

PHOTOMETRIC TEST REPORT

TRIMLESS PRO ROUND
ADJUSTABLE - MATT WHITE -
4002451

astro

TRIMLESS PRO ROUND ADJUSTABLE -

astro

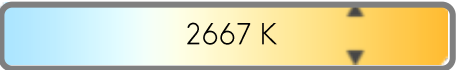
LIGHT EFFICIENCY:



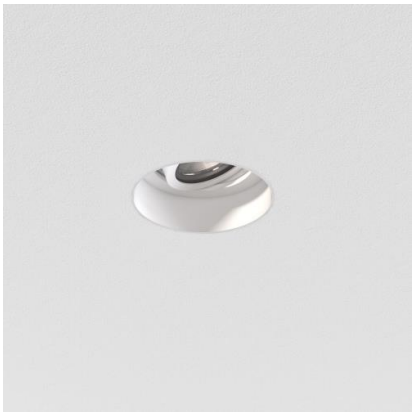
LIGHT QUALITY:



COLOR TEMPERATURE:



OUTPUT: 1146 lm
PEAK: 5846 cd
POWER: 11.8 W
PF: 0.95



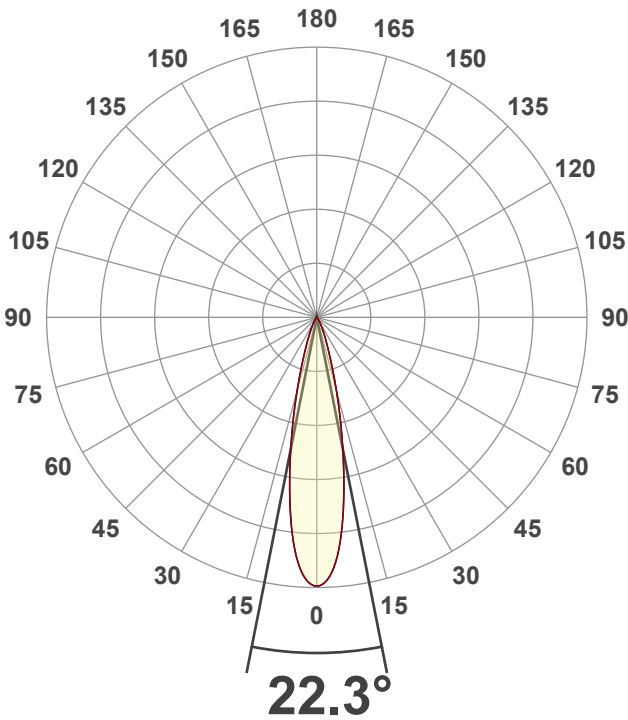
Tracking number: [n/a](#)

Product name:
Trimless Pro Round Adjustable - Matt
White - 4002451

Item number:
TRA-MW-HE27G1-15G1-X-D1

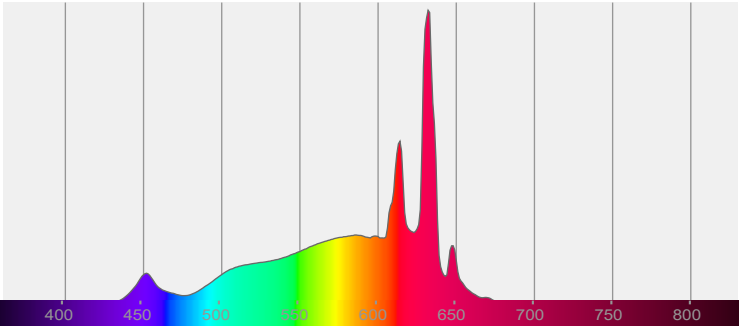
Date and time:
23/01/2025 09:29:34

Description:
IP20 LED Downlight

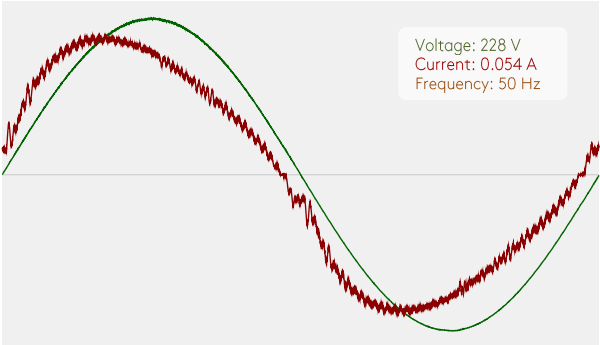


CIE 1931
x: 0.463
y: 0.412

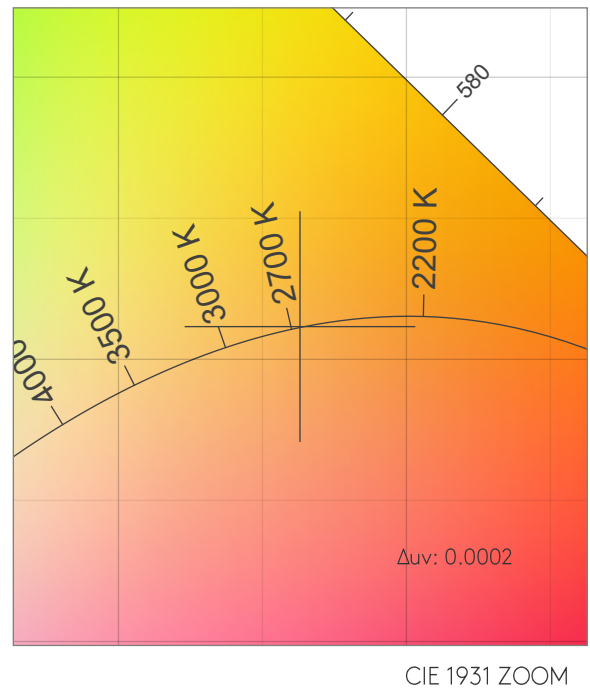
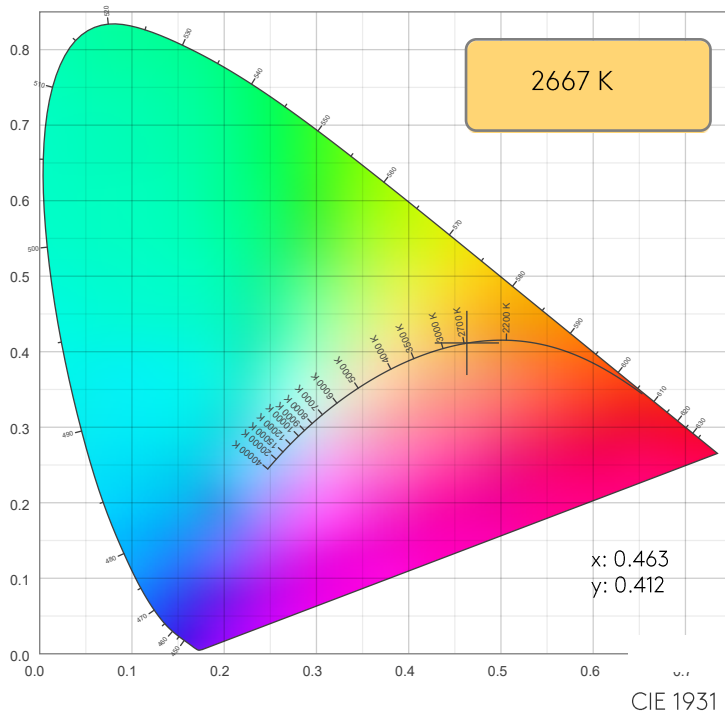
SPECTRA



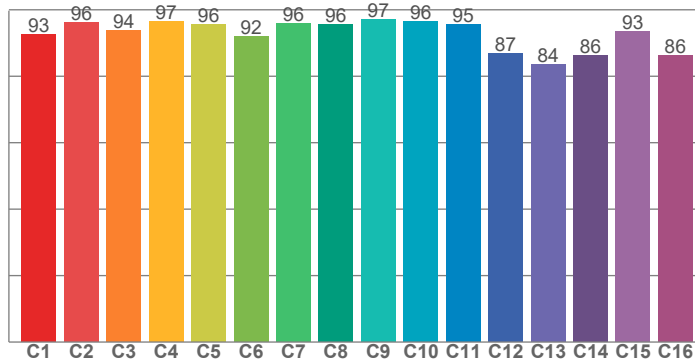
POWER



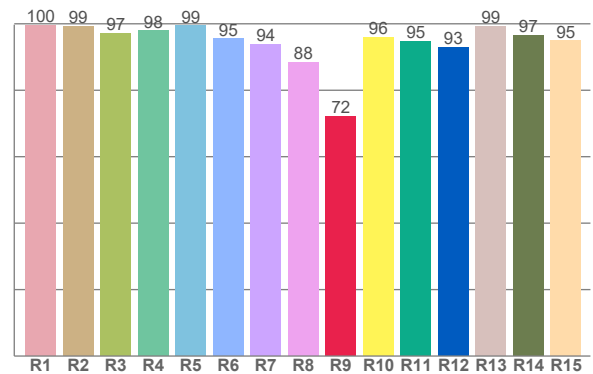
COLOR DETAILS



TM30: 93.3



CRI: 96.3 (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
99.6	99.2	97.0	97.8	99.4	95.5	93.7	88.4	72.1	95.9	94.7	92.8	99.3	96.5	94.9

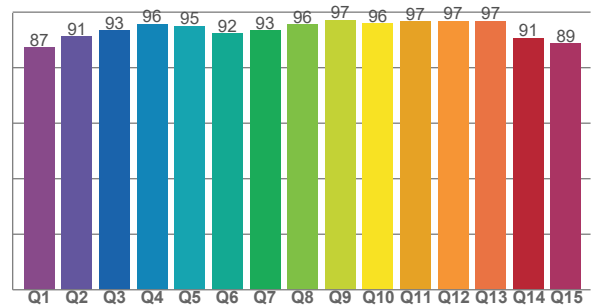
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92.7	96.1	93.8	96.5	95.6	92.0	95.9	95.5	97.2	96.4	95.5	86.8	83.6	86.1	93.4	86.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87.2	91.3	93.3	95.7	95.0	92.3	93.4	95.6	97.2	96.0	96.6	96.8	96.8	90.8	88.8

CQS: 92.7



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
2667 K	96.3	72.1	93.3	100.8	92.7	0.463	0.412	0.264	0.352	0.0002

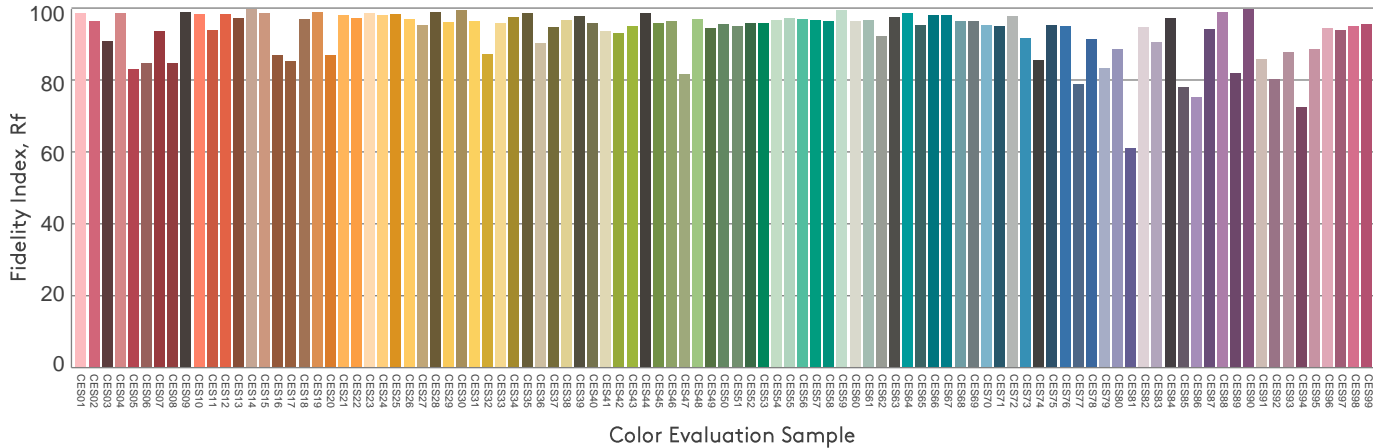
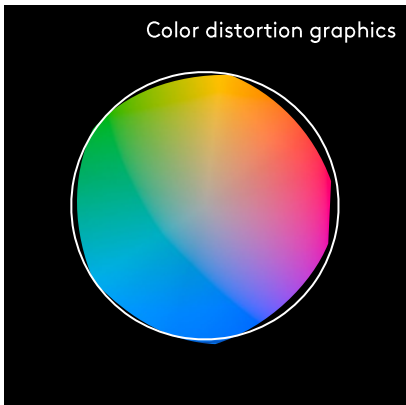
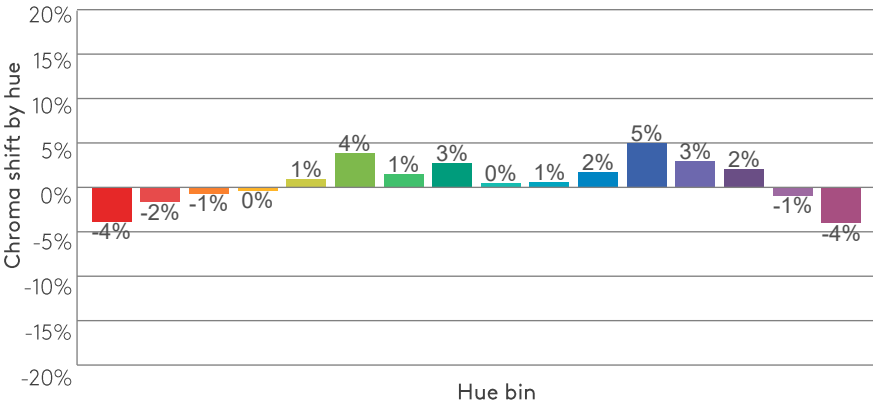
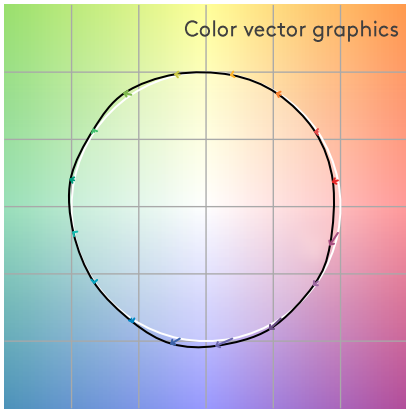
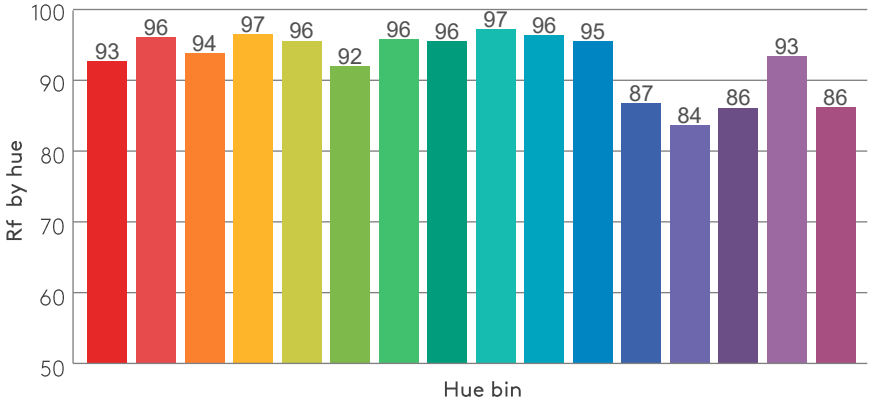
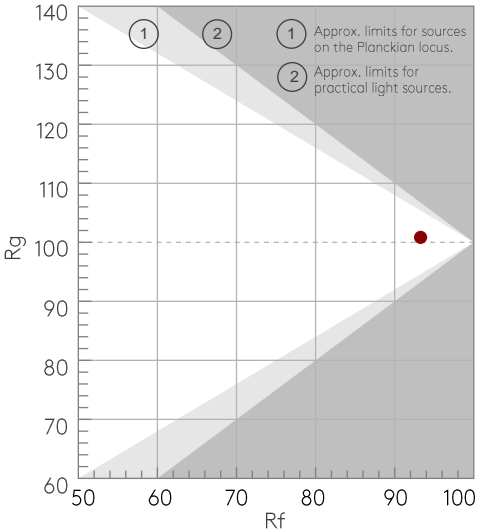
Rf 93.3

Fidelity index Rf

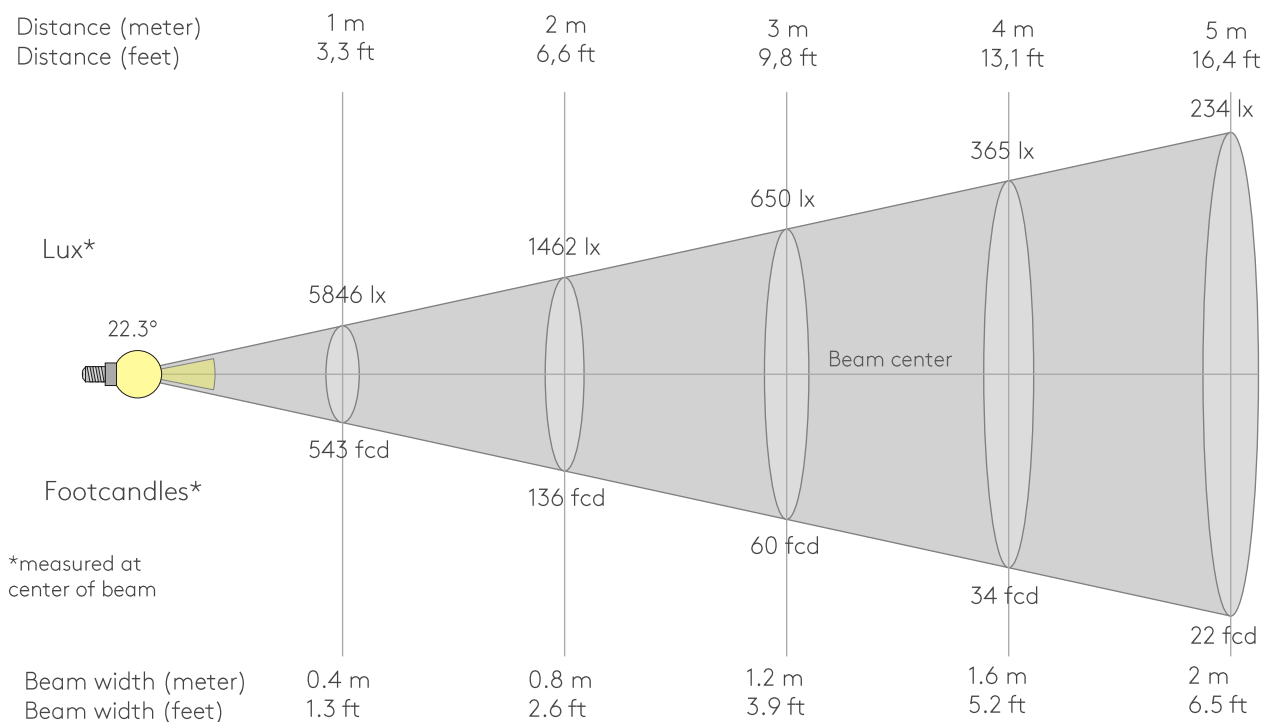
Rg 100.8

Gammut index Rg

Hue Bin	Rf	Graphic shifts (%)	
		Chroma	Hue
1	93	-4%	0%
2	96	-2%	1%
3	94	-1%	3%
4	97	0%	1%
5	96	1%	3%
6	92	4%	4%
7	96	1%	-1%
8	96	3%	0%
9	97	0%	-1%
10	96	1%	1%
11	95	2%	2%
12	87	5%	-5%
13	84	3%	-13%
14	86	2%	-11%
15	93	-1%	-4%
16	86	-4%	-10%



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
5846lx	1462lx	650lx	365lx	234lx	162lx	119lx	91lx	72lx	58lx	48lx	41lx	35lx	30lx	26lx	23lx	20lx	18lx	16lx	15lx
543.1fcd	135.8fcd	60.3fcd	33.9fcd	21.7fcd	15.1fcd	11.1fcd	8.5fcd	6.7fcd	5.4fcd	4.5fcd	3.8fcd	3.2fcd	2.8fcd	2.4fcd	2.1fcd	1.9fcd	1.7fcd	1.5fcd	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°
5846	5744	5429	4889	4167	3375	2619	1950	1391	974	691	499	363	267	199	149	113	87	66	52
100%	98%	93%	84%	71%	58%	45%	33%	24%	17%	12%	9%	6%	5%	3%	3%	2%	1%	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°
5846	5744	5429	4889	4167	3375	2619	1950	1391	974	691	499	363	267	199	149	113	87	66	52
100%	98%	93%	84%	71%	58%	45%	33%	24%	17%	12%	9%	6%	5%	3%	3%	2%	1%	1%	1%

Intensities in 180° c-plane

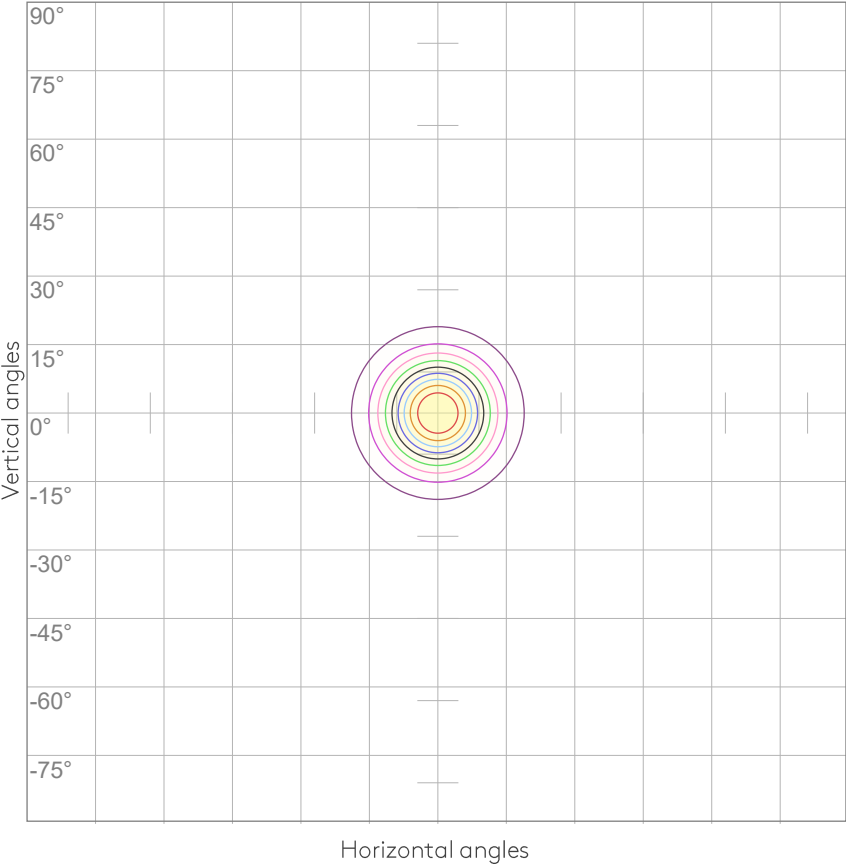
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5846	5744	5429	4889	4167	3375	2619	1950	1391	974	691	499	363	267	199	149	113	87	66	52
100%	98%	93%	84%	71%	58%	45%	33%	24%	17%	12%	9%	6%	5%	3%	3%	2%	1%	1%	1%

Intensities in 270° c-plane

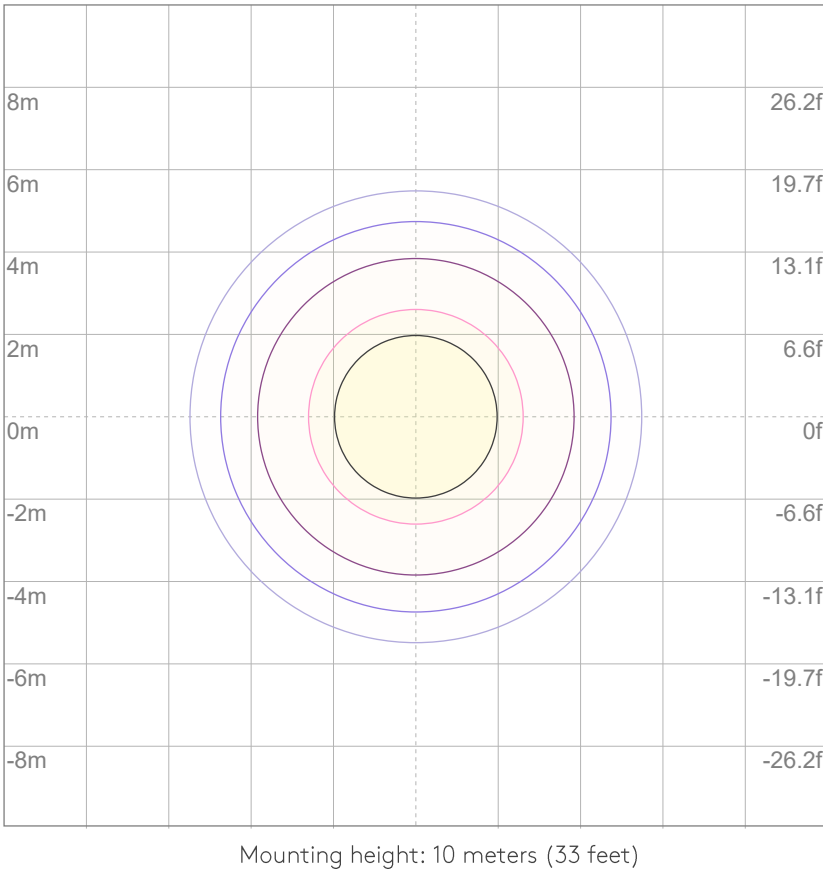
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5846	5744	5429	4889	4167	3375	2619	1950	1391	974	691	499	363	267	199	149	113	87	66	52
100%	98%	93%	84%	71%	58%	45%	33%	24%	17%	12%	9%	6%	5%	3%	3%	2%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
22.3°	42°	60.3°	98.0%	97.0%

ISO CANDELA DIAGRAM



ISO LUX DIAGRAM



UGR

GLARE EVALUATION ACCORDING TO UGR

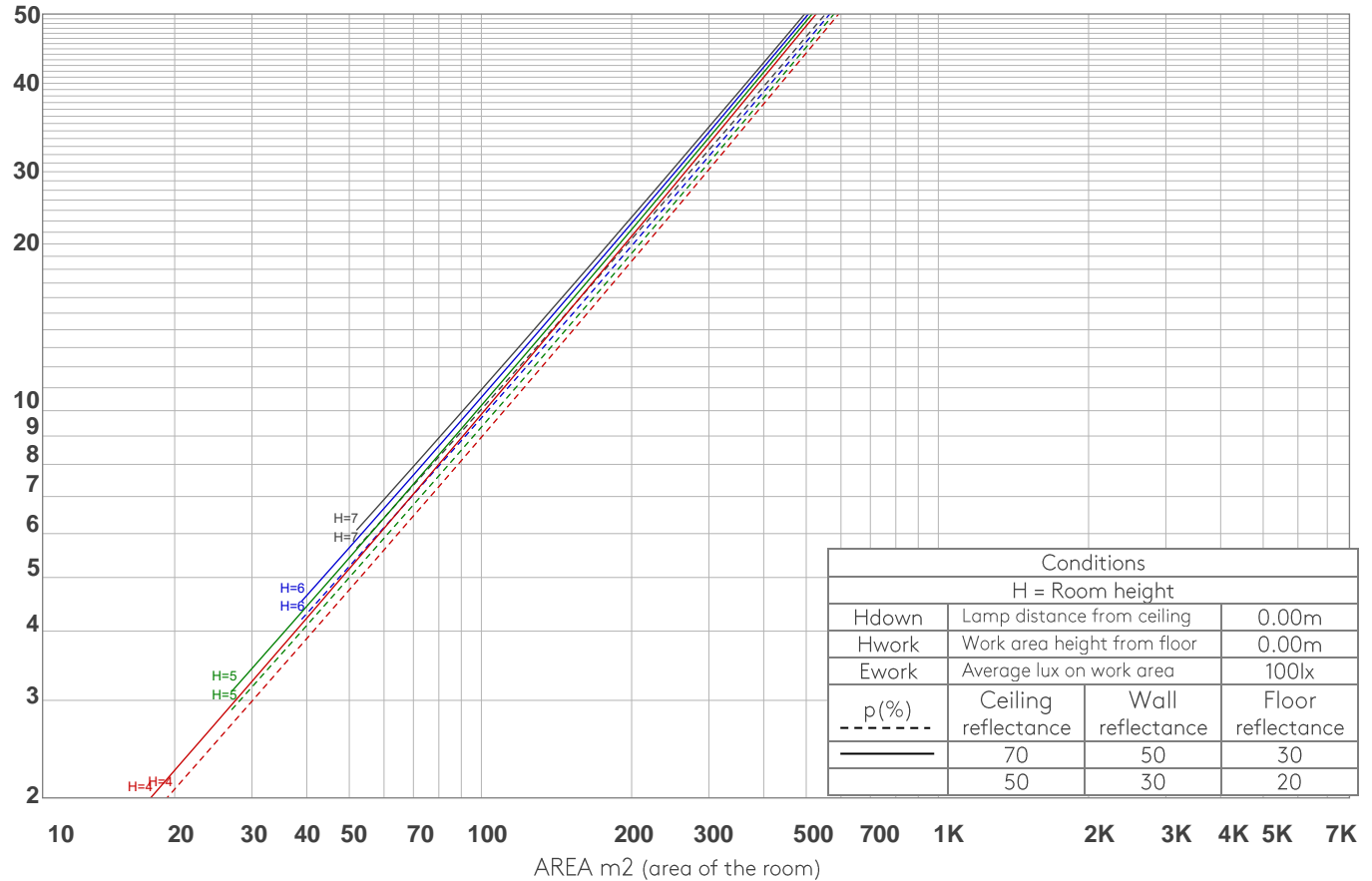
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	14.1	14.5	14.2	14.7	14.9	14.1	14.5	14.2	14.7	14.9
	3H	14.1	14.7	14.5	14.9	15.1	14.1	14.7	14.5	14.9	15.1
	4H	14.3	14.9	14.7	15.1	15.4	14.3	14.9	14.7	15.1	15.4
	6H	14.8	15.3	15.1	15.6	15.9	14.8	15.3	15.1	15.6	15.9
	8H	15.1	15.5	15.4	15.9	16.3	15.1	15.5	15.4	15.9	16.3
	12H	15.5	15.9	15.8	16.3	16.7	15.5	15.9	15.8	16.3	16.7
4H	2H	13.9	14.4	14.3	14.7	14.9	13.9	14.4	14.3	14.7	14.9
	3H	14.2	14.7	14.6	15.0	15.5	14.2	14.7	14.6	15.0	15.5
	4H	14.6	15.0	15.0	15.4	15.9	14.6	15.0	15.0	15.4	15.9
	6H	15.2	15.7	15.7	16.0	16.4	15.2	15.7	15.7	16.0	16.4
	8H	15.6	16.0	16.2	16.4	16.8	15.6	16.0	16.2	16.4	16.8
	12H	16.2	16.5	16.7	16.9	17.4	16.2	16.5	16.7	16.9	17.4
8H	4H	14.7	15.1	15.2	15.5	15.9	14.7	15.1	15.2	15.5	15.9
	6H	15.6	15.9	16.1	16.3	16.9	15.6	15.9	16.1	16.3	16.9
	8H	16.3	16.5	16.8	17.0	17.6	16.3	16.5	16.8	17.0	17.6
	12H	17.1	17.2	17.7	17.8	18.4	17.1	17.2	17.7	17.8	18.4
12H	4H	14.7	15.0	15.2	15.5	15.9	14.7	15.0	15.2	15.5	15.9
	6H	15.8	16.0	16.3	16.5	17.1	15.8	16.0	16.3	16.5	17.1
	8H	16.5	16.6	17.1	17.2	17.8	16.5	16.6	17.1	17.2	17.8
Variation of the observer position for the luminaire distance S											
S = 1.0H		1.7 / -0.8					1.7 / -0.8				
S = 1.5H		3.5 / -0.9					3.5 / -0.9				
S = 2.0H		5.0 / -1.1					5.0 / -1.1				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1146 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	110	110	110	105	105	105	101	101	101	99
1	115	112	110	109	112	110	108	107	106	105	103	102	101	100	98	98	97	95
2	111	107	104	101	108	105	102	100	102	100	98	99	97	96	96	95	93	92
3	107	102	99	96	105	101	98	95	98	95	93	96	94	92	94	92	90	89
4	104	98	94	91	102	97	93	91	95	92	89	93	90	88	91	89	87	86
5	101	95	90	87	99	94	90	87	92	89	86	90	88	85	89	86	85	83
6	98	91	87	84	96	91	87	84	89	86	83	88	85	83	87	84	82	81
7	95	88	84	81	94	88	84	81	87	83	81	85	82	80	84	82	80	79
8	92	86	82	79	91	85	81	79	84	81	78	83	80	78	82	80	78	77
9	90	83	79	77	89	83	79	76	82	79	76	81	78	76	80	78	76	75
10	88	81	77	74	87	81	77	74	80	76	74	79	76	74	79	76	74	73

LAMPS (number of lamps)

LUMINAIRE BUDGETARY DIAGRAM



ZONAL LUMEN SUMMARY

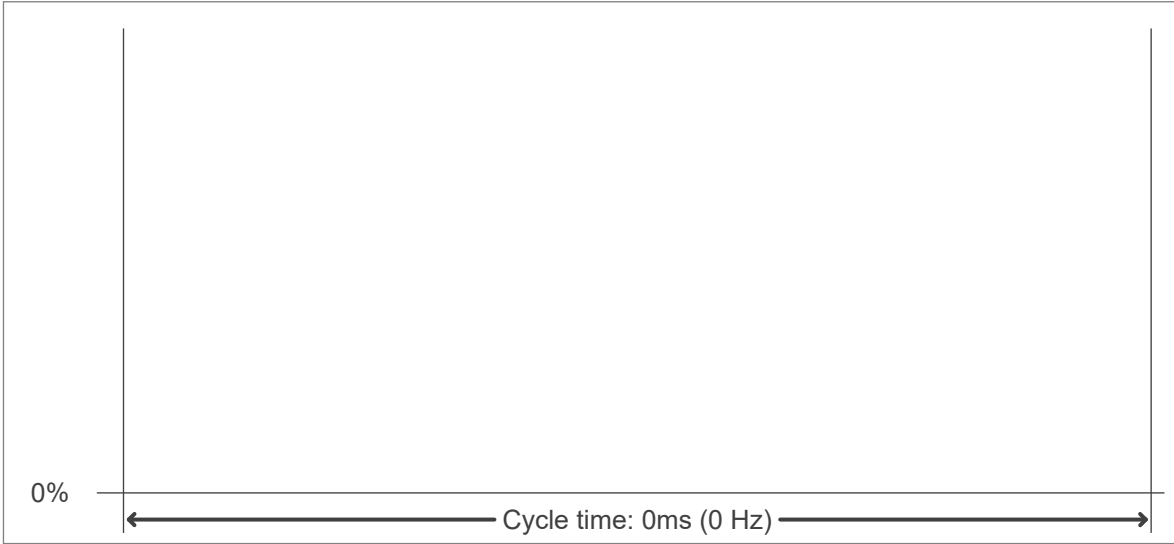
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
435 lm	463 lm	153 lm	50.1 lm	16.0 lm	5.79 lm	3.63 lm	3.03 lm	2.50 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
2.09 lm	1.99 lm	1.91 lm	1.78 lm	1.68 lm	1.66 lm	1.53 lm	1.03 lm	0.293 lm

FLICKER

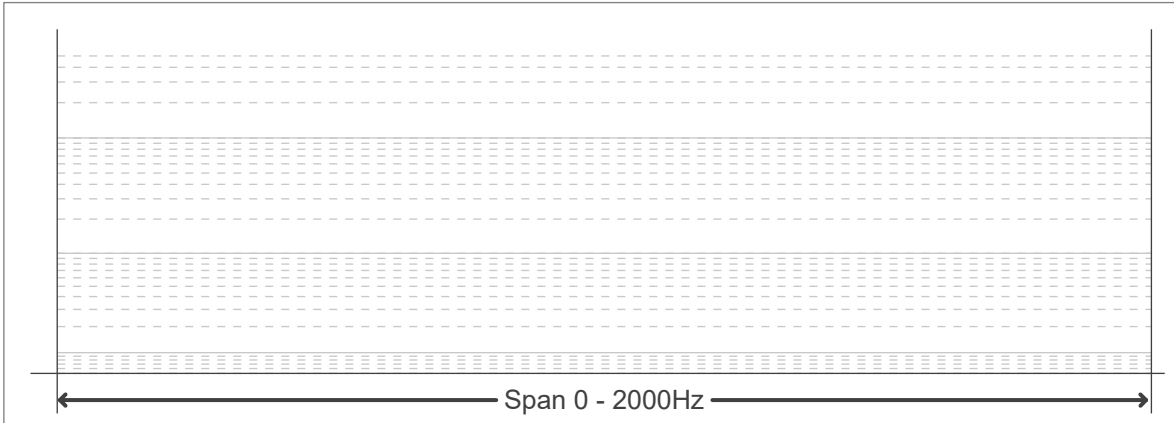
FLICKER CURVE (COMPLETE SAMPLED)



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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