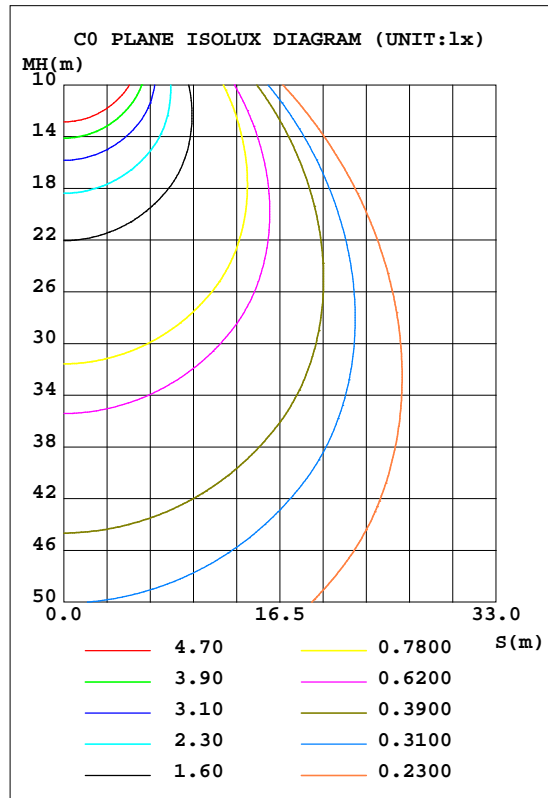
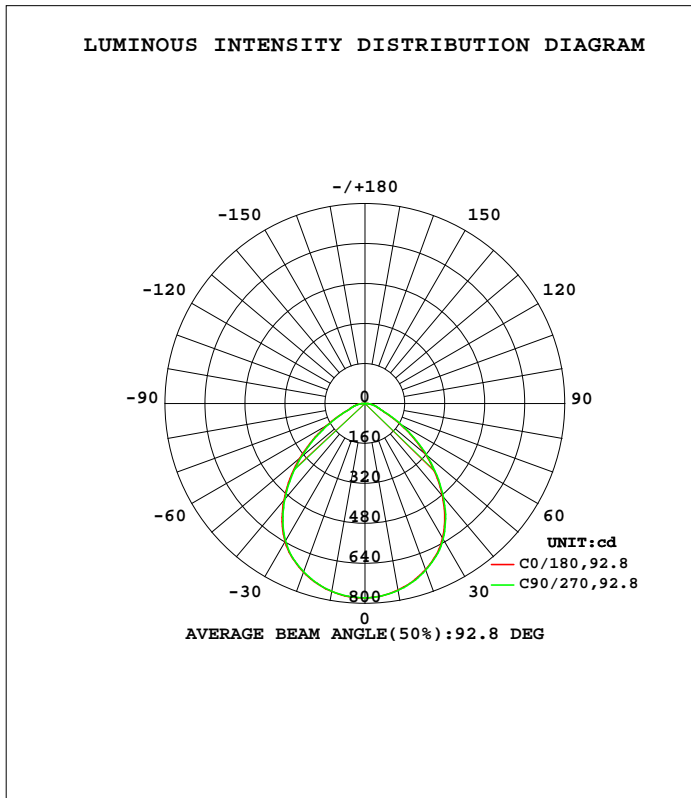


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Lotus LED Lights	SUR.: 21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 109.99 lm/W			
MODEL	8"	I <sub>max</sub> (cd)	777.7	S/MH(C0/180)	1.22
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1656.1	h UP, DN(C0-180)	0.0, 49.1
NOMINAL FLUX(lm)	1656.12	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0, 50.9
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	h down(%)	100.0	CIBSE SHR MAX	1.30



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-06-01

Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 3.200m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	758.7	759.7	764.2	763.5					0- 10	73.46	73.46	4.44,4.44
20	707.9	710.1	718.8	716.9					10- 20	209.1	282.5	17.1,17.1
30	621.9	626.4	639.3	635.9					20- 30	311.9	594.4	35.9,35.9
40	482.3	488.8	505.4	499.3					30- 40	353.8	948.2	57.3,57.3
50	316.0	323.5	340.0	332.6					40- 50	317.3	1265	76.4,76.4
60	157.6	163.8	177.4	170.6					50- 60	219.1	1485	89.6,89.6
70	61.34	63.23	66.53	64.56					60- 70	105.3	1590	96,96
80	29.16	31.29	33.85	31.69					70- 80	50.25	1640	99,99
90	0.2978	0.2935	1.630	0.1455					80- 90	16.03	1656	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): 1116 lm

%lum = 67.4%  
 %lamp = 67.4%

Conical surface Flux(120deg): 1484.6 lm

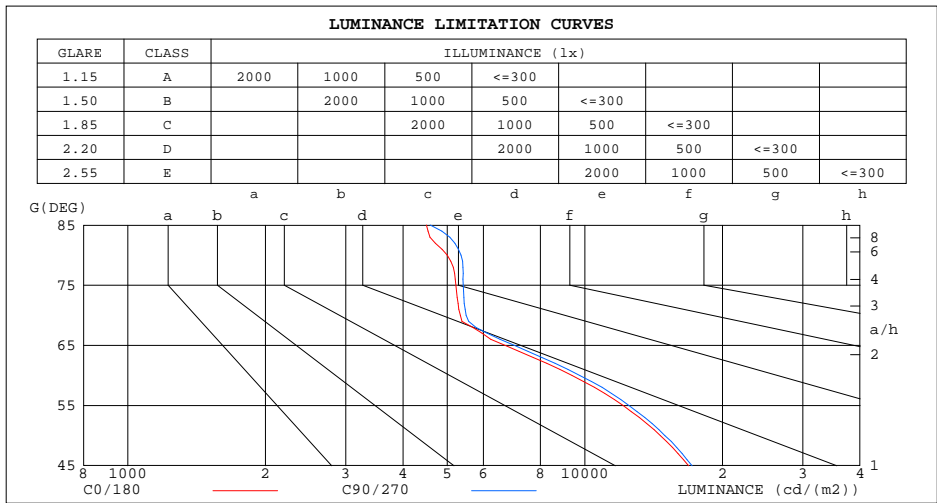
%lum = 89.6%  
 %lamp = 89.6%

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-06-01

g Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:3.200m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Lotus LED Lights	SUR.: 21cm*16cm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	4503	4590
80	4999	5361
75	5225	5422
70	5339	5501
65	6692	7012
60	9384	9746
55	12132	12504
50	14635	14974
45	16855	17156

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-06-01

G Range: 0 - 90DEG  
 G Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 3.200m [K=1.0000]  
 Remarks:

WEC AND CCEC

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:Lotus LED Lights	SUR.:21cm*16cm	Shielding Angle:

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.259	.147	.047	.252	.144	.046	.239	.137	.044	.227	.131	.042	.216	.125	.040	
2.0	.248	.136	.042	.242	.133	.041	.231	.128	.040	.220	.124	.039	.211	.119	.038	
3.0	.234	.125	.037	.229	.123	.037	.219	.119	.036	.210	.115	.035	.201	.111	.034	
4.0	.220	.114	.034	.215	.113	.033	.206	.109	.033	.198	.106	.032	.191	.104	.032	
5.0	.206	.105	.030	.202	.104	.030	.194	.101	.030	.187	.099	.029	.180	.096	.029	
6.0	.193	.097	.028	.190	.096	.028	.183	.094	.027	.176	.092	.027	.170	.090	.027	
7.0	.182	.090	.025	.179	.089	.025	.172	.087	.025	.167	.085	.025	.161	.084	.025	
8.0	.171	.084	.024	.168	.083	.023	.163	.081	.023	.158	.080	.023	.153	.078	.023	
9.0	.162	.078	.022	.159	.078	.022	.154	.076	.022	.150	.075	.021	.145	.074	.021	
10.0	.153	.073	.020	.151	.073	.020	.146	.072	.020	.142	.071	.020	.138	.069	.020	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	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	.151	.134	.119	.103	.092	.082	.060	.054	.048	.019	.017	.015	
2.0	.166	.132	.103	.143	.114	.089	.098	.079	.062	.056	.046	.037	.018	.015	.012	
3.0	.158	.114	.079	.135	.098	.069	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.150	.100	.063	.128	.087	.054	.088	.060	.038	.051	.035	.023	.016	.012	.007	
5.0	.142	.090	.051	.122	.078	.044	.084	.054	.031	.049	.032	.019	.016	.010	.006	
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.129	.074	.036	.111	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004	
8.0	.123	.068	.031	.106	.059	.027	.073	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.023	.070	.039	.016	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.097	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-06-01

g Range: 0 - 90DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:3.200m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

NAME:		TYPE:					WEIGHT:				
SPEC.:		DIM.:					SERIAL No.:				
MFR.:Lotus LED Lights		SUR.:21cm*16cm					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	19.1	20.4	19.3	20.6	20.8	19.2	20.5	19.4	20.7	20.9
	3H	19.4	20.7	19.7	20.9	21.1	19.6	20.8	19.8	21.0	21.2
	4H	19.6	20.8	19.9	21.0	21.3	19.7	20.9	20.0	21.2	21.4
	6H	19.8	20.9	20.1	21.1	21.4	19.9	21.0	20.2	21.3	21.5
	8H	19.8	20.9	20.2	21.2	21.4	20.0	21.0	20.3	21.3	21.6
	12H	19.8	20.9	20.2	21.2	21.5	20.0	21.0	20.3	21.3	21.6
4H	2H	19.3	20.4	19.6	20.7	20.9	19.3	20.5	19.6	20.8	21.0
	3H	19.7	20.8	20.1	21.1	21.4	19.8	20.9	20.2	21.2	21.5
	4H	20.0	21.0	20.4	21.3	21.6	20.1	21.1	20.5	21.4	21.7
	6H	20.3	21.1	20.7	21.5	21.8	20.4	21.3	20.8	21.6	22.0
	8H	20.4	21.2	20.8	21.5	21.9	20.6	21.3	21.0	21.7	22.1
	12H	20.5	21.2	20.9	21.6	22.0	20.6	21.3	21.1	21.7	22.1
8H	4H	20.1	20.9	20.5	21.2	21.6	20.2	21.0	20.6	21.3	21.7
	6H	20.5	21.1	20.9	21.5	22.0	20.6	21.3	21.1	21.7	22.1
	8H	20.7	21.2	21.1	21.6	22.1	20.8	21.4	21.3	21.8	22.2
	12H	20.8	21.3	21.3	21.7	22.2	21.0	21.4	21.4	21.9	22.4
12H	4H	20.1	20.8	20.5	21.2	21.6	20.2	20.9	20.6	21.3	21.7
	6H	20.5	21.1	21.0	21.5	22.0	20.7	21.2	21.1	21.6	22.1
	8H	20.7	21.2	21.2	21.6	22.1	20.9	21.3	21.3	21.8	22.3
Variations with the observer position at spacings:											
S = 1.0H		+ 0.5 / - 0.7					+ 0.5 / - 0.6				
1.5H		+ 0.2 / - 0.3					+ 0.3 / - 0.4				
2.0H		+ 1.1 / - 1.3					+ 1.1 / - 1.3				

CIE Pub.117, 1656 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.8)

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-06-01

g Range: 0 - 90DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:3.200m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Lotus LED Lights	SUR.: 21cm*16cm	Shielding Angle:

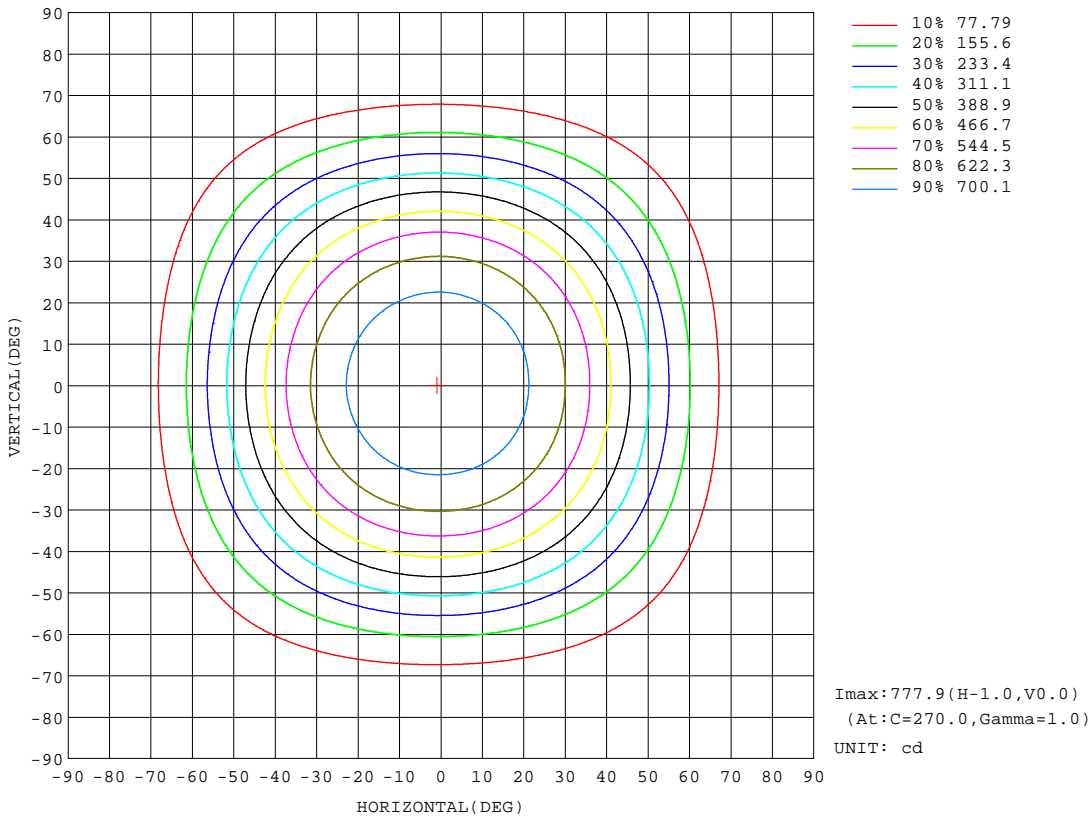
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	54	48	64	54	48	63	53	48	42
0.80	75	65	58	74	64	58	72	63	58	52
1.00	83	73	67	82	73	67	80	74	66	60
1.25	90	81	75	88	80	74	86	79	74	67
1.50	94	86	80	92	85	80	90	83	78	72
2.00	100	93	88	98	92	87	95	90	85	78
2.50	103	96	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	107	102	99	103	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			

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-06-01

g Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 3.200m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Lotus LED Lights	SUR.: 21cm*16cm	Shielding Angle:



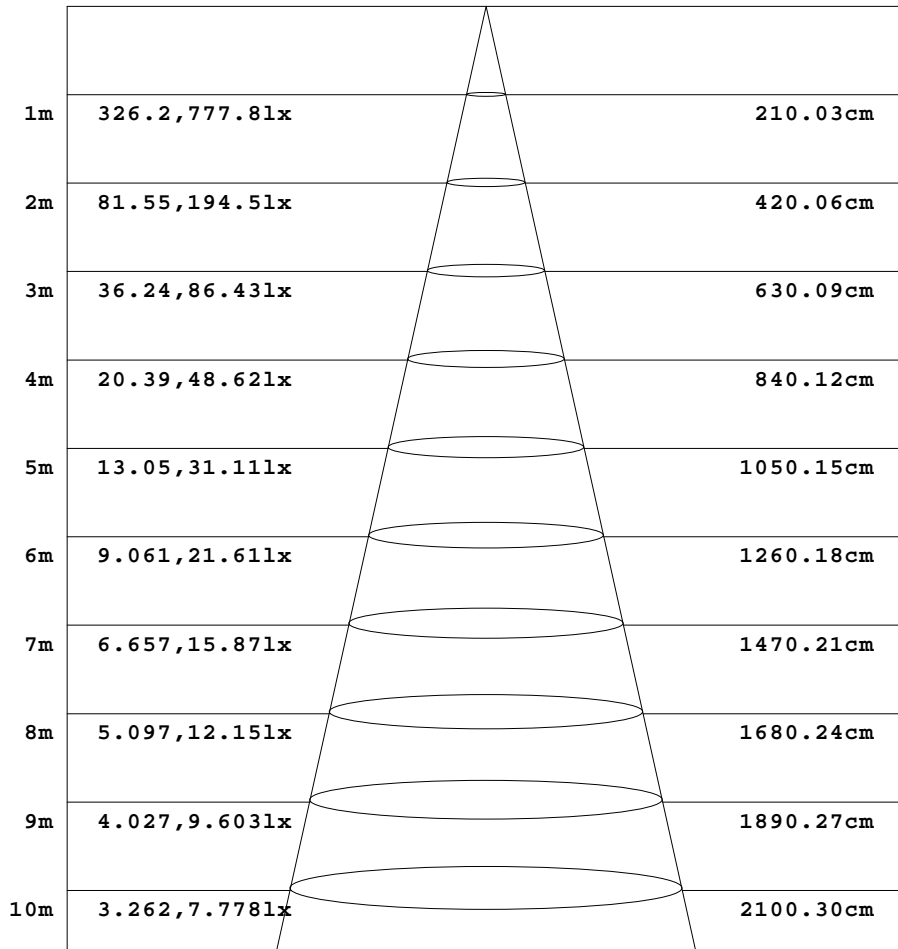
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2021-06-01

Page Range: 0 - 90DEG  
Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.366  
Humidity: 65.0%  
Test Distance: 3.200m [K=1.0000]  
Remarks:

**AAI Figure**

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:Lotus LED Lights	SUR.:21cm*16cm	Shielding Angle:

Flux out:1178 lm



Height                      Eavg, Emax                      Angle:92.80deg                      Diameter

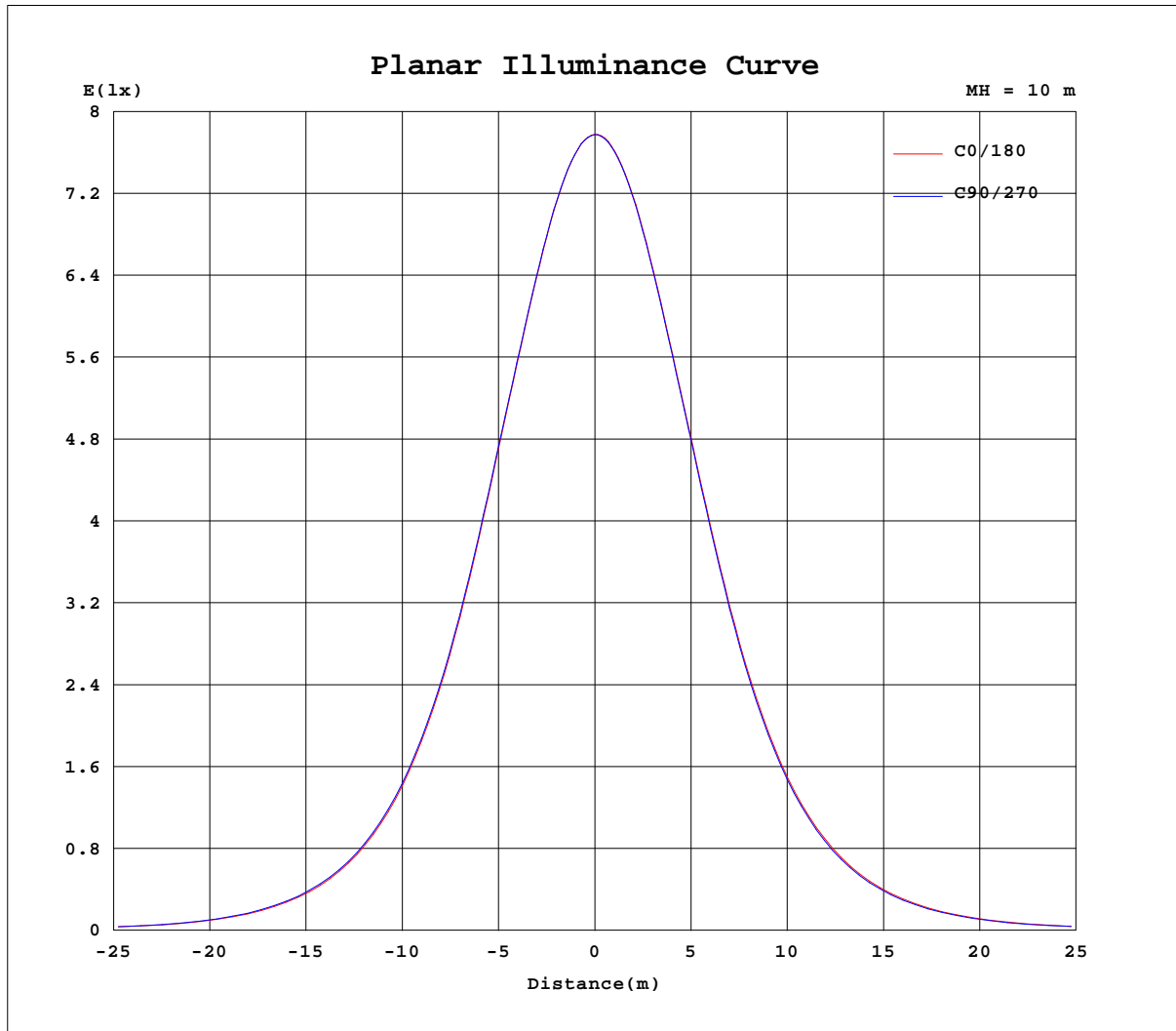
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-06-01

Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:3.200m [K=1.0000]  
 Remarks:



Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-06-01

Page Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 3.200m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Lotus LED Lights	SUR.: 21cm*16cm	Shielding Angle:

Table--1

UNIT: cd

C( DEG ) g (DEG)	0	90	180	270																
0	778	778	778	778																
5	772	773	775	775																
10	759	760	764	763																
15	737	739	746	744																
20	708	710	719	717																
25	672	675	685	682																
30	622	626	639	636																
35	557	563	578	573																
40	482	489	505	499																
45	400	408	424	418																
50	316	323	340	333																
55	234	241	256	249																
60	158	164	177	171																
65	95.0	99.6	110	105																
70	61.3	63.2	66.5	64.6																
75	45.4	47.2	49.8	48.1																
80	29.2	31.3	33.9	31.7																
85	13.2	13.4	17.9	13.8																
90	0.30	0.29	1.63	0.15																

C Range: 0 - 360DEG      C Range: 0 - 90DEG  
C Interval: 90.0DEG      Interval: 1.0DEG  
Test Speed: HIGH      Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.366  
Temperature: 25.3DEG      Humidity: 65.0%  
Operators: DAMIN      Test Distance: 3.200m [K=1.0000]  
Test Date: 2021-06-01      Remarks: