

PHOTOMETRIC TEST REPORT

MASHIKO 600 LED POLISHED
CHROME

astro

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LIGHT EFFICIENCY:



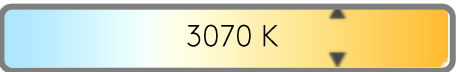
OUTPUT: 899 lm

LIGHT QUALITY:



PEAK: 173 cd

COLOR TEMPERATURE:



POWER: 10.6 W

PF: 0.91



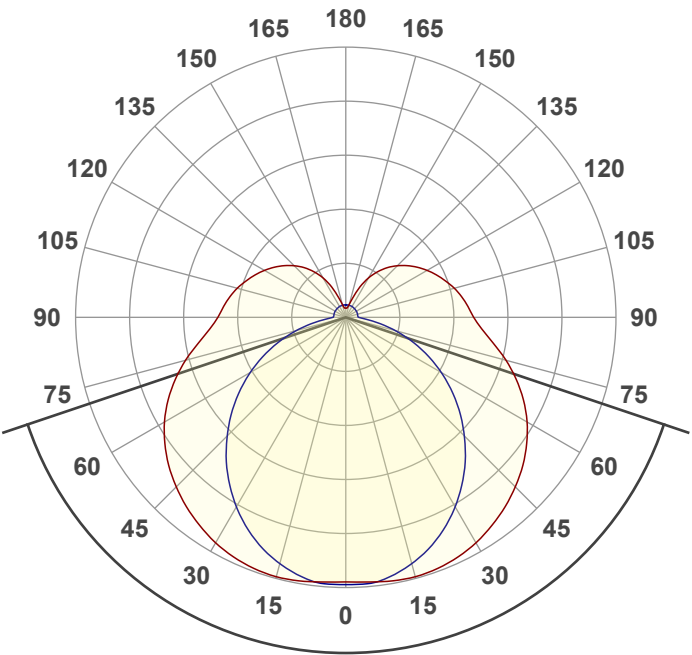
Tracking number: [n/a](#)

Product name:
Mashiko 600 LED Polished Chrome

Item number:
1121101

Date and time:
03/03/2023 12:41:22

Description:
IP44 LED Bathroom Wall Light

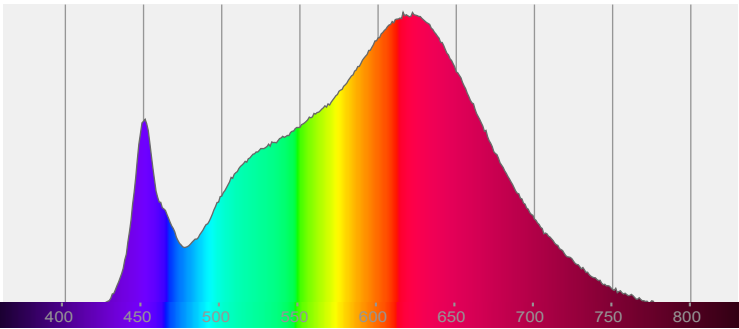


142.8°

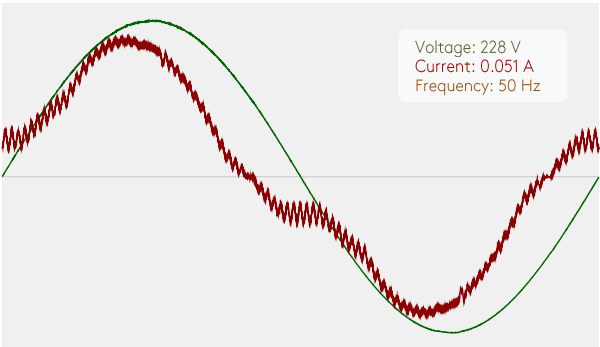


CIE 1931
x: 0.429
y: 0.396

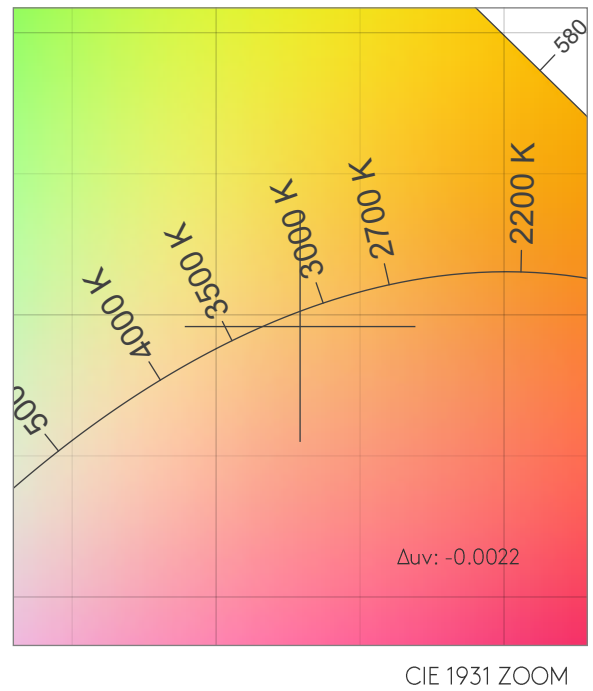
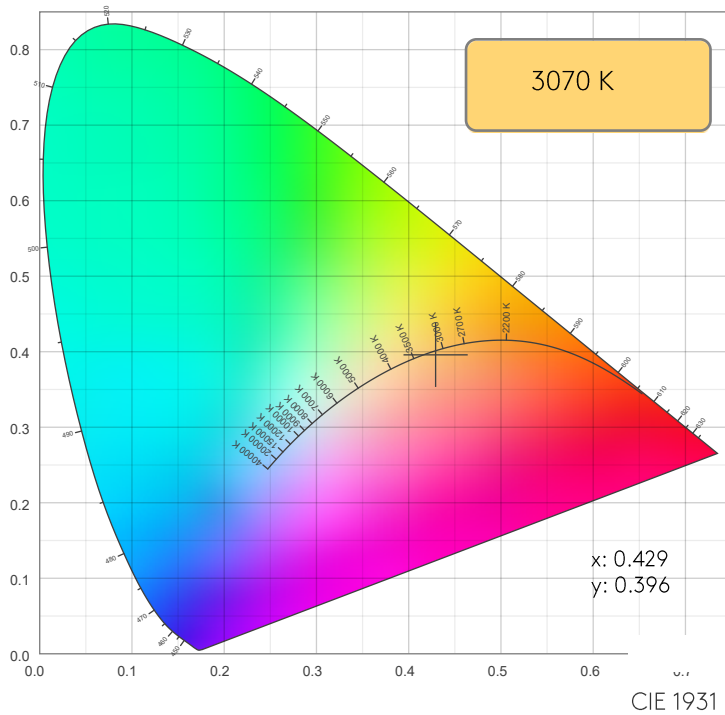
SPECTRA



POWER

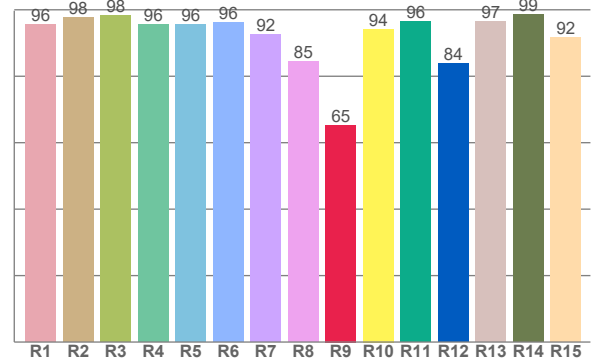
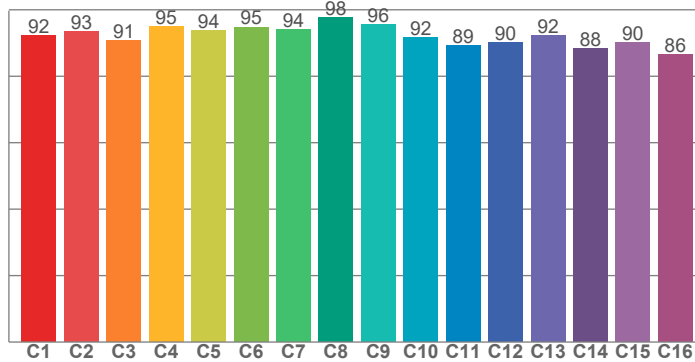


COLOR DETAILS



TM30: 92.4

CRI: 94.5 (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
95.7	97.8	98.2	95.5	95.7	96.3	92.5	84.5	65.3	94.2	96.4	83.7	96.6	98.6	91.7

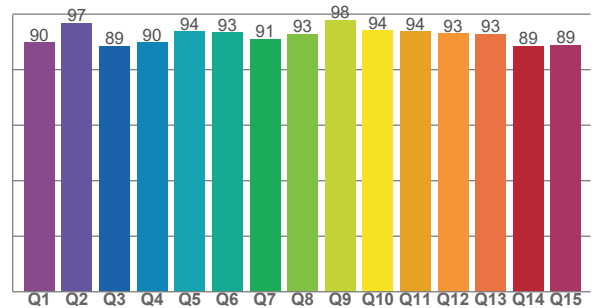
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92.3	93.4	90.7	95.0	93.8	94.8	94.1	97.8	95.6	91.6	89.2	90.1	92.3	88.3	90.2	86.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.8	96.7	88.5	89.8	93.8	93.4	91.1	92.9	97.9	94.1	93.7	93.0	92.8	88.6	88.8

CQS: 91.7



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
3070 K	94.5	65.3	92.4	101.0	91.7	0.429	0.396	0.249	0.345	-0.0022

MASHIKO 600 LED POLISHED CHROME

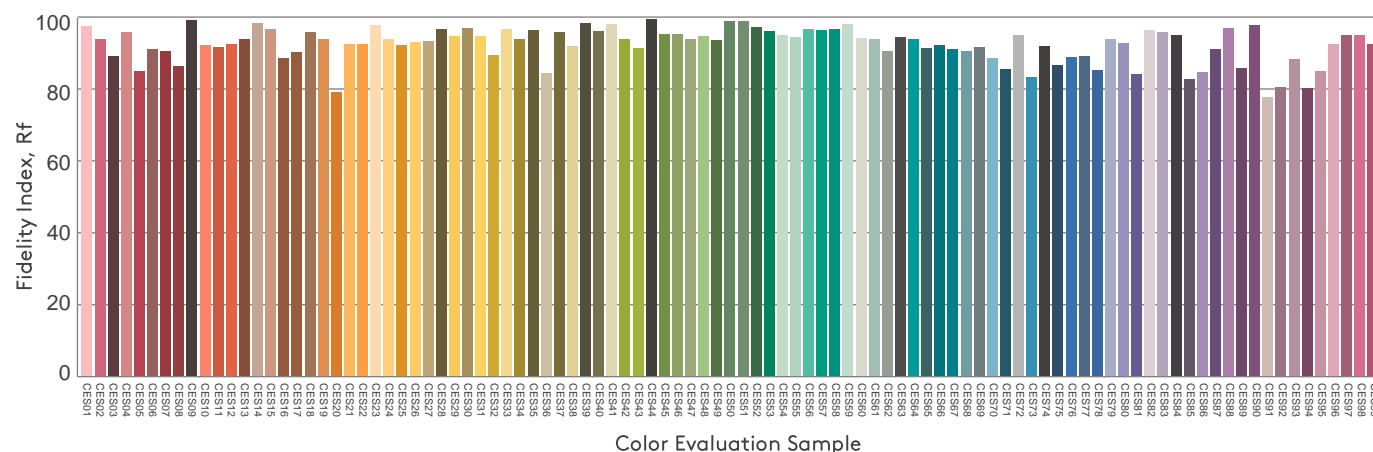
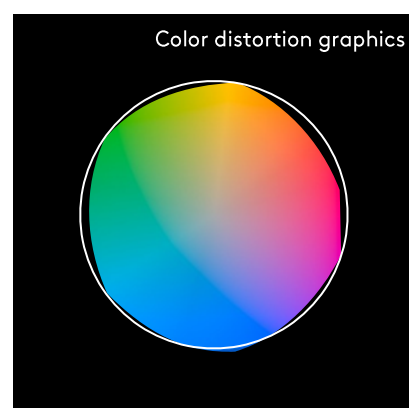
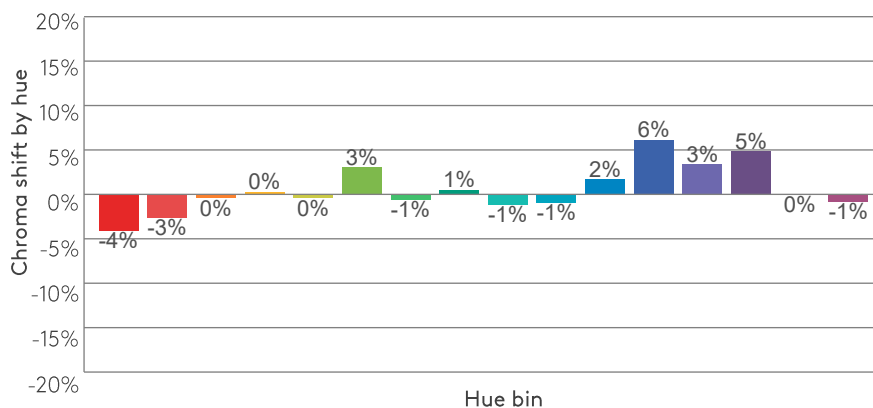
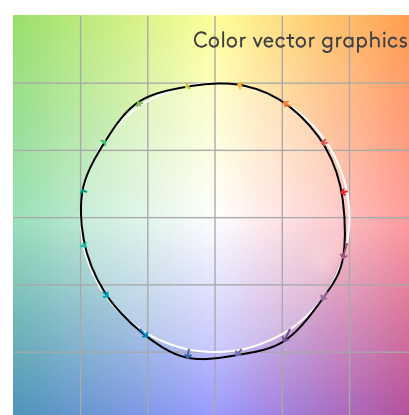
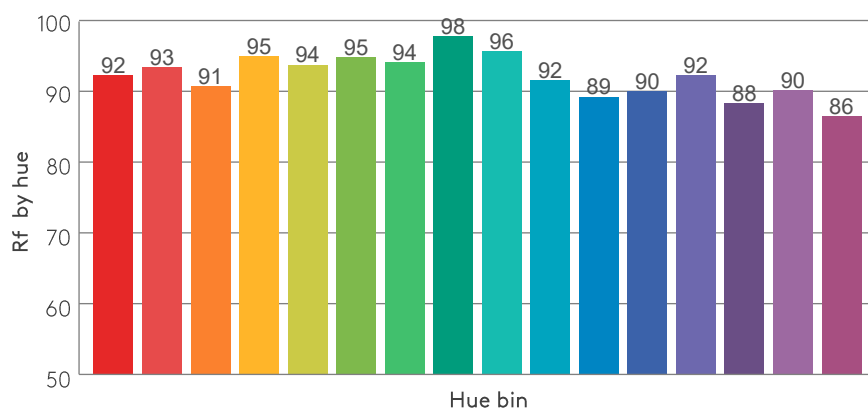
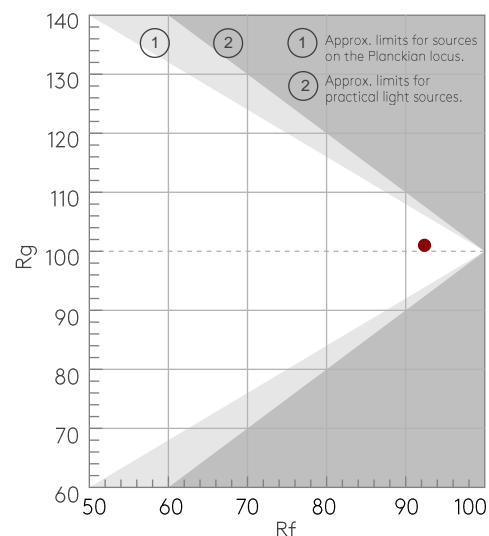
TM30 DETAILS

astro

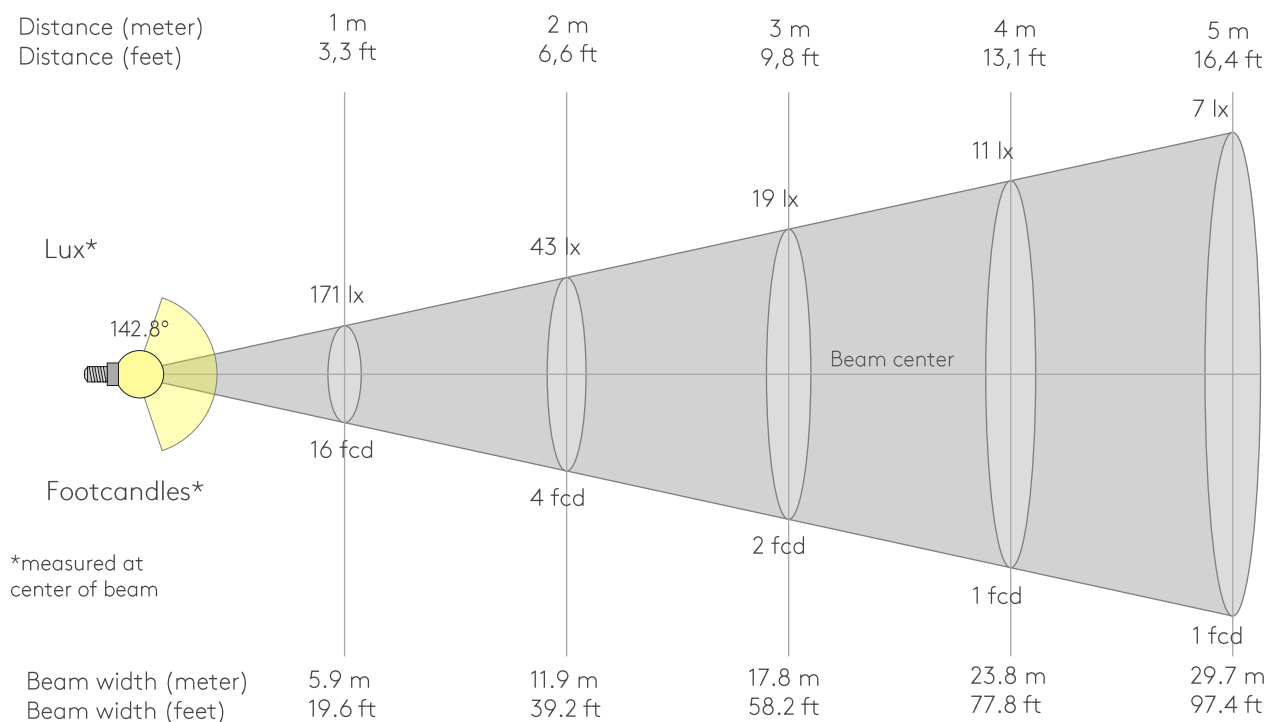
Rf 92.4
Fidelity index Rf

Rg 101.0
Gammut index Rg

Hue Bin	Rf	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	0%
2	93	-3%	2%
3	91	0%	5%
4	95	0%	2%
5	94	0%	2%
6	95	3%	0%
7	94	-1%	-2%
8	98	1%	-1%
9	96	-1%	2%
10	92	-1%	5%
11	89	2%	7%
12	90	6%	0%
13	92	3%	-4%
14	88	5%	-8%
15	90	0%	-6%
16	86	-1%	-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
171lx	43lx	19lx	11lx	7lx	5lx	3lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx
15.9fcd	4fcd	1.8fcd	1fcd	0.6fcd	0.4fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd

Intensities in 0° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
171	172	173	169	163	154	144	130	113	95	82	77	70	63	55	47	37	25	12	6
100%	100%	101%	99%	95%	90%	84%	76%	66%	55%	48%	45%	41%	37%	32%	27%	22%	14%	7%	4%

Intensities in 90° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
171	170	160	146	129	108	86	63	41	20	8	8	8	8	8	8	8	8	8	8
100%	99%	94%	85%	75%	63%	50%	37%	24%	12%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%

Intensities in 180° c-plane

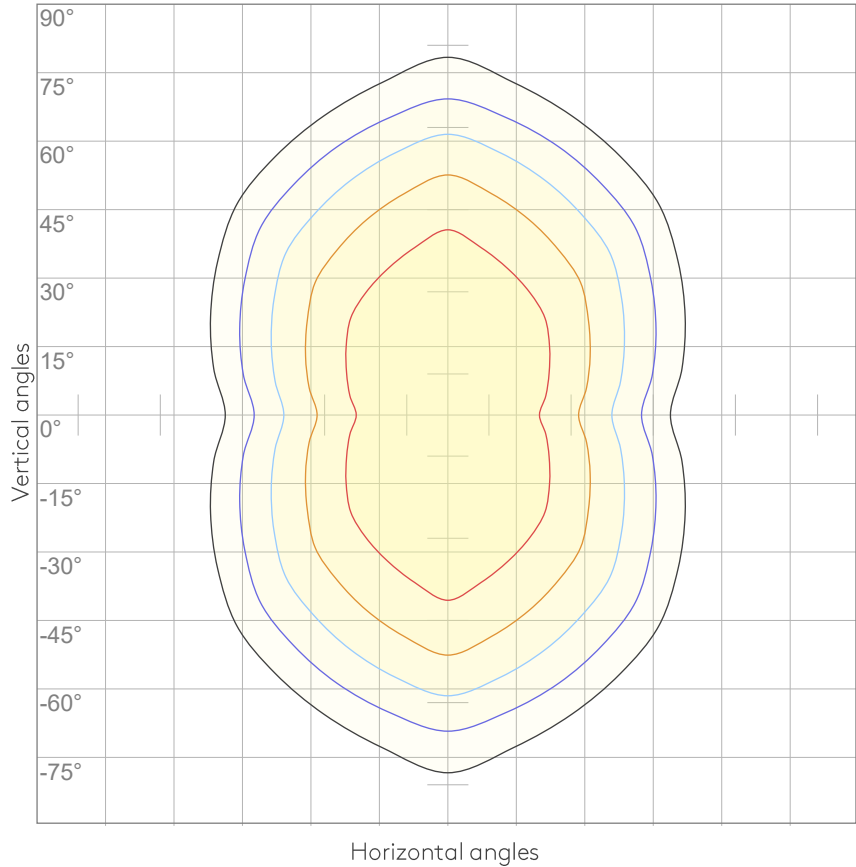
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
171	172	173	169	163	154	144	130	113	95	82	77	70	63	55	47	37	25	12	6
100%	100%	101%	99%	95%	90%	84%	76%	66%	55%	48%	45%	41%	37%	32%	27%	22%	14%	7%	4%

Intensities in 270° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
171	170	160	146	129	108	86	63	41	20	8	8	8	8	8	8	8	8	8	8
100%	99%	94%	85%	75%	63%	50%	37%	24%	12%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
142.8°	267.9°	360°	49.1%	31.6%

ISO CANDELA DIAGRAM



10%17 cd

20%34 cd

30%51 cd

40%69 cd

50%86 cd

60%103 cd

70%120 cd

80%137 cd

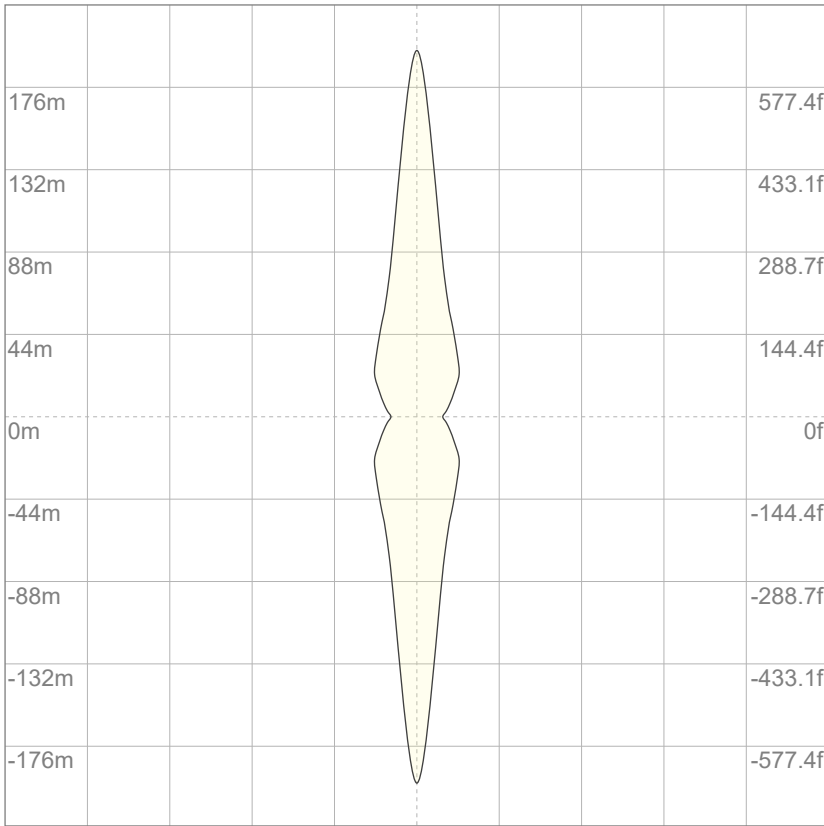
90%154 cd

Conditions:

Number of c-planes: 8

Candela at center: 171 cd

ISO LUX DIAGRAM



3%51.4m lx

5%85.7m lx

10%0.171 lx

30%0.514 lx

50%{LUX_10M50} lx

Conditions:

Number of c-planes: 8

Lux at center: 1.71 lx

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

UGR

GLARE EVALUATION ACCORDING TO UGR

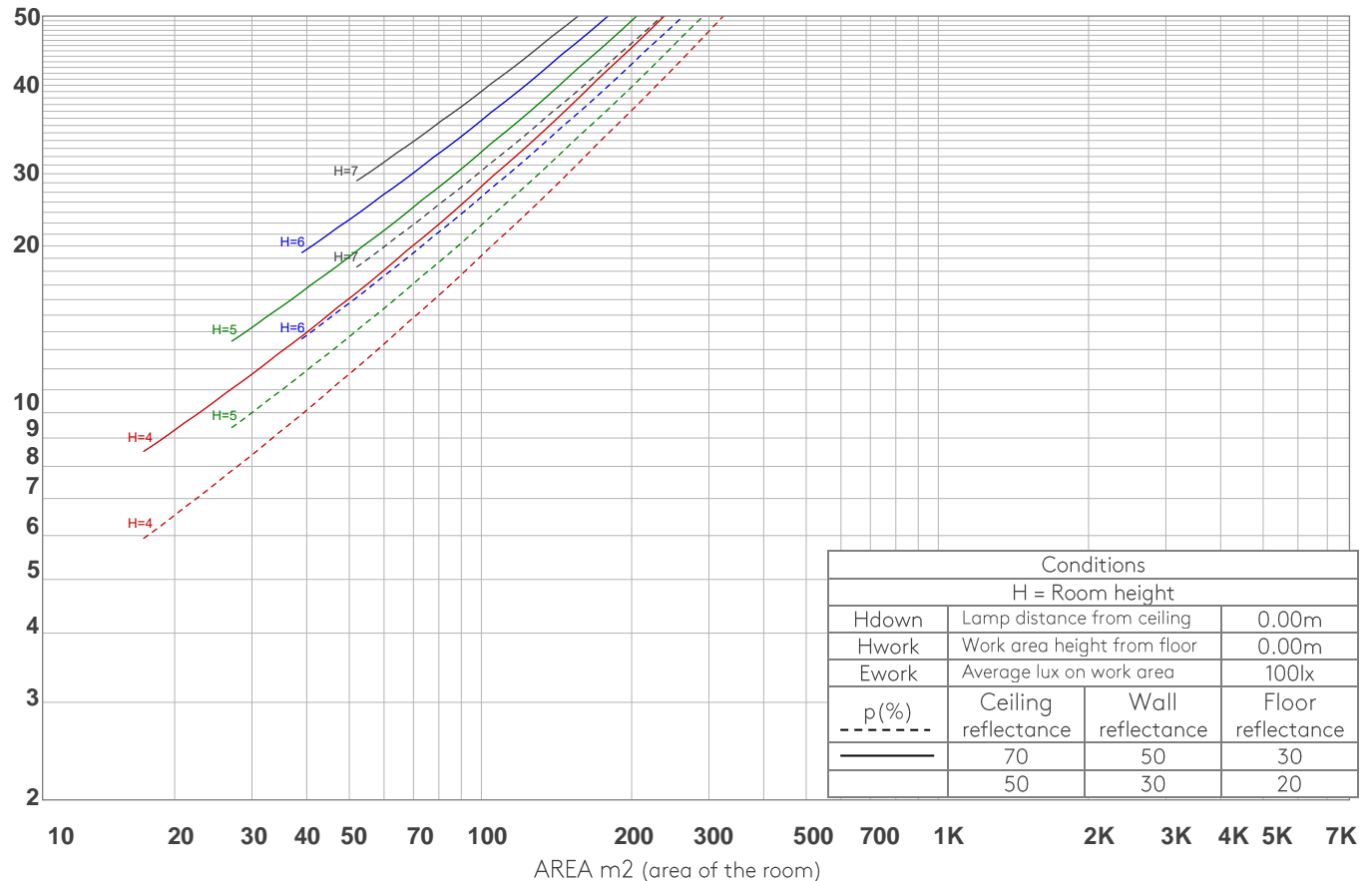
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	13.9	15.0	14.5	15.6	16.4	13.1	14.2	13.7	14.8	15.6
	3H	15.9	17.0	16.6	17.6	18.3	14.6	15.6	15.3	16.3	17.0
	4H	16.9	17.9	17.6	18.6	19.3	15.2	16.2	15.9	16.8	17.6
	6H	17.9	18.8	18.5	19.5	20.3	15.7	16.6	16.3	17.2	18.0
	8H	18.4	19.3	19.0	19.9	20.7	15.8	16.7	16.5	17.4	18.2
	12H	18.8	19.8	19.5	20.4	21.2	15.9	16.9	16.6	17.5	18.3
4H	2H	14.4	15.5	15.2	16.1	16.8	13.9	14.9	14.6	15.5	16.3
	3H	16.7	17.7	17.4	18.3	19.1	15.6	16.6	16.3	17.2	18.0
	4H	17.8	18.9	18.5	19.3	20.2	16.3	17.4	17.0	17.9	18.8
	6H	18.9	19.7	19.7	20.4	21.2	16.9	17.7	17.7	18.4	19.2
	8H	19.5	20.1	20.2	20.9	21.7	17.1	17.8	17.9	18.6	19.4
	12H	20.0	20.6	20.8	21.4	22.2	17.3	17.9	18.1	18.7	19.5
8H	4H	18.1	18.7	18.8	19.5	20.3	16.8	17.5	17.6	18.2	19.0
	6H	19.4	19.9	20.2	20.7	21.6	17.7	18.2	18.5	19.0	19.9
	8H	20.1	20.6	20.9	21.4	22.4	18.1	18.5	18.9	19.4	20.3
	12H	20.8	21.2	21.7	22.1	23.0	18.4	18.8	19.2	19.6	20.5
12H	4H	18.1	18.7	18.8	19.4	20.3	16.9	17.5	17.7	18.3	19.1
	6H	19.5	20.0	20.3	20.8	21.8	17.9	18.4	18.7	19.2	20.2
	8H	20.3	20.7	21.1	21.5	22.4	18.4	18.8	19.2	19.6	20.5
Variation of the observer position for the luminaire distance S											
S = 1.0H		0.1 / 0.0					0.1 / -0.1				
S = 1.5H		0.1 / 0.0					0.1 / -0.2				
S = 2.0H		0.2 / -0.2					0.2 / -0.4				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 899 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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	76
1	100	95	89	85	95	90	85	81	81	77	74	73	70	67	65	63	61	57
2	90	81	73	67	85	77	70	64	69	64	59	62	58	54	56	52	49	45
3	82	70	61	54	77	67	59	52	60	53	48	54	49	44	48	44	40	37
4	74	61	52	45	70	58	50	43	53	46	40	48	42	37	43	38	34	31
5	68	55	45	38	64	52	43	37	47	40	34	42	36	32	38	33	29	26
6	62	49	39	33	59	46	38	32	42	35	30	38	32	27	34	29	25	23
7	58	44	35	29	55	42	34	28	38	31	26	35	29	24	31	26	22	20
8	54	40	31	25	51	38	30	24	35	28	23	32	26	21	29	24	20	17
9	50	36	28	22	47	35	27	22	32	25	20	29	23	19	26	21	18	16
10	47	33	25	20	44	32	25	20	29	23	18	27	21	17	24	20	16	14

LAMPS (number of lamps)

LUMINAIRE BUDGETARY DIAGRAM



ZONAL LUMEN SUMMARY

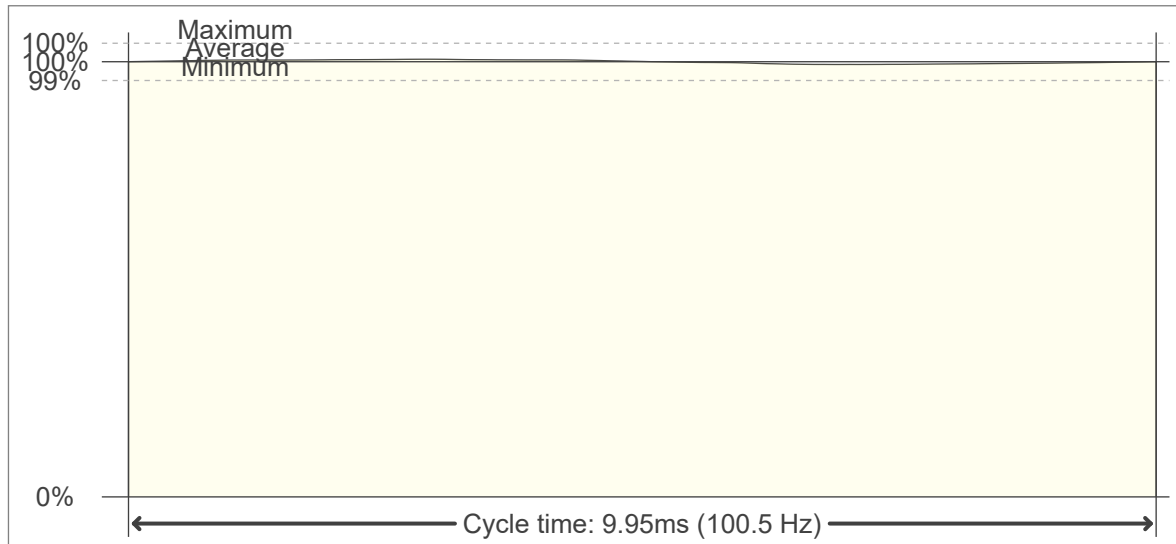
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
16.4 lm	47.8 lm	74.6 lm	93.8 lm	104 lm	105 lm	96.1 lm	79.6 lm	62.0 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
53.7 lm	48.2 lm	40.9 lm	32.3 lm	22.5 lm	13.2 lm	6.35 lm	2.41 lm	0.671 lm

FLICKER

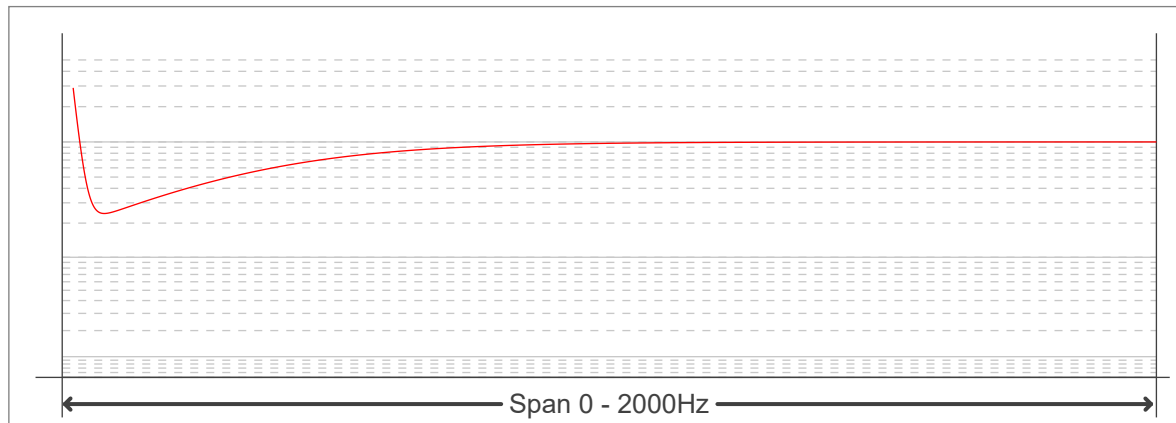
FLICKER CURVE (COMPLETE SAMPLED)



FLICKER FRAME (FRAME OF ONE FLICKER)



FLICKER FFT (FREQUENCY SCOPE OF FLICKER)



FLICKER RESULTS:

Flicker frequency:	100.5 Hz
Flicker index:	0
Flicker percentage:	0.63 %
SVM: (Visual flicker)	0.02

FLICKER CONDITIONS:

Sample rate:	20000 samples/second
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