

LED Tracklight ROXY-K-28W-930-35



Light Output Ratio:	100.0%	
Luminaire Power:	27.29 W	
SHR Nominal:	0.50	Calculated using the TM5
SHR Maximum:	0.55	fine grid method.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason
Test Date: 2020-06-11

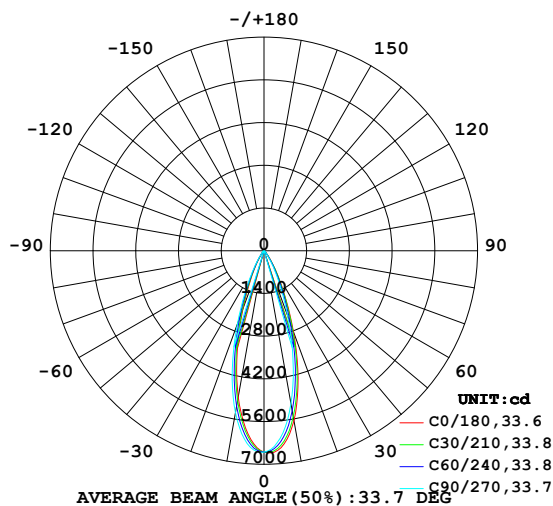
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 58%
Test Distance: 5.850m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

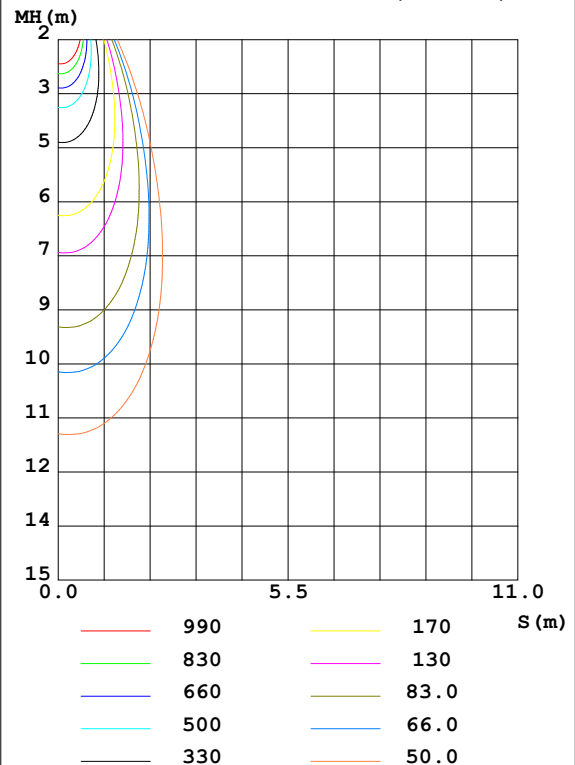
Test:U:220.9V I:0.1303A P:27.29W PF:0.9480 Freq:60.07Hz Lamp Flux:2570.09x1 lm		
NAME: ROXY-K-28W-930-35	TYPE:Tracklight	SERIAL No.:
SPEC.:3000K	DIM.: ϕ 72mm*H137mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 94.17 lm/W			
MODEL	CITIZEN-3000K	I _{max} (cd)	6637	S/MH (C0/180)	0.51
NOMINAL POWER (W)	28	LOR (%)	100.0	S/MH (C90/270)	0.57
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	2570.1	η UP, DN (C0-180)	0.0, 49.6
NOMINAL FLUX (lm)	2570.09	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.4
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	0.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
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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	5656	5466	5093	4884	4867	5026	5388	5597	0- 10	564.3	564.3	22,22
20	2836	2673	2265	2031	2012	2200	2558	2782	10- 20	1047	1611	62.7,62.7
30	827.2	785.1	619.9	516.6	494.9	552.8	669.5	763.0	20- 30	620.0	2231	86.8,86.8
40	165.0	160.8	125.2	109.4	101.4	110.2	127.7	153.1	30- 40	198.2	2429	94.5,94.5
50	71.87	72.54	64.97	59.81	57.93	60.02	62.47	67.47	40- 50	67.17	2496	97.1,97.1
60	43.36	42.09	37.60	34.87	34.43	35.99	38.67	41.01	50- 60	45.71	2542	98.9,98.9
70	13.46	12.43	10.52	9.374	9.425	10.27	11.34	12.36	60- 70	22.88	2565	99.8,99.8
80	0.5801	0.4168	0.2912	0.2179	0.2160	0.2655	0.4152	0.5788	70- 80	5.003	2570	100,100
90	0.1293	0.1269	0.1288	0.1398	0.0898	0.0897	0.0851	0.0874	80- 90	0.1676	2570	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): 2466.9 lm

%lum = 96.0%

%lamp = 96.0%

Conical surface Flux(120deg): 2542 lm

%lum = 98.9%

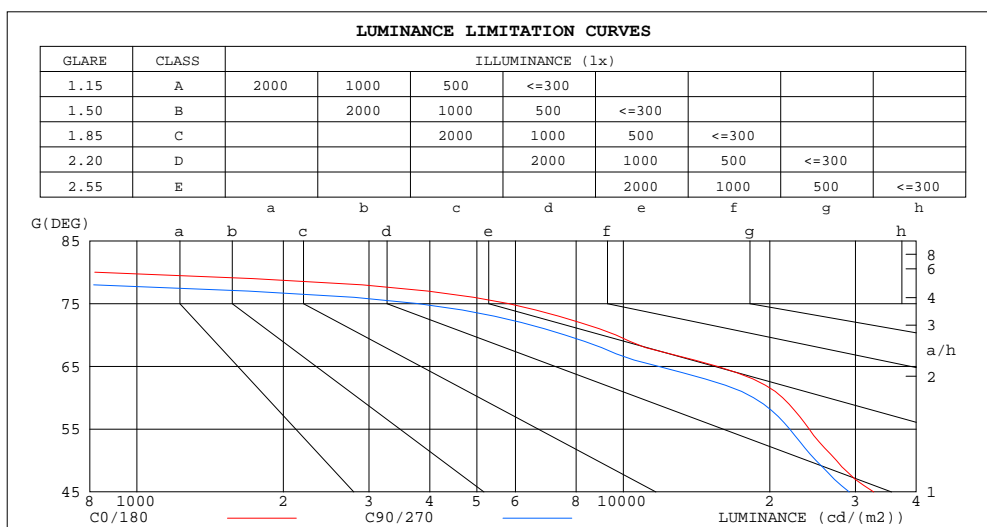
%lamp = 98.9%

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LUMINANCE LIMITATION CURVES

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NAME: ROXY-K-28W-930-35	TYPE:Tracklight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi 72\text{mm} \times H137\text{mm}$	
MFR.: NEKO LIGHTING AG		



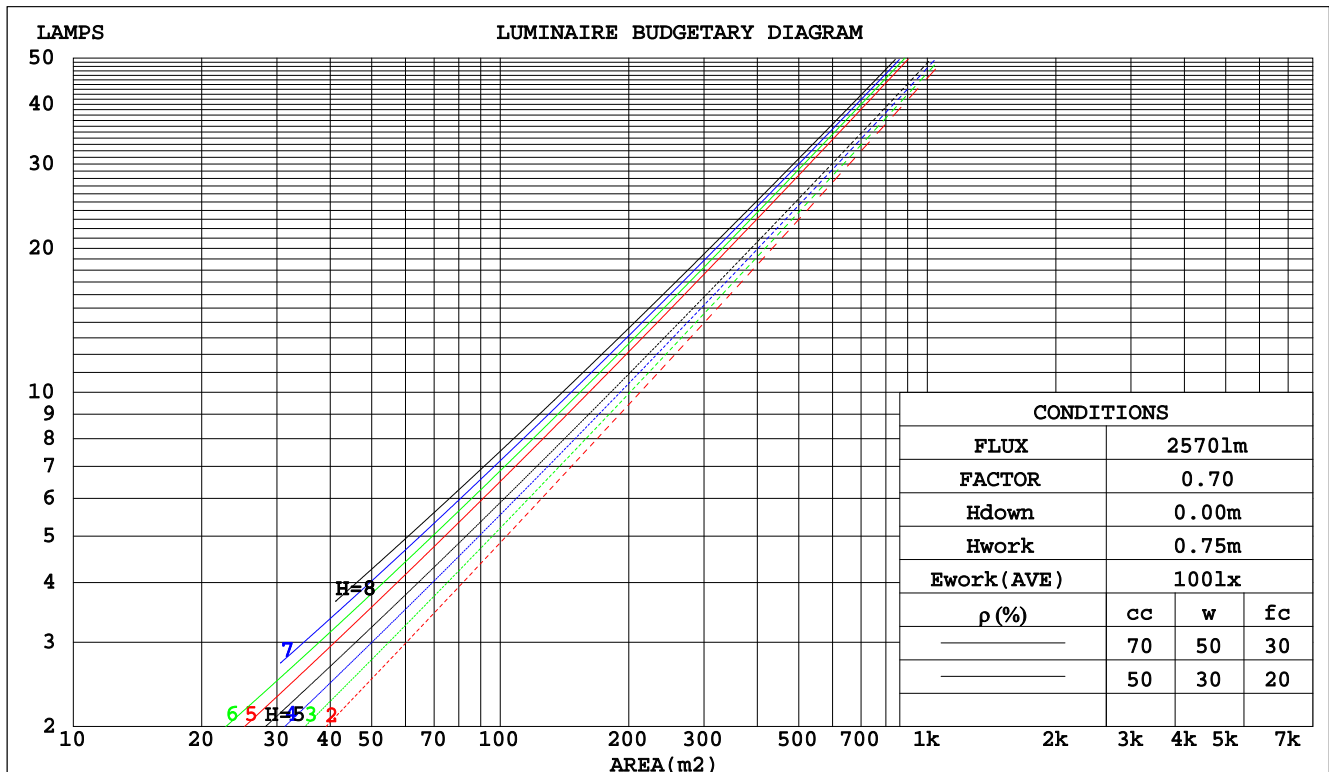
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CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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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	.00
1.0	1.12	1.10	1.08	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	.00	.99	.98	.97	.95
2.0	1.05	1.02	.99	1.04	1.00	.98	1.00	.98	.96	.98	.95	.94	.95	.93	.92	.90
3.0	.00	.95	.92	.98	.94	.91	.96	.92	.90	.93	.91	.88	.91	.89	.87	.86
4.0	.94	.90	.86	.93	.89	.86	.91	.88	.85	.89	.86	.84	.88	.85	.83	.81
5.0	.90	.85	.81	.89	.84	.81	.87	.83	.80	.86	.82	.80	.84	.81	.79	.78
6.0	.86	.81	.77	.85	.80	.77	.84	.80	.76	.82	.79	.76	.81	.78	.75	.74
7.0	.82	.77	.74	.81	.77	.73	.80	.76	.73	.79	.75	.73	.78	.75	.72	.71
8.0	.79	.74	.70	.78	.73	.70	.77	.73	.70	.76	.72	.70	.75	.72	.69	.68
9.0	.76	.71	.67	.75	.70	.67	.74	.70	.67	.73	.70	.67	.73	.69	.67	.65
10.0	.73	.68	.65	.72	.68	.65	.72	.67	.64	.71	.67	.64	.70	.67	.64	.63



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WEC AND CCEC

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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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.158	.090	.028	.151	.086	.027	.139	.080	.025	.127	.073	.024	.117	.068	.022		
2.0	.149	.082	.025	.144	.079	.024	.133	.074	.023	.124	.069	.022	.115	.065	.020		
3.0	.140	.075	.022	.136	.073	.022	.127	.069	.021	.119	.065	.020	.111	.062	.019		
4.0	.133	.069	.020	.129	.067	.020	.121	.064	.019	.114	.061	.018	.108	.059	.018		
5.0	.126	.064	.019	.122	.063	.018	.116	.060	.018	.110	.058	.017	.104	.056	.017		
6.0	.119	.060	.017	.116	.059	.017	.111	.057	.016	.105	.055	.016	.100	.053	.016		
7.0	.113	.056	.016	.111	.055	.016	.106	.054	.015	.101	.052	.015	.097	.050	.015		
8.0	.108	.053	.015	.106	.052	.015	.102	.051	.014	.098	.049	.014	.094	.048	.014		
9.0	.104	.050	.014	.102	.049	.014	.098	.048	.014	.094	.047	.013	.091	.046	.013		
10.0	.099	.048	.013	.097	.047	.013	.094	.046	.013	.091	.045	.013	.088	.044	.013		

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	.170	.157	.146	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016		
2.0	.153	.133	.115	.131	.114	.100	.090	.079	.070	.052	.046	.041	.017	.015	.013		
3.0	.140	.113	.093	.120	.098	.080	.082	.068	.056	.047	.040	.033	.015	.013	.011		
4.0	.128	.098	.076	.110	.085	.066	.076	.059	.046	.044	.035	.027	.014	.011	.009		
5.0	.118	.086	.063	.102	.075	.055	.070	.052	.039	.041	.031	.023	.013	.010	.008		
6.0	.110	.077	.053	.095	.066	.046	.065	.047	.032	.038	.027	.019	.012	.009	.006		
7.0	.103	.069	.045	.089	.060	.039	.061	.042	.028	.036	.025	.016	.012	.008	.005		
8.0	.097	.062	.039	.084	.054	.034	.058	.038	.024	.034	.022	.014	.011	.007	.005		
9.0	.092	.057	.034	.079	.049	.029	.055	.035	.021	.032	.021	.012	.010	.007	.004		
10.0	.087	.052	.029	.075	.045	.026	.052	.032	.018	.030	.019	.011	.010	.006	.004		

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γ Interval: 1.0DEG
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Humidity:58%
Test Distance:5.850m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.9V I:0.1303A P:27.29W PF:0.9480 Freq:60.07Hz Lamp Flux:2570.09x1 lm										
NAME: ROXY-K-28W-930-35					TYPE:Tracklight			SERIAL No.:		
SPEC.:3000K					DIM.: ϕ 72mm*H137mm					
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	16.0	16.8	16.2	16.9	17.1	14.9	15.7	15.2	15.9	16.1
3H	16.1	16.8	16.4	17.0	17.2	15.1	15.8	15.3	16.0	16.2
4H	16.1	16.8	16.4	17.0	17.2	15.0	15.7	15.3	15.9	16.1
6H	16.0	16.7	16.3	16.9	17.1	14.9	15.6	15.2	15.8	16.1
8H	16.0	16.6	16.3	16.9	17.1	14.9	15.5	15.2	15.8	16.0
12H	15.9	16.5	16.2	16.8	17.1	14.8	15.5	15.2	15.7	16.0
4H 2H	16.0	16.7	16.3	16.9	17.1	15.1	15.8	15.3	16.0	16.2
3H	16.2	16.8	16.5	17.0	17.3	15.2	15.8	15.5	16.1	16.3
4H	16.2	16.7	16.5	17.0	17.3	15.2	15.7	15.5	16.0	16.3
6H	16.1	16.6	16.4	16.9	17.2	15.1	15.6	15.4	15.9	16.2
8H	16.0	16.5	16.4	16.8	17.2	15.0	15.5	15.4	15.8	16.2
12H	16.0	16.4	16.4	16.7	17.1	15.0	15.4	15.4	15.8	16.1
8H 4H	16.0	16.5	16.4	16.8	17.2	15.1	15.5	15.5	15.9	16.2
6H	15.9	16.3	16.4	16.7	17.1	15.0	15.3	15.4	15.7	16.1
8H	15.9	16.2	16.3	16.6	17.1	14.9	15.2	15.3	15.7	16.1
12H	15.8	16.1	16.3	16.6	17.0	14.8	15.1	15.3	15.6	16.0
12H 4H	16.0	16.4	16.4	16.8	17.2	15.0	15.4	15.4	15.8	16.2
6H	15.9	16.2	16.3	16.6	17.1	14.9	15.2	15.3	15.7	16.1
8H	15.8	16.1	16.3	16.6	17.0	14.8	15.1	15.3	15.6	16.0
Variations with the observer position at spacings:										
S = 1.0H	+ 1.8 / - 2.0					+ 1.1 / - 1.6				
1.5H	+ 3.2 / - 1.5					+ 1.9 / - 1.0				
2.0H	+ 1.1 / - 1.4					+ 1.1 / - 1.6				

CIE Pub.117, 2570 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.3$)

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 γ Interval: 1.0DEG
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Humidity:58%
Test Distance:5.850m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.9V I:0.1303A P:27.29W PF:0.9480 Freq:60.07Hz Lamp Flux:2570.09x1 lm		
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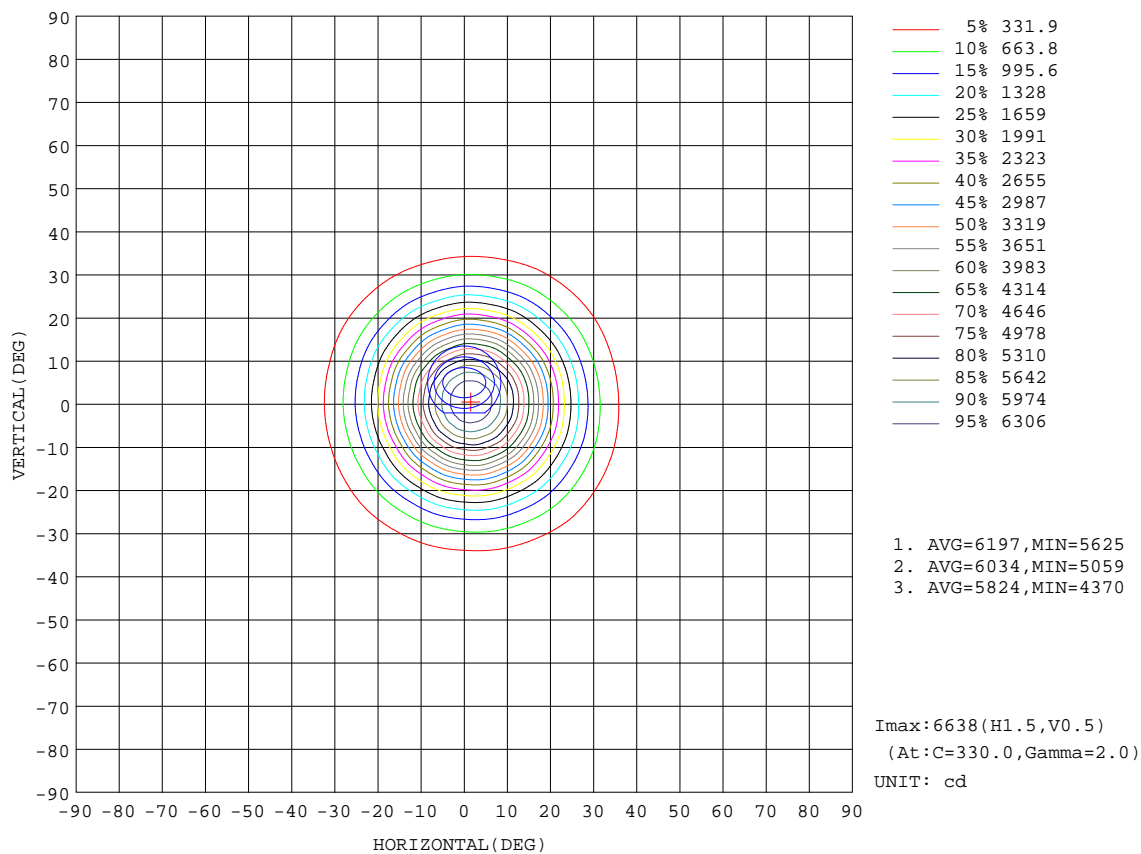
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	78	88	82	78	87	81	78	74
0.80	95	90	86	95	89	86	94	89	86	82
1.00	100	94	91	99	94	90	97	94	90	86
1.25	104	98	95	103	98	95	101	97	94	90
1.50	106	102	98	105	101	98	103	99	97	92
2.00	109	105	102	107	104	101	105	102	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	96
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	99
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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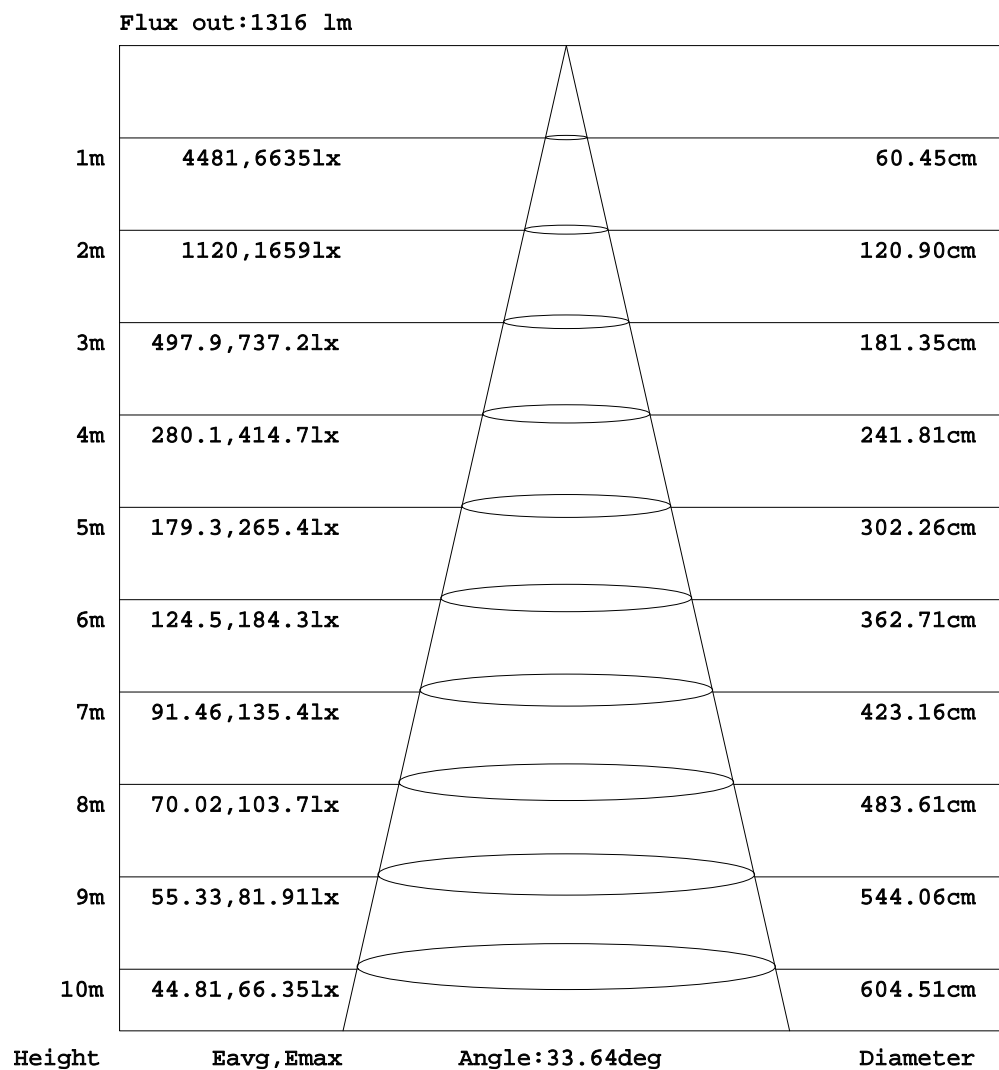


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AAI Figure

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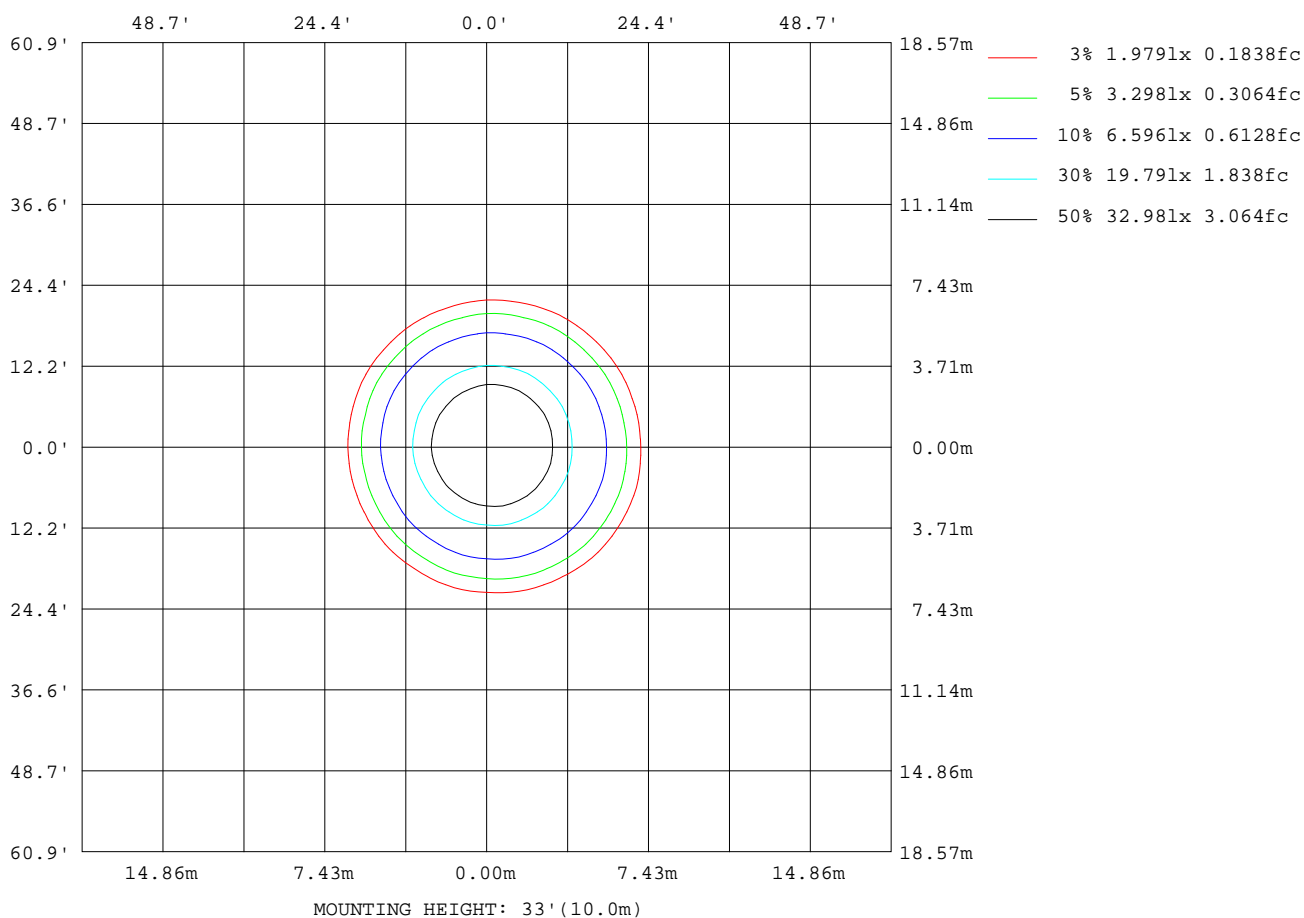
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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ISOLUX DIAGRAM

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LED Avg.L Report

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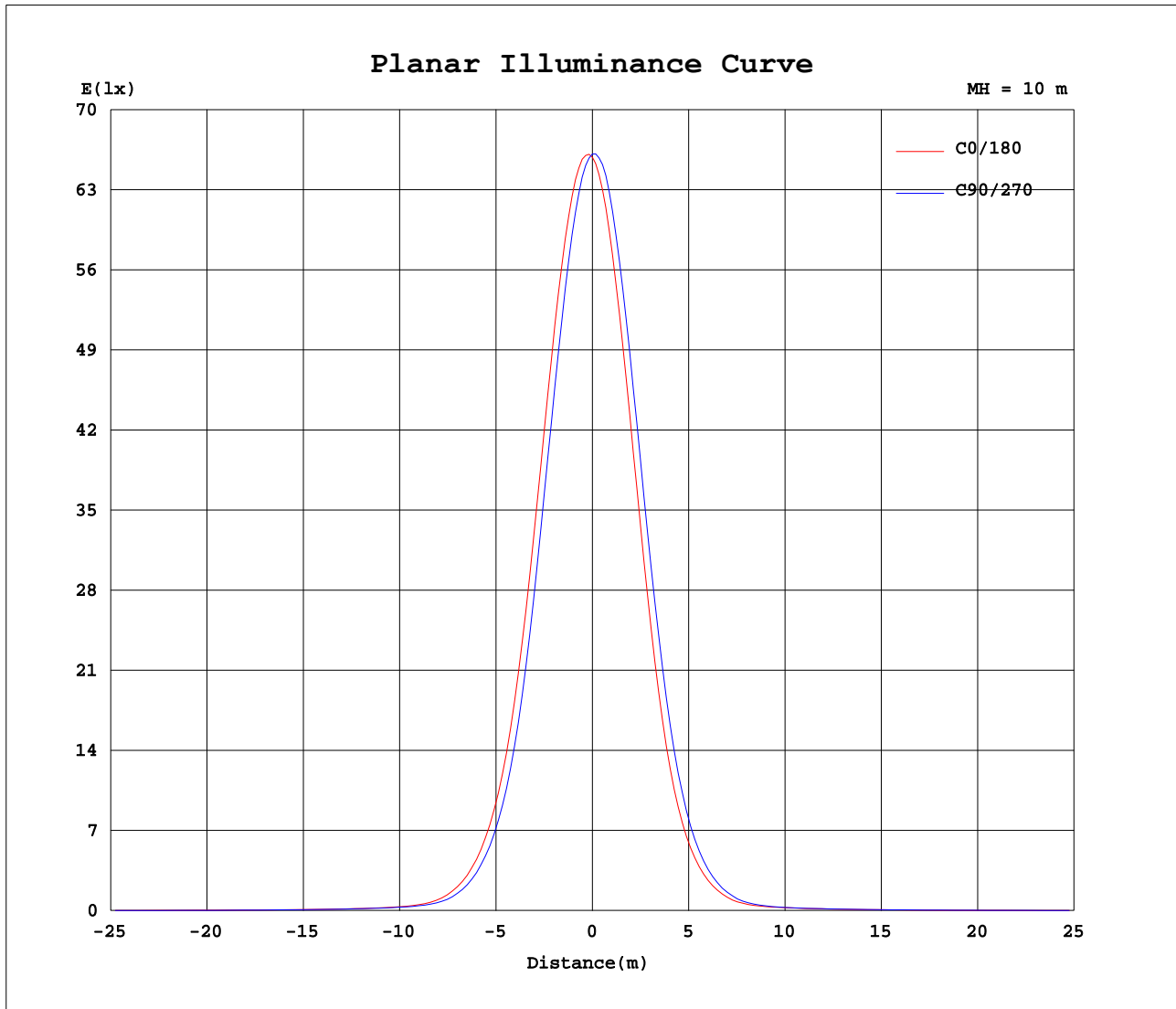
AvgL	cd/m2
L_0~180 (65) av	13177
L_0~180 (75) av	4359
L_0~180 (85) av	346
L_90~270 (65) av	12688
L_90~270 (75) av	4037
L_90~270 (85) av	339
L_45 (65) av	12867
L_45 (75) av	4109
L_45 (85) av	352

Standard: GB/T 29293-2012

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Test Date:2020-06-11

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: 2020-06-11

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:

```