

Light efficiency:

87 Lumen/Watt

Light quality:

CRI: 92.9

Color temperature:

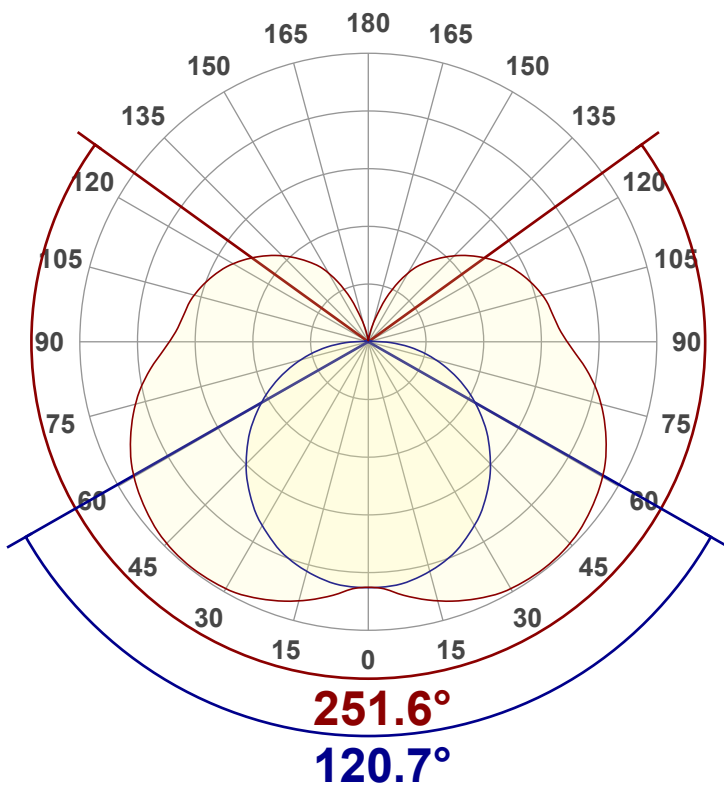
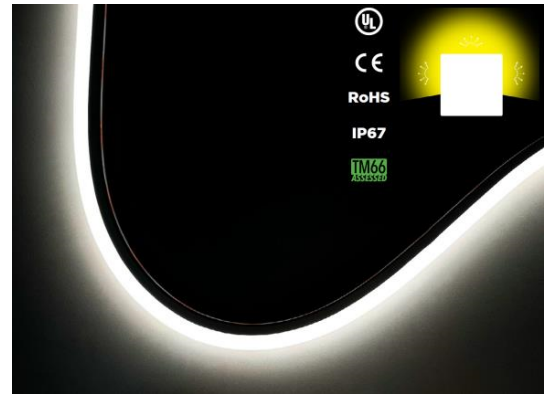
2380 K

Output: 308 lm

Peak: 48.7 cd

Power: 3.5 W

PF: 1.0



Tracking number: [n/a](#)

Product name:
NLA3D4.4VWE, 2400K

Item number:

Date and time:
8/1/2025 11:29:08 AM

Operator:
MW

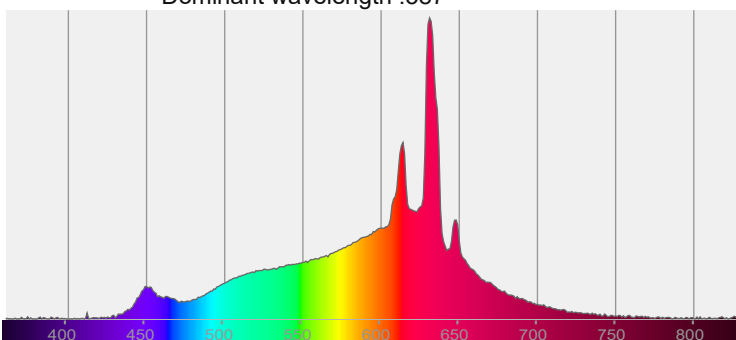
Description:
**color:white 2400K+6000K,
Power:14.4w/m,voltage:24V,length:
0.5m**



CIE 1931
x: 0.484
y: 0.409

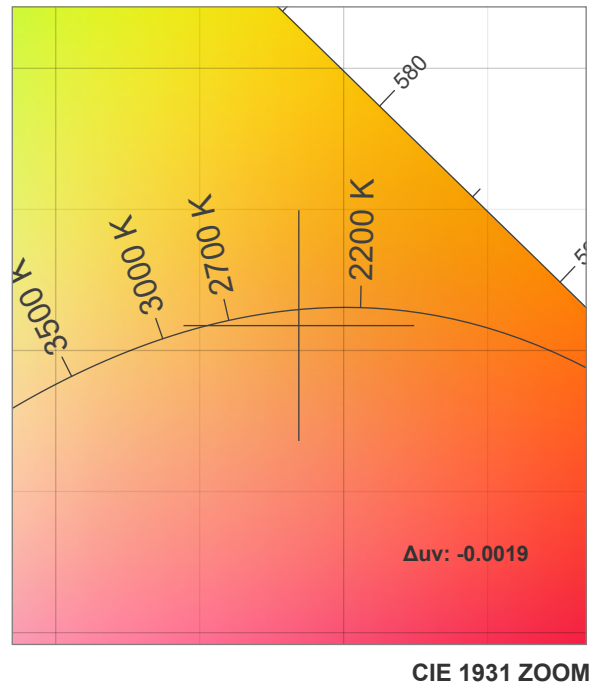
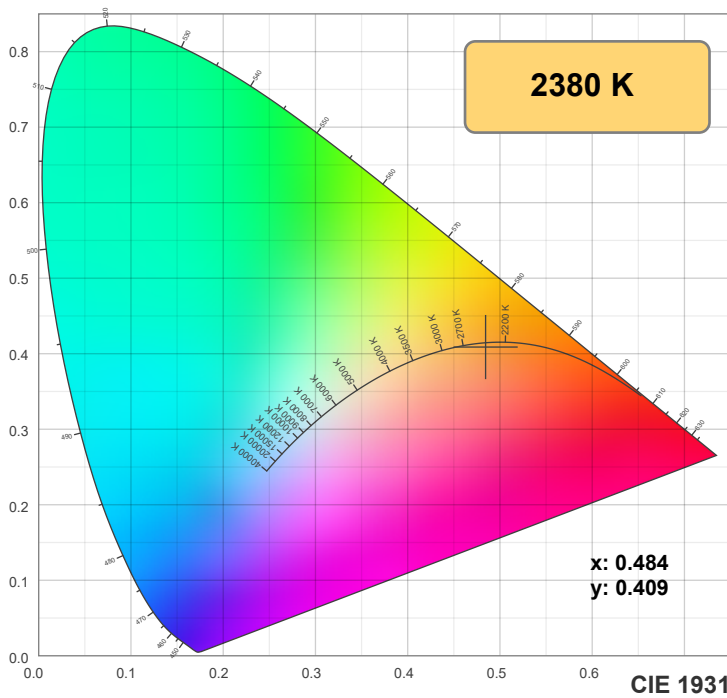
Spectra: Peak wavelength :631

Dominant wavelength :587

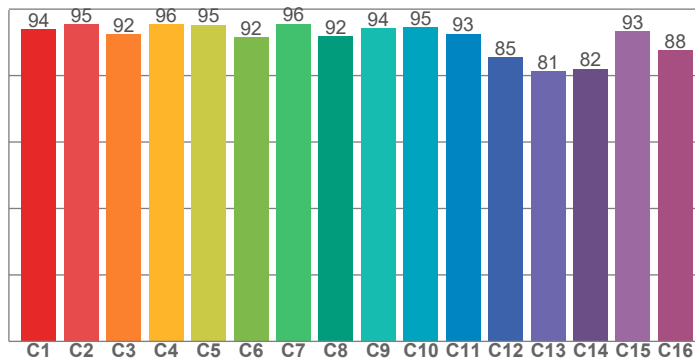


Power

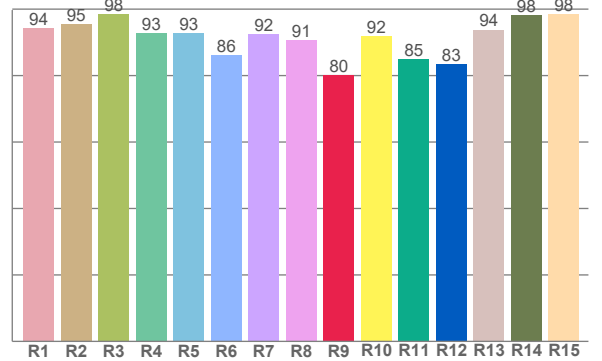
Voltage: 24.0 V
Current: 0.147 A
Frequency: 0 Hz



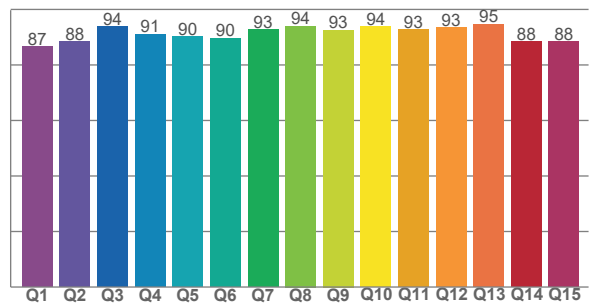
TM-30: 92.2



CRI: 92.9 (R1-R8)



CQS: 90.6



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
94.4	95.4	98.4	92.8	92.8	86.3	92.4	90.6	80.1	91.9	84.9	83.4	93.8	98.1	98.4

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

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93.9	95.5	92.5	95.5	95.3	91.6	95.6	91.9	94.3	94.6	92.6	85.4	81.3	82.1	93.2	87.7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
86.6	88.5	93.8	91.1	90.3	89.7	92.7	94.0	92.6	93.8	92.8	93.5	94.7	88.5	88.4

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
2380 K	92.9	80.1	92.2	102.0	90.6	0.484	0.409	0.279	0.354	-0.0019

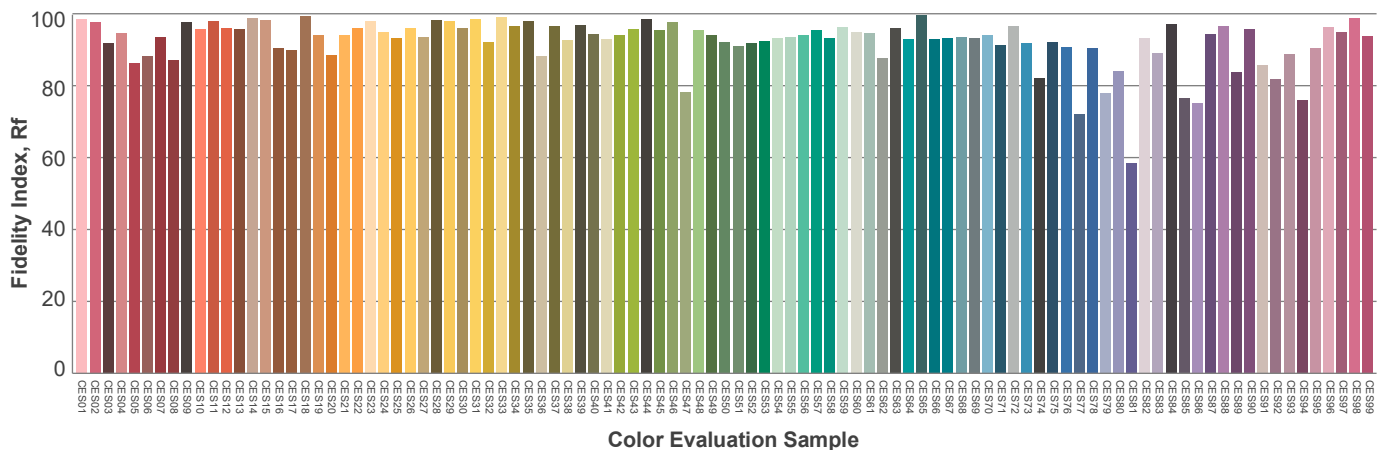
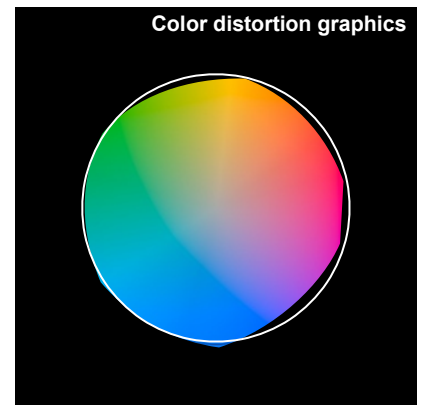
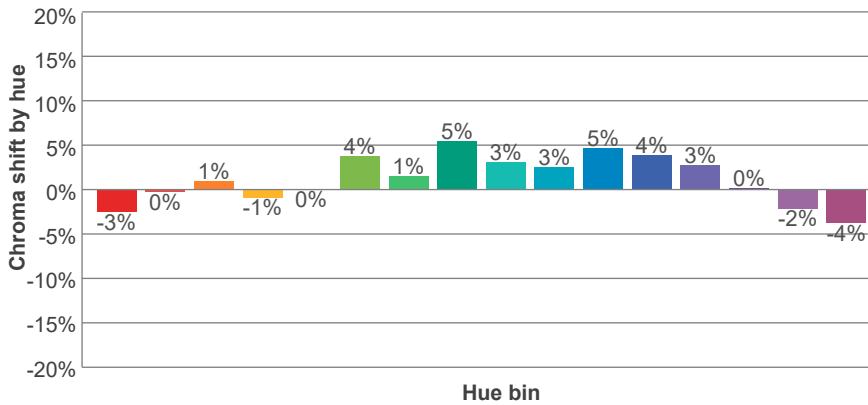
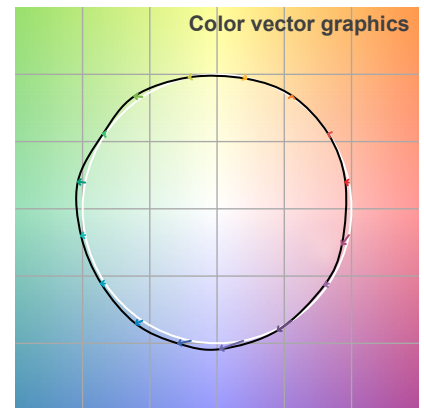
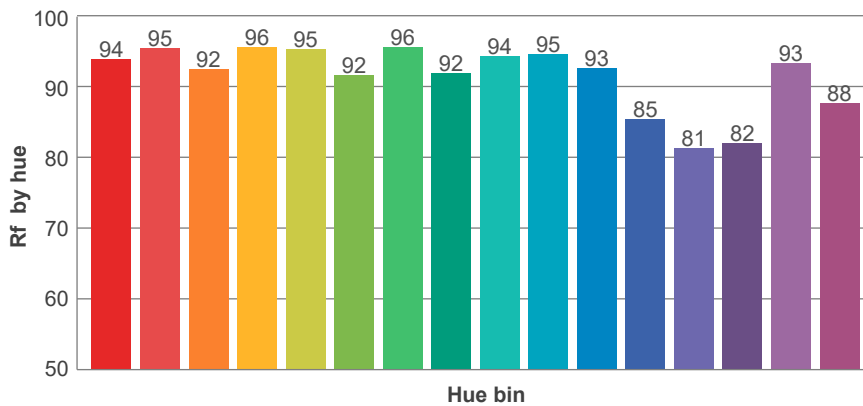
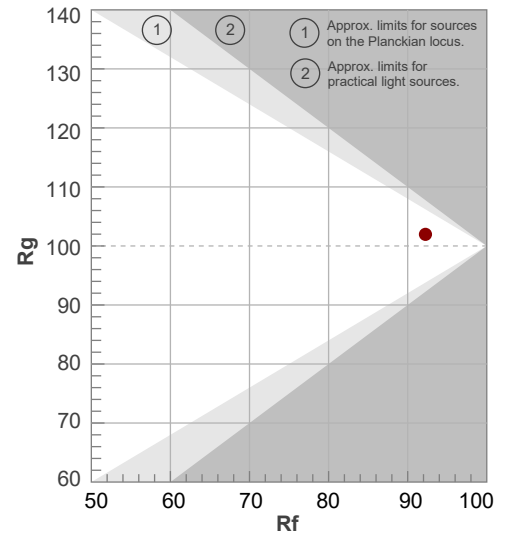
Rf 92.2

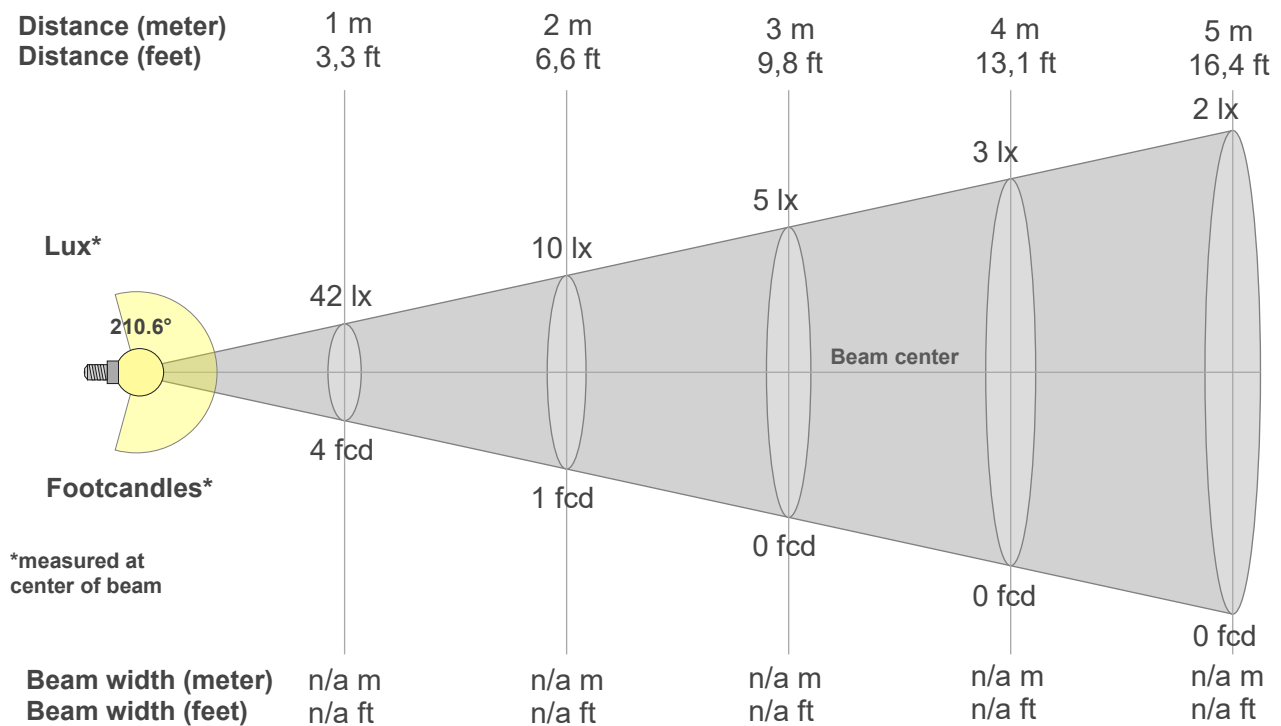
Fidelity index Rf

Rg 102.0

Gamut index Rg

Hue Bin	R _f	Shifts (%)	
		Chroma	Hue
1	94	-3%	1%
2	95	0%	0%
3	92	1%	0%
4	96	-1%	-2%
5	95	0%	2%
6	92	4%	5%
7	96	1%	1%
8	92	5%	0%
9	94	3%	0%
10	95	3%	-2%
11	93	5%	-3%
12	85	4%	-9%
13	81	3%	-18%
14	82	0%	-13%
15	93	-2%	-3%
16	88	-4%	-8%





Beam intensities from 1-20m

[illegible]

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°
41.8	43.8	46.3	48.1	48.7	48.4	47.2	45.2	42.1	38.2	33.9	31.6	29.9	27.5	24.3	20.6	16.6	11.4	4.9	0.8
100%	105%	111%	115%	116%	116%	113%	108%	101%	91%	81%	76%	72%	66%	58%	49%	40%	27%	12%	2%

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°
41.8	41.3	39.7	37.1	33.6	29.3	24.5	19.3	13.8	8.2	2.7	0.4	0.5	0.2	0.2	0.2	0.3	0.2	0.2	0.3
100%	99%	95%	89%	80%	70%	59%	46%	33%	20%	6%	1%	1%	1%	0%	1%	1%	0%	1%	1%

Intensities in 180° c-plane

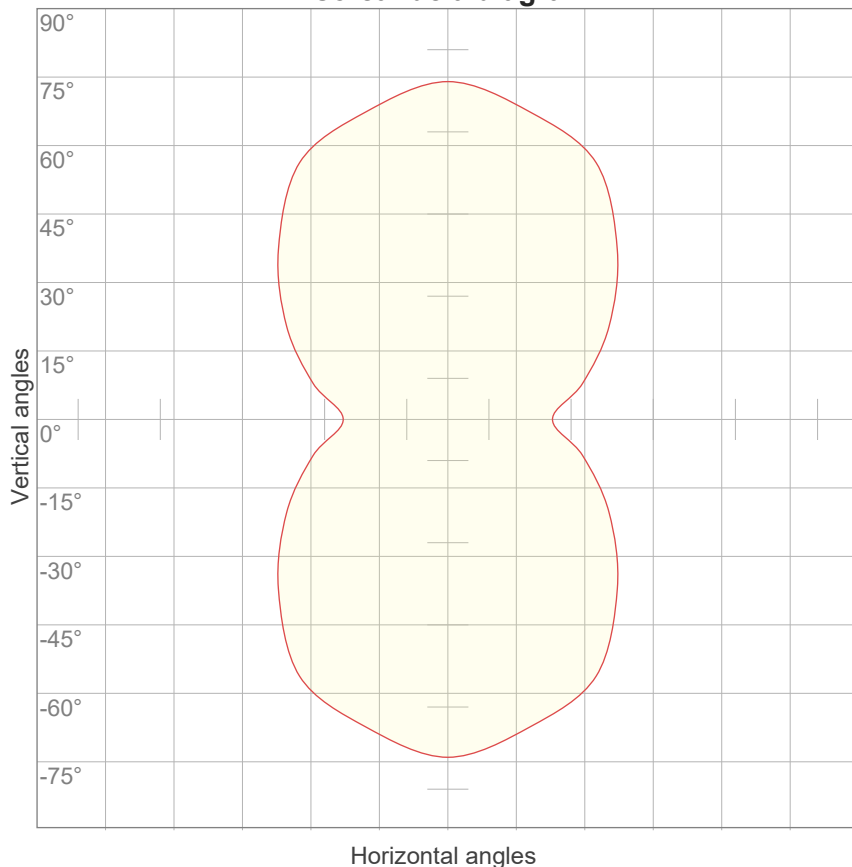
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
41.8	43.8	46.3	48.1	48.7	48.4	47.2	45.2	42.1	38.2	33.9	31.6	29.9	27.5	24.3	20.6	16.6	11.4	4.9	0.8
100%	105%	111%	115%	116%	116%	113%	108%	101%	91%	81%	76%	72%	66%	58%	49%	40%	27%	12%	2%

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°
41.8	41.3	39.7	37.1	33.6	29.3	24.5	19.3	13.8	8.2	2.7	0.4	0.5	0.2	0.2	0.2	0.3	0.2	0.2	0.3
100%	99%	95%	89%	80%	70%	59%	46%	33%	20%	6%	1%	1%	1%	0%	1%	1%	0%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
210.6°	284°	299.9°	41.7%	25.5%

iso-candela diagram



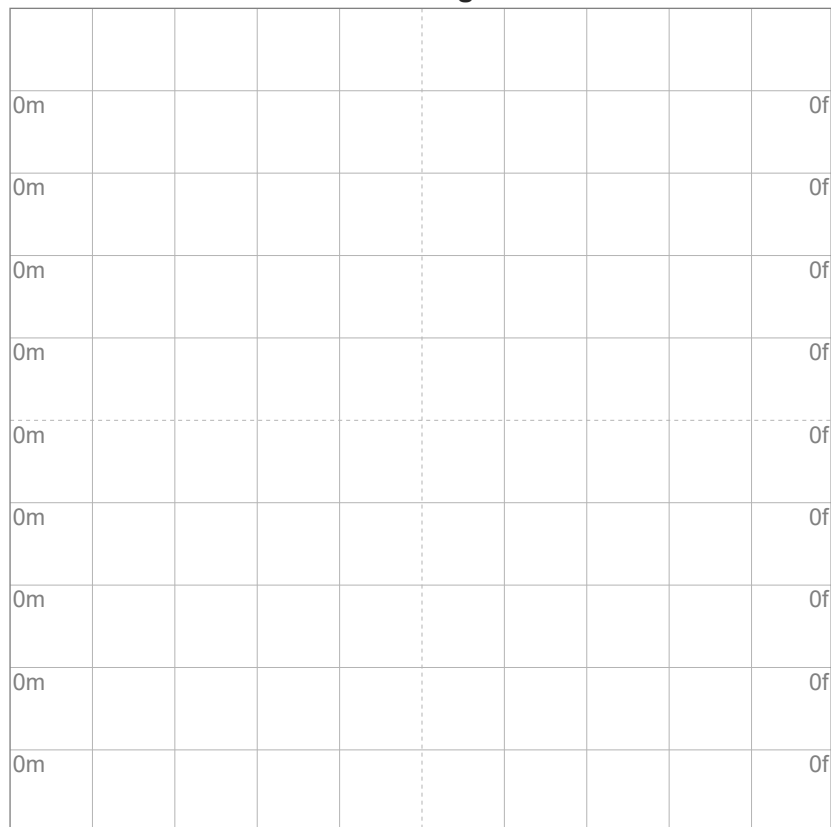
10%	4 cd
20%	8 cd
30%	13 cd
40%	17 cd
50%	21 cd
60%	25 cd
70%	29 cd
80%	33 cd
90%	38 cd

Conditions:

Number of c-planes: 12

Candela at center: 42 cd

iso-lux diagram



Mounting height: 10 meters (33 feet)

3%	12.5m lx
5%	20.9m lx
10%	41.8m lx
30%	0.125 lx
50%	0.209 lx

Conditions:

Number of c-planes: 12

Lux at center: 0.418 lx

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

Glare evaluation according to UGR

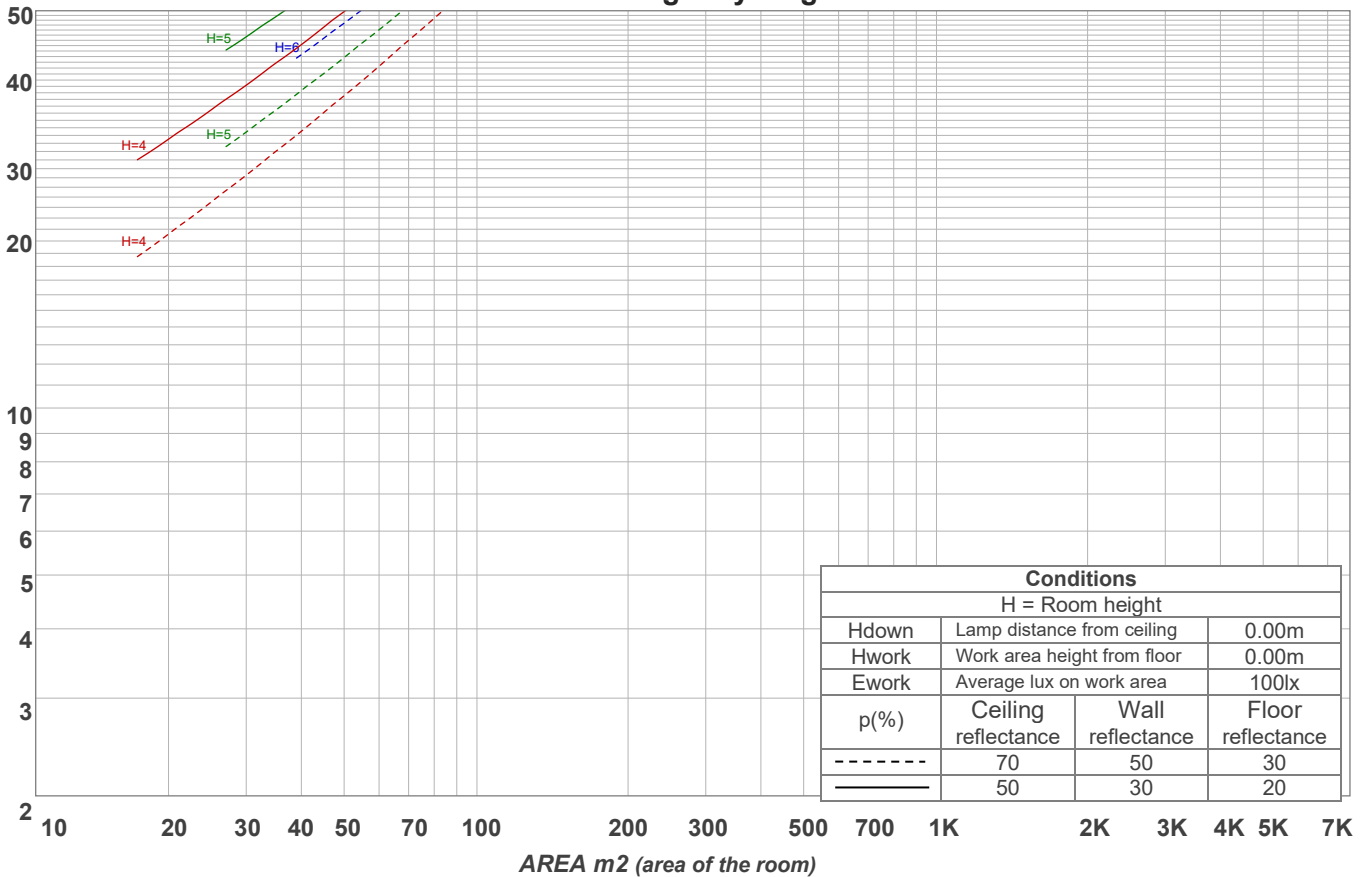
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	16.2	17.3	16.8	18.0	18.8	15.0	16.1	15.7	16.8	17.6
	3H	18.4	19.5	19.2	20.2	21.0	16.8	17.9	17.6	18.6	19.4
	4H	19.6	20.6	20.4	21.3	22.2	17.7	18.7	18.4	19.4	20.2
	6H	20.8	21.7	21.5	22.4	23.3	18.4	19.3	19.1	20.1	20.9
	8H	21.4	22.3	22.1	23.0	23.9	18.8	19.7	19.5	20.4	21.3
	12H	21.9	22.9	22.6	23.5	24.4	19.0	20.0	19.8	20.7	21.6
4H	2H	16.8	17.8	17.5	18.5	19.3	15.9	16.9	16.7	17.7	18.5
	3H	19.4	20.4	20.1	21.0	21.9	18.0	19.0	18.8	19.7	20.6
	4H	20.6	21.8	21.4	22.3	23.2	19.0	20.1	19.7	20.6	21.5
	6H	21.9	22.8	22.8	23.5	24.3	19.9	20.7	20.7	21.4	22.3
	8H	22.6	23.3	23.4	24.1	24.9	20.3	20.9	21.1	21.7	22.6
	12H	23.2	23.8	24.0	24.6	25.5	20.6	21.2	21.4	22.0	22.9
8H	4H	21.0	21.7	21.8	22.5	23.3	19.6	20.3	20.4	21.1	21.9
	6H	22.6	23.1	23.4	24.0	24.9	20.8	21.3	21.6	22.2	23.1
	8H	23.4	23.8	24.2	24.7	25.8	21.3	21.8	22.2	22.7	23.7
	12H	24.2	24.6	25.0	25.5	26.4	21.8	22.2	22.7	23.1	24.1
12H	4H	21.0	21.6	21.8	22.4	23.3	19.8	20.3	20.6	21.2	22.1
	6H	22.7	23.1	23.5	24.0	25.1	21.0	21.5	21.9	22.4	23.4
	8H	23.6	24.0	24.4	24.9	25.8	21.7	22.1	22.6	23.0	23.9
Variation of the observer position for the luminaire distance S											
S = 1.0H		0.1 / 0.0					0.1 / -0.1				
S = 1.5H		0.1 / -0.1					0.1 / -0.1				
S = 2.0H		0.2 / -0.1					0.2 / -0.3				
CIE 117-1995. Corrected glare indices referring to 308 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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71
1	98	92	87	82	93	87	82	77	77	73	70	68	65	62	60	58	56	51
2	88	78	70	63	82	74	66	60	65	60	54	58	53	49	51	47	44	40
3	79	67	58	51	74	64	55	48	56	50	44	50	44	40	43	39	35	32
4	72	59	49	42	67	56	47	40	49	42	36	43	38	33	38	33	29	26
5	66	52	42	35	61	49	40	34	44	36	31	39	32	28	34	29	25	22
6	60	46	37	30	56	44	35	29	39	32	26	35	28	24	30	25	21	19
7	56	42	32	26	52	39	31	25	35	28	23	31	25	21	28	23	19	16
8	52	38	29	23	48	36	28	22	32	25	20	28	23	18	25	20	16	14
9	48	34	26	20	45	33	25	19	29	23	18	26	20	16	23	18	15	12
10	45	31	23	18	42	30	22	17	27	20	16	24	18	15	21	17	13	11

LAMPS (number of lamps)

Luminaire budgetary diagram



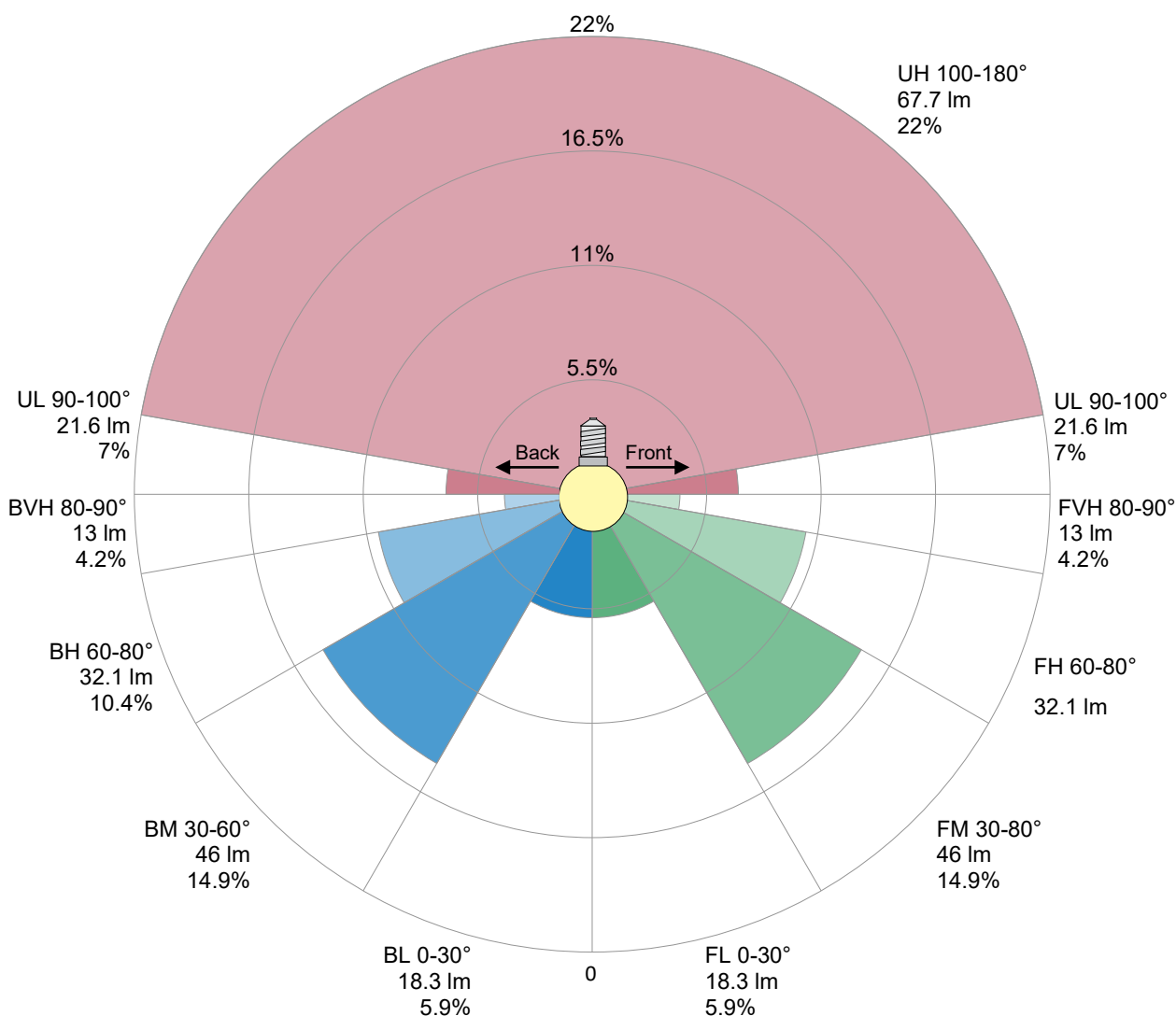
Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
4.04 lm	12.3 lm	20.2 lm	26.8 lm	31.5 lm	33.8 lm	33.5 lm	30.8 lm	25.9 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
21.5 lm	19.6 lm	16.9 lm	13.5 lm	9.53 lm	5.58 lm	2.22 lm	0.470 lm	0.029 lm

LCS table

BUG rating:	B0 U3 G1	
Forward light	Lumens	Lumens %
Low(0-30):	18.3	5.9%
Medium(30-60):	46	14.9%
High(60-80):	32.1	10.4%
Very high(80-90):	13	4.2%
Back light		
Low(0-30):	18.3	5.9%
Medium(30-60):	46	14.9%
High(60-80):	32.1	10.4%
Very high(80-90):	13	4.2%
Uplight		
Low(90-100):	21.6	7%
High(100-180):	67.7	22%

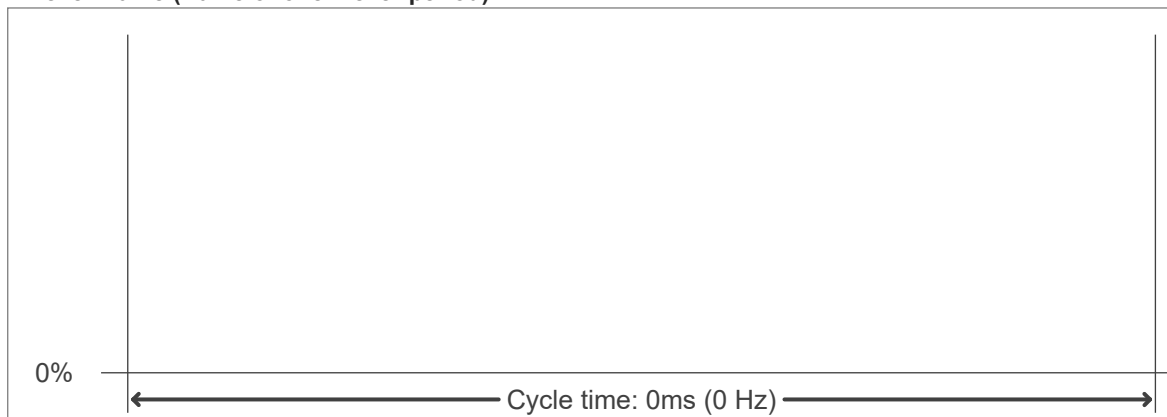
LCS graph



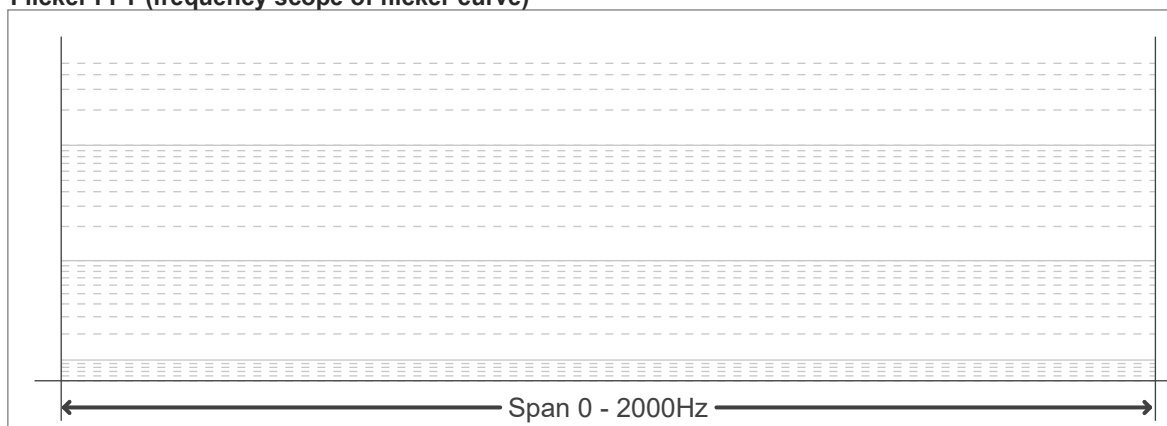
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:		n/a Hz	
Flicker index:	n/a	JA8/10 40Hz	n/a %
Flicker percentage:	n/a %	JA8/10 90Hz	n/a %
SVM: (Visual flicker)	n/a	JA8/10 200Hz	n/a %
PstLM	n/a	JA8/10 400Hz	n/a %
Mp	n/a	JA8/10 1000Hz	n/a %

Flicker conditions:

Sample rate:	n/a samples/second
--------------	--------------------