

PHOTOMETRIC TEST REPORT

LYNX RECESS MATT WHITE

astro

LIGHT EFFICIENCY:

67 Lumen/Watt

OUTPUT: 810 lm

LIGHT QUALITY:

CRI: 84.5

PEAK: 1382 cd

COLOR TEMPERATURE:

2953 K

POWER: 12.1 W

PF: 0.97

Tracking number: [n/a](#)

Product name:

Lynx Recess Matt White

Item number:

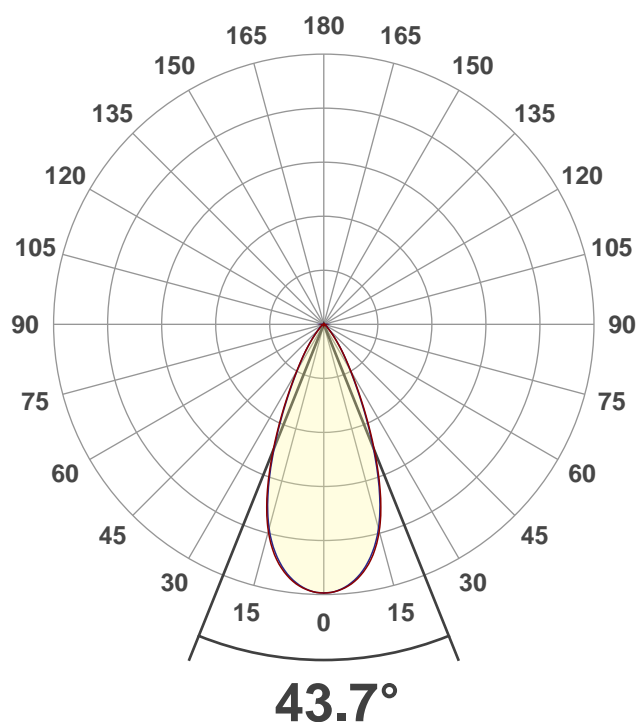
1403009

Date and time:

12/05/2021 10:12:49

Description:

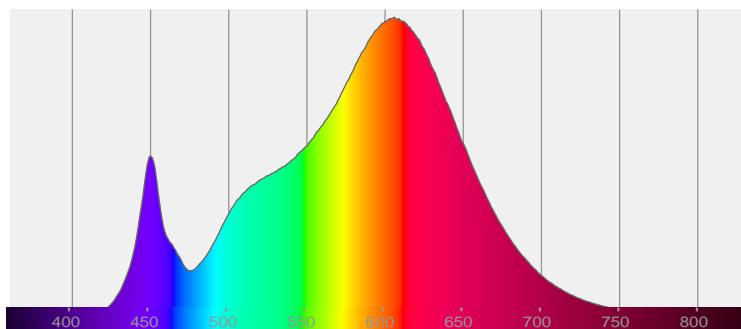
IP20 LED Recessed Spot Light



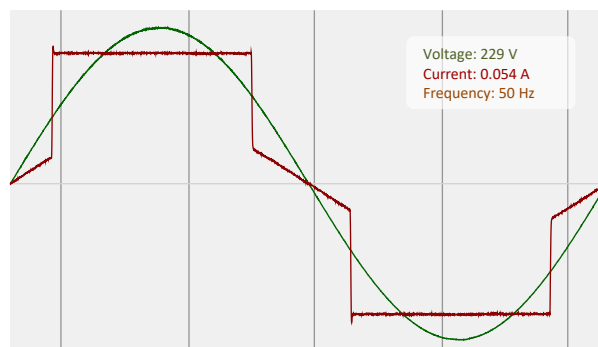
43.7°

CIE 1931
x: 0.440
y: 0.404

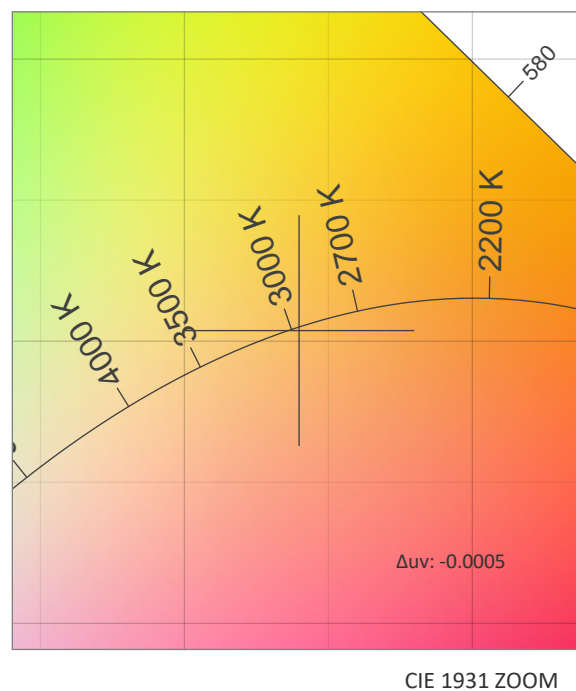
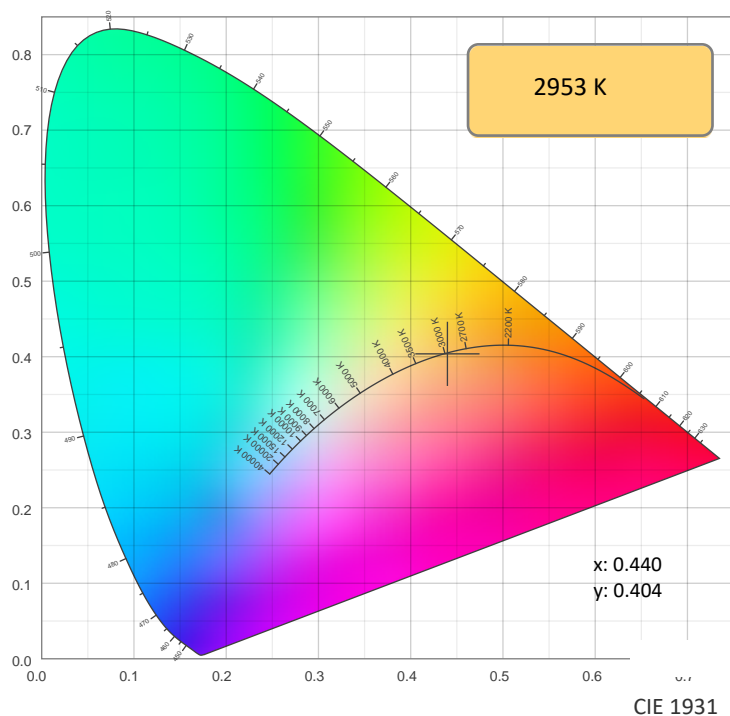
SPECTRA



POWER

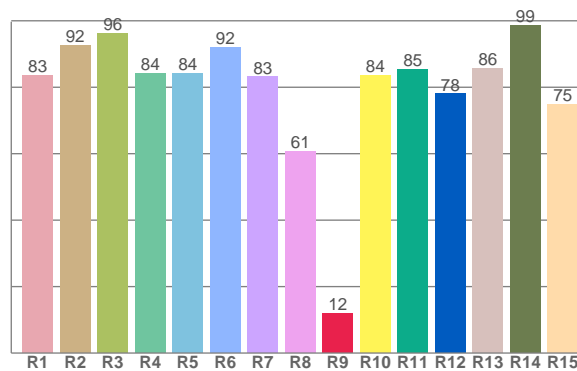
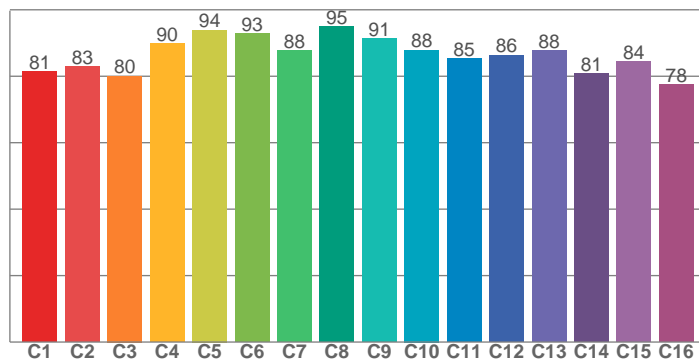


COLOR DETAILS



TM30: 86.5

CRI: 84.5 (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
83.5	92.5	96.2	84.1	84.2	92.0	83.1	60.8	11.9	83.5	85.3	78.0	85.8	98.6	74.8

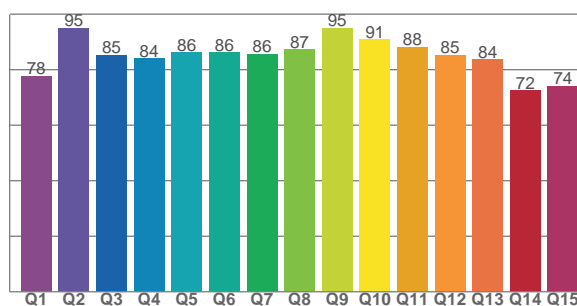
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
81.4	82.8	80.1	89.8	93.9	92.8	87.8	95.0	91.3	87.9	85.2	86.3	87.7	80.8	84.4	77.5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77.8	95.0	85.3	84.0	86.2	86.1	85.5	87.2	95.0	90.8	88.1	85.2	83.7	72.5	74.1

CQS: 83.7



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
2953 K	84.5	11.9	86.5	97.1	83.7	0.440	0.404	0.253	0.348	-0.0005

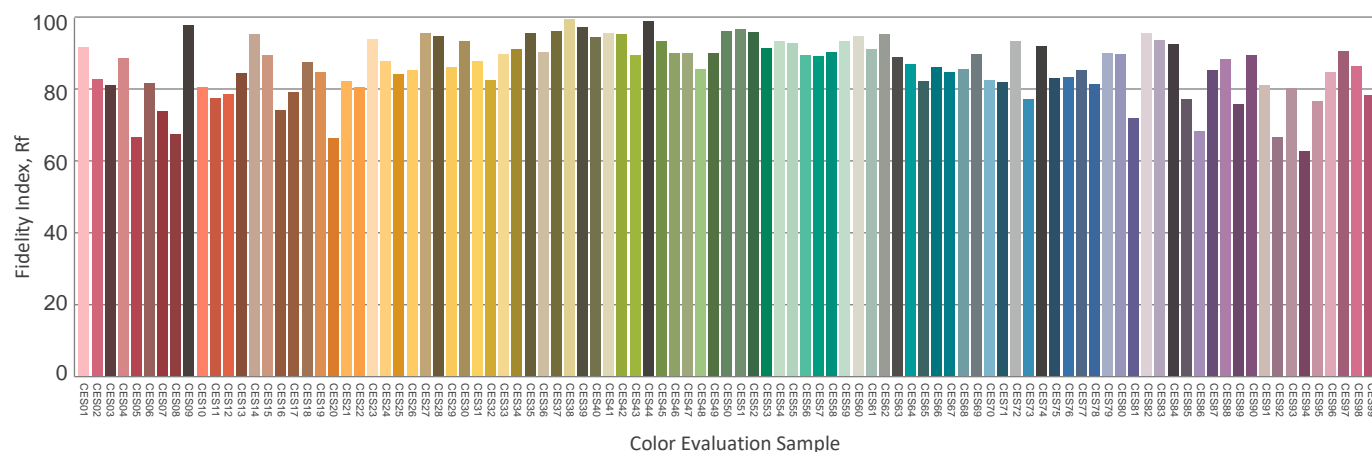
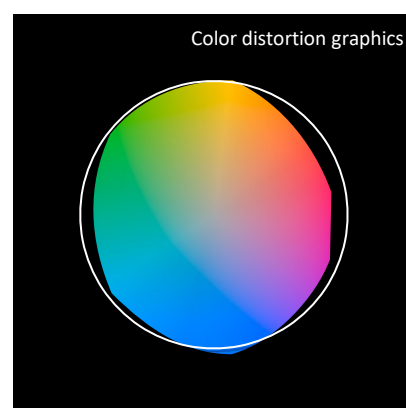
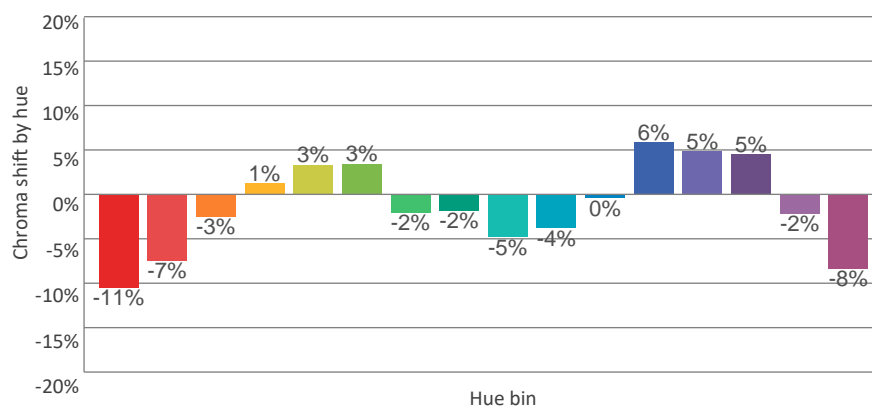
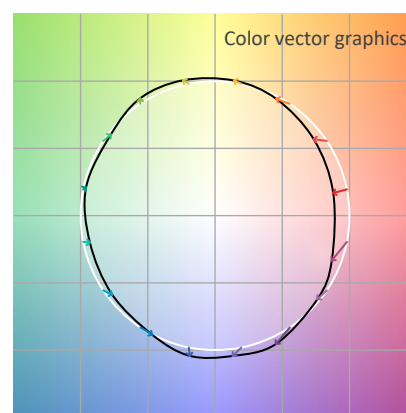
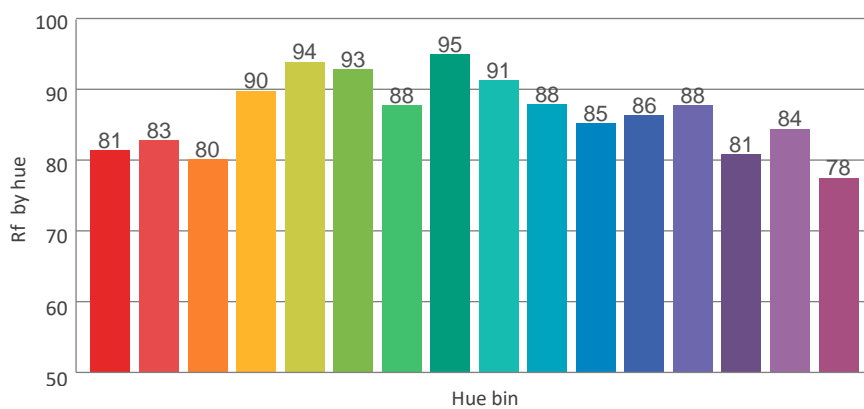
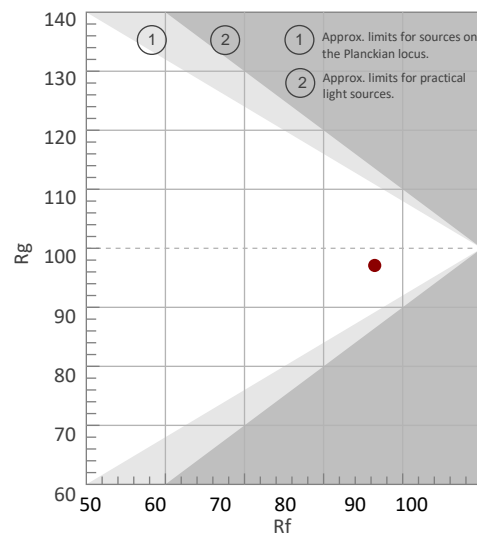
Rf 86.5

Fidelity index Rf

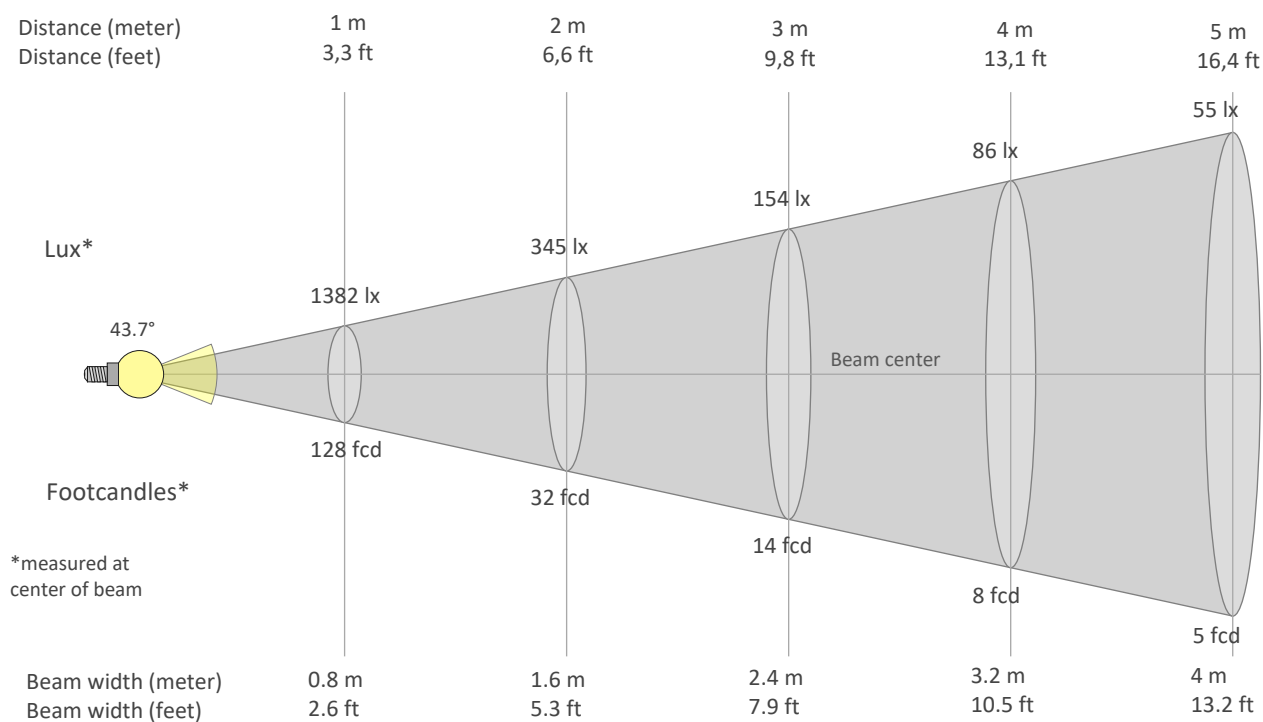
Rg 97.1

Gammut index Rg

Hue Bin	Graphic shifts (%)		
	R _f	Chroma	Hue
1	81	-11%	-1%
2	83	-7%	6%
3	80	-3%	10%
4	90	1%	6%
5	94	3%	4%
6	93	3%	-2%
7	88	-2%	-7%
8	95	-2%	-2%
9	91	-5%	1%
10	88	-4%	6%
11	85	0%	10%
12	86	6%	2%
13	88	5%	-7%
14	81	5%	-15%
15	84	-2%	-9%
16	78	-8%	-16%



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
1382lx	345lx	154lx	86lx	55lx	38lx	28lx	22lx	17lx	14lx	11lx	10lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx
128.4fcd	32.1fcd	14.3fcd	8fcd	5.1fcd	3.6fcd	2.6fcd	2fcd	1.6fcd	1.3fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.4fcd	0.3fcd

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°
1382	1378	1366	1344	1312	1269	1214	1143	1055	947	822	691	567	453	356	280	220	173	133	101
100%	100%	99%	97%	95%	92%	88%	83%	76%	69%	60%	50%	41%	33%	26%	20%	16%	13%	10%	7%

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°
1382	1378	1363	1339	1304	1258	1201	1128	1039	931	805	675	549	438	344	269	214	169	130	100
100%	100%	99%	97%	94%	91%	87%	82%	75%	67%	58%	49%	40%	32%	25%	19%	15%	12%	9%	7%

Intensities in 180° c-plane

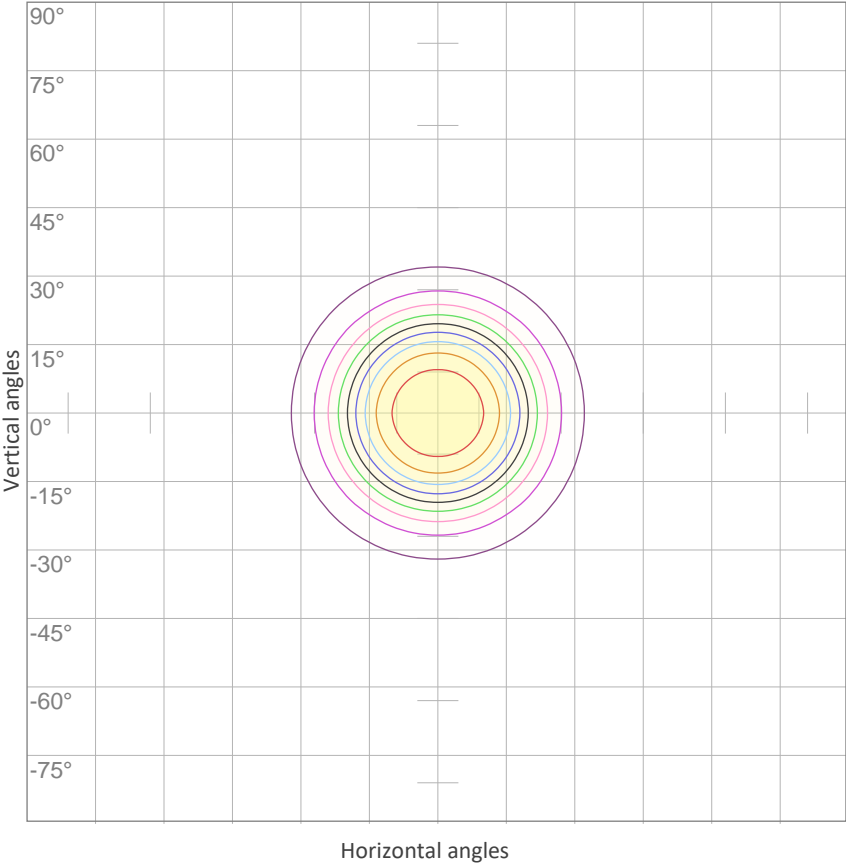
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1382	1378	1366	1344	1312	1269	1214	1143	1055	947	822	691	567	453	356	280	220	173	133	101
100%	100%	99%	97%	95%	92%	88%	83%	76%	69%	60%	50%	41%	33%	26%	20%	16%	13%	10%	7%

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°
1382	1378	1363	1339	1304	1258	1201	1128	1039	931	805	675	549	438	344	269	214	169	130	100
100%	100%	99%	97%	94%	91%	87%	82%	75%	67%	58%	49%	40%	32%	25%	19%	15%	12%	9%	7%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
43.7°	71.4°	91.6°	98.5%	95.3%

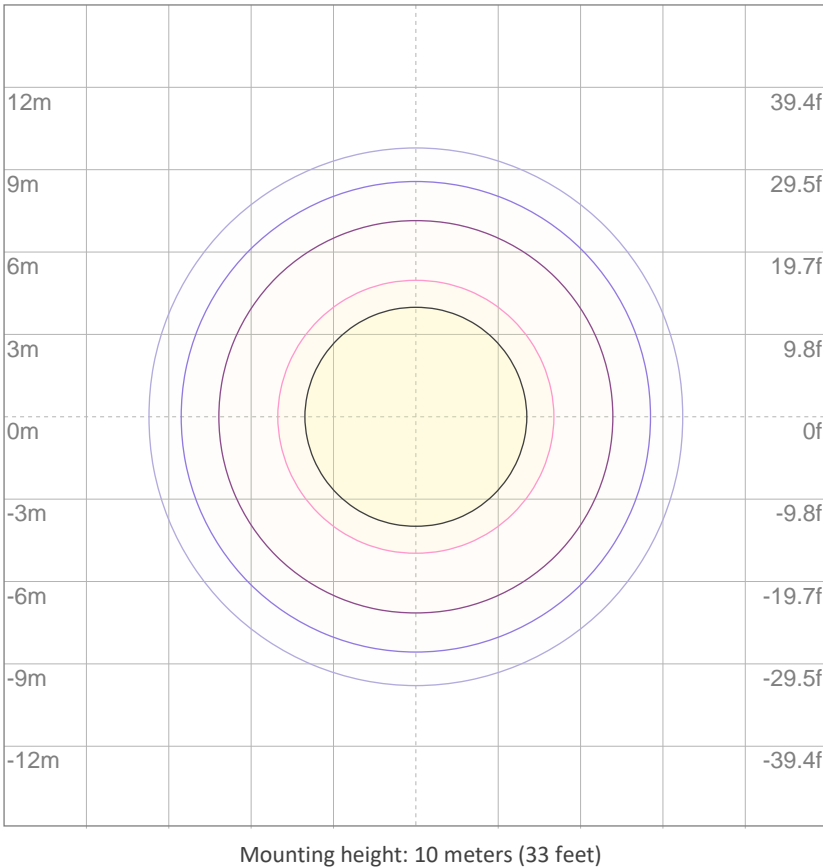
ISO CANDELA DIAGRAM



10%	138 cd
20%	276 cd
30%	415 cd
40%	553 cd
50%	691 cd
60%	829 cd
70%	967 cd
80%	1105 cd
90%	1244 cd

Conditions:
Number of c-planes: 8
Candela at center: 1382 cd

ISO LUX DIAGRAM



3%	0.415 lx
5%	0.691 lx
10%	1.38 lx
30%	4.15 lx
50%	{LUX_10M50} lx

Conditions:
Number of c-planes: 8
Lux at center: 13.8 lx

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

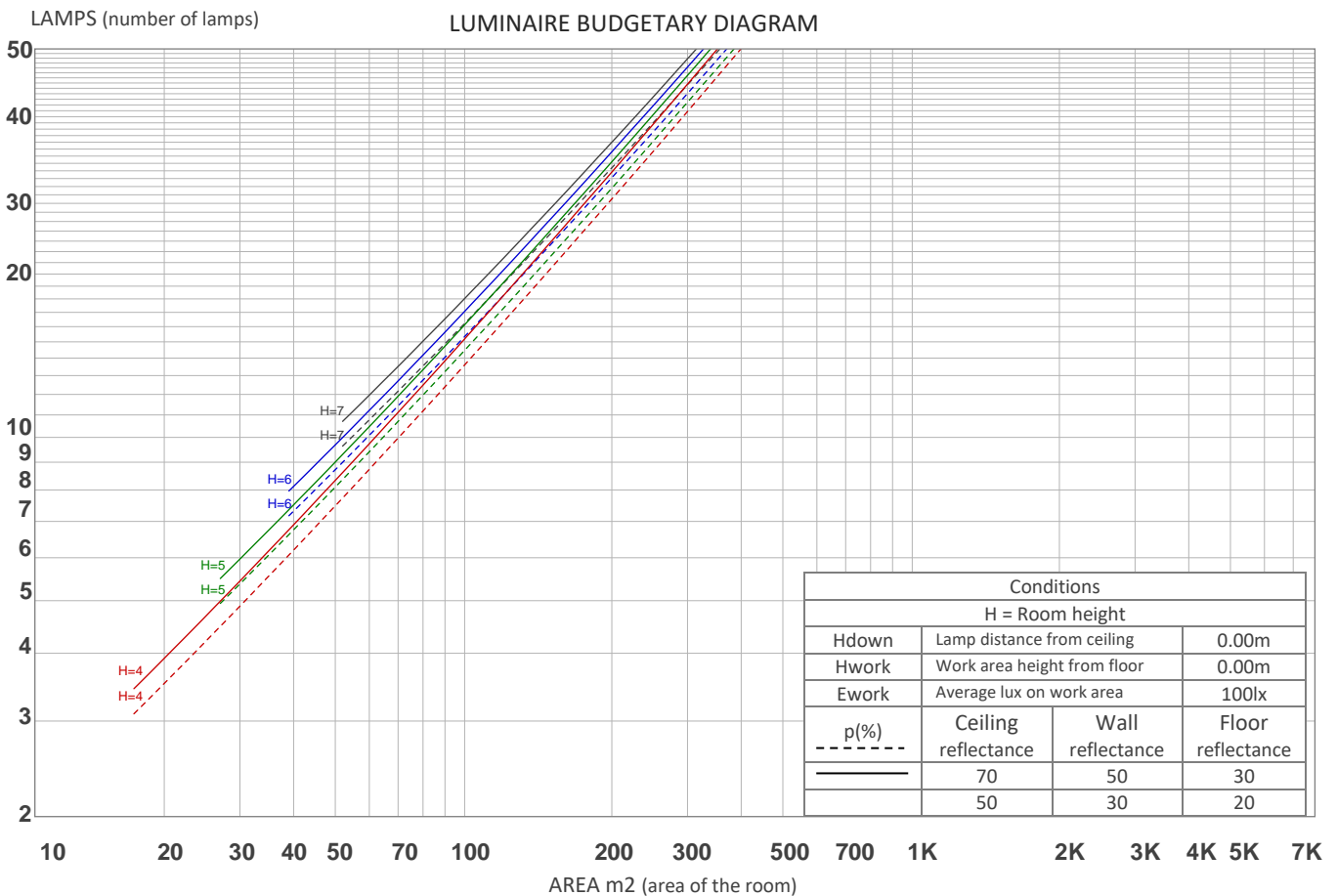
UGR

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	17.5	18.0	17.6	18.3	18.5	17.4	18.0	17.5	18.2	18.4
	3H	17.2	17.9	17.6	18.1	18.3	17.2	17.9	17.5	18.1	18.3
	4H	17.2	17.8	17.6	18.1	18.3	17.1	17.8	17.5	18.0	18.3
	6H	17.2	17.7	17.5	18.0	18.4	17.1	17.7	17.4	18.0	18.3
	8H	17.1	17.7	17.4	18.0	18.4	17.1	17.6	17.4	17.9	18.3
	12H	17.1	17.6	17.4	17.9	18.4	17.0	17.5	17.3	17.9	18.3
4H	2H	17.1	17.8	17.5	18.1	18.3	17.1	17.8	17.5	18.0	18.2
	3H	17.1	17.6	17.5	18.0	18.4	17.0	17.6	17.4	17.9	18.4
	4H	17.0	17.5	17.4	17.9	18.4	16.9	17.4	17.3	17.8	18.4
	6H	16.9	17.4	17.4	17.8	18.1	16.8	17.4	17.4	17.7	18.1
	8H	16.9	17.3	17.4	17.7	18.1	16.8	17.3	17.3	17.6	18.0
	12H	16.8	17.2	17.3	17.6	18.1	16.7	17.1	17.2	17.5	18.0
8H	4H	16.9	17.3	17.4	17.7	18.1	16.8	17.3	17.3	17.6	18.0
	6H	16.8	17.1	17.3	17.6	18.1	16.7	17.1	17.3	17.5	18.1
	8H	16.8	17.1	17.3	17.6	18.2	16.7	17.0	17.3	17.5	18.2
	12H	16.7	17.0	17.3	17.5	18.1	16.7	16.9	17.3	17.4	18.0
12H	4H	16.8	17.2	17.3	17.6	18.1	16.7	17.1	17.2	17.5	18.0
	6H	16.8	17.1	17.3	17.6	18.2	16.7	17.0	17.3	17.5	18.1
	8H	16.7	17.0	17.3	17.5	18.1	16.7	16.9	17.3	17.4	18.0
Variation of the observer position for the luminaire distance S											
S = 1.0H		5.0 / -6.5					4.9 / -6.3				
S = 1.5H		7.6 / -9.1					7.5 / -8.9				
S = 2.0H		9.5 / -10.3					9.4 / -10.2				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 810 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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	84	83
4	99	92	87	83	97	91	86	83	89	85	82	87	83	81	85	82	80	78
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74
6	91	82	77	73	89	82	77	73	80	76	72	79	75	72	77	74	71	70
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66
8	83	74	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63
9	80	71	66	62	79	71	65	62	70	65	62	69	64	61	68	64	61	60
10	77	68	63	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57



ZONAL LUMEN SUMMARY

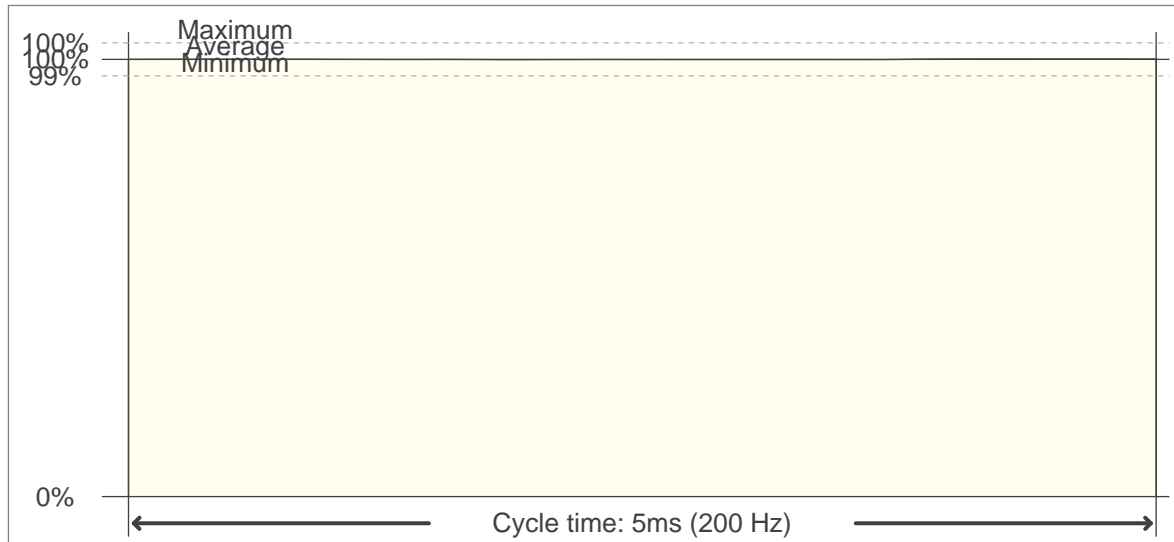
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
126 lm	297 lm	230 lm	97.1 lm	31.9 lm	14.0 lm	5.66 lm	2.61 lm	0.647 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.156 lm	0.192 lm	0.272 lm	0.416 lm	0.593 lm	0.730 lm	0.677 lm	0.440 lm	0.144 lm

FLICKER

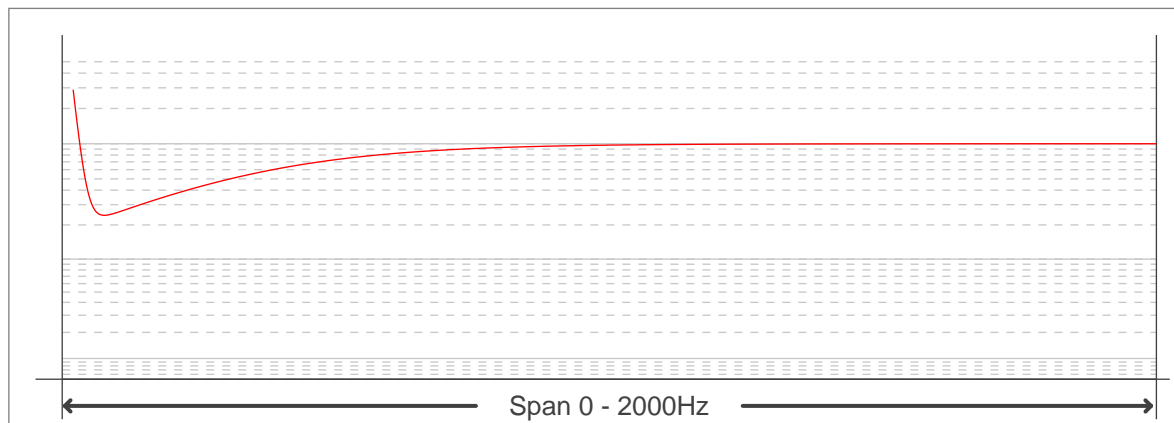
FLICKER CURVE (COMPLETE SAMPLED FLICKER)



FLICKER FRAME (FRAME OF ONE FLICKER PERIOD)



FLICKER FFT (FREQUENCY SCOPE OF FLICKER CURVE)



FLICKER RESULTS:

Flicker frequency:	200 Hz
Flicker index:	0
Flicker percentage:	0.12 %
SVM: (Visual flicker)	0

FLICKER CONDITIONS:

Sample rate:	20000 samples/second
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