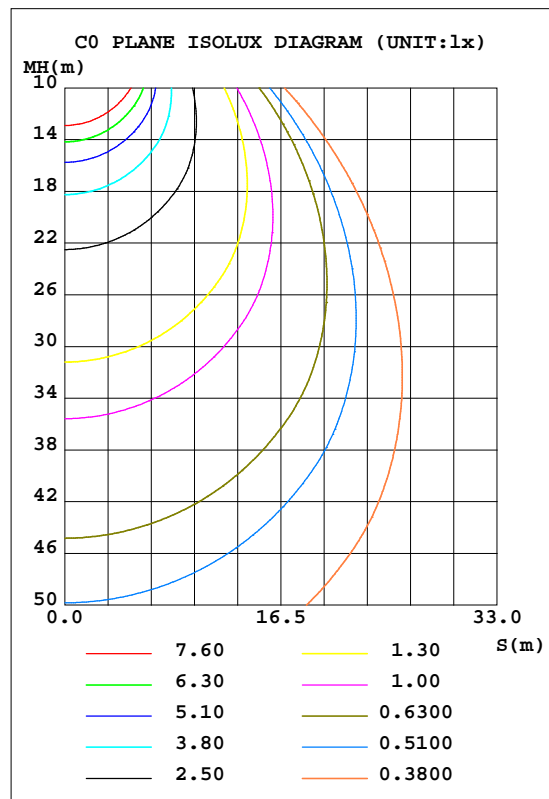
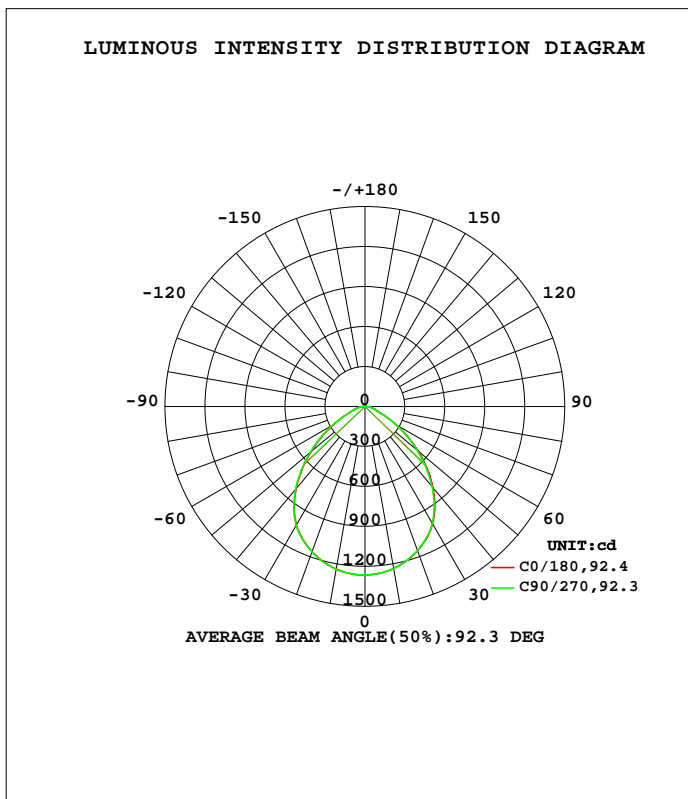


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 107.00 lm/W			
MODEL	10"	I _{max} (cd)	1265	S/MH(C0/180)	1.21
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	2674.3	h UP, DN(C0-180)	0.0,49.3
NOMINAL FLUX(lm)	2674.3	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0,50.7
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	h down(%)	100.0	CIBSE SHR MAX	1.30



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-06-01

Range: 0 - 90DEG
 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	1235	1234	1240	1241					0- 10	119.4	119.4	4.47,4.47
20	1152	1150	1160	1162					10- 20	339.3	458.7	17.2,17.2
30	1016	1013	1029	1032					20- 30	504.9	963.6	36,36
40	793.5	782.8	804.8	810.4					30- 40	572.9	1536	57.5,57.5
50	523.6	513.2	531.3	540.0					40- 50	511.0	2047	76.6,76.6
60	263.1	262.3	275.4	281.7					50- 60	352.3	2400	89.7,89.7
70	95.48	97.72	103.5	102.1					60- 70	170.4	2570	96.1,96.1
80	45.75	48.93	53.12	50.64					70- 80	78.28	2648	99,99
90	0.4946	0.5050	2.899	0.2572					80- 90	25.87	2674	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1807.1 lm

%lum = 67.6%
 %lamp = 67.6%

Conical surface Flux(120deg): 2399.7 lm

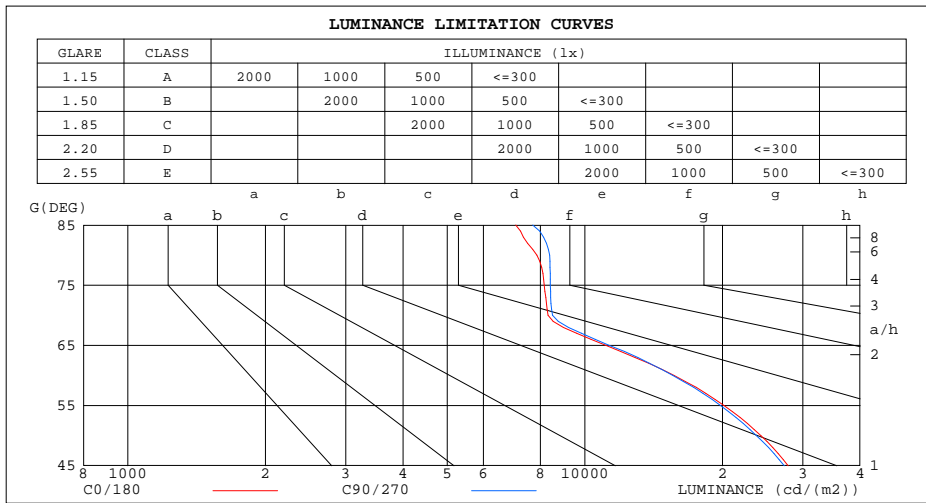
%lum = 89.7%
 %lamp = 89.7%

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-06-01

g Range: 0 - 90DEG
 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	7064	7691
80	7849	8379
75	8153	8403
70	8317	8495
65	11131	11306
60	15678	15597
55	20175	19811
50	24266	23738
45	27851	27297

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-06-01

G Range: 0 - 90DEG
 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	.258	.147	.046	.251	.143	.045	.238	.136	.044	.226	.130	.042	.215	.125	.040	
2.0	.248	.136	.042	.242	.133	.041	.230	.128	.040	.220	.123	.039	.210	.119	.037	
3.0	.234	.124	.037	.228	.122	.037	.218	.118	.036	.209	.115	.035	.201	.111	.034	
4.0	.219	.114	.033	.215	.112	.033	.206	.109	.033	.198	.106	.032	.190	.103	.031	
5.0	.206	.105	.030	.202	.103	.030	.194	.101	.030	.187	.098	.029	.180	.096	.029	
6.0	.193	.097	.028	.190	.096	.028	.183	.094	.027	.176	.092	.027	.170	.090	.027	
7.0	.182	.090	.025	.178	.089	.025	.172	.087	.025	.166	.085	.025	.161	.084	.025	
8.0	.171	.084	.024	.168	.083	.023	.163	.081	.023	.158	.080	.023	.153	.078	.023	
9.0	.162	.078	.022	.159	.078	.022	.154	.076	.022	.149	.075	.021	.145	.074	.021	
10.0	.153	.073	.020	.151	.073	.020	.146	.072	.020	.142	.070	.020	.138	.069	.020	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.177	.157	.138	.151	.134	.119	.103	.092	.082	.060	.054	.048	.019	.017	.015	
2.0	.166	.132	.103	.142	.114	.089	.098	.079	.062	.056	.046	.037	.018	.015	.012	
3.0	.157	.114	.079	.135	.098	.069	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.149	.100	.063	.128	.087	.055	.088	.060	.038	.051	.035	.023	.016	.012	.007	
5.0	.142	.090	.051	.122	.078	.044	.084	.054	.031	.049	.032	.019	.016	.010	.006	
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.129	.074	.036	.111	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004	
8.0	.123	.068	.031	.106	.059	.027	.073	.042	.019	.043	.024	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.023	.070	.039	.017	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.097	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-06-01

Range: 0 - 90DEG
 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	19.2	20.6	19.5	20.8	21.0	19.2	20.5	19.4	20.7	20.9
	3H	19.5	20.8	19.8	21.0	21.2	19.5	20.8	19.8	21.0	21.2
	4H	19.7	20.9	20.0	21.1	21.4	19.7	20.9	20.0	21.1	21.3
	6H	19.8	20.9	20.1	21.2	21.5	19.8	20.9	20.2	21.2	21.5
	8H	19.9	20.9	20.2	21.2	21.5	19.9	21.0	20.2	21.2	21.5
	12H	19.9	20.9	20.2	21.2	21.5	19.9	21.0	20.3	21.2	21.5
4H	2H	19.4	20.6	19.7	20.8	21.0	19.3	20.5	19.6	20.8	21.0
	3H	19.8	20.8	20.2	21.1	21.4	19.8	20.8	20.1	21.1	21.4
	4H	20.1	21.0	20.4	21.3	21.6	20.1	21.0	20.4	21.3	21.6
	6H	20.3	21.1	20.7	21.5	21.9	20.4	21.2	20.7	21.5	21.9
	8H	20.4	21.2	20.8	21.5	21.9	20.5	21.2	20.9	21.6	22.0
	12H	20.5	21.2	20.9	21.6	22.0	20.6	21.2	21.0	21.6	22.0
8H	4H	20.1	20.9	20.5	21.3	21.6	20.1	20.9	20.5	21.3	21.6
	6H	20.5	21.1	20.9	21.5	22.0	20.5	21.2	21.0	21.6	22.0
	8H	20.7	21.2	21.1	21.6	22.1	20.7	21.3	21.2	21.7	22.1
	12H	20.8	21.3	21.3	21.7	22.2	20.9	21.3	21.3	21.8	22.3
12H	4H	20.1	20.8	20.5	21.2	21.6	20.1	20.8	20.5	21.2	21.6
	6H	20.5	21.1	21.0	21.5	21.9	20.6	21.1	21.0	21.5	22.0
	8H	20.7	21.2	21.2	21.6	22.1	20.8	21.2	21.2	21.7	22.2
Variations with the observer position at spacings:											
S = 1.0H		+ 0.5 / - 0.7					+ 0.5 / - 0.7				
1.5H		+ 0.3 / - 0.4					+ 0.2 / - 0.3				
2.0H		+ 1.1 / - 1.3					+ 1.1 / - 1.2				

CIE Pub.117, 2674 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.4)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-06-01

g Range: 0 - 90DEG
 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:

UTILIZATION FACTORS TABLE

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

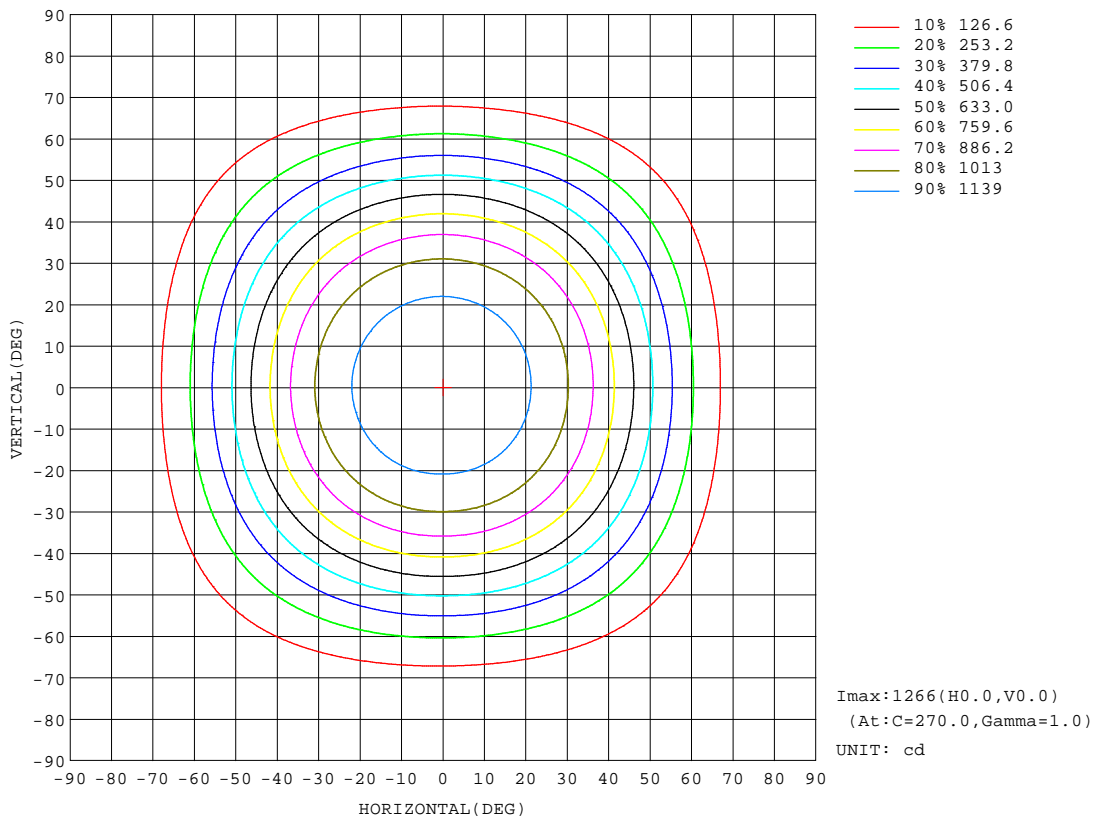
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	54	48	64	54	48	63	54	48	42
0.80	75	65	58	74	64	58	72	64	58	52
1.00	83	74	67	82	73	67	80	74	67	60
1.25	90	81	75	88	80	75	86	79	74	67
1.50	94	86	80	93	85	80	90	83	79	72
2.00	100	93	88	98	92	87	95	90	85	78
2.50	103	97	92	101	95	91	97	93	89	81
3.00	106	100	96	104	99	94	100	96	92	85
4.00	109	104	100	107	102	99	103	99	96	88
5.00	111	107	103	108	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: 2021-06-01

g Range: 0 - 90DEG
 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:



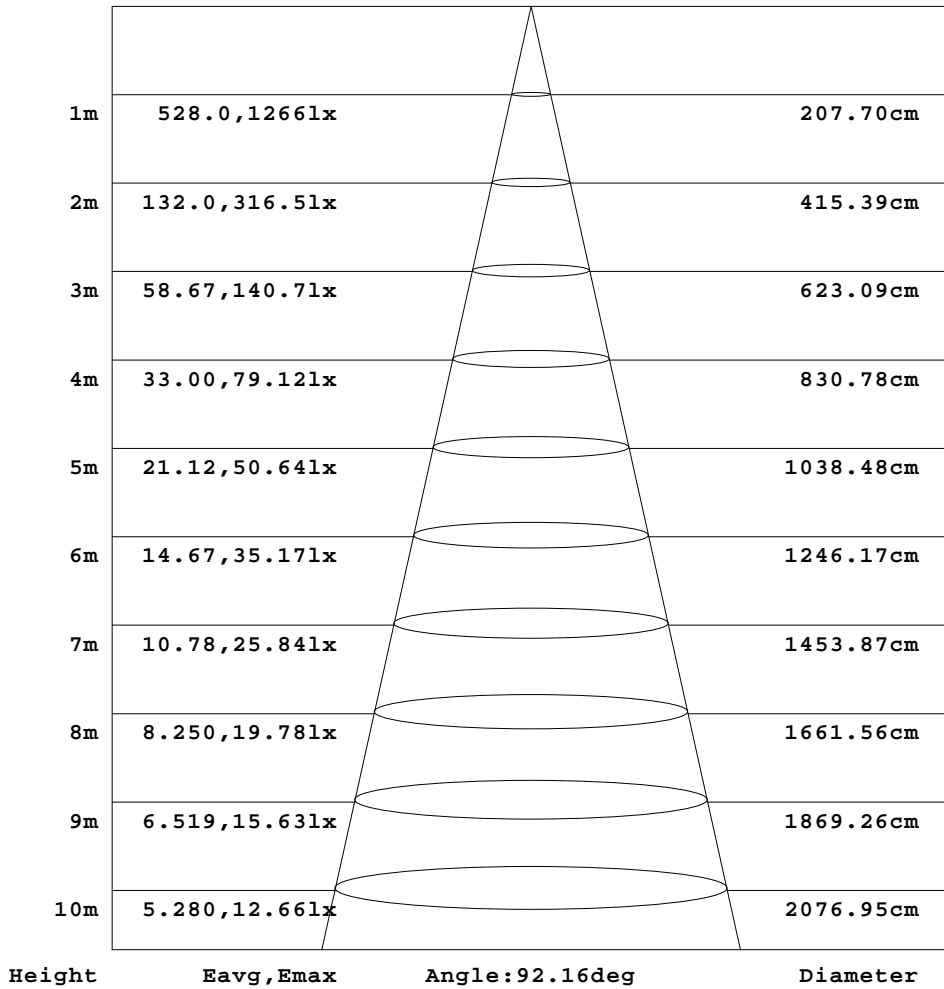
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-06-01

Page Range: 0 - 90DEG
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: 1908 lm

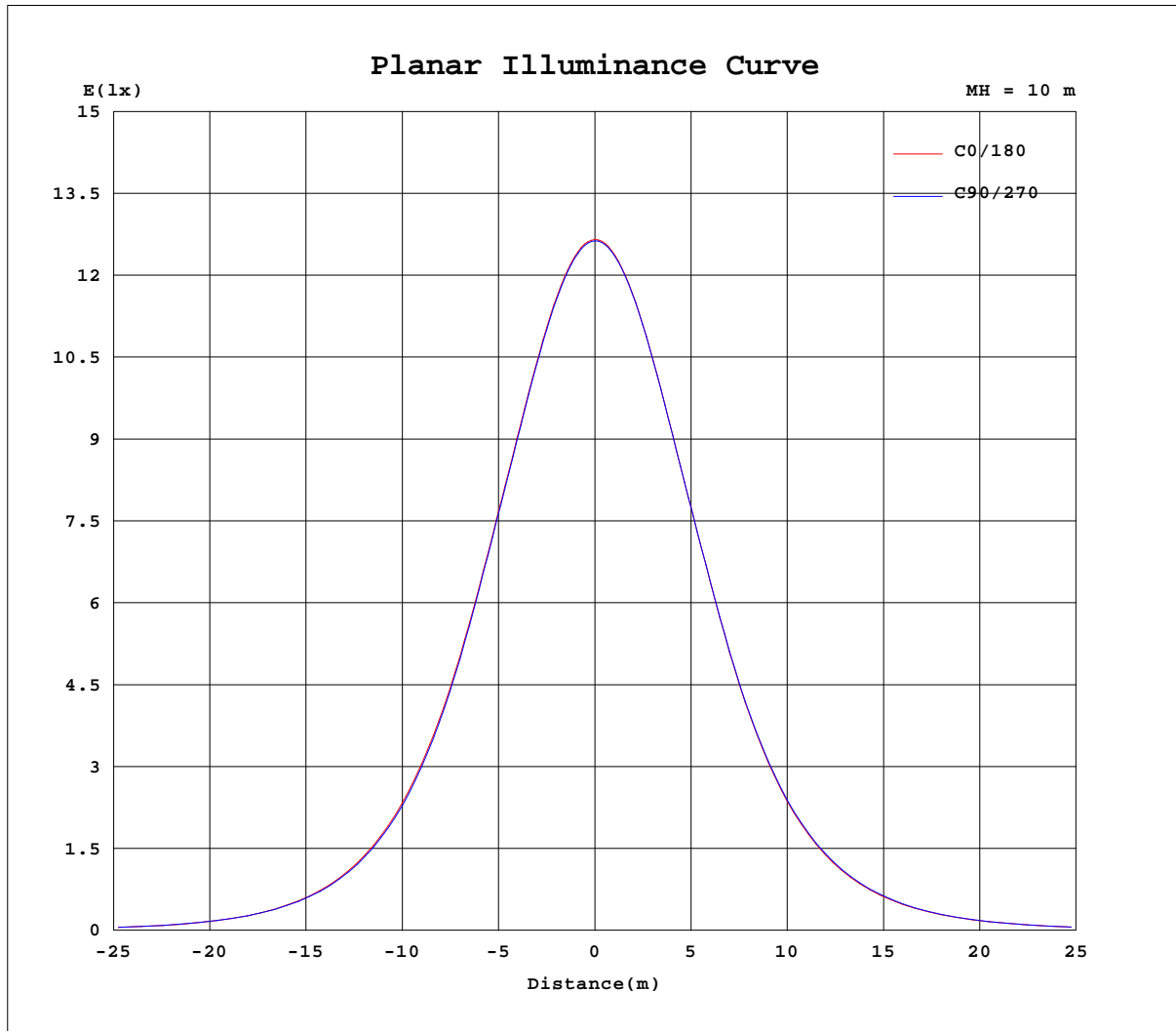


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-06-01

Range: 0 - 90DEG
 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: 2021-06-01

Page Range: 0 - 90DEG
 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	1265	1265	1265	1265											
5	1257	1256	1259	1259											
10	1235	1234	1240	1241											
15	1200	1199	1207	1208											
20	1152	1150	1160	1162											
25	1093	1090	1102	1104											
30	1016	1013	1029	1032											
35	914	907	927	932											
40	793	783	805	810											
45	661	649	669	677											
50	524	513	531	540											
55	388	382	398	406											
60	263	262	275	282											
65	158	161	174	174											
70	95.5	97.7	103	102											
75	70.8	73.1	77.0	75.4											
80	45.7	48.9	53.1	50.6											
85	20.7	22.5	28.6	23.4											
90	0.49	0.51	2.90	0.26											

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-06-01

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 3.200m [K=1.0000]
 Remarks: