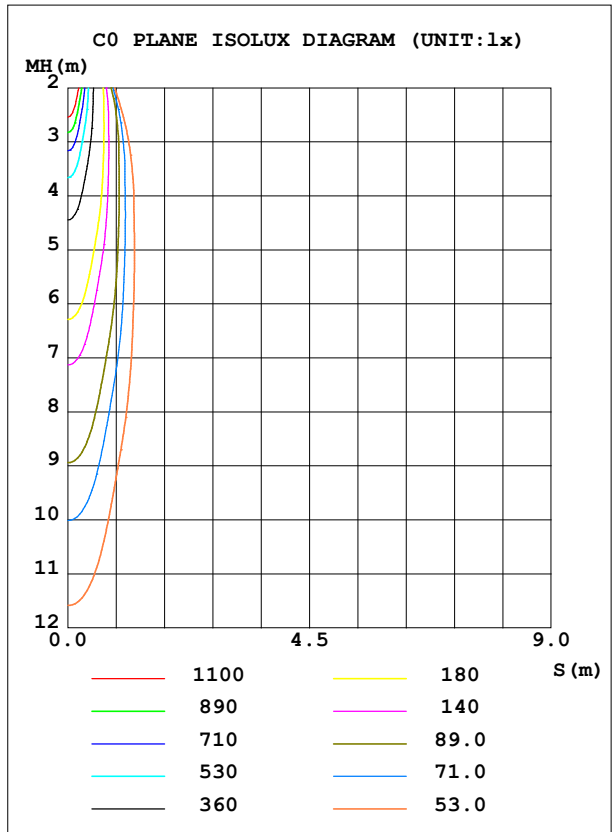
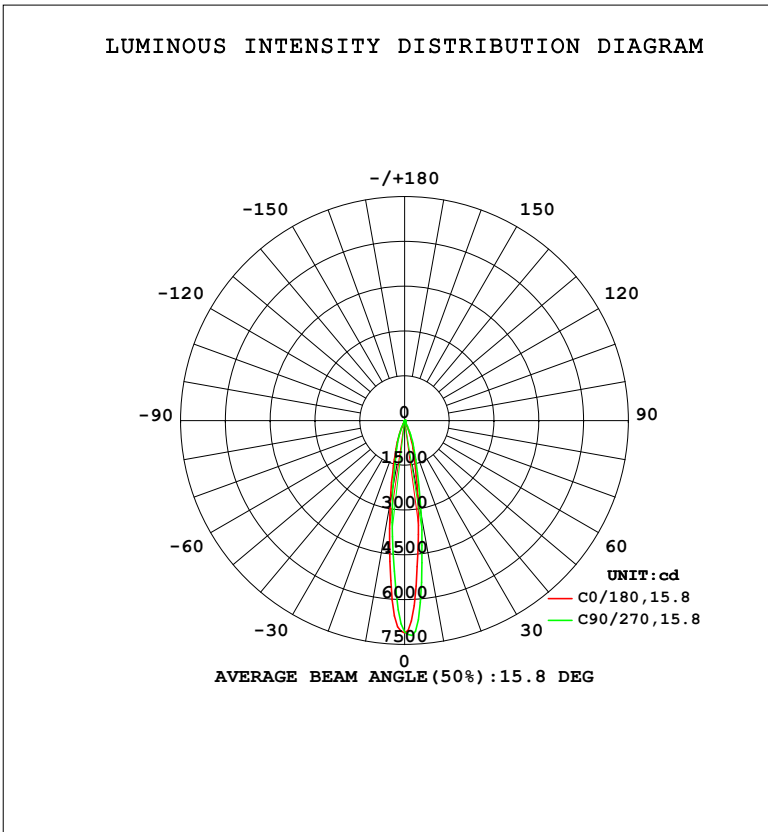


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.77V I:0.1164A P:13.744W PF:0.9858 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:966.354x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	AD-3-S15W-FC-3018K-WH	Imax (cd)	7196	S/MH (C0/180)	0.28
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.23
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	966.35	η UP, DN (C0-180)	0.0,55.7
NOMINAL FLUX (lm)	966.354	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,44.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	0.25



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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

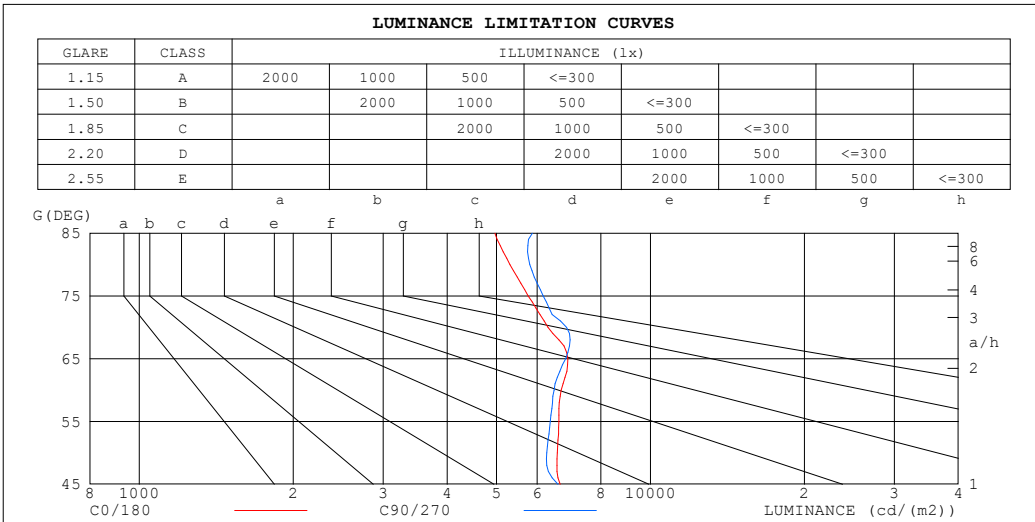
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	2553	2898	3230	3182	2779	2475	2283	2306	0- 10	412.4	412.4	42.7,42.7
20	652.7	774.2	819.8	785.0	651.5	606.7	569.5	572.3	10- 20	381.8	794.2	82.2,82.2
30	40.84	39.74	40.23	42.32	39.89	36.57	34.85	37.02	20- 30	108.2	902.4	93.4,93.4
40	23.67	24.90	25.11	24.85	23.27	21.50	20.50	21.83	30- 40	19.68	922.1	95.4,95.4
50	16.24	16.00	15.49	15.52	15.35	14.83	14.78	15.50	40- 50	13.90	936.0	96.9,96.9
60	12.86	12.81	12.45	12.22	11.87	11.47	11.52	12.31	50- 60	12.40	948.4	98.1,98.1
70	8.295	8.737	9.015	8.368	7.563	7.306	7.436	7.703	60- 70	10.34	958.8	99.2,99.2
80	3.548	3.832	3.880	3.555	3.057	2.822	2.827	3.074	70- 80	5.856	964.6	99.8,99.8
90	0.2604	0.5913	0.3748	0.4769	0.2448	0.2860	0.1950	0.3220	80- 90	1.733	966.4	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: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:

LUMINANCE LIMITATION CURVES

Test:U:119.77V I:0.1164A P:13.744W PF:0.9858 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:966.354x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4963	5870
80	5313	5808
75	5767	6170
70	6305	6853
65	6892	6828
60	6686	6476
55	6622	6365
50	6569	6265
45	6656	6588

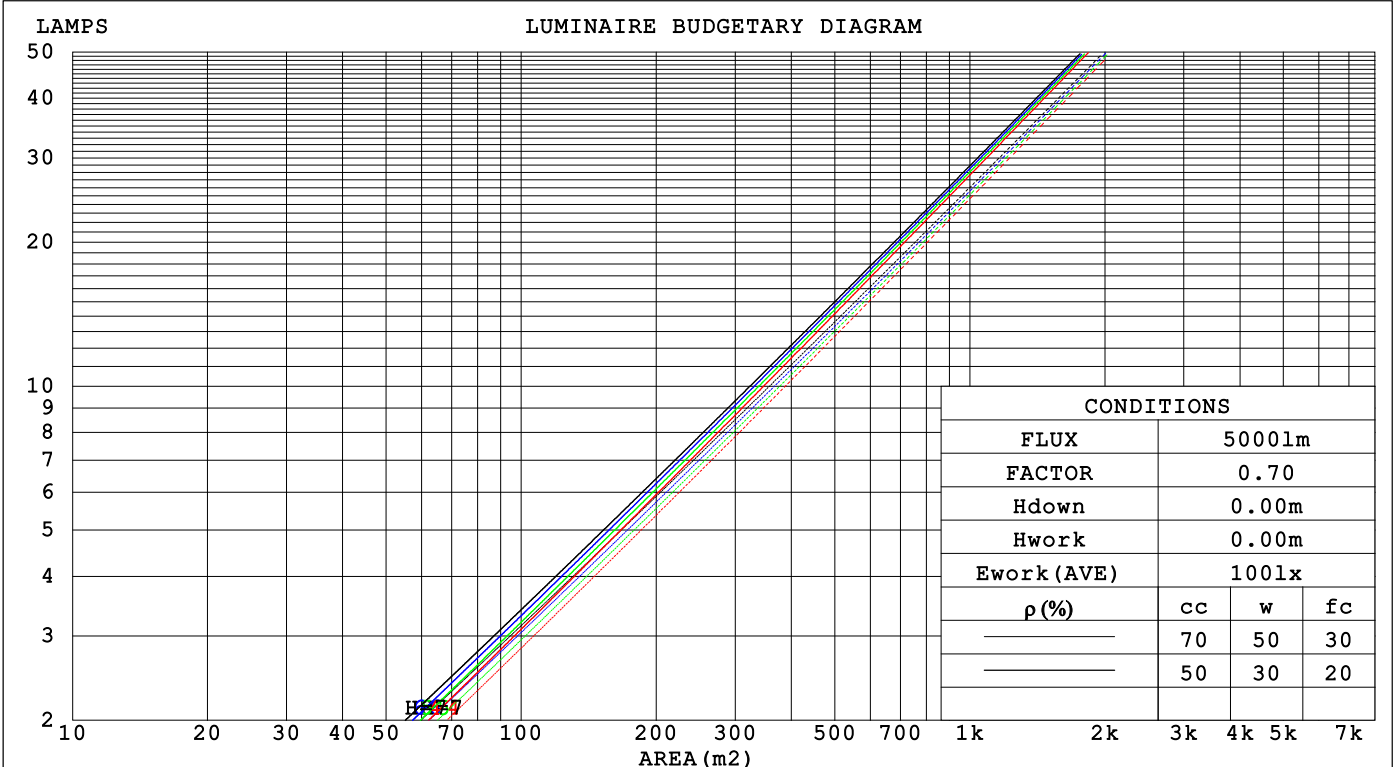
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 24.3 °C
 Operators:
 Test Date: 2024-09-22

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:119.77V I:0.1164A P:13.744W PF:0.9858 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:966.354x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	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	1.13	1.11	1.09	1.11	1.09	1.07	1.07	1.05	1.04	1.03	1.02	1.01	.00	.99	.98	.96
2.0	1.07	1.04	1.02	1.06	1.03	1.01	1.03	1.00	.98	.00	.98	.96	.97	.96	.94	.93
3.0	1.03	.99	.96	1.02	.98	.96	.99	.96	.94	.97	.95	.93	.95	.93	.91	.90
4.0	.99	.95	.92	.98	.94	.91	.96	.93	.90	.94	.92	.89	.92	.90	.88	.87
5.0	.96	.92	.88	.95	.91	.88	.93	.90	.87	.92	.89	.87	.90	.88	.86	.85
6.0	.93	.88	.86	.92	.88	.85	.91	.87	.85	.89	.86	.84	.88	.86	.84	.83
7.0	.90	.86	.83	.89	.85	.83	.88	.85	.82	.87	.84	.82	.86	.84	.82	.81
8.0	.87	.83	.81	.87	.83	.81	.86	.83	.80	.85	.82	.80	.84	.82	.80	.79
9.0	.85	.81	.79	.85	.81	.79	.84	.81	.78	.83	.80	.78	.83	.80	.78	.77
10.0	.83	.79	.77	.83	.79	.77	.82	.79	.76	.82	.78	.76	.81	.78	.76	.75



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:119.77V I:0.1164A P:13.744W PF:0.9858 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:966.354x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	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	.141	.080	.025	.134	.076	.024	.122	.070	.022	.110	.064	.020	.100	.058	.019	
2.0	.129	.071	.022	.124	.068	.021	.114	.063	.020	.104	.058	.018	.095	.054	.017	
3.0	.119	.064	.019	.115	.062	.019	.106	.058	.018	.099	.054	.017	.091	.050	.016	
4.0	.111	.058	.017	.107	.056	.017	.100	.053	.016	.093	.050	.015	.087	.047	.014	
5.0	.104	.053	.015	.100	.052	.015	.094	.049	.014	.089	.047	.014	.083	.045	.013	
6.0	.097	.049	.014	.095	.048	.014	.089	.046	.013	.084	.044	.013	.080	.042	.012	
7.0	.092	.045	.013	.089	.045	.013	.085	.043	.012	.081	.041	.012	.077	.040	.012	
8.0	.087	.043	.012	.085	.042	.012	.081	.040	.012	.077	.039	.011	.074	.038	.011	
9.0	.083	.040	.011	.081	.039	.011	.077	.038	.011	.074	.037	.011	.071	.036	.010	
10.0	.079	.038	.010	.077	.037	.010	.074	.036	.010	.071	.035	.010	.068	.034	.010	

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	.169	.158	.148	.144	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.151	.133	.118	.129	.114	.102	.088	.079	.071	.051	.046	.042	.016	.015	.014	
3.0	.135	.113	.096	.116	.098	.083	.080	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.123	.098	.079	.105	.085	.069	.072	.059	.048	.042	.035	.029	.013	.011	.009	
5.0	.112	.086	.066	.096	.074	.057	.066	.052	.041	.038	.030	.024	.012	.010	.008	
6.0	.103	.076	.056	.088	.065	.049	.061	.046	.034	.035	.027	.020	.011	.009	.007	
7.0	.095	.067	.048	.082	.058	.042	.056	.041	.030	.033	.024	.018	.011	.008	.006	
8.0	.088	.060	.041	.076	.052	.036	.053	.037	.026	.031	.022	.015	.010	.007	.005	
9.0	.082	.055	.036	.071	.047	.031	.049	.033	.022	.029	.020	.013	.009	.006	.004	
10.0	.077	.050	.032	.067	.043	.028	.046	.030	.020	.027	.018	.012	.009	.006	.004	

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:

UGR(Unified Glare Rating) Table

Test:U:119.77V I:0.1164A P:13.744W PF:0.9858 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:966.354x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	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	11.3	12.0	11.5	12.1	12.3	11.2	11.8	11.4	12.0	12.1
3H	13.1	13.7	13.3	13.9	14.1	13.1	13.7	13.4	13.9	14.1
4H	13.7	14.3	14.0	14.5	14.7	13.8	14.4	14.1	14.6	14.8
6H	14.2	14.7	14.5	15.0	15.2	14.3	14.9	14.6	15.1	15.4
8H	14.3	14.9	14.6	15.1	15.4	14.5	15.1	14.8	15.3	15.6
12H	14.5	15.0	14.8	15.2	15.5	14.7	15.2	15.0	15.5	15.7
4H 2H	12.1	12.7	12.4	12.9	13.1	12.0	12.6	12.3	12.8	13.0
3H	14.0	14.5	14.3	14.8	15.0	14.1	14.6	14.4	14.8	15.1
4H	14.7	15.2	15.1	15.5	15.8	14.9	15.3	15.2	15.6	15.9
6H	15.3	15.7	15.7	16.1	16.4	15.5	15.9	15.9	16.2	16.6
8H	15.5	15.9	15.9	16.3	16.6	15.7	16.1	16.1	16.5	16.8
12H	15.7	16.0	16.1	16.4	16.8	15.9	16.3	16.3	16.6	17.0
8H 4H	15.0	15.4	15.4	15.8	16.1	15.1	15.5	15.5	15.9	16.2
6H	15.7	16.1	16.2	16.5	16.9	15.9	16.2	16.3	16.6	17.0
8H	16.0	16.3	16.5	16.7	17.2	16.2	16.5	16.7	16.9	17.4
12H	16.2	16.5	16.7	16.9	17.4	16.5	16.8	17.0	17.2	17.7
12H 4H	15.0	15.4	15.4	15.8	16.2	15.1	15.5	15.5	15.9	16.3
6H	15.8	16.1	16.2	16.5	16.9	16.0	16.2	16.4	16.7	17.1
8H	16.1	16.4	16.6	16.8	17.3	16.3	16.6	16.8	17.0	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 / - 0.3	+ 0.1 / - 0.2
2.0H	+ 0.2 / - 0.4	+ 0.2 / - 0.3

CIE Pub.117, 966.4 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:119.77V I:0.1164A P:13.744W PF:0.9858 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:966.354x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

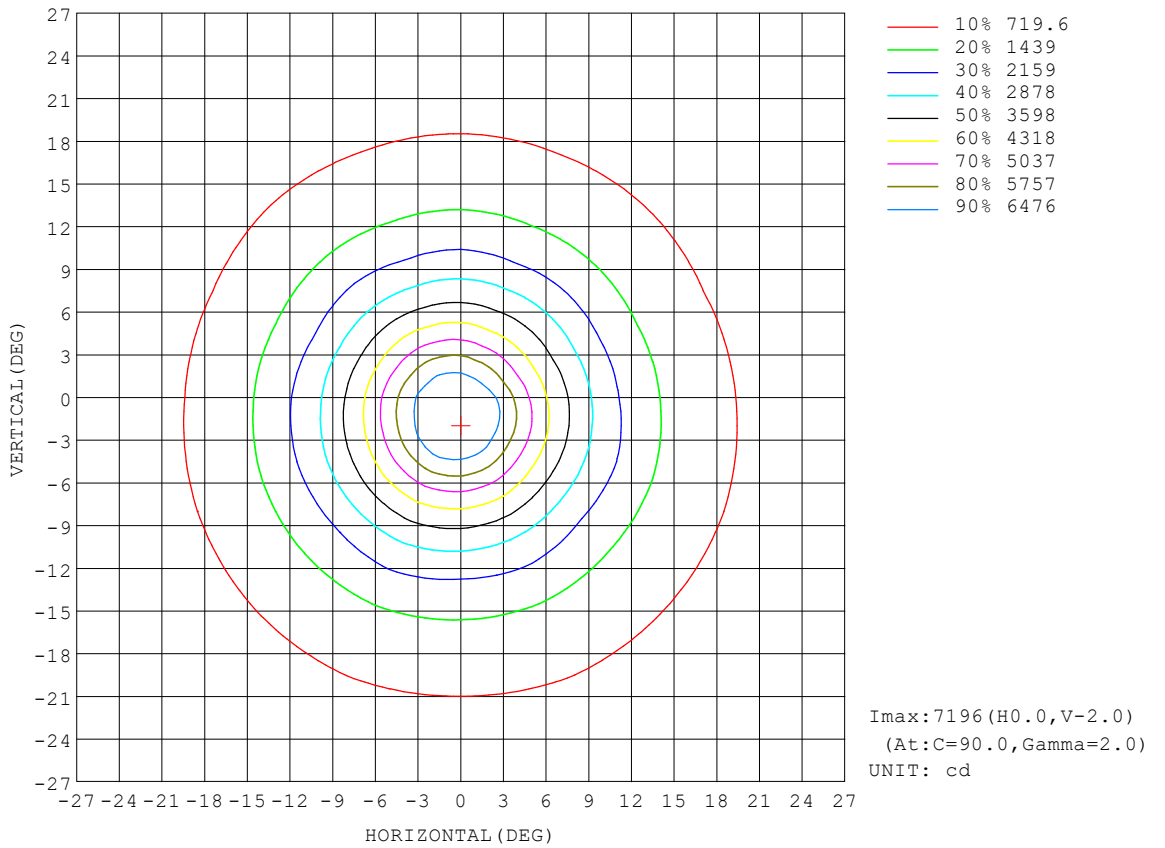
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	79	88	83	79	88	82	79	75
0.80	96	90	87	95	90	87	94	89	86	83
1.00	100	95	91	99	94	91	98	94	90	86
1.25	104	99	95	103	98	95	101	97	94	90
1.50	106	102	98	105	101	98	103	99	97	92
2.00	109	105	102	107	104	101	105	102	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	109	106	110	107	105	107	104	103	96
4.00	114	111	109	112	110	108	108	106	105	98
5.00	115	113	111	113	111	110	109	108	107	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

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:

ISOCANDELA DIAGRAM

Test:U:119.77V I:0.1164A P:13.744W PF:0.9858 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:966.354x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

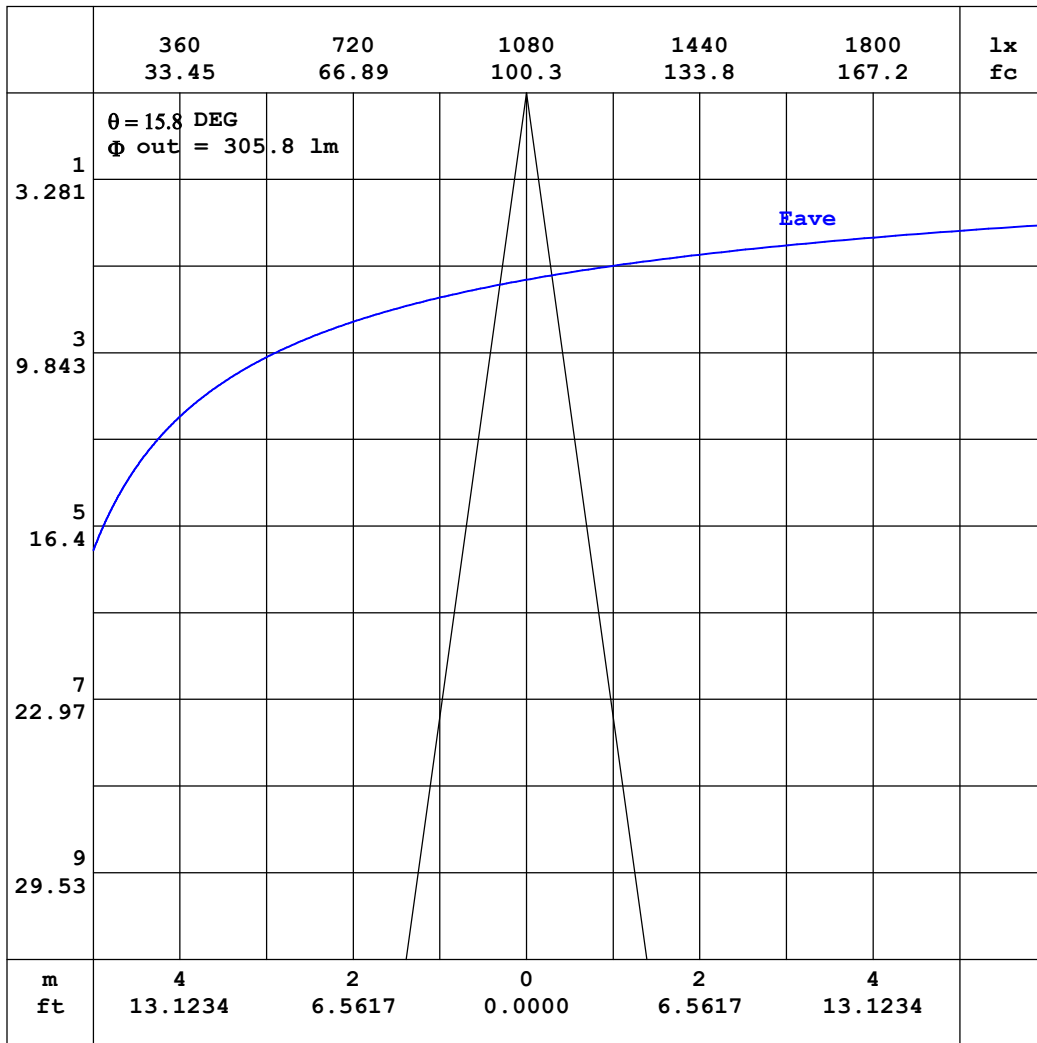


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 24.3°C
 Operators:
 Test Date: 2024-09-22

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:119.77V I:0.1164A P:13.744W PF:0.9858 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:966.354x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



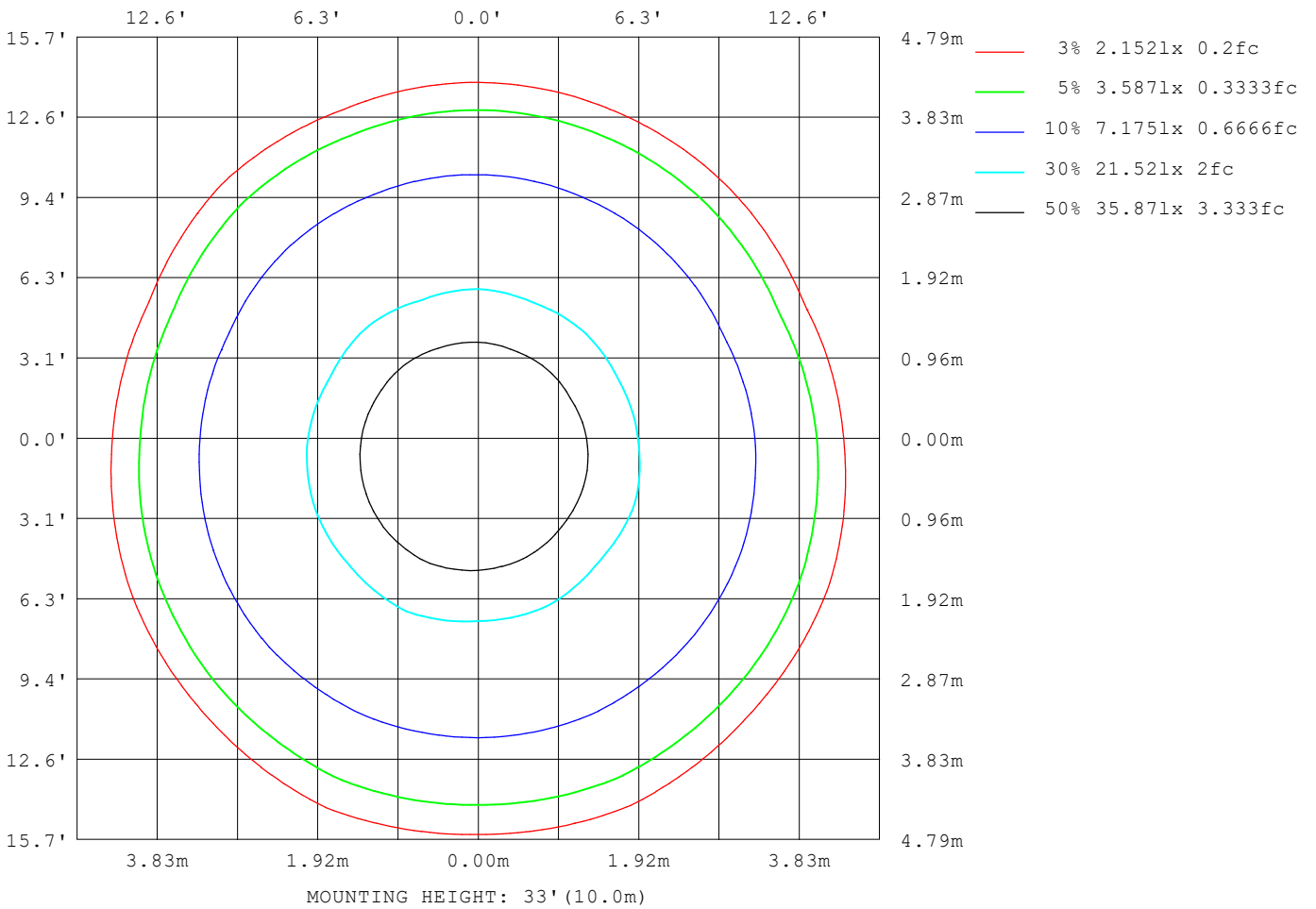
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:119.77V I:0.1164A P:13.744W PF:0.9858 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:966.354x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	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:119.77V I:0.1164A P:13.744W PF:0.9858 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:966.354x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

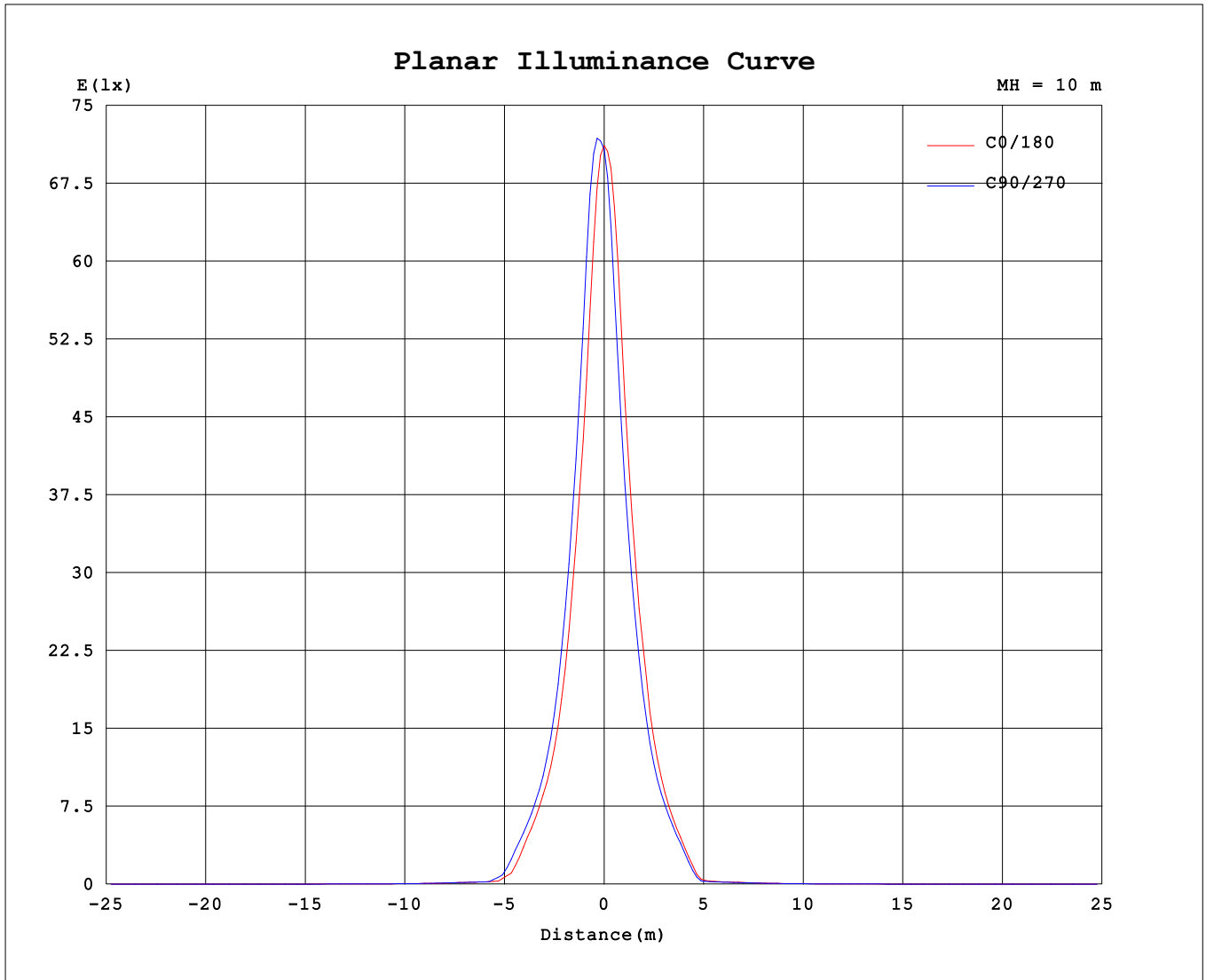
AvgL	cd/m2
L_0~180 (65) av	6590
L_0~180 (75) av	5472
L_0~180 (85) av	4360
L_90~270 (65) av	6493
L_90~270 (75) av	5589
L_90~270 (85) av	4393
L_45 (65) av	6563
L_45 (75) av	5513
L_45 (85) av	4404

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:

