

PHOTOMETRIC TEST REPORT

MINIMA PRO ROUND 25 IP65 -
MATT WHITE - 4000803

astro

MINIMA PRO ROUND 25 IP65 - MATT

astro

LIGHT EFFICIENCY:

104 Lumen/Watt

LIGHT QUALITY:

CRI: 95.6

COLOR TEMPERATURE:

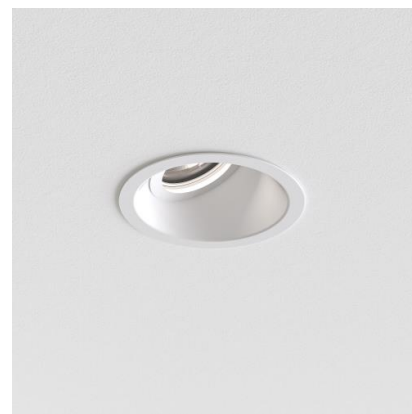
3035 K

OUTPUT: 1220 lm

PEAK: 2091 cd

POWER: 11.8 W

PF: 0.95



Tracking number: [n/a](#)

Product name:

Minima Pro Round 25 IP65 - Matt White - 4000803

Item number:

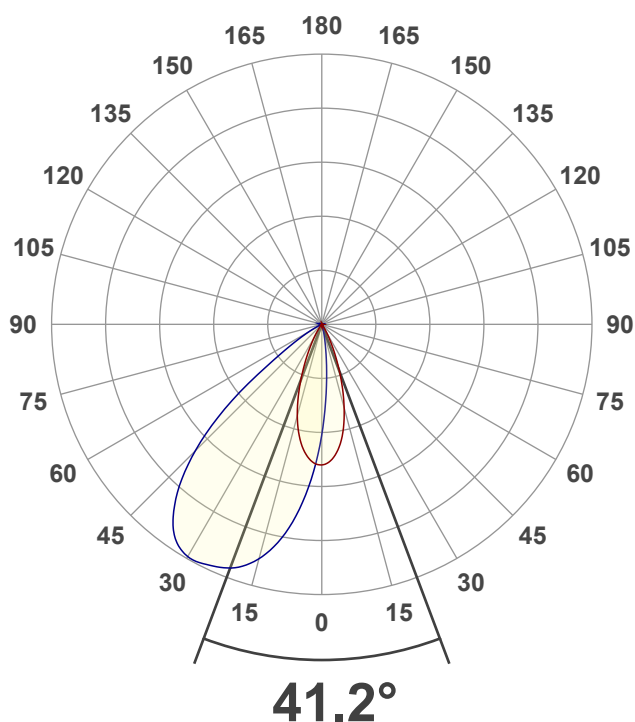
MRW-MW-HE30G1-50G1-X-D1

Date and time:

20/01/2025 16:14:32

Description:

IP65 LED Downlight

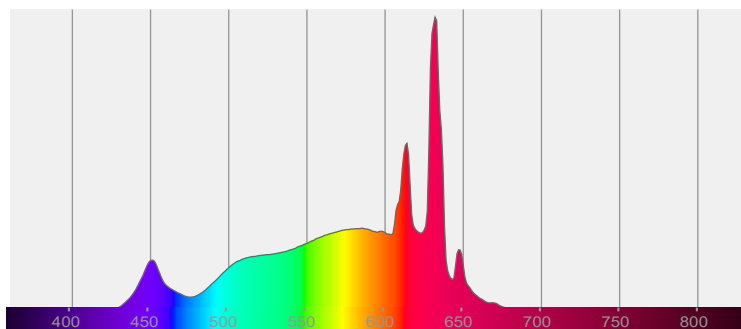


41.2°

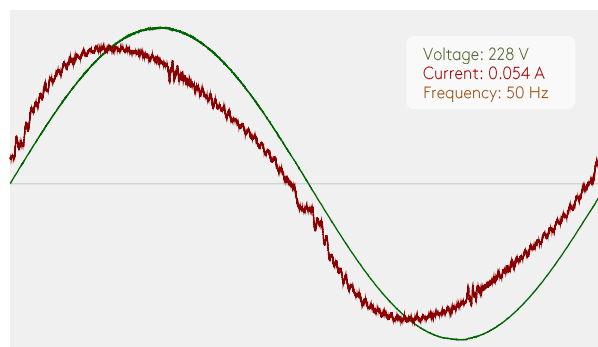


CIE 1931
x: 0.437
y: 0.408

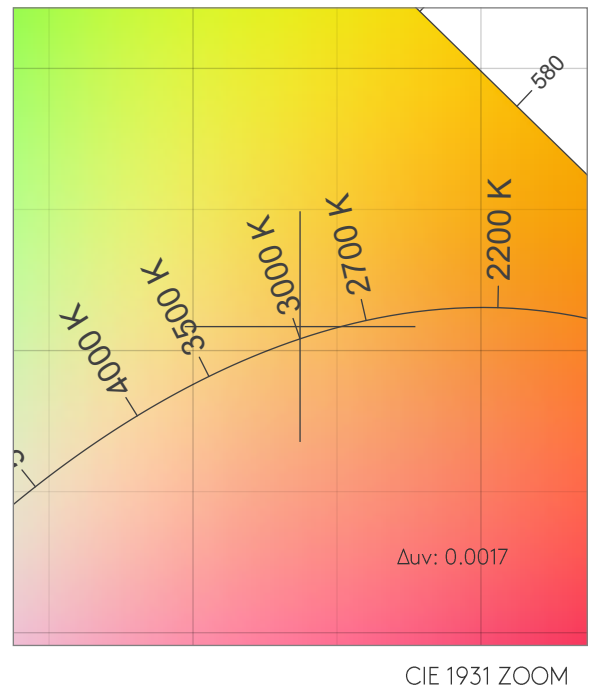
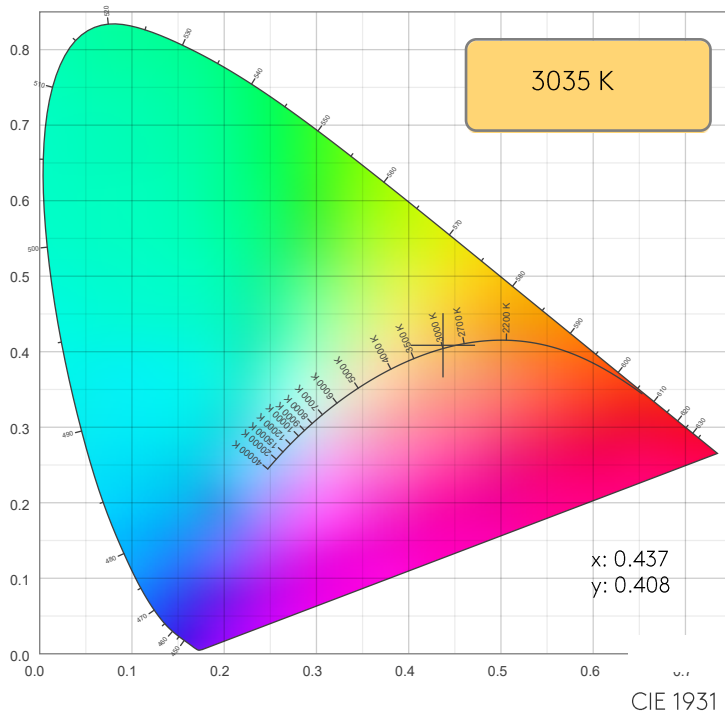
SPECTRA



POWER

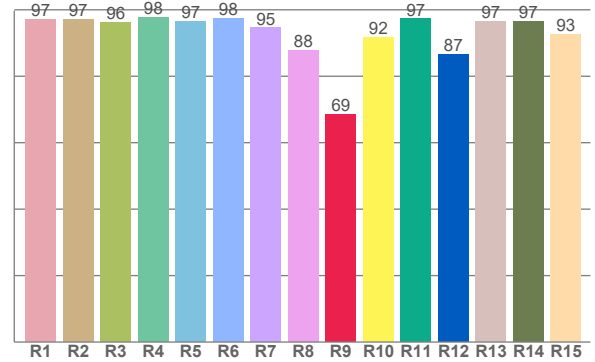
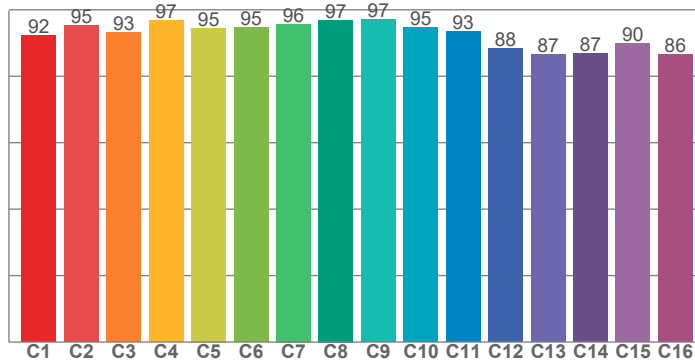


COLOR DETAILS



TM30: 93.1

CRI: 95.6 (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
97.0	97.0	96.2	97.8	96.6	97.5	94.6	87.7	68.6	91.7	97.3	86.7	96.5	96.6	92.6

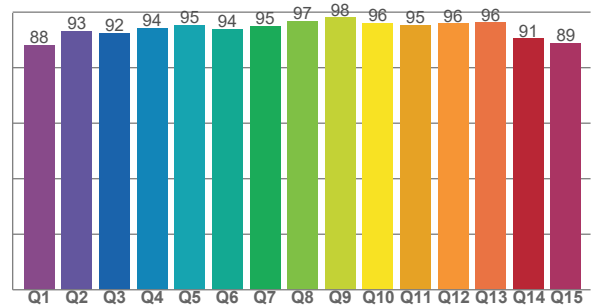
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92.3	95.4	93.2	96.8	94.5	94.7	95.7	96.9	97.0	94.8	93.4	88.4	86.6	86.9	89.9	86.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
88.1	93.3	92.4	94.4	95.4	93.9	94.9	96.8	98.1	96.1	95.4	95.8	96.3	90.6	88.9

CQS: 93.2



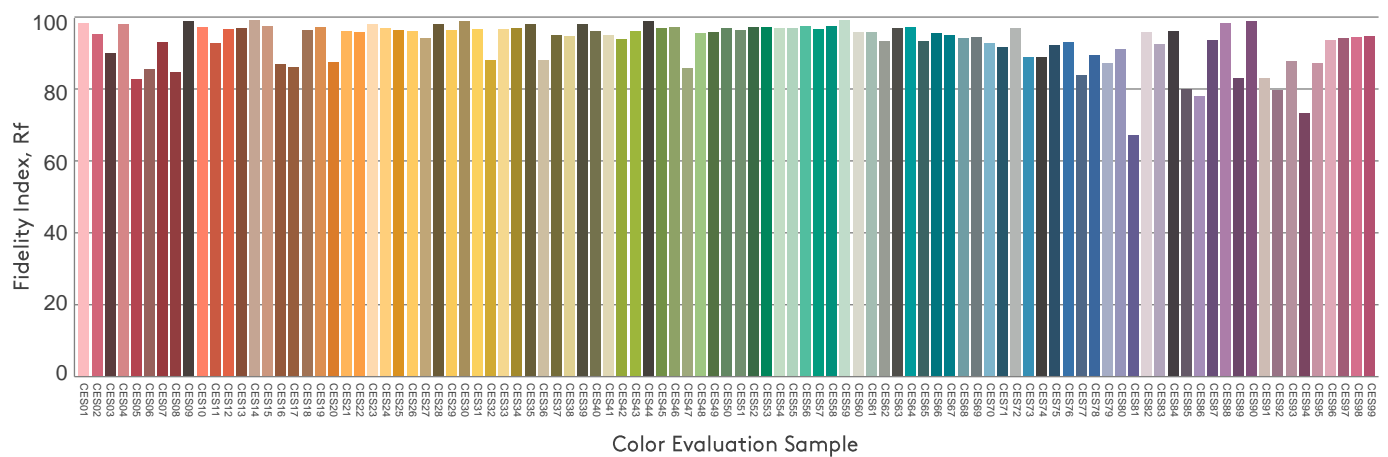
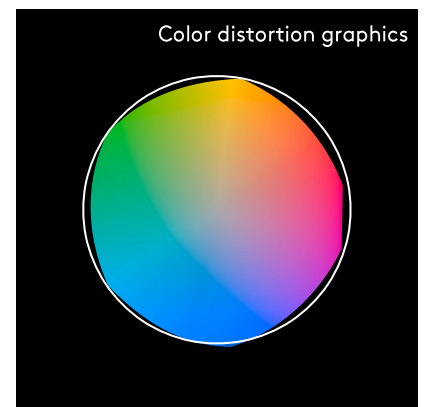
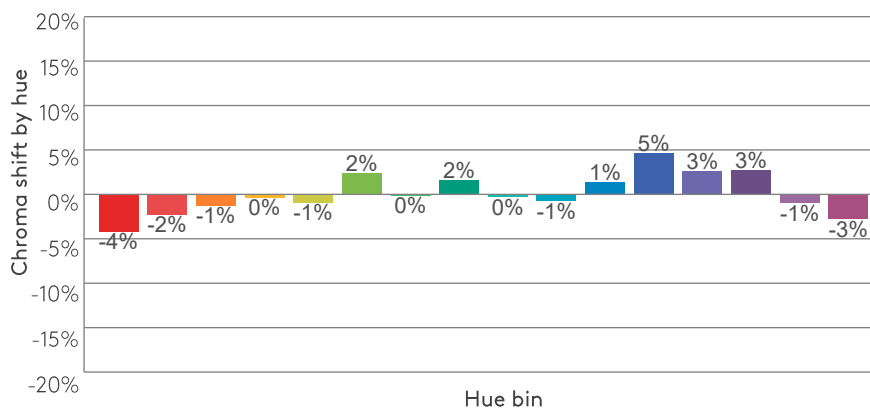
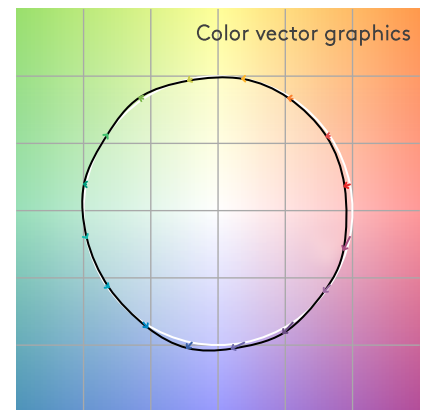
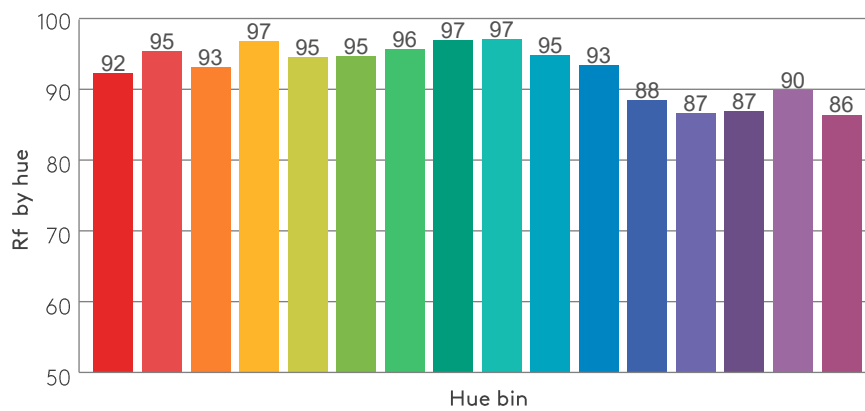
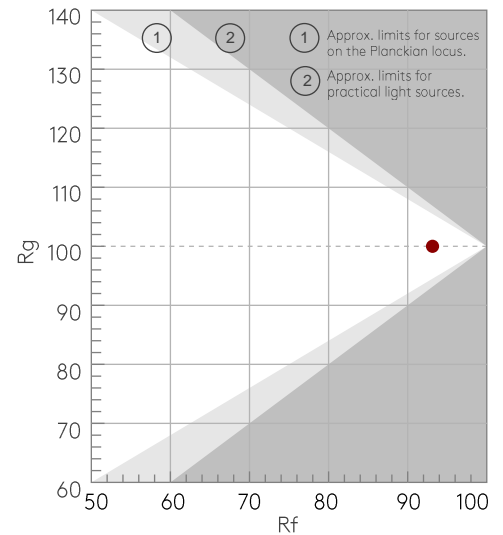
COLOR PARAMETERS

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
3035 K	95.6	68.6	93.1	100.0	93.2	0.437	0.408	0.249	0.349	0.0017

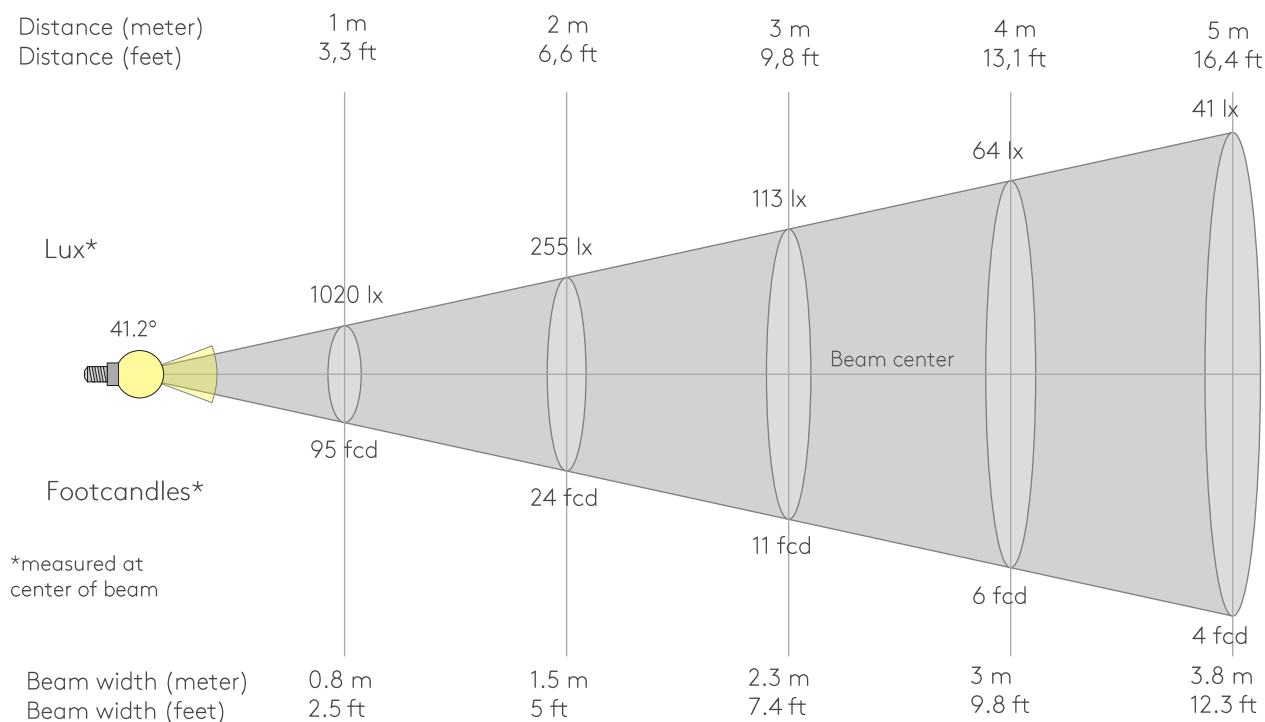
Rf 93.1
Fidelity index Rf

Rg 100.0
Gammut index Rg

Hue Bin	Rf	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	95	-2%	1%
3	93	-1%	3%
4	97	0%	1%
5	95	-1%	3%
6	95	2%	2%
7	96	0%	-1%
8	97	2%	0%
9	97	0%	1%
10	95	-1%	2%
11	93	1%	4%
12	88	5%	-3%
13	87	3%	-10%
14	87	3%	-10%
15	90	-1%	-6%
16	86	-3%	-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
1020lx	255lx	113lx	64lx	41lx	28lx	21lx	16lx	13lx	10lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx	3lx	3lx
94.8fcd	23.7fcd	10.5fcd	5.9fcd	3.8fcd	2.6fcd	1.9fcd	1.5fcd	1.2fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd	0.3fcd	0.2fcd

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°
1020	1084	1059	1019	966	898	815	721	622	521	419	328	247	177	126	86	53	32	20	14
100%	106%	104%	100%	95%	88%	80%	71%	61%	51%	41%	32%	24%	17%	12%	8%	5%	3%	2%	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°
1020	677	508	362	244	155	94	54	29	18	14	11	10	8	8	7	6	6	6	5
100%	66%	50%	35%	24%	15%	9%	5%	3%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%

Intensities in 180° c-plane

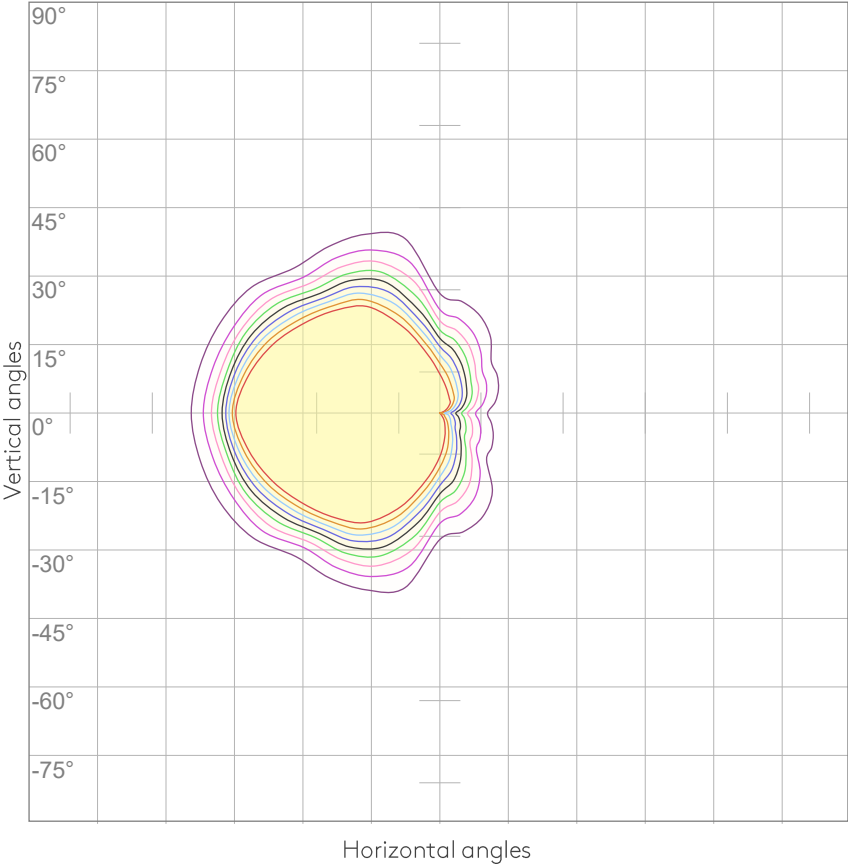
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1020	1090	1072	1039	993	935	863	781	689	592	493	397	312	236	171	121	80	48	29	17
100%	107%	105%	102%	97%	92%	85%	77%	68%	58%	48%	39%	31%	23%	17%	12%	8%	5%	3%	2%

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°
1020	1042	1216	1380	1527	1655	1763	1851	1922	1978	2018	2044	2062	2077	2089	2088	2068	2029	1967	1876
100%	102%	119%	135%	150%	162%	173%	181%	188%	194%	198%	200%	202%	204%	205%	205%	203%	199%	193%	184%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
41.2°	62.7°	73.7°	99.2%	88.5%

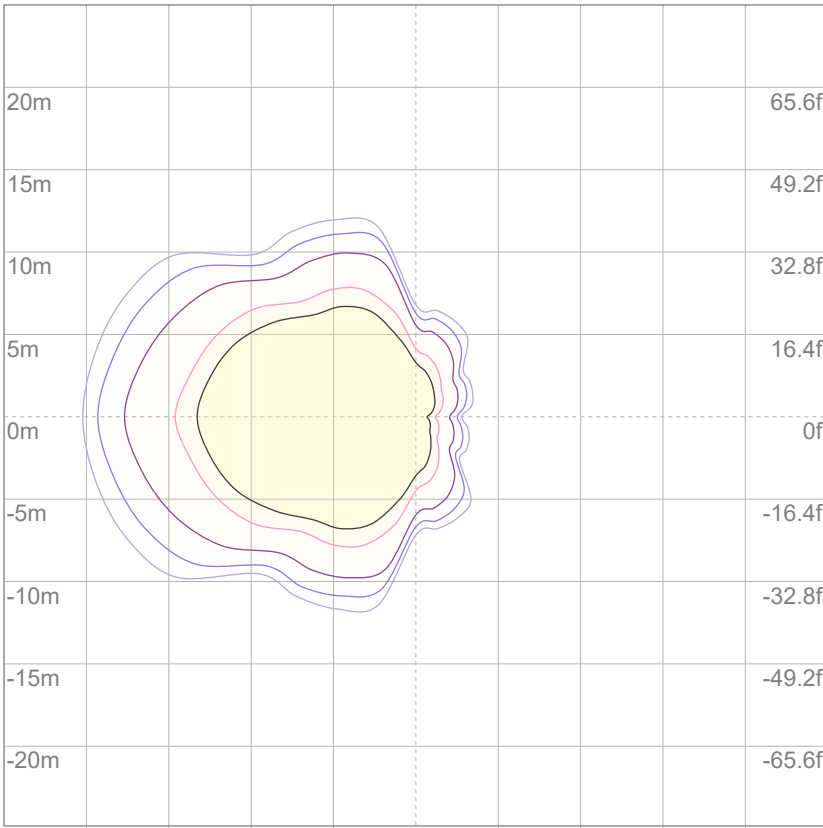
ISO CANDELA DIAGRAM



10%	102 cd
20%	204 cd
30%	306 cd
40%	408 cd
50%	510 cd
60%	612 cd
70%	714 cd
80%	816 cd
90%	918 cd

Conditions:
Number of c-planes: 8
Candela at center: 1020 cd

ISO LUX DIAGRAM



3%	0.306 lx
5%	0.510 lx
10%	1.02 lx
30%	3.06 lx
50%	{LUX_10M50} lx

Conditions:
Number of c-planes: 8
Lux at center: 10.2 lx

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

Mounting height: 10 meters (33 feet)

GLARE EVALUATION ACCORDING TO UGR

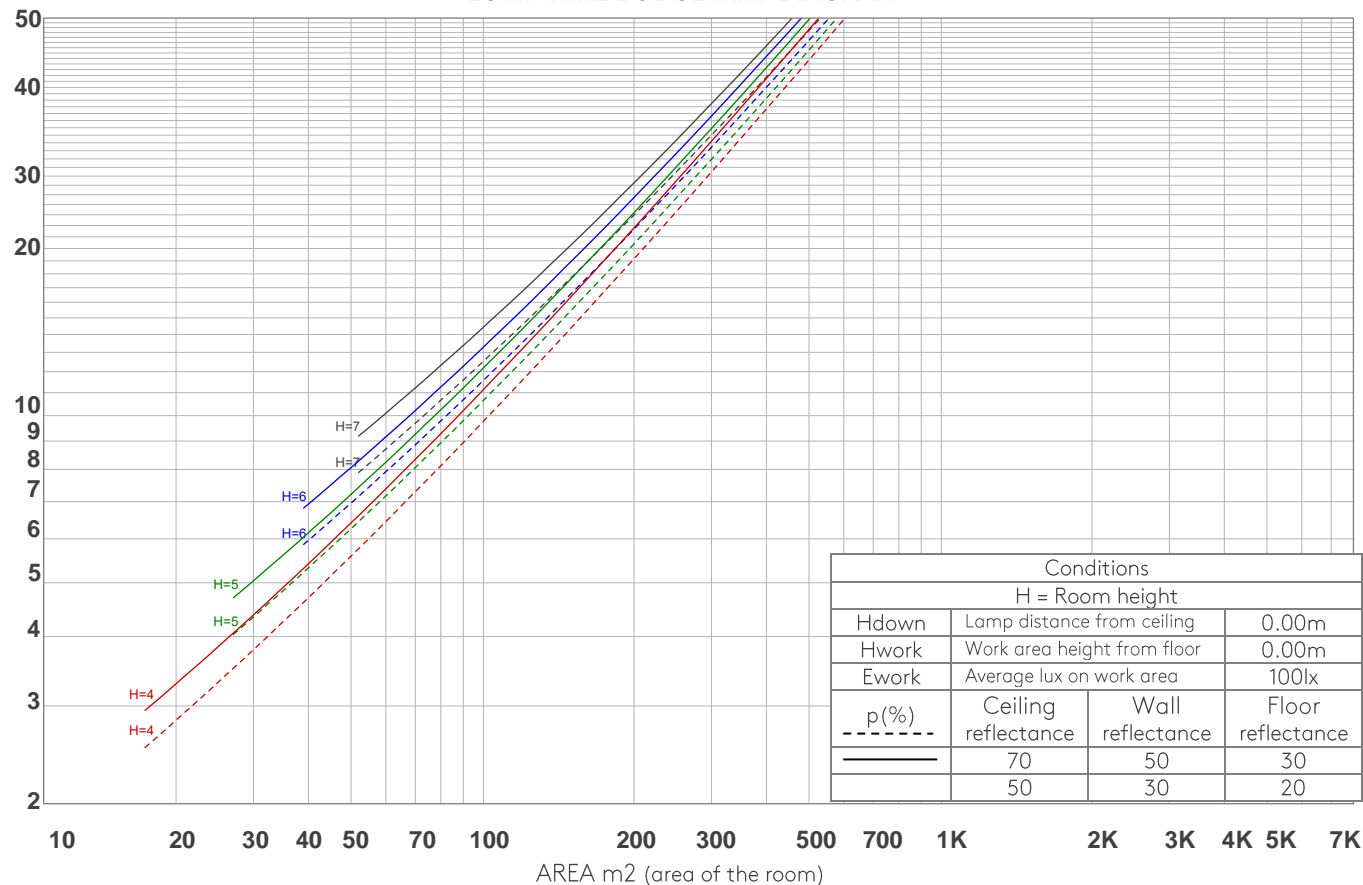
UGR data could not be calculated due to missing/wrong symmetry. Go to Edit -> Photometric -> Corrections and select Correct asymmetry (UGR not defined for asymmetrical distributions)..

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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	66	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	65	60	55	64	59	55	63	58	55	53
8	74	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	69	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

LAMPS (number of lamps)

LUMINAIRE BUDGETARY DIAGRAM



ZONAL LUMEN SUMMARY

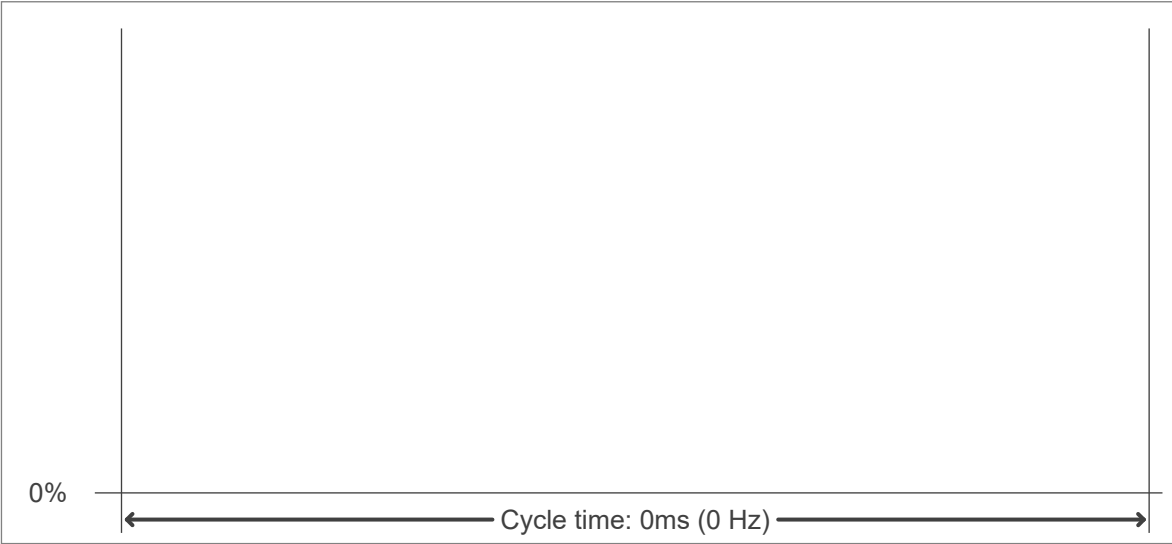
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
92.9 lm	241 lm	320 lm	311 lm	192 lm	52.9 lm	5.99 lm	1.05 lm	0.321 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.134 lm	0.138 lm	0.205 lm	0.324 lm	0.456 lm	0.476 lm	0.411 lm	0.277 lm	0.092 lm

FLICKER

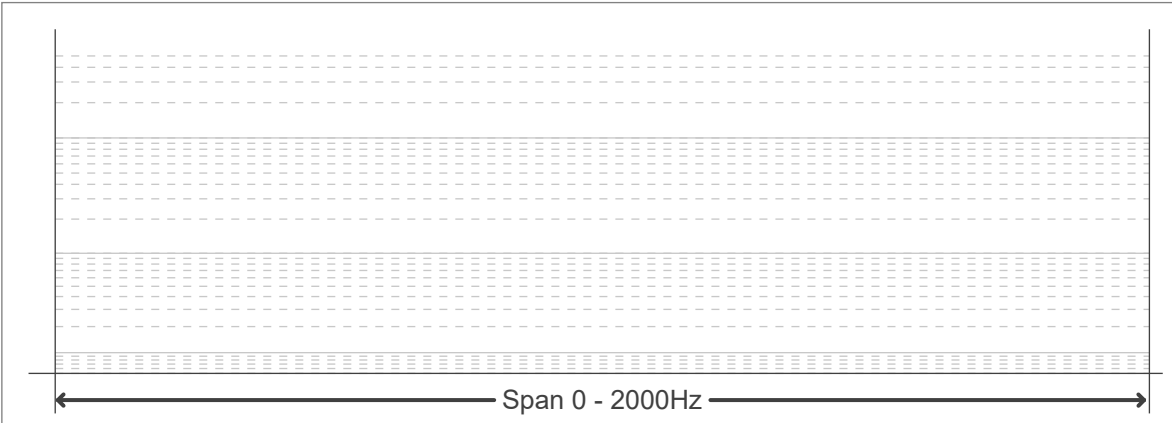
FLICKER CURVE (COMPLETE SAMPLED)



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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