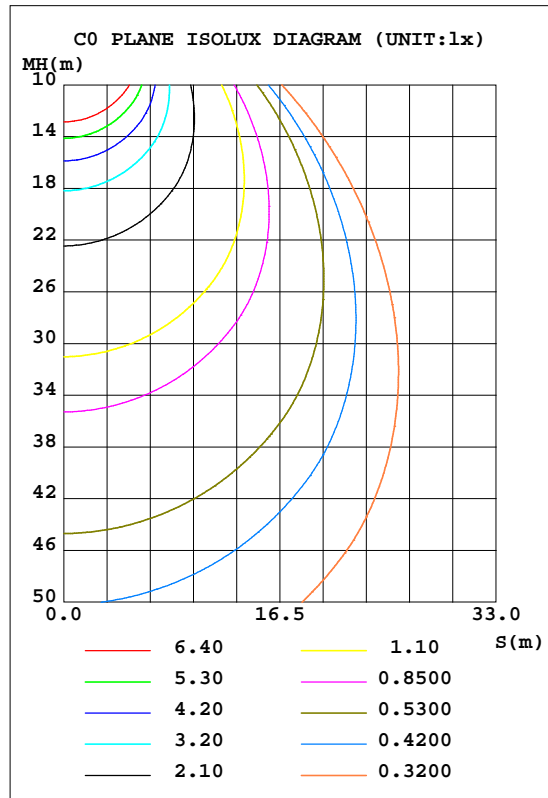
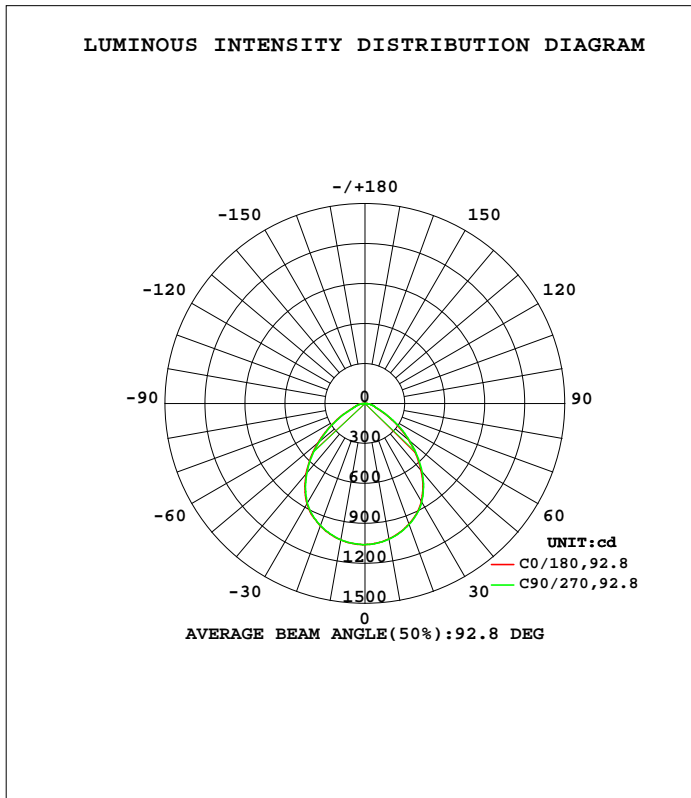


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 107.45 lm/W			
MODEL	8"	I _{max} (cd)	1059	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)	2254.3	h UP, DN(C0-180)	0.0,49.2
NOMINAL FLUX(lm)	2254.35	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0,50.8
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	1033	1034	1040	1039					0- 10	100.0	100.0	4.44,4.44
20	963.9	966.9	978.3	975.6					10- 20	284.6	384.6	17.1,17.1
30	846.9	852.8	870.1	864.9					20- 30	424.5	809.1	35.9,35.9
40	656.9	665.6	687.6	679.3					30- 40	481.6	1291	57.3,57.3
50	430.8	441.1	462.6	452.5					40- 50	431.9	1723	76.4,76.4
60	215.1	224.2	241.5	232.1					50- 60	298.4	2021	89.6,89.6
70	83.53	86.10	90.37	87.72					60- 70	143.3	2164	96,96
80	39.70	42.56	45.95	43.01					70- 80	68.38	2233	99,99
90	0.4110	0.4053	2.152	0.2077					80- 90	21.76	2254	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): 1519.1 lm

%lum = 67.4%
 %lamp = 67.4%

Conical surface Flux(120deg): 2020.9 lm

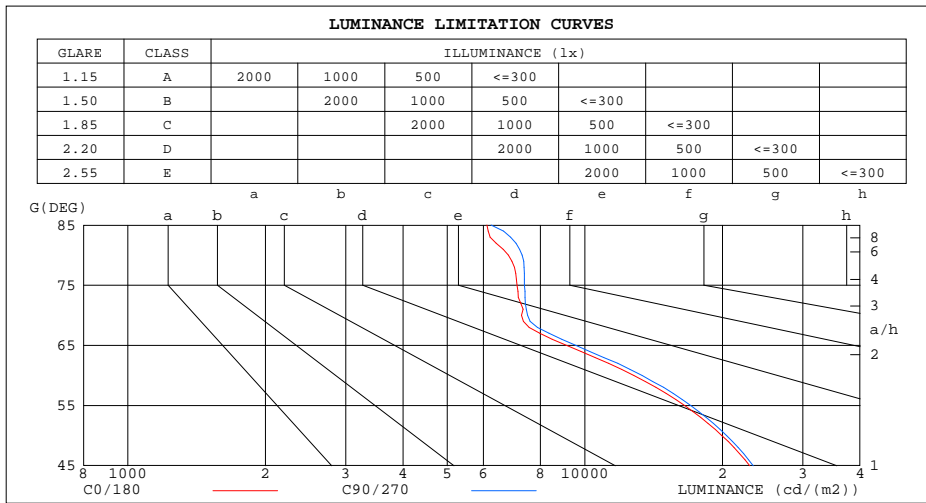
%lum = 89.6%
 %lamp = 89.6%

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	6104	6235
80	6804	7295
75	7110	7379
70	7269	7491
65	9125	9563
60	12806	13341
55	16537	17049
50	19948	20422
45	22964	23371

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	.143	.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	20.5	19.4	20.6	20.8	19.2	20.6	19.5	20.8	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	21.1	21.4	19.9	21.0	20.2	21.3	21.6	
8H	19.8	20.9	20.2	21.2	21.4	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	21.4	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, 2254 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:

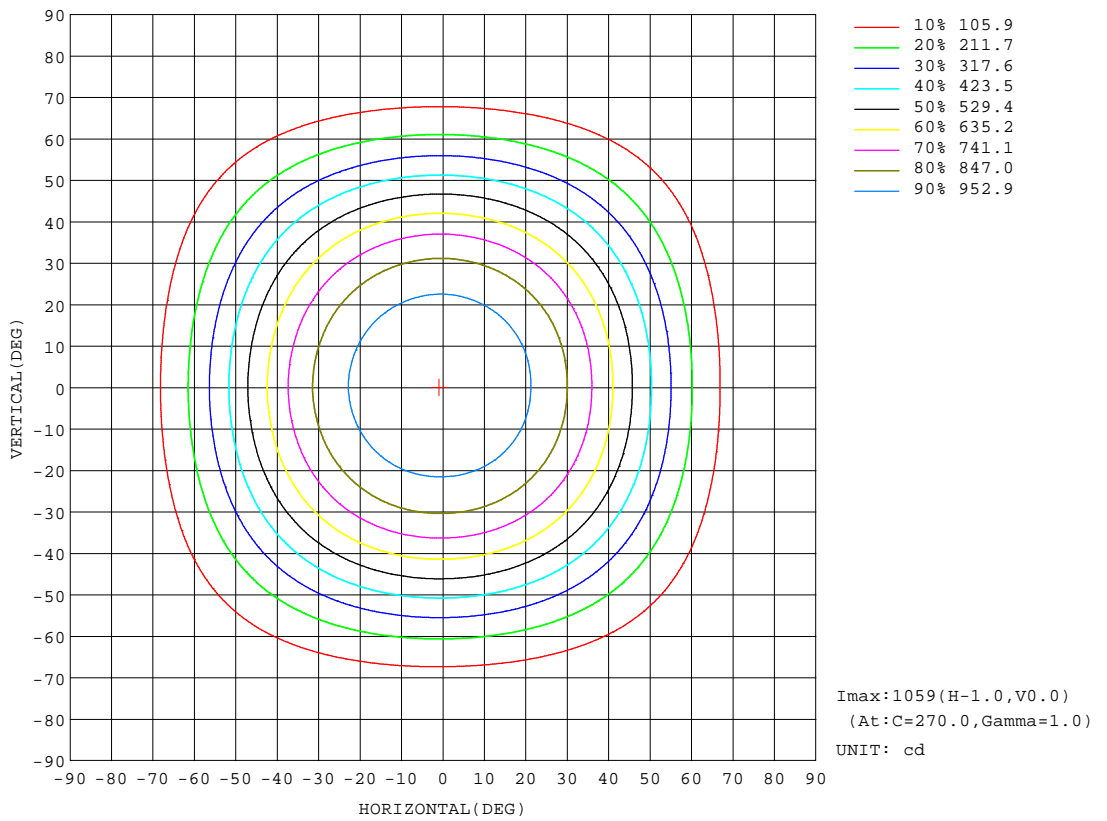
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	54	48	64	54	48	63	53	48	42
0.80	75	65	58	74	64	58	72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



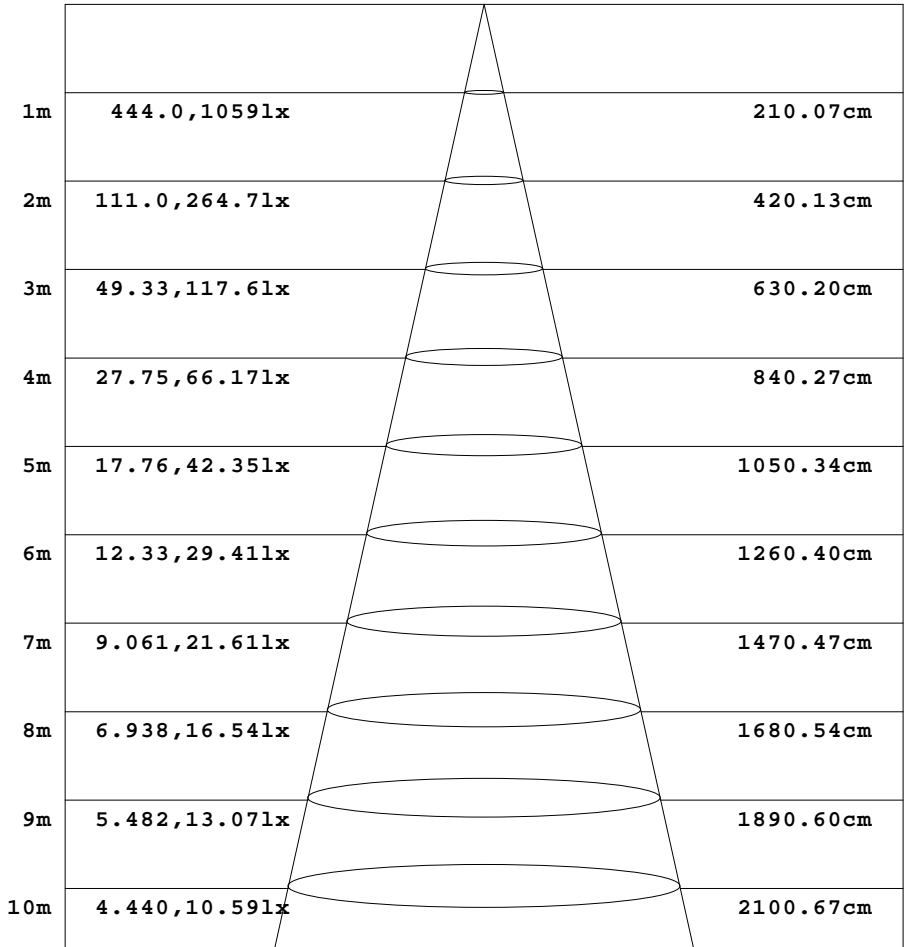
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-06-01

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:1604 lm



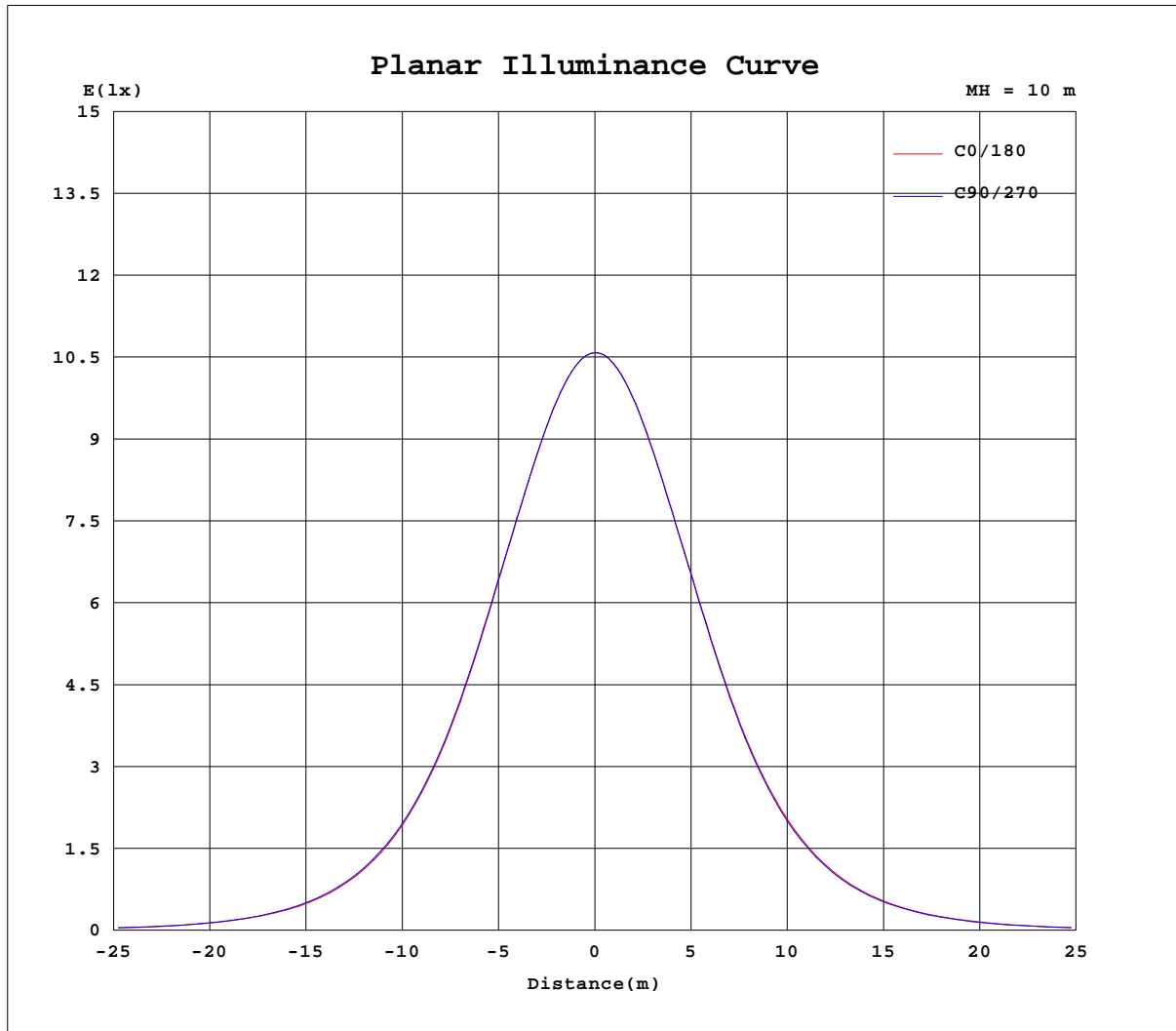
Height Eavg, Emax Angle:92.81deg Diameter

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	1059	1059	1059	1059													
5	1051	1052	1055	1054													
10	1033	1034	1040	1039													
15	1004	1006	1015	1013													
20	964	967	978	976													
25	914	918	932	929													
30	847	853	870	865													
35	759	767	787	780													
40	657	666	688	679													
45	546	555	578	568													
50	431	441	463	453													
55	319	329	348	338													
60	215	224	242	232													
65	130	136	149	142													
70	83.5	86.1	90.4	87.7													
75	61.8	64.2	67.6	65.3													
80	39.7	42.6	45.9	43.0													
85	17.9	18.3	24.2	18.8													
90	0.41	0.41	2.15	0.21													

C Range: 0 - 360DEG	Page 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: