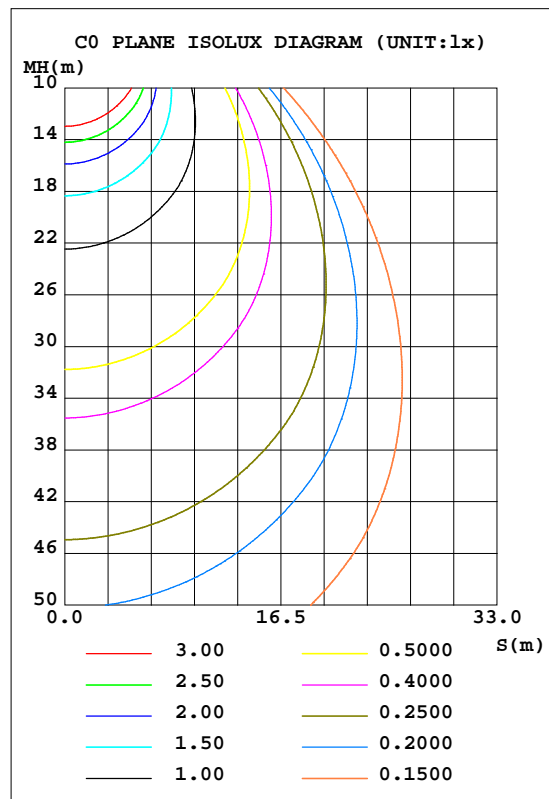
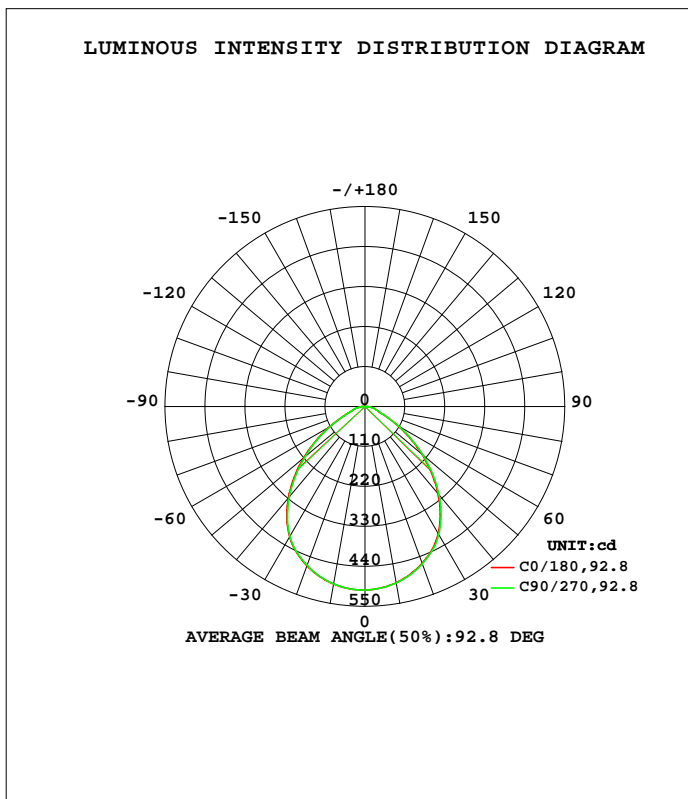


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 110.91 lm/W			
MODEL	8"	I <sub>max</sub> (cd)	504.9	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)	1074.8	h UP, DN(C0-180)	0.0,49.1
NOMINAL FLUX(lm)	1074.76	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	492.4	493.3	496.3	495.6					0- 10	47.69	47.69	4.44,4.44
20	459.5	461.1	466.7	465.3					10- 20	135.7	183.4	17.1,17.1
30	403.5	406.5	415.2	412.8					20- 30	202.4	385.8	35.9,35.9
40	312.8	317.1	328.2	324.1					30- 40	229.7	615.5	57.3,57.3
50	204.9	210.1	220.9	215.9					40- 50	205.9	821.4	76.4,76.4
60	102.1	106.1	114.9	110.7					50- 60	142.0	963.4	89.6,89.6
70	39.80	41.07	43.25	41.93					60- 70	68.28	1032	96,96
80	18.92	20.32	22.01	20.56					70- 80	32.63	1064	99,99
90	0.1853	0.1829	1.079	0.0860					80- 90	10.41	1075	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): 724.4 lm

%lum = 67.4%  
 %lamp = 67.4%

Conical surface Flux(120deg): 963.43 lm

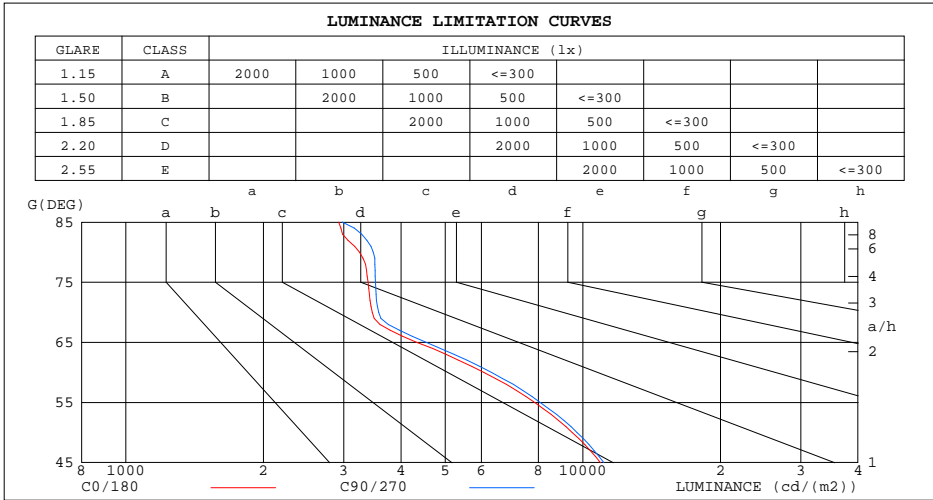
%lum = 89.6%  
 %lamp = 89.6%

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	2922	2976
80	3244	3481
75	3388	3520
70	3464	3573
65	4334	4550
60	6077	6316
55	7860	8077
50	9490	9724
45	10931	11132

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:

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	19.5	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	21.1	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	20.1	21.2	21.4	20.0	21.0	20.3	21.3	21.6
	12H	19.8	20.9	20.2	21.1	21.4	20.0	21.0	20.3	21.3	21.6
4H	2H	19.2	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	21.0	21.3	19.8	20.9	20.2	21.1	21.4
	4H	20.0	20.9	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	21.5	21.9	20.6	21.3	21.0	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	21.9	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	22.3
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	21.9	20.6	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		+ 0.3 / - 0.4					+ 0.3 / - 0.4				
2.0H		+ 1.1 / - 1.3					+ 1.1 / - 1.3				

CIE Pub.117, 1075 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.3)

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:

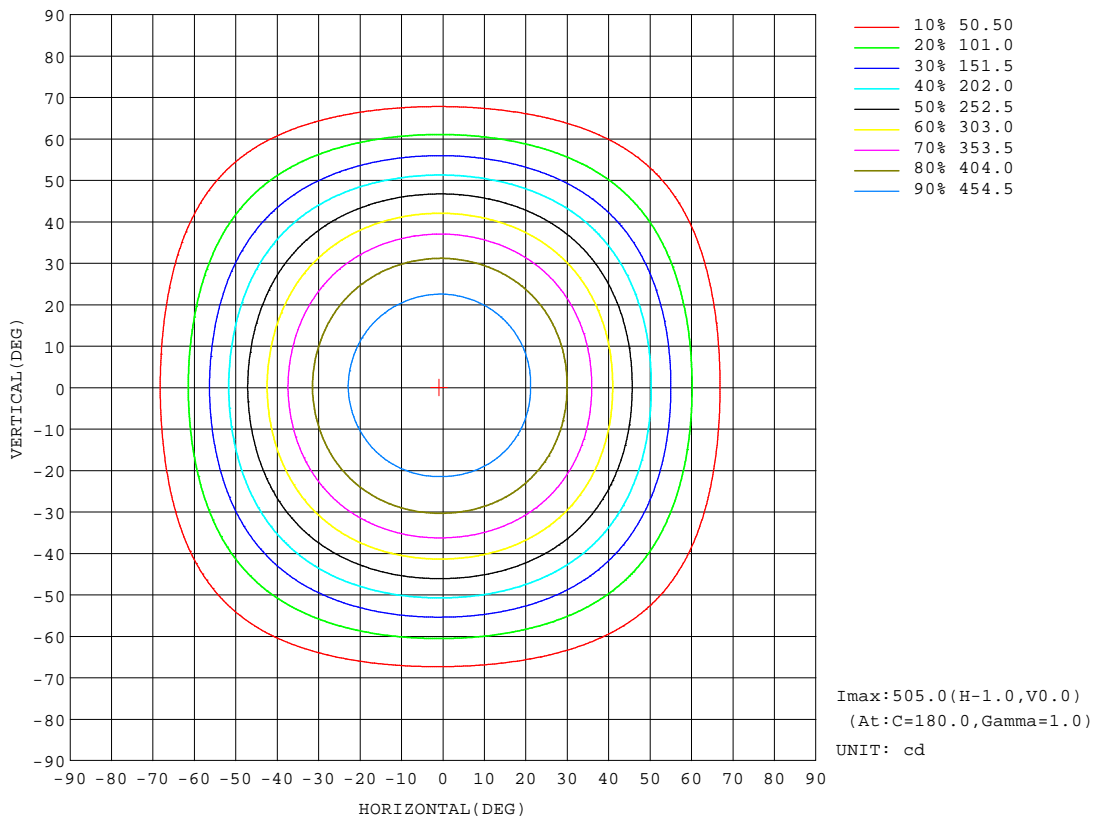
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	54	48	64	54	48	63	53	48	42
0.80	75	65	58	74	64	58	72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

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



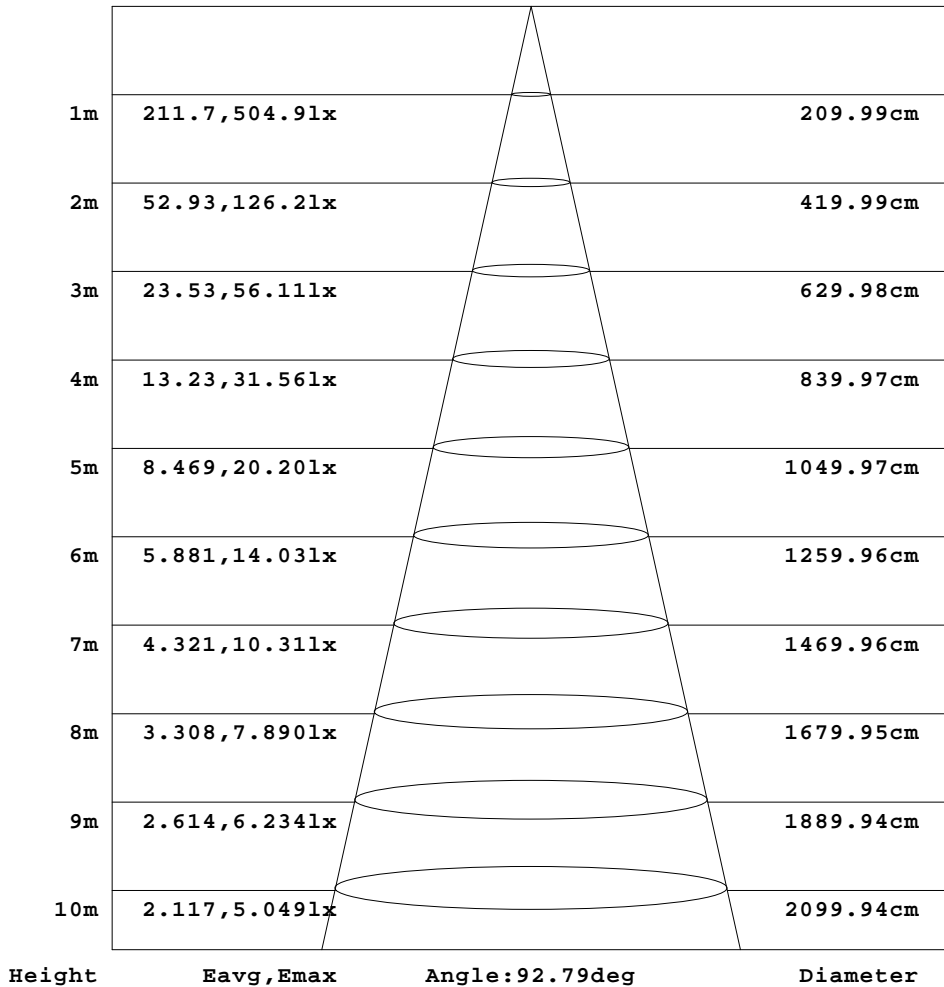
**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2021-06-01**

**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:764.9 lm



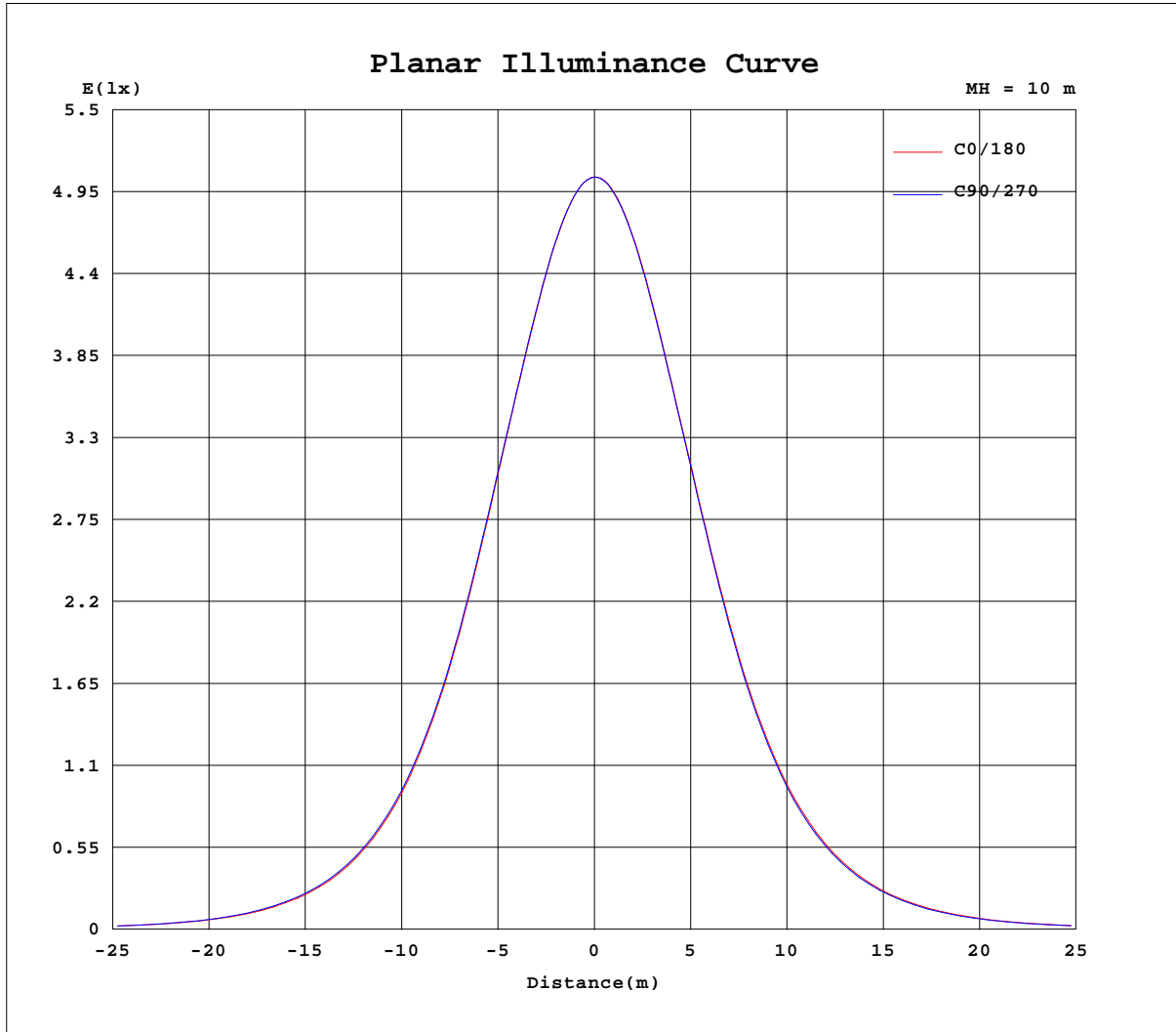
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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	505	505	505	505																
5	501	502	503	503																
10	492	493	496	496																
15	478	480	484	483																
20	459	461	467	465																
25	436	438	445	443																
30	403	407	415	413																
35	362	365	375	372																
40	313	317	328	324																
45	260	265	276	271																
50	205	210	221	216																
55	151	156	166	161																
60	102	106	115	111																
65	61.5	64.6	71.3	68.0																
70	39.8	41.1	43.3	41.9																
75	29.5	30.6	32.3	31.2																
80	18.9	20.3	22.0	20.6																
85	8.56	8.72	11.6	8.97																
90	0.19	0.18	1.08	0.09																

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: