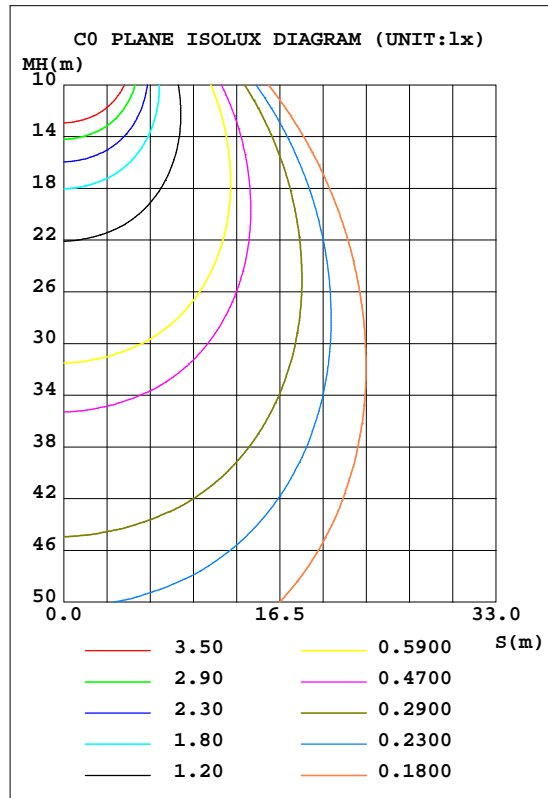
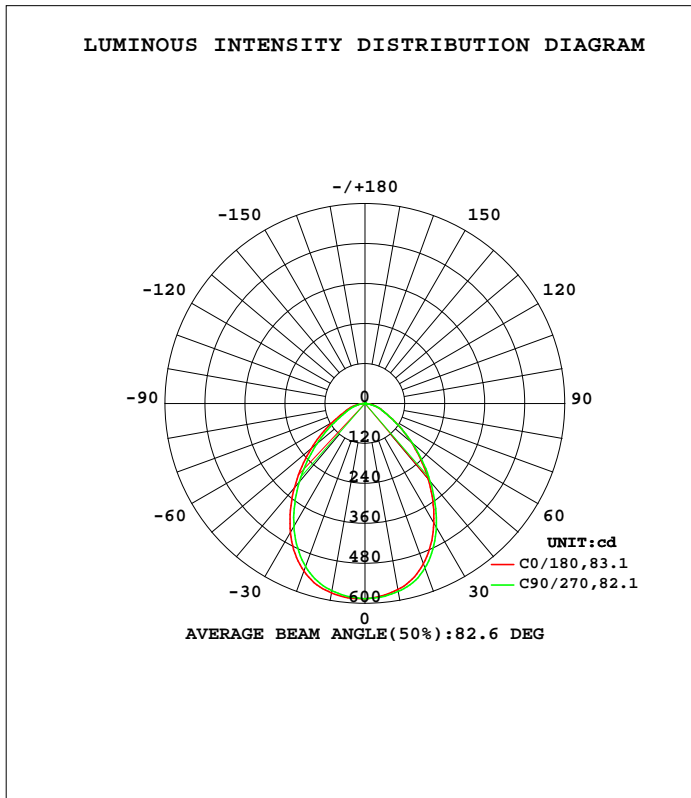


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		I _{max} (cd)	586.3	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)	1103.7	h UP, DN(C0-180)	0.3, 48.5
NOMINAL FLUX(lm)	1103.69	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	567.0	573.1	577.3	570.9					0- 10	55.24	55.24	5.01,5.01
20	512.4	526.1	536.0	521.1					10- 20	155.8	211.0	19.1,19.1
30	414.5	429.0	447.8	426.7					20- 30	220.8	431.8	39.1,39.1
40	294.8	304.7	329.4	307.1					30- 40	230.9	662.7	60,60
50	183.1	187.1	211.5	189.1					40- 50	191.9	854.7	77.4,77.4
60	95.38	95.41	113.9	94.97					50- 60	127.8	982.5	89,89
70	50.07	49.75	58.09	48.61					60- 70	71.35	1054	95.5,95.5
80	19.34	17.02	22.79	15.99					70- 80	37.04	1091	98.8,98.8
90	0.2483	0.1675	0.2773	0.0626					80- 90	6.905	1098	99.5,99.5
100	0.3756	0.3014	0.2068	0.1977					90-100	0.2116	1098	99.5,99.5
110	0.7207	0.5846	0.4252	0.4031					100-110	0.4139	1098	99.5,99.5
120	1.203	0.9994	0.7207	0.7222					110-120	0.7052	1099	99.6,99.6
130	1.684	1.454	1.063	1.090					120-130	0.9966	1100	99.7,99.7
140	2.006	1.861	1.309	1.455					130-140	1.163	1101	99.8,99.8
150	1.895	2.124	1.323	1.500					140-150	1.078	1102	99.9,99.9
160	1.714	2.020	1.157	1.392					150-160	0.7649	1103	99.9,99.9
170	1.676	1.604	1.202	1.293					160-170	0.4251	1104	100,100
180	1.688	1.700	1.691	1.699					170-180	0.1417	1104	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 765.77 lm

%lum = 69.4%
 %lamp = 69.4%

Conical surface Flux(120deg): 982.5 lm

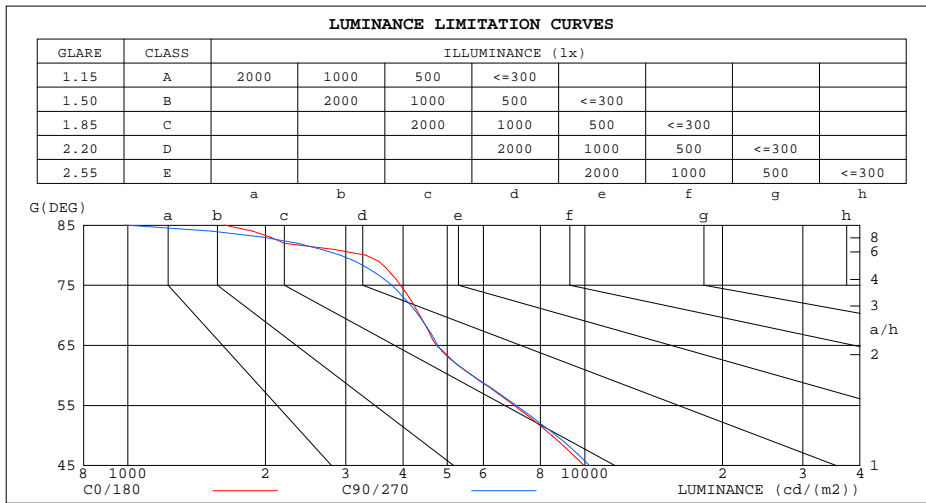
%lum = 89.0%
 %lamp = 89.0%

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	1625	986
80	3312	2919
75	3954	3780
70	4354	4332
65	4731	4768
60	5673	5683
55	7013	7082
50	8470	8669
45	9966	10254

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	.195	.195	.195	.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	.050	.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	.153	.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	.052	.029	.048	.030	.017	.015	.010	.006	
7.0	.132	.078	.040	.113	.068	.035	.078	.047	.025	.045	.028	.015	.015	.009	.005	
8.0	.126	.072	.035	.108	.063	.031	.075	.044	.022	.044	.026	.013	.014	.008	.004	
9.0	.120	.067	.031	.104	.058	.027	.072	.041	.019	.042	.024	.012	.014	.008	.004	
10.0	.115	.063	.028	.099	.055	.025	.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	20.7
	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	19.9	20.9	21.2	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	20.5	19.8	20.7	21.1	19.5	20.5	19.8	20.8	21.1
	4H	19.9	20.8	20.3	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	20.6	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	20.9	21.4	21.9	20.4	21.0	20.8	21.4	21.8
	8H	20.5	21.0	20.9	21.4	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	20.9	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, 1104 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: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:

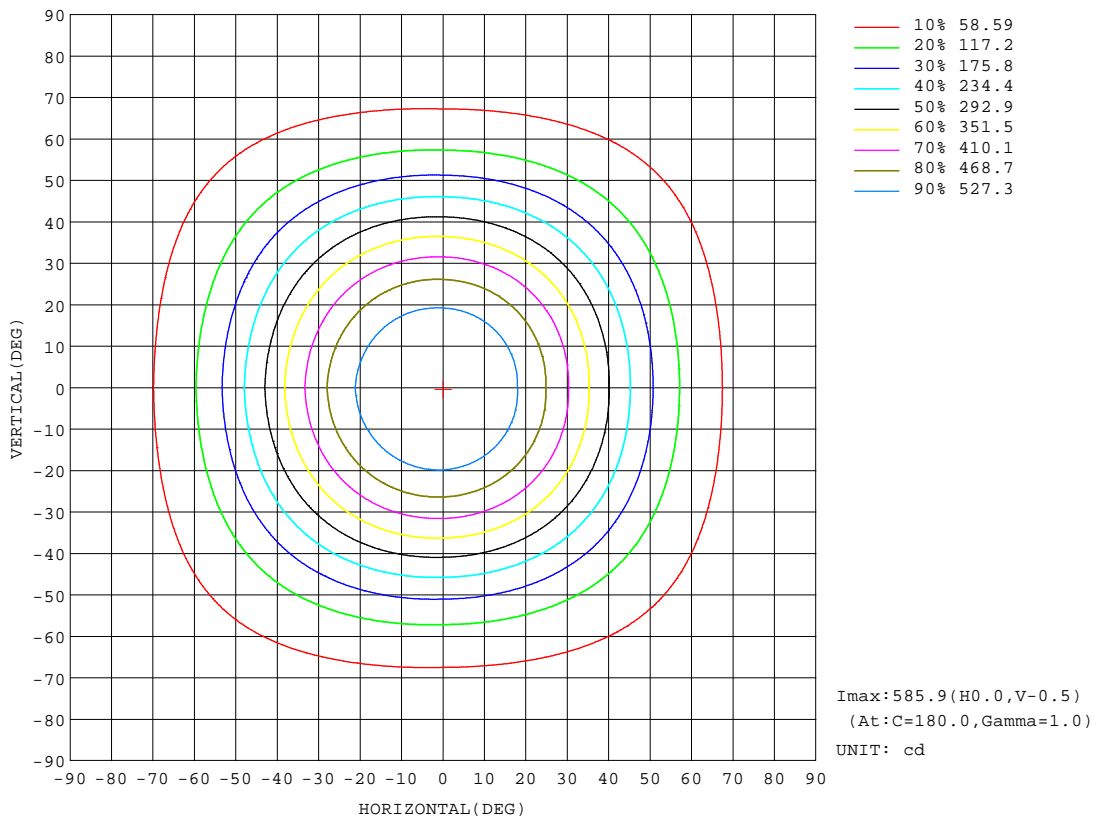
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	66	56	50	66	56	50	65	56	50	45
0.80	76	67	60	75	66	60	74	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	98	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

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



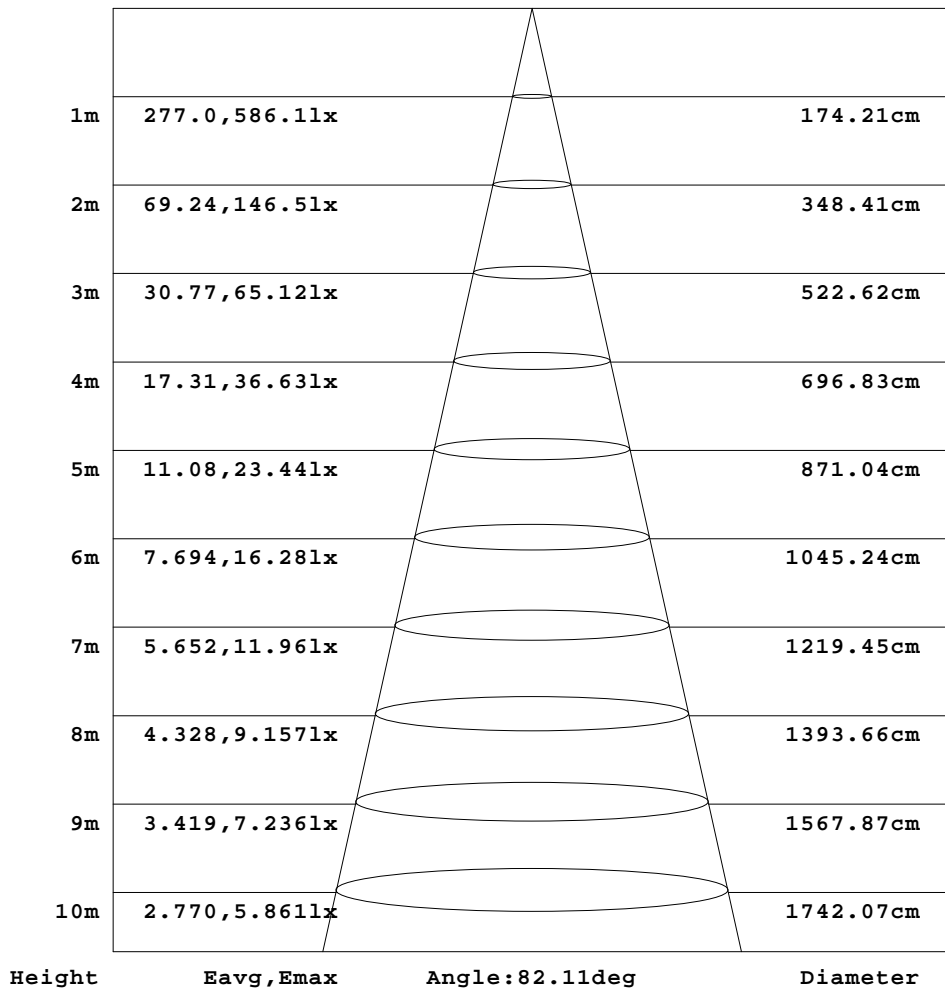
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 01 June 2021

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: 705.4 lm

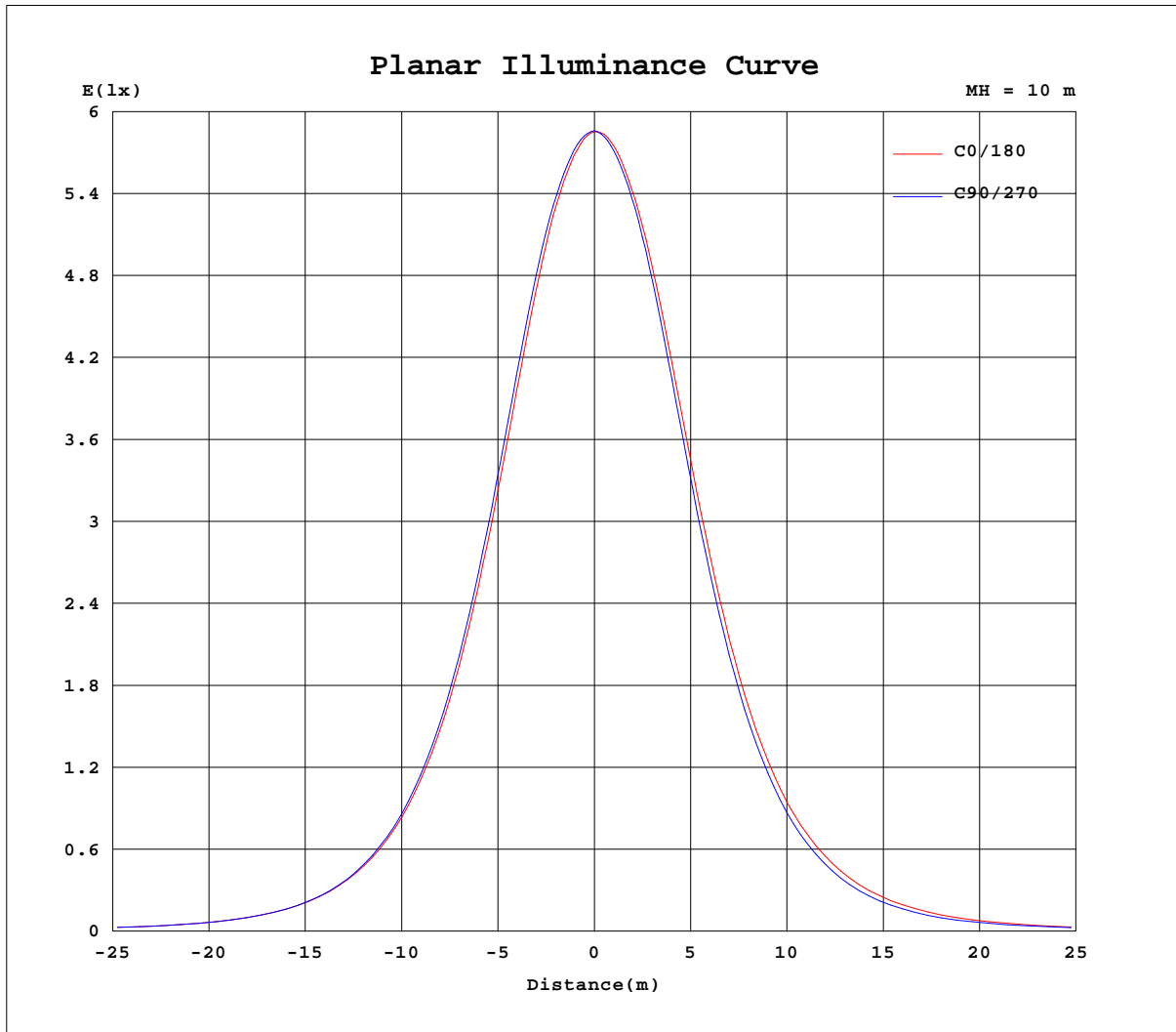


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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	586	586	586	586															
5	580	582	585	581															
10	567	573	577	571															
15	546	556	563	552															
20	512	526	536	521															
25	468	483	497	479															
30	414	429	448	427															
35	355	368	391	368															
40	295	305	329	307															
45	237	243	269	246															
50	183	187	211	189															
55	135	136	159	137															
60	95.4	95.4	114	95.0															
65	67.2	67.7	78.9	66.3															
70	50.1	49.7	58.1	48.6															
75	34.4	32.8	41.1	31.9															
80	19.3	17.0	22.8	16.0															
85	4.76	2.89	9.32	1.82															
90	0.25	0.17	0.28	0.06															
95	0.28	0.21	0.13	0.12															
100	0.38	0.30	0.21	0.20															
105	0.53	0.42	0.32	0.29															
110	0.72	0.58	0.43	0.40															
115	0.94	0.78	0.56	0.55															
120	1.20	1.00	0.72	0.72															
125	1.44	1.23	0.90	0.89															
130	1.68	1.45	1.06	1.09															
135	1.88	1.69	1.22	1.27															
140	2.01	1.86	1.31	1.45															
145	2.00	2.05	1.35	1.56															
150	1.90	2.12	1.32	1.50															
155	1.80	2.13	1.22	1.49															
160	1.71	2.02	1.16	1.39															
165	1.63	1.83	1.09	1.34															
170	1.68	1.60	1.20	1.29															
175	1.62	1.61	1.40	1.40															
180	1.69	1.70	1.69	1.70															

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: