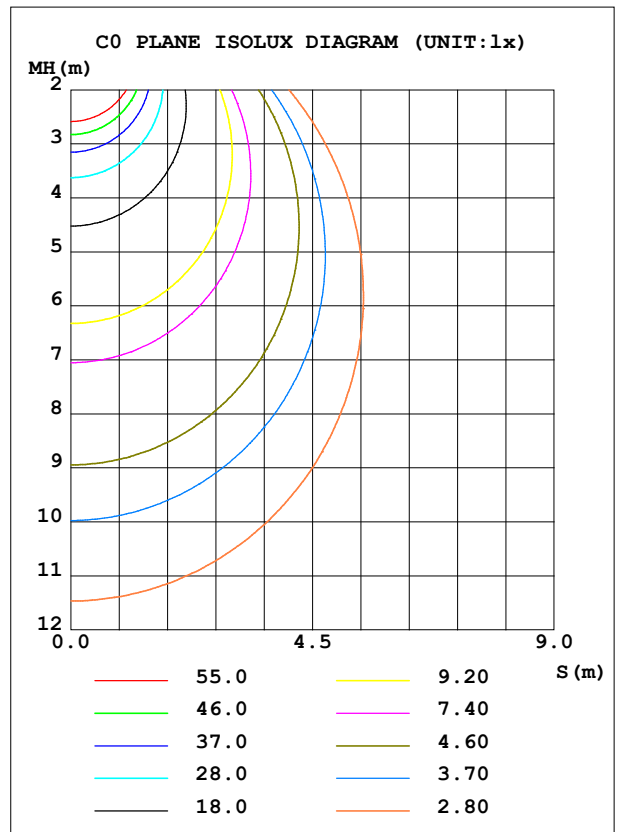
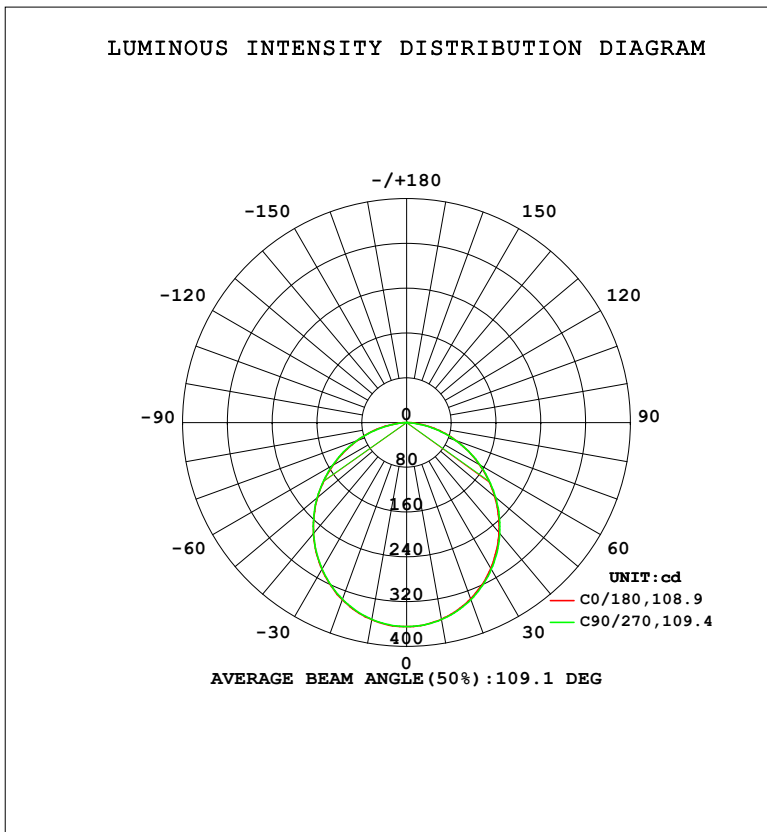


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.97V I:0.1332A P:11.580W PF:0.9531 Freq:59.98Hz Lamp Flux:1003.67x1 lm		
NAME: LED-6-S12W-5CCT	TYPE:	WEIGHT:
SPEC.: 2700K 80	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 86.67 lm/W
MODEL		I _{max} (cd)	364.7	S/MH (C0/180)	1.24	
NOMINAL POWER (W)	12	LOR (%)	100.0	S/MH (C90/270)	1.24	
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	1003.7	η UP, DN (C0-180)	0.0, 50.0	
NOMINAL FLUX (lm)	1003.67	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.0	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2022-04-14

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity: 65.0%
 Test Distance: 3.080m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

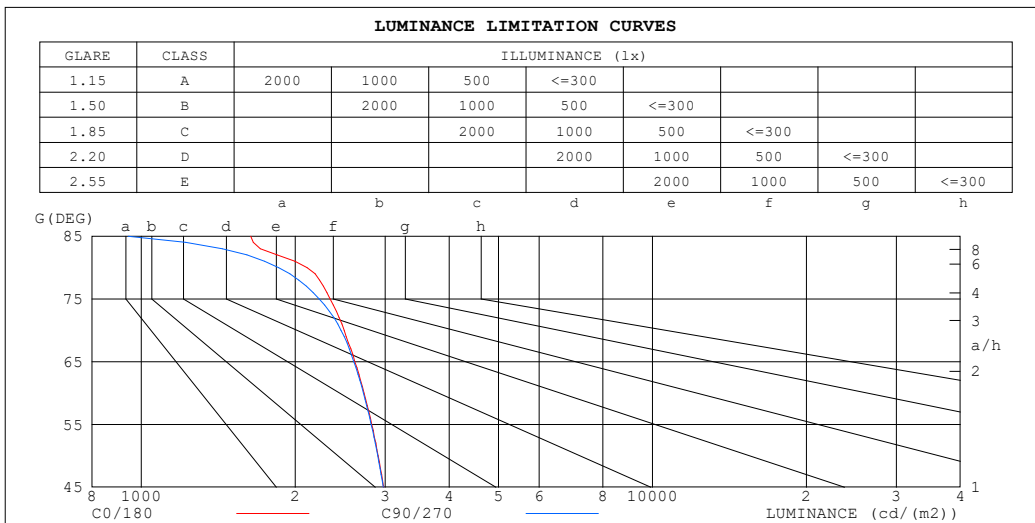
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	356.9	357.3	357.4	357.9	357.7	357.5	356.9	356.9	0- 10	34.45	34.45	3.43,3.43
20	335.0	336.1	336.4	336.5	336.5	336.5	335.8	335.0	10- 20	98.24	132.7	13.2,13.2
30	300.8	302.1	302.7	302.8	302.8	303.0	302.4	301.5	20- 30	147.7	280.4	27.9,27.9
40	256.8	258.2	259.0	258.4	258.8	259.5	258.8	257.7	30- 40	176.0	456.3	45.5,45.5
50	205.6	207.1	207.5	206.7	207.7	208.9	208.7	207.3	40- 50	180.2	636.5	63.4,63.4
60	150.2	151.3	151.3	150.4	151.5	153.0	153.0	151.7	50- 60	160.7	797.3	79.4,79.4
70	93.84	94.24	93.61	93.19	93.88	95.31	94.84	94.81	60- 70	121.6	918.8	91.5,91.5
80	40.32	38.81	35.84	37.25	39.08	38.64	36.45	38.91	70- 80	69.51	988.3	98.5,98.5
90	0.1719	0.1714	0.1621	0.1685	0.2900	0.2816	0.2718	0.2820	80- 90	15.32	1004	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		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-04-14

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:119.97V I:0.1332A P:11.580W PF:0.9531 Freq:59.98Hz Lamp Flux:1003.67x1 lm		
NAME: LED-6-S12W-5CCT	TYPE:	WEIGHT:
SPEC.: 2700K 80	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1637	942
80	2109	1855
75	2340	2229
70	2493	2459
65	2616	2605
60	2729	2719
55	2824	2817
50	2906	2900
45	2979	2974

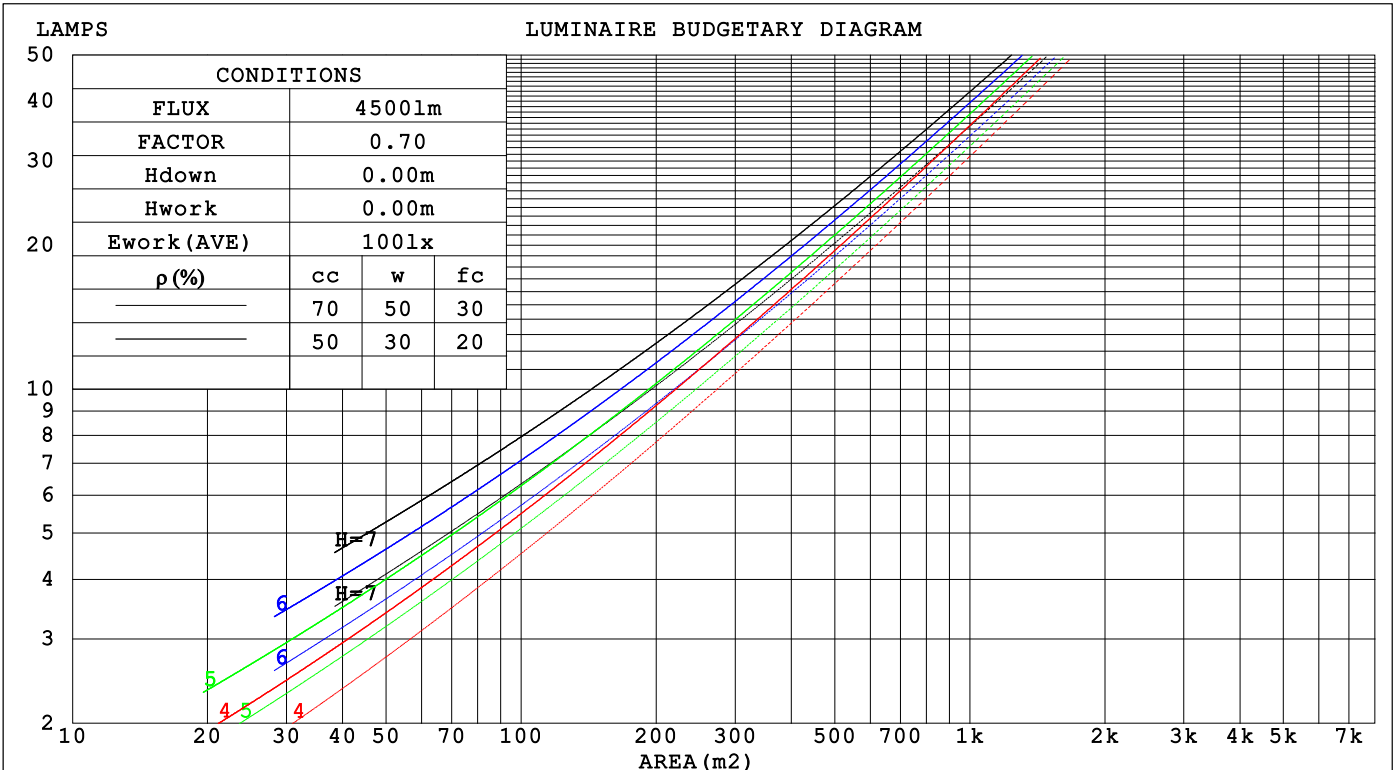
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3 °C
 Operators:
 Test Date:2022-04-14

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:119.97V I:0.1332A P:11.580W PF:0.9531 Freq:59.98Hz Lamp Flux:1003.67x1 lm		
NAME: LED-6-S12W-5CCT	TYPE:	WEIGHT:
SPEC.: 2700K 80	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
p _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
p _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.04	.90	.96	1.02	.98	.95	.98	.94	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.83	.77	.85	.80	.76	.82	.78	.74	.79	.75	.72	.70
3.0	.80	.72	.65	.78	.71	.65	.75	.69	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.71	.62	.55	.69	.61	.55	.67	.60	.54	.64	.58	.53	.62	.57	.53	.50
5.0	.63	.54	.48	.62	.54	.47	.60	.52	.47	.58	.51	.46	.56	.50	.46	.44
6.0	.57	.48	.42	.56	.47	.41	.54	.47	.41	.52	.46	.41	.51	.45	.40	.38
7.0	.52	.43	.37	.51	.42	.37	.49	.42	.36	.48	.41	.36	.46	.40	.36	.34
8.0	.47	.39	.33	.46	.38	.33	.45	.38	.32	.44	.37	.32	.43	.37	.32	.30
9.0	.43	.35	.29	.43	.35	.29	.41	.34	.29	.40	.34	.29	.39	.33	.29	.27
10.0	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.37	.31	.26	.25



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-04-14

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:119.97V I:0.1332A P:11.580W PF:0.9531 Freq:59.98Hz		
Lamp Flux:1003.67x1 lm		
NAME: LED-6-S12W-5CCT	TYPE:	WEIGHT:
SPEC.: 2700K 80	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

ρ _{CC}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.305	.173	.055	.297	.170	.054	.284	.163	.052	.272	.157	.050	.261	.151	.049	
2.0	.288	.158	.048	.282	.155	.048	.270	.150	.047	.260	.146	.046	.250	.141	.045	
3.0	.267	.142	.043	.262	.140	.042	.252	.136	.041	.242	.133	.041	.233	.129	.040	
4.0	.247	.128	.038	.242	.127	.037	.233	.124	.037	.225	.121	.036	.217	.118	.036	
5.0	.229	.117	.034	.224	.115	.034	.216	.113	.033	.209	.110	.033	.202	.108	.032	
6.0	.212	.106	.030	.208	.105	.030	.201	.103	.030	.194	.101	.030	.188	.099	.029	
7.0	.198	.098	.028	.194	.097	.028	.188	.095	.027	.182	.093	.027	.176	.091	.027	
8.0	.185	.090	.025	.182	.089	.025	.176	.088	.025	.170	.086	.025	.165	.085	.025	
9.0	.173	.084	.023	.170	.083	.023	.165	.082	.023	.160	.080	.023	.156	.079	.023	
10.0	.163	.078	.022	.160	.077	.022	.156	.076	.021	.151	.075	.021	.147	.074	.021	

ρ _{CC}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.141	.099	.065	.097	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.069	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.023	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-04-14

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.97V I:0.1332A P:11.580W PF:0.9531 Freq:59.98Hz										
Lamp Flux:1003.67x1 lm										
NAME: LED-6-S12W-5CCT					TYPE:			WEIGHT:		
SPEC.: 2700K 80					DIM.:			SERIAL No.:		
MFR.: Light by Lotus					SUR.:			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	16.5	18.0	16.7	18.2	18.4	16.5	18.0	16.7	18.2	18.4
3H	18.0	19.4	18.3	19.6	19.8	17.9	19.3	18.2	19.6	19.8
4H	18.6	19.9	18.9	20.2	20.4	18.5	19.8	18.8	20.1	20.4
6H	19.0	20.3	19.4	20.5	20.8	18.9	20.1	19.2	20.4	20.7
8H	19.1	20.3	19.5	20.6	20.9	19.0	20.2	19.3	20.5	20.8
12H	19.2	20.3	19.5	20.6	20.9	19.0	20.1	19.3	20.4	20.7
4H 2H	17.1	18.4	17.4	18.6	18.9	17.1	18.4	17.4	18.6	18.9
3H	18.8	19.9	19.1	20.2	20.5	18.7	19.9	19.1	20.2	20.5
4H	19.5	20.6	19.9	20.9	21.2	19.4	20.5	19.8	20.8	21.1
6H	20.1	21.0	20.5	21.4	21.7	19.9	20.9	20.3	21.2	21.6
8H	20.2	21.1	20.6	21.5	21.8	20.1	20.9	20.5	21.3	21.7
12H	20.3	21.1	20.7	21.5	21.9	20.1	20.9	20.5	21.3	21.7
8H 4H	19.8	20.6	20.2	21.0	21.4	19.7	20.6	20.1	20.9	21.3
6H	20.5	21.2	20.9	21.6	22.0	20.3	21.1	20.8	21.5	21.9
8H	20.7	21.3	21.1	21.7	22.2	20.5	21.2	21.0	21.6	22.0
12H	20.8	21.4	21.3	21.8	22.3	20.6	21.2	21.1	21.6	22.1
12H 4H	19.8	20.6	20.2	21.0	21.4	19.7	20.5	20.1	20.9	21.3
6H	20.5	21.2	21.0	21.6	22.0	20.4	21.0	20.8	21.4	21.9
8H	20.7	21.3	21.2	21.7	22.2	20.6	21.2	21.1	21.6	22.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				

CIE Pub.117, 1004 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.0)
 Area: 0.111111 m2

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-04-14

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:119.97V I:0.1332A P:11.580W PF:0.9531 Freq:59.98Hz Lamp Flux:1003.67x1 lm		
NAME: LED-6-S12W-5CCT	TYPE:	WEIGHT:
SPEC.: 2700K 80	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

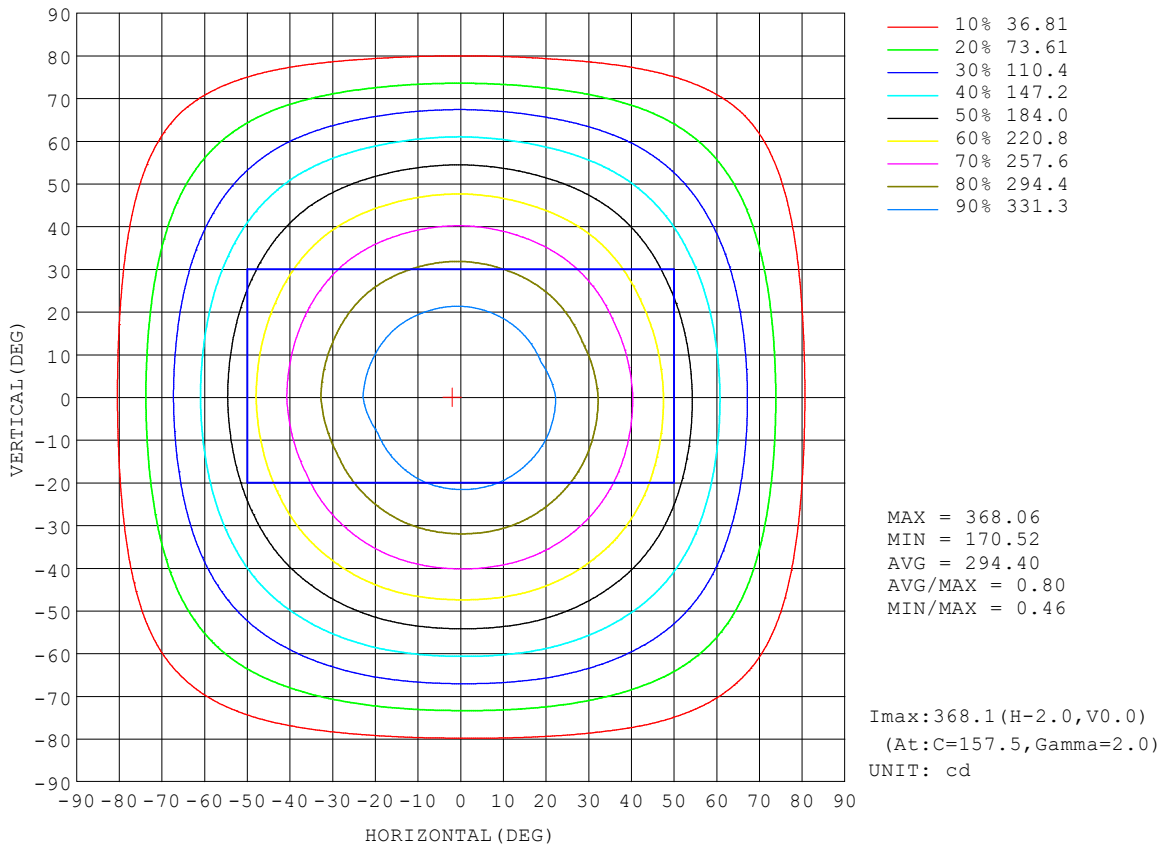
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	40	57	46	39	56	46	39	33
0.80	68	57	49	67	56	49	65	55	49	42
1.00	76	65	58	75	65	58	73	66	57	50
1.25	84	73	66	82	72	66	79	71	65	58
1.50	88	79	72	87	78	71	84	76	70	63
2.00	95	87	80	93	86	80	90	83	78	70
2.50	99	92	86	97	90	85	93	87	83	75
3.00	103	96	90	100	94	89	96	91	87	79
4.00	106	101	96	104	99	95	100	96	92	83
5.00	109	104	100	106	102	99	102	99	96	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3 °C
 Operators:
 Test Date:2022-04-14

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.97V I:0.1332A P:11.580W PF:0.9531 Freq:59.98Hz Lamp Flux:1003.67x1 lm		
NAME: LED-6-S12W-5CCT	TYPE:	WEIGHT:
SPEC.: 2700K 80	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

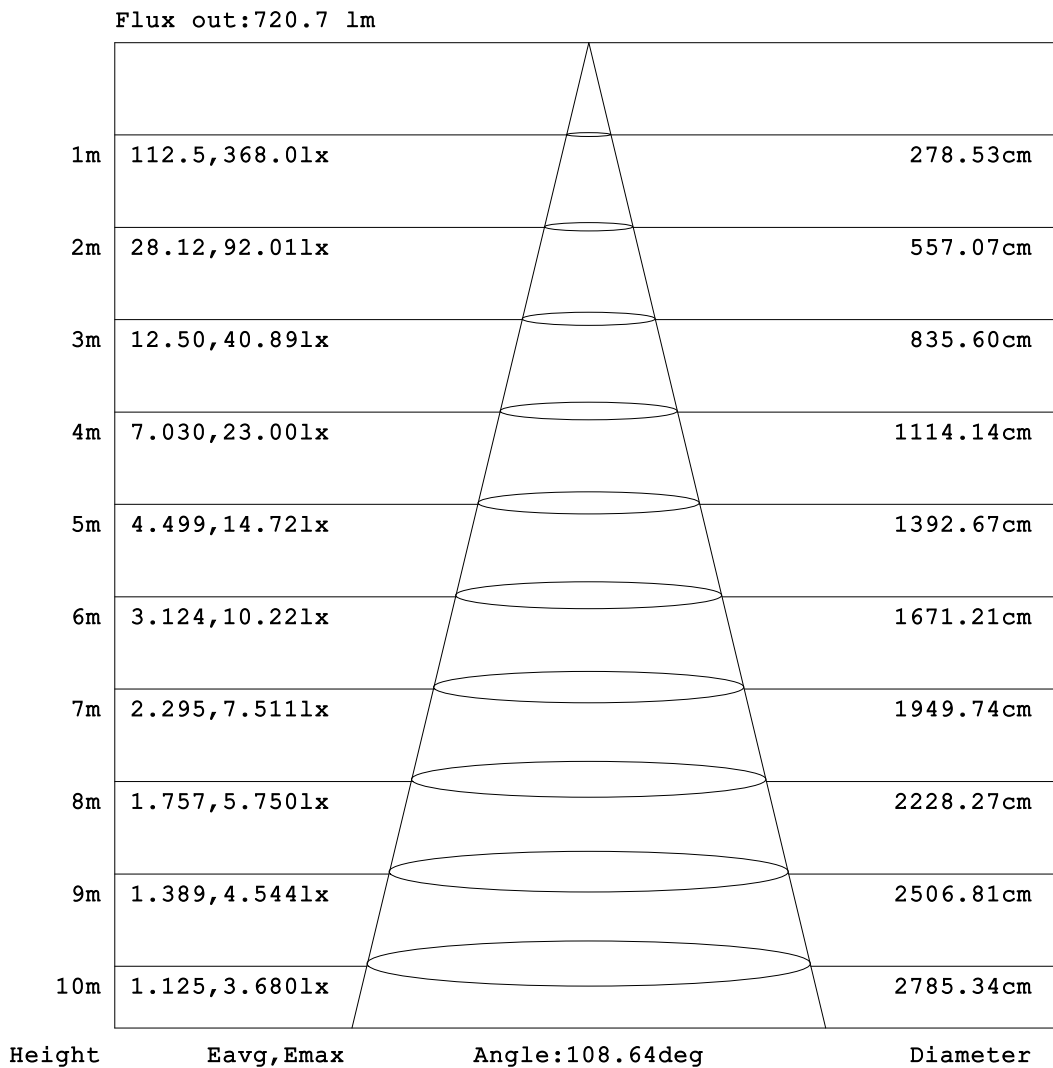


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-04-14

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

AAI Figure

Test:U:119.97V I:0.1332A P:11.580W PF:0.9531 Freq:59.98Hz Lamp Flux:1003.67x1 lm		
NAME: LED-6-S12W-5CCT	TYPE:	WEIGHT:
SPEC.: 2700K 80	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



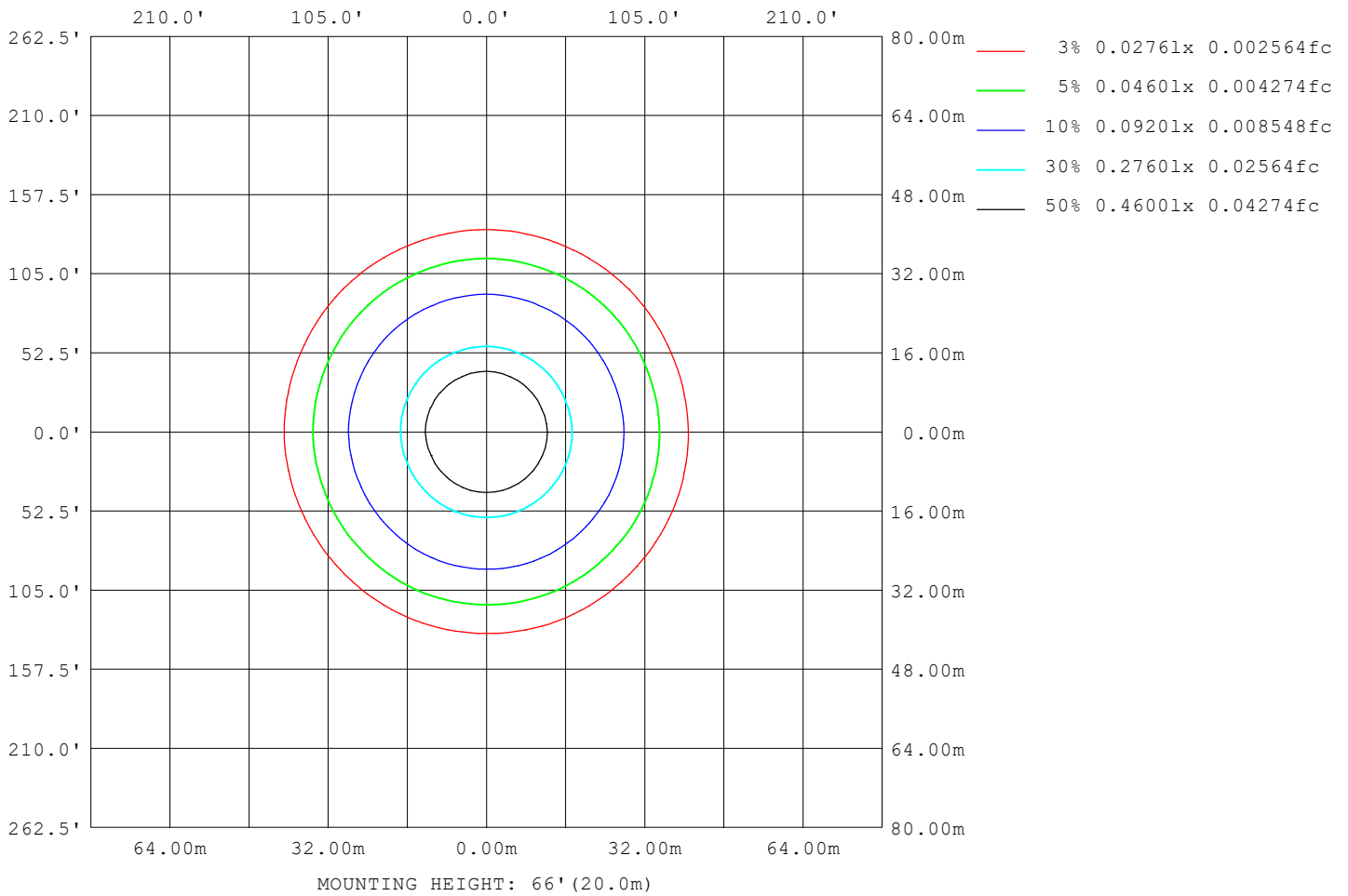
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2022-04-14

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity: 65.0%
 Test Distance: 3.080m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:119.97V I:0.1332A P:11.580W PF:0.9531 Freq:59.98Hz Lamp Flux:1003.67x1 lm		
NAME: LED-6-S12W-5CCT	TYPE:	WEIGHT:
SPEC.: 2700K 80	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2022-04-14

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity: 65.0%
 Test Distance: 3.080m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:119.97V I:0.1332A P:11.580W PF:0.9531 Freq:59.98Hz Lamp Flux:1003.67x1 lm		
NAME: LED-6-S12W-5CCT	TYPE:	WEIGHT:
SPEC.: 2700K 80	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

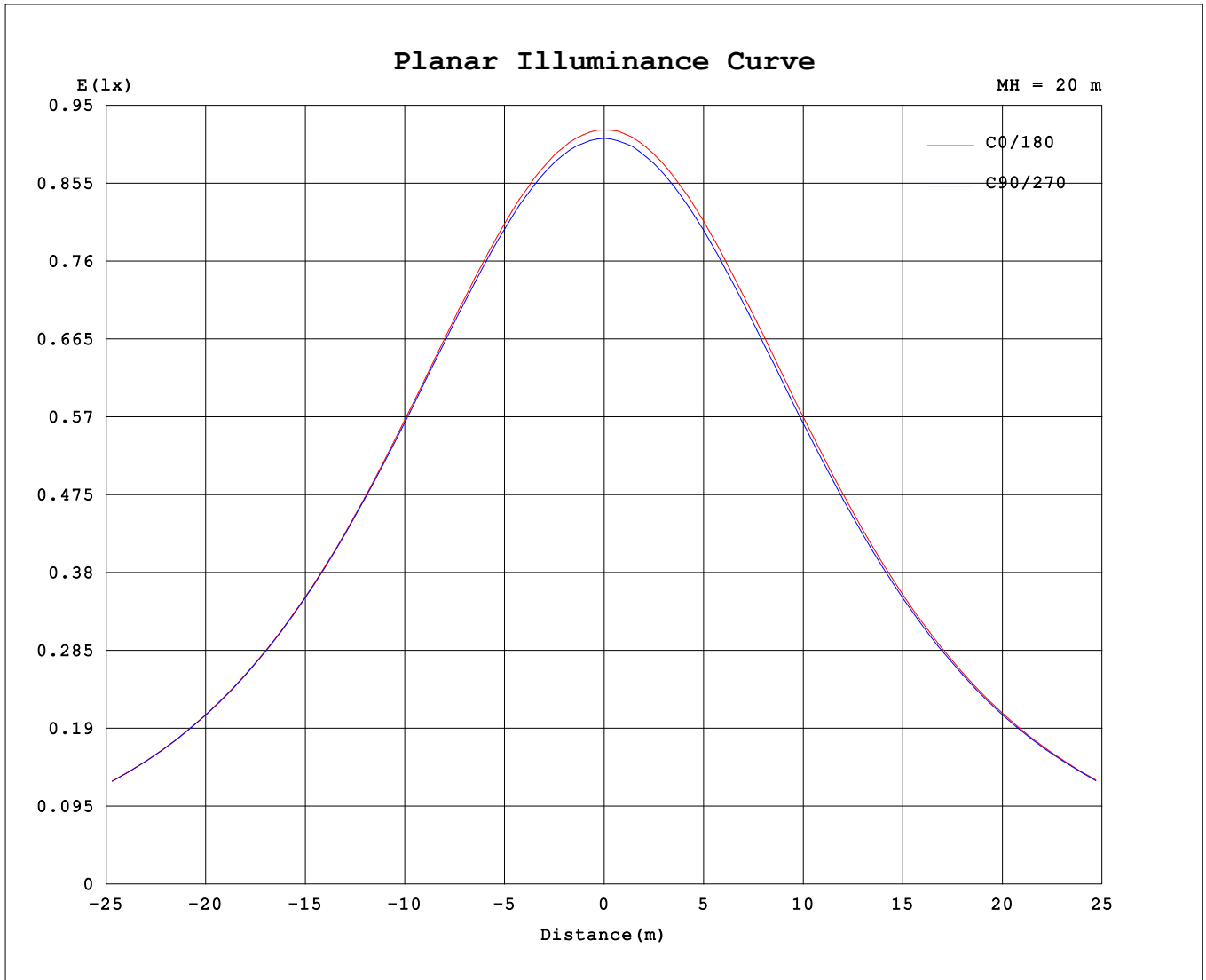
AvgL	cd/m2
L_0~180 (65) av	2601
L_0~180 (75) av	2308
L_0~180 (85) av	1555
L_90~270 (65) av	2629
L_90~270 (75) av	2248
L_90~270 (85) av	957
L_45 (65) av	2617
L_45 (75) av	2292
L_45 (85) av	1292

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:
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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2022-04-14

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity: 65.0%
 Test Distance: 3.080m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.97V I:0.1332A P:11.580W PF:0.9531 Freq:59.98Hz		
Lamp Flux:1003.67x1 lm		
NAME: LED-6-S12W-5CCT	TYPE:	WEIGHT:
SPEC.: 2700K 80	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365			
5	363	363	363	363	363	363	363	363	363	363	363	363	362	362	363	363			
10	357	357	357	358	357	357	358	358	358	357	357	357	357	357	357	357			
15	348	348	348	349	349	349	349	349	349	349	349	348	348	347	348	348			
20	335	336	336	337	336	337	337	337	337	336	336	336	336	335	335	335			
25	319	320	321	321	321	321	321	321	321	321	321	321	320	320	320	320			
30	301	302	302	303	303	303	303	303	303	302	303	302	302	301	301	301			
35	280	281	281	282	282	282	282	282	282	282	282	282	282	281	281	280			
40	257	258	258	260	259	259	258	259	259	259	259	259	259	258	258	257			
45	232	233	233	235	234	234	233	234	234	234	235	234	234	233	233	232			
50	206	207	207	209	207	208	207	208	208	207	209	208	209	207	207	206			
55	178	180	179	181	180	180	179	180	180	180	181	181	181	180	180	178			
60	150	152	151	153	151	152	150	151	151	151	153	152	153	152	152	150			
65	122	123	123	124	123	123	122	122	123	122	124	124	124	123	123	122			
70	93.8	94.7	94.2	94.7	93.6	93.9	93.2	93.7	93.9	94.0	95.3	94.7	94.8	94.2	94.8	93.9			
75	66.6	67.1	66.0	65.4	64.2	64.6	64.8	65.9	66.1	66.4	66.5	65.3	65.1	65.1	66.3	66.7			
80	40.3	38.8	38.8	37.3	35.8	36.3	37.3	37.2	39.1	39.6	38.6	36.7	36.4	36.7	38.9	40.4			
85	15.7	12.1	13.3	10.7	9.14	9.75	11.4	10.9	14.4	14.7	12.5	10.3	9.40	10.2	13.0	16.1			
90	0.17	0.20	0.17	0.16	0.16	0.17	0.17	0.21	0.29	0.31	0.28	0.29	0.27	0.27	0.28	0.32			

C Range: 0 - 360DEG γ Range: 0 - 90DEG
 C Interval: 22.5DEG γ Interval: 1.0DEG
 Test Speed: HIGH Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Temperature:25.3℃ Humidity:65.0%
 Operators: Test Distance:3.080m [K=1.0000]
 Test Date:2022-04-14 Remarks: