

PHOTOMETRIC TEST REPORT

CAN 50 SPOT 48V TRACK DALI -
MATT BLACK

astro

CAN 50 SPOT 48V TRACK DALI - MATT

astro

LIGHT EFFICIENCY:

85 Lumen/Watt

LIGHT QUALITY:

CRI: 95.4

COLOR TEMPERATURE:

2732 K

OUTPUT: 1350 lm

PEAK: 5907 cd

POWER: 15.8 W

PF: 0.83



Tracking number: [n/a](#)

Product name:

Can 50 Spot 48V Track DALI - Matt Black

Item number:

1396048

Date and time:

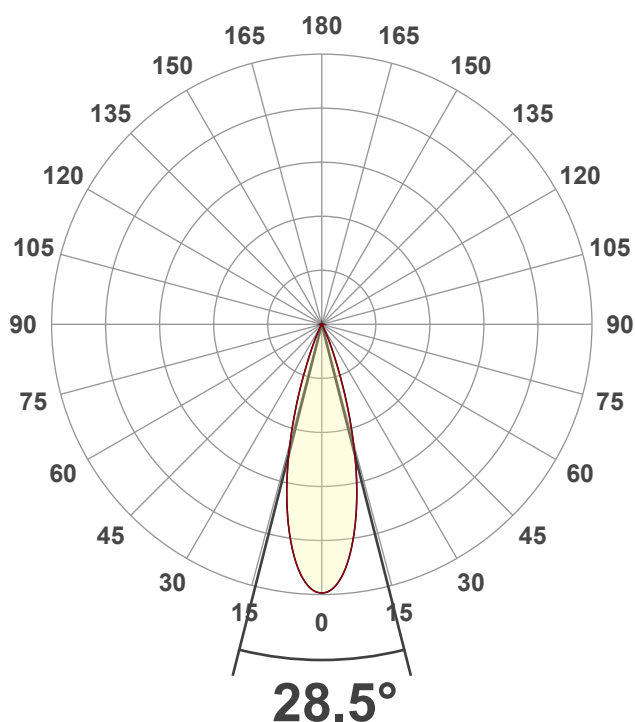
17/12/2025 10:36:35

Description:

IP20 48V Track Spot Light

Tested with Stucchi 9500/P-100E-B-SP-N

Driver Box

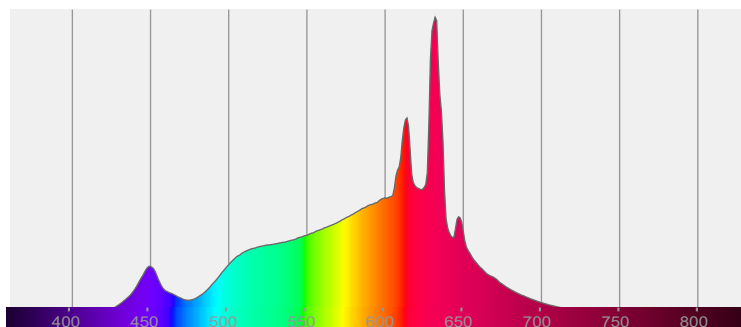


28.5°

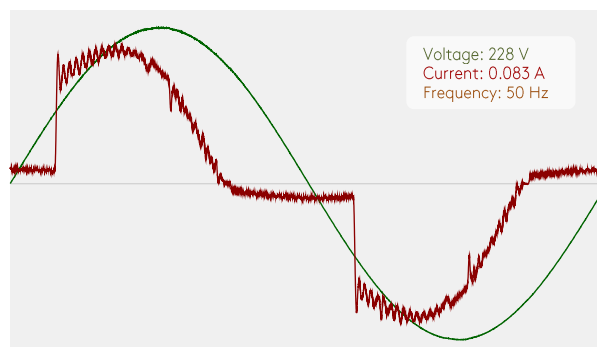


CIE 1931
x: 0.460
y: 0.414

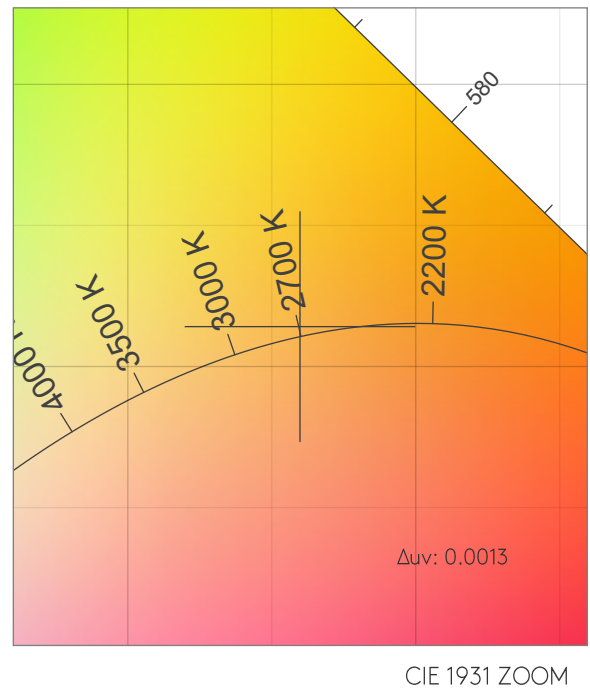
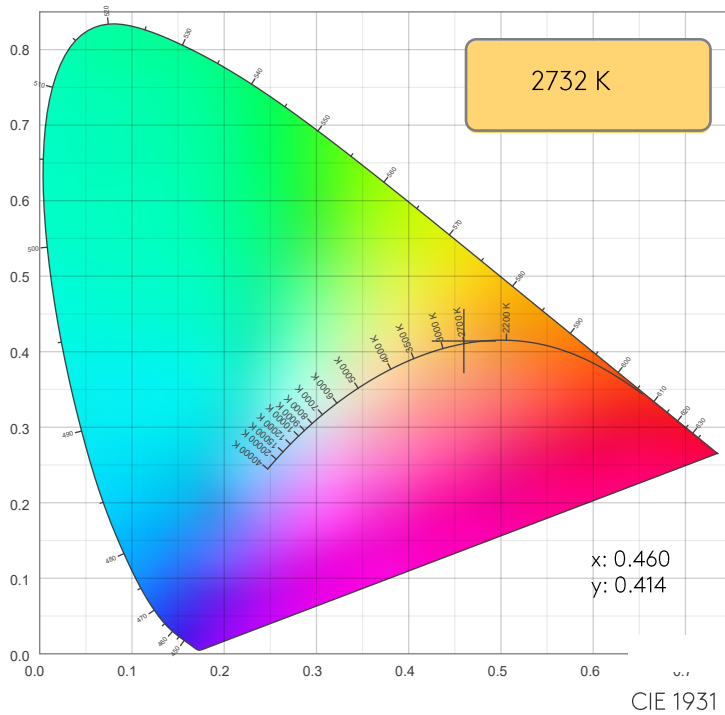
SPECTRA



POWER

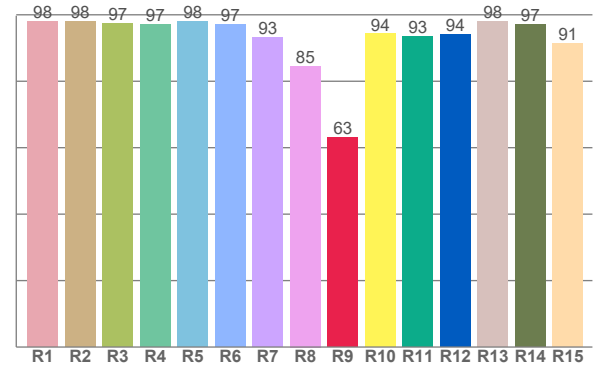
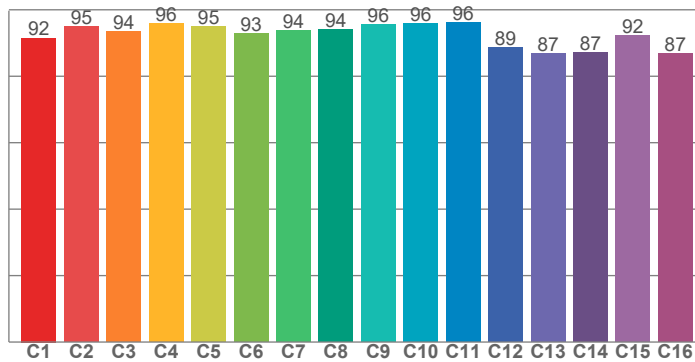


COLOR DETAILS



TM30: 93.0

CRI: 95.4 (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
98.0	97.9	97.3	97.1	97.9	97.2	93.1	84.6	63.0	94.2	93.4	94.0	98.0	97.0	91.3

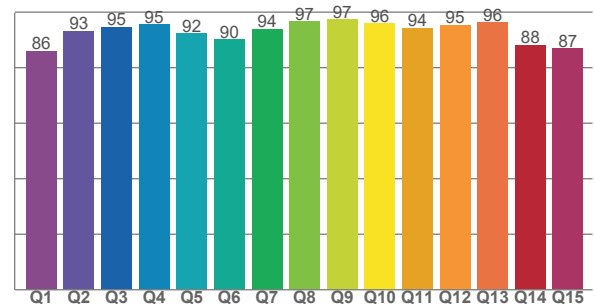
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.5	95.0	93.5	95.8	95.0	92.8	93.7	94.0	95.6	95.8	96.3	88.7	86.7	87.2	92.3	86.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
85.9	93.1	94.6	95.5	92.2	90.1	93.9	96.6	97.3	95.9	94.3	95.3	96.2	88.1	86.8

CQS: 91.9



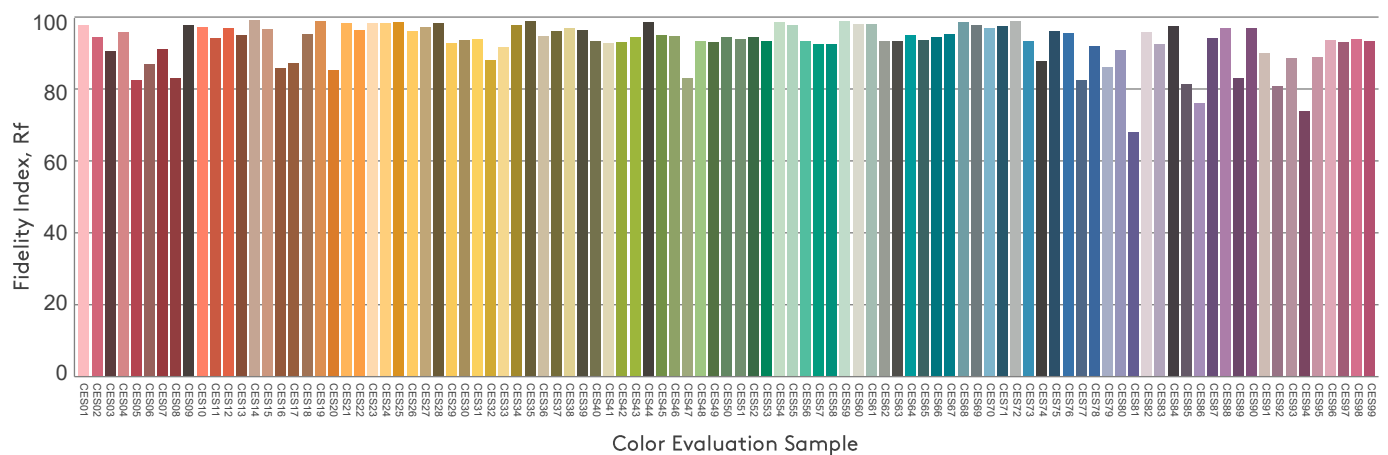
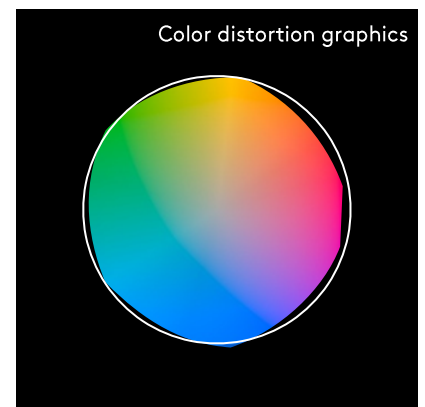
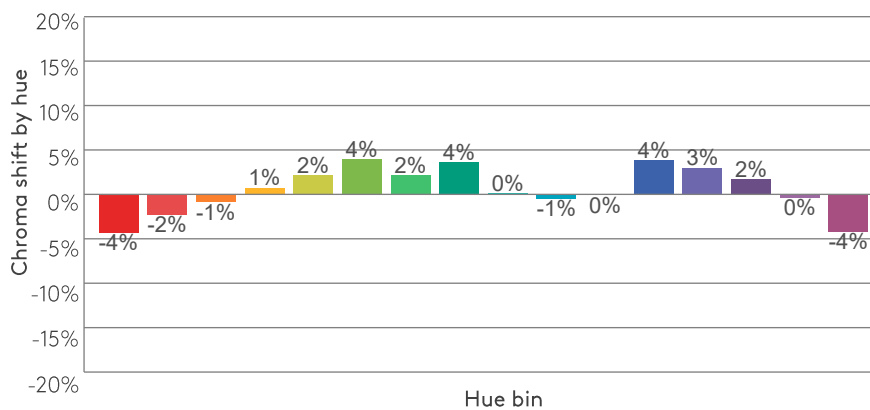
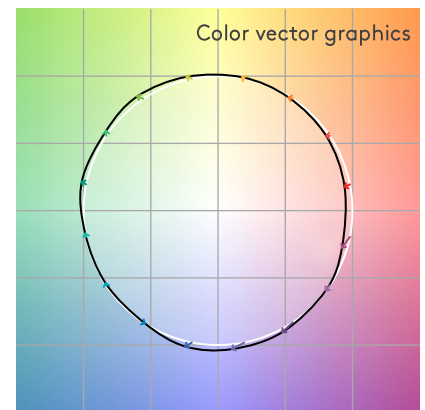
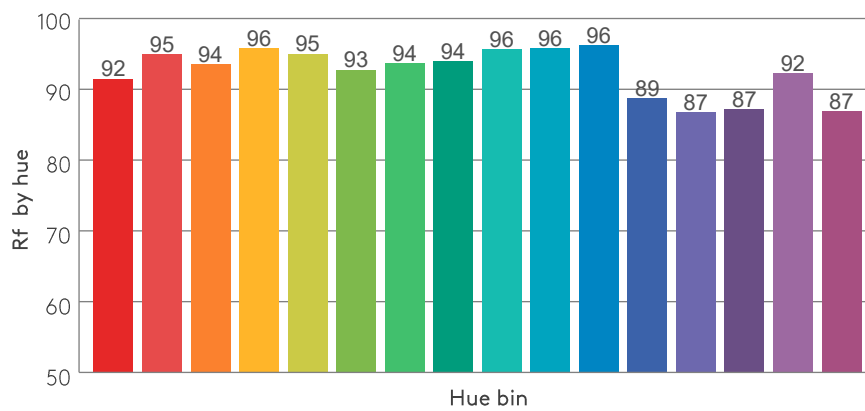
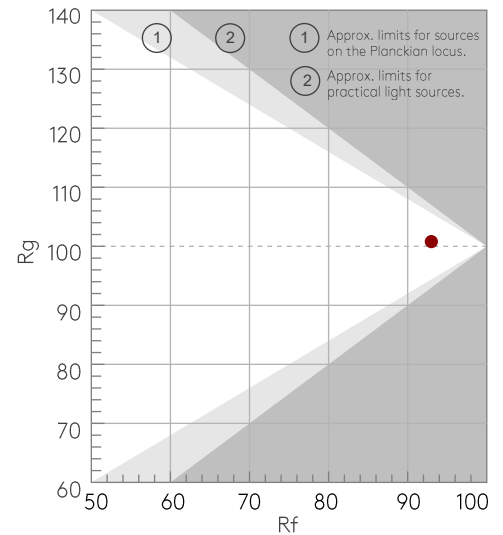
COLOR PARAMETERS

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
2732 K	95.4	63.0	93.0	100.8	91.9	0.460	0.414	0.261	0.352	0.0013

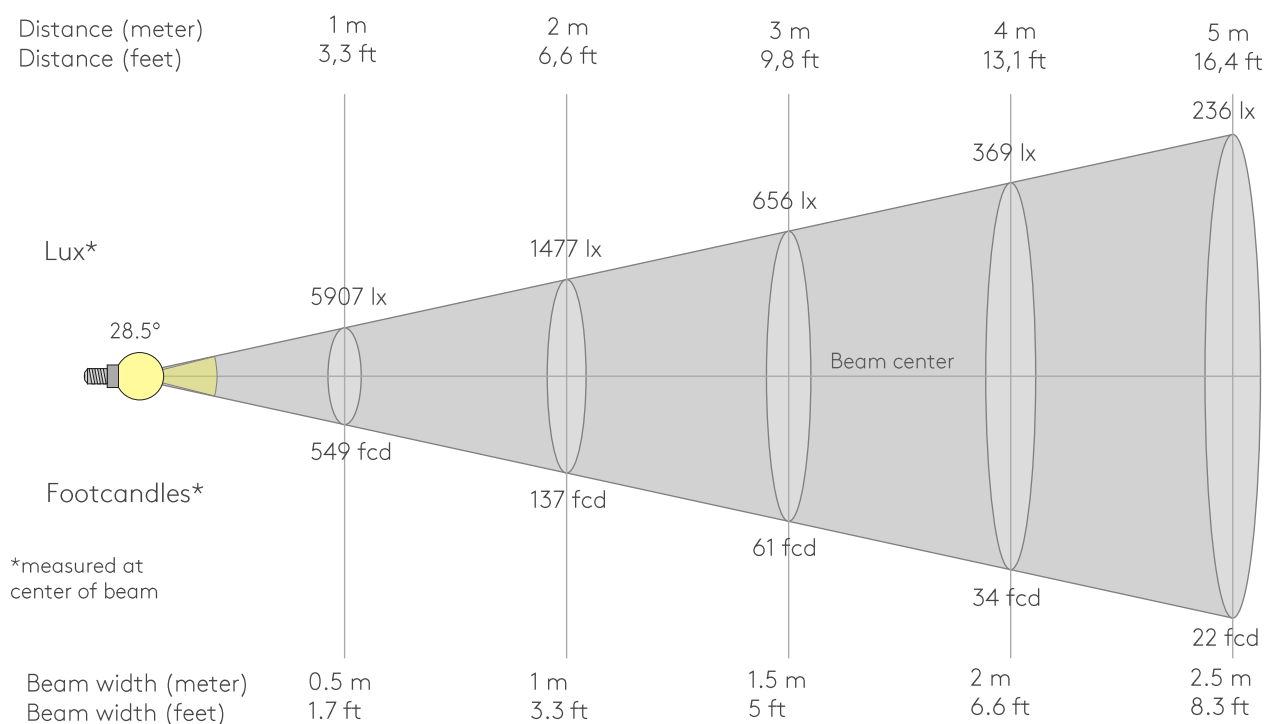
Rf 93.0
Fidelity index Rf

Rg 100.8
Gammut index Rg

Hue Bin	Rf	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	95	-2%	1%
3	94	-1%	3%
4	96	1%	2%
5	95	2%	4%
6	93	4%	3%
7	94	2%	-3%
8	94	4%	-1%
9	96	0%	-2%
10	96	-1%	-1%
11	96	0%	1%
12	89	4%	-4%
13	87	3%	-10%
14	87	2%	-10%
15	92	0%	-5%
16	87	-4%	-9%



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
5907lx	1477lx	656lx	369lx	236lx	164lx	121lx	92lx	73lx	59lx	49lx	41lx	35lx	30lx	26lx	23lx	20lx	18lx	16lx	15lx
548.7fcd	137.2fcd	61fcd	34.3fcd	21.9fcd	15.2fcd	11.2fcd	8.6fcd	6.8fcd	5.5fcd	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°
5907	5842	5639	5303	4850	4312	3701	3033	2337	1676	1076	648	359	160	55	20	10	8	6	5
100%	99%	95%	90%	82%	73%	63%	51%	40%	28%	18%	11%	6%	3%	1%	0%	0%	0%	0%	0%

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°
5907	5842	5639	5303	4850	4312	3701	3033	2337	1676	1076	648	359	160	55	20	10	8	6	5
100%	99%	95%	90%	82%	73%	63%	51%	40%	28%	18%	11%	6%	3%	1%	0%	0%	0%	0%	0%

Intensities in 180° c-plane

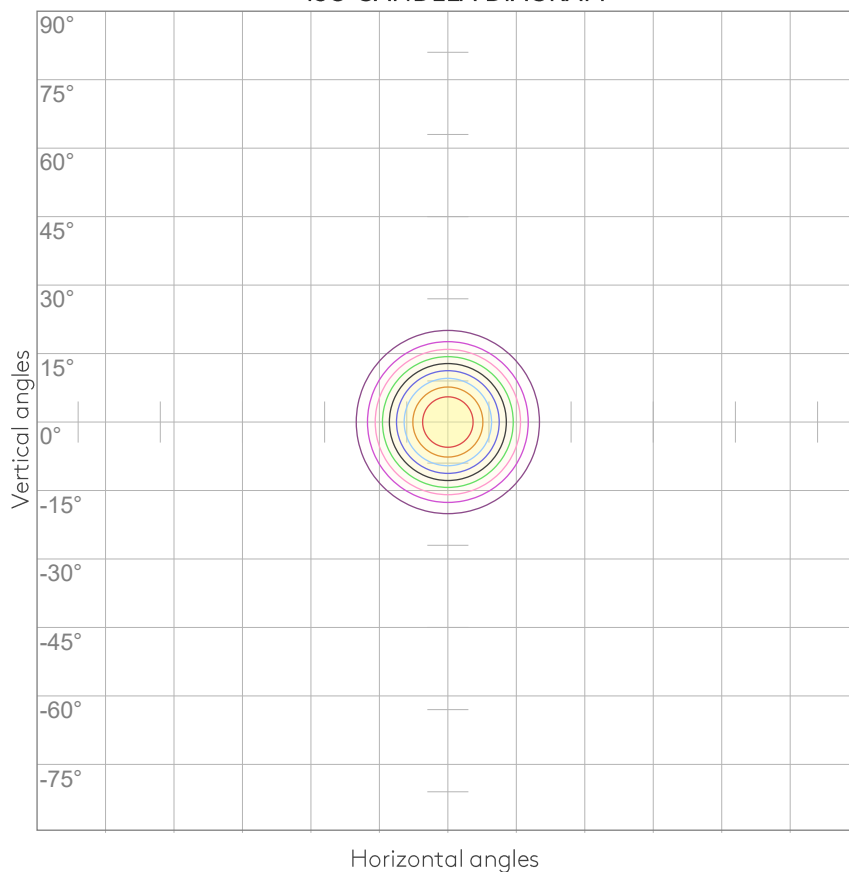
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5907	5842	5639	5303	4850	4312	3701	3033	2337	1676	1076	648	359	160	55	20	10	8	6	5
100%	99%	95%	90%	82%	73%	63%	51%	40%	28%	18%	11%	6%	3%	1%	0%	0%	0%	0%	0%

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°
5907	5842	5639	5303	4850	4312	3701	3033	2337	1676	1076	648	359	160	55	20	10	8	6	5
100%	99%	95%	90%	82%	73%	63%	51%	40%	28%	18%	11%	6%	3%	1%	0%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
28.5°	44.7°	52.3°	99.9%	99.8%

ISO CANDELA DIAGRAM



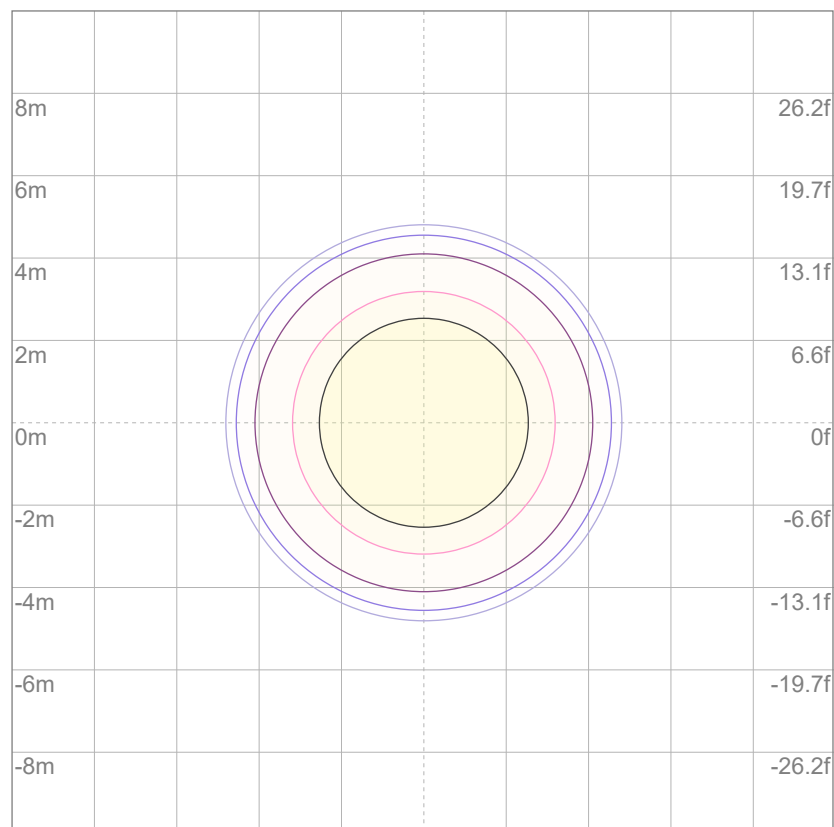
10%	591 cd
20%	1181 cd
30%	1772 cd
40%	2363 cd
50%	2953 cd
60%	3544 cd
70%	4135 cd
80%	4725 cd
90%	5316 cd

Conditions:

Number of c-planes: 8

Candela at center: 5907 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	1.77 lx
5%	2.95 lx
10%	5.91 lx
30%	17.7 lx
50%	29.5 lx

Conditions:

Number of c-planes: 8

Lux at center: 59.1 lx

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

UGR

GLARE EVALUATION ACCORDING TO UGR

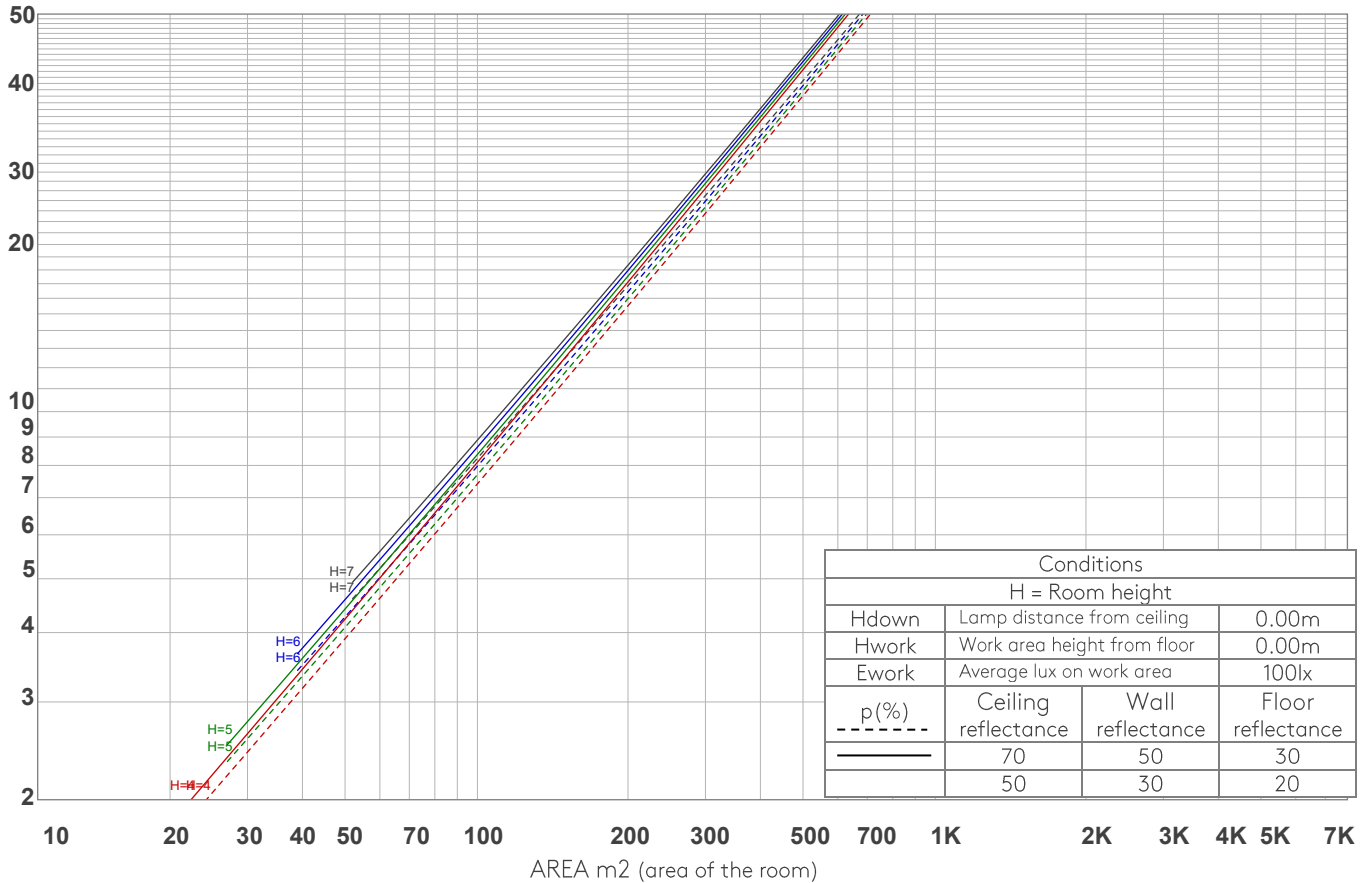
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	-3.3	-3.0	-3.3	-2.8	-2.6	-3.3	-3.0	-3.3	-2.8	-2.6
	3H	-3.6	-3.1	-3.3	-2.9	-2.7	-3.6	-3.1	-3.3	-2.9	-2.7
	4H	-3.7	-3.2	-3.3	-3.0	-2.7	-3.7	-3.2	-3.3	-3.0	-2.7
	6H	-3.7	-3.3	-3.4	-3.0	-2.6	-3.7	-3.3	-3.4	-3.0	-2.6
	8H	-3.7	-3.4	-3.4	-3.0	-2.6	-3.7	-3.4	-3.4	-3.0	-2.6
	12H	-3.8	-3.4	-3.5	-3.0	-2.6	-3.8	-3.4	-3.5	-3.0	-2.6
4H	2H	-3.7	-3.2	-3.3	-3.0	-2.7	-3.7	-3.2	-3.3	-3.0	-2.7
	3H	-3.8	-3.4	-3.4	-3.0	-2.6	-3.8	-3.4	-3.4	-3.0	-2.6
	4H	-3.9	-3.6	-3.5	-3.1	-2.6	-3.9	-3.6	-3.5	-3.1	-2.6
	6H	-4.0	-3.6	-3.5	-3.3	-2.9	-4.0	-3.6	-3.5	-3.3	-2.9
	8H	-4.1	-3.7	-3.6	-3.3	-3.0	-4.1	-3.7	-3.6	-3.3	-3.0
	12H	-4.1	-3.8	-3.6	-3.4	-3.0	-4.1	-3.8	-3.6	-3.4	-3.0
8H	4H	-4.1	-3.7	-3.6	-3.4	-3.0	-4.1	-3.7	-3.6	-3.4	-3.0
	6H	-4.2	-3.9	-3.6	-3.5	-2.9	-4.2	-3.9	-3.6	-3.5	-2.9
	8H	-4.1	-4.0	-3.6	-3.4	-2.8	-4.1	-4.0	-3.6	-3.4	-2.8
	12H	-4.2	-4.0	-3.6	-3.5	-2.9	-4.2	-4.0	-3.6	-3.5	-2.9
12H	4H	-4.2	-3.9	-3.7	-3.5	-3.0	-4.2	-3.9	-3.7	-3.5	-3.0
	6H	-4.2	-4.0	-3.6	-3.5	-2.8	-4.2	-4.0	-3.6	-3.5	-2.8
	8H	-4.2	-4.1	-3.6	-3.6	-3.0	-4.2	-4.1	-3.6	-3.6	-3.0
Variation of the observer position for the luminaire distance S											
S = 1.0H		4.4 / -8.6					4.4 / -8.6				
S = 1.5H		6.9 / -10.8					6.9 / -10.8				
S = 2.0H		8.8 / -11.8					8.8 / -11.8				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1350 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	110	113	111	109	108	107	106	105	103	102	102	100	99	99	97
2	112	108	105	103	110	107	104	102	104	102	100	101	99	98	98	97	96	94
3	108	104	101	98	107	103	100	97	100	98	96	98	96	94	96	94	93	92
4	105	100	97	94	104	99	96	93	97	95	92	96	93	91	94	92	90	89
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87
6	100	94	90	87	99	93	90	87	92	89	87	91	88	86	90	87	85	84
7	97	91	87	85	96	91	87	85	90	86	84	89	86	84	88	85	83	82
8	95	89	85	82	94	88	85	82	87	84	82	87	84	82	86	83	81	80
9	93	86	83	80	92	86	82	80	85	82	80	85	82	79	84	81	79	78
10	90	84	81	78	90	84	80	78	83	80	78	83	80	78	82	79	77	77

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°
485 lm	710 lm	146 lm	4.79 lm	1.68 lm	0.419 lm	0.061 lm	0.023 lm	0.025 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.032 lm	0.025 lm	0.016 lm	0.017 lm	0.073 lm	0.340 lm	0.589 lm	0.409 lm	0.053 lm

Flicker /TLA details

FLICKER

Flicker Meter Type Viso Systems LabFlicker
 Frequency of input power 50 Hz
 Flicker/TLA sample rate 20000 samples/s

Measurement time
 PstLM 180 sec
 All other indices 1,2 sec

Flicker indices according to Illuminating Engineering Society (IES)

Flicker frequency 1000 Hz
 Percent Flicker 0.61 %
 Flicker index 0

Flicker indices according to California Energy Commission (CEC) 2016b

JA8/10 40 Hz 0.02 %
 JA8/10 90 Hz 0.03 %
 JA8/10 200 Hz 0.04 %
 JA8/10 400 Hz 0.07 %
 JA8/10 1000 Hz 0.93 %

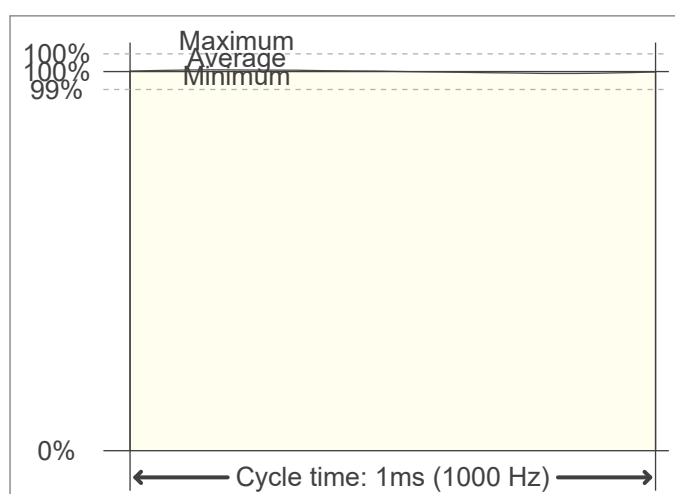
TLA indices (re IEC TR 61547-1, IEC 61000-3-3 and IEC 61000-4-15)

PstLM value ($F < 80$ Hz) 0.02
 SVM value ($80 < F < 2000$ Hz) 0

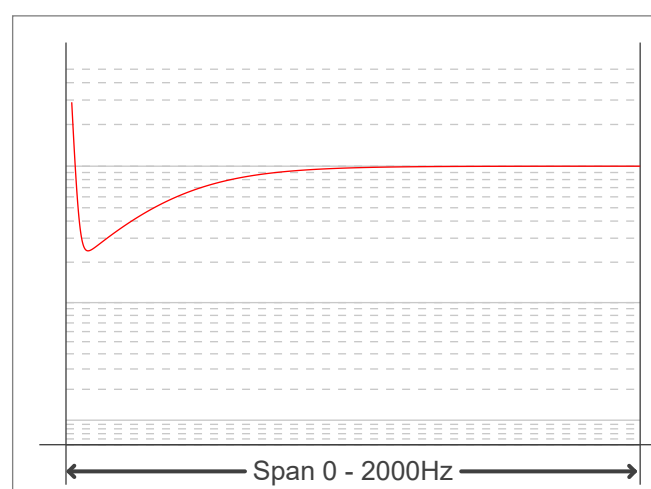
Flicker indices according to Lighting Research Center (2015)

Perception metric, Assist Mp 0.01

Flicker frame (frame of one flicker period in time domain)



Flicker FFT (flicker curve in frequency domain)



IEEE 1789 Frequency/modulation plot

