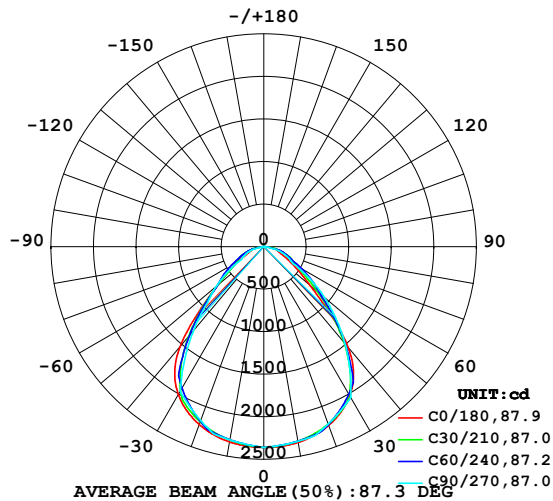


LUMINAIRE PHOTOMETRIC TEST REPORT

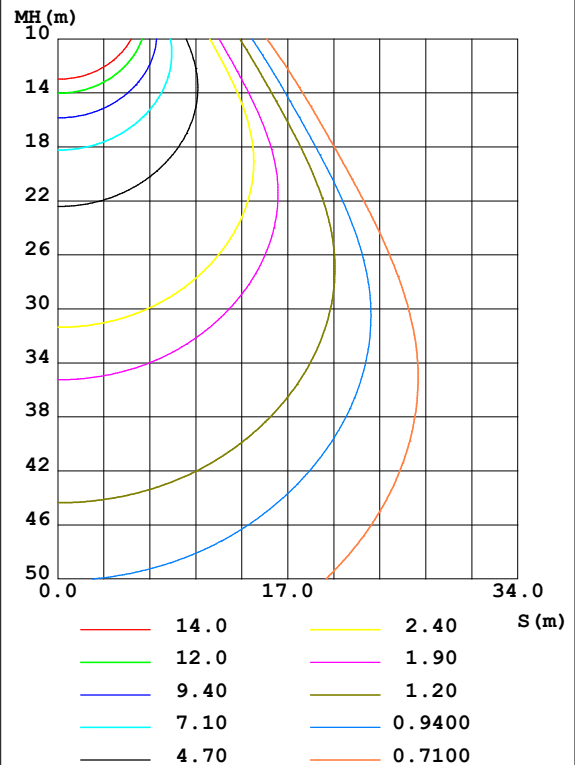
Test:U:219.25V I:0.1107A P:23.354W PF:0.9622 Freq:49.99Hz Lamp Flux:4784.35x1 lm		
NAME: GLM-BPL6060-22	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 204.86 lm/W			
MODEL		Imax(cd)	2361	S/MH(C0/180)	1.25
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.18
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	4784.4	η UP,DN(C0-180)	0.0,51.6
NOMINAL FLUX(lm)	4784.35	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.4
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:28 August 2024

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.250m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2336	2319	2322	2317	2330	2303	2305	2307	0- 10	222.7	222.7	4.66,4.66
20	2235	2237	2218	2234	2223	2203	2173	2209	10- 20	642.4	865.2	18.1,18.1
30	2024	1969	2046	1974	2008	1893	1965	1897	20- 30	969.5	1835	38.3,38.3
40	1542	1499	1485	1501	1532	1349	1283	1354	30- 40	1080	2915	60.9,60.9
50	714.5	882.6	936.3	861.2	715.1	753.4	731.0	769.7	40- 50	832.9	3748	78.3,78.3
60	362.2	474.8	398.8	451.0	348.8	383.8	308.5	407.1	50- 60	521.1	4269	89.2,89.2
70	200.6	257.6	249.2	250.2	181.7	213.2	196.1	226.5	60- 70	320.7	4590	95.9,95.9
80	99.25	118.1	0	122.9	84.65	97.30	0	97.20	70- 80	177.8	4768	99.7,99.7
90	0	0	0	0	0	0	0	0	80- 90	16.56	4784	100,100
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		

Conical surface Flux(90deg): 3377.2 lm

%lum = 70.6%

%lamp = 70.6%

Conical surface Flux(120deg): 4269.2 lm

%lum = 89.2%

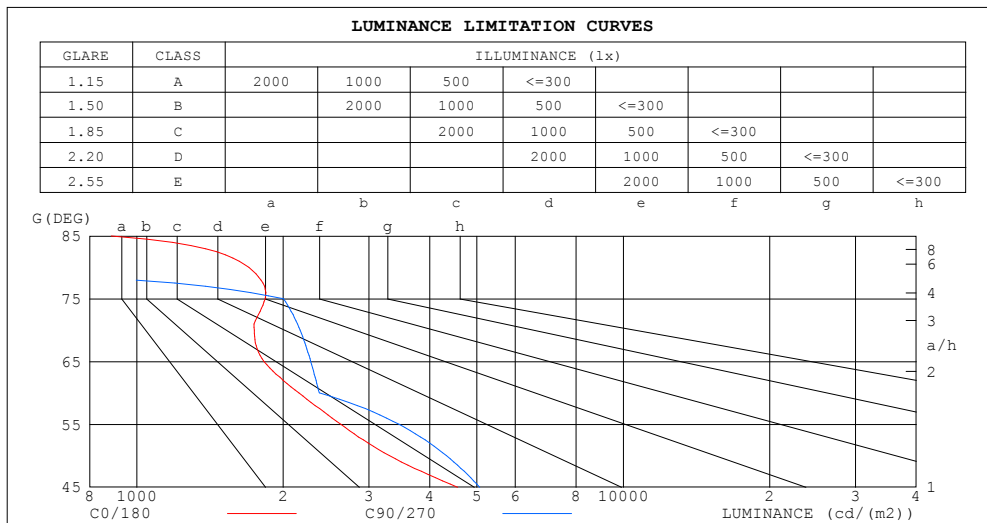
%lamp = 89.2%

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:28 August 2024

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:219.25V I:0.1107A P:23.354W PF:0.9622 Freq:49.99Hz Lamp Flux:4784.35x1 lm		
NAME: GLM-BPL6060-22	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



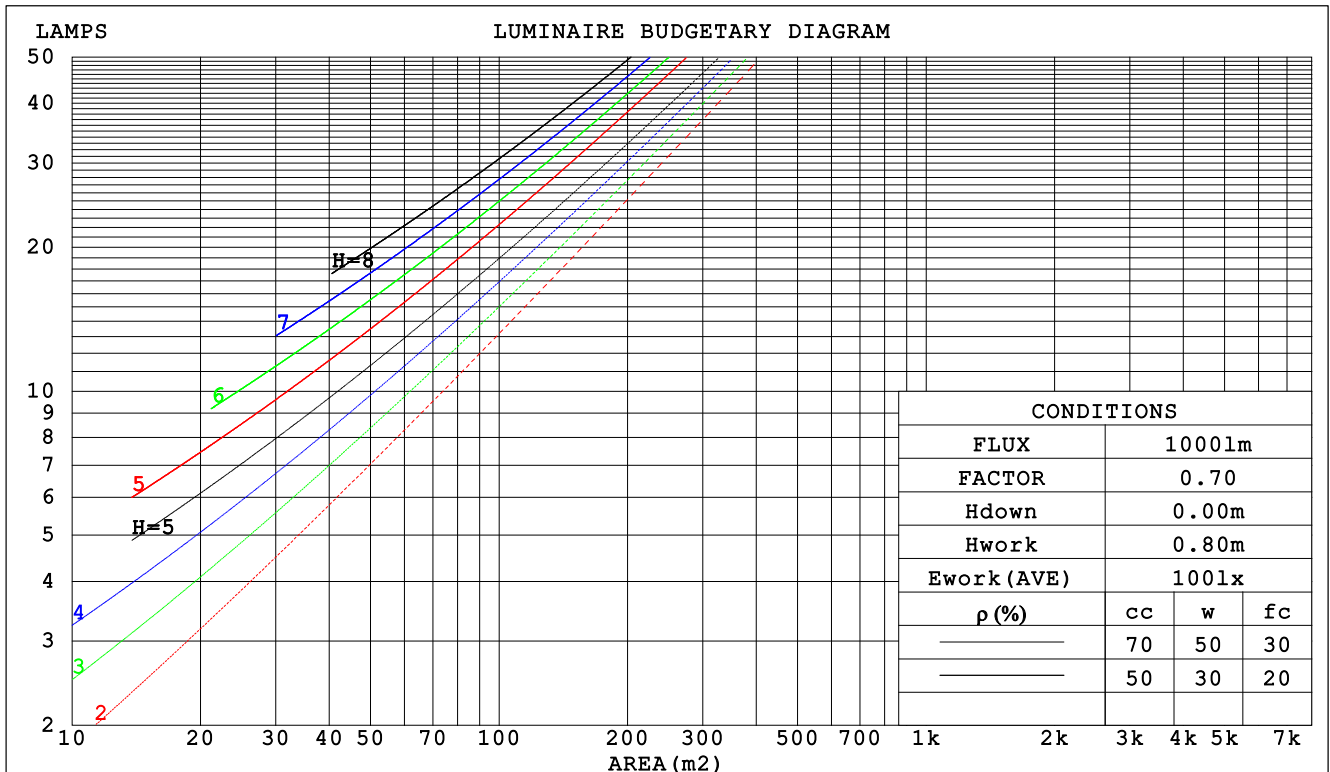
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:28 August 2024

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.250m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.25V I:0.1107A P:23.354W PF:0.9622 Freq:49.99Hz Lamp Flux:4784.35x1 lm		
NAME: GLM-BPL6060-22	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
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	1.00
1.0	1.07	1.03	1.00	1.05	1.02	.99	1.01	.98	.96	.97	.95	.93	.93	.91	.90	.88
2.0	.95	.90	.85	.94	.88	.84	.90	.86	.82	.87	.83	.80	.84	.81	.78	.77
3.0	.86	.79	.73	.84	.78	.72	.81	.76	.71	.79	.74	.70	.76	.72	.69	.67
4.0	.77	.70	.64	.76	.69	.63	.74	.67	.63	.71	.66	.62	.69	.65	.61	.59
5.0	.70	.62	.56	.69	.62	.56	.67	.60	.55	.65	.59	.55	.63	.58	.54	.52
6.0	.64	.56	.50	.63	.55	.50	.61	.55	.49	.60	.54	.49	.58	.53	.49	.47
7.0	.58	.51	.45	.58	.50	.45	.56	.49	.45	.55	.49	.44	.54	.48	.44	.42
8.0	.54	.46	.41	.53	.46	.41	.52	.45	.40	.51	.45	.40	.50	.44	.40	.38
9.0	.50	.42	.37	.49	.42	.37	.48	.41	.37	.47	.41	.37	.46	.41	.36	.35
10.0	.46	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.34	.43	.37	.33	.32



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:28 August 2024

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.250m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:219.25V I:0.1107A P:23.354W PF:0.9622 Freq:49.99Hz Lamp Flux:4784.35x1 lm					
NAME: GLM-BPL6060-22			TYPE:LED		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:1
MFR.: EVERFINE			SUR.:		Shielding Angle:

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.252	.143	.045	.245	.140	.044	.232	.133	.042	.220	.127	.041	.209	.121	.039		
2.0	.243	.133	.041	.237	.131	.040	.226	.126	.039	.216	.121	.038	.206	.117	.037		
3.0	.230	.122	.037	.224	.120	.036	.215	.116	.035	.205	.113	.035	.197	.109	.034		
4.0	.216	.112	.033	.211	.110	.033	.202	.107	.032	.194	.104	.031	.187	.101	.031		
5.0	.202	.103	.030	.198	.102	.030	.190	.099	.029	.183	.097	.029	.177	.094	.028		
6.0	.190	.095	.027	.186	.094	.027	.179	.092	.027	.173	.090	.026	.167	.088	.026		
7.0	.179	.088	.025	.175	.087	.025	.169	.086	.025	.164	.084	.024	.158	.082	.024		
8.0	.168	.082	.023	.166	.082	.023	.160	.080	.023	.155	.079	.023	.150	.077	.022		
9.0	.159	.077	.022	.157	.076	.021	.152	.075	.021	.147	.074	.021	.143	.072	.021		
10.0	.151	.072	.020	.148	.072	.020	.144	.071	.020	.140	.069	.020	.136	.068	.020		

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	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	.176	.157	.139	.151	.134	.120	.103	.092	.083	.059	.054	.048	.019	.017	.016	
2.0	.166	.132	.104	.142	.114	.090	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.157	.114	.080	.134	.098	.069	.092	.068	.049	.053	.040	.029	.017	.013	.009	
4.0	.149	.100	.063	.127	.087	.055	.088	.060	.039	.051	.035	.023	.016	.012	.008	
5.0	.141	.089	.051	.121	.077	.045	.083	.054	.032	.048	.032	.019	.016	.010	.006	
6.0	.134	.081	.043	.115	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.122	.068	.031	.105	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.116	.063	.027	.100	.055	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.096	.051	.021	.066	.036	.015	.039	.021	.009	.013	.007	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:28 August 2024

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.250m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:219.25V I:0.1107A P:23.354W PF:0.9622 Freq:49.99Hz Lamp Flux:4784.35x1 lm										
NAME: GLM-BPL6060-22					TYPE:LED			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:1		
MFR.: EVERFINE					SUR.:			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	16.1	17.4	16.3	17.6	17.8	16.8	18.1	17.0	18.3	18.5
3H	16.8	18.0	17.1	18.2	18.5	17.6	18.8	17.9	19.1	19.3
4H	17.1	18.3	17.4	18.5	18.8	18.0	19.1	18.3	19.4	19.6
6H	17.4	18.5	17.7	18.7	19.0	18.0	19.0	18.3	19.3	19.6
8H	17.4	18.4	17.7	18.7	19.0	17.9	19.0	18.2	19.2	19.5
12H	17.4	18.4	17.7	18.7	19.0	17.9	18.9	18.2	19.1	19.4
4H 2H	16.4	17.6	16.7	17.8	18.1	17.0	18.2	17.3	18.4	18.7
3H	17.5	18.5	17.9	18.8	19.1	18.1	19.1	18.5	19.4	19.7
4H	18.0	18.9	18.4	19.2	19.6	18.6	19.6	19.0	19.9	20.2
6H	18.3	19.1	18.7	19.5	19.8	18.7	19.5	19.1	19.8	20.2
8H	18.4	19.1	18.8	19.5	19.9	18.6	19.4	19.1	19.8	20.1
12H	18.4	19.1	18.8	19.4	19.8	18.6	19.3	19.0	19.7	20.1
8H 4H	18.3	19.1	18.7	19.4	19.8	18.9	19.6	19.3	20.0	20.4
6H	18.8	19.4	19.3	19.8	20.3	19.0	19.6	19.4	20.0	20.4
8H	18.9	19.5	19.4	19.9	20.3	18.9	19.5	19.4	19.9	20.3
12H	18.9	19.4	19.4	19.9	20.3	18.9	19.3	19.4	19.8	20.3
12H 4H	18.3	19.0	18.7	19.3	19.7	18.9	19.6	19.3	19.9	20.3
6H	18.8	19.4	19.3	19.8	20.2	19.0	19.5	19.4	20.0	20.4
8H	19.0	19.4	19.4	19.9	20.3	19.0	19.4	19.4	19.9	20.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.5 / - 0.7					+ 0.5 / - 0.6				
1.5H	+ 0.5 / - 0.6					+ 0.2 / - 0.3				
2.0H	+ 1.0 / - 1.0					+ 0.9 / - 1.4				

CIE Pub.117, 4784 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.4$)

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:28 August 2024

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.250m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:219.25V I:0.1107A P:23.354W PF:0.9622 Freq:49.99Hz Lamp Flux:4784.35x1 lm		
NAME: GLM-BPL6060-22	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

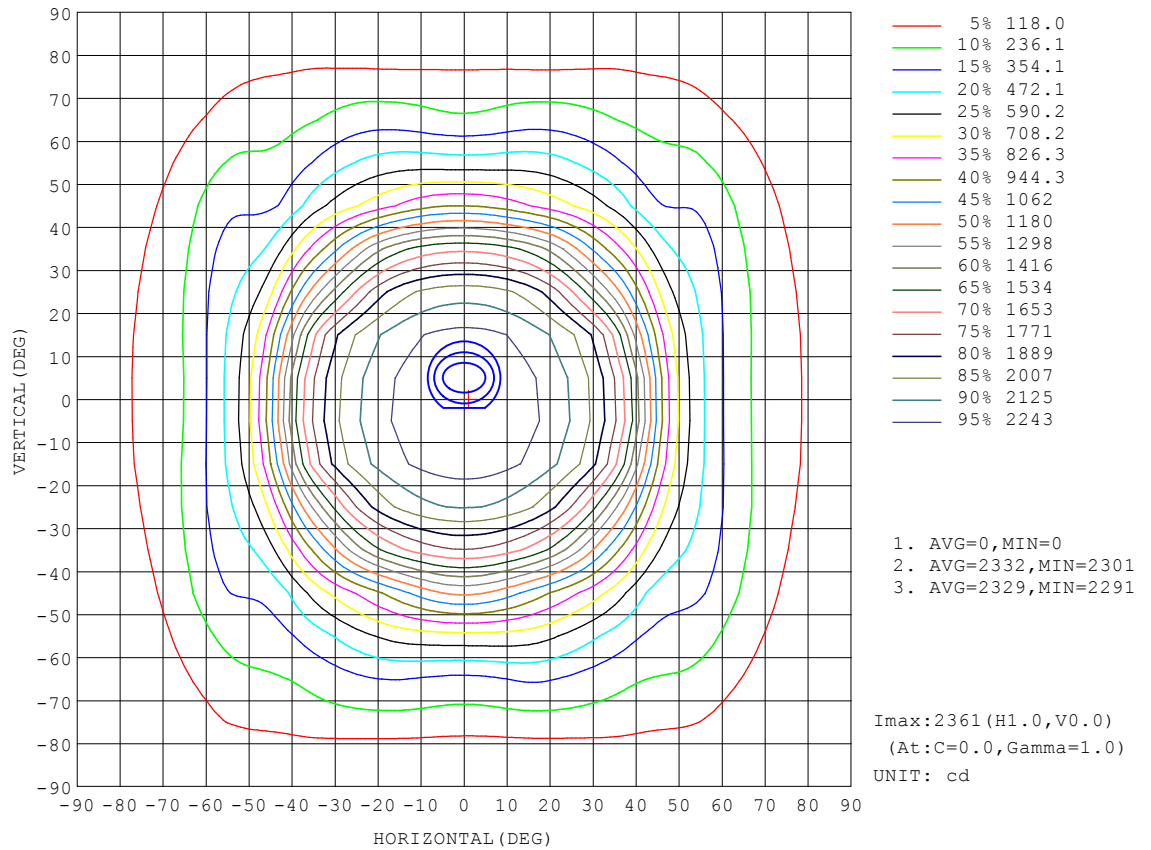
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	67	57	51	67	57	51	65	57	51	46
0.80	77	67	61	76	67	61	74	66	61	55
1.00	84	75	69	83	75	69	81	76	69	63
1.25	91	82	76	89	82	76	87	80	75	69
1.50	95	87	82	93	86	81	91	85	80	74
2.00	100	94	89	99	93	88	96	90	86	80
2.50	104	97	93	102	96	92	98	93	90	82
3.00	106	101	96	104	99	95	100	96	93	86
4.00	109	105	101	107	103	100	103	100	97	89
5.00	111	107	104	109	106	103	105	102	100	91
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:28 August 2024

$V(B)$ Range:-75 - 75DEG
 $V(B)$ Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:219.25V I:0.1107A P:23.354W PF:0.9622 Freq:49.99Hz Lamp Flux:4784.35x1 lm		
NAME: GLM-BPL6060-22	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

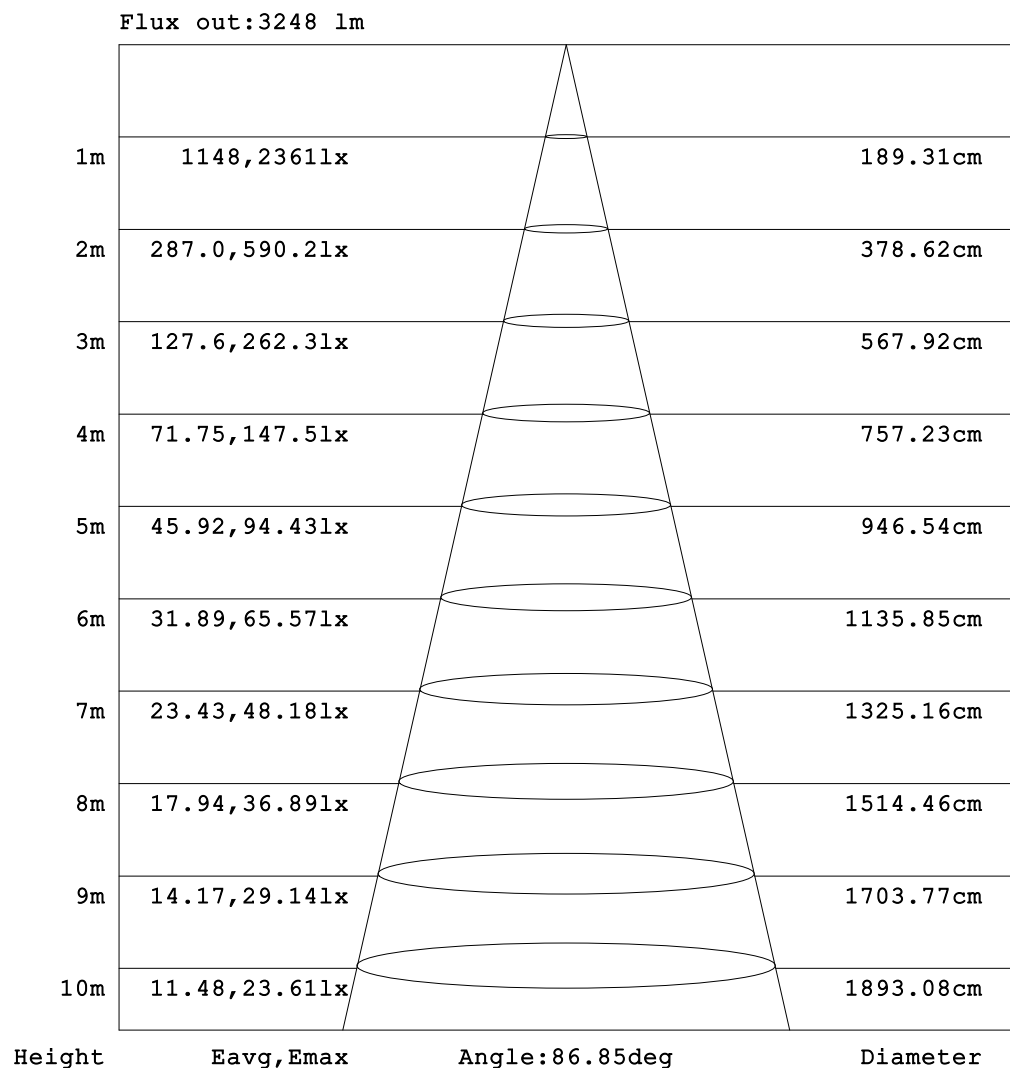


H(β) Range:-90 - 90DEG
 H(β) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:28 August 2024

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

AAI Figure

Test:U:219.25V I:0.1107A P:23.354W PF:0.9622 Freq:49.99Hz Lamp Flux:4784.35x1 lm		
NAME: GLM-BPL6060-22	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



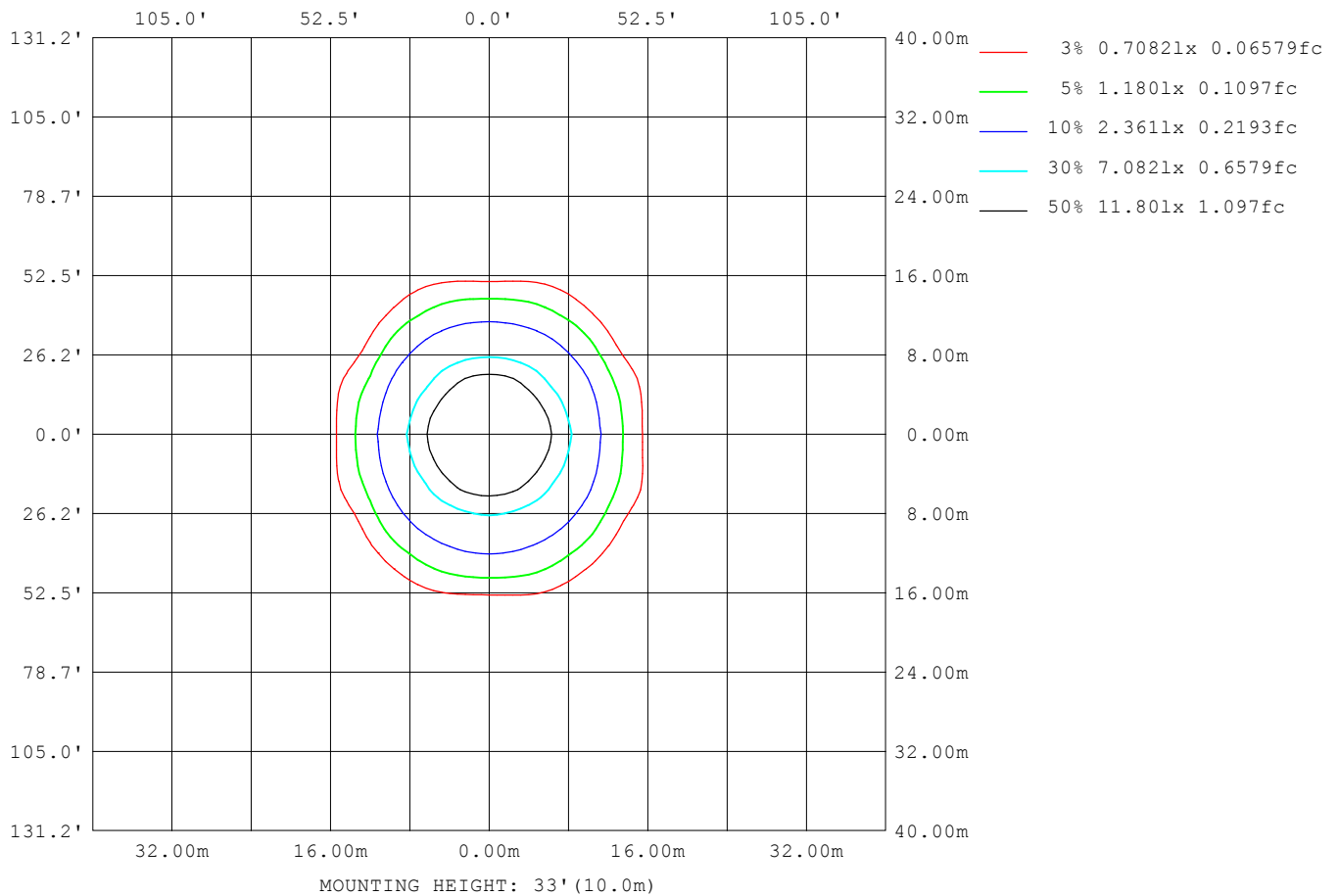
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
 H(β) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:28 August 2024

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:219.25V I:0.1107A P:23.354W PF:0.9622 Freq:49.99Hz Lamp Flux:4784.35x1 lm		
NAME: GLM-BPL6060-22	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:28 August 2024

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.250m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:219.25V I:0.1107A P:23.354W PF:0.9622 Freq:49.99Hz Lamp Flux:4784.35x1 lm		
NAME: GLM-BPL6060-22	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

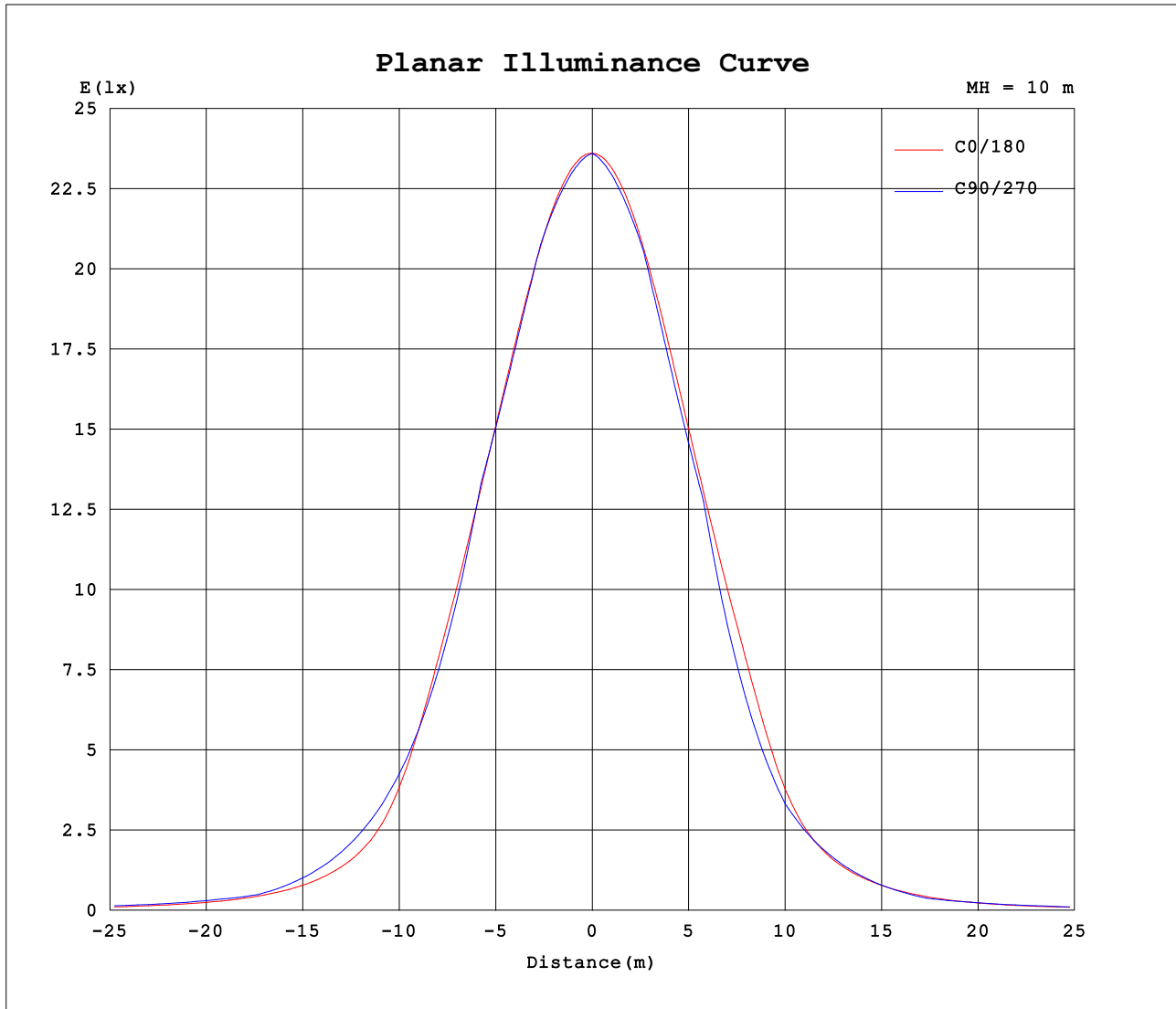
AvgL	cd/m2
L_0~180 (65) av	1742
L_0~180 (75) av	1750
L_0~180 (85) av	563
L_90~270 (65) av	2027
L_90~270 (75) av	1805
L_90~270 (85) av	0
L_45 (65) av	2201
L_45 (75) av	2096
L_45 (85) av	0

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:28 August 2024

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.250m [K=1.0000]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:28 August 2024

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.250m [K=1.0000]
Remarks:

