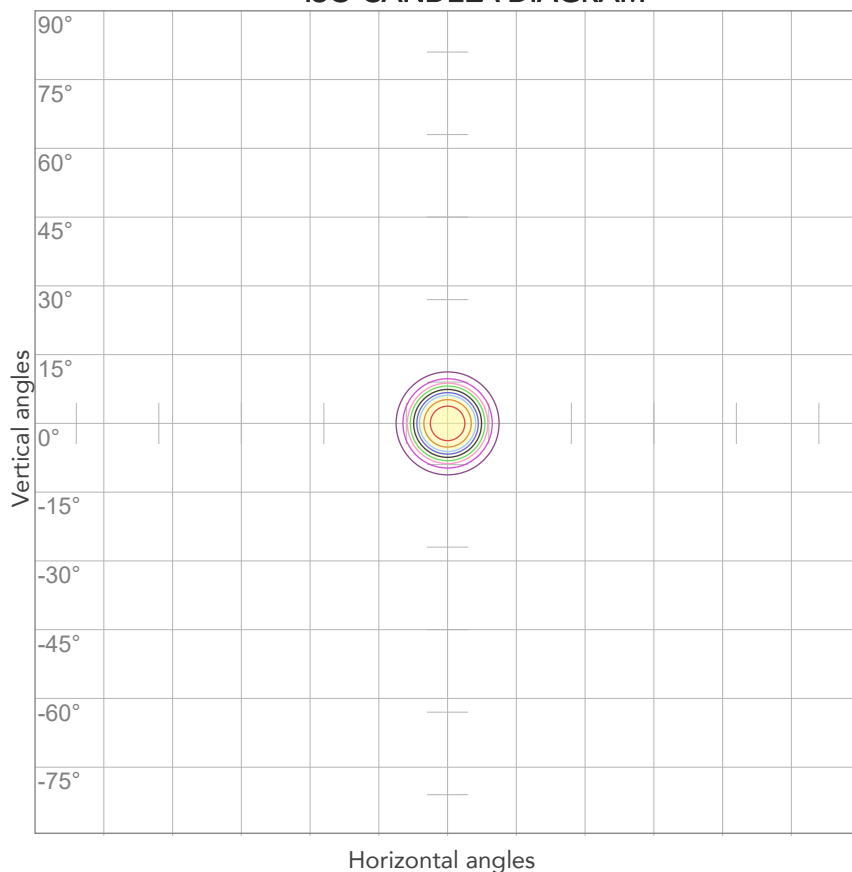
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,152A	31,6W	19lm/W

ISO CANDELA DIAGRAM



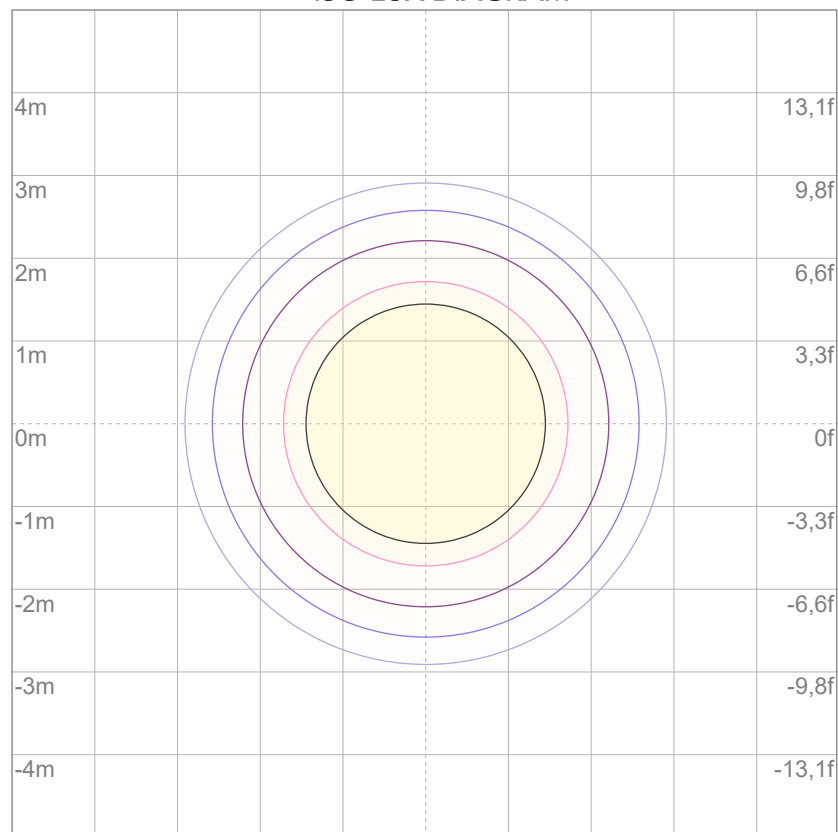
10%	730 cd
20%	1461 cd
30%	2191 cd
40%	2921 cd
50%	3651 cd
60%	4382 cd
70%	5112 cd
80%	5842 cd

Conditions:

Number of c-planes: 2

Candela at center: 7303 cd

ISO LUX DIAGRAM



3%	2,19 lx
5%	3,65 lx
10%	7,30 lx
30%	21,9 lx
50%	36,5 lx

Conditions:

Number of c-planes: 2

Lux at center: 73,0 lx

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



Total lumen output:

1122 lm

Peak candela output:

3770 cd

Light quality:

CRI: 96,6

Color temperature:

5419 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Wash 1530 Max Zoom

Target:

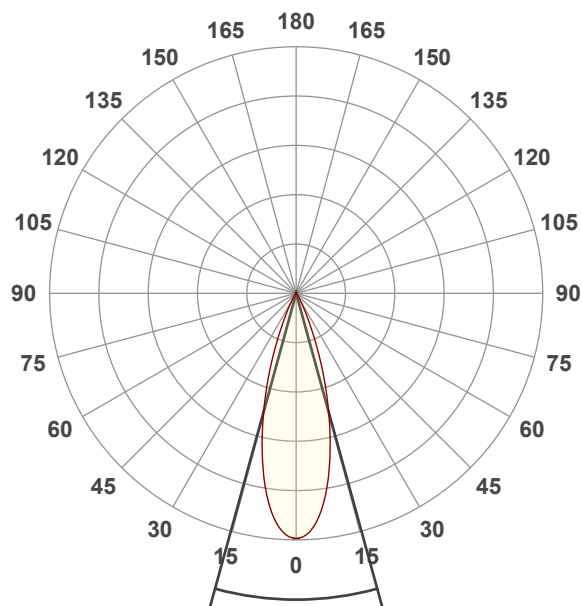
Cold White

Operator:

Paolo Carvone

Date and time:

29/03/2023 11:40:25

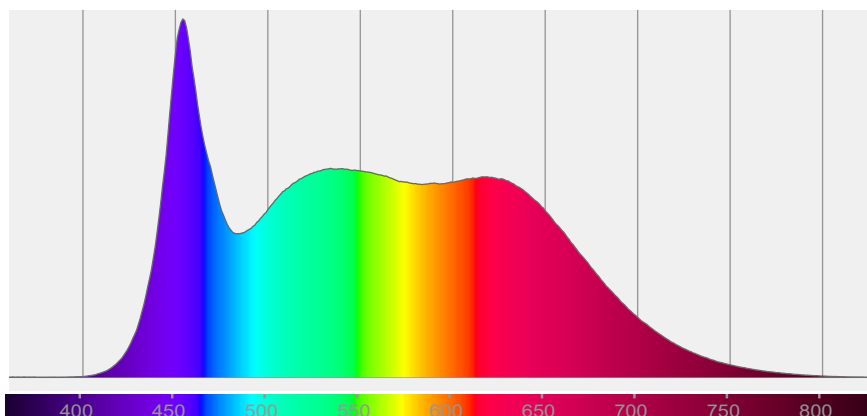


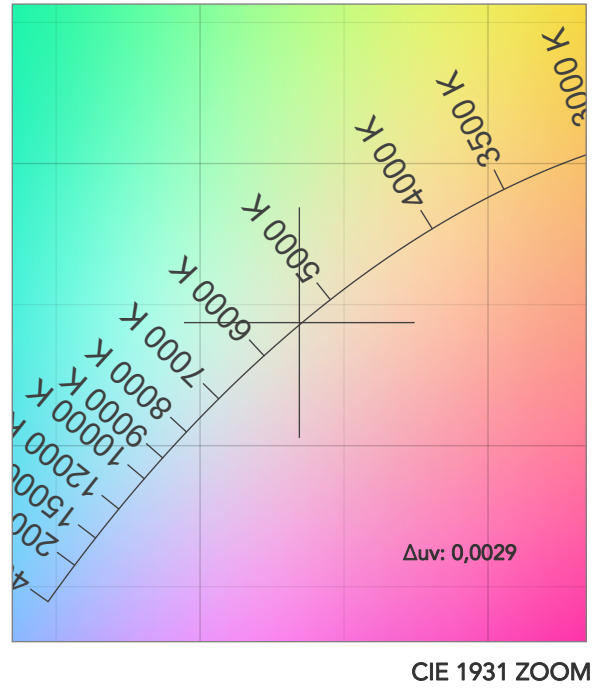
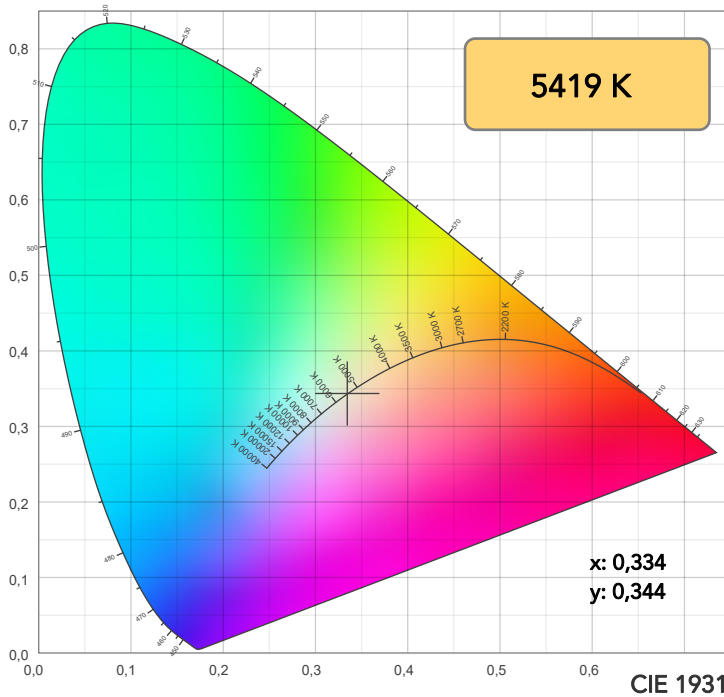
Beam angle 50%: 30,7°

Field angle 10%: 50,9°

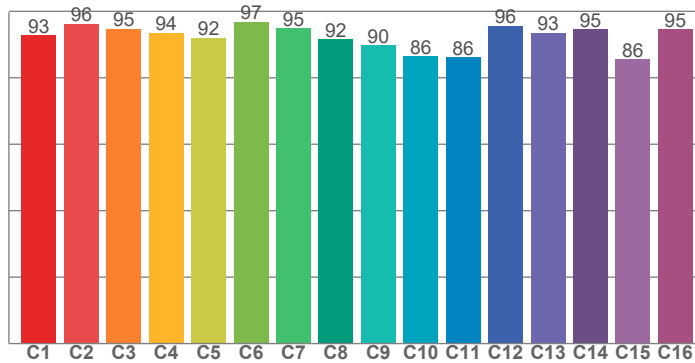
Cut off angle 2.5%: 64,3°

Spectra

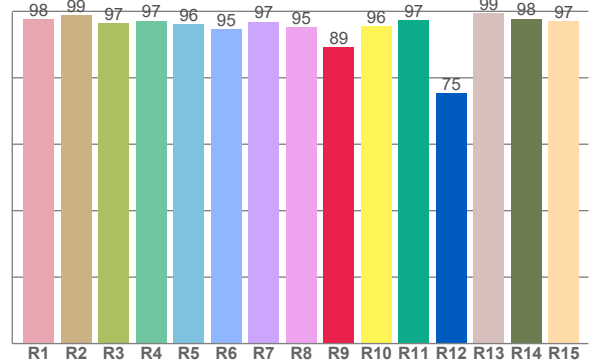




TM30: 92,3



CRI: 96,6 (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
97,7	98,7	96,5	97,1	96,1	94,5	96,9	95,2	89,1	95,5	97,3	75,3	99,3	97,8	96,9

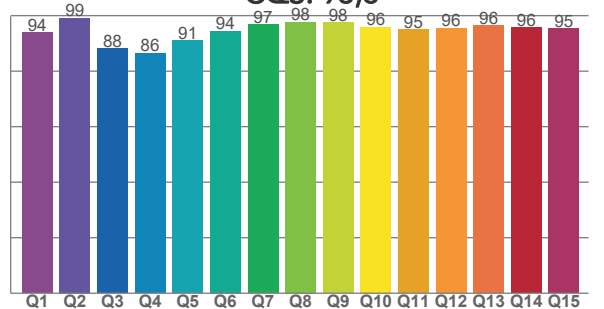
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,8	96,3	94,8	93,5	92,1	96,8	94,9	91,6	89,8	86,5	86,1	95,7	93,5	94,5	85,6	94,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93,9	99,2	88,1	86,4	91,0	94,4	96,7	97,7	97,6	95,8	95,0	95,6	96,4	95,7	95,4

CQS: 93,6



COLOR PARAMETERS

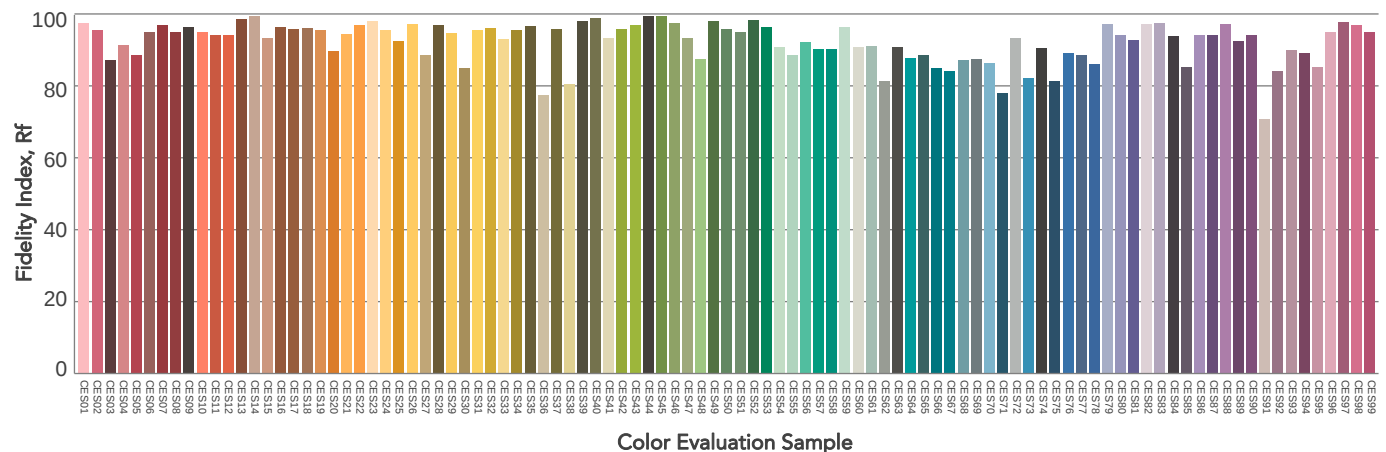
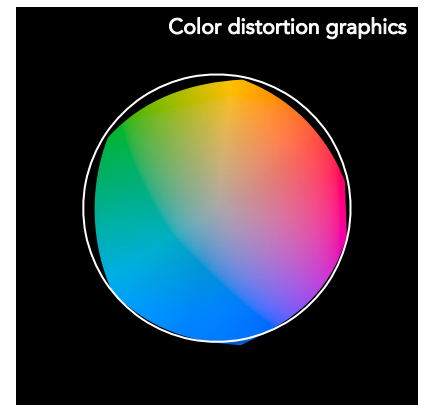
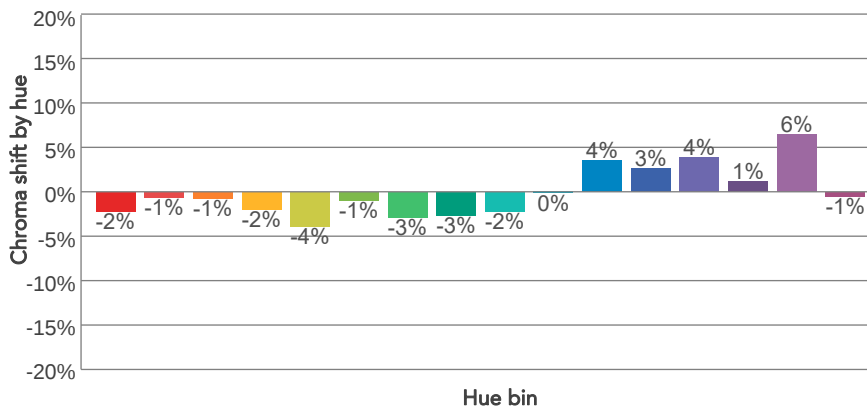
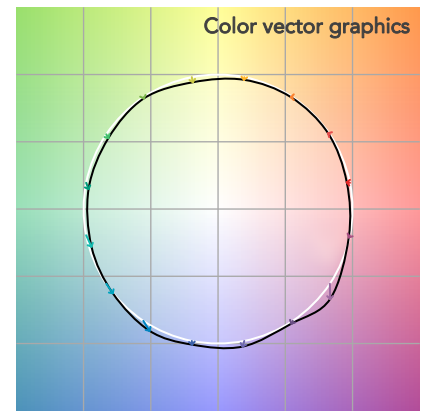
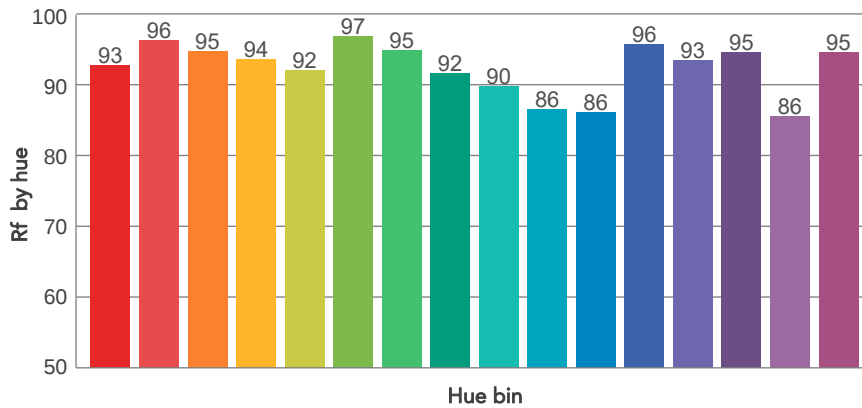
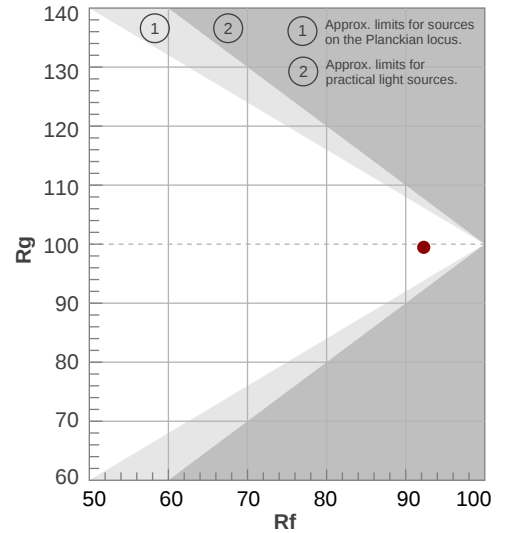
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5419 K	96,6	89,1	92,3	99,5	93,6	98	0,334	0,344	0,0029

TM30 DETAILS

Rf 92,3
Fidelity index Rf

Rg 99,5
Gammut index

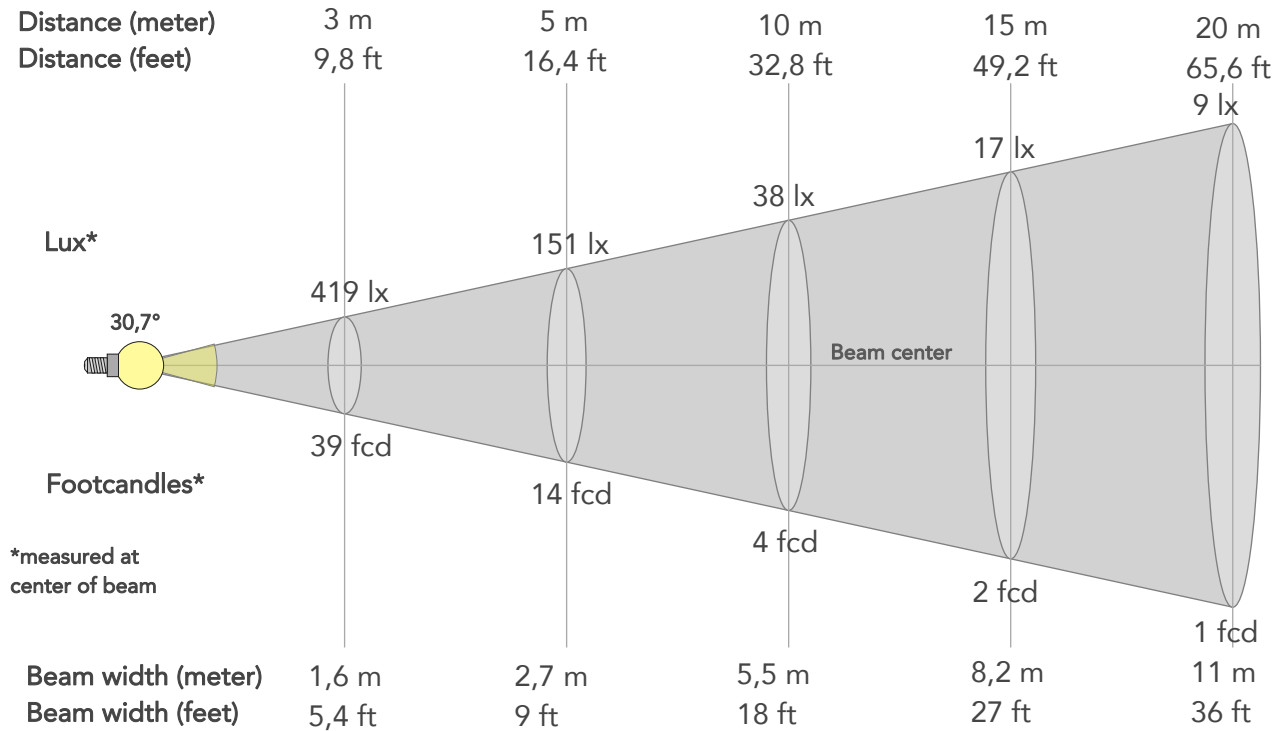
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	93	-2%	1%
2	96	-1%	1%
3	95	-1%	1%
4	94	-2%	0%
5	92	-4%	0%
6	97	-1%	0%
7	95	-3%	1%
8	92	-3%	4%
9	90	-2%	9%
10	86	0%	9%
11	86	4%	8%
12	96	3%	1%
13	93	4%	-2%
14	95	1%	-2%
15	86	6%	-9%
16	95	-1%	-2%



BEAM DETAILS



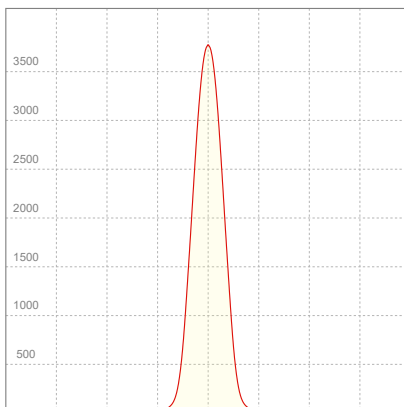
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,7°	50,9°	64,3°	99,7%	98,3%



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	3770lx	943lx	419lx	236lx	151lx	67lx	38lx	17lx	9lx	6lx	4lx	2lx	2lx
Footcand.	350fcd	88fcd	39fcd	22fcd	14fcd	6fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,2m	2,7m	4,1m	5,5m	8,2m	11m	13,7m	16,5m	22m	27,5m
Beam wid.	1,8ft	3,6ft	5,4ft	7,2ft	9ft	13,5ft	18ft	27ft	36ft	45ft	54ft	72ft	90,1ft

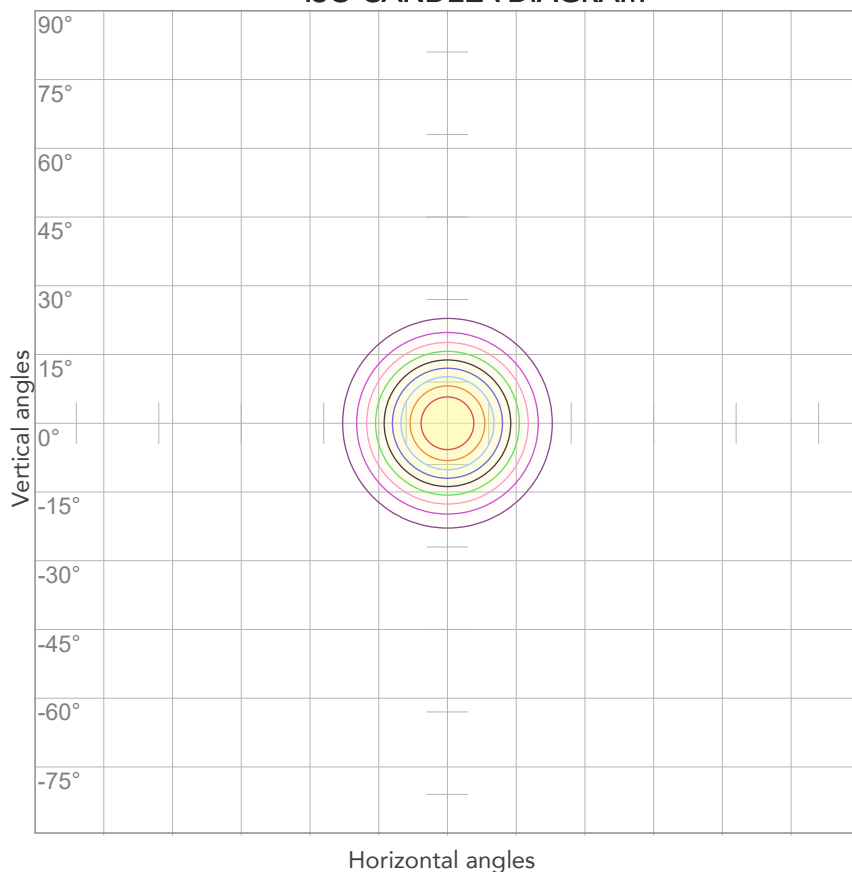
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
228V	0,156A	32,1W	35lm/W

ISO CANDELA DIAGRAM



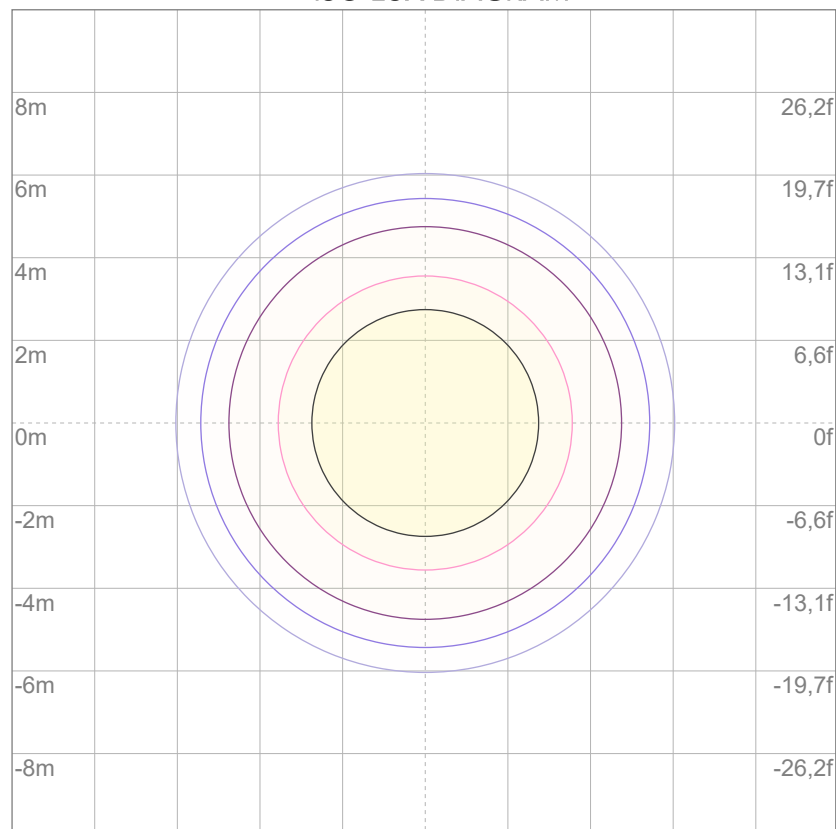
10%	377 cd
20%	754 cd
30%	1131 cd
40%	1508 cd
50%	1885 cd
60%	2262 cd
70%	2639 cd
80%	3016 cd

Conditions:

Number of c-planes: 2

Candela at center: 3770 cd

ISO LUX DIAGRAM



3%	1,13 lx
5%	1,89 lx
10%	3,77 lx
30%	11,3 lx
50%	18,9 lx

Conditions:

Number of c-planes: 2

Lux at center: 37,7 lx

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



Total lumen output:

852 lm

Peak candela output:

10066 cd

Light quality:

CRI: 96,6

Color temperature:

5331 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Wash 1530 Min Zoom

Target:

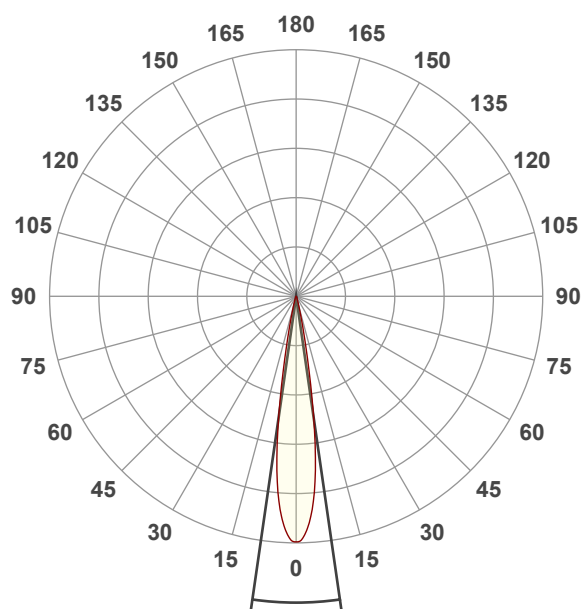
Cold White

Operator:

Paolo Carvone

Date and time:

29/03/2023 11:38:31

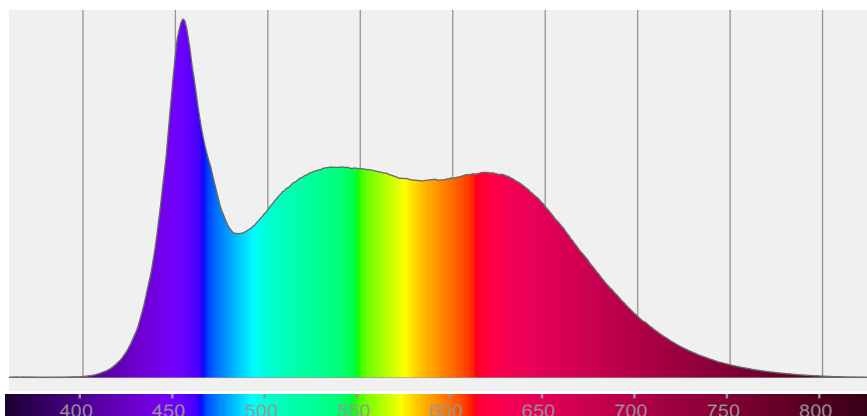


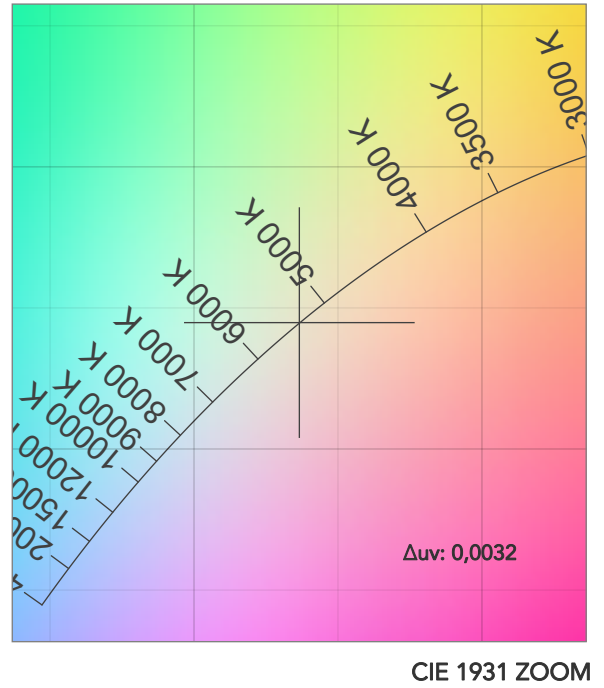
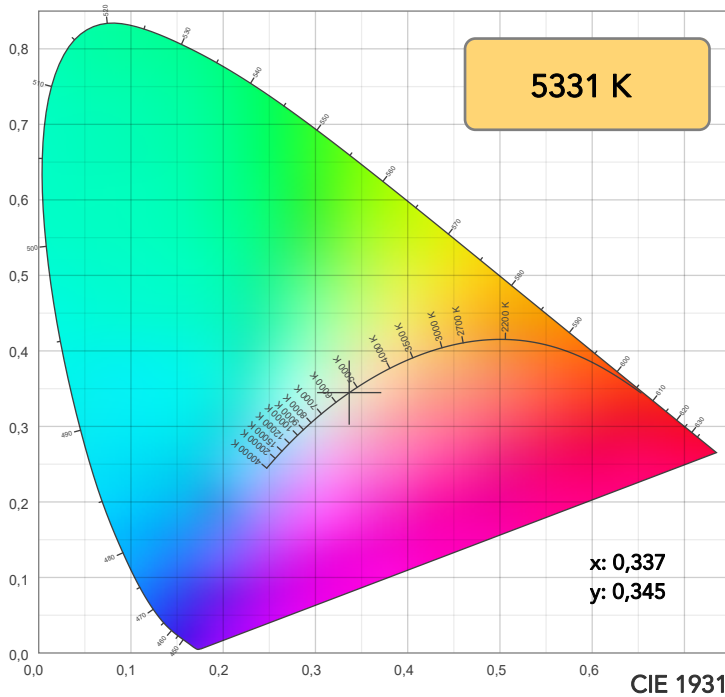
Beam angle 50%: 16,4°

Field angle 10%: 25,7°

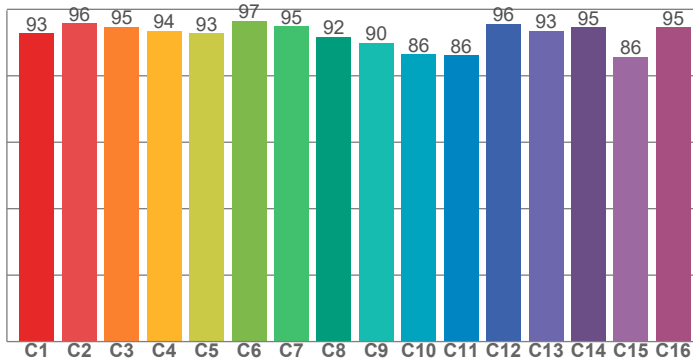
Cut off angle 2.5%: 34,6°

Spectra

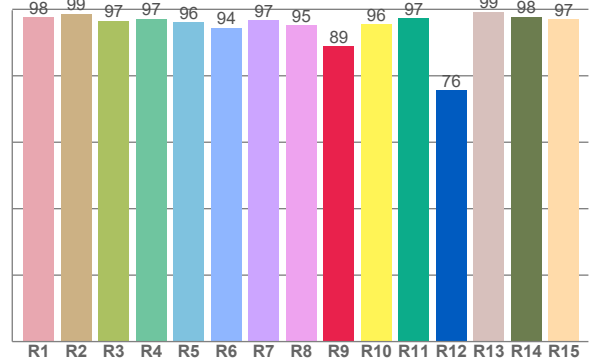




TM30: 92,3



CRI: 96,6 (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
97,7	98,7	96,5	97,1	96,2	94,5	96,8	95,1	88,9	95,6	97,2	75,6	99,3	97,8	97,0

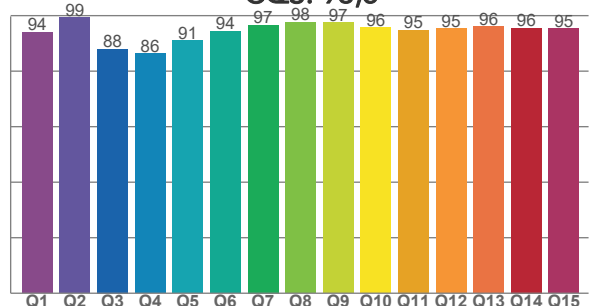
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,7	95,7	94,8	93,5	92,8	96,6	94,9	91,7	89,8	86,4	86,1	95,6	93,5	94,5	85,7	94,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,0	99,3	87,9	86,3	91,0	94,4	96,6	97,6	97,5	95,6	94,7	95,3	96,1	95,6	95,3

CQS: 93,5



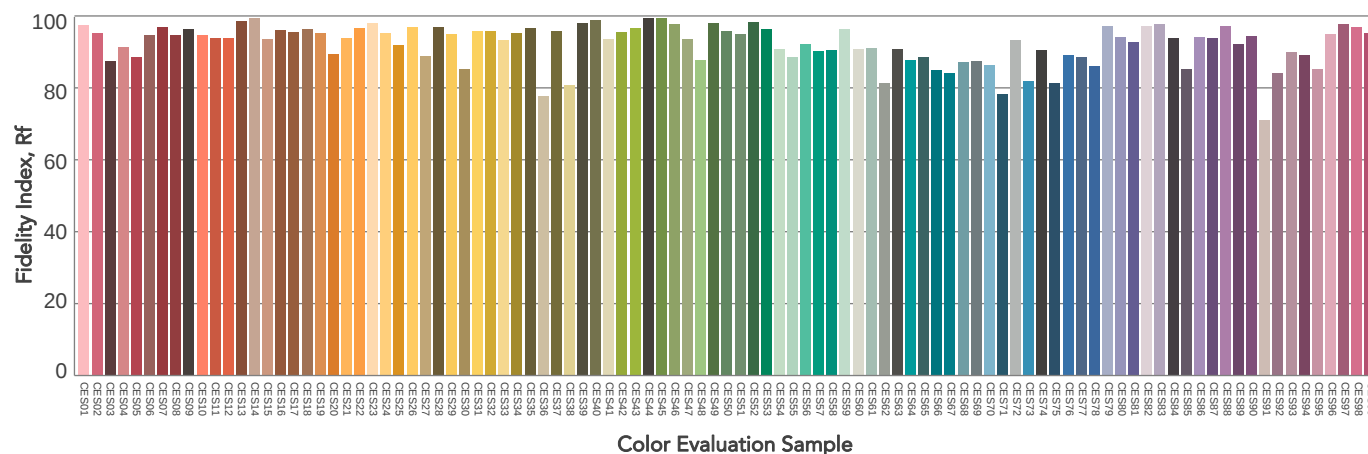
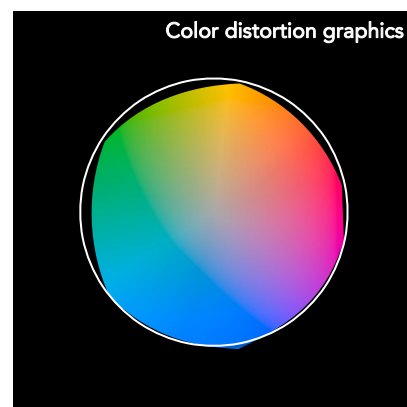
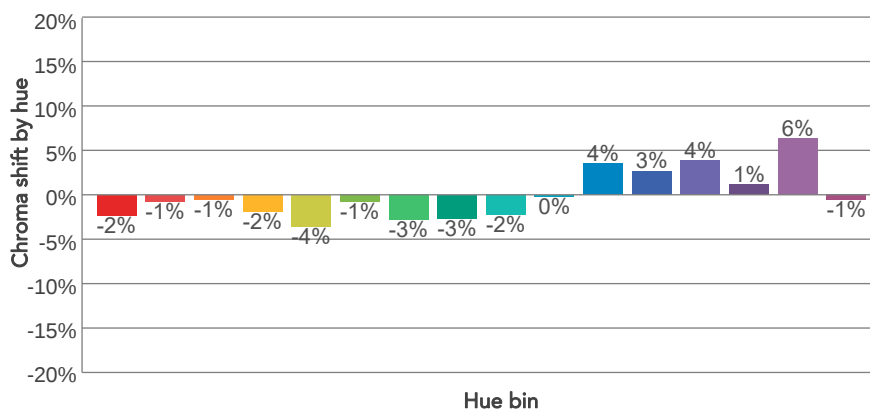
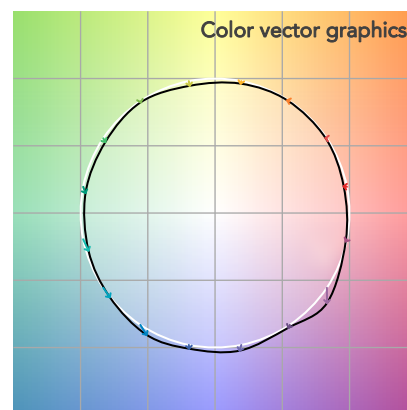
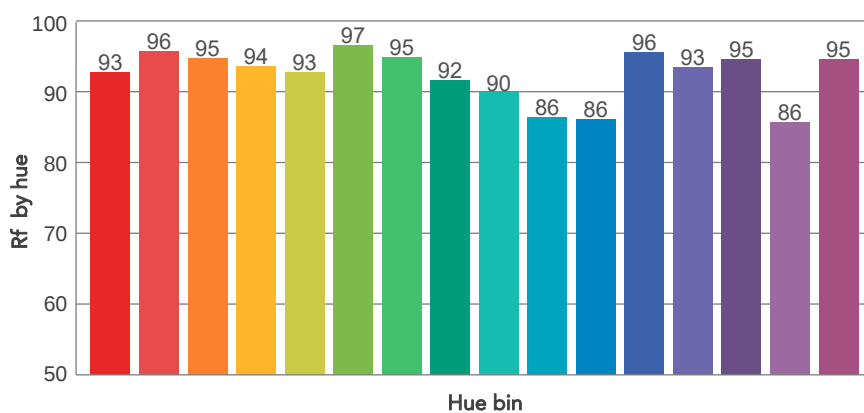
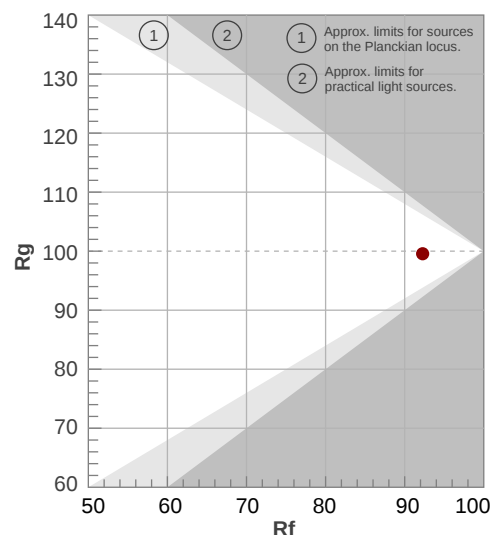
COLOR PARAMETERS

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	Δuv
5331 K	96,6	88,9	92,3	99,6	93,5	98	0,337	0,345	0,0032

Fidelity index R_f

Gammut index

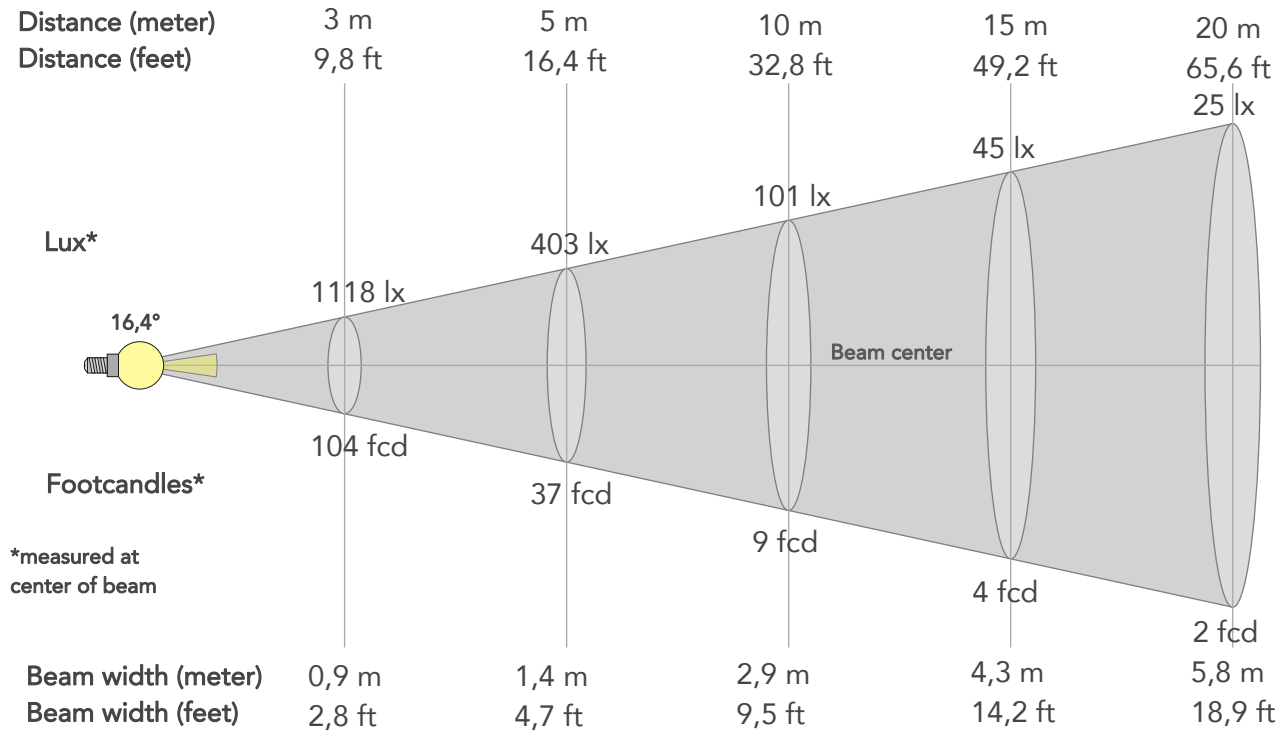
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	93	-2%	1%
2	96	-1%	1%
3	95	-1%	2%
4	94	-2%	0%
5	93	-4%	0%
6	97	-1%	0%
7	95	-3%	1%
8	92	-3%	4%
9	90	-2%	9%
10	86	0%	9%
11	86	4%	8%
12	96	3%	1%
13	93	4%	-2%
14	95	1%	-2%
15	86	6%	-9%
16	95	-1%	-2%



BEAM DETAILS



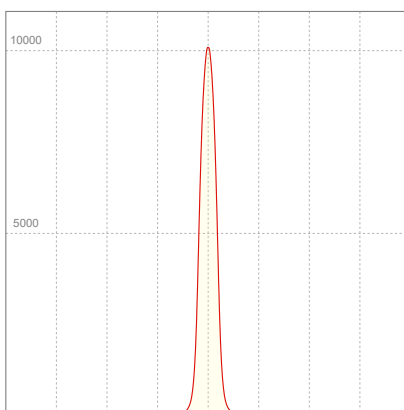
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16,4°	25,7°	34,6°	100,0%	99,9%



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	10066lx	2517lx	1118lx	629lx	403lx	179lx	101lx	45lx	25lx	16lx	11lx	6lx	4lx
Footcand.	935fcd	234fcd	104fcd	58fcd	37fcd	17fcd	9fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,3m	0,6m	0,9m	1,2m	1,4m	2,2m	2,9m	4,3m	5,8m	7,2m	8,7m	11,5m	14,4m
Beam wid.	1ft	1,9ft	2,8ft	3,8ft	4,7ft	7,1ft	9,5ft	14,2ft	18,9ft	23,7ft	28,4ft	37,9ft	47,3ft

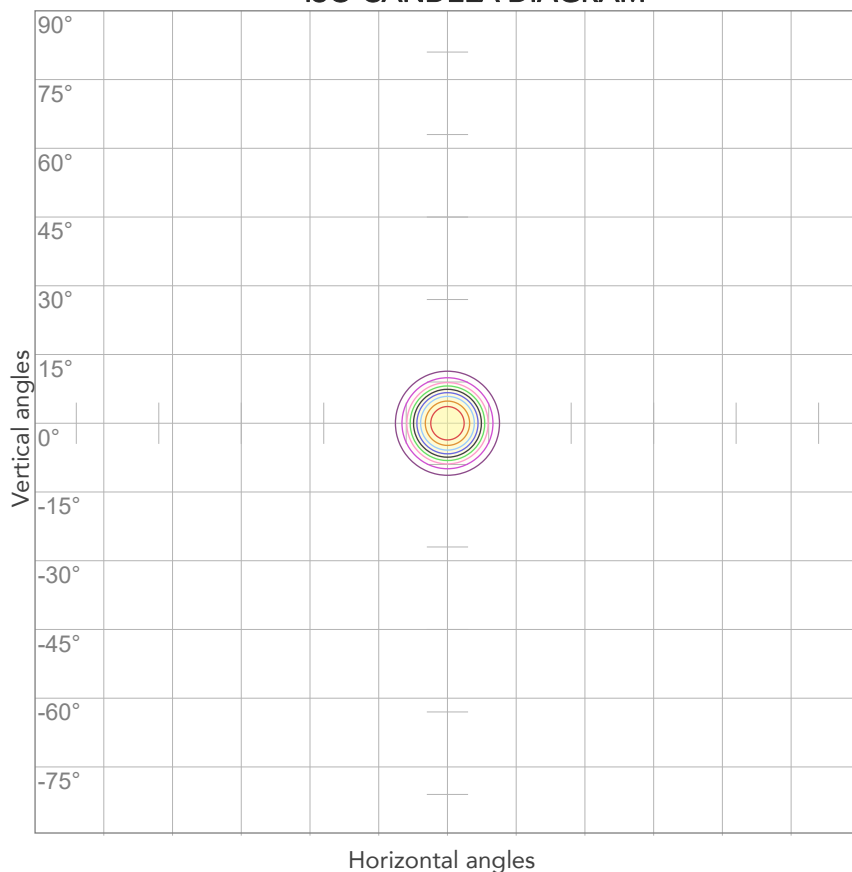
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
229V	0,158A	33,2W	26lm/W

ISO CANDELA DIAGRAM



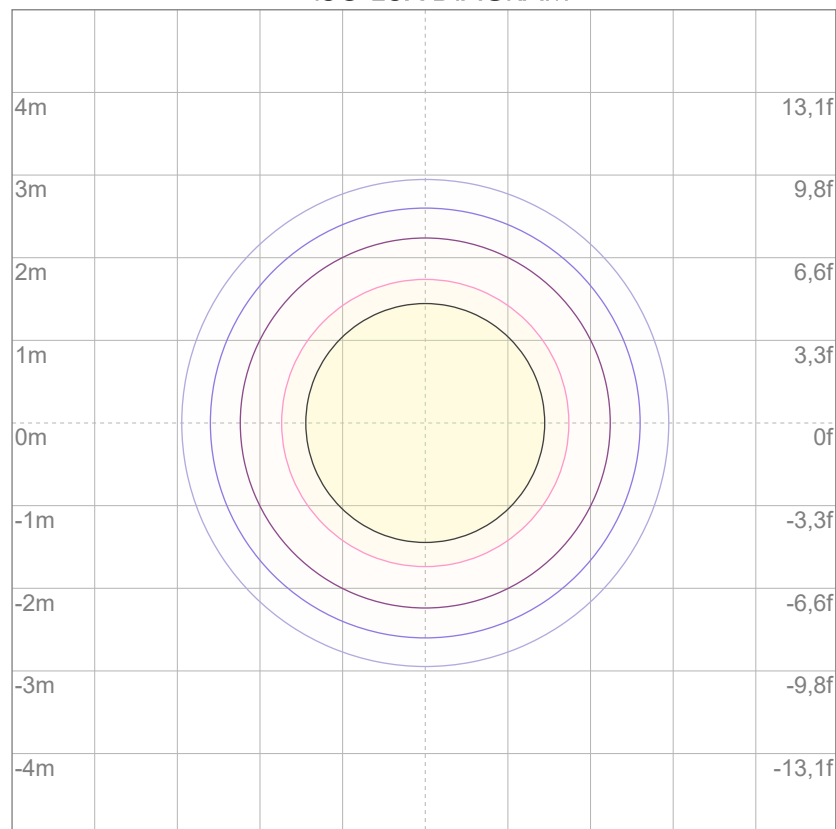
10%	1007 cd
20%	2013 cd
30%	3020 cd
40%	4027 cd
50%	5033 cd
60%	6040 cd
70%	7046 cd
80%	8053 cd

Conditions:

Number of c-planes: 2

Candela at center: 10066 cd

ISO LUX DIAGRAM



3%	3,02 lx
5%	5,03 lx
10%	10,1 lx
30%	30,2 lx
50%	50,3 lx

Conditions:

Number of c-planes: 2

Lux at center: 101 lx

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