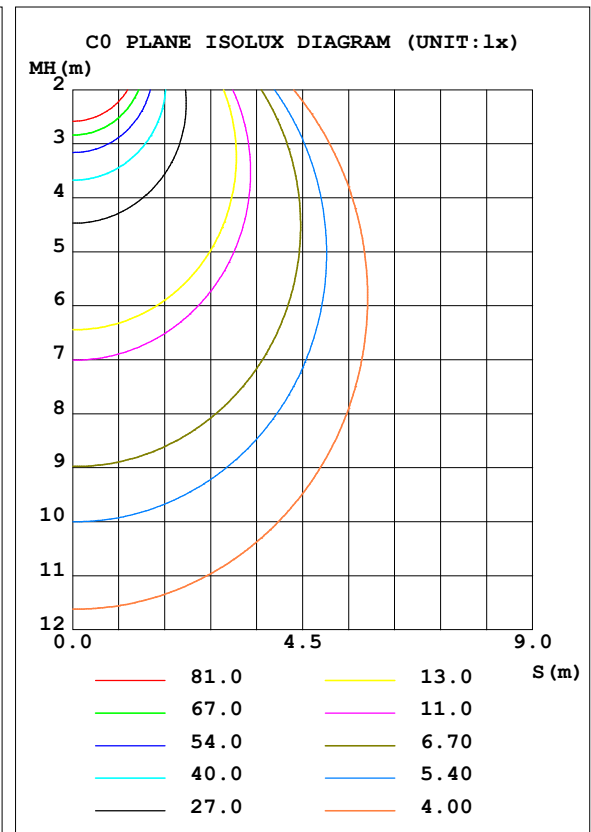
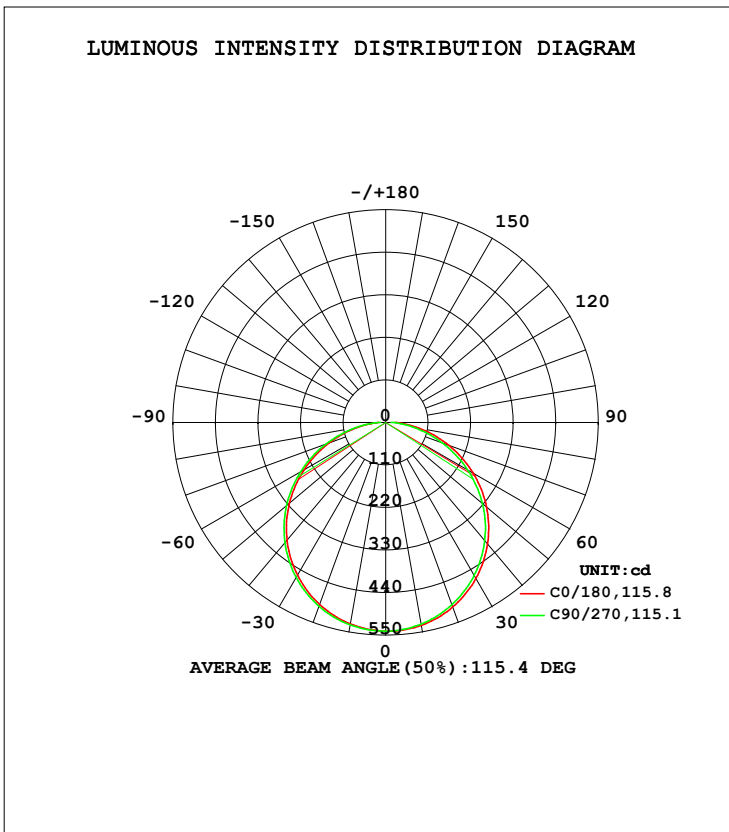


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.15V I:0.0683A P:14.234W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-15W-C3-4000K	TYPE: 15W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 113.64 lm/W			
MODEL	AL117-11-15W-C3-4000K	I _{max} (cd)	539.8	S/MH (C0/180)	1.26
NOMINAL POWER (W)	15	LOR (%)	99.0	S/MH (C90/270)	1.28
RATED VOLTAGE (V)	200-240	TOTAL FLUX (lm)	1617.6	η UP, DN (C0-180)	0.0, 49.9
NOMINAL FLUX (lm)	1633.45	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	99.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2020-09-10

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:

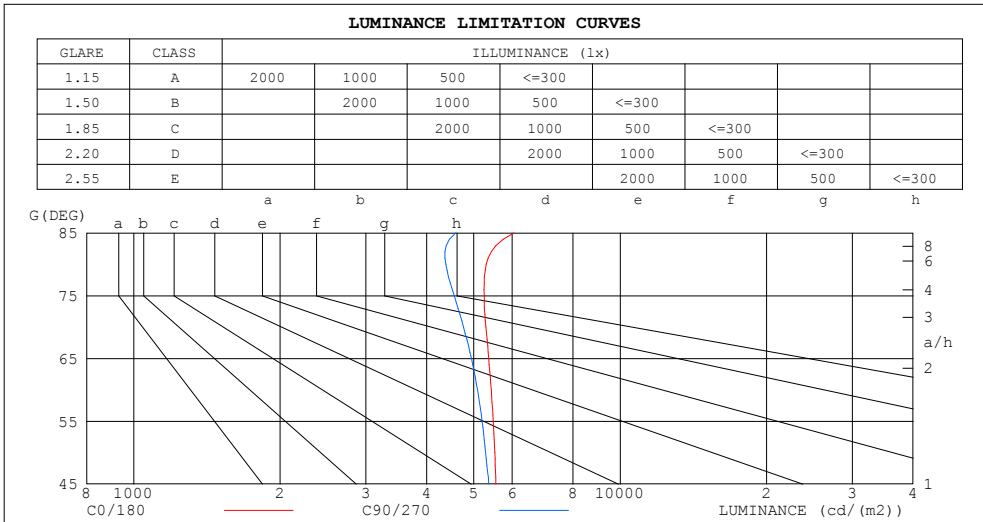
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	532.6	529.3	529.1	531.5				0- 10	51.08	51.08	3.16,3.13
20	507.7	501.4	500.7	505.6				10- 20	146.6	197.7	12.2,12.1
30	466.4	457.3	456.3	463.0				20- 30	223.2	420.9	26,25.8
40	410.0	398.6	397.2	405.5				30- 40	271.2	692.1	42.8,42.4
50	340.8	326.5	325.1	334.8				40- 50	284.5	976.6	60.4,59.8
60	260.7	244.4	243.3	253.4				50- 60	261.1	1238	76.5,75.8
70	173.9	156.5	156.1	165.2				60- 70	204.8	1443	89.2,88.3
80	88.43	73.03	72.94	79.63				70- 80	126.6	1569	97,96.1
90	24.46	14.29	18.22	13.98				80- 90	48.42	1618	100,99
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:2020-09-10

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:230.15V I:0.0683A P:14.234W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm
NAME: AL117-11-15W-C3-4000K	TYPE: 15W	WEIGHT:	
SPEC.: 4000K	DIM.:	SERIAL No.:	
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:	



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	6053	4593
80	5306	4380
75	5252	4560
70	5297	4765
65	5370	4946
60	5433	5090
55	5486	5203
50	5525	5290
45	5555	5367

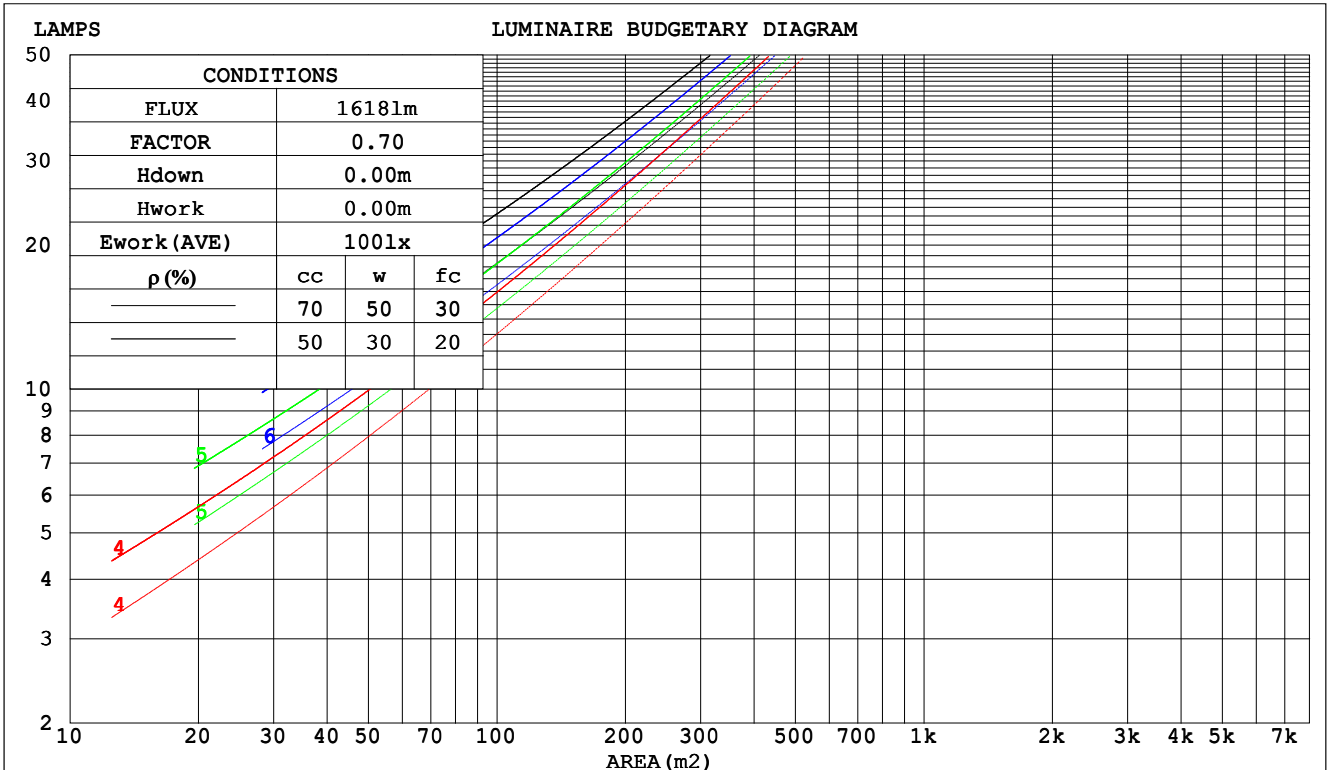
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-10

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:230.15V I:0.0683A P:14.234W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm
NAME: AL117-11-15W-C3-4000K	TYPE: 15W	WEIGHT:	
SPEC.: 4000K	DIM.:	SERIAL No.:	
MFR.: EVERFINE	SUR.: D0.35	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	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.99
1.0	1.02	.97	.93	.00	.96	.92	.95	.92	.89	.92	.89	.86	.88	.86	.84	.82
2.0	.88	.81	.75	.87	.80	.75	.83	.78	.73	.80	.75	.71	.77	.73	.70	.67
3.0	.77	.69	.62	.76	.68	.62	.73	.66	.61	.70	.64	.60	.68	.63	.59	.56
4.0	.68	.59	.53	.67	.59	.52	.65	.57	.51	.62	.56	.51	.60	.55	.50	.48
5.0	.61	.52	.45	.60	.51	.45	.58	.50	.44	.56	.49	.44	.54	.48	.43	.41
6.0	.55	.46	.39	.54	.45	.39	.52	.44	.39	.50	.44	.38	.49	.43	.38	.36
7.0	.50	.41	.35	.49	.40	.34	.47	.40	.34	.46	.39	.34	.45	.38	.34	.32
8.0	.45	.37	.31	.45	.36	.31	.43	.36	.31	.42	.35	.30	.41	.35	.30	.28
9.0	.42	.33	.28	.41	.33	.28	.40	.33	.27	.39	.32	.27	.38	.32	.27	.25
10.0	.38	.30	.25	.38	.30	.25	.37	.30	.25	.36	.29	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-10

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:230.15V I:0.0683A P:14.234W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm		
NAME: AL117-11-15W-C3-4000K		TYPE: 15W		WEIGHT:	
SPEC.: 4000K		DIM.:		SERIAL No.:	
MFR.: EVERFINE		SUR.: D0.35		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	.324	.184	.058	.317	.181	.057	.303	.174	.056	.291	.168	.054	.280	.162	.052	
2.0	.299	.164	.050	.293	.162	.050	.282	.157	.049	.271	.152	.048	.261	.148	.047	
3.0	.275	.146	.044	.269	.144	.043	.259	.140	.043	.249	.137	.042	.241	.133	.041	
4.0	.252	.131	.039	.247	.130	.038	.238	.126	.038	.230	.123	.037	.222	.121	.037	
5.0	.232	.118	.034	.228	.117	.034	.220	.115	.034	.212	.112	.033	.205	.110	.033	
6.0	.215	.108	.031	.211	.107	.031	.204	.104	.030	.197	.102	.030	.191	.100	.030	
7.0	.200	.099	.028	.196	.098	.028	.190	.096	.028	.184	.094	.027	.178	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.174	.084	.024	.172	.084	.023	.166	.082	.023	.161	.081	.023	.157	.080	.023	
10.0	.164	.078	.022	.161	.078	.022	.157	.077	.022	.152	.076	.021	.148	.074	.021	

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	.189	.189	.189	.161	.161	.161	.110	.110	.110	.063	.063	.063	.020	.020	.020	
1.0	.180	.154	.132	.154	.133	.113	.105	.091	.078	.061	.053	.046	.019	.017	.015	
2.0	.172	.131	.096	.147	.112	.083	.101	.078	.058	.058	.045	.034	.019	.015	.011	
3.0	.164	.113	.073	.141	.098	.063	.097	.068	.044	.056	.040	.026	.018	.013	.009	
4.0	.157	.100	.057	.134	.087	.049	.092	.060	.035	.053	.035	.021	.017	.011	.007	
5.0	.149	.090	.046	.128	.078	.040	.088	.054	.028	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.038	.122	.071	.033	.084	.049	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.028	.080	.045	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.069	.028	.111	.060	.025	.077	.042	.017	.045	.025	.010	.014	.008	.003	
9.0	.123	.064	.025	.106	.056	.022	.073	.039	.015	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.019	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-10

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:230.15V I:0.0683A P:14.234W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0%		Lamp Flux:1633.45x1 lm
NAME: AL117-11-15W-C3-4000K	TYPE: 15W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: D0.35	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	18.8	20.4	19.1	20.6	20.8	18.6	20.2	18.9	20.4	20.6
3H	20.5	22.0	20.8	22.2	22.5	20.2	21.6	20.5	21.9	22.1
4H	21.3	22.7	21.6	22.9	23.2	20.9	22.2	21.2	22.5	22.7
6H	21.9	23.2	22.3	23.5	23.8	21.4	22.7	21.7	23.0	23.2
8H	22.2	23.4	22.5	23.7	24.0	21.6	22.8	21.9	23.1	23.4
12H	22.4	23.6	22.8	23.9	24.2	21.7	22.9	22.1	23.2	23.5
4H 2H	19.5	20.8	19.8	21.1	21.3	19.3	20.7	19.6	20.9	21.2
3H	21.4	22.6	21.7	22.9	23.2	21.1	22.3	21.4	22.6	22.9
4H	22.2	23.4	22.6	23.7	24.0	21.9	23.0	22.3	23.3	23.6
6H	23.0	24.0	23.4	24.4	24.7	22.5	23.5	22.9	23.9	24.2
8H	23.4	24.3	23.8	24.6	25.0	22.8	23.7	23.2	24.1	24.5
12H	23.7	24.5	24.1	24.9	25.3	23.0	23.9	23.4	24.2	24.7
8H 4H	22.6	23.5	23.0	23.8	24.2	22.2	23.1	22.6	23.5	23.9
6H	23.5	24.3	24.0	24.7	25.1	23.1	23.8	23.5	24.2	24.7
8H	24.0	24.6	24.4	25.1	25.5	23.4	24.1	23.9	24.6	25.0
12H	24.4	25.0	24.9	25.4	25.9	23.8	24.4	24.3	24.8	25.3
12H 4H	22.6	23.4	23.0	23.8	24.2	22.3	23.1	22.7	23.5	23.9
6H	23.6	24.3	24.1	24.7	25.2	23.2	23.9	23.6	24.3	24.7
8H	24.1	24.7	24.6	25.1	25.6	23.6	24.2	24.1	24.6	25.1
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					+ 0.1 / - 0.3				

CIE Pub.117, 1633 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.7)
 Area: 0.096 m2

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-10

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:230.15V I:0.0683A P:14.234W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm
NAME: AL117-11-15W-C3-4000K	TYPE: 15W	WEIGHT:	
SPEC.: 4000K	DIM.:	SERIAL No.:	
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:	

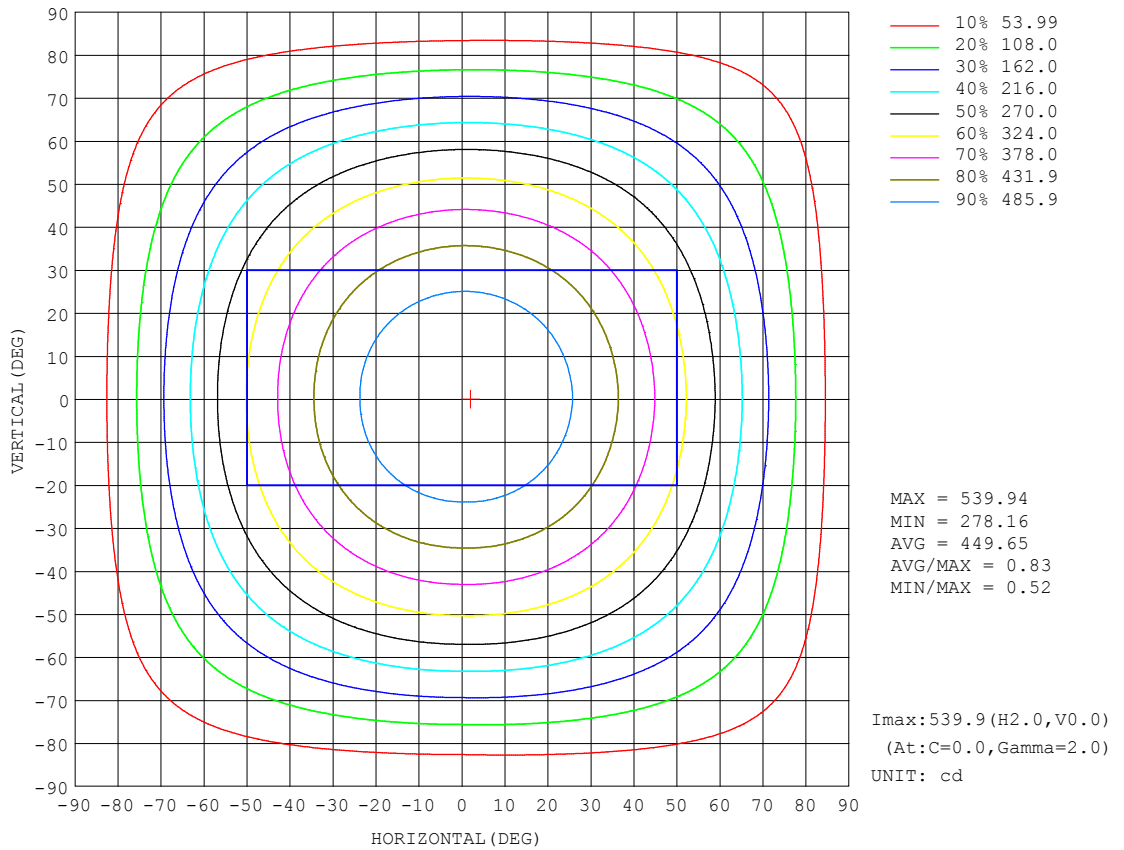
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	44	37	55	44	37	54	44	37	31
0.80	66	54	47	65	54	46	63	53	46	39
1.00	74	63	55	73	62	55	71	64	55	47
1.25	81	70	63	80	70	63	77	68	62	55
1.50	86	76	69	84	75	68	81	73	67	60
2.00	93	84	78	91	83	77	88	81	75	67
2.50	97	89	83	95	88	82	91	85	80	72
3.00	100	93	88	98	92	86	94	89	84	76
4.00	104	99	94	102	97	92	98	93	90	81
5.00	107	102	98	104	100	96	100	96	93	84
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:2020-09-10

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:230.15V I:0.0683A P:14.234W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-15W-C3-4000K	TYPE: 15W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:

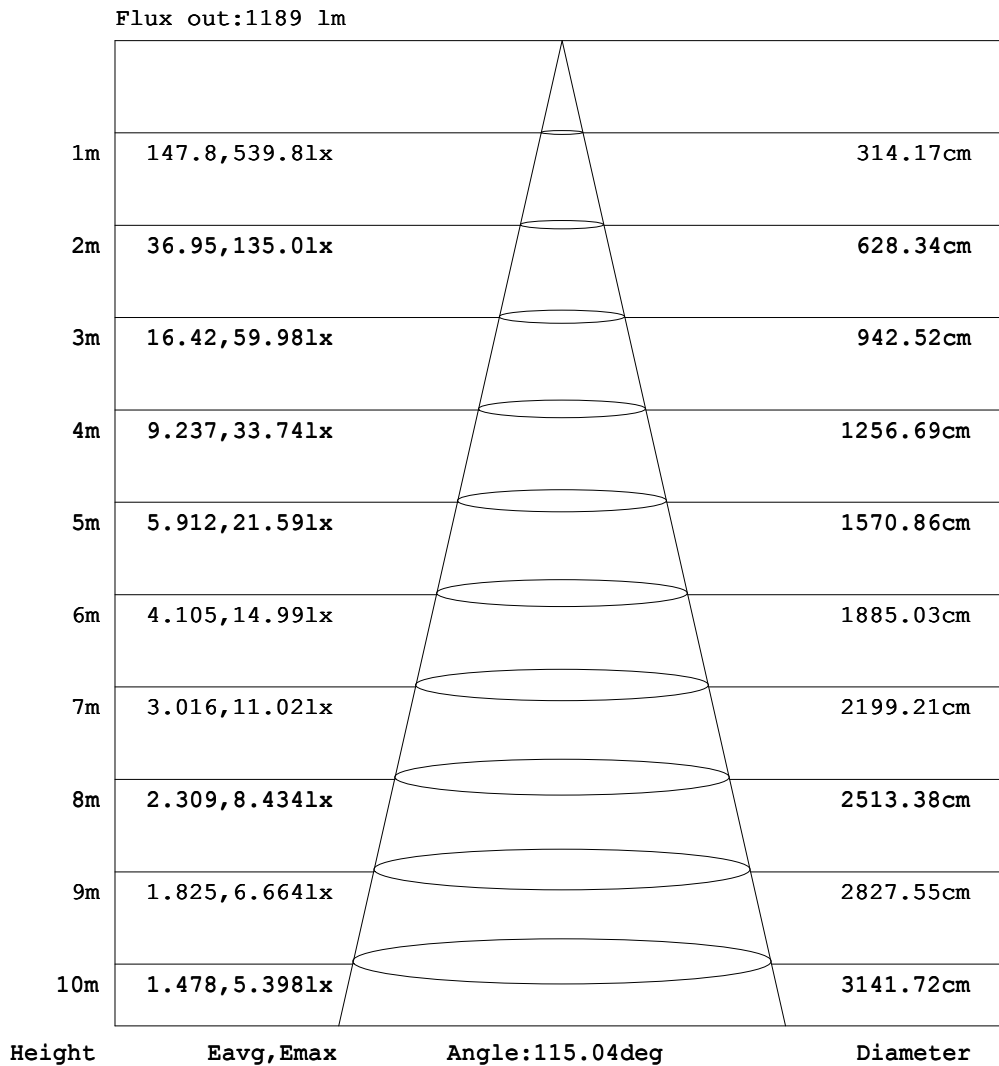


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-10

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:230.15V I:0.0683A P:14.234W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-15W-C3-4000K	TYPE: 15W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:



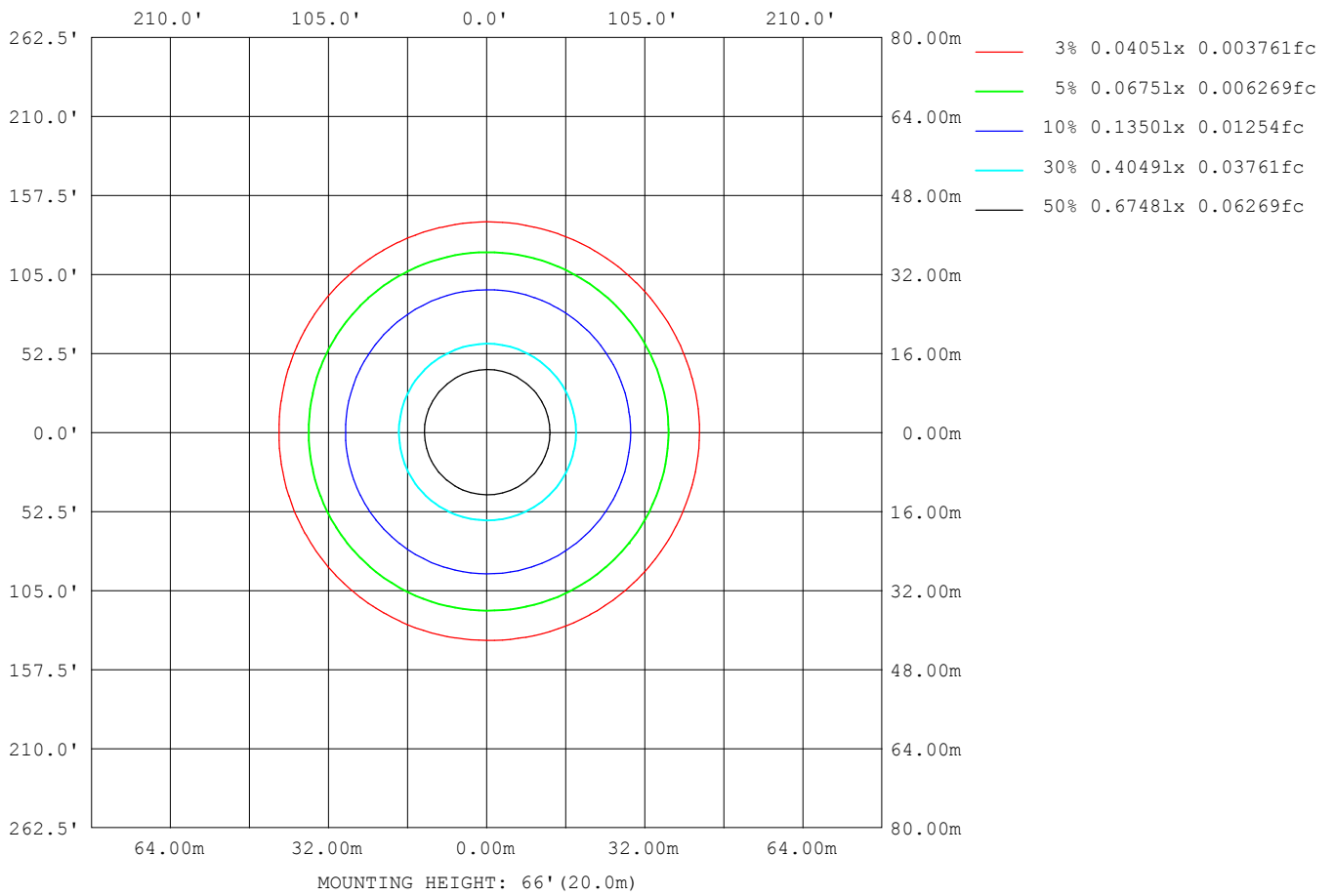
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2020-09-10

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:230.15V I:0.0683A P:14.234W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0%		Lamp Flux:1633.45x1 lm
NAME: AL117-11-15W-C3-4000K	TYPE: 15W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-10

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:230.15V I:0.0683A P:14.234W PF:0.9377 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-11-15W-C3-4000K	TYPE: 15W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:

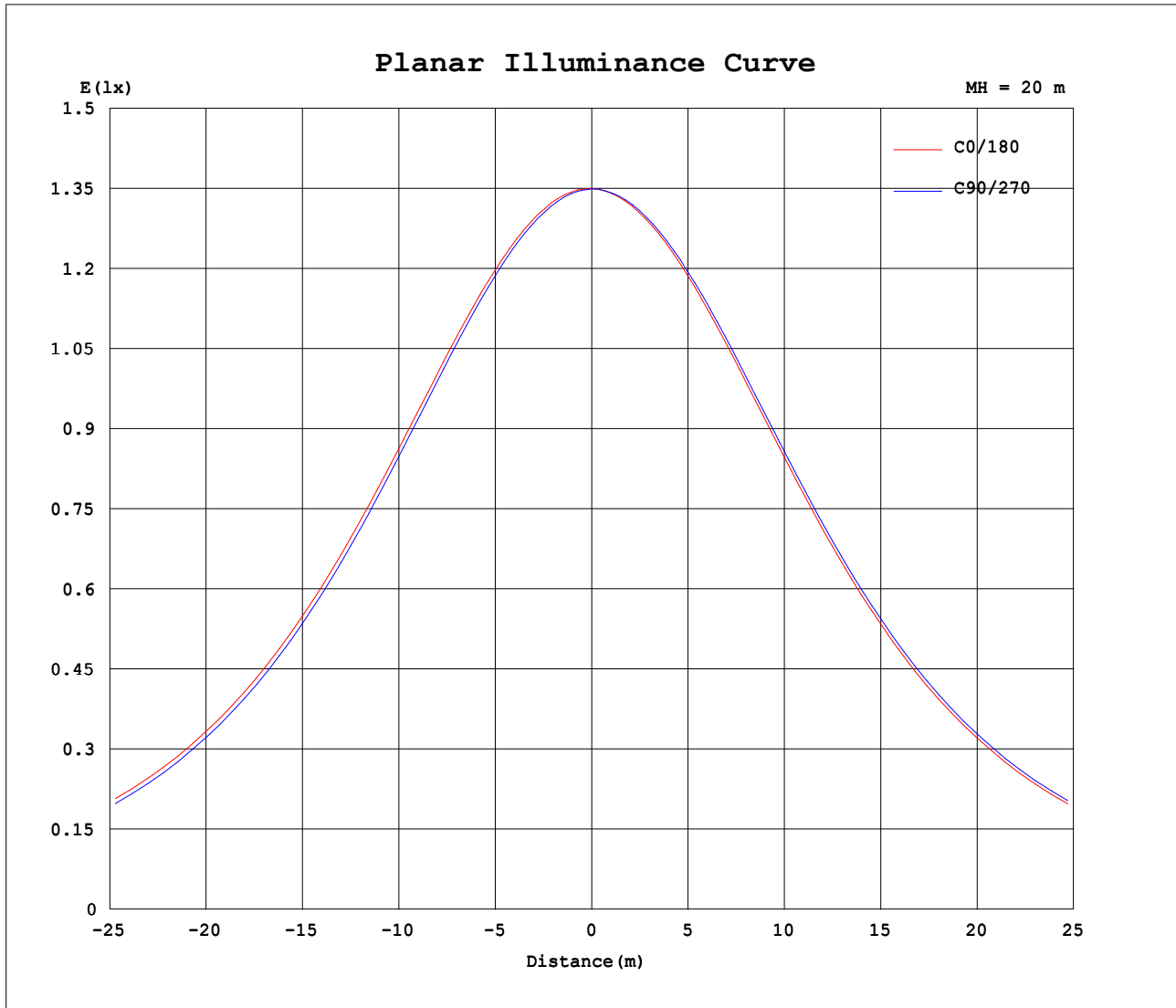
AvgL	cd/m2
L_0~180 (65) av	5148
L_0~180 (75) av	4906
L_0~180 (85) av	5318
L_90~270 (65) av	5060
L_90~270 (75) av	4724
L_90~270 (85) av	4840
L_45 (65) av	5079
L_45 (75) av	4771
L_45 (85) av	4974

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-10

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:2020-09-10

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:

