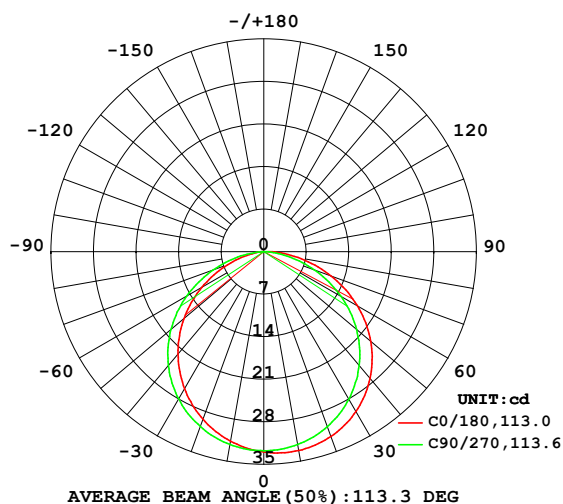


LUMINAIRE PHOTOMETRIC TEST REPORT

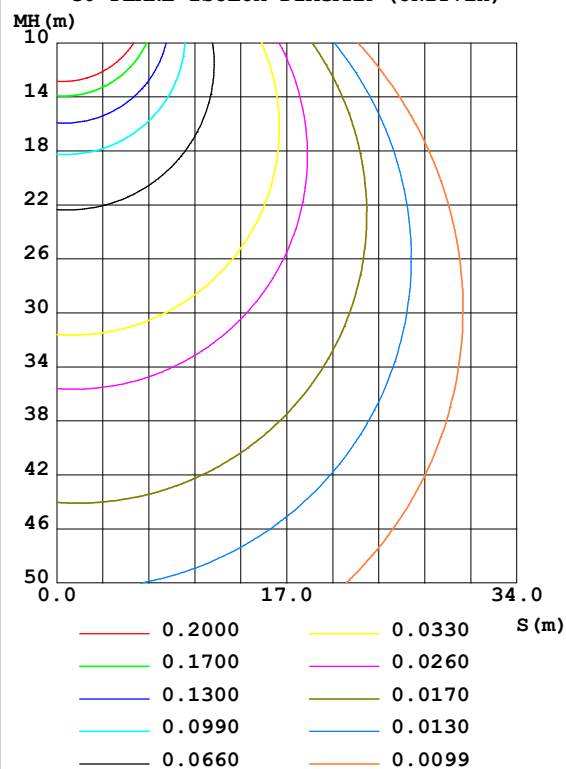
Test:U:24.015V I:0.1378A P:3.3093W PF:1.0000 Freq:50.00Hz Lamp Flux:94.7677x1 lm		
NAME: LSP80-RGB-PF-24V	TYPE:LED	WEIGHT:
SPEC.:R	DIM.: 0.4m	SERIAL No.:
MFR.: CORE LIGHTING	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 28.64 lm/W			
MODEL		Imax(cd)	33.26	S/MH	1.27
NOMINAL POWER(W)	6.18	LOR(%)	100.0		
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	94.768	<input type="checkbox"/> UP,DN(C0-180)	0.0,51.1
NOMINAL FLUX(lm)	94.7677	CIE CLASS	DIRECT	<input type="checkbox"/> UP,DN(C180-360)	0.0,48.9
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:

°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum,lamp
10	33.23	32.75	32.22	31.66	31.67	31.61	32.22	32.79	0- 10	3.102	3.102	3.27,3.27
20	32.34	31.69	30.62	29.55	29.32	29.49	30.62	31.72	10- 20	8.911	12.01	12.7,12.7
30	30.36	29.55	28.02	26.49	26.08	26.42	27.99	29.54	20- 30	13.58	25.59	27,27
40	27.24	26.33	24.46	22.57	22.02	22.53	24.46	26.35	30- 40	16.49	42.08	44.4,44.4
50	22.99	22.02	19.93	17.82	17.14	17.78	19.93	22.02	40- 50	17.19	59.27	62.5,62.5
60	17.76	16.77	14.63	12.47	11.78	12.47	14.62	16.80	50- 60	15.52	74.79	78.9,78.9
70	11.81	10.90	8.895	6.958	6.361	6.970	8.886	10.94	60- 70	11.69	86.48	91.3,91.3
80	5.732	5.019	3.407	2.075	1.635	2.040	3.346	5.039	70- 80	6.521	93.01	98.1,98.1
90	0.6909	0.5269	0.1271	0.1087	0.0185	0.0205	0	0.5597	80- 90	1.763	94.77	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): 50.736 lm

%lum = 53.5%

%lamp = 53.5%

Conical surface Flux(120deg): 74.79 lm

%lum = 78.9%

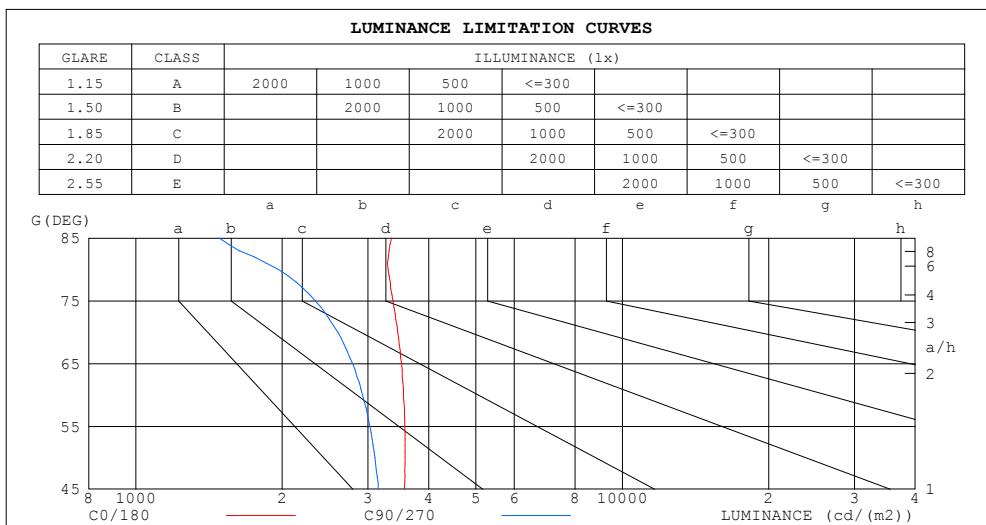
%lamp = 78.9%

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:0.1378A P:3.3093W PF:1.0000 Freq:50.00Hz Lamp Flux:94.7677x1 lm		
NAME: LSP80-RGB-PF-24V	TYPE:LED	WEIGHT:
SPEC.:R	DIM.: 0.4m	SERIAL No.:
MFR.: CORE LIGHTING	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3355	1484
80	3301	1962
75	3378	2338
70	3454	2601
65	3519	2791
60	3551	2926
55	3574	3030
50	3576	3100
45	3564	3148

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:0.1378A P:3.3093W PF:1.0000 Freq:50.00Hz Lamp Flux:94.7677x1 lm					
NAME: LSP80-RGB-PF-24V			TYPE:LED		WEIGHT:
SPEC.:R			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	.309	.176	.056	.302	.172	.055	.289	.166	.053	.277	.160	.051	.266	.154	.050															
2.0	.292	.160	.049	.285	.157	.048	.274	.152	.047	.263	.147	.046	.253	.143	.045															
3.0	.270	.144	.043	.265	.142	.043	.254	.138	.042	.245	.134	.041	.236	.131	.040															
4.0	.249	.130	.038	.245	.128	.038	.235	.125	.037	.227	.122	.037	.219	.119	.036															
5.0	.231	.118	.034	.226	.116	.034	.218	.114	.033	.211	.111	.033	.203	.109	.033															
6.0	.214	.107	.031	.210	.106	.031	.203	.104	.030	.196	.102	.030	.190	.100	.030															
7.0	.199	.098	.028	.196	.097	.028	.189	.096	.028	.183	.094	.027	.177	.092	.027															
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.172	.087	.025	.167	.085	.025															
9.0	.174	.084	.024	.172	.084	.023	.166	.082	.023	.161	.081	.023	.157	.080	.023															
10.0	.164	.079	.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	.148	.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	.136	.075	.033	.117	.065	.029	.081	.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:0.1378A P:3.3093W PF:1.0000 Freq:50.00Hz Lamp Flux:94.7677x1 lm										
NAME: LSP80-RGB-PF-24V					TYPE:LED			WEIGHT:		
SPEC.:R					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	17.8	19.4	18.1	19.6	19.8	17.1	18.7	17.4	18.9	19.1
3H	19.6	21.0	19.9	21.2	21.5	18.6	20.0	18.9	20.3	20.5
4H	20.3	21.7	20.7	21.9	22.2	19.2	20.5	19.5	20.8	21.0
6H	20.9	22.2	21.3	22.5	22.7	19.5	20.8	19.9	21.1	21.3
8H	21.2	22.4	21.5	22.7	23.0	19.6	20.8	19.9	21.1	21.4
12H	21.3	22.5	21.7	22.8	23.1	19.6	20.8	20.0	21.1	21.4
4H 2H	18.4	19.8	18.8	20.0	20.3	17.9	19.3	18.2	19.5	19.8
3H	20.4	21.6	20.7	21.9	22.2	19.6	20.8	19.9	21.1	21.4
4H	21.3	22.3	21.7	22.7	23.0	20.3	21.3	20.6	21.7	22.0
6H	22.0	23.0	22.4	23.3	23.7	20.8	21.7	21.2	22.1	22.4
8H	22.3	23.2	22.7	23.6	24.0	20.9	21.8	21.3	22.2	22.5
12H	22.6	23.4	23.0	23.8	24.2	21.0	21.8	21.4	22.2	22.6
8H 4H	21.5	22.4	22.0	22.8	23.2	20.7	21.6	21.1	21.9	22.3
6H	22.5	23.2	22.9	23.6	24.0	21.3	22.1	21.8	22.5	22.9
8H	22.9	23.5	23.3	24.0	24.4	21.6	22.2	22.0	22.6	23.1
12H	23.2	23.8	23.7	24.2	24.7	21.7	22.3	22.2	22.7	23.2
12H 4H	21.6	22.4	22.0	22.8	23.2	20.7	21.5	21.1	21.9	22.3
6H	22.5	23.2	23.0	23.6	24.1	21.4	22.1	21.9	22.5	23.0
8H	23.0	23.5	23.5	24.0	24.5	21.7	22.3	22.2	22.7	23.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.5				

CIE Pub.117, 94.77 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -8.2$)

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:0.1378A P:3.3093W PF:1.0000 Freq:50.00Hz Lamp Flux:94.7677x1 lm		
NAME: LSP80-RGB-PF-24V	TYPE:LED	WEIGHT:
SPEC.:R	DIM.: 0.4m	SERIAL No.:
MFR.: CORE LIGHTING	SUR.:	Shielding Angle:

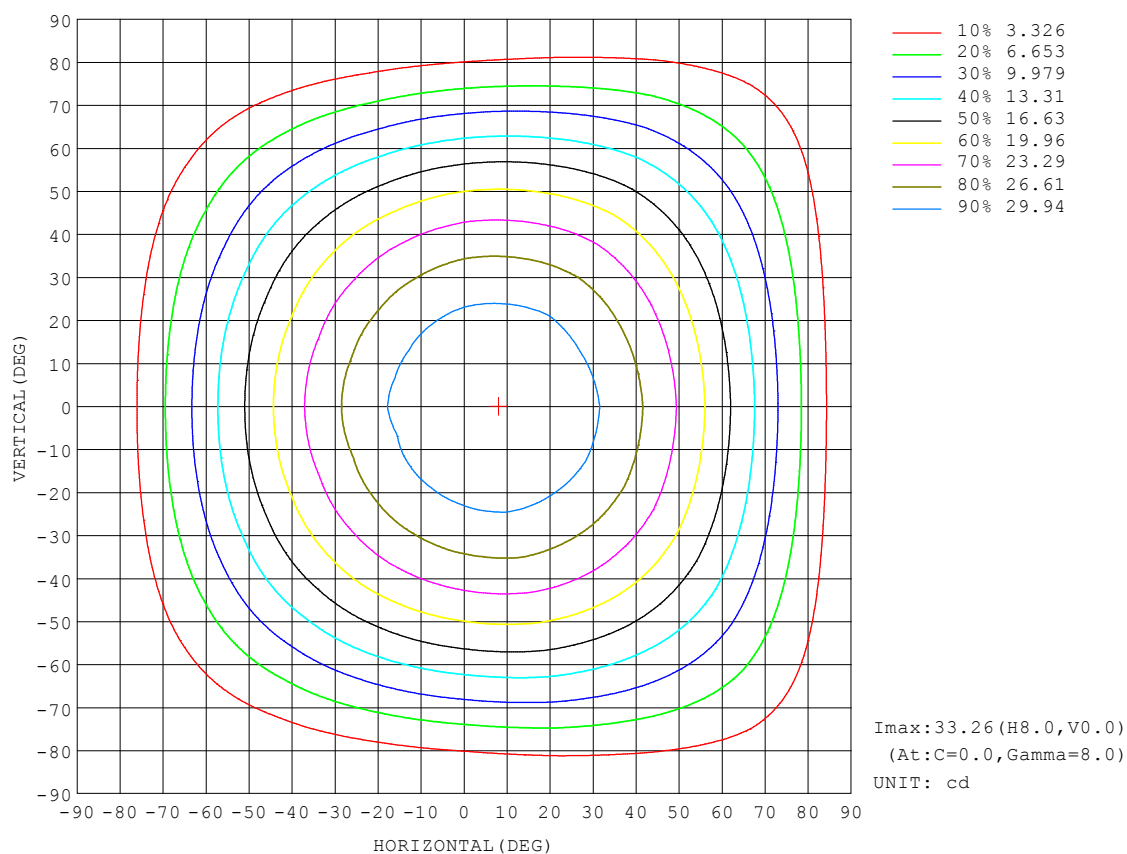
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	46	39	57	45	39	55	45	38	32
0.80	67	56	48	66	55	48	65	55	48	41
1.00	76	65	57	75	64	57	72	66	57	49
1.25	83	73	65	82	72	65	79	70	64	57
1.50	88	78	71	86	77	71	83	75	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:0.1378A P:3.3093W PF:1.0000 Freq:50.00Hz Lamp Flux:94.7677x1 lm		
NAME: LSP80-RGB-PF-24V	TYPE:LED	WEIGHT:
SPEC.:R	DIM.: 0.4m	SERIAL No.:
MFR.: CORE LIGHTING	SUR.:	Shielding Angle:

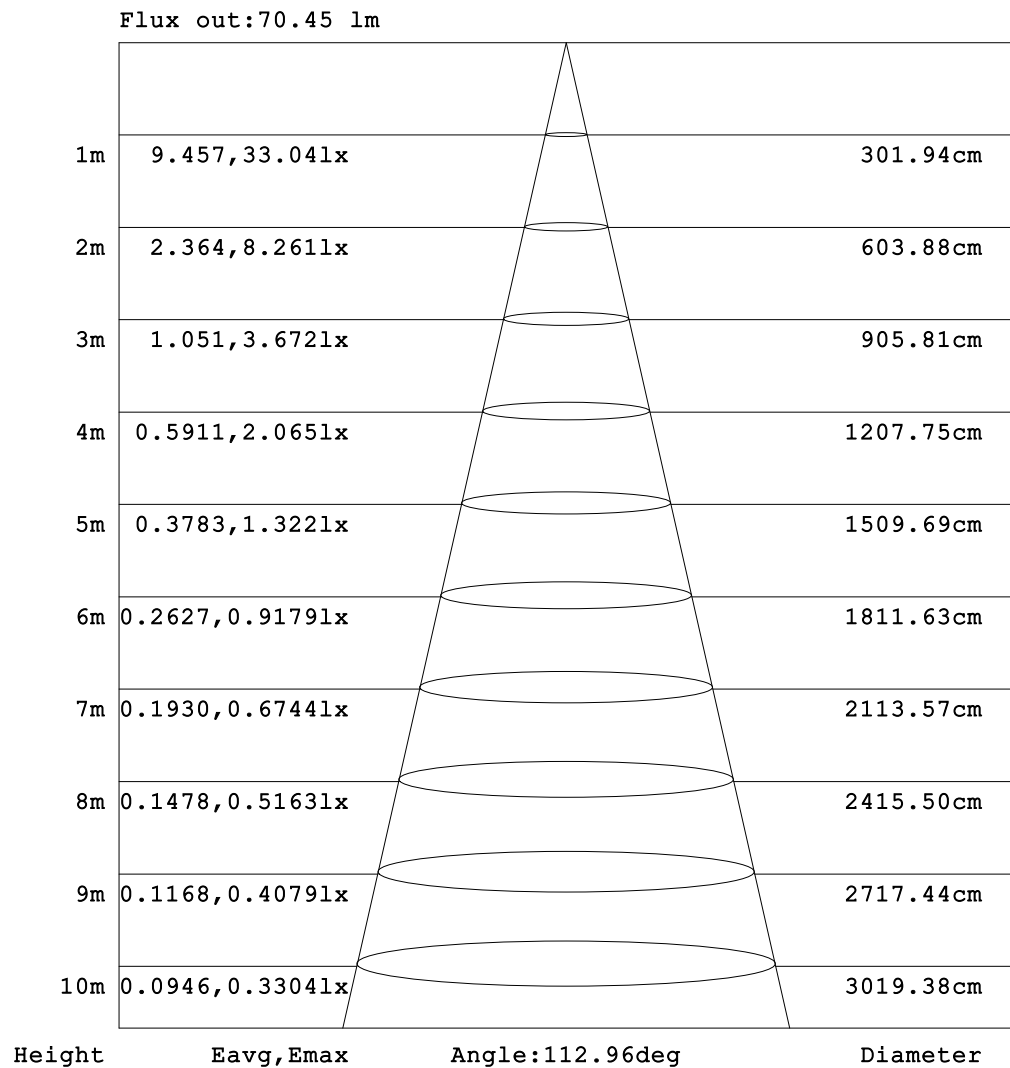


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:20DEG
Operators:
Test Date:03/14/2017

☐ 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:0.1378A P:3.3093W PF:1.0000 Freq:50.00Hz Lamp Flux:94.7677x1 lm		
NAME: LSP80-RGB-PF-24V	TYPE:LED	WEIGHT:
SPEC.:R	DIM.: 0.4m	SERIAL No.:
MFR.: CORE LIGHTING	SUR.:	Shielding Angle:

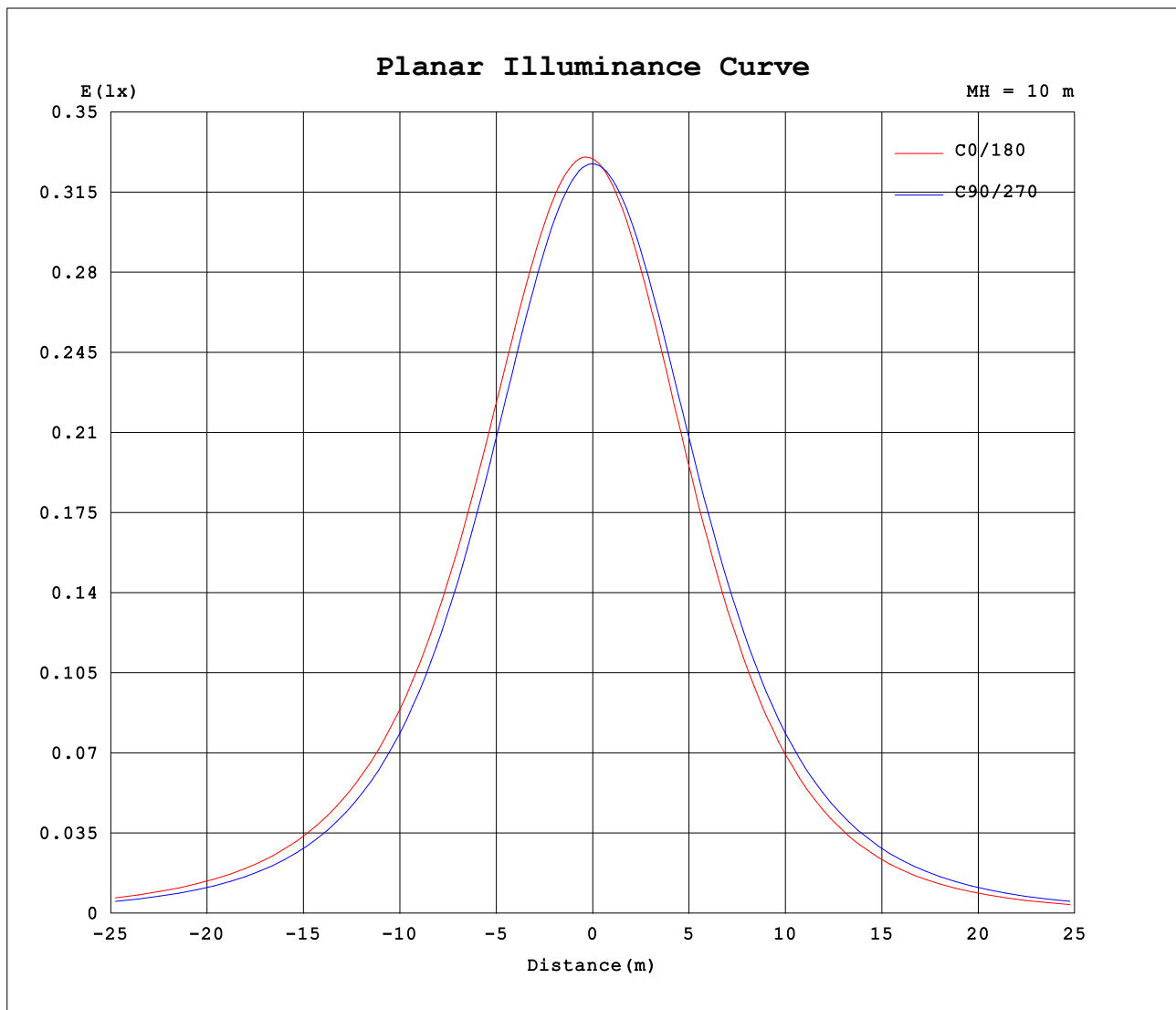


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1378A P:3.3093W PF:1.0000 Freq:50.00Hz Lamp Flux:94.7677x1 lm		
NAME: LSP80-RGB-PF-24V	TYPE:LED	WEIGHT:
SPEC.:R	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:

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