Luminaire Efficiency:

23 Lumens/Watt

Light Quality:

CRI: 0.0

Color Temperature:

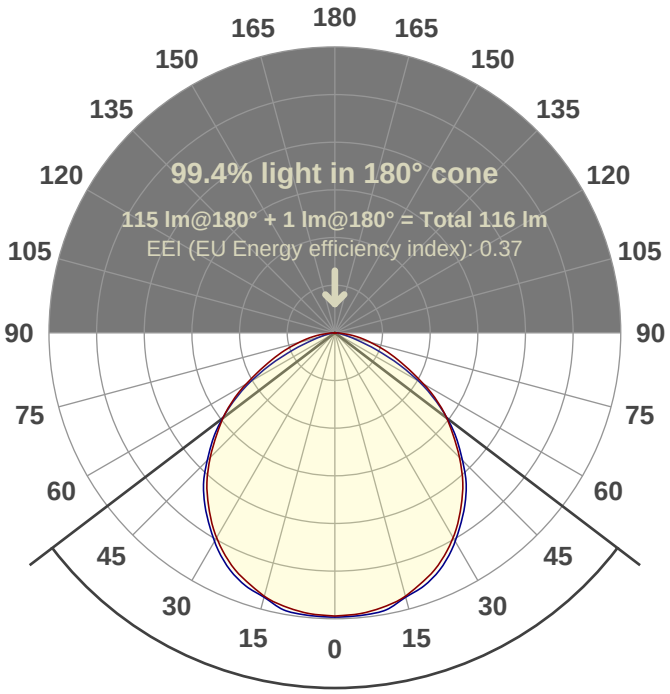
0 K

Output: 115 lm

Max. cd: 45.5 cd

Power: 5.0 W

PF: 1.0



Beam Angle: 105.4°

CIE 1931
x: 0.134
y: 0.056

Product:
Highlighter Cove Luminaire
Modular LED Cove Lighting System

Light Source:
High Output RGBW LED; Blue Component

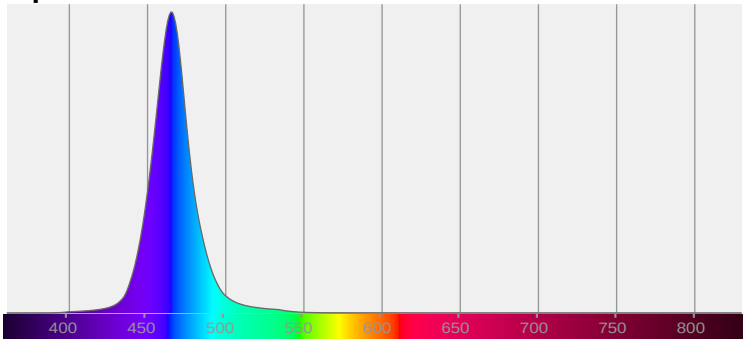
Product Code:
HL Cove
HL-COVE-300-RGBW-HO-CA-120-5W-ELV-IP66 (BL)

Filename:
PH-HL-COVE-300-RGBW-HO-CA-120-5W-ELV-IP66 (BL)

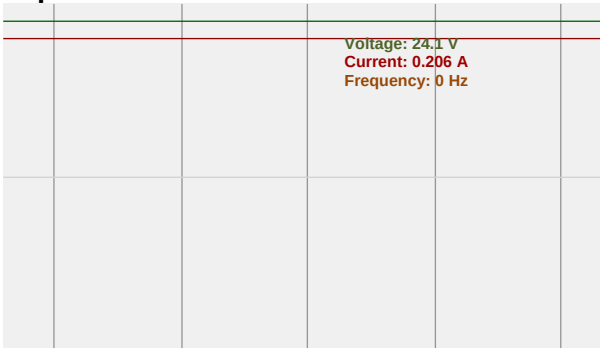
Test:
PH-02142019-0037

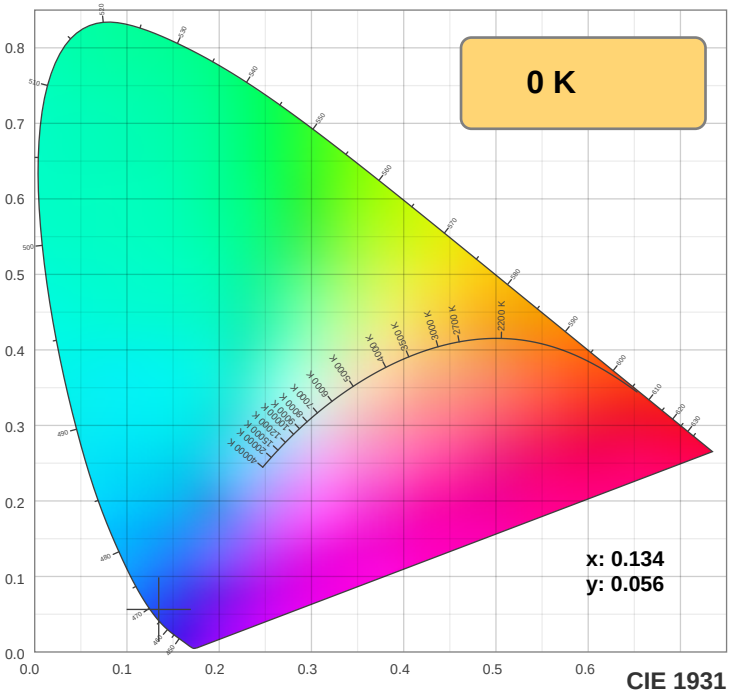
Date and time:
2/14/2019 12:11:52 PM

Spectral Distribution

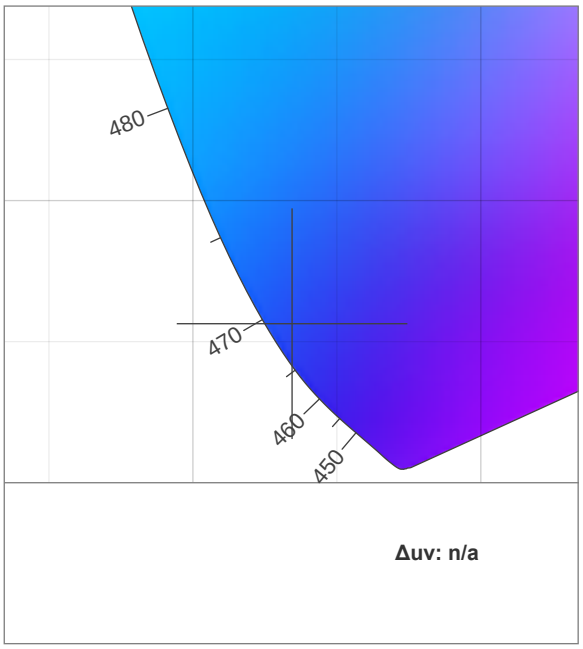


Input Power Waveform





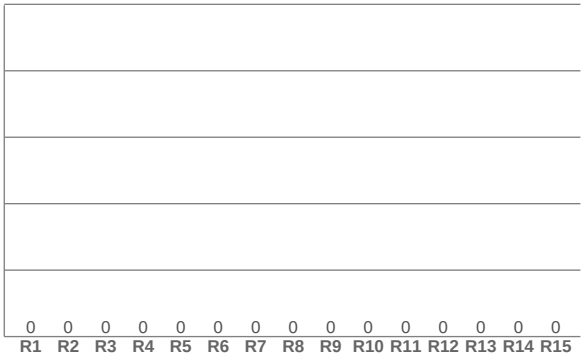
CIE 1931



CIE 1931 ZOOM

TM30: 0.0

CRI: 0.0 (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
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

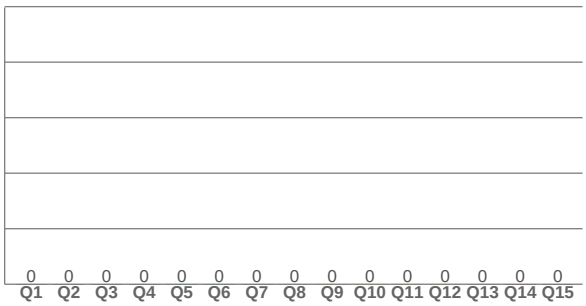
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CQS: 0.0



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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
0 K	0.0	0.0	0.0	0.0	0.0	0.134	0.056	0.158	0.099	n/a

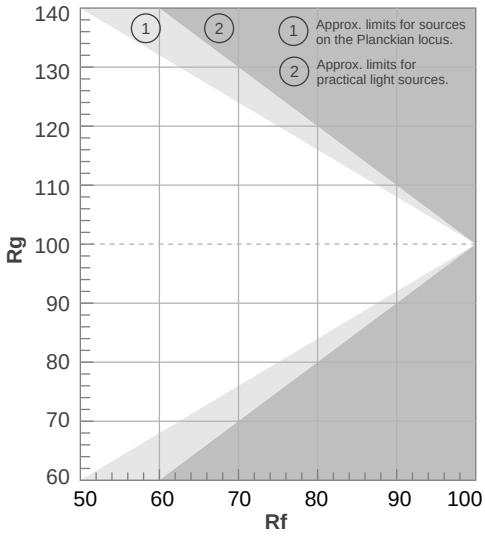
Rf 0.0

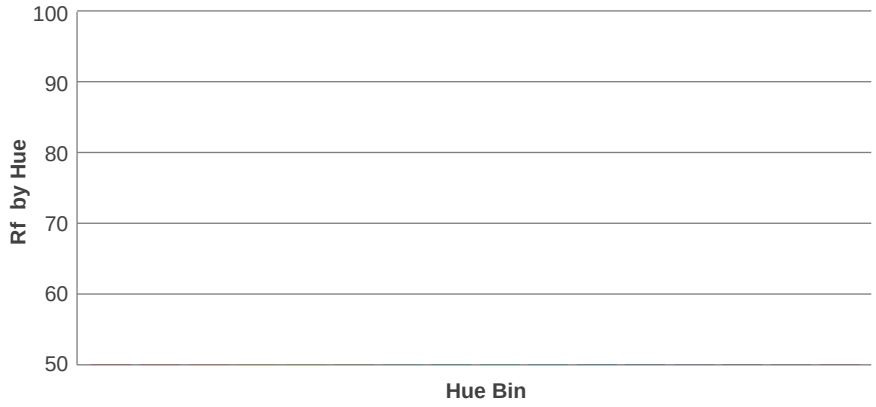
Fidelity Index Rf

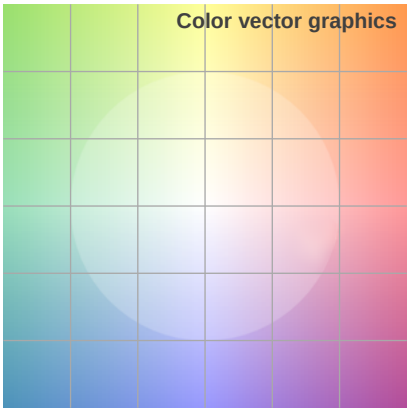
Rg 0.0

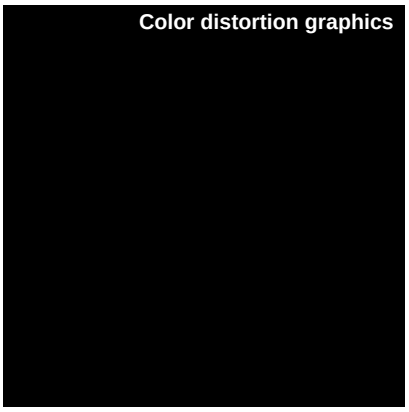
Gamut Index Rg

		Graphic Shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	0	0%	0%
2	0	0%	0%
3	0	0%	0%
4	0	0%	0%
5	0	0%	0%
6	0	0%	0%
7	0	0%	0%
8	0	0%	0%
9	0	0%	0%
10	0	0%	0%
11	0	0%	0%
12	0	0%	0%
13	0	0%	0%
14	0	0%	0%
15	0	0%	0%
16	0	0%	0%

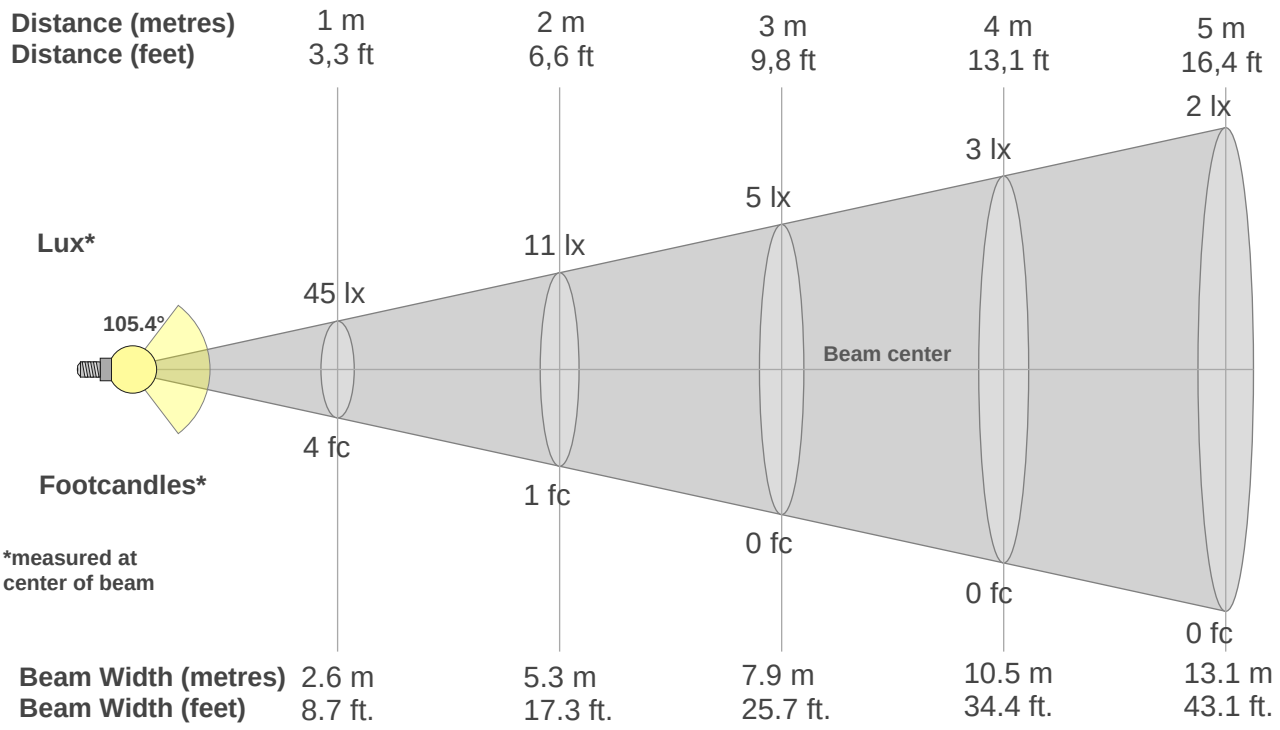








Beam Details



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
45lx	11lx	5lx	3lx	2lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
4.2fcd	1.1fcd	0.5fcd	0.3fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd

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°
45.3	45.0	44.4	43.5	41.9	40.1	37.7	34.9	31.8	28.1	24.4	20.7	16.4	12.3	8.9	5.9	3.6	1.2	0.2	0.0
100%	99%	98%	96%	93%	89%	83%	77%	70%	62%	54%	46%	36%	27%	20%	13%	8%	3%	0%	0%

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°
45.3	45.3	45.0	43.7	42.6	40.9	38.4	35.6	32.6	28.8	24.9	20.4	15.5	10.1	5.3	2.3	1.1	0.5	0.2	0.0
100%	100%	99%	96%	94%	90%	85%	79%	72%	64%	55%	45%	34%	22%	12%	5%	2%	1%	0%	0%

Intensities in 180° c-plane

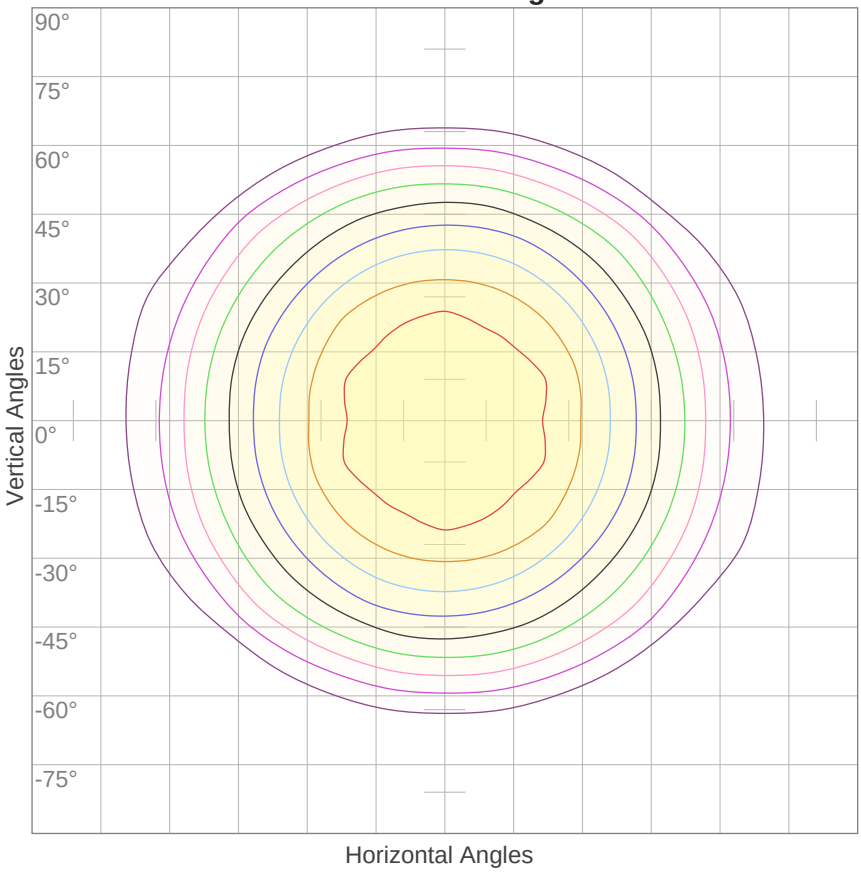
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
45.3	45.0	44.4	43.5	41.9	40.1	37.7	34.9	31.8	28.1	24.4	20.7	16.4	12.3	8.9	5.9	3.6	1.2	0.2	0.0
100%	99%	98%	96%	93%	89%	83%	77%	70%	62%	54%	46%	36%	27%	20%	13%	8%	3%	0%	0%

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°
45.3	45.3	45.0	43.7	42.6	40.9	38.4	35.6	32.6	28.8	24.9	20.4	15.5	10.1	5.3	2.3	1.1	0.5	0.2	0.0
100%	100%	99%	96%	94%	90%	85%	79%	72%	64%	55%	45%	34%	22%	12%	5%	2%	1%	0%	0%

Beam angle 50%	Field angle 10%	Cut-off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
105.4°	**148.8°**	**163.9°**	**84.6%**	**59.3%**

ISO Candela Diagram



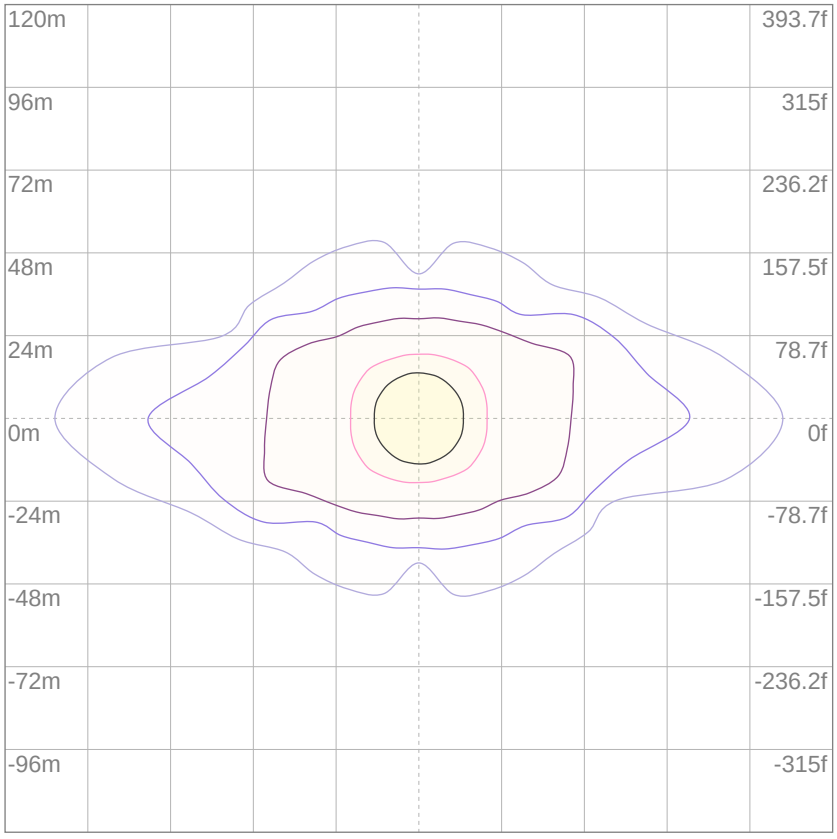
10%	5 cd
20%	9 cd
30%	14 cd
40%	18 cd
50%	23 cd
60%	27 cd
70%	32 cd
80%	36 cd
90%	41 cd

Conditions:

Number of c-planes: 16

Center Beam Intensity: 45 cd

ISO Lux Diagram



3%	13.6m lx
5%	22.7m lx
10%	45.3m lx
30%	0.136 lx
50%	0.227 lx

Conditions:

Number of c-planes: 16

Center Beam Flux Density: 0.453 lx

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

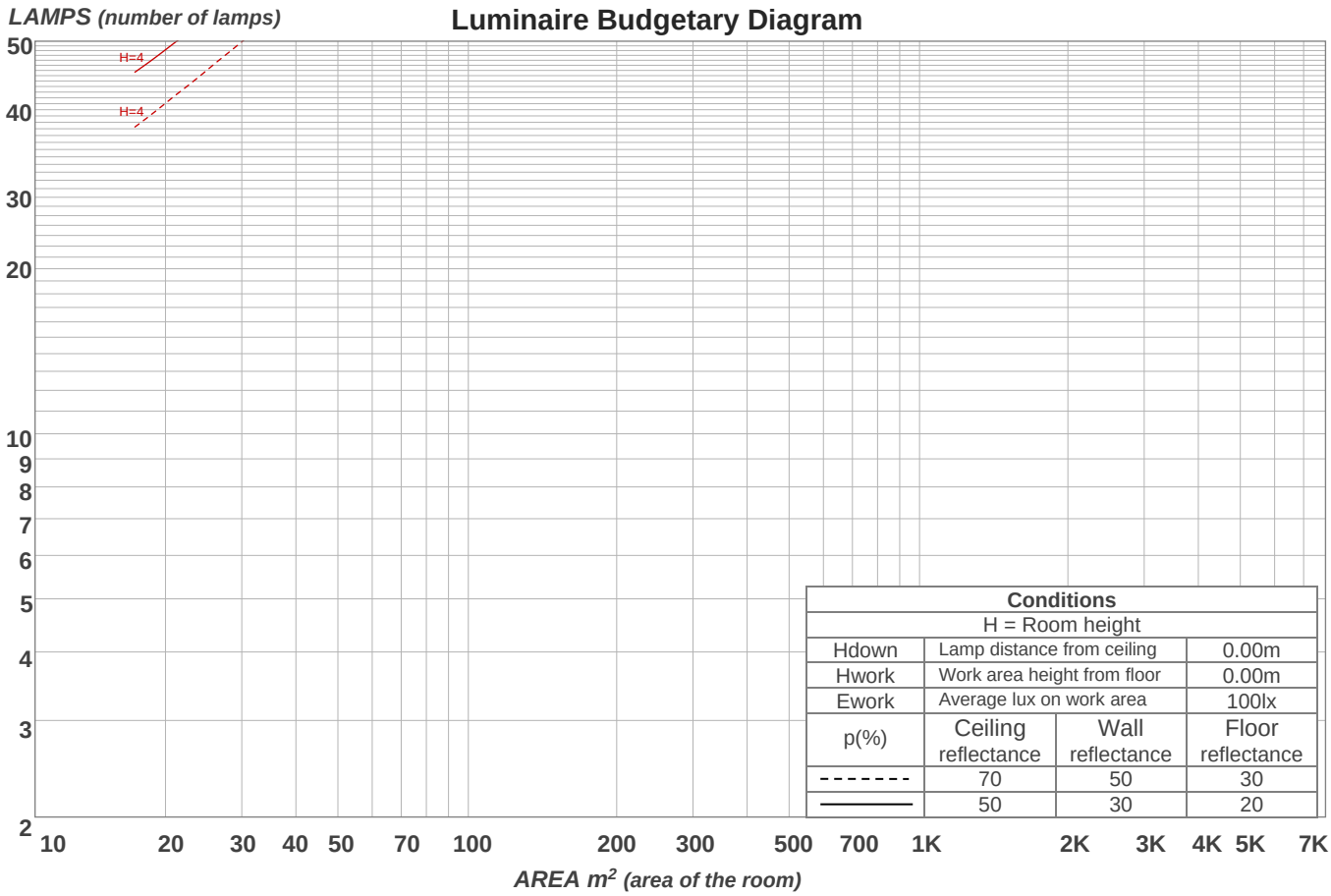
Glare Evaluation According to UGR

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	16.6	17.8	16.9	18.0	18.3	16.4	17.7	16.7	17.9	18.1
	3H	17.7	18.9	18.1	19.1	19.4	17.1	18.2	17.4	18.4	18.7
	4H	18.2	19.3	18.5	19.5	19.8	17.1	18.2	17.5	18.5	18.8
	6H	18.5	19.5	18.9	19.8	20.1	17.1	18.1	17.5	18.4	18.7
	8H	18.6	19.5	19.0	19.8	20.2	17.1	18.0	17.5	18.3	18.7
	12H	18.6	19.5	19.0	19.9	20.2	17.1	18.0	17.5	18.3	18.6
4H	2H	17.1	18.2	17.5	18.5	18.7	17.0	18.0	17.3	18.3	18.6
	3H	18.5	19.4	18.8	19.7	20.0	17.8	18.7	18.1	19.0	19.3
	4H	19.0	19.8	19.4	20.2	20.5	17.9	18.7	18.3	19.0	19.4
	6H	19.5	20.1	19.9	20.5	20.9	17.9	18.6	18.3	19.0	19.4
	8H	19.6	20.2	20.0	20.6	21.0	17.9	18.5	18.3	18.9	19.3
	12H	19.6	20.2	20.1	20.6	21.0	17.9	18.5	18.3	18.9	19.3
8H	4H	19.1	19.7	19.5	20.1	20.5	18.0	18.6	18.5	19.0	19.4
	6H	19.6	20.1	20.0	20.5	21.0	18.1	18.6	18.5	19.0	19.5
	8H	19.8	20.2	20.2	20.6	21.1	18.1	18.5	18.6	19.0	19.4
	12H	19.9	20.2	20.3	20.7	21.2	18.1	18.5	18.6	18.9	19.4
12H	4H	19.1	19.6	19.5	20.0	20.5	18.0	18.6	18.5	19.0	19.4
	6H	19.6	20.0	20.0	20.5	20.9	18.1	18.5	18.6	19.0	19.5
	8H	19.7	20.1	20.2	20.6	21.1	18.1	18.5	18.6	18.9	19.4
Variation of the observer's position for the luminaire distance S.											
S = 1.0H		+0.1 / -0.2					+0.2 / -0.3				
S = 1.5H		+0.3 / -0.6					+0.5 / -0.9				
S = 2.0H		+0.7 / -1.1					+1.2 / -2.2				
Standard table		BK04					BK02				
Correction summand		2.1					0.1				
Corrected glare indices referring to 115 lm total luminous flux.											

Coefficient 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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	82	98	91	85	81	88	83	79	85	80	77	82	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	55	50	61	54	50	59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	41
7	67	54	45	40	65	53	45	39	52	44	39	50	44	39	49	43	39	37
8	62	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	31	41	36	31	30
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	39	33	29	27

Luminaire Budgetary Diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
4.31 lm	12.4 lm	18.7 lm	22.2 lm	22.0 lm	18.5 lm	11.7 lm	4.57 lm	0.864 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm

LCS Table

BUG Rating:	B0 U1 G0	
Forward Light	Lumens	Lumens %
Low(0-30):	17.7	15.2%
Medium(30-60):	31.4	27%
High(60-80):	8.2	7%
Very high(80-90):	0.4	0.4%
Back Light		
Low(0-30):	17.7	15.2%
Medium(30-60):	31.4	27%
High(60-80):	8.2	7%
Very high(80-90):	0.4	0.4%
Uplight		
Low(90-100):	0	0%
High(100-180):	0	0%

LCS Graph