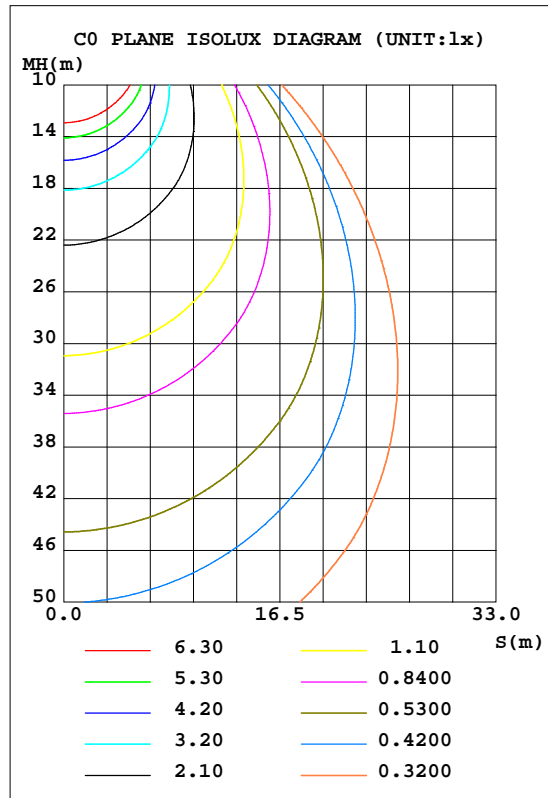
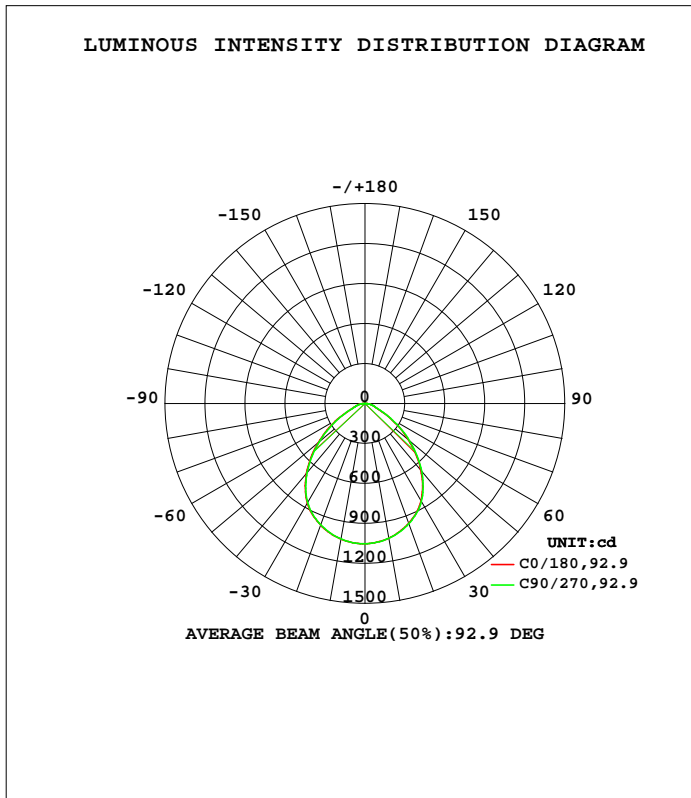


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 102.77 lm/W			
MODEL	8"	I <sub>max</sub> (cd)	1052	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)	2241.8	h UP, DN(C0-180)	0.0,49.1
NOMINAL FLUX(lm)	2241.84	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	1027	1028	1034	1033					0- 10	99.40	99.40	4.43,4.43
20	958.0	961.3	972.4	970.0					10- 20	282.9	382.3	17.1,17.1
30	842.0	847.9	864.9	860.5					20- 30	422.0	804.3	35.9,35.9
40	653.4	661.7	683.6	676.0					30- 40	478.9	1283	57.2,57.2
50	428.5	438.3	459.9	450.4					40- 50	429.6	1713	76.4,76.4
60	214.0	222.8	239.8	231.2					50- 60	296.8	2010	89.6,89.6
70	83.16	85.66	89.90	87.35					60- 70	142.6	2152	96,96
80	39.55	42.37	45.70	42.87					70- 80	68.01	2220	99,99
90	0.4084	0.4037	2.096	0.2049					80- 90	21.69	2242	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): 1510.4 lm

%lum = 67.4%  
 %lamp = 67.4%

Conical surface Flux(120deg): 2009.6 lm

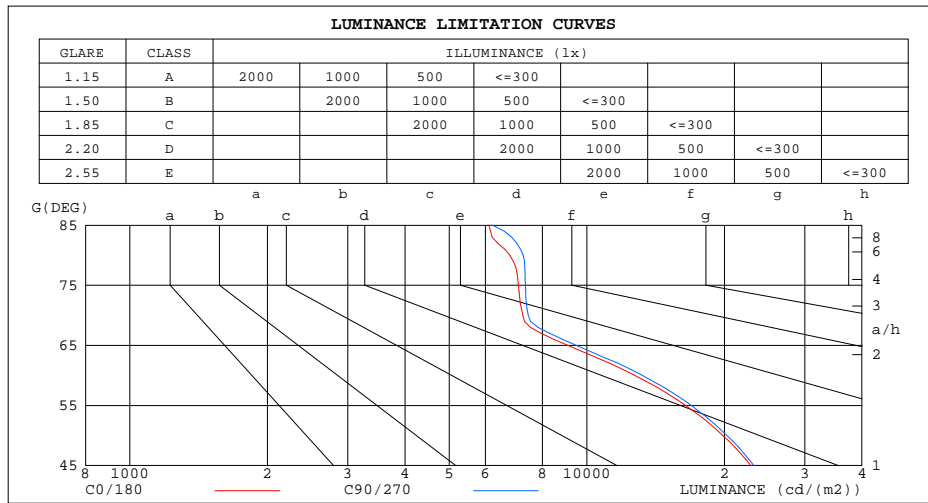
%lum = 89.6%  
 %lamp = 89.6%

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	6109	6208
80	6785	7255
75	7085	7334
70	7243	7447
65	9093	9488
60	12748	13247
55	16456	16940
50	19857	20274
45	22859	23212

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	.169	.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	20.5	19.4	20.6	20.8	19.2	20.6	19.5	20.7	20.9	
3H	19.4	20.7	19.7	20.9	21.1	19.6	20.8	19.8	21.0	21.3	
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	21.2	21.4	19.9	21.0	20.2	21.3	21.6	
8H	19.8	20.9	20.2	21.2	21.5	20.0	21.0	20.3	21.3	21.6	
12H	19.9	20.9	20.2	21.2	21.5	20.0	21.0	20.4	21.3	21.6	
4H 2H	19.3	20.4	19.6	20.7	20.9	19.4	20.5	19.7	20.8	21.0	
3H	19.8	20.8	20.1	21.1	21.4	19.9	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	21.0	21.5	22.0	20.6	21.3	21.1	21.7	22.1	
8H	20.7	21.2	21.1	21.7	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	21.7	22.1	20.9	21.3	21.4	21.8	22.3	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.5 / - 0.7					+ 0.5 / - 0.6					
1.5H	+ 0.3 / - 0.4					+ 0.3 / - 0.4					
2.0H	+ 1.1 / - 1.3					+ 1.1 / - 1.3					

CIE Pub.117, 2242 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.8)

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:

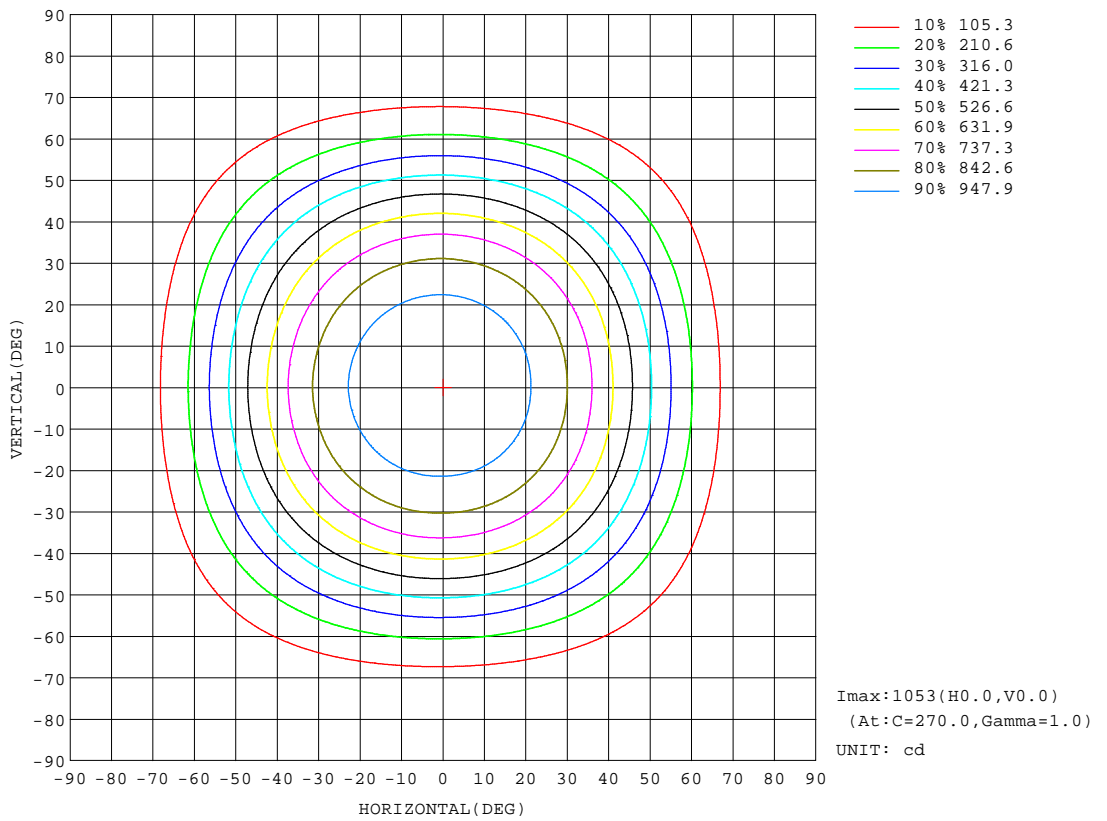
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	54	48	64	54	48	63	53	48	42
0.80	75	65	58	74	64	58	72	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:



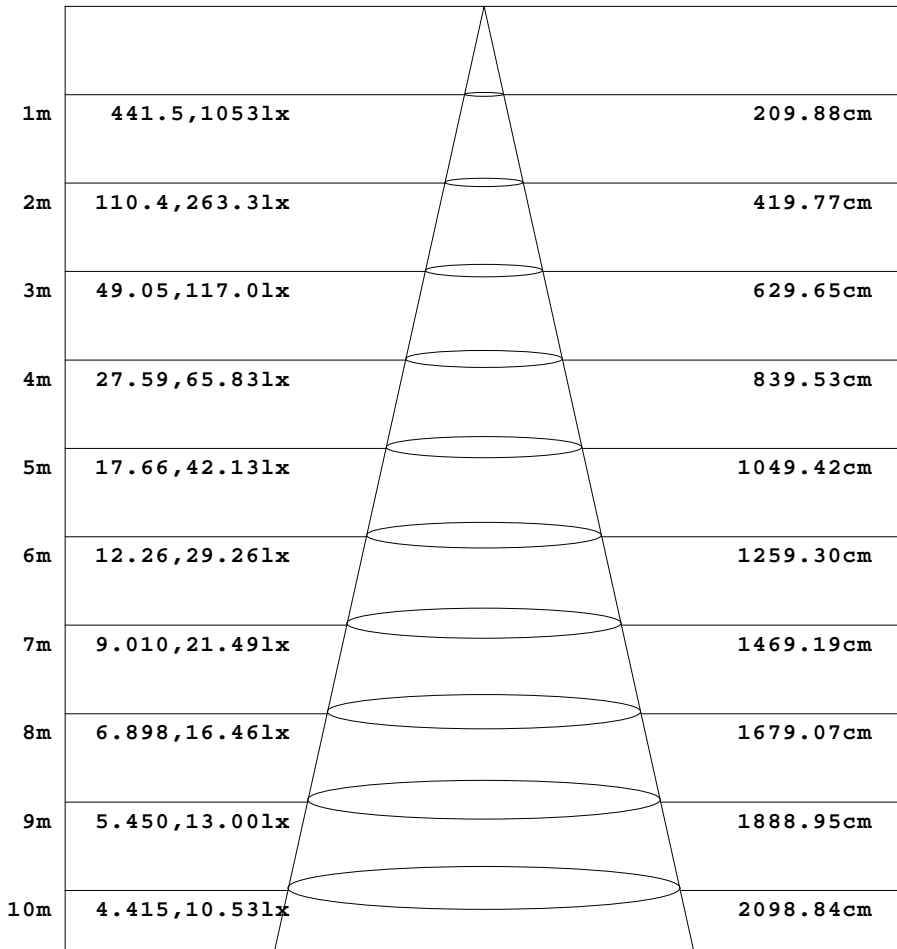
C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-06-01

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:1595 lm



Height                      Eavg, Emax                      Angle:92.76deg                      Diameter

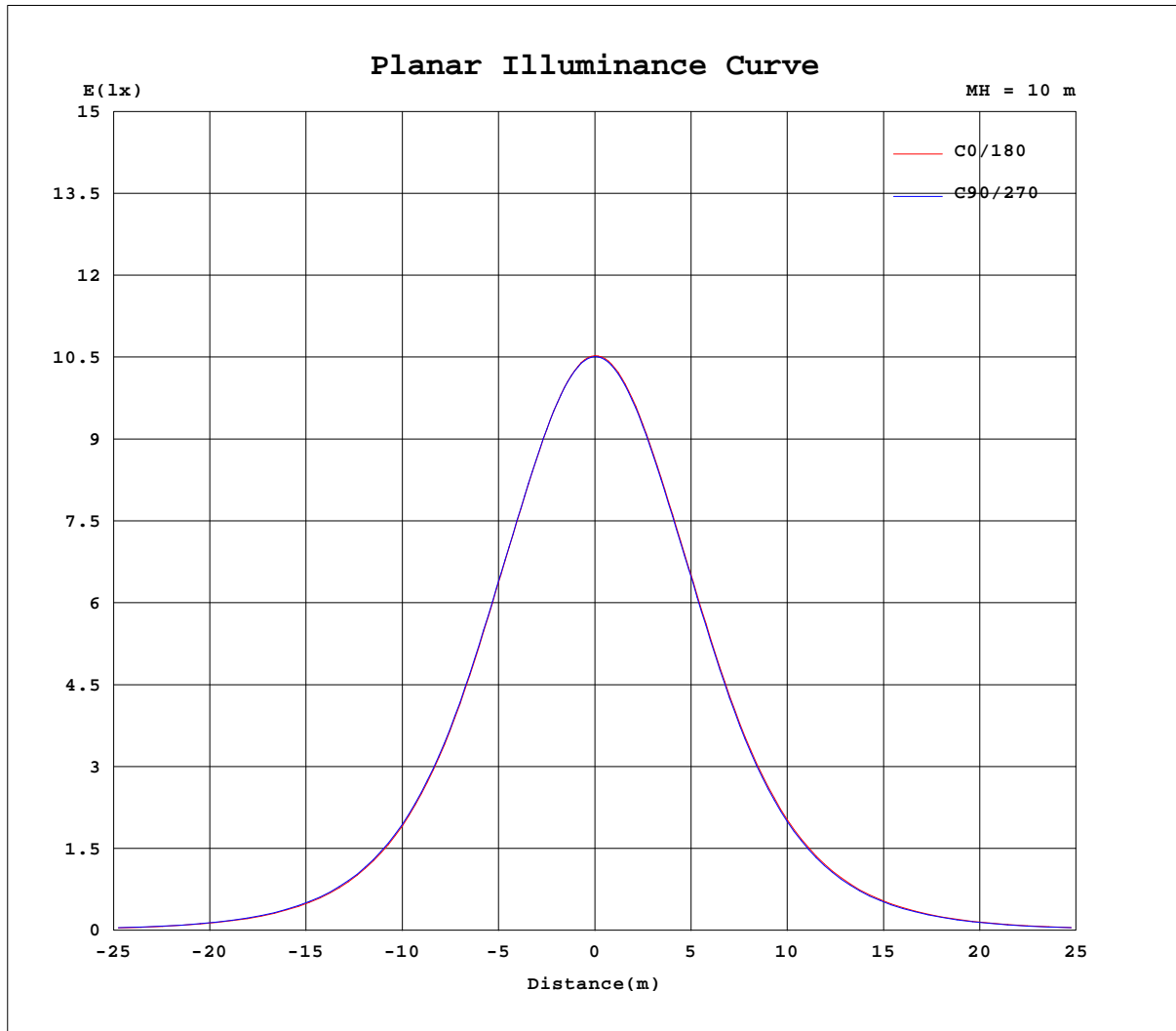
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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	1052	1052	1052	1052													
5	1045	1046	1049	1048													
10	1027	1028	1034	1033													
15	998	1000	1009	1007													
20	958	961	972	970													
25	909	913	926	923													
30	842	848	865	860													
35	755	762	782	776													
40	653	662	684	676													
45	543	552	575	565													
50	428	438	460	450													
55	317	327	347	337													
60	214	223	240	231													
65	129	135	148	142													
70	83.2	85.7	89.9	87.3													
75	61.6	63.8	67.3	65.0													
80	39.5	42.4	45.7	42.9													
85	17.9	18.2	24.0	18.7													
90	0.41	0.40	2.10	0.20													

C Range: 0 - 360DEG	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: