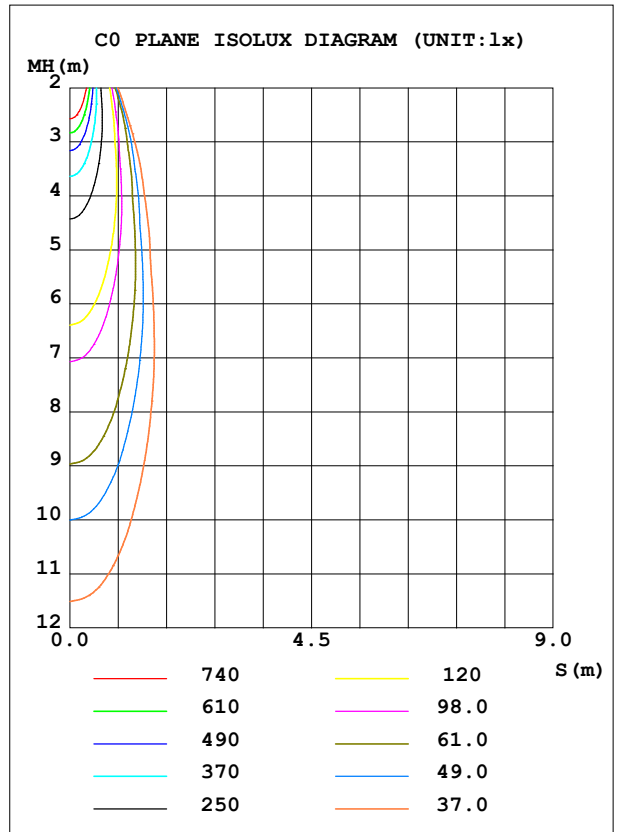
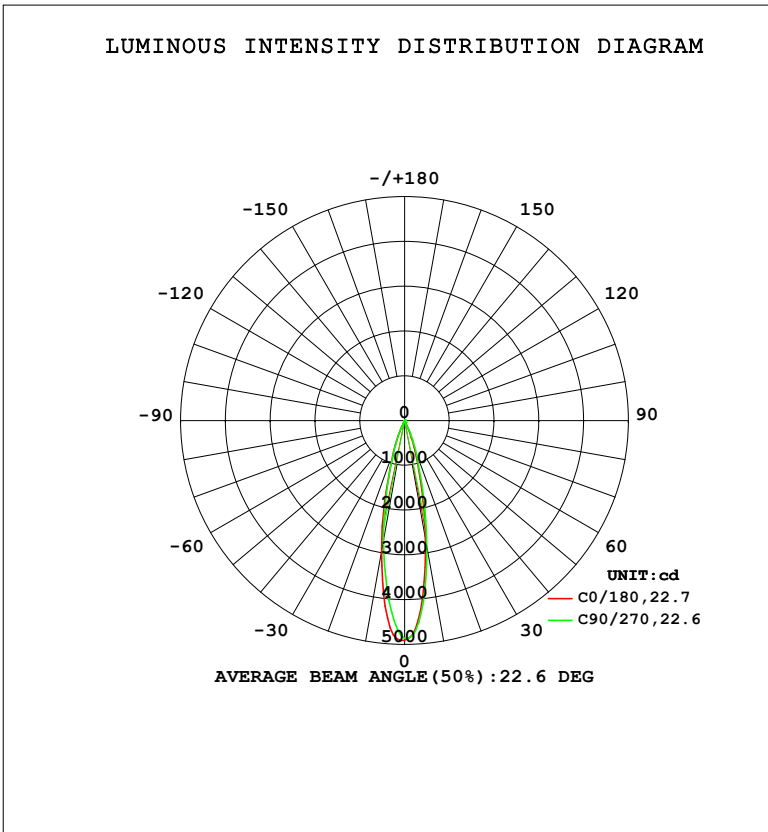


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.86V I:0.1160A P:13.710W PF:0.9859 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:951.429x1 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				Eff: 69.40 lm/W
MODEL	AD-3-S15W-FC-3018K-WH	I _{max} (cd)	4909	S/MH (C0/180)		0.40
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)		0.38
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	951.43	η UP, DN (C0-180)		0.0, 51.4
NOMINAL FLUX (lm)	951.429	CIE CLASS	DIRECT	η UP, DN (C180-360)		0.0, 48.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM		0.00
TEST VOLTAGE (V)	120	η 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

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:

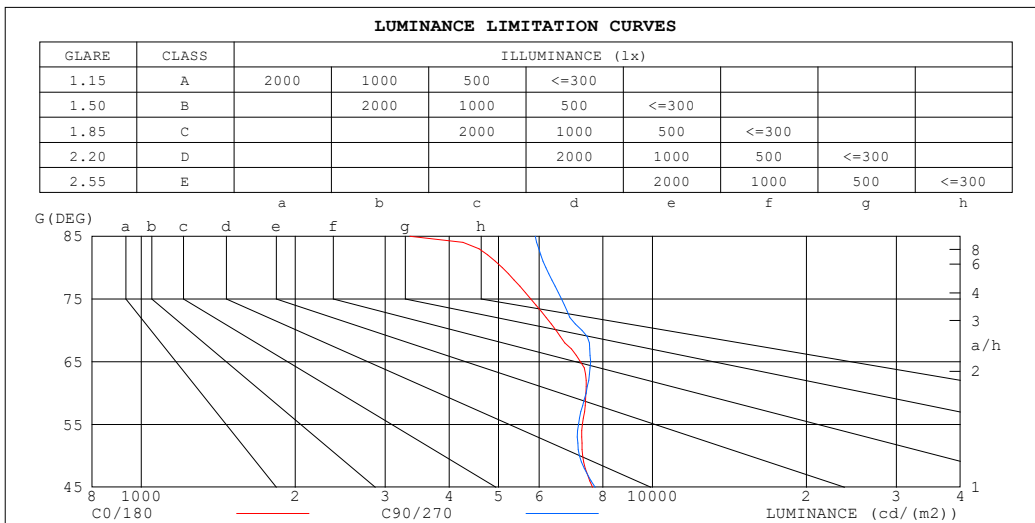
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	2707	2746	2878	2997	2986	2943	2729	2598	0- 10	356.8	356.8	37.5,37.5
20	620.2	686.8	735.6	768.6	695.9	698.1	675.2	605.3	10- 20	413.9	770.7	81,81
30	43.75	44.33	45.21	45.63	42.53	41.63	40.07	39.20	20- 30	110.8	881.5	92.6,92.6
40	24.97	25.99	26.14	25.60	24.90	24.82	24.71	24.18	30- 40	20.34	901.8	94.8,94.8
50	18.05	17.81	17.80	17.78	17.65	17.38	17.35	17.37	40- 50	16.10	917.9	96.5,96.5
60	14.25	14.16	14.26	14.07	13.75	13.45	13.50	13.67	50- 60	14.03	931.9	98,98
70	8.517	9.074	9.585	9.233	8.279	8.341	8.634	8.298	60- 70	11.44	943.4	99.2,99.2
80	3.396	3.810	4.130	4.029	3.354	3.250	3.287	3.144	70- 80	6.324	949.7	99.8,99.8
90	0.0915	0.0736	0.0802	0.1188	0.1326	0.0917	0.0479	0.0565	80- 90	1.725	951.4	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:119.86V I:0.1160A P:13.710W PF:0.9859 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:951.429x1 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	3350	5899
80	5084	6183
75	5782	6635
70	6474	7286
65	7229	7569
60	7410	7417
55	7289	7163
50	7299	7199
45	7638	7724

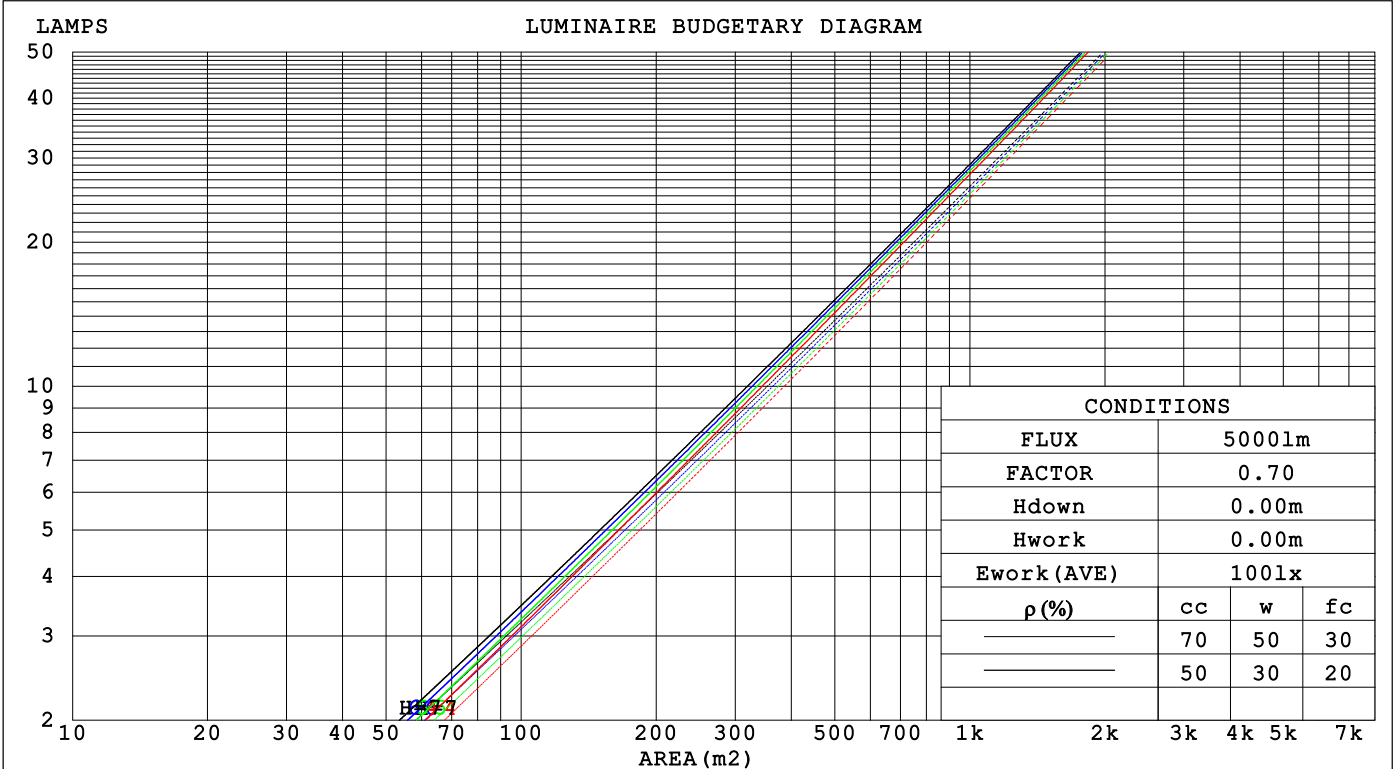
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 24.3 °C
 Operators:
 Test Date: 2024-09-22

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:119.86V I:0.1160A P:13.710W PF:0.9859 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:951.429x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	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	1.09	1.10	1.09	1.07	1.06	1.05	1.04	1.03	1.02	1.01	.99	.98	.98	.96
2.0	1.07	1.04	1.01	1.05	1.02	.99	1.02	.99	.98	.99	.97	.96	.97	.95	.94	.92
3.0	1.02	.98	.95	1.01	.97	.95	.98	.96	.93	.96	.94	.92	.94	.92	.90	.89
4.0	.98	.94	.91	.97	.93	.90	.95	.92	.89	.93	.90	.88	.91	.89	.87	.86
5.0	.94	.90	.87	.94	.90	.87	.92	.89	.86	.91	.88	.85	.89	.87	.85	.83
6.0	.91	.87	.84	.91	.87	.84	.89	.86	.83	.88	.85	.83	.87	.84	.82	.81
7.0	.88	.84	.81	.88	.84	.81	.87	.83	.81	.86	.83	.80	.85	.82	.80	.79
8.0	.86	.82	.79	.85	.81	.79	.84	.81	.78	.84	.80	.78	.83	.80	.78	.77
9.0	.83	.79	.77	.83	.79	.76	.82	.79	.76	.82	.78	.76	.81	.78	.76	.75
10.0	.81	.77	.75	.81	.77	.75	.80	.77	.74	.80	.76	.74	.79	.76	.74	.73



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:119.86V I:0.1160A P:13.710W PF:0.9859 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:951.429x1 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	.145	.082	.026	.138	.079	.025	.126	.072	.023	.115	.066	.021	.104	.060	.019	
2.0	.134	.073	.022	.128	.071	.022	.118	.066	.020	.109	.061	.019	.100	.056	.018	
3.0	.124	.066	.020	.119	.064	.019	.111	.060	.018	.103	.056	.017	.095	.053	.016	
4.0	.115	.060	.018	.111	.058	.017	.104	.055	.017	.097	.052	.016	.091	.050	.015	
5.0	.108	.055	.016	.105	.054	.016	.098	.051	.015	.093	.049	.015	.087	.047	.014	
6.0	.101	.051	.015	.099	.050	.014	.093	.048	.014	.088	.046	.013	.084	.044	.013	
7.0	.096	.047	.013	.093	.047	.013	.089	.045	.013	.084	.043	.013	.080	.042	.012	
8.0	.091	.044	.012	.089	.044	.012	.085	.042	.012	.081	.041	.012	.077	.040	.012	
9.0	.086	.042	.012	.085	.041	.012	.081	.040	.011	.078	.039	.011	.075	.038	.011	
10.0	.083	.040	.011	.081	.039	.011	.078	.038	.011	.075	.037	.011	.072	.036	.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	.147	.145	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.016	
2.0	.151	.133	.117	.129	.114	.101	.089	.079	.071	.051	.046	.041	.016	.015	.013	
3.0	.136	.113	.095	.117	.098	.082	.080	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.124	.098	.078	.106	.085	.068	.073	.059	.048	.042	.035	.028	.014	.011	.009	
5.0	.113	.086	.065	.097	.074	.057	.067	.052	.040	.039	.030	.024	.013	.010	.008	
6.0	.104	.076	.055	.090	.066	.048	.062	.046	.034	.036	.027	.020	.012	.009	.007	
7.0	.097	.068	.047	.083	.059	.041	.057	.041	.029	.033	.024	.017	.011	.008	.006	
8.0	.090	.061	.041	.077	.053	.036	.054	.037	.025	.031	.022	.015	.010	.007	.005	
9.0	.084	.055	.036	.072	.048	.031	.050	.034	.022	.029	.020	.013	.009	.007	.004	
10.0	.079	.050	.031	.068	.044	.027	.047	.031	.019	.028	.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:119.86V I:0.1160A P:13.710W PF:0.9859 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:951.429x1 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	12.0	12.6	12.2	12.8	12.9	12.0	12.6	12.2	12.8	12.9
3H	13.6	14.2	13.8	14.4	14.6	13.8	14.4	14.0	14.6	14.8
4H	14.1	14.7	14.4	14.9	15.1	14.4	15.0	14.7	15.2	15.4
6H	14.5	15.1	14.8	15.3	15.6	14.9	15.5	15.2	15.7	16.0
8H	14.6	15.2	14.9	15.4	15.7	15.1	15.7	15.4	15.9	16.2
12H	14.7	15.2	15.0	15.5	15.8	15.2	15.8	15.5	16.0	16.3
4H 2H	12.7	13.3	13.0	13.5	13.7	12.7	13.3	13.0	13.5	13.7
3H	14.4	15.0	14.7	15.2	15.5	14.6	15.2	14.9	15.4	15.7
4H	15.1	15.6	15.4	15.9	16.2	15.4	15.9	15.7	16.2	16.5
6H	15.6	16.0	16.0	16.4	16.7	16.0	16.4	16.4	16.8	17.1
8H	15.8	16.2	16.1	16.5	16.9	16.2	16.6	16.6	17.0	17.3
12H	15.8	16.2	16.2	16.6	17.0	16.4	16.8	16.8	17.1	17.5
8H 4H	15.4	15.8	15.8	16.1	16.5	15.6	16.0	16.0	16.4	16.8
6H	16.0	16.3	16.4	16.7	17.1	16.4	16.7	16.8	17.1	17.5
8H	16.2	16.5	16.7	16.9	17.4	16.7	17.0	17.1	17.4	17.8
12H	16.4	16.6	16.8	17.1	17.5	16.9	17.2	17.4	17.6	18.1
12H 4H	15.4	15.8	15.8	16.1	16.5	15.6	16.0	16.0	16.4	16.8
6H	16.0	16.3	16.5	16.8	17.2	16.4	16.7	16.8	17.1	17.6
8H	16.3	16.6	16.8	17.0	17.5	16.7	17.0	17.2	17.4	17.9

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	+ 0.2 / - 0.3

CIE Pub.117, 951.4 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -0.2)
 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:119.86V I:0.1160A P:13.710W PF:0.9859 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:951.429x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

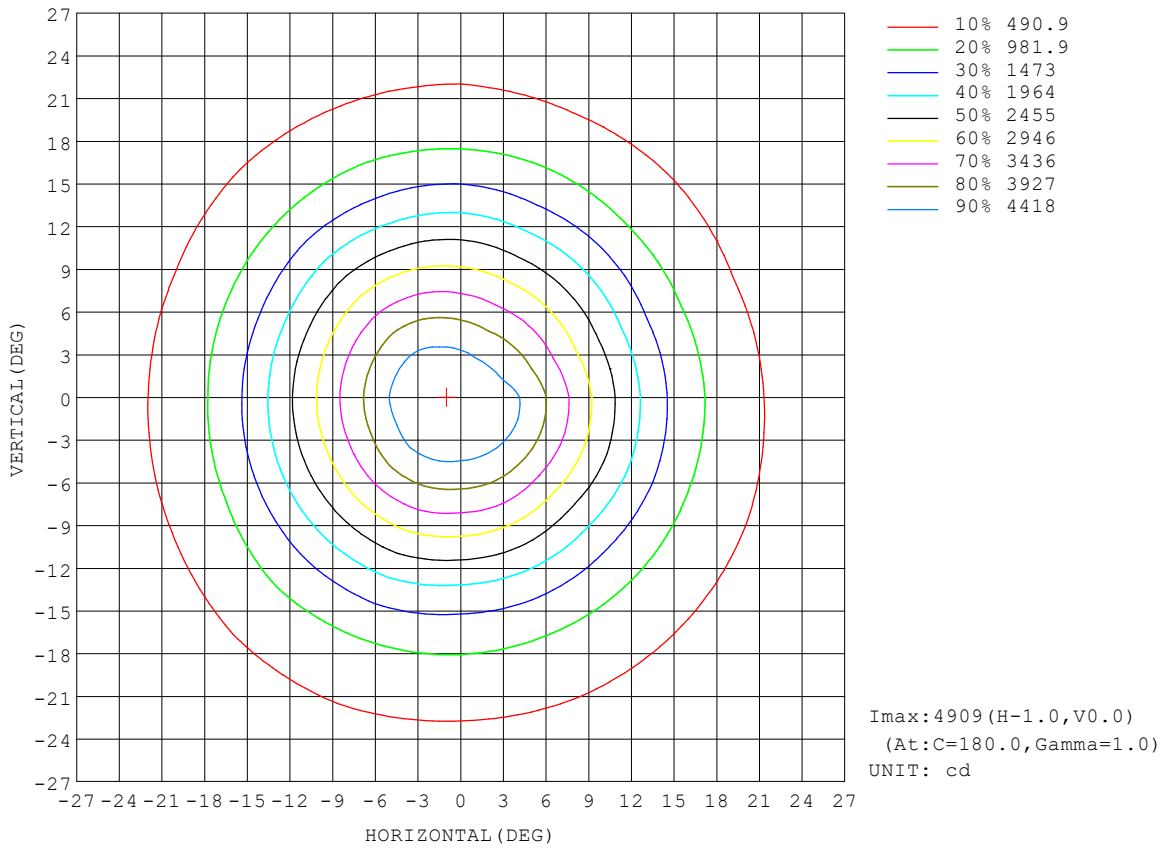
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	79	88	82	78	87	82	78	75
0.80	96	90	86	95	90	86	94	89	86	82
1.00	100	94	91	99	94	90	97	94	90	86
1.25	103	98	95	102	98	95	100	97	94	90
1.50	106	101	98	105	101	98	103	99	96	92
2.00	109	104	101	107	103	100	104	101	99	94
2.50	110	106	104	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	108	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

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:119.86V I:0.1160A P:13.710W PF:0.9859 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:951.429x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

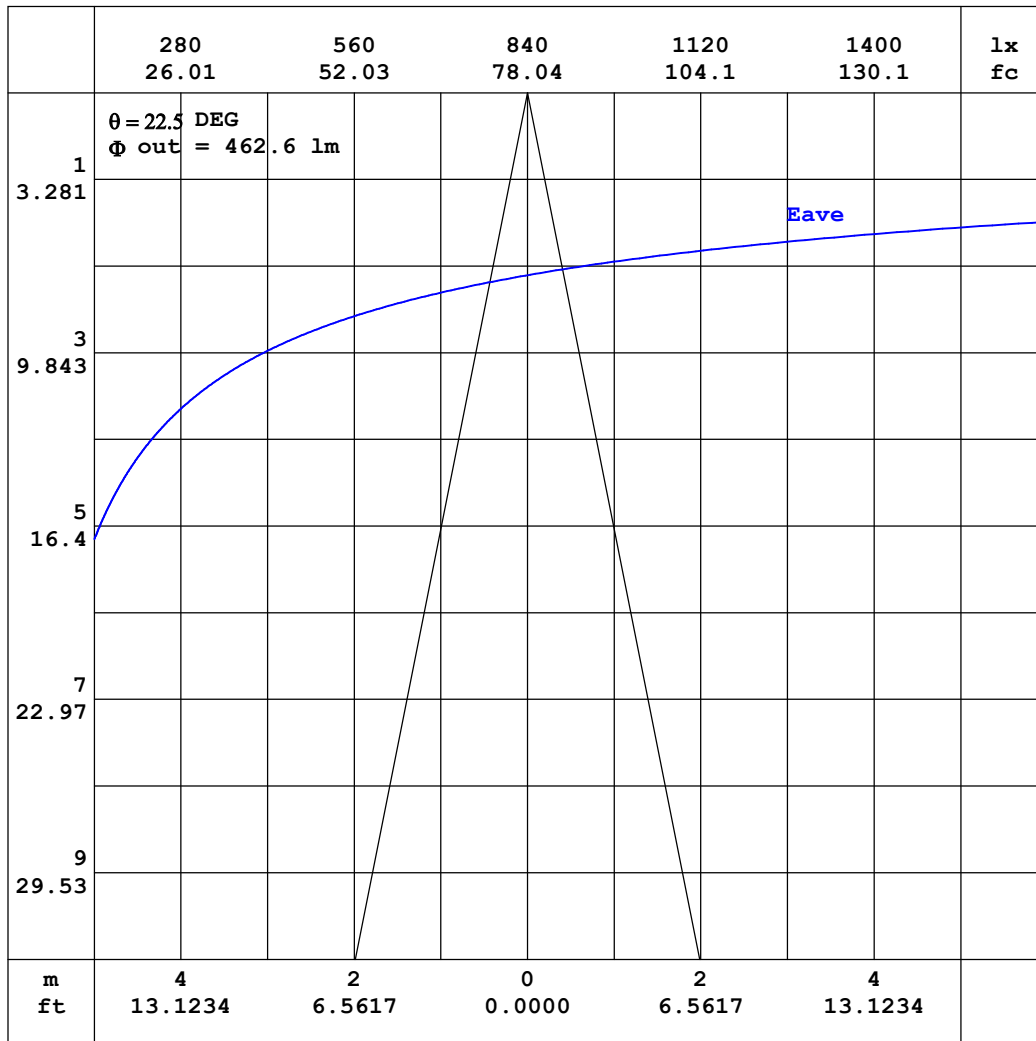


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.3°C
 Operators:
 Test Date:2024-09-22

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:119.86V I:0.1160A P:13.710W PF:0.9859 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:951.429x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



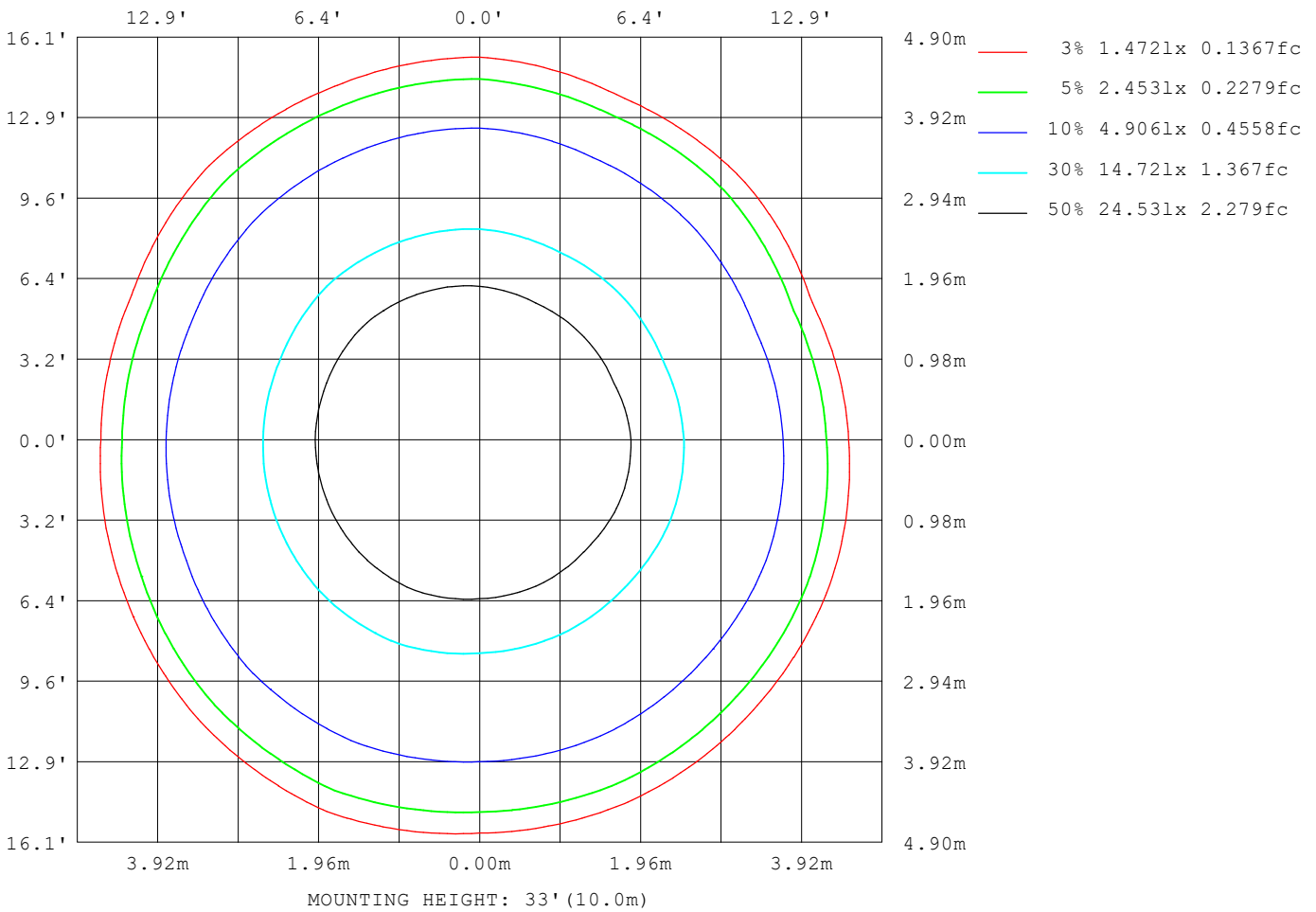
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:119.86V I:0.1160A P:13.710W PF:0.9859 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:951.429x1 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:119.86V I:0.1160A P:13.710W PF:0.9859 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:951.429x1 lm		
NAME: AD-3-S15W-FC-3018K-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

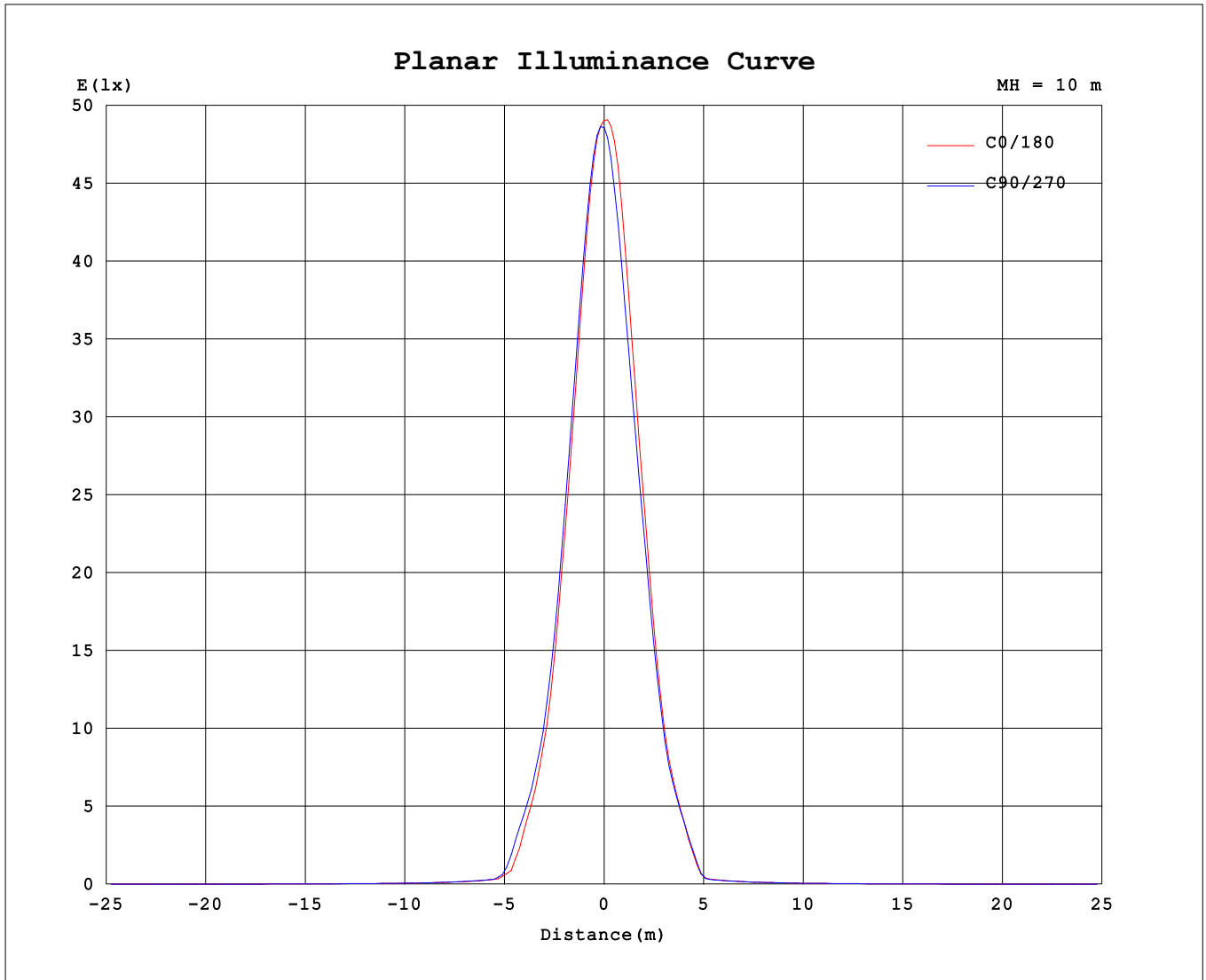
AvgL	cd/m2
L_0~180 (65) av	7131
L_0~180 (75) av	5716
L_0~180 (85) av	3682
L_90~270 (65) av	7301
L_90~270 (75) av	6190
L_90~270 (85) av	4713
L_45 (65) av	7186
L_45 (75) av	5975
L_45 (85) av	4726

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:

