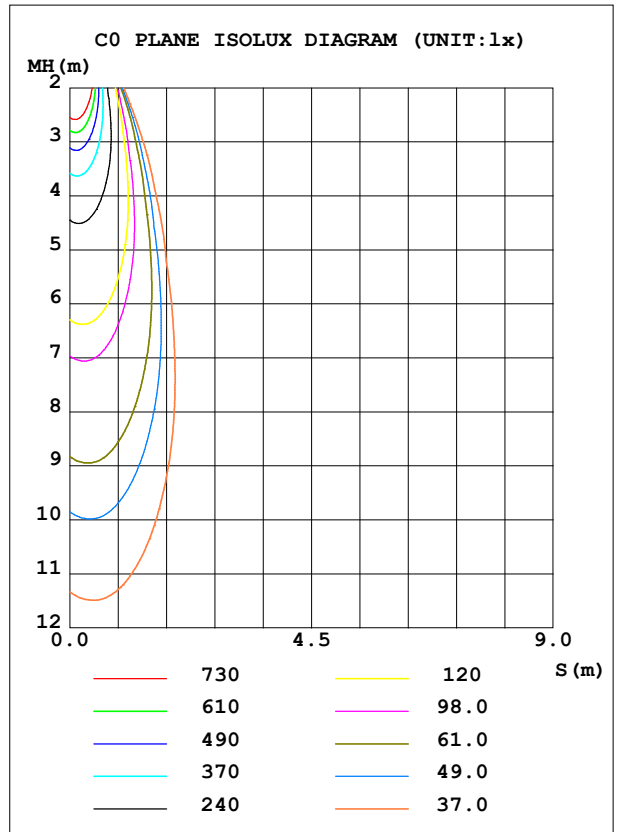
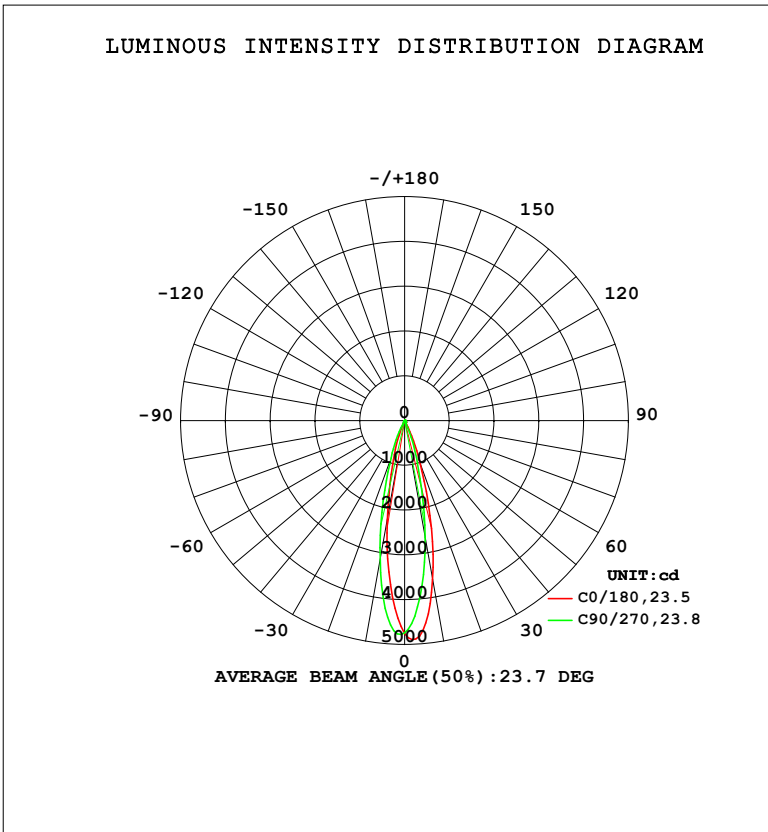


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.81V I:0.1134A P:13.398W PF:0.9857 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1016.49x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	AD-3-S15W-FC-5CCT-WH	Imax (cd)	4950	S/MH (C0/180)	0.33
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.44
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	1016.5	$\eta$ UP, DN (C0-180)	0.0, 47.7
NOMINAL FLUX (lm)	1016.49	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.0, 52.3
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE (V)	120	$\eta$ down (%)	100.0	CIBSE SHR MAX	0.30



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:

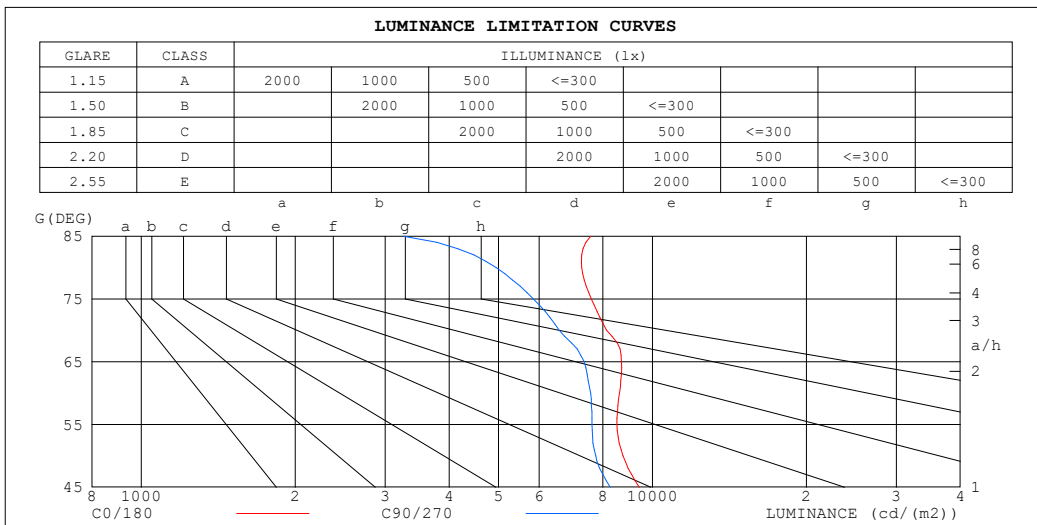
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	3611	3179	2648	2303	2259	2614	3163	3702	0- 10	359.1	359.1	35.3,35.3
20	1041	829.8	618.3	475.8	460.3	636.7	892.6	1072	10- 20	449.0	808.2	79.5,79.5
30	59.49	52.98	47.08	46.74	45.55	50.24	53.12	63.06	20- 30	126.3	934.5	91.9,91.9
40	31.99	29.29	27.26	27.72	28.29	30.31	31.36	32.52	30- 40	24.34	958.8	94.3,94.3
50	21.65	20.09	19.14	19.66	20.44	21.50	22.05	22.36	40- 50	19.08	977.9	96.2,96.2
60	16.57	15.46	14.55	14.72	15.62	16.76	17.23	17.30	50- 60	16.42	994.3	97.8,97.8
70	10.70	9.691	8.648	8.115	8.116	9.491	11.63	11.86	60- 70	12.95	1007	99.1,99.1
80	4.855	4.190	3.305	3.024	3.029	3.904	4.902	5.342	70- 80	7.153	1014	99.8,99.8
90	0.2653	0.4966	0.0992	0.1969	0.1820	0.1593	0.1003	0.3606	80- 90	2.100	1016	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**

Test:U:119.81V I:0.1134A P:13.398W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1016.49x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	7572	3259
80	7268	4948
75	7593	5847
70	8135	6573
65	8689	7352
60	8613	7567
55	8523	7611
50	8755	7741
45	9423	8260

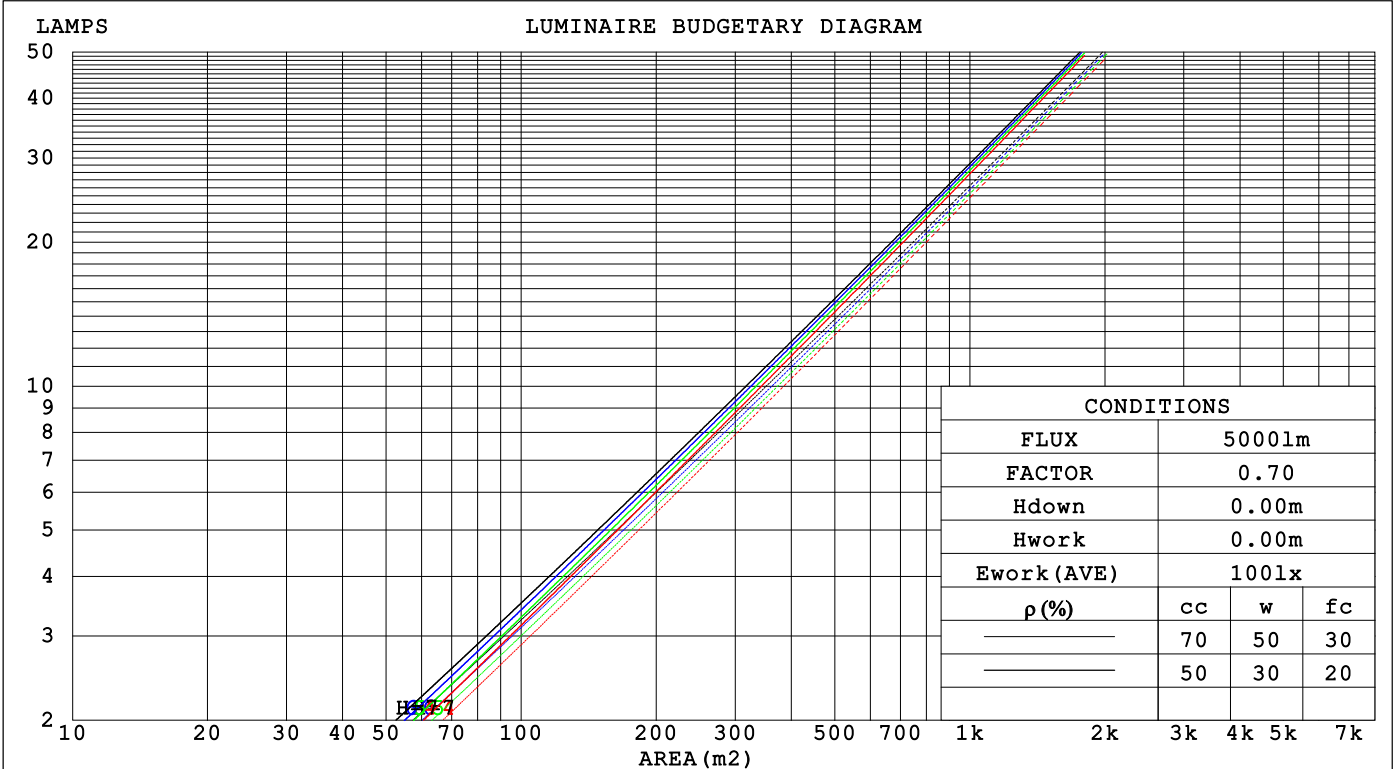
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-09-22

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:119.81V I:0.1134A P:13.398W PF:0.9857 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1016.49x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	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	1.07	1.06	1.05	1.03	1.03	1.01	1.00	.99	.98	.97	.96
2.0	1.07	1.03	1.01	1.05	1.02	.99	1.02	.99	.97	.99	.97	.95	.96	.95	.93	.92
3.0	1.02	.98	.95	1.00	.97	.94	.98	.95	.93	.96	.93	.91	.93	.92	.90	.88
4.0	.98	.93	.90	.96	.93	.90	.94	.91	.89	.93	.90	.88	.91	.89	.87	.85
5.0	.94	.90	.86	.93	.89	.86	.91	.88	.85	.90	.87	.85	.88	.86	.84	.83
6.0	.91	.86	.83	.90	.86	.83	.89	.85	.82	.87	.84	.82	.86	.83	.81	.80
7.0	.88	.83	.80	.87	.83	.80	.86	.82	.80	.85	.82	.79	.84	.81	.79	.78
8.0	.85	.81	.78	.84	.80	.78	.83	.80	.77	.83	.79	.77	.82	.79	.77	.76
9.0	.82	.78	.75	.82	.78	.75	.81	.78	.75	.80	.77	.75	.80	.77	.75	.74
10.0	.80	.76	.73	.80	.76	.73	.79	.76	.73	.79	.75	.73	.78	.75	.73	.72



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:119.81V I:0.1134A P:13.398W PF:0.9857 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1016.49x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	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	.148	.084	.027	.141	.081	.026	.129	.074	.024	.117	.068	.022	.107	.062	.020	
2.0	.137	.075	.023	.131	.072	.022	.121	.067	.021	.111	.062	.020	.102	.058	.018	
3.0	.127	.067	.020	.122	.065	.020	.113	.061	.019	.105	.058	.018	.098	.054	.017	
4.0	.118	.061	.018	.114	.060	.018	.107	.057	.017	.100	.054	.016	.094	.051	.016	
5.0	.110	.056	.016	.107	.055	.016	.101	.053	.015	.095	.050	.015	.090	.048	.014	
6.0	.104	.052	.015	.101	.051	.015	.096	.049	.014	.091	.047	.014	.086	.045	.013	
7.0	.098	.049	.014	.096	.048	.014	.091	.046	.013	.087	.044	.013	.083	.043	.013	
8.0	.093	.045	.013	.091	.045	.013	.087	.043	.012	.083	.042	.012	.079	.041	.012	
9.0	.089	.043	.012	.087	.042	.012	.083	.041	.012	.080	.040	.011	.077	.039	.011	
10.0	.085	.041	.011	.083	.040	.011	.080	.039	.011	.077	.038	.011	.074	.037	.011	

$\rho_{CC}$	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	.169	.158	.147	.145	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.016	
2.0	.152	.133	.117	.130	.114	.101	.089	.079	.070	.051	.046	.041	.016	.015	.013	
3.0	.137	.113	.095	.117	.098	.082	.081	.068	.058	.047	.040	.034	.015	.013	.011	
4.0	.124	.098	.078	.107	.085	.068	.073	.059	.048	.042	.035	.028	.014	.011	.009	
5.0	.114	.086	.065	.098	.074	.057	.067	.052	.040	.039	.030	.024	.013	.010	.008	
6.0	.105	.076	.055	.090	.066	.048	.062	.046	.034	.036	.027	.020	.012	.009	.007	
7.0	.097	.068	.047	.084	.059	.041	.058	.041	.029	.034	.024	.017	.011	.008	.006	
8.0	.091	.061	.041	.078	.053	.035	.054	.037	.025	.031	.022	.015	.010	.007	.005	
9.0	.085	.055	.035	.073	.048	.031	.051	.034	.022	.030	.020	.013	.010	.007	.004	
10.0	.080	.051	.031	.069	.044	.027	.048	.031	.019	.028	.018	.011	.009	.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:119.81V I:0.1134A P:13.398W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1016.49x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	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	12.8	13.4	13.0	13.6	13.7	12.2	12.9	12.4	13.0	13.2
3H	14.4	15.1	14.7	15.3	15.5	13.7	14.3	13.9	14.5	14.7
4H	15.1	15.7	15.4	15.9	16.1	14.2	14.8	14.5	15.0	15.3
6H	15.6	16.2	15.9	16.4	16.7	14.6	15.2	14.9	15.4	15.6
8H	15.8	16.4	16.1	16.6	16.9	14.7	15.2	15.0	15.5	15.7
12H	16.0	16.5	16.3	16.8	17.0	14.7	15.3	15.0	15.5	15.8
4H 2H	13.4	14.0	13.7	14.2	14.4	13.0	13.6	13.2	13.8	14.0
3H	15.2	15.8	15.5	16.0	16.3	14.6	15.1	14.9	15.4	15.7
4H	16.0	16.5	16.3	16.8	17.1	15.2	15.7	15.6	16.0	16.3
6H	16.6	17.0	17.0	17.4	17.7	15.7	16.1	16.1	16.5	16.8
8H	16.8	17.3	17.2	17.6	18.0	15.8	16.2	16.2	16.6	16.9
12H	17.1	17.4	17.5	17.8	18.2	15.9	16.3	16.3	16.6	17.0
8H 4H	16.2	16.6	16.6	17.0	17.3	15.5	16.0	15.9	16.3	16.7
6H	16.9	17.3	17.4	17.7	18.1	16.1	16.5	16.5	16.9	17.3
8H	17.3	17.6	17.7	18.0	18.4	16.3	16.6	16.8	17.0	17.5
12H	17.6	17.8	18.0	18.3	18.7	16.4	16.7	16.9	17.1	17.6
12H 4H	16.2	16.6	16.6	16.9	17.3	15.6	15.9	16.0	16.3	16.7
6H	17.0	17.3	17.4	17.7	18.1	16.2	16.5	16.6	16.9	17.3
8H	17.3	17.6	17.8	18.0	18.5	16.4	16.7	16.9	17.1	17.6

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

CIE Pub.117, 1016 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 0.1)  
 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:119.81V I:0.1134A P:13.398W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1016.49x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

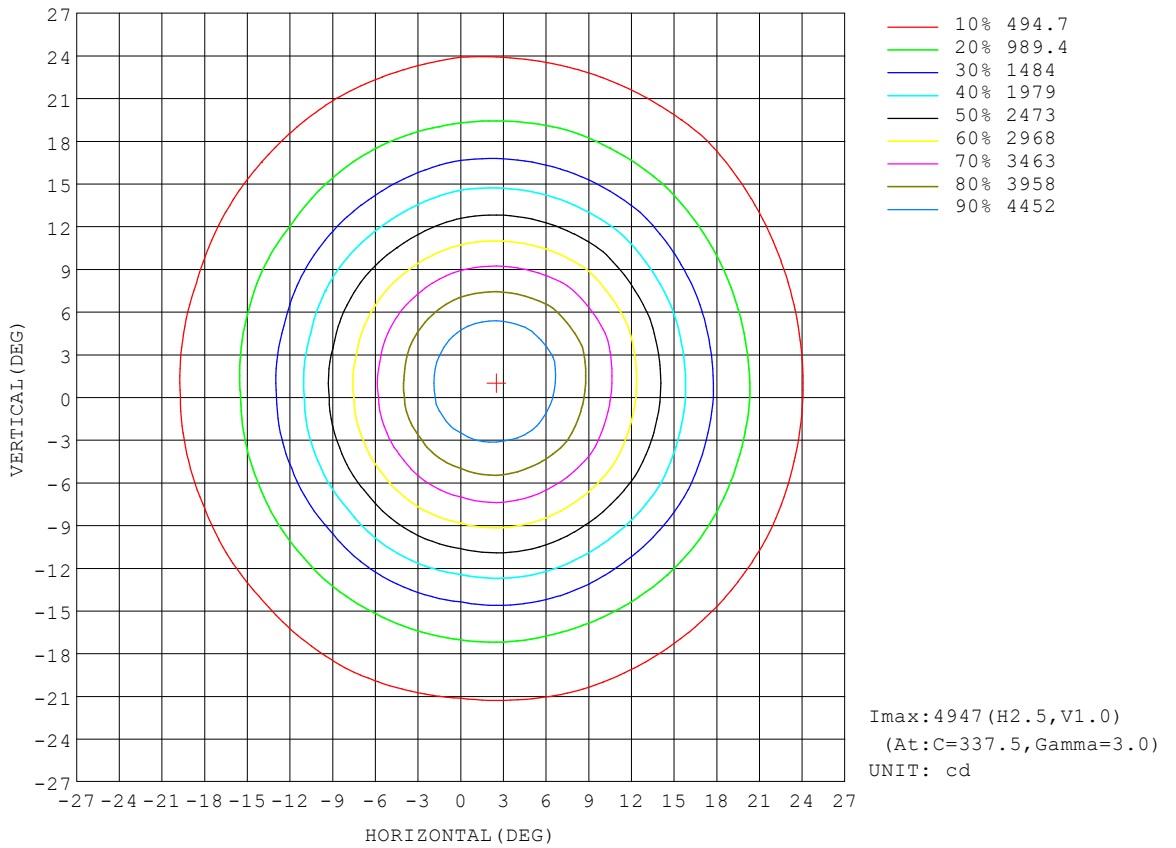
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	78	88	82	78	87	81	78	74
0.80	95	90	86	95	89	86	93	89	85	82
1.00	99	94	90	99	93	90	97	93	89	86
1.25	103	98	95	102	98	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	108	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	102	105	103	101	95
3.00	112	108	106	110	107	104	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:119.81V I:0.1134A P:13.398W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1016.49x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



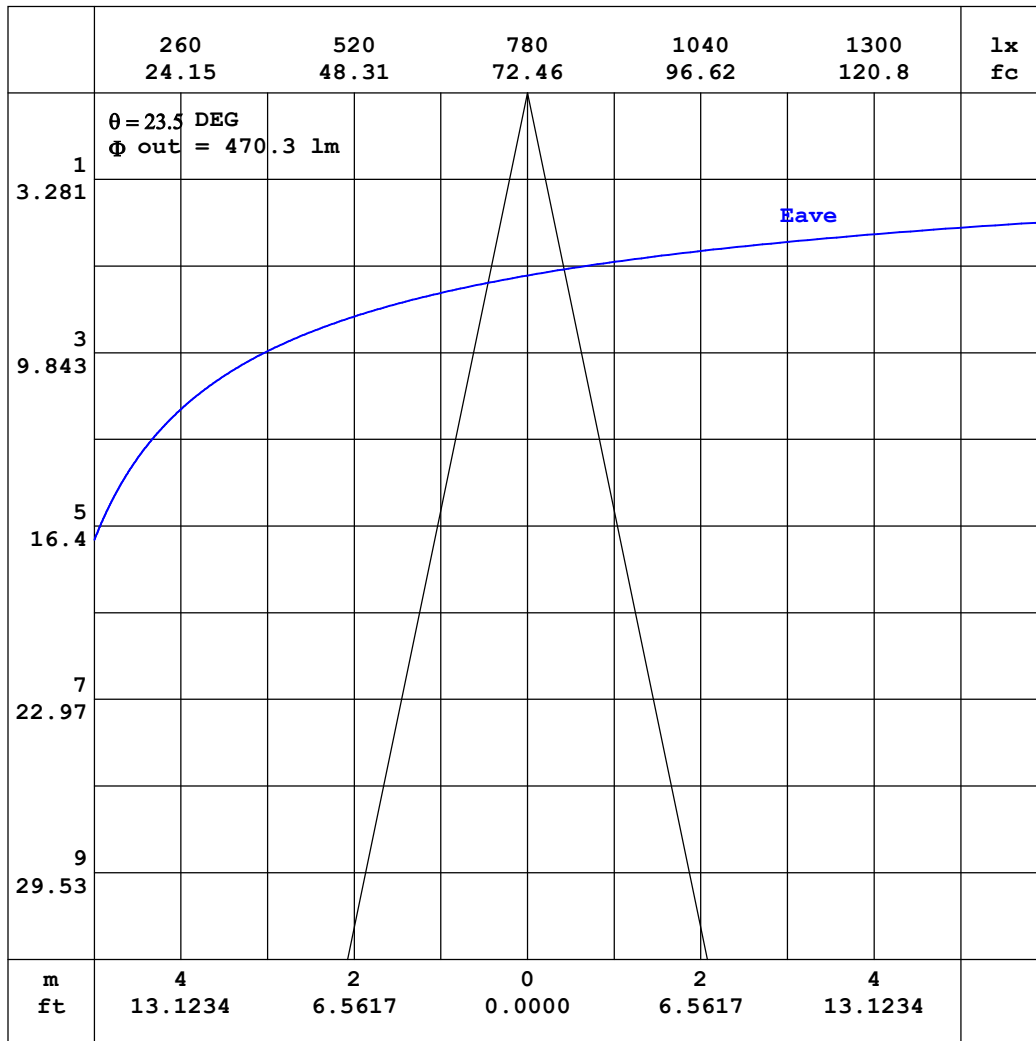
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-09-22

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:119.81V I:0.1134A P:13.398W PF:0.9857 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1016.49x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



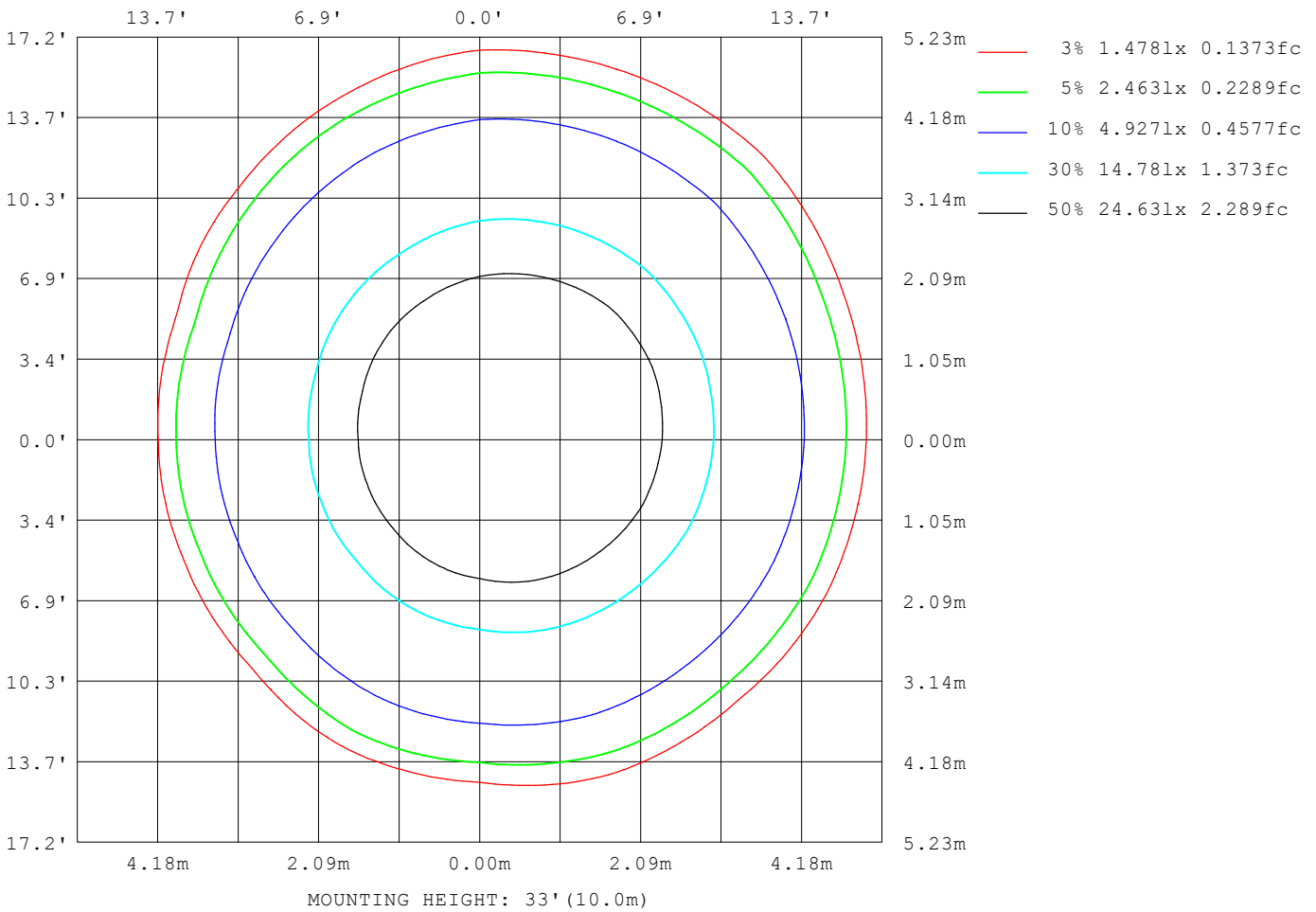
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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:

**ISOLUX DIAGRAM**

Test:U:119.81V I:0.1134A P:13.398W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1016.49x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	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:119.81V I:0.1134A P:13.398W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1016.49x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

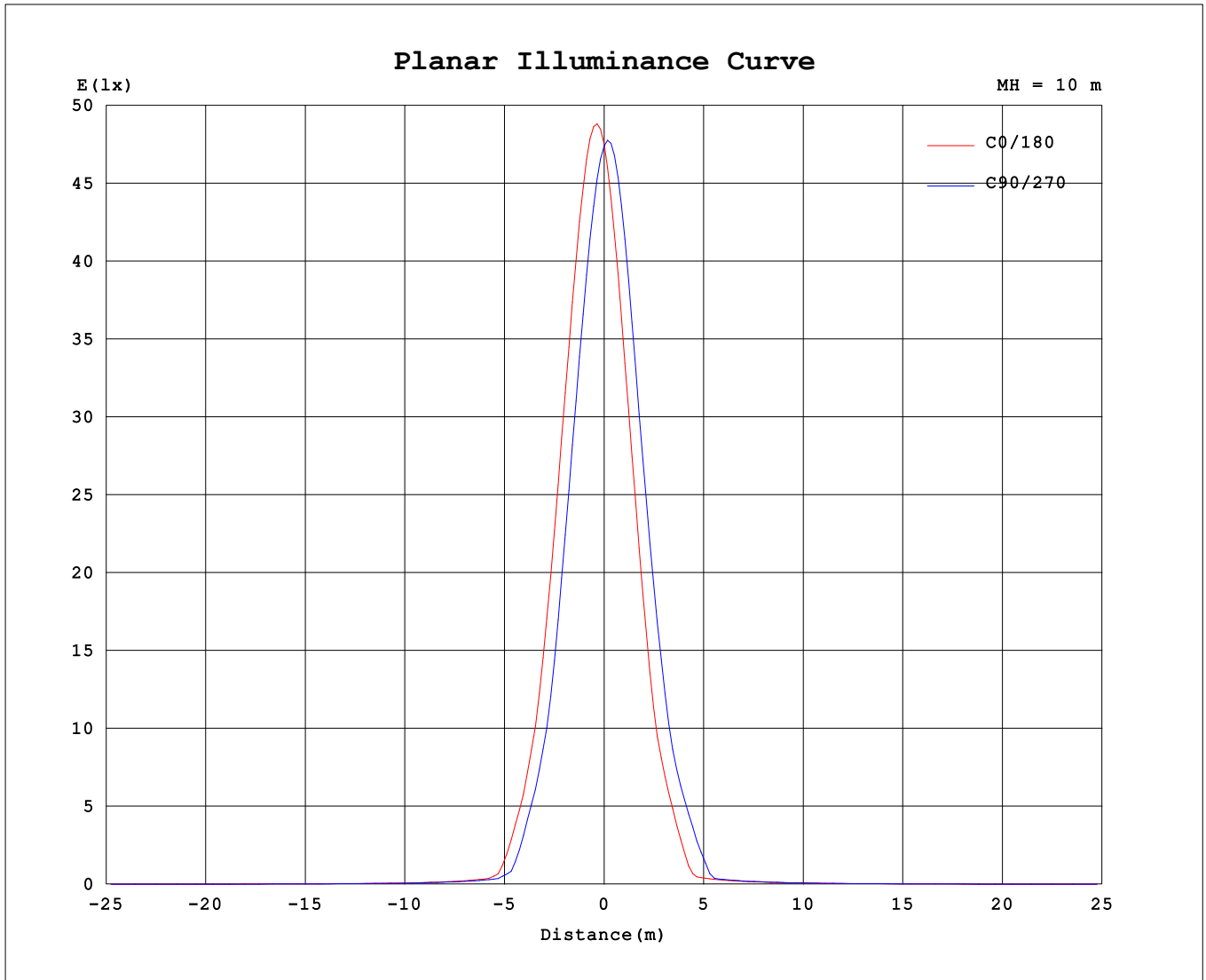
AvgL	cd/m2
L_0~180 (65) av	7924
L_0~180 (75) av	6522
L_0~180 (85) av	5030
L_90~270 (65) av	8211
L_90~270 (75) av	6907
L_90~270 (85) av	5055
L_45 (65) av	8168
L_45 (75) av	6783
L_45 (85) av	5801

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:

