

PHOTOMETRIC TEST REPORT

LINEAR 600 FIXED 48V TRACK
DALI - MATT WHITE

astro

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LIGHT EFFICIENCY:

57 Lumen/Watt

LIGHT QUALITY:

CRI: 92.9

COLOR TEMPERATURE:

2671 K

OUTPUT: 1173 lm

PEAK: 376 cd

POWER: 20.5 W

PF: 0.88



Tracking number: [n/a](#)

Product name:

Linear 600 Fixed 48V Track DALI - Matt White

Item number:

1521006

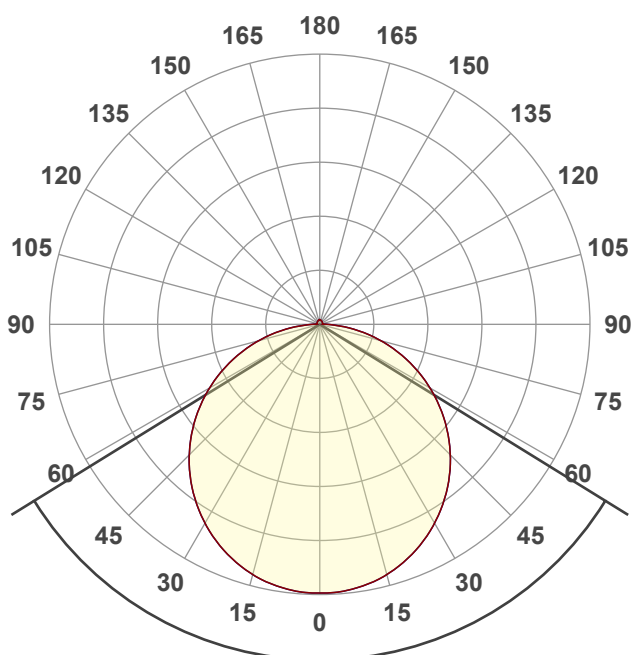
Date and time:

18/12/2025 12:04:04

Description:

IP20 48V Track Light

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

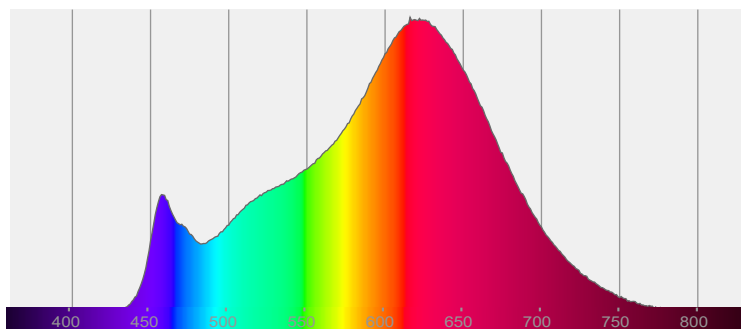


116.6°

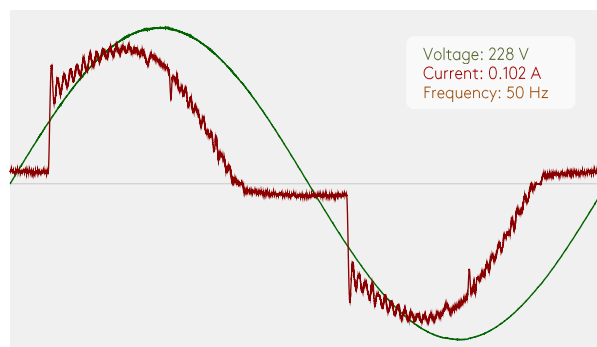


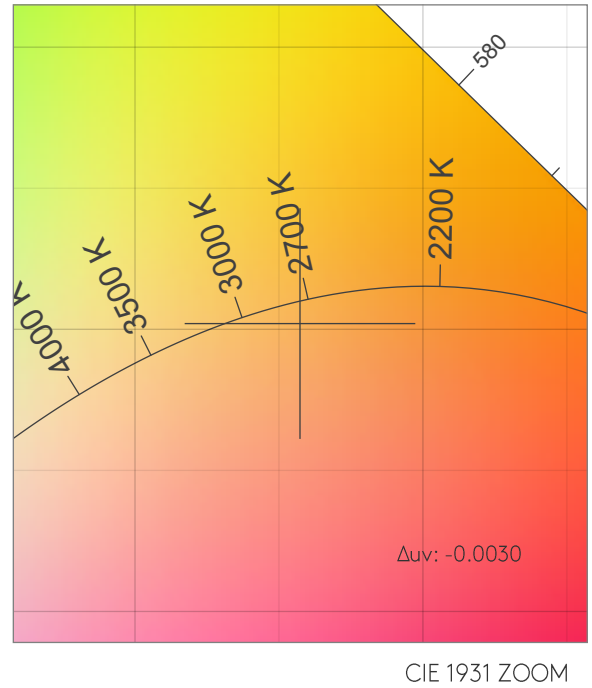
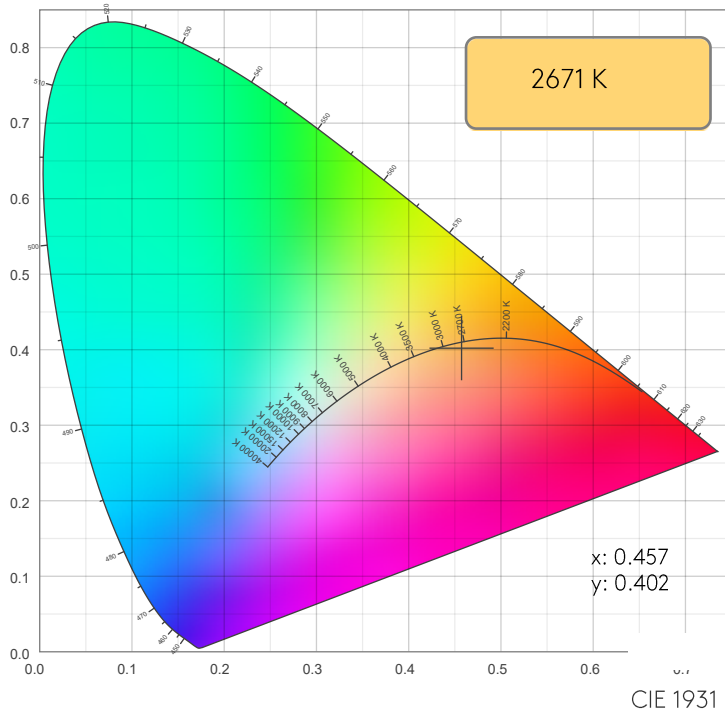
CIE 1931
x: 0.457
y: 0.402

SPECTRA



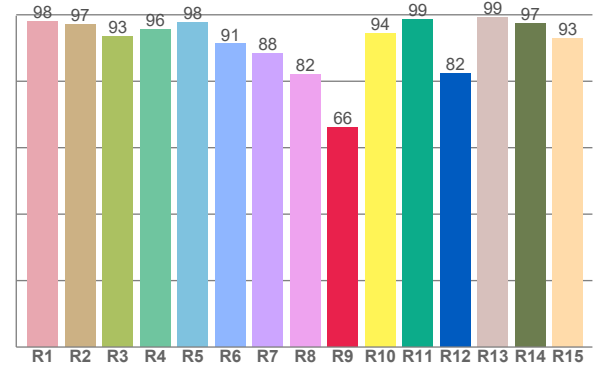
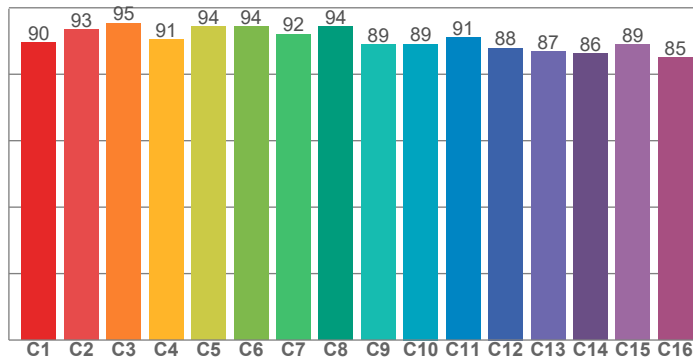
POWER





TM30: 90.6

CRI: 92.9 (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
97.9	97.0	93.5	95.6	97.7	91.2	88.4	82.0	66.2	94.4	98.7	82.5	99.1	97.4	92.8

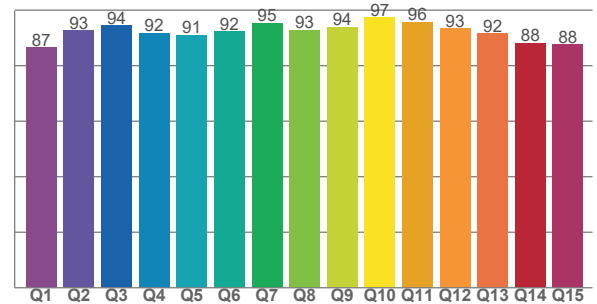
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
89.6	93.4	95.4	90.5	94.4	94.2	92.1	94.5	88.9	89.1	91.1	87.9	86.8	86.1	88.9	85.0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
86.5	92.7	94.4	91.8	91.0	92.2	95.4	92.8	94.0	97.4	95.6	93.3	91.6	88.1	87.6

CQS: 91.5



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
2671 K	92.9	66.2	90.6	97.5	91.5	0.457	0.402	0.265	0.349	-0.0030

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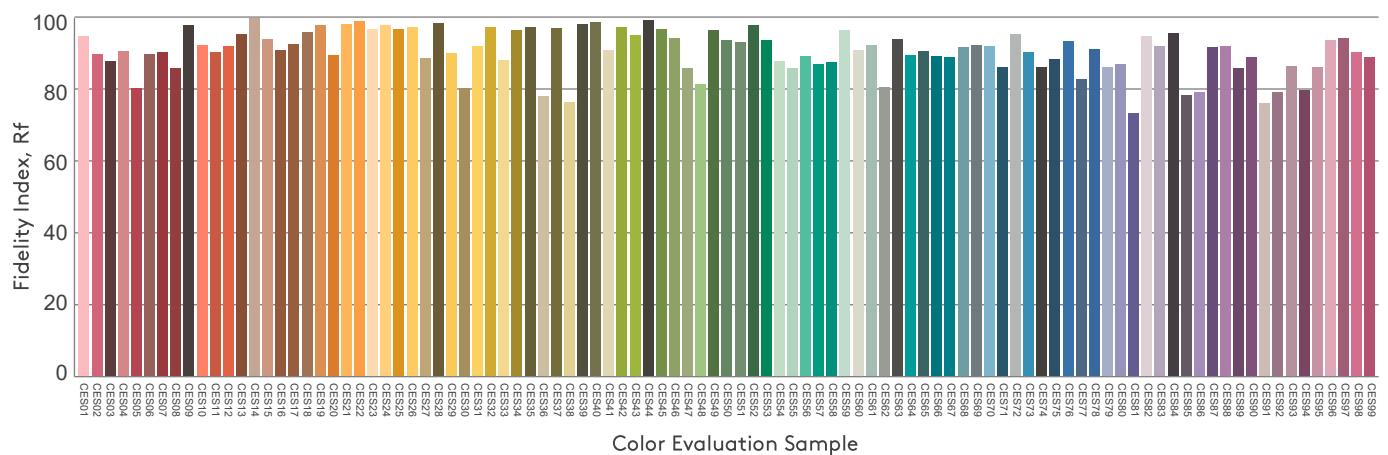
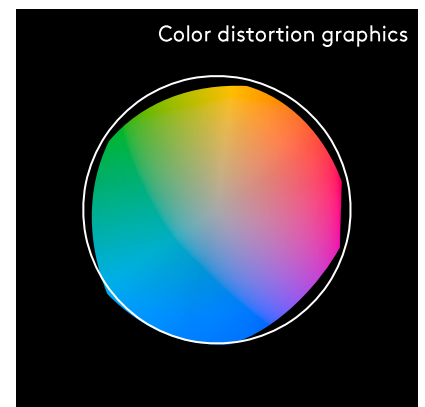
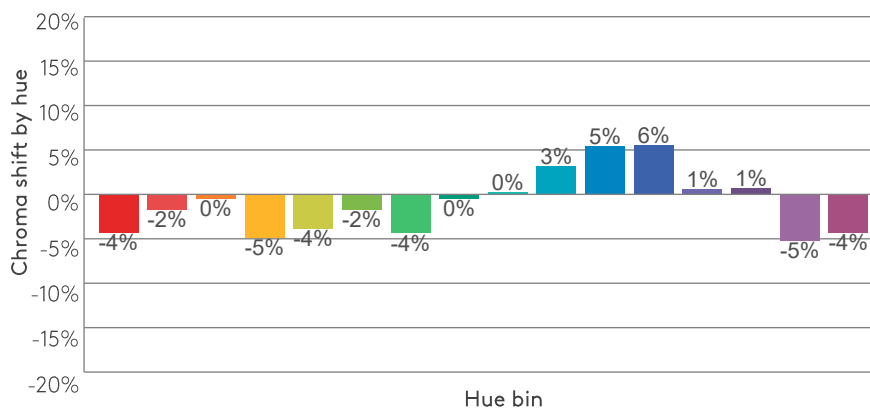
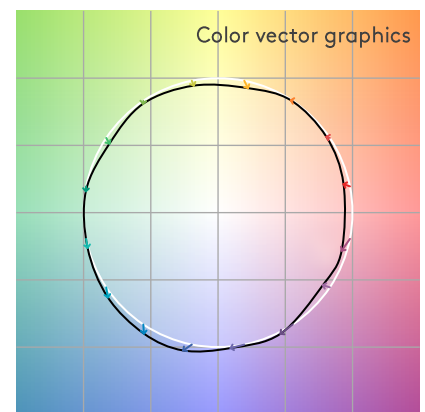
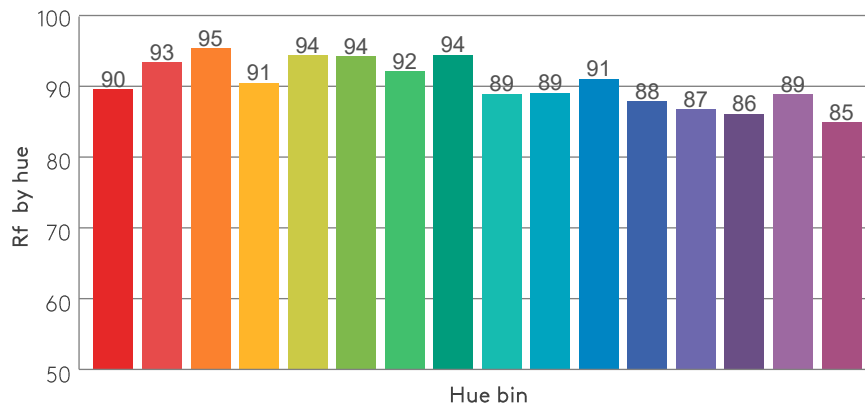
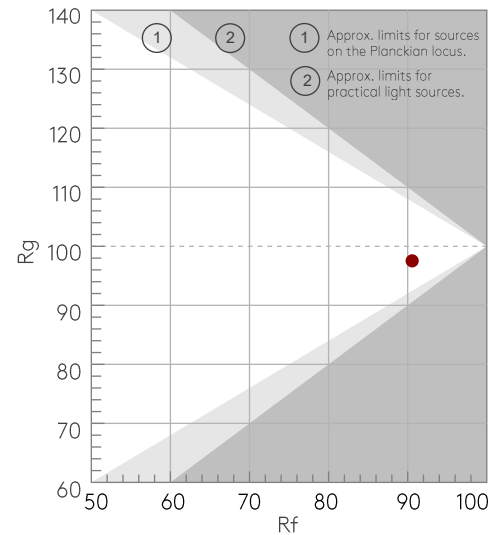
TM30 DETAILS

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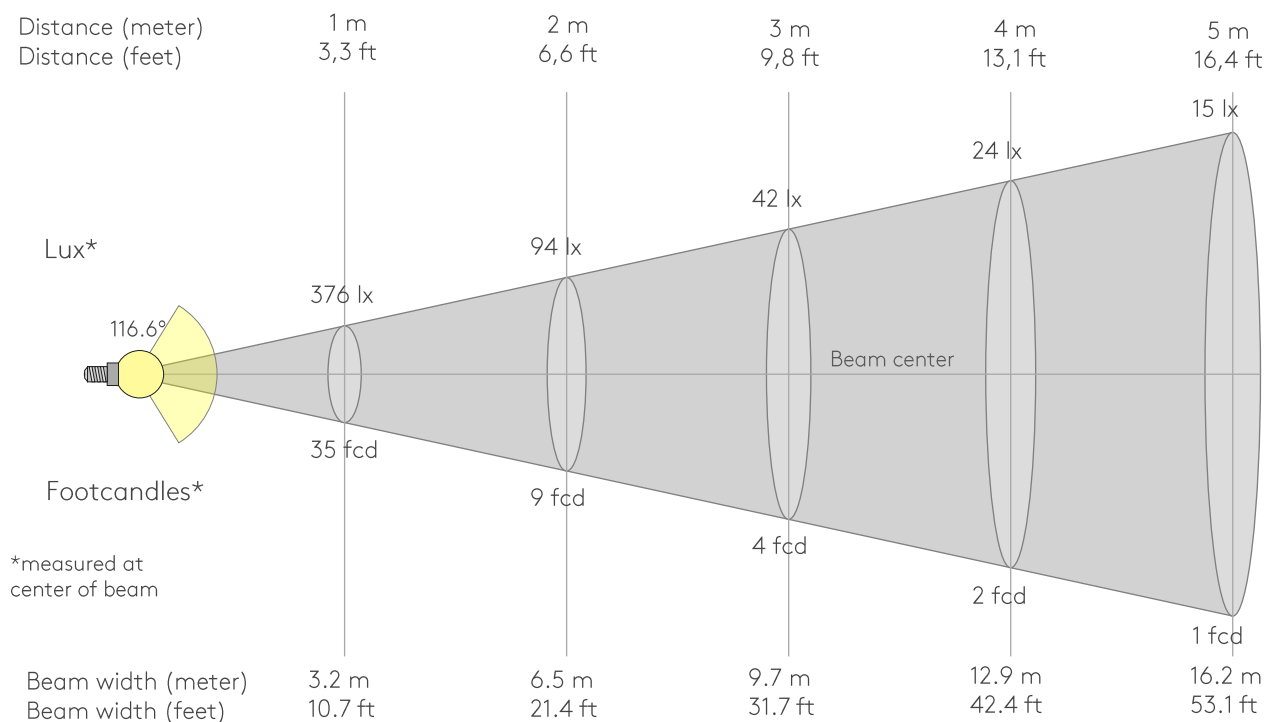
Rf 90.6
Fidelity index Rf

Rg 97.5
Gammut index Rg

Hue Bin	Rf	Graphic shifts (%)	
		Chroma	Hue
1	90	-4%	3%
2	93	-2%	2%
3	95	0%	1%
4	91	-5%	-4%
5	94	-4%	-1%
6	94	-2%	1%
7	92	-4%	2%
8	94	0%	4%
9	89	0%	7%
10	89	3%	7%
11	91	5%	4%
12	88	6%	-5%
13	87	1%	-11%
14	86	1%	-11%
15	89	-5%	-2%
16	85	-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
376lx	94lx	42lx	24lx	15lx	10lx	8lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx
34.9fcd	8.7fcd	3.9fcd	2.2fcd	1.4fcd	1fcd	0.7fcd	0.5fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd

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°
376	375	370	362	351	338	321	302	281	258	233	206	178	149	119	89	59	32	12	5
100%	100%	98%	96%	93%	90%	85%	80%	75%	69%	62%	55%	47%	40%	32%	24%	16%	8%	3%	1%

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°
376	375	370	362	351	338	321	302	281	258	233	206	178	149	119	89	59	32	12	5
100%	100%	98%	96%	93%	90%	85%	80%	75%	69%	62%	55%	47%	40%	32%	24%	16%	8%	3%	1%

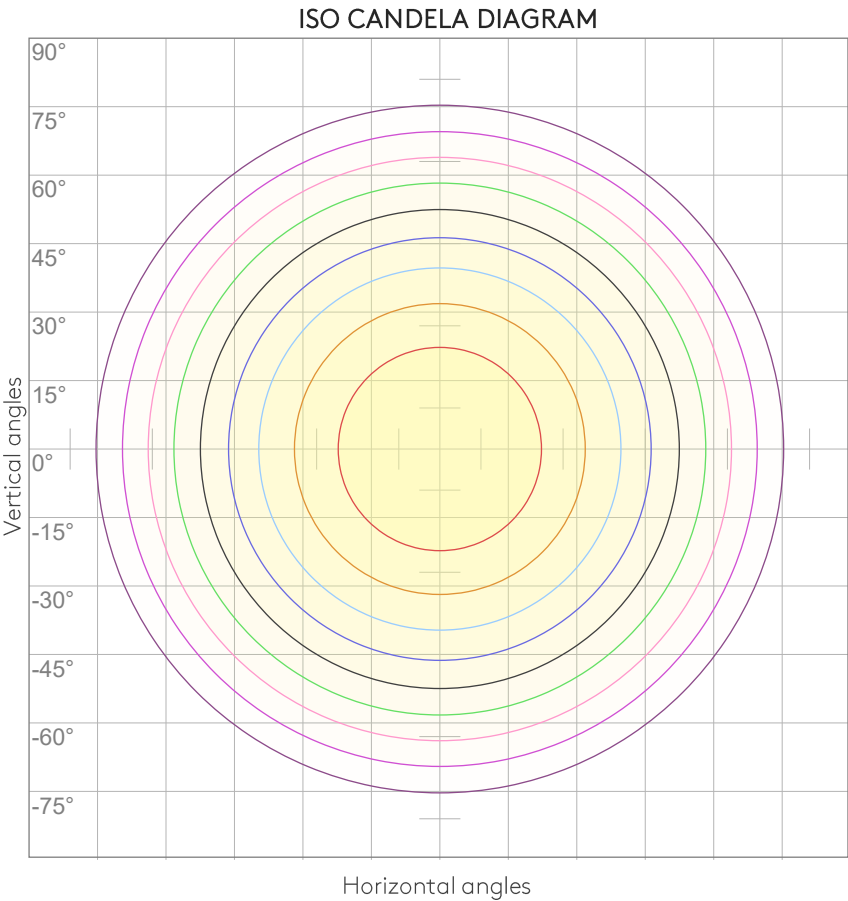
Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
376	375	370	362	351	338	321	302	281	258	233	206	178	149	119	89	59	32	12	5
100%	100%	98%	96%	93%	90%	85%	80%	75%	69%	62%	55%	47%	40%	32%	24%	16%	8%	3%	1%

Intensities in 270° c-plane

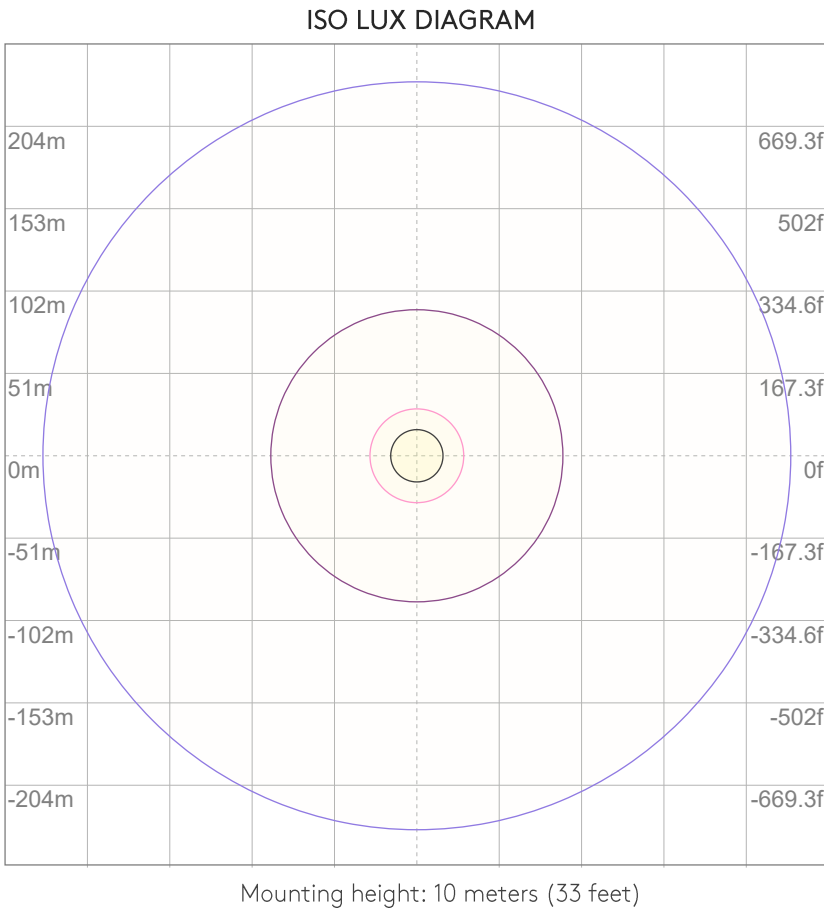
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
376	375	370	362	351	338	321	302	281	258	233	206	178	149	119	89	59	32	12	5
100%	100%	98%	96%	93%	90%	85%	80%	75%	69%	62%	55%	47%	40%	32%	24%	16%	8%	3%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
116.6°	167.6°	182.2°	73.9%	49.7%



10%	38 cd
20%	75 cd
30%	113 cd
40%	150 cd
50%	188 cd
60%	226 cd
70%	263 cd
80%	301 cd
90%	338 cd

Conditions:
 Number of c-planes: 8
 Candela at center: 376 cd



3%	0.113 lx
5%	0.188 lx
10%	0.376 lx
30%	1.13 lx
50%	1.88 lx

Conditions:
 Number of c-planes: 8
 Lux at center: 3.76 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	24.0	25.2	24.3	25.6	25.9	24.0	25.2	24.3	25.6	25.9
	3H	25.6	26.9	26.1	27.3	27.5	25.6	26.9	26.1	27.3	27.5
	4H	26.4	27.6	26.9	28.0	28.3	26.4	27.6	26.9	28.0	28.3
	6H	27.1	28.2	27.5	28.5	29.0	27.1	28.2	27.5	28.5	29.0
	8H	27.4	28.4	27.8	28.8	29.2	27.4	28.4	27.8	28.8	29.2
	12H	27.6	28.6	28.0	29.0	29.5	27.6	28.6	28.0	29.0	29.5
4H	2H	24.6	25.9	25.1	26.2	26.5	24.6	25.9	25.1	26.2	26.5
	3H	26.6	27.7	27.0	28.0	28.5	26.6	27.7	27.0	28.0	28.5
	4H	27.5	28.4	28.0	28.9	29.4	27.5	28.4	28.0	28.9	29.4
	6H	28.2	29.1	28.8	29.5	30.0	28.2	29.1	28.8	29.5	30.0
	8H	28.6	29.4	29.1	29.8	30.2	28.6	29.4	29.1	29.8	30.2
	12H	28.8	29.5	29.4	30.0	30.5	28.8	29.5	29.4	30.0	30.5
8H	4H	27.8	28.6	28.4	29.1	29.5	27.8	28.6	28.4	29.1	29.5
	6H	28.8	29.4	29.3	29.9	30.5	28.8	29.4	29.3	29.9	30.5
	8H	29.3	29.8	29.8	30.4	31.0	29.3	29.8	29.8	30.4	31.0
	12H	29.6	30.1	30.3	30.6	31.3	29.6	30.1	30.3	30.6	31.3
12H	4H	27.9	28.5	28.4	29.0	29.5	27.9	28.5	28.4	29.0	29.5
	6H	28.9	29.5	29.5	30.0	30.7	28.9	29.5	29.5	30.0	30.7
	8H	29.4	29.9	30.0	30.4	31.1	29.4	29.9	30.0	30.4	31.1
Variation of the observer position for the luminaire distance S											
S = 1.0H		0.1 / -0.1					0.1 / -0.1				
S = 1.5H		0.1 / -0.1					0.1 / -0.1				
S = 2.0H		0.3 / -0.3					0.3 / -0.3				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1173 lm total luminous flux											

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LIGHT PLANNING

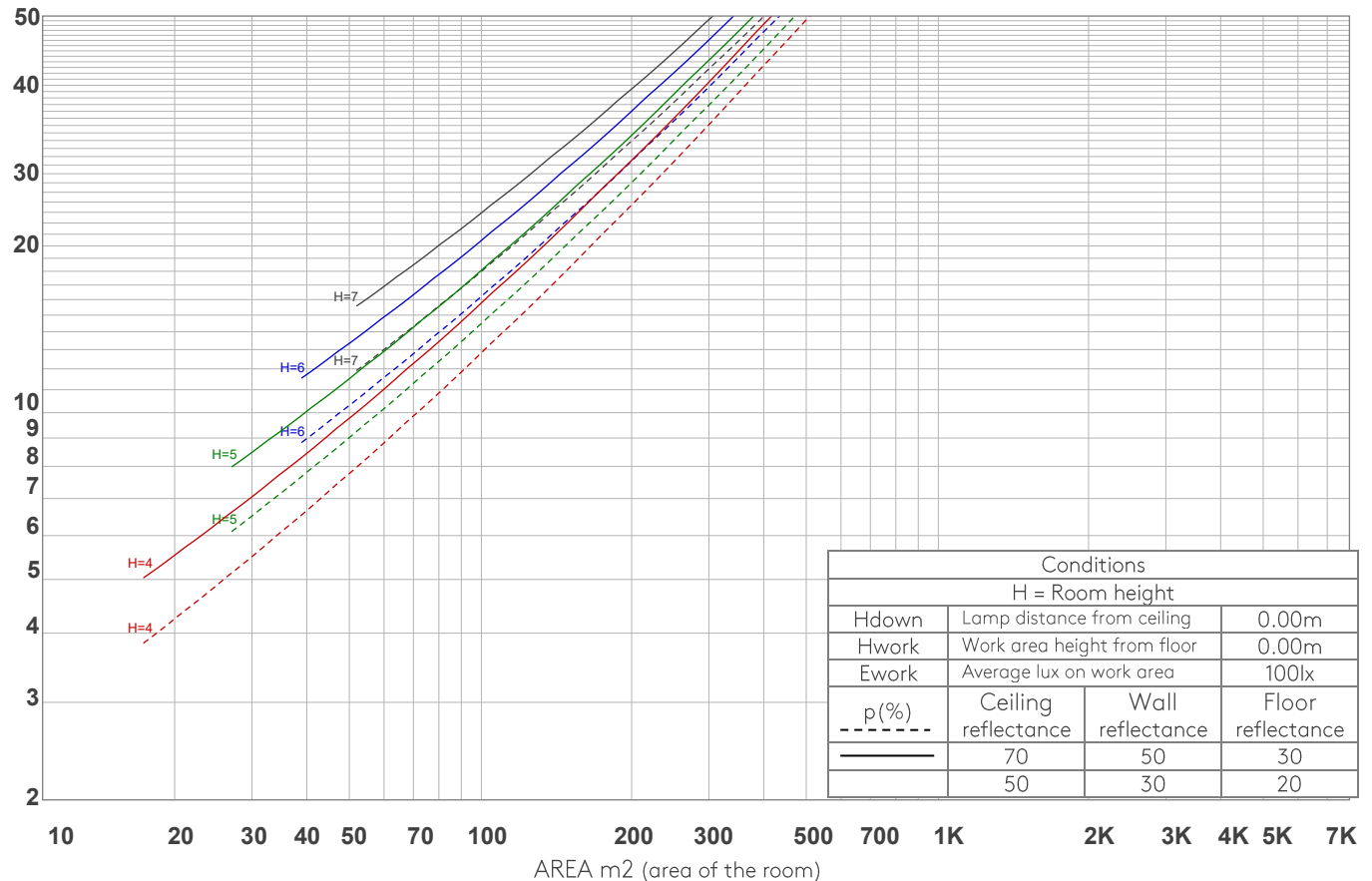
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COEFFICIENTS OF UTILIZATION

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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97
1	107	102	98	94	104	100	96	92	95	92	88	91	88	85	87	84	82	80
2	97	89	82	76	94	87	80	74	83	77	72	79	74	70	75	72	68	66
3	88	78	69	62	86	76	68	62	72	66	60	69	64	59	66	62	57	55
4	81	68	59	52	78	67	59	52	64	57	51	61	55	50	59	54	49	47
5	74	61	52	45	72	60	51	45	57	50	44	55	48	43	53	47	42	40
6	68	55	46	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35
7	63	50	41	34	61	49	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	37	31	57	44	36	30	43	35	30	41	35	30	40	34	29	27
9	55	41	33	28	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	36	29	25	35	29	24	34	28	24	22

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°
35.7 lm	102 lm	156 lm	189 lm	199 lm	185 lm	147 lm	93.7 lm	34.6 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
5.85 lm	4.51 lm	4.20 lm	3.87 lm	3.67 lm	3.27 lm	2.52 lm	1.64 lm	0.577 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	0.26 %
Flicker index	0

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

JA8/10 40 Hz	0.01 %
JA8/10 90 Hz	0.01 %
JA8/10 200 Hz	0.02 %
JA8/10 400 Hz	0.04 %
JA8/10 1000 Hz	0.25 %

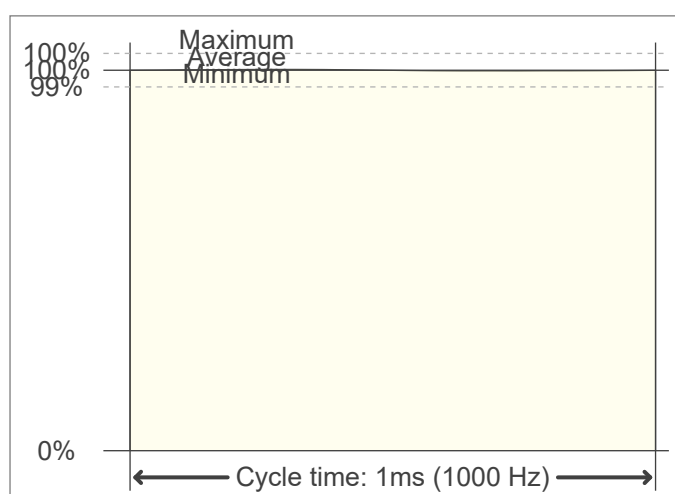
TLA indices (re IEC TR 61547-1, IEC 61000-3-3 and IEC 61000-4-15)

PstLM value ($F < 80$ Hz)	0.01
SVM value ($80 < F < 2000$ Hz)	0

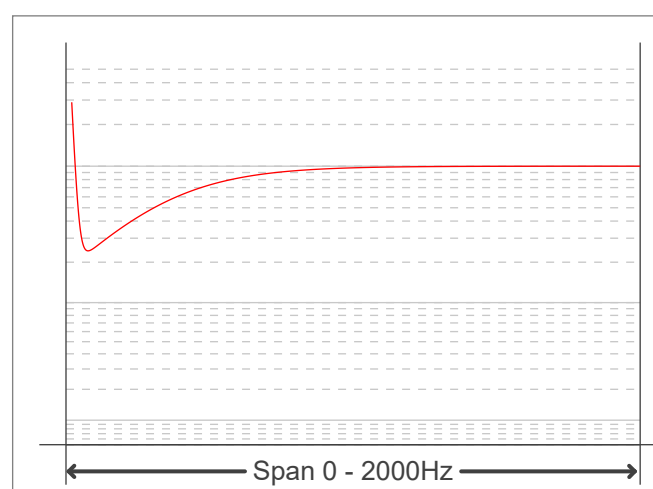
Flicker indices according to Lighting Research Center (2015)

Perception metric, Assist Mp 0

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



Flicker FFT (flicker curve in frequency domain)



IEEE 1789 Frequency/modulation plot

