

PHOTOMETRIC TEST REPORT

TALLINN SURFACE - WITHOUT
DIFFUSER

astro

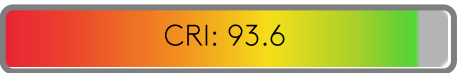
TALLINN SURFACE - WITHOUT DIFFUSER

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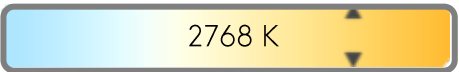
LIGHT EFFICIENCY:



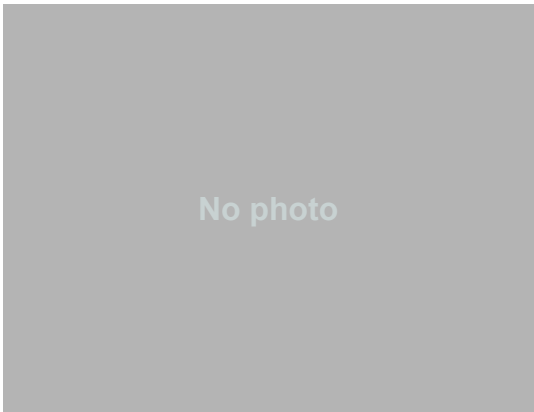
LIGHT QUALITY:



COLOR TEMPERATURE:



OUTPUT: 836 lm
PEAK: 3599 cd
POWER: 10.9 W
PF: 0.94



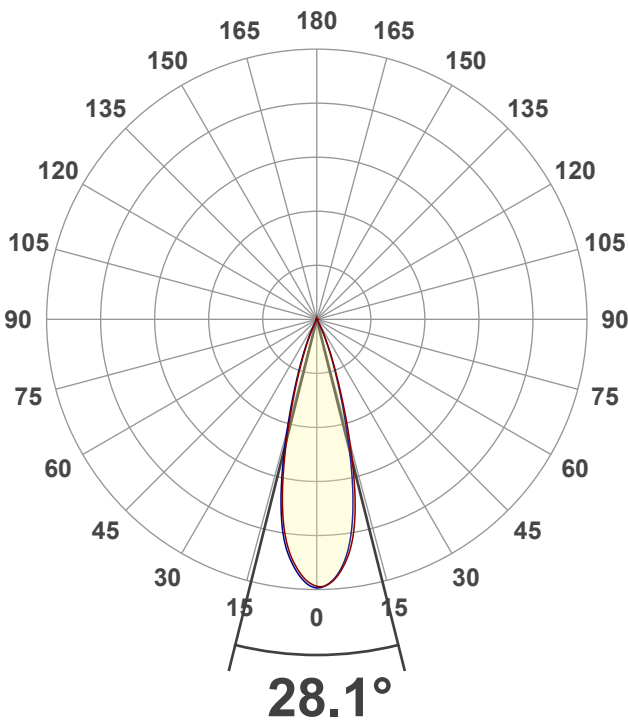
Tracking number: [n/a](#)

Product name:
Tallinn Surface - without diffuser

Item number:
1516003

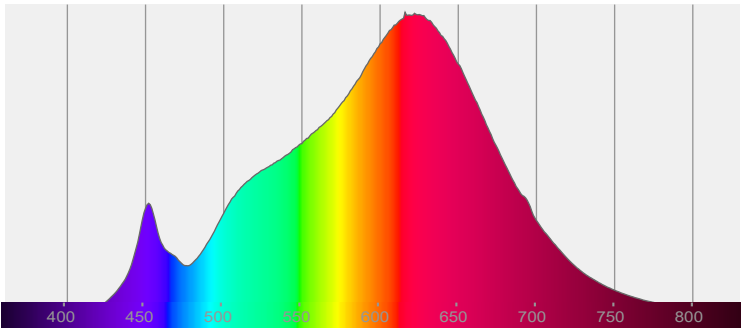
Date and time:
10/12/2025 12:51:24

Description:
Outside IP65 LED Surface Mounted Light
No Diffuser Fitted

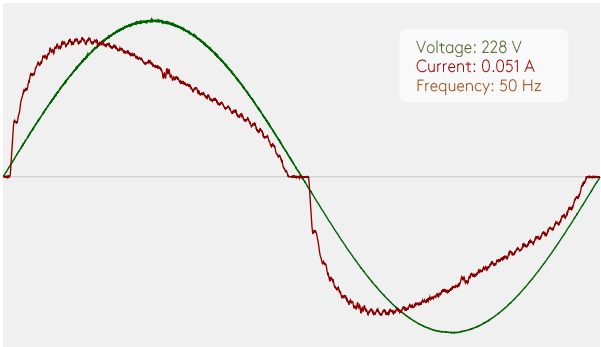


CIE 1931
x: 0.457
y: 0.414

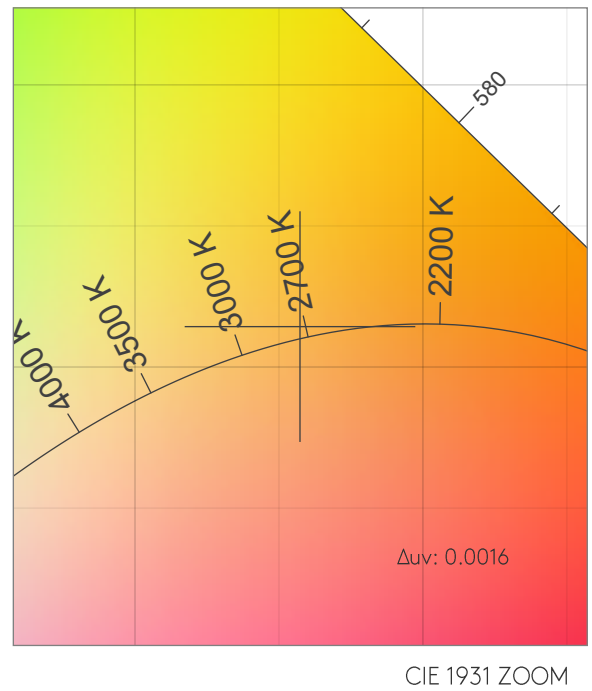
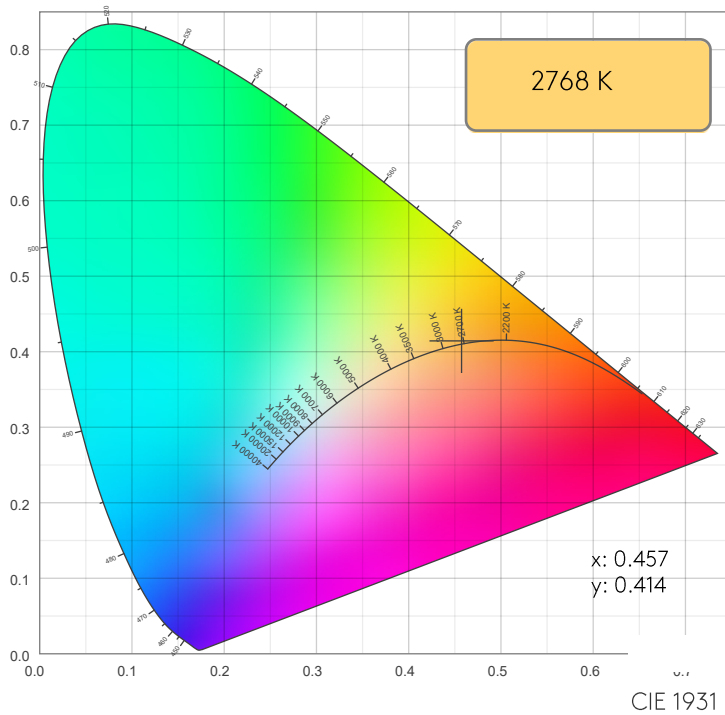
SPECTRA



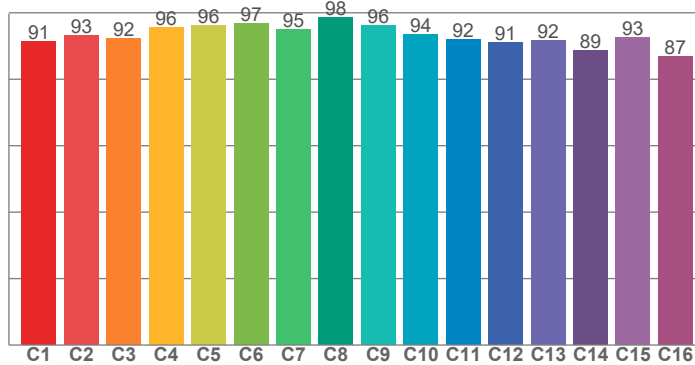
POWER



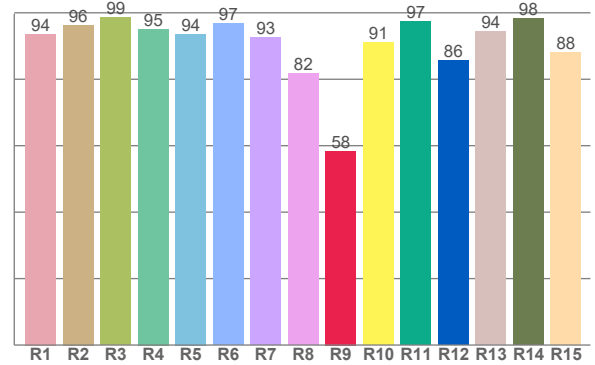
COLOR DETAILS



TM30: 93.2



CRI: 93.6 (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
93.6	96.3	98.6	95.1	93.6	96.9	92.6	81.7	58.4	91.2	97.3	85.6	94.4	98.4	88.1

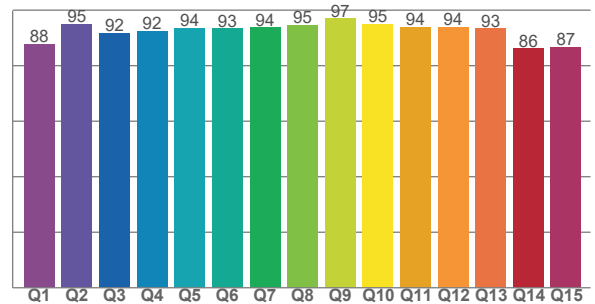
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.2	93.1	92.3	95.7	96.2	96.8	95.0	98.5	96.3	93.5	92.1	91.0	91.7	88.6	92.6	86.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87.8	95.1	91.8	92.4	93.6	93.4	93.8	94.7	97.1	94.9	94.0	94.0	93.4	86.2	86.8

CQS: 91.8



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
2768 K	93.6	58.4	93.2	98.7	91.8	0.457	0.414	0.259	0.352	0.0016

TALLINN SURFACE - WITHOUT DIFFUSER

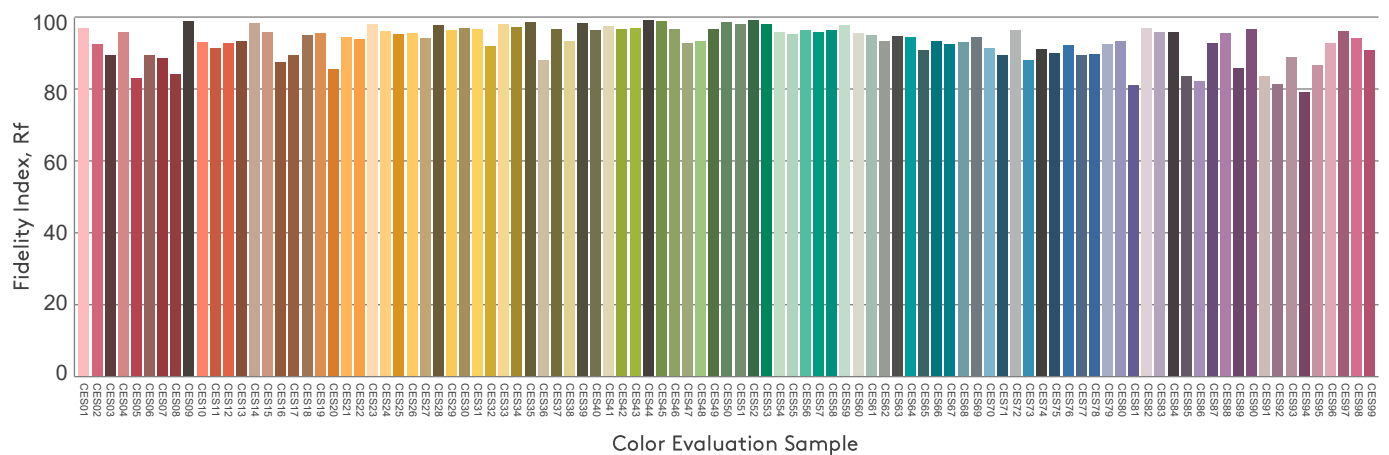
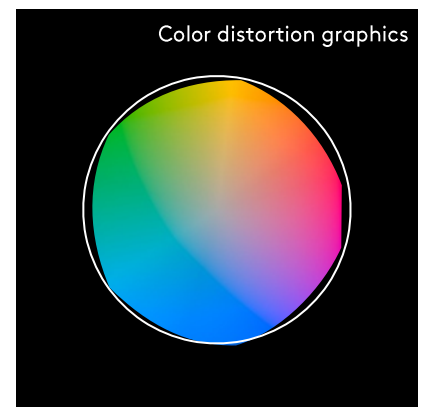
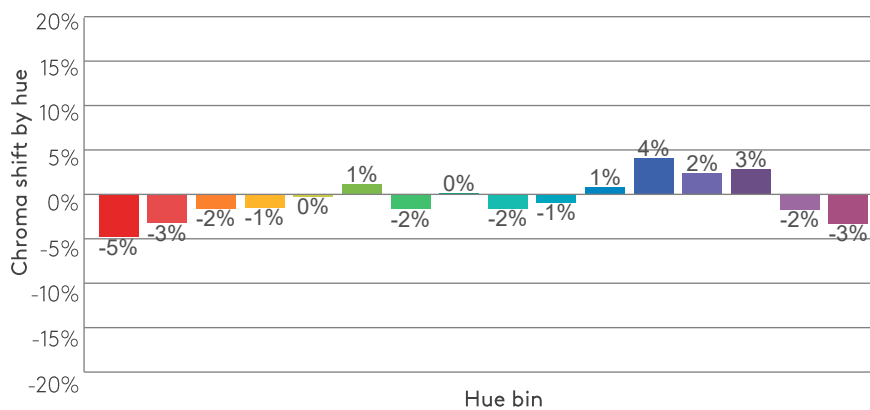
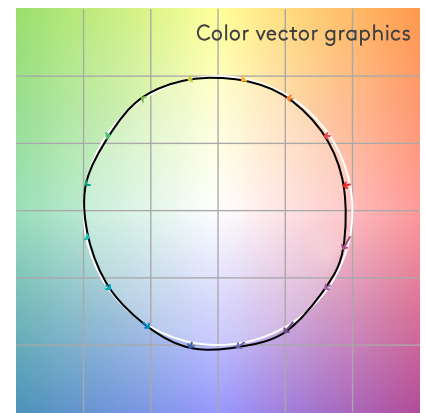
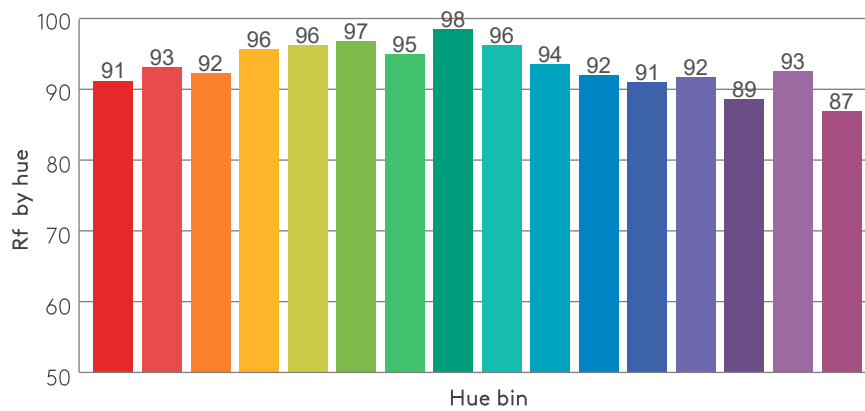
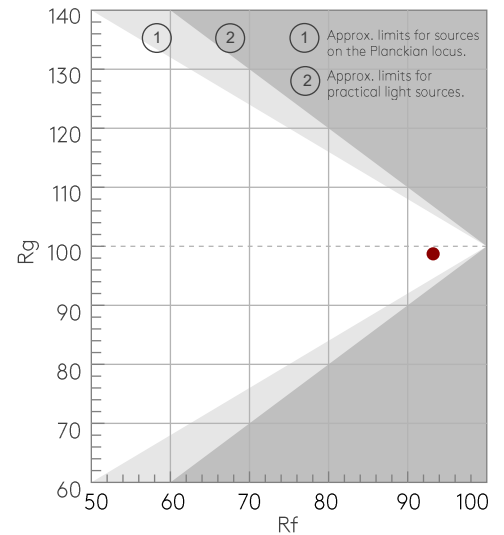
TM30 DETAILS

astro

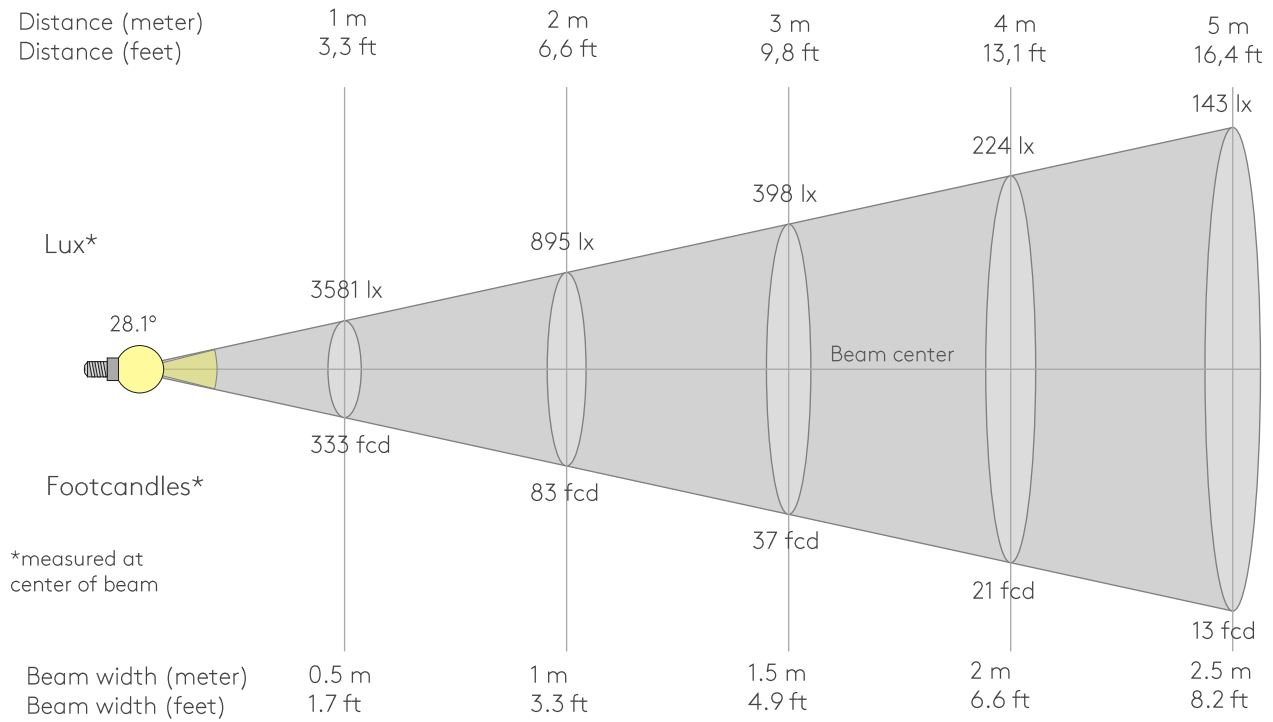
Rf 93.2
Fidelity index Rf

Rg 98.7
Gammut index Rg

Hue Bin	Rf	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-2%	4%
4	96	-1%	1%
5	96	0%	2%
6	97	1%	1%
7	95	-2%	-2%
8	98	0%	0%
9	96	-2%	1%
10	94	-1%	4%
11	92	1%	6%
12	91	4%	-1%
13	92	2%	-6%
14	89	3%	-9%
15	93	-2%	-4%
16	87	-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
3581lx	895lx	398lx	224lx	143lx	99lx	73lx	56lx	44lx	36lx	30lx	25lx	21lx	18lx	16lx	14lx	12lx	11lx	10lx	9lx
332.7fcd	83.2fcd	37fcd	20.8fcd	13.3fcd	9.2fcd	6.8fcd	5.2fcd	4.1fcd	3.3fcd	2.7fcd	2.3fcd	2fcd	1.7fcd	1.5fcd	1.3fcd	1.2fcd	1fcd	0.9fcd	0.8fcd

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°
3581	3569	3487	3343	3146	2864	2470	1978	1482	1050	723	481	299	162	63	26	18	14	11	8
100%	100%	97%	93%	88%	80%	69%	55%	41%	29%	20%	13%	8%	5%	2%	1%	1%	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°
3581	3566	3473	3313	3078	2745	2314	1815	1342	950	651	433	261	130	47	23	17	13	10	8
100%	100%	97%	93%	86%	77%	65%	51%	37%	27%	18%	12%	7%	4%	1%	1%	0%	0%	0%	0%

Intensities in 180° c-plane

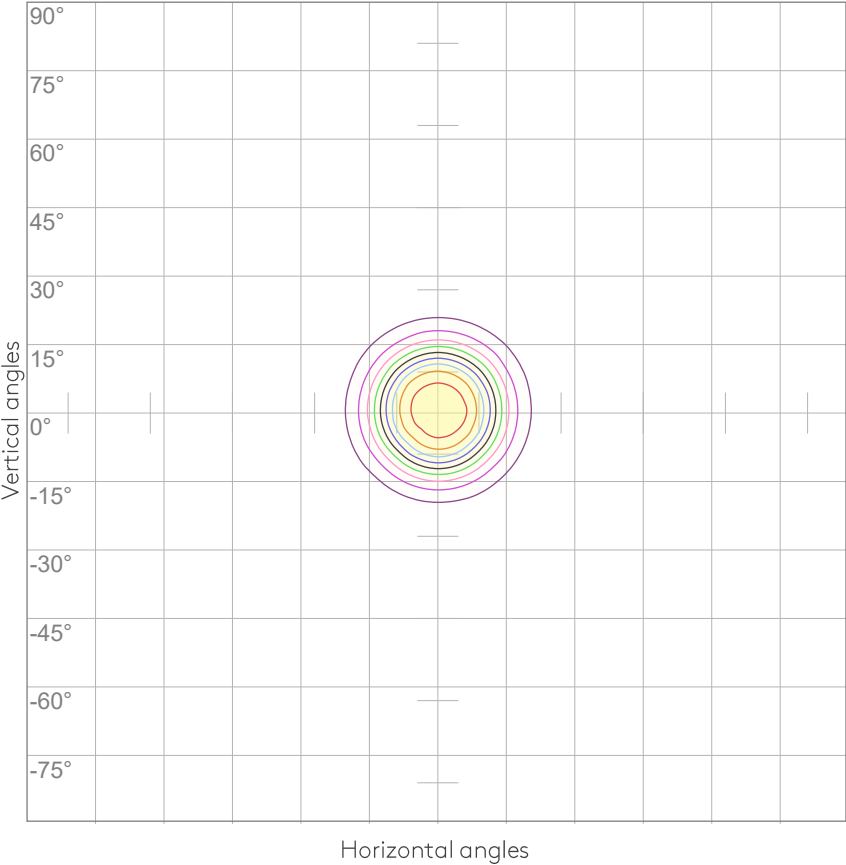
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3581	3514	3389	3216	2972	2627	2177	1672	1208	838	555	347	178	68	28	19	14	11	9	7
100%	98%	95%	90%	83%	73%	61%	47%	34%	23%	15%	10%	5%	2%	1%	1%	0%	0%	0%	0%

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°
3581	3551	3433	3264	3043	2718	2280	1780	1309	921	627	408	250	120	46	23	16	13	10	8
100%	99%	96%	91%	85%	76%	64%	50%	37%	26%	18%	11%	7%	3%	1%	1%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
28.1°	45.3°	53.2°	99.7%	99.4%

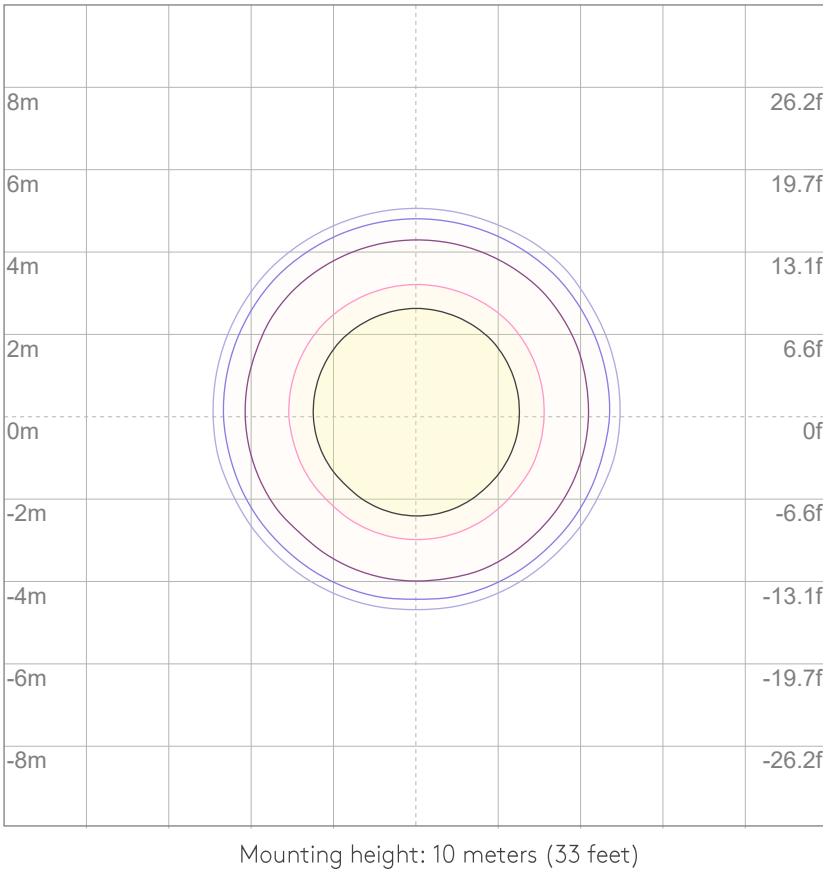
ISO CANDELA DIAGRAM



10%	358 cd
20%	716 cd
30%	1074 cd
40%	1432 cd
50%	1791 cd
60%	2149 cd
70%	2507 cd
80%	2865 cd
90%	3223 cd

Conditions:
Number of c-planes: 8
Candela at center: 3581 cd

ISO LUX DIAGRAM



3%	1.07 lx
5%	1.79 lx
10%	3.58 lx
30%	10.7 lx
50%	{LUX_10M50} lx

Conditions:
Number of c-planes: 8
Lux at center: 35.8 lx

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

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)..

TALLINN SURFACE - WITHOUT DIFFUSER

LIGHT PLANNING

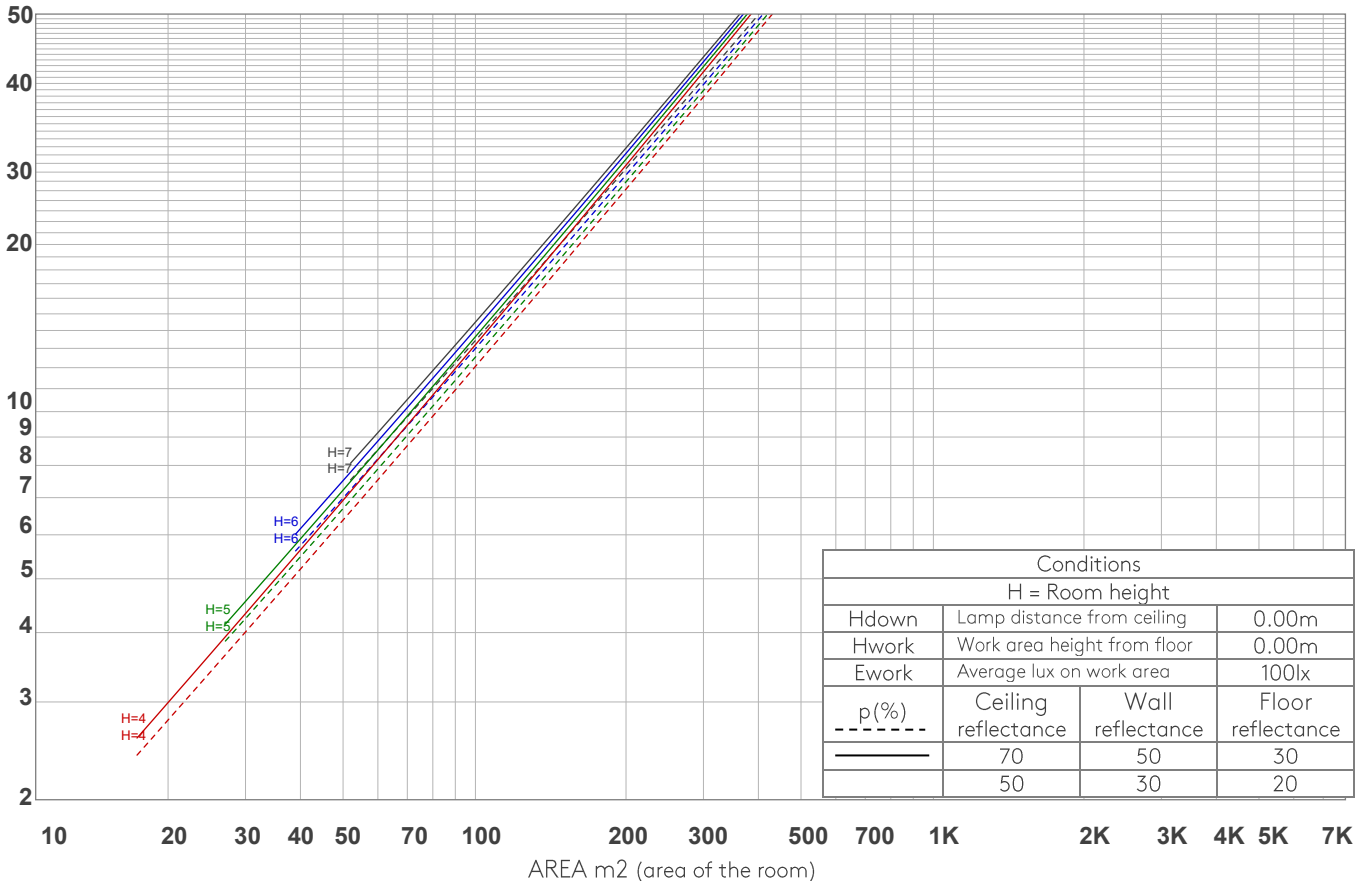
astro

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	101	100	99	98	97
2	112	108	105	103	110	106	104	102	103	101	99	100	99	97	98	96	95	94
3	108	104	100	98	106	103	99	97	100	97	95	98	96	94	96	94	92	91
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	93	91	90	89
5	102	97	93	90	101	96	92	90	94	91	89	93	90	88	91	89	87	86
6	100	94	90	87	98	93	89	87	92	88	86	90	88	85	89	87	85	84
7	97	91	87	84	96	90	87	84	89	86	84	88	85	83	87	85	83	82
8	94	88	84	82	94	88	84	82	87	84	81	86	83	81	85	83	81	80
9	92	86	82	79	91	85	82	79	85	81	79	84	81	79	83	81	79	78
10	90	84	80	77	89	83	80	77	83	79	77	82	79	77	81	79	77	76

LAMPS (number of lamps)

LUMINAIRE BUDGETARY DIAGRAM



ZONAL LUMEN SUMMARY

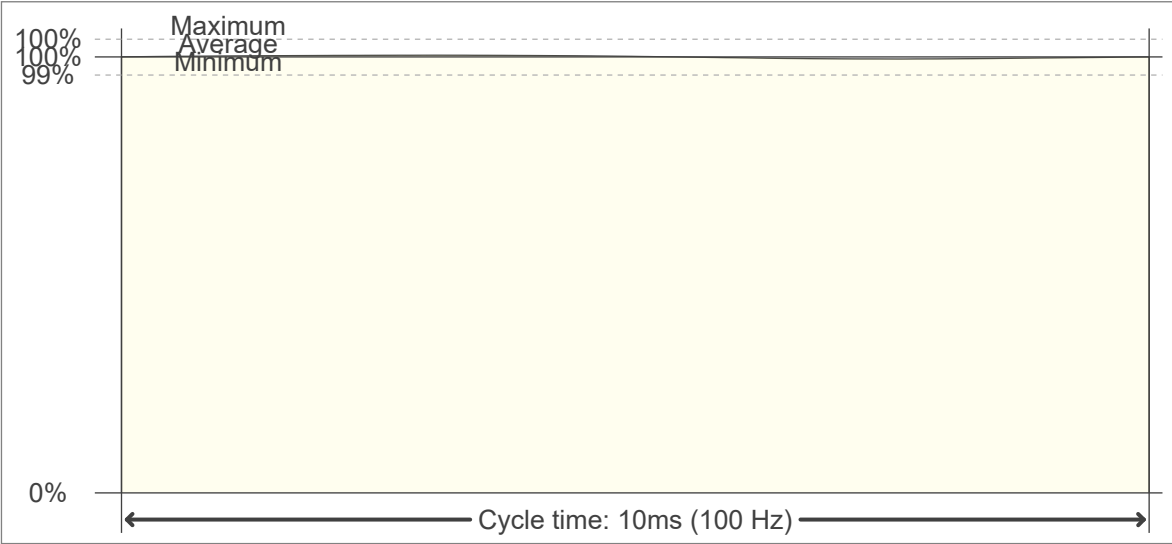
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
302 lm	423 lm	97.6 lm	7.50 lm	2.94 lm	1.06 lm	0.442 lm	0.108 lm	0.003 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.000 lm	0.010 lm	0.000 lm	0.027 lm	0.188 lm	0.443 lm	0.657 lm	0.504 lm	0.120 lm

FLICKER

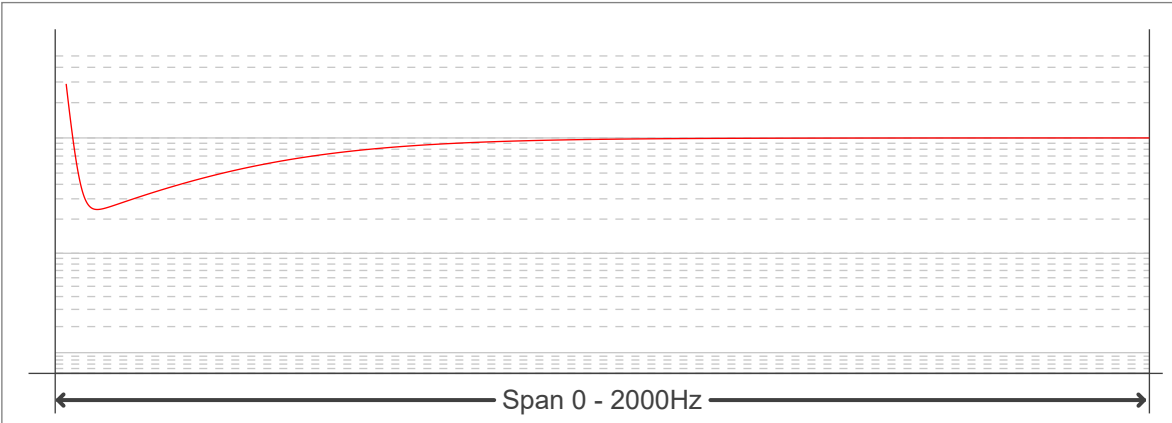
FLICKER CURVE (COMPLETE SAMPLED)



FLICKER FRAME (FRAME OF ONE FLICKER)



FLICKER FFT (FREQUENCY SCOPE OF FLICKER)



FLICKER RESULTS:

Flicker frequency:	100 Hz
Flicker index:	0
Flicker percentage:	0.48 %
SVM: (Visual flicker)	0.02

FLICKER CONDITIONS:

Sample rate:	20000 samples/second
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