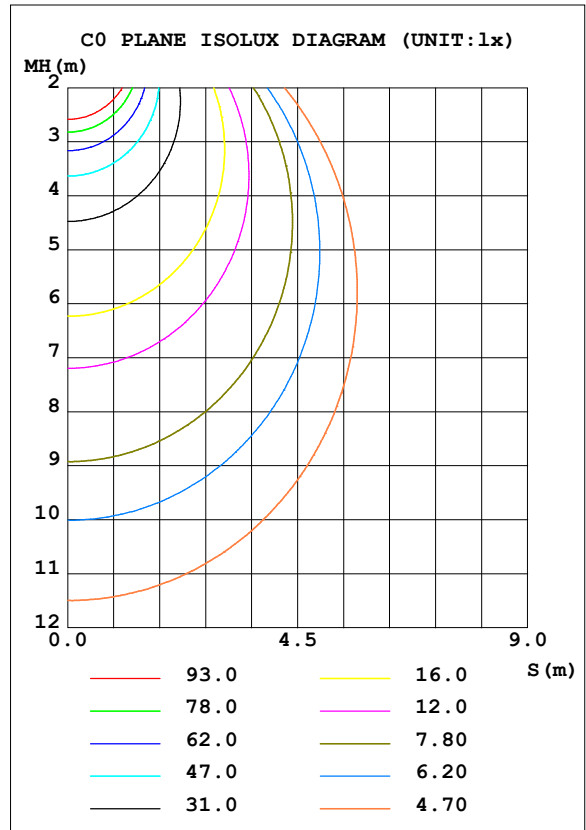
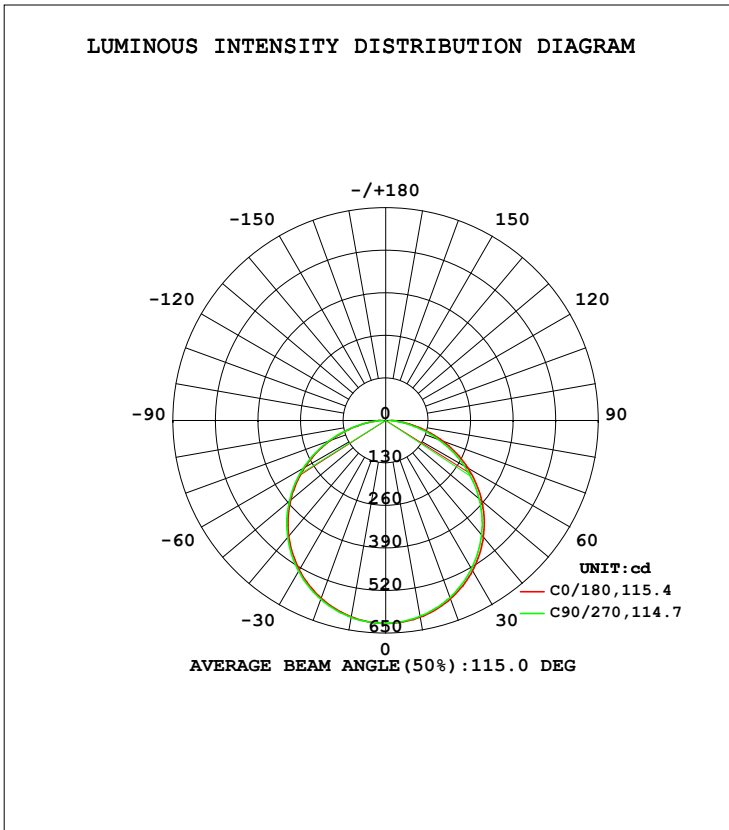


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.18V I:0.0840A P:18.120W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-5700K	TYPE: 18W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 101.00 lm/W			
MODEL	AL117-11-18W-5700K	I _{max} (cd)	620.2	S/MH (C0/180)	1.27
NOMINAL POWER (W)	18	LOR (%)	112.0	S/MH (C90/270)	1.28
RATED VOLTAGE (V)	200-240	TOTAL FLUX (lm)	1830.2	η UP, DN (C0-180)	0.0,55.8
NOMINAL FLUX (lm)	1633.45	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,56.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	112.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2020-09-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity: 65.0%
 Test Distance: 8.692m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

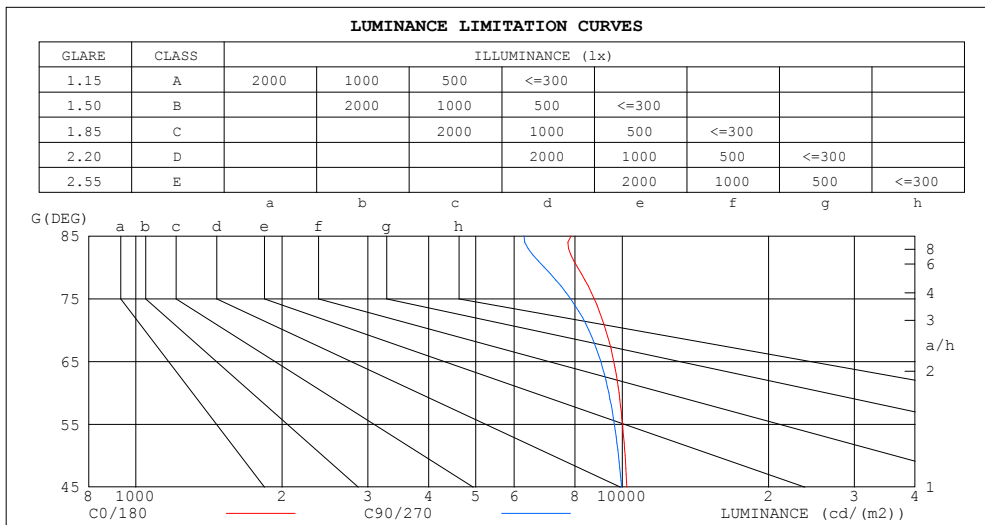
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	610.3	607.4	609.2	610.7				0- 10	58.68	58.68	3.21,3.59
20	580.0	575.3	577.4	581.3				10- 20	168.4	227.0	12.4,13.9
30	530.6	524.0	527.8	532.2				20- 30	256.2	483.3	26.4,29.6
40	464.7	456.3	461.3	466.1				30- 40	311.2	794.5	43.4,48.6
50	384.0	373.3	379.6	384.8				40- 50	326.2	1121	61.2,68.6
60	290.2	277.3	284.8	290.1				50- 60	298.7	1419	77.6,86.9
70	186.4	172.6	181.0	185.8				60- 70	231.7	1651	90.2,101
80	82.80	71.00	77.85	80.82				70- 80	135.9	1787	97.6,109
90	17.58	10.46	15.67	8.522				80- 90	43.26	1830	100,112
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: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:8.692m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.18V I:0.0840A P:18.120W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm
NAME: AL117-11-18W-5700K	TYPE: 18W	WEIGHT:	
SPEC.: 5700K	DIM.:	SERIAL No.:	
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:	



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	7855	6281
80	8095	6918
75	8760	7832
70	9254	8539
65	9612	9039
60	9855	9385
55	10019	9633
50	10142	9827
45	10229	9971

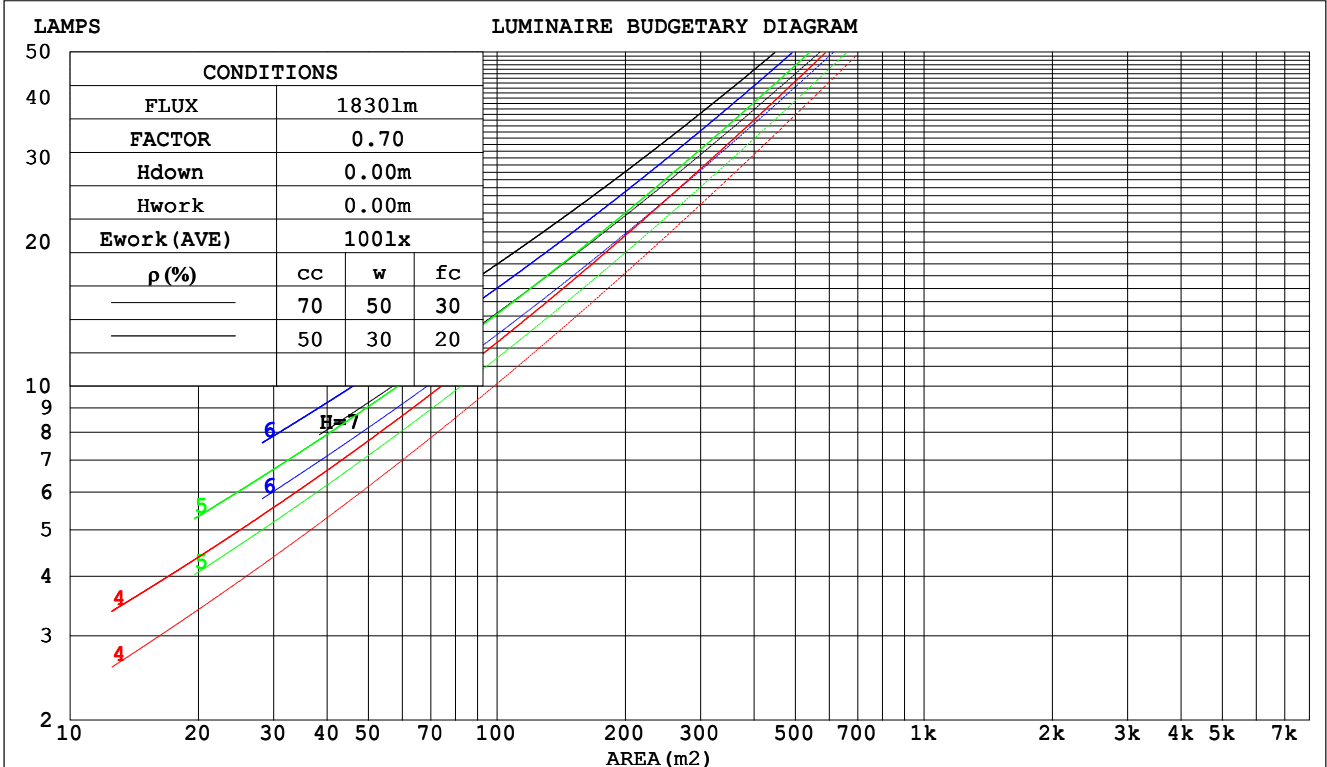
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:8.692m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.18V I:0.0840A P:18.120W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm
NAME: AL117-11-18W-5700K	TYPE: 18W	WEIGHT:	
SPEC.: 5700K	DIM.:	SERIAL No.:	
MFR.: EVERFINE	SUR.: 0.059	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%
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.33	1.33	1.33	1.30	1.30	1.30	1.24	1.24	1.24	1.19	1.19	1.19	1.14	1.14	1.14	1.12
1.0	1.16	1.11	1.06	1.13	1.09	1.05	1.09	1.05	1.01	1.04	1.01	.98	1.00	.98	.95	.93
2.0	1.01	.93	.86	.99	.91	.85	.95	.88	.83	.91	.86	.81	.87	.83	.79	.77
3.0	.88	.79	.71	.86	.78	.71	.83	.76	.69	.80	.74	.68	.77	.72	.67	.65
4.0	.78	.68	.60	.76	.67	.60	.74	.65	.59	.71	.64	.58	.69	.62	.57	.55
5.0	.70	.59	.52	.68	.59	.51	.66	.57	.51	.64	.56	.50	.62	.55	.50	.47
6.0	.63	.52	.45	.61	.52	.45	.59	.51	.44	.57	.50	.44	.56	.49	.44	.41
7.0	.57	.47	.40	.56	.46	.40	.54	.45	.39	.52	.45	.39	.51	.44	.39	.36
8.0	.52	.42	.35	.51	.42	.35	.49	.41	.35	.48	.40	.35	.47	.40	.35	.32
9.0	.47	.38	.32	.47	.38	.32	.45	.37	.31	.44	.37	.31	.43	.36	.31	.29
10.0	.44	.35	.29	.43	.34	.29	.42	.34	.29	.41	.34	.28	.40	.33	.28	.26



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:8.692m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.18V I:0.0840A P:18.120W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-5700K		TYPE: 18W		WEIGHT:	
SPEC.: 5700K		DIM.:		SERIAL No.:	
MFR.: EVERFINE		SUR.: 0.059		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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.357	.203	.064	.349	.199	.063	.334	.191	.061	.320	.185	.059	.307	.178	.057	
2.0	.333	.183	.056	.326	.180	.055	.313	.174	.054	.301	.169	.053	.290	.164	.052	
3.0	.307	.164	.049	.301	.161	.049	.289	.157	.048	.279	.153	.047	.269	.149	.046	
4.0	.283	.147	.043	.277	.145	.043	.267	.142	.042	.257	.138	.042	.249	.135	.041	
5.0	.261	.133	.039	.256	.132	.038	.247	.129	.038	.238	.126	.037	.230	.123	.037	
6.0	.242	.121	.035	.237	.120	.035	.229	.118	.034	.222	.115	.034	.214	.113	.034	
7.0	.225	.111	.031	.221	.110	.031	.214	.108	.031	.207	.106	.031	.200	.104	.031	
8.0	.210	.102	.029	.206	.102	.029	.200	.100	.028	.194	.098	.028	.188	.096	.028	
9.0	.196	.095	.027	.193	.094	.026	.187	.093	.026	.182	.091	.026	.177	.090	.026	
10.0	.185	.088	.025	.182	.088	.024	.176	.086	.024	.172	.085	.024	.167	.084	.024	

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.213	.213	.213	.182	.182	.182	.124	.124	.124	.072	.072	.072	.023	.023	.023	
1.0	.203	.175	.150	.173	.150	.129	.119	.103	.089	.068	.060	.052	.022	.019	.017	
2.0	.194	.148	.109	.166	.127	.094	.114	.088	.066	.066	.051	.039	.021	.017	.013	
3.0	.185	.128	.083	.159	.111	.072	.109	.077	.050	.063	.045	.030	.020	.015	.010	
4.0	.177	.113	.065	.152	.098	.056	.104	.068	.040	.060	.040	.023	.019	.013	.008	
5.0	.168	.102	.052	.145	.088	.046	.100	.061	.032	.058	.036	.019	.019	.012	.006	
6.0	.160	.092	.044	.138	.080	.038	.095	.056	.027	.055	.033	.016	.018	.011	.005	
7.0	.152	.085	.037	.131	.073	.032	.091	.051	.023	.053	.030	.014	.017	.010	.004	
8.0	.145	.078	.032	.125	.068	.028	.086	.048	.020	.050	.028	.012	.016	.009	.004	
9.0	.138	.072	.028	.119	.063	.024	.083	.044	.017	.048	.026	.010	.016	.009	.003	
10.0	.132	.068	.025	.114	.059	.022	.079	.041	.015	.046	.024	.009	.015	.008	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:8.692m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.18V I:0.0840A P:18.120W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-5700K		TYPE: 18W		WEIGHT:	
SPEC.: 5700K		DIM.:		SERIAL No.:	
MFR.: EVERFINE		SUR.: 0.059		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	20.9	22.4	21.2	22.7	22.9	20.7	22.3	21.0	22.5	22.7
3H	22.5	23.9	22.8	24.2	24.4	22.3	23.7	22.6	23.9	24.2
4H	23.2	24.5	23.5	24.8	25.0	22.9	24.2	23.2	24.5	24.7
6H	23.7	25.0	24.0	25.2	25.5	23.3	24.6	23.6	24.8	25.1
8H	23.8	25.1	24.2	25.4	25.7	23.4	24.6	23.7	24.9	25.2
12H	24.0	25.1	24.3	25.4	25.7	23.5	24.7	23.8	25.0	25.3
4H 2H	21.5	22.9	21.8	23.1	23.4	21.4	22.7	21.7	23.0	23.3
3H	23.3	24.5	23.7	24.8	25.1	23.1	24.3	23.5	24.6	24.9
4H	24.1	25.2	24.5	25.5	25.8	23.8	24.9	24.2	25.2	25.6
6H	24.7	25.7	25.1	26.0	26.4	24.4	25.3	24.8	25.7	26.0
8H	24.9	25.8	25.4	26.2	26.6	24.5	25.4	24.9	25.8	26.2
12H	25.1	25.9	25.5	26.3	26.7	24.7	25.5	25.1	25.9	26.3
8H 4H	24.4	25.3	24.8	25.6	26.0	24.1	25.0	24.5	25.4	25.8
6H	25.1	25.9	25.6	26.3	26.7	24.8	25.6	25.2	26.0	26.4
8H	25.4	26.1	25.9	26.5	27.0	25.1	25.7	25.5	26.2	26.6
12H	25.7	26.3	26.2	26.7	27.2	25.3	25.9	25.8	26.3	26.8
12H 4H	24.4	25.2	24.8	25.6	26.0	24.1	25.0	24.6	25.3	25.8
6H	25.2	25.9	25.6	26.3	26.7	24.9	25.5	25.3	26.0	26.4
8H	25.5	26.1	26.0	26.6	27.1	25.2	25.8	25.7	26.2	26.7
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 1633 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.7)
 Area: 0.059 m2

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:8.692m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.18V I:0.0840A P:18.120W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm
NAME: AL117-11-18W-5700K	TYPE: 18W	WEIGHT:	
SPEC.: 5700K	DIM.:	SERIAL No.:	
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:	

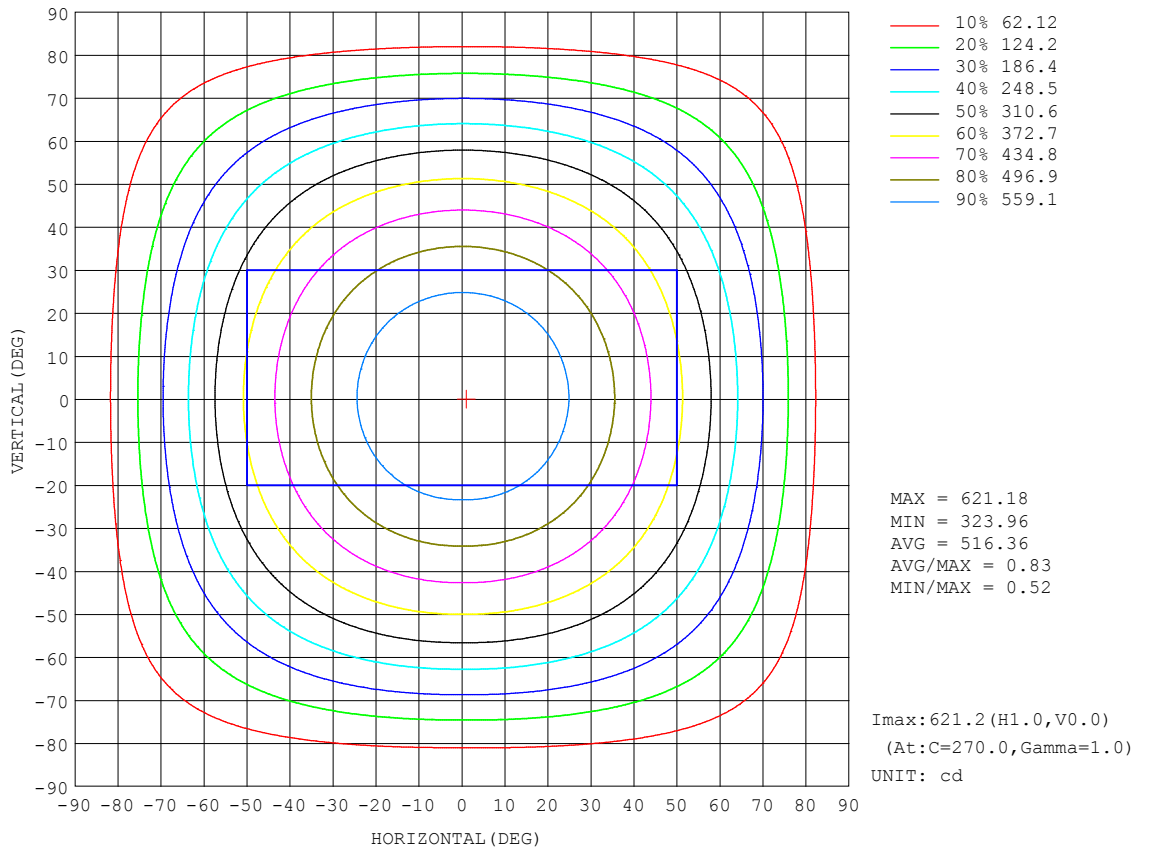
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	64	51	43	63	50	43	62	50	42	35
0.80	75	62	53	74	61	53	72	60	53	45
1.00	84	72	63	83	71	63	80	73	62	54
1.25	92	80	72	91	80	72	88	78	71	63
1.50	98	87	79	96	86	78	93	84	77	68
2.00	106	96	89	104	95	88	100	92	86	77
2.50	110	101	94	108	100	93	104	97	91	82
3.00	114	106	100	112	104	99	107	101	96	87
4.00	119	112	107	116	110	105	111	106	102	92
5.00	121	116	111	119	114	109	114	110	106	96
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:8.692m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.18V I:0.0840A P:18.120W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-5700K	TYPE: 18W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:

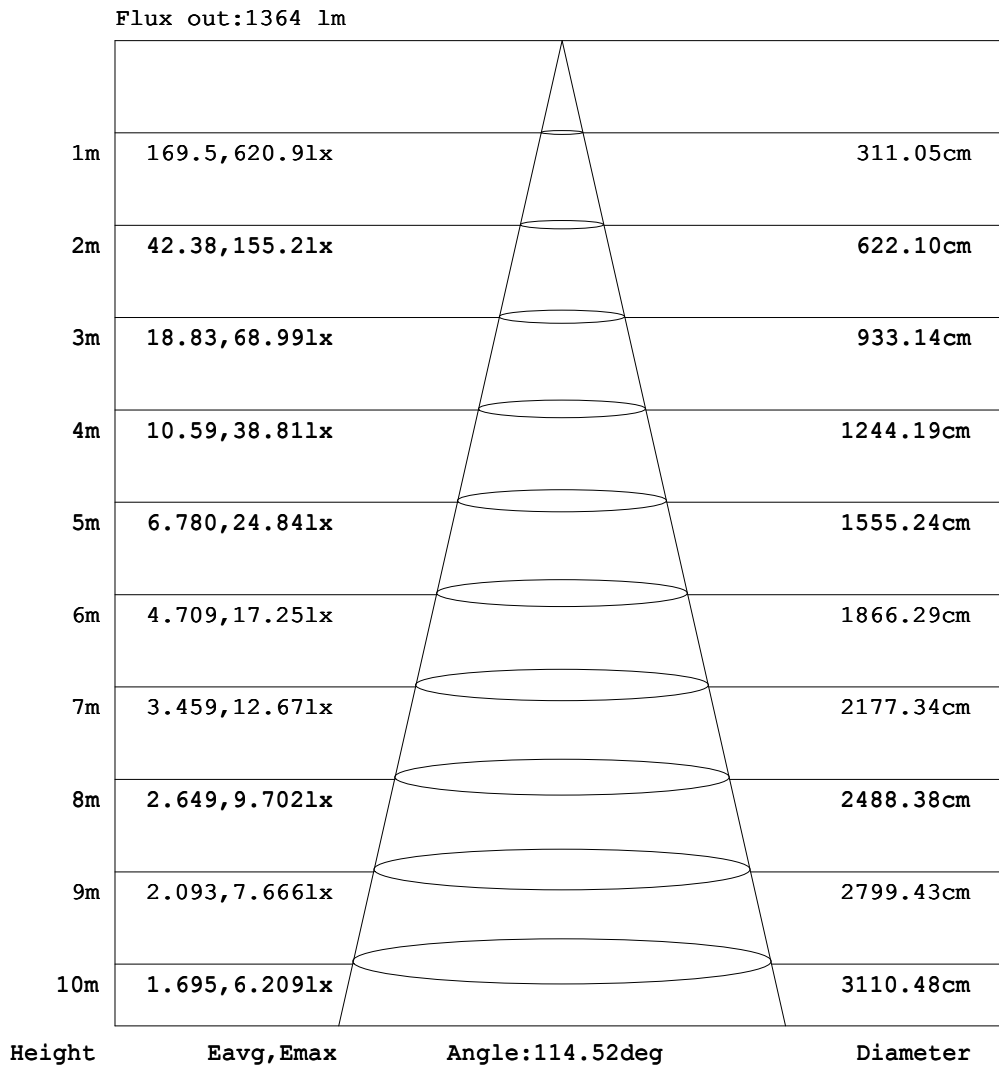


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2020-09-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity: 65.0%
 Test Distance: 8.692m [K=1.0000]
 Remarks:

AAI Figure

Test:U:230.18V I:0.0840A P:18.120W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-5700K	TYPE: 18W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:



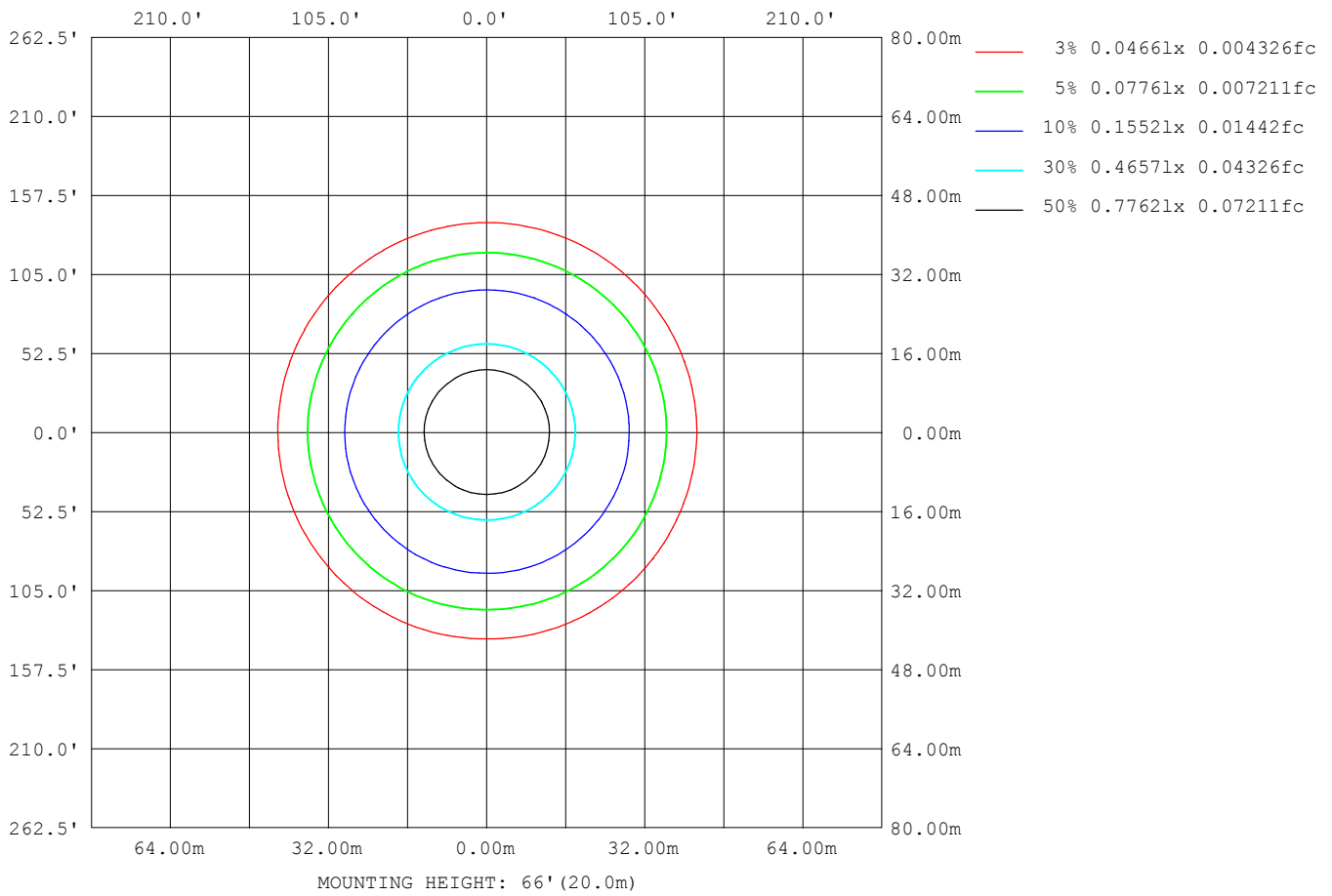
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:8.692m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.18V I:0.0840A P:18.120W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0%		Lamp Flux:1633.45x1 lm
NAME: AL117-11-18W-5700K	TYPE: 18W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:8.692m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:230.18V I:0.0840A P:18.120W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-5700K	TYPE: 18W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:

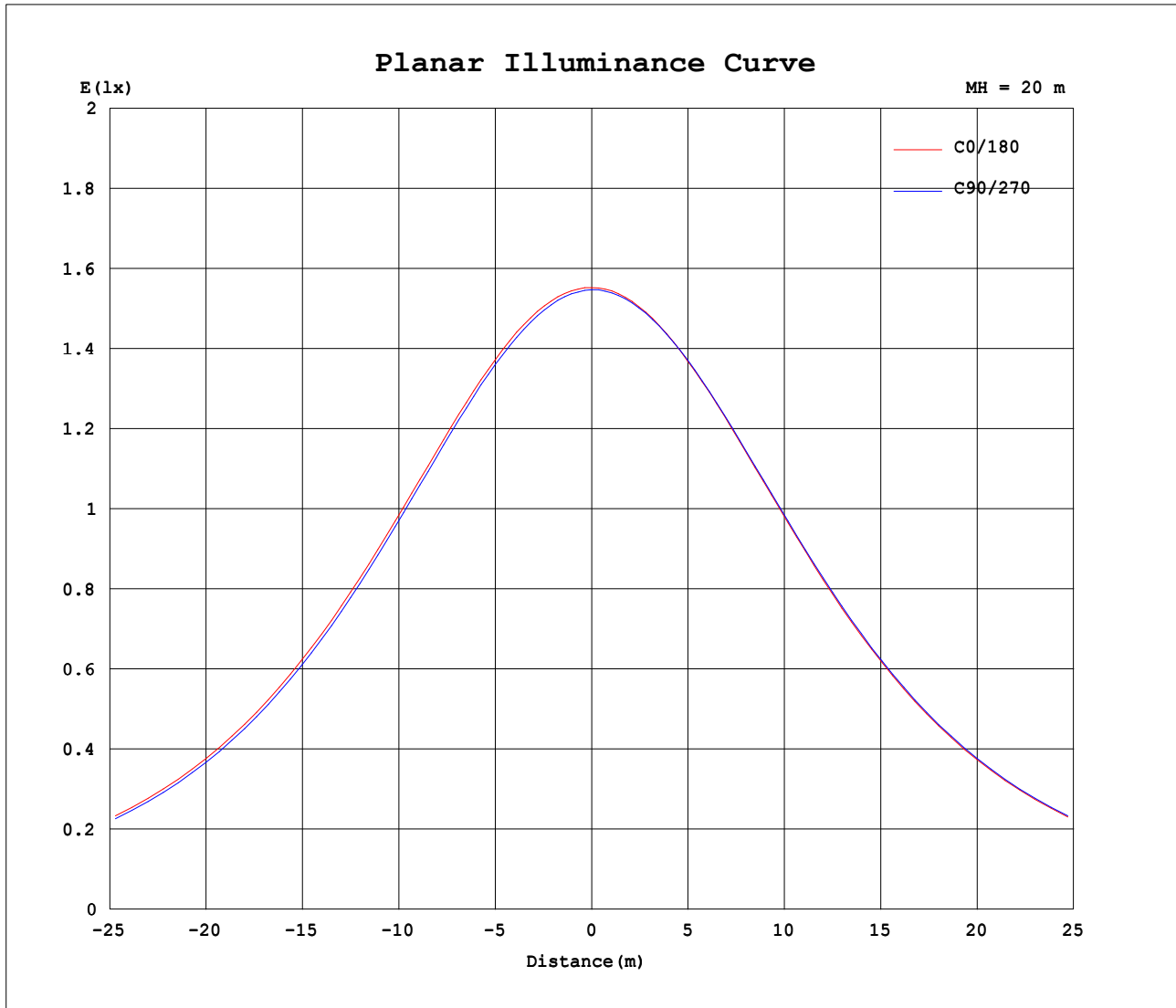
AvgL	cd/m2
L_0~180 (65) av	9481
L_0~180 (75) av	8564
L_0~180 (85) av	7490
L_90~270 (65) av	9317
L_90~270 (75) av	8252
L_90~270 (85) av	6724
L_45 (65) av	9372
L_45 (75) av	8358
L_45 (85) av	6990

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:8.692m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2020-09-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity: 65.0%
 Test Distance: 8.692m [K=1.0000]
 Remarks:

