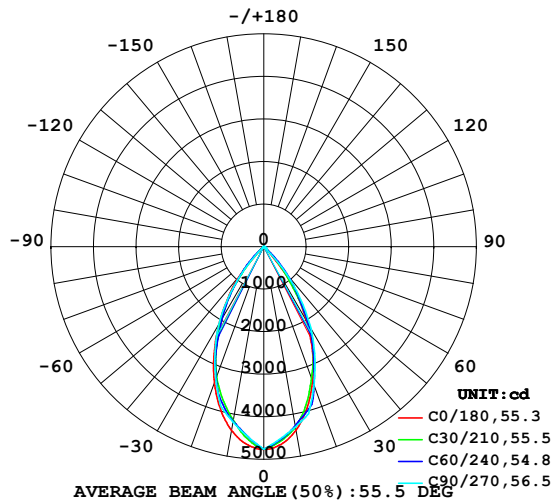


LUMINAIRE PHOTOMETRIC TEST REPORT

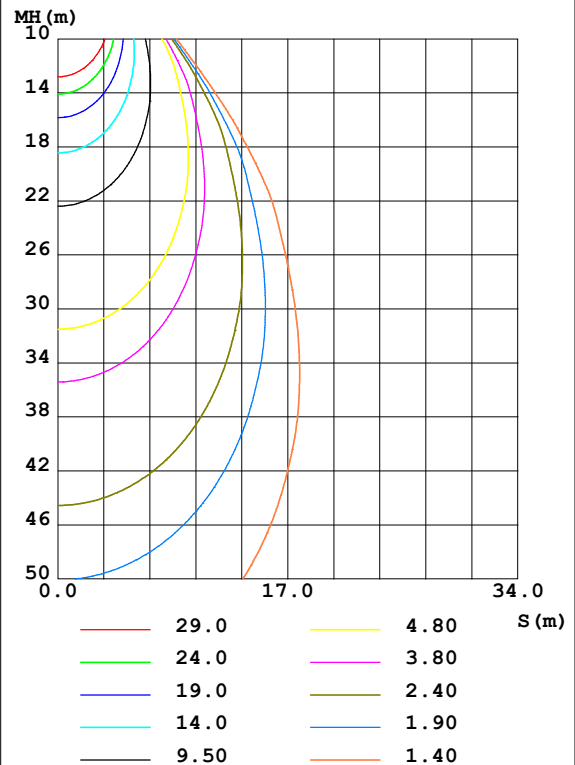
Test:U:220.32V I:0.1475A P:31.071W PF:0.9437 Freq:49.99Hz Lamp Flux:3809.58x1 lm		
NAME: GLM-PLS128CR600T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:31.1W Current:800mA Voltage:32.9V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 122.61 lm/W			
MODEL		I _{max} (cd)	4765	S/MH(C0/180)	0.84
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.83
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	3809.6	η UP,DN(C0-180)	0.0,50.9
NOMINAL FLUX(lm)	3809.58	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	0.90

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:01 March 2025

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=1.0588]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	4380	4275	4302	4227	4384	4147	4185	4198	0- 10	424.5	424.5	11.1,11.1
20	3357	3507	3455	3401	3398	3269	3305	3371	10- 20	1075	1499	39.3,39.3
30	2007	2034	2226	2047	2112	1983	2124	1952	20- 30	1231	2730	71.7,71.7
40	551.3	713.7	808.5	801.3	848.7	788.2	740.9	667.9	30- 40	852.6	3583	94,94
50	12.64	101.6	66.43	136.4	10.35	112.1	32.78	71.47	40- 50	212.6	3795	99.6,99.6
60	0	6.869	0.0000	7.169	0	0	0.0000	0	50- 60	13.92	3809	100,100
70	0	0	0	0	0	0	0	0	60- 70	0.3604	3810	100,100
80	0	0	0	0	0	0	0	0	70- 80	0	3810	100,100
90	0	0	0	0	0	0	0	0	80- 90	0	3810	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): 3752 lm

%lum = 98.5%

%lamp = 98.5%

Conical surface Flux(120deg): 3809.2 lm

%lum = 100.0%

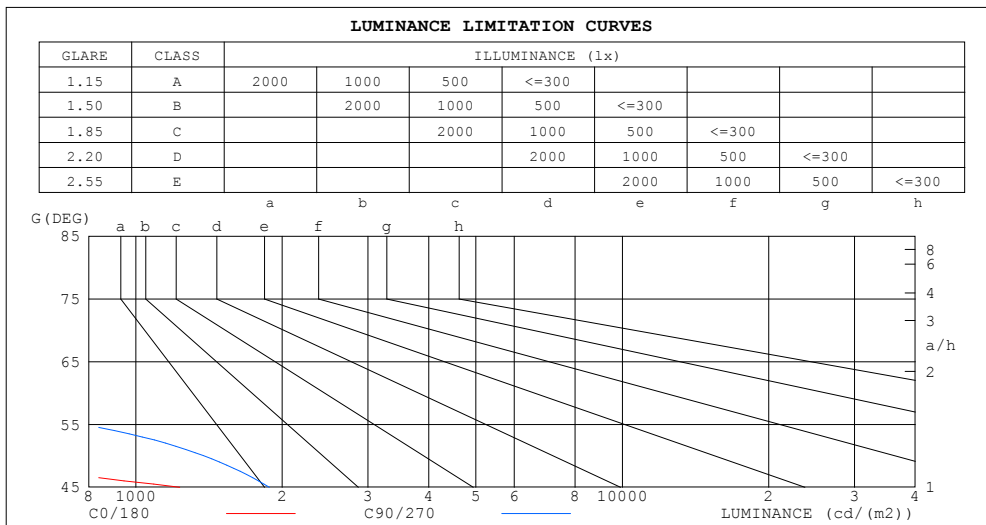
%lamp = 100.0%

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:01 March 2025

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=1.0588]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.32V I:0.1475A P:31.071W PF:0.9437 Freq:49.99Hz Lamp Flux:3809.58x1 lm		
NAME: GLM-PLS128CR600T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:31.1W Current:800mA Voltage:32.9V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	0	0
80	0	0
75	0	0
70	0	0
65	0	0
60	0	0
55	0	773
50	262	1378
45	1231	1881

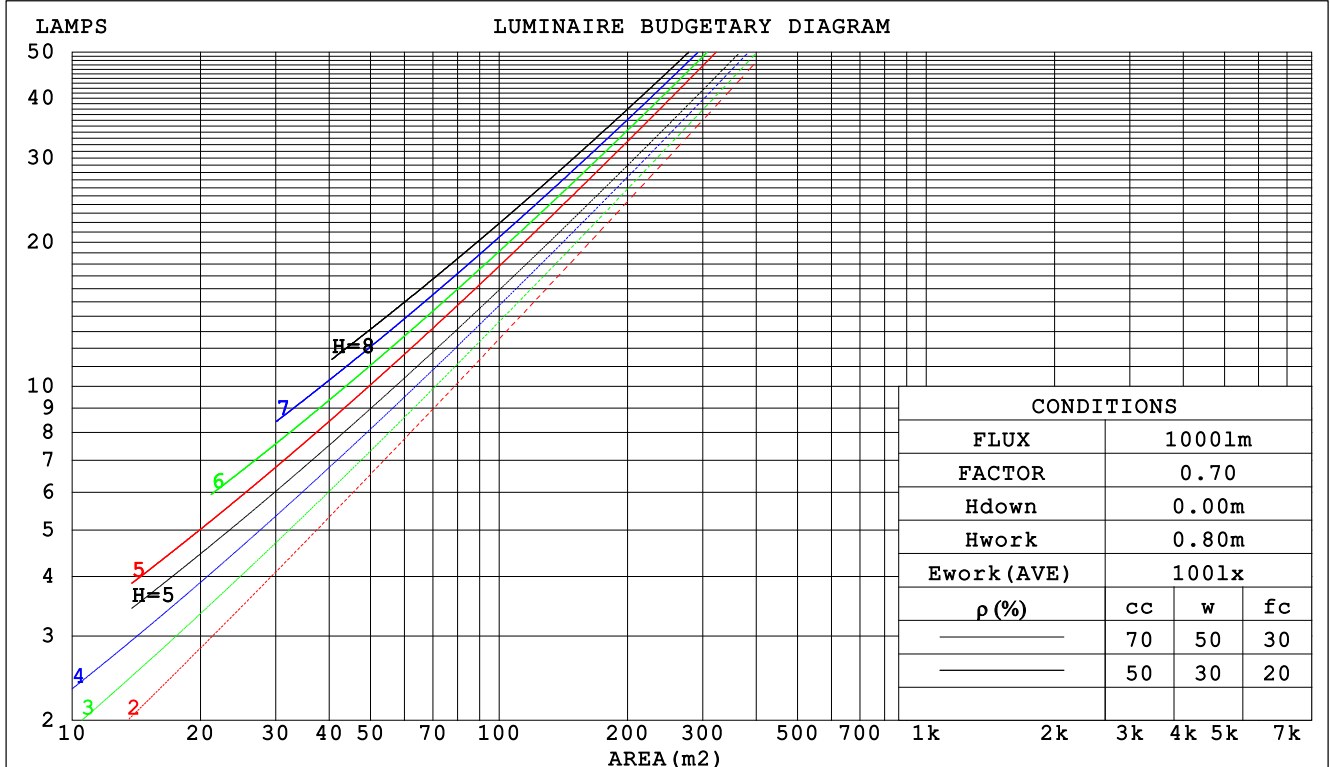
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:01 March 2025

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=1.0588]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.32V I:0.1475A P:31.071W PF:0.9437 Freq:49.99Hz Lamp Flux:3809.58x1 lm		
NAME: GLM-PLS128CR600T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:31.1W Current:800mA Voltage:32.9V	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	1.09	1.06	1.09	1.07	1.05	1.05	1.03	1.01	1.01	.00	.98	.98	.97	.96	.94
2.0	1.03	.99	.96	1.02	.98	.95	.98	.96	.93	.95	.93	.91	.93	.91	.89	.87
3.0	.97	.92	.88	.95	.91	.87	.93	.89	.86	.90	.87	.84	.88	.85	.83	.82
4.0	.90	.85	.81	.89	.84	.80	.87	.83	.79	.85	.81	.78	.83	.80	.78	.76
5.0	.85	.79	.75	.84	.78	.74	.82	.77	.74	.80	.76	.73	.79	.75	.72	.71
6.0	.80	.74	.69	.79	.73	.69	.77	.72	.69	.76	.72	.68	.75	.71	.68	.66
7.0	.75	.69	.65	.74	.69	.65	.73	.68	.64	.72	.67	.64	.71	.67	.64	.62
8.0	.71	.65	.61	.70	.64	.60	.69	.64	.60	.68	.63	.60	.67	.63	.60	.58
9.0	.67	.61	.57	.66	.61	.57	.65	.60	.57	.64	.60	.56	.63	.59	.56	.55
10.0	.63	.57	.54	.63	.57	.53	.62	.57	.53	.61	.56	.53	.60	.56	.53	.52



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:01 March 2025

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=1.0588]
Remarks:

WEC AND CCEC

Test:U:220.32V I:0.1475A P:31.071W PF:0.9437 Freq:49.99Hz Lamp Flux:3809.58x1 lm		
NAME: GLM-PLS128CR600T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:31.1W Current:800mA Voltage:32.9V	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	.174	.099	.031	.168	.096	.030	.155	.089	.028	.144	.083	.027	.133	.077	.025		
2.0	.167	.092	.028	.162	.089	.027	.151	.084	.026	.141	.079	.025	.132	.075	.024		
3.0	.160	.085	.025	.155	.083	.025	.146	.079	.024	.138	.075	.023	.130	.072	.022		
4.0	.153	.079	.023	.148	.078	.023	.141	.075	.022	.133	.072	.022	.127	.069	.021		
5.0	.146	.074	.022	.142	.073	.021	.135	.070	.021	.129	.068	.020	.123	.066	.020		
6.0	.139	.070	.020	.136	.069	.020	.130	.067	.019	.125	.065	.019	.119	.063	.019		
7.0	.133	.066	.019	.131	.065	.019	.125	.063	.018	.120	.062	.018	.116	.060	.018		
8.0	.128	.063	.018	.125	.062	.017	.121	.060	.017	.116	.059	.017	.112	.058	.017		
9.0	.123	.059	.017	.121	.059	.016	.116	.057	.016	.112	.056	.016	.108	.055	.016		
10.0	.118	.057	.016	.116	.056	.016	.112	.055	.015	.108	.054	.015	.105	.053	.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	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.078	.060	.044	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.107	.075	.052	.074	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.117	.078	.050	.101	.067	.043	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.111	.070	.042	.095	.061	.037	.066	.043	.026	.038	.025	.015	.012	.008	.005	
8.0	.105	.064	.036	.091	.056	.031	.063	.039	.022	.036	.023	.013	.012	.008	.004	
9.0	.100	.059	.031	.086	.051	.027	.060	.036	.019	.035	.021	.012	.011	.007	.004	
10.0	.096	.055	.027	.082	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:01 March 2025

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=1.0588]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.32V I:0.1475A P:31.071W PF:0.9437 Freq:49.99Hz Lamp Flux:3809.58x1 lm										
NAME: GLM-PLS128CR600T(4000K)					TYPE:LED			WEIGHT:		
SPEC.:Power:31.1W Current:800mA Voltage:32.9V					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	13.8	14.8	14.0	14.9	15.1	15.2	16.1	15.4	16.3	16.5
3H	13.6	14.5	13.9	14.7	14.9	15.0	15.9	15.3	16.1	16.3
4H	13.6	14.4	13.8	14.6	14.8	14.9	15.7	15.2	16.0	16.2
6H	13.5	14.2	13.8	14.5	14.7	14.8	15.6	15.1	15.8	16.1
8H	13.4	14.2	13.7	14.4	14.7	14.8	15.5	15.1	15.8	16.0
12H	13.4	14.1	13.7	14.3	14.6	14.7	15.4	15.1	15.7	16.0
4H 2H	13.6	14.4	13.8	14.6	14.8	14.9	15.7	15.2	16.0	16.2
3H	13.4	14.1	13.7	14.3	14.6	14.7	15.4	15.1	15.7	16.0
4H	13.3	13.9	13.6	14.2	14.5	14.7	15.3	15.0	15.6	15.9
6H	13.2	13.7	13.6	14.1	14.4	14.6	15.1	14.9	15.4	15.8
8H	13.1	13.7	13.5	14.0	14.4	14.5	15.0	14.9	15.4	15.7
12H	13.1	13.6	13.5	13.9	14.3	14.5	14.9	14.9	15.3	15.7
8H 4H	13.1	13.7	13.5	14.0	14.4	14.5	15.0	14.9	15.4	15.7
6H	13.0	13.5	13.5	13.9	14.3	14.4	14.8	14.8	15.2	15.6
8H	13.0	13.4	13.4	13.8	14.2	14.3	14.7	14.8	15.1	15.6
12H	12.9	13.2	13.4	13.7	14.2	14.3	14.6	14.8	15.1	15.5
12H 4H	13.1	13.6	13.5	13.9	14.3	14.5	14.9	14.9	15.3	15.7
6H	13.0	13.4	13.4	13.8	14.2	14.3	14.7	14.8	15.1	15.6
8H	12.9	13.2	13.4	13.7	14.2	14.3	14.6	14.8	15.1	15.5
Variations with the observer position at spacings:										
S = 1.0H	+ 3.1 / - 1.\$					+ 2.9 / -17.9				
1.5H	+ 5.9 / -24.4					+ 5.6 / -13.6				
2.0H	+ 6.2 / - 1.\$					+ 4.4 / - 1.\$				

CIE Pub.117, 3810 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.6$)

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:01 March 2025

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=1.0588]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.32V I:0.1475A P:31.071W PF:0.9437 Freq:49.99Hz Lamp Flux:3809.58x1 lm		
NAME: GLM-PLS128CR600T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:31.1W Current:800mA Voltage:32.9V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

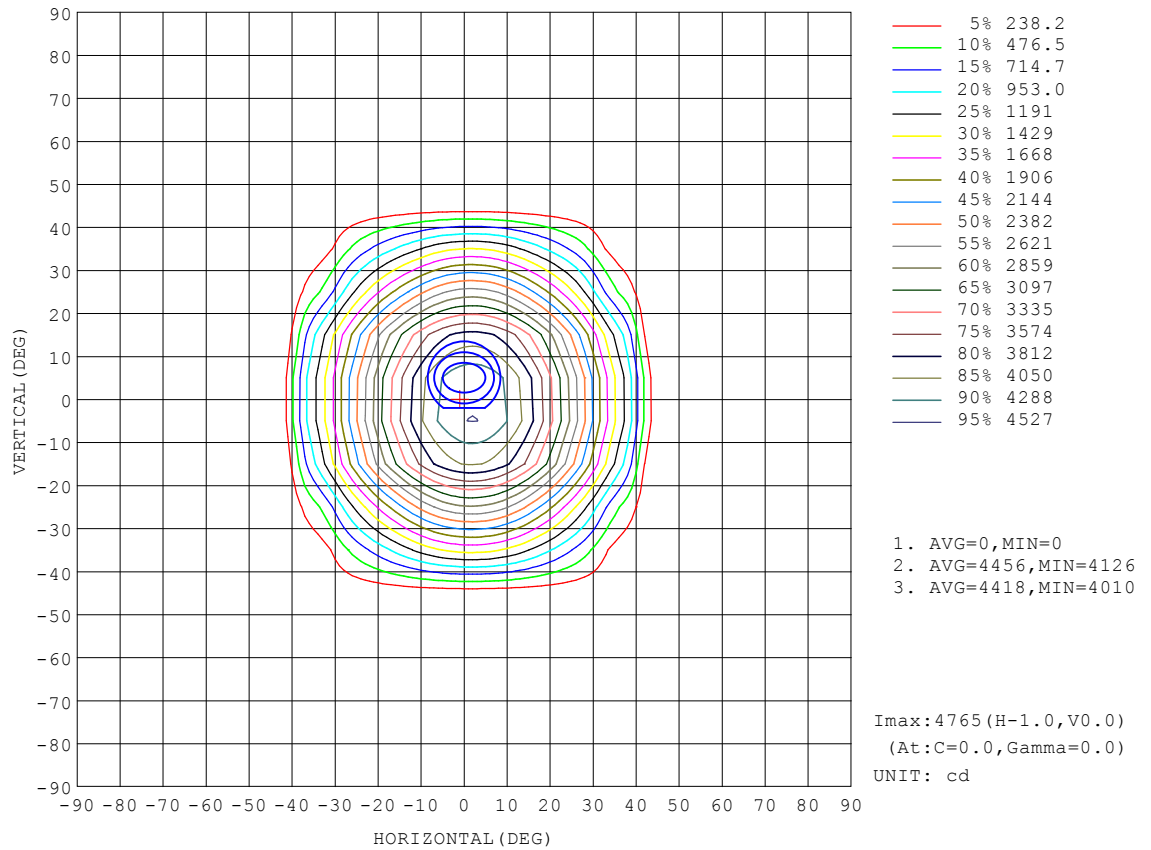
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	78	87	81	78	87	81	78	74
0.80	95	90	86	95	89	86	93	89	85	82
1.00	100	94	91	99	94	90	97	94	90	86
1.25	104	99	95	103	98	95	101	97	94	90
1.50	106	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	94
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	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:01 March 2025

$V(B)$ 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=1.0588]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.32V I:0.1475A P:31.071W PF:0.9437 Freq:49.99Hz Lamp Flux:3809.58x1 lm		
NAME: GLM-PLS128CR600T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:31.1W Current:800mA Voltage:32.9V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

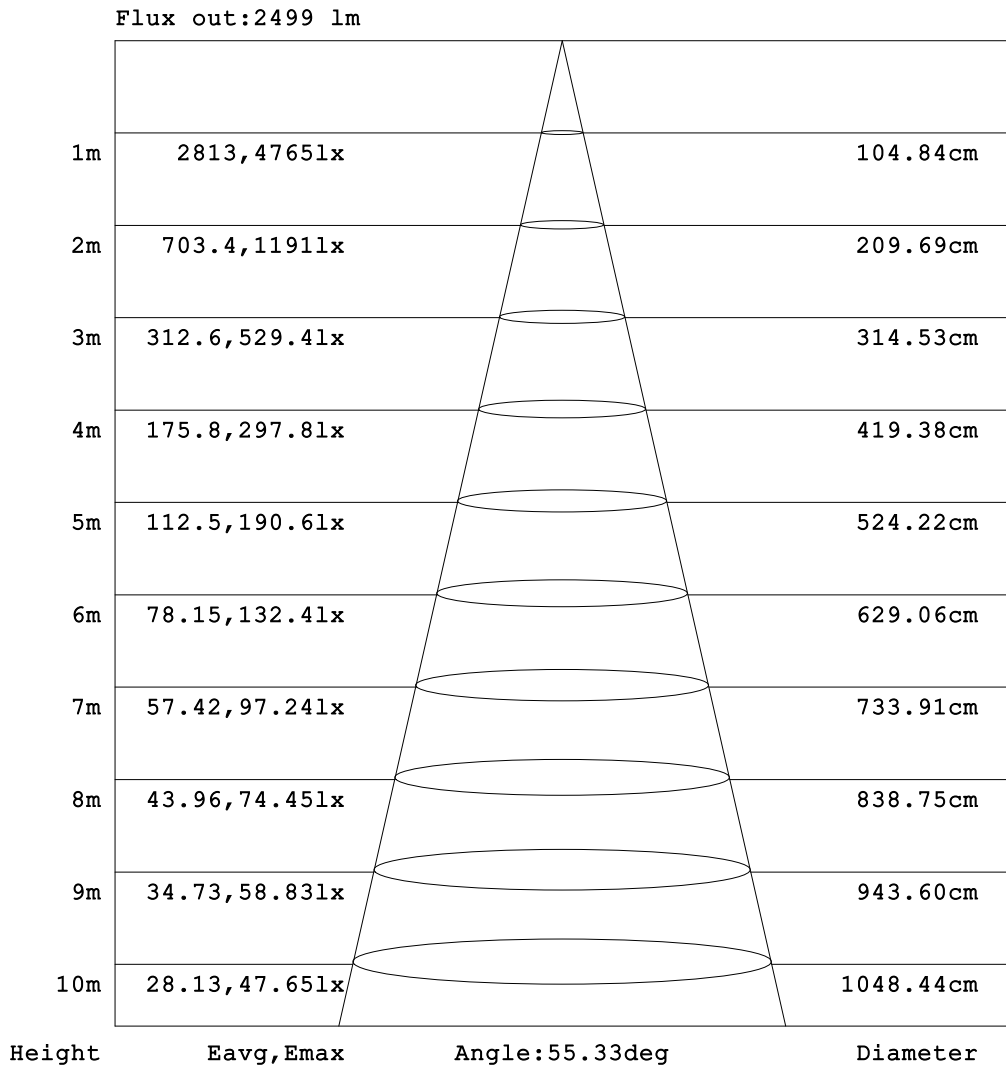


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:01 March 2025

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=1.0588]
Remarks:

AAI Figure

Test:U:220.32V I:0.1475A P:31.071W PF:0.9437 Freq:49.99Hz Lamp Flux:3809.58x1 lm		
NAME: GLM-PLS128CR600T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:31.1W Current:800mA Voltage:32.9V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



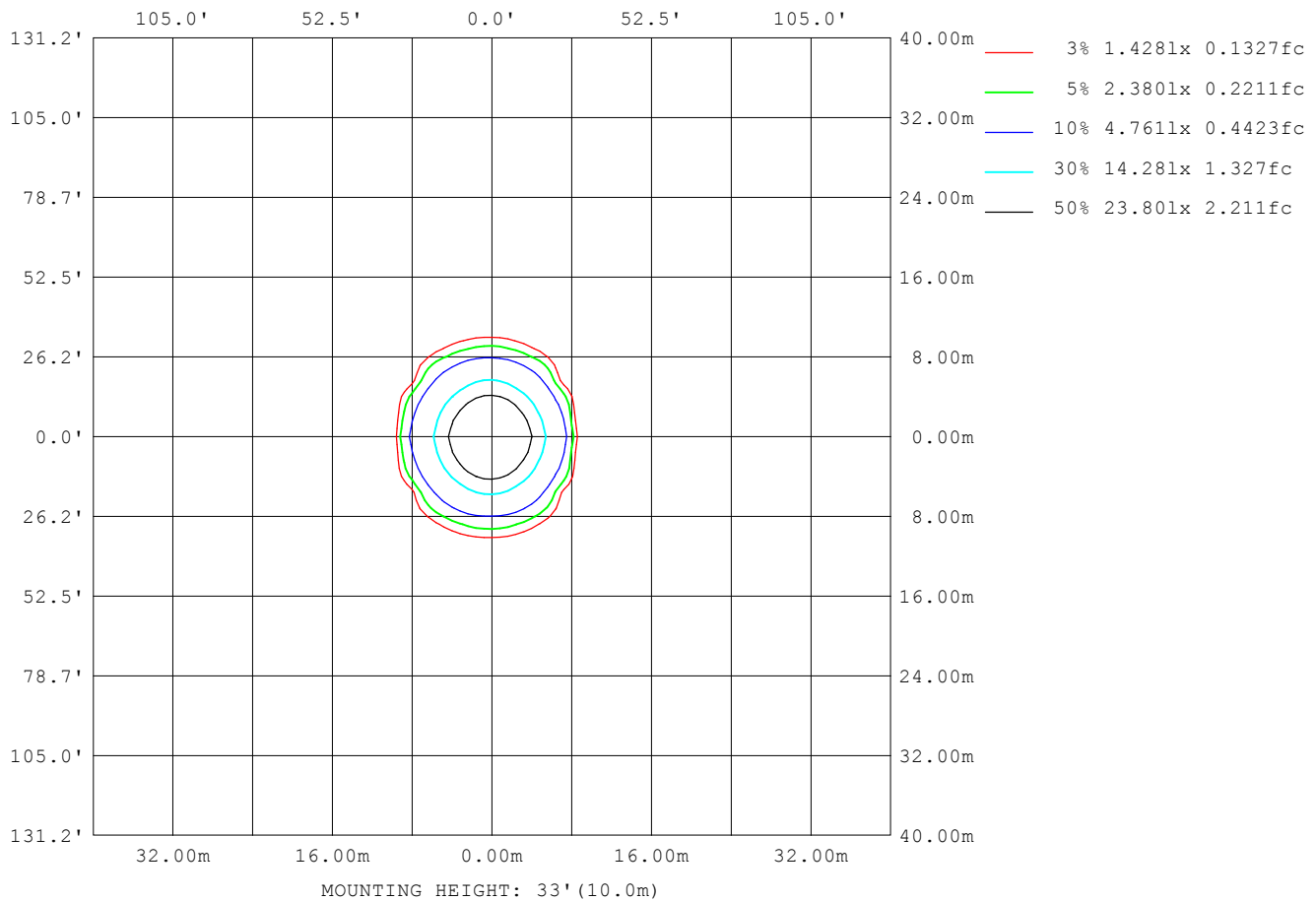
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:01 March 2025

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=1.0588]
Remarks:

ISOLUX DIAGRAM

Test:U:220.32V I:0.1475A P:31.071W PF:0.9437 Freq:49.99Hz Lamp Flux:3809.58x1 lm		
NAME: GLM-PLS128CR600T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:31.1W Current:800mA Voltage:32.9V	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:01 March 2025

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=1.0588]
Remarks:

LED Avg.L Report

Test:U:220.32V I:0.1475A P:31.071W PF:0.9437 Freq:49.99Hz Lamp Flux:3809.58x1 lm		
NAME: GLM-PLS128CR600T(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:31.1W Current:800mA Voltage:32.9V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

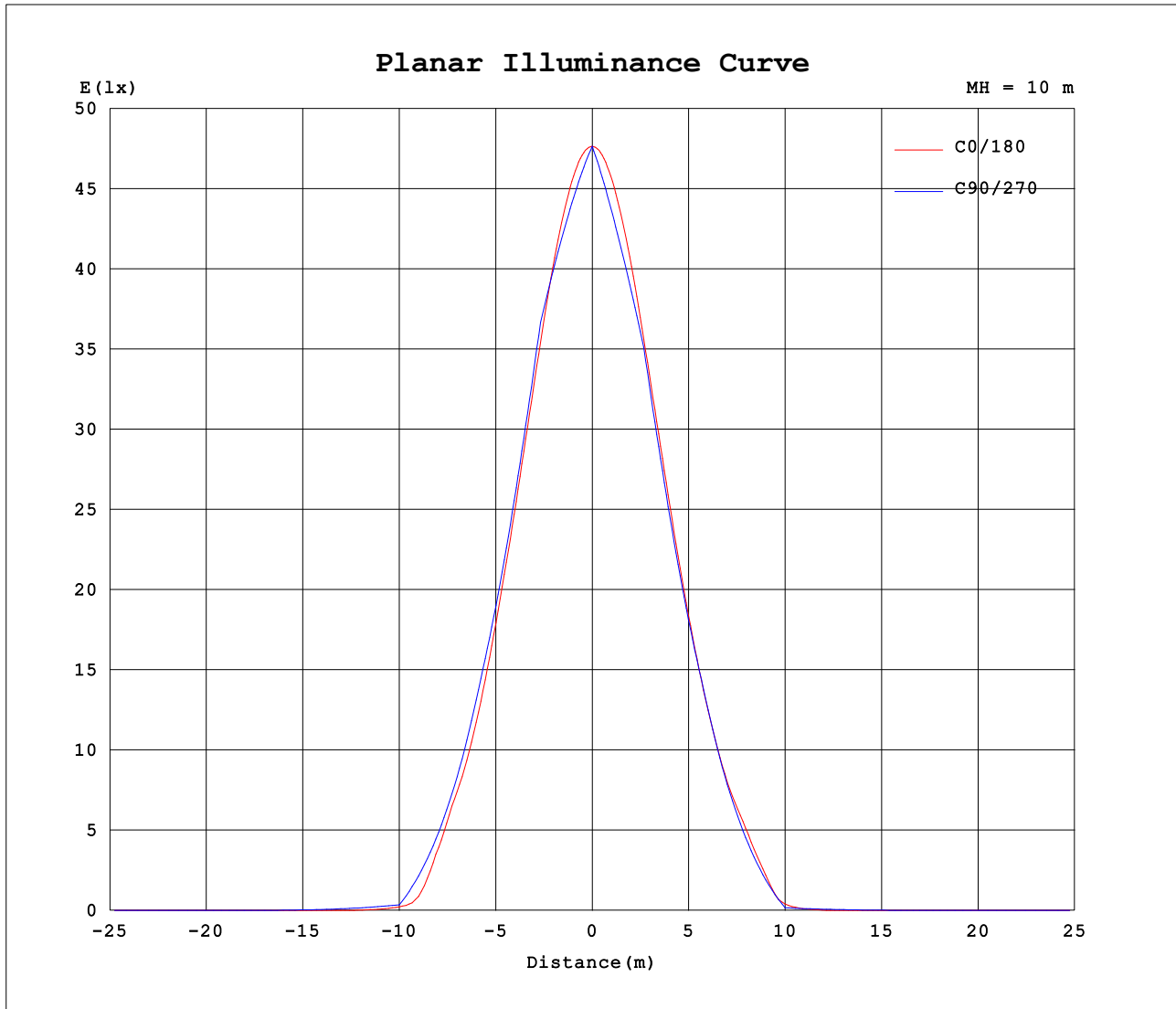
AvgL	cd/m2
L_0~180 (65) av	0
L_0~180 (75) av	0
L_0~180 (85) av	0
L_90~270 (65) av	0
L_90~270 (75) av	0
L_90~270 (85) av	0
L_45 (65) av	17
L_45 (75) av	0
L_45 (85) av	0

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:01 March 2025

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=1.0588]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:01 March 2025

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=1.0588]
Remarks:

