

Light efficiency:

70 Lumen/Watt

Light quality:

CRI: 57.6

Color temperature:

7474 K

Output: 1399 lm

Peak: 412 cd

Power: 19.8 W

PF: 1.0



Tracking number: [n/a](#)

Product name:

**PC10.5MRBORGBWADR2012.0RGB3
0-ALL ON**

Item number:

Date and time:

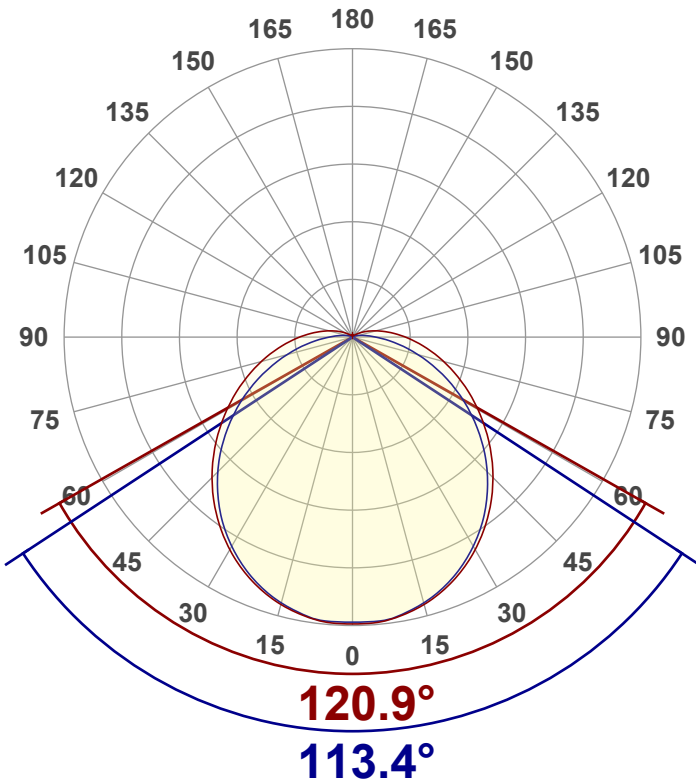
2024/9/25 17:28:42

Operator:

Nick

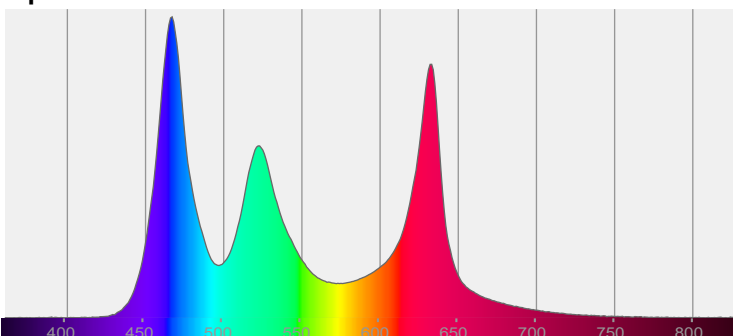
Description:

DIAMETER 40.6MM,LENGTH 500MM

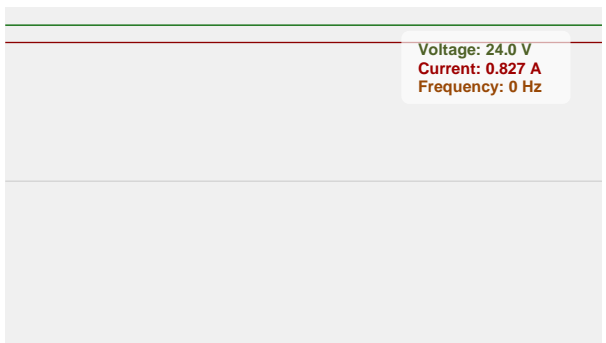


CIE 1931
x: 0.301
y: 0.311

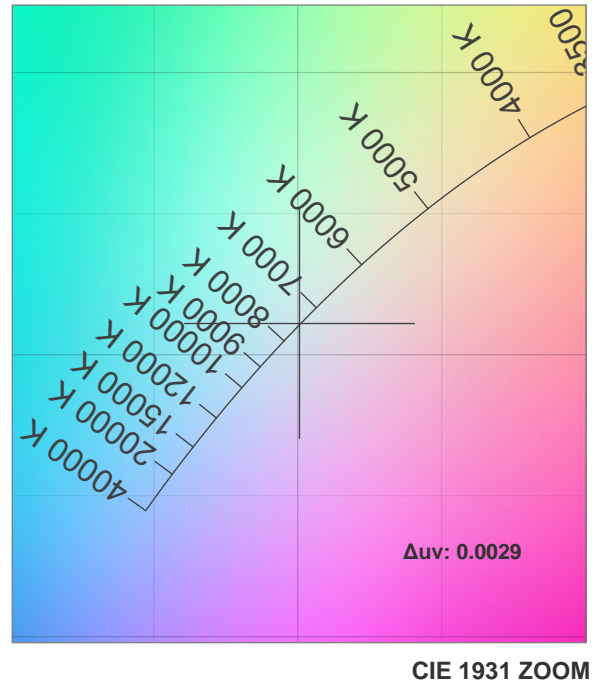
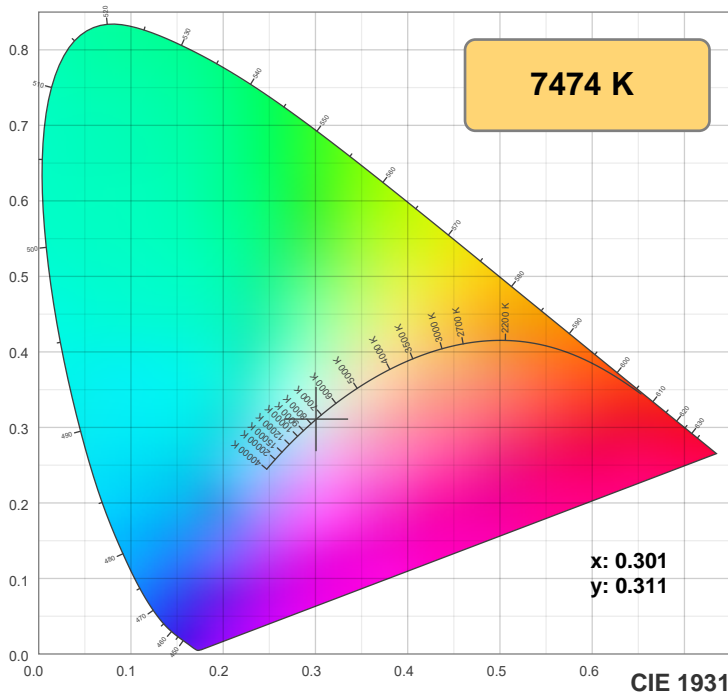
Spectra



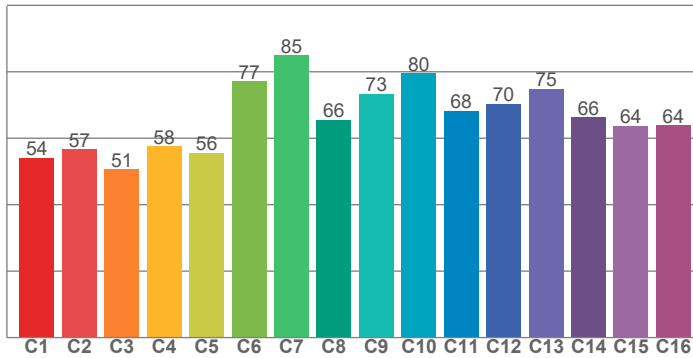
Power



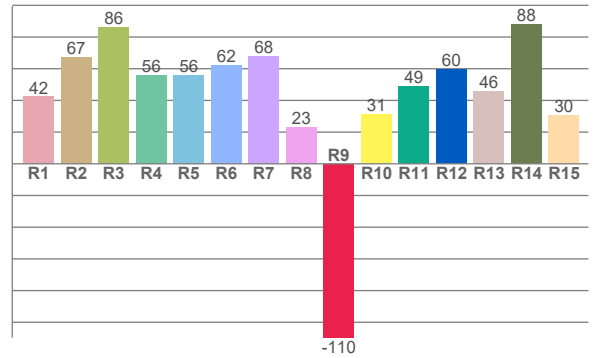
Voltage: 24.0 V
Current: 0.827 A
Frequency: 0 Hz



TM-30: 65.9



CRI: 57.6 (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
42.3	67.3	85.9	56.0	56.0	62.0	67.8	23.2	-109.7	31.2	48.7	59.6	46.0	88.0	30.5

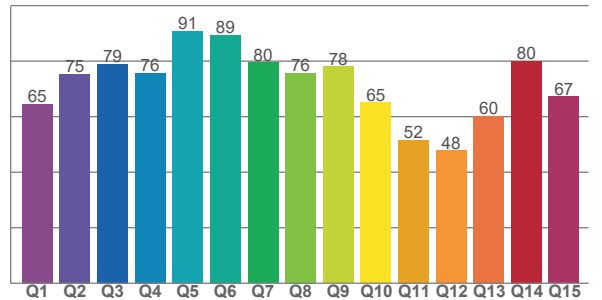
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
54.1	56.7	50.7	57.6	55.6	77.1	85.0	65.6	73.4	79.5	68.3	70.4	74.9	66.2	63.7	63.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
64.6	75.3	79.1	75.7	90.9	89.4	79.5	75.8	78.0	65.0	51.6	47.8	60.2	80.0	67.3

CQS: 69.5



Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
7474 K	57.6	-109.7	65.9	102.1	69.5	0.301	0.311	0.196	0.304	0.0029

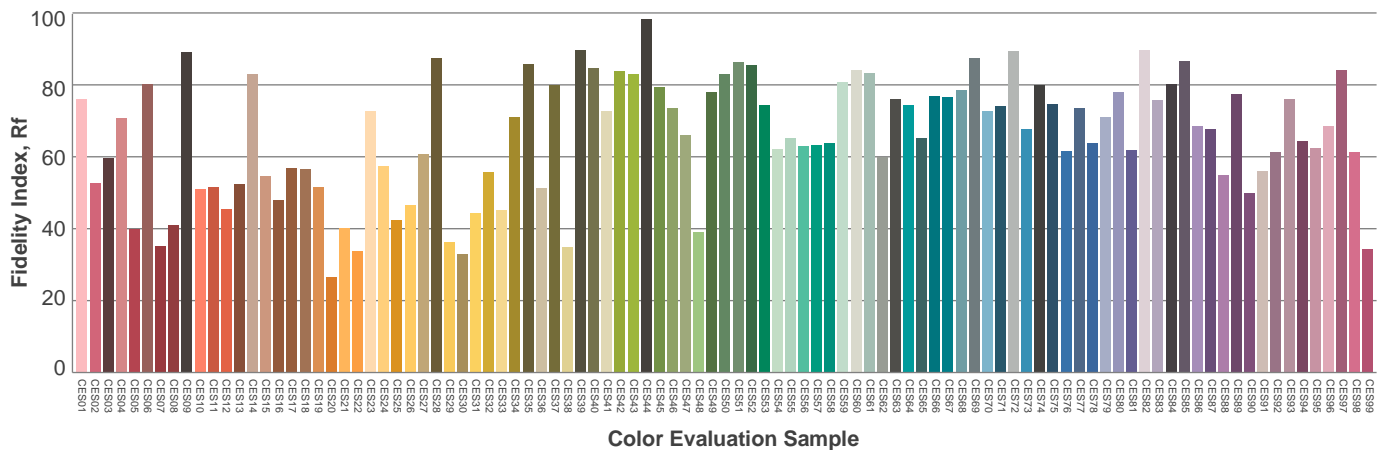
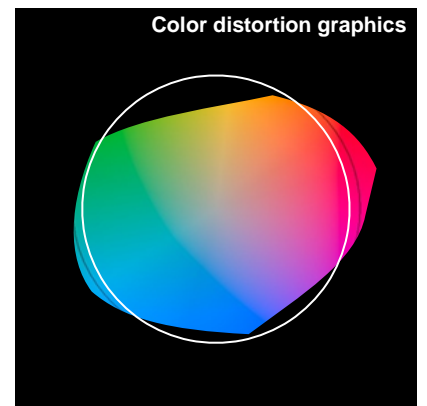
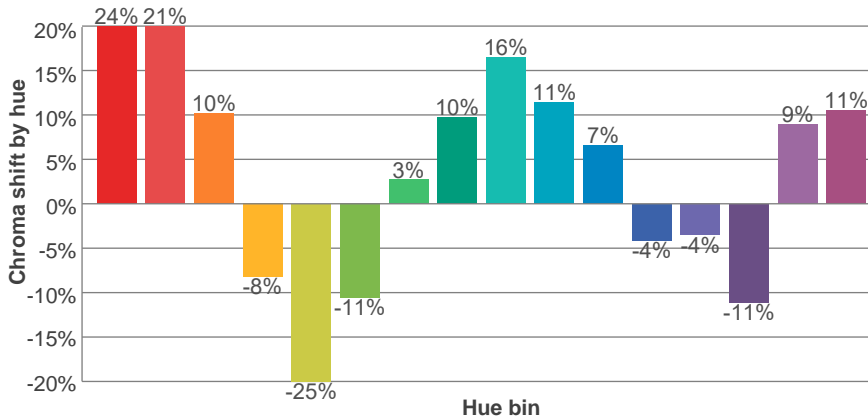
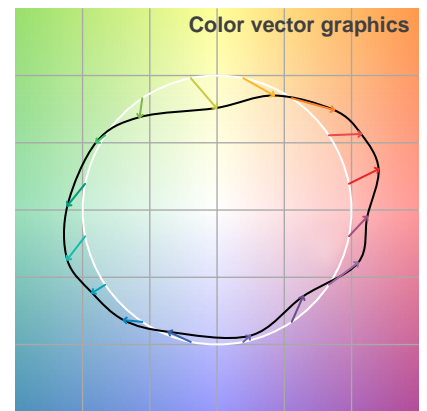
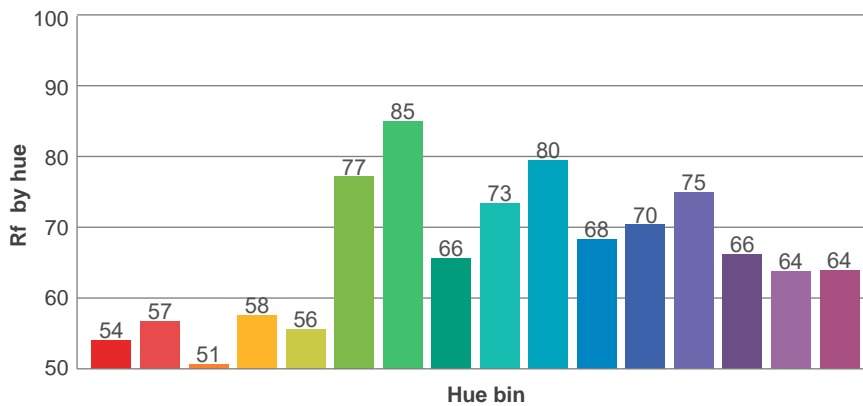
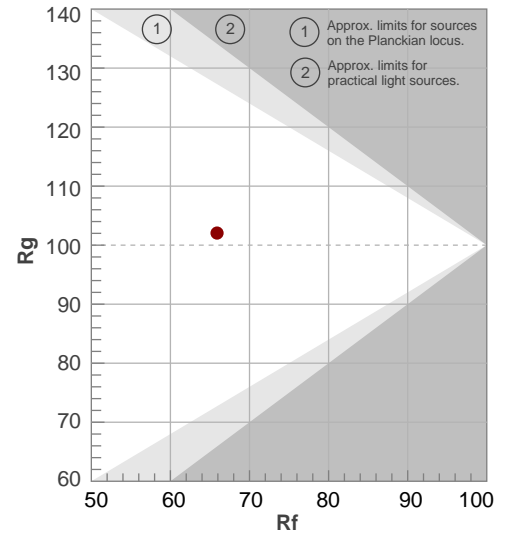
Rf 65.9

Fidelity index Rf

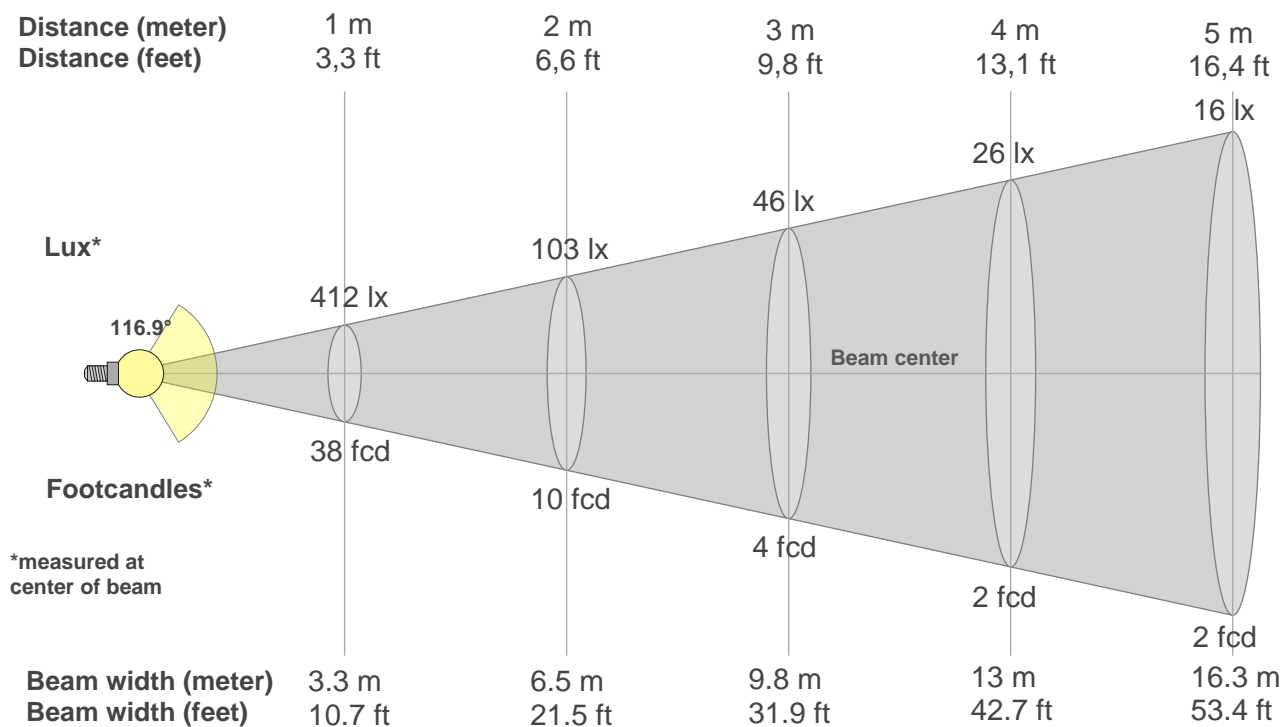
Rg 102.1

Gamut index Rg

Hue Bin	R _f	Shifts (%)	
		Chroma	Hue
1	54	24%	6%
2	57	21%	-13%
3	51	10%	-31%
4	58	-8%	-25%
5	56	-25%	-14%
6	77	-11%	10%
7	85	3%	8%
8	66	10%	18%
9	73	16%	14%
10	80	11%	0%
11	68	7%	-12%
12	70	-4%	-18%
13	75	-4%	6%
14	66	-11%	18%
15	64	9%	26%
16	64	11%	17%



Beam details



Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
412lx	103lx	46lx	26lx	16lx	11lx	8lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx
38.2fcd	9.6fcd	4.2fcd	2.4fcd	1.5fcd	1.1fcd	0.8fcd	0.6fcd	0.5fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd

Intensities in 0° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
412	406	389	362	327	285	239	193	149	110	76	49	29	15	8	4	3	3	3	3
100%	99%	95%	88%	79%	69%	58%	47%	36%	27%	18%	12%	7%	4%	2%	1%	1%	1%	1%	1%

Intensities in 90° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
412	404	387	358	320	273	221	167	114	68	34	16	6	3	3	2	2	3	3	3
100%	98%	94%	87%	78%	66%	54%	40%	28%	17%	8%	4%	2%	1%	1%	1%	1%	1%	1%	1%

Intensities in 180° c-plane

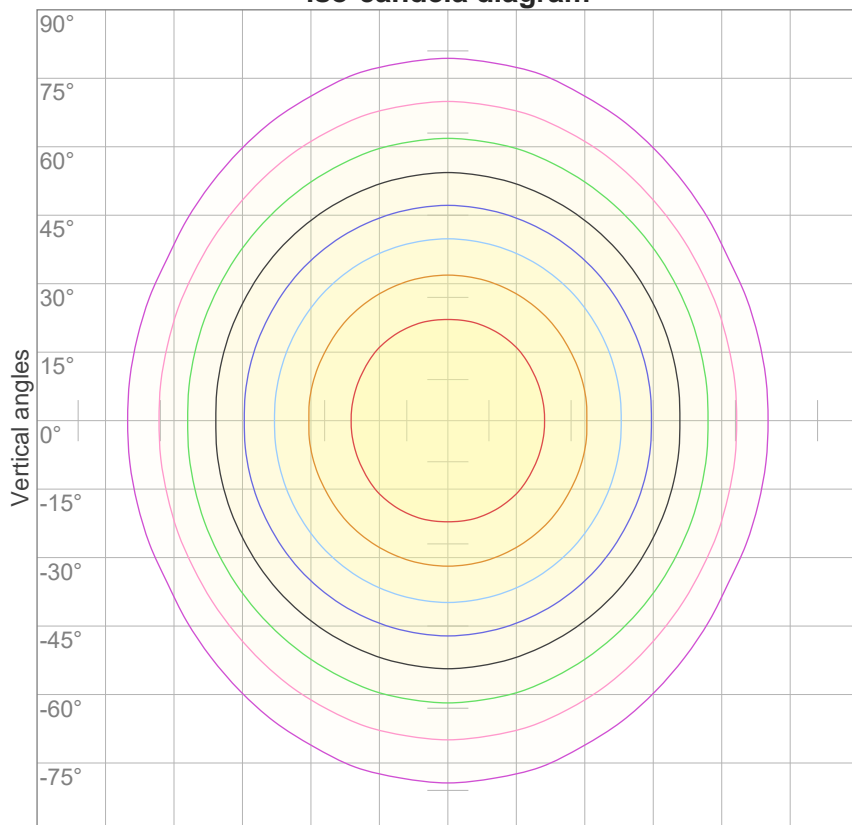
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
412	406	389	362	327	285	239	193	149	110	76	49	29	15	8	4	3	3	3	3
100%	99%	95%	88%	79%	69%	58%	47%	36%	27%	18%	12%	7%	4%	2%	1%	1%	1%	1%	1%

Intensities in 270° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
412	404	387	358	320	273	221	167	114	68	34	16	6	3	3	2	2	3	3	3
100%	98%	94%	87%	78%	66%	54%	40%	28%	17%	8%	4%	2%	1%	1%	1%	1%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
116.9°	188.4°	230.9°	67.3%	45.3%

iso-candela diagram



Horizontal angles

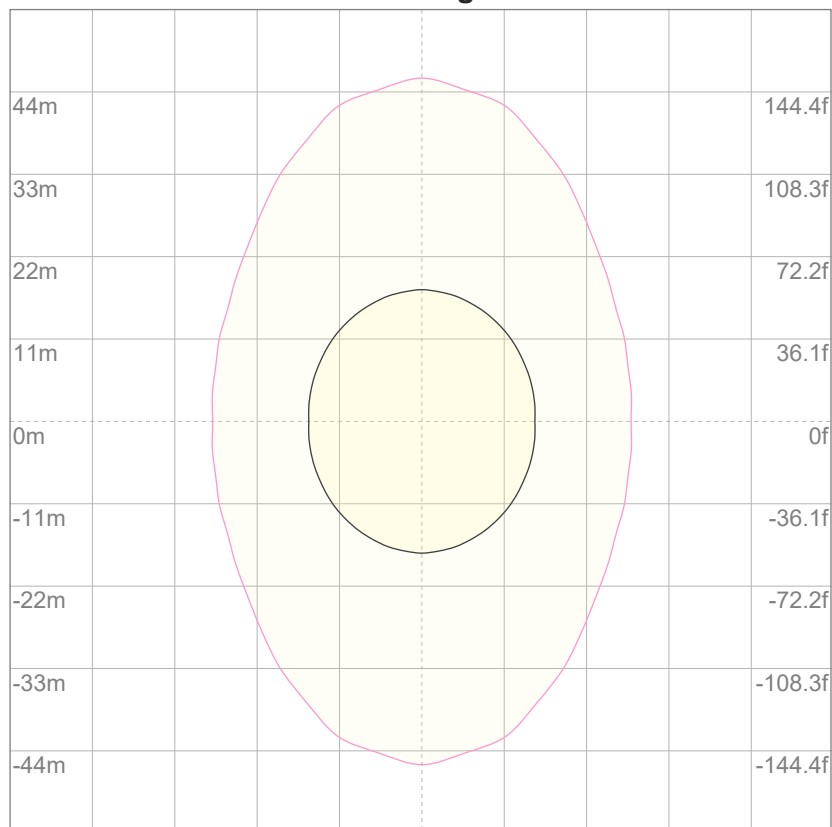
10%	41 cd
20%	82 cd
30%	123 cd
40%	165 cd
50%	206 cd
60%	247 cd
70%	288 cd
80%	329 cd
90%	370 cd

Conditions:

Number of c-planes: 24

Candela at center: 412 cd

iso-lux diagram



Mounting height: 10 meters (33 feet)

3%	0.123 lx
5%	0.206 lx
10%	0.412 lx
30%	1.23 lx
50%	2.06 lx

Conditions:

Number of c-planes: 24

Lux at center: 4.12 lx

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

Glare evaluation according to UGR

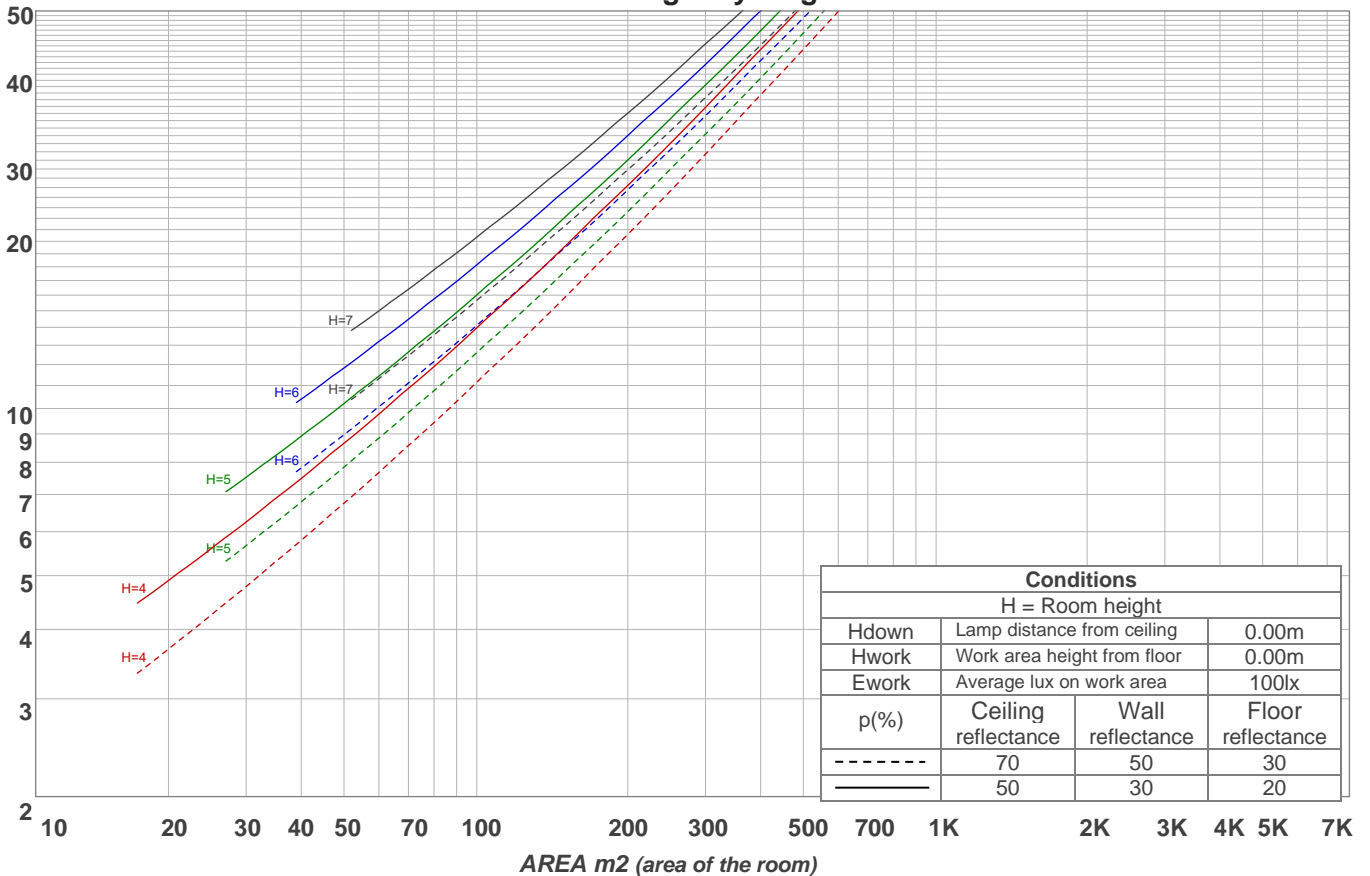
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	19.6	20.8	19.9	21.2	21.5	20.7	21.9	21.0	22.3	22.6
	3H	21.0	22.3	21.5	22.7	23.0	22.2	23.5	22.7	23.9	24.2
	4H	21.8	22.9	22.3	23.3	23.7	23.0	24.2	23.5	24.5	24.9
	6H	22.5	23.5	22.9	23.9	24.4	23.7	24.7	24.1	25.1	25.6
	8H	22.8	23.8	23.2	24.2	24.7	24.0	25.0	24.4	25.4	26.0
	12H	23.0	24.0	23.5	24.5	25.0	24.3	25.3	24.8	25.7	26.3
4H	2H	20.2	21.3	20.7	21.7	22.1	21.0	22.2	21.5	22.6	23.0
	3H	21.9	23.0	22.4	23.4	23.9	22.9	23.9	23.3	24.3	24.9
	4H	22.7	23.7	23.3	24.2	24.8	23.6	24.6	24.2	25.1	25.7
	6H	23.5	24.4	24.1	24.9	25.4	24.4	25.3	25.0	25.8	26.3
	8H	23.9	24.7	24.5	25.2	25.7	24.8	25.6	25.4	26.1	26.6
	12H	24.2	24.9	24.8	25.4	26.0	25.1	25.8	25.7	26.3	26.9
8H	4H	23.0	23.8	23.6	24.3	24.8	23.8	24.6	24.4	25.1	25.6
	6H	24.0	24.6	24.6	25.2	25.9	24.8	25.4	25.4	25.9	26.6
	8H	24.5	25.1	25.1	25.7	26.4	25.2	25.8	25.8	26.4	27.1
	12H	25.0	25.5	25.7	26.1	26.8	25.7	26.1	26.3	26.7	27.4
12H	4H	23.0	23.7	23.6	24.2	24.8	23.9	24.5	24.4	25.1	25.6
	6H	24.1	24.7	24.7	25.3	26.0	24.8	25.4	25.4	26.0	26.7
	8H	24.7	25.1	25.3	25.7	26.4	25.3	25.8	26.0	26.4	27.1
Variation of the observer position for the luminaire distance S											
S = 1.0H		0.1 / -0.1					0.1 / -0.1				
S = 1.5H		0.1 / -0.2					0.2 / -0.3				
S = 2.0H		0.3 / -0.4					0.6 / -0.7				
CIE 117-1995. Corrected glare indices referring to 1399 lm total luminous flux											

Coefficients of Utilization

Ceiling reflectance	80				70				50			30			10			0
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
RCR	(RCR: Room Cavity Ratio) Room Values are expressed as percentage of Lumens delivered to the task surface																	
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93
1	105	100	95	90	102	97	92	88	91	88	84	86	83	81	82	79	77	74
2	95	86	79	72	92	84	77	71	79	73	68	75	70	66	71	67	63	61
3	86	75	66	59	83	73	65	58	69	62	57	65	60	55	62	57	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	46	55	50	45	43
5	72	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	37
6	67	53	44	37	64	52	43	37	49	42	36	47	40	35	45	39	34	32
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	28
8	58	44	35	29	56	43	35	29	41	33	28	39	32	28	37	32	27	25
9	54	40	32	26	52	39	31	26	38	30	25	36	30	25	35	29	24	22
10	50	37	29	24	49	36	29	23	35	28	23	33	27	23	32	26	22	20

LAMPS (number of lamps)

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
{LUM0-10}	112 lm	169 lm	206 lm	215 lm	201 lm	168 lm	121 lm	76.3 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
44.4 lm	23.5 lm	11.8 lm	5.48 lm	2.71 lm	1.79 lm	1.22 lm	0.780 lm	0.272 lm

LCS table

BUG rating:	B1 U2 G1	
Forward light	Lumens	Lumens %
Low(0-30):	159.9	11.4%
Medium(30-60):	310.7	22.2%
High(60-80):	144.5	10.3%
Very high(80-90):	38.3	2.7%
Back light		
Low(0-30):	159.9	11.4%
Medium(30-60):	310.7	22.2%
High(60-80):	144.5	10.3%
Very high(80-90):	38.3	2.7%
Uplight		
Low(90-100):	44	3.1%
High(100-180):	48.1	3.4%

LCS graph

