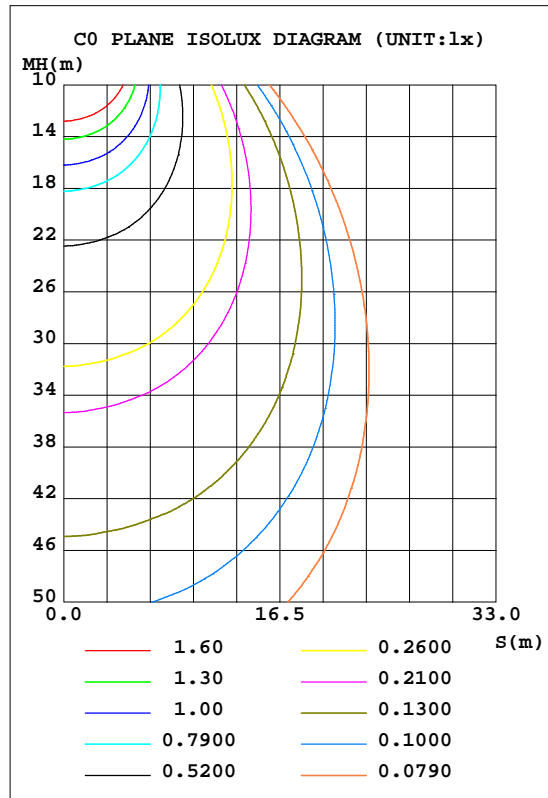
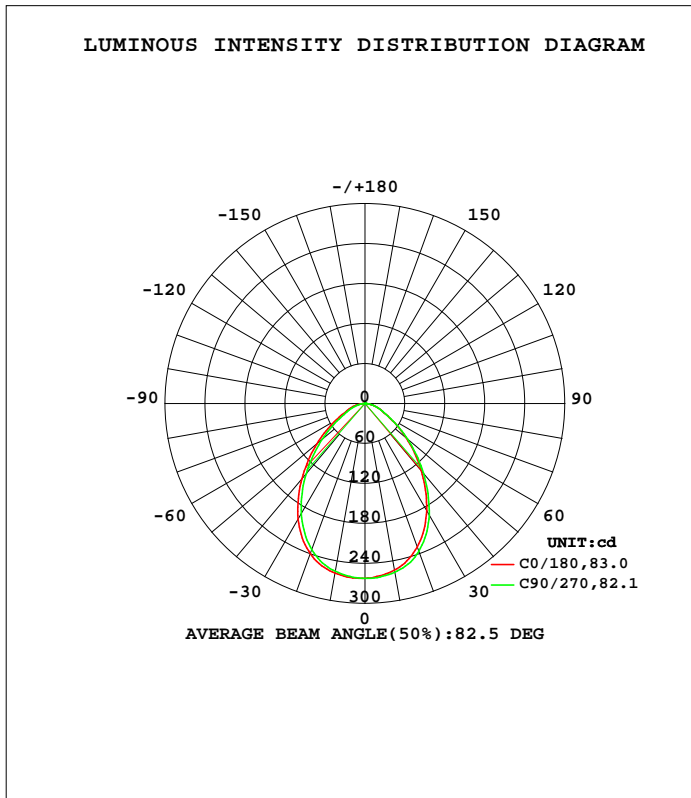


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 93.57 lm/W			
MODEL		I _{max} (cd)	262.6	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)	494.38	h UP, DN(C0-180)	0.3, 48.6
NOMINAL FLUX(lm)	494.376	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	254.1	257.1	258.5	255.8					0- 10	24.76	24.76	5.01,5.01
20	229.4	236.2	240.0	233.5					10- 20	69.82	94.57	19.1,19.1
30	185.4	193.0	201.0	191.2					20- 30	99.00	193.6	39.2,39.2
40	131.9	136.7	147.3	137.4					30- 40	103.4	297.0	60.1,60.1
50	81.73	83.99	94.56	84.33					40- 50	85.88	382.9	77.4,77.4
60	42.61	43.17	51.24	42.40					50- 60	57.33	440.2	89,89
70	22.42	22.48	26.12	21.76					60- 70	32.01	472.2	95.5,95.5
80	8.642	7.740	10.08	7.131					70- 80	16.62	488.8	98.9,98.9
90	0.0927	0.0594	0.1084	0.0092					80- 90	3.028	491.8	99.5,99.5
100	0.1516	0.1160	0.0746	0.0700					90-100	0.0747	491.9	99.5,99.5
110	0.3053	0.2427	0.1714	0.1636					100-110	0.1659	492.1	99.5,99.5
120	0.5240	0.4285	0.3024	0.3043					110-120	0.2973	492.4	99.6,99.6
130	0.7373	0.6308	0.4567	0.4696					120-130	0.4298	492.8	99.7,99.7
140	0.8801	0.8151	0.5668	0.6334					130-140	0.5068	493.3	99.8,99.8
150	0.8294	0.9317	0.5725	0.6523					140-150	0.4711	493.8	99.9,99.9
160	0.7482	0.8849	0.4995	0.6043					150-160	0.3336	494.1	100,100
170	0.7321	0.6977	0.5201	0.5592					160-170	0.1850	494.3	100,100
180	0.7363	0.7416	0.7363	0.7419					170-180	0.0616	494.4	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 343.1 lm

%lum = 69.4%
 %lamp = 69.4%

Conical surface Flux(120deg): 440.2 lm

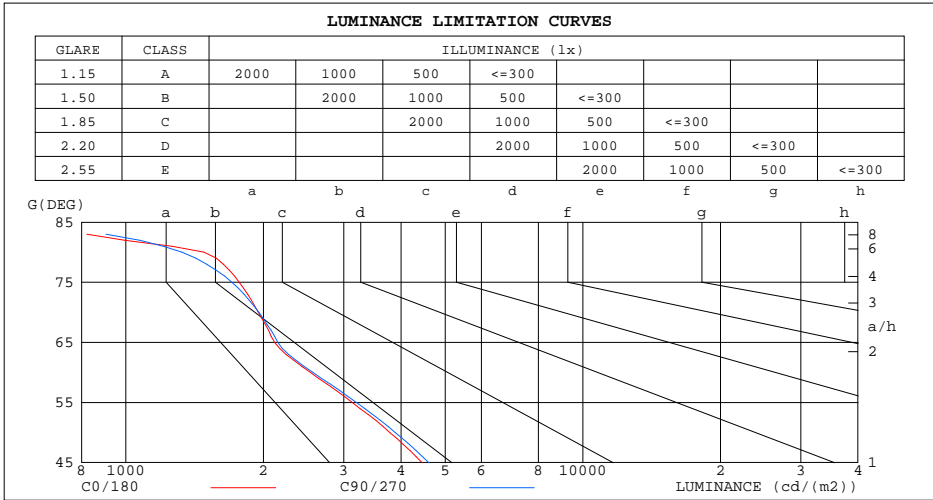
%lum = 89.0%
 %lamp = 89.0%

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	737	466
80	1481	1326
75	1771	1706
70	1951	1956
65	2117	2150
60	2537	2570
55	3134	3197
50	3785	3889
45	4454	4604

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	.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	.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	21.2	19.5	20.6	19.9	20.9	21.2
	8H	19.5	20.6	19.9	20.9	21.1	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	21.4	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	20.9	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, 494.4 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:

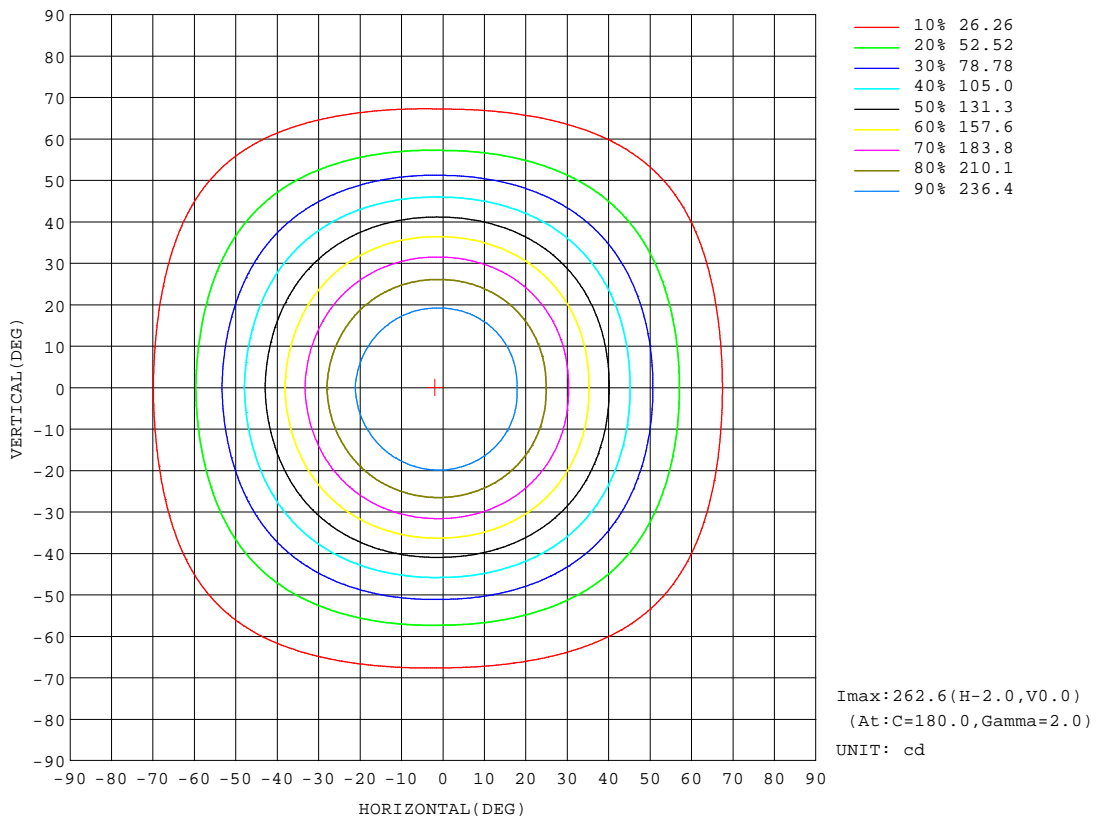
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	67	57	51	66	56	50	65	56	50	45
0.80	76	67	60	75	66	60	74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



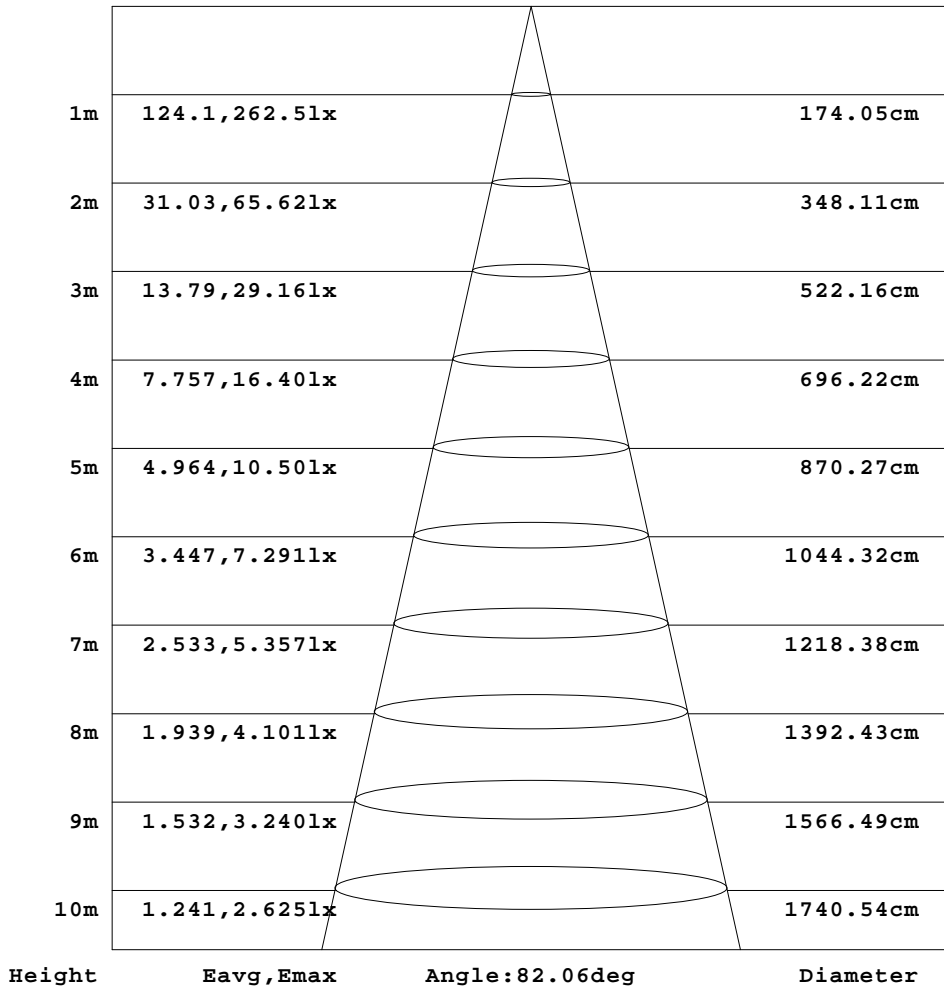
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 01 June 2021

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:316.1 lm

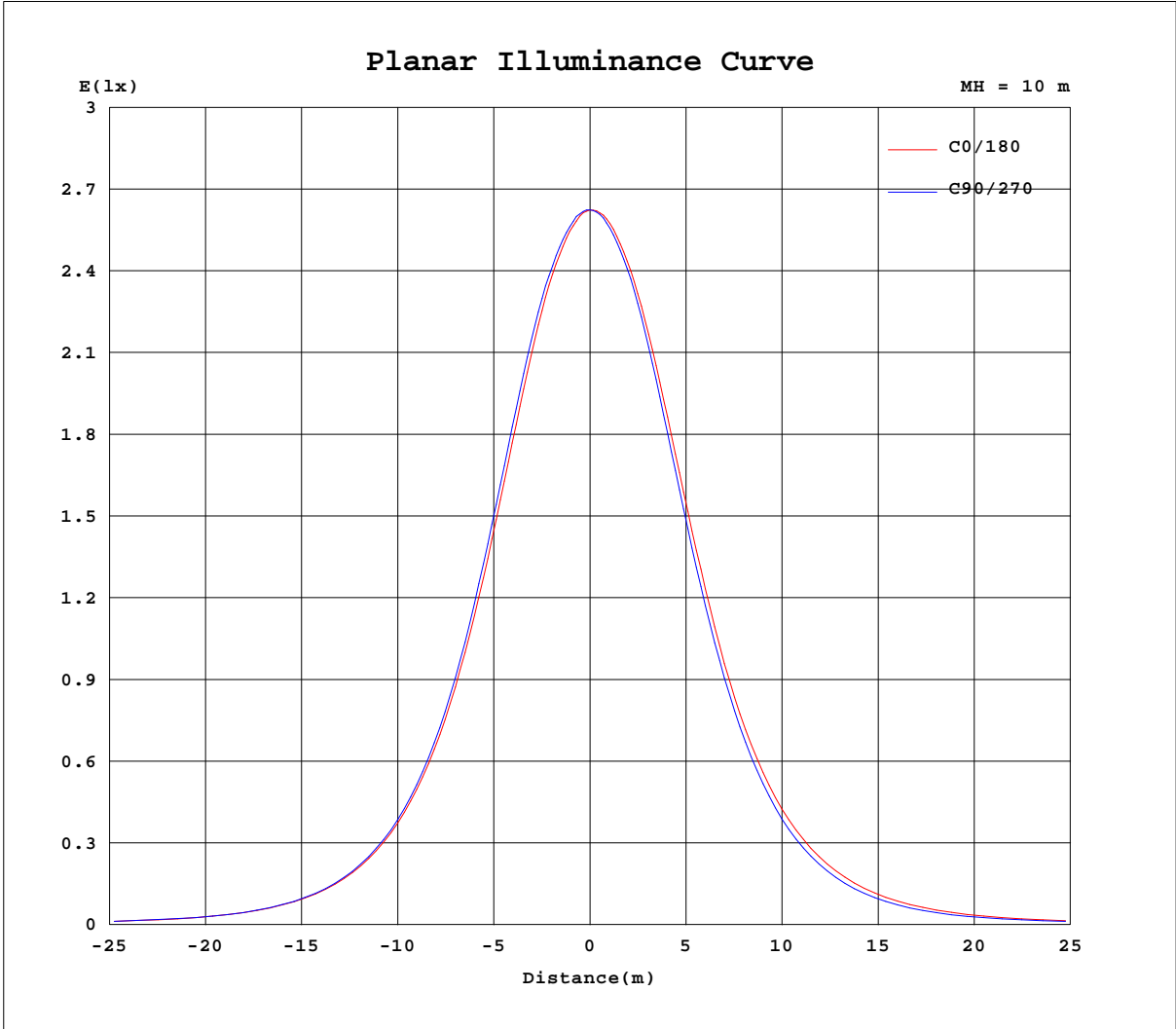


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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	262	262	262	262																
5	260	261	262	261																
10	254	257	259	256																
15	244	250	252	248																
20	229	236	240	234																
25	210	217	223	215																
30	185	193	201	191																
35	159	165	175	165																
40	132	137	147	137																
45	106	109	120	110																
50	81.7	84.0	94.6	84.3																
55	60.4	61.6	71.3	61.4																
60	42.6	43.2	51.2	42.4																
65	30.1	30.5	35.5	29.7																
70	22.4	22.5	26.1	21.8																
75	15.4	14.8	18.5	14.2																
80	8.64	7.74	10.1	7.13																
85	2.16	1.37	4.08	0.76																
90	0.09	0.06	0.11	0.01																
95	0.11	0.08	0.04	0.04																
100	0.15	0.12	0.07	0.07																
105	0.22	0.17	0.12	0.11																
110	0.31	0.24	0.17	0.16																
115	0.40	0.33	0.23	0.23																
120	0.52	0.43	0.30	0.30																
125	0.63	0.53	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	0.63																
145	0.88	0.90	0.59	0.68																
150	0.83	0.93	0.57	0.65																
155	0.79	0.93	0.52	0.65																
160	0.75	0.88	0.50	0.60																
165	0.71	0.80	0.47	0.58																
170	0.73	0.70	0.52	0.56																
175	0.71	0.70	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: