

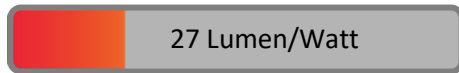
# PHOTOMETRIC TEST REPORT

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MORI 250 3000K

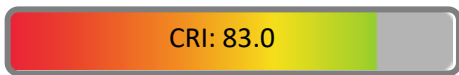
astro

## LIGHT EFFICIENCY:



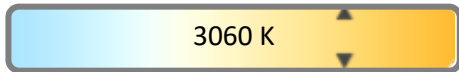
OUTPUT: 214 lm

## LIGHT QUALITY:



PEAK: 219 cd

## COLOR TEMPERATURE:



POWER: 8.1 W

PF: 0.82

Tracking number: [n/a](#)

Product name:

Mori 250 3000K

Item number:

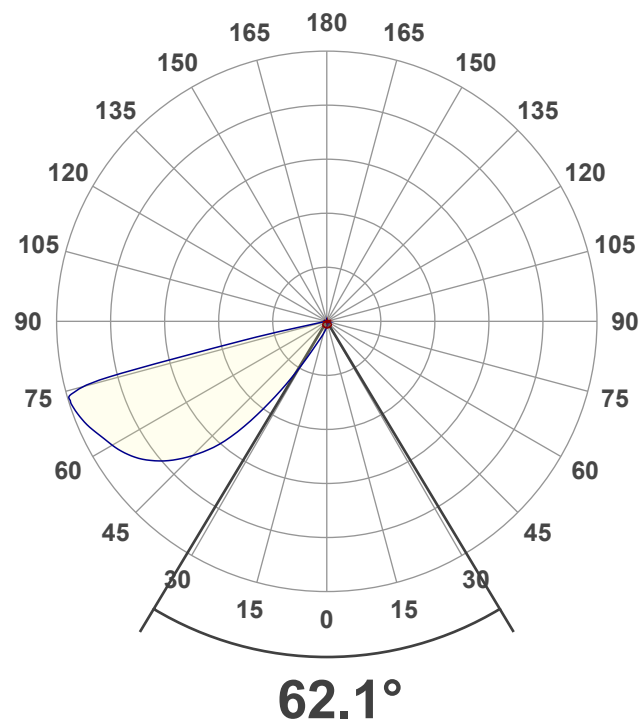
1466002

Date and time:

08/11/2022 17:28:50

Description:

IP65 Outdoor Marker Light 3000K



62.1°

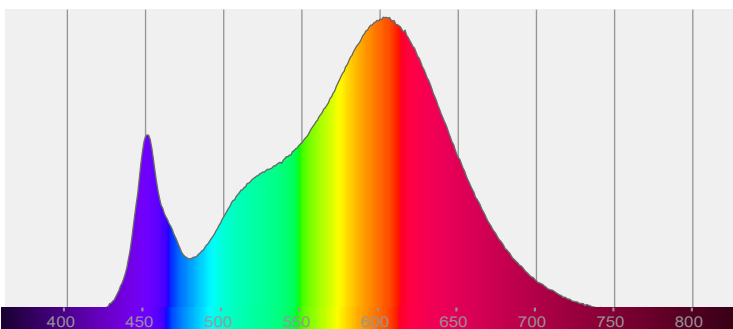


CIE 1931

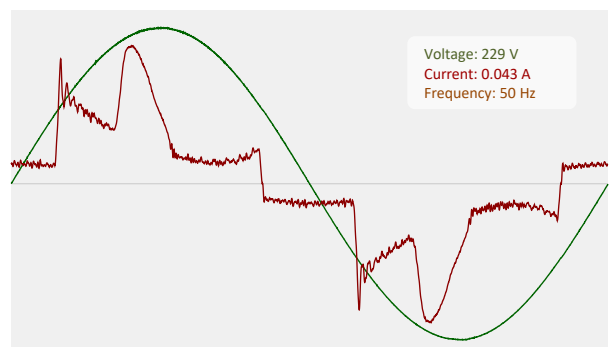
x: 0.431

y: 0.398

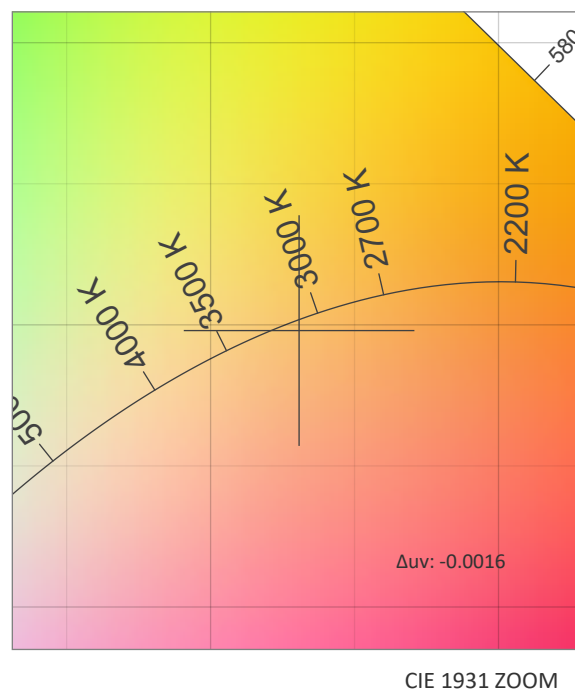
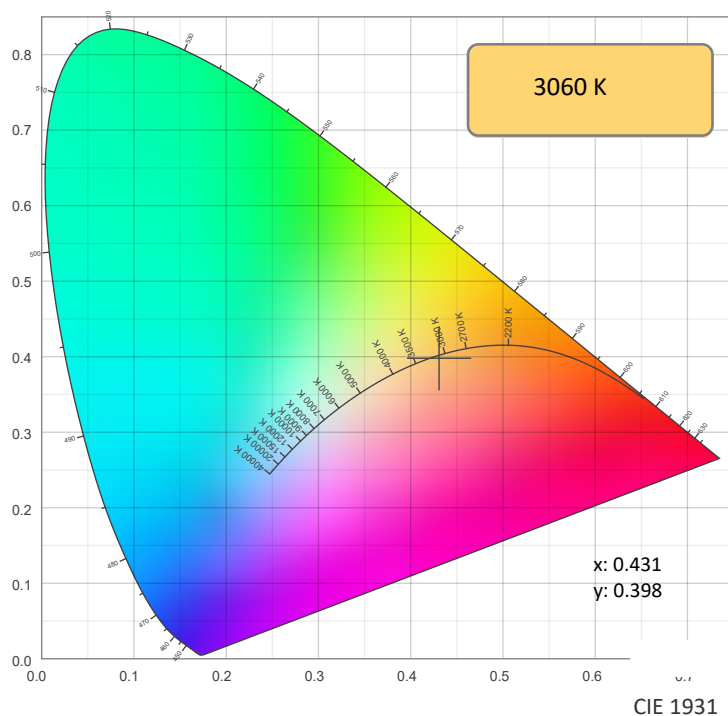
## SPECTRA



## POWER

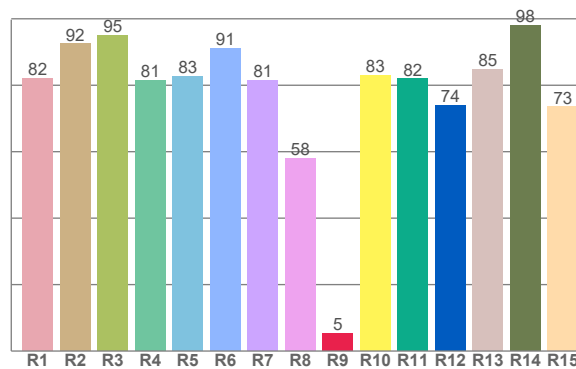
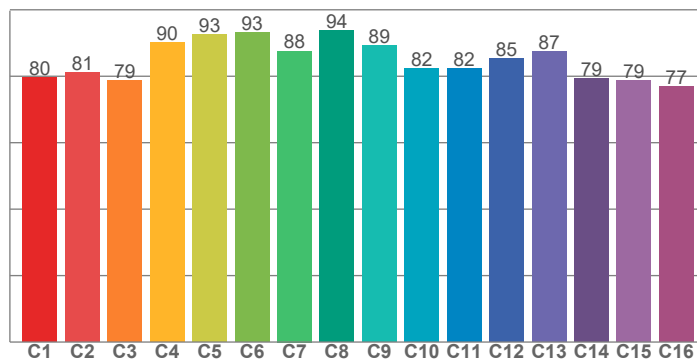


## COLOR DETAILS



TM30: 85.0

CRI: 83.0 (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
82.1	92.4	94.9	81.5	82.7	91.2	81.4	57.9	5.4	83.1	81.9	74.0	84.9	98.0	73.5

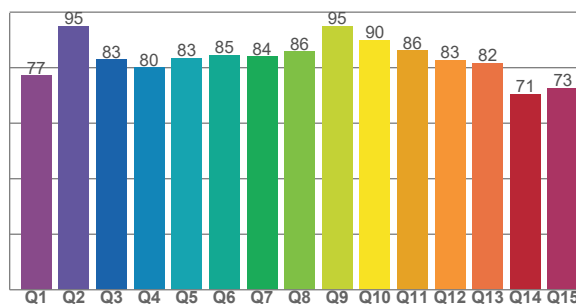
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
79.6	81.2	78.6	90.2	92.5	93.2	87.6	93.6	89.3	82.2	82.2	85.3	87.3	79.3	78.7	76.8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77.2	95.0	83.0	80.1	83.5	84.5	84.0	85.8	94.9	90.0	86.2	82.8	81.6	70.5	72.7

CQS: 82.1



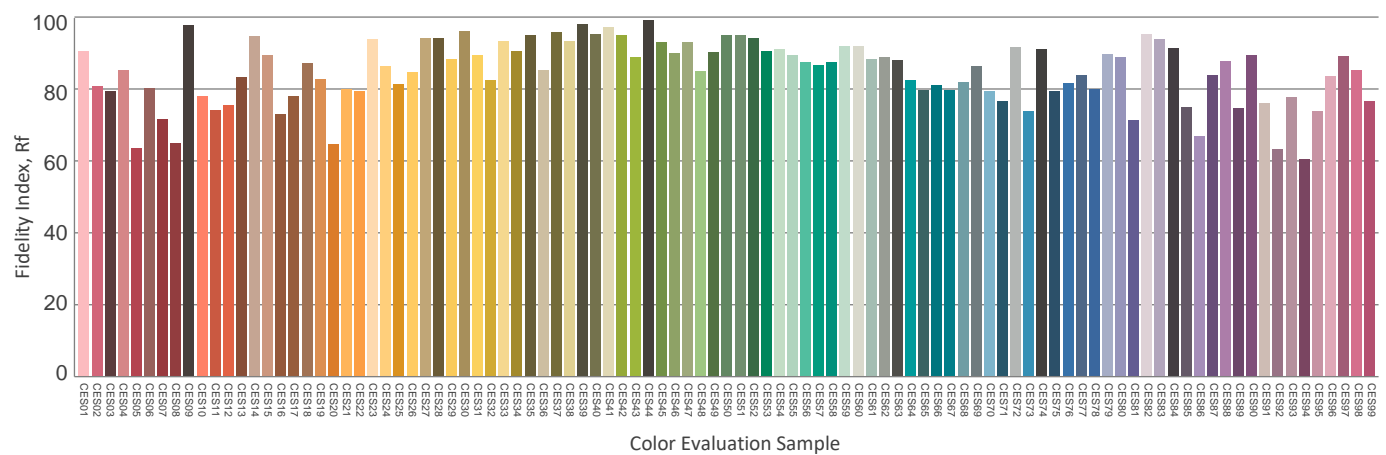
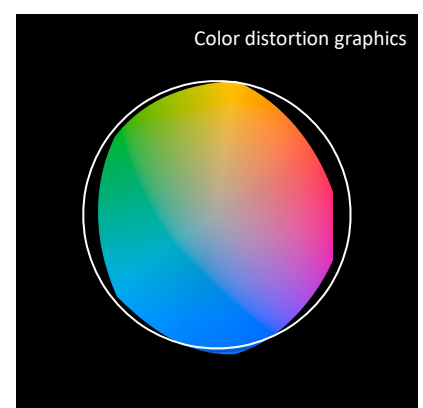
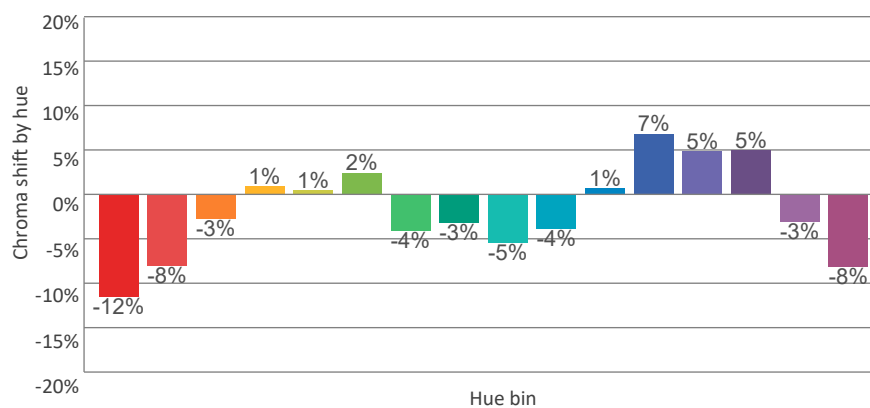
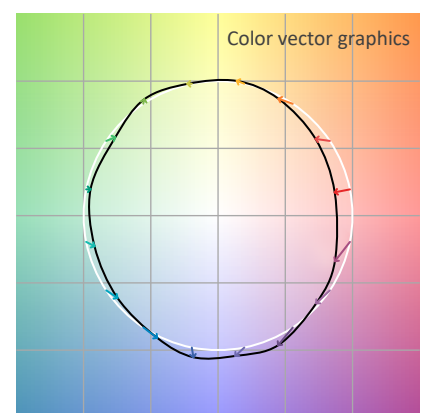
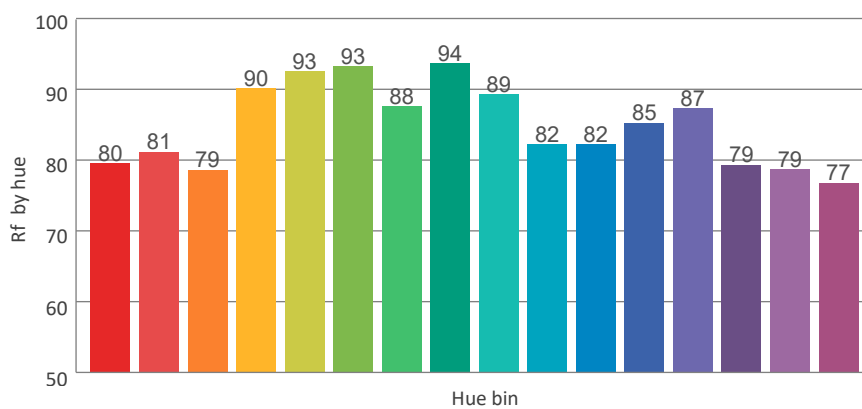
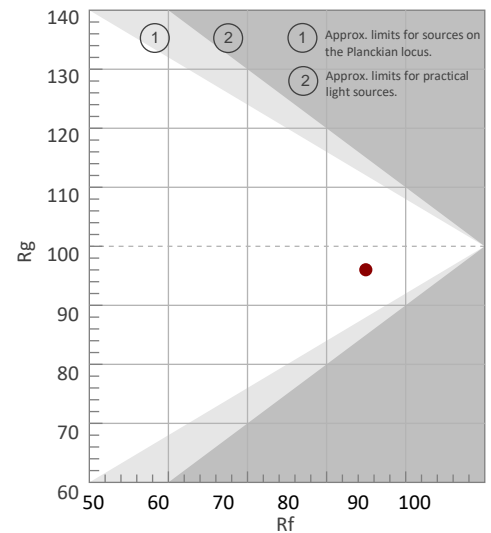
## COLOR PARAMETERS

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
3060 K	83.0	5.4	85.0	96.0	82.1	0.431	0.398	0.249	0.345	-0.0016

**Rf 85.0**  
Fidelity index Rf

**Rg 96.0**  
Gammut index Rg

Hue Bin	Graphic shifts (%)		
	R <sub>f</sub>	Chroma	Hue
1	80	-12%	0%
2	81	-8%	7%
3	79	-3%	11%
4	90	1%	6%
5	93	1%	3%
6	93	2%	-2%
7	88	-4%	-6%
8	94	-3%	-1%
9	89	-5%	4%
10	82	-4%	9%
11	82	1%	13%
12	85	7%	3%
13	87	5%	-8%
14	79	5%	-16%
15	79	-3%	-14%
16	77	-8%	-16%



The diagram illustrates a beam of light originating from a point source (represented by a light bulb icon) with a beam angle of 62.1°. The beam is shown as a cone that widens as it travels. The distance from the source is marked in meters and feet at the top. The beam width at each distance is marked at the bottom. The illuminance (Lux\*) and footcandle (fcd) values are marked along the beam's length. The beam center is indicated by a horizontal line.

Distance (meter)	Distance (feet)	Illuminance (Lux*)	Footcandle (fcd)	Beam width (meter)	Beam width (feet)
1 m	3,3 ft	5 lx	0 fcd	1.2 m	4 ft
2 m	6,6 ft	1 lx	0 fcd	2.4 m	7.9 ft
3 m	9,8 ft	1 lx	0 fcd	3.6 m	11.8 ft
4 m	13,1 ft	0 lx	0 fcd	4.8 m	15.8 ft
5 m	16,4 ft	0 lx	0 fcd	6 m	19.7 ft

\*measured at center of beam

[illegible]

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5.05	5.20	5.20	5.21	5.10	5.09	5.25	5.25	5.22	5.21	5.26	5.14	5.14	5.18	5.24	5.17	5.13	5.16	5.10	5.10
100%	103%	103%	103%	101%	101%	104%	104%	103%	103%	104%	102%	102%	103%	104%	102%	101%	102%	101%	101%

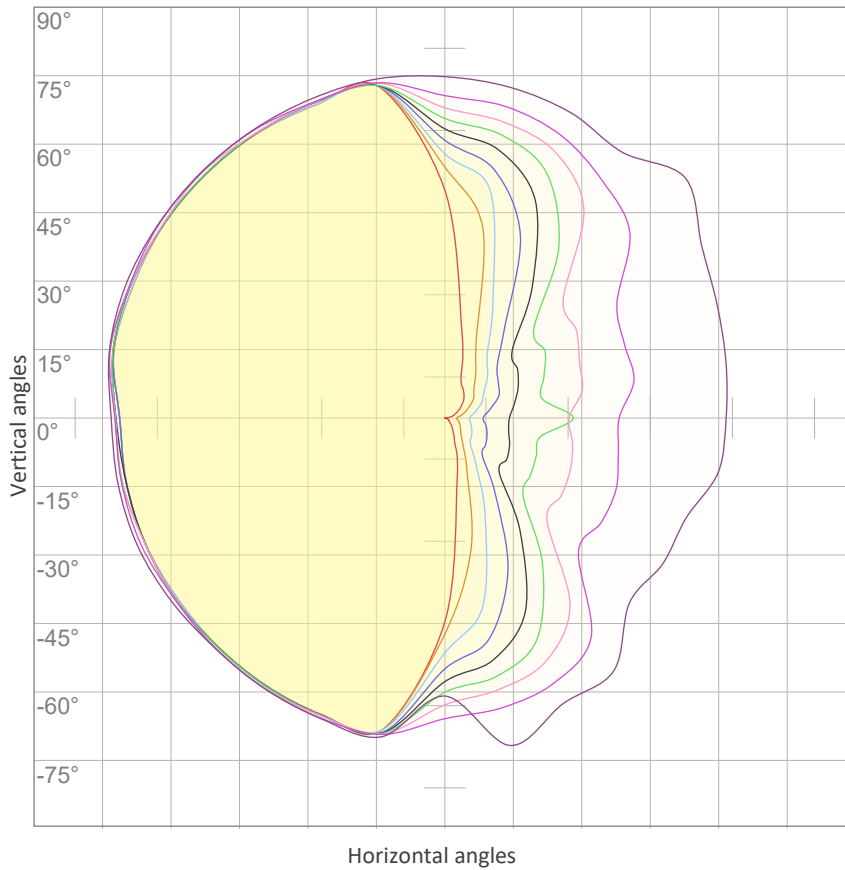
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5.05	4.25	3.83	3.50	3.17	2.96	2.71	2.60	2.41	2.27	2.08	2.07	1.88	1.70	1.67	1.53	1.43	1.39	1.28	1.13
100%	84%	76%	69%	63%	59%	54%	51%	48%	45%	41%	41%	37%	34%	33%	30%	28%	27%	25%	22%

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5.05	5.18	5.13	5.16	5.11	5.11	5.23	5.17	5.12	5.14	5.02	5.06	5.01	4.97	4.98	4.95	4.88	4.82	4.85	4.77
100%	102%	102%	102%	101%	101%	103%	102%	101%	102%	99%	100%	99%	98%	99%	98%	97%	95%	96%	94%

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5	5	6	6	7	8	9	10	11	13	14	17	20	25	32	42	55	71	88	107
100%	98%	110%	121%	134%	152%	171%	191%	220%	250%	285%	332%	397%	490%	628%	825%	1079%	1397%	1751%	2125%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
62.1°	82.5°	109°	49.5%	16.6%

ISO CANDELA DIAGRAM



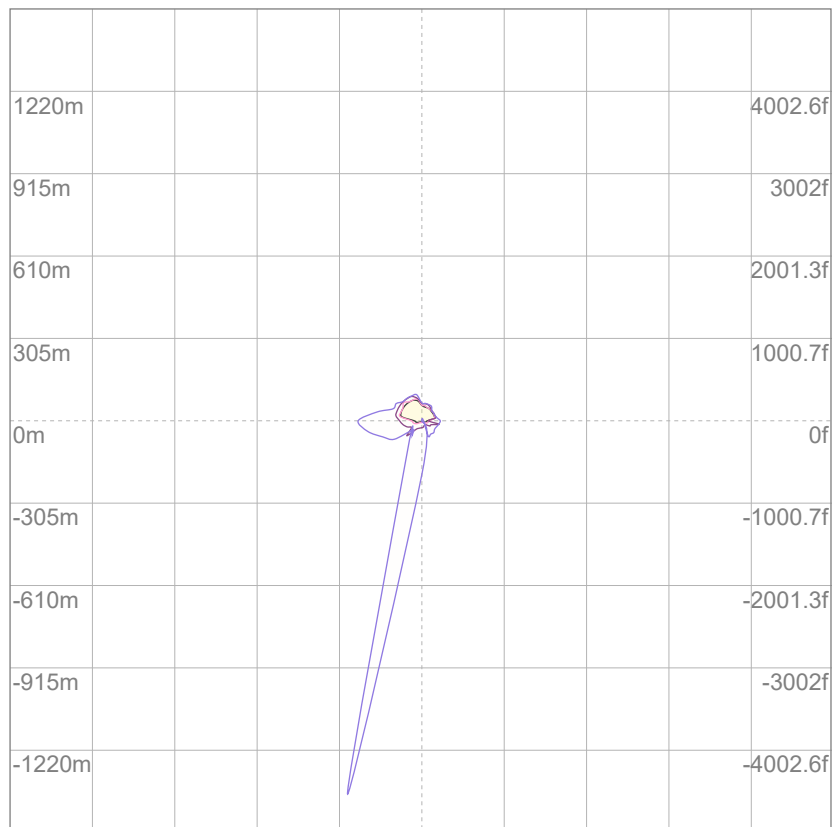
10%	1 cd
20%	1 cd
30%	2 cd
40%	2 cd
50%	3 cd
60%	3 cd
70%	4 cd
80%	4 cd
90%	5 cd

Conditions:

Number of c-planes: 8

Candela at center: 5 cd

ISO LUX DIAGRAM



3%	1.52m lx
5%	2.53m lx
10%	5.05m lx
30%	15.2m lx
50%	{LUX_10M50} lx

Conditions:

Number of c-planes: 8

Lux at center: 50.5m lx

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

## UGR

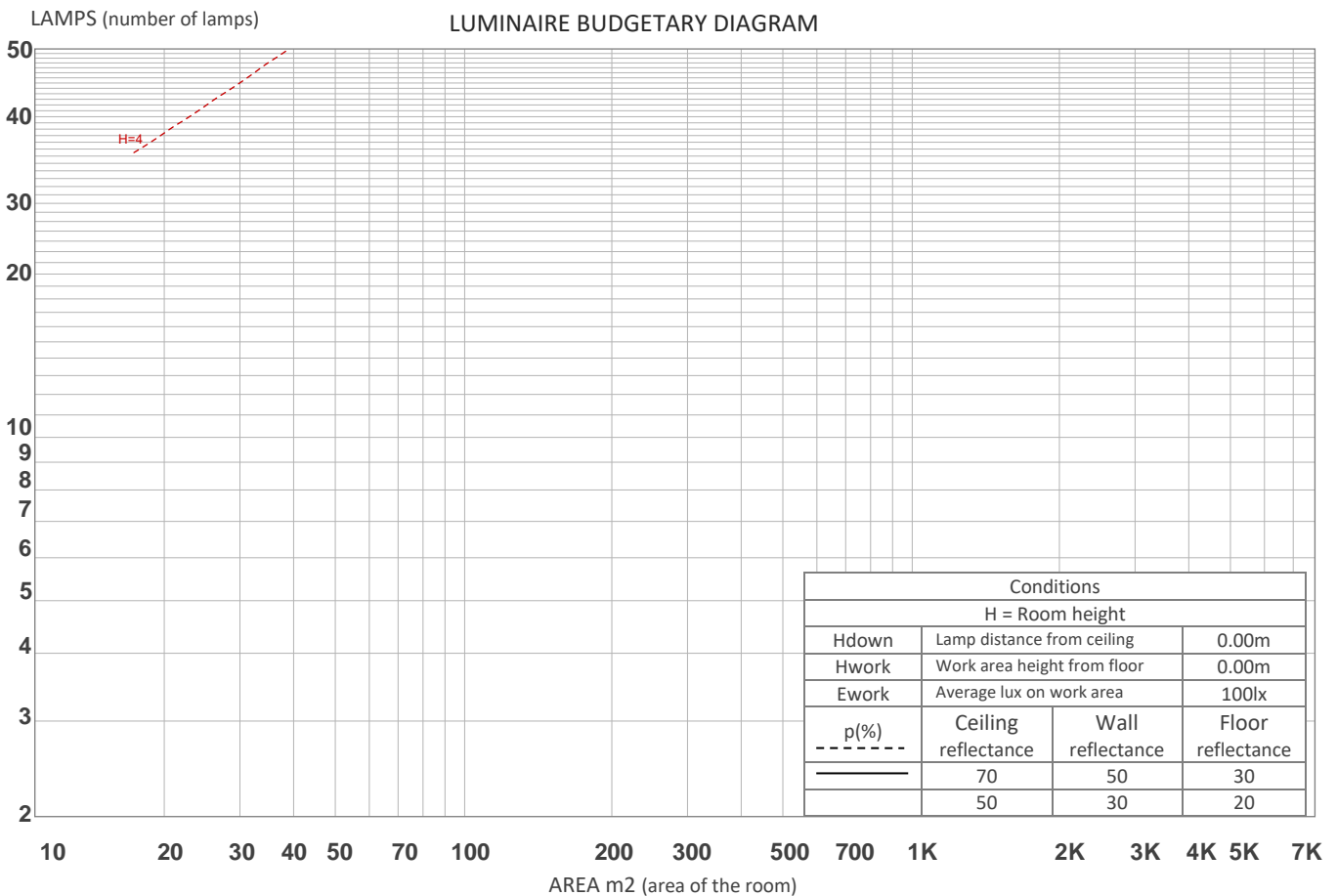
## GLARE EVALUATION ACCORDING TO UGR

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				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Variation of the observer position for the luminaire distance S										
n/a	n/a					n/a				
n/a	n/a					n/a				
n/a	n/a					n/a				
Standard table	n/a					n/a				
Correction summand	n/a					n/a				
Corrected glare indices referring to 214 lm total luminous flux										

UGR data could not be calculated due to missing/wrong symmetry. Goto Edit->Photometric->Corrections and select Correct asymmetry.

## 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	104	97	91	86	101	95	90	85	91	86	82	86	83	79	83	79	77	74
2	90	79	69	61	87	76	68	60	73	65	59	69	63	57	66	60	56	53
3	79	64	53	44	76	62	52	44	59	50	43	56	48	42	53	46	41	38
4	70	54	42	33	67	52	41	33	49	40	32	47	38	31	44	37	31	28
5	62	46	34	25	60	44	33	25	42	32	25	40	31	24	37	30	24	21
6	56	39	28	20	54	38	28	20	36	27	19	34	26	19	32	25	19	16
7	51	34	24	16	49	33	23	16	32	22	16	30	22	15	28	21	15	13
8	47	31	20	13	45	30	20	13	28	19	13	27	19	13	25	18	12	10
9	43	27	17	11	42	27	17	11	25	17	11	24	16	10	23	16	10	8
10	40	25	15	9	39	24	15	9	23	15	9	22	14	9	21	14	9	7



## ZONAL LUMEN SUMMARY

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
0.498 lm	1.75 lm	4.33 lm	14.3 lm	34.4 lm	50.7 lm	59.0 lm	46.0 lm	2.13 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.135 lm	0.149 lm	0.133 lm	0.125 lm	0.097 lm	0.069 lm	0.054 lm	0.031 lm	0.009 lm

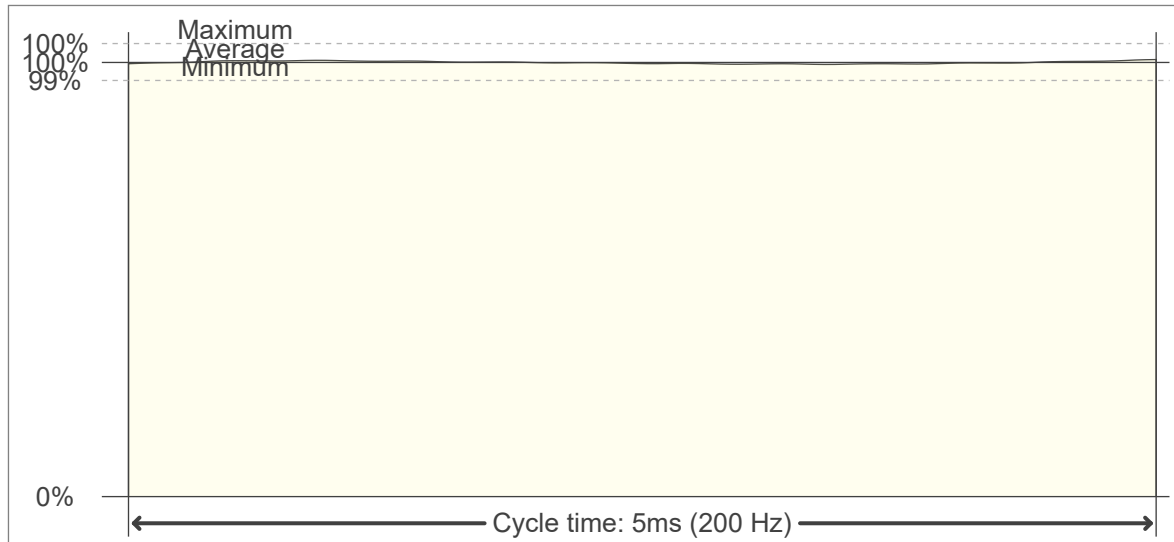


## FLICKER

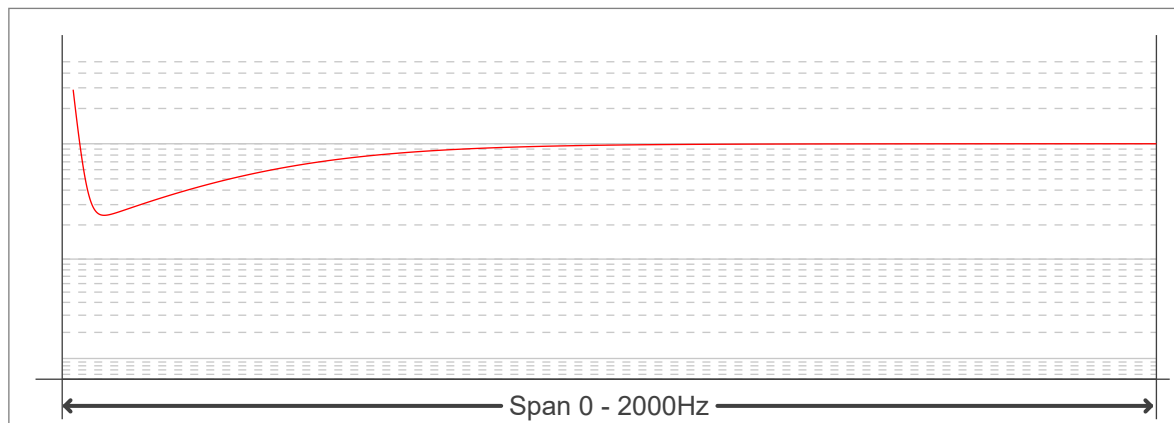
## FLICKER CURVE (COMPLETE SAMPLED FLICKER)



## FLICKER FRAME (FRAME OF ONE FLICKER PERIOD)



## FLICKER FFT (FREQUENCY SCOPE OF FLICKER CURVE)



## FLICKER RESULTS:

Flicker frequency:	200 Hz
Flicker index:	0
Flicker percentage:	1.31 %
SVM: (Visual flicker)	0.03

## FLICKER CONDITIONS:

Sample rate:	20000 samples/second
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