

# PHOTOMETRIC TEST REPORT

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TRIMLESS PRO ROUND  
ADJUSTABLE - MATT WHITE -  
4002547

astro

## TRIMLESS PRO ROUND ADJUSTABLE -

astro

### LIGHT EFFICIENCY:

68 Lumen/Watt

### LIGHT QUALITY:

CRI: 94.7

### COLOR TEMPERATURE:

2706 K

OUTPUT: 811 lm

PEAK: 4287 cd

POWER: 11.8 W

PF: 0.95



Tracking number: [n/a](#)

Product name:

Trimless Pro Round Adjustable - Matt White - 4002547

Item number:

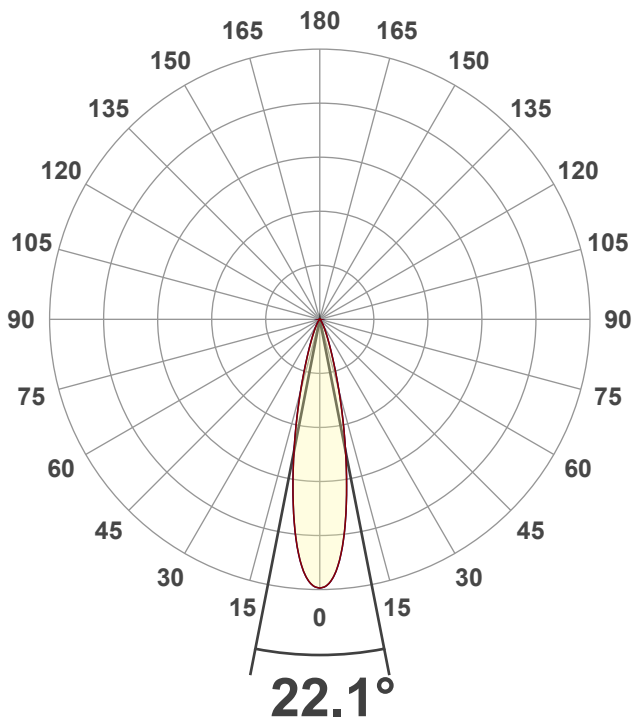
TRA-MW-HQ27G1-15G1-X-D1

Date and time:

23/01/2025 12:18:08

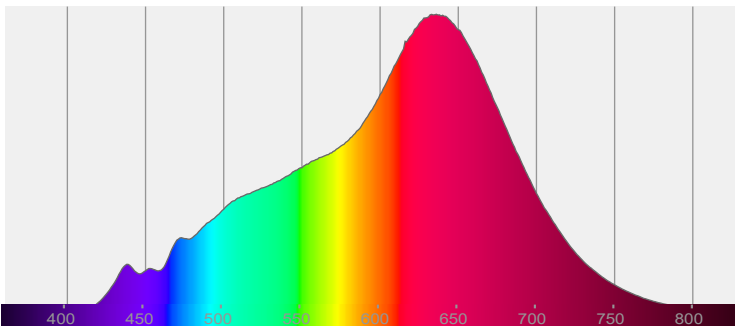
Description:

IP20 LED Downlight

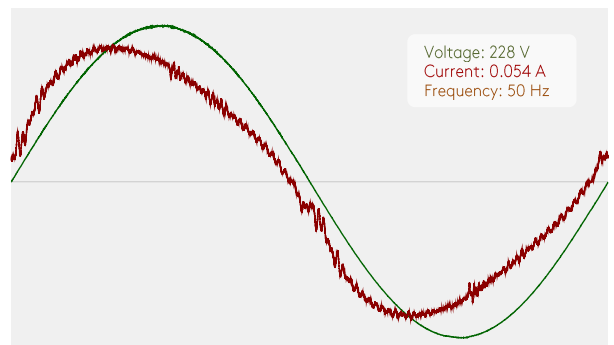


CIE 1931  
x: 0.460  
y: 0.410

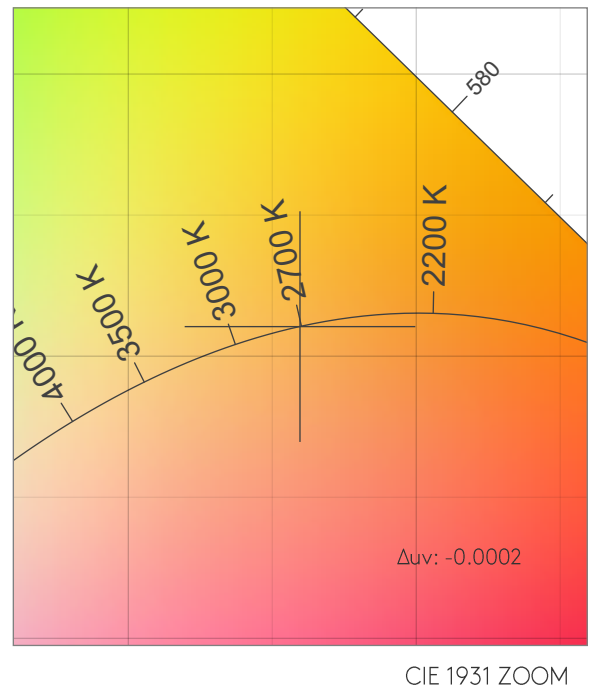
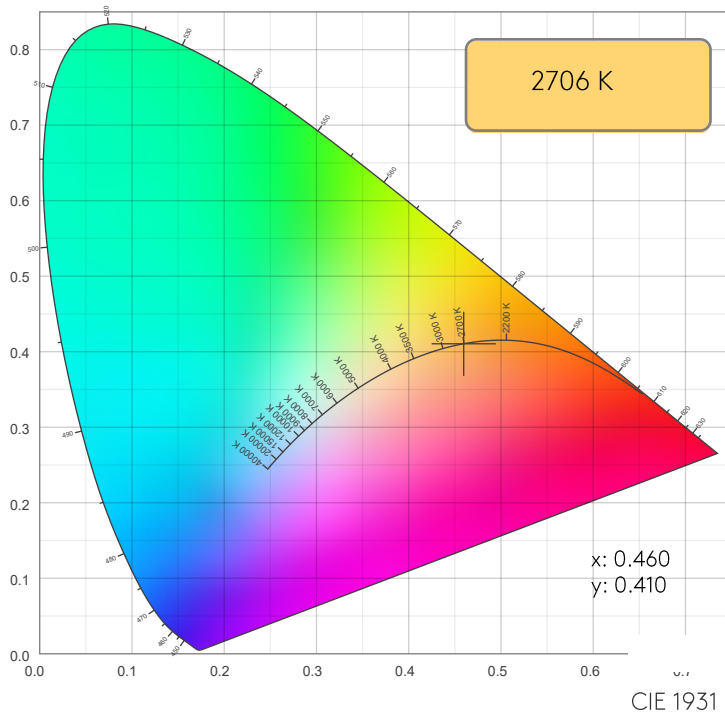
### SPECTRA



### POWER

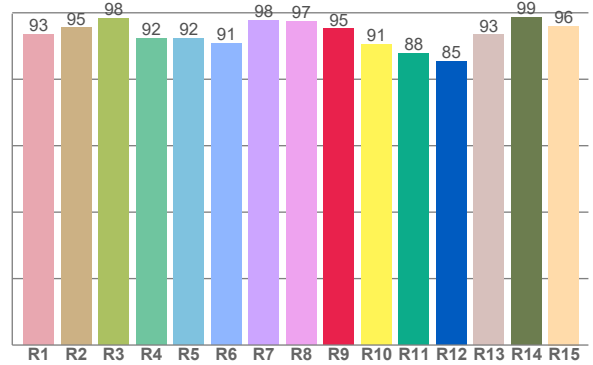
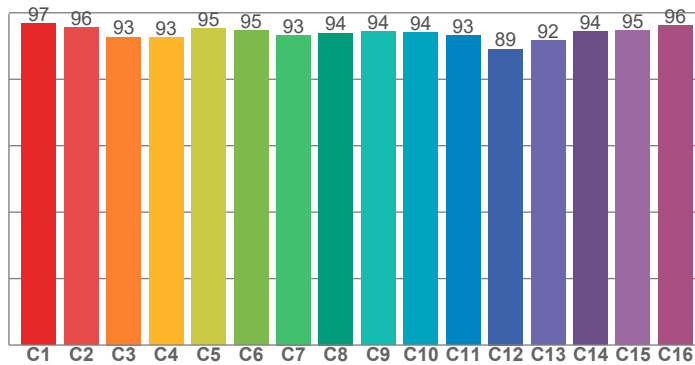


## COLOR DETAILS



TM30: 94.1

CRI: 94.7 (R1-R8)



CQS: 92.8

CRI R values, only R1-R8 are used to calculate final CRI value

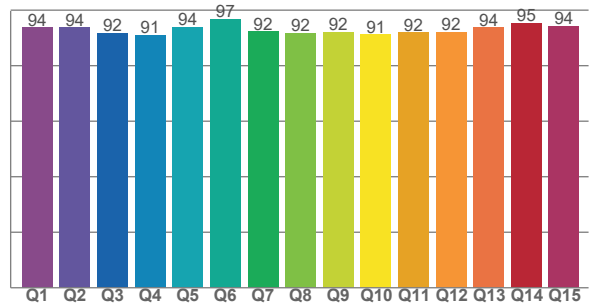
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93.4	95.5	98.3	92.4	92.3	90.8	97.8	97.4	95.1	90.5	87.8	85.3	93.4	98.6	96.0

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
96.7	95.7	92.7	92.5	95.3	94.6	93.3	93.9	94.3	94.0	93.2	89.1	91.8	94.3	94.8	96.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93.7	93.7	91.7	91.0	93.9	96.7	92.4	91.8	92.2	91.3	92.0	92.1	93.8	95.4	94.4



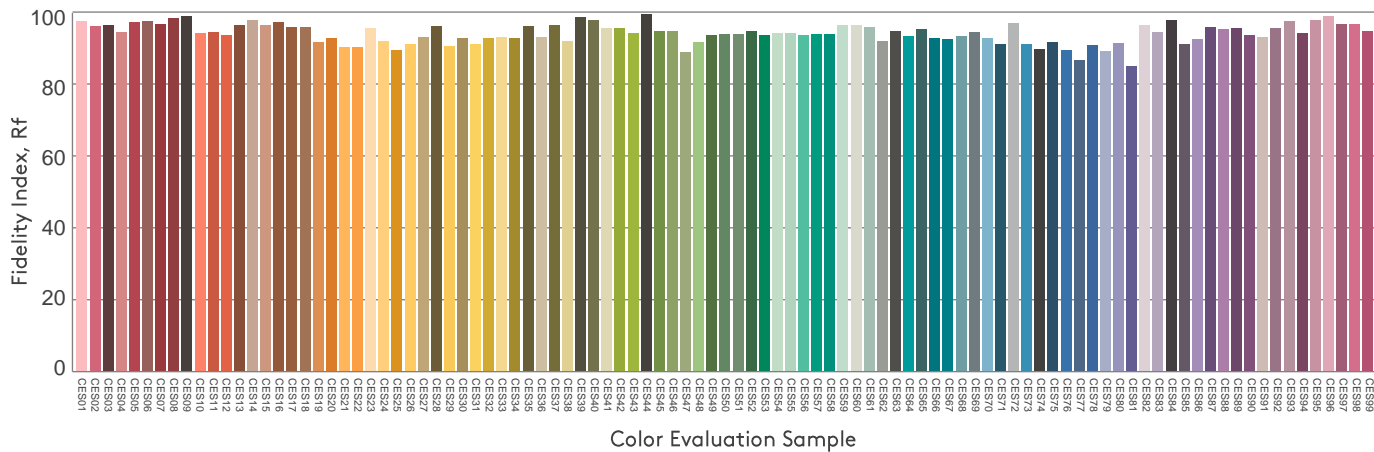
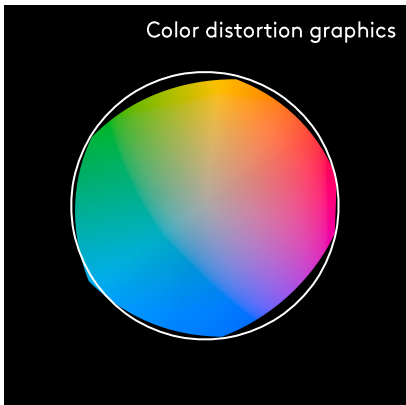
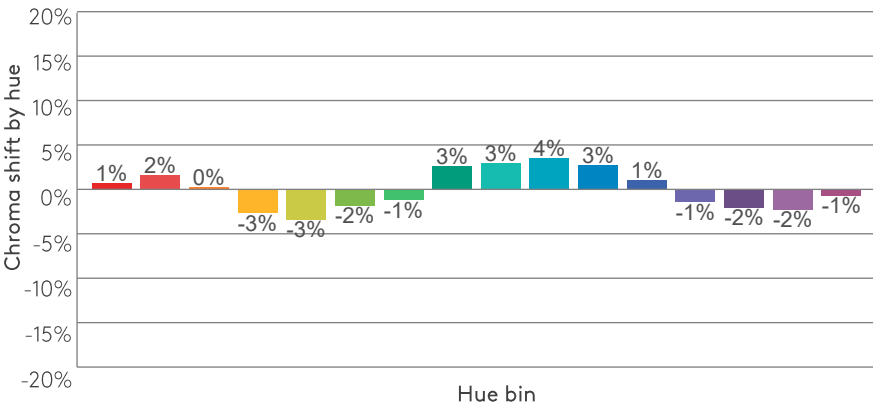
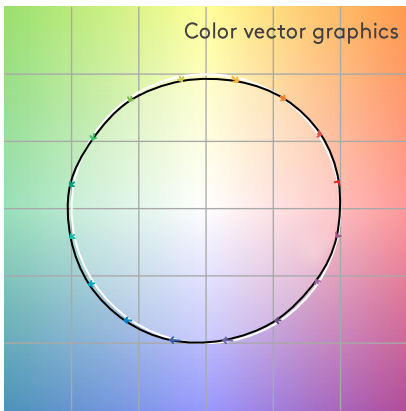
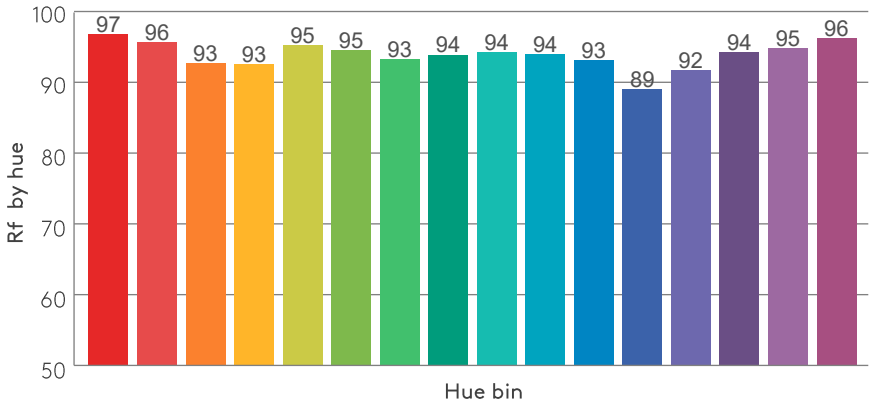
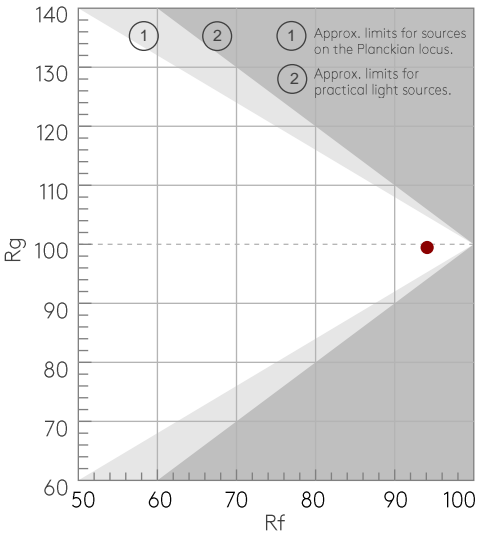
## COLOR PARAMETERS

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	$\Delta uv$
2706 K	94.7	95.1	94.1	99.5	92.8	0.460	0.410	0.262	0.352	-0.0002

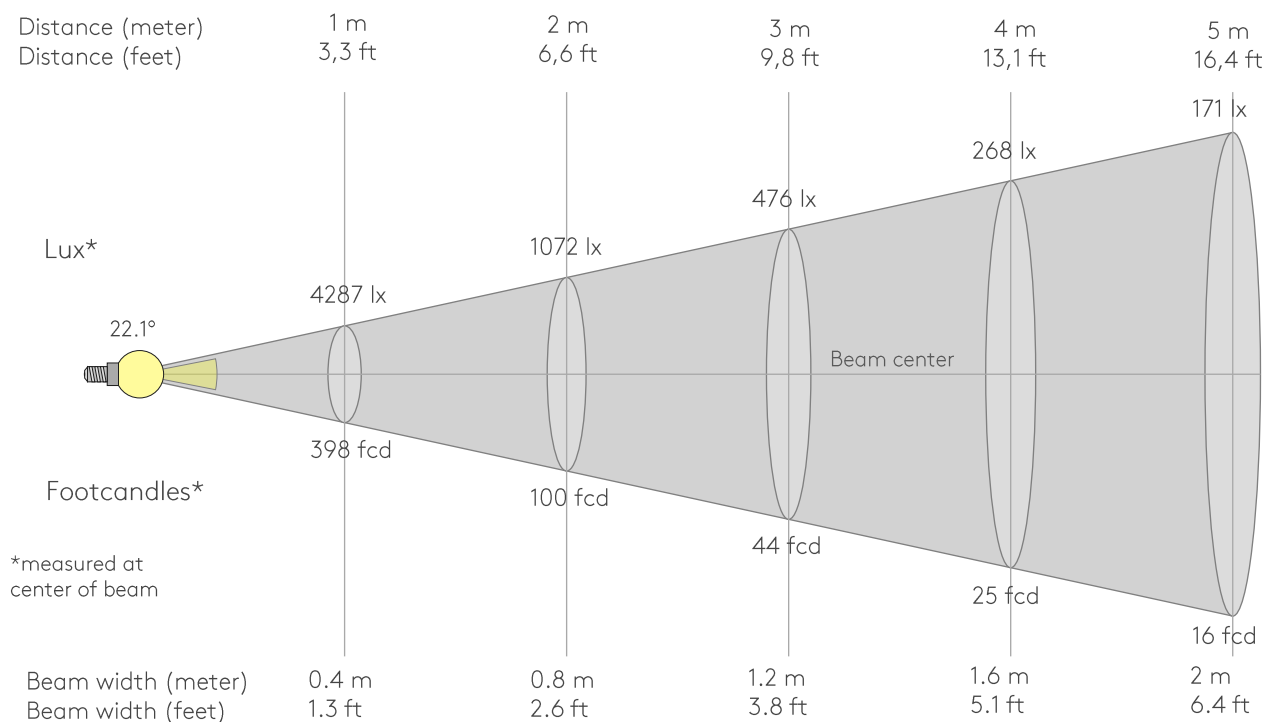
Rf 94.1  
Fidelity index Rf

Rg 99.5  
Gammut index Rg

Hue Bin	Rf	Graphic shifts (%)	
		Chroma	Hue
1	97	1%	1%
2	96	2%	-2%
3	93	0%	-4%
4	93	-3%	-5%
5	95	-3%	-1%
6	95	-2%	3%
7	93	-1%	4%
8	94	3%	3%
9	94	3%	2%
10	94	4%	-1%
11	93	3%	-4%
12	89	1%	-7%
13	92	-1%	-7%
14	94	-2%	-3%
15	95	-2%	1%
16	96	-1%	-1%



## 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
4287lx	1072lx	476lx	268lx	171lx	119lx	87lx	67lx	53lx	43lx	35lx	30lx	25lx	22lx	19lx	17lx	15lx	13lx	12lx	11lx
398.3fcd	99.6fcd	44.3fcd	24.9fcd	15.9fcd	11.1fcd	8.1fcd	6.2fcd	4.9fcd	4fcd	3.3fcd	2.8fcd	2.4fcd	2fcd	1.8fcd	1.6fcd	1.4fcd	1.2fcd	1.1fcd	1fcd

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°
4287	4214	3976	3567	3029	2445	1890	1399	994	695	492	354	258	190	141	106	82	63	50	38
100%	98%	93%	83%	71%	57%	44%	33%	23%	16%	11%	8%	6%	4%	3%	2%	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°
4287	4214	3976	3567	3029	2445	1890	1399	994	695	492	354	258	190	141	106	82	63	50	38
100%	98%	93%	83%	71%	57%	44%	33%	23%	16%	11%	8%	6%	4%	3%	2%	2%	1%	1%	1%

Intensities in 180° c-plane

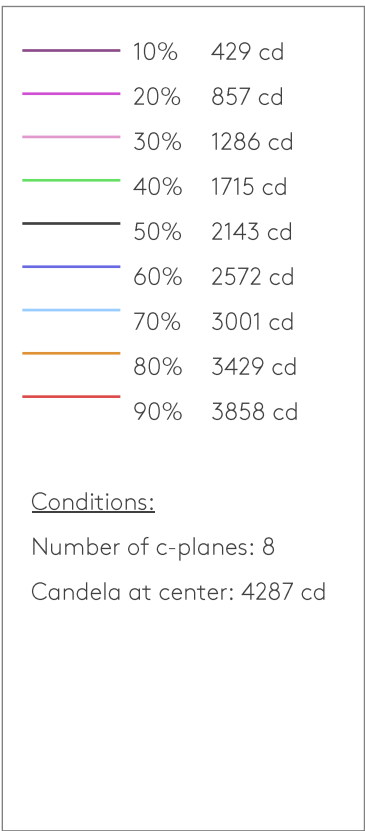
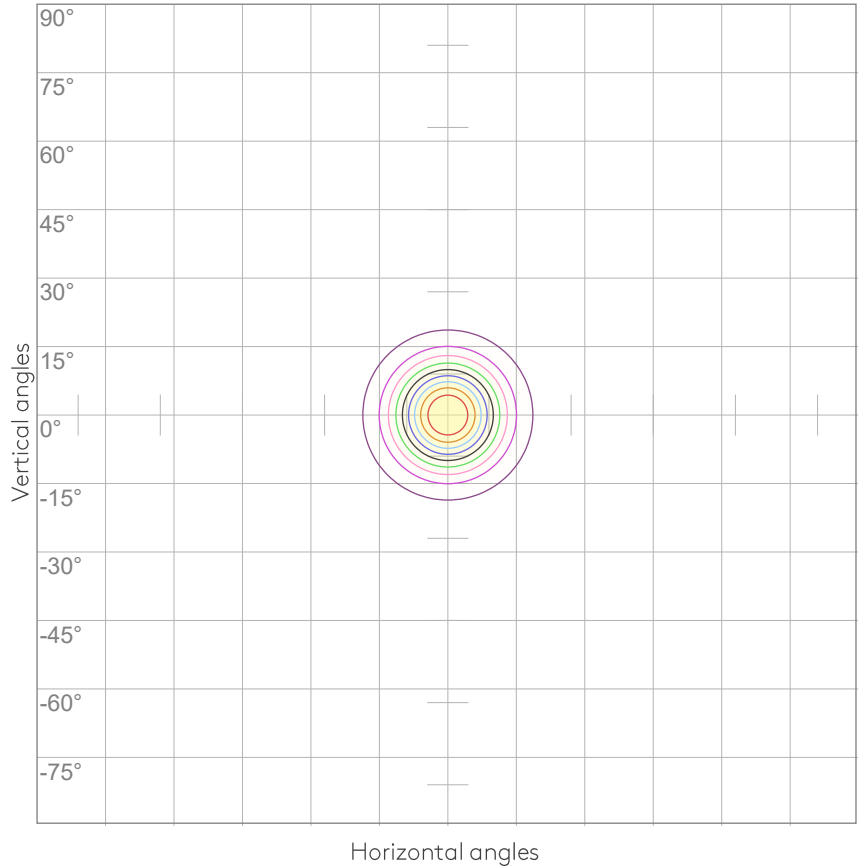
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4287	4214	3976	3567	3029	2445	1890	1399	994	695	492	354	258	190	141	106	82	63	50	38
100%	98%	93%	83%	71%	57%	44%	33%	23%	16%	11%	8%	6%	4%	3%	2%	2%	1%	1%	1%

Intensities in 270° c-plane

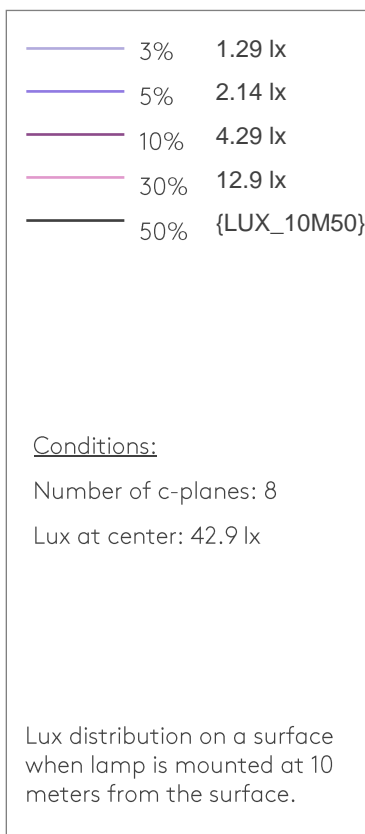
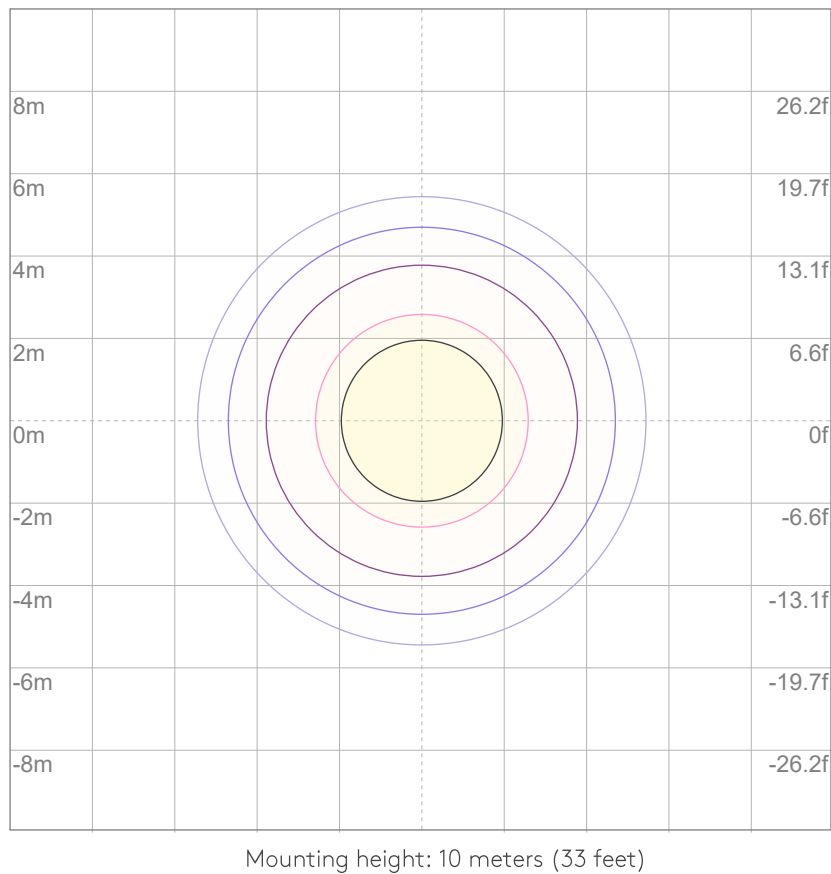
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4287	4214	3976	3567	3029	2445	1890	1399	994	695	492	354	258	190	141	106	82	63	50	38
100%	98%	93%	83%	71%	57%	44%	33%	23%	16%	11%	8%	6%	4%	3%	2%	2%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
22.1°	41.7°	59.8°	99.5%	98.8%

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	12.5	12.9	12.6	13.1	13.3	12.5	12.9	12.6	13.1	13.3
	3H	12.3	12.8	12.7	13.0	13.2	12.3	12.8	12.7	13.0	13.2
	4H	12.3	12.8	12.7	13.0	13.3	12.3	12.8	12.7	13.0	13.3
	6H	12.4	12.8	12.7	13.1	13.4	12.4	12.8	12.7	13.1	13.4
	8H	12.4	12.8	12.7	13.1	13.5	12.4	12.8	12.7	13.1	13.5
	12H	12.3	12.7	12.7	13.1	13.5	12.3	12.7	12.7	13.1	13.5
4H	2H	12.2	12.7	12.6	12.9	13.2	12.2	12.7	12.6	12.9	13.2
	3H	12.2	12.6	12.5	13.0	13.4	12.2	12.6	12.5	13.0	13.4
	4H	12.2	12.5	12.6	13.0	13.5	12.2	12.5	12.6	13.0	13.5
	6H	12.2	12.7	12.7	13.0	13.3	12.2	12.7	12.7	13.0	13.3
	8H	12.2	12.6	12.7	13.0	13.3	12.2	12.6	12.7	13.0	13.3
	12H	12.2	12.5	12.7	12.9	13.4	12.2	12.5	12.7	12.9	13.4
8H	4H	12.1	12.5	12.6	12.8	13.2	12.1	12.5	12.6	12.8	13.2
	6H	12.2	12.5	12.7	12.9	13.5	12.2	12.5	12.7	12.9	13.5
	8H	12.3	12.5	12.8	13.0	13.6	12.3	12.5	12.8	13.0	13.6
	12H	12.3	12.5	12.9	13.0	13.6	12.3	12.5	12.9	13.0	13.6
12H	4H	12.0	12.3	12.5	12.7	13.2	12.0	12.3	12.5	12.7	13.2
	6H	12.2	12.4	12.7	13.0	13.6	12.2	12.4	12.7	13.0	13.6
	8H	12.3	12.4	12.9	13.0	13.6	12.3	12.4	12.9	13.0	13.6
Variation of the observer position for the luminaire distance S											
S = 1.0H		4.4 / -4.5					4.4 / -4.5				
S = 1.5H		6.9 / -5.0					6.9 / -5.0				
S = 2.0H		8.9 / -5.4					8.9 / -5.4				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 811 lm total luminous flux											

# TRIMLESS PRO ROUND ADJUSTABLE - LIGHT PLANNING

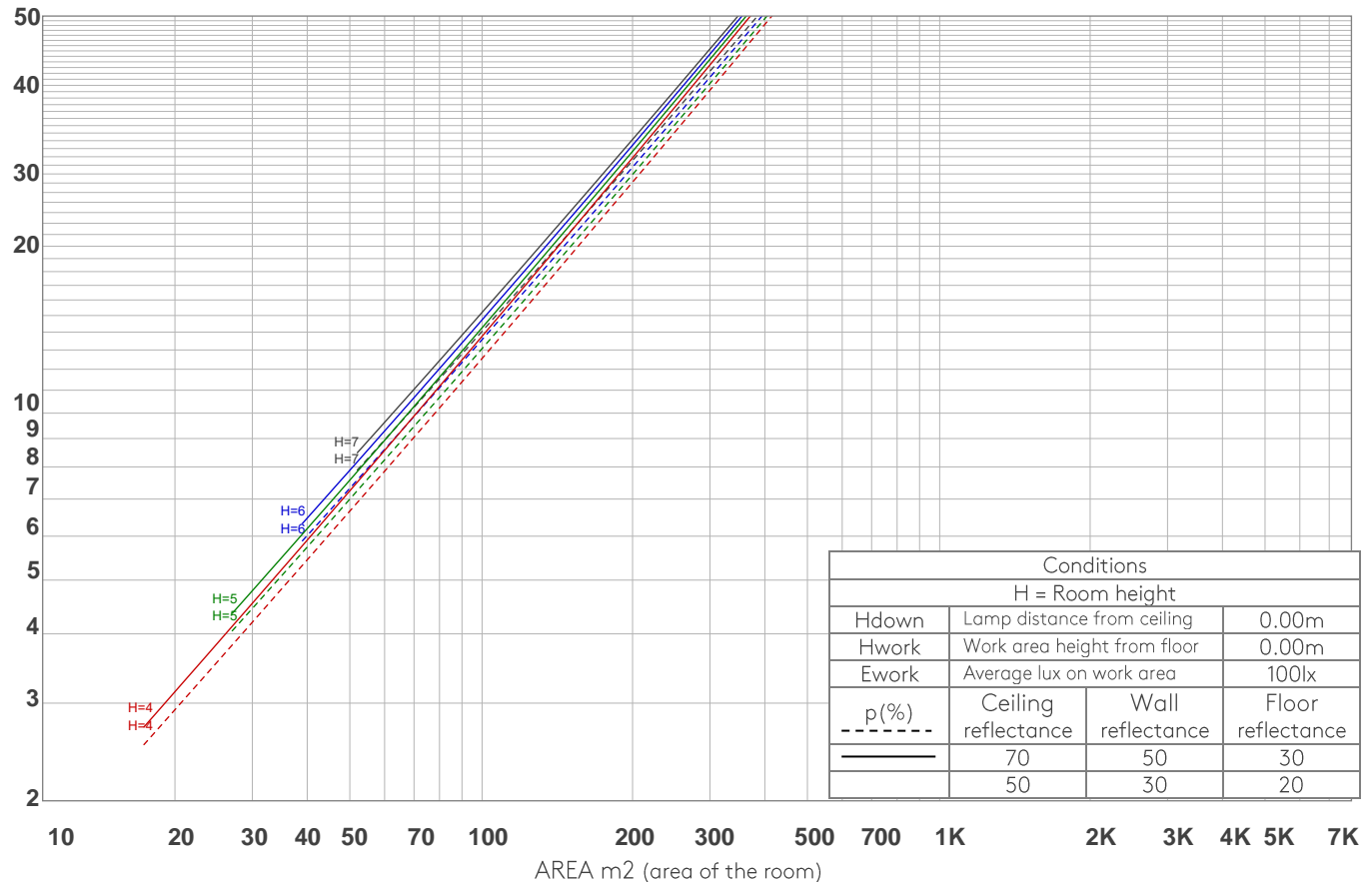
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## COEFFICIENTS OF UTILIZATION

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	108	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	100	97	106	102	99	96	99	97	94	97	95	93	95	93	92	90
4	105	99	95	92	103	98	95	92	96	93	91	94	92	90	93	90	89	88
5	101	96	92	89	100	95	91	88	93	90	87	92	89	87	90	88	86	85
6	99	92	88	85	97	92	88	85	90	87	85	89	86	84	88	86	84	82
7	96	90	86	83	95	89	85	82	88	85	82	87	84	82	86	83	81	80
8	93	87	83	80	92	86	83	80	86	82	80	85	82	79	84	81	79	78
9	91	85	81	78	90	84	80	78	83	80	78	83	80	77	82	79	77	76
10	89	82	78	76	88	82	78	76	81	78	76	81	78	75	80	77	75	74

LAMPS (number of lamps)

## LUMINAIRE BUDGETARY DIAGRAM



## ZONAL LUMEN SUMMARY

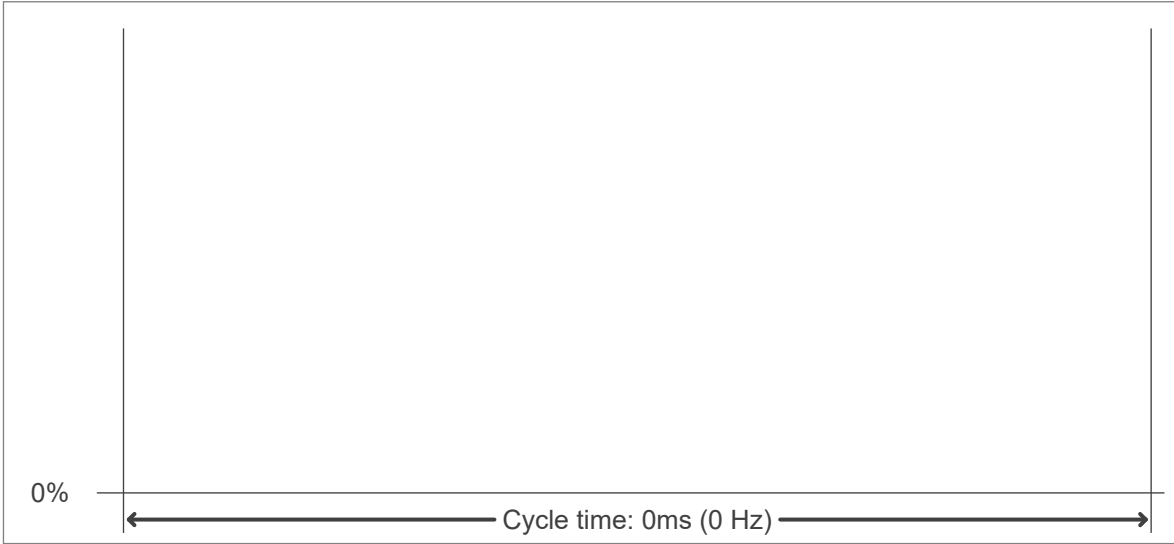
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
317 lm	333 lm	109 lm	36.2 lm	9.42 lm	2.65 lm	1.29 lm	0.881 lm	0.347 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.076 lm	0.074 lm	0.075 lm	0.093 lm	0.166 lm	0.318 lm	0.450 lm	0.350 lm	0.078 lm

FLICKER

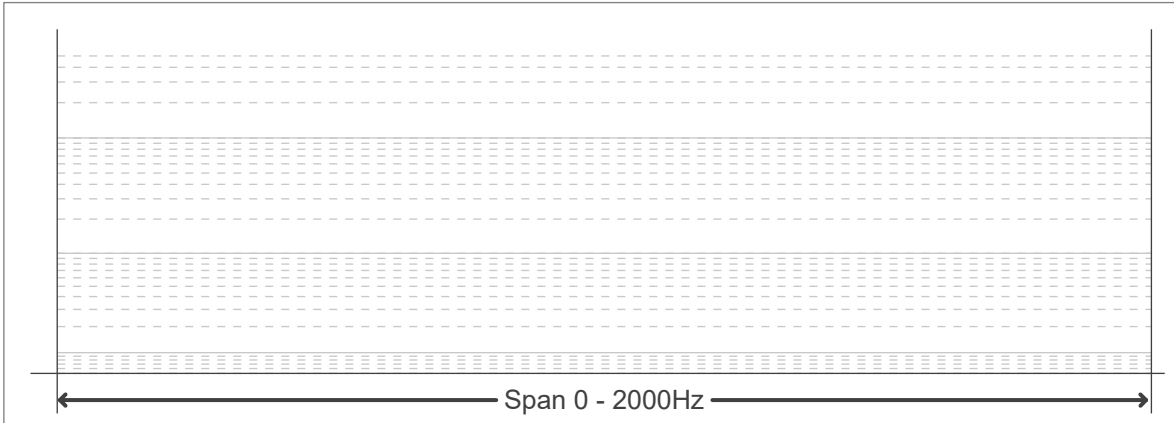
FLICKER CURVE (COMPLETE SAMPLED)



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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