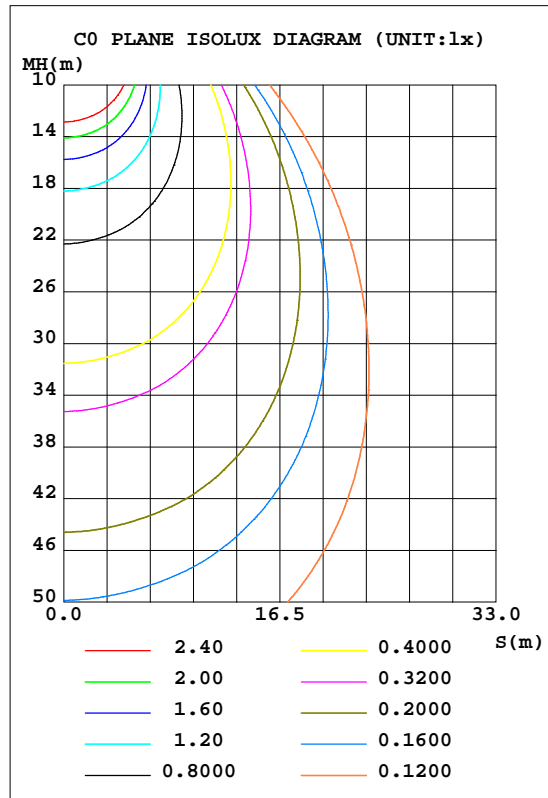
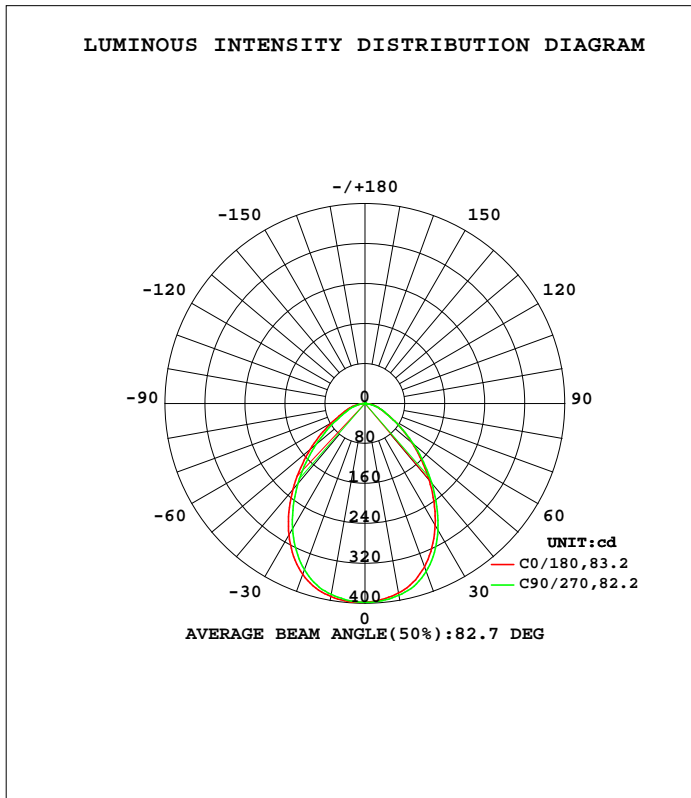


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 91.68 lm/W			
MODEL		I <sub>max</sub> (cd)	398.2	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)	750.21	h UP, DN(C0-180)	0.3,48.6
NOMINAL FLUX(lm)	750.213	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	385.2	389.7	392.1	387.9					0- 10	37.54	37.54	5,5
20	348.1	358.0	364.2	353.9					10- 20	105.9	143.4	19.1,19.1
30	281.3	292.3	304.5	289.8					20- 30	150.1	293.5	39.1,39.1
40	200.2	208.2	224.1	208.4					30- 40	157.1	450.6	60.1,60.1
50	124.0	127.2	143.3	127.9					40- 50	130.4	581.0	77.4,77.4
60	64.64	65.36	77.70	64.25					50- 60	86.90	667.9	89,89
70	34.00	34.06	39.59	33.01					60- 70	48.53	716.4	95.5,95.5
80	13.15	11.70	15.40	10.79					70- 80	25.22	741.6	98.9,98.9
90	0.1582	0.1040	0.1802	0.0320					80- 90	4.668	746.3	99.5,99.5
100	0.2473	0.1935	0.1289	0.1213					90-100	0.1317	746.4	99.5,99.5
110	0.4785	0.3840	0.2768	0.2648					100-110	0.2694	746.7	99.5,99.5
120	0.8081	0.6675	0.4755	0.4804					110-120	0.4678	747.1	99.6,99.6
130	1.135	0.9785	0.7094	0.7319					120-130	0.6669	747.8	99.7,99.7
140	1.351	1.254	0.8755	0.9754					130-140	0.7817	748.6	99.8,99.8
150	1.274	1.432	0.8853	1.006					140-150	0.7248	749.3	99.9,99.9
160	1.151	1.362	0.7749	0.9348					150-160	0.5140	749.8	99.9,99.9
170	1.126	1.079	0.8049	0.8653					160-170	0.2855	750.1	100,100
180	1.133	1.143	1.138	1.141					170-180	0.0951	750.2	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 520.64 lm

%lum = 69.4%  
 %lamp = 69.4%

Conical surface Flux(120deg): 667.86 lm

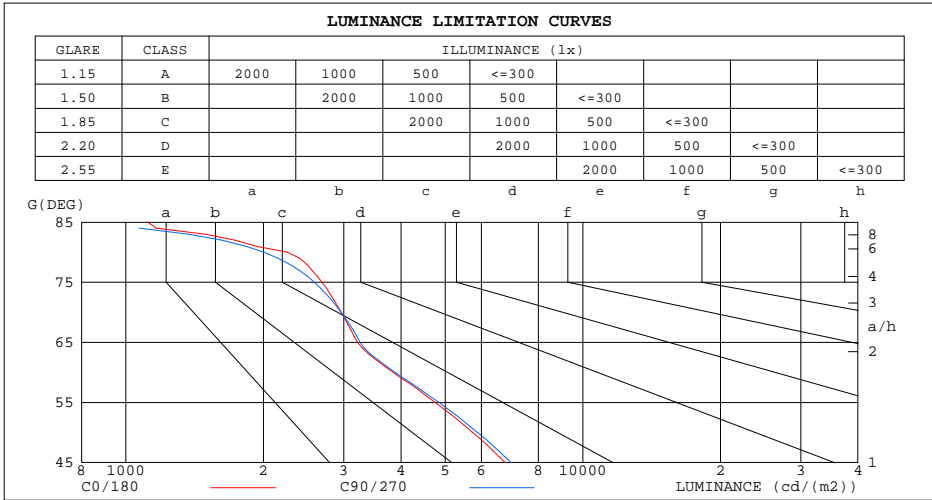
%lum = 89.0%  
 %lamp = 89.0%

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:



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	.144	.045	.245	.140	.044	.232	.133	.043	.220	.127	.041	.209	.121	.039	
2.0	.243	.133	.041	.237	.130	.040	.225	.125	.039	.214	.120	.038	.205	.116	.036	
3.0	.229	.122	.036	.224	.120	.036	.213	.116	.035	.204	.112	.034	.195	.108	.033	
4.0	.215	.112	.033	.210	.110	.032	.201	.107	.032	.193	.104	.031	.185	.101	.031	
5.0	.201	.103	.030	.197	.101	.029	.189	.099	.029	.182	.096	.029	.175	.094	.028	
6.0	.189	.095	.027	.185	.094	.027	.178	.091	.027	.172	.089	.026	.166	.087	.026	
7.0	.178	.088	.025	.175	.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	.135	.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	.125	.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	18.7	19.9	20.1	
3H	19.0	20.2	19.3	20.5	20.7	19.1	20.3	19.4	20.5	20.8	
4H	19.3	20.5	19.6	20.7	21.0	19.4	20.5	19.7	20.8	21.0	
6H	19.5	20.6	19.9	20.9	21.1	19.5	20.6	19.9	20.9	21.2	
8H	19.5	20.6	19.9	20.9	21.2	19.5	20.6	19.9	20.9	21.2	
12H	19.5	20.5	19.9	20.8	21.1	19.5	20.5	19.9	20.8	21.1	
4H 2H	18.6	19.7	18.9	20.0	20.2	18.6	19.8	19.0	20.0	20.3	
3H	19.5	20.5	19.8	20.7	21.1	19.5	20.5	19.9	20.8	21.1	
4H	19.9	20.8	20.3	21.1	21.4	19.9	20.8	20.3	21.1	21.5	
6H	20.2	21.0	20.6	21.3	21.7	20.2	21.0	20.6	21.3	21.7	
8H	20.3	21.0	20.7	21.4	21.7	20.2	21.0	20.6	21.3	21.7	
12H	20.2	20.9	20.7	21.3	21.7	20.2	20.9	20.6	21.3	21.7	
8H 4H	20.0	20.7	20.4	21.1	21.5	20.0	20.8	20.4	21.1	21.5	
6H	20.4	21.0	20.9	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	20.5	21.0	20.9	21.4	21.9	
12H	20.5	21.0	21.0	21.4	21.9	20.5	20.9	20.9	21.4	21.9	
12H 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	20.9	21.4	21.8	20.4	20.9	20.9	21.4	21.8	
8H	20.5	21.0	21.0	21.4	21.9	20.5	20.9	21.0	21.4	21.9	
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, 750.2 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.0)

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:

UTILIZATION FACTORS TABLE

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

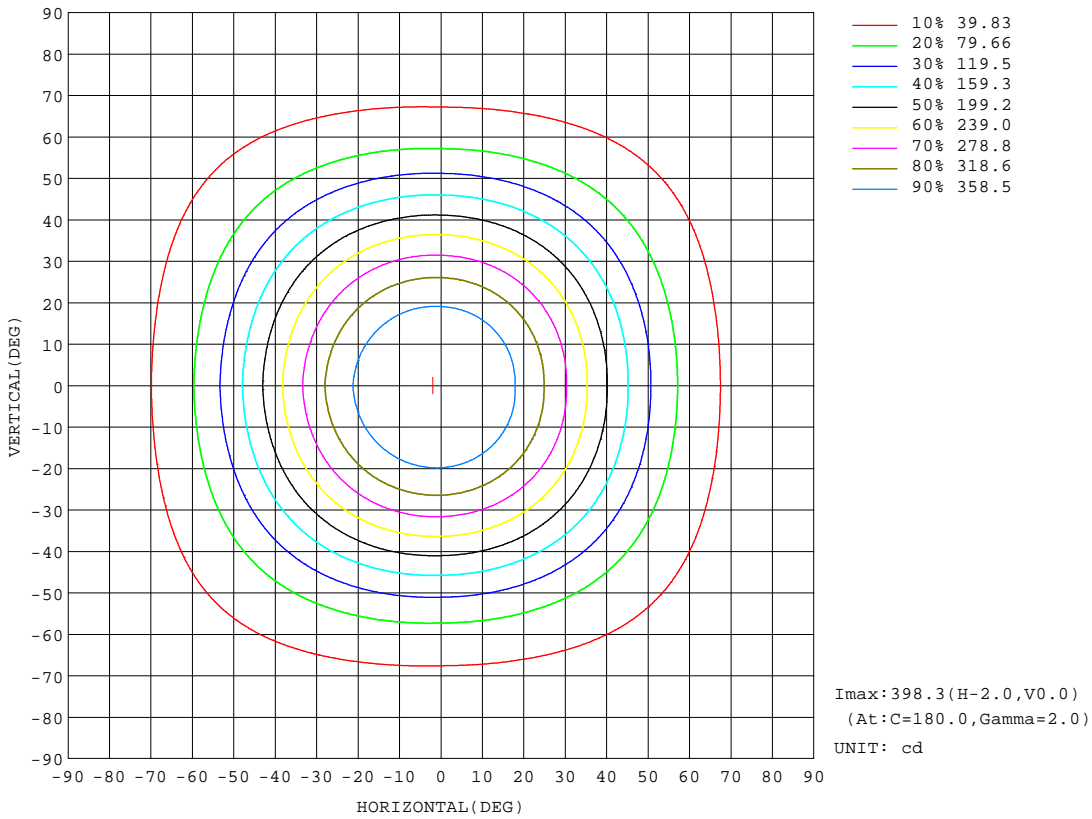
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	67	56	51	66	56	50	65	56	50	45
0.80	76	67	60	75	66	60	74	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	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: 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>



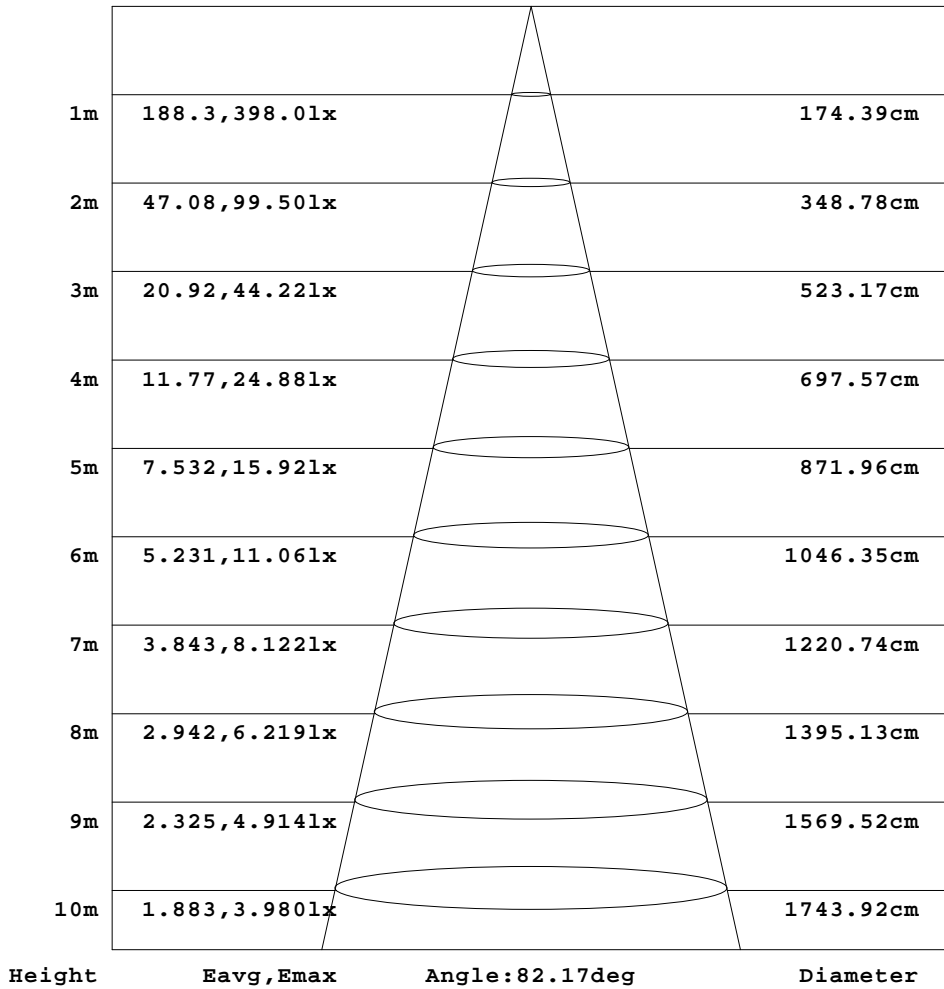
**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: DAMIN**  
**Test Date: 01 June 2021**

**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: 479.6 lm



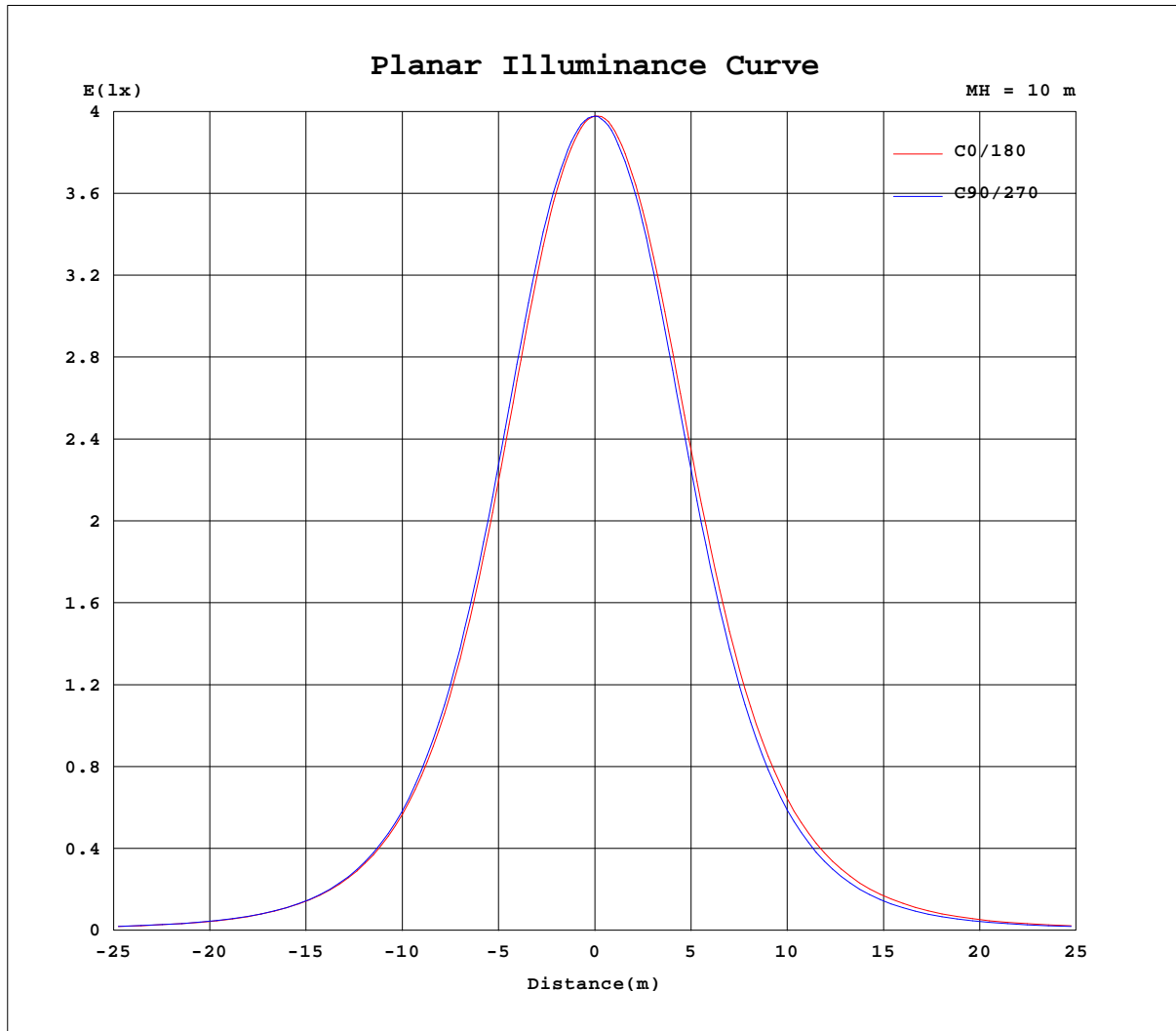
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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	398	398	398	398															
5	394	396	397	395															
10	385	390	392	388															
15	371	379	382	375															
20	348	358	364	354															
25	318	329	338	325															
30	281	292	304	290															
35	241	251	266	250															
40	200	208	224	208															
45	161	166	183	167															
50	124	127	143	128															
55	91.6	93.4	108	93.2															
60	64.6	65.4	77.7	64.2															
65	45.6	46.3	53.8	45.0															
70	34.0	34.1	39.6	33.0															
75	23.4	22.5	28.0	21.6															
80	13.1	11.7	15.4	10.8															
85	3.27	2.06	6.23	1.17															
90	0.16	0.10	0.18	0.03															
95	0.18	0.14	0.08	0.07															
100	0.25	0.19	0.13	0.12															
105	0.35	0.27	0.20	0.18															
110	0.48	0.38	0.28	0.26															
115	0.63	0.52	0.37	0.36															
120	0.81	0.67	0.48	0.48															
125	0.97	0.83	0.60	0.60															
130	1.13	0.98	0.71	0.73															
135	1.27	1.14	0.82	0.85															
140	1.35	1.25	0.88	0.98															
145	1.35	1.38	0.90	1.05															
150	1.27	1.43	0.89	1.01															
155	1.21	1.43	0.81	1.00															
160	1.15	1.36	0.77	0.93															
165	1.10	1.23	0.73	0.90															
170	1.13	1.08	0.80	0.87															
175	1.09	1.08	0.94	0.94															
180	1.13	1.14	1.14	1.14															

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: