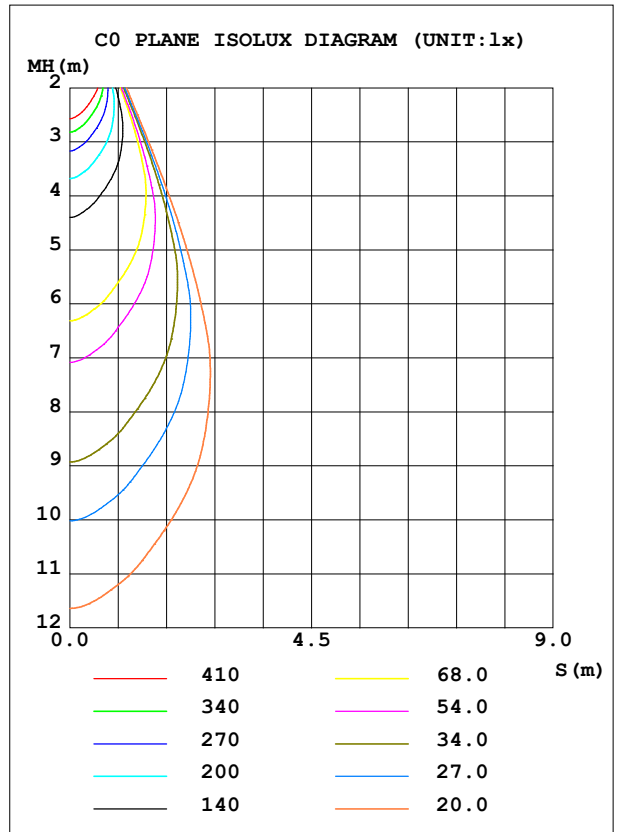
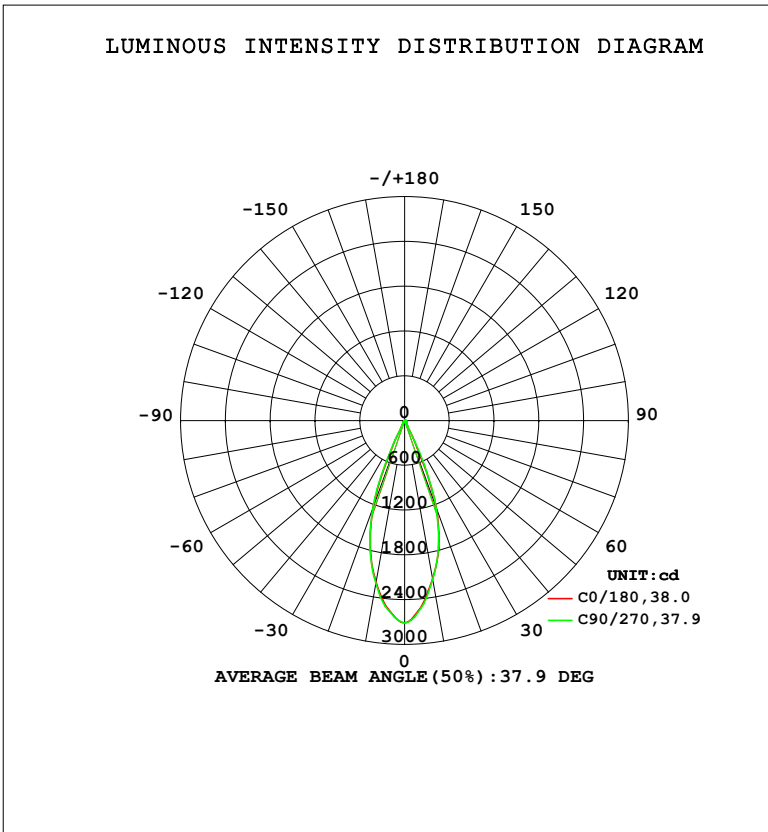


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.79V I:0.1131A P:13.356W PF:0.9856 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1013.42x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	AD-3-S15W-FC-5CCT-WH	Imax (cd)	2713	S/MH (C0/180)	0.59
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.59
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	1013.4	$\eta$ UP, DN (C0-180)	0.0, 50.0
NOMINAL FLUX (lm)	1013.42	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.0, 50.0
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	120	$\eta$ down (%)	100.0	CIBSE SHR MAX	0.60



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-09-22

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.087m [K=1.0000]  
 Remarks:

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

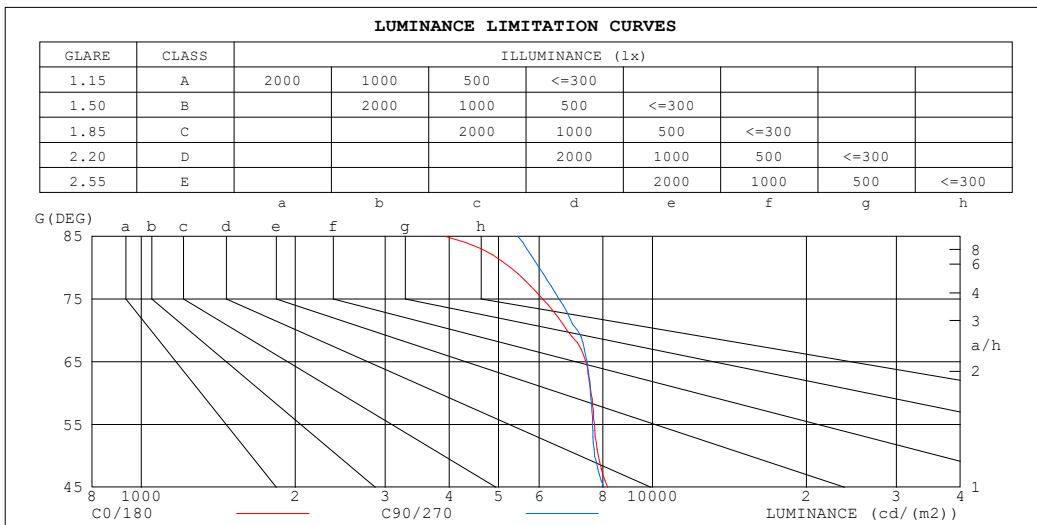
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	2158	2149	2167	2189	2201	2229	2221	2187	0- 10	230.7	230.7	22.8,22.8
20	1246	1222	1234	1239	1229	1250	1252	1238	10- 20	481.9	712.6	70.3,70.3
30	70.09	57.47	69.13	69.84	60.17	64.03	64.13	61.32	20- 30	223.7	936.2	92.4,92.4
40	26.57	26.01	26.56	28.16	27.63	27.44	27.15	26.18	30- 40	22.62	958.8	94.6,94.6
50	19.38	18.92	19.05	20.55	21.00	20.73	20.07	19.49	40- 50	17.73	976.6	96.4,96.4
60	14.58	14.25	14.55	15.42	16.08	15.94	15.08	14.80	50- 60	15.66	992.2	97.9,97.9
70	8.957	8.897	9.385	9.676	9.437	9.786	9.912	9.271	60- 70	12.28	1005	99.1,99.1
80	3.527	3.581	4.009	4.402	4.278	4.272	4.050	3.650	70- 80	6.934	1011	99.8,99.8
90	0.0776	0.0631	0.0761	0.1723	0.1397	0.0505	0.0490	0.0438	80- 90	1.980	1013	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:24.3°C  
 Operators:  
 Test Date:2024-09-22

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

<b>Test:U:119.79V I:0.1131A P:13.356W PF:0.9856 Freq:59.98Hz</b> <b>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1013.42x1 lm</b>		
<b>NAME: AD-3-S15W-FC-5CCT-WH</b>	<b>TYPE:</b>	<b>WEIGHT:</b>
<b>SPEC.: 3500K</b>	<b>DIM.:</b>	<b>SERIAL No.:</b>
<b>MFR.: Light by Lotus</b>	<b>SUR.:</b>	<b>Shielding Angle:</b>



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3925	5447
80	5281	6002
75	6097	6562
70	6808	7134
65	7406	7446
60	7579	7563
55	7702	7626
50	7837	7707
45	8167	8042

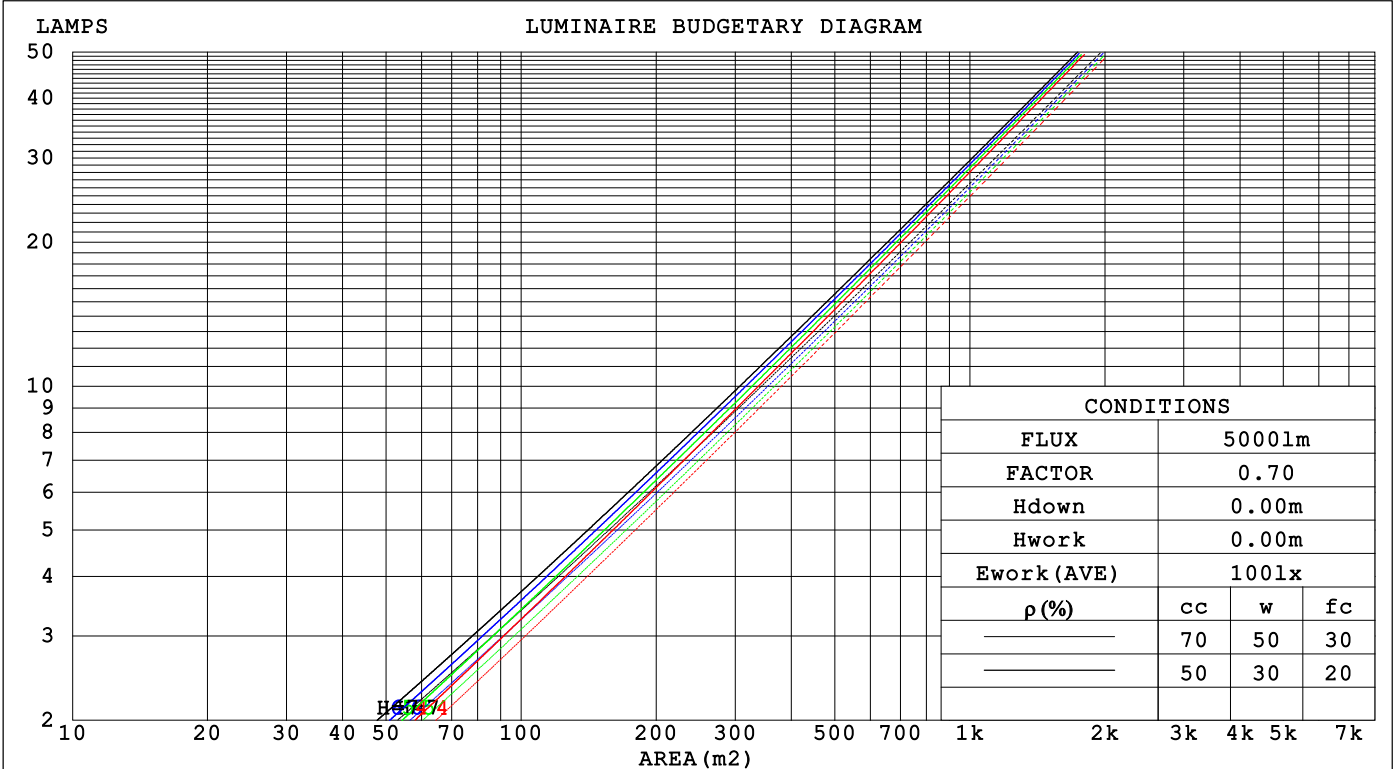
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:119.79V I:0.1131A P:13.356W PF:0.9856 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1013.42x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	1.12	1.10	1.08	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	.00	.99	.98	.97	.95
2.0	1.06	1.02	.99	1.04	1.01	.98	1.01	.98	.96	.98	.96	.94	.95	.93	.92	.91
3.0	1.00	.96	.93	.99	.95	.92	.96	.93	.91	.94	.91	.89	.92	.90	.88	.86
4.0	.95	.91	.87	.94	.90	.87	.92	.89	.86	.90	.87	.85	.89	.86	.84	.83
5.0	.91	.86	.83	.90	.86	.83	.89	.85	.82	.87	.84	.81	.86	.83	.81	.79
6.0	.87	.83	.79	.87	.82	.79	.85	.81	.78	.84	.81	.78	.83	.80	.77	.76
7.0	.84	.79	.76	.83	.79	.76	.82	.78	.75	.81	.77	.75	.80	.77	.74	.73
8.0	.81	.76	.73	.80	.76	.73	.79	.75	.72	.78	.75	.72	.77	.74	.72	.71
9.0	.78	.73	.70	.77	.73	.70	.77	.73	.70	.76	.72	.69	.75	.72	.69	.68
10.0	.75	.71	.67	.75	.70	.67	.74	.70	.67	.73	.70	.67	.73	.69	.67	.66



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3 °C  
 Operators:  
 Test Date:2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:

**WEC AND CCEC**

Test:U:119.79V I:0.1131A P:13.356W PF:0.9856 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1013.42x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

$\rho_{CC}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.157	.089	.028	.151	.086	.027	.138	.079	.025	.127	.073	.023	.116	.067	.022	
2.0	.146	.080	.025	.141	.078	.024	.130	.073	.023	.121	.068	.021	.112	.063	.020	
3.0	.137	.073	.022	.132	.071	.021	.123	.067	.020	.115	.063	.019	.108	.060	.018	
4.0	.128	.067	.020	.124	.065	.019	.117	.062	.018	.110	.059	.018	.103	.056	.017	
5.0	.121	.061	.018	.117	.060	.018	.111	.058	.017	.105	.055	.016	.099	.053	.016	
6.0	.114	.057	.016	.111	.056	.016	.106	.054	.016	.100	.052	.015	.096	.050	.015	
7.0	.108	.054	.015	.106	.053	.015	.101	.051	.015	.096	.049	.014	.092	.048	.014	
8.0	.103	.050	.014	.101	.050	.014	.097	.048	.014	.093	.047	.014	.089	.046	.013	
9.0	.099	.048	.013	.097	.047	.013	.093	.046	.013	.089	.045	.013	.086	.044	.013	
10.0	.094	.045	.013	.093	.045	.012	.089	.044	.012	.086	.043	.012	.083	.042	.012	

$\rho_{CC}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	.170	.157	.146	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.153	.133	.116	.131	.114	.100	.090	.079	.070	.052	.046	.041	.017	.015	.013	
3.0	.139	.113	.093	.119	.098	.081	.082	.068	.057	.047	.040	.033	.015	.013	.011	
4.0	.127	.098	.076	.109	.085	.066	.075	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.117	.086	.063	.100	.075	.055	.069	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.109	.076	.053	.093	.066	.047	.064	.046	.033	.037	.027	.020	.012	.009	.006	
7.0	.101	.068	.046	.087	.059	.040	.060	.042	.028	.035	.025	.017	.011	.008	.006	
8.0	.095	.062	.039	.082	.054	.034	.057	.038	.024	.033	.022	.014	.011	.007	.005	
9.0	.089	.056	.034	.077	.049	.030	.053	.034	.021	.031	.020	.013	.010	.007	.004	
10.0	.085	.052	.030	.073	.045	.026	.051	.032	.019	.030	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-09-22

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:119.79V I:0.1131A P:13.356W PF:0.9856 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1013.42x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	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	12.0	12.7	12.2	12.9	13.0	11.9	12.7	12.1	12.8	13.0
3H	13.5	14.2	13.8	14.4	14.6	13.5	14.3	13.8	14.4	14.6
4H	14.1	14.8	14.4	15.0	15.2	14.2	14.9	14.5	15.1	15.3
6H	14.5	15.1	14.8	15.4	15.6	14.7	15.3	14.9	15.5	15.8
8H	14.6	15.2	14.9	15.5	15.7	14.8	15.4	15.1	15.7	15.9
12H	14.6	15.2	15.0	15.5	15.8	14.9	15.5	15.2	15.8	16.0
4H 2H	12.6	13.3	12.9	13.5	13.7	12.6	13.3	12.9	13.5	13.7
3H	14.3	14.9	14.7	15.2	15.5	14.4	15.0	14.7	15.2	15.5
4H	15.0	15.6	15.4	15.8	16.1	15.1	15.7	15.5	16.0	16.3
6H	15.5	16.0	15.9	16.3	16.6	15.7	16.2	16.1	16.5	16.8
8H	15.6	16.1	16.0	16.4	16.8	15.9	16.3	16.3	16.7	17.0
12H	15.7	16.1	16.1	16.5	16.9	16.0	16.4	16.4	16.8	17.2
8H 4H	15.2	15.7	15.6	16.0	16.4	15.3	15.8	15.7	16.1	16.5
6H	15.8	16.2	16.3	16.6	17.0	16.0	16.4	16.5	16.8	17.2
8H	16.1	16.4	16.5	16.8	17.2	16.3	16.6	16.7	17.0	17.5
12H	16.2	16.5	16.6	16.9	17.4	16.5	16.8	17.0	17.2	17.7
12H 4H	15.2	15.7	15.7	16.0	16.4	15.3	15.7	15.7	16.1	16.5
6H	15.9	16.2	16.3	16.6	17.1	16.1	16.4	16.5	16.8	17.2
8H	16.1	16.4	16.6	16.8	17.3	16.4	16.6	16.8	17.1	17.5

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 0.2 / - 0.2	+ 0.1 / - 0.2
1.5H	+ 0.1 / - 0.2	+ 0.1 / - 0.2
2.0H	+ 0.2 / - 0.3	+ 0.1 / - 0.2

CIE Pub.117, 1013 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 0.0)  
 Area: 0.0038465 m2

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:119.79V I:0.1131A P:13.356W PF:0.9856 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1013.42x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

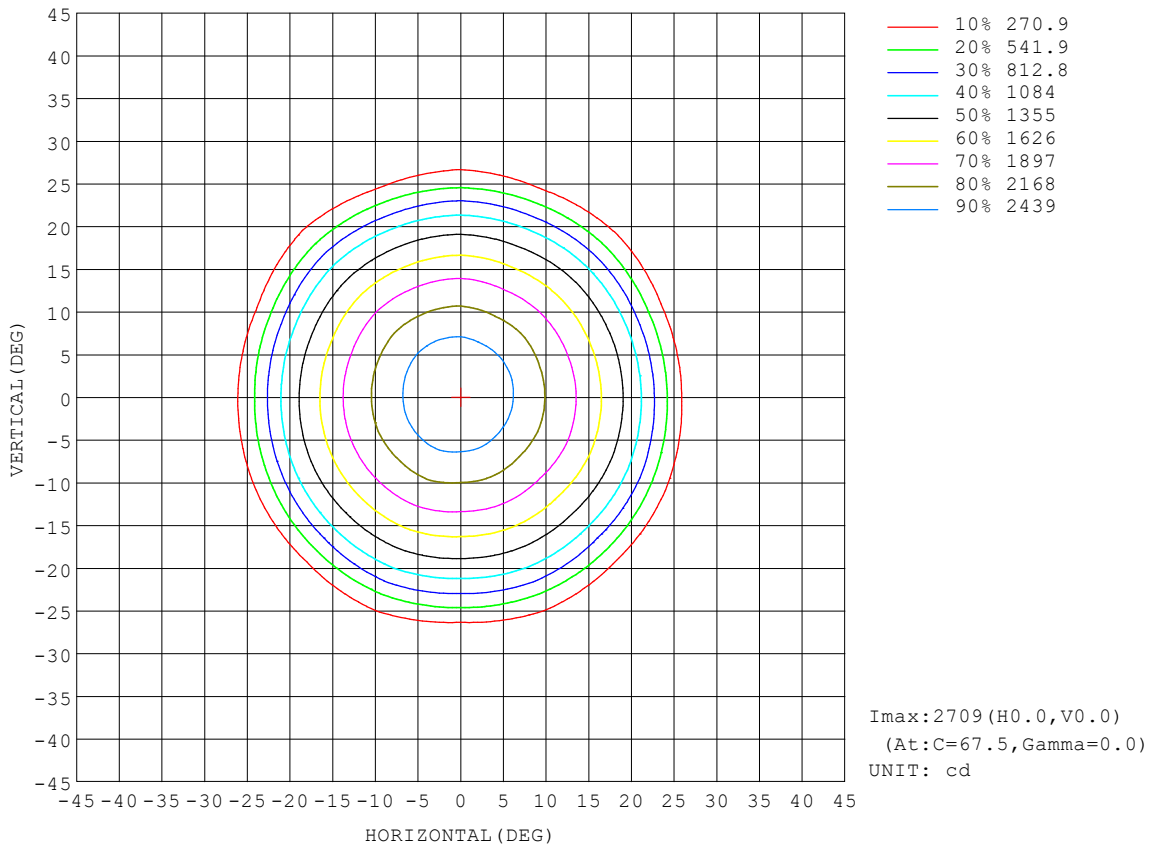
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	78	88	82	78	87	82	78	75
0.80	95	90	86	95	89	86	94	89	86	82
1.00	100	94	90	99	94	90	97	93	90	86
1.25	103	98	95	102	98	94	100	96	94	89
1.50	106	101	98	105	101	97	103	99	96	92
2.00	109	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	99
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: 24.3 °C  
 Operators:  
 Test Date: 2024-09-22

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.087m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:119.79V I:0.1131A P:13.356W PF:0.9856 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1013.42x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



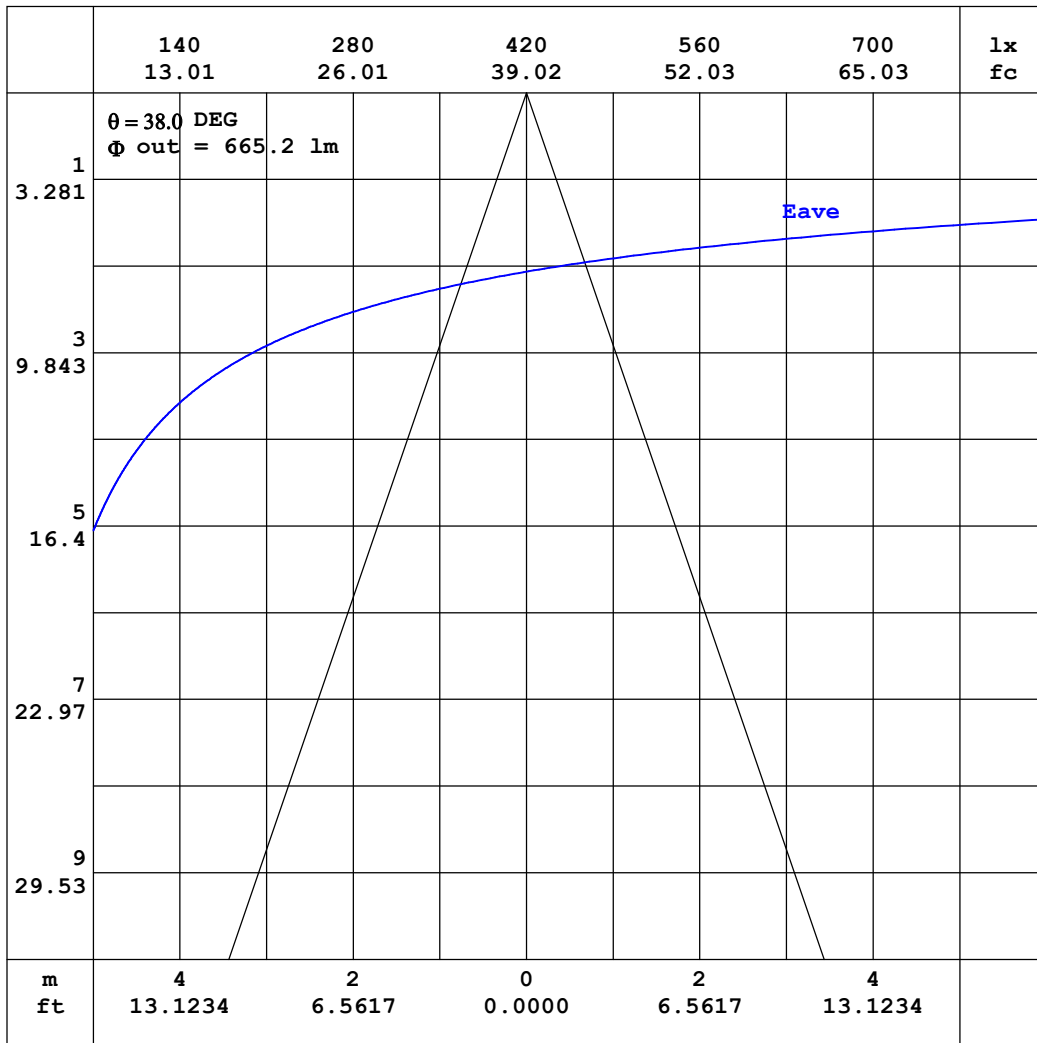
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:



**AAI CURVES**

Test:U:119.79V I:0.1131A P:13.356W PF:0.9856 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1013.42x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



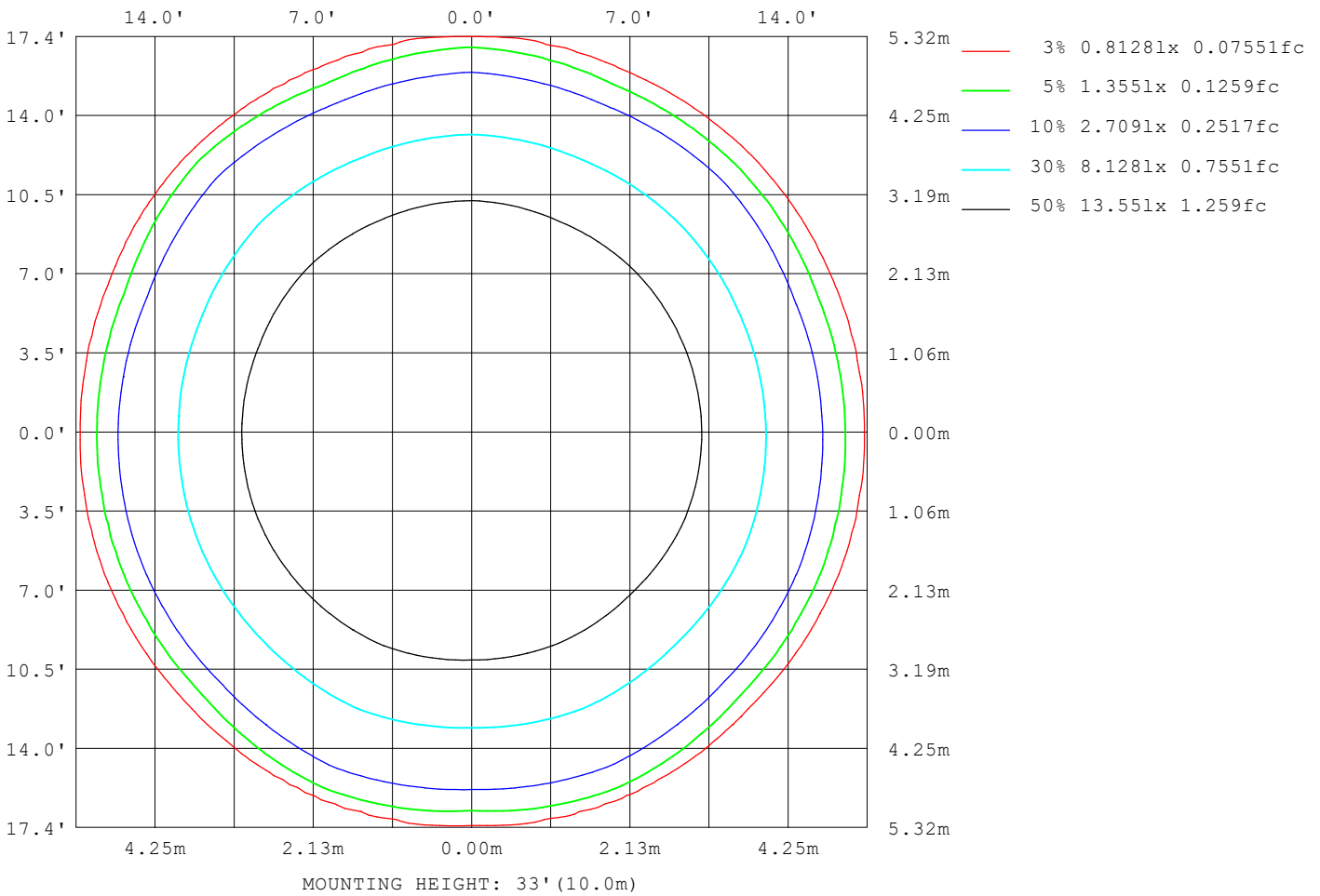
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-09-22

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.087m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:119.79V I:0.1131A P:13.356W PF:0.9856 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1013.42x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	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: 24.3 °C  
 Operators:  
 Test Date: 2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.087m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

Test:U:119.79V I:0.1131A P:13.356W PF:0.9856 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1013.42x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 3500K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

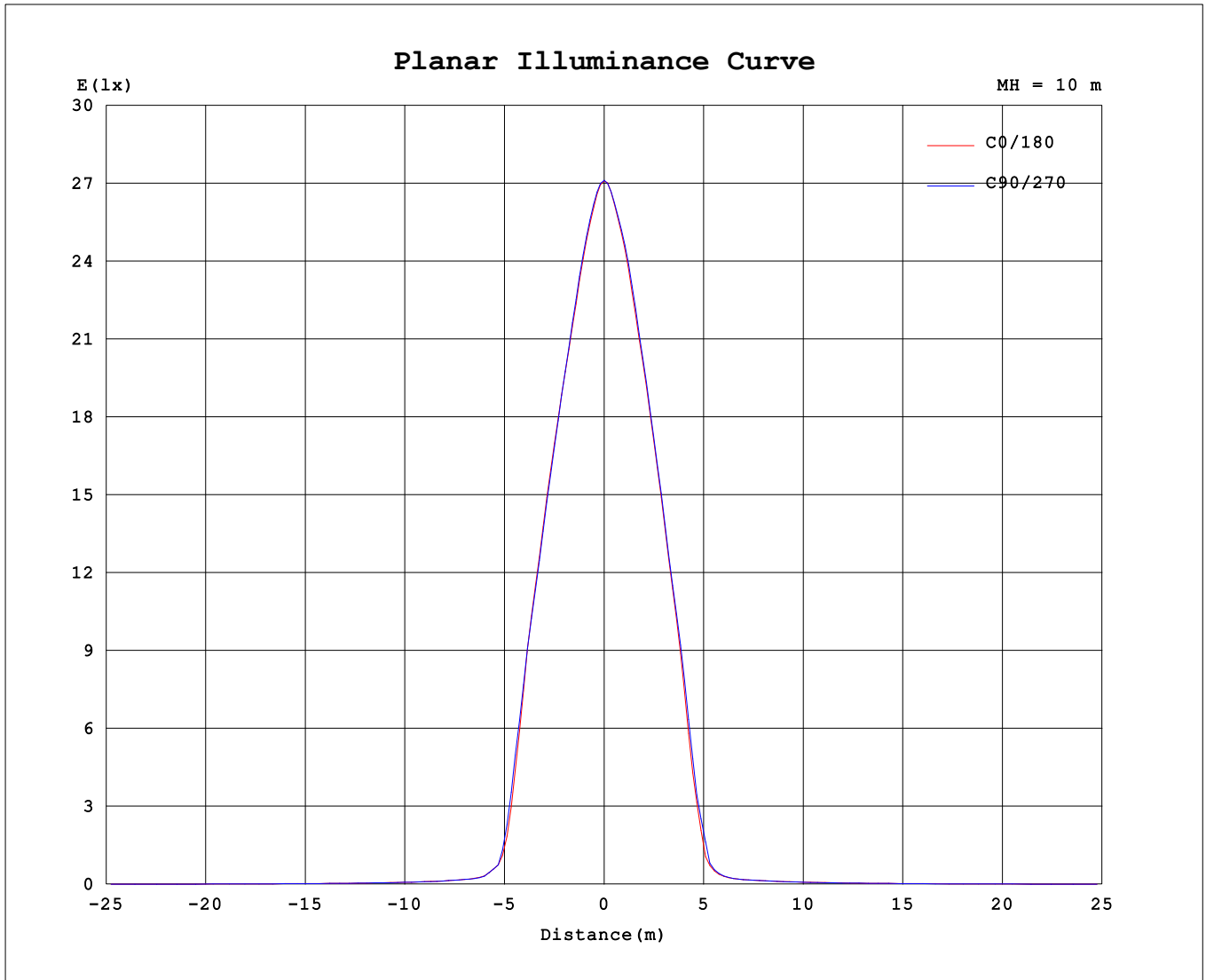
AvgL	cd/m2
L_0~180 (65) av	7823
L_0~180 (75) av	6421
L_0~180 (85) av	4994
L_90~270 (65) av	7595
L_90~270 (75) av	6686
L_90~270 (85) av	5258
L_45 (65) av	7663
L_45 (75) av	6556
L_45 (85) av	5217

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3℃  
 Operators:  
 Test Date:2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.087m [K=1.0000]  
 Remarks:

