

Light efficiency:

101 Lumen/Watt

Light quality:

CRI: 94.5

Color temperature:

4081 K

Output: 2536 lm

Peak: 9036 cd

Power: 25.1 W

PF: 1.0



Tracking number: [n/a](#)

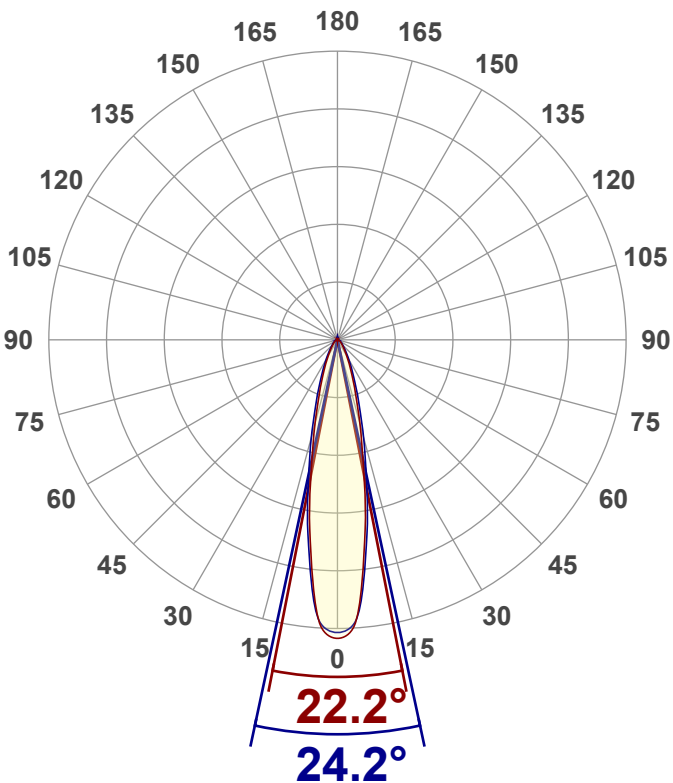
Product name:
NANO FLEX90677.64020WHB

Item number:

Date and time:
9/10/2025 2:13:34 PM

Operator:
MW

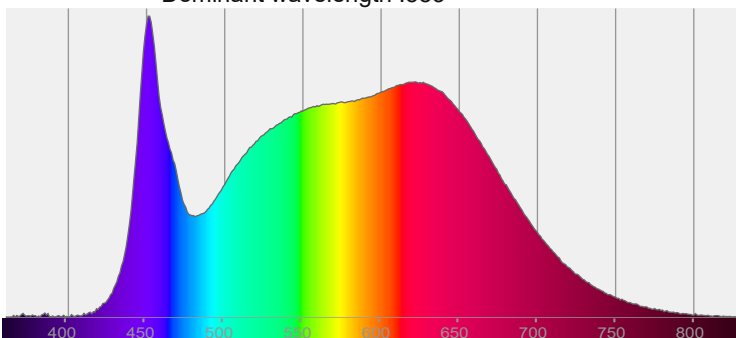
Description:
**24Vdc,25w/m, 4000K,Beam
angle:20degree, length:1m**



CIE 1931
x: 0.375
y: 0.368

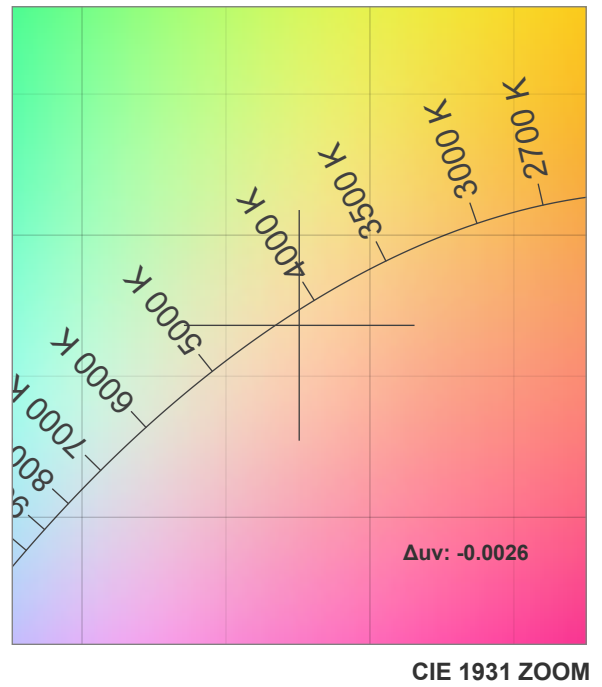
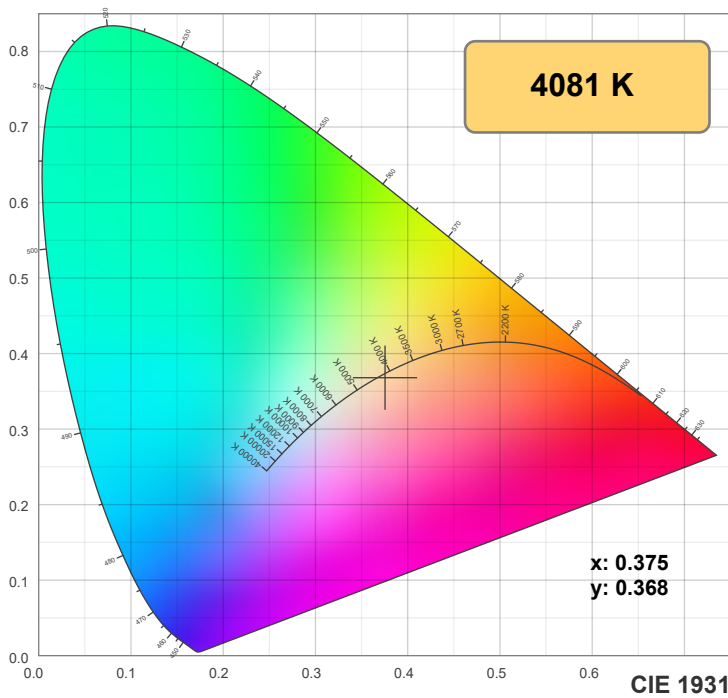
Spectra: Peak wavelength :451

Dominant wavelength :583

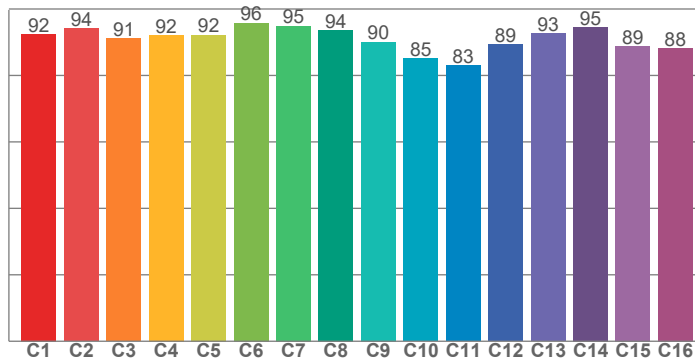


Power

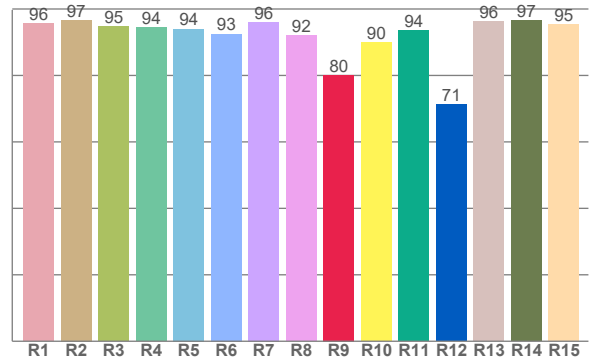
Voltage: 24.0 V
Current: 1.05 A
Frequency: 0 Hz



TM-30: 90.8



CRI: 94.5 (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
95.6	96.7	94.7	94.4	94.1	92.5	96.1	92.1	80.1	89.9	93.5	71.3	96.3	96.5	95.3

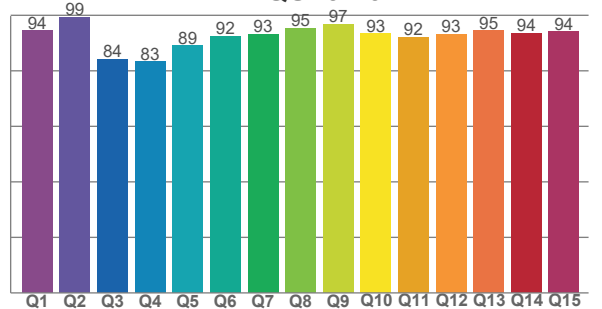
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92.5	94.1	91.1	92.1	92.2	95.8	94.9	93.6	90.1	85.1	83.1	89.3	92.7	94.5	88.8	88.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94.5	99.3	84.3	83.3	89.2	92.5	93.2	95.4	96.8	93.4	92.2	93.2	94.5	93.6	94.1

CQS: 91.6



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
4081 K	94.5	80.1	90.8	99.9	91.6	0.375	0.368	0.225	0.331	-0.0026

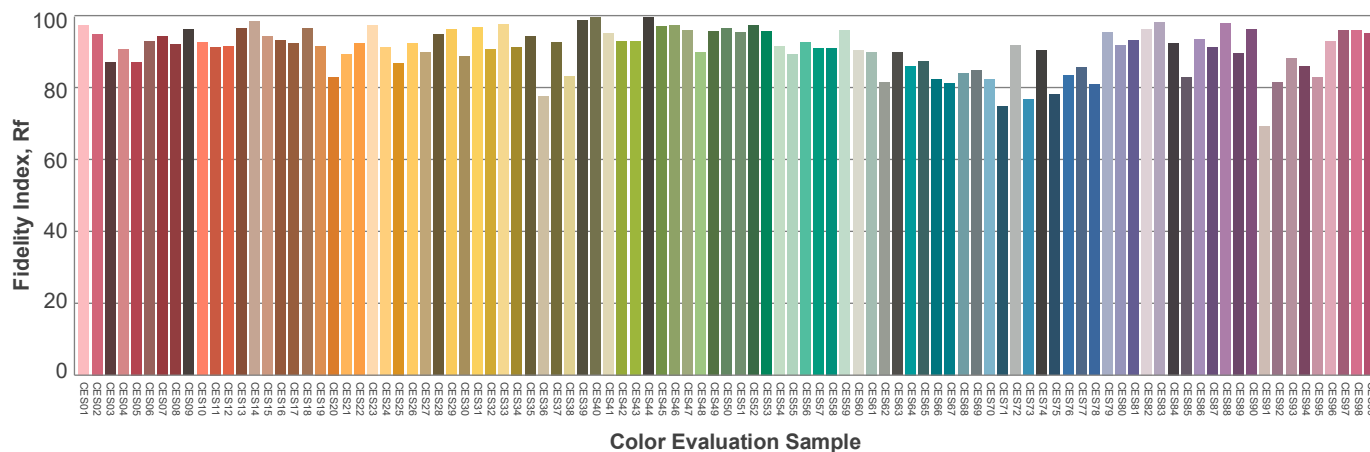
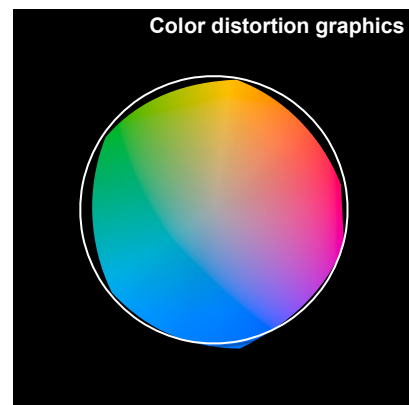
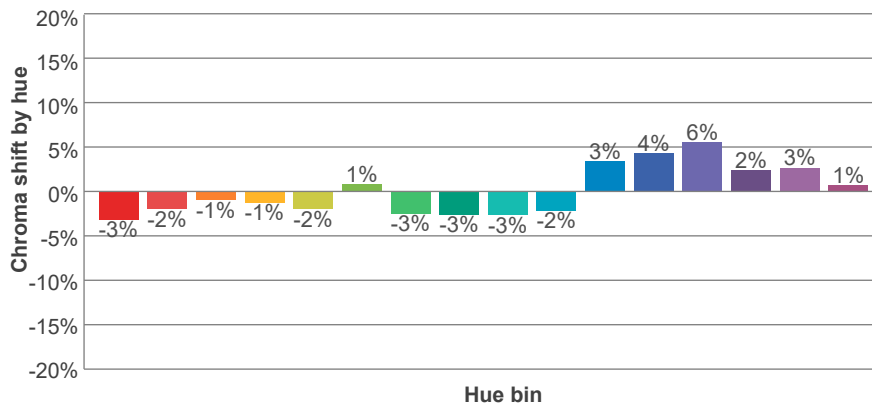
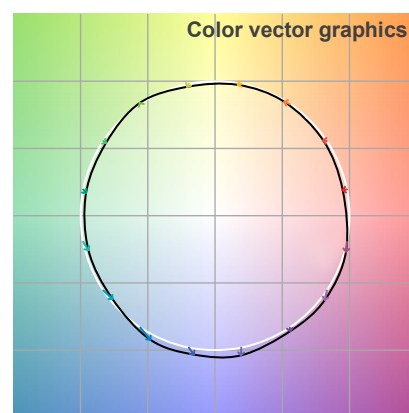
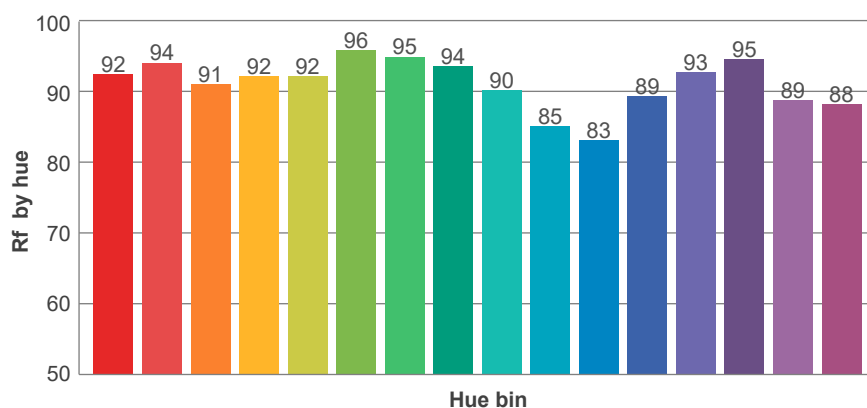
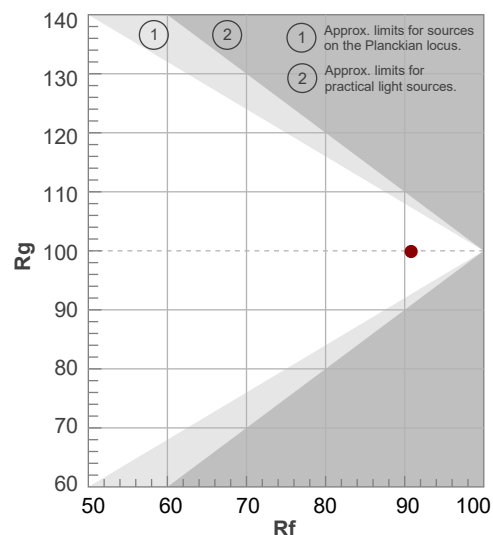
Rf 90.8

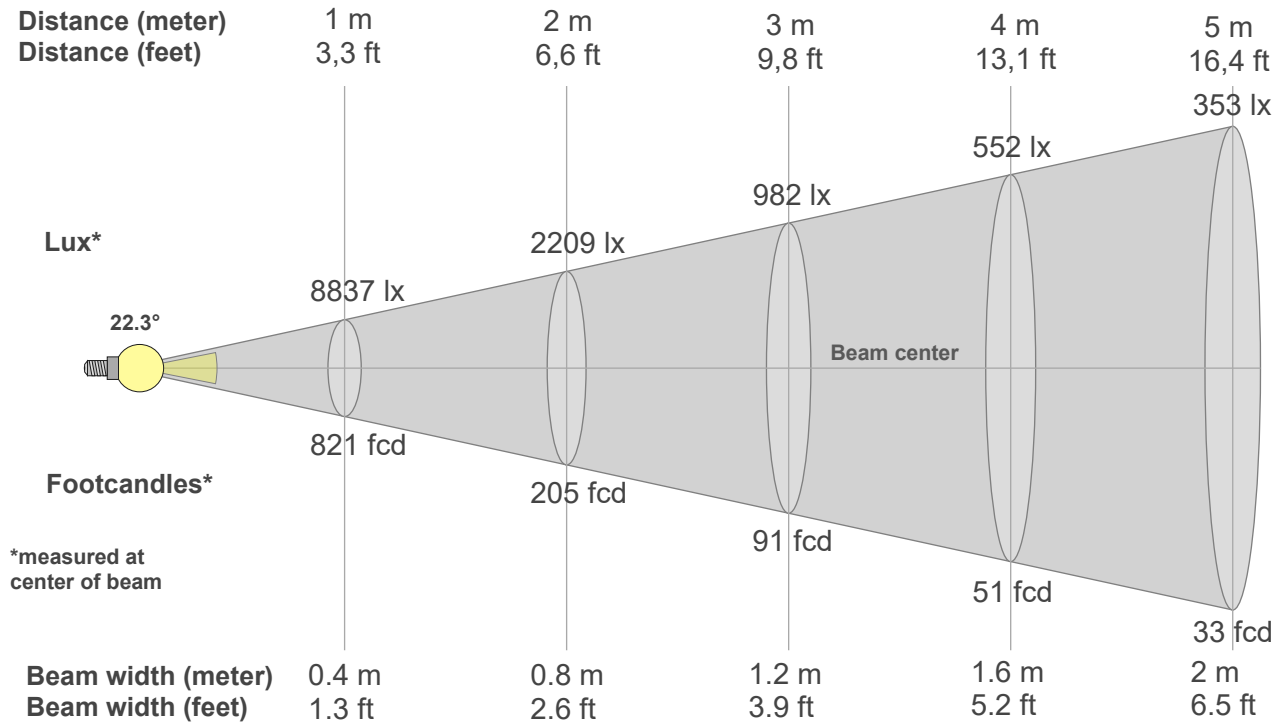
Fidelity index Rf

Rg 99.9

Gamut index Rg

Hue Bin	R _f	Shifts (%)	
		Chroma	Hue
1	92	-3%	0%
2	94	-2%	2%
3	91	-1%	4%
4	92	-1%	2%
5	92	-2%	2%
6	96	1%	0%
7	95	-3%	0%
8	94	-3%	2%
9	90	-3%	7%
10	85	-2%	9%
11	83	3%	11%
12	89	4%	5%
13	93	6%	-1%
14	95	2%	-1%
15	89	3%	-7%
16	88	1%	-7%





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
8837lx	2209lx	982lx	552lx	353lx	245lx	180lx	138lx	109lx	88lx	73lx	61lx	52lx	45lx	39lx	35lx	31lx	27lx	24lx	22lx
821fcd	205.2fcd	91.2fcd	51.3fcd	32.8fcd	22.8fcd	16.8fcd	12.8fcd	10.1fcd	8.2fcd	6.8fcd	5.7fcd	4.9fcd	4.2fcd	3.6fcd	3.2fcd	2.8fcd	2.5fcd	2.3fcd	2.1fcd

Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
8837	8564	8180	7039	5898	4848	3817	2945	2386	1827	1501	1219	978	819	660	559	468	391	338	285
100%	97%	93%	80%	67%	55%	43%	33%	27%	21%	17%	14%	11%	9%	7%	6%	5%	4%	4%	3%

Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
8837	8430	8235	7213	6192	5214	4256	3369	2779	2189	1786	1465	1172	995	818	691	586	488	425	361
100%	95%	93%	82%	70%	59%	48%	38%	31%	25%	20%	17%	13%	11%	9%	8%	7%	6%	5%	4%

Intensities in 180° c-plane

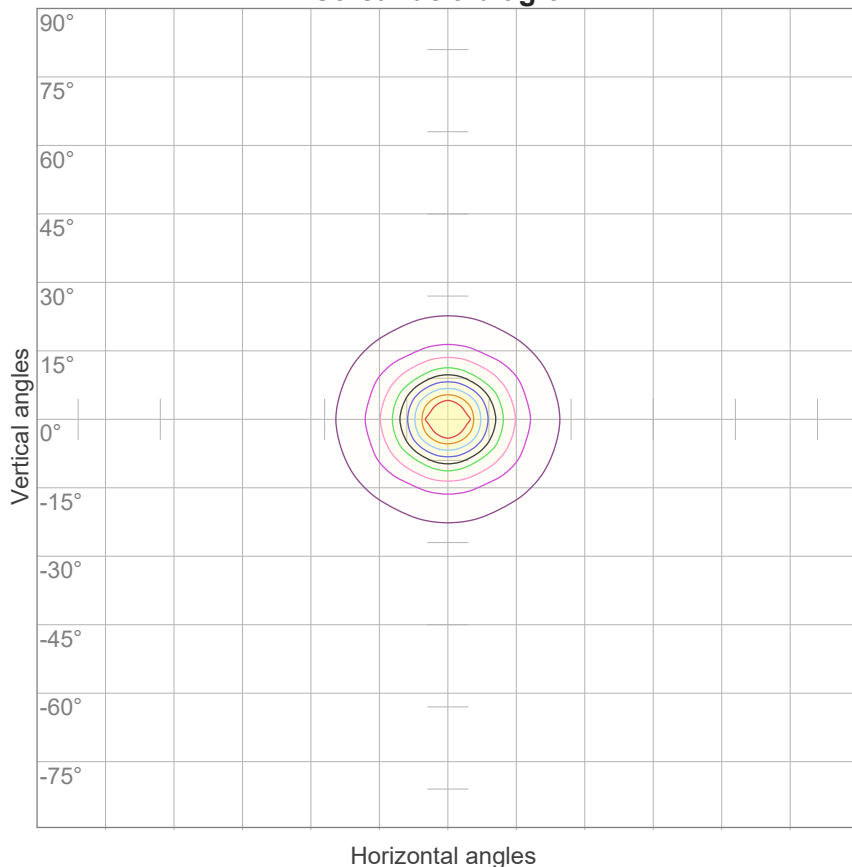
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
8837	8564	8180	7039	5898	4848	3817	2945	2386	1827	1501	1219	978	819	660	559	468	391	338	285
100%	97%	93%	80%	67%	55%	43%	33%	27%	21%	17%	14%	11%	9%	7%	6%	5%	4%	4%	3%

Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
8837	8430	8235	7213	6192	5214	4256	3369	2779	2189	1786	1465	1172	995	818	691	586	488	425	361
100%	95%	93%	82%	70%	59%	48%	38%	31%	25%	20%	17%	13%	11%	9%	8%	7%	6%	5%	4%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
22.3°	52.1°	87.3°	94.9%	87.7%

iso-candela diagram



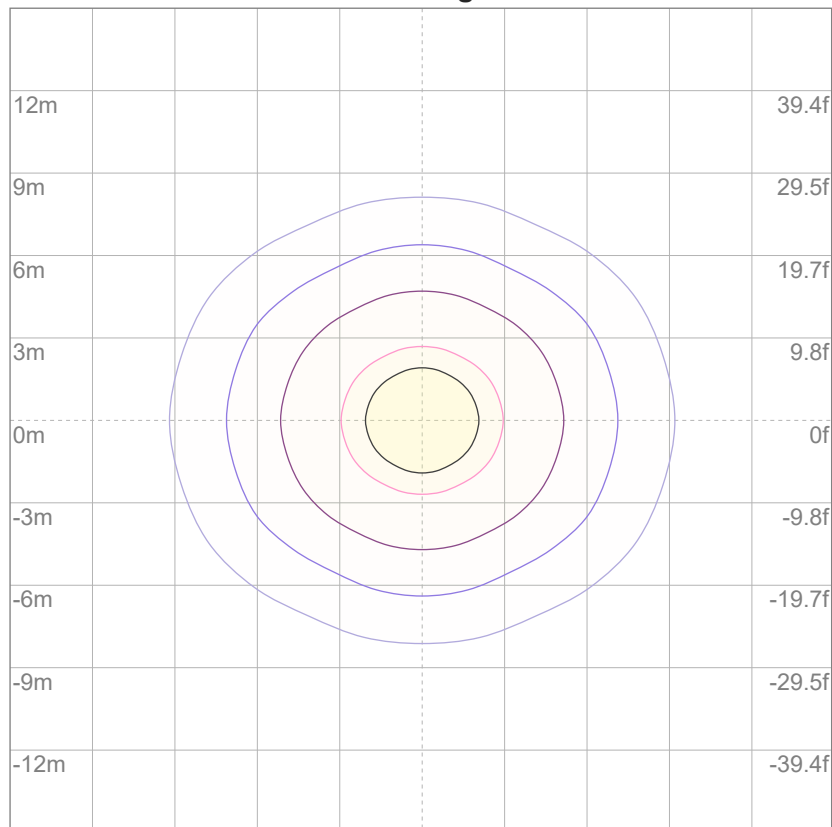
10%	884 cd
20%	1767 cd
30%	2651 cd
40%	3535 cd
50%	4418 cd
60%	5302 cd
70%	6186 cd
80%	7069 cd
90%	7953 cd

Conditions:

Number of c-planes: 12

Candela at center: 8837 cd

iso-lux diagram



3%	2.65 lx
5%	4.42 lx
10%	8.84 lx
30%	26.5 lx
50%	44.2 lx

Conditions:

Number of c-planes: 12

Lux at center: 88.4 lx

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

Glare evaluation according to UGR

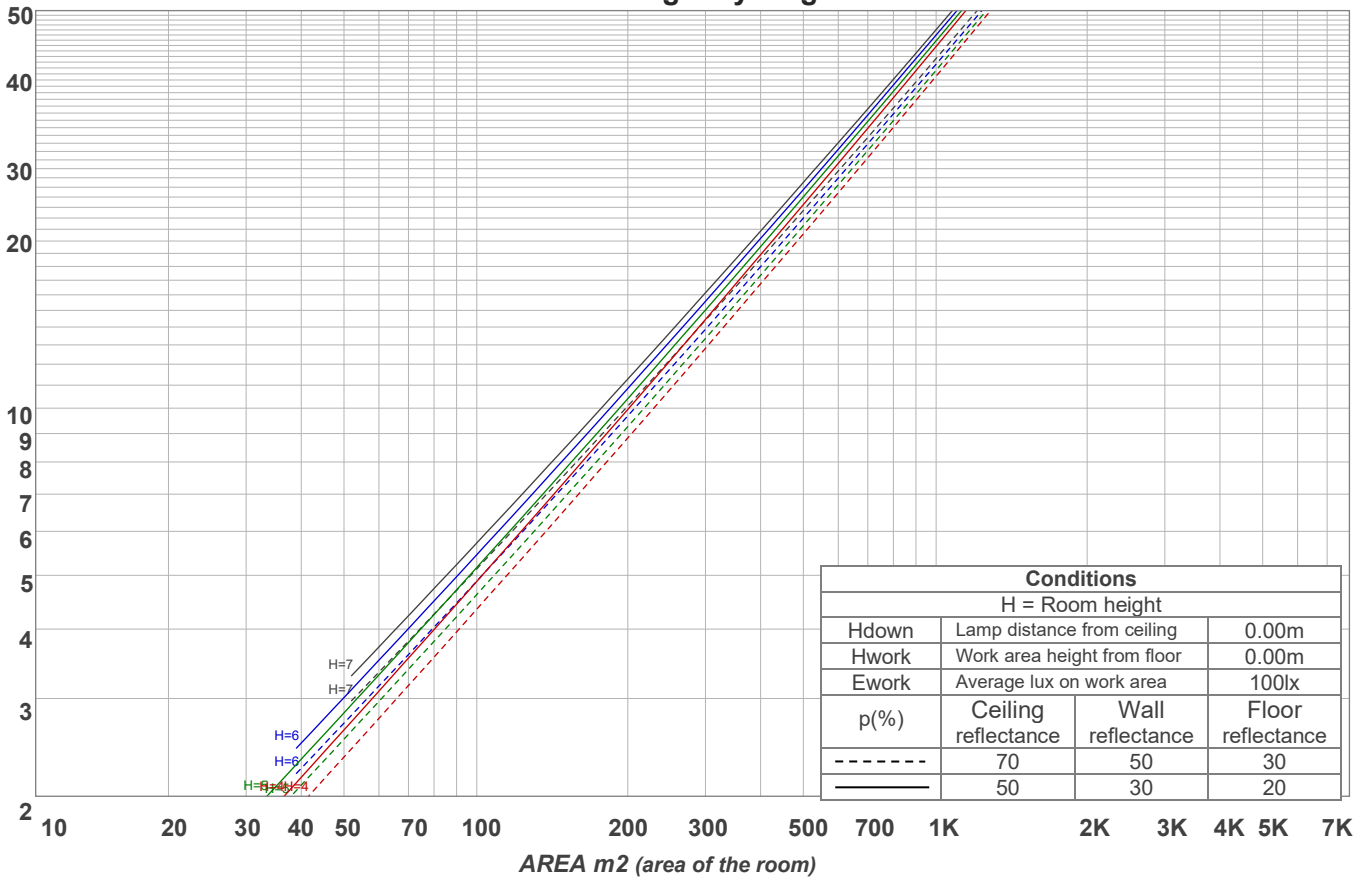
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	13.1	13.8	13.2	14.0	14.2	15.6	16.2	15.7	16.4	16.6
	3H	13.6	14.4	14.0	14.6	14.8	16.4	17.2	16.8	17.4	17.6
	4H	13.8	14.5	14.2	14.8	15.0	16.8	17.6	17.2	17.8	18.0
	6H	14.0	14.6	14.3	14.9	15.2	17.2	17.8	17.5	18.1	18.4
	8H	13.9	14.5	14.3	14.9	15.3	17.2	17.8	17.5	18.1	18.5
	12H	13.9	14.5	14.3	14.8	15.3	17.2	17.8	17.5	18.1	18.5
4H	2H	13.5	14.2	13.9	14.4	14.7	15.6	16.3	16.0	16.5	16.8
	3H	14.3	14.9	14.6	15.2	15.6	16.8	17.3	17.1	17.7	18.1
	4H	14.5	15.0	14.9	15.4	16.0	17.2	17.7	17.6	18.1	18.7
	6H	14.6	15.2	15.1	15.5	15.9	17.5	18.1	18.0	18.4	18.8
	8H	14.6	15.1	15.1	15.5	15.8	17.6	18.1	18.1	18.4	18.8
	12H	14.5	15.0	15.0	15.4	15.8	17.6	18.0	18.1	18.4	18.8
8H	4H	14.6	15.2	15.1	15.5	15.9	17.2	17.7	17.7	18.0	18.4
	6H	14.8	15.2	15.3	15.6	16.2	17.6	17.9	18.1	18.4	18.9
	8H	14.9	15.2	15.4	15.7	16.3	17.7	18.0	18.2	18.5	19.1
	12H	14.8	15.1	15.4	15.6	16.2	17.7	18.0	18.3	18.5	19.1
12H	4H	14.6	15.0	15.1	15.4	15.9	17.1	17.5	17.6	17.9	18.4
	6H	14.9	15.1	15.4	15.7	16.3	17.6	17.8	18.1	18.4	19.0
	8H	14.9	15.1	15.5	15.6	16.2	17.7	17.9	18.2	18.4	19.0
Variation of the observer position for the luminaire distance S											
S = 1.0H		0.9 / -0.8					0.9 / -0.6				
S = 1.5H		2.0 / -1.3					1.9 / -1.1				
S = 2.0H		3.1 / -2.0					3.1 / -1.8				
CIE 117-1995. Corrected glare indices referring to 2536 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	111	108	106	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	108	103	99	96	106	101	98	94	98	95	92	95	92	90	92	90	88	87
3	103	96	92	88	101	95	91	87	92	89	86	90	87	84	88	85	83	81
4	98	91	86	81	96	90	85	81	88	83	80	86	82	79	84	81	78	77
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	90	82	76	72	89	81	76	72	79	75	71	78	74	71	77	73	70	69
7	86	78	72	69	85	77	72	68	76	71	68	75	71	68	74	70	67	66
8	83	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63
9	80	72	66	63	79	71	66	63	70	66	62	69	65	62	69	65	62	61
10	78	69	64	60	77	68	63	60	68	63	60	67	63	60	66	62	60	58

LAMPS (number of lamps)

Luminaire budgetary diagram



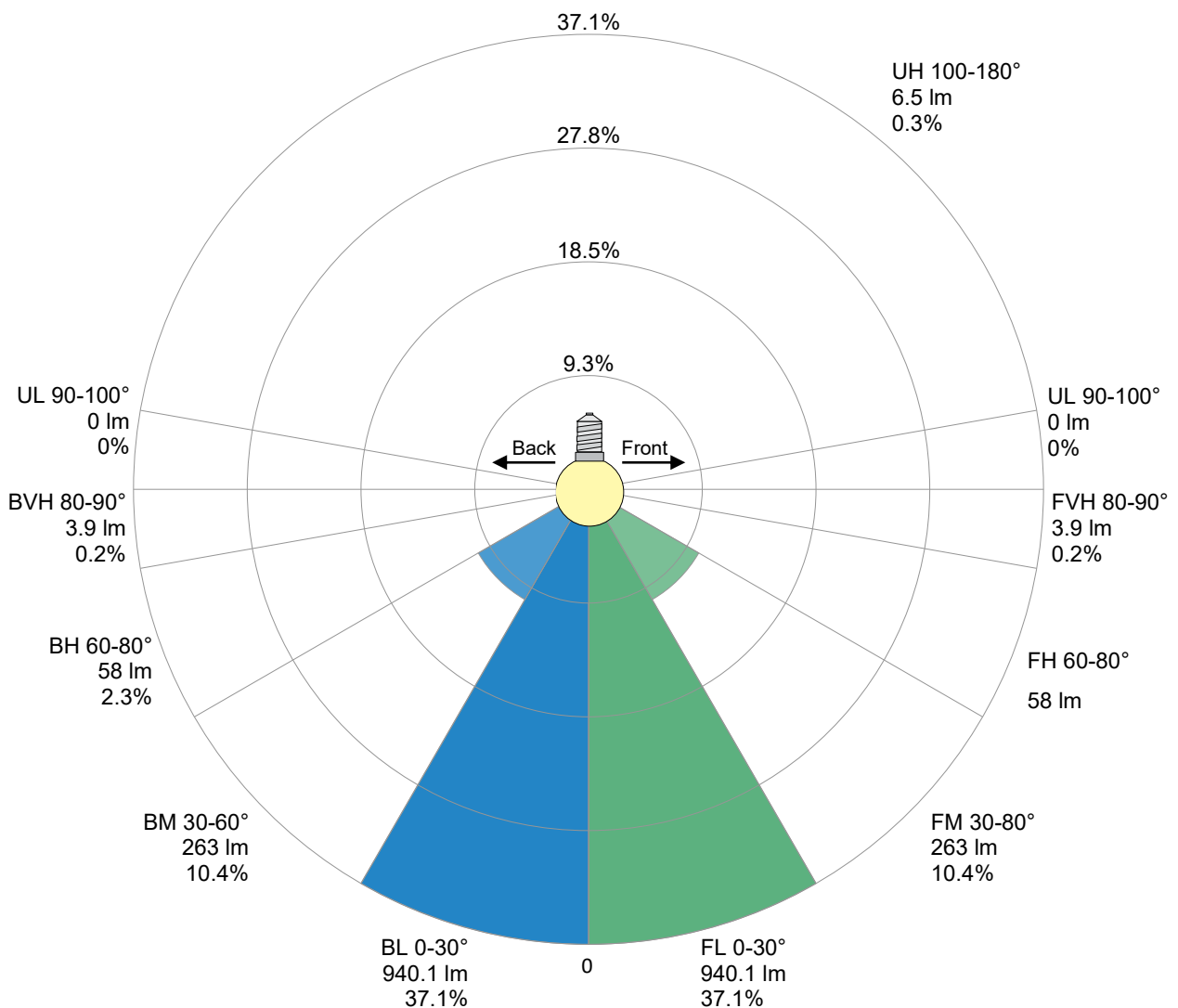
Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
662 lm	775 lm	447 lm	254 lm	158 lm	111 lm	76.1 lm	40.5 lm	6.92 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.004 lm	0.000 lm	0.004 lm	0.118 lm	0.530 lm	1.73 lm	1.94 lm	1.67 lm	0.563 lm

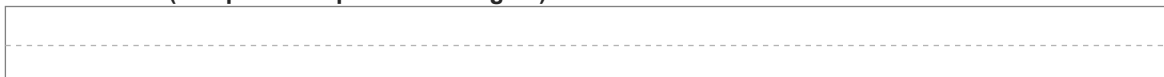
LCS table

BUG rating:	B2 U1 G0	
Forward light	Lumens	Lumens %
Low(0-30):	940.1	37.1%
Medium(30-60):	263	10.4%
High(60-80):	58	2.3%
Very high(80-90):	3.9	0.2%
Back light		
Low(0-30):	940.1	37.1%
Medium(30-60):	263	10.4%
High(60-80):	58	2.3%
Very high(80-90):	3.9	0.2%
Uplight		
Low(90-100):	0	0%
High(100-180):	6.5	0.3%

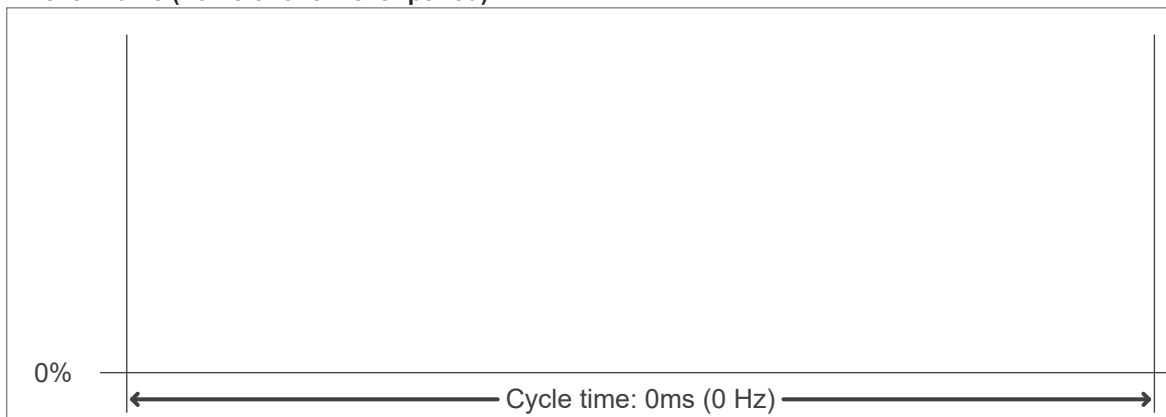
LCS graph



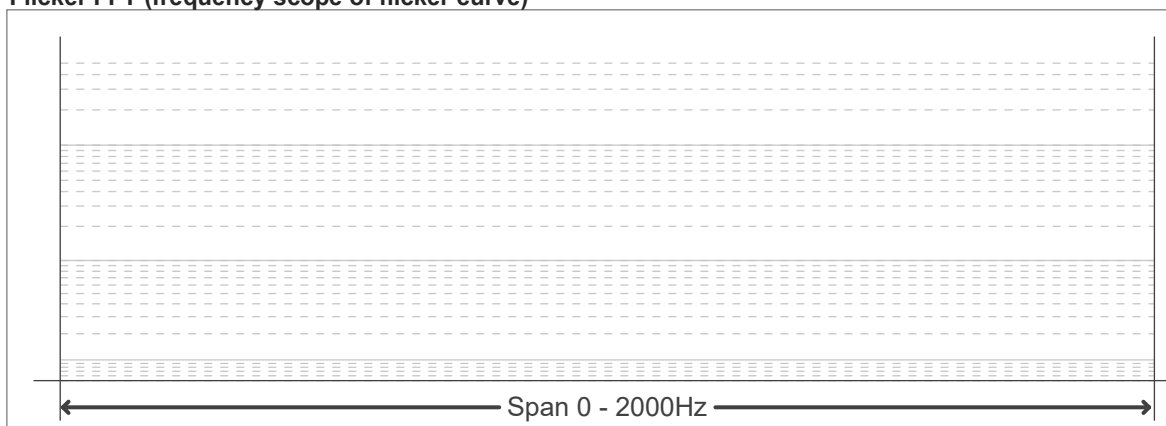
Flicker curve (complete sampled flicker signal)



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
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