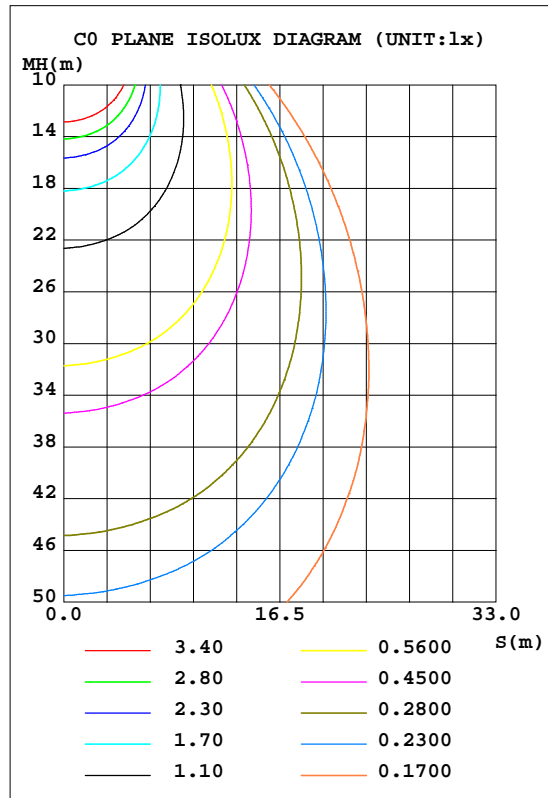
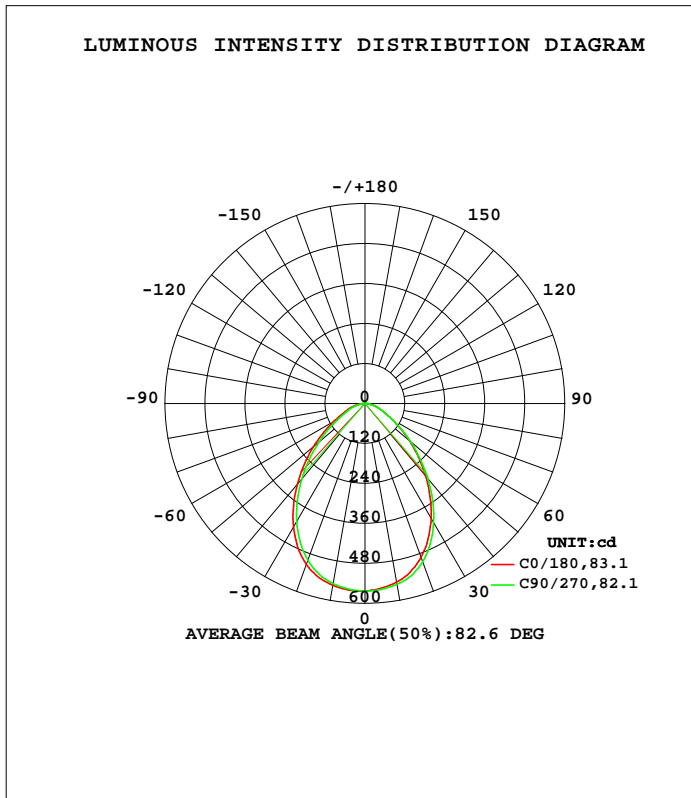


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 87.48 lm/W			
MODEL		I _{max} (cd)	562.9	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)	1059.5	h UP, DN(C0-180)	0.3,48.5
NOMINAL FLUX(lm)	1059.49	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	544.8	551.2	554.0	549.1					0- 10	53.09	53.09	5.01,5.01
20	492.0	505.9	514.1	500.8					10- 20	149.7	202.7	19.1,19.1
30	397.8	412.5	429.5	409.9					20- 30	212.1	414.8	39.2,39.2
40	283.2	293.0	315.9	295.0					30- 40	221.8	636.6	60.1,60.1
50	175.6	179.4	202.4	181.4					40- 50	184.2	820.8	77.5,77.5
60	91.25	91.55	109.0	91.03					50- 60	122.6	943.3	89,89
70	47.99	47.80	55.58	46.68					60- 70	68.37	1012	95.5,95.5
80	18.48	16.42	21.80	15.35					70- 80	35.53	1047	98.8,98.8
90	0.2357	0.1609	0.2621	0.0581					80- 90	6.623	1054	99.5,99.5
100	0.3591	0.2871	0.1991	0.1867					90-100	0.2010	1054	99.5,99.5
110	0.6850	0.5585	0.4067	0.3850					100-110	0.3950	1054	99.5,99.5
120	1.148	0.9594	0.6909	0.6905					110-120	0.6744	1055	99.6,99.6
130	1.611	1.396	1.019	1.044					120-130	0.9545	1056	99.7,99.7
140	1.919	1.788	1.255	1.394					130-140	1.115	1057	99.8,99.8
150	1.812	2.041	1.269	1.439					140-150	1.034	1058	99.9,99.9
160	1.642	1.942	1.109	1.336					150-160	0.7339	1059	99.9,99.9
170	1.604	1.539	1.155	1.241					160-170	0.4079	1059	100,100
180	1.617	1.633	1.622	1.630					170-180	0.1359	1059	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 735.49 lm

%lum = 69.4%
 %lamp = 69.4%

Conical surface Flux(120deg): 943.32 lm

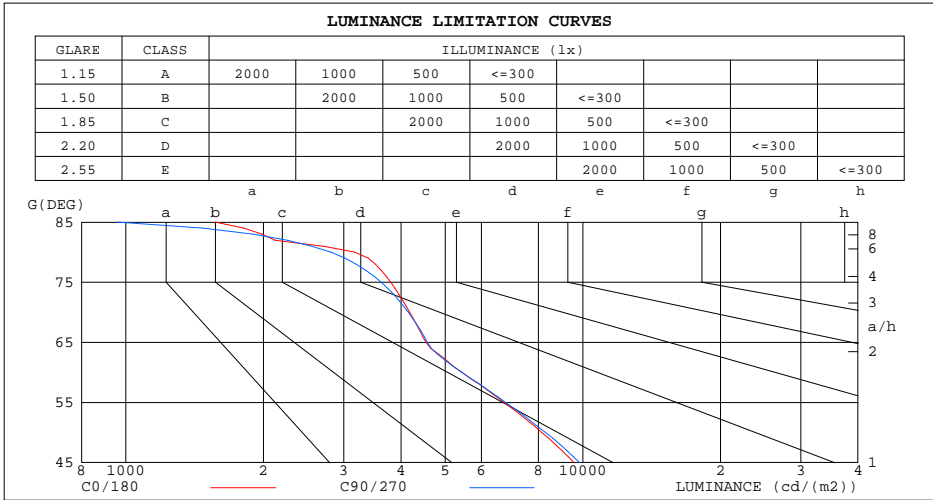
%lum = 89.0%
 %lamp = 89.0%

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	1569	957
80	3171	2810
75	3799	3624
70	4180	4155
65	4540	4567
60	5438	5444
55	6742	6783
50	8141	8296
45	9581	9844

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:

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	.237	.130	.040	.225	.125	.039	.214	.120	.038	.205	.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	.166	.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	.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	18.6	19.9	20.1
	3H	19.0	20.2	19.3	20.5	20.7	19.1	20.3	19.3	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	19.8	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	20.3	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	21.8
	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	21.0	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, 1059 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.2)

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:

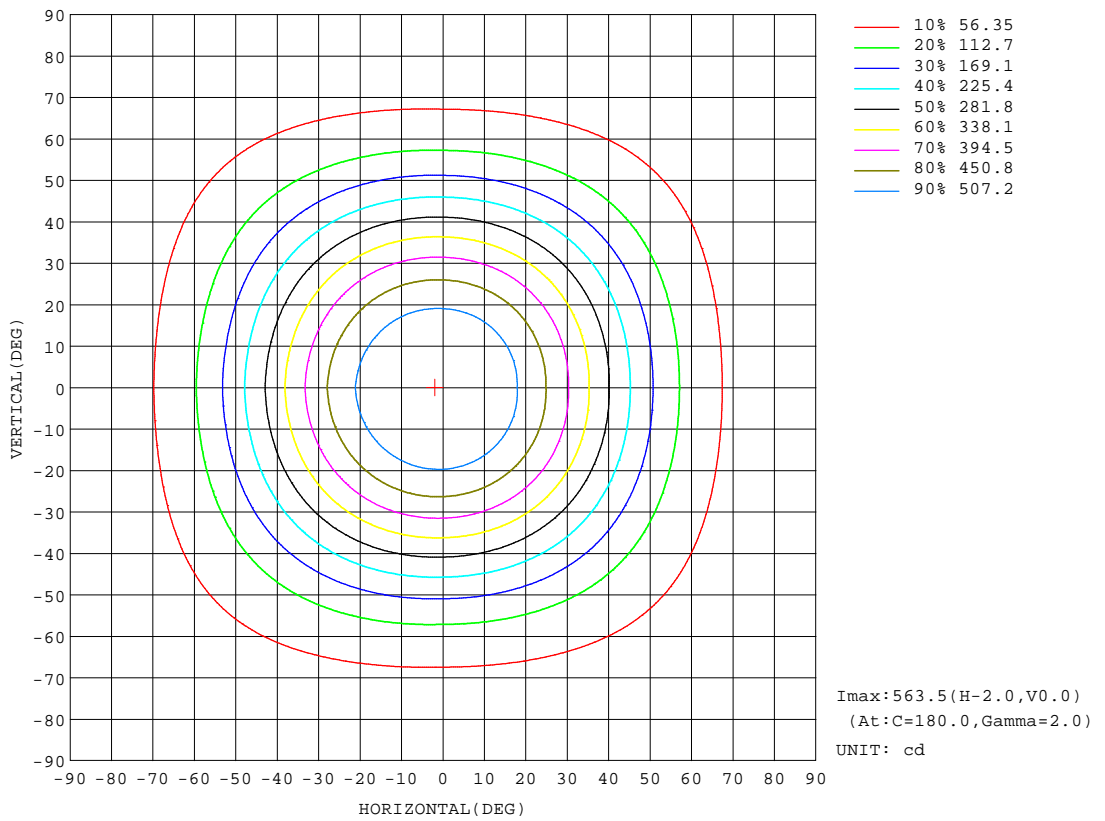
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	67	57	51	66	56	50	65	56	50	45
0.80	76	67	60	75	66	60	74	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	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:



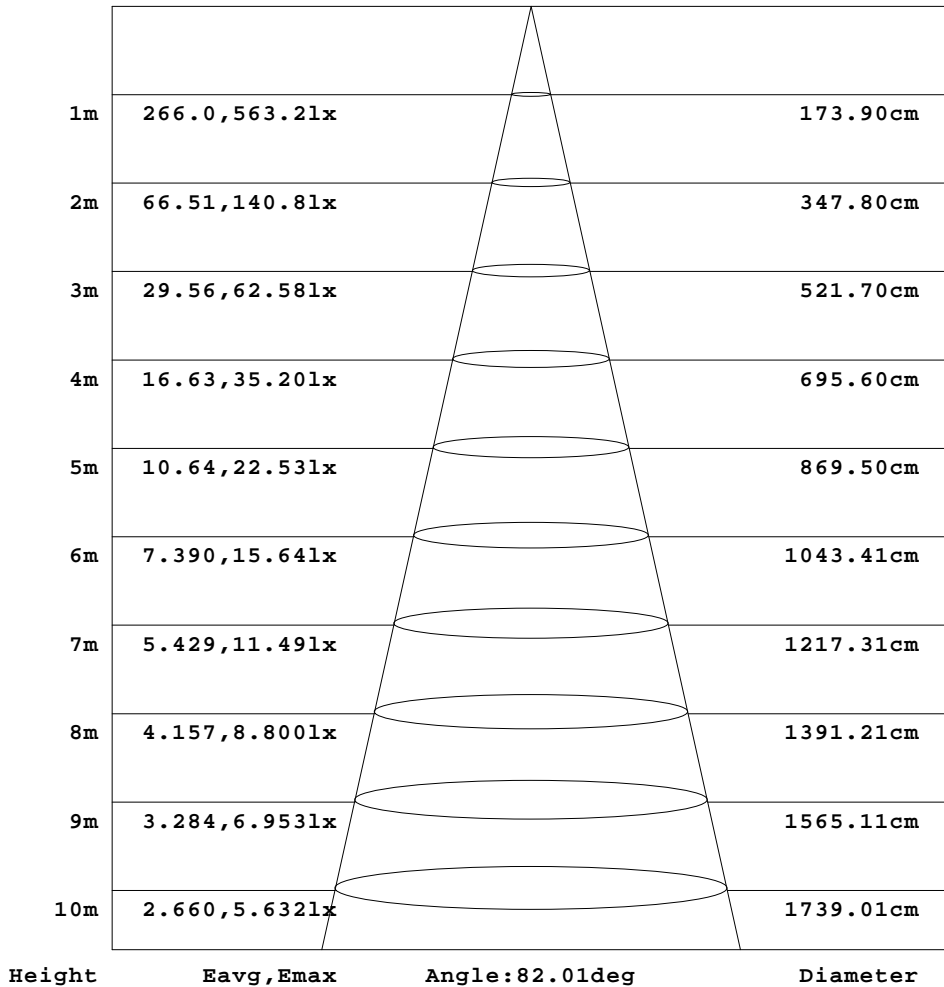
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 01 June 2021

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:677.6 lm

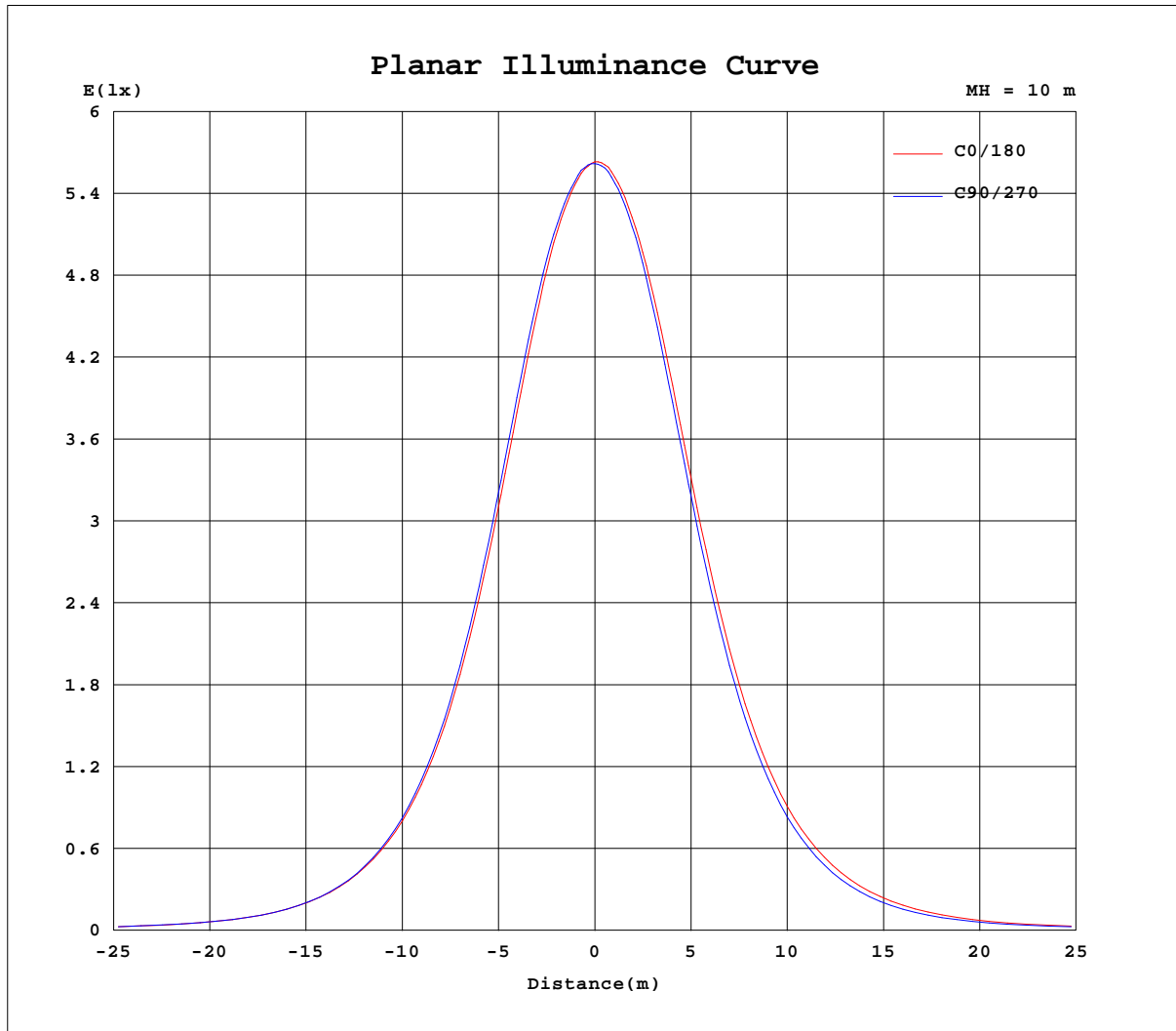


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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	563	563	563	563															
5	556	560	562	559															
10	545	551	554	549															
15	524	535	540	531															
20	492	506	514	501															
25	449	464	477	460															
30	398	412	430	410															
35	341	354	375	354															
40	283	293	316	295															
45	227	234	257	236															
50	176	179	202	181															
55	130	131	152	132															
60	91.3	91.6	109	91.0															
65	64.4	64.9	75.4	63.6															
70	48.0	47.8	55.6	46.7															
75	33.0	31.6	39.4	30.6															
80	18.5	16.4	21.8	15.4															
85	4.59	2.80	8.87	1.73															
90	0.24	0.16	0.26	0.06															
95	0.26	0.20	0.12	0.11															
100	0.36	0.29	0.20	0.19															
105	0.50	0.40	0.30	0.27															
110	0.69	0.56	0.41	0.38															
115	0.90	0.75	0.54	0.53															
120	1.15	0.96	0.69	0.69															
125	1.38	1.18	0.86	0.86															
130	1.61	1.40	1.02	1.04															
135	1.80	1.62	1.18	1.21															
140	1.92	1.79	1.25	1.39															
145	1.92	1.96	1.29	1.49															
150	1.81	2.04	1.27	1.44															
155	1.72	2.04	1.17	1.43															
160	1.64	1.94	1.11	1.34															
165	1.56	1.76	1.05	1.29															
170	1.60	1.54	1.16	1.24															
175	1.55	1.55	1.35	1.34															
180	1.62	1.63	1.62	1.63															

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: