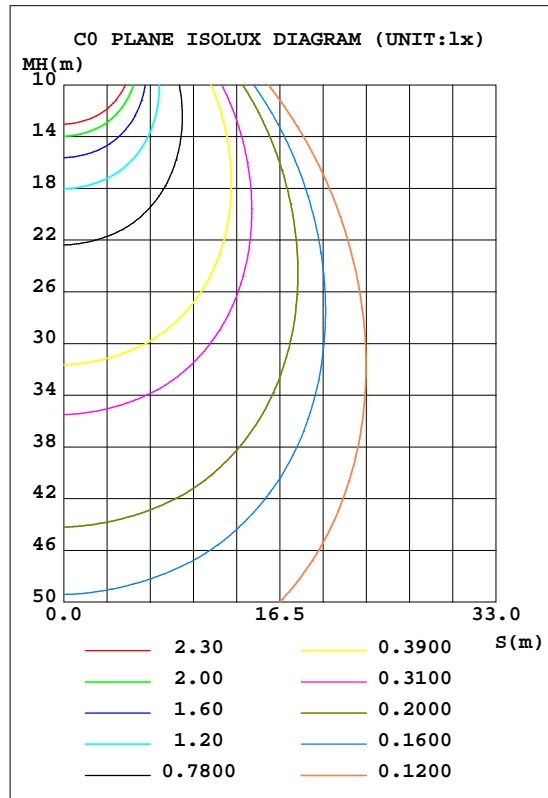
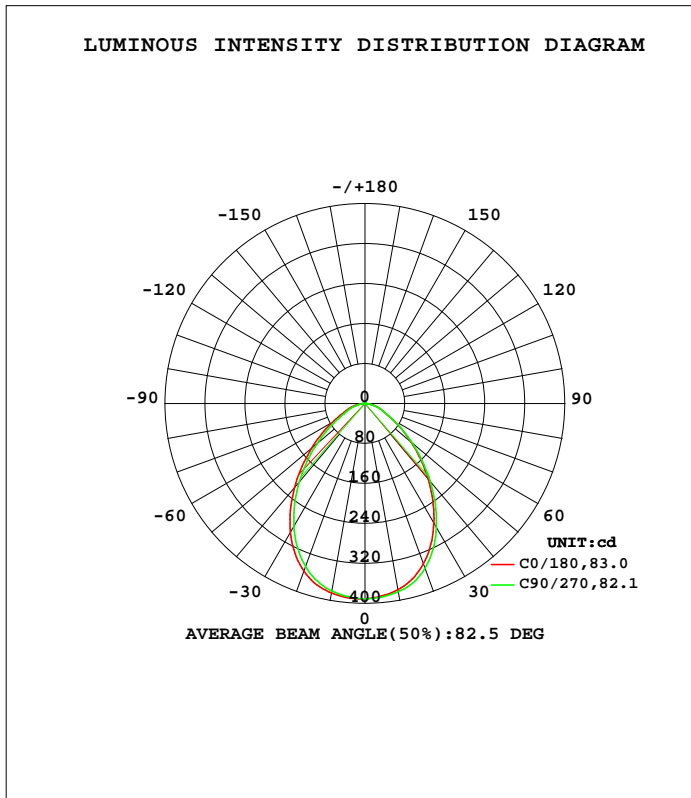


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 91.26 lm/W			
MODEL		I <sub>max</sub> (cd)	391.2	S/MH(C0/180)	1.15
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.11
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	735.27	h UP, DN(C0-180)	0.3, 48.6
NOMINAL FLUX(lm)	735.267	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.2, 50.9
LAMPS INSIDE	1	h up(%)	0.5	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	120	h down(%)	99.5	CIBSE SHR MAX	1.15



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

Range: 0 - 180DEG  
 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	378.3	382.4	384.9	380.9					0- 10	36.86	36.86	5.01,5.01
20	341.8	351.2	357.2	347.6					10- 20	103.9	140.8	19.1,19.1
30	276.1	286.1	298.6	284.5					20- 30	147.2	288.0	39.2,39.2
40	196.3	203.3	219.5	204.6					30- 40	154.0	442.0	60.1,60.1
50	121.8	124.1	140.1	125.7					40- 50	127.7	569.7	77.5,77.5
60	63.36	63.54	75.88	63.04					50- 60	85.07	654.7	89,89
70	33.31	33.16	38.65	32.37					60- 70	47.44	702.2	95.5,95.5
80	12.81	11.37	15.12	10.62					70- 80	24.66	726.8	98.9,98.9
90	0.1550	0.1016	0.1779	0.0304					80- 90	4.568	731.4	99.5,99.5
100	0.2397	0.1891	0.1279	0.1206					90-100	0.1289	731.5	99.5,99.5
110	0.4665	0.3767	0.2721	0.2583					100-110	0.2636	731.8	99.5,99.5
120	0.7909	0.6554	0.4669	0.4703					110-120	0.4583	732.3	99.6,99.6
130	1.110	0.9587	0.6970	0.7154					120-130	0.6541	732.9	99.7,99.7
140	1.324	1.230	0.8614	0.9559					130-140	0.7670	733.7	99.8,99.8
150	1.251	1.406	0.8708	0.9889					140-150	0.7116	734.4	99.9,99.9
160	1.130	1.337	0.7623	0.9182					150-160	0.5049	734.9	99.9,99.9
170	1.106	1.058	0.7903	0.8508					160-170	0.2804	735.2	100,100
180	1.115	1.123	1.116	1.122					170-180	0.0934	735.3	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 510.6 lm

%lum = 69.4%  
 %lamp = 69.4%

Conical surface Flux(120deg): 654.74 lm

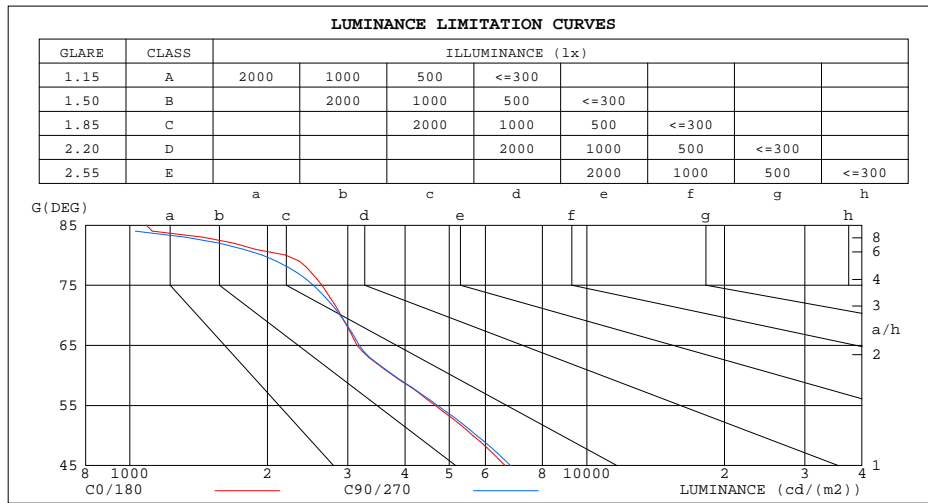
%lum = 89.0%  
 %lamp = 89.0%

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

g Range: 0 - 180DEG  
 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	1085	669
80	2195	1949
75	2633	2520
70	2897	2887
65	3143	3178
60	3770	3784
55	4665	4721
50	5637	5748
45	6633	6814

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

G Range: 0 - 180DEG  
 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	.252	.143	.045	.245	.140	.044	.232	.133	.042	.220	.127	.041	.208	.121	.039	
2.0	.243	.133	.041	.236	.130	.040	.225	.125	.039	.214	.120	.038	.204	.116	.036	
3.0	.229	.122	.036	.223	.120	.036	.213	.116	.035	.204	.112	.034	.195	.108	.033	
4.0	.215	.112	.033	.210	.110	.032	.201	.107	.032	.193	.103	.031	.185	.101	.031	
5.0	.201	.103	.030	.197	.101	.029	.189	.099	.029	.182	.096	.029	.175	.093	.028	
6.0	.189	.095	.027	.185	.094	.027	.178	.091	.027	.172	.089	.026	.165	.087	.026	
7.0	.178	.088	.025	.174	.087	.025	.168	.085	.024	.162	.083	.024	.157	.081	.024	
8.0	.168	.082	.023	.165	.081	.023	.159	.079	.023	.154	.078	.022	.149	.076	.022	
9.0	.158	.077	.021	.156	.076	.021	.151	.074	.021	.146	.073	.021	.141	.072	.021	
10.0	.150	.072	.020	.148	.071	.020	.143	.070	.020	.139	.069	.020	.134	.068	.019	

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	.194	.194	.194	.166	.166	.166	.113	.113	.113	.065	.065	.065	.021	.021	.021	
1.0	.180	.161	.143	.154	.138	.123	.106	.095	.085	.061	.055	.049	.019	.018	.016	
2.0	.170	.136	.108	.145	.117	.093	.100	.081	.065	.057	.047	.038	.018	.015	.012	
3.0	.161	.118	.084	.138	.102	.073	.095	.071	.051	.055	.041	.030	.018	.013	.010	
4.0	.152	.104	.068	.131	.090	.059	.090	.063	.041	.052	.037	.024	.017	.012	.008	
5.0	.145	.094	.056	.124	.081	.048	.086	.057	.034	.050	.033	.020	.016	.011	.007	
6.0	.138	.085	.047	.119	.074	.041	.082	.051	.029	.047	.030	.017	.015	.010	.006	
7.0	.132	.078	.040	.113	.067	.035	.078	.047	.025	.045	.028	.015	.015	.009	.005	
8.0	.126	.072	.035	.108	.062	.031	.075	.044	.022	.044	.026	.013	.014	.008	.004	
9.0	.120	.067	.031	.103	.058	.027	.072	.041	.019	.042	.024	.012	.014	.008	.004	
10.0	.115	.063	.028	.099	.055	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	

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

Range: 0 - 180DEG  
 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	18.3	19.6	18.6	19.8	20.0	18.4	19.7	18.6	19.9	20.1
	3H	19.0	20.2	19.3	20.4	20.7	19.1	20.3	19.4	20.5	20.7
	4H	19.3	20.5	19.6	20.7	21.0	19.3	20.5	19.6	20.7	21.0
	6H	19.5	20.6	19.8	20.9	21.1	19.5	20.6	19.8	20.8	21.1
	8H	19.5	20.6	19.9	20.9	21.1	19.5	20.5	19.9	20.8	21.1
	12H	19.5	20.5	19.9	20.8	21.1	19.5	20.5	19.8	20.8	21.1
4H	2H	18.6	19.7	18.9	20.0	20.2	18.6	19.8	18.9	20.0	20.3
	3H	19.5	20.4	19.8	20.7	21.0	19.5	20.5	19.8	20.8	21.1
	4H	19.9	20.8	20.2	21.1	21.4	19.9	20.8	20.3	21.1	21.4
	6H	20.2	21.0	20.6	21.3	21.7	20.1	20.9	20.5	21.3	21.7
	8H	20.2	21.0	20.7	21.3	21.7	20.2	20.9	20.6	21.3	21.7
	12H	20.2	20.9	20.7	21.3	21.7	20.2	20.8	20.6	21.2	21.6
8H	4H	20.0	20.7	20.4	21.1	21.5	20.0	20.7	20.4	21.1	21.5
	6H	20.4	21.0	20.8	21.4	21.9	20.4	21.0	20.8	21.4	21.8
	8H	20.5	21.0	21.0	21.5	21.9	20.4	21.0	20.9	21.4	21.9
	12H	20.5	21.0	21.0	21.4	21.9	20.4	20.9	20.9	21.3	21.8
12H	4H	20.0	20.7	20.4	21.0	21.5	20.0	20.7	20.4	21.1	21.5
	6H	20.4	20.9	20.9	21.4	21.8	20.4	20.9	20.8	21.3	21.8
	8H	20.5	21.0	21.0	21.4	21.9	20.4	20.9	20.9	21.4	21.8
Variations with the observer position at spacings:											
S = 1.0H		+ 0.5 / - 0.6					+ 0.5 / - 0.6				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 1.1 / - 1.0					+ 1.1 / - 1.0				

CIE Pub.117, 735.3 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.1)

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

g Range: 0 - 180DEG  
 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:

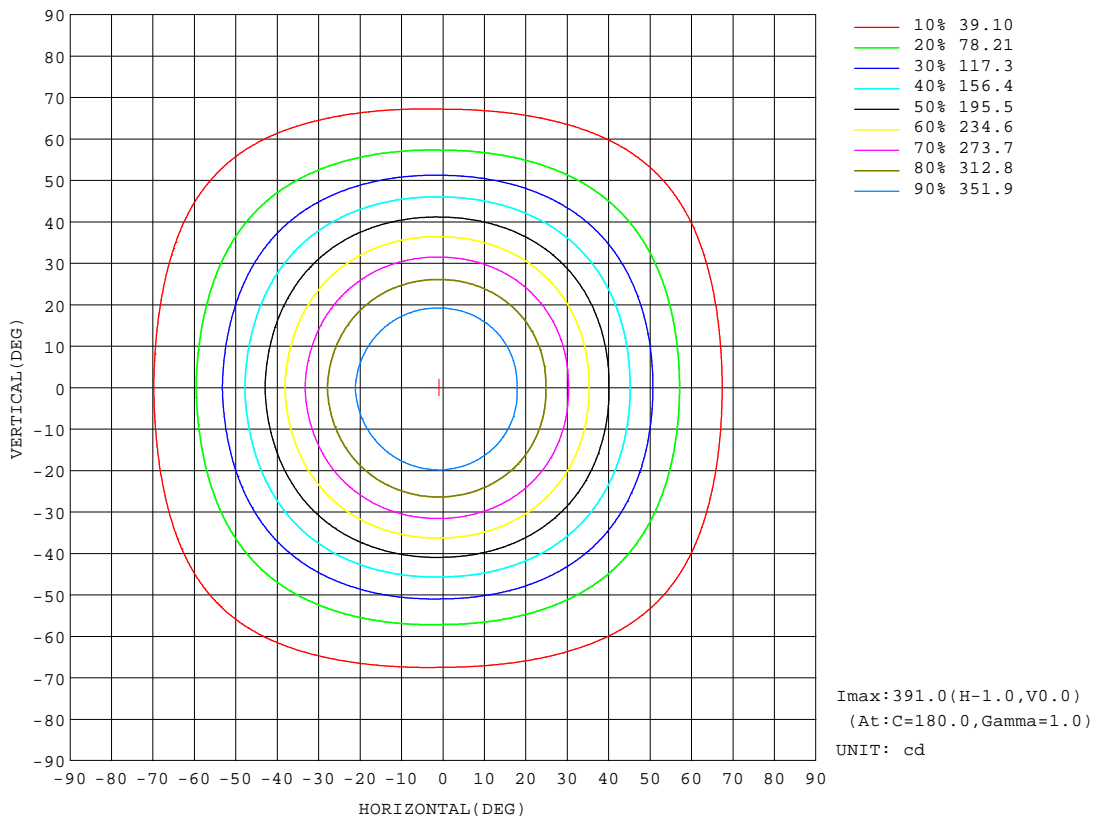
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	67	57	51	66	56	50	65	56	50	45
0.80	76	67	60	75	66	60	74	65	60	54
1.00	84	75	69	83	74	69	81	75	68	62
1.25	90	82	76	89	81	76	87	80	75	69
1.50	95	87	81	93	86	81	90	84	79	73
2.00	100	93	88	99	92	87	95	90	86	79
2.50	103	97	92	101	96	91	98	93	89	82
3.00	106	100	96	104	99	95	100	96	93	85
4.00	109	105	101	107	103	99	103	99	97	88
5.00	111	107	104	109	105	102	104	102	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:01 June 2021

g Range: 0 - 180DEG  
 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>



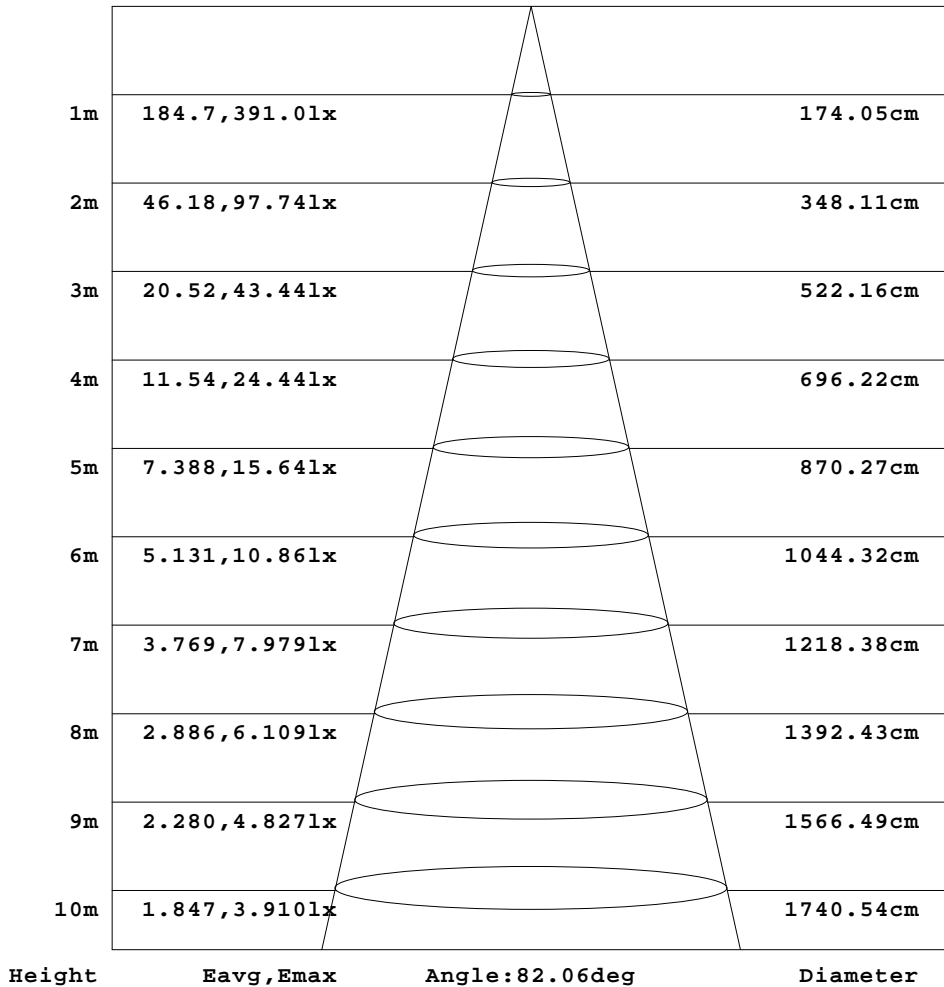
**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: DAMIN**  
**Test Date: 01 June 2021**

**Range: 0 - 180DEG**  
**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:470.4 lm



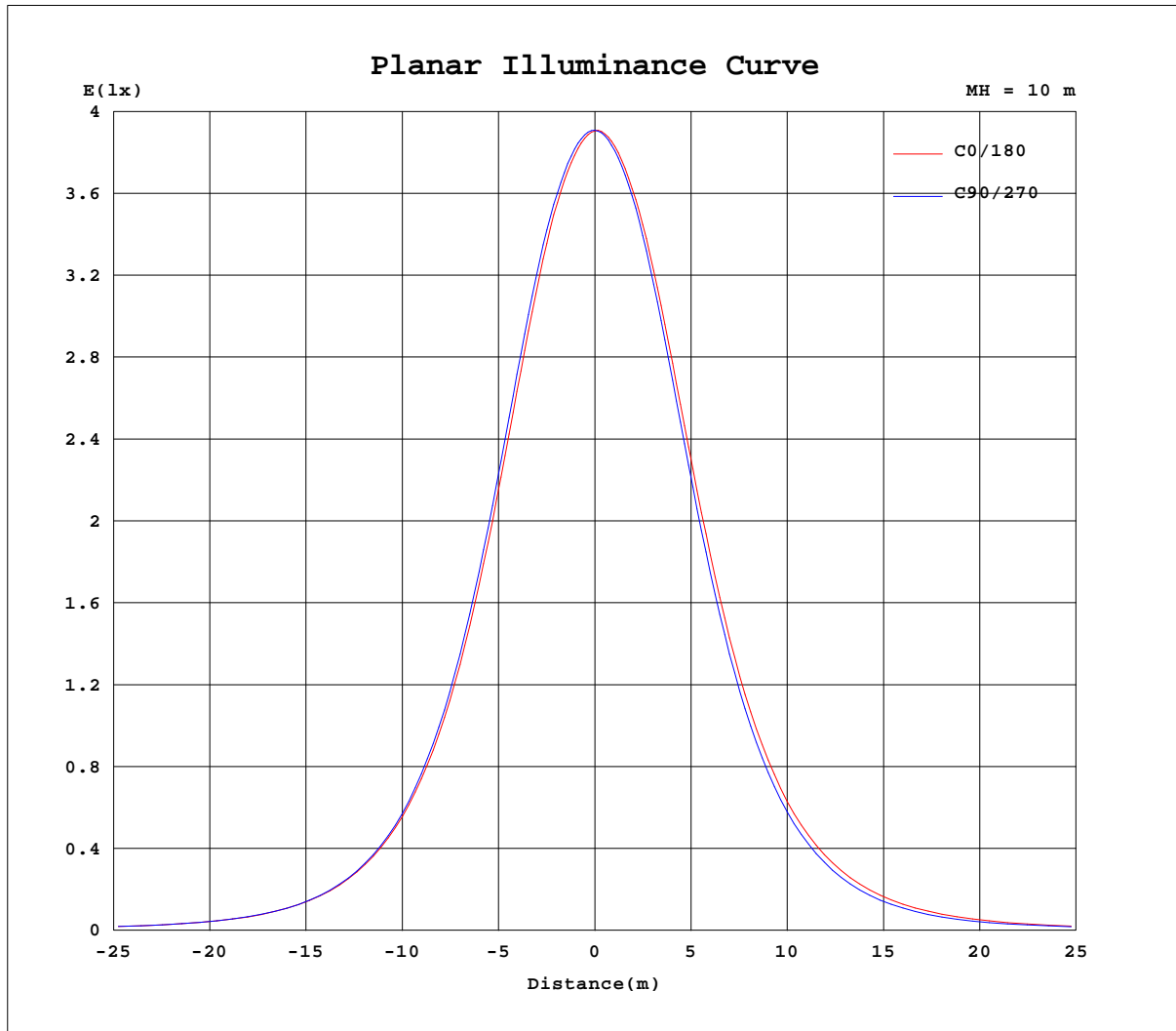
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

Range: 0 - 180DEG  
 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: 01 June 2021

Page Range: 0 - 180DEG  
 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	391	391	391	391															
5	387	389	390	388															
10	378	382	385	381															
15	364	371	375	368															
20	342	351	357	348															
25	312	322	331	319															
30	276	286	299	285															
35	237	246	260	246															
40	196	203	219	205															
45	158	162	179	164															
50	122	124	140	126															
55	89.9	90.9	106	91.4															
60	63.4	63.5	75.9	63.0															
65	44.7	45.1	52.5	44.1															
70	33.3	33.2	38.6	32.4															
75	22.9	21.9	27.4	21.2															
80	12.8	11.4	15.1	10.6															
85	3.18	1.96	6.14	1.18															
90	0.16	0.10	0.18	0.03															
95	0.17	0.13	0.07	0.07															
100	0.24	0.19	0.13	0.12															
105	0.34	0.27	0.20	0.18															
110	0.47	0.38	0.27	0.26															
115	0.61	0.51	0.36	0.35															
120	0.79	0.66	0.47	0.47															
125	0.95	0.81	0.58	0.58															
130	1.11	0.96	0.70	0.72															
135	1.25	1.12	0.81	0.83															
140	1.32	1.23	0.86	0.96															
145	1.32	1.35	0.89	1.03															
150	1.25	1.41	0.87	0.99															
155	1.19	1.41	0.80	0.98															
160	1.13	1.34	0.76	0.92															
165	1.08	1.21	0.72	0.88															
170	1.11	1.06	0.79	0.85															
175	1.07	1.06	0.92	0.92															
180	1.11	1.12	1.12	1.12															

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

g Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 3.200m [K=1.0000]  
 Remarks: