

PHOTOMETRIC TEST REPORT

SKYE SPIKE SPOT

astro

LIGHT EFFICIENCY:

68 Lumen/Watt

LIGHT QUALITY:

CRI: 83.5

COLOR TEMPERATURE:

3117 K

OUTPUT: 655 lm

PEAK: 2477 cd

POWER: 9.7 W

PF: 0.95

Tracking number: [n/a](#)

Product name:

Skye Spike Spot

Item number:

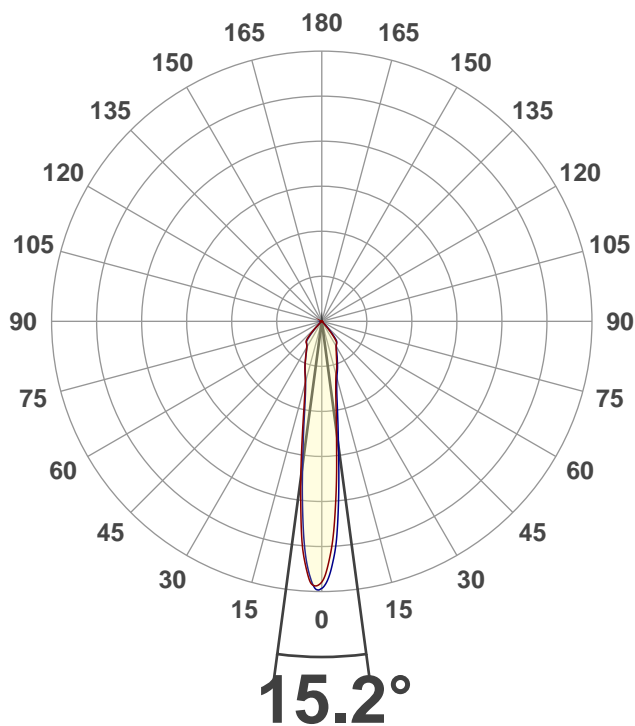
1386001

Date and time:

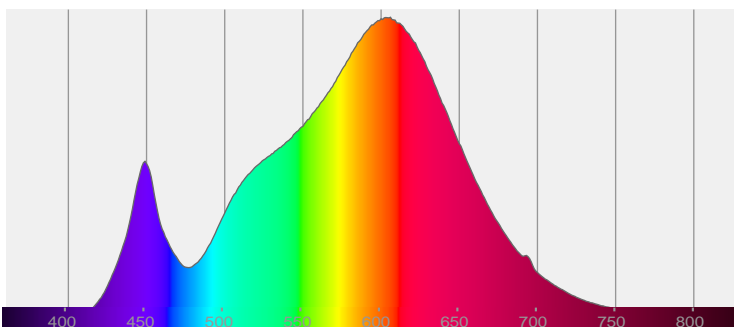
13/09/2019 16:34:52

Description:

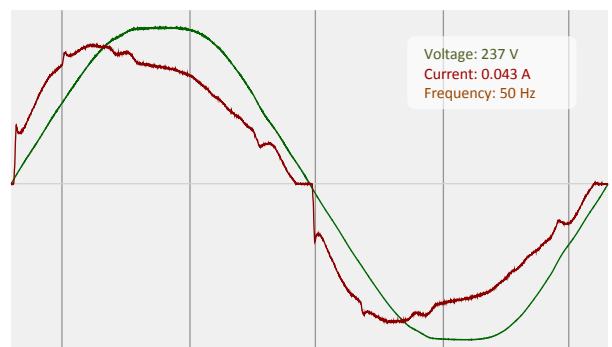
IP65 LED Outdoor Spot Light

CIE 1931
x: 0.430
y: 0.403

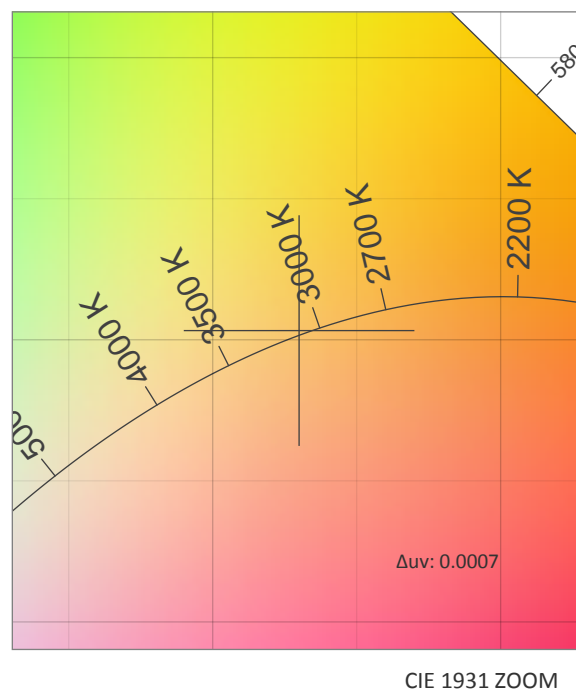
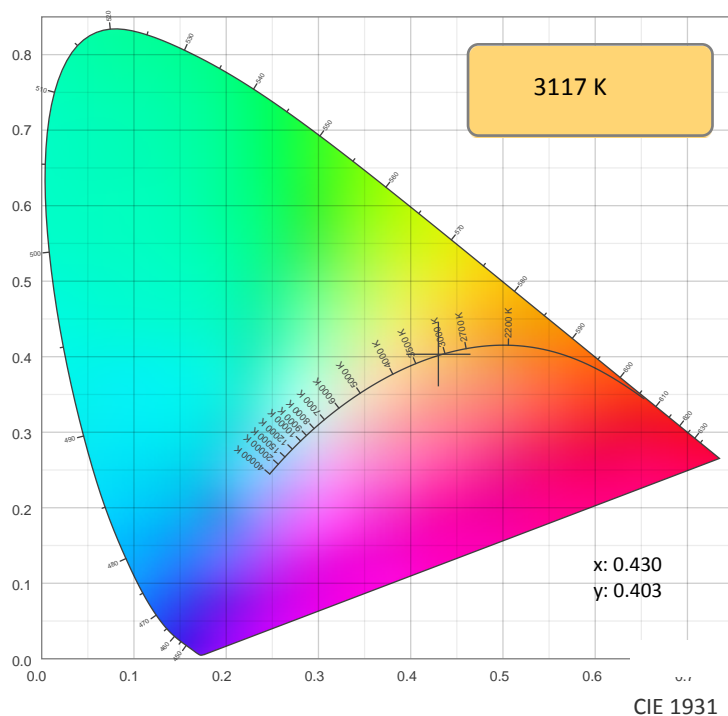
SPECTRA



POWER

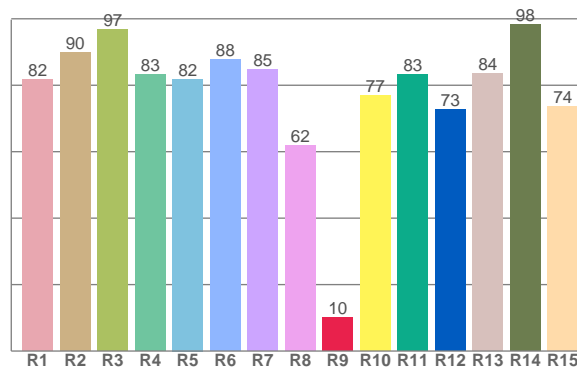
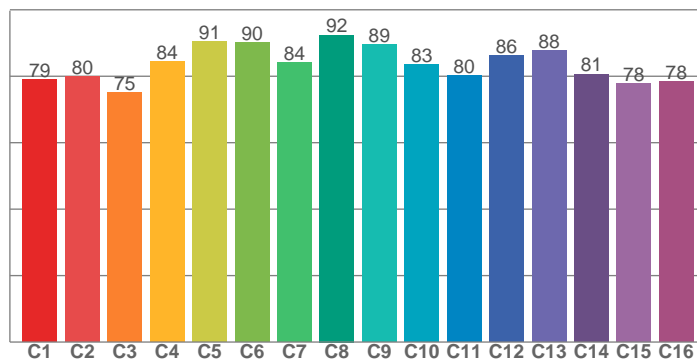


COLOR DETAILS



TM30: 83.6

CRI: 83.5 (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
81.7	89.8	96.8	83.2	81.9	87.7	84.7	61.8	10.0	76.8	83.2	72.6	83.5	98.3	73.6

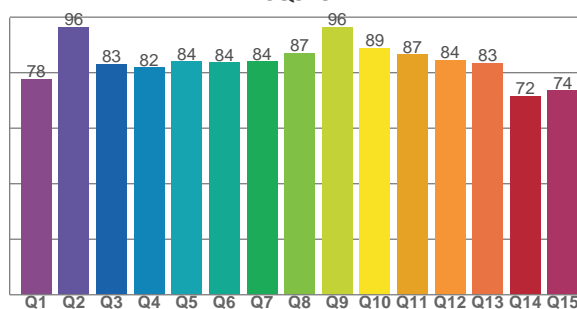
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
78.9	79.9	75.2	84.3	90.5	90.2	84.0	92.4	89.5	83.4	80.3	86.2	87.7	80.7	77.7	78.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77.6	96.4	83.2	81.8	84.0	83.6	84.0	87.2	96.3	88.8	86.5	84.4	83.4	71.6	73.6

CQS: 82.7



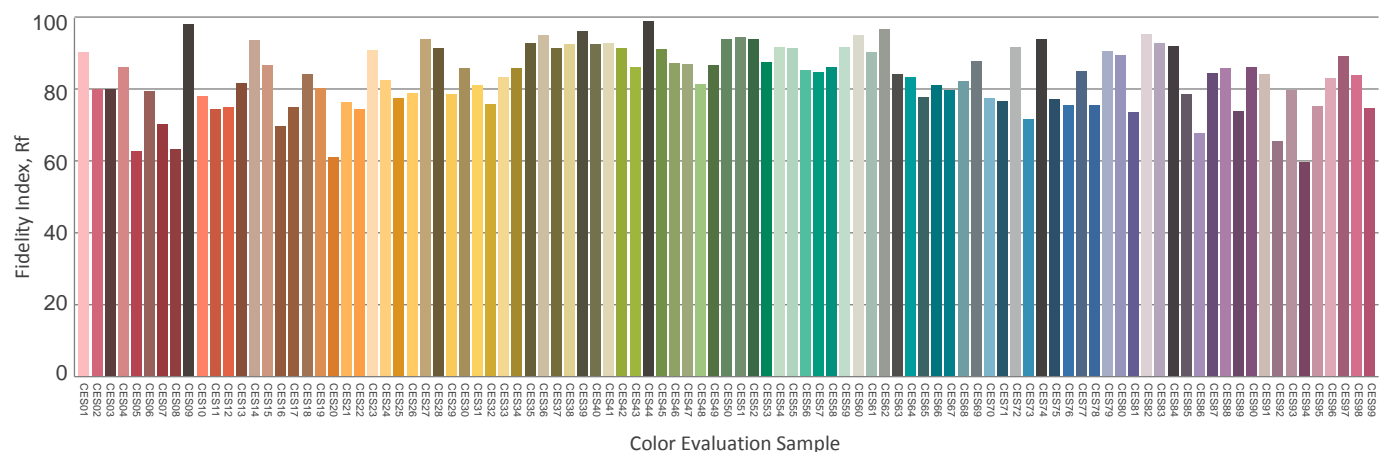
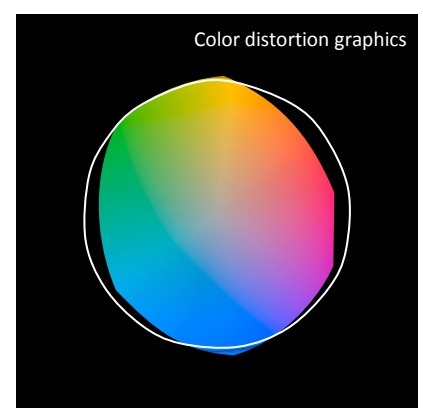
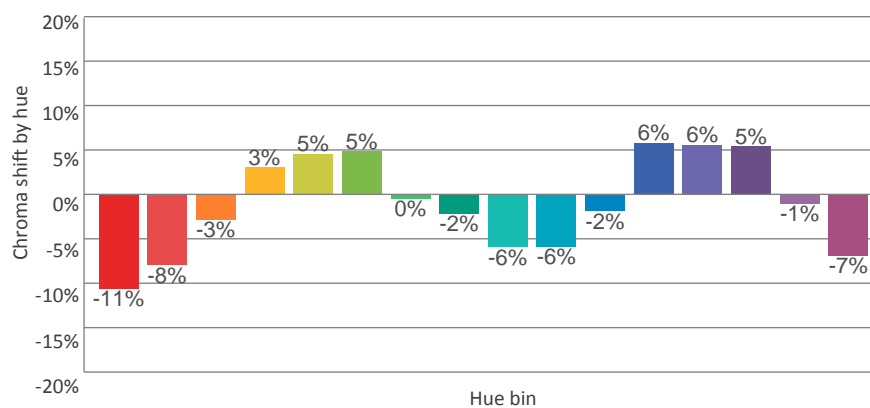
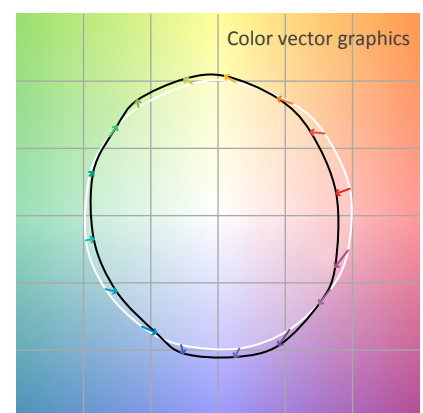
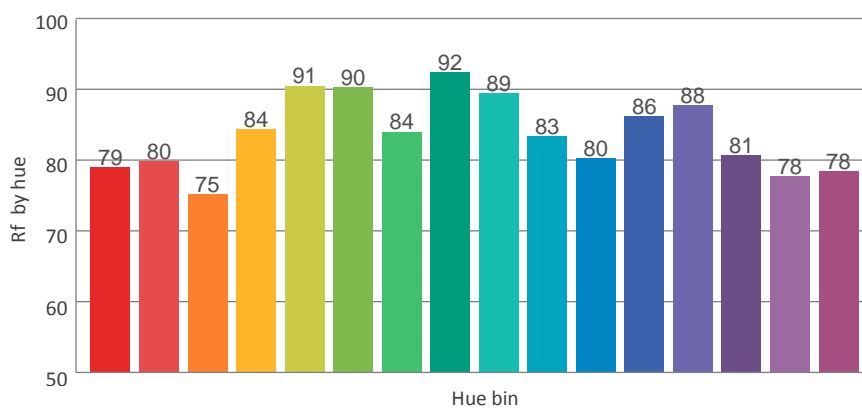
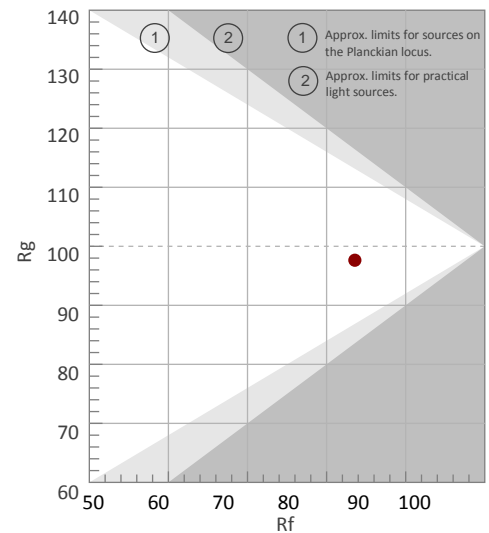
COLOR PARAMETERS

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
3117 K	83.5	10.0	83.6	97.6	82.7	0.430	0.403	0.246	0.347	0.0007

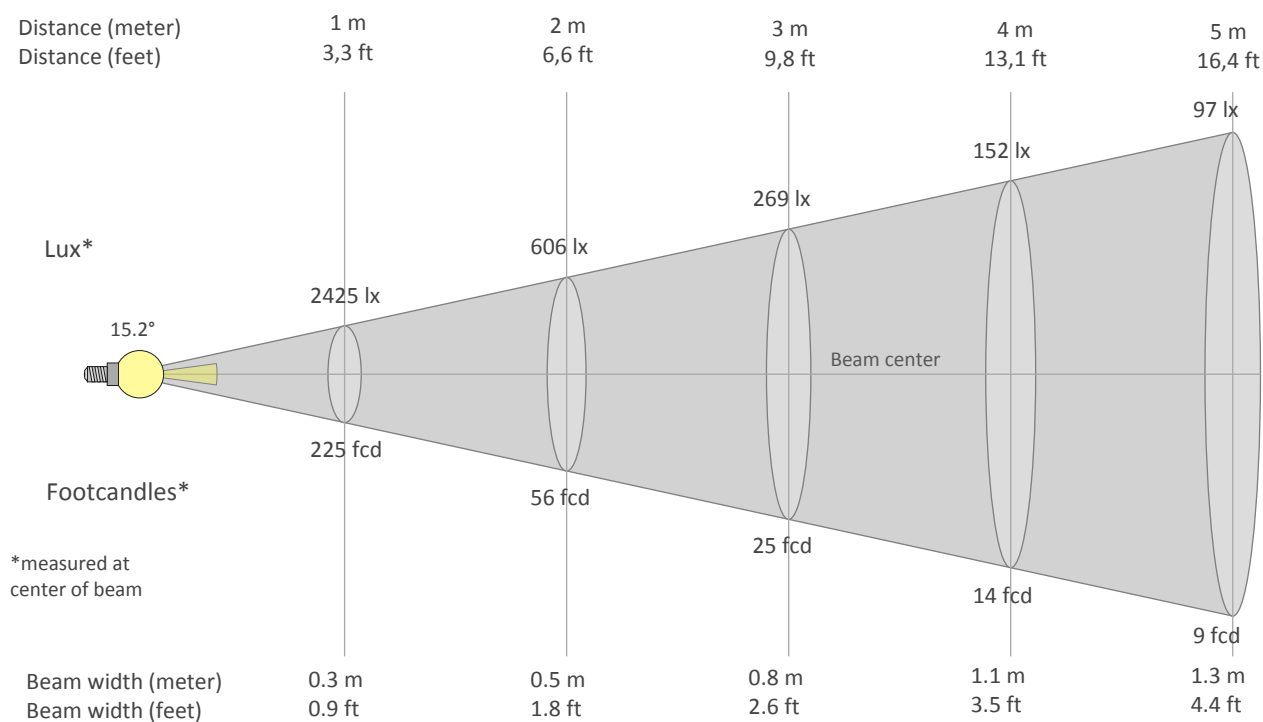
Rf 83.6
Fidelity index Rf

Rg 97.6
Gammut index Rg

Hue Bin	Graphic shifts (%)		
	R _f	Chroma	Hue
1	79	-11%	-2%
2	80	-8%	7%
3	75	-3%	11%
4	84	3%	8%
5	91	5%	5%
6	90	5%	-2%
7	84	0%	-9%
8	92	-2%	-3%
9	89	-6%	0%
10	83	-6%	6%
11	80	-2%	11%
12	86	6%	3%
13	88	6%	-5%
14	81	5%	-13%
15	78	-1%	-13%
16	78	-7%	-14%



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
2425lx	606lx	269lx	152lx	97lx	67lx	49lx	38lx	30lx	24lx	20lx	17lx	14lx	12lx	11lx	9lx	8lx	7lx	7lx	6lx
225.3fcd	56.3fcd	25fcd	14.1fcd	9fcd	6.3fcd	4.6fcd	3.5fcd	2.8fcd	2.3fcd	1.9fcd	1.6fcd	1.3fcd	1.1fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.6fcd

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°
2425	2168	1764	1313	972	753	620	538	487	445	402	362	330	304	282	264	254	244	224	169
100%	89%	73%	54%	40%	31%	26%	22%	20%	18%	17%	15%	14%	13%	12%	11%	10%	10%	9%	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°
2425	2309	1985	1504	1098	834	666	572	512	467	423	382	346	315	289	268	253	244	234	206
100%	95%	82%	62%	45%	34%	27%	24%	21%	19%	17%	16%	14%	13%	12%	11%	10%	10%	10%	9%

Intensities in 180° c-plane

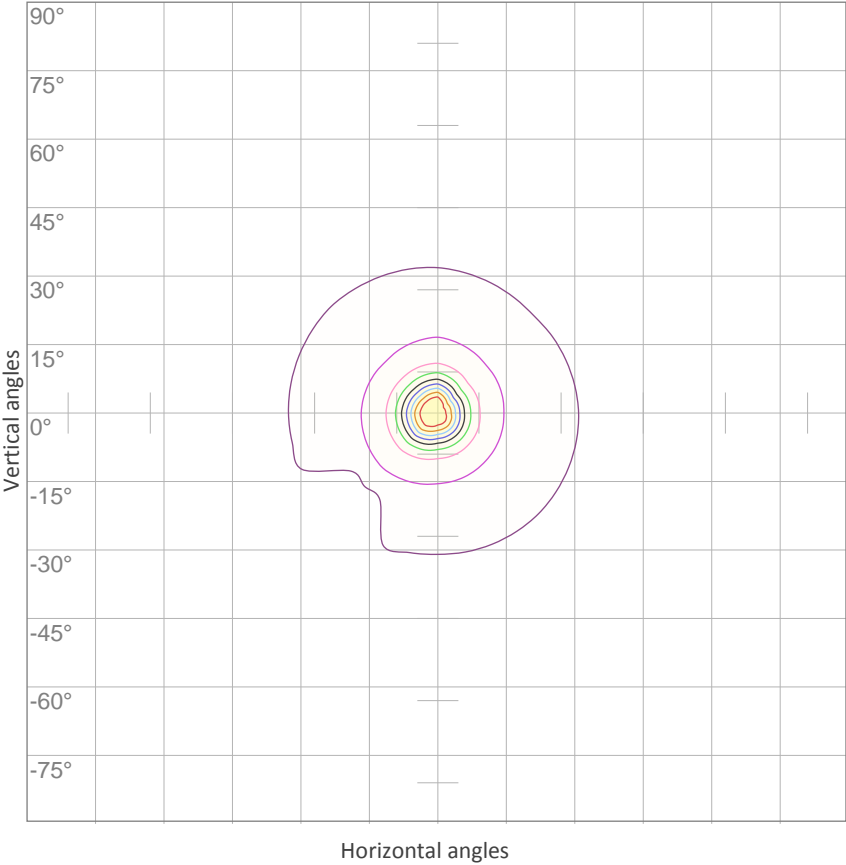
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2425	2431	2229	1832	1380	1019	781	639	554	501	454	409	368	332	302	278	261	251	244	234
100%	100%	92%	76%	57%	42%	32%	26%	23%	21%	19%	17%	15%	14%	12%	11%	11%	10%	10%	10%

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°
2425	2423	2155	1701	1255	942	735	616	543	495	450	404	361	326	297	274	258	249	240	217
100%	100%	89%	70%	52%	39%	30%	25%	22%	20%	19%	17%	15%	13%	12%	11%	11%	10%	10%	9%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15.2°	69°	86.2°	98.3%	95.8%

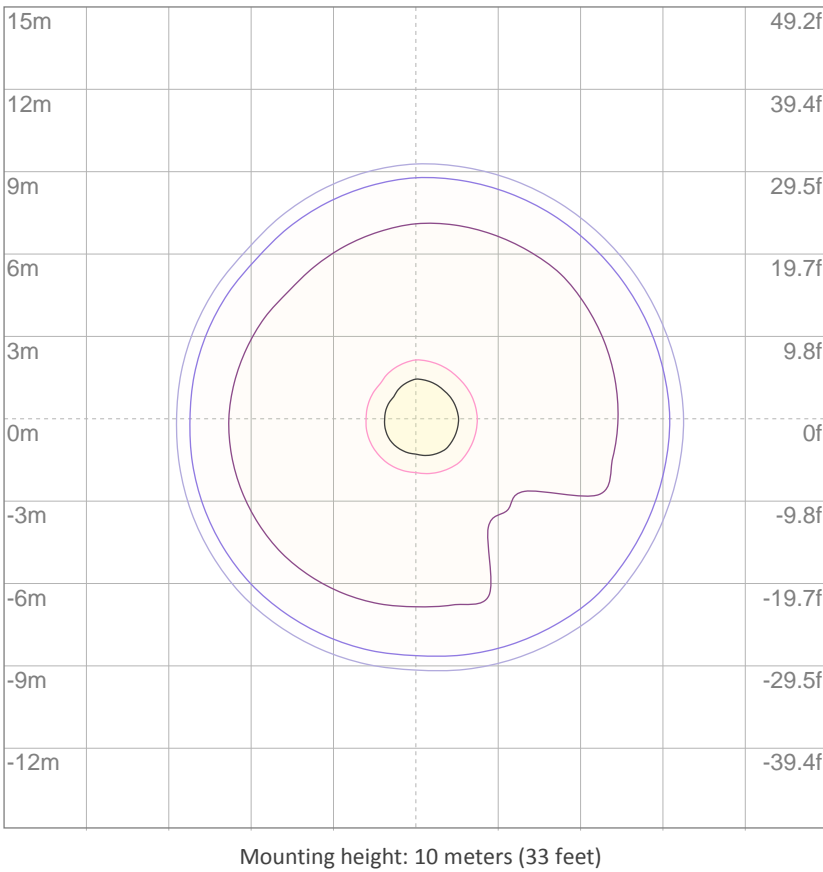
ISO CANDELA DIAGRAM



10%	242 cd
20%	485 cd
30%	727 cd
40%	970 cd
50%	1212 cd
60%	1455 cd
70%	1697 cd
80%	1940 cd
90%	2182 cd

Conditions:
Number of c-planes: 8
Candela at center: 2425 cd

ISO LUX DIAGRAM



3%	0.727 lx
5%	1.21 lx
10%	2.42 lx
30%	7.27 lx
50%	{LUX_10M50} lx

Conditions:
Number of c-planes: 8
Lux at center: 24.2 lx

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

UGR

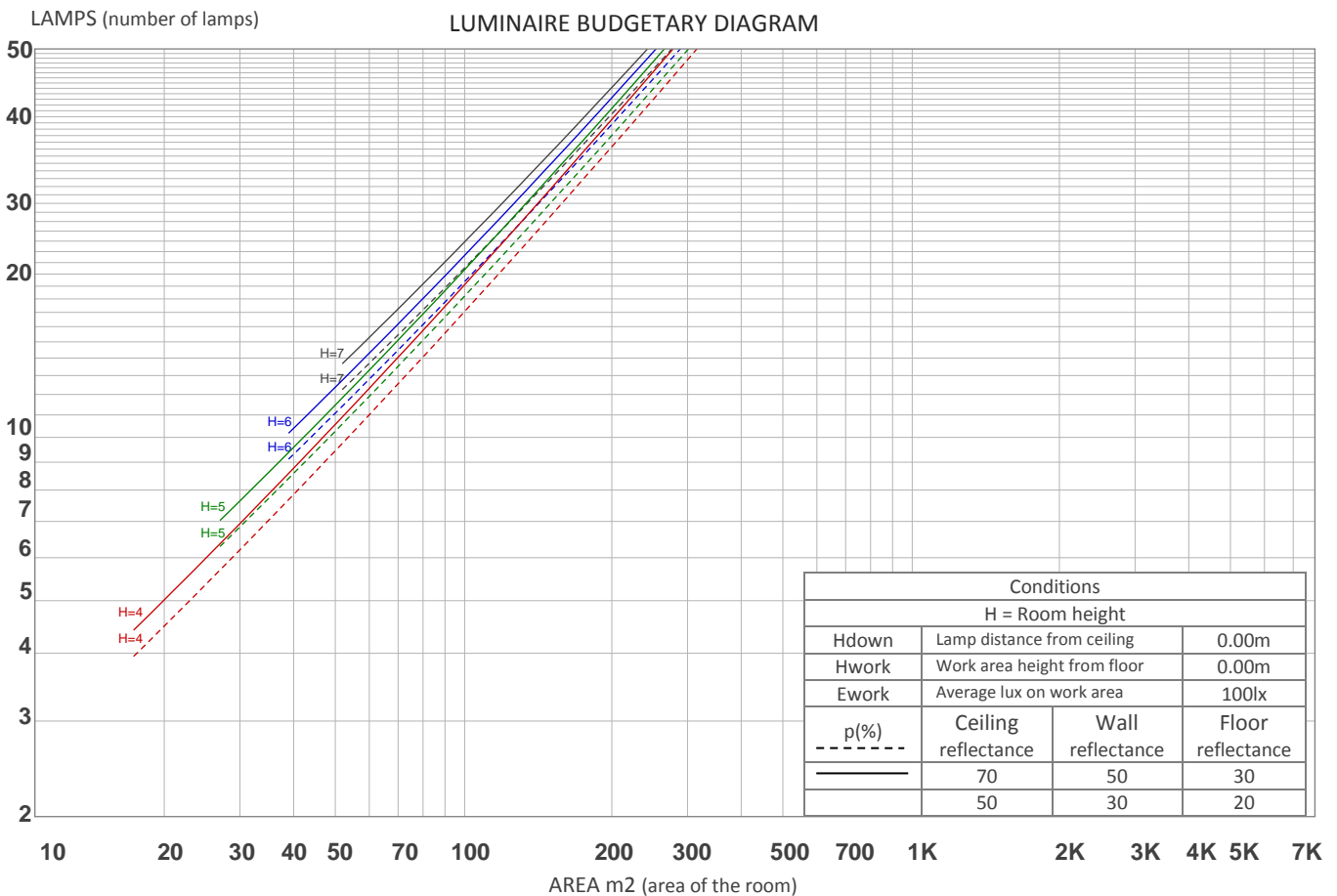
GLARE EVALUATION ACCORDING TO UGR

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	20.2	20.9	20.4	21.1	21.3	21.0	21.8	21.3	22.0	22.2
	3H	20.1	20.8	20.4	21.0	21.3	21.0	21.6	21.3	21.9	22.1
	4H	20.1	20.7	20.4	21.0	21.2	21.0	21.6	21.3	21.8	22.1
	6H	20.1	20.6	20.4	20.9	21.2	20.9	21.5	21.3	21.8	22.1
	8H	20.0	20.6	20.4	20.9	21.2	20.9	21.4	21.2	21.7	22.0
	12H	20.0	20.5	20.4	20.8	21.1	20.9	21.4	21.2	21.7	22.0
4H	2H	20.0	20.6	20.3	20.9	21.1	20.9	21.5	21.2	21.7	22.0
	3H	20.0	20.5	20.4	20.8	21.1	20.8	21.3	21.2	21.7	22.0
	4H	20.0	20.4	20.4	20.8	21.1	20.8	21.3	21.2	21.6	22.0
	6H	20.0	20.4	20.4	20.7	21.1	20.8	21.2	21.2	21.6	21.9
	8H	20.0	20.3	20.4	20.7	21.1	20.8	21.1	21.2	21.5	21.9
	12H	20.0	20.2	20.4	20.7	21.1	20.8	21.1	21.2	21.5	21.9
8H	4H	19.9	20.3	20.4	20.7	21.1	20.7	21.1	21.2	21.5	21.9
	6H	19.9	20.2	20.4	20.6	21.1	20.7	21.0	21.2	21.4	21.9
	8H	19.9	20.1	20.4	20.6	21.1	20.7	20.9	21.2	21.4	21.9
	12H	19.9	20.1	20.4	20.6	21.1	20.7	20.9	21.2	21.4	21.9
12H	4H	19.9	20.2	20.3	20.6	21.0	20.7	21.0	21.1	21.4	21.8
	6H	19.9	20.1	20.4	20.6	21.0	20.7	20.9	21.2	21.4	21.8
	8H	19.9	20.1	20.4	20.5	21.0	20.7	20.9	21.2	21.3	21.8
Variation of the observer position for the luminaire distance S											
S = 1.0H		+4.0 / -5.7					+4.2 / -6.4				
S = 1.5H		+6.8 / -6.0					+6.2 / -6.4				
S = 2.0H		+8.8 / -6.6					+8.1 / -7.0				
Standard table		BK00					BK00				
Correction summand		1.7					2.6				
Corrected glare indices referring to 655 lm total luminous flux											

UGR data could be incorrect as lamp output is not symmetrical. Goto Edit->Photometric->Corrections and select Correct asymmetry.

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	108	106	111	109	107	105	105	103	101	101	99	98	97	96	95	93
2	108	103	100	96	106	102	98	95	98	96	93	95	93	91	93	91	89	87
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82
4	98	91	86	82	96	90	85	81	88	83	80	86	82	79	84	81	78	77
5	94	86	80	76	92	85	79	76	83	78	75	81	77	74	80	76	74	72
6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	69	68
7	85	77	71	67	84	76	71	67	75	70	66	73	69	66	72	69	66	64
8	82	73	67	63	80	72	67	63	71	66	63	70	66	62	69	65	62	61
9	78	69	64	60	77	69	63	60	68	63	60	67	62	59	66	62	59	58
10	75	66	61	57	74	66	60	57	65	60	57	64	60	57	63	59	56	55

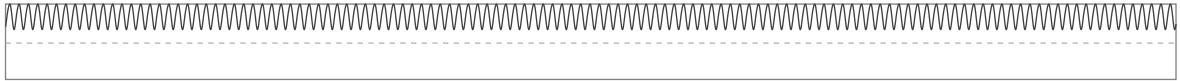


ZONAL LUMEN SUMMARY

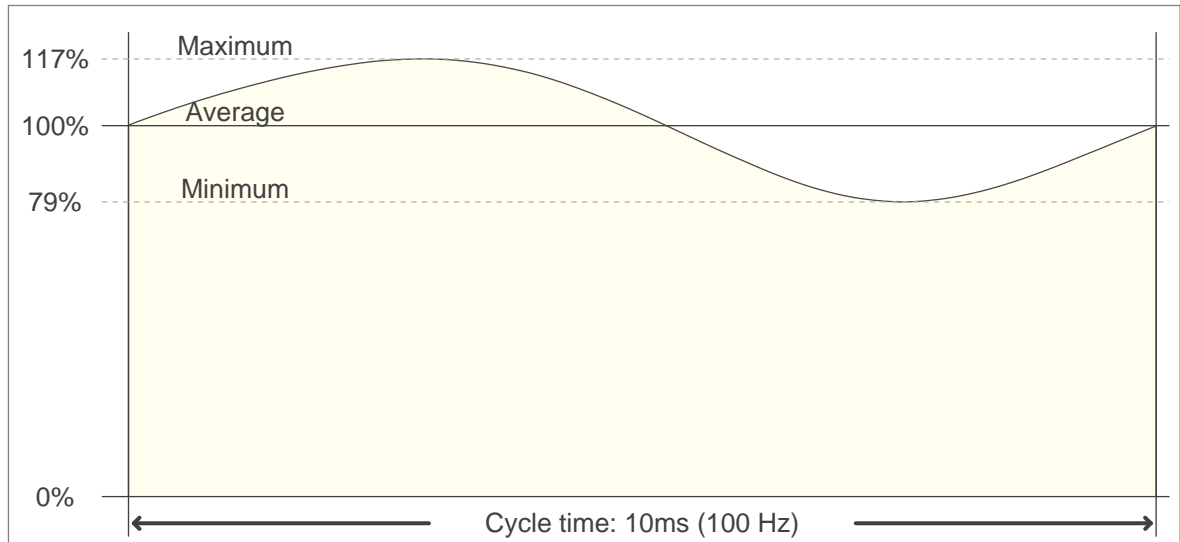
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
139 lm	160 lm	152 lm	145 lm	39.2 lm	8.81 lm	5.40 lm	2.53 lm	0.710 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.112 lm	0.133 lm	0.167 lm	0.263 lm	0.383 lm	0.462 lm	0.434 lm	0.305 lm	0.094 lm

FLICKER

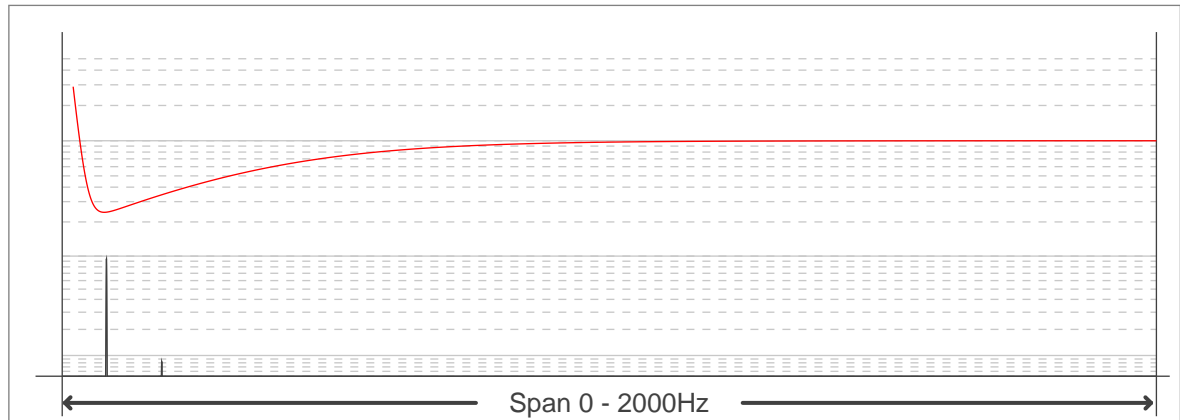
FLICKER CURVE (COMPLETE SAMPLED FLICKER)



FLICKER FRAME (FRAME OF ONE FLICKER PERIOD)



FLICKER FFT (FREQUENCY SCOPE OF FLICKER CURVE)



FLICKER RESULTS:

Flicker frequency:	100 Hz
Flicker index:	0.06
Flicker percentage:	19.56 %
SVM: (Visual flicker)	0.74

FLICKER CONDITIONS:

Sample rate:	40000 samples/second
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