

PEPPER400-30W-935

Light Output Ratio:	100.0%	
Luminaire Power:	28.42 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.30	fine grid method.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jasoan
Test Date: 2022-08-01

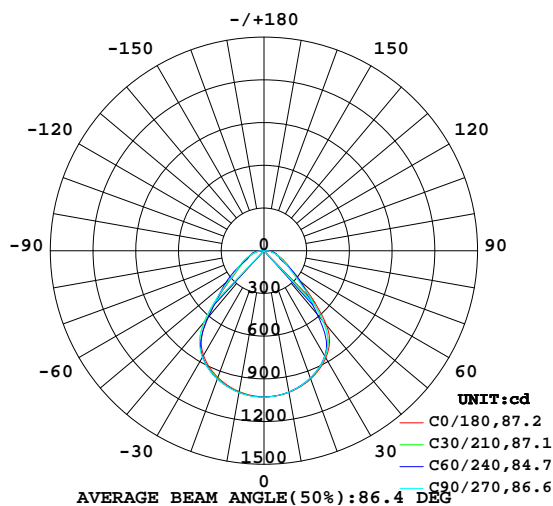
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 58%
Test Distance: 8.967m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

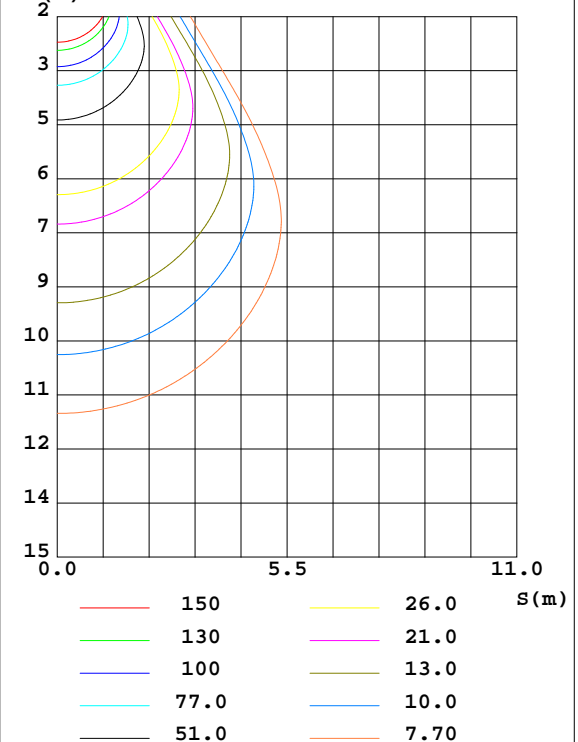
Test:U:221.0V I:0.1303A P:28.42W PF:0.9868 Freq:49.99Hz Lamp Flux:2100.3x1 lm		
NAME: PEPPER400-30W-935	TYPE:Downlight	SERIAL No.:
SPEC.:3500K	DIM.: L400mm*W400mm*H45mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 73.89 lm/W			
MODEL	3500K	I _{max} (cd)	1029	S/MH(C0/180)	1.22
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	2100.3	η UP,DN(C0-180)	0.0,49.5
NOMINAL FLUX(lm)	2100.3	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.30

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	1010	1008	1008	1007	1004	1009	1011	1013	0- 10	97.20	97.20	4.63,4.63
20	958.2	952.8	951.4	949.6	947.1	955.7	958.1	961.5	10- 20	278.3	375.5	17.9,17.9
30	868.6	857.4	856.1	851.3	849.4	861.2	865.4	871.6	20- 30	420.6	796.1	37.9,37.9
40	682.9	604.0	640.2	624.4	616.2	621.7	646.3	688.5	30- 40	480.9	1277	60.8,60.8
50	323.2	323.6	300.8	294.2	295.9	329.2	315.1	327.5	40- 50	356.1	1633	77.8,77.8
60	186.4	160.7	173.1	167.2	181.4	174.8	188.9	173.9	50- 60	206.1	1839	87.6,87.6
70	110.2	125.0	105.5	98.65	106.7	131.6	111.3	105.9	60- 70	134.4	1974	94,94
80	62.17	69.34	57.92	53.08	54.99	69.13	60.09	61.55	70- 80	90.93	2065	98.3,98.3
90	1.581	0.4124	0.4124	0.3965	0.7508	0.7296	0.8195	1.903	80- 90	35.70	2100	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): 1478.7 lm

%lum = 70.4%

%lamp = 70.4%

Conical surface Flux(120deg): 1839.3 lm

%lum = 87.6%

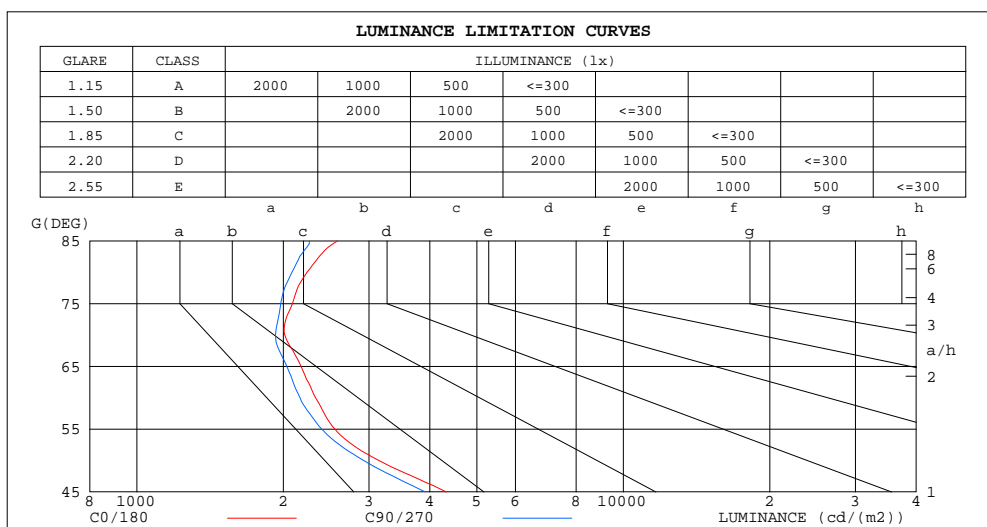
%lamp = 87.6%

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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:221.0V I:0.1303A P:28.42W PF:0.9868 Freq:49.99Hz Lamp Flux:2100.3x1 lm		
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SPEC.:3500K	DIM.: L400mm*W400mm*H45mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2585	2265
80	2238	2085
75	2088	1977
70	2014	1927
65	2175	2034
60	2330	2164
55	2552	2399
50	3143	2925
45	4326	3917

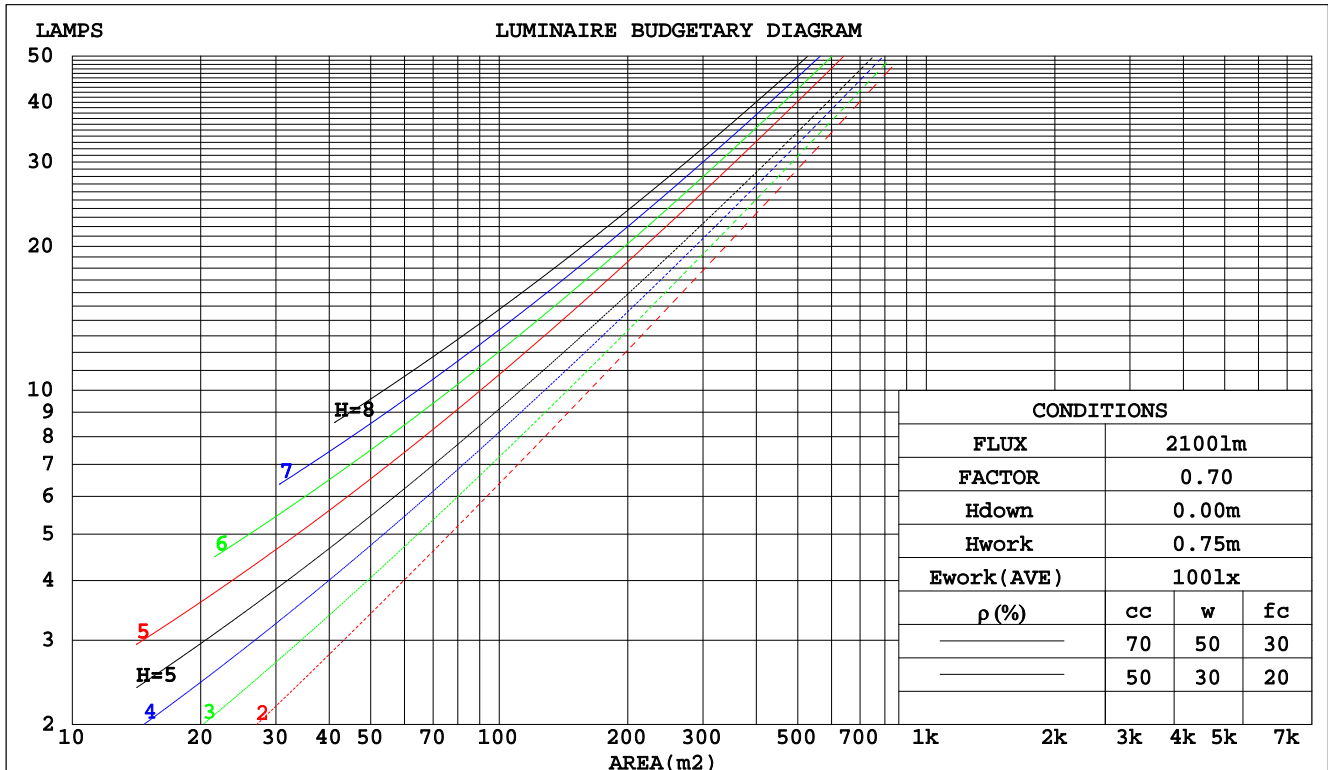
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CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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SPEC.:3500K	DIM.: L400mm*W400mm*H45mm	
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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	1.06	1.02	.99	1.04	1.00	.97	.00	.97	.94	.96	.94	.92	.92	.90	.89	.87
2.0	.95	.89	.84	.93	.87	.83	.89	.85	.81	.86	.82	.79	.83	.80	.77	.75
3.0	.85	.78	.72	.83	.77	.71	.81	.75	.70	.78	.73	.69	.75	.71	.68	.66
4.0	.77	.69	.63	.75	.68	.63	.73	.67	.62	.71	.65	.61	.69	.64	.60	.58
5.0	.70	.62	.56	.68	.61	.55	.66	.60	.55	.65	.59	.54	.63	.58	.54	.52
6.0	.63	.55	.50	.63	.55	.49	.61	.54	.49	.59	.53	.49	.58	.52	.48	.46
7.0	.58	.50	.45	.57	.50	.44	.56	.49	.44	.55	.48	.44	.53	.48	.44	.42
8.0	.54	.46	.40	.53	.45	.40	.52	.45	.40	.50	.44	.40	.49	.44	.40	.38
9.0	.49	.42	.37	.49	.42	.37	.48	.41	.37	.47	.41	.36	.46	.40	.36	.34
10.0	.46	.39	.34	.45	.38	.34	.44	.38	.33	.44	.38	.33	.43	.37	.33	.32



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WEC AND CCEC

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SPEC.:3500K	DIM.: L400mm*W400mm*H45mm	
MFR.: NEKO LIGHTING AG		

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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.267	.152	.048	.260	.148	.047	.247	.142	.045	.235	.136	.044	.224	.130	.042		
2.0	.251	.138	.042	.245	.135	.042	.234	.130	.040	.223	.125	.039	.214	.121	.038		
3.0	.234	.125	.037	.229	.123	.037	.219	.119	.036	.210	.115	.035	.201	.112	.035		
4.0	.218	.114	.033	.214	.112	.033	.205	.109	.032	.197	.106	.032	.189	.103	.031		
5.0	.204	.104	.030	.200	.103	.030	.192	.100	.029	.185	.098	.029	.178	.095	.029		
6.0	.191	.096	.027	.188	.095	.027	.181	.093	.027	.174	.091	.027	.168	.089	.026		
7.0	.180	.089	.025	.176	.088	.025	.170	.086	.025	.165	.084	.025	.159	.083	.024		
8.0	.169	.083	.023	.166	.082	.023	.161	.080	.023	.156	.079	.023	.151	.077	.023		
9.0	.160	.077	.022	.157	.077	.021	.152	.075	.021	.148	.074	.021	.143	.073	.021		
10.0	.151	.073	.020	.149	.072	.020	.144	.071	.020	.140	.070	.020	.136	.069	.020		

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.177	.157	.138	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.167	.132	.103	.143	.114	.089	.098	.079	.062	.056	.046	.036	.018	.015	.012	
3.0	.158	.114	.079	.135	.098	.069	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.149	.100	.063	.128	.087	.055	.088	.060	.038	.051	.035	.023	.016	.012	.007	
5.0	.142	.090	.051	.122	.077	.044	.084	.054	.031	.049	.032	.019	.016	.010	.006	
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.122	.068	.031	.105	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.117	.063	.027	.100	.055	.023	.070	.038	.017	.041	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.096	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
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γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:221.0V I:0.1303A P:28.42W PF:0.9868 Freq:49.99Hz Lamp Flux:2100.3x1 lm										
NAME: PEPPER400-30W-935					TYPE:Downlight			SERIAL No.:		
SPEC.:3500K					DIM.: L400mm*W400mm*H45mm					
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	12.7	14.0	13.0	14.2	14.4	12.7	14.0	12.9	14.2	14.4
3H	13.4	14.7	13.7	14.9	15.1	13.8	15.0	14.1	15.2	15.5
4H	14.0	15.1	14.3	15.4	15.6	14.3	15.5	14.6	15.7	16.0
6H	14.5	15.6	14.8	15.9	16.1	14.8	15.9	15.2	16.2	16.5
8H	14.8	15.8	15.1	16.1	16.4	15.1	16.1	15.4	16.4	16.7
12H	15.0	16.0	15.3	16.3	16.6	15.2	16.3	15.6	16.5	16.8
4H 2H	13.0	14.2	13.3	14.4	14.7	12.9	14.1	13.2	14.4	14.6
3H	14.0	15.0	14.4	15.3	15.6	14.3	15.3	14.6	15.6	15.9
4H	14.7	15.6	15.1	16.0	16.3	15.1	16.0	15.4	16.3	16.6
6H	15.4	16.3	15.8	16.6	17.0	15.8	16.7	16.2	17.0	17.4
8H	15.8	16.5	16.2	16.9	17.3	16.2	16.9	16.6	17.3	17.7
12H	16.1	16.8	16.5	17.2	17.6	16.4	17.1	16.9	17.5	17.9
8H 4H	15.0	15.8	15.5	16.2	16.6	15.4	16.1	15.8	16.5	16.9
6H	16.0	16.6	16.4	17.0	17.4	16.4	17.1	16.9	17.5	17.9
8H	16.4	17.0	16.9	17.4	17.8	16.9	17.5	17.4	17.9	18.4
12H	16.8	17.3	17.3	17.7	18.2	17.3	17.8	17.8	18.3	18.7
12H 4H	15.1	15.8	15.5	16.2	16.6	15.4	16.1	15.8	16.5	16.9
6H	16.1	16.7	16.6	17.1	17.5	16.5	17.1	17.0	17.5	18.0
8H	16.6	17.1	17.1	17.5	18.0	17.1	17.6	17.6	18.1	18.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.3 / - 0.5				
1.5H	+ 0.6 / - 0.4					+ 0.3 / - 0.5				
2.0H	+ 1.0 / - 0.4					+ 0.6 / - 0.4				

CIE Pub.117, 2100 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 2.6$)

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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
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Remarks:

UTILIZATION FACTORS TABLE

Test:U:221.0V I:0.1303A P:28.42W PF:0.9868 Freq:49.99Hz Lamp Flux:2100.3x1 lm		
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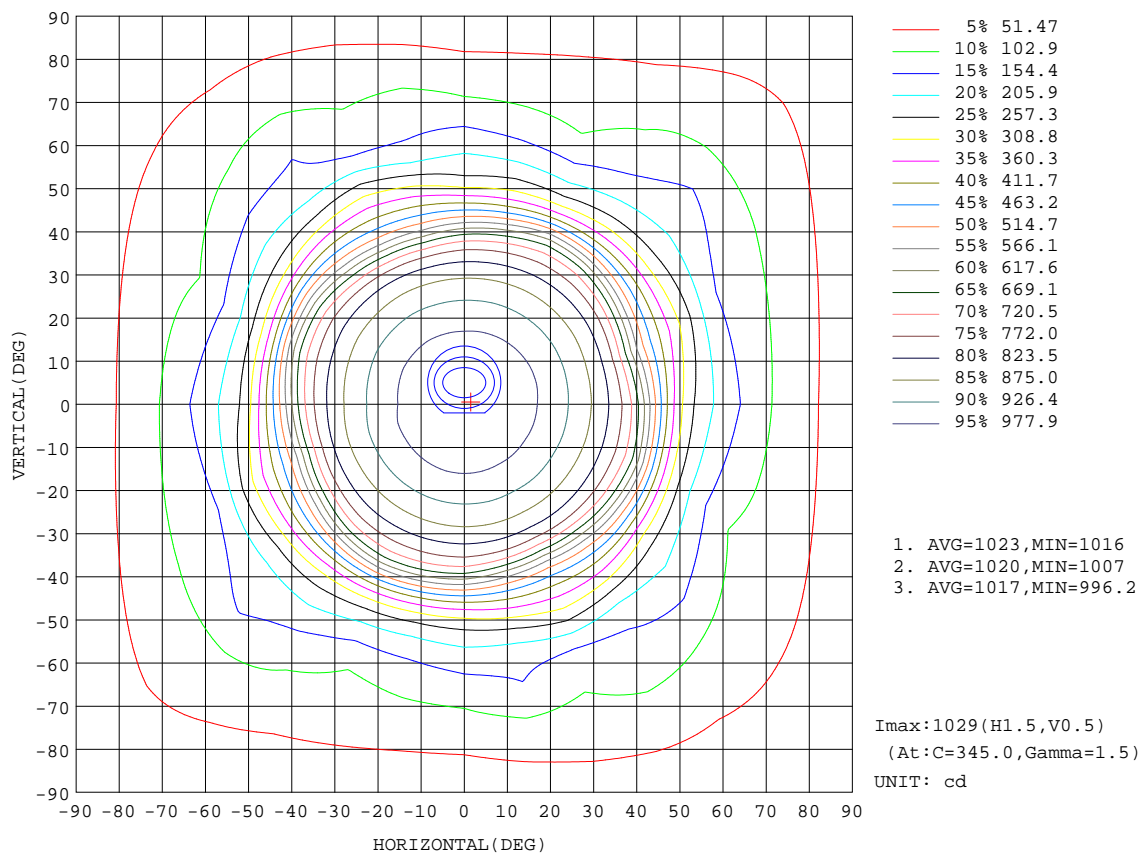
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	67	57	51	67	57	51	66	57	51	46
0.80	77	67	61	76	67	61	74	66	60	55
1.00	84	75	69	83	74	69	81	75	68	62
1.25	90	82	76	89	81	75	87	80	75	68
1.50	94	86	81	93	86	80	90	84	79	73
2.00	100	93	88	98	92	87	95	90	85	78
2.50	103	97	92	101	95	91	97	93	89	81
3.00	106	100	95	104	98	94	100	96	92	84
4.00	109	104	100	106	102	99	102	99	96	88
5.00	111	107	103	108	105	102	104	101	99	90
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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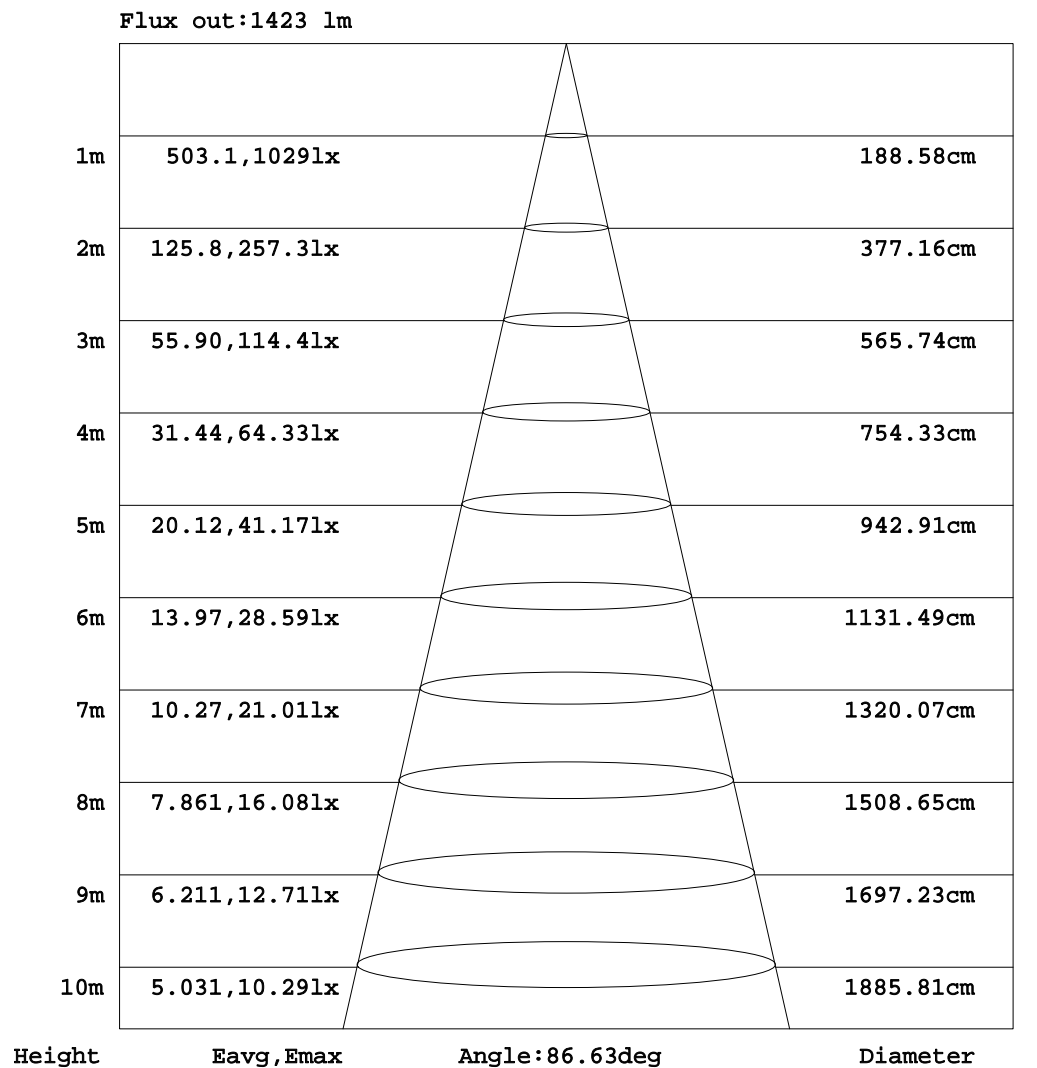


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AAI Figure

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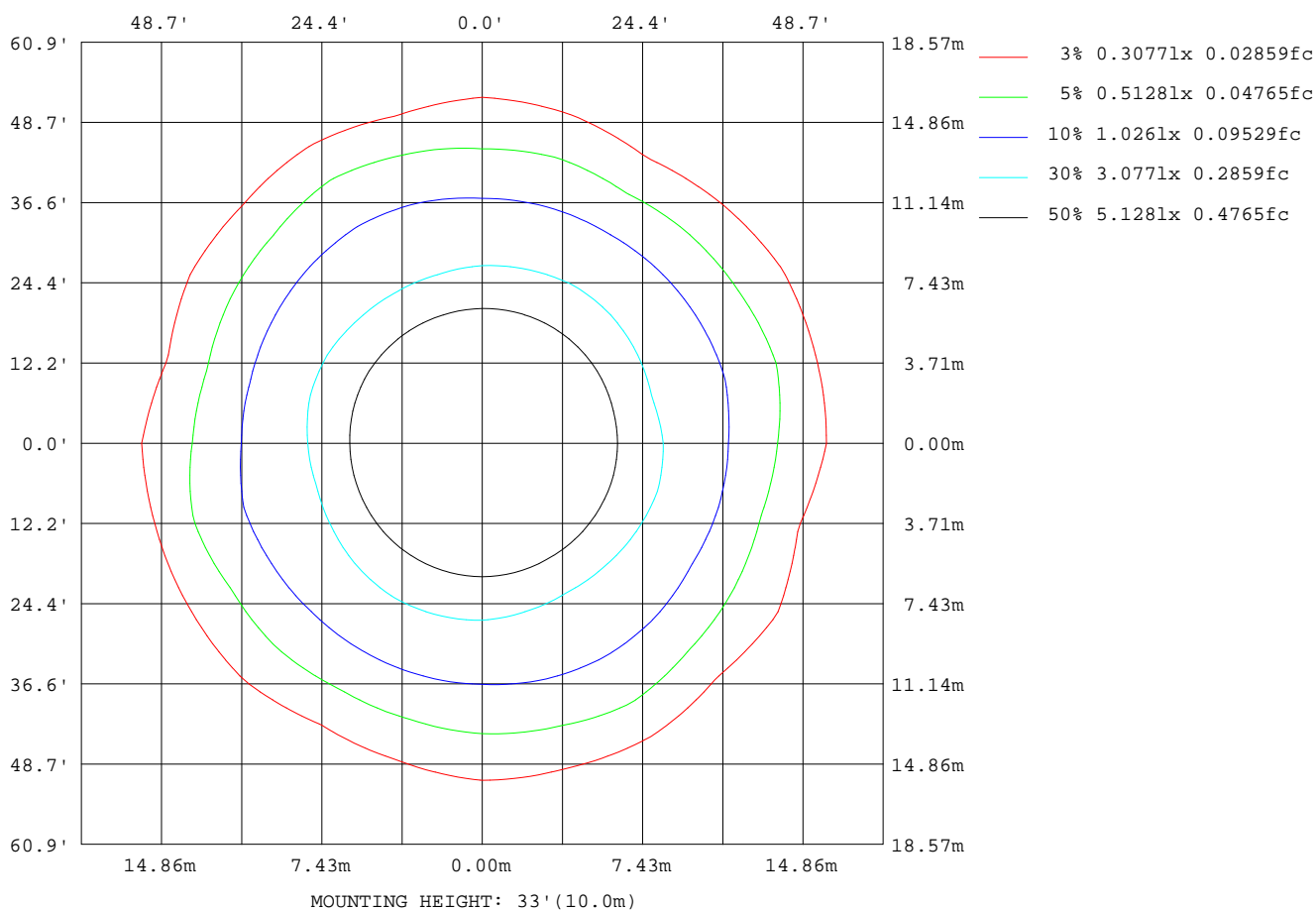
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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ISOLUX DIAGRAM

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LED Avg.L Report

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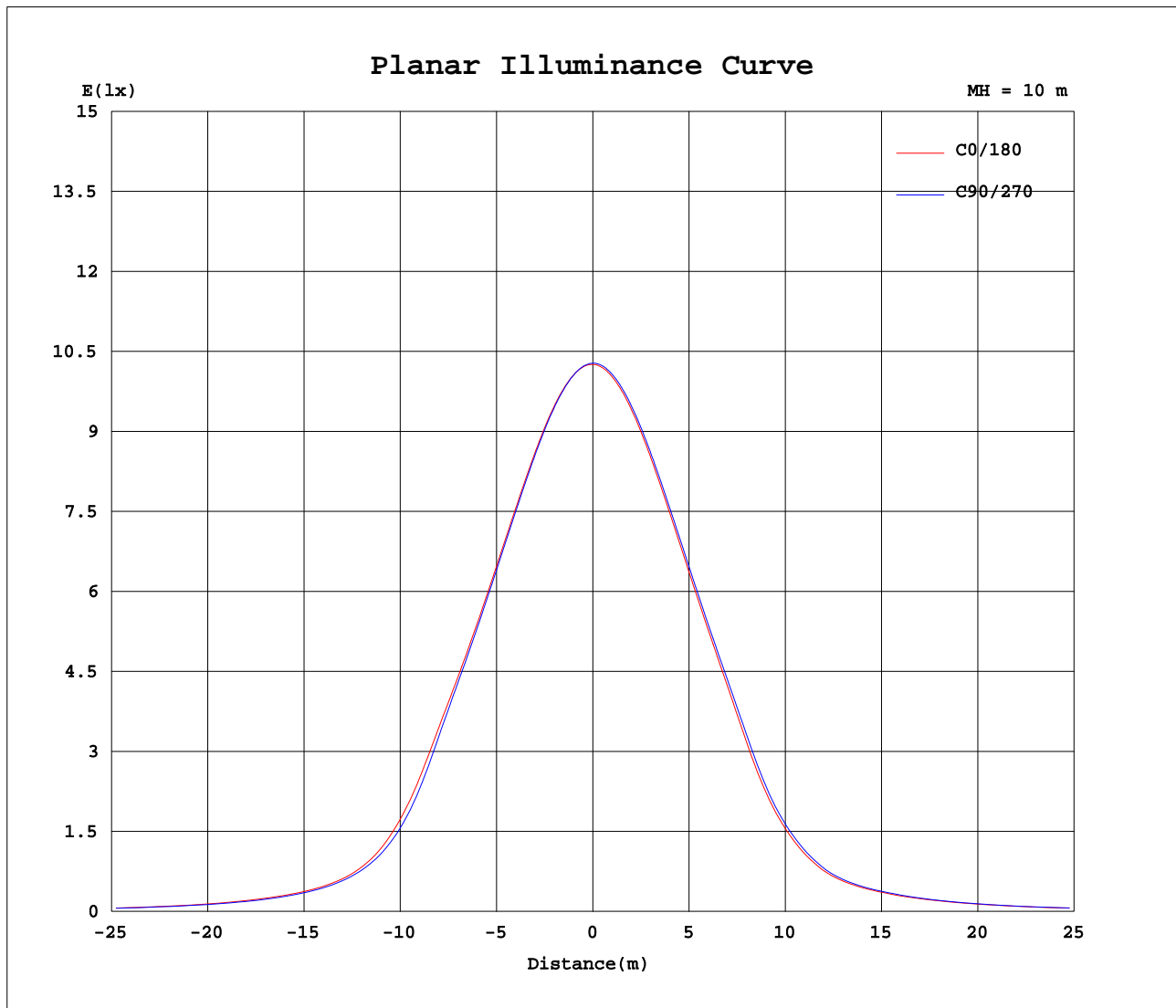
AvgL	cd/m2
L_0~180(65)av	2151
L_0~180(75)av	2015
L_0~180(85)av	2295
L_90~270(65)av	2124
L_90~270(75)av	2012
L_90~270(85)av	2362
L_45(65)av	2074
L_45(75)av	2107
L_45(85)av	2453

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jasoan
Test Date:2022-08-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jasoan
Test Date: 2022-08-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 58%
Test Distance: 8.967m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

```