

LED Recessed Ground light TERARACE Micro-1.5W-830-65



Light Output Ratio:	100.0%	
Luminaire Power:	1.574 W	
SHR Nominal:	1.00	Calculated using the TM5
SHR Maximum:	1.05	fine grid method.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason Long
Test Date: 2018-06-23

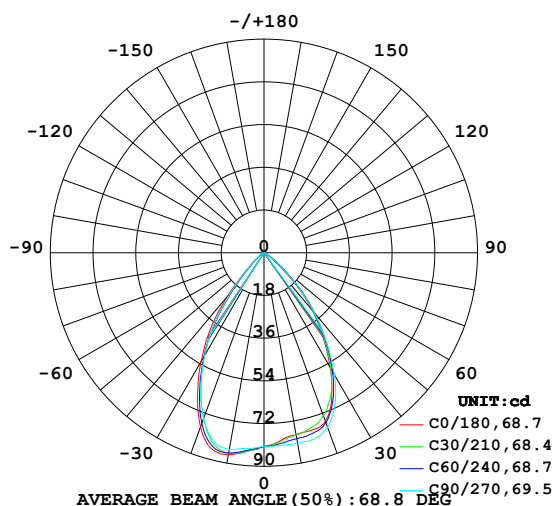
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 56%
Test Distance: 5.850m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

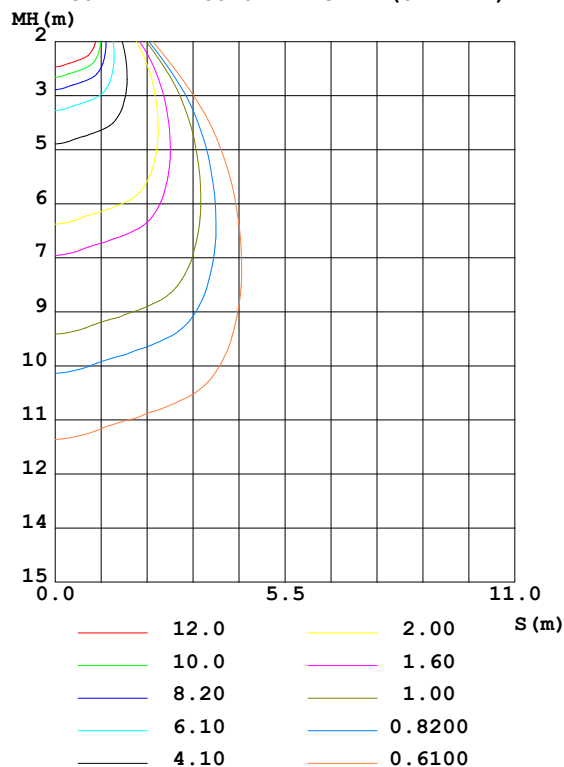
Test:U:24.00V I:0.0656A P:1.574W PF:1.000 Freq:0Hz Lamp Flux:102.403x1 lm		
NAME: TERARACE Micro-1.5W-830-65	TYPE: Recessed Ground light	SERIAL No.:
SPEC.: 3000K	DIM.: ϕ 28mm*H70mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 65.04 lm/W			
MODEL	CREE-3000K	I _{max} (cd)	86.84	S/MH (C0/180)	1.01
NOMINAL POWER (W)	1.5	LOR (%)	100.0	S/MH (C90/270)	0.99
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	102.40	η UP, DN (C0-180)	0.0, 53.1
NOMINAL FLUX (lm)	102.403	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 46.9
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	24	η down (%)	100.0	CIBSE SHR MAX	1.05

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



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ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	77.93	78.85	81.46	85.45	86.28	85.62	84.10	79.39	0- 10	7.836	7.836	7.65,7.65
20	75.65	74.67	78.27	80.12	78.20	75.81	74.36	73.33	10- 20	22.74	30.57	29.9,29.9
30	56.01	57.32	59.35	56.78	53.24	50.60	50.08	52.12	20- 30	30.25	60.83	59.4,59.4
40	31.56	33.08	32.96	29.47	23.82	19.58	21.36	26.41	30- 40	25.38	86.21	84.2,84.2
50	8.046	10.73	10.59	6.891	4.838	4.128	4.501	5.169	40- 50	11.91	98.13	95.8,95.8
60	1.502	2.138	2.278	1.607	1.316	1.167	1.189	1.275	50- 60	3.109	101.2	98.9,98.9
70	0.4465	0.5680	0.5917	0.4497	0.3711	0.3458	0.3234	0.3741	60- 70	0.8610	102.1	99.7,99.7
80	0.1205	0.1375	0.1556	0.1069	0.0851	0.0941	0.0743	0.1007	70- 80	0.2527	102.3	99.9,99.9
90	0.0131	0.0109	0.0153	0.0131	0.0087	0.0087	0.0088	0.0087	80- 90	0.0539	102.4	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 93.926 lm

%lum = 91.7%

%lamp = 91.7%

Conical surface Flux(120deg): 101.23 lm

%lum = 98.9%

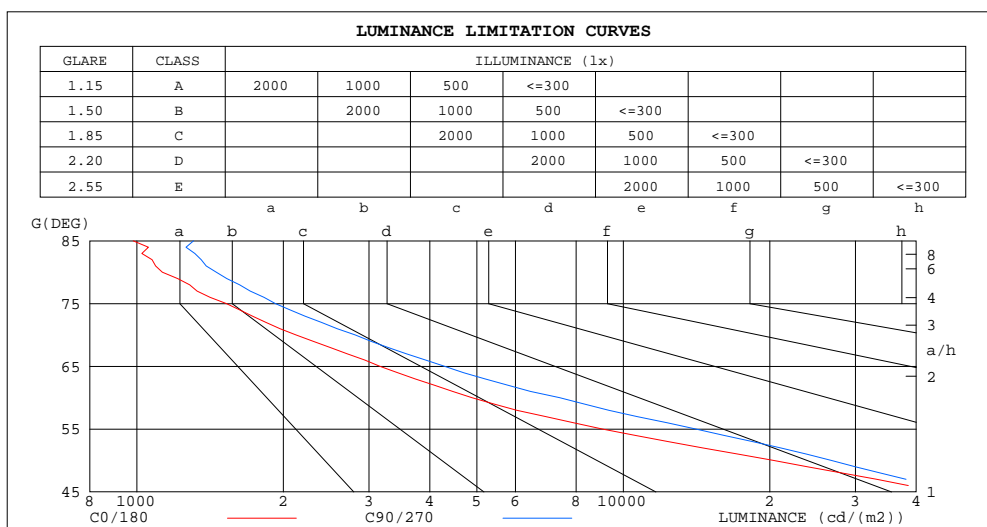
%lamp = 98.9%

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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

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SPEC.: 3000K	DIM.: $\phi 28\text{mm} \times H70\text{mm}$	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	982	1308
80	1128	1456
75	1527	1926
70	2124	2810
65	3159	4289
60	4885	7399
55	9057	14097
50	20360	26752
45	43925	47327

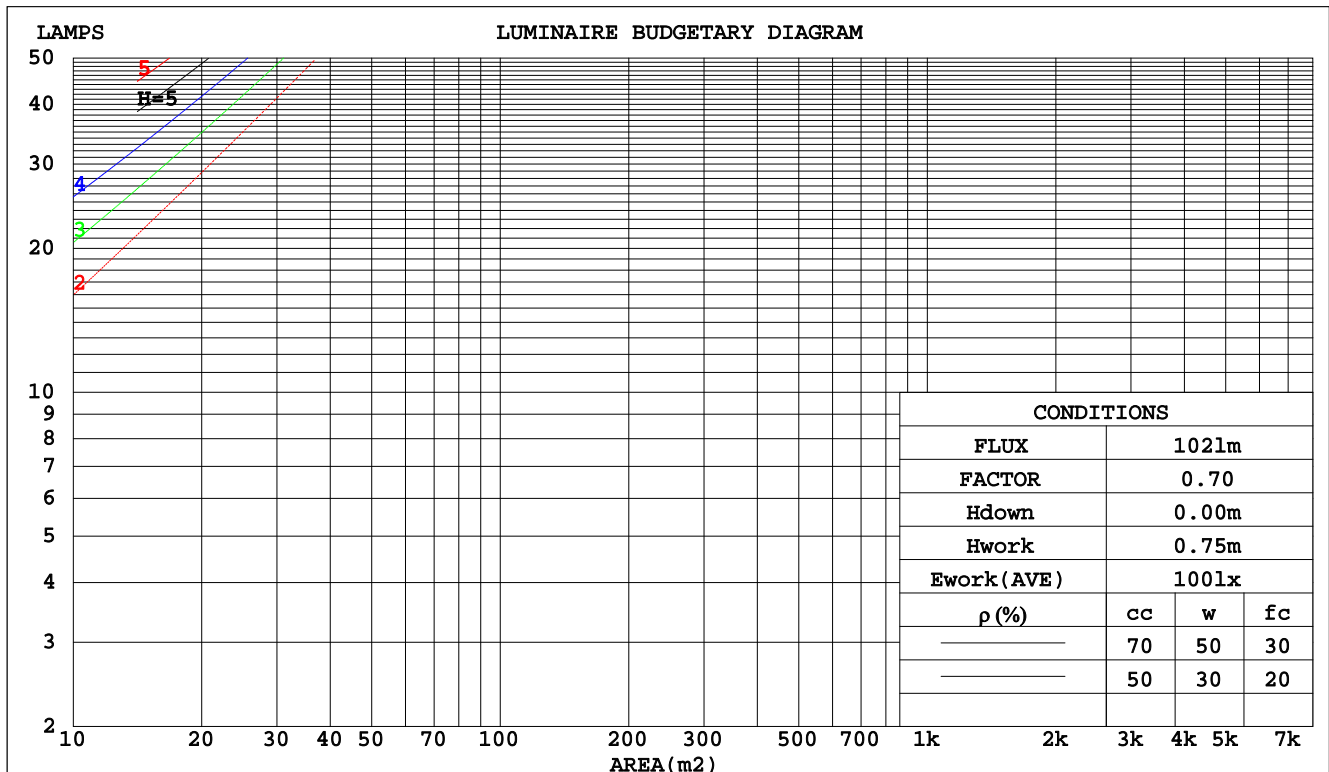
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CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	.00	.00	.98	.97	.97	.95	.94	.92
2.0	1.01	.97	.93	.00	.96	.92	.96	.93	.90	.93	.91	.88	.90	.88	.86	.85
3.0	.94	.88	.84	.92	.87	.83	.89	.85	.82	.87	.83	.80	.85	.82	.79	.77
4.0	.86	.80	.76	.85	.80	.75	.83	.78	.74	.81	.77	.73	.79	.76	.73	.71
5.0	.80	.74	.69	.79	.73	.69	.77	.72	.68	.76	.71	.67	.74	.70	.67	.65
6.0	.74	.68	.63	.74	.67	.63	.72	.67	.63	.71	.66	.62	.69	.65	.62	.60
7.0	.69	.63	.58	.69	.62	.58	.67	.62	.58	.66	.61	.57	.65	.60	.57	.55
8.0	.65	.58	.54	.64	.58	.54	.63	.57	.53	.62	.57	.53	.61	.56	.53	.51
9.0	.61	.54	.50	.60	.54	.50	.59	.54	.50	.58	.53	.49	.57	.53	.49	.48
10.0	.57	.51	.46	.56	.50	.46	.56	.50	.46	.55	.50	.46	.54	.49	.46	.45



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WEC AND CCEC

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ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.193	.110	.035	.187	.106	.034	.174	.100	.032	.162	.094	.030	.152	.088	.028		
2.0	.187	.103	.031	.181	.100	.031	.171	.095	.029	.161	.090	.028	.152	.086	.027		
3.0	.179	.095	.029	.174	.093	.028	.165	.089	.027	.157	.086	.026	.149	.082	.025		
4.0	.171	.089	.026	.167	.087	.026	.159	.084	.025	.151	.081	.025	.144	.078	.024		
5.0	.163	.083	.024	.159	.082	.024	.152	.079	.023	.146	.077	.023	.140	.075	.022		
6.0	.156	.078	.022	.152	.077	.022	.146	.075	.022	.140	.073	.021	.135	.071	.021		
7.0	.149	.073	.021	.146	.073	.021	.140	.071	.020	.135	.069	.020	.130	.068	.020		
8.0	.142	.069	.019	.139	.069	.019	.134	.067	.019	.130	.066	.019	.125	.064	.019		
9.0	.136	.066	.018	.133	.065	.018	.129	.064	.018	.125	.062	.018	.121	.061	.018		
10.0	.130	.062	.017	.128	.062	.017	.124	.061	.017	.120	.060	.017	.116	.058	.017		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.172	.157	.144	.147	.135	.124	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.158	.132	.111	.136	.114	.096	.093	.079	.067	.054	.046	.039	.017	.015	.013	
3.0	.147	.114	.087	.126	.098	.076	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.138	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.130	.088	.057	.111	.076	.050	.077	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.123	.079	.047	.105	.068	.041	.073	.048	.029	.042	.028	.017	.014	.009	.006	
7.0	.116	.072	.040	.100	.062	.035	.069	.043	.025	.040	.026	.015	.013	.008	.005	
8.0	.111	.065	.034	.095	.057	.030	.066	.040	.021	.038	.024	.013	.012	.008	.004	
9.0	.106	.060	.030	.091	.052	.026	.063	.037	.018	.037	.022	.011	.012	.007	.004	
10.0	.101	.056	.026	.087	.049	.023	.061	.034	.016	.035	.020	.010	.011	.007	.003	

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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 56%
Test Distance: 5.850m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.0656A P:1.574W PF:1.000 Freq:0Hz Lamp Flux:102.403x1 lm										
NAME: TERARACE Micro-1.5W-830-65					TYPE: Recessed Ground light			SERIAL No.:		
SPEC.: 3000K					DIM.: ϕ 28mm*H70mm					
MFR.: NEKO LIGHTING AG										
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	30.0	31.1	30.2	31.2	31.4	30.4	31.5	30.7	31.7	31.8
3H	29.8	30.8	30.1	31.0	31.2	30.3	31.3	30.6	31.5	31.7
4H	29.7	30.7	30.0	30.9	31.1	30.2	31.1	30.5	31.3	31.6
6H	29.7	30.5	30.0	30.8	31.0	30.1	31.0	30.4	31.2	31.5
8H	29.6	30.4	29.9	30.7	31.0	30.1	30.9	30.4	31.2	31.4
12H	29.6	30.4	29.9	30.6	30.9	30.0	30.8	30.4	31.1	31.4
4H 2H	29.8	30.7	30.1	30.9	31.2	30.2	31.1	30.5	31.4	31.6
3H	29.6	30.4	30.0	30.7	31.0	30.1	30.9	30.4	31.1	31.4
4H	29.6	30.3	29.9	30.6	30.9	30.0	30.7	30.4	31.0	31.3
6H	29.5	30.1	29.8	30.4	30.8	29.9	30.5	30.3	30.9	31.2
8H	29.4	30.0	29.8	30.3	30.7	29.9	30.4	30.3	30.8	31.2
12H	29.4	29.9	29.8	30.3	30.7	29.8	30.3	30.2	30.7	31.1
8H 4H	29.4	30.0	29.8	30.3	30.7	29.9	30.4	30.3	30.8	31.2
6H	29.3	29.8	29.8	30.2	30.6	29.8	30.3	30.2	30.6	31.1
8H	29.3	29.7	29.7	30.1	30.6	29.7	30.1	30.2	30.6	31.0
12H	29.2	29.6	29.7	30.0	30.5	29.7	30.0	30.2	30.5	31.0
12H 4H	29.4	29.9	29.8	30.3	30.7	29.8	30.3	30.2	30.7	31.1
6H	29.3	29.7	29.7	30.1	30.6	29.7	30.1	30.2	30.6	31.0
8H	29.2	29.6	29.7	30.0	30.5	29.7	30.0	30.2	30.5	31.0
Variations with the observer position at spacings:										
S = 1.0H	+ 2.4 / - 8.7					+ 2.3 / - 7.0				
1.5H	+ 3.1 / - 6.3					+ 2.9 / - 5.2				
2.0H	+ 5.7 / - 7.6					+ 5.2 / - 7.3				

CIE Pub.117, 102.4 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -7.9$)

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γ Range: 0 - 90DEG
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Humidity: 56%
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UTILIZATION FACTORS TABLE

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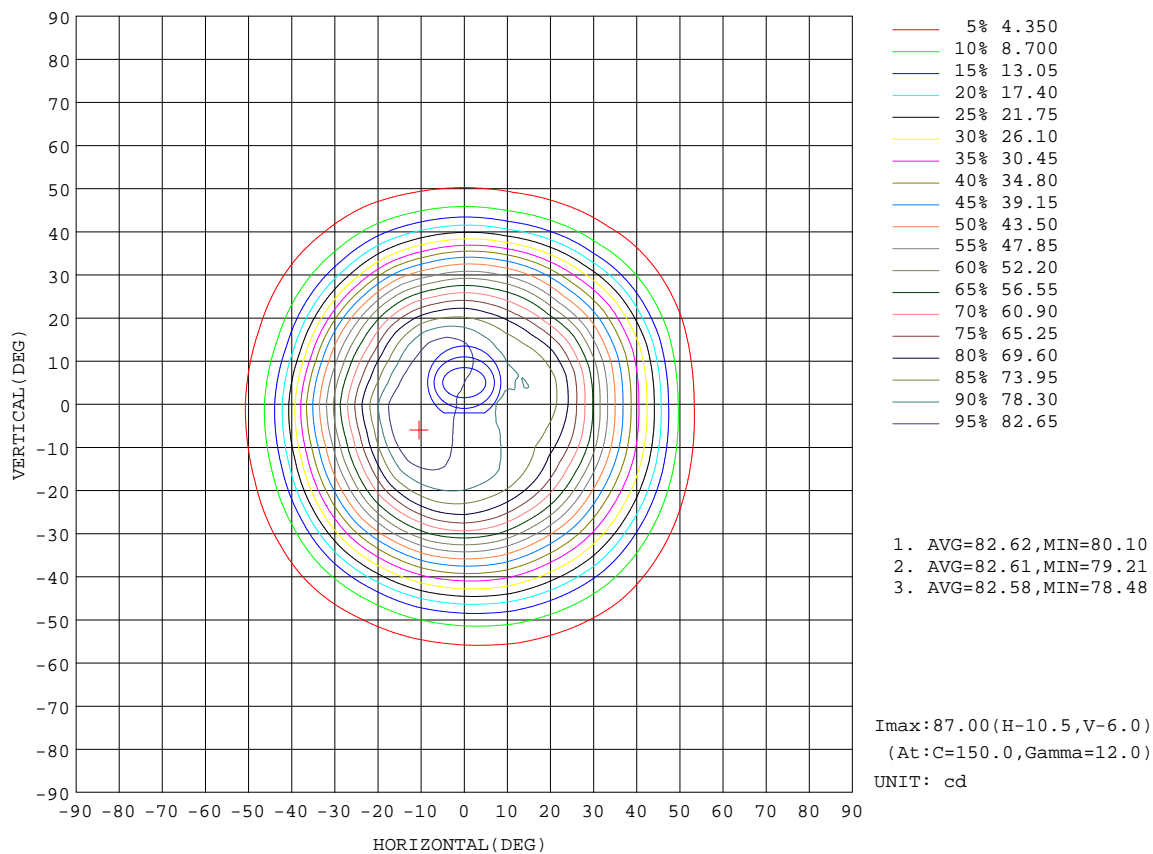
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	81	74	70	81	74	70	80	73	69	65
0.80	90	83	79	89	83	78	88	82	78	74
1.00	96	89	85	95	89	85	93	89	84	80
1.25	100	94	90	99	94	90	97	93	89	85
1.50	103	98	94	102	97	94	100	96	93	88
2.00	107	102	99	105	101	98	103	99	96	91
2.50	109	105	101	107	103	100	104	101	98	92
3.00	111	107	104	109	105	103	105	103	100	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	111	109	112	110	108	108	106	105	97
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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ISOCANDELA DIAGRAM

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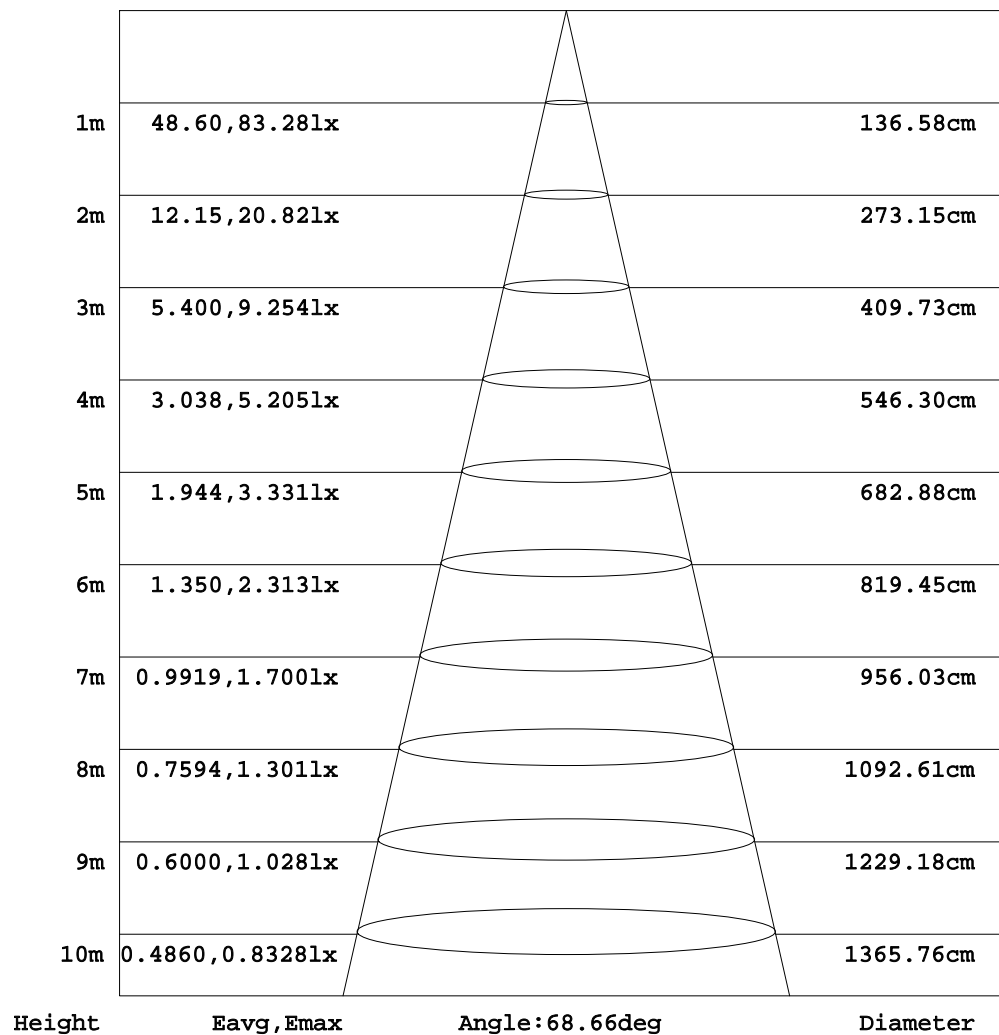
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AAI Figure

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Flux out: 74.86 lm



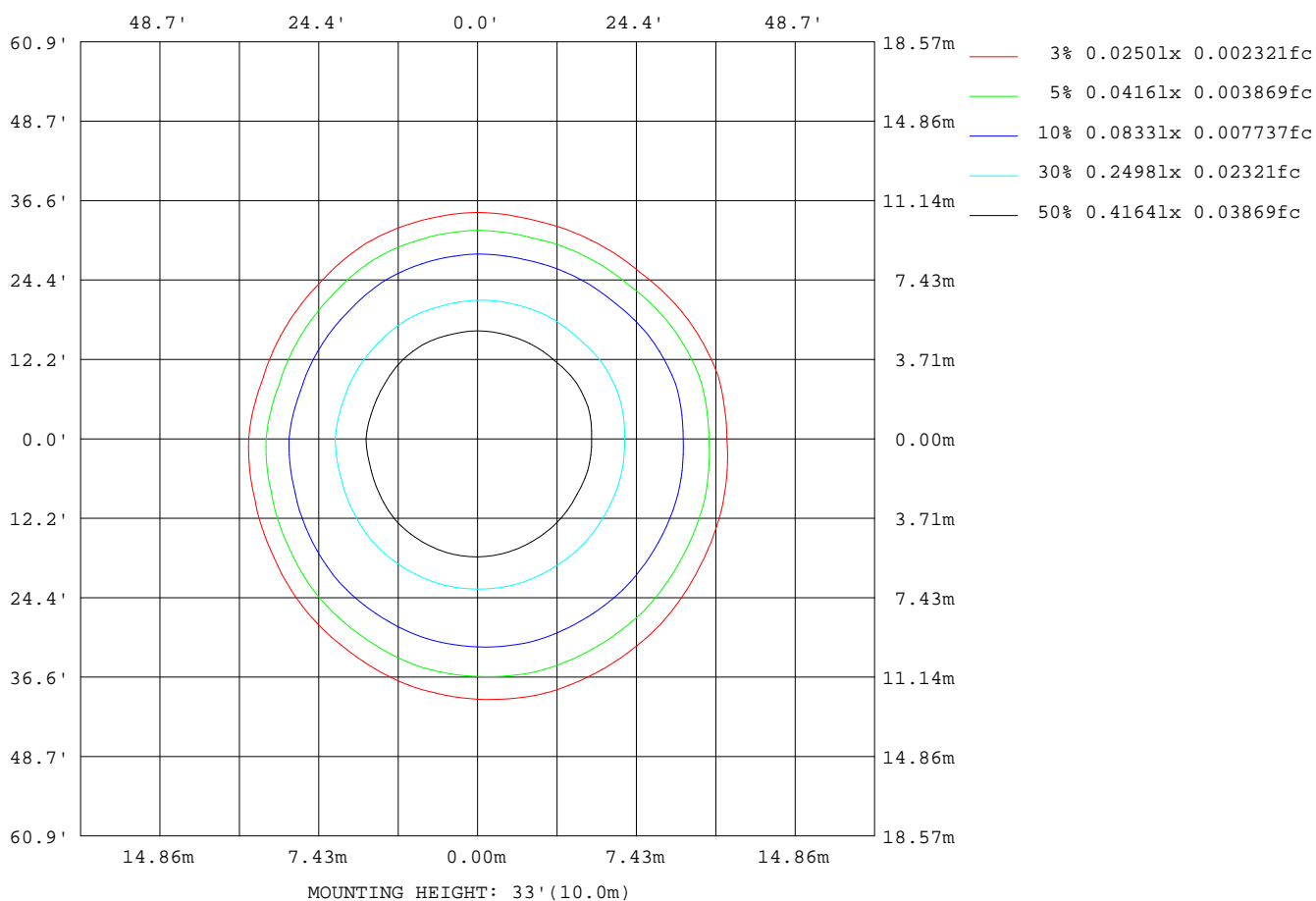
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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ISOLUX DIAGRAM

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LED Avg.L Report

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MFR.: NEKO LIGHTING AG		

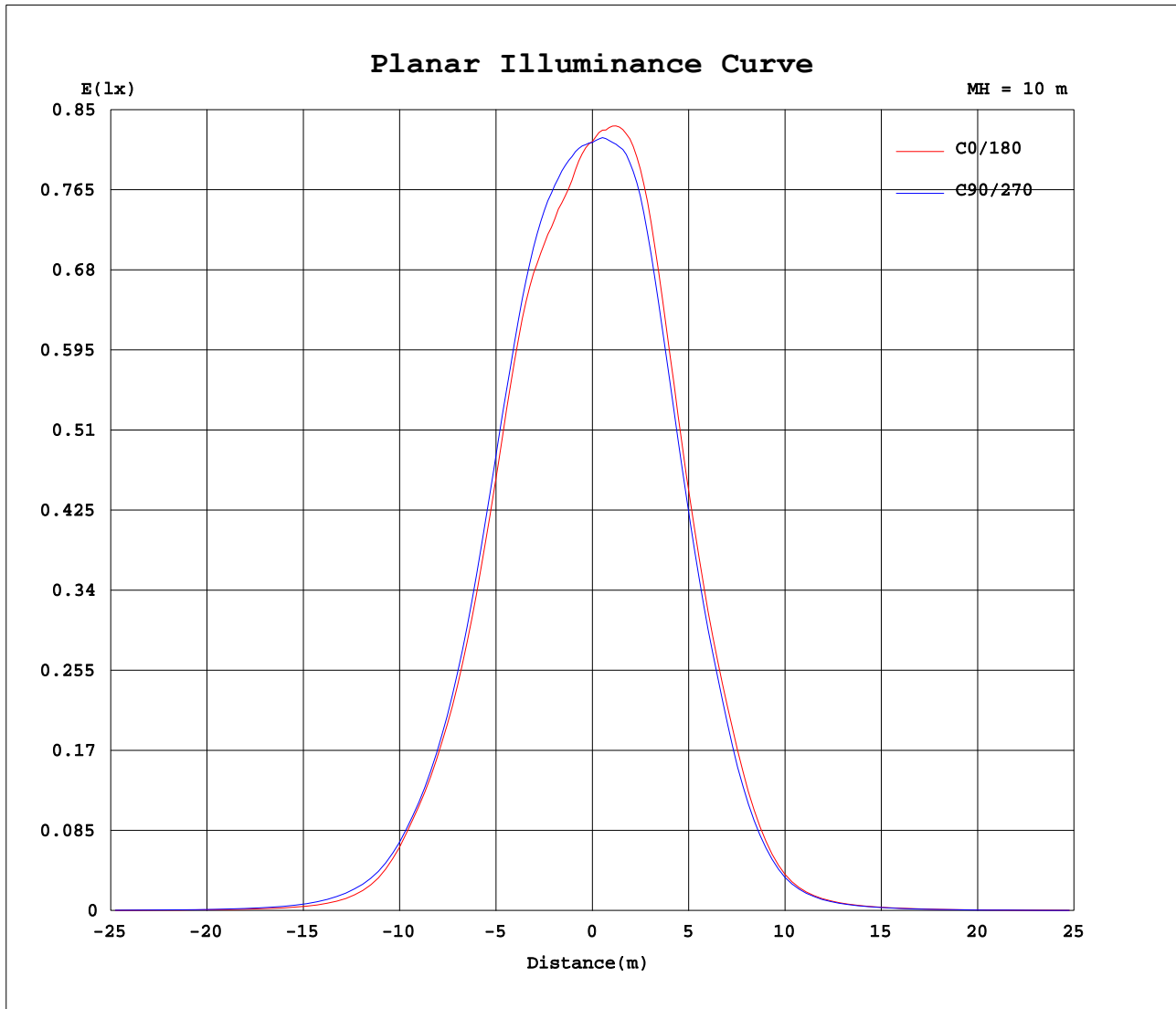
AvgL	cd/m2
L_0~180 (65) av	2948
L_0~180 (75) av	1353
L_0~180 (85) av	796
L_90~270 (65) av	3349
L_90~270 (75) av	1479
L_90~270 (85) av	918
L_45 (65) av	3154
L_45 (75) av	1421
L_45 (85) av	836

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason Long
Test Date: 2018-06-23

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 56%
Test Distance: 5.850m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason Long
Test Date: 2018-06-23

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 56%
Test Distance: 5.850m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [K=1.0000]
Remarks:

```