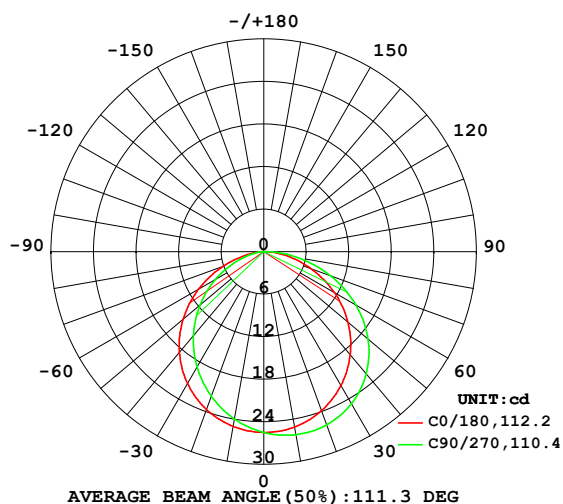


# LUMINAIRE PHOTOMETRIC TEST REPORT

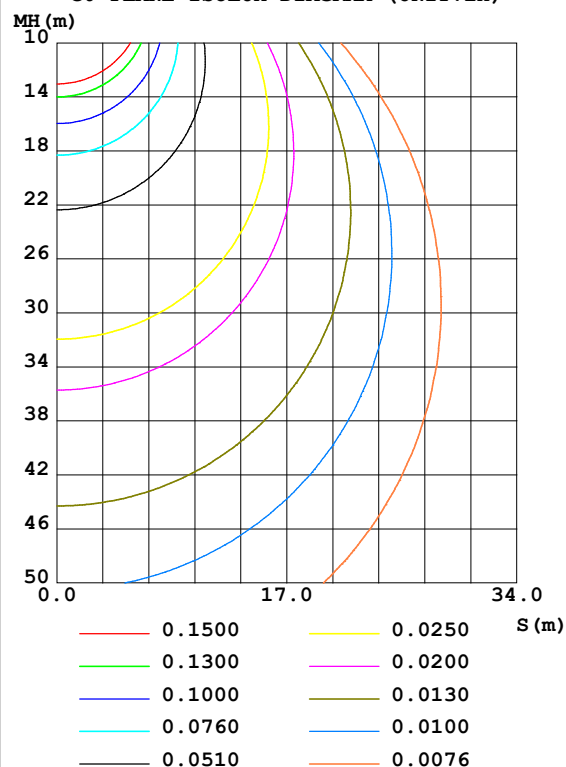
Test:U:24.015V I:0.1712A P:4.1114W PF:1.0000 Freq:50.00Hz Lamp Flux:73.1948x1 lm		
NAME: LSP80-RGB-PF-24V	TYPE:LED	WEIGHT:
SPEC.:B	DIM.: 0.4m	SERIAL No.:
MFR.: CORE LIGHTING	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 17.80 lm/W
MODEL		I <sub>max</sub> (cd)	26.24	S/MH		1.27
NOMINAL POWER(W)	4.11	LOR(%)	100.0			
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	73.195	<input type="checkbox"/> UP,DN(C0-180)		0.0,57.5
NOMINAL FLUX(lm)	73.1948	CIE CLASS	DIRECT	<input type="checkbox"/> UP,DN(C180-360)		0.0,42.5
LAMPS INSIDE	1	<input type="checkbox"/> up(%)	0.0	CIBSE SHR NOM		1.25
TEST VOLTAGE(V)	24	<input type="checkbox"/> down(%)	100.0	CIBSE SHR MAX		1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:20DEG  
Operators:  
Test Date:03/14/2017

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.020m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum,lamp
10	25.10	25.91	26.21	25.85	25.02	24.27	23.97	24.33	0- 10	2.414	2.414	3.3,3.3
20	23.85	25.41	25.98	25.27	23.68	22.22	21.67	22.35	10- 20	6.927	9.341	12.8,12.8
30	21.80	23.95	24.76	23.73	21.49	19.49	18.78	19.70	20- 30	10.53	19.88	27.2,27.2
40	19.00	21.57	22.50	21.21	18.55	16.24	15.48	16.56	30- 40	12.75	32.62	44.6,44.6
50	15.51	18.24	19.19	17.70	14.88	12.49	11.77	12.95	40- 50	13.25	45.87	62.7,62.7
60	11.48	14.10	14.96	13.39	10.63	8.436	7.884	9.030	50- 60	11.92	57.79	79,79
70	7.149	9.368	10.04	8.507	6.127	4.448	4.135	5.127	60- 70	8.964	66.76	91.2,91.2
80	3.081	4.566	4.848	3.562	1.977	1.236	1.216	1.822	70- 80	5.030	71.79	98.1,98.1
90	0.3547	0.5597	0.2645	0.1989	0.0164	0.0021	0	0.1866	80- 90	1.409	73.19	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): 39.3 lm

%lum = 53.7%

%lamp = 53.7%

Conical surface Flux(120deg): 57.793 lm

%lum = 79.0%

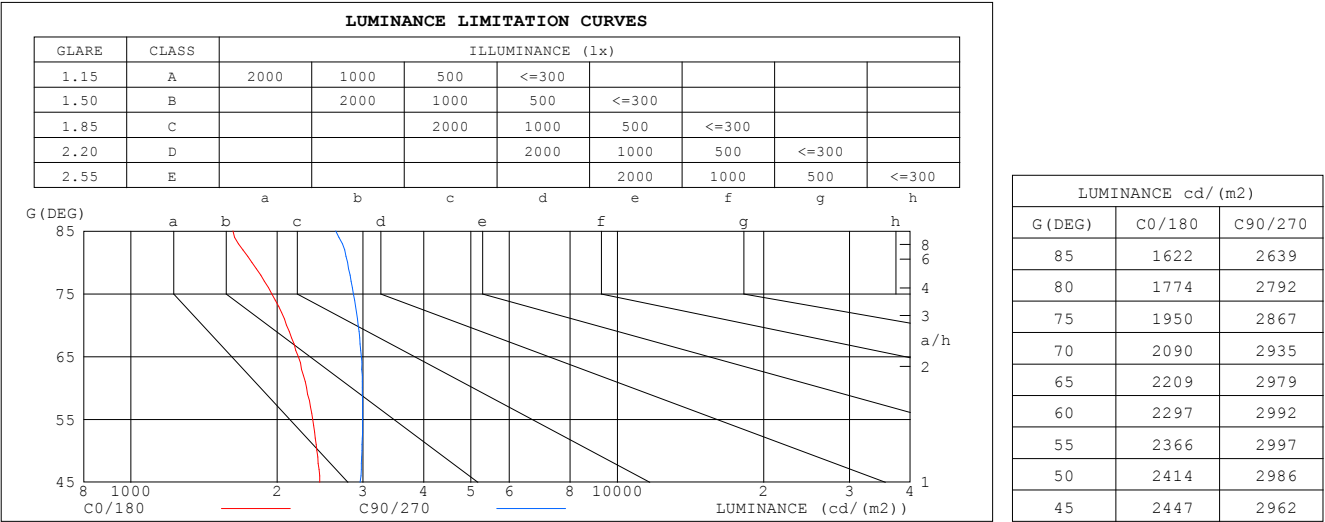
%lamp = 79.0%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:20DEG  
 Operators:  
 Test Date:03/14/2017

□ Range: 0 - 90DEG  
 □ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.020m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.015V I:0.1712A P:4.1114W PF:1.0000 Freq:50.00Hz Lamp Flux:73.1948x1 lm		
NAME: LSP80-RGB-PF-24V	TYPE:LED	WEIGHT:
SPEC.:B	DIM.: 0.4m	SERIAL No.:
MFR.: CORE LIGHTING	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:20DEG  
Operators:  
Test Date:03/14/2017

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.020m [K=1.0000]  
Remarks:

## WEC AND CCEC

Test:U:24.015V I:0.1712A P:4.1114W PF:1.0000 Freq:50.00Hz Lamp Flux:73.1948x1 lm					
NAME: LSP80-RGB-PF-24V			TYPE:LED		WEIGHT:
SPEC.:B			DIM.: 0.4m		SERIAL No.:
MFR.: CORE LIGHTING			SUR.:		Shielding Angle:

<input type="checkbox"/> cc	80%			70%			50%			30%			10%			0														
<input type="checkbox"/> w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0														
<input type="checkbox"/> fc	20%			20%			20%			20%			20%			0														
RCR	RCR:Room Cavity Ratio															Wall Exitance Coefficients (WEC)														
0.0																														
1.0	.310	.176	.056	.303	.173	.055	.289	.166	.053	.277	.160	.051	.266	.154	.050															
2.0	.291	.160	.049	.285	.157	.048	.274	.152	.047	.263	.147	.046	.253	.143	.045															
3.0	.270	.144	.043	.264	.142	.043	.254	.138	.042	.244	.134	.041	.236	.130	.040															
4.0	.249	.129	.038	.244	.128	.038	.235	.125	.037	.227	.122	.037	.219	.119	.036															
5.0	.230	.117	.034	.226	.116	.034	.218	.113	.033	.210	.111	.033	.203	.109	.033															
6.0	.214	.107	.031	.210	.106	.031	.203	.104	.030	.196	.102	.030	.189	.100	.030															
7.0	.199	.098	.028	.195	.097	.028	.189	.096	.028	.183	.094	.027	.177	.092	.027															
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025															
9.0	.174	.084	.024	.171	.084	.023	.166	.082	.023	.161	.081	.023	.157	.080	.023															
10.0	.164	.078	.022	.161	.078	.022	.157	.077	.022	.152	.076	.021	.148	.074	.021															

<input type="checkbox"/> cc	80%			70%			50%			30%			10%			0
<input type="checkbox"/> w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
<input type="checkbox"/> 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	.180	.156	.134	.154	.134	.116	.106	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.074	.141	.099	.064	.097	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.117	.065	.029	.080	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:20DEG  
 Operators:  
 Test Date:03/14/2017

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.020m [K=1.0000]  
 Remarks:

## UGR(Unified Glare Rating) Table

Test:U:24.015V I:0.1712A P:4.1114W PF:1.0000 Freq:50.00Hz Lamp Flux:73.1948x1 lm										
NAME: LSP80-RGB-PF-24V					TYPE:LED			WEIGHT:		
SPEC.:B					DIM.: 0.4m			SERIAL No.:		
MFR.: CORE LIGHTING					SUR.:			Shielding Angle:		
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	16.5	18.1	16.8	18.3	18.5	17.5	19.1	17.8	19.3	19.5
3H	18.0	19.4	18.3	19.7	19.9	19.3	20.7	19.6	21.0	21.2
4H	18.6	20.0	18.9	20.2	20.5	20.1	21.4	20.4	21.7	21.9
6H	19.1	20.3	19.4	20.6	20.9	20.7	22.0	21.0	22.2	22.5
8H	19.2	20.4	19.5	20.7	21.0	20.9	22.1	21.3	22.4	22.7
12H	19.3	20.5	19.6	20.7	21.1	21.1	22.3	21.4	22.5	22.9
4H 2H	17.4	18.7	17.7	19.0	19.2	18.1	19.5	18.5	19.7	20.0
3H	19.1	20.3	19.5	20.6	20.9	20.1	21.3	20.5	21.6	21.9
4H	19.8	20.9	20.2	21.2	21.6	21.1	22.1	21.4	22.4	22.8
6H	20.4	21.4	20.8	21.7	22.1	21.8	22.8	22.2	23.1	23.5
8H	20.6	21.5	21.0	21.8	22.2	22.1	23.0	22.5	23.4	23.8
12H	20.7	21.5	21.2	21.9	22.3	22.3	23.2	22.8	23.5	23.9
8H 4H	20.3	21.2	20.7	21.5	21.9	21.3	22.2	21.8	22.6	23.0
6H	21.1	21.8	21.5	22.2	22.6	22.3	23.0	22.7	23.4	23.9
8H	21.4	22.0	21.8	22.4	22.9	22.7	23.4	23.2	23.8	24.3
12H	21.6	22.1	22.1	22.6	23.1	23.1	23.6	23.5	24.1	24.5
12H 4H	20.4	21.2	20.8	21.6	22.0	21.4	22.2	21.8	22.6	23.0
6H	21.2	21.8	21.6	22.3	22.7	22.4	23.0	22.8	23.5	23.9
8H	21.6	22.1	22.0	22.6	23.0	22.8	23.4	23.3	23.9	24.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.5					+ 0.2 / - 0.3				

CIE Pub.117, 73.19 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -9.1$ )

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:20DEG  
 Operators:  
 Test Date:03/14/2017

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.020m [K=1.0000]  
 Remarks:

## UTILIZATION FACTORS TABLE

Test:U:24.015V I:0.1712A P:4.1114W PF:1.0000 Freq:50.00Hz Lamp Flux:73.1948x1 lm		
NAME: LSP80-RGB-PF-24V	TYPE:LED	WEIGHT:
SPEC.:B	DIM.: 0.4m	SERIAL No.:
MFR.: CORE LIGHTING	SUR.:	Shielding Angle:

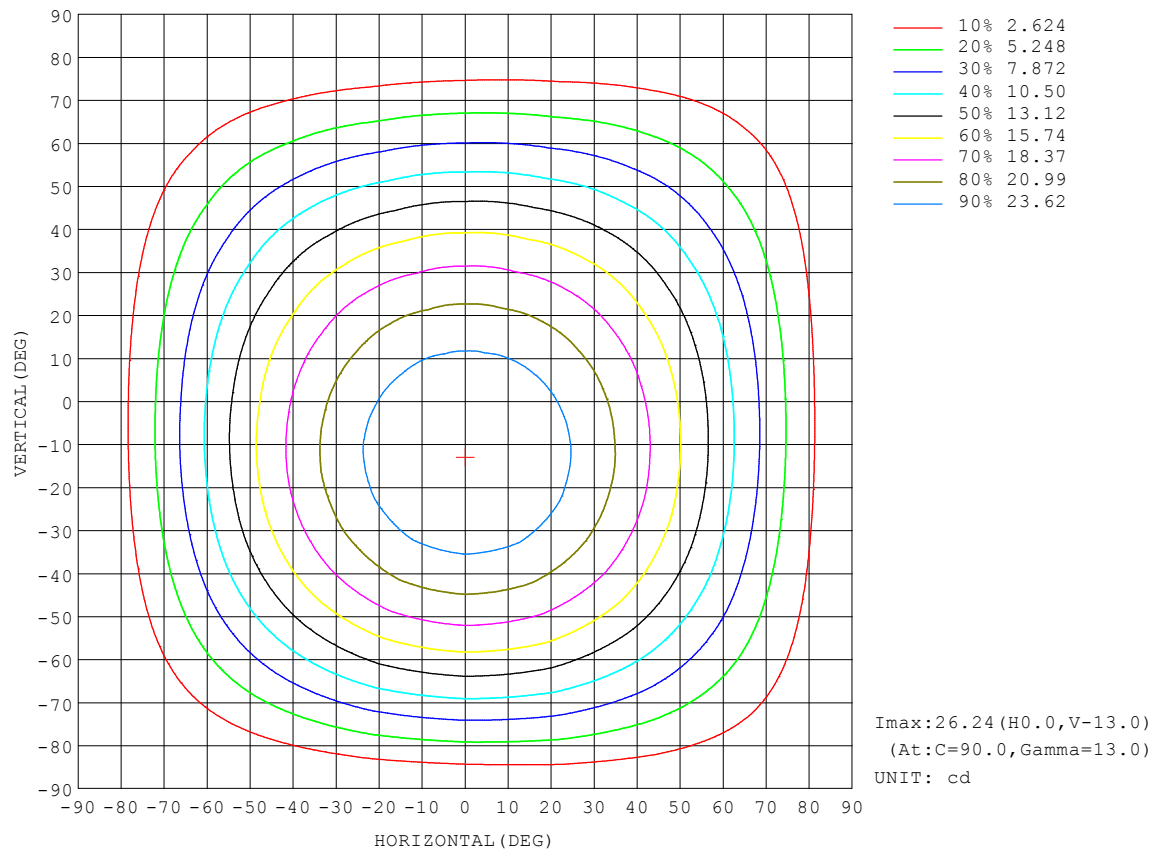
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	46	39	57	46	39	56	45	39	32
0.80	68	56	49	66	55	48	65	55	48	41
1.00	76	65	58	75	64	57	73	66	57	50
1.25	83	73	65	82	72	65	79	70	64	57
1.50	88	78	71	86	77	71	83	76	70	62
2.00	95	86	80	93	85	79	90	83	78	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	95	100	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 20DEG  
 Operators:  
 Test Date: 03/14/2017

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 6.020m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

Test:U:24.015V I:0.1712A P:4.1114W PF:1.0000 Freq:50.00Hz Lamp Flux:73.1948x1 lm		
NAME: LSP80-RGB-PF-24V	TYPE:LED	WEIGHT:
SPEC.:B	DIM.: 0.4m	SERIAL No.:
MFR.: CORE LIGHTING	SUR.:	Shielding Angle:

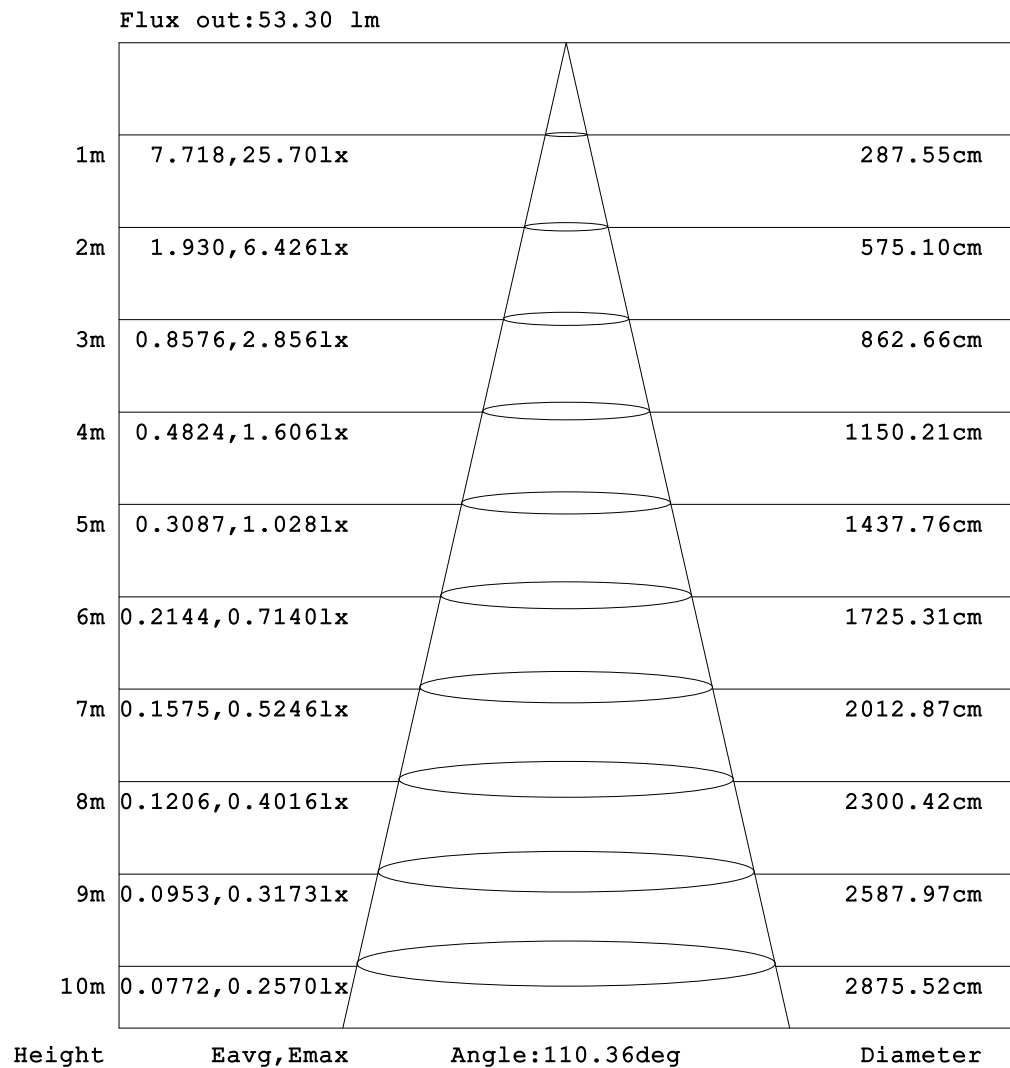


C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:20DEG  
 Operators:  
 Test Date:03/14/2017

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.020m [K=1.0000]  
 Remarks:

## AAI Figure

Test:U:24.015V I:0.1712A P:4.1114W PF:1.0000 Freq:50.00Hz Lamp Flux:73.1948x1 lm		
NAME: LSP80-RGB-PF-24V	TYPE:LED	WEIGHT:
SPEC.:B	DIM.: 0.4m	SERIAL No.:
MFR.: CORE LIGHTING	SUR.:	Shielding Angle:



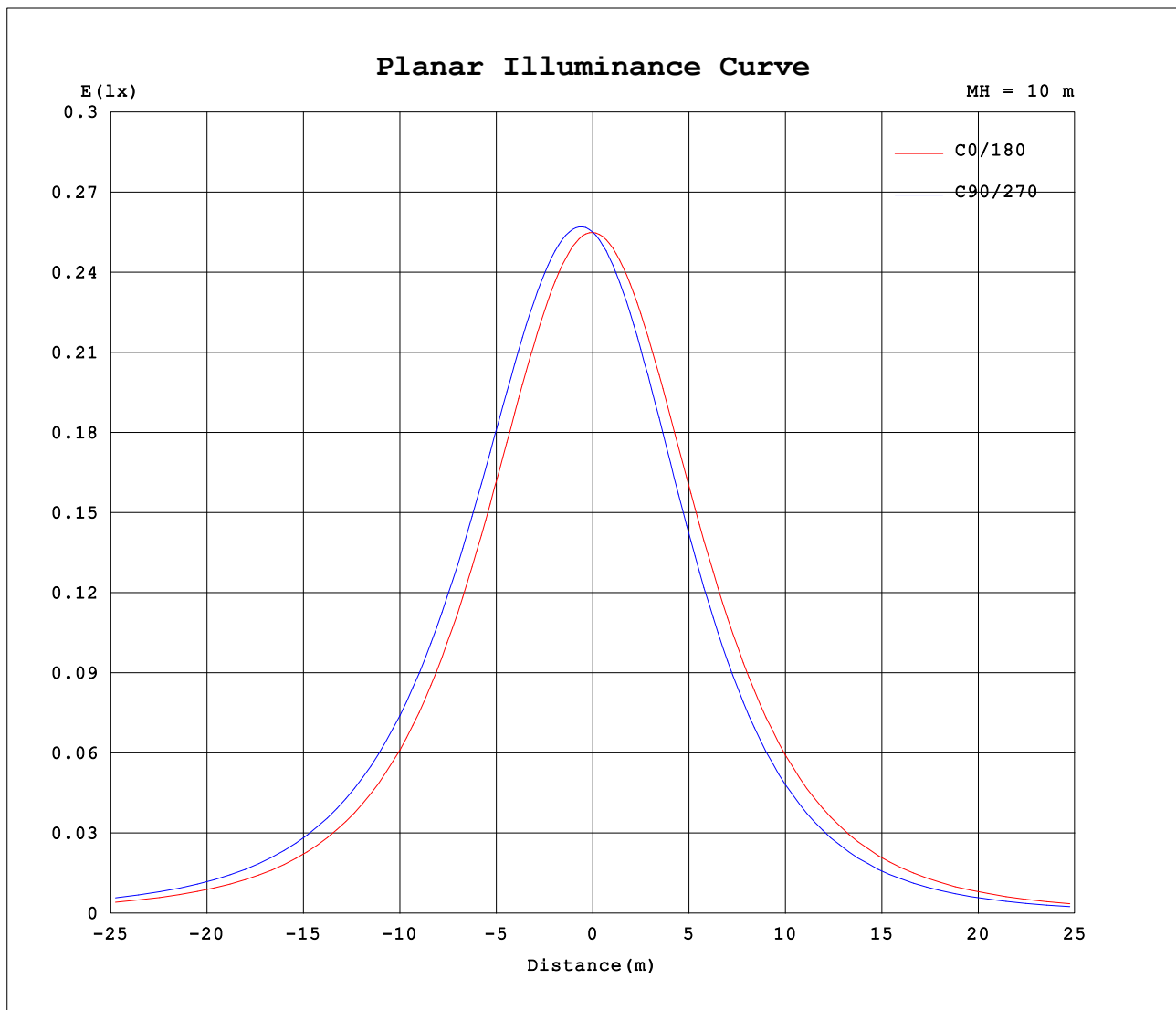
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:20DEG  
 Operators:  
 Test Date:03/14/2017

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.020m [K=1.0000]  
 Remarks:



## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 20DEG  
Operators:  
Test Date: 03/14/2017

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
Humidity: 65.0%  
Test Distance: 6.020m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.015V I:0.1712A P:4.1114W PF:1.0000 Freq:50.00Hz Lamp Flux:73.1948x1 lm		
NAME: LSP80-RGB-PF-24V	TYPE:LED	WEIGHT:
SPEC.:B	DIM.: 0.4m	SERIAL No.:
MFR.: CORE LIGHTING	SUR.:	Shielding Angle:

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 20DEG  
Operators:  
Test Date: 03/14/2017

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.020m [K=1.0000]
Remarks:

```