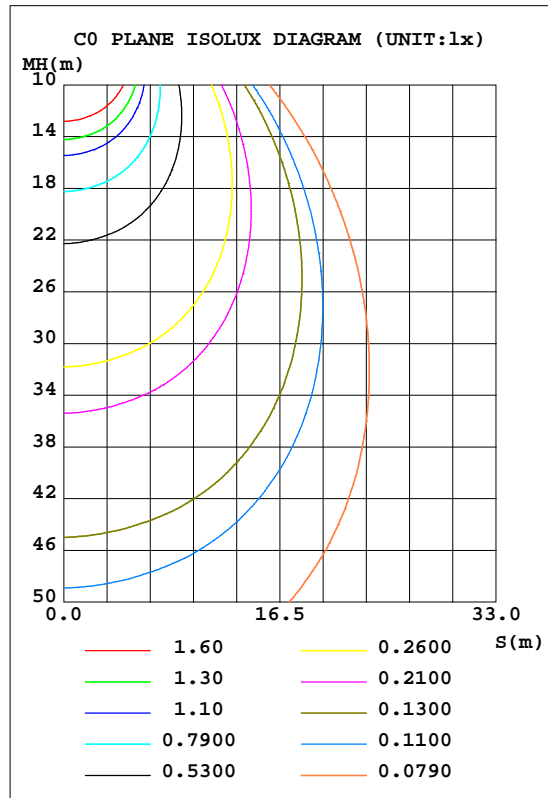
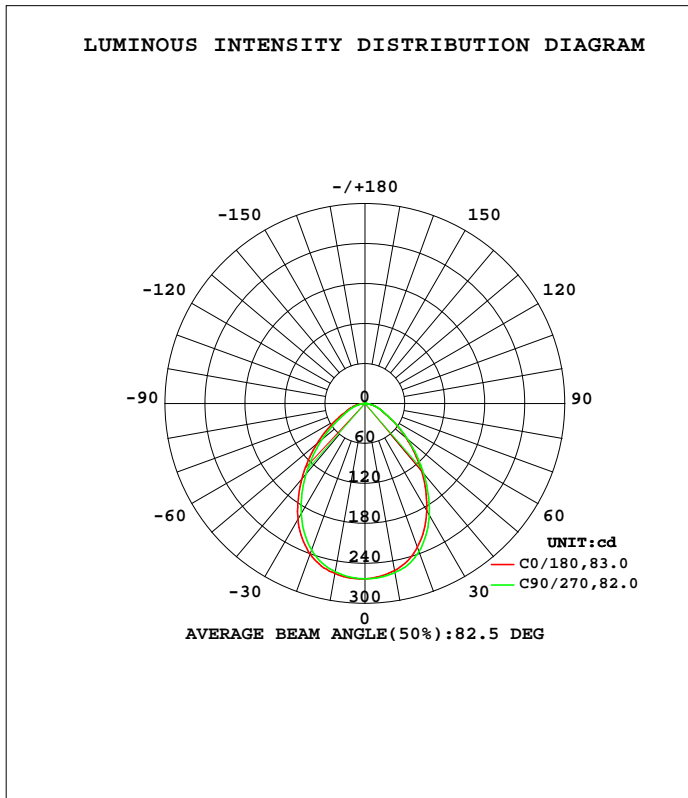


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 95.82 lm/W			
MODEL		I _{max} (cd)	263.4	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)	495.23	h UP, DN(C0-180)	0.3,48.6
NOMINAL FLUX(lm)	495.231	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	254.6	257.7	259.3	256.8					0- 10	24.83	24.83	5.01,5.01
20	230.1	236.8	240.6	234.1					10- 20	69.99	94.82	19.1,19.1
30	185.8	193.5	201.2	191.5					20- 30	99.21	194.0	39.2,39.2
40	132.2	137.0	147.4	137.5					30- 40	103.6	297.6	60.1,60.1
50	81.86	84.10	94.61	84.35					40- 50	86.00	383.6	77.5,77.5
60	42.61	43.23	51.29	42.39					50- 60	57.35	441.0	89,89
70	22.45	22.52	26.12	21.77					60- 70	32.04	473.0	95.5,95.5
80	8.638	7.767	10.09	7.104					70- 80	16.64	489.7	98.9,98.9
90	0.0957	0.0594	0.1101	0.0133					80- 90	3.030	492.7	99.5,99.5
100	0.1515	0.1180	0.0764	0.0710					90-100	0.0765	492.8	99.5,99.5
110	0.3074	0.2436	0.1735	0.1648					100-110	0.1671	492.9	99.5,99.5
120	0.5228	0.4301	0.3049	0.3074					110-120	0.2988	493.2	99.6,99.6
130	0.7399	0.6348	0.4581	0.4721					120-130	0.4313	493.7	99.7,99.7
140	0.8820	0.8189	0.5665	0.6353					130-140	0.5083	494.2	99.8,99.8
150	0.8329	0.9336	0.5741	0.6536					140-150	0.4723	494.6	99.9,99.9
160	0.7488	0.8896	0.5009	0.6055					150-160	0.3347	495.0	100,100
170	0.7322	0.7028	0.5203	0.5605					160-170	0.1855	495.2	100,100
180	0.7380	0.7446	0.7405	0.7443					170-180	0.0618	495.2	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 343.82 lm

%lum = 69.4%
 %lamp = 69.4%

Conical surface Flux(120deg): 440.99 lm

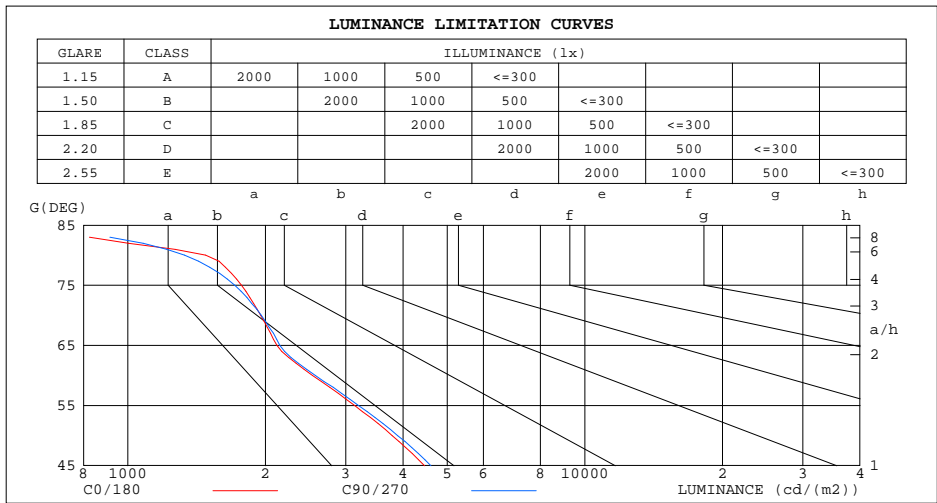
%lum = 89.0%
 %lamp = 89.0%

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	736	472
80	1480	1331
75	1772	1713
70	1953	1959
65	2121	2153
60	2536	2573
55	3136	3200
50	3790	3894
45	4460	4608

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	.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	.105	.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	.094	.071	.051	.055	.041	.030	.018	.013	.010	
4.0	.152	.104	.067	.131	.090	.059	.090	.063	.041	.052	.037	.024	.017	.012	.008	
5.0	.145	.093	.055	.124	.081	.048	.086	.056	.034	.050	.033	.020	.016	.011	.007	
6.0	.138	.085	.047	.119	.073	.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	.011	.014	.008	.004	
10.0	.115	.063	.028	.099	.054	.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	20.8	21.1	19.6	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	20.2	21.0	20.6	21.3	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	20.5	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	20.5	21.0	20.9	21.4	21.9
	12H	20.5	20.9	21.0	21.4	21.9	20.5	20.9	21.0	21.4	21.9
12H	4H	20.0	20.7	20.4	21.1	21.5	20.0	20.7	20.5	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	20.9	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, 495.2 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.4)

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:

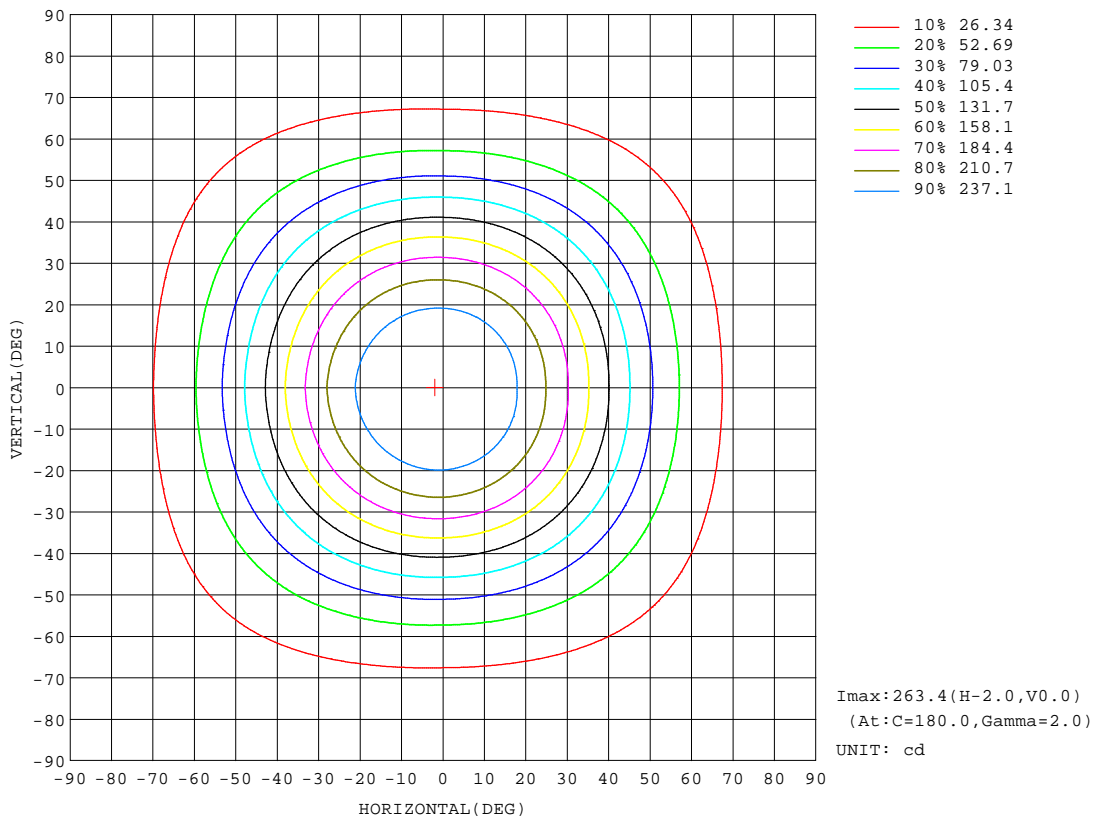
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	67	57	51	66	56	50	65	56	50	45
0.80	76	67	60	75	66	60	74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



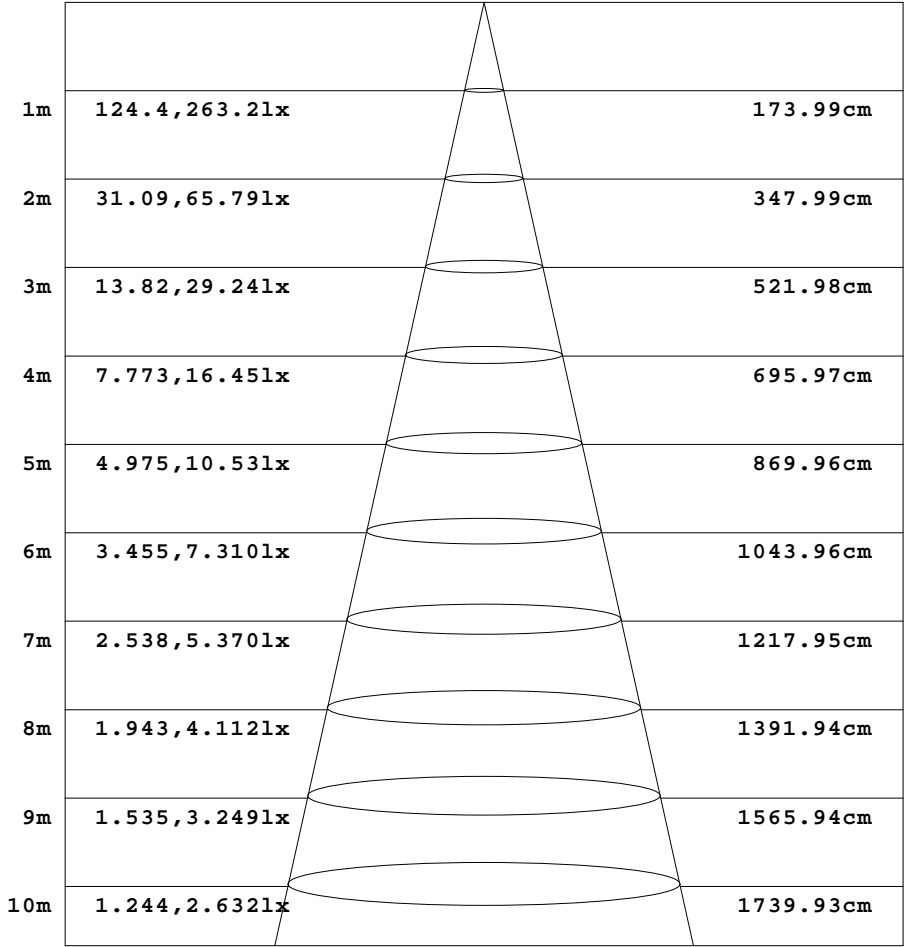
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 01 June 2021

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:

AAI Figure

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

Flux out: 316.8 lm



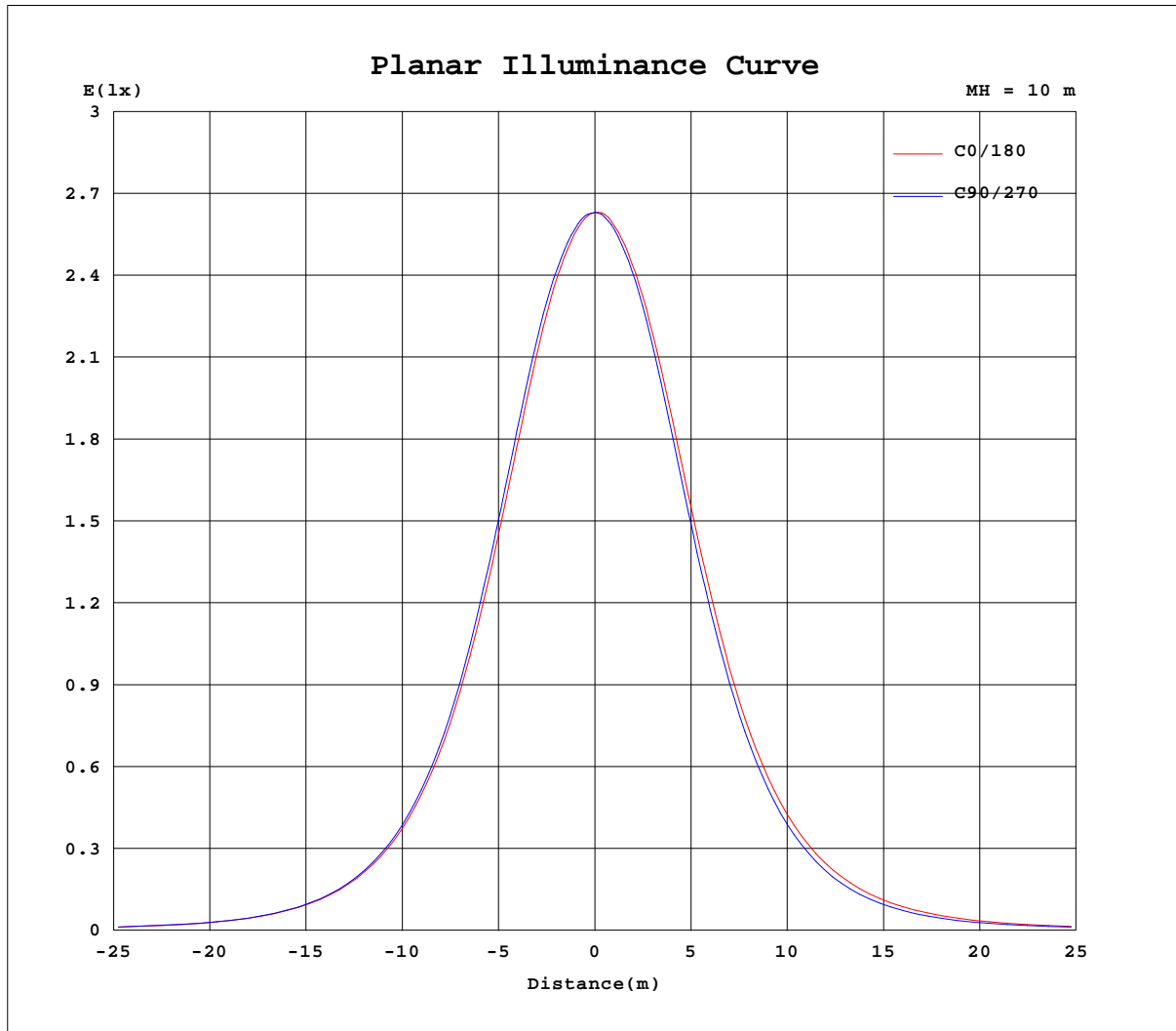
Height Eavg, Emax Angle: 82.04deg Diameter

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
 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	263	263	263	263															
5	260	262	263	261															
10	255	258	259	257															
15	245	250	253	248															
20	230	237	241	234															
25	210	218	223	215															
30	186	193	201	192															
35	159	165	175	165															
40	132	137	147	138															
45	106	109	120	110															
50	81.9	84.1	94.6	84.4															
55	60.4	61.7	71.4	61.4															
60	42.6	43.2	51.3	42.4															
65	30.1	30.6	35.5	29.7															
70	22.4	22.5	26.1	21.8															
75	15.4	14.9	18.5	14.2															
80	8.64	7.77	10.1	7.10															
85	2.15	1.38	4.06	0.76															
90	0.10	0.06	0.11	0.01															
95	0.11	0.08	0.04	0.03															
100	0.15	0.12	0.08	0.07															
105	0.22	0.17	0.12	0.11															
110	0.31	0.24	0.17	0.16															
115	0.41	0.33	0.23	0.23															
120	0.52	0.43	0.30	0.31															
125	0.63	0.54	0.38	0.38															
130	0.74	0.63	0.46	0.47															
135	0.83	0.74	0.53	0.55															
140	0.88	0.82	0.57	0.64															
145	0.88	0.90	0.59	0.68															
150	0.83	0.93	0.57	0.65															
155	0.79	0.94	0.53	0.65															
160	0.75	0.89	0.50	0.61															
165	0.71	0.80	0.47	0.58															
170	0.73	0.70	0.52	0.56															
175	0.71	0.71	0.61	0.61															
180	0.74	0.74	0.74	0.74															

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: