

PORTOFINO A-830-Z-10



Light Output Ratio:	100.0%	
Luminaire Power:	10.62 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason
Test Date: 2020-06-29

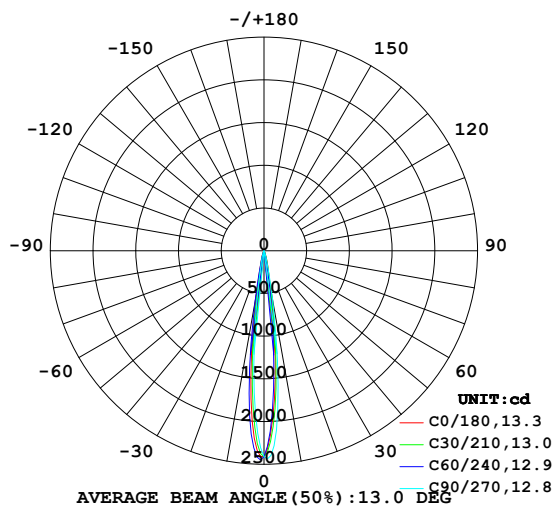
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 58%
Test Distance: 5.850m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

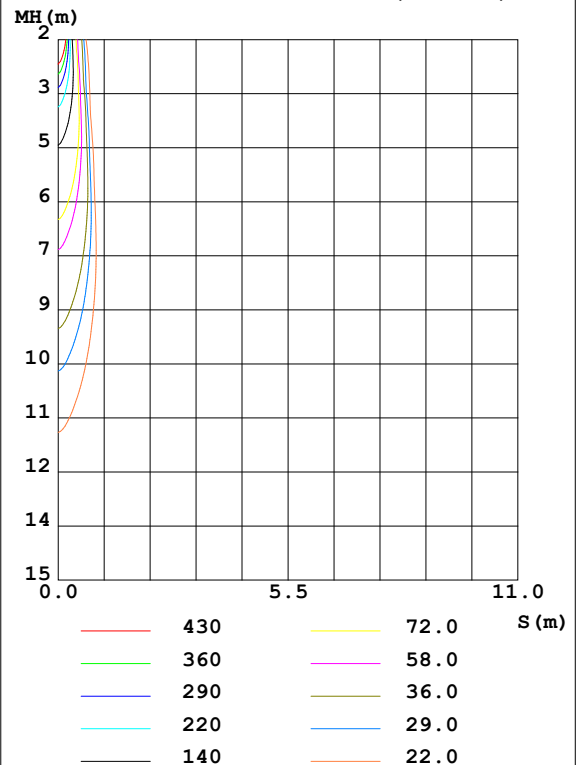
Test:U:221.1V I:0.0530A P:10.62W PF:0.9059 Freq:49.99Hz Lamp Flux:203.523x1 lm		
NAME: PORTOFINO A-830-Z-10	TYPE: Recessed Ground Light	SERIAL No.:
SPEC.: 3000K	DIM.: $\varnothing 70\text{mm} \times H135\text{mm}$	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 19.16 lm/W			
MODEL	3000K	I _{max} (cd)	3348	S/MH (C0/180)	0.23
NOMINAL POWER (W)	11	LOR (%)	100.0	S/MH (C90/270)	0.20
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	203.52	η UP, DN (C0-180)	0.0, 62.9
NOMINAL FLUX (lm)	203.523	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 37.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
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γ Range: 0 - 90DEG
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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	441.8	342.4	584.0	1692	510.9	567.5	320.9	212.0	0- 10	126.6	126.6	62.2,62.2
20	65.19	39.04	47.00	105.6	67.74	47.89	34.84	32.46	10- 20	54.55	181.1	89,89
30	15.41	8.353	9.717	19.81	18.79	10.83	8.029	8.488	20- 30	12.76	193.9	95.3,95.3
40	4.935	3.195	3.589	6.244	6.608	4.508	3.308	3.294	30- 40	4.866	198.8	97.7,97.7
50	2.275	1.729	1.890	2.799	2.653	2.753	1.949	1.747	40- 50	2.510	201.3	98.9,98.9
60	1.008	0.7214	1.038	1.549	1.014	1.180	1.050	0.7768	50- 60	1.462	202.7	99.6,99.6
70	0.2215	0.1703	0.2469	0.4238	0.1933	0.2559	0.2315	0.1893	60- 70	0.5679	203.3	99.9,99.9
80	0.0786	0.0608	0.0967	0.1115	0.0602	0.1015	0.0724	0.0752	70- 80	0.1528	203.5	100,100
90	0.0183	0.0183	0.0290	0.0437	0.0201	0.0325	0.0217	0.0218	80- 90	0.0541	203.5	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): 200.2 lm

%lum = 98.4%

%lamp = 98.4%

Conical surface Flux(120deg): 202.75 lm

%lum = 99.6%

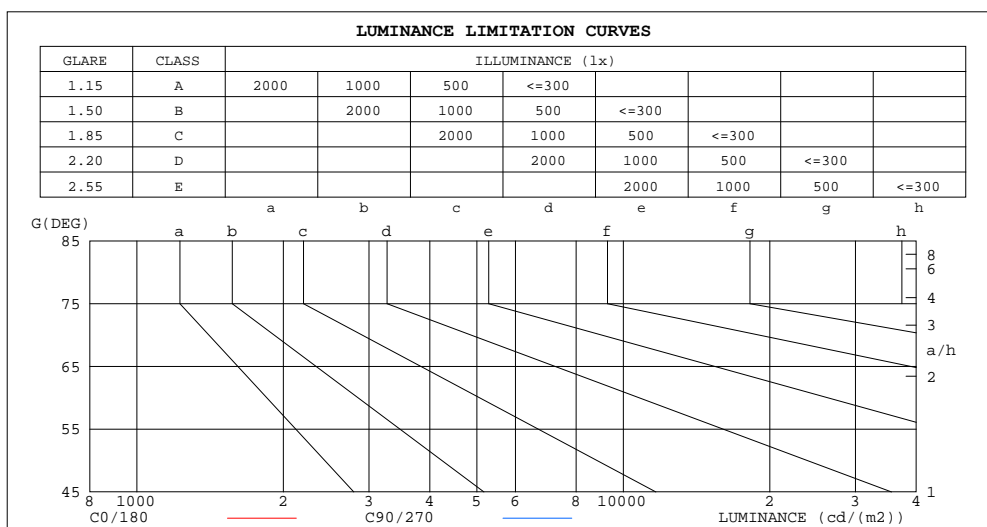
%lamp = 99.6%

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Temperature:25.3DEG
Operators:Jason
Test Date:2020-06-29

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:5.850m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:221.1V I:0.0530A P:10.62W PF:0.9059 Freq:49.99Hz Lamp Flux:203.523x1 lm		
NAME: PORTOFINO A-830-Z-10	TYPE: Recessed Ground Light	SERIAL No.:
SPEC.: 3000K	DIM.: $\phi 70\text{mm} \times H135\text{mm}$	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	6	6
80	5	5
75	5	5
70	7	6
65	13	10
60	22	17
55	30	22
50	39	24
45	50	29

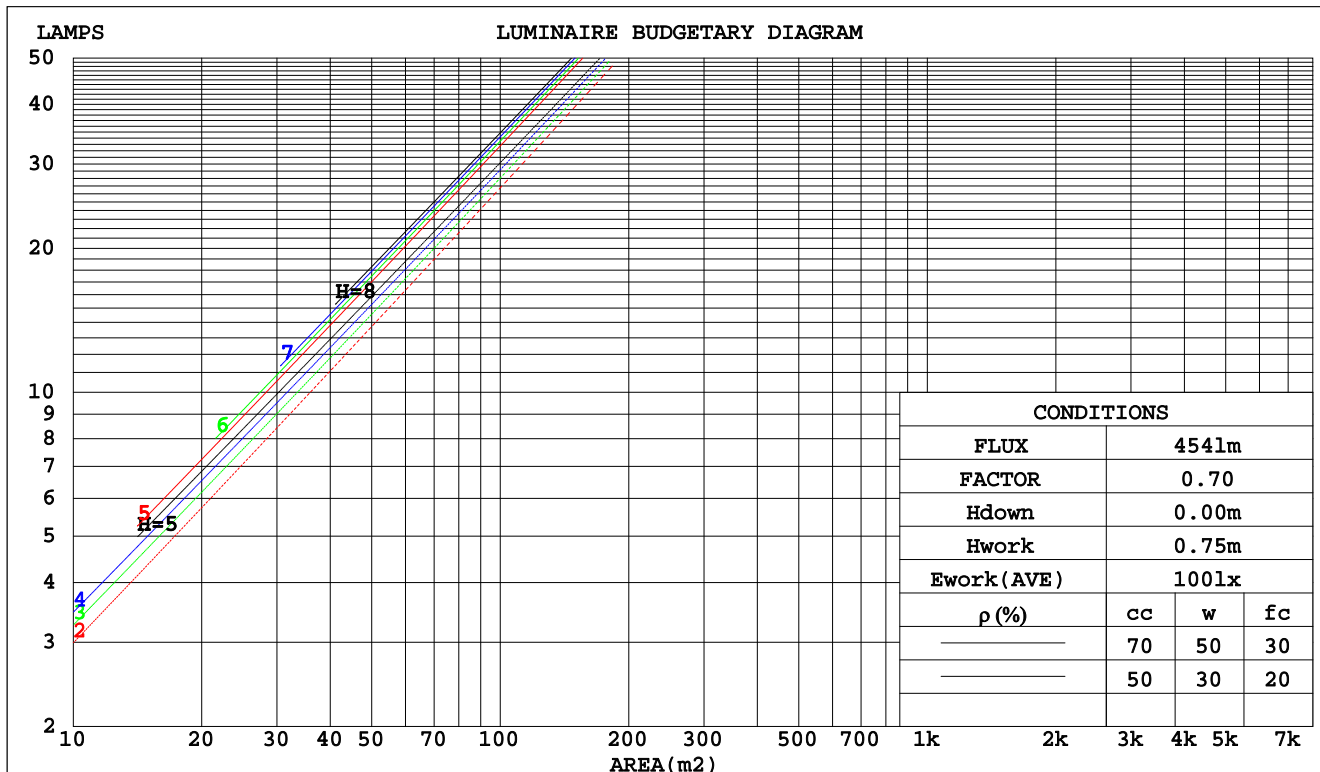
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CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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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	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	1.14	1.12	1.11	1.12	1.10	1.09	1.08	1.07	1.06	1.04	1.03	1.02	1.01	1.00	.99	.98
2.0	1.09	1.07	1.05	1.08	1.05	1.03	1.05	1.03	1.01	1.02	1.00	.99	.99	.98	.97	.96
3.0	1.06	1.03	1.00	1.04	1.02	.99	1.02	.00	.98	.00	.98	.96	.98	.96	.95	.94
4.0	1.03	.99	.97	1.02	.99	.96	.00	.97	.95	.98	.96	.94	.96	.95	.93	.92
5.0	.00	.97	.94	.99	.96	.94	.98	.95	.93	.96	.94	.92	.95	.93	.91	.90
6.0	.98	.94	.92	.97	.94	.92	.96	.93	.91	.95	.92	.90	.94	.91	.90	.89
7.0	.96	.92	.90	.95	.92	.90	.94	.91	.89	.93	.91	.89	.92	.90	.88	.88
8.0	.94	.90	.88	.93	.90	.88	.92	.90	.88	.92	.89	.87	.91	.89	.87	.86
9.0	.92	.89	.87	.92	.89	.87	.91	.88	.86	.90	.88	.86	.90	.88	.86	.85
10.0	.91	.87	.85	.90	.87	.85	.90	.87	.85	.89	.87	.85	.89	.86	.85	.84



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WEC AND CCEC

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MFR.: NEKO LIGHTING AG		

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	.120	.068	.022	.114	.065	.021	.101	.058	.019	.090	.052	.017	.080	.046	.015		
2.0	.110	.060	.018	.104	.058	.018	.094	.052	.016	.085	.048	.015	.077	.043	.014		
3.0	.101	.054	.016	.096	.052	.016	.088	.048	.015	.080	.044	.014	.073	.041	.013		
4.0	.093	.048	.014	.090	.047	.014	.083	.044	.013	.076	.041	.012	.070	.038	.012		
5.0	.087	.044	.013	.084	.043	.012	.078	.040	.012	.072	.038	.011	.067	.036	.011		
6.0	.081	.041	.012	.078	.040	.011	.073	.038	.011	.069	.036	.011	.064	.034	.010		
7.0	.076	.038	.011	.074	.037	.010	.070	.035	.010	.066	.034	.010	.062	.032	.009		
8.0	.072	.035	.010	.070	.034	.010	.066	.033	.009	.063	.032	.009	.059	.030	.009		
9.0	.068	.033	.009	.066	.032	.009	.063	.031	.009	.060	.030	.009	.057	.029	.008		
10.0	.064	.031	.009	.063	.030	.008	.060	.029	.008	.057	.029	.008	.055	.028	.008		

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	.167	.158	.149	.143	.135	.129	.098	.093	.089	.056	.054	.052	.018	.017	.017		
2.0	.148	.133	.120	.127	.114	.104	.087	.079	.072	.050	.046	.042	.016	.015	.014		
3.0	.132	.113	.098	.113	.098	.085	.078	.068	.060	.045	.040	.035	.014	.013	.012		
4.0	.118	.098	.082	.102	.084	.071	.070	.059	.050	.040	.034	.030	.013	.011	.010		
5.0	.107	.085	.069	.092	.073	.060	.063	.051	.042	.037	.030	.025	.012	.010	.008		
6.0	.097	.075	.058	.084	.065	.051	.058	.045	.036	.033	.027	.021	.011	.009	.007		
7.0	.089	.066	.050	.077	.057	.044	.053	.040	.031	.031	.024	.018	.010	.008	.006		
8.0	.082	.059	.043	.071	.051	.038	.049	.036	.027	.028	.021	.016	.009	.007	.005		
9.0	.076	.053	.038	.065	.046	.033	.045	.032	.023	.026	.019	.014	.009	.006	.005		
10.0	.070	.048	.033	.061	.042	.029	.042	.029	.021	.025	.017	.012	.008	.006	.004		

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C Interval: 15.0DEG
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 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 58%
Test Distance: 5.850m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:221.1V I:0.0530A P:10.62W PF:0.9059 Freq:49.99Hz Lamp Flux:203.523x1 lm										
NAME: PORTOFINO A-830-Z-10					TYPE: Recessed Ground Light			SERIAL No.:		
SPEC.: 3000K					DIM.: ϕ 70mm*H135mm					
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	-3.1	-2.6	-2.9	-2.4	-2.3	-5.4	-4.9	-5.2	-4.7	-4.6
3H	-3.0	-2.5	-2.8	-2.4	-2.2	-5.3	-4.8	-5.1	-4.6	-4.5
4H	-3.1	-2.6	-2.8	-2.4	-2.2	-5.3	-4.9	-5.1	-4.7	-4.5
6H	-3.1	-2.7	-2.8	-2.4	-2.2	-5.4	-4.9	-5.1	-4.7	-4.5
8H	-3.1	-2.7	-2.9	-2.5	-2.2	-5.4	-4.9	-5.1	-4.7	-4.5
12H	-3.2	-2.7	-2.9	-2.5	-2.2	-5.4	-5.0	-5.1	-4.7	-4.5
4H 2H	-3.1	-2.7	-2.9	-2.5	-2.3	-5.3	-4.8	-5.0	-4.6	-4.4
3H	-3.1	-2.6	-2.8	-2.4	-2.1	-5.2	-4.8	-4.9	-4.5	-4.3
4H	-3.1	-2.7	-2.8	-2.4	-2.1	-5.2	-4.8	-4.9	-4.6	-4.3
6H	-3.2	-2.8	-2.8	-2.5	-2.1	-5.3	-4.9	-4.9	-4.6	-4.2
8H	-3.2	-2.9	-2.8	-2.5	-2.2	-5.3	-4.9	-4.9	-4.6	-4.2
12H	-3.2	-2.9	-2.8	-2.5	-2.2	-5.3	-5.0	-4.9	-4.6	-4.2
8H 4H	-3.2	-2.9	-2.9	-2.6	-2.2	-5.3	-5.0	-5.0	-4.7	-4.3
6H	-3.3	-3.0	-2.9	-2.6	-2.2	-5.4	-5.1	-4.9	-4.7	-4.3
8H	-3.3	-3.1	-2.9	-2.6	-2.2	-5.4	-5.1	-4.9	-4.7	-4.3
12H	-3.3	-3.1	-2.9	-2.7	-2.2	-5.4	-5.2	-4.9	-4.7	-4.3
12H 4H	-3.3	-3.0	-2.9	-2.6	-2.2	-5.4	-5.1	-5.0	-4.7	-4.3
6H	-3.3	-3.1	-2.9	-2.7	-2.2	-5.4	-5.2	-5.0	-4.7	-4.3
8H	-3.4	-3.1	-2.9	-2.7	-2.2	-5.4	-5.2	-4.9	-4.8	-4.3
Variations with the observer position at spacings:										
S = 1.0H	+ 2.1 / - 2.1					+ 1.2 / - 1.4				
1.5H	+ 3.1 / - 2.3					+ 0.9 / - 1.2				
2.0H	+ 2.9 / - 3.5					+ 1.9 / - 2.6				

CIE Pub.117, 203.5 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -5.5$)

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 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 58%
Test Distance: 5.850m [K=1.0000]
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UTILIZATION FACTORS TABLE

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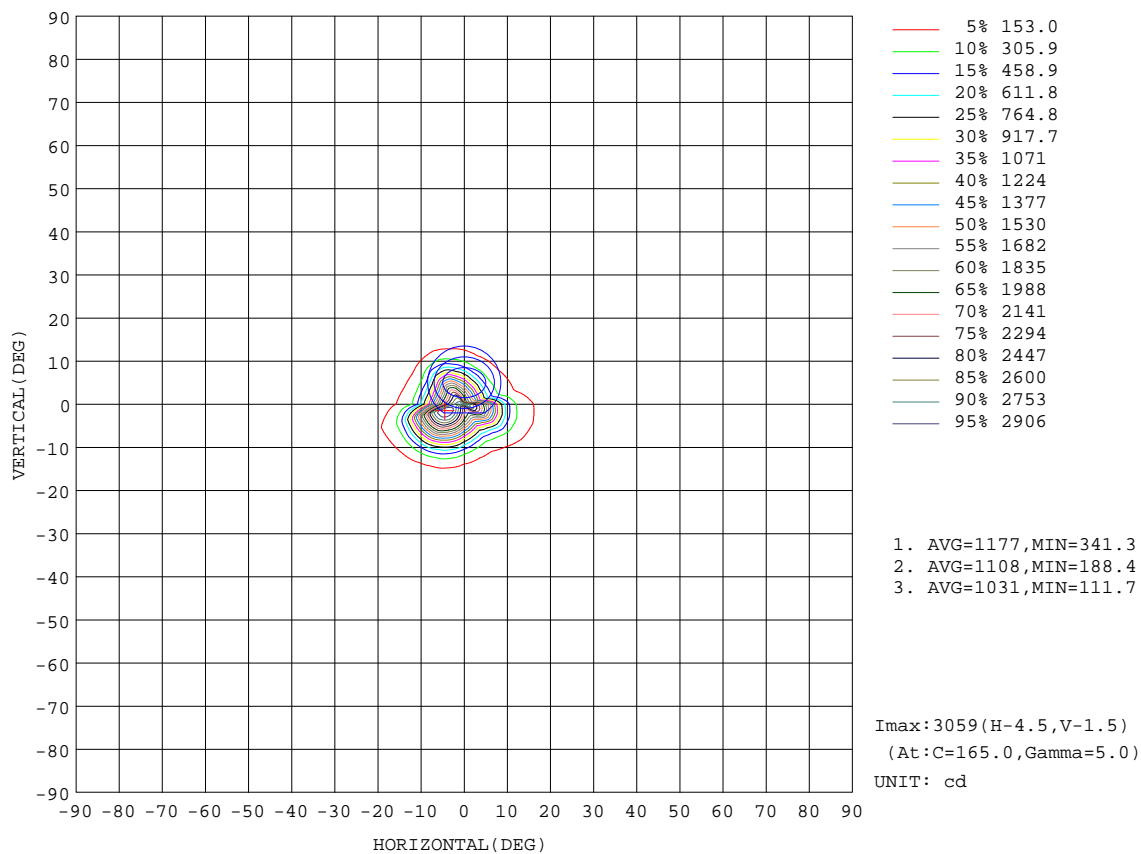
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	90	84	81	90	84	81	89	84	81	77
0.80	97	92	88	97	91	88	95	91	88	85
1.00	101	96	93	100	95	92	99	95	92	88
1.25	105	100	97	104	99	96	102	98	96	92
1.50	107	103	100	106	102	99	104	101	98	94
2.00	109	106	103	108	105	102	105	103	100	95
2.50	111	108	105	109	106	104	106	104	102	96
3.00	112	109	107	111	108	106	107	105	103	97
4.00	114	112	110	112	110	108	109	107	106	99
5.00	116	113	112	113	112	110	110	108	107	100
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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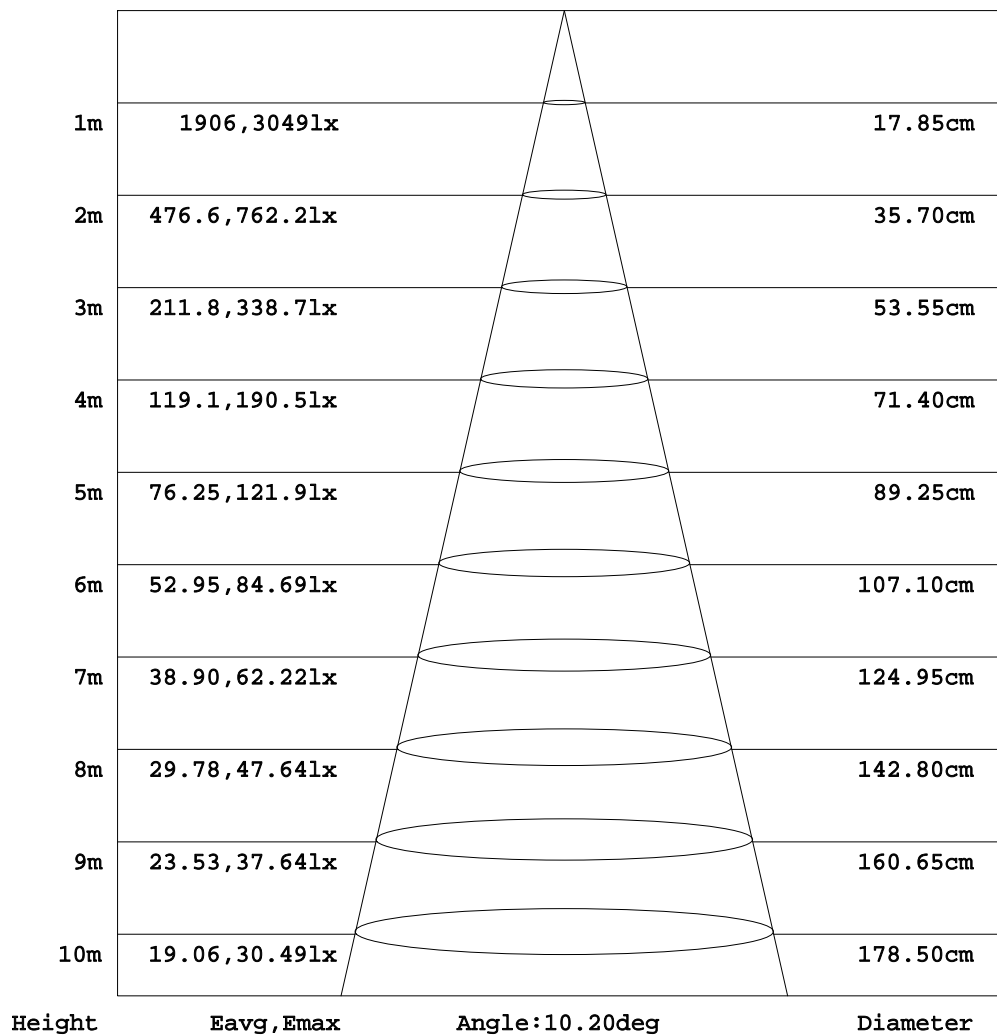
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AAI Figure

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Flux out: 66.16 lm



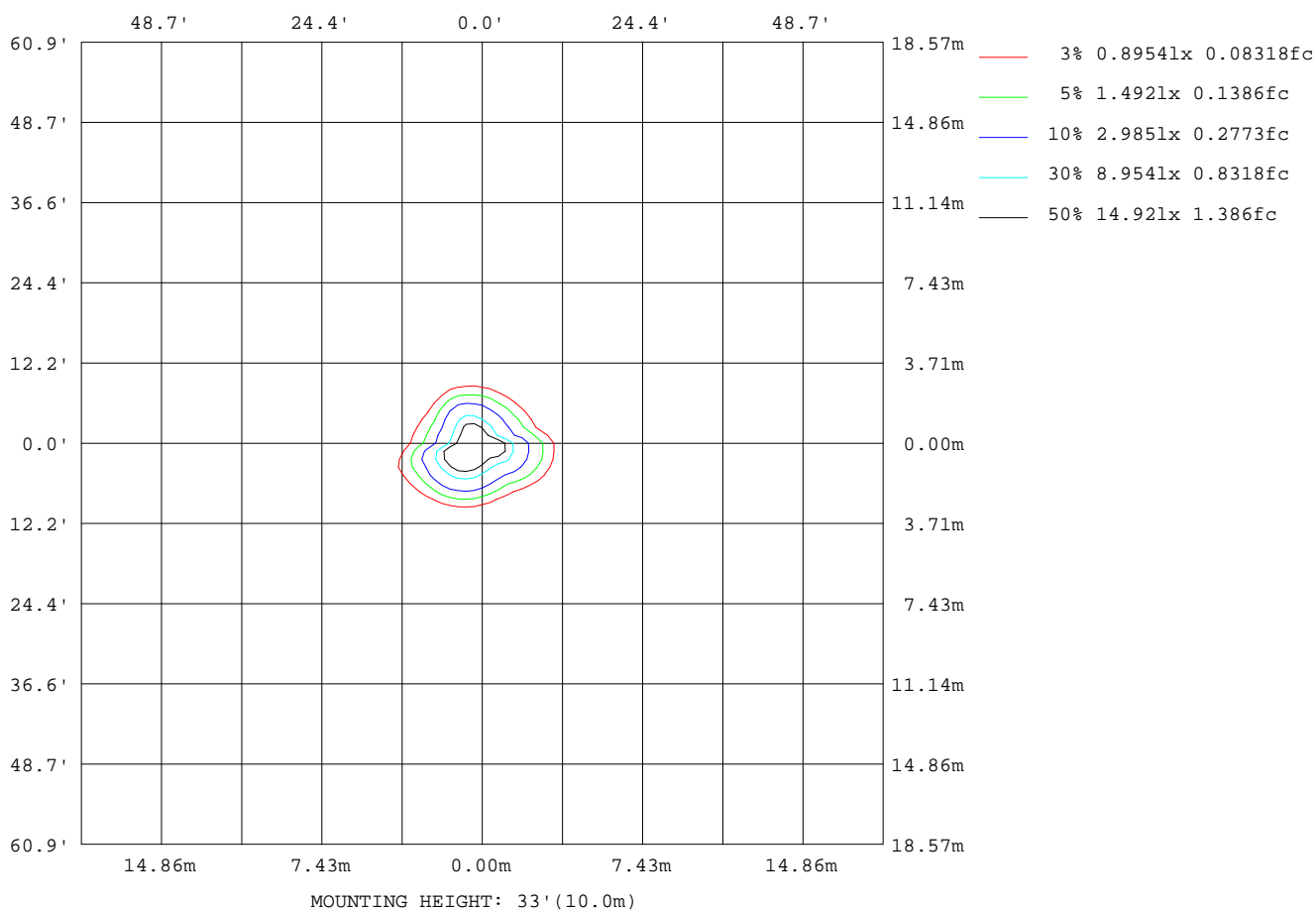
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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ISOLUX DIAGRAM

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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 58%
Test Distance: 5.850m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:221.1V I:0.0530A P:10.62W PF:0.9059 Freq:49.99Hz Lamp Flux:203.523x1 lm		
NAME: PORTOFINO A-830-Z-10	TYPE: Recessed Ground Light	SERIAL No.:
SPEC.: 3000K	DIM.: ϕ 70mm*H135mm	
MFR.: NEKO LIGHTING AG		

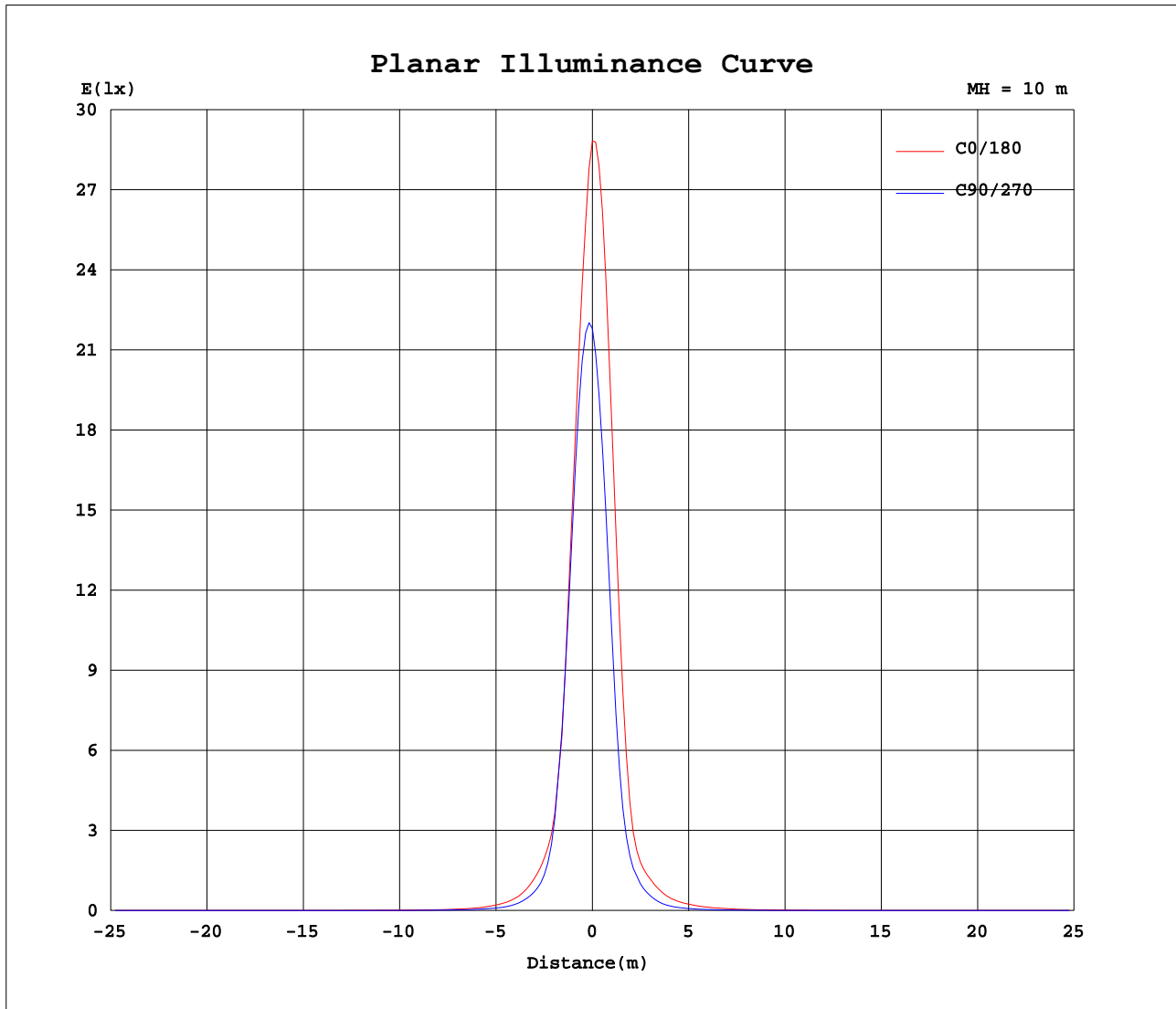
AvgL	cd/m2
L_0~180 (65) av	11
L_0~180 (75) av	4
L_0~180 (85) av	4
L_90~270 (65) av	11
L_90~270 (75) av	5
L_90~270 (85) av	5
L_45 (65) av	12
L_45 (75) av	5
L_45 (85) av	5

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason
Test Date: 2020-06-29

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 58%
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
Test Date: 2020-06-29

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 58%
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:58%
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:58%
Test Distance:5.850m [K=1.0000]
Remarks:

```