

PHOTOMETRIC TEST REPORT

TRIMLESS PRO ROUND
ADJUSTABLE - MATT WHITE -
4002499

astro

TRIMLESS PRO ROUND ADJUSTABLE -

astro

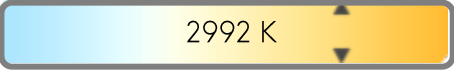
LIGHT EFFICIENCY:



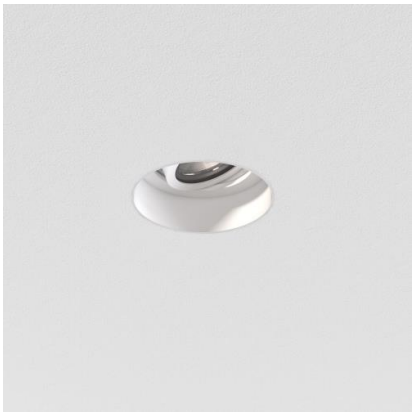
LIGHT QUALITY:



COLOR TEMPERATURE:



OUTPUT: 1194 lm
PEAK: 6090 cd
POWER: 11.8 W
PF: 0.95



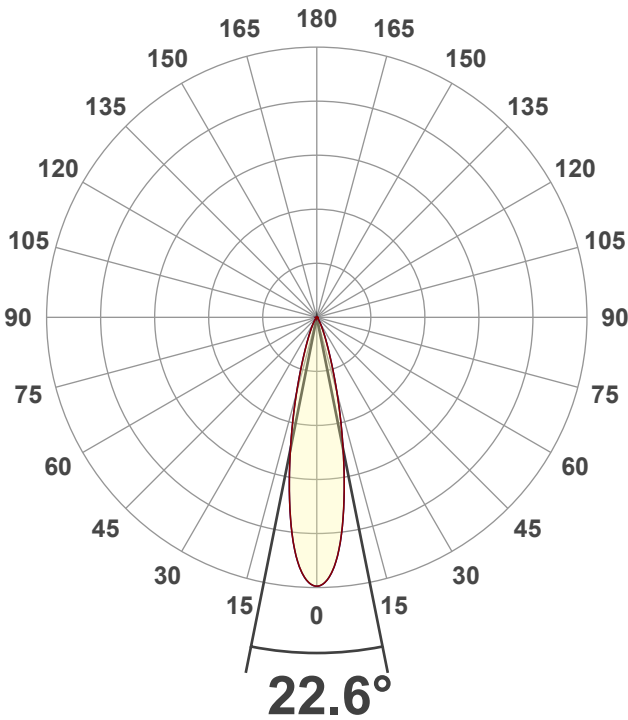
Tracking number: [n/a](#)

Product name:
Trimless Pro Round Adjustable - Matt
White - 4002499

Item number:
TRA-MW-HE30G1-15G1-X-D1

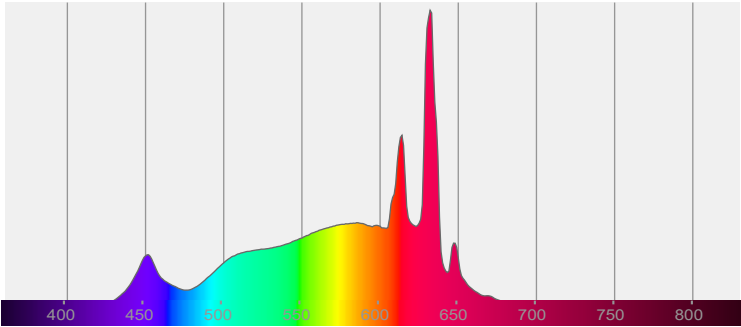
Date and time:
23/01/2025 11:28:09

Description:
IP20 LED Downlight

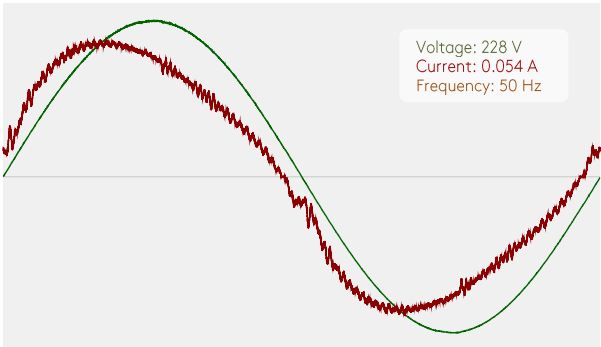


CIE 1931
x: 0.439
y: 0.407

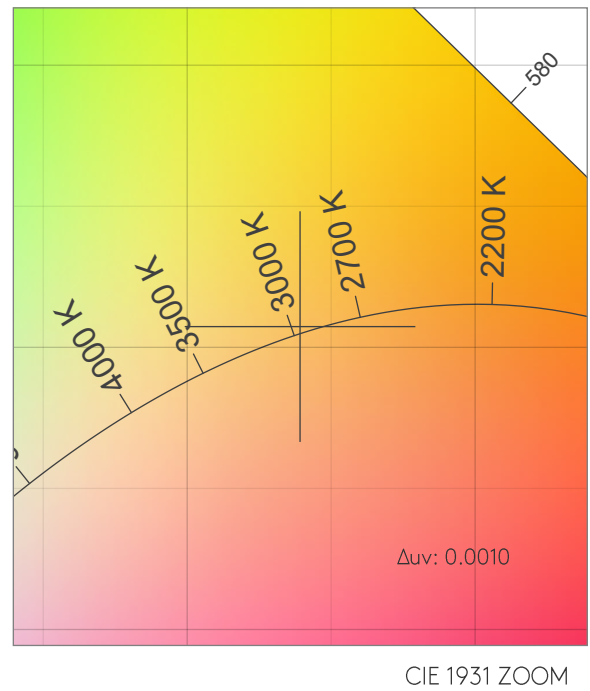
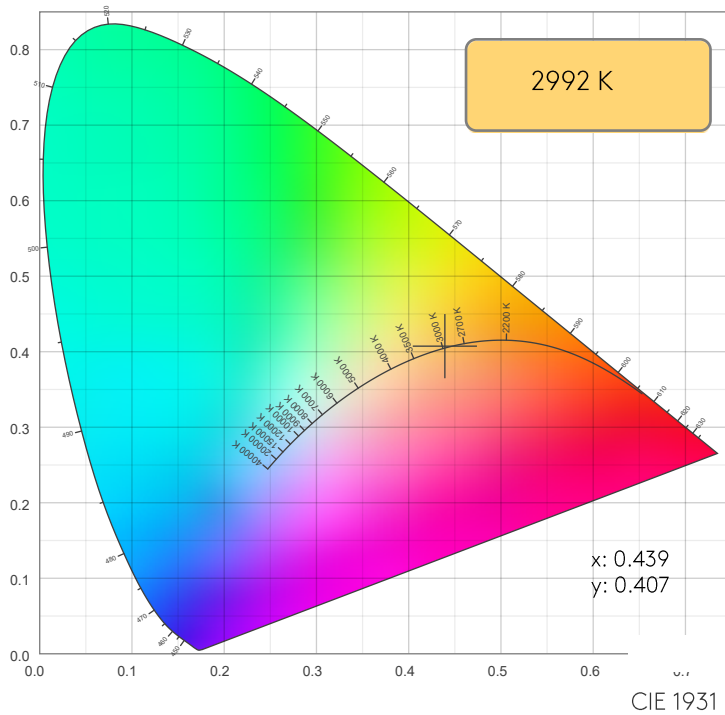
SPECTRA



POWER

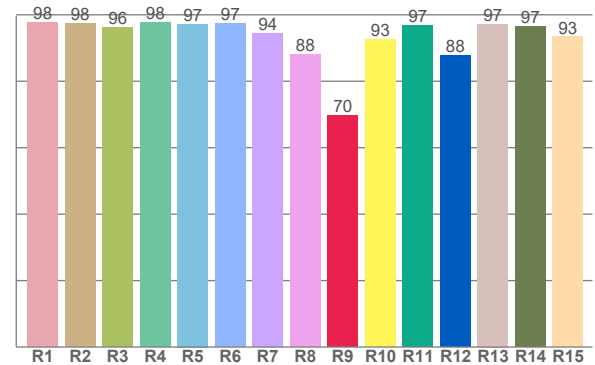
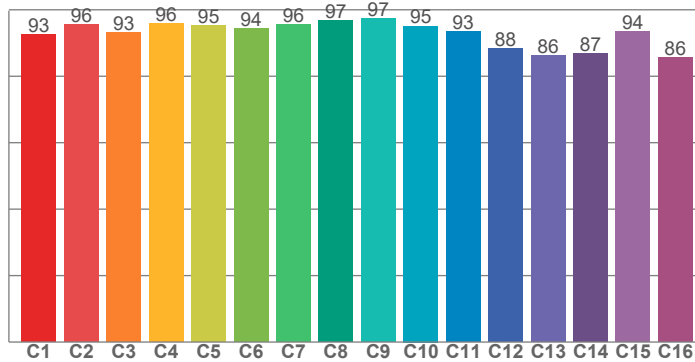


COLOR DETAILS



TM30: 93.1

CRI: 95.8 (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
97.7	97.5	96.3	97.8	97.2	97.4	94.4	88.1	69.8	92.6	96.7	87.7	97.2	96.5	93.4

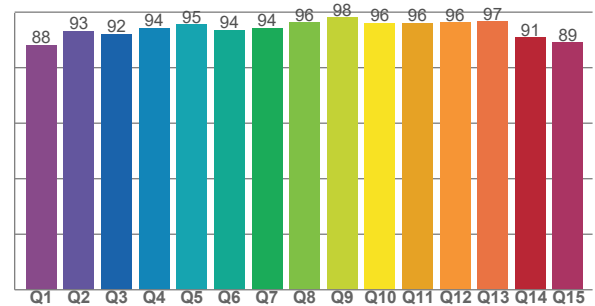
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92.5	95.5	93.0	95.9	95.2	94.2	95.6	96.7	97.3	95.1	93.5	88.2	86.4	86.8	93.5	85.6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
88.2	93.2	92.2	94.3	95.5	93.6	94.2	96.3	98.0	96.1	96.1	96.3	96.6	90.8	89.1

CQS: 93.2



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
2992 K	95.8	69.8	93.1	100.3	93.2	0.439	0.407	0.251	0.349	0.0010

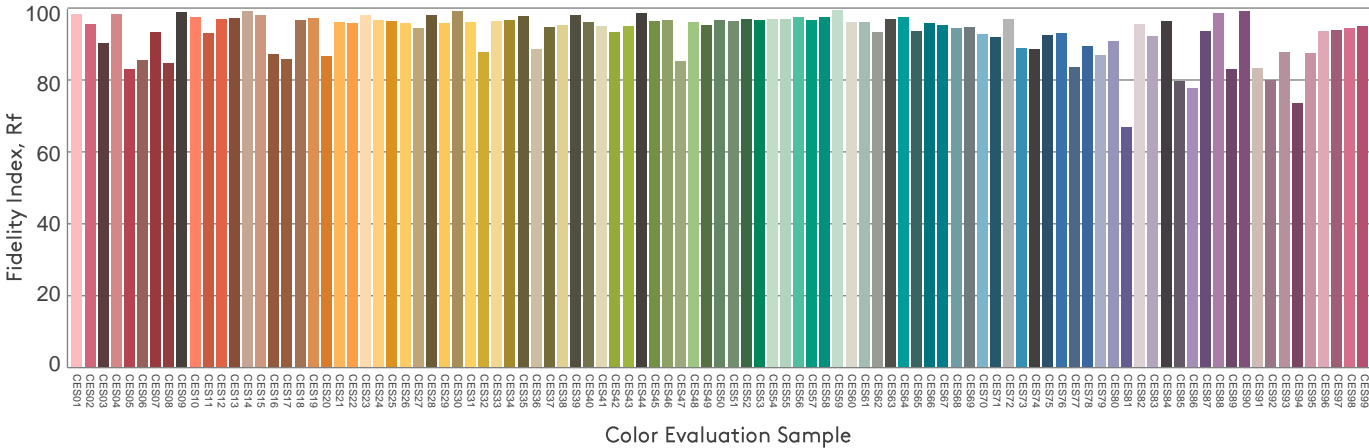
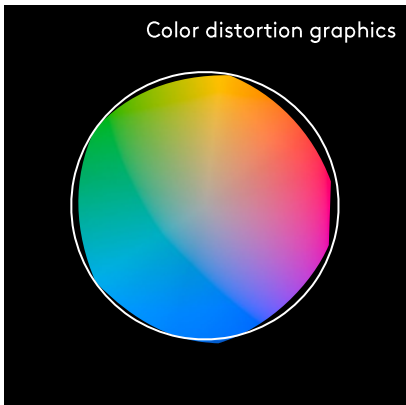
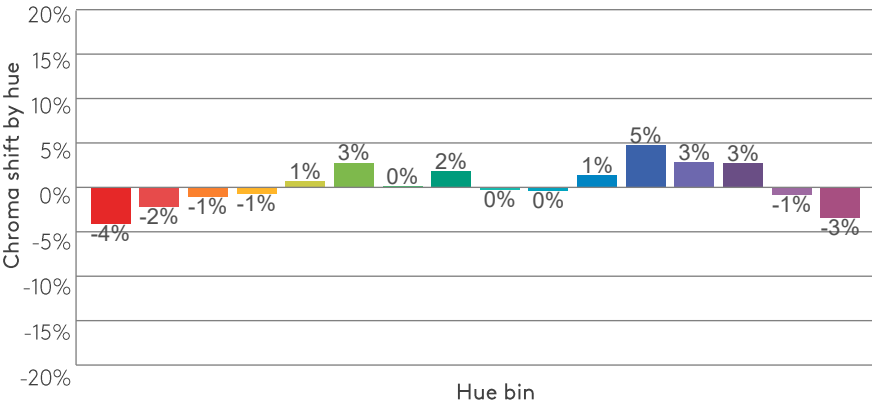
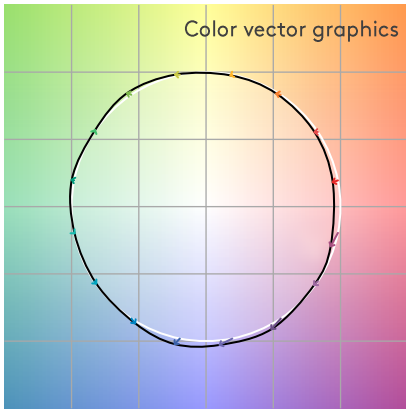
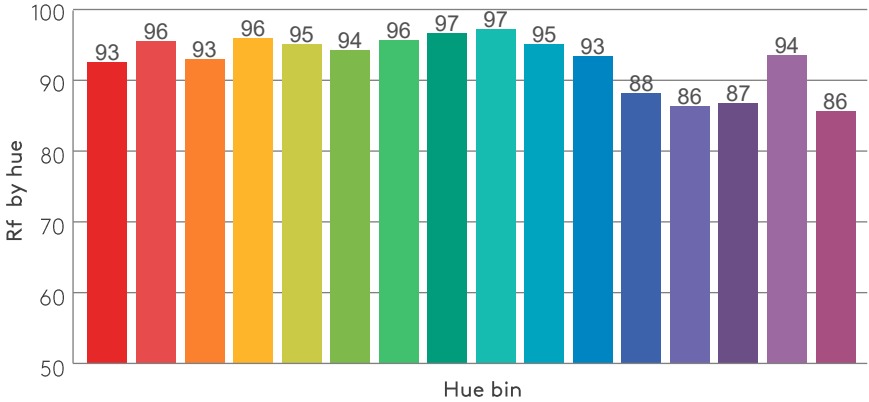
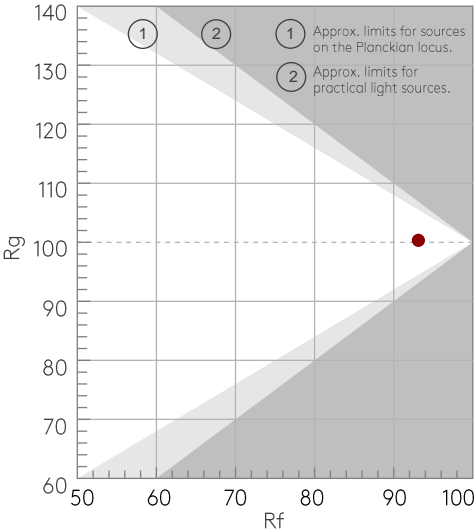
Rf 93.1

Fidelity index Rf

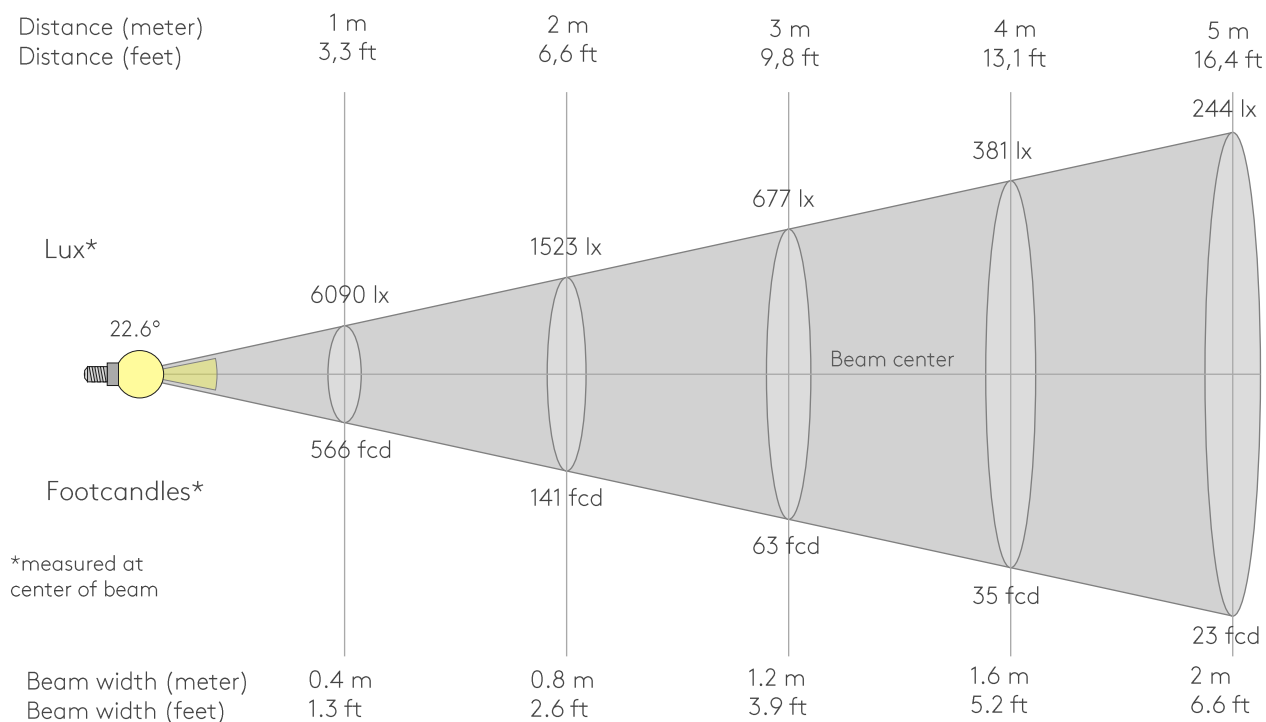
Rg 100.3

Gammut index Rg

Hue Bin	Rf	Graphic shifts (%)	
		Chroma	Hue
1	93	-4%	-1%
2	96	-2%	1%
3	93	-1%	3%
4	96	-1%	1%
5	95	1%	3%
6	94	3%	2%
7	96	0%	-1%
8	97	2%	0%
9	97	0%	0%
10	95	0%	2%
11	93	1%	4%
12	88	5%	-3%
13	86	3%	-10%
14	87	3%	-10%
15	94	-1%	-4%
16	86	-3%	-11%



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
6090lx	1523lx	677lx	381lx	244lx	169lx	124lx	95lx	75lx	61lx	50lx	42lx	36lx	31lx	27lx	24lx	21lx	19lx	17lx	15lx
565.8fcd	141.5fcd	62.9fcd	35.4fcd	22.6fcd	15.7fcd	11.5fcd	8.8fcd	7fcd	5.7fcd	4.7fcd	3.9fcd	3.3fcd	2.9fcd	2.5fcd	2.2fcd	2fcd	1.7fcd	1.6fcd	1.4fcd

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°
6090	5983	5659	5110	4375	3565	2781	2085	1500	1055	747	539	392	288	214	160	121	94	75	57
100%	98%	93%	84%	72%	59%	46%	34%	25%	17%	12%	9%	6%	5%	4%	3%	2%	2%	1%	1%

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°
6090	5983	5659	5110	4375	3565	2781	2085	1500	1055	747	539	392	288	214	160	121	94	75	57
100%	98%	93%	84%	72%	59%	46%	34%	25%	17%	12%	9%	6%	5%	4%	3%	2%	2%	1%	1%

Intensities in 180° c-plane

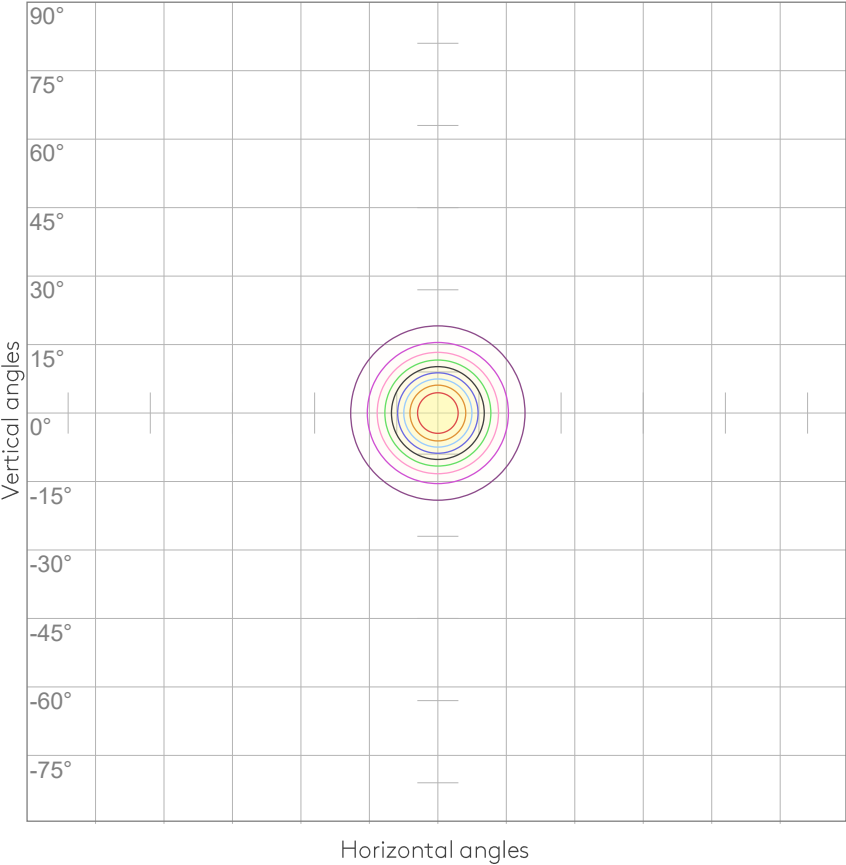
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
6090	5983	5659	5110	4375	3565	2781	2085	1500	1055	747	539	392	288	214	160	121	94	75	57
100%	98%	93%	84%	72%	59%	46%	34%	25%	17%	12%	9%	6%	5%	4%	3%	2%	2%	1%	1%

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°
6090	5983	5659	5110	4375	3565	2781	2085	1500	1055	747	539	392	288	214	160	121	94	75	57
100%	98%	93%	84%	72%	59%	46%	34%	25%	17%	12%	9%	6%	5%	4%	3%	2%	2%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
22.6°	42.5°	60.7°	99.5%	98.8%

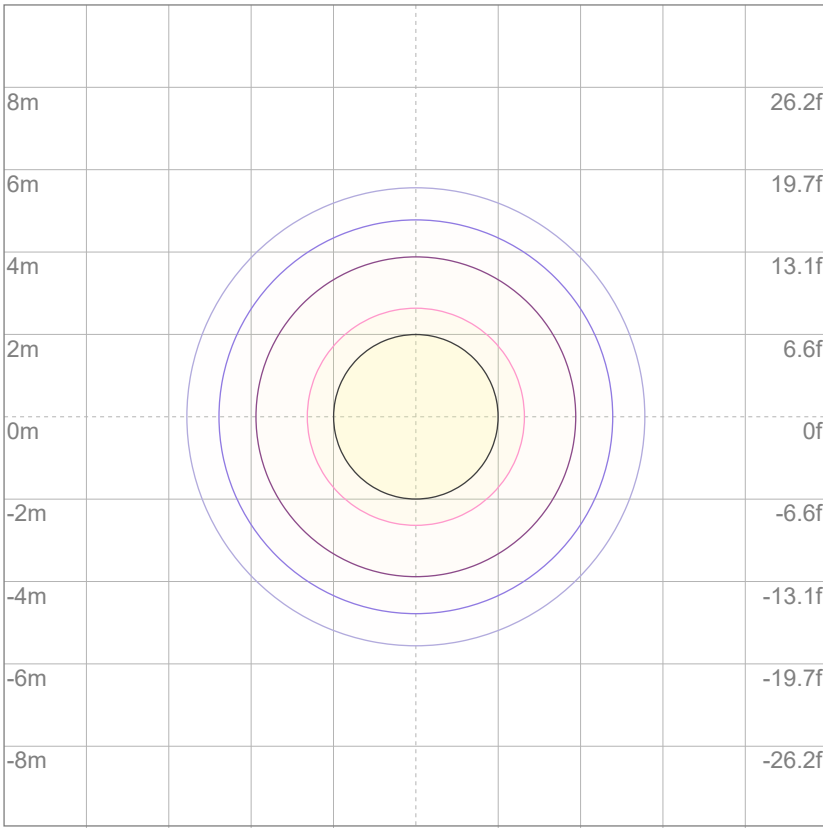
ISO CANDELA DIAGRAM



10%	609 cd
20%	1218 cd
30%	1827 cd
40%	2436 cd
50%	3045 cd
60%	3654 cd
70%	4263 cd
80%	4872 cd
90%	5481 cd

Conditions:
Number of c-planes: 8
Candela at center: 6090 cd

ISO LUX DIAGRAM



3%	1.83 lx
5%	3.05 lx
10%	6.09 lx
30%	18.3 lx
50%	{LUX_10M50} lx

Conditions:
Number of c-planes: 8
Lux at center: 60.9 lx

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

Mounting height: 10 meters (33 feet)

UGR

GLARE EVALUATION ACCORDING TO UGR

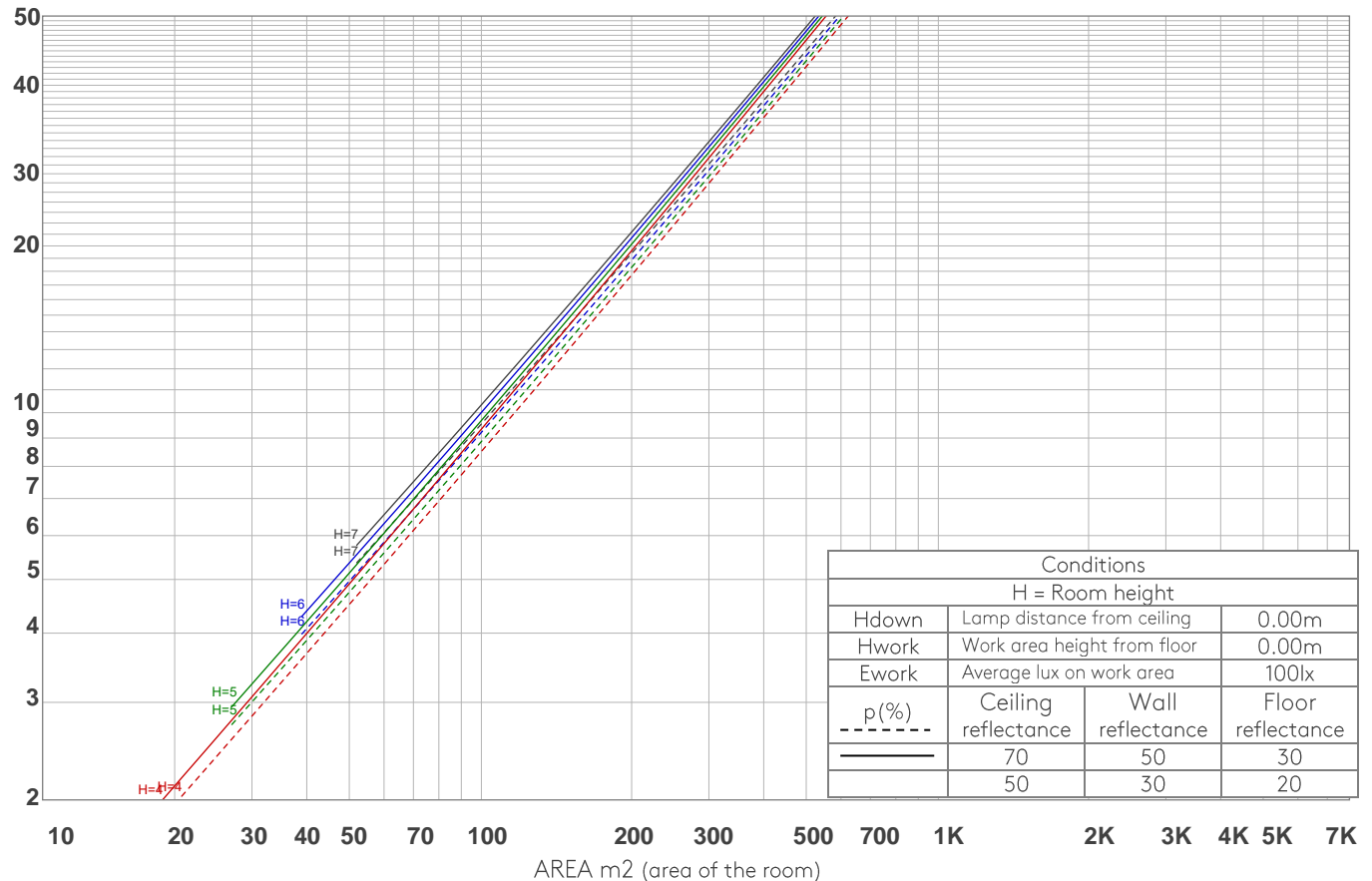
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	13.9	14.3	14.0	14.5	14.7	13.9	14.3	14.0	14.5	14.7
	3H	13.7	14.3	14.1	14.4	14.6	13.7	14.3	14.1	14.4	14.6
	4H	13.7	14.2	14.1	14.5	14.7	13.7	14.2	14.1	14.5	14.7
	6H	13.8	14.2	14.1	14.5	14.9	13.8	14.2	14.1	14.5	14.9
	8H	13.8	14.2	14.1	14.5	14.9	13.8	14.2	14.1	14.5	14.9
	12H	13.7	14.2	14.1	14.5	14.9	13.7	14.2	14.1	14.5	14.9
4H	2H	13.6	14.1	14.0	14.4	14.6	13.6	14.1	14.0	14.4	14.6
	3H	13.6	14.0	13.9	14.4	14.8	13.6	14.0	13.9	14.4	14.8
	4H	13.6	14.0	14.0	14.4	14.9	13.6	14.0	14.0	14.4	14.9
	6H	13.6	14.1	14.1	14.4	14.8	13.6	14.1	14.1	14.4	14.8
	8H	13.6	14.1	14.2	14.4	14.8	13.6	14.1	14.2	14.4	14.8
	12H	13.6	14.0	14.1	14.4	14.8	13.6	14.0	14.1	14.4	14.8
8H	4H	13.5	13.9	14.0	14.2	14.6	13.5	13.9	14.0	14.2	14.6
	6H	13.6	13.9	14.1	14.3	14.9	13.6	13.9	14.1	14.3	14.9
	8H	13.7	13.9	14.3	14.5	15.1	13.7	13.9	14.3	14.5	15.1
	12H	13.8	13.9	14.4	14.4	15.0	13.8	13.9	14.4	14.4	15.0
12H	4H	13.4	13.7	13.9	14.2	14.6	13.4	13.7	13.9	14.2	14.6
	6H	13.7	13.8	14.2	14.4	15.0	13.7	13.8	14.2	14.4	15.0
	8H	13.7	13.9	14.3	14.4	15.0	13.7	13.9	14.3	14.4	15.0
Variation of the observer position for the luminaire distance S											
S = 1.0H		4.3 / -4.4					4.3 / -4.4				
S = 1.5H		6.9 / -4.9					6.9 / -4.9				
S = 2.0H		8.8 / -5.2					8.8 / -5.2				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1194 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	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	96	95	93
3	108	103	99	97	106	102	98	96	99	97	94	97	95	93	95	93	91	90
4	104	99	95	92	103	98	94	92	96	93	91	94	92	89	92	90	89	87
5	101	95	91	88	100	95	91	88	93	90	87	91	89	87	90	88	86	85
6	98	92	88	85	97	92	88	85	90	87	84	89	86	84	88	85	83	82
7	96	89	85	82	95	89	85	82	88	84	82	87	84	81	86	83	81	80
8	93	87	83	80	92	86	82	80	85	82	79	84	81	79	84	81	79	78
9	91	84	80	78	90	84	80	77	83	80	77	82	79	77	82	79	77	76
10	89	82	78	75	88	82	78	75	81	78	75	80	77	75	80	77	75	74

LAMPS (number of lamps)

LUMINAIRE BUDGETARY DIAGRAM



ZONAL LUMEN SUMMARY

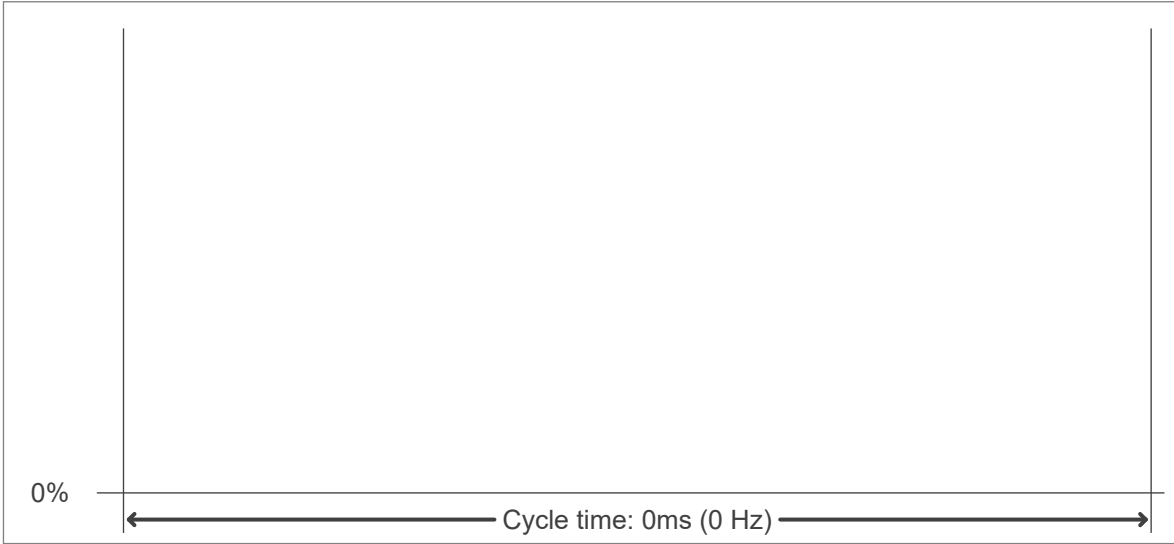
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
456 lm	495 lm	164 lm	54.3 lm	13.9 lm	3.95 lm	1.89 lm	1.32 lm	0.559 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.170 lm	0.149 lm	0.160 lm	0.189 lm	0.269 lm	0.474 lm	0.673 lm	0.513 lm	0.114 lm

FLICKER

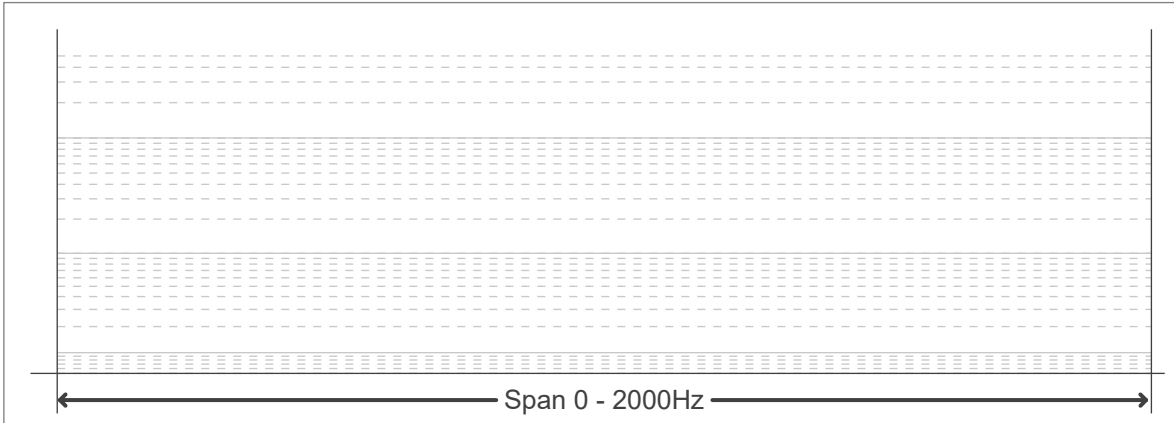
FLICKER CURVE (COMPLETE SAMPLED)



FLICKER FRAME (FRAME OF ONE FLICKER)



FLICKER FFT (FREQUENCY SCOPE OF FLICKER)



FLICKER RESULTS:

Flicker frequency:	n/a Hz
Flicker index:	n/a
Flicker percentage:	n/a %
SVM: (Visual flicker)	n/a

FLICKER CONDITIONS:

Sample rate:	n/a samples/second
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