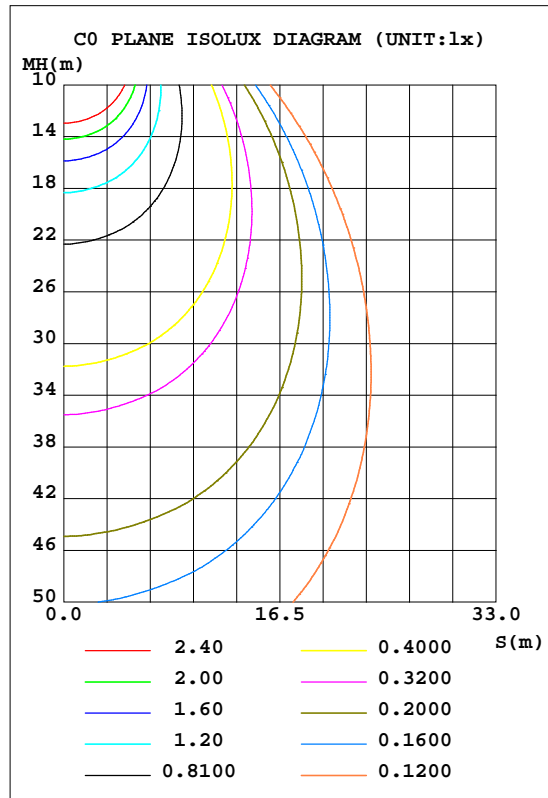
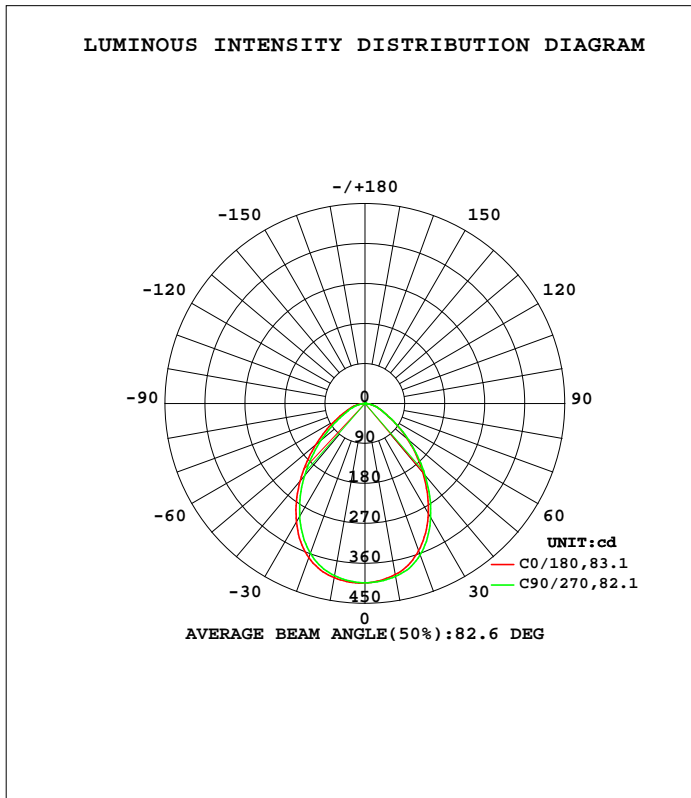


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 96.36 lm/W			
MODEL		I _{max} (cd)	404.5	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)	760.56	h UP, DN(C0-180)	0.3, 48.6
NOMINAL FLUX(lm)	760.565	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	391.0	395.2	398.0	393.7					0- 10	38.10	38.10	5.01,5.01
20	353.2	363.1	369.6	359.3					10- 20	107.4	145.5	19.1,19.1
30	285.3	296.2	308.9	294.0					20- 30	152.2	297.8	39.2,39.2
40	203.0	210.6	227.1	211.4					30- 40	159.2	457.0	60.1,60.1
50	125.9	128.8	145.1	129.9					40- 50	132.2	589.1	77.5,77.5
60	65.54	65.98	78.61	65.23					50- 60	88.04	677.2	89,89
70	34.45	34.43	40.04	33.45					60- 70	49.13	726.3	95.5,95.5
80	13.28	11.82	15.61	10.94					70- 80	25.53	751.8	98.9,98.9
90	0.1601	0.1064	0.1827	0.0331					80- 90	4.727	756.6	99.5,99.5
100	0.2505	0.1964	0.1341	0.1256					90-100	0.1343	756.7	99.5,99.5
110	0.4849	0.3906	0.2821	0.2687					100-110	0.2740	757.0	99.5,99.5
120	0.8191	0.6793	0.4849	0.4890					110-120	0.4754	757.4	99.6,99.6
130	1.150	0.9911	0.7206	0.7390					120-130	0.6771	758.1	99.7,99.7
140	1.370	1.271	0.8901	0.9889					130-140	0.7934	758.9	99.8,99.8
150	1.296	1.452	0.9014	1.023					140-150	0.7359	759.7	99.9,99.9
160	1.171	1.383	0.7863	0.9491					150-160	0.5221	760.2	99.9,99.9
170	1.142	1.094	0.8196	0.8796					160-170	0.2901	760.5	100,100
180	1.151	1.162	1.155	1.160					170-180	0.0966	760.6	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 528 lm

%lum = 69.4%
 %lamp = 69.4%

Conical surface Flux(120deg): 677.17 lm

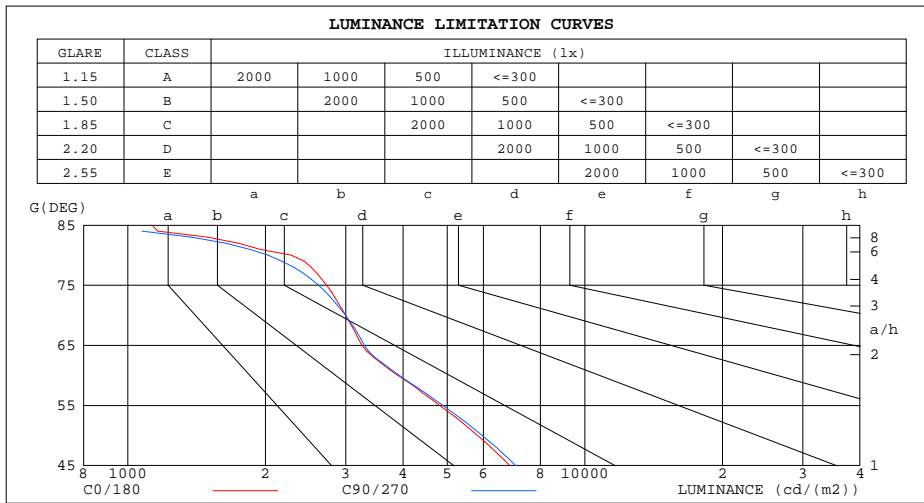
%lum = 89.0%
 %lamp = 89.0%

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	1128	706
80	2275	2026
75	2724	2616
70	2996	2998
65	3254	3293
60	3899	3929
55	4821	4898
50	5825	5966
45	6857	7059

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	.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	.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	.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	.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	.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	.068	.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	20.4	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	19.8	20.9	21.1	19.5	20.6	19.8	20.9	21.1
	8H	19.5	20.6	19.9	20.9	21.2	19.5	20.6	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	19.9	20.8	21.1
	4H	19.9	20.8	20.2	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	20.2	21.0	20.7	21.4	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	20.9	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	20.4	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	21.4	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	20.5	20.9	20.9	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, 760.6 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:

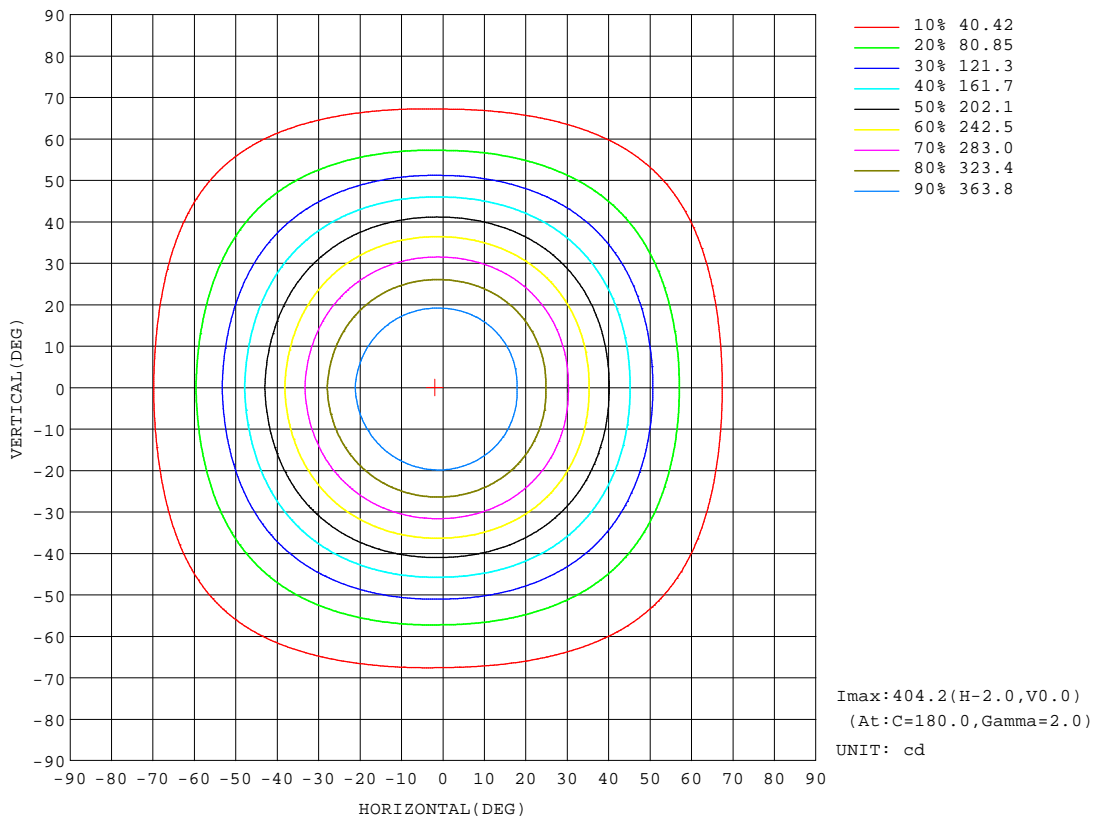
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	67	57	51	66	56	50	65	56	50	45
0.80	76	67	60	75	66	60	74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

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



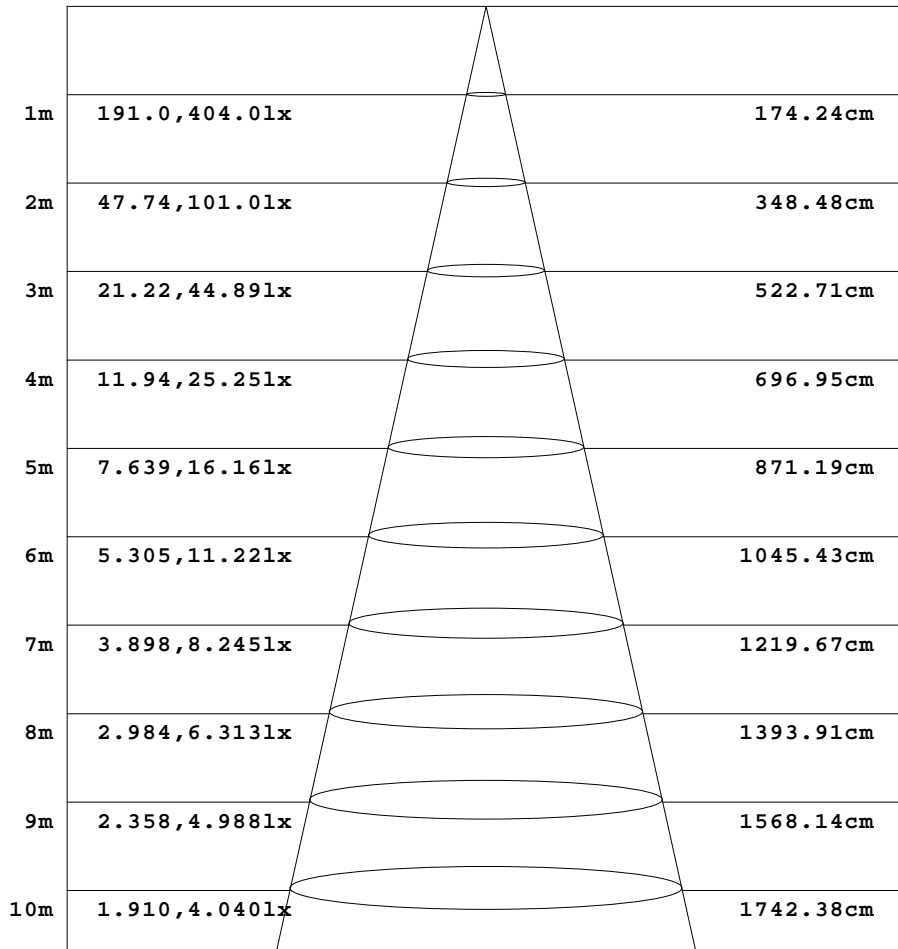
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 01 June 2021

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:486.4 lm



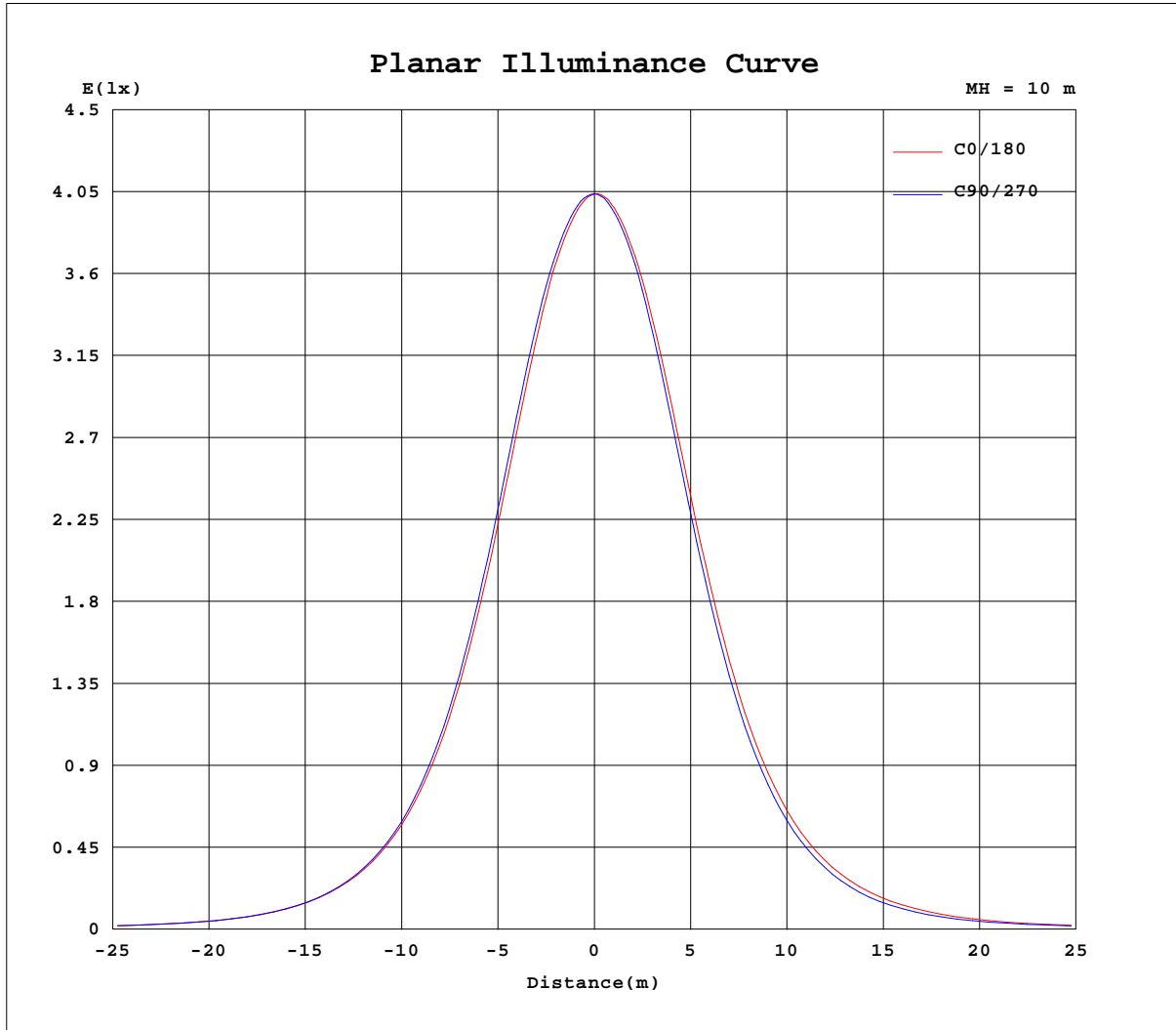
Height Eavg, Emax Angle:82.12deg Diameter

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
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 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	404	404	404	404															
5	400	402	403	401															
10	391	395	398	394															
15	377	384	388	381															
20	353	363	370	359															
25	323	333	343	330															
30	285	296	309	294															
35	245	254	269	254															
40	203	211	227	211															
45	163	168	185	169															
50	126	129	145	130															
55	93.0	94.3	109	94.5															
60	65.5	66.0	78.6	65.2															
65	46.2	46.7	54.4	45.6															
70	34.5	34.4	40.0	33.4															
75	23.7	22.7	28.4	21.9															
80	13.3	11.8	15.6	10.9															
85	3.31	2.07	6.34	1.21															
90	0.16	0.11	0.18	0.03															
95	0.18	0.14	0.08	0.07															
100	0.25	0.20	0.13	0.13															
105	0.35	0.28	0.21	0.19															
110	0.48	0.39	0.28	0.27															
115	0.64	0.53	0.37	0.37															
120	0.82	0.68	0.48	0.49															
125	0.98	0.84	0.61	0.60															
130	1.15	0.99	0.72	0.74															
135	1.29	1.16	0.83	0.86															
140	1.37	1.27	0.89	0.99															
145	1.37	1.40	0.92	1.06															
150	1.30	1.45	0.90	1.02															
155	1.23	1.45	0.83	1.01															
160	1.17	1.38	0.79	0.95															
165	1.11	1.25	0.74	0.92															
170	1.14	1.09	0.82	0.88															
175	1.11	1.10	0.96	0.95															
180	1.15	1.16	1.15	1.16															

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: