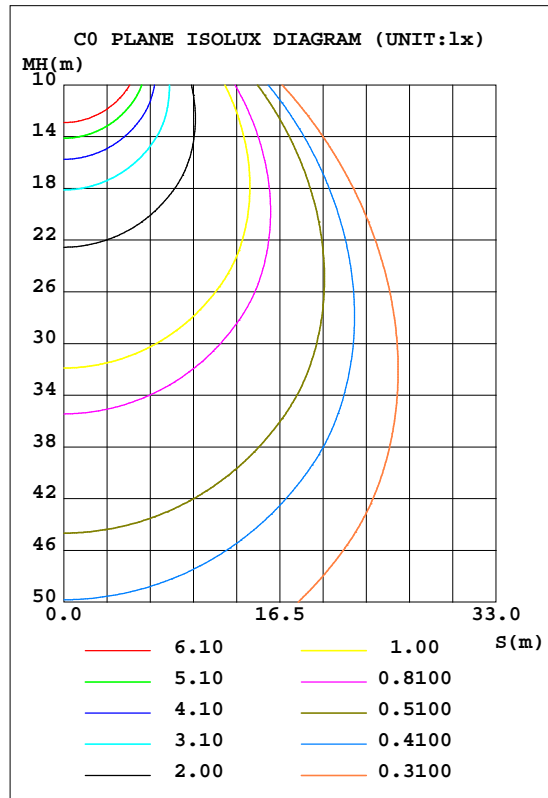
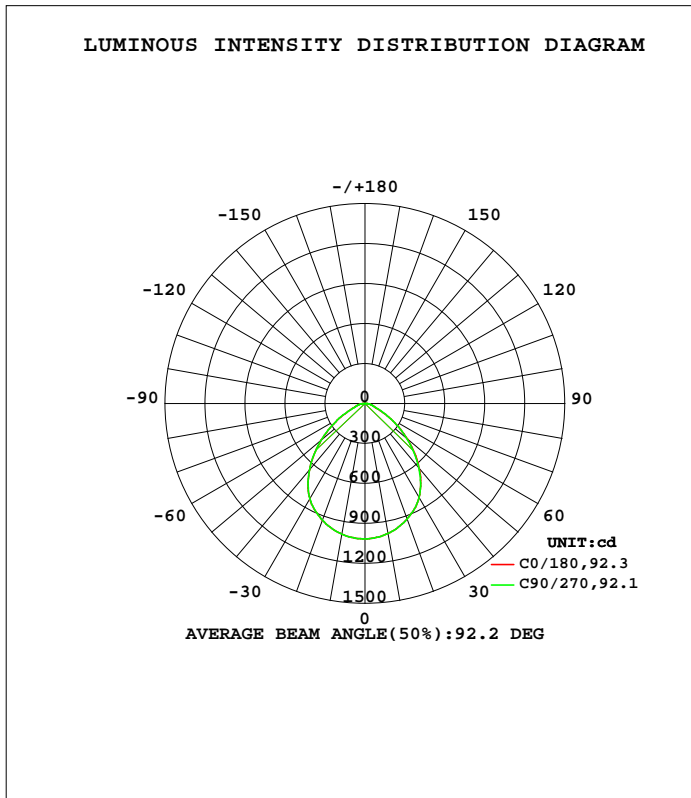


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 107.78 lm/W			
MODEL	10"	I _{max} (cd)	1016	S/MH(C0/180)	1.21
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.21
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	2146.0	h UP, DN(C0-180)	0.0, 49.3
NOMINAL FLUX(lm)	2145.97	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	991.7	991.5	996.2	996.3					0- 10	95.93	95.93	4.47,4.47
20	924.1	924.0	933.4	932.8					10- 20	272.5	368.4	17.2,17.2
30	814.3	813.7	828.2	827.9					20- 30	405.4	773.8	36.1,36.1
40	634.4	629.2	649.1	648.8					30- 40	459.8	1234	57.5,57.5
50	416.9	413.0	429.3	431.1					40- 50	409.9	1644	76.6,76.6
60	208.9	211.7	222.3	224.8					50- 60	282.4	1926	89.8,89.8
70	76.96	78.81	83.11	81.42					60- 70	136.4	2062	96.1,96.1
80	36.64	39.38	42.65	40.46					70- 80	62.79	2125	99,99
90	0.3844	0.3912	2.249	0.1970					80- 90	20.74	2146	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): 1450.8 lm

%lum = 67.6%
 %lamp = 67.6%

Conical surface Flux(120deg): 1926 lm

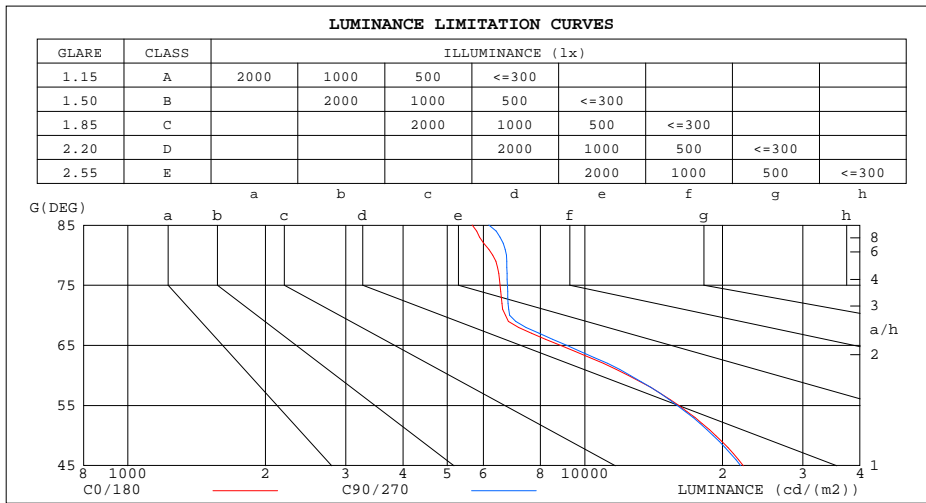
%lum = 89.8%
 %lamp = 89.8%

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	5673	6168
80	6289	6739
75	6524	6766
70	6708	6846
65	8854	9136
60	12455	12583
55	16058	15953
50	19333	19091
45	22240	21935

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	.247	.136	.042	.241	.133	.041	.230	.128	.040	.220	.123	.039	.210	.119	.037	
3.0	.233	.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	.189	.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	.077	.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	.016	
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	20.5	19.4	20.7	20.9	19.2	20.5	19.4	20.7	20.9
	3H	19.5	20.7	19.8	21.0	21.2	19.5	20.8	19.8	21.0	21.2
	4H	19.7	20.8	20.0	21.1	21.3	19.7	20.9	20.0	21.1	21.3
	6H	19.8	20.9	20.1	21.2	21.4	19.8	20.9	20.2	21.2	21.5
	8H	19.8	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	19.3	20.5	19.6	20.8	21.0	19.3	20.5	19.6	20.8	21.0
	3H	19.8	20.8	20.1	21.1	21.4	19.8	20.8	20.2	21.1	21.4
	4H	20.0	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	21.8	20.4	21.2	20.8	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	21.5	21.9	20.6	21.3	21.0	21.6	22.0
8H	4H	20.1	20.9	20.5	21.2	21.6	20.1	20.9	20.5	21.3	21.6
	6H	20.5	21.1	20.9	21.5	21.9	20.5	21.2	21.0	21.6	22.0
	8H	20.6	21.2	21.1	21.6	22.1	20.7	21.3	21.2	21.7	22.1
	12H	20.8	21.2	21.2	21.7	22.2	20.9	21.4	21.4	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	21.3	21.3	21.7	22.2
Variations with the observer position at spacings:											
S = 1.0H		+ 0.5 / - 0.7					+ 0.5 / - 0.6				
1.5H		+ 0.3 / - 0.4					+ 0.2 / - 0.3				
2.0H		+ 1.1 / - 1.3					+ 1.0 / - 1.3				

CIE Pub.117, 2146 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.7)

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
 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:

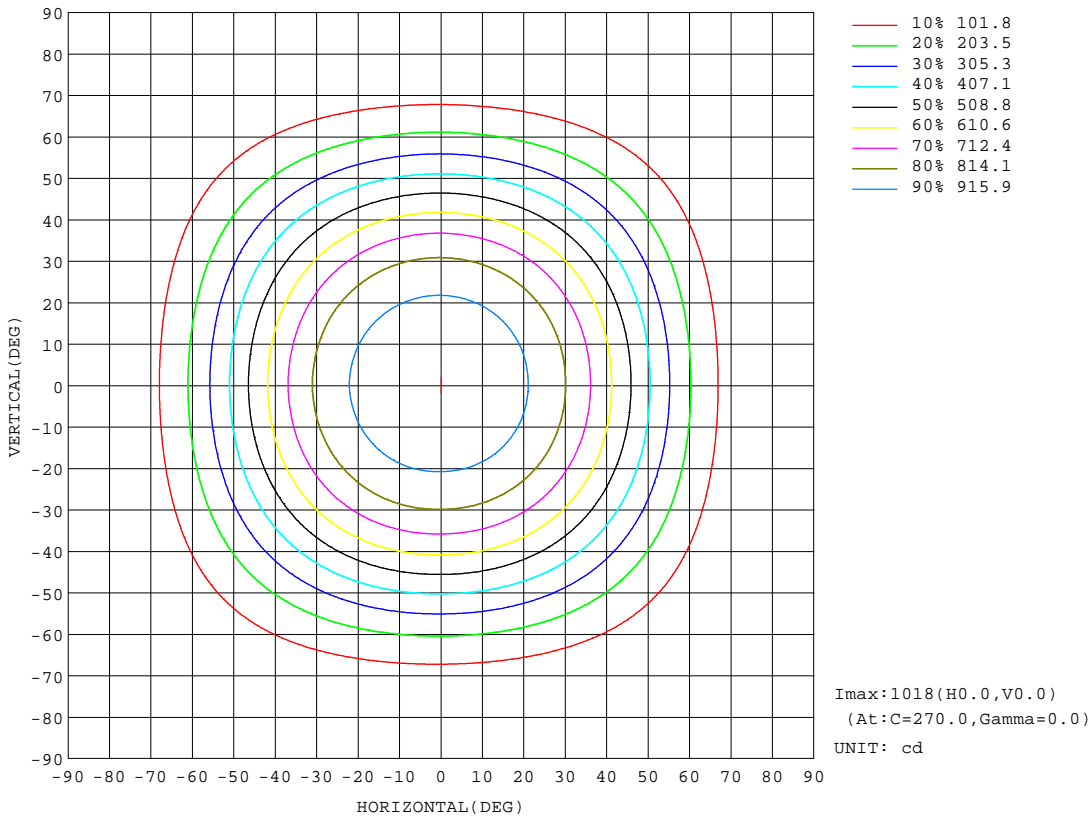
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	54	48	64	54	48	63	54	48	42
0.80	75	65	58	74	64	58	72	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:



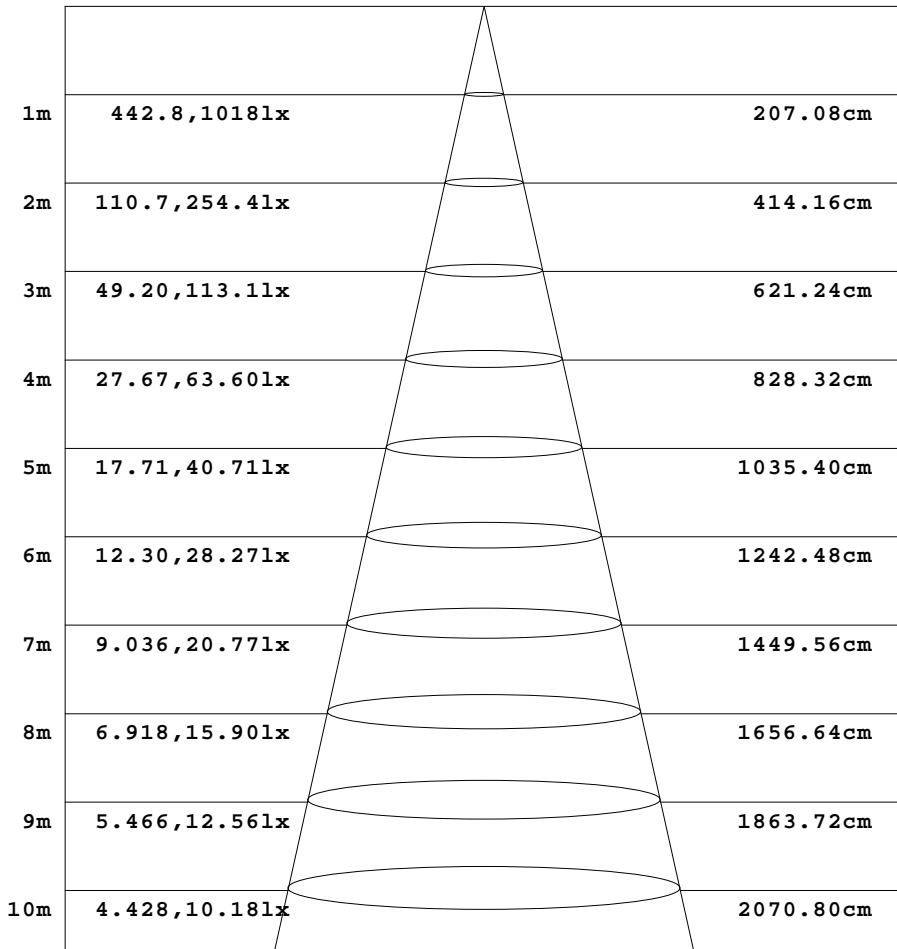
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-06-01

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: 1492 lm



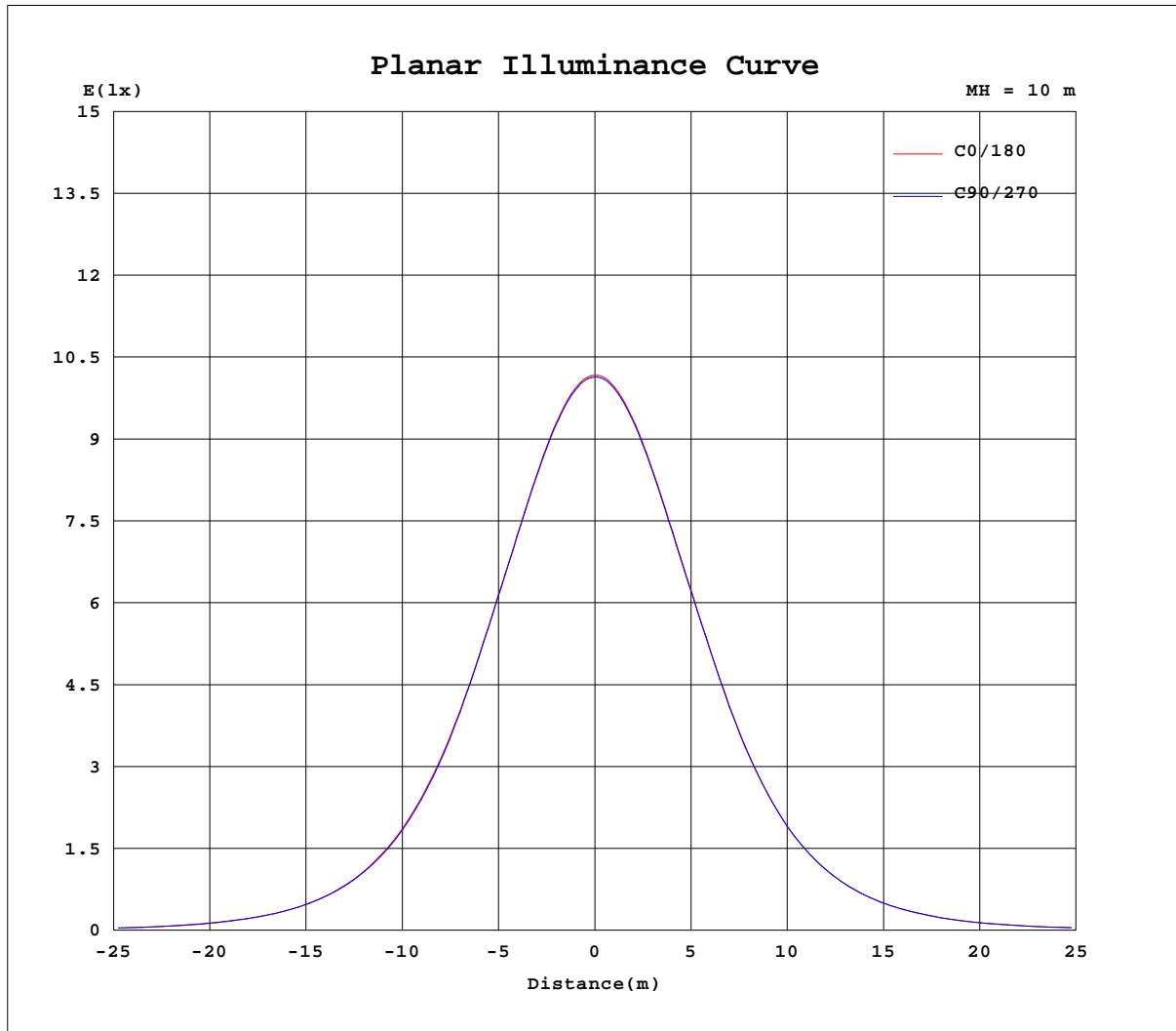
Height Eavg, Emax Angle: 91.99deg Diameter

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: 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	1016	1016	1016	1016																
5	1009	1009	1012	1012																
10	992	992	996	996																
15	963	963	970	970																
20	924	924	933	933																
25	876	876	886	886																
30	814	814	828	828																
35	731	729	747	746																
40	634	629	649	649																
45	528	522	541	541																
50	417	413	429	431																
55	309	308	321	324																
60	209	212	222	225																
65	126	130	139	139																
70	77.0	78.8	83.1	81.4																
75	56.6	58.9	61.9	60.3																
80	36.6	39.4	42.6	40.5																
85	16.6	18.1	22.9	18.7																
90	0.38	0.39	2.25	0.20																

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%
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 Remarks: