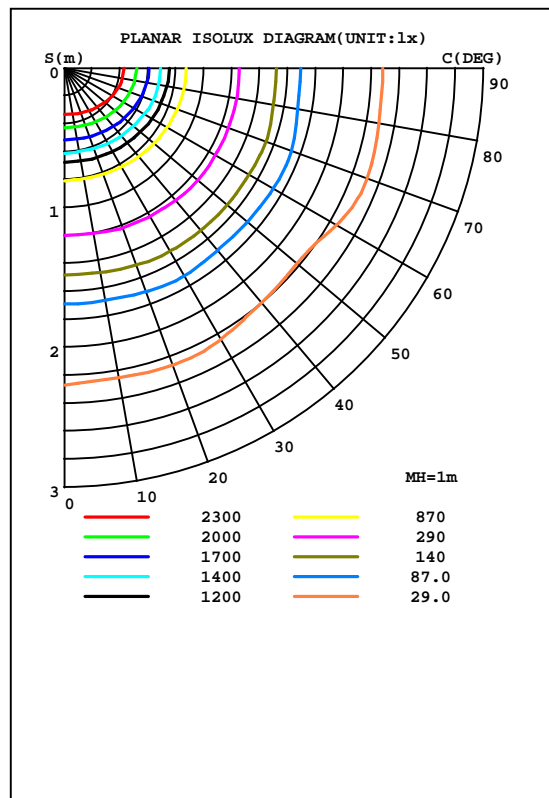
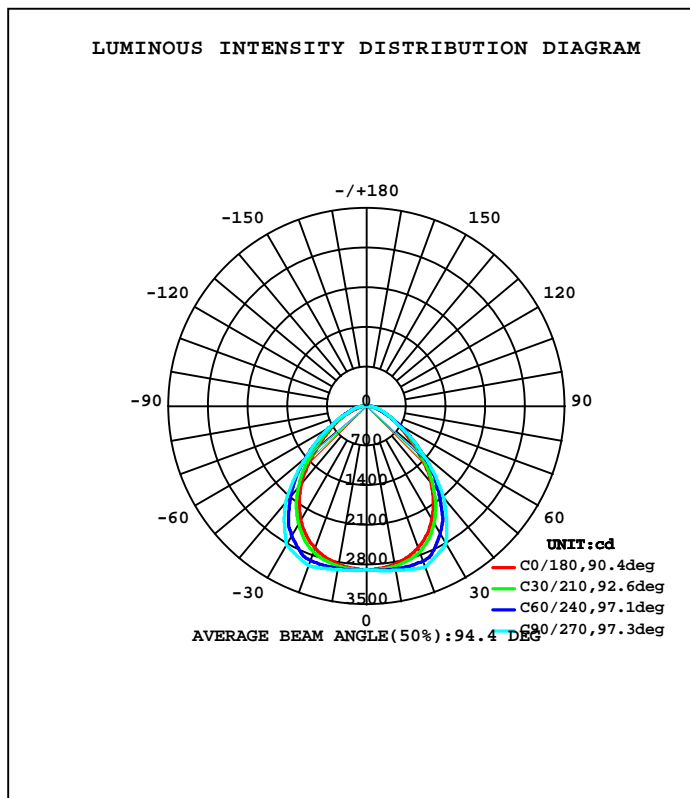


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:241.1V I:0.2509A P:56.81W PF:0.9392 Lamp Flux:6685.86x1 lm		
NAME: PLU60120-60W-840	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 117.68 lm/W			
MODEL		I _{max} (cd)	3025	S/MH(C0/180)	1.19
NOMINAL POWER(W)	58	LOR(%)	100.0	S/MH(C90/270)	1.33
RATED VOLTAGE(V)	242	TOTAL FLUX(lm)	6685.9	h UP, DN(C0-180)	0.0, 49.1
NOMINAL FLUX(lm)	6685.86	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0, 50.9
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	241.1	h down(%)	100.0	CIBSE SHR MAX	1.35



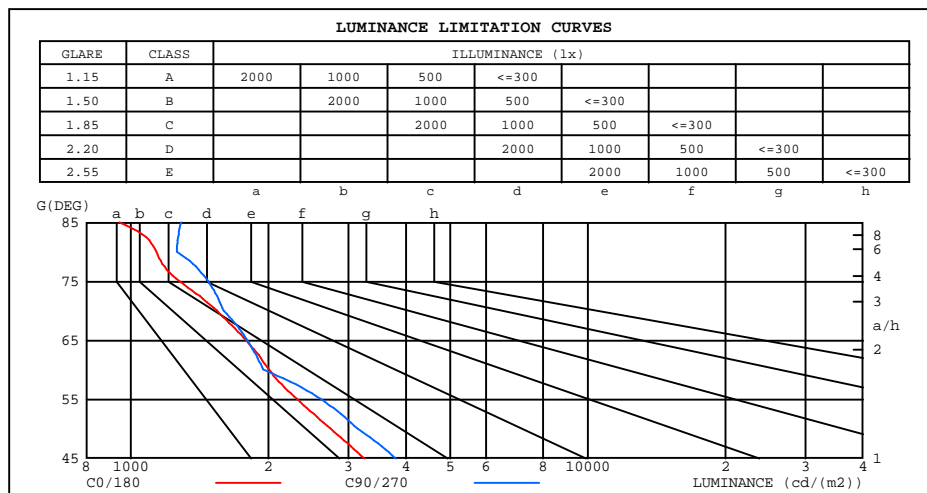
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 03
 Test Date: 2017-11-10

Angle Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity: 60.0%
 Test Distance: 11.540m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
5	2873	2899	2914	2900	2874	2895	2908	2894	0- 5	69.18	69.18	1.03,1.03
10	2835	2896	2943	2901	2838	2890	2930	2889	5- 10	207.1	276.3	4.13,4.13
15	2767	2872	2984	2881	2773	2867	2965	2864	10- 15	342.1	618.3	9.25,9.25
20	2662	2813	3025	2825	2671	2811	3001	2807	15- 20	470.2	1088	16.3,16.3
25	2512	2707	2917	2720	2525	2711	2918	2706	20- 25	582.0	1671	25,25
30	2310	2493	2808	2512	2328	2523	2835	2512	25- 30	664.2	2335	34.9,34.9
35	2060	2206	2465	2234	2083	2272	2538	2253	30- 35	707.8	3043	45.5,45.5
40	1777	1909	2122	1942	1803	2002	2242	1975	35- 40	704.9	3747	56.1,56.1
45	1451	1581	1699	1602	1466	1663	1812	1643	40- 45	662.7	4410	66,66
50	1112	1264	1276	1273	1134	1323	1381	1307	45- 50	580.0	4990	74.6,74.6
55	839.5	940.7	946.6	943.0	874.2	987.8	1072	963.3	50- 55	479.1	5469	81.8,81.8
60	635.4	653.4	617.2	651.1	675.7	700.8	762.9	672.6	55- 60	377.6	5847	87.5,87.5
65	477.8	417.4	481.5	422.5	493.7	490.5	560.2	466.4	60- 65	284.0	6131	91.7,91.7
70	334.2	257.2	345.7	267.4	331.8	345.0	357.5	322.2	65- 70	210.5	6341	94.8,94.8
75	209.6	170.8	242.1	181.7	219.4	253.9	273.2	236.3	70- 75	152.4	6494	97.1,97.1
80	125.0	125.0	138.6	132.8	144.9	167.3	188.9	156.7	75- 80	106.6	6601	98.7,98.7
85	52.00	71.19	71.16	76.20	65.38	83.46	96.29	78.18	80- 85	63.83	6664	99.7,99.7
90	3.427	3.777	3.727	3.710	3.270	3.702	3.652	3.835	85- 90	21.51	6686	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	943	1291
80	1138	1262
75	1281	1479
70	1545	1598
65	1788	1801
60	2009	1952
55	2314	2609
50	2735	3138
45	3243	3799

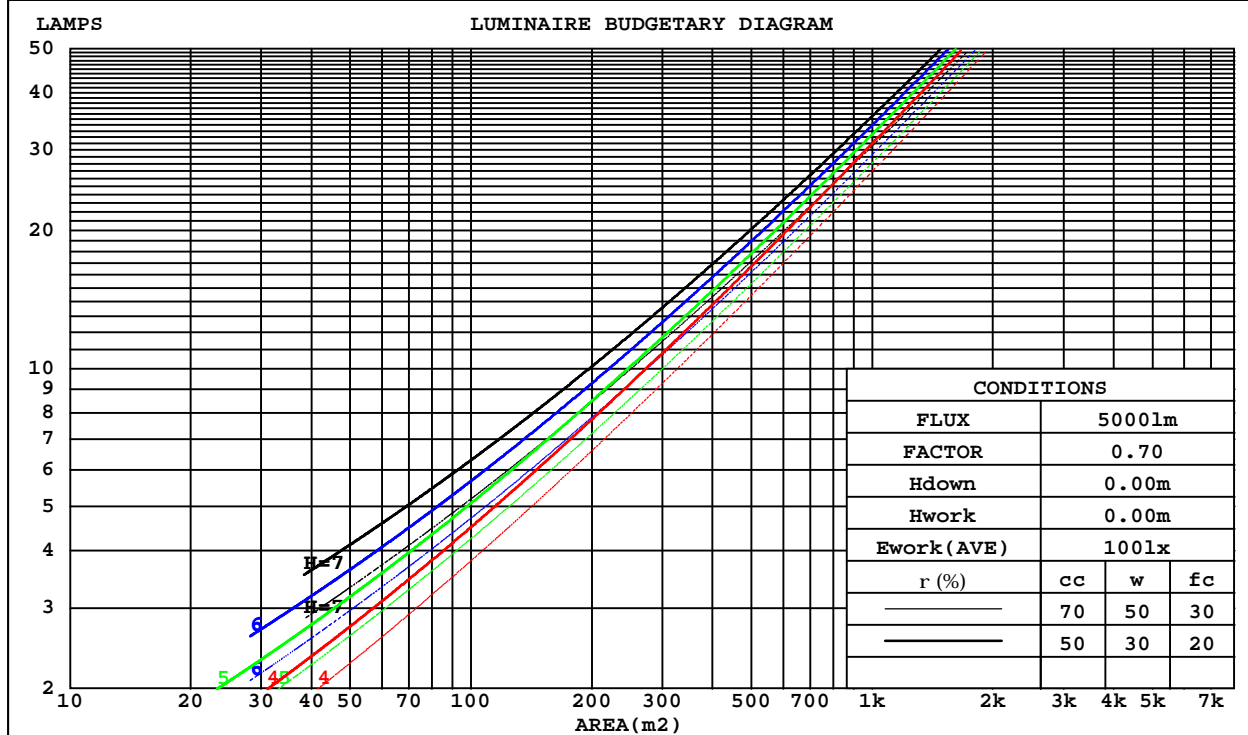
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:03
Test Date:2017-11-10

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:60.0%
Test Distance:11.540m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:241.1V I:0.2509A P:56.81W PF:0.9392 Lamp Flux:6685.86x1 lm		
NAME: PLU60120-60W-840	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:

r _{cc}	80%			70%			50%			30%			10%			0
r _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r _{fc}	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	.00
1.0	1.06	1.02	.99	1.04	1.00	.97	.90	.97	.94	.96	.93	.91	.92	.90	.89	.87
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.86	.82	.78	.83	.80	.77	.75
3.0	.84	.77	.71	.83	.76	.70	.80	.74	.69	.77	.72	.68	.74	.70	.67	.65
4.0	.75	.67	.61	.74	.67	.61	.72	.65	.60	.69	.64	.59	.67	.63	.59	.57
5.0	.68	.60	.54	.67	.59	.54	.65	.58	.53	.63	.57	.52	.61	.56	.52	.50
6.0	.62	.54	.48	.61	.53	.47	.59	.52	.47	.58	.51	.47	.56	.51	.46	.44
7.0	.56	.48	.43	.56	.48	.42	.54	.47	.42	.53	.47	.42	.51	.46	.42	.40
8.0	.52	.44	.38	.51	.43	.38	.50	.43	.38	.49	.42	.38	.47	.42	.38	.36
9.0	.48	.40	.35	.47	.40	.35	.46	.39	.34	.45	.39	.34	.44	.38	.34	.32
10.0	.44	.37	.32	.44	.36	.32	.43	.36	.31	.42	.36	.31	.41	.35	.31	.30



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:03
Test Date:2017-11-10

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:60.0%
Test Distance:11.540m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:241.1V I:0.2509A P:56.81W PF:0.9392 Lamp Flux:6685.86x1 lm		
NAME: PLU60120-60W-840	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.269	.153	.048	.262	.149	.047	.248	.143	.046	.236	.136	.044	.225	.131	.042	
2.0	.256	.140	.043	.250	.138	.042	.238	.133	.041	.228	.128	.040	.218	.123	.039	
3.0	.240	.128	.038	.235	.126	.038	.225	.122	.037	.215	.118	.036	.207	.114	.035	
4.0	.224	.117	.034	.220	.115	.034	.211	.112	.033	.203	.109	.033	.195	.106	.032	
5.0	.210	.107	.031	.205	.105	.031	.198	.103	.030	.190	.100	.030	.184	.098	.029	
6.0	.196	.098	.028	.193	.097	.028	.186	.095	.028	.179	.093	.027	.173	.091	.027	
7.0	.184	.091	.026	.181	.090	.026	.175	.088	.025	.169	.087	.025	.163	.085	.025	
8.0	.173	.085	.024	.170	.084	.024	.165	.082	.024	.160	.081	.023	.155	.079	.023	
9.0	.164	.079	.022	.161	.078	.022	.156	.077	.022	.151	.076	.022	.147	.075	.022	
10.0	.155	.074	.021	.152	.074	.021	.148	.072	.020	.143	.071	.020	.139	.070	.020	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	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	.177	.156	.138	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.167	.132	.102	.143	.114	.088	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.159	.114	.079	.136	.098	.068	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.151	.100	.062	.129	.087	.054	.089	.060	.038	.051	.035	.022	.017	.012	.007	
5.0	.143	.090	.050	.123	.078	.044	.085	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.136	.081	.042	.117	.070	.036	.081	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.130	.074	.035	.112	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004	
8.0	.124	.068	.030	.107	.059	.026	.074	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.118	.063	.026	.102	.055	.023	.071	.039	.016	.041	.023	.010	.013	.008	.003	
10.0	.113	.059	.023	.097	.051	.020	.068	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:03
 Test Date:2017-11-10

g Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:11.540m [K=1.0000]
 Remarks:

Uncorrected UGR Table

Test:U:241.1V I:0.2509A P:56.81W PF:0.9392 Lamp Flux:6685.86x1 lm										
NAME: PLU60120-60W-840					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:1		
MFR.: AXG					SUR.:			PROTECTION 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	15.2	16.5	15.4	16.7	16.9	15.7	17.1	16.0	17.3	17.5
3H	15.9	17.2	16.2	17.4	17.7	16.4	17.7	16.7	17.9	18.2
4H	16.2	17.4	16.5	17.7	17.9	16.8	18.0	17.1	18.2	18.5
6H	16.4	17.6	16.8	17.8	18.1	17.0	18.2	17.3	18.4	18.7
8H	16.5	17.6	16.8	17.8	18.1	17.1	18.2	17.4	18.5	18.8
12H	16.5	17.5	16.8	17.8	18.1	17.2	18.2	17.5	18.5	18.8
4H 2H	15.4	16.6	15.7	16.9	17.1	15.9	17.1	16.2	17.3	17.6
3H	16.4	17.4	16.7	17.7	18.0	16.8	17.8	17.1	18.1	18.4
4H	16.8	17.7	17.2	18.1	18.4	17.2	18.2	17.6	18.5	18.8
6H	17.1	18.0	17.5	18.3	18.7	17.6	18.5	18.0	18.8	19.2
8H	17.2	18.0	17.6	18.4	18.7	17.8	18.6	18.2	18.9	19.3
12H	17.3	18.0	17.7	18.4	18.8	17.9	18.6	18.3	19.0	19.4
8H 4H	16.9	17.7	17.3	18.0	18.4	17.3	18.1	17.7	18.4	18.8
6H	17.3	18.0	17.8	18.4	18.8	17.9	18.5	18.3	18.9	19.3
8H	17.5	18.1	18.0	18.5	19.0	18.1	18.7	18.6	19.1	19.5
12H	17.6	18.1	18.1	18.6	19.0	18.3	18.8	18.8	19.3	19.7
12H 4H	16.9	17.6	17.3	18.0	18.4	17.3	18.0	17.7	18.4	18.8
6H	17.4	17.9	17.8	18.4	18.8	17.9	18.4	18.3	18.9	19.3
8H	17.6	18.1	18.1	18.5	19.0	18.2	18.7	18.7	19.1	19.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.4 / - 0.5				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				
2.0H	+ 0.7 / - 0.8					+ 1.0 / - 1.1				

CIE Pub.117 Corrected 6686 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.6)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:03
 Test Date:2017-11-10

g Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:11.540m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:241.1V I:0.2509A P:56.81W PF:0.9392 Lamp Flux:6685.86x1 lm		
NAME: PLU60120-60W-840	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:

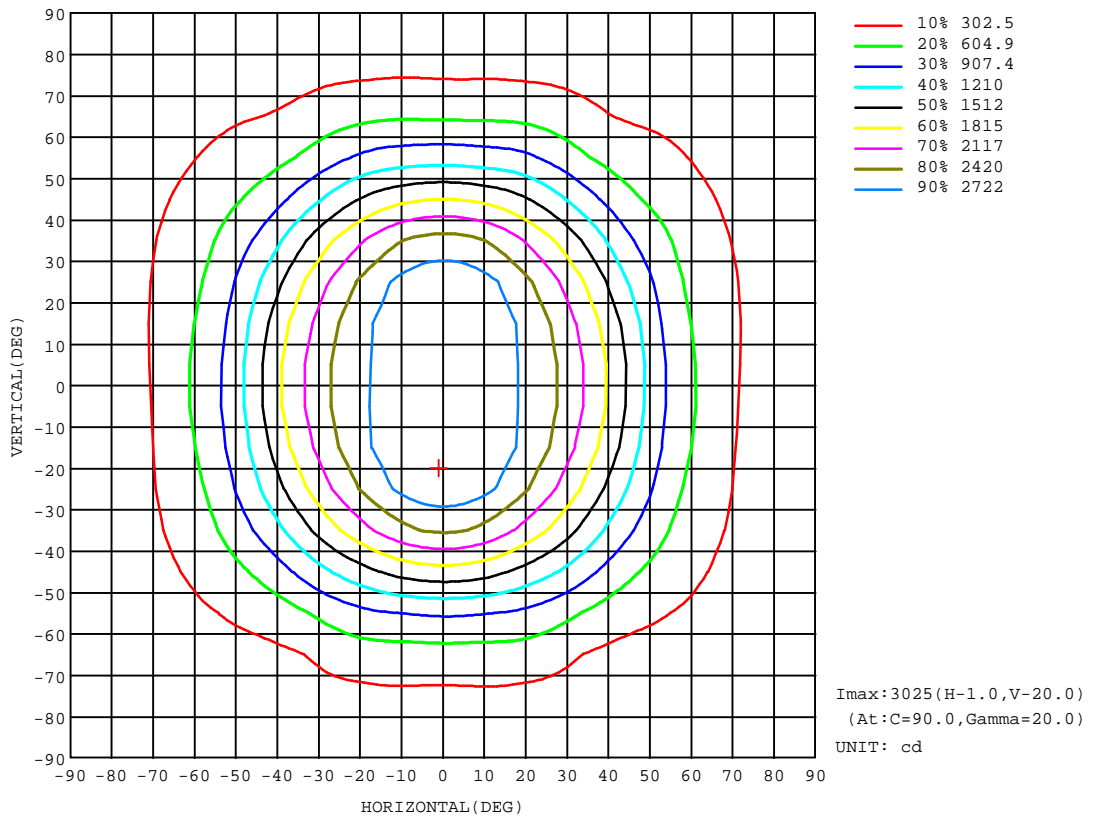
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	64	54	47	63	53	47	62	53	47	41
0.80	74	64	57	73	63	57	71	63	57	51
1.00	82	72	66	81	72	66	79	73	65	59
1.25	89	80	74	87	79	73	85	78	72	66
1.50	93	85	79	92	84	78	89	82	77	71
2.00	99	92	86	97	91	86	94	89	84	77
2.50	102	96	91	100	94	90	97	92	88	80
3.00	105	99	95	103	98	93	99	95	91	83
4.00	108	104	100	106	102	98	102	99	96	87
5.00	110	106	103	108	104	101	104	101	98	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:03
 Test Date:2017-11-10

g Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:11.540m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:241.1V I:0.2509A P:56.81W PF:0.9392 Lamp Flux:6685.86x1 lm		
NAME: PLU60120-60W-840	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:



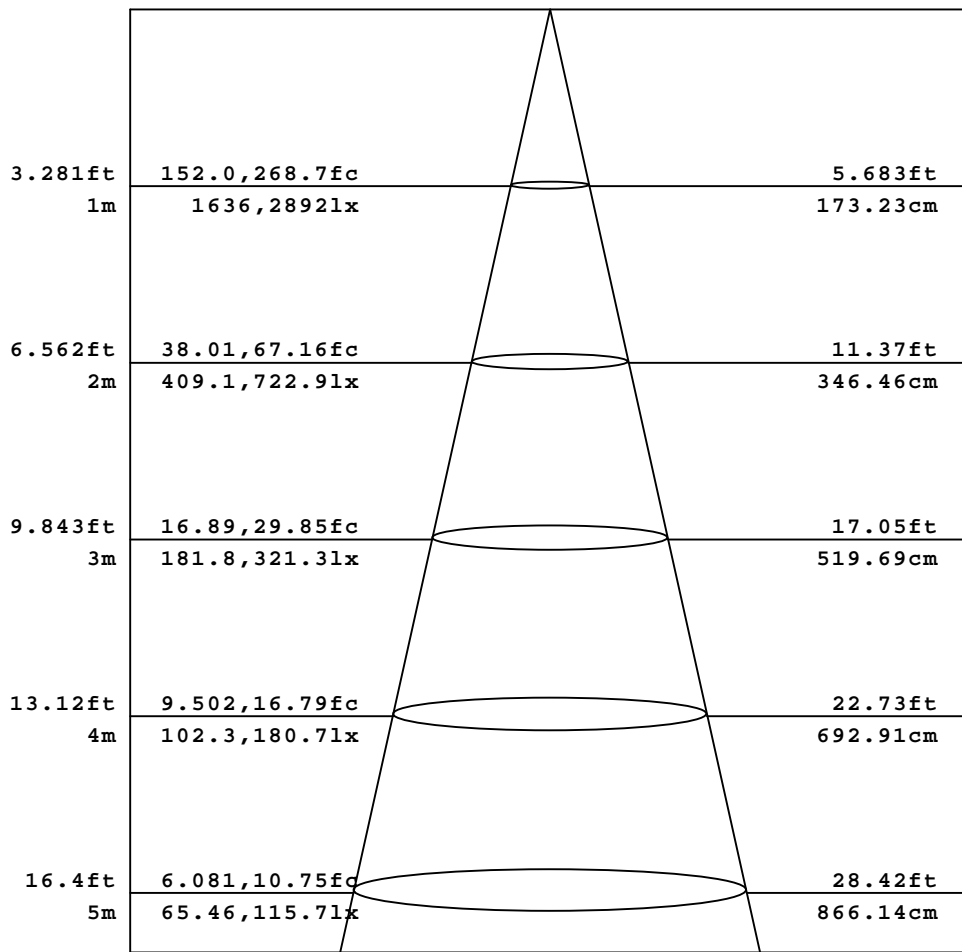
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 03
 Test Date: 2017-11-10

Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity: 60.0%
 Test Distance: 11.540m [K=1.0000]
 Remarks:

AAI Figure

Test:U:241.1V I:0.2509A P:56.81W PF:0.9392 Lamp Flux:6685.86x1 lm		
NAME: PLU60120-60W-840	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:

Flux out:3885 lm



Height Eavg, Emax Angle:81.79deg Diameter

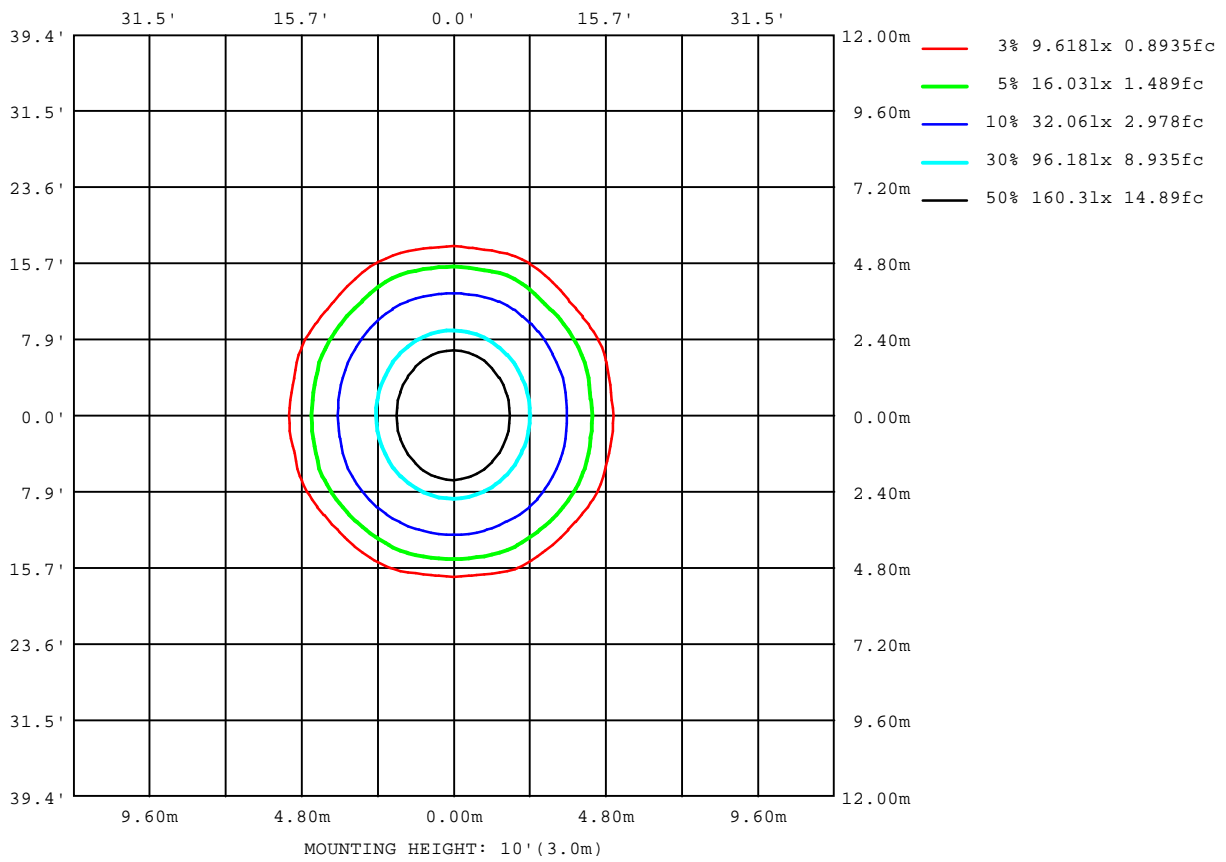
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:03
Test Date:2017-11-10

log Range: 0 - 90DEG
Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:60.0%
Test Distance:11.540m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

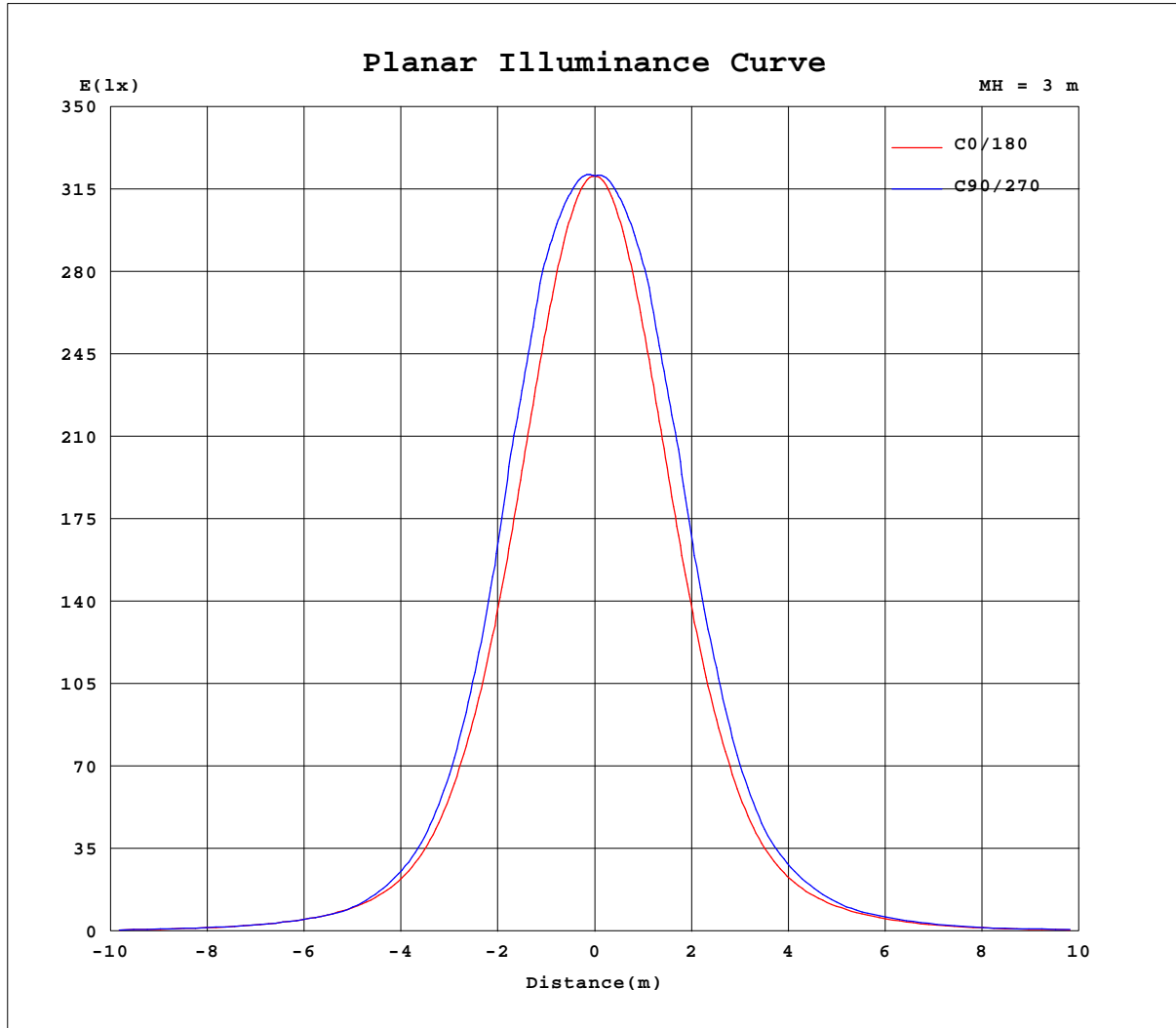
Test:U:241.1V I:0.2509A P:56.81W PF:0.9392 Lamp Flux:6685.86x1 lm		
NAME: PLU60120-60W-840	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:03
 Test Date:2017-11-10

log Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:11.540m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 03
 Test Date: 2017-11-10

log Range: 0 - 90DEG
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