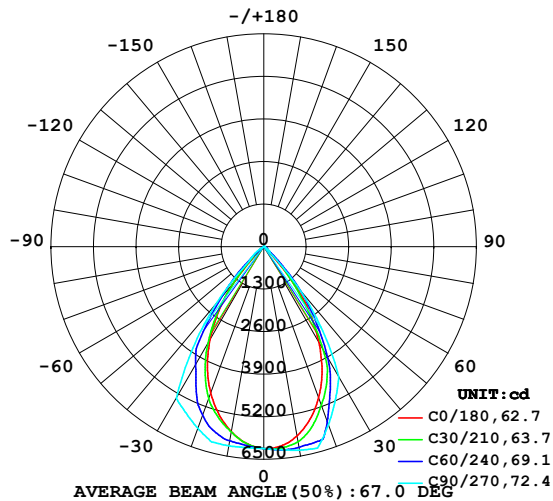


LUMINAIRE PHOTOMETRIC TEST REPORT

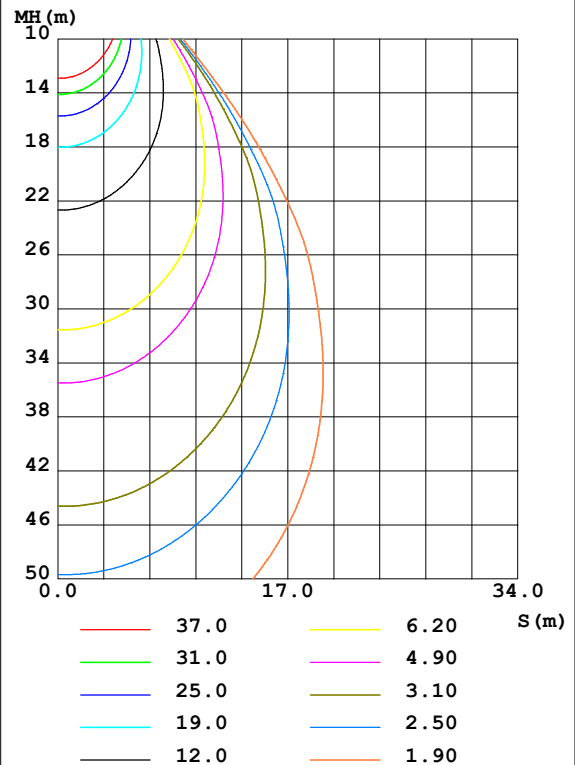
Test:U:220.15V I:0.2413A P:52.938W PF:0.9757 Freq:49.99Hz Lamp Flux:6623.7x1 lm		
NAME: GLM-PLS128CR1500 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:52.9W Current:350mA Voltage:139V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 125.12 lm/W			
MODEL		I _{max} (cd)	6384	S/MH (C0/180)	0.92
NOMINAL POWER(W)		LOR(%)	100.0	S/MH (C90/270)	1.08
RATED VOLTAGE(V)	220.0	TOTAL FLUX (lm)	6623.7	η UP,DN (C0-180)	0.0,48.3
NOMINAL FLUX(lm)	6623.7	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,51.7
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	0.95

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:27 November 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:8.000m [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	5872	6135	6313	5977	5739	5886	6180	6044	0- 10	582.0	582.0	8.79,8.79
20	4911	5643	5785	5315	4750	5177	5907	5507	10- 20	1619	2201	33.2,33.2
30	3372	3538	4586	3378	3292	3630	5351	3842	20- 30	2128	4330	65.4,65.4
40	1218	1234	1714	1262	1340	1745	2211	1754	30- 40	1703	6033	91.1,91.1
50	72.78	232.6	191.9	247.0	56.26	356.1	427.3	328.1	40- 50	514.2	6547	98.8,98.8
60	0.0000	31.15	19.53	30.07	0	20.73	0.0002	22.47	50- 60	72.93	6620	99.9,99.9
70	0	0	6.510	0	0	0	0	0	60- 70	3.872	6624	100,100
80	0	0	0	0	0	0	0	0	70- 80	0.1912	6624	100,100
90	0	0	0	0	0	0	0	0	80- 90	0	6624	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): 6415.2 lm

%lum = 96.9%

%lamp = 96.9%

Conical surface Flux(120deg): 6619.6 lm

%lum = 99.9%

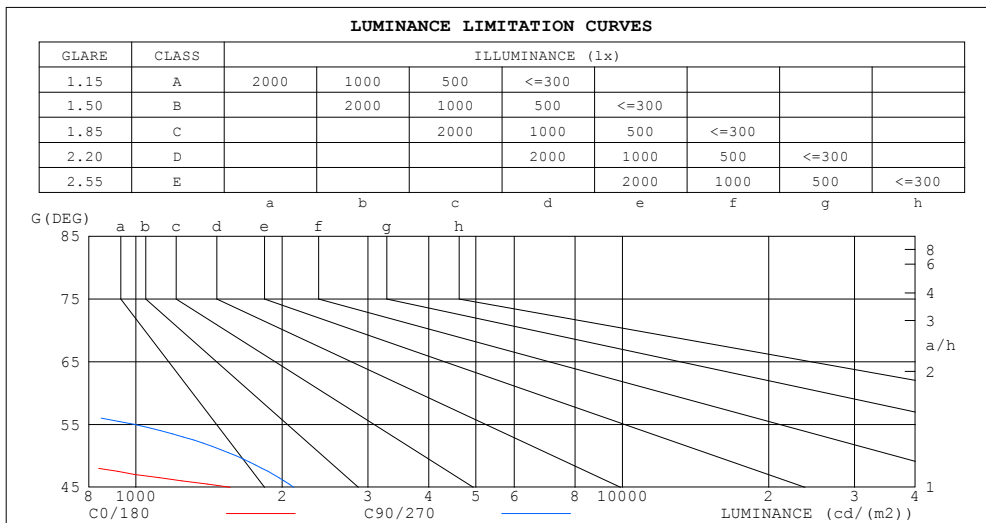
%lamp = 99.9%

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:27 November 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:8.000m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.15V I:0.2413A P:52.938W PF:0.9757 Freq:49.99Hz Lamp Flux:6623.7x1 lm		
NAME: GLM-PLS128CR1500 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:52.9W Current:350mA Voltage:139V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



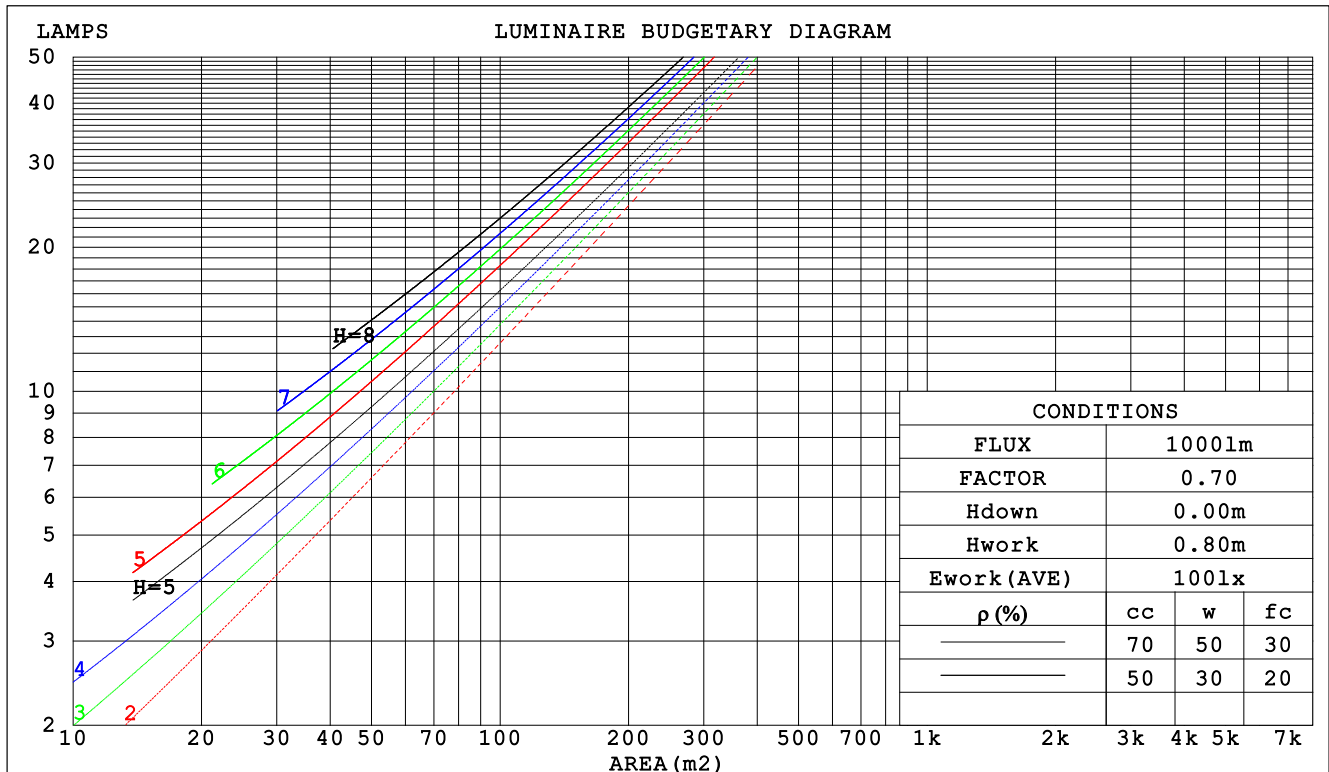
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:27 November 2024

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:8.000m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.15V I:0.2413A P:52.938W PF:0.9757 Freq:49.99Hz Lamp Flux:6623.7x1 lm		
NAME: GLM-PLS128CR1500 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:52.9W Current:350mA Voltage:139V	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	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	1.00
1.0	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.02	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.98	.95	1.01	.97	.94	.98	.94	.92	.95	.92	.90	.92	.90	.88	.86
3.0	.95	.90	.86	.94	.89	.85	.91	.87	.84	.89	.85	.83	.86	.84	.81	.80
4.0	.89	.83	.79	.87	.82	.78	.85	.81	.77	.83	.79	.76	.81	.78	.75	.74
5.0	.83	.77	.72	.82	.76	.72	.80	.75	.71	.78	.74	.70	.77	.73	.70	.68
6.0	.77	.71	.66	.76	.70	.66	.75	.70	.66	.73	.69	.65	.72	.68	.65	.63
7.0	.72	.66	.62	.71	.66	.61	.70	.65	.61	.69	.64	.61	.68	.64	.60	.59
8.0	.68	.61	.57	.67	.61	.57	.66	.61	.57	.65	.60	.57	.64	.60	.56	.55
9.0	.64	.57	.53	.63	.57	.53	.62	.57	.53	.61	.56	.53	.60	.56	.53	.51
10.0	.60	.54	.50	.59	.54	.50	.59	.53	.50	.58	.53	.49	.57	.53	.49	.48



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:27 November 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:8.000m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.15V I:0.2413A P:52.938W PF:0.9757 Freq:49.99Hz Lamp Flux:6623.7x1 lm		
NAME: GLM-PLS128CR1500 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:52.9W Current:350mA Voltage:139V	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	.182	.104	.033	.175	.100	.032	.163	.093	.030	.151	.087	.028	.140	.081	.026		
2.0	.176	.096	.030	.170	.094	.029	.159	.089	.028	.150	.084	.026	.140	.079	.025		
3.0	.168	.090	.027	.163	.087	.026	.154	.084	.025	.146	.080	.025	.138	.076	.024		
4.0	.161	.084	.025	.157	.082	.024	.149	.079	.024	.141	.076	.023	.135	.073	.022		
5.0	.154	.078	.023	.150	.077	.022	.143	.075	.022	.137	.072	.021	.131	.070	.021		
6.0	.147	.074	.021	.144	.073	.021	.138	.071	.021	.132	.069	.020	.127	.067	.020		
7.0	.141	.070	.020	.138	.069	.020	.133	.067	.019	.127	.065	.019	.123	.064	.019		
8.0	.135	.066	.019	.132	.065	.018	.127	.064	.018	.123	.062	.018	.119	.061	.018		
9.0	.129	.063	.017	.127	.062	.017	.123	.061	.017	.119	.059	.017	.115	.058	.017		
10.0	.124	.060	.017	.122	.059	.016	.118	.058	.016	.114	.057	.016	.111	.056	.016		

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	.171	.157	.144	.147	.135	.124	.100	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.157	.132	.112	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.145	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.135	.099	.071	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.127	.088	.059	.109	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007	
6.0	.120	.078	.049	.103	.068	.042	.071	.048	.030	.041	.028	.018	.013	.009	.006	
7.0	.114	.071	.041	.098	.061	.036	.067	.043	.025	.039	.025	.015	.013	.008	.005	
8.0	.108	.065	.035	.093	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.103	.060	.030	.089	.052	.027	.062	.036	.019	.036	.022	.011	.012	.007	.004	
10.0	.099	.055	.027	.085	.048	.023	.059	.034	.017	.034	.020	.010	.011	.007	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:27 November 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:8.000m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.15V I:0.2413A P:52.938W PF:0.9757 Freq:49.99Hz Lamp Flux:6623.7x1 lm										
NAME: GLM-PLS128CR1500 (4000K)					TYPE:LED			WEIGHT:		
SPEC.:Power:52.9W Current:350mA Voltage:139V					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	12.9	13.9	13.1	14.1	14.3	15.0	16.0	15.3	16.2	16.4
3H	12.7	13.7	13.0	13.9	14.1	14.9	15.8	15.1	16.0	16.2
4H	12.7	13.5	12.9	13.7	14.0	14.8	15.6	15.0	15.8	16.1
6H	12.6	13.4	12.9	13.6	13.9	14.7	15.5	15.0	15.7	16.0
8H	12.5	13.3	12.8	13.5	13.8	14.6	15.4	14.9	15.7	15.9
12H	12.5	13.2	12.8	13.5	13.8	14.6	15.3	14.9	15.6	15.9
4H 2H	12.7	13.5	12.9	13.7	14.0	14.8	15.6	15.0	15.9	16.1
3H	12.5	13.2	12.8	13.5	13.8	14.6	15.3	14.9	15.6	15.9
4H	12.4	13.1	12.7	13.4	13.7	14.5	15.2	14.8	15.5	15.8
6H	12.3	12.9	12.7	13.2	13.6	14.4	15.0	14.8	15.3	15.7
8H	12.2	12.8	12.6	13.1	13.5	14.4	14.9	14.7	15.2	15.6
12H	12.2	12.7	12.6	13.1	13.4	14.3	14.8	14.7	15.2	15.6
8H 4H	12.2	12.8	12.6	13.1	13.5	14.4	14.9	14.7	15.2	15.6
6H	12.1	12.6	12.6	13.0	13.4	14.2	14.7	14.7	15.1	15.5
8H	12.1	12.5	12.5	12.9	13.3	14.2	14.6	14.6	15.0	15.4
12H	12.0	12.4	12.5	12.8	13.3	14.1	14.5	14.6	14.9	15.4
12H 4H	12.2	12.7	12.6	13.1	13.4	14.3	14.8	14.7	15.2	15.6
6H	12.1	12.5	12.5	12.9	13.3	14.2	14.6	14.6	15.0	15.4
8H	12.0	12.4	12.5	12.8	13.3	14.1	14.5	14.6	14.9	15.4
Variations with the observer position at spacings:										
S = 1.0H	+ 3.3 / -24.4					+ 3.1 / -14.6				
1.5H	+ 5.9 / -14.2					+ 5.7 / -11.9				
2.0H	+ 5.6 / - 1.5					+ 4.6 / -34.5				

CIE Pub.117, 6624 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 6.6$)

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:27 November 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:8.000m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.15V I:0.2413A P:52.938W PF:0.9757 Freq:49.99Hz Lamp Flux:6623.7x1 lm		
NAME: GLM-PLS128CR1500 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:52.9W Current:350mA Voltage:139V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

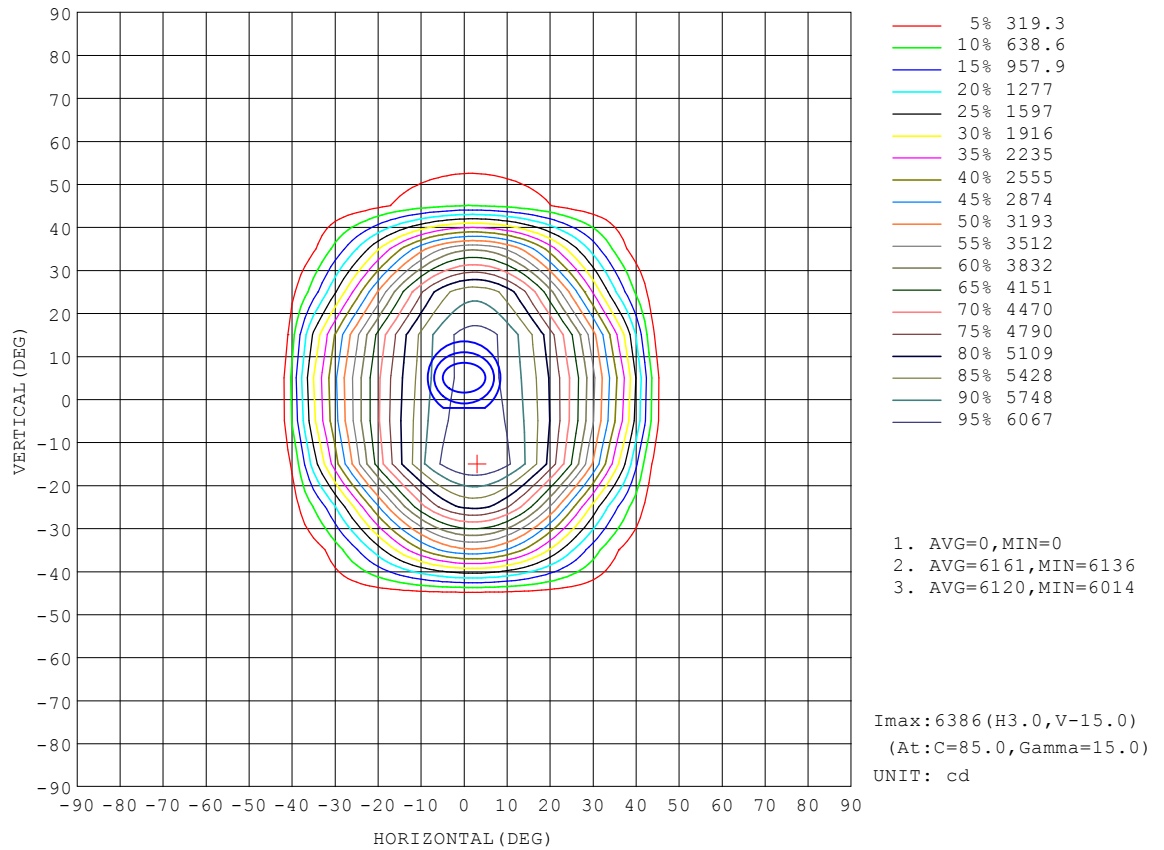
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	79	75	85	79	75	85	79	75	71
0.80	94	88	84	93	87	84	92	87	83	79
1.00	99	93	89	98	92	89	96	92	88	84
1.25	103	97	94	102	97	94	100	96	93	89
1.50	106	101	97	104	100	97	102	99	96	91
2.00	108	104	101	107	103	100	104	101	99	93
2.50	110	106	103	108	105	102	105	103	100	95
3.00	112	108	105	110	107	104	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	97
5.00	115	113	111	113	111	109	109	107	106	98
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:27 November 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:8.000m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.15V I:0.2413A P:52.938W PF:0.9757 Freq:49.99Hz Lamp Flux:6623.7x1 lm		
NAME: GLM-PLS128CR1500 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:52.9W Current:350mA Voltage:139V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

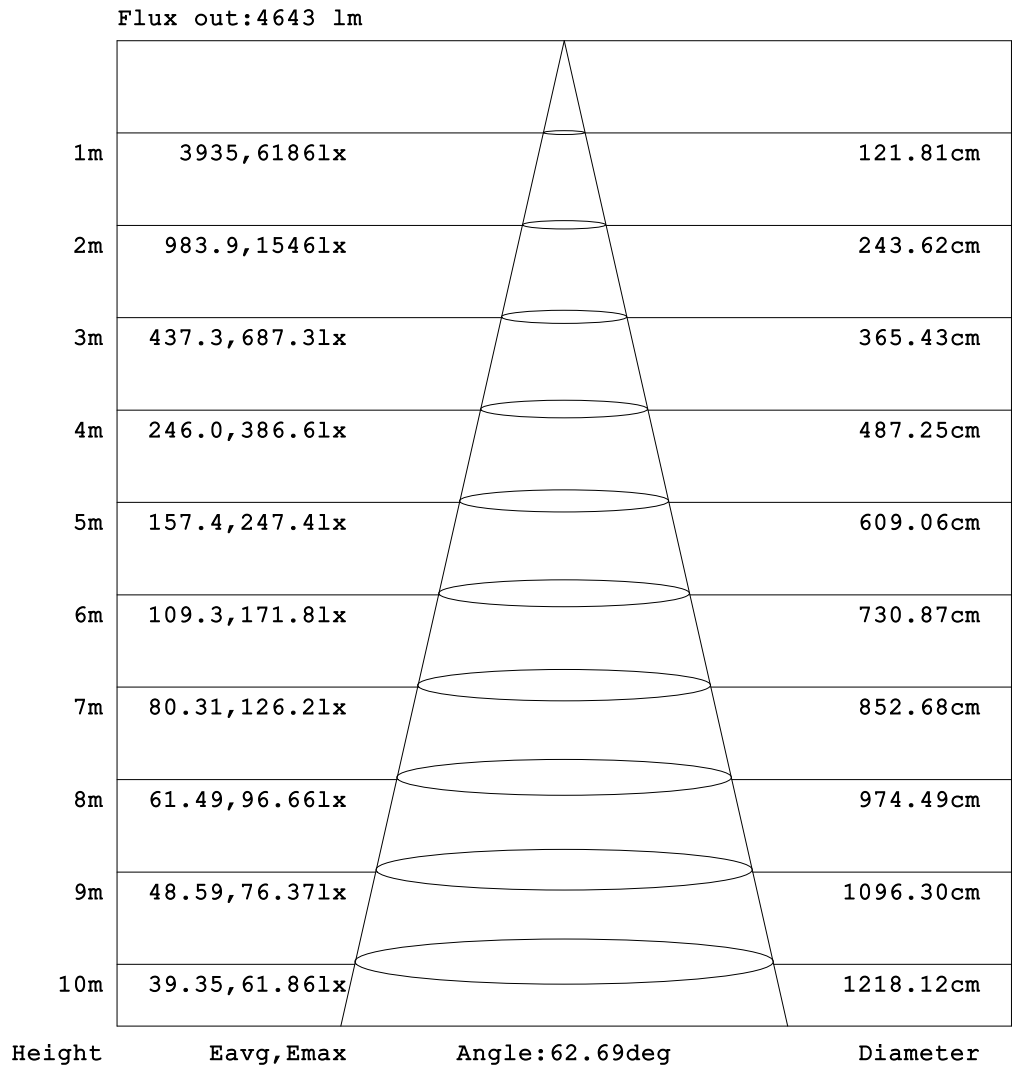


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:27 November 2024

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:8.000m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.15V I:0.2413A P:52.938W PF:0.9757 Freq:49.99Hz Lamp Flux:6623.7x1 lm		
NAME: GLM-PLS128CR1500 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:52.9W Current:350mA Voltage:139V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



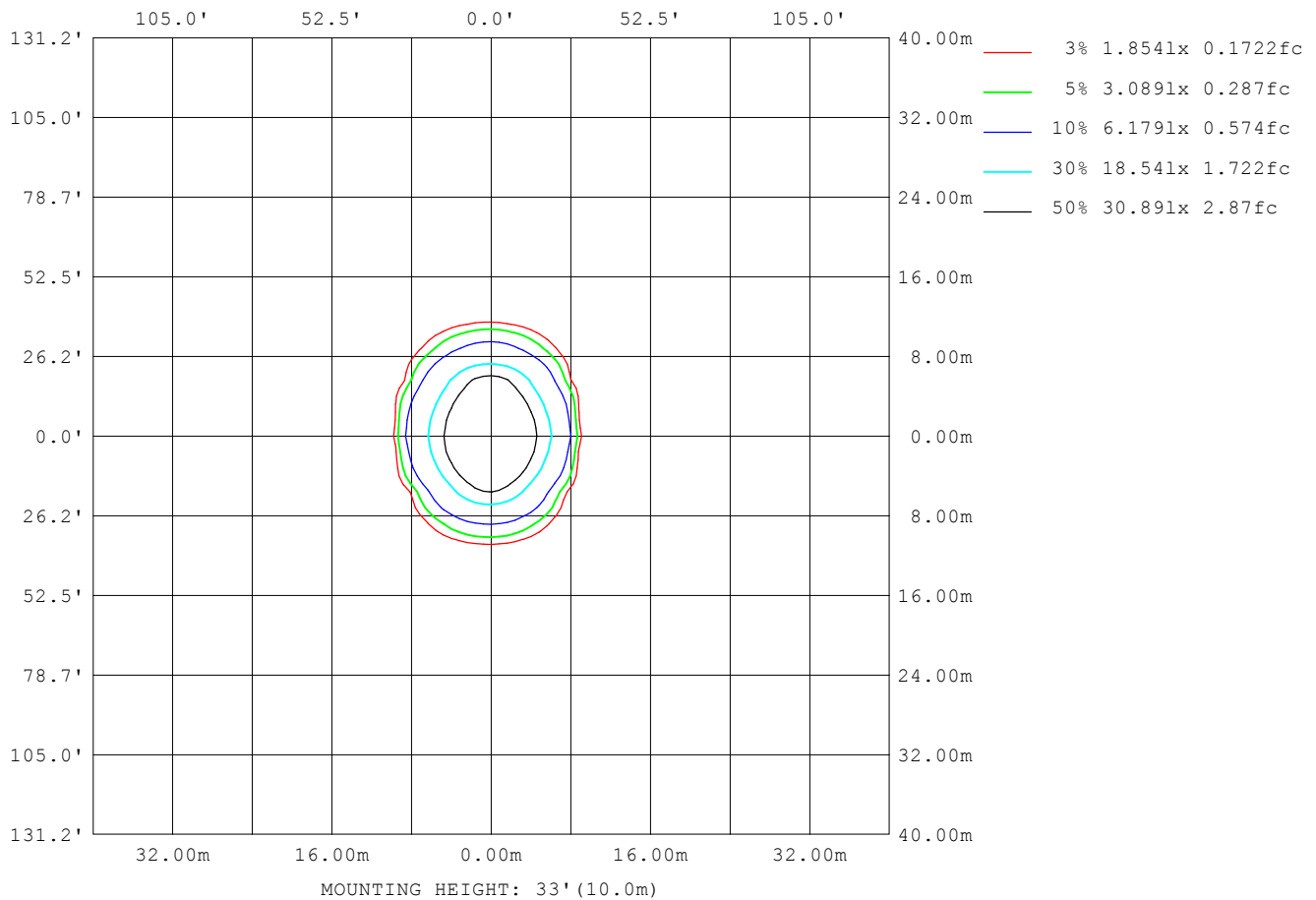
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:27 November 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:8.000m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:220.15V I:0.2413A P:52.938W PF:0.9757 Freq:49.99Hz Lamp Flux:6623.7x1 lm		
NAME: GLM-PLS128CR1500 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:52.9W Current:350mA Voltage:139V	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:27 November 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:8.000m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.15V I:0.2413A P:52.938W PF:0.9757 Freq:49.99Hz Lamp Flux:6623.7x1 lm		
NAME: GLM-PLS128CR1500 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:52.9W Current:350mA Voltage:139V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

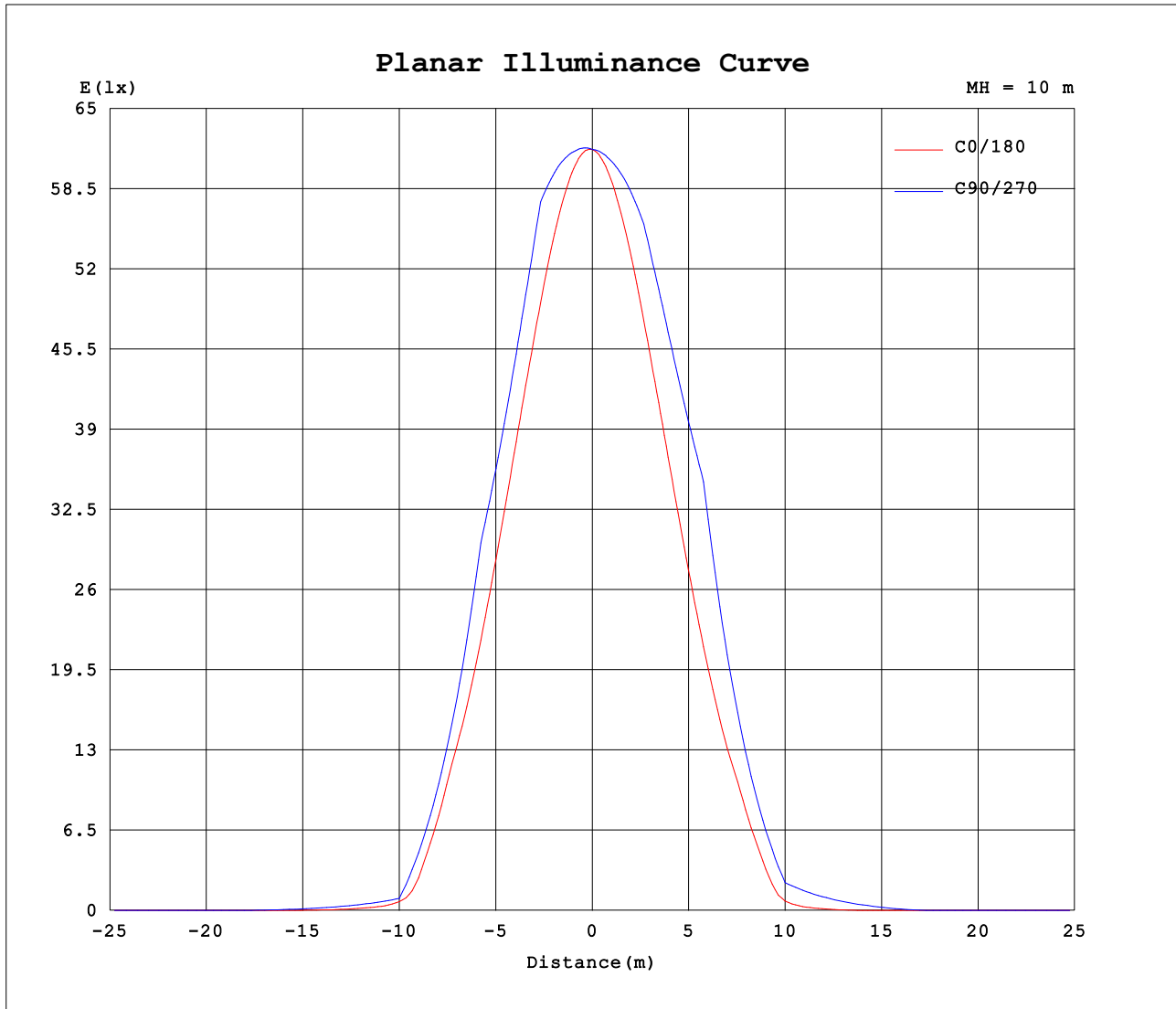
AvgL	cd/m2
L_0~180 (65) av	0
L_0~180 (75) av	0
L_0~180 (85) av	0
L_90~270 (65) av	83
L_90~270 (75) av	0
L_90~270 (85) av	0
L_45 (65) av	88
L_45 (75) av	0
L_45 (85) av	0

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:27 November 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:8.000m [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:27 November 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:8.000m [K=1.0000]
Remarks:

