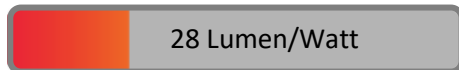


PHOTOMETRIC TEST REPORT

BATON READER

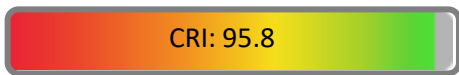
astro

LIGHT EFFICIENCY:



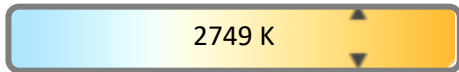
OUTPUT: 90.4 lm

LIGHT QUALITY:



PEAK: 391 cd

COLOR TEMPERATURE:



POWER: 3.3 W

PF: 0.48

Tracking number: [n/a](#)

Product name:

Baton reader

Item number:

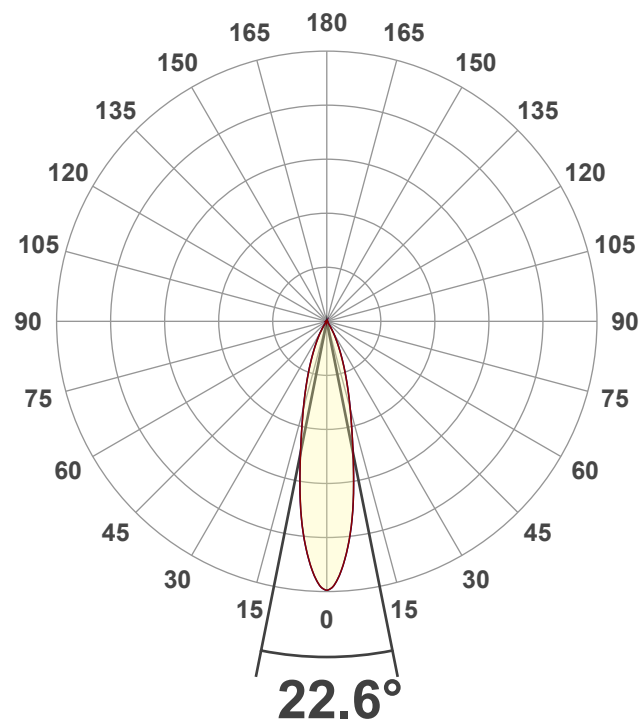
1475012

Date and time:

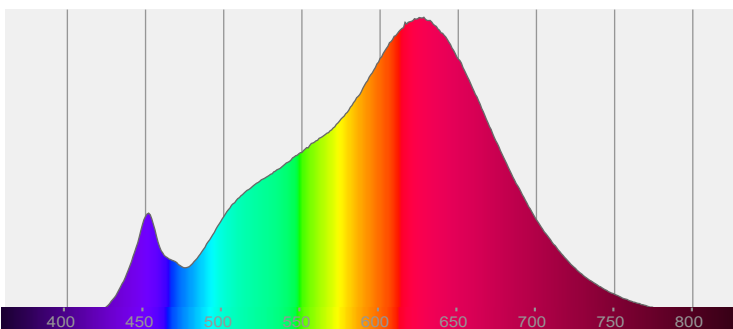
26/09/2022 15:45:26

Description:

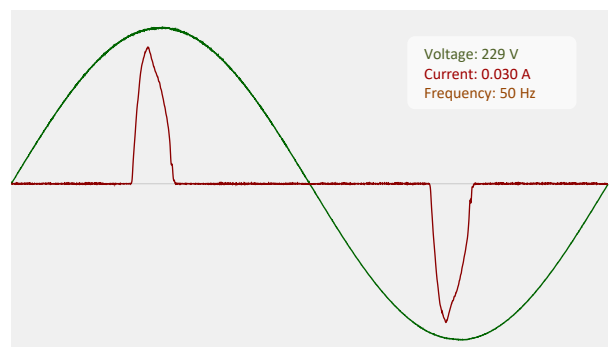
E27 Wall Light with LED Reader Head

CIE 1931
x: 0.457
y: 0.411

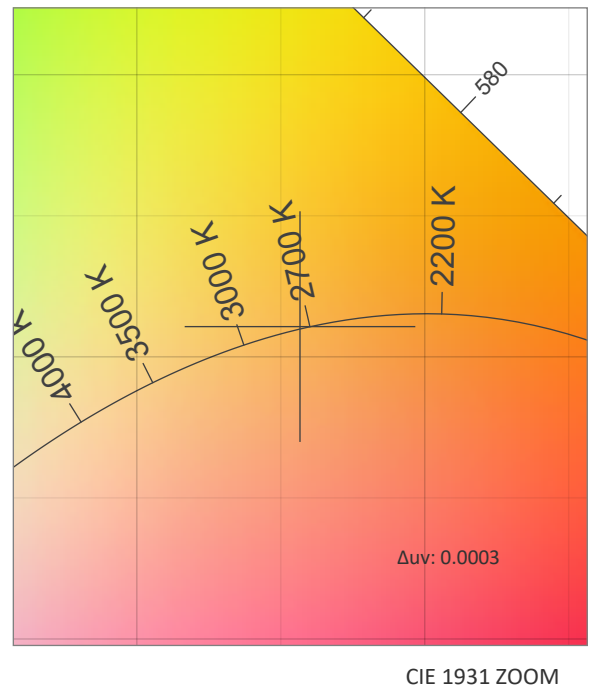
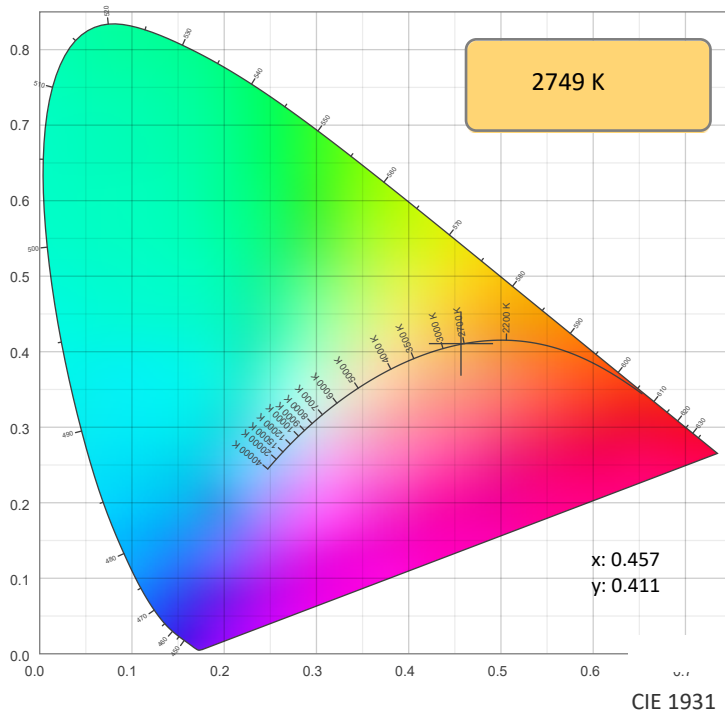
SPECTRA



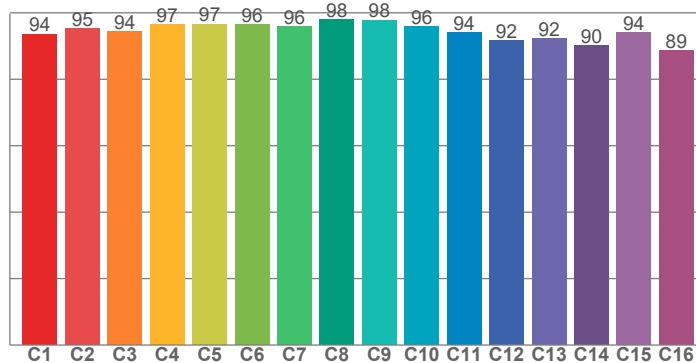
POWER



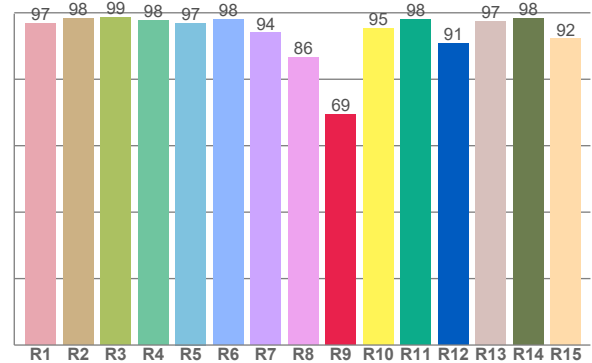
COLOR DETAILS



TM30: 94.6



CRI: 95.8 (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
96.7	98.2	98.6	97.7	96.9	98.0	93.9	86.4	69.4	95.2	97.9	90.8	97.4	98.2	92.1

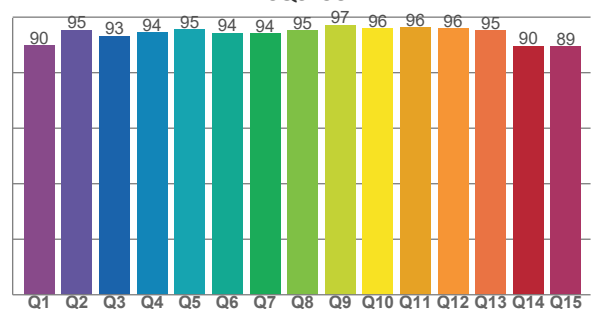
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93.6	95.3	94.3	96.6	96.6	96.4	95.9	98.0	97.8	95.7	94.1	91.7	92.1	90.0	94.1	88.7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.8	95.3	93.1	94.4	95.5	94.2	94.1	95.2	97.2	96.0	96.3	96.0	95.2	89.5	89.5

CQS: 93.4



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
2749 K	95.8	69.4	94.6	100.1	93.4	0.457	0.411	0.260	0.351	0.0003

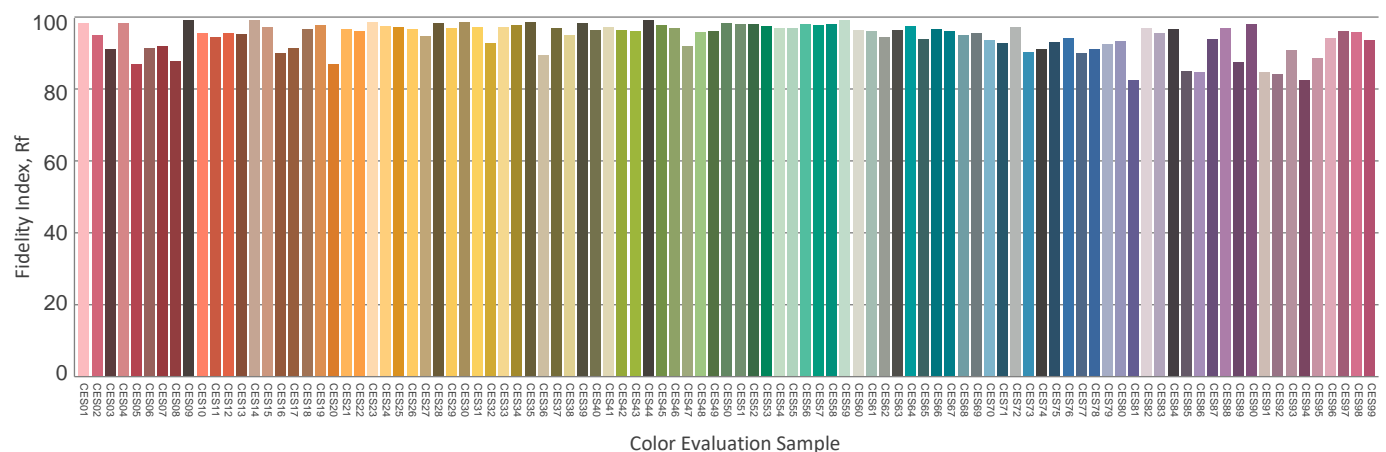
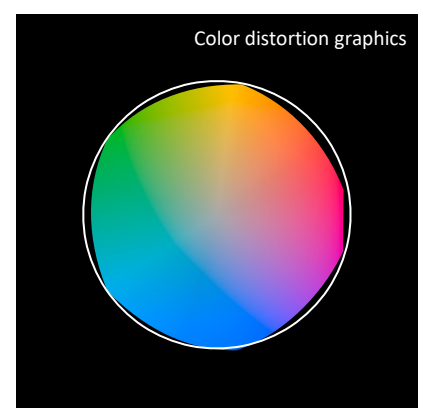
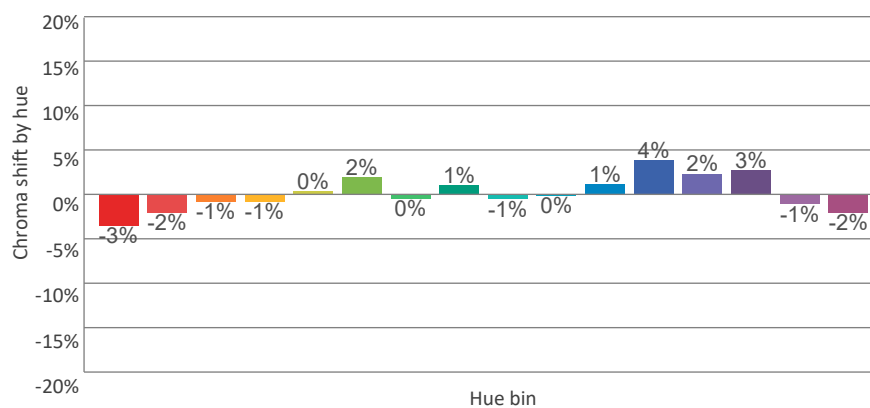
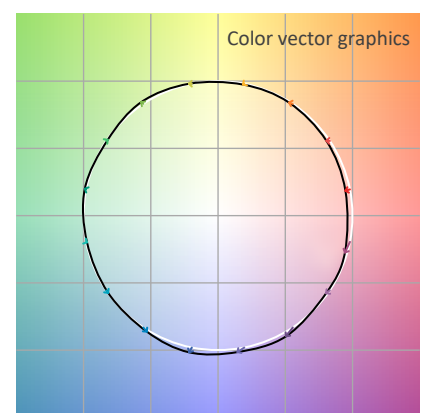
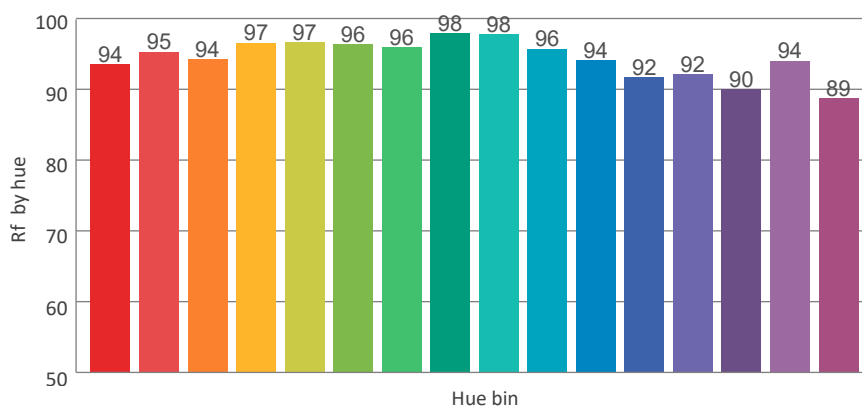
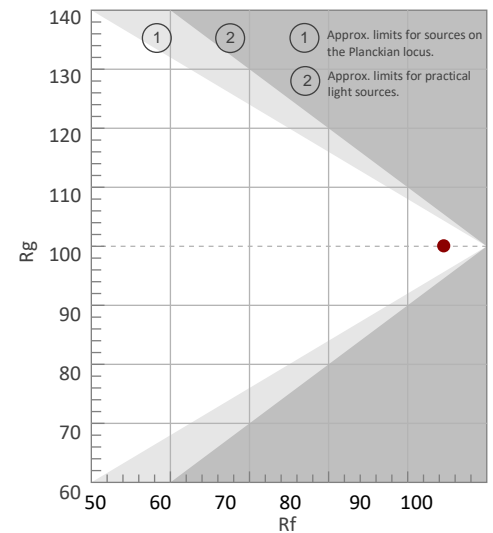
Rf 94.6

Fidelity index Rf

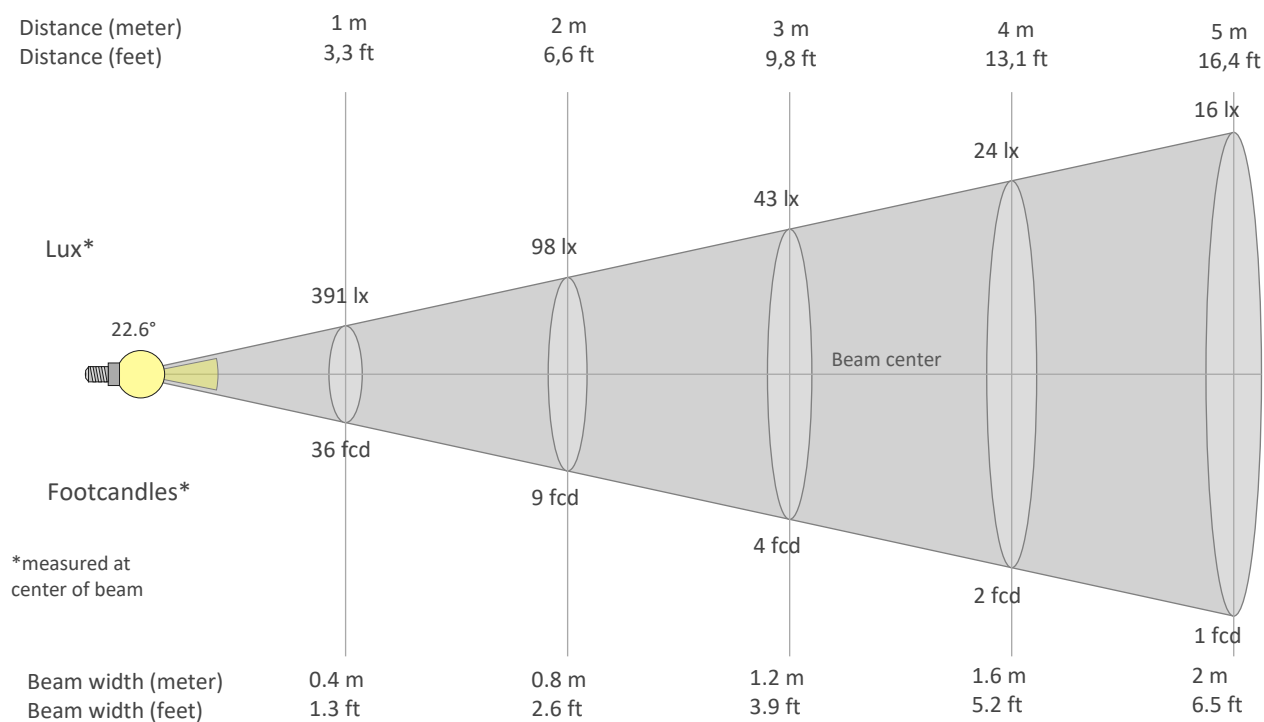
Rg 100.1

Gammut index Rg

Hue Bin	Graphic shifts (%)		
	R _f	Chroma	Hue
1	94	-3%	0%
2	95	-2%	2%
3	94	-1%	3%
4	97	-1%	1%
5	97	0%	2%
6	96	2%	1%
7	96	0%	-1%
8	98	1%	0%
9	98	-1%	0%
10	96	0%	2%
11	94	1%	4%
12	92	4%	-1%
13	92	2%	-6%
14	90	3%	-8%
15	94	-1%	-3%
16	89	-2%	-8%



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
391lx	98lx	43lx	24lx	16lx	11lx	8lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx
36.3fcd	9.1fcd	4fcd	2.3fcd	1.5fcd	1fcd	0.7fcd	0.6fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd

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°
391	380	353	317	273	225	181	146	119	96	76	60	47	35	26	19	13	9	5	3
100%	97%	90%	81%	70%	57%	46%	37%	30%	25%	20%	15%	12%	9%	7%	5%	3%	2%	1%	1%

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°
391	380	353	317	273	225	181	146	119	96	76	60	47	35	26	19	13	9	5	3
100%	97%	90%	81%	70%	57%	46%	37%	30%	25%	20%	15%	12%	9%	7%	5%	3%	2%	1%	1%

Intensities in 180° c-plane

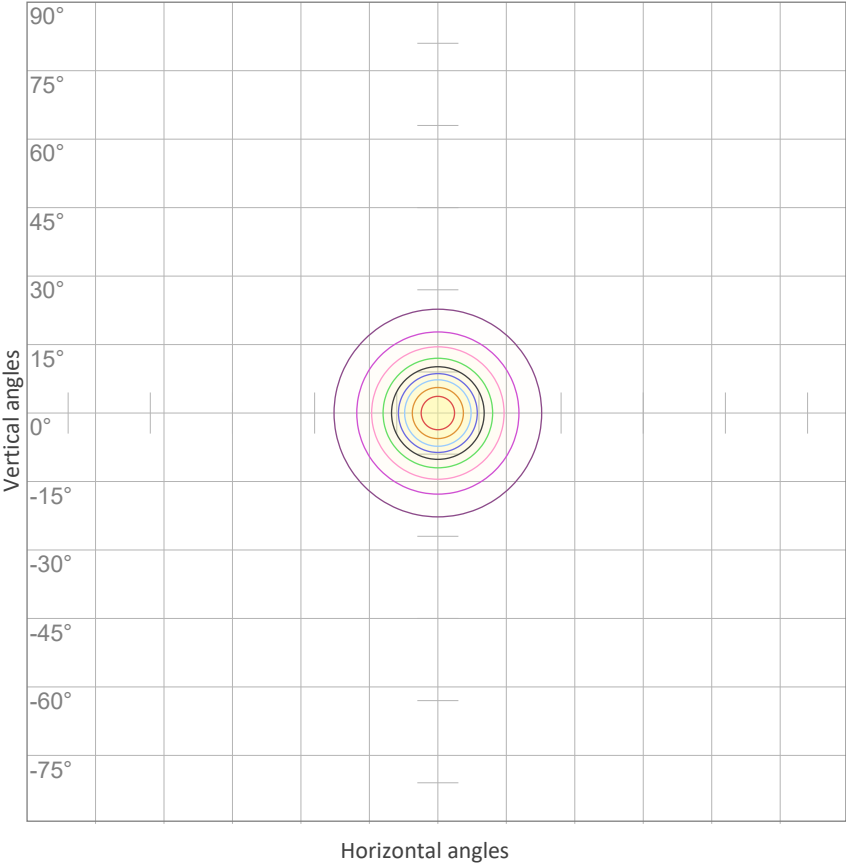
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
391	380	353	317	273	225	181	146	119	96	76	60	47	35	26	19	13	9	5	3
100%	97%	90%	81%	70%	57%	46%	37%	30%	25%	20%	15%	12%	9%	7%	5%	3%	2%	1%	1%

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°
391	380	353	317	273	225	181	146	119	96	76	60	47	35	26	19	13	9	5	3
100%	97%	90%	81%	70%	57%	46%	37%	30%	25%	20%	15%	12%	9%	7%	5%	3%	2%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
22.6°	50.6°	66.8°	99.7%	99.3%

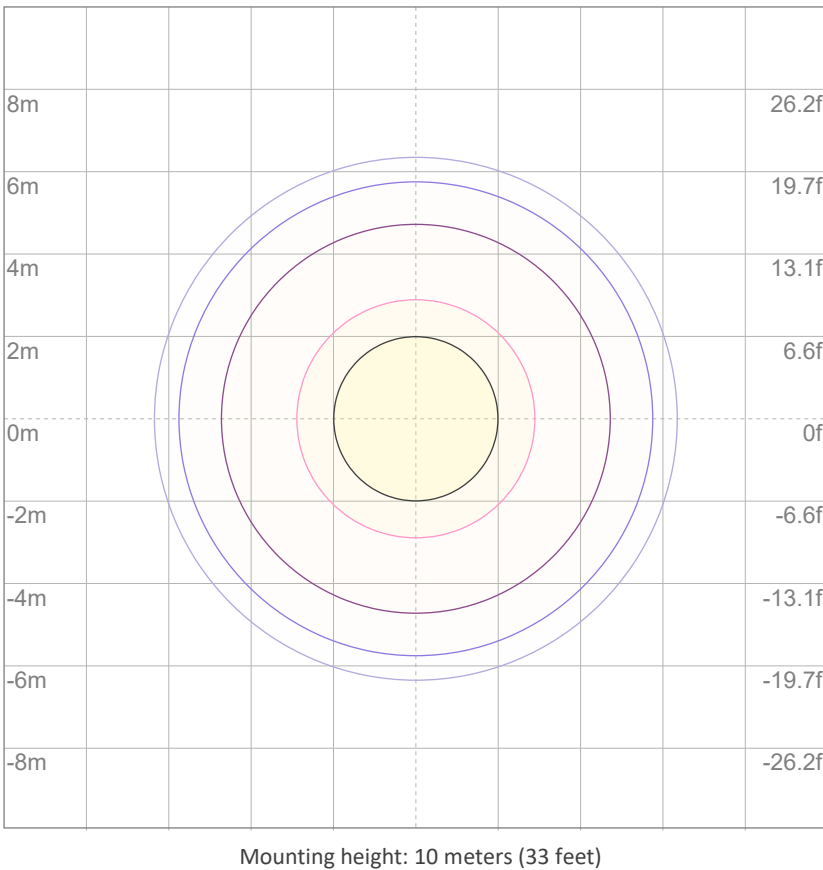
ISO CANDELA DIAGRAM



10%	39 cd
20%	78 cd
30%	117 cd
40%	156 cd
50%	195 cd
60%	235 cd
70%	274 cd
80%	313 cd
90%	352 cd

Conditions:
Number of c-planes: 8
Candela at center: 391 cd

ISO LUX DIAGRAM



3%	0.117 lx
5%	0.195 lx
10%	0.391 lx
30%	1.17 lx
50%	{LUX_10M50} lx

Conditions:
Number of c-planes: 8
Lux at center: 3.91 lx

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

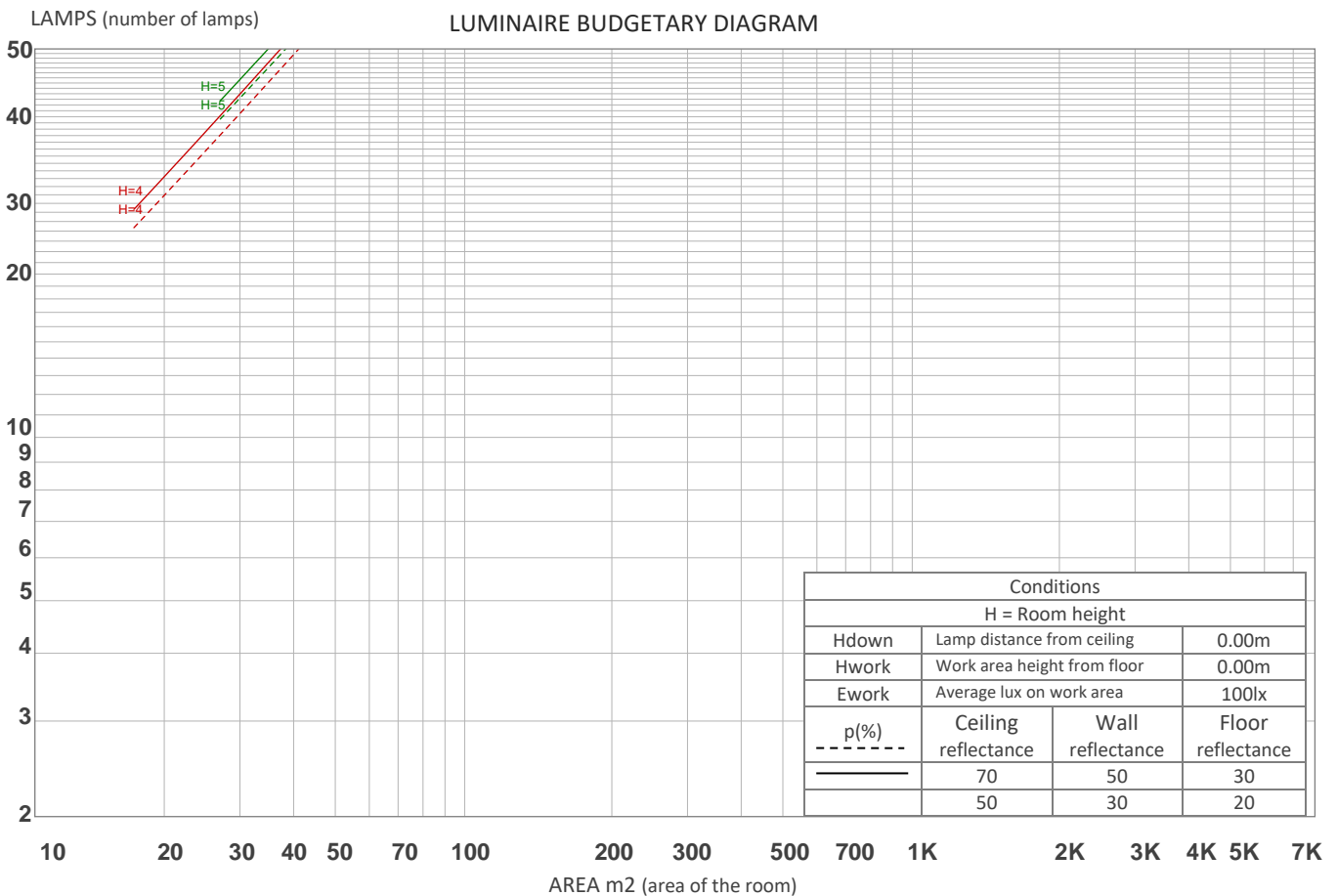
UGR

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	10.7	11.1	10.8	11.3	11.5	10.7	11.1	10.8	11.3	11.5
	3H	10.4	11.0	10.8	11.2	11.3	10.4	11.0	10.8	11.2	11.3
	4H	10.3	10.9	10.7	11.1	11.3	10.3	10.9	10.7	11.1	11.3
	6H	10.3	10.8	10.6	11.1	11.4	10.3	10.8	10.6	11.1	11.4
	8H	10.3	10.7	10.6	11.0	11.4	10.3	10.7	10.6	11.0	11.4
	12H	10.2	10.7	10.6	11.0	11.4	10.2	10.7	10.6	11.0	11.4
4H	2H	10.3	10.9	10.7	11.1	11.3	10.3	10.9	10.7	11.1	11.3
	3H	10.2	10.6	10.5	11.0	11.4	10.2	10.6	10.5	11.0	11.4
	4H	10.1	10.5	10.5	10.9	11.4	10.1	10.5	10.5	10.9	11.4
	6H	10.0	10.5	10.5	10.8	11.1	10.0	10.5	10.5	10.8	11.1
	8H	9.9	10.4	10.5	10.7	11.1	9.9	10.4	10.5	10.7	11.1
	12H	9.9	10.2	10.4	10.6	11.1	9.9	10.2	10.4	10.6	11.1
8H	4H	9.9	10.3	10.4	10.7	11.0	9.9	10.3	10.4	10.7	11.0
	6H	9.9	10.1	10.4	10.6	11.1	9.9	10.1	10.4	10.6	11.1
	8H	9.9	10.1	10.4	10.6	11.2	9.9	10.1	10.4	10.6	11.2
	12H	9.8	10.0	10.4	10.5	11.1	9.8	10.0	10.4	10.5	11.1
12H	4H	9.9	10.2	10.4	10.6	11.0	9.9	10.2	10.4	10.6	11.0
	6H	9.9	10.1	10.4	10.6	11.2	9.9	10.1	10.4	10.6	11.2
	8H	9.8	10.0	10.4	10.5	11.1	9.8	10.0	10.4	10.5	11.1
Variation of the observer position for the luminaire distance S											
S = 1.0H		6.2 / -11.1					6.2 / -11.1				
S = 1.5H		8.9 / -11.8					8.9 / -11.8				
S = 2.0H		10.9 / -12.1					10.9 / -12.1				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 90.4 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	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96
2	111	107	104	101	109	105	103	100	102	100	98	99	97	96	97	95	94	92
3	107	102	98	95	105	101	97	95	98	95	93	96	94	92	94	92	90	89
4	103	98	94	91	102	97	93	90	95	91	89	93	90	88	91	89	87	86
5	100	94	90	86	99	93	89	86	91	88	85	90	87	85	88	86	84	83
6	97	90	86	83	96	90	86	83	88	85	82	87	84	81	86	83	81	80
7	94	87	83	80	93	87	82	79	85	82	79	84	81	79	83	80	78	77
8	91	84	80	77	90	84	79	77	83	79	76	82	78	76	81	78	76	75
9	88	81	77	74	88	81	77	74	80	76	74	79	76	74	79	76	73	72
10	86	79	75	72	85	78	74	72	78	74	72	77	74	71	76	73	71	70



ZONAL LUMEN SUMMARY

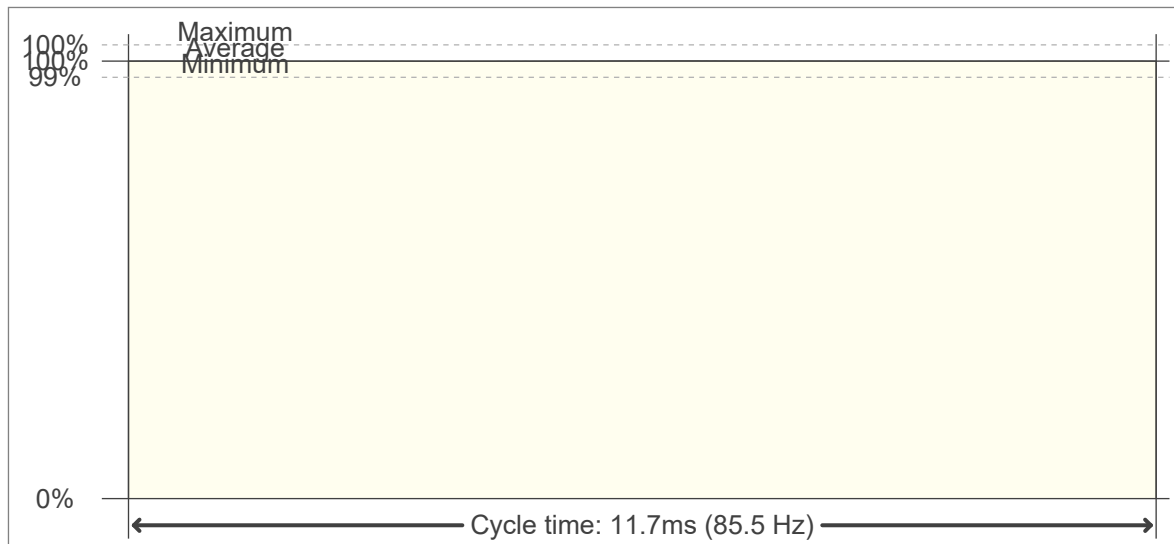
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
28.5 lm	36.9 lm	19.1 lm	4.85 lm	0.777 lm	0.144 lm	0.039 lm	0.026 lm	0.022 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.021 lm	0.018 lm	0.020 lm	0.016 lm	0.017 lm	0.020 lm	0.023 lm	0.016 lm	0.003 lm

FLICKER

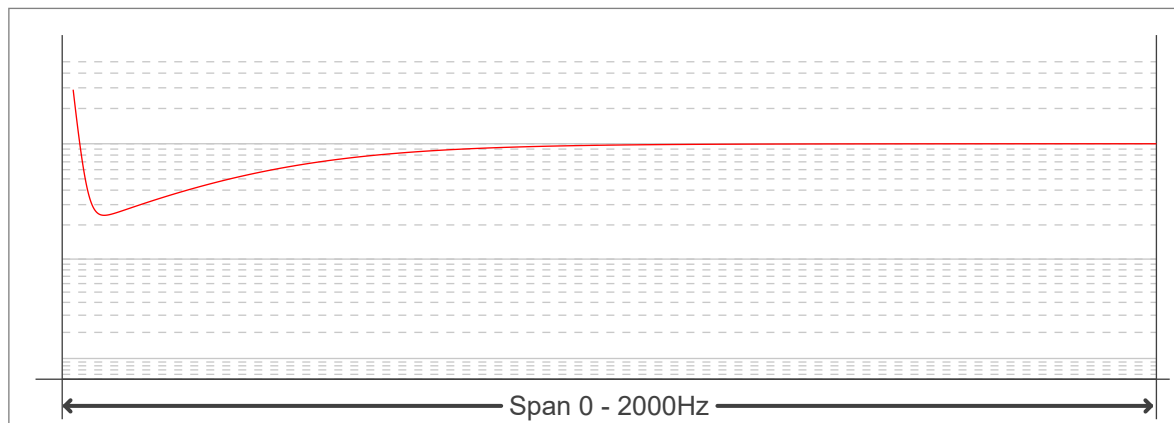
FLICKER CURVE (COMPLETE SAMPLED FLICKER)



FLICKER FRAME (FRAME OF ONE FLICKER PERIOD)



FLICKER FFT (FREQUENCY SCOPE OF FLICKER CURVE)



FLICKER RESULTS:

Flicker frequency:	85.47 Hz
Flicker index:	0
Flicker percentage:	0.07 %
SVM: (Visual flicker)	0

FLICKER CONDITIONS:

Sample rate:	20000 samples/second
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