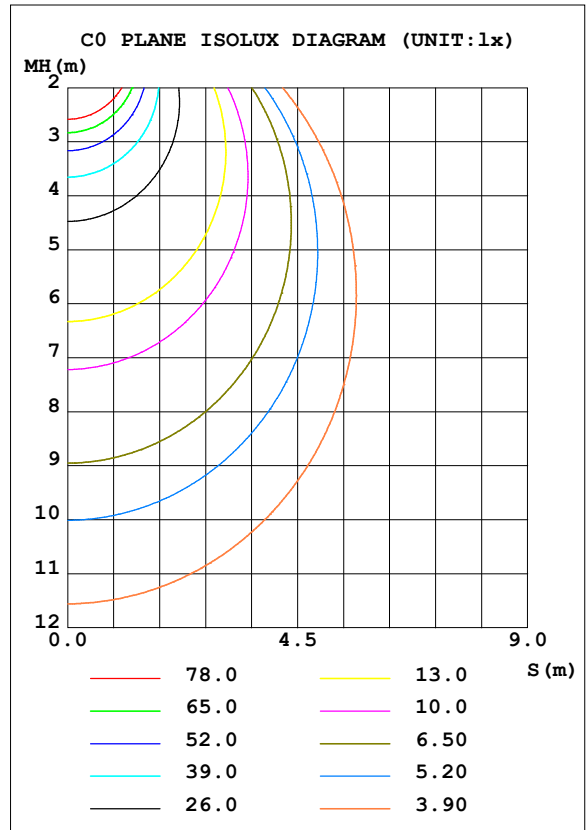
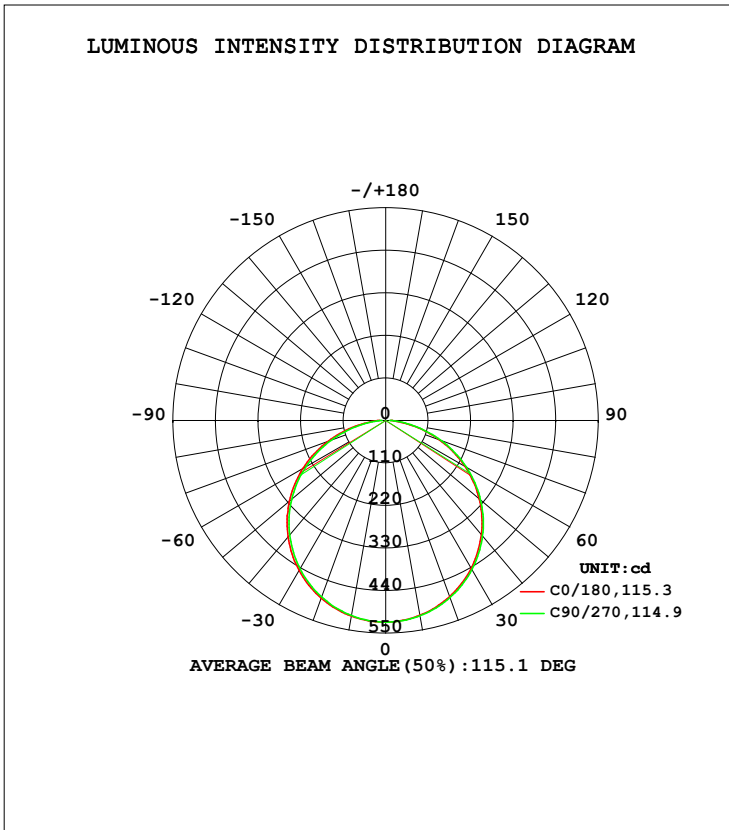


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.13V I:0.0679A P:14.649W PF:0.9371 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-14-15W-5700K	TYPE: 15W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 105.19 lm/W			
MODEL	AL117-14-15W-5700K	I _{max} (cd)	521.4	S/MH (C0/180)	1.28
NOMINAL POWER (W)	15	LOR (%)	94.3	S/MH (C90/270)	1.26
RATED VOLTAGE (V)	200-240	TOTAL FLUX (lm)	1540.9	η UP, DN (C0-180)	0.0, 46.9
NOMINAL FLUX (lm)	1633.45	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 47.4
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	94.3	CIBSE SHR MAX	1.35



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

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:

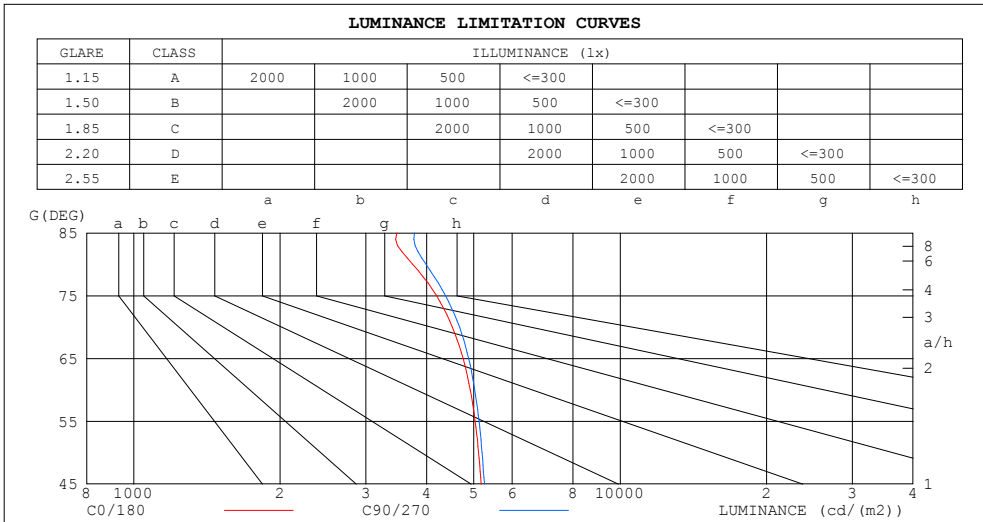
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	511.4	513.0	513.7	512.2				0- 10	49.35	49.35	3.2,3.02
20	484.5	487.3	488.7	485.5				10- 20	141.6	190.9	12.4,11.7
30	442.0	445.6	448.1	443.3				20- 30	215.5	406.4	26.4,24.9
40	385.2	389.8	393.0	386.5				30- 40	261.7	668.1	43.4,40.9
50	316.1	320.6	325.0	317.4				40- 50	274.3	942.5	61.2,57.7
60	236.3	241.0	246.6	237.6				50- 60	251.3	1194	77.5,73.1
70	148.5	153.4	159.9	150.0				60- 70	195.1	1389	90.1,85
80	62.49	66.47	72.33	63.66				70- 80	114.8	1504	97.6,92.1
90	13.17	10.06	15.24	9.348				80- 90	37.23	1541	100,94.3
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:230.13V I:0.0679A P:14.649W PF:0.9371 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm
NAME: AL117-14-15W-5700K	TYPE: 15W	WEIGHT:	
SPEC.: 5700K	DIM.:	SERIAL No.:	
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:	



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3475	3778
80	3746	3990
75	4193	4377
70	4520	4677
65	4756	4882
60	4920	5025
55	5034	5127
50	5118	5200
45	5180	5265

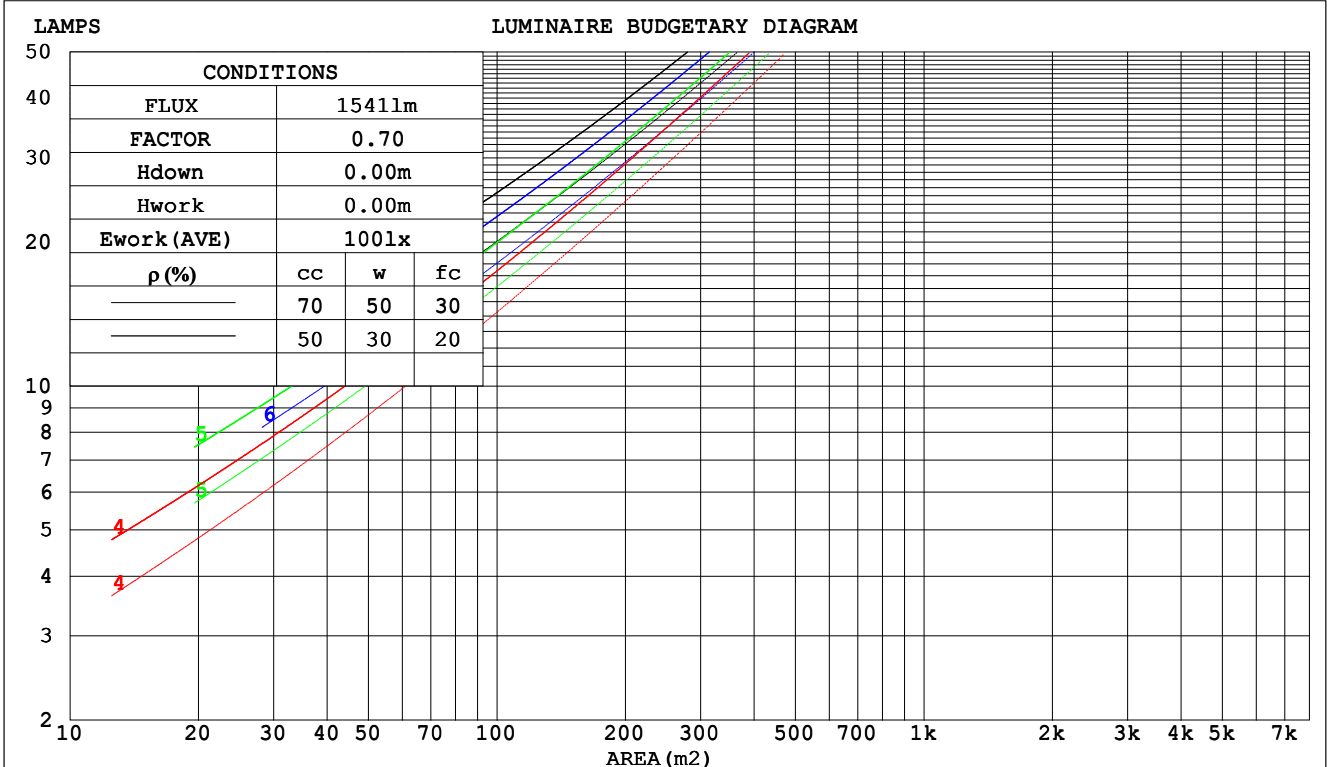
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-10

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:230.13V I:0.0679A P:14.649W PF:0.9371 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-14-15W-5700K	TYPE: 15W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: D0.35	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	1.12	1.12	1.12	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	.96	.96	.96	.94
1.0	.98	.93	.90	.95	.92	.88	.91	.88	.85	.88	.85	.83	.84	.82	.80	.78
2.0	.85	.78	.73	.83	.77	.72	.80	.74	.70	.76	.72	.68	.74	.70	.67	.65
3.0	.74	.66	.60	.73	.65	.59	.70	.64	.58	.67	.62	.57	.65	.60	.56	.54
4.0	.66	.57	.51	.64	.56	.50	.62	.55	.50	.60	.54	.49	.58	.52	.48	.46
5.0	.59	.50	.44	.57	.49	.43	.55	.48	.43	.54	.47	.42	.52	.46	.42	.40
6.0	.53	.44	.38	.52	.44	.38	.50	.43	.37	.48	.42	.37	.47	.41	.37	.35
7.0	.48	.39	.33	.47	.39	.33	.45	.38	.33	.44	.38	.33	.43	.37	.32	.31
8.0	.43	.35	.30	.43	.35	.30	.42	.34	.29	.40	.34	.29	.39	.33	.29	.27
9.0	.40	.32	.27	.39	.32	.27	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24
10.0	.37	.29	.24	.36	.29	.24	.35	.29	.24	.34	.28	.24	.34	.28	.24	.22



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:230.13V I:0.0679A P:14.649W PF:0.9371 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm		
NAME: AL117-14-15W-5700K		TYPE: 15W		WEIGHT:	
SPEC.: 5700K		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	.301	.171	.054	.294	.168	.053	.282	.162	.052	.270	.156	.050	.259	.150	.048	
2.0	.281	.154	.047	.275	.151	.047	.264	.147	.046	.254	.142	.045	.244	.138	.044	
3.0	.259	.138	.041	.254	.136	.041	.244	.132	.040	.235	.129	.039	.226	.125	.039	
4.0	.238	.124	.036	.234	.122	.036	.225	.119	.036	.217	.116	.035	.209	.114	.035	
5.0	.220	.112	.032	.216	.111	.032	.208	.108	.032	.201	.106	.032	.194	.104	.031	
6.0	.204	.102	.029	.200	.101	.029	.193	.099	.029	.187	.097	.029	.181	.095	.028	
7.0	.189	.094	.027	.186	.093	.026	.180	.091	.026	.174	.089	.026	.169	.088	.026	
8.0	.177	.086	.024	.174	.086	.024	.168	.084	.024	.163	.083	.024	.158	.081	.024	
9.0	.165	.080	.022	.163	.079	.022	.158	.078	.022	.153	.077	.022	.149	.076	.022	
10.0	.155	.075	.021	.153	.074	.021	.149	.073	.021	.144	.072	.020	.140	.071	.020	

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	.180	.180	.180	.154	.154	.154	.105	.105	.105	.060	.060	.060	.019	.019	.019	
1.0	.171	.147	.126	.146	.126	.108	.100	.087	.075	.057	.050	.044	.018	.016	.014	
2.0	.163	.124	.092	.140	.107	.079	.096	.074	.055	.055	.043	.032	.018	.014	.011	
3.0	.156	.108	.069	.134	.093	.060	.092	.065	.042	.053	.038	.025	.017	.012	.008	
4.0	.149	.095	.055	.128	.082	.047	.088	.057	.033	.051	.034	.020	.016	.011	.006	
5.0	.142	.086	.044	.122	.074	.038	.084	.052	.027	.049	.030	.016	.016	.010	.005	
6.0	.135	.078	.037	.116	.067	.032	.080	.047	.023	.046	.028	.013	.015	.009	.004	
7.0	.128	.071	.031	.110	.062	.027	.076	.043	.019	.044	.025	.011	.014	.008	.004	
8.0	.122	.066	.027	.105	.057	.023	.073	.040	.017	.042	.024	.010	.014	.008	.003	
9.0	.116	.061	.024	.100	.053	.021	.070	.037	.015	.040	.022	.009	.013	.007	.003	
10.0	.111	.057	.021	.096	.049	.018	.066	.035	.013	.039	.021	.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:230.13V I:0.0679A P:14.649W PF:0.9371 Freq:49.99Hz UTHDi:0% ITHDi:0%		Lamp Flux:1633.45x1 lm
NAME: AL117-14-15W-5700K	TYPE: 15W	WEIGHT:
SPEC.: 5700K	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	18.5	20.0	18.8	20.2	20.4	18.6	20.1	18.8	20.3	20.5
3H	20.0	21.5	20.3	21.7	21.9	20.2	21.6	20.5	21.8	22.1
4H	20.7	22.0	21.0	22.3	22.5	20.8	22.1	21.1	22.4	22.7
6H	21.1	22.4	21.4	22.6	22.9	21.3	22.5	21.6	22.8	23.1
8H	21.2	22.5	21.6	22.7	23.0	21.4	22.6	21.8	22.9	23.2
12H	21.3	22.5	21.7	22.8	23.1	21.5	22.7	21.9	23.0	23.3
4H 2H	19.1	20.5	19.4	20.7	21.0	19.2	20.5	19.5	20.8	21.1
3H	20.9	22.1	21.2	22.3	22.7	21.0	22.1	21.3	22.4	22.7
4H	21.6	22.7	22.0	23.0	23.3	21.7	22.8	22.1	23.1	23.5
6H	22.2	23.1	22.6	23.5	23.9	22.3	23.3	22.7	23.6	24.0
8H	22.4	23.3	22.8	23.6	24.0	22.5	23.4	22.9	23.8	24.2
12H	22.5	23.3	22.9	23.7	24.1	22.7	23.5	23.1	23.9	24.3
8H 4H	21.9	22.8	22.3	23.2	23.5	22.0	22.9	22.4	23.3	23.6
6H	22.6	23.4	23.0	23.8	24.2	22.7	23.5	23.2	23.9	24.3
8H	22.9	23.5	23.3	24.0	24.4	23.0	23.7	23.5	24.1	24.6
12H	23.1	23.7	23.6	24.1	24.6	23.3	23.9	23.8	24.3	24.8
12H 4H	21.9	22.7	22.3	23.1	23.5	22.0	22.8	22.4	23.2	23.6
6H	22.7	23.3	23.1	23.8	24.2	22.8	23.5	23.3	23.9	24.3
8H	23.0	23.6	23.5	24.0	24.5	23.1	23.7	23.6	24.2	24.6
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	+ 0.2 / - 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:230.13V I:0.0679A P:14.649W PF:0.9371 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:1633.45x1 lm
NAME: AL117-14-15W-5700K	TYPE: 15W	WEIGHT:	
SPEC.: 5700K	DIM.:	SERIAL No.:	
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:	

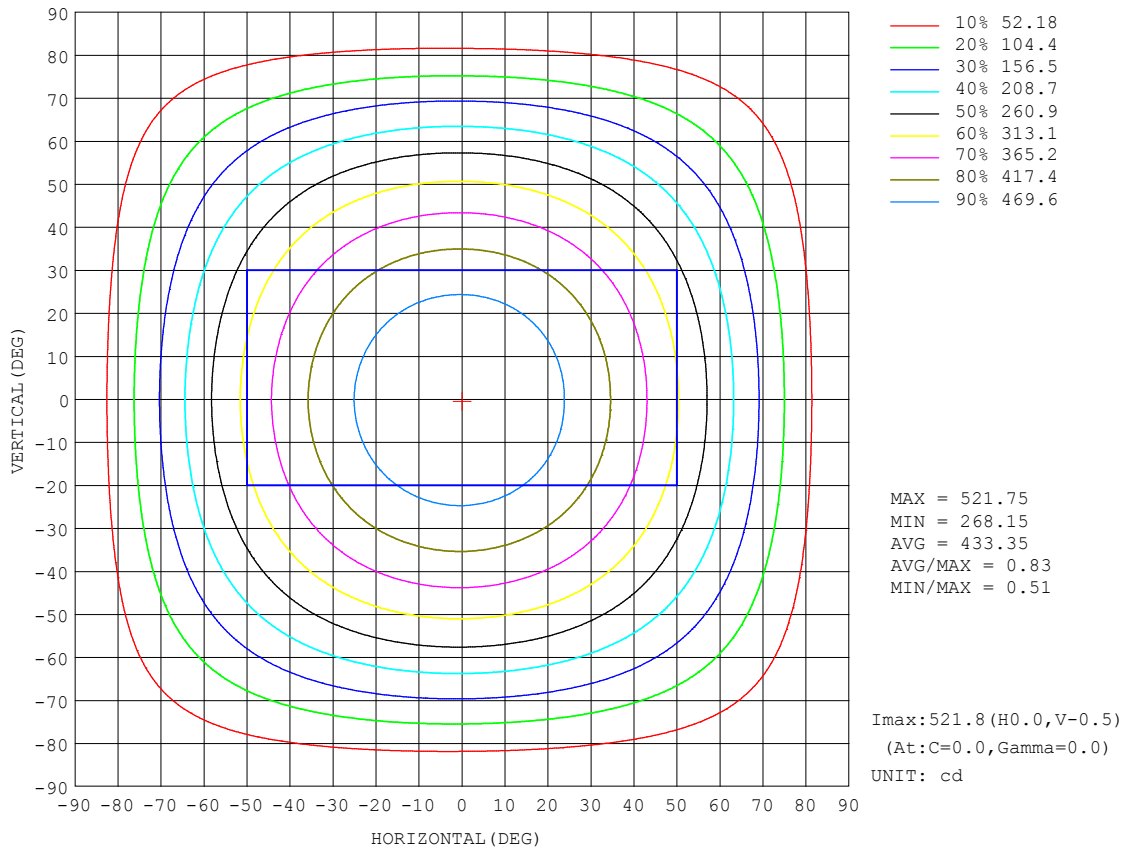
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	54	43	36	53	42	36	52	42	36	29
0.80	63	52	45	62	52	45	60	51	44	38
1.00	71	60	53	70	60	53	68	61	53	46
1.25	78	68	61	76	67	60	74	66	60	53
1.50	82	73	66	81	72	66	78	70	65	57
2.00	89	81	75	87	80	74	84	77	72	65
2.50	93	85	79	91	84	79	87	81	77	69
3.00	96	89	84	94	88	83	90	85	81	73
4.00	100	94	90	98	93	88	94	89	86	77
5.00	102	97	94	100	96	92	96	92	89	80
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:230.13V I:0.0679A P:14.649W PF:0.9371 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-14-15W-5700K	TYPE: 15W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:

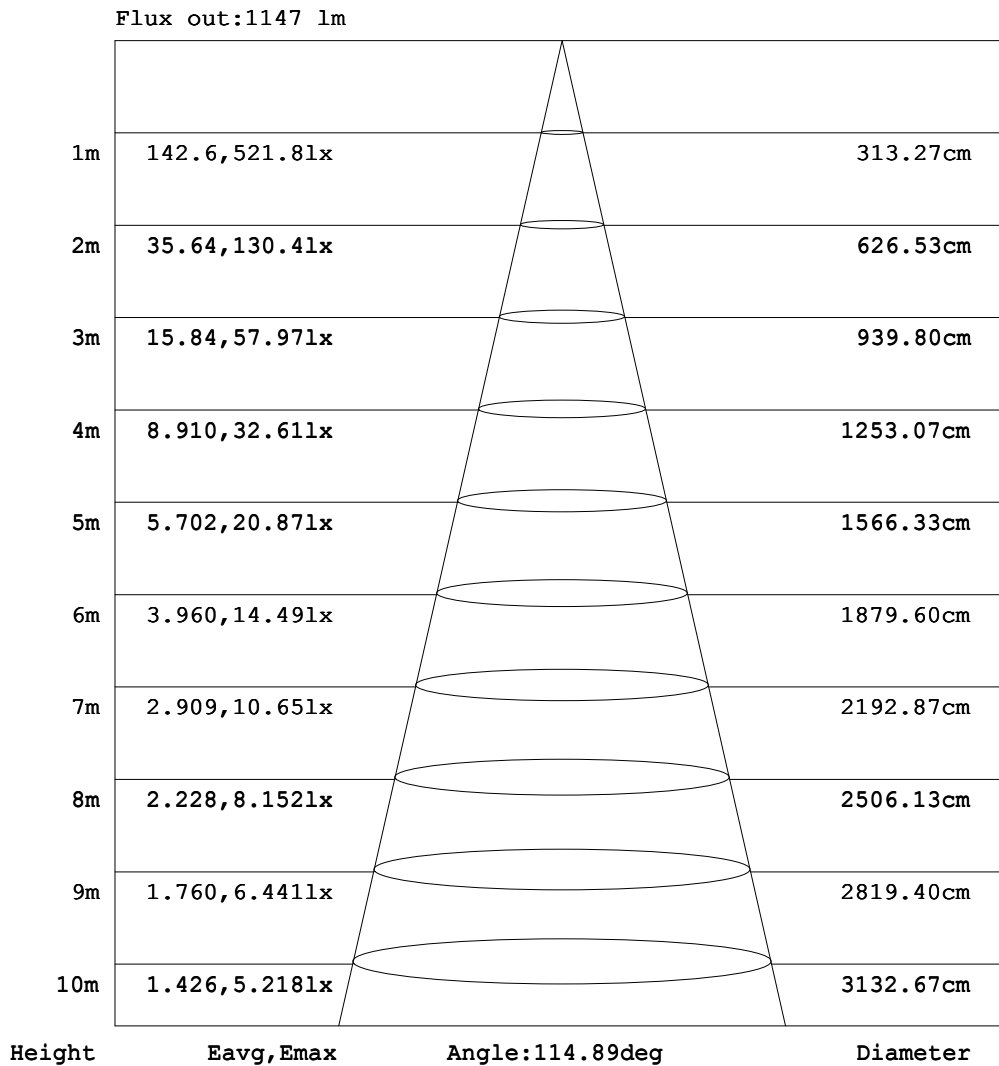


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-09-10

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:230.13V I:0.0679A P:14.649W PF:0.9371 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-14-15W-5700K	TYPE: 15W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:



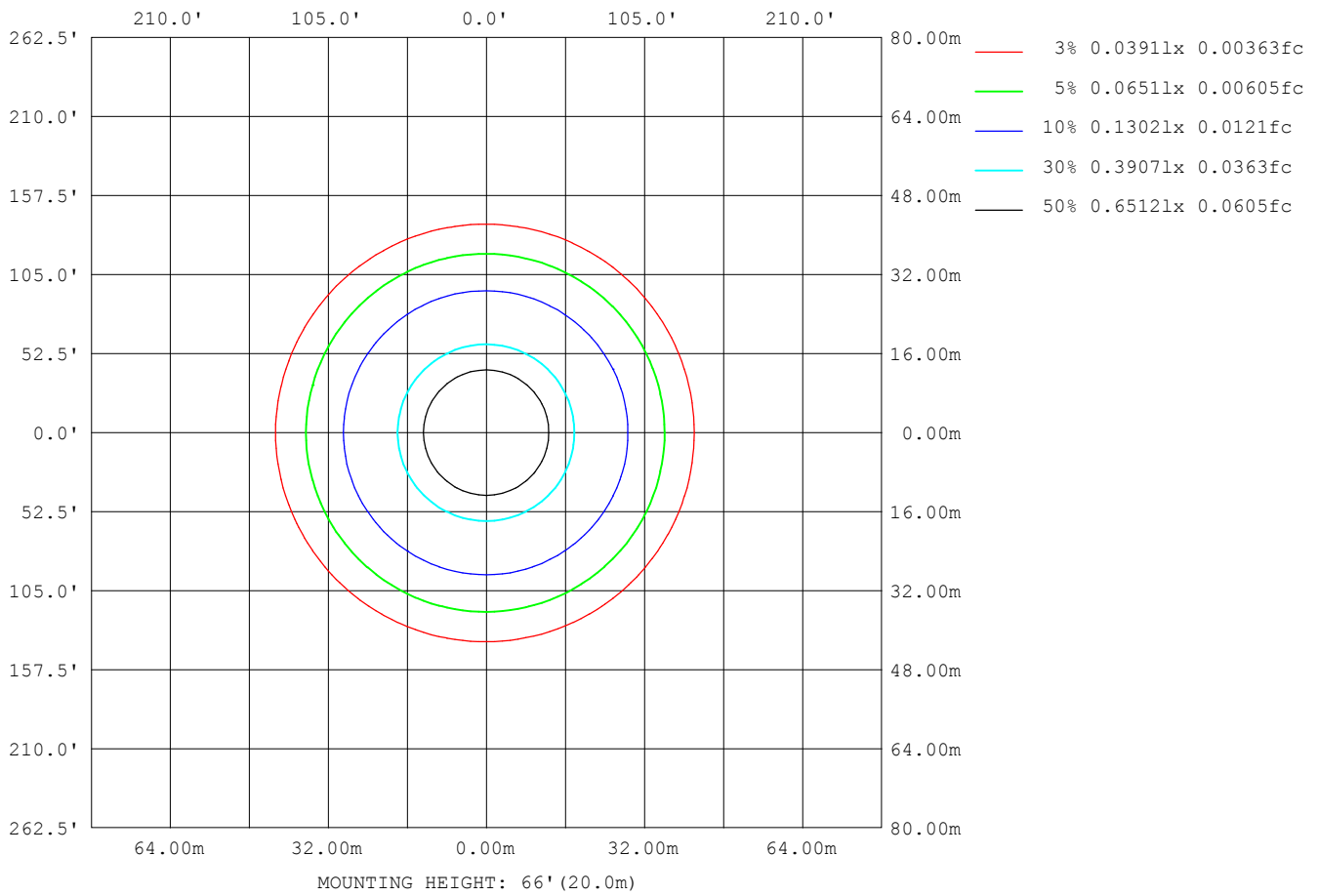
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:230.13V I:0.0679A P:14.649W PF:0.9371 Freq:49.99Hz UTHDi:0% ITHDi:0%		Lamp Flux:1633.45x1 lm
NAME: AL117-14-15W-5700K	TYPE: 15W	WEIGHT:
SPEC.: 5700K	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:230.13V I:0.0679A P:14.649W PF:0.9371 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1633.45x1 lm		
NAME: AL117-14-15W-5700K	TYPE: 15W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: D0.35	Shielding Angle:

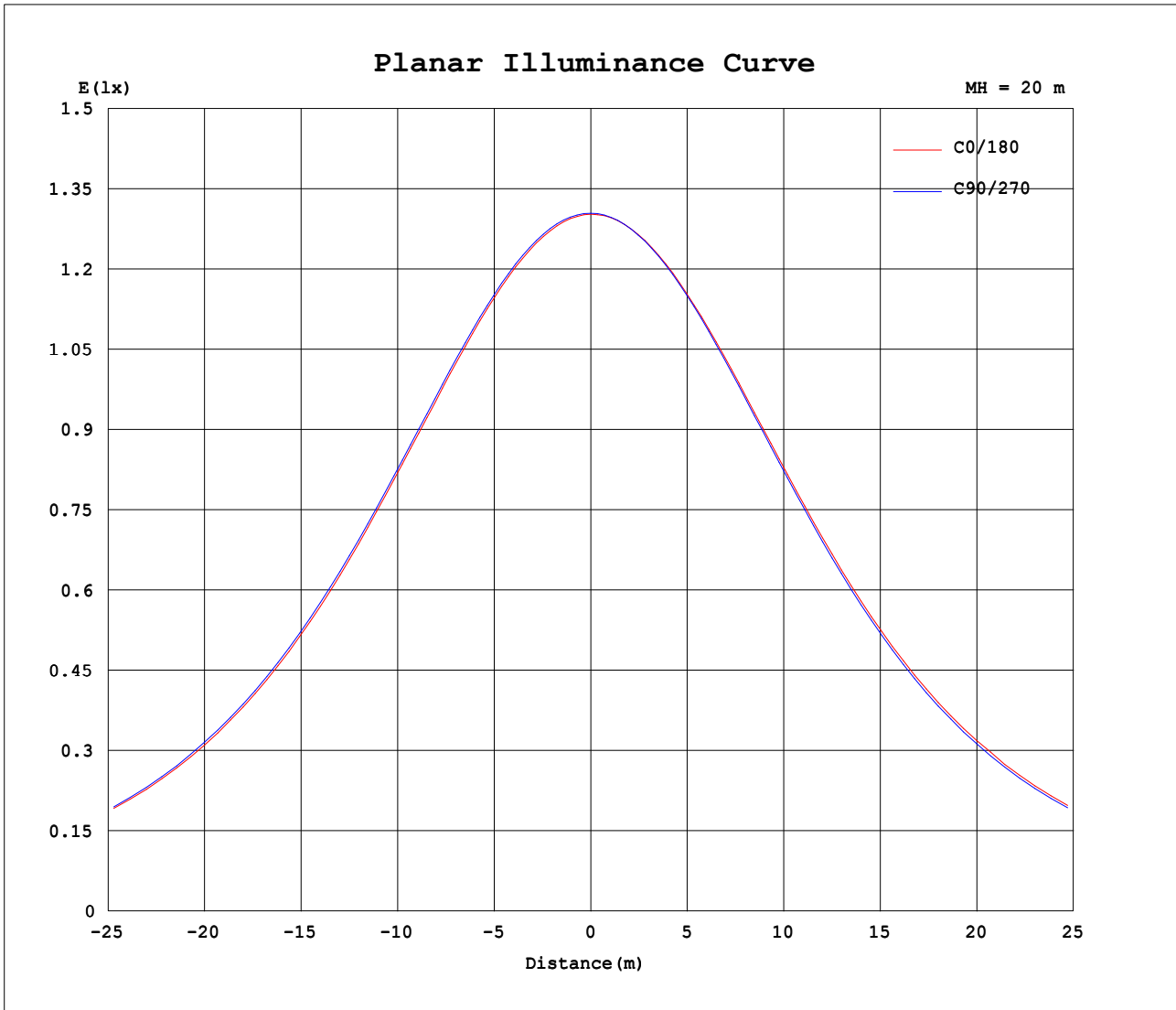
AvgL	cd/m2
L_0~180 (65) av	4893
L_0~180 (75) av	4422
L_0~180 (85) av	3878
L_90~270 (65) av	4838
L_90~270 (75) av	4310
L_90~270 (85) av	3654
L_45 (65) av	4867
L_45 (75) av	4366
L_45 (85) av	3763

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:

