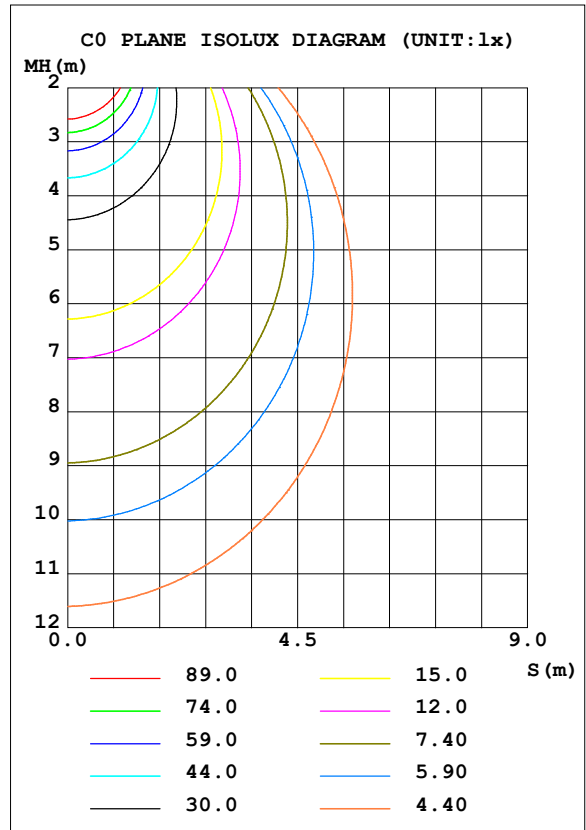
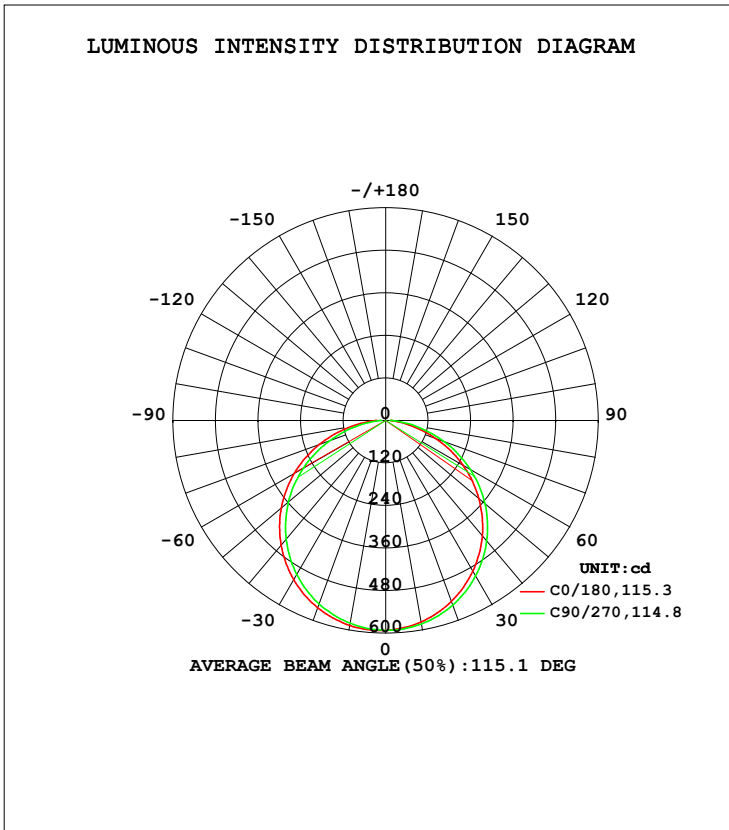


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.16V I:0.0834A P:18.036W PF:0.9391 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-3000K	TYPE: 18W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 97.15 lm/W			
MODEL	AL117-11-18W-3000K	I _{max} (cd)	592.6	S/MH (C0/180)	1.30
NOMINAL POWER (W)	18	LOR (%)	107.3	S/MH (C90/270)	1.26
RATED VOLTAGE (V)	200-240	TOTAL FLUX (lm)	1752.3	η UP, DN (C0-180)	0.0,52.2
NOMINAL FLUX (lm)	1633.45	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,55.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	107.3	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:

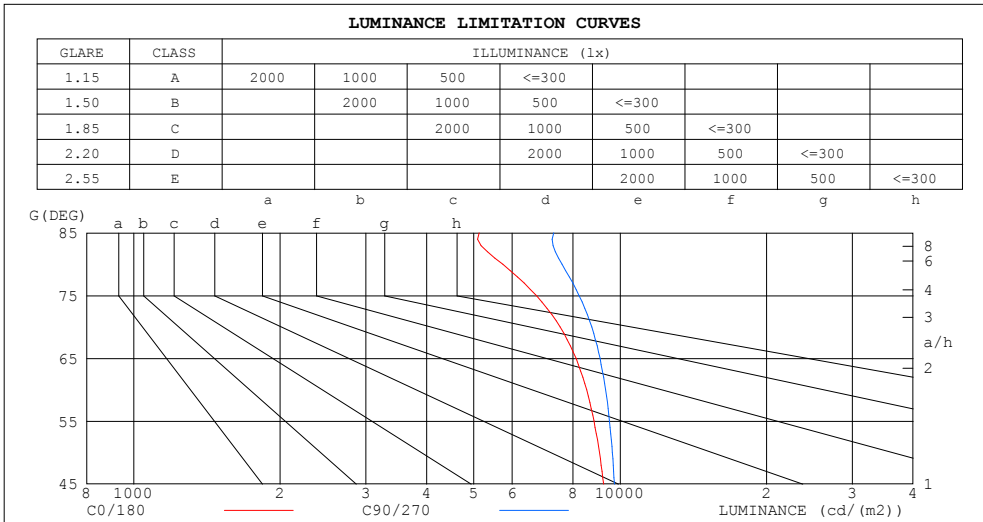
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum,lamp
10	577.1	582.7	587.1	580.8				0- 10	56.03	56.03	3.2,3.43
20	543.0	554.2	562.0	550.6				10- 20	160.8	216.8	12.4,13.3
30	491.6	507.0	519.0	501.9				20- 30	244.6	461.4	26.3,28.2
40	424.3	443.5	459.1	437.1				30- 40	297.1	758.5	43.3,46.4
50	343.5	366.0	384.7	358.3				40- 50	311.3	1070	61.1,65.5
60	251.5	275.6	297.2	267.5				50- 60	285.3	1355	77.3,83
70	151.7	176.5	200.0	168.0				60- 70	221.7	1577	90,96.5
80	58.72	77.89	99.04	70.63				70- 80	131.2	1708	97.5,105
90	14.37	12.57	23.72	11.16				80- 90	44.30	1752	100,107
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:230.16V I:0.0834A P:18.036W PF:0.9391 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm
NAME: AL117-11-18W-3000K	TYPE: 18W	WEIGHT:	
SPEC.: 3000K	DIM.:	SERIAL No.:	
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:	



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	5130	7299
80	5737	7596
75	6731	8235
70	7523	8741
65	8118	9090
60	8533	9334
55	8834	9504
50	9066	9642
45	9248	9737

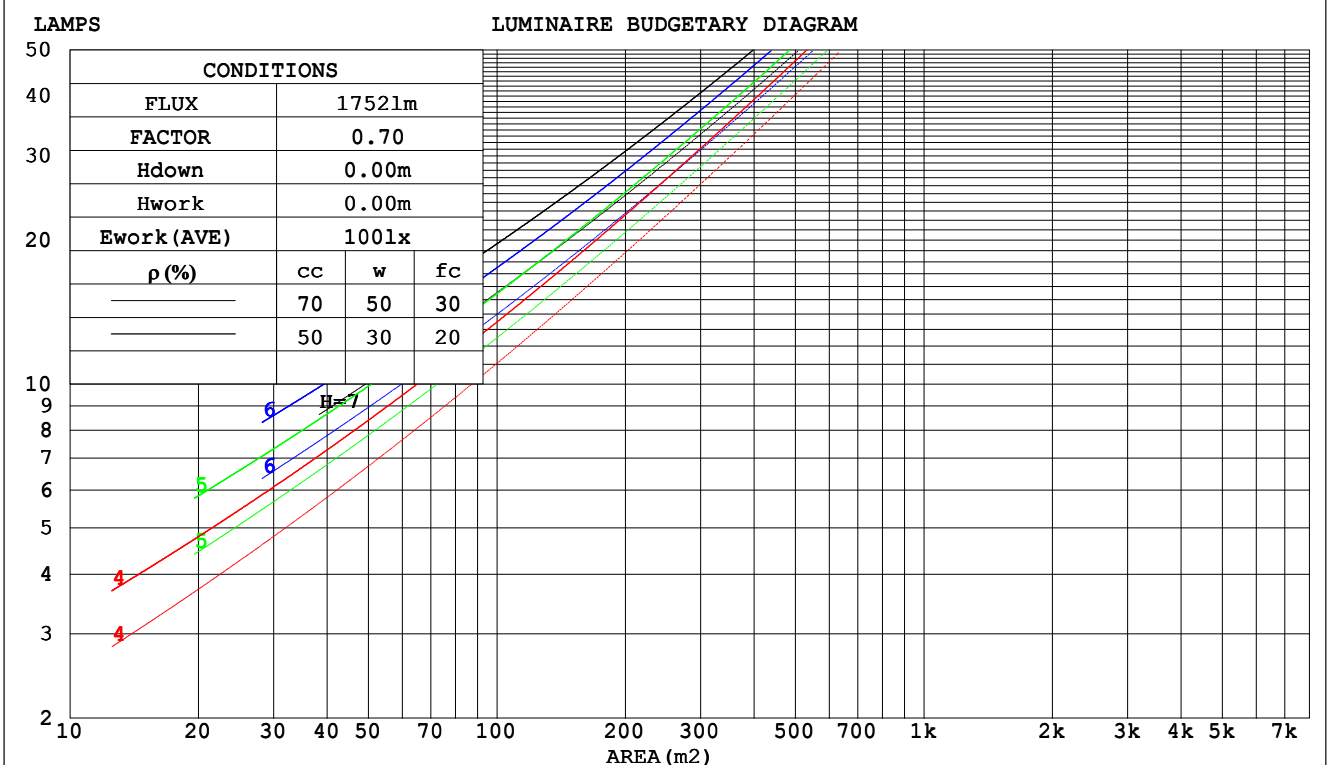
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-11

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:230.16V I:0.0834A P:18.036W PF:0.9391 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm
NAME: AL117-11-18W-3000K	TYPE: 18W	WEIGHT:	
SPEC.: 3000K	DIM.:	SERIAL No.:	
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:	

pcc	80%			70%			50%			30%			10%			0		
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0		
pw	0																	
pfc	20%			20%			20%			20%			20%			0		
RCR	RCR:Room Cavity Ratio Coefficients of Utilization(CU)																	
0.0	1.28	1.28	1.28	1.25	1.25	1.25	1.19	1.19	1.19	1.14	1.14	1.14	1.09	1.09	1.09	1.07		
1.0	1.11	1.06	1.02	1.08	1.04	1.00	1.04	1.00	.97	.00	.97	.94	.96	.93	.91	.89		
2.0	.96	.89	.82	.94	.87	.81	.90	.85	.79	.87	.82	.78	.84	.79	.76	.74		
3.0	.84	.75	.68	.83	.74	.68	.79	.72	.66	.76	.70	.65	.74	.68	.64	.62		
4.0	.75	.65	.58	.73	.64	.57	.70	.63	.56	.68	.61	.56	.65	.60	.55	.52		
5.0	.66	.57	.49	.65	.56	.49	.63	.55	.49	.61	.54	.48	.59	.53	.47	.45		
6.0	.60	.50	.43	.59	.50	.43	.57	.49	.42	.55	.48	.42	.53	.47	.42	.39		
7.0	.54	.45	.38	.53	.44	.38	.52	.43	.37	.50	.43	.37	.49	.42	.37	.35		
8.0	.49	.40	.34	.49	.40	.34	.47	.39	.33	.46	.39	.33	.45	.38	.33	.31		
9.0	.45	.36	.30	.45	.36	.30	.43	.36	.30	.42	.35	.30	.41	.35	.30	.28		
10.0	.42	.33	.27	.41	.33	.27	.40	.33	.27	.39	.32	.27	.38	.32	.27	.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:

WEC AND CCEC

Test:U:230.16V I:0.0834A P:18.036W PF:0.9391 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-3000K		TYPE: 18W		WEIGHT:	
SPEC.: 3000K		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	.344	.195	.062	.336	.192	.061	.322	.185	.059	.309	.178	.057	.296	.172	.055	
2.0	.320	.176	.054	.314	.173	.053	.301	.167	.052	.289	.162	.051	.279	.158	.050	
3.0	.295	.157	.047	.289	.155	.047	.278	.151	.046	.268	.147	.045	.258	.143	.044	
4.0	.271	.141	.041	.266	.139	.041	.256	.136	.041	.247	.133	.040	.238	.130	.039	
5.0	.250	.128	.037	.246	.126	.037	.237	.123	.036	.229	.121	.036	.221	.118	.035	
6.0	.232	.116	.033	.228	.115	.033	.220	.113	.033	.212	.110	.032	.206	.108	.032	
7.0	.215	.107	.030	.212	.105	.030	.205	.104	.030	.198	.102	.030	.192	.100	.029	
8.0	.201	.098	.028	.198	.097	.028	.191	.096	.027	.186	.094	.027	.180	.092	.027	
9.0	.188	.091	.025	.185	.090	.025	.180	.089	.025	.174	.087	.025	.169	.086	.025	
10.0	.177	.085	.024	.174	.084	.023	.169	.083	.023	.164	.082	.023	.160	.080	.023	

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	.204	.204	.204	.175	.175	.175	.119	.119	.119	.068	.068	.068	.022	.022	.022	
1.0	.194	.167	.143	.166	.144	.123	.114	.099	.085	.065	.057	.050	.021	.018	.016	
2.0	.186	.141	.104	.159	.122	.090	.109	.084	.063	.063	.049	.037	.020	.016	.012	
3.0	.177	.123	.079	.152	.106	.068	.104	.074	.048	.060	.043	.028	.019	.014	.009	
4.0	.169	.108	.062	.145	.094	.054	.100	.065	.038	.058	.038	.022	.019	.012	.007	
5.0	.161	.097	.050	.138	.084	.044	.095	.059	.031	.055	.035	.018	.018	.011	.006	
6.0	.153	.088	.042	.132	.077	.036	.091	.054	.026	.053	.032	.015	.017	.010	.005	
7.0	.146	.081	.035	.126	.070	.031	.087	.049	.022	.050	.029	.013	.016	.009	.004	
8.0	.139	.075	.031	.120	.065	.027	.083	.046	.019	.048	.027	.011	.016	.009	.004	
9.0	.132	.069	.027	.114	.060	.023	.079	.042	.017	.046	.025	.010	.015	.008	.003	
10.0	.126	.065	.024	.109	.056	.021	.076	.040	.015	.044	.023	.009	.014	.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:230.16V I:0.0834A P:18.036W PF:0.9391 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-3000K		TYPE: 18W		WEIGHT:	
SPEC.: 3000K		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	20.3	21.9	20.6	22.1	22.3	20.6	22.2	20.9	22.4	22.6
3H	21.8	23.2	22.1	23.4	23.7	22.2	23.7	22.5	23.9	24.1
4H	22.3	23.7	22.6	23.9	24.2	22.9	24.3	23.2	24.5	24.8
6H	22.7	23.9	23.0	24.2	24.5	23.4	24.7	23.7	24.9	25.2
8H	22.8	24.0	23.1	24.3	24.6	23.5	24.8	23.9	25.1	25.4
12H	22.8	24.0	23.2	24.3	24.6	23.7	24.9	24.0	25.1	25.5
4H 2H	21.0	22.3	21.3	22.6	22.9	21.2	22.6	21.5	22.8	23.1
3H	22.6	23.8	23.0	24.1	24.4	23.0	24.2	23.4	24.5	24.8
4H	23.3	24.4	23.6	24.7	25.0	23.8	24.9	24.2	25.2	25.5
6H	23.7	24.7	24.1	25.1	25.4	24.4	25.4	24.8	25.7	26.1
8H	23.9	24.8	24.3	25.2	25.5	24.6	25.5	25.0	25.9	26.3
12H	24.0	24.8	24.4	25.2	25.6	24.8	25.6	25.2	26.0	26.4
8H 4H	23.6	24.5	24.0	24.8	25.2	24.0	24.9	24.4	25.3	25.7
6H	24.2	24.9	24.6	25.3	25.8	24.8	25.5	25.2	25.9	26.4
8H	24.4	25.1	24.9	25.5	26.0	25.1	25.8	25.5	26.2	26.6
12H	24.6	25.2	25.1	25.6	26.1	25.3	25.9	25.8	26.4	26.9
12H 4H	23.6	24.4	24.0	24.8	25.2	24.0	24.8	24.4	25.2	25.6
6H	24.2	24.9	24.7	25.3	25.8	24.8	25.5	25.3	25.9	26.4
8H	24.5	25.1	25.0	25.5	26.0	25.2	25.7	25.6	26.2	26.7
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.2 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 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:230.16V I:0.0834A P:18.036W PF:0.9391 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm
NAME: AL117-11-18W-3000K	TYPE: 18W	WEIGHT:	
SPEC.: 3000K	DIM.:	SERIAL No.:	
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:	

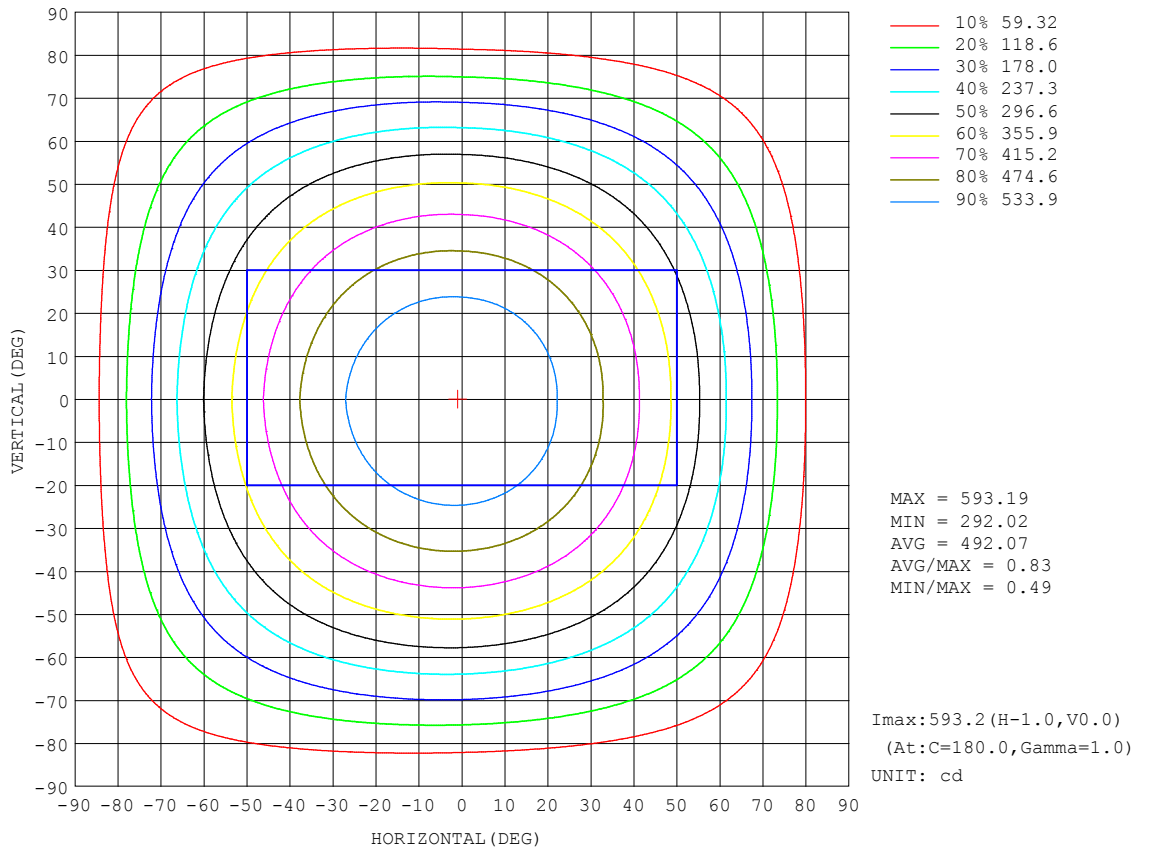
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	61	48	41	60	48	41	59	48	40	33
0.80	72	59	51	71	59	51	69	58	50	43
1.00	81	69	61	79	68	60	77	69	60	52
1.25	88	77	69	87	76	69	84	74	68	60
1.50	94	83	75	92	82	75	89	80	73	65
2.00	101	92	85	99	90	84	95	88	82	74
2.50	105	97	90	103	95	89	99	92	87	78
3.00	109	101	95	107	100	94	102	97	92	83
4.00	113	107	102	111	105	100	106	102	98	88
5.00	116	111	106	113	109	105	109	105	101	91
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:230.16V I:0.0834A P:18.036W PF:0.9391 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-3000K	TYPE: 18W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:

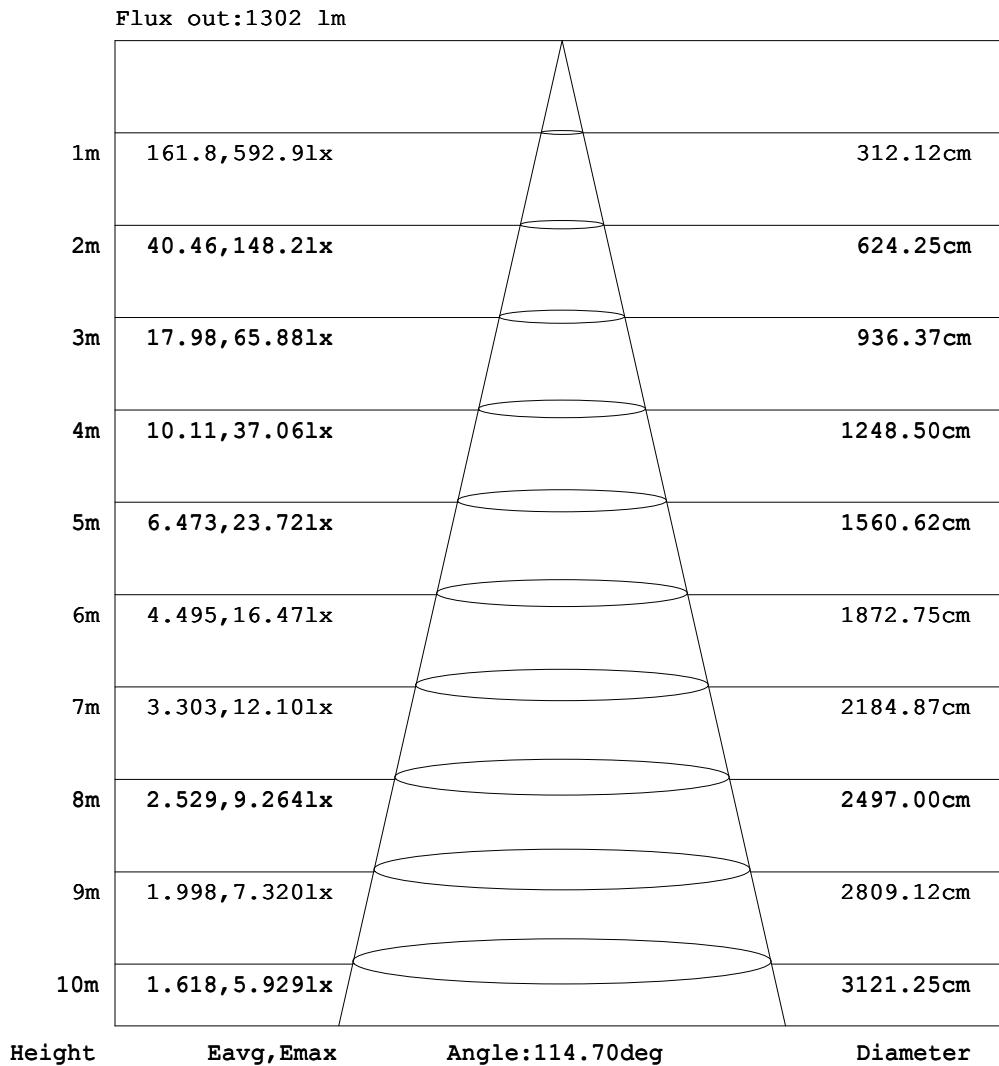


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-11

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:230.16V I:0.0834A P:18.036W PF:0.9391 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-3000K	TYPE: 18W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:



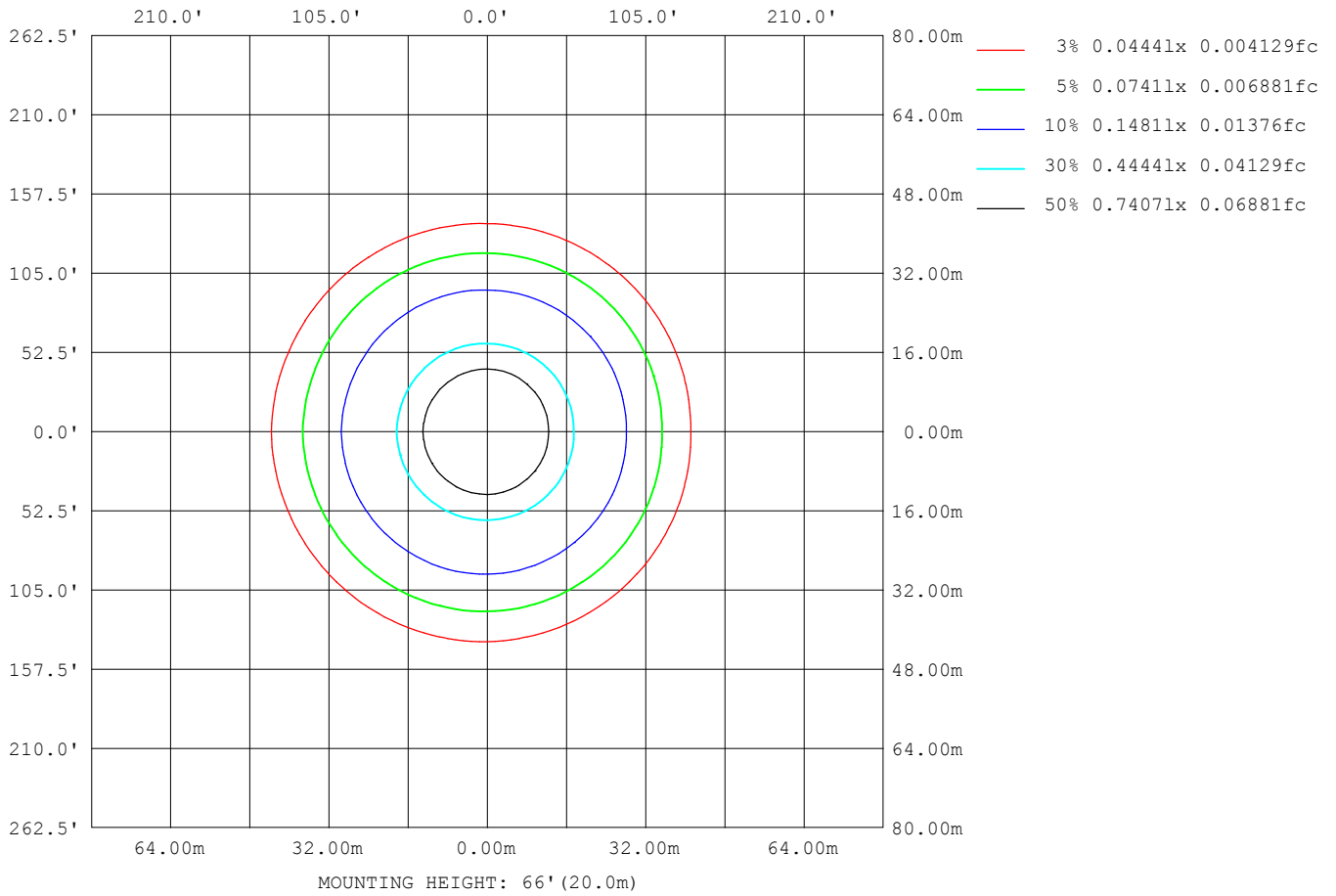
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:230.16V I:0.0834A P:18.036W PF:0.9391 Freq:49.99Hz UTHDi:0% ITHDi:0%		Lamp Flux:1633.45x1 lm
NAME: AL117-11-18W-3000K	TYPE: 18W	WEIGHT:
SPEC.: 3000K	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:230.16V I:0.0834A P:18.036W PF:0.9391 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-3000K	TYPE: 18W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:

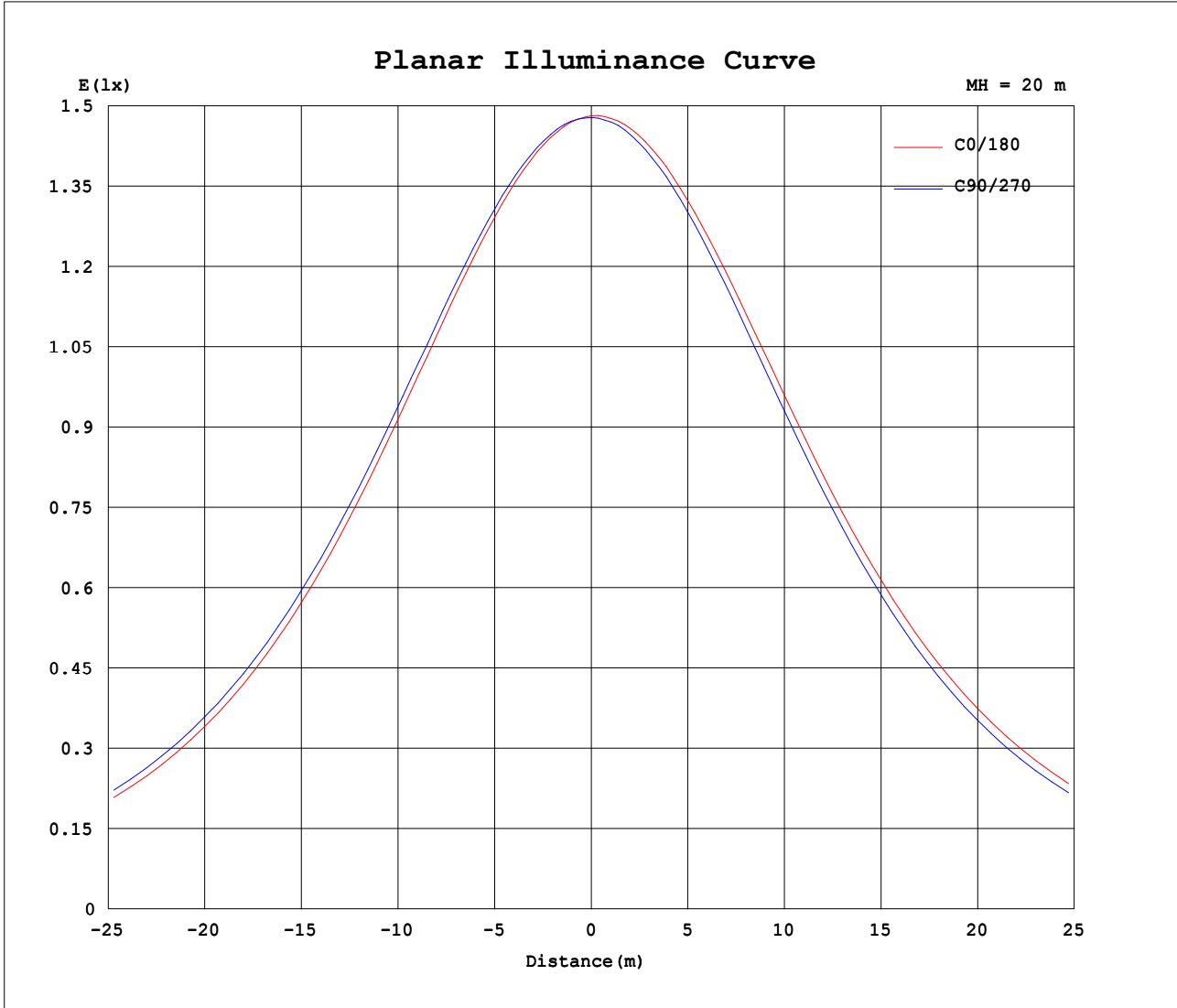
AvgL	cd/m2
L_0~180 (65) av	9060
L_0~180 (75) av	8254
L_0~180 (85) av	7837
L_90~270 (65) av	8934
L_90~270 (75) av	7978
L_90~270 (85) av	6829
L_45 (65) av	9041
L_45 (75) av	8177
L_45 (85) av	7377

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
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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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.16V I:0.0834A P:18.036W PF:0.9391 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-18W-3000K	TYPE: 18W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.059	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	90	180	270																
0	592	592	592	592																
5	587	590	592	589																
10	577	583	587	581																
15	562	571	577	568																
20	543	554	562	551																
25	519	533	543	528																
30	492	507	519	502																
35	460	477	491	471																
40	424	443	459	437																
45	385	407	424	399																
50	343	366	385	358																
55	299	322	342	314																
60	251	276	297	267																
65	202	227	250	219																
70	152	177	200	168																
75	103	126	149	118																
80	58.7	77.9	99.0	70.6																
85	26.4	37.6	54.2	32.7																
90	14.4	12.6	23.7	11.2																

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: