

PHOTOMETRIC TEST REPORT

ATTICUS 600 MATT BLACK

astro

LIGHT EFFICIENCY:

45 Lumen/Watt

LIGHT QUALITY:

CRI: 82.4

COLOR TEMPERATURE:

2720 K

OUTPUT: 606 lm

PEAK: 218 cd

POWER: 13.4 W

PF: 0.93

Tracking number: [n/a](#)

Product name:

Atticus 600 Matt Black

Item number:

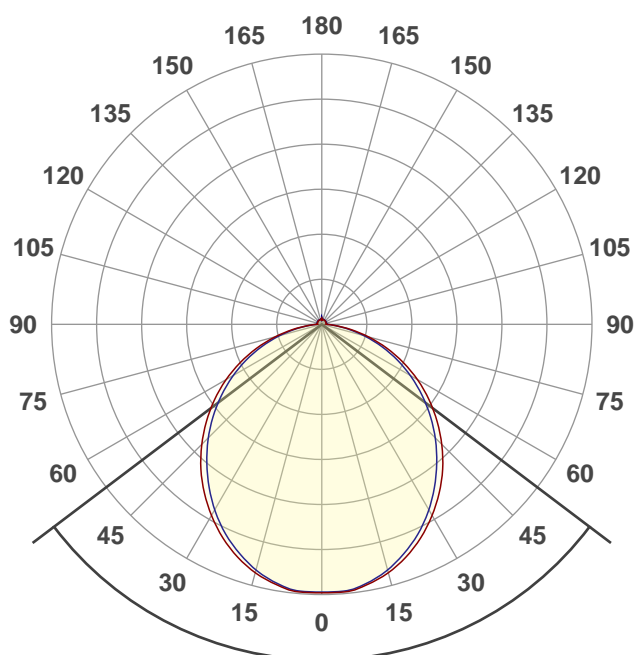
1440005

Date and time:

11/02/2021 10:57:52

Description:

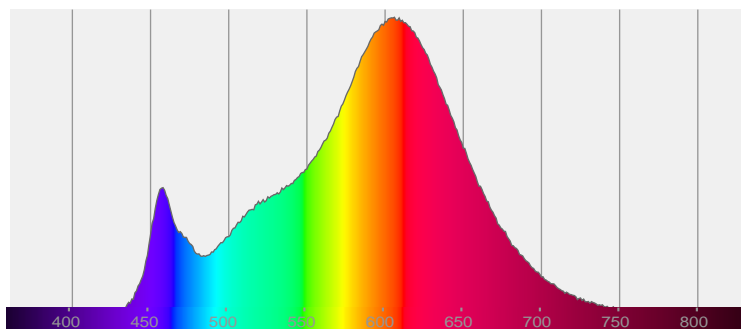
IP44 LED Bathroom Wall Light



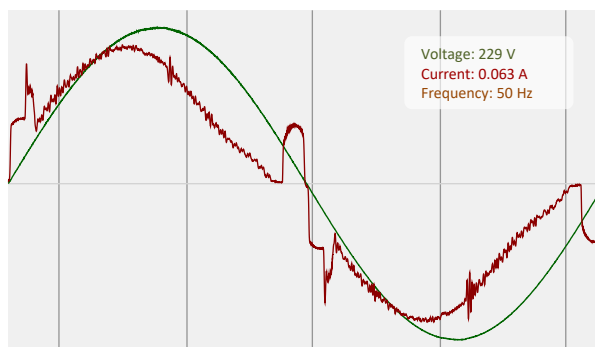
105.8°

CIE 1931
x: 0.456
y: 0.407

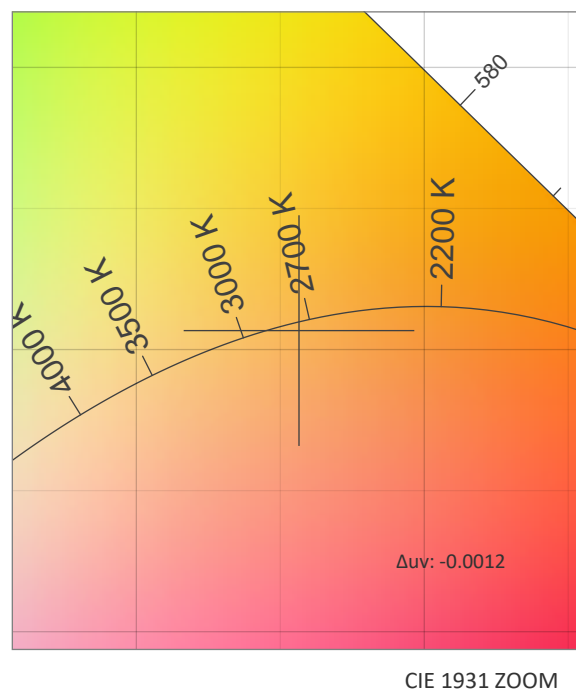
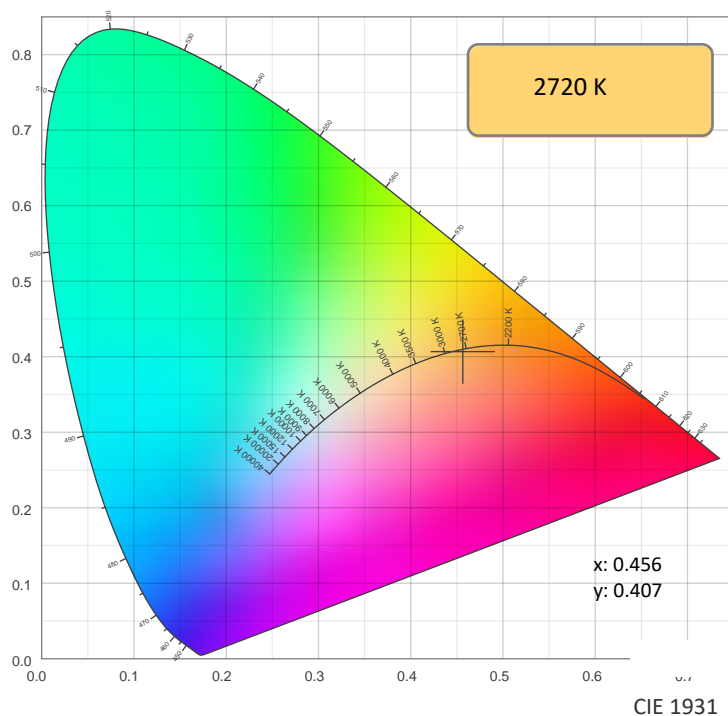
SPECTRA



POWER

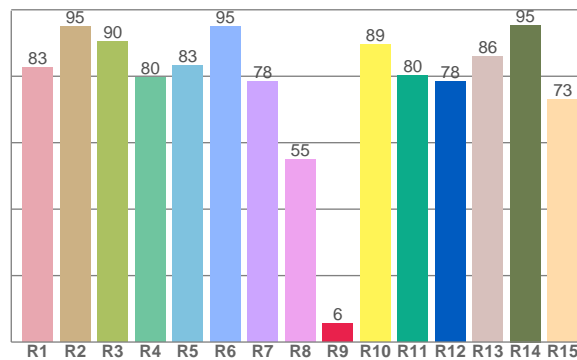
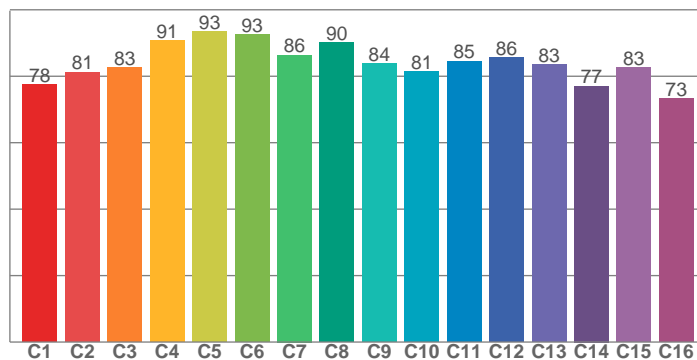


COLOR DETAILS



TM30: 84.1

CRI: 82.4 (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
82.5	95.1	90.4	79.5	83.3	94.9	78.3	54.9	5.6	89.4	80.2	78.4	86.0	95.4	73.1

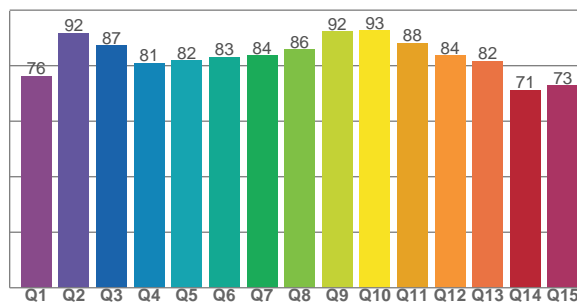
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
77.5	81.2	82.5	90.8	93.5	92.6	86.4	90.2	83.8	81.5	84.5	85.7	83.4	77.1	82.5	73.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
76.2	91.7	87.2	80.9	81.9	83.1	83.7	85.8	92.3	92.7	88.1	83.7	81.6	71.1	72.9

CQS: 82.2



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
2720 K	82.4	5.6	84.1	92.9	82.2	0.456	0.407	0.262	0.350	-0.0012

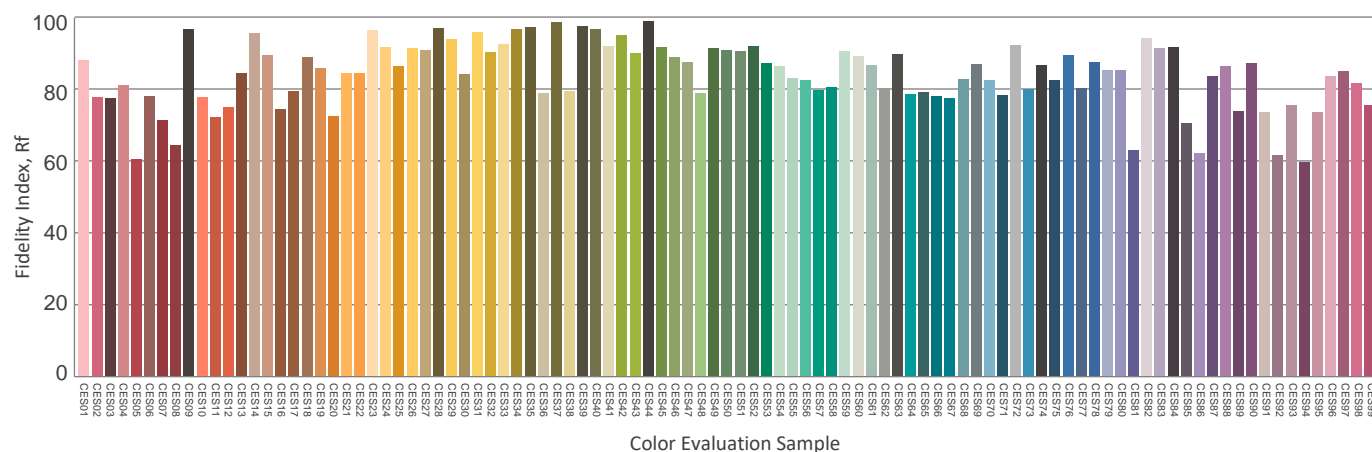
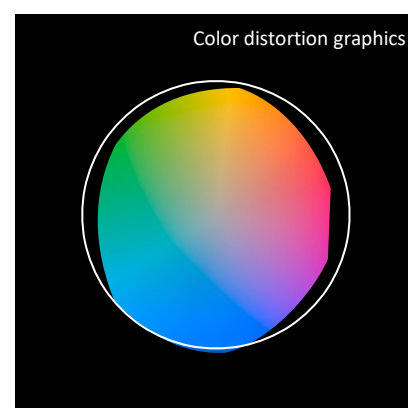
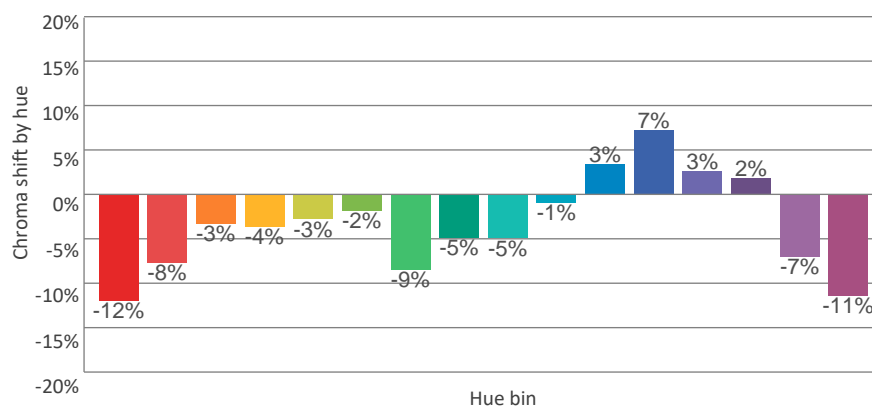
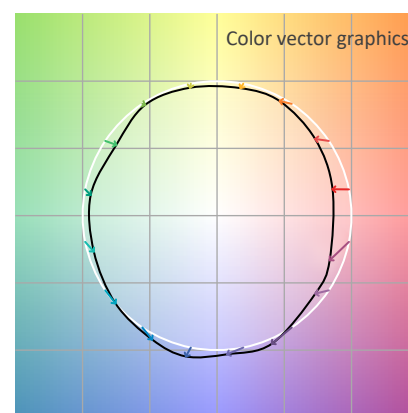
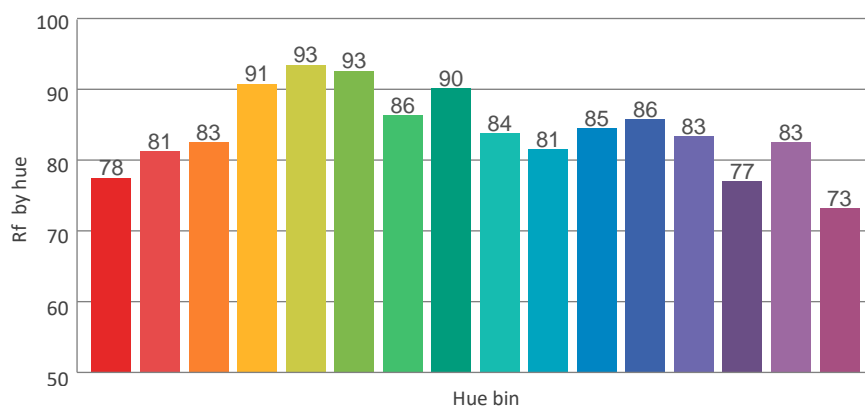
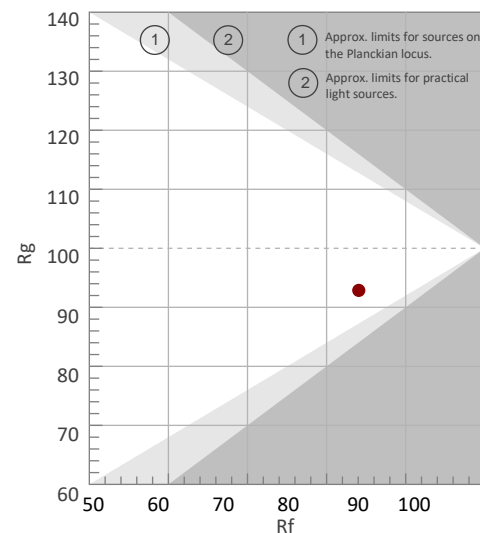
Rf 84.1

Fidelity index Rf

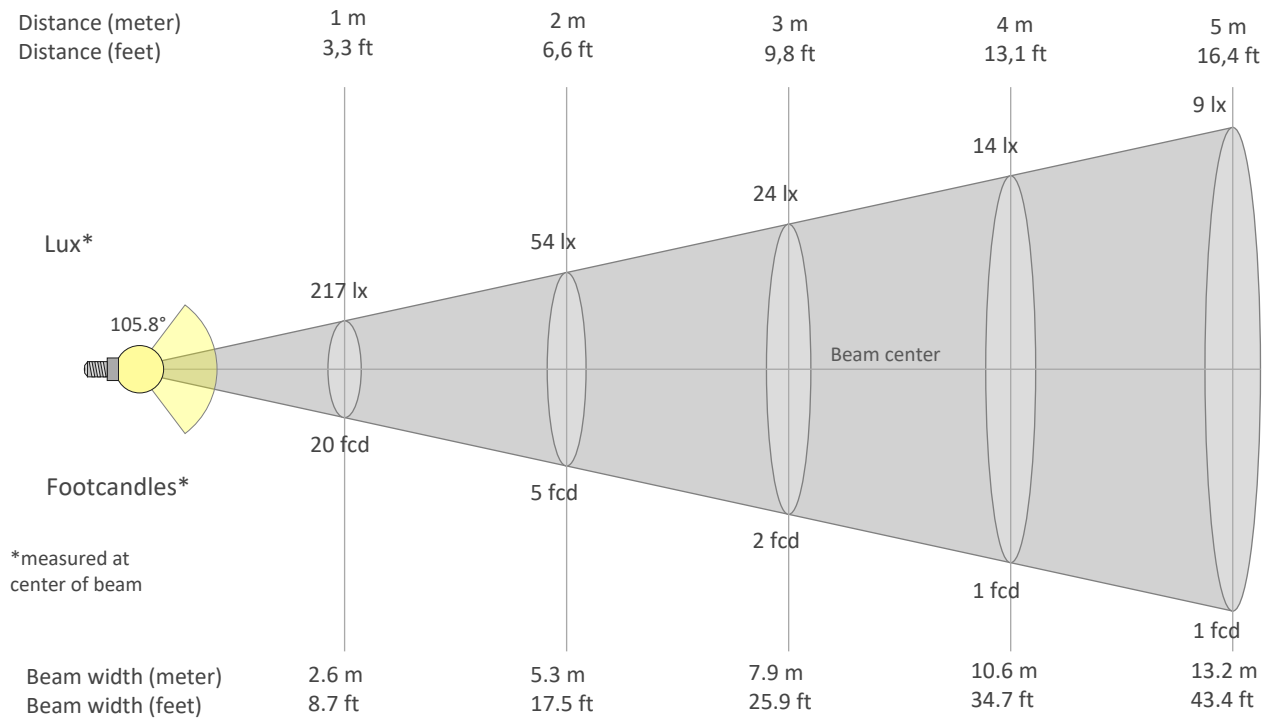
Rg 92.9

Gammut index Rg

Hue Bin	Graphic shifts (%)		
	R _f	Chroma	Hue
1	78	-12%	2%
2	81	-8%	7%
3	83	-3%	9%
4	91	-4%	1%
5	93	-3%	1%
6	93	-2%	-1%
7	86	-9%	-2%
8	90	-5%	3%
9	84	-5%	8%
10	81	-1%	12%
11	85	3%	11%
12	86	7%	-2%
13	83	3%	-13%
14	77	2%	-19%
15	83	-7%	-8%
16	73	-11%	-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
217lx	54lx	24lx	14lx	9lx	6lx	4lx	3lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx
20.2fcd	5fcd	2.2fcd	1.3fcd	0.8fcd	0.6fcd	0.4fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
217	217	213	208	200	190	178	166	152	137	122	106	89	72	56	39	24	11	4	4
100%	100%	98%	96%	92%	87%	82%	76%	70%	63%	56%	49%	41%	33%	26%	18%	11%	5%	2%	2%

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
217	216	212	205	196	186	173	159	145	130	114	98	83	67	51	35	21	10	4	4
100%	99%	98%	95%	90%	85%	80%	73%	67%	60%	53%	45%	38%	31%	23%	16%	10%	5%	2%	2%

Intensities in 180° c-plane

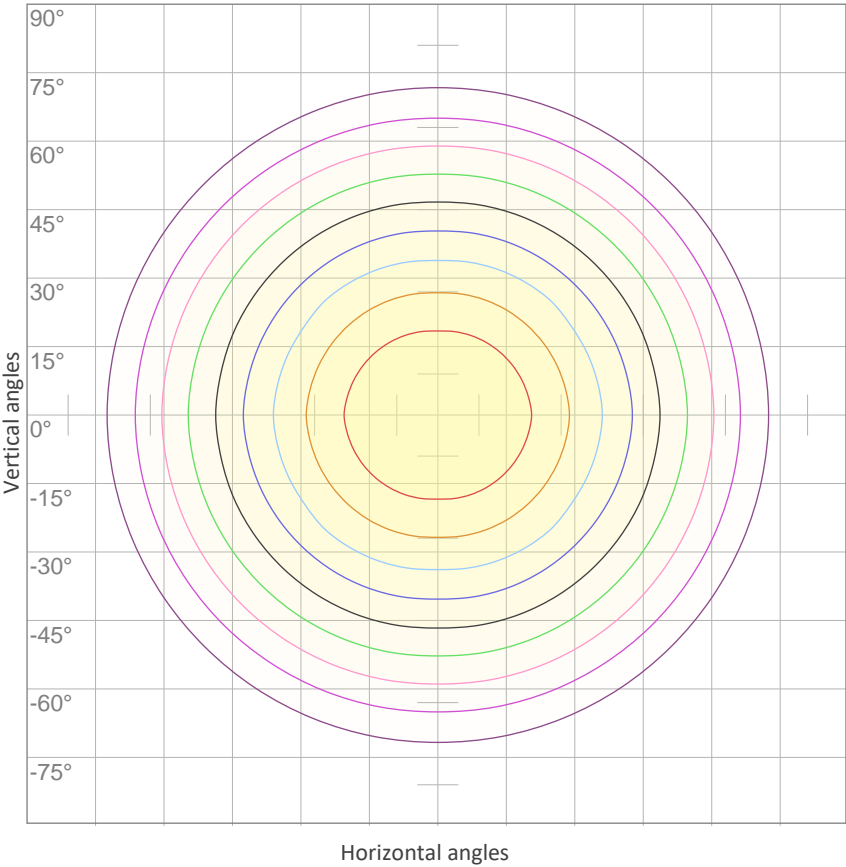
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
217	217	213	208	200	190	178	166	152	137	122	106	89	72	56	39	24	11	4	4
100%	100%	98%	96%	92%	87%	82%	76%	70%	63%	56%	49%	41%	33%	26%	18%	11%	5%	2%	2%

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
217	216	212	205	196	186	173	159	145	130	114	98	83	67	51	35	21	10	4	4
100%	99%	98%	95%	90%	85%	80%	73%	67%	60%	53%	45%	38%	31%	23%	16%	10%	5%	2%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
105.8°	160.6°	177.9°	76.1%	52.7%

ISO CANDELA DIAGRAM



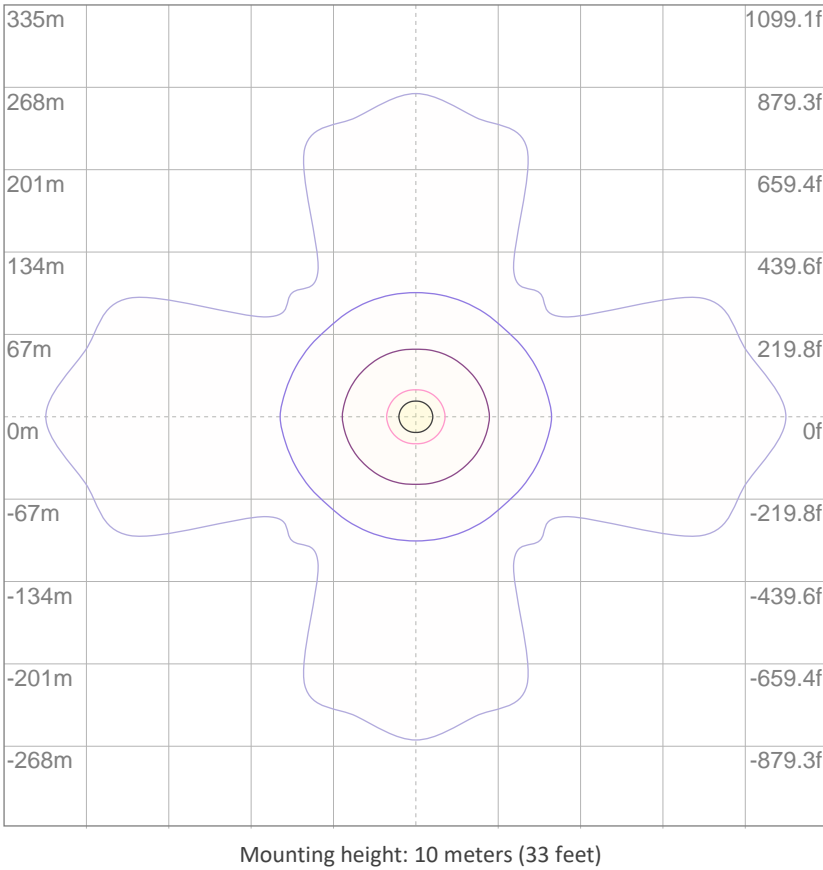
10%	22 cd
20%	43 cd
30%	65 cd
40%	87 cd
50%	109 cd
60%	130 cd
70%	152 cd
80%	174 cd
90%	195 cd

Conditions:

Number of c-planes: 8

Candela at center: 217 cd

ISO LUX DIAGRAM



3%	65.1m lx
5%	0.109 lx
10%	0.217 lx
30%	0.651 lx
50%	{LUX_10M50} lx

Conditions:

Number of c-planes: 8

Lux at center: 2.17 lx

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

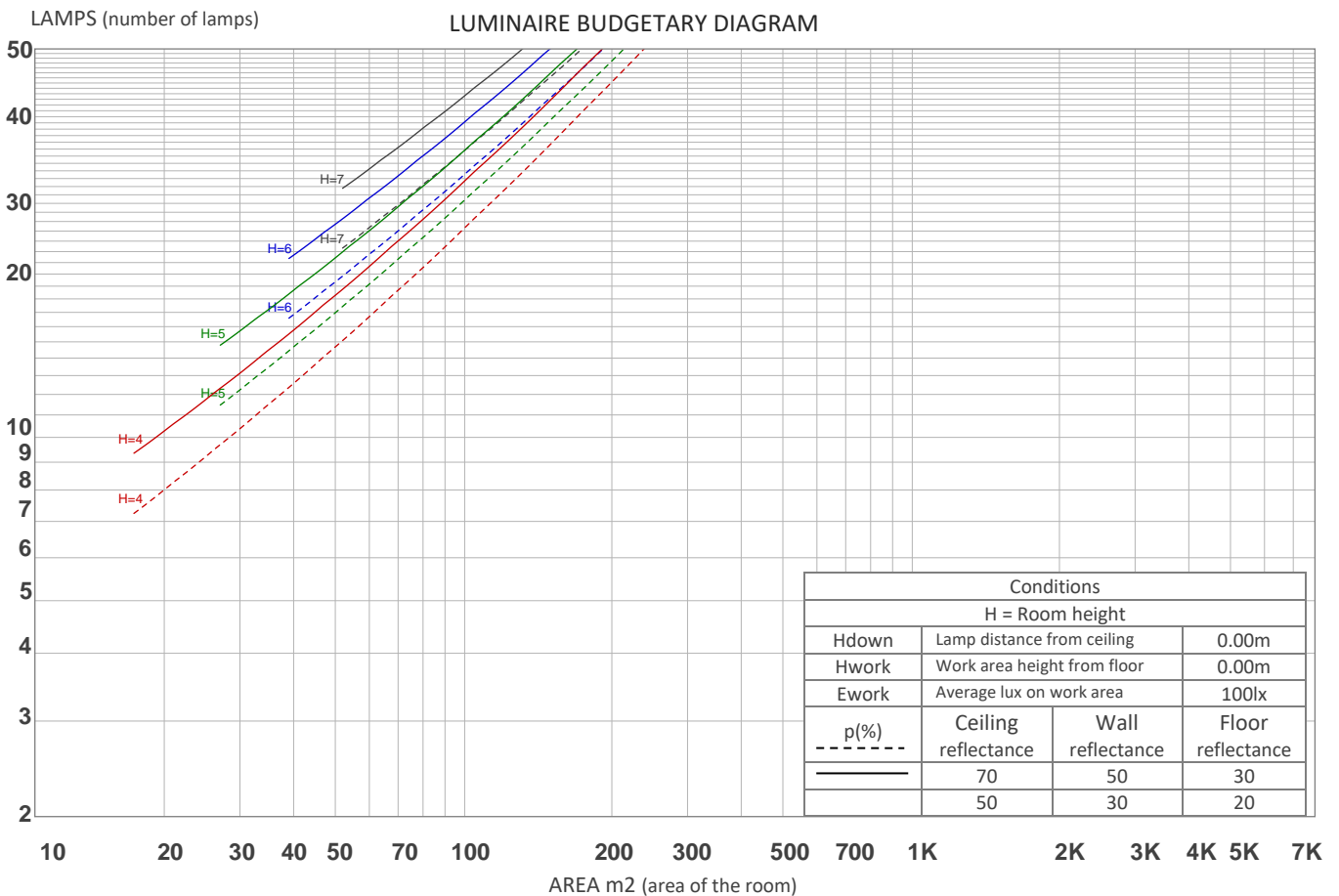
UGR

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	13.8	14.9	14.1	15.3	15.6	15.2	16.4	15.5	16.8	17.1
	3H	14.7	15.9	15.2	16.3	16.5	16.5	17.7	16.9	18.0	18.3
	4H	15.0	16.2	15.5	16.5	16.9	17.0	18.1	17.4	18.5	18.8
	6H	15.3	16.3	15.7	16.7	17.1	17.4	18.4	17.8	18.7	19.2
	8H	15.3	16.3	15.7	16.7	17.2	17.5	18.4	17.9	18.8	19.3
	12H	15.3	16.3	15.7	16.7	17.2	17.5	18.5	17.9	18.9	19.4
4H	2H	14.3	15.4	14.7	15.7	16.1	15.5	16.6	15.9	16.9	17.3
	3H	15.5	16.4	15.9	16.8	17.3	17.0	17.9	17.4	18.3	18.8
	4H	15.8	16.7	16.3	17.2	17.8	17.5	18.4	18.0	18.8	19.4
	6H	16.1	16.9	16.6	17.3	17.8	17.9	18.7	18.4	19.1	19.6
	8H	16.1	16.9	16.7	17.3	17.8	18.0	18.8	18.6	19.2	19.7
	12H	16.2	16.8	16.7	17.3	17.8	18.1	18.7	18.6	19.2	19.7
8H	4H	16.0	16.8	16.6	17.2	17.6	17.5	18.3	18.1	18.7	19.2
	6H	16.4	16.9	16.9	17.5	18.1	18.0	18.6	18.6	19.1	19.7
	8H	16.5	17.0	17.0	17.6	18.3	18.2	18.7	18.8	19.3	20.0
	12H	16.5	16.9	17.2	17.5	18.2	18.3	18.8	19.0	19.3	20.0
12H	4H	16.0	16.6	16.5	17.1	17.6	17.5	18.1	18.0	18.6	19.2
	6H	16.4	16.9	17.0	17.5	18.2	18.0	18.5	18.6	19.1	19.8
	8H	16.5	16.9	17.1	17.5	18.2	18.2	18.6	18.8	19.2	19.9
Variation of the observer position for the luminaire distance S											
S = 1.0H		0.1 / -0.2					0.1 / -0.2				
S = 1.5H		0.3 / -0.6					0.5 / -0.6				
S = 2.0H		0.8 / -1.1					1.1 / -1.3				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 606 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	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96
1	108	103	99	95	105	100	97	93	95	92	89	91	88	86	87	85	83	80
2	98	90	83	77	95	88	82	76	84	78	74	80	75	72	76	73	69	67
3	90	79	71	65	87	77	70	64	74	67	62	70	65	60	67	63	59	57
4	82	70	61	55	79	69	60	54	66	59	53	63	57	52	60	55	51	48
5	75	63	54	47	73	61	53	47	59	52	46	56	50	45	54	49	44	42
6	70	57	48	41	68	55	47	41	53	46	40	51	45	40	49	43	39	37
7	65	51	43	37	63	50	42	36	48	41	36	47	40	35	45	39	35	33
8	60	47	38	33	58	46	38	32	44	37	32	43	36	32	41	35	31	29
9	56	43	35	29	55	42	34	29	41	34	29	39	33	28	38	32	28	26
10	53	40	32	27	51	39	32	26	38	31	26	37	30	26	35	30	26	24



ZONAL LUMEN SUMMARY

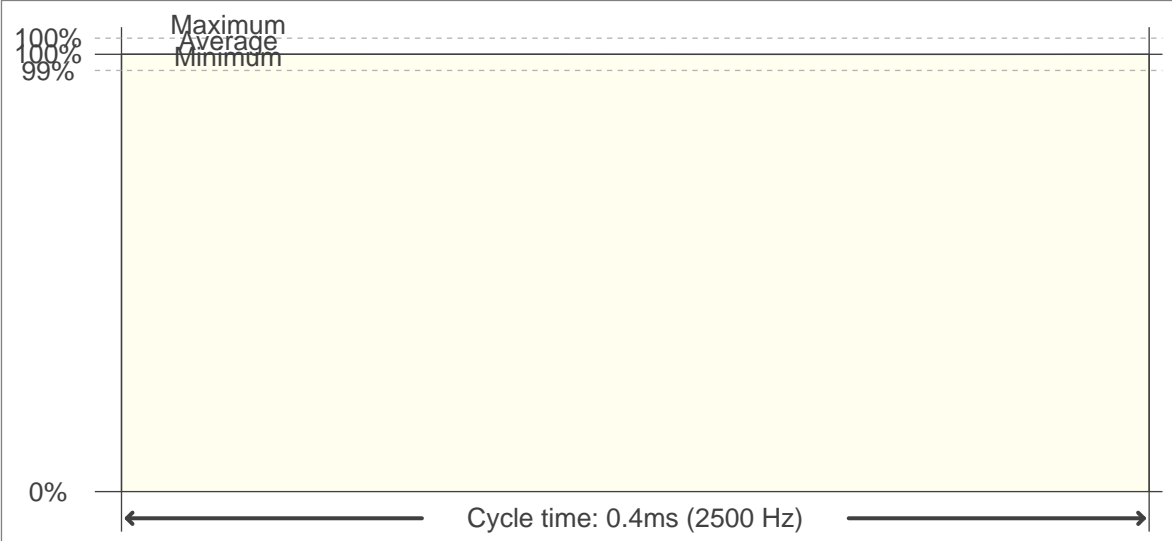
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
20.6 lm	58.2 lm	86.4 lm	102 lm	103 lm	91.1 lm	68.8 lm	39.3 lm	12.4 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
4.16 lm	4.04 lm	3.84 lm	3.52 lm	3.07 lm	2.49 lm	1.84 lm	1.14 lm	0.387 lm

FLICKER

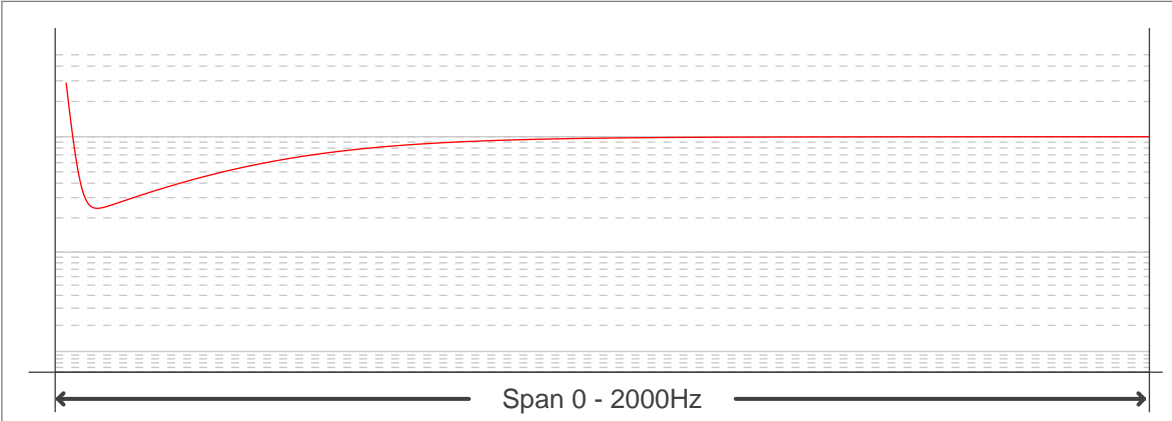
FLICKER CURVE (COMPLETE SAMPLED FLICKER)



FLICKER FRAME (FRAME OF ONE FLICKER PERIOD)



FLICKER FFT (FREQUENCY SCOPE OF FLICKER CURVE)



FLICKER RESULTS:

Flicker frequency:	2500 Hz
Flicker index:	0
Flicker percentage:	0.1 %
SVM: (Visual flicker)	0

FLICKER CONDITIONS:

Sample rate:	40000 samples/second
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