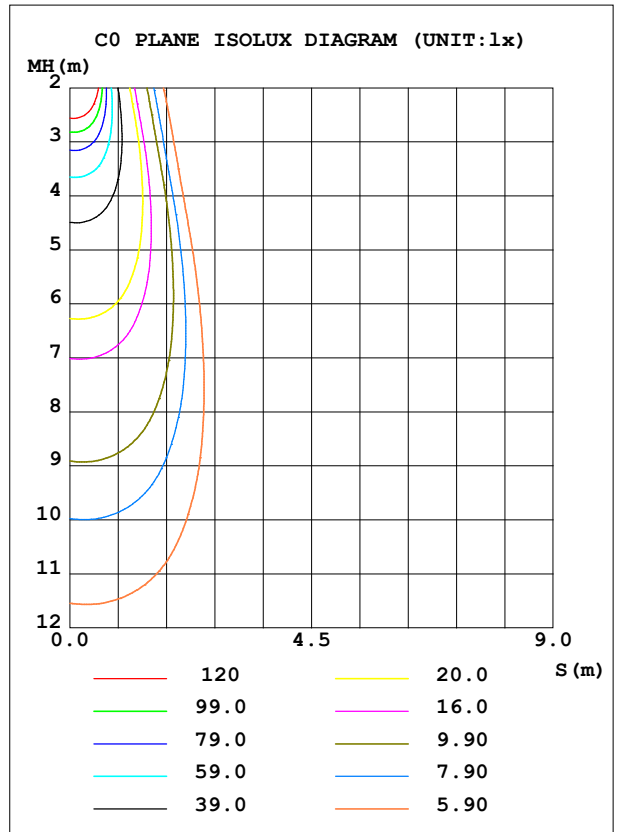
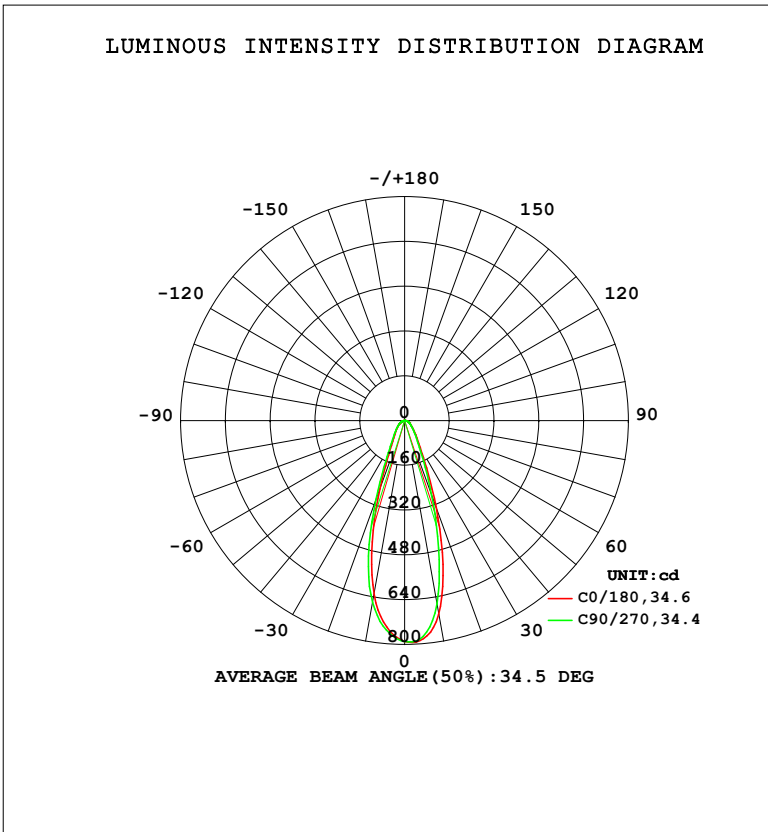


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.35V I:0.0501A P:4.4294W PF:0.7346 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:408.429x1 lm		
NAME: LED-2-S5W-5CCT-FG	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax (cd)	795.9	S/MH (C0/180)	0.53
NOMINAL POWER (W)	5	LOR (%)	100.0	S/MH (C90/270)	0.57
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	408.43	η UP, DN (C0-180)	0.0, 50.7
NOMINAL FLUX (lm)	408.429	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	0.55



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2022-08-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity: 65.0%
 Test Distance: 3.090m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

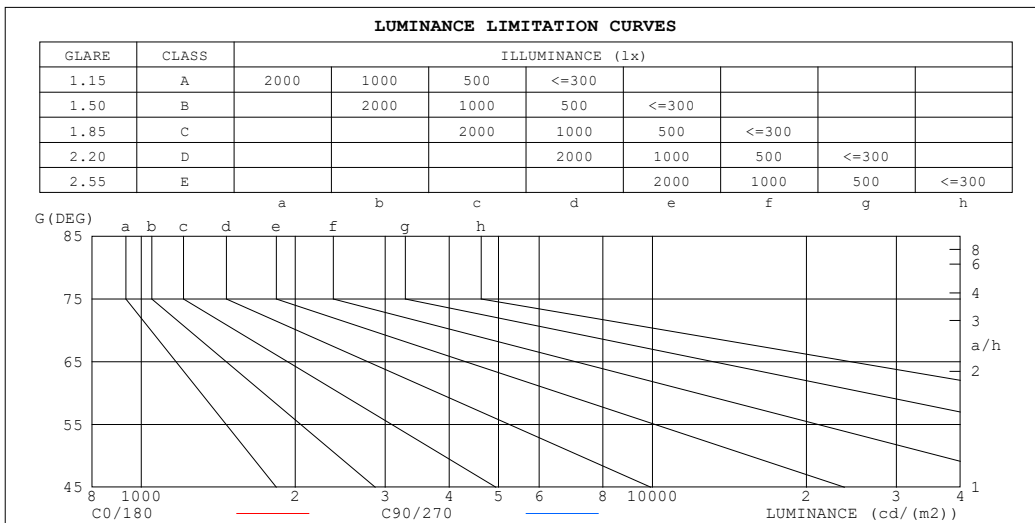
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	703.7	697.0	665.1	635.5	630.2	633.7	659.5	688.2	0- 10	69.67	69.67	17.1,17.1
20	331.0	316.3	283.7	256.7	260.0	271.5	302.4	328.1	10- 20	131.3	200.9	49.2,49.2
30	112.2	113.2	102.8	90.33	86.25	87.53	97.35	104.6	20- 30	77.87	278.8	68.3,68.3
40	58.47	59.36	54.67	50.96	49.67	49.84	52.60	55.40	30- 40	44.89	323.7	79.3,79.3
50	34.75	34.77	33.03	31.26	30.74	30.55	32.38	33.52	40- 50	32.41	356.1	87.2,87.2
60	22.76	22.49	21.39	20.63	20.72	20.32	20.97	21.67	50- 60	23.69	379.8	93,93
70	14.17	13.77	12.89	12.46	12.79	12.76	13.21	13.71	60- 70	17.01	396.8	97.2,97.2
80	6.639	5.717	2.768	5.174	5.478	5.438	4.890	6.674	70- 80	9.950	406.7	99.6,99.6
90	0.0564	0.0500	0.0490	0.0560	0.0355	0.0291	0.0242	0.0237	80- 90	1.679	408.4	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:2022-08-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.090m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.35V I:0.0501A P:4.4294W PF:0.7346 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:408.429x1 lm		
NAME: LED-2-S5W-5CCT-FG	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	298	9
80	343	144
75	356	314
70	372	340
65	388	362
60	408	386
55	438	417
50	485	463
45	567	533

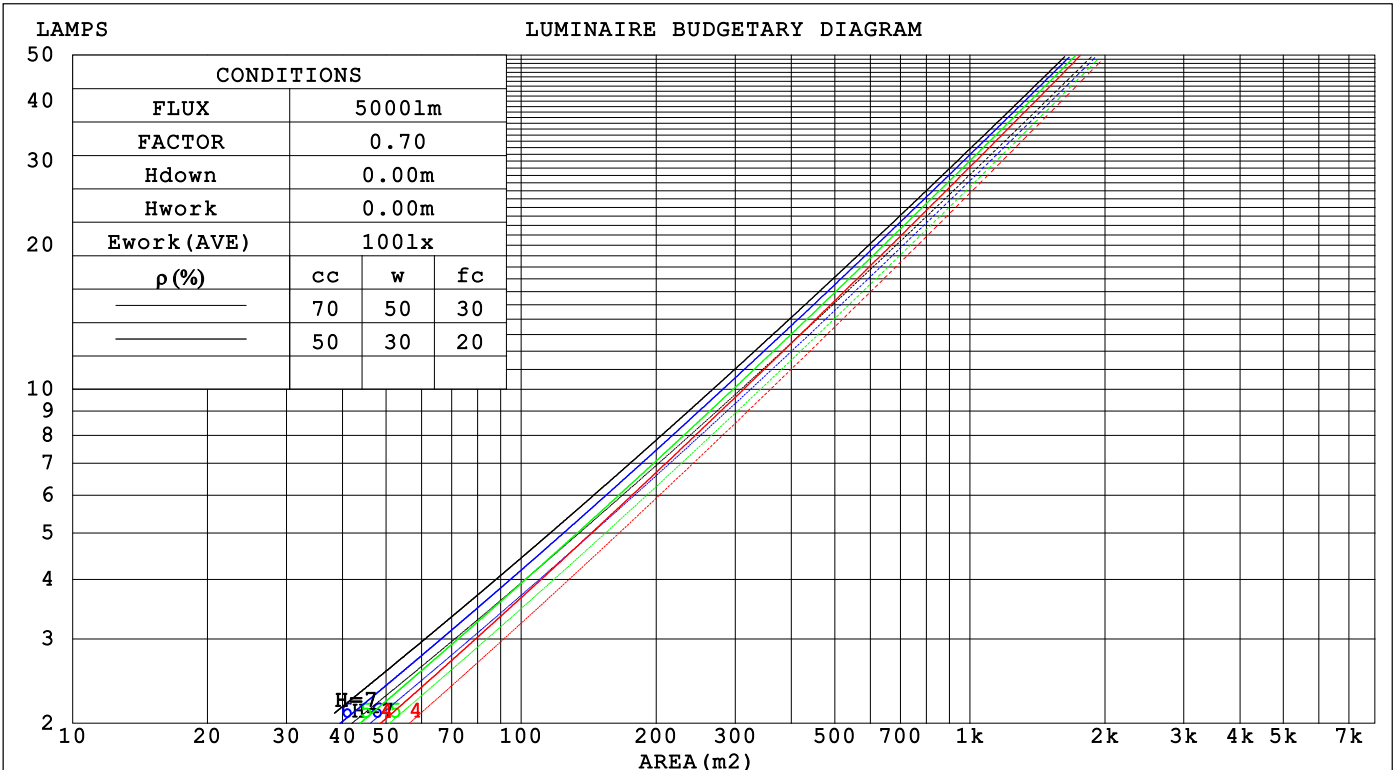
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-08-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.090m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.35V I:0.0501A P:4.4294W PF:0.7346 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:408.429x1 lm		
NAME: LED-2-S5W-5CCT-FG	TYPE:	WEIGHT:
SPEC.: 3500K	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															
	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	1.10	1.07	1.04	1.07	1.05	1.03	1.03	1.01	.99	.99	.98	.96	.96	.95	.94	.92
2.0	1.01	.96	.93	.99	.95	.92	.96	.93	.90	.93	.90	.88	.90	.88	.86	.84
3.0	.94	.88	.84	.92	.87	.83	.90	.85	.82	.87	.84	.81	.85	.82	.79	.78
4.0	.87	.81	.77	.86	.81	.76	.84	.79	.76	.82	.78	.75	.80	.77	.74	.72
5.0	.82	.76	.71	.81	.75	.71	.79	.74	.70	.77	.73	.70	.76	.72	.69	.68
6.0	.77	.71	.67	.76	.71	.66	.75	.70	.66	.73	.69	.65	.72	.68	.65	.64
7.0	.73	.67	.63	.72	.67	.62	.71	.66	.62	.70	.65	.62	.69	.65	.61	.60
8.0	.69	.63	.59	.69	.63	.59	.68	.63	.59	.67	.62	.59	.66	.61	.58	.57
9.0	.66	.60	.56	.66	.60	.56	.65	.60	.56	.64	.59	.56	.63	.59	.56	.54
10.0	.63	.57	.54	.63	.57	.53	.62	.57	.53	.61	.56	.53	.60	.56	.53	.52



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-08-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.090m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.35V I:0.0501A P:4.4294W PF:0.7346 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:408.429x1 lm		
NAME: LED-2-S5W-5CCT-FG	TYPE:	WEIGHT:
SPEC.: 3500K	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	.202	.115	.036	.195	.111	.035	.182	.105	.033	.171	.098	.032	.160	.093	.030	
2.0	.191	.105	.032	.185	.102	.031	.174	.097	.030	.164	.092	.029	.155	.088	.028	
3.0	.178	.095	.028	.173	.093	.028	.164	.089	.027	.156	.085	.026	.148	.082	.025	
4.0	.167	.087	.025	.162	.085	.025	.154	.082	.024	.147	.079	.024	.140	.076	.023	
5.0	.156	.080	.023	.152	.078	.023	.146	.076	.022	.139	.073	.022	.133	.071	.021	
6.0	.147	.074	.021	.143	.072	.021	.137	.070	.020	.132	.068	.020	.126	.067	.020	
7.0	.138	.068	.019	.135	.067	.019	.130	.066	.019	.125	.064	.019	.120	.062	.018	
8.0	.131	.064	.018	.128	.063	.018	.123	.062	.018	.119	.060	.017	.115	.059	.017	
9.0	.124	.060	.017	.122	.059	.017	.117	.058	.016	.113	.057	.016	.110	.056	.016	
10.0	.118	.057	.016	.116	.056	.016	.112	.055	.015	.108	.054	.015	.105	.053	.015	

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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.147	.114	.087	.126	.098	.076	.086	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.137	.099	.071	.117	.086	.061	.081	.060	.043	.047	.035	.026	.015	.011	.008	
5.0	.128	.088	.058	.110	.076	.051	.075	.053	.036	.044	.031	.021	.014	.010	.007	
6.0	.120	.078	.049	.103	.068	.042	.071	.048	.030	.041	.028	.018	.013	.009	.006	
7.0	.113	.071	.041	.097	.061	.036	.067	.043	.026	.039	.025	.015	.013	.008	.005	
8.0	.106	.064	.036	.092	.056	.031	.063	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.101	.059	.031	.087	.051	.027	.060	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.096	.055	.027	.082	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-08-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.090m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.35V I:0.0501A P:4.4294W PF:0.7346 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:408.429x1 lm										
NAME: LED-2-S5W-5CCT-FG					TYPE:			WEIGHT:		
SPEC.: 3500K					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	10.4	11.4	10.6	11.6	11.8	10.2	11.2	10.4	11.4	11.5
3H	11.6	12.6	11.9	12.8	13.0	11.3	12.3	11.6	12.5	12.7
4H	12.2	13.1	12.5	13.3	13.5	11.8	12.7	12.1	12.9	13.2
6H	12.6	13.5	12.9	13.7	14.0	12.1	12.9	12.4	13.2	13.4
8H	12.8	13.6	13.1	13.9	14.1	12.0	12.8	12.4	13.1	13.4
12H	12.9	13.7	13.2	14.0	14.2	12.0	12.8	12.3	13.0	13.3
4H 2H	10.9	11.8	11.2	12.0	12.2	10.7	11.6	11.0	11.8	12.0
3H	12.3	13.1	12.6	13.4	13.6	12.1	12.8	12.4	13.1	13.4
4H	13.0	13.7	13.3	14.0	14.3	12.7	13.4	13.0	13.7	14.0
6H	13.6	14.2	14.0	14.5	14.9	13.0	13.6	13.4	14.0	14.3
8H	13.8	14.4	14.2	14.7	15.1	13.0	13.6	13.4	13.9	14.3
12H	13.9	14.5	14.4	14.8	15.2	12.9	13.5	13.3	13.8	14.2
8H 4H	13.2	13.8	13.6	14.2	14.5	12.9	13.5	13.3	13.9	14.2
6H	13.9	14.4	14.4	14.8	15.2	13.3	13.8	13.8	14.2	14.6
8H	14.2	14.7	14.7	15.1	15.5	13.3	13.7	13.7	14.1	14.6
12H	14.4	14.8	14.9	15.2	15.7	13.2	13.6	13.7	14.1	14.5
12H 4H	13.2	13.7	13.6	14.1	14.5	12.9	13.5	13.4	13.9	14.3
6H	13.9	14.4	14.4	14.8	15.2	13.4	13.8	13.8	14.2	14.6
8H	14.3	14.6	14.7	15.1	15.5	13.3	13.7	13.8	14.1	14.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.4 / - 0.3					+ 0.5 / - 0.5				

CIE Pub.117, 408.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.1)
 Area: 0.111111 m2

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-08-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.090m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.35V I:0.0501A P:4.4294W PF:0.7346 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:408.429x1 lm		
NAME: LED-2-S5W-5CCT-FG	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

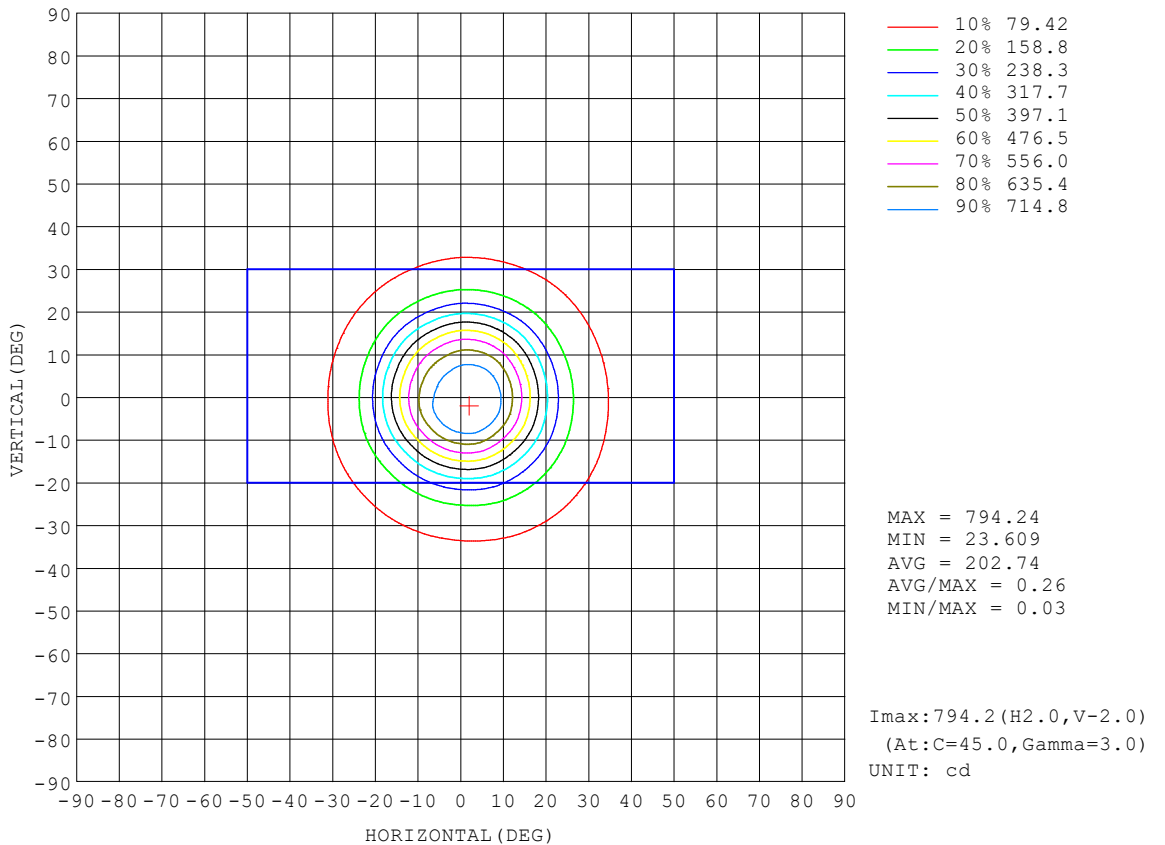
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	79	71	66	78	71	66	77	70	66	62
0.80	87	79	75	86	79	74	85	78	74	69
1.00	92	85	81	92	85	80	90	85	80	75
1.25	97	91	86	96	90	86	94	89	85	80
1.50	101	95	90	99	94	90	97	92	89	83
2.00	105	99	95	103	98	94	100	96	93	87
2.50	107	102	98	105	101	97	102	98	95	89
3.00	109	105	101	107	103	100	104	100	98	91
4.00	112	108	105	110	106	104	106	103	101	93
5.00	113	110	108	111	108	106	107	105	103	95
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:2022-08-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.090m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.35V I:0.0501A P:4.4294W PF:0.7346 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:408.429x1 lm		
NAME: LED-2-S5W-5CCT-FG	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

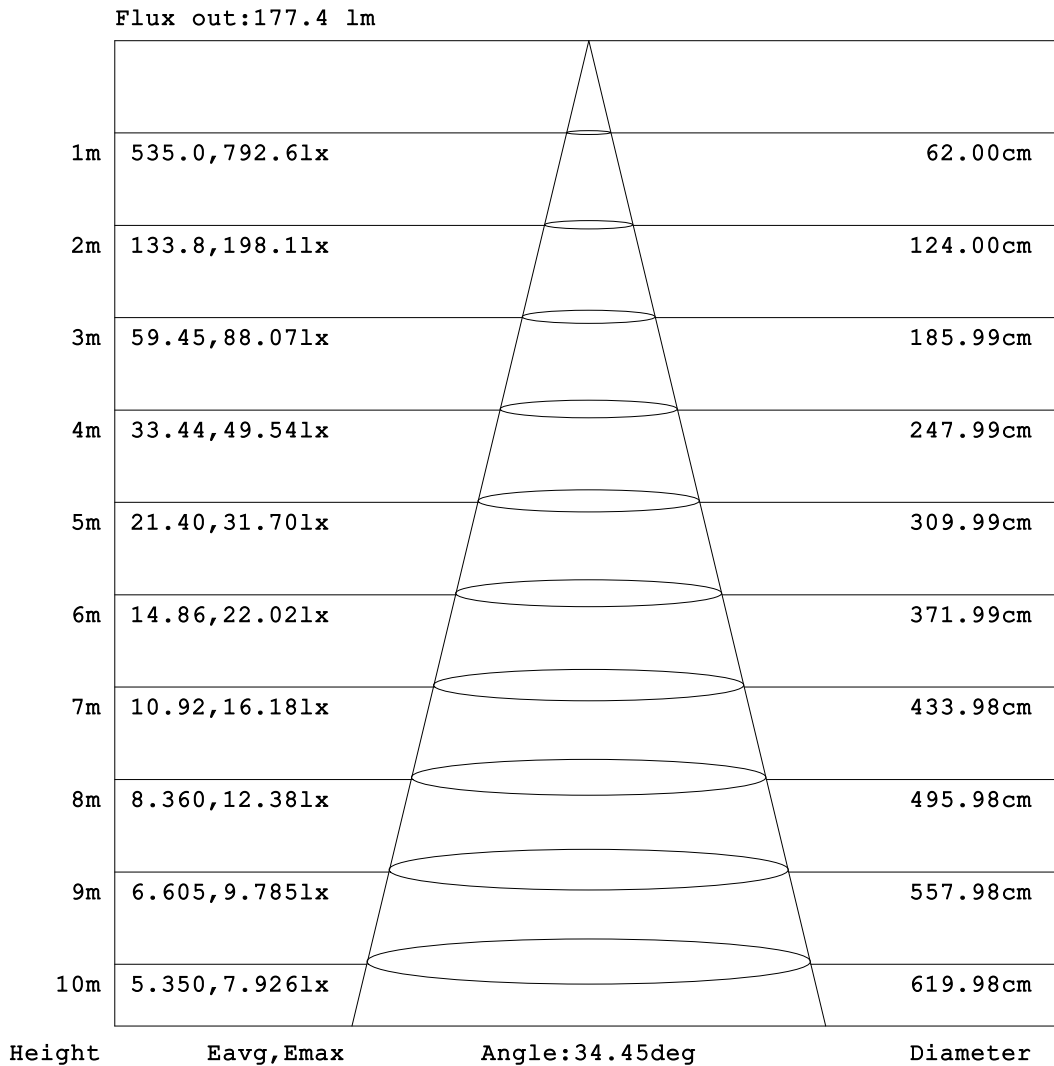


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2022-08-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity: 65.0%
 Test Distance: 3.090m [K=1.0000]
 Remarks:

AAI Figure

Test:U:120.35V I:0.0501A P:4.4294W PF:0.7346 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:408.429x1 lm		
NAME: LED-2-S5W-5CCT-FG	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



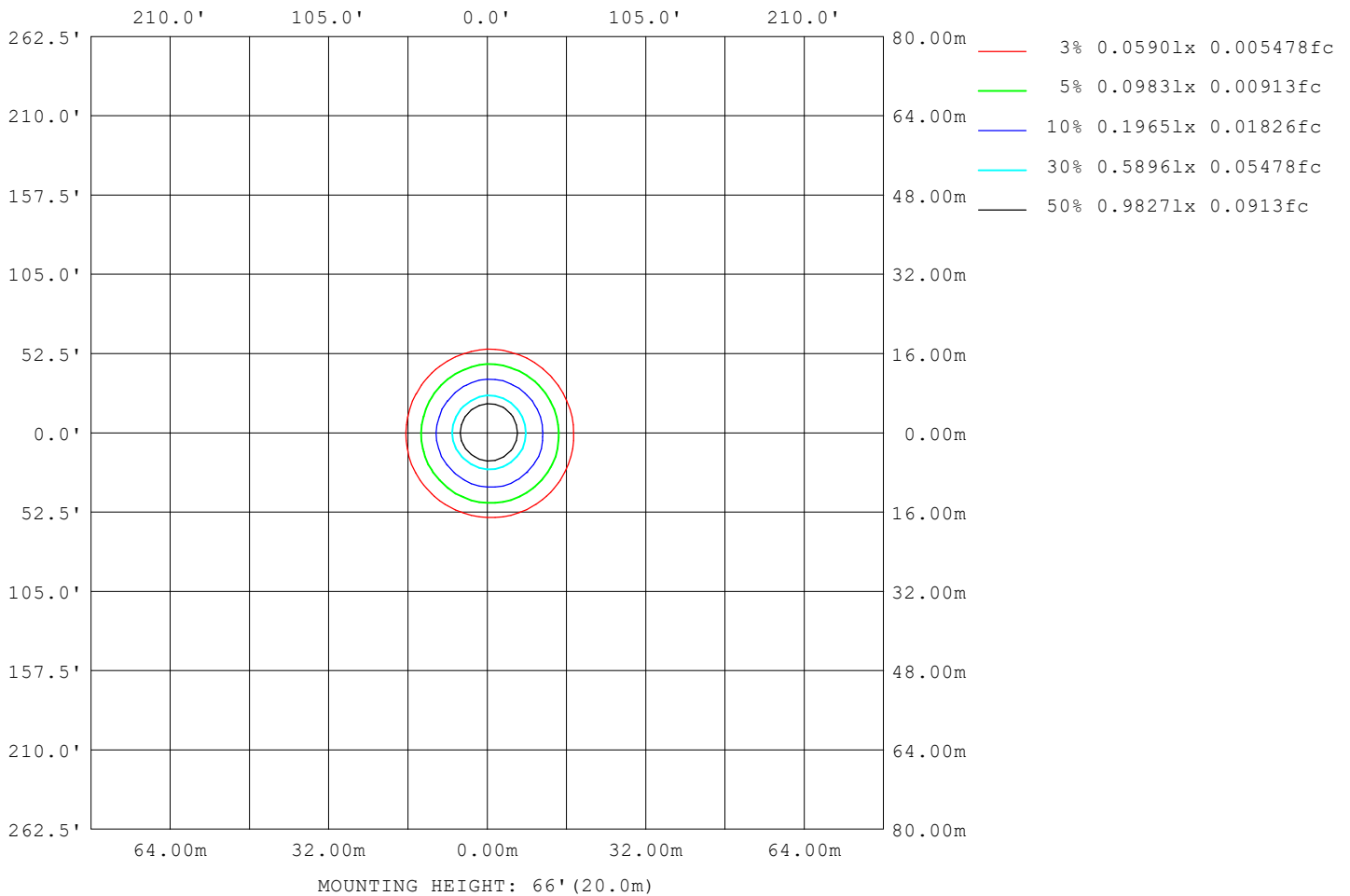
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators:
Test Date: 2022-08-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:120.35V I:0.0501A P:4.4294W PF:0.7346 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:408.429x1 lm		
NAME: LED-2-S5W-5CCT-FG	TYPE:	WEIGHT:
SPEC.: 3500K	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:2022-08-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.090m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:120.35V I:0.0501A P:4.4294W PF:0.7346 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:408.429x1 lm		
NAME: LED-2-S5W-5CCT-FG	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

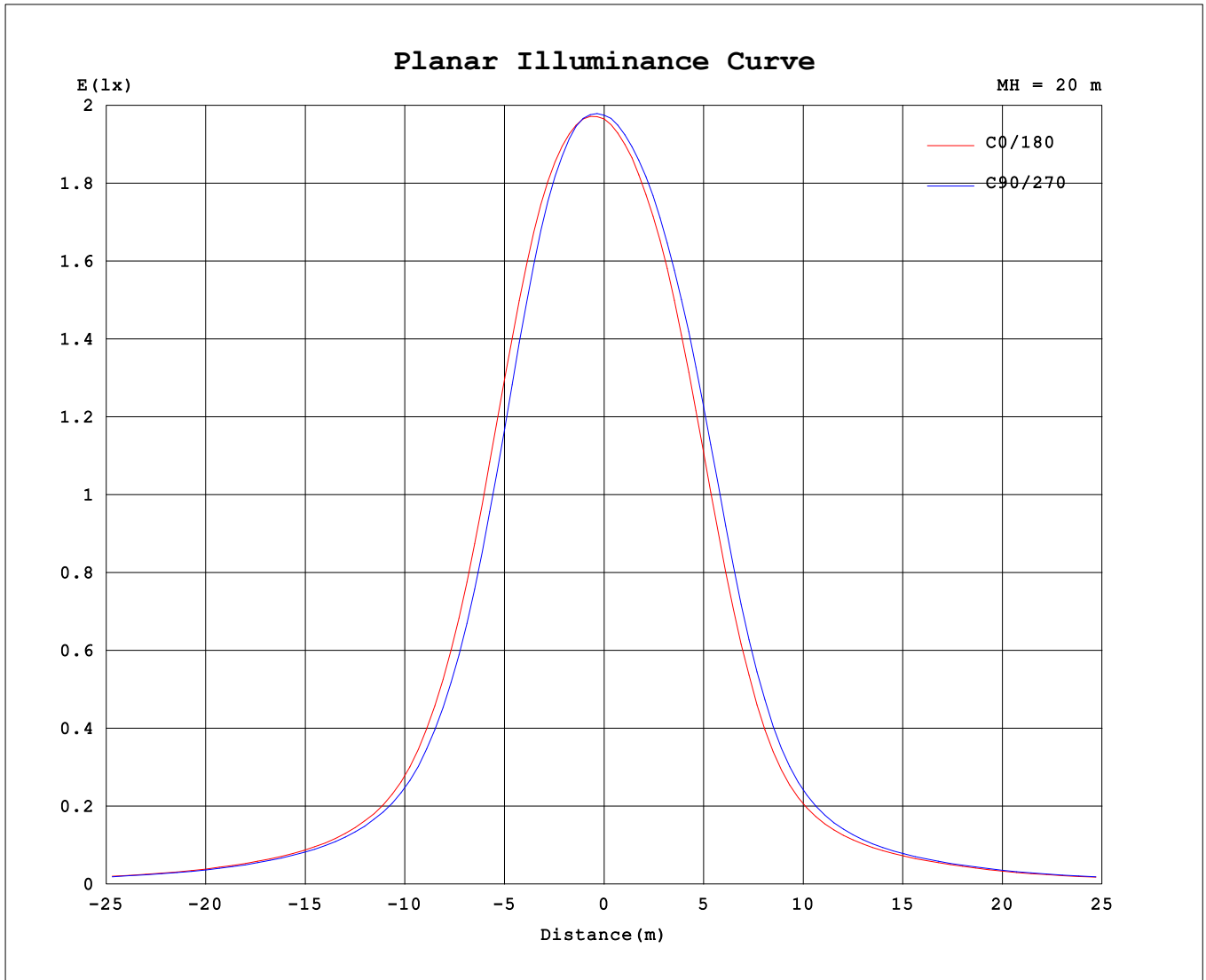
AvgL	cd/m2
L_0~180 (65) av	372
L_0~180 (75) av	335
L_0~180 (85) av	241
L_90~270 (65) av	361
L_90~270 (75) av	326
L_90~270 (85) av	7
L_45 (65) av	363
L_45 (75) av	328
L_45 (85) av	42

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:
 Test Date:2022-08-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.090m [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: 2022-08-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity: 65.0%
 Test Distance: 3.090m [K=1.0000]
 Remarks:

