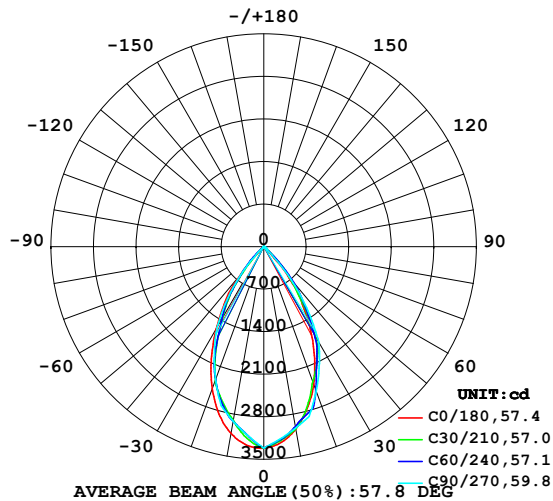


LUMINAIRE PHOTOMETRIC TEST REPORT

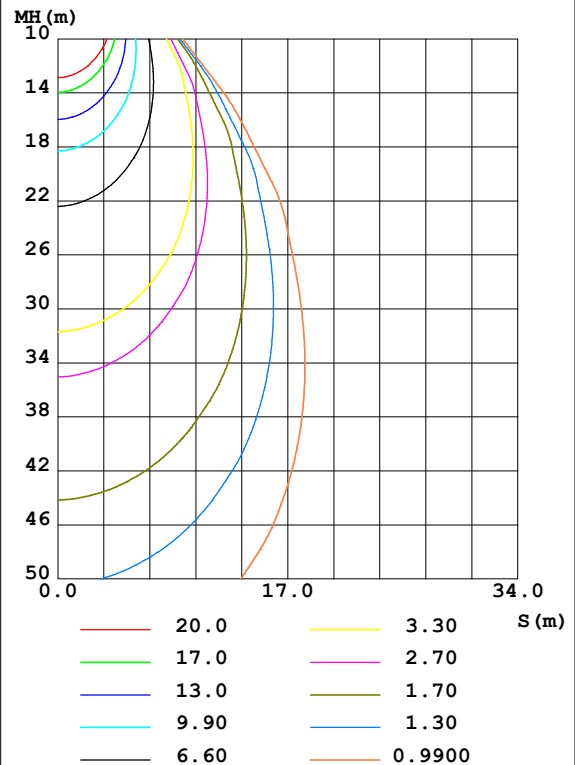
Test:U:220.20V I:0.1139A P:22.511W PF:0.9635 Freq:49.99Hz Lamp Flux:2800.56x1 lm		
NAME: GLM-PLS128CR300T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:22.5W Current:550mA Voltage:33.9V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 124.41 lm/W			
MODEL		I _{max} (cd)	3318	S/MH(C0/180)	0.88
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.84
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	2800.6	η UP,DN(C0-180)	0.0,52.1
NOMINAL FLUX(lm)	2800.56	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.9
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:25 December 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	3049	3010	3031	2992	3120	2908	2915	2931	0- 10	297.0	297.0	10.6,10.6
20	2407	2553	2529	2457	2483	2294	2324	2398	10- 20	762.7	1060	37.8,37.8
30	1507	1593	1811	1544	1568	1390	1540	1434	20- 30	901.9	1962	70,70
40	583.4	670.4	659.0	652.7	586.3	532.0	532.9	561.0	30- 40	653.9	2615	93.4,93.4
50	8.818	126.9	55.17	123.5	0.0275	71.01	19.49	81.21	40- 50	174.2	2790	99.6,99.6
60	0	5.346	0.0000	4.455	0	0	0.0000	0	50- 60	10.64	2800	100,100
70	0	0	0	0	0	0	0	0	60- 70	0.2669	2801	100,100
80	0	0	0	0	0	0	0	0	70- 80	0	2801	100,100
90	0	0	0	0	0	0	0	0	80- 90	0	2801	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): 2753.9 lm

%lum = 98.3%

%lamp = 98.3%

Conical surface Flux(120deg): 2800.3 lm

%lum = 100.0%

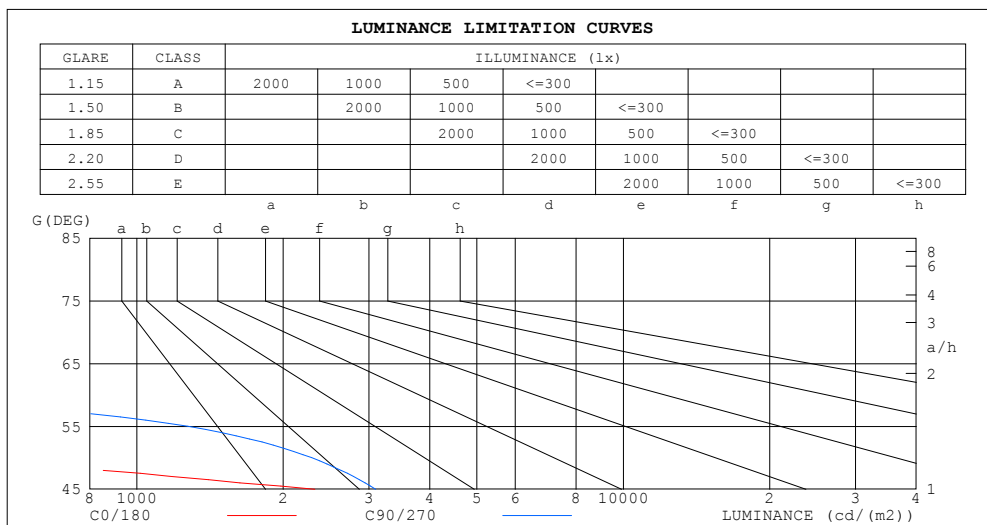
%lamp = 100.0%

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:25 December 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:220.20V I:0.1139A P:22.511W PF:0.9635 Freq:49.99Hz Lamp Flux:2800.56x1 lm		
NAME: GLM-PLS128CR300T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:22.5W Current:550mA Voltage:33.9V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



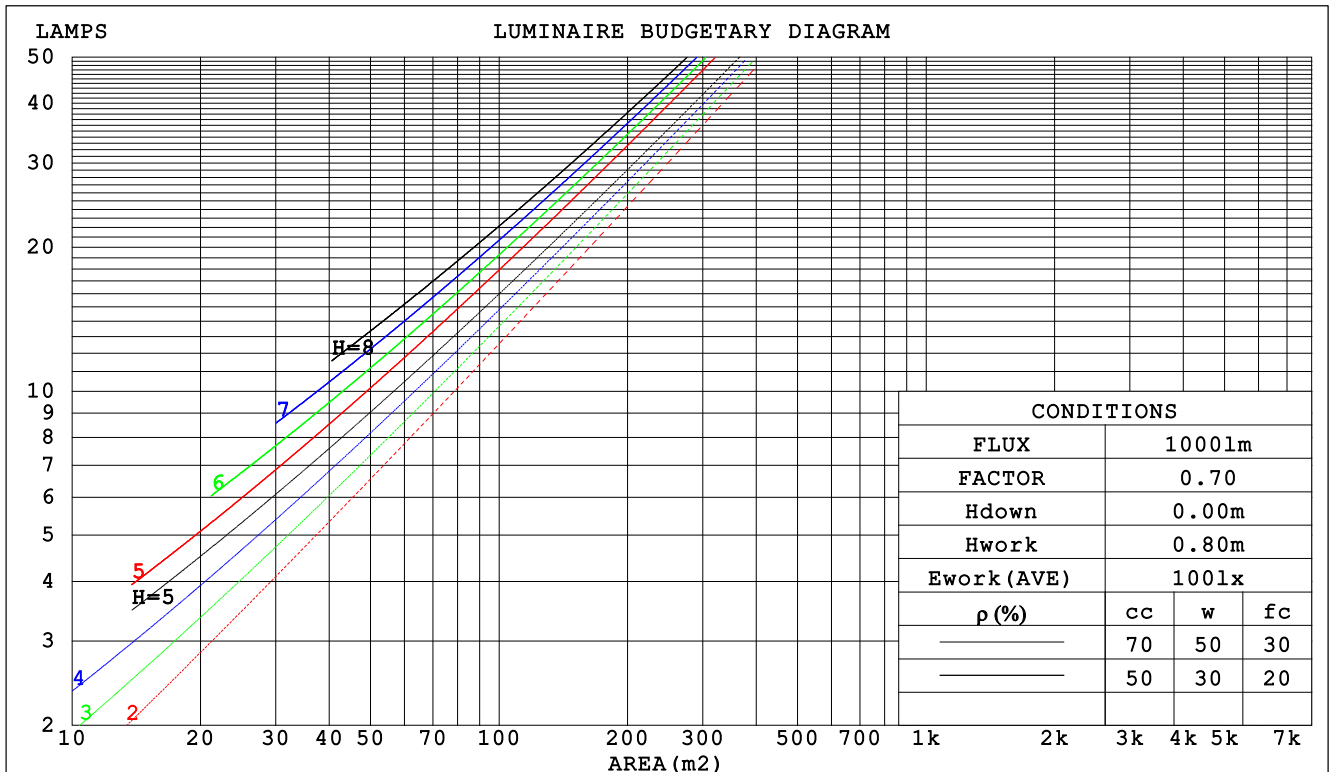
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:25 December 2024

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:220.20V I:0.1139A P:22.511W PF:0.9635 Freq:49.99Hz Lamp Flux:2800.56x1 lm		
NAME: GLM-PLS128CR300T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:22.5W Current:550mA Voltage:33.9V	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	1.11	1.08	1.06	1.09	1.06	1.04	1.05	1.03	1.01	1.01	.00	.98	.98	.96	.95	.94
2.0	1.03	.99	.96	1.01	.98	.95	.98	.95	.93	.95	.93	.91	.93	.91	.89	.87
3.0	.96	.91	.87	.95	.90	.87	.92	.88	.85	.90	.87	.84	.88	.85	.83	.81
4.0	.90	.84	.80	.89	.84	.80	.87	.82	.79	.85	.81	.78	.83	.80	.77	.76
5.0	.84	.78	.74	.83	.78	.74	.81	.77	.73	.80	.76	.72	.78	.75	.72	.70
6.0	.79	.73	.69	.78	.73	.69	.77	.72	.68	.75	.71	.68	.74	.70	.67	.66
7.0	.74	.68	.64	.74	.68	.64	.72	.67	.63	.71	.67	.63	.70	.66	.63	.61
8.0	.70	.64	.60	.69	.64	.60	.68	.63	.59	.67	.63	.59	.66	.62	.59	.58
9.0	.66	.60	.56	.65	.60	.56	.64	.59	.56	.64	.59	.56	.63	.58	.55	.54
10.0	.62	.57	.53	.62	.56	.53	.61	.56	.52	.60	.56	.52	.60	.55	.52	.51



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:25 December 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:220.20V I:0.1139A P:22.511W PF:0.9635 Freq:49.99Hz Lamp Flux:2800.56x1 lm		
NAME: GLM-PLS128CR300T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:22.5W Current:550mA Voltage:33.9V	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	.176	.100	.032	.169	.097	.031	.157	.090	.029	.145	.084	.027	.135	.078	.025		
2.0	.169	.093	.028	.164	.090	.028	.153	.085	.026	.143	.080	.025	.134	.076	.024		
3.0	.162	.086	.026	.157	.084	.025	.148	.080	.024	.139	.076	.023	.132	.073	.023		
4.0	.154	.080	.024	.150	.079	.023	.142	.076	.023	.135	.073	.022	.128	.070	.021		
5.0	.148	.075	.022	.144	.074	.022	.137	.071	.021	.131	.069	.021	.125	.067	.020		
6.0	.141	.071	.020	.138	.070	.020	.132	.068	.020	.126	.066	.019	.121	.064	.019		
7.0	.135	.067	.019	.132	.066	.019	.127	.064	.018	.122	.063	.018	.117	.061	.018		
8.0	.130	.063	.018	.127	.063	.018	.122	.061	.017	.118	.060	.017	.114	.058	.017		
9.0	.124	.060	.017	.122	.059	.017	.118	.058	.017	.114	.057	.016	.110	.056	.016		
10.0	.119	.057	.016	.117	.057	.016	.113	.056	.016	.110	.055	.016	.106	.054	.015		

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	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.133	.113	.134	.114	.098	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.090	.123	.098	.078	.085	.068	.054	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.072	.115	.085	.063	.079	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.125	.087	.059	.107	.076	.052	.074	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.118	.078	.050	.101	.068	.043	.070	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.111	.071	.042	.096	.061	.037	.066	.043	.026	.038	.025	.015	.012	.008	.005	
8.0	.106	.064	.036	.091	.056	.031	.063	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.101	.059	.031	.087	.051	.027	.060	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.096	.055	.027	.083	.048	.024	.058	.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:25 December 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:220.20V I:0.1139A P:22.511W PF:0.9635 Freq:49.99Hz Lamp Flux:2800.56x1 lm										
NAME: GLM-PLS128CR300T(4000K)					TYPE:LED			WEIGHT:		
SPEC.:Power:22.5W Current:550mA Voltage:33.9V					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	16.7	17.6	16.9	17.8	18.0	17.4	18.3	17.6	18.5	18.7
3H	16.5	17.4	16.8	17.6	17.8	17.2	18.1	17.5	18.3	18.5
4H	16.4	17.2	16.7	17.5	17.7	17.1	18.0	17.4	18.2	18.4
6H	16.3	17.1	16.6	17.3	17.6	17.0	17.8	17.3	18.1	18.3
8H	16.3	17.0	16.6	17.3	17.5	17.0	17.7	17.3	18.0	18.3
12H	16.2	16.9	16.6	17.2	17.5	17.0	17.7	17.3	17.9	18.2
4H 2H	16.4	17.2	16.7	17.5	17.7	17.1	18.0	17.4	18.2	18.4
3H	16.2	16.9	16.6	17.2	17.5	17.0	17.7	17.3	17.9	18.2
4H	16.1	16.8	16.5	17.1	17.4	16.9	17.5	17.2	17.8	18.1
6H	16.0	16.6	16.4	16.9	17.3	16.8	17.3	17.1	17.7	18.0
8H	16.0	16.5	16.4	16.9	17.2	16.7	17.2	17.1	17.6	18.0
12H	15.9	16.4	16.4	16.8	17.2	16.7	17.1	17.1	17.5	17.9
8H 4H	16.0	16.5	16.4	16.9	17.2	16.7	17.2	17.1	17.6	18.0
6H	15.9	16.3	16.3	16.7	17.1	16.6	17.0	17.0	17.4	17.8
8H	15.8	16.2	16.3	16.6	17.1	16.6	16.9	17.0	17.3	17.8
12H	15.8	16.1	16.3	16.6	17.0	16.5	16.8	17.0	17.3	17.7
12H 4H	15.9	16.4	16.4	16.8	17.2	16.7	17.1	17.1	17.5	17.9
6H	15.8	16.2	16.3	16.6	17.1	16.6	16.9	17.0	17.3	17.8
8H	15.8	16.1	16.3	16.6	17.0	16.5	16.8	17.0	17.3	17.7
Variations with the observer position at spacings:										
S = 1.0H	+ 2.9 / - 1.\$					+ 2.7 / -17.9				
1.5H	+ 5.2 / -25.6					+ 5.4 / -13.8				
2.0H	+ 6.8 / - 1.\$					+ 4.3 / - 1.\$				

CIE Pub.117, 2801 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 3.6)

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:25 December 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:220.20V I:0.1139A P:22.511W PF:0.9635 Freq:49.99Hz Lamp Flux:2800.56x1 lm		
NAME: GLM-PLS128CR300T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:22.5W Current:550mA Voltage:33.9V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

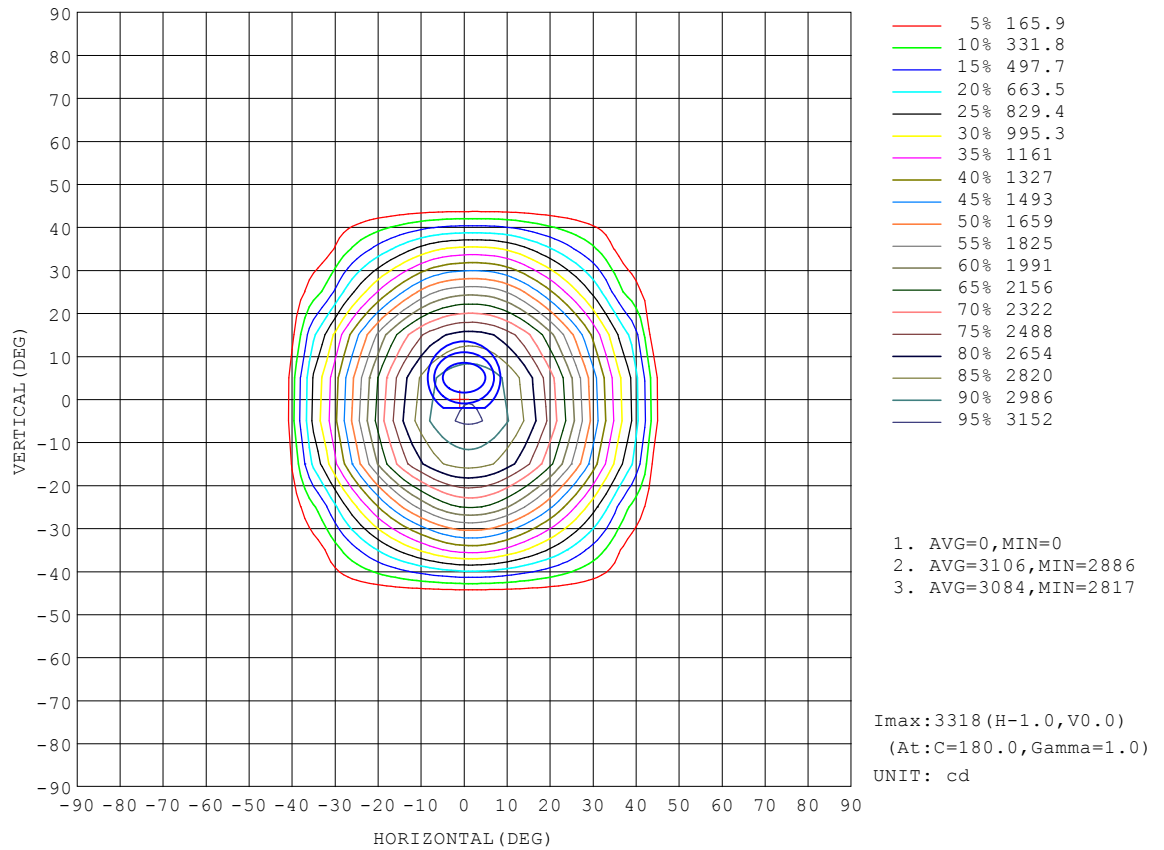
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	81	77	86	81	77	73
0.80	95	89	85	94	89	85	93	88	85	81
1.00	100	94	90	99	94	90	97	93	90	86
1.25	104	98	95	102	98	95	101	97	94	90
1.50	106	102	98	105	101	98	103	99	97	92
2.00	109	105	102	107	104	101	105	102	99	94
2.50	110	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	96
4.00	114	111	109	112	110	108	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	99
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:25 December 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:220.20V I:0.1139A P:22.511W PF:0.9635 Freq:49.99Hz Lamp Flux:2800.56x1 lm		
NAME: GLM-PLS128CR300T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:22.5W Current:550mA Voltage:33.9V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

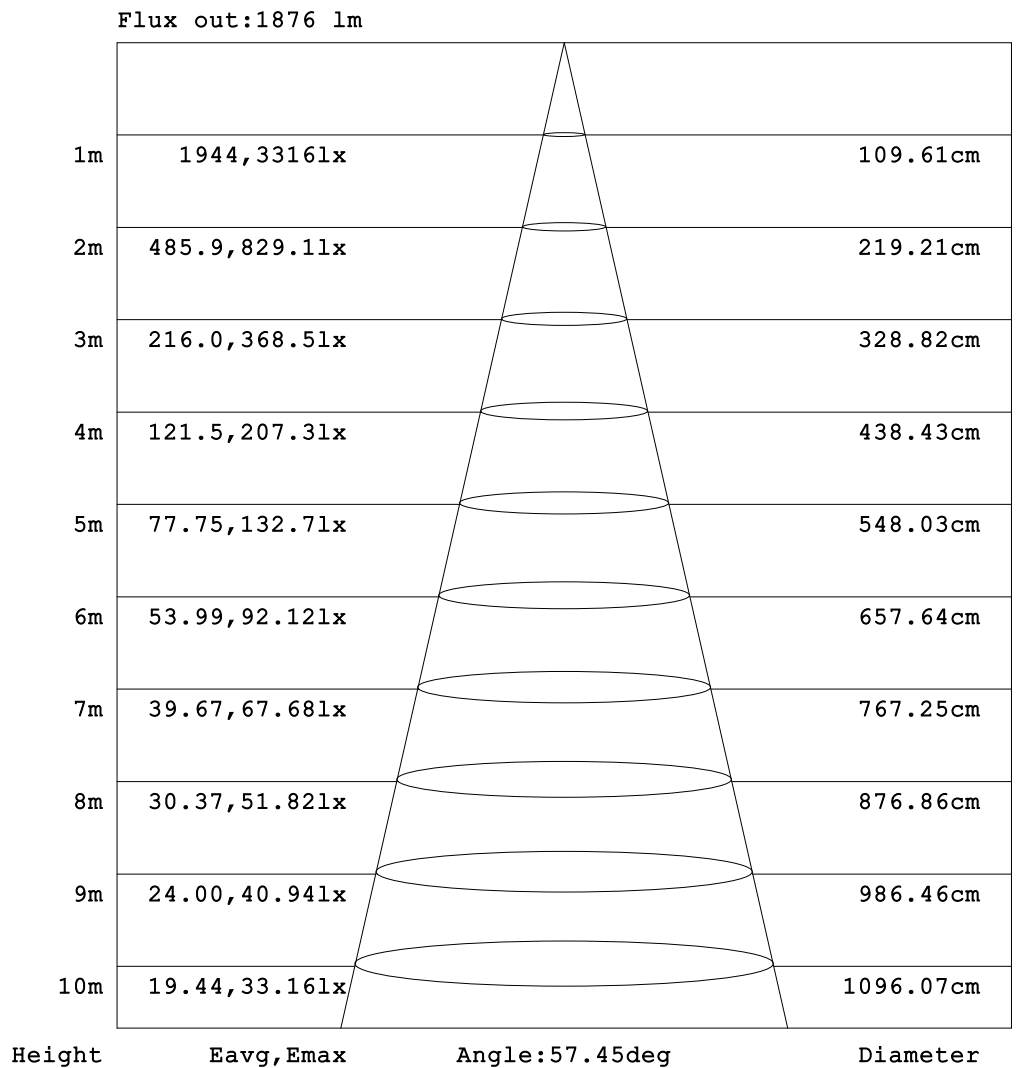


H(β) Range:-90 - 90DEG
 H(β) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:25 December 2024

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:220.20V I:0.1139A P:22.511W PF:0.9635 Freq:49.99Hz Lamp Flux:2800.56x1 lm		
NAME: GLM-PLS128CR300T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:22.5W Current:550mA Voltage:33.9V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



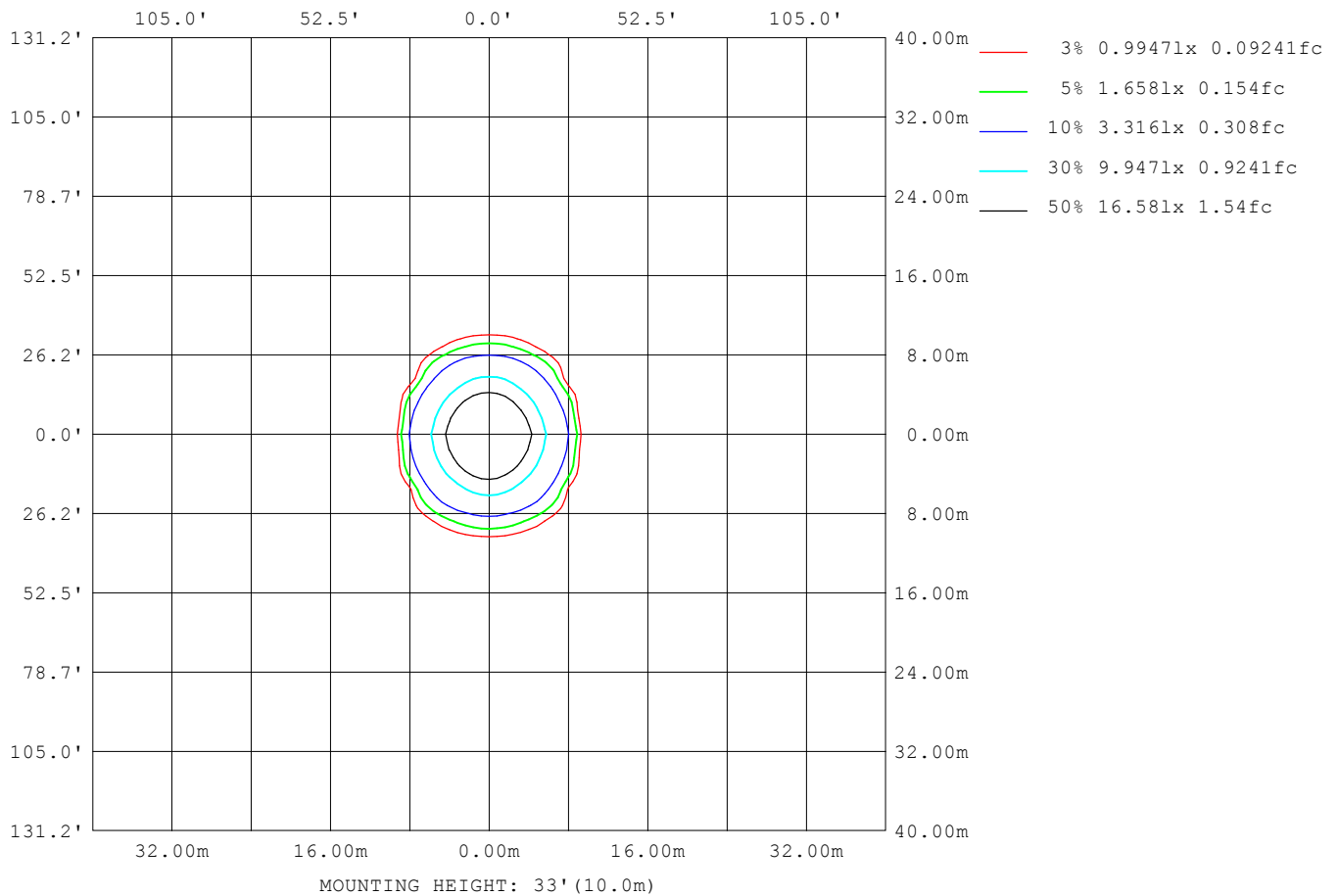
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:25 December 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:220.20V I:0.1139A P:22.511W PF:0.9635 Freq:49.99Hz Lamp Flux:2800.56x1 lm		
NAME: GLM-PLS128CR300T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:22.5W Current:550mA Voltage:33.9V	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:25 December 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:220.20V I:0.1139A P:22.511W PF:0.9635 Freq:49.99Hz Lamp Flux:2800.56x1 lm		
NAME: GLM-PLS128CR300T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:22.5W Current:550mA Voltage:33.9V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

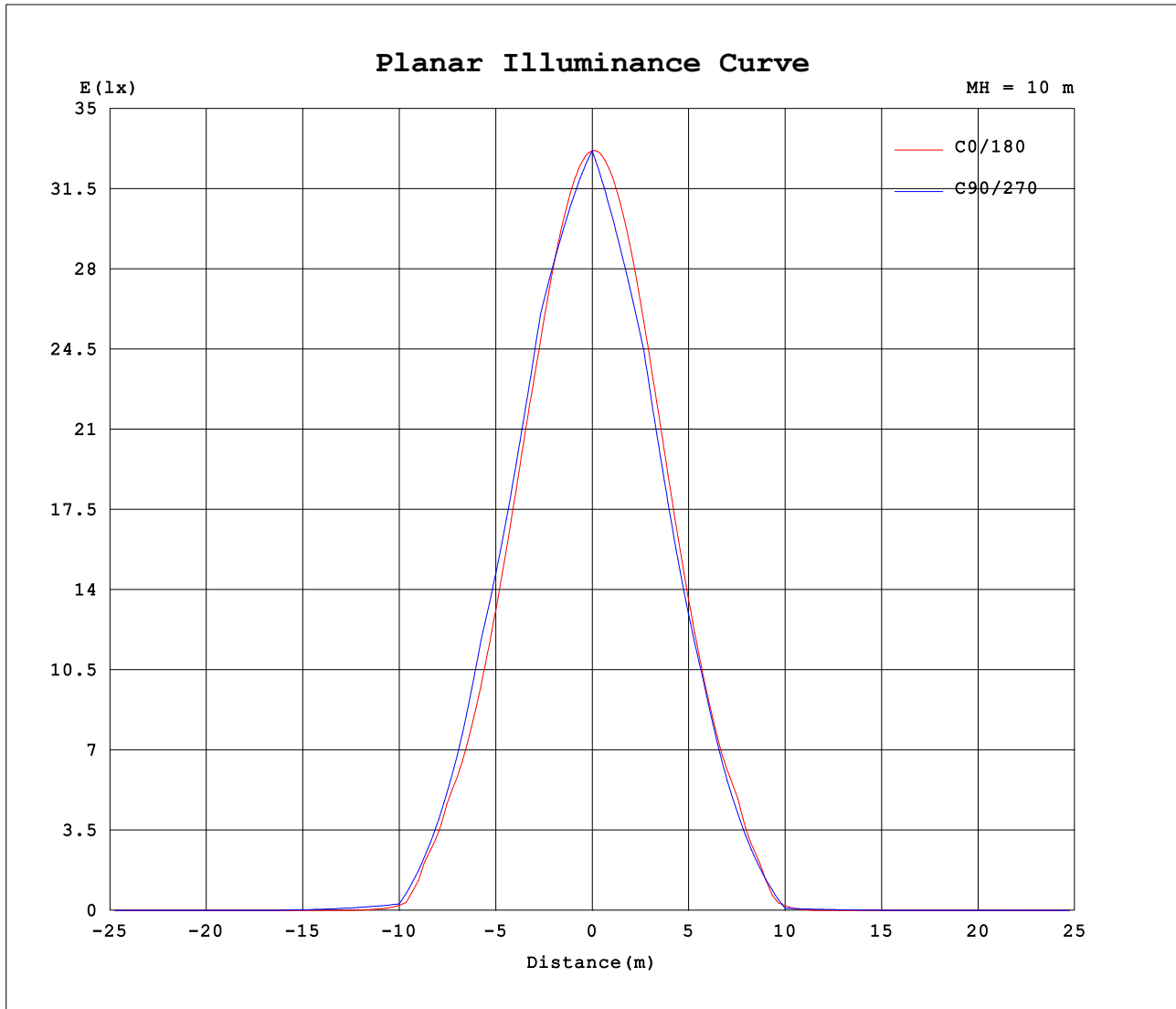
AvgL	cd/m2
L_0~180 (65) av	0
L_0~180 (75) av	0
L_0~180 (85) av	0
L_90~270 (65) av	0
L_90~270 (75) av	0
L_90~270 (85) av	0
L_45 (65) av	29
L_45 (75) av	0
L_45 (85) av	0

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:25 December 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:25 December 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:

