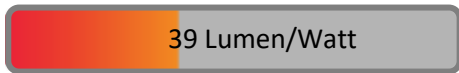


PHOTOMETRIC TEST REPORT

LYNX MATT WHITE & GLARE GUARD

astro

LIGHT EFFICIENCY:



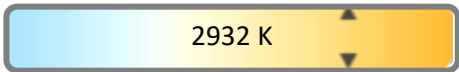
OUTPUT: 466 lm

LIGHT QUALITY:



PEAK: 1245 cd

COLOR TEMPERATURE:



POWER: 12.1 W

PF: 0.97



Tracking number: [n/a](#)

Product name:

Lynx Matt White & Glare Guard

Item number:

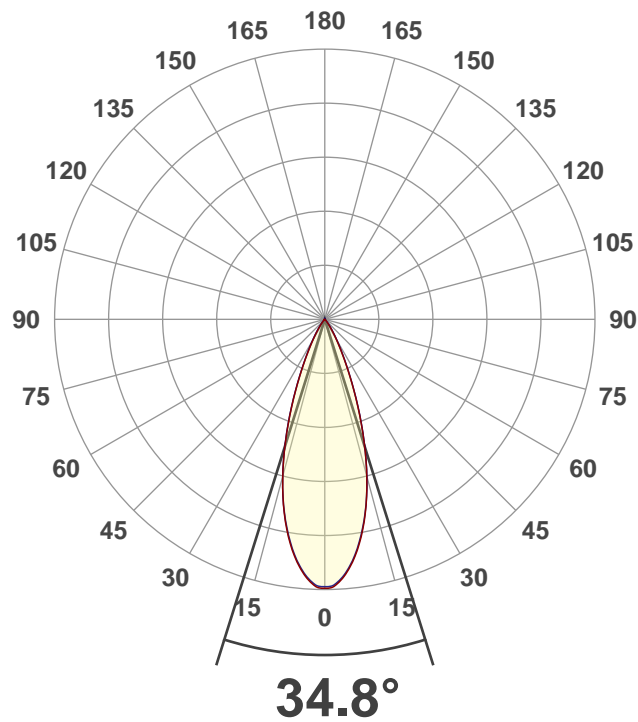
1403007

Date and time:

12/05/2021 10:24:15

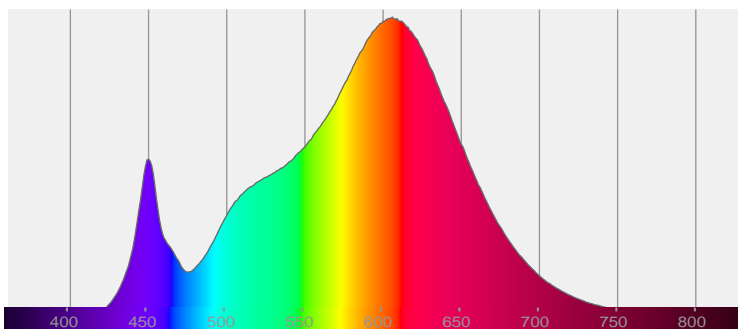
Description:

IP20 LED Spot Light with Glare Guard

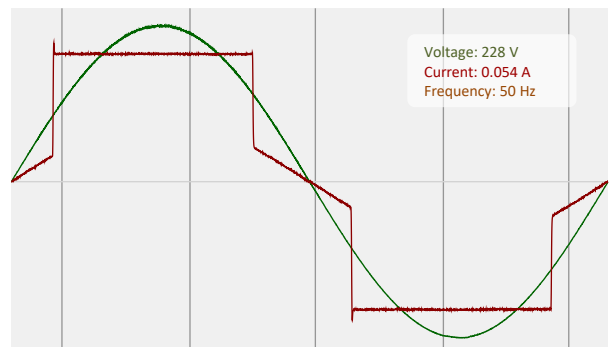


CIE 1931
x: 0.441
y: 0.405

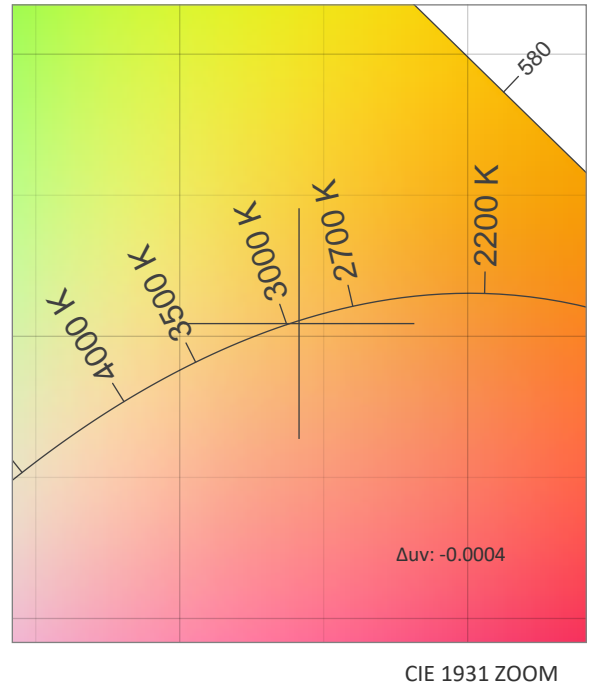
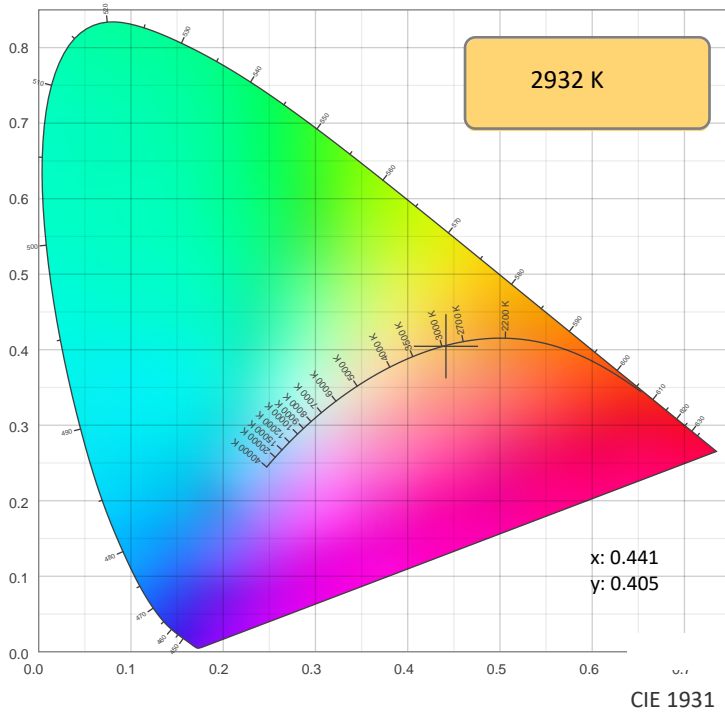
SPECTRA



POWER

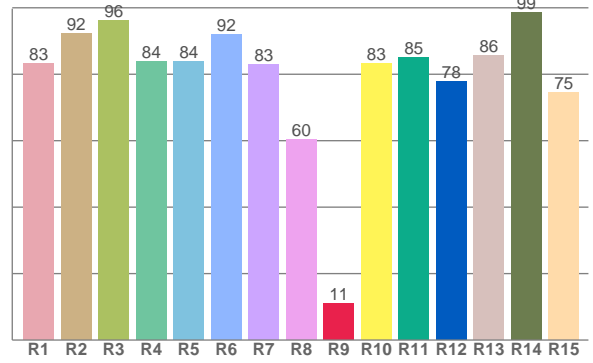
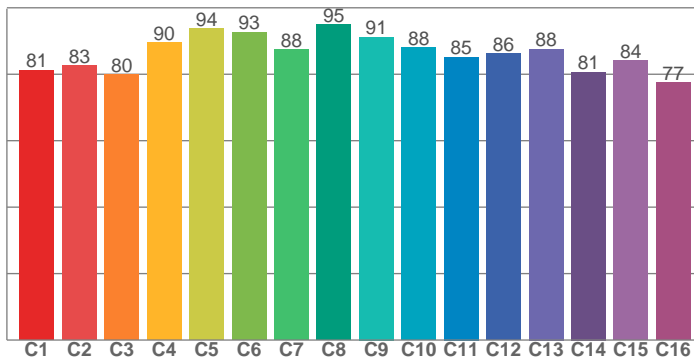


COLOR DETAILS



TM30: 86.3

CRI: 84.3 (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
83.2	92.4	96.2	83.8	83.9	91.9	82.9	60.3	11.1	83.3	85.0	77.9	85.5	98.6	74.5

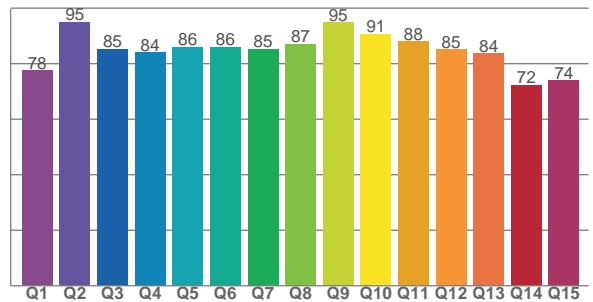
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
81.3	82.6	79.9	89.6	93.8	92.7	87.6	94.9	91.2	87.9	85.2	86.3	87.6	80.7	84.2	77.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77.5	94.9	85.3	83.9	86.1	85.9	85.4	87.1	94.9	90.8	88.0	85.1	83.6	72.2	73.9

CQS: 83.6



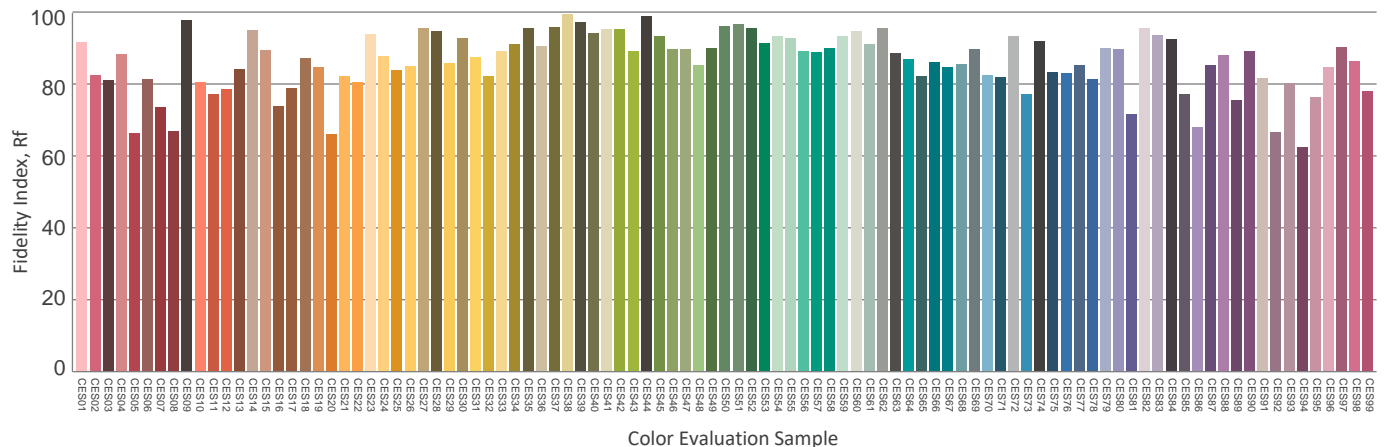
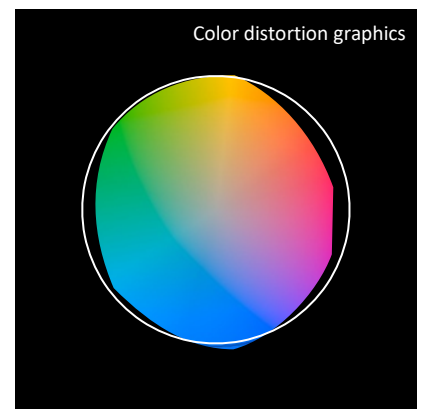
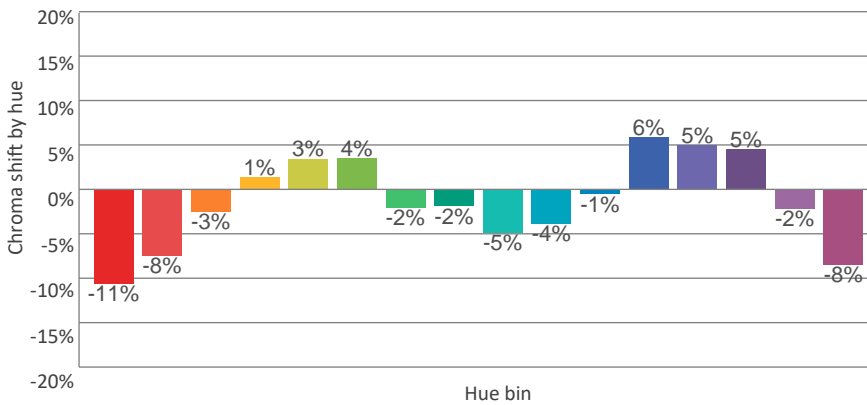
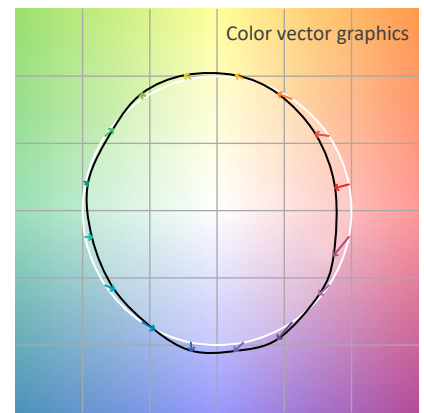
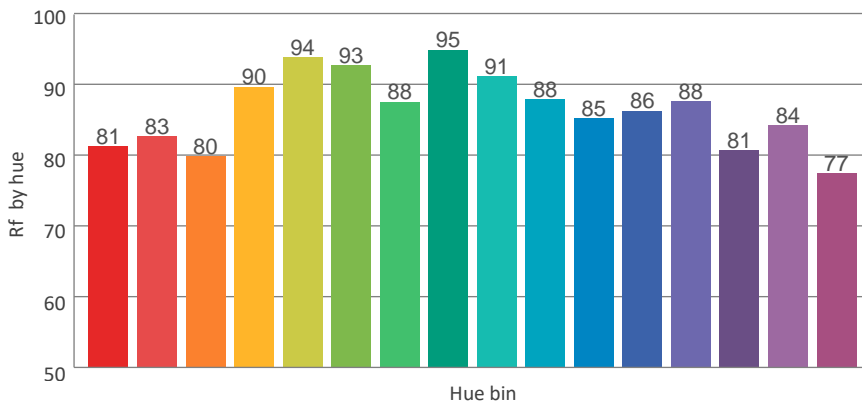
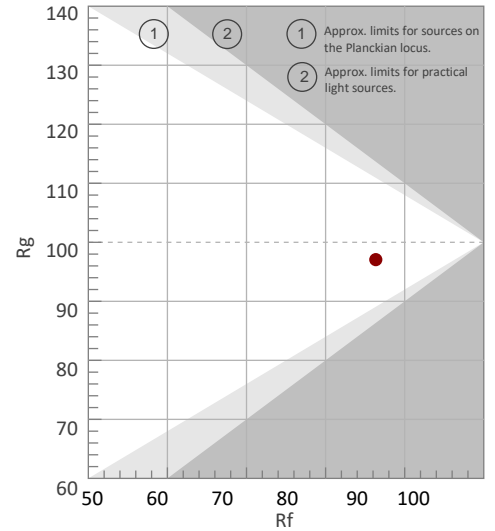
COLOR PARAMETERS

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
2932 K	84.3	11.1	86.3	97.1	83.6	0.441	0.405	0.253	0.348	-0.0004

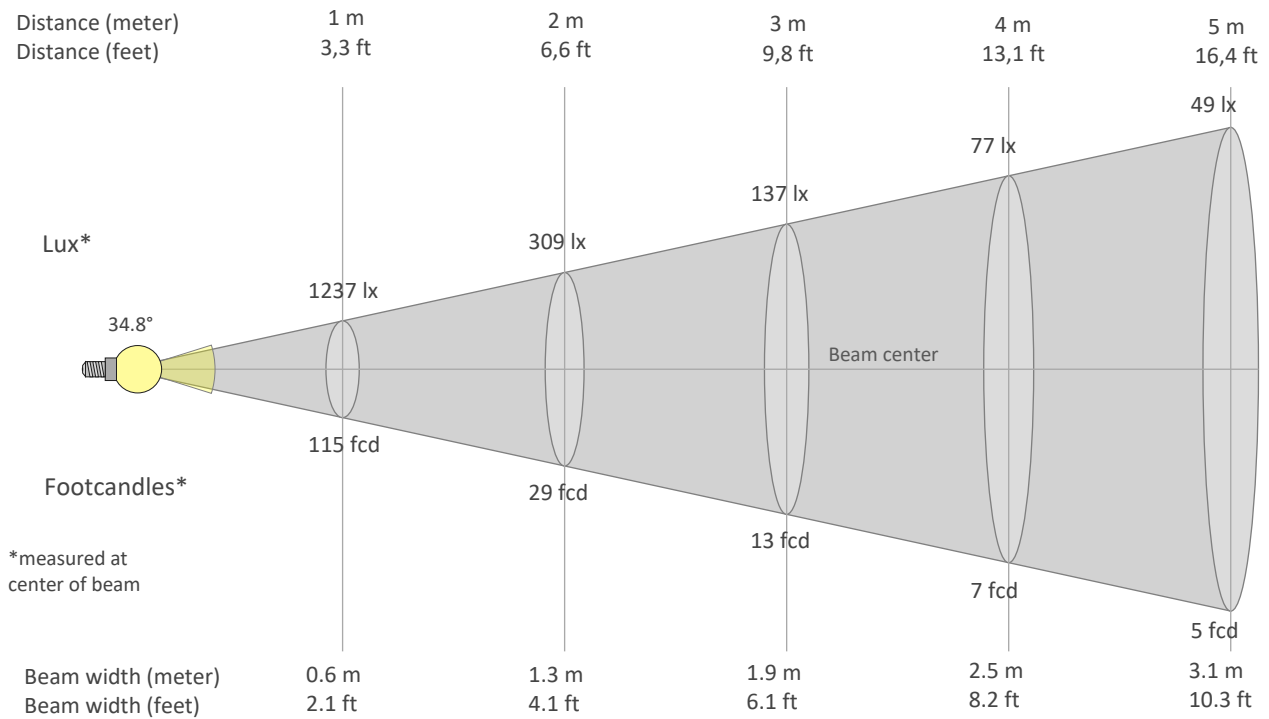
Rf 86.3
Fidelity index Rf

Rg 97.1
Gammut index Rg

		Graphic shifts (%)	
Hue Bin	Rf	Chroma	Hue
1	81	-11%	-1%
2	83	-8%	7%
3	80	-3%	10%
4	90	1%	6%
5	94	3%	4%
6	93	4%	-2%
7	88	-2%	-7%
8	95	-2%	-2%
9	91	-5%	1%
10	88	-4%	6%
11	85	-1%	10%
12	86	6%	2%
13	88	5%	-8%
14	81	5%	-15%
15	84	-2%	-10%
16	77	-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
1237lx	309lx	137lx	77lx	49lx	34lx	25lx	19lx	15lx	12lx	10lx	9lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx	3lx
114.9fcd	28.7fcd	12.8fcd	7.2fcd	4.6fcd	3.2fcd	2.3fcd	1.8fcd	1.4fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.4fcd	0.3fcd	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°
1237	1236	1201	1148	1080	1000	908	805	697	585	474	371	280	207	150	107	75	51	34	23
100%	100%	97%	93%	87%	81%	73%	65%	56%	47%	38%	30%	23%	17%	12%	9%	6%	4%	3%	2%

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°
1237	1229	1195	1142	1074	994	905	805	698	586	477	373	282	211	156	114	83	59	40	27
100%	99%	97%	92%	87%	80%	73%	65%	56%	47%	39%	30%	23%	17%	13%	9%	7%	5%	3%	2%

Intensities in 180° c-plane

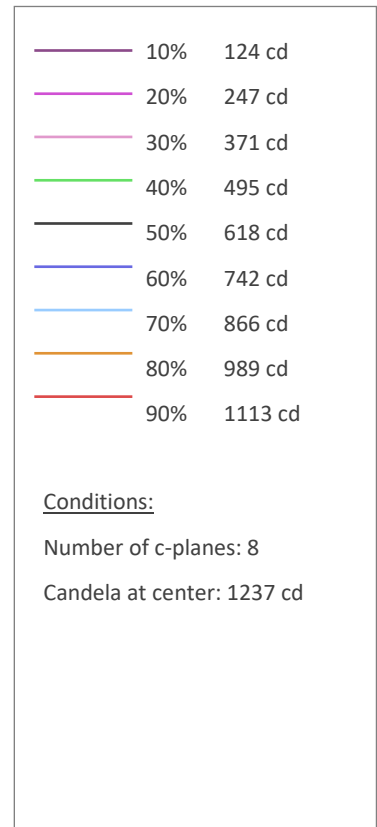
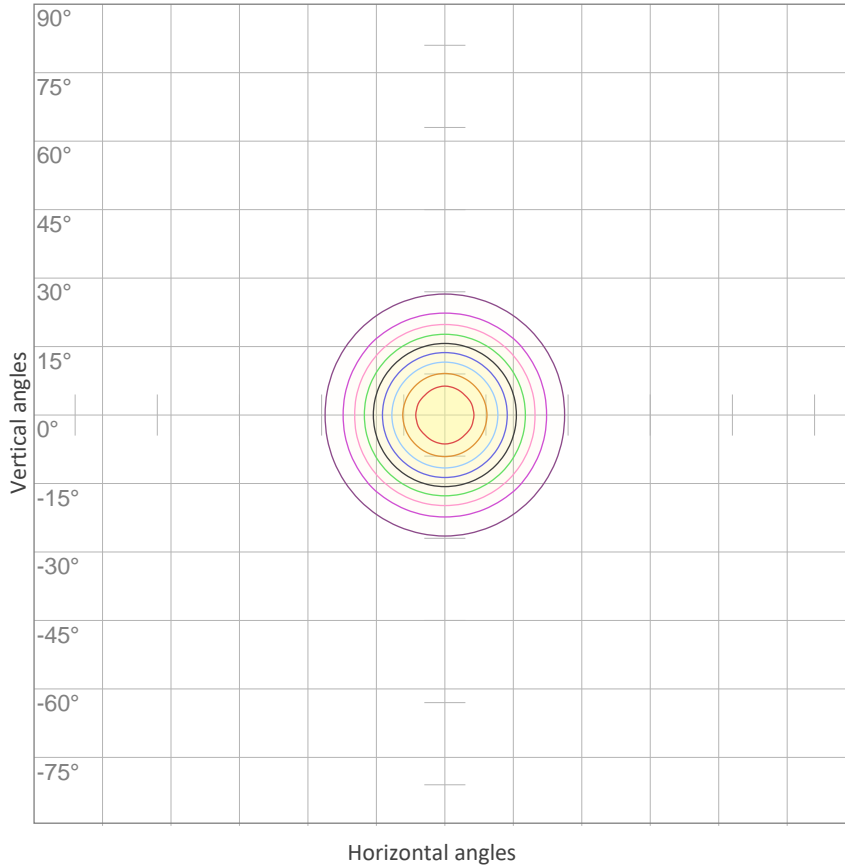
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1237	1236	1201	1148	1080	1000	908	805	697	585	474	371	280	207	150	107	75	51	34	23
100%	100%	97%	93%	87%	81%	73%	65%	56%	47%	38%	30%	23%	17%	12%	9%	6%	4%	3%	2%

Intensities in 270° c-plane

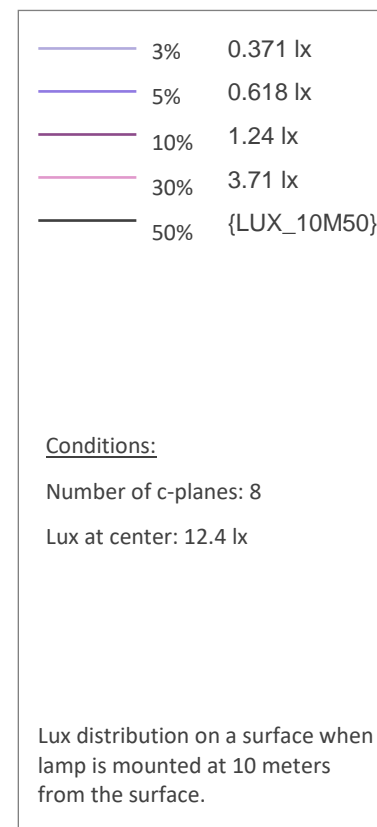
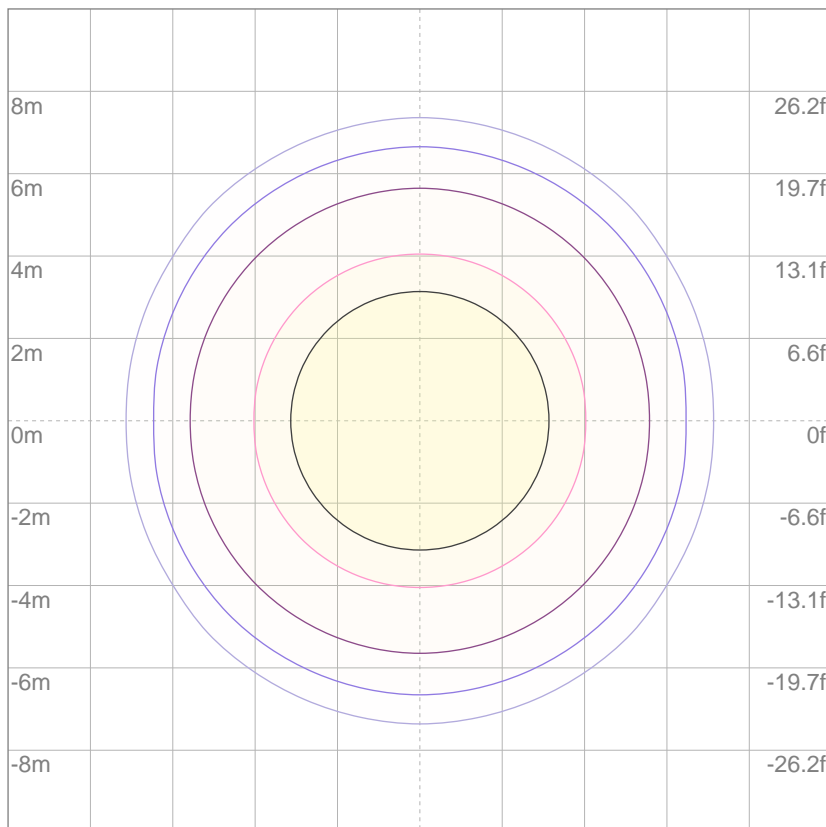
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1237	1229	1195	1142	1074	994	905	805	698	586	477	373	282	211	156	114	83	59	40	27
100%	99%	97%	92%	87%	80%	73%	65%	56%	47%	39%	30%	23%	17%	13%	9%	7%	5%	3%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
34.8°	58.7°	73.8°	99.2%	98.7%

ISO CANDELA DIAGRAM



ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

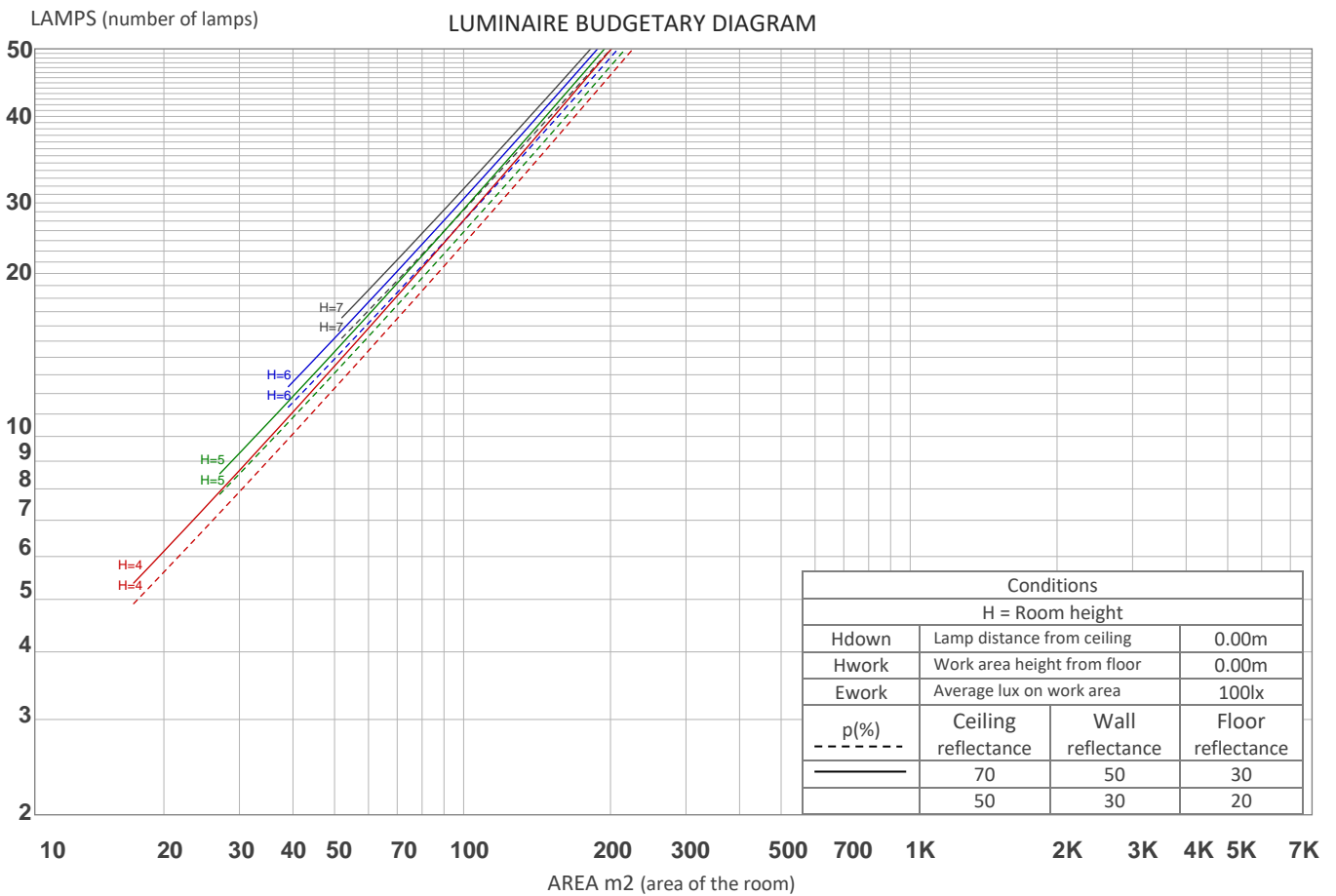
UGR

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	10.6	11.0	10.7	11.2	11.4	11.1	11.5	11.2	11.8	11.9
	3H	10.3	10.9	10.6	11.1	11.3	10.8	11.4	11.1	11.6	11.8
	4H	10.2	10.8	10.6	11.0	11.2	10.7	11.3	11.1	11.5	11.8
	6H	10.2	10.7	10.5	11.0	11.3	10.7	11.2	11.0	11.5	11.8
	8H	10.1	10.6	10.5	10.9	11.3	10.6	11.1	11.0	11.4	11.8
	12H	10.1	10.5	10.4	10.9	11.3	10.6	11.0	10.9	11.4	11.8
4H	2H	10.2	10.8	10.6	11.0	11.2	10.7	11.3	11.1	11.5	11.8
	3H	10.1	10.5	10.4	10.9	11.3	10.6	11.0	10.9	11.4	11.8
	4H	9.9	10.4	10.3	10.8	11.3	10.4	10.9	10.9	11.3	11.8
	6H	9.8	10.3	10.3	10.7	11.0	10.4	10.8	10.9	11.2	11.5
	8H	9.8	10.2	10.3	10.6	10.9	10.3	10.7	10.8	11.1	11.5
	12H	9.7	10.1	10.2	10.5	10.9	10.2	10.6	10.7	11.0	11.5
8H	4H	9.8	10.2	10.3	10.6	10.9	10.3	10.7	10.8	11.1	11.5
	6H	9.7	10.0	10.2	10.5	11.0	10.2	10.5	10.7	11.0	11.5
	8H	9.7	9.9	10.2	10.5	11.1	10.2	10.4	10.7	11.0	11.6
	12H	9.6	9.8	10.2	10.3	11.0	10.2	10.3	10.8	10.9	11.5
12H	4H	9.7	10.1	10.2	10.5	10.9	10.2	10.6	10.7	11.0	11.4
	6H	9.7	9.9	10.2	10.5	11.1	10.2	10.4	10.7	11.0	11.6
	8H	9.6	9.8	10.2	10.3	10.9	10.2	10.3	10.8	10.9	11.5
Variation of the observer position for the luminaire distance S											
S = 1.0H	6.2 / -14.5					6.2 / -14.6					
S = 1.5H	8.9 / -15.6					9.0 / -15.9					
S = 2.0H	10.9 / -16.2					11.0 / -16.3					
Standard table	n/a					n/a					
Correction summand	n/a					n/a					
Corrected glare indices referring to 466 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	99
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	103	100	108	104	101	99	101	99	97	98	96	94	95	94	92	91
3	106	101	97	93	104	99	96	93	97	94	91	94	92	90	92	90	88	87
4	102	96	91	88	100	95	91	88	93	89	87	91	88	85	89	86	84	83
5	98	92	87	84	97	91	86	83	89	85	82	87	84	82	86	83	81	80
6	95	88	83	80	93	87	82	79	85	82	79	84	81	78	83	80	78	76
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	71	69	68
10	83	75	70	67	82	74	70	67	74	70	67	73	69	67	72	69	67	66



ZONAL LUMEN SUMMARY

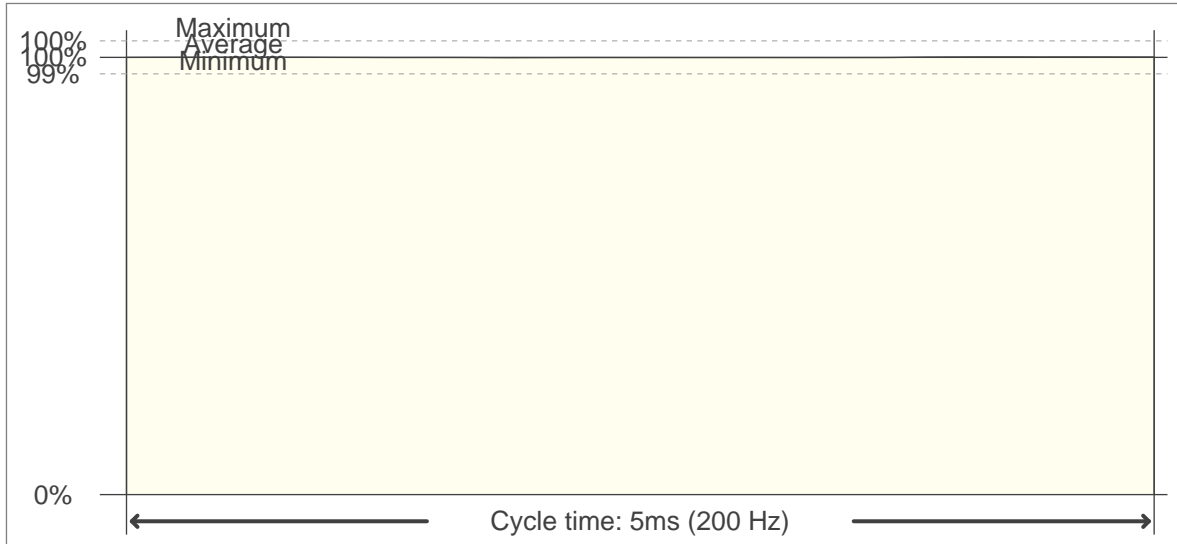
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
106 lm	204 lm	116 lm	31.1 lm	5.16 lm	1.05 lm	0.412 lm	0.310 lm	0.199 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.156 lm	0.154 lm	0.228 lm	0.321 lm	0.443 lm	0.520 lm	0.472 lm	0.322 lm	0.098 lm

FLICKER

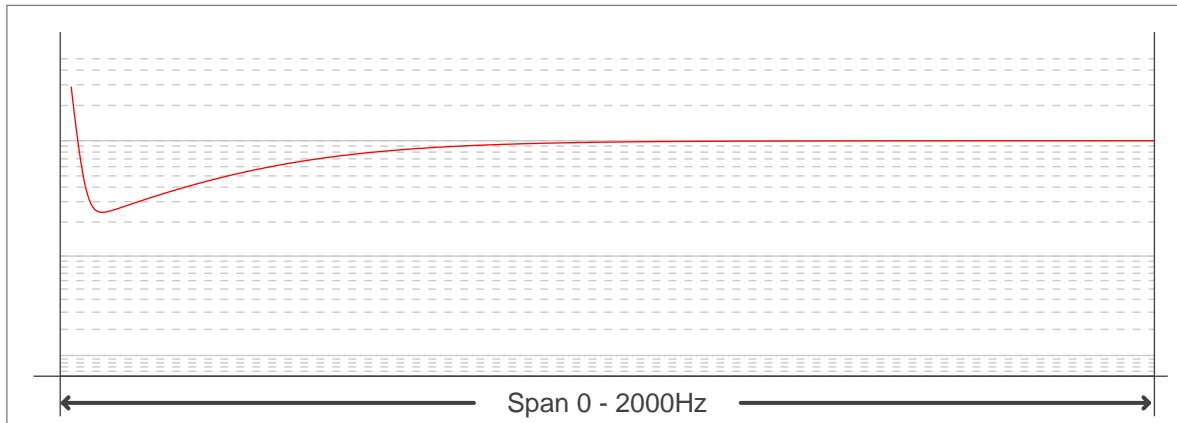
FLICKER CURVE (COMPLETE SAMPLED FLICKER)



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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