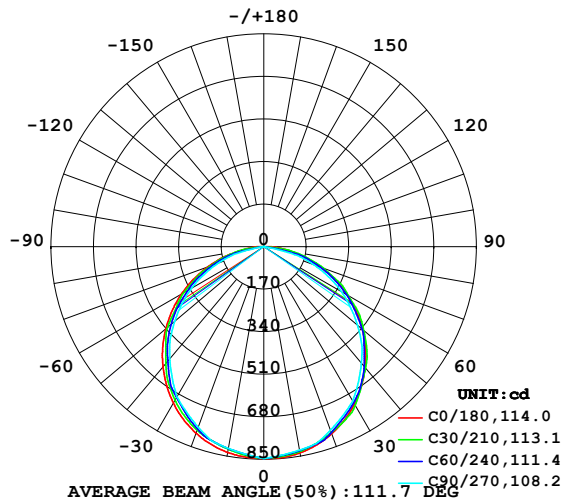


LUMINAIRE PHOTOMETRIC TEST REPORT

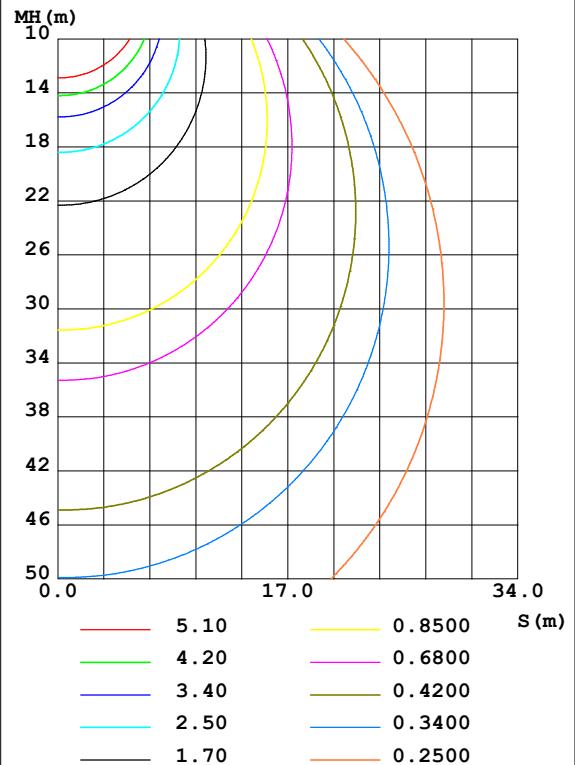
Test:U:220.33V I:0.0887A P:19.121W PF:0.9738 Freq:49.99Hz Lamp Flux:2370.9x1 lm		
NAME: GLM-PLS128C300 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:19.1W Current:280mA Voltage:63V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 123.99 lm/W			
MODEL		I _{max} (cd)	846.8	S/MH (C0/180)	1.27
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.22
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	2370.9	η UP, DN (C0-180)	0.0, 50.7
NOMINAL FLUX (lm)	2370.9	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	1.35

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: 03 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=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	836.7	828.9	825.5	825.0	834.7	820.2	818.3	823.7	0- 10	79.58	79.58	3.36, 3.36
20	795.5	798.0	780.7	789.2	793.1	779.8	767.4	787.0	10- 20	228.4	308.0	13, 13
30	725.4	721.6	712.3	713.4	722.2	701.6	693.8	706.0	20- 30	345.7	653.7	27.6, 27.6
40	630.5	632.8	607.4	625.8	626.6	611.8	585.0	613.6	30- 40	416.5	1070	45.1, 45.1
50	515.4	514.3	489.3	508.3	511.3	492.9	465.0	492.9	40- 50	431.3	1501	63.3, 63.3
60	384.8	386.3	358.2	377.1	380.4	362.8	334.1	364.1	50- 60	388.8	1890	79.7, 79.7
70	244.2	251.2	214.3	232.0	239.5	225.0	193.4	230.0	60- 70	295.1	2185	92.2, 92.2
80	110.5	99.01	0	85.10	96.57	80.94	0	84.62	70- 80	163.2	2348	99.1, 99.1
90	0	0	0	0	0	0	0	0	80- 90	22.43	2371	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): 1287.4 lm

%lum = 54.3%

%lamp = 54.3%

Conical surface Flux(120deg): 1890.2 lm

%lum = 79.7%

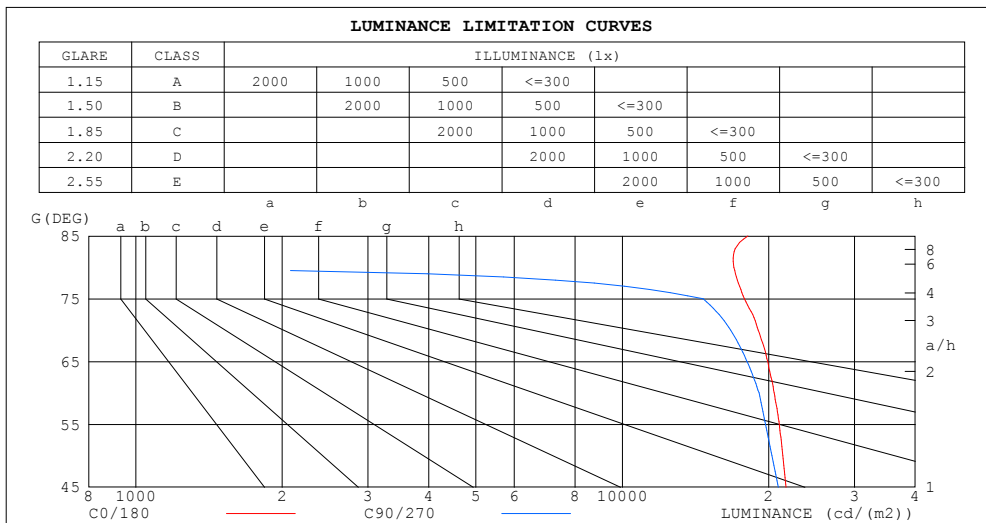
%lamp = 79.7%

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:03 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=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.33V I:0.0887A P:19.121W PF:0.9738 Freq:49.99Hz Lamp Flux:2370.9x1 lm		
NAME: GLM-PLS128C300 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:19.1W Current:280mA Voltage:63V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	18135	0
80	16964	0
75	17828	14649
70	19037	16707
65	19895	18051
60	20524	19104
55	21019	19693
50	21383	20300
45	21694	20918

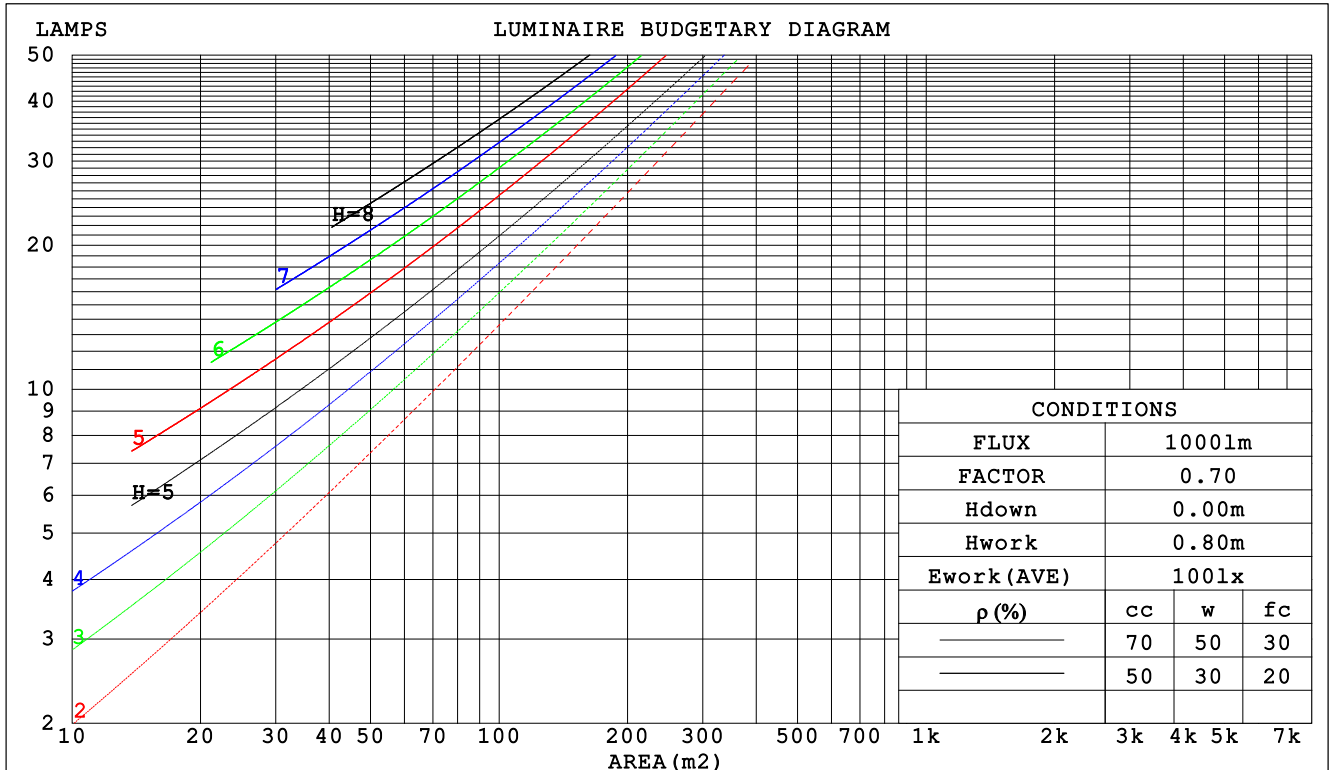
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:03 March 2025

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=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.33V I:0.0887A P:19.121W PF:0.9738 Freq:49.99Hz Lamp Flux:2370.9x1 lm		
NAME: GLM-PLS128C300(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:19.1W Current:280mA Voltage:63V	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	1.04	1.00	.96	1.02	.98	.95	.98	.95	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.79	.89	.83	.78	.86	.80	.76	.82	.78	.74	.79	.76	.72	.70
3.0	.80	.72	.65	.78	.71	.65	.75	.69	.63	.73	.67	.62	.70	.65	.61	.59
4.0	.71	.62	.55	.69	.61	.55	.67	.60	.54	.65	.58	.53	.62	.57	.53	.50
5.0	.63	.54	.48	.62	.54	.47	.60	.52	.47	.58	.51	.46	.56	.50	.46	.44
6.0	.57	.48	.41	.56	.47	.41	.54	.46	.41	.52	.46	.40	.51	.45	.40	.38
7.0	.51	.43	.37	.51	.42	.36	.49	.42	.36	.48	.41	.36	.46	.40	.36	.34
8.0	.47	.38	.33	.46	.38	.32	.45	.38	.32	.44	.37	.32	.43	.36	.32	.30
9.0	.43	.35	.29	.42	.35	.29	.41	.34	.29	.40	.34	.29	.39	.33	.29	.27
10.0	.40	.32	.27	.39	.32	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:03 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=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.33V I:0.0887A P:19.121W PF:0.9738 Freq:49.99Hz Lamp Flux:2370.9x1 lm		
NAME: GLM-PLS128C300(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:19.1W Current:280mA Voltage:63V	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	.300	.170	.054	.293	.167	.053	.280	.160	.051	.267	.154	.049	.256	.148	.048		
2.0	.287	.157	.048	.280	.154	.048	.269	.149	.046	.258	.145	.045	.248	.140	.044		
3.0	.267	.142	.043	.261	.140	.042	.251	.136	.041	.242	.132	.041	.233	.129	.040		
4.0	.247	.128	.038	.242	.127	.037	.233	.124	.037	.225	.121	.036	.217	.118	.036		
5.0	.229	.117	.034	.225	.115	.034	.216	.113	.033	.209	.110	.033	.202	.108	.032		
6.0	.213	.107	.030	.209	.105	.030	.201	.103	.030	.195	.101	.030	.188	.099	.029		
7.0	.198	.098	.028	.195	.097	.028	.188	.095	.027	.182	.093	.027	.176	.092	.027		
8.0	.185	.090	.025	.182	.090	.025	.176	.088	.025	.171	.087	.025	.166	.085	.025		
9.0	.173	.084	.023	.171	.083	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023		
10.0	.163	.078	.022	.161	.078	.022	.156	.076	.022	.152	.075	.021	.147	.074	.021		

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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.099	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.140	.099	.065	.096	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.069	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:03 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=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.33V I:0.0887A P:19.121W PF:0.9738 Freq:49.99Hz Lamp Flux:2370.9x1 lm										
NAME: GLM-PLS128C300(4000K)					TYPE:LED			WEIGHT:		
SPEC.:Power:19.1W Current:280mA Voltage:63V					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	23.7	25.2	24.0	25.4	25.7	23.4	24.9	23.7	25.1	25.3
3H	25.4	26.8	25.7	27.0	27.2	24.8	26.2	25.1	26.5	26.7
4H	26.0	27.4	26.3	27.6	27.9	25.4	26.7	25.7	26.9	27.2
6H	26.6	27.8	26.9	28.1	28.4	25.4	26.6	25.7	26.9	27.2
8H	26.8	28.0	27.1	28.3	28.5	25.3	26.5	25.7	26.8	27.1
12H	26.9	28.1	27.3	28.4	28.7	25.3	26.4	25.6	26.7	27.0
4H 2H	24.4	25.7	24.7	25.9	26.2	24.1	25.4	24.4	25.7	25.9
3H	26.2	27.4	26.5	27.6	28.0	25.8	26.9	26.1	27.2	27.5
4H	27.0	28.1	27.4	28.4	28.7	26.4	27.5	26.8	27.8	28.1
6H	27.7	28.6	28.1	29.0	29.3	26.5	27.4	26.9	27.8	28.1
8H	28.0	28.8	28.4	29.2	29.6	26.4	27.3	26.9	27.7	28.1
12H	28.2	29.0	28.6	29.3	29.8	26.4	27.2	26.8	27.6	28.0
8H 4H	27.3	28.2	27.7	28.5	28.9	26.8	27.6	27.2	28.0	28.4
6H	28.2	28.9	28.6	29.3	29.7	26.9	27.6	27.3	28.0	28.5
8H	28.5	29.2	29.0	29.6	30.1	26.9	27.5	27.3	27.9	28.4
12H	28.9	29.4	29.3	29.9	30.3	26.8	27.4	27.3	27.8	28.3
12H 4H	27.3	28.1	27.7	28.5	28.9	26.8	27.6	27.2	28.0	28.4
6H	28.2	28.8	28.6	29.2	29.7	27.0	27.6	27.4	28.0	28.5
8H	28.6	29.1	29.0	29.6	30.0	26.9	27.5	27.4	27.9	28.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
1.5H	+ 0.3 / - 0.4					+ 0.1 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.5				

CIE Pub.117, 2371 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 3.0$)

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:03 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=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.33V I:0.0887A P:19.121W PF:0.9738 Freq:49.99Hz Lamp Flux:2370.9x1 lm		
NAME: GLM-PLS128C300(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:19.1W Current:280mA Voltage:63V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

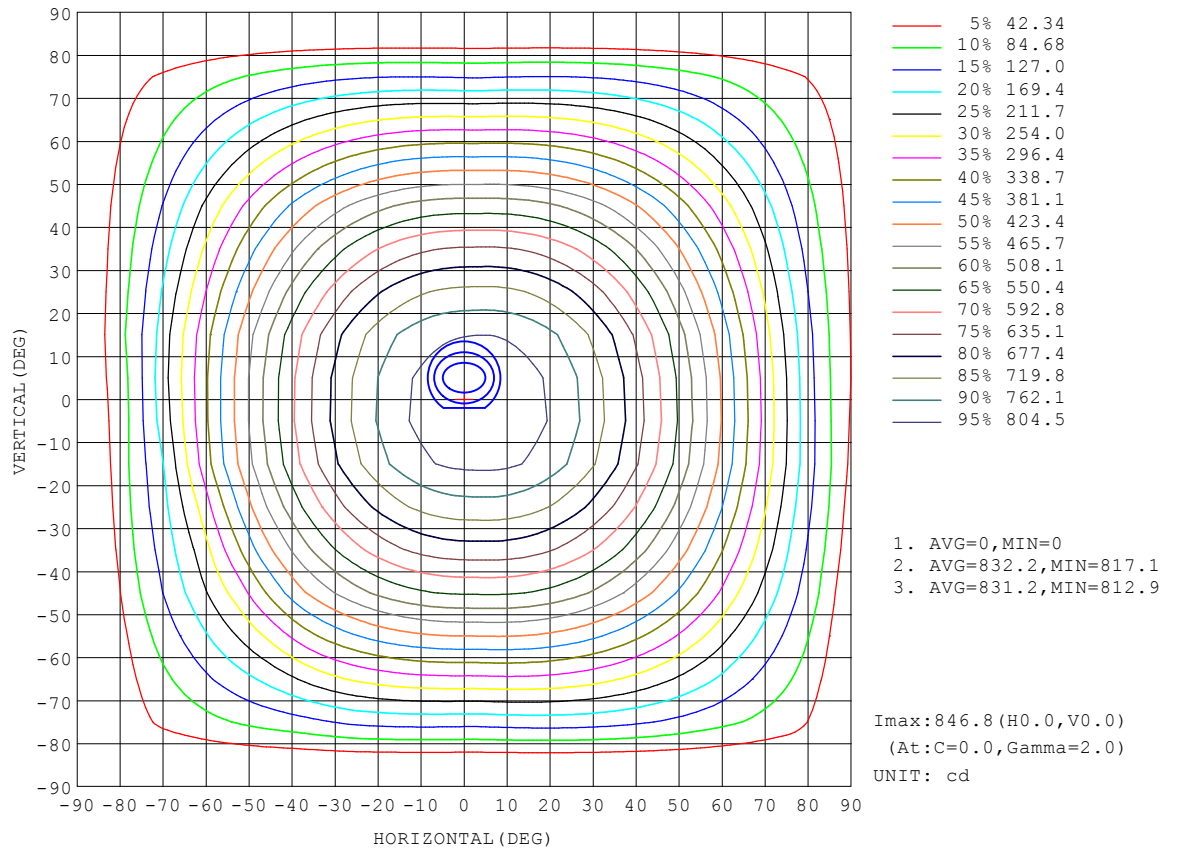
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	39	57	46	39	56	45	39	33
0.80	68	56	49	67	56	49	65	55	48	42
1.00	76	65	58	75	65	58	73	66	57	50
1.25	84	73	66	82	72	66	79	71	65	58
1.50	89	79	72	87	78	71	84	76	70	63
2.00	95	87	81	94	86	80	90	84	78	71
2.50	99	92	86	97	90	85	93	88	83	75
3.00	103	96	91	101	94	89	97	91	87	79
4.00	107	101	97	104	99	95	100	96	93	84
5.00	109	104	100	107	102	99	102	99	96	87
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:03 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=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.33V I:0.0887A P:19.121W PF:0.9738 Freq:49.99Hz Lamp Flux:2370.9x1 lm		
NAME: GLM-PLS128C300 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:19.1W Current:280mA Voltage:63V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

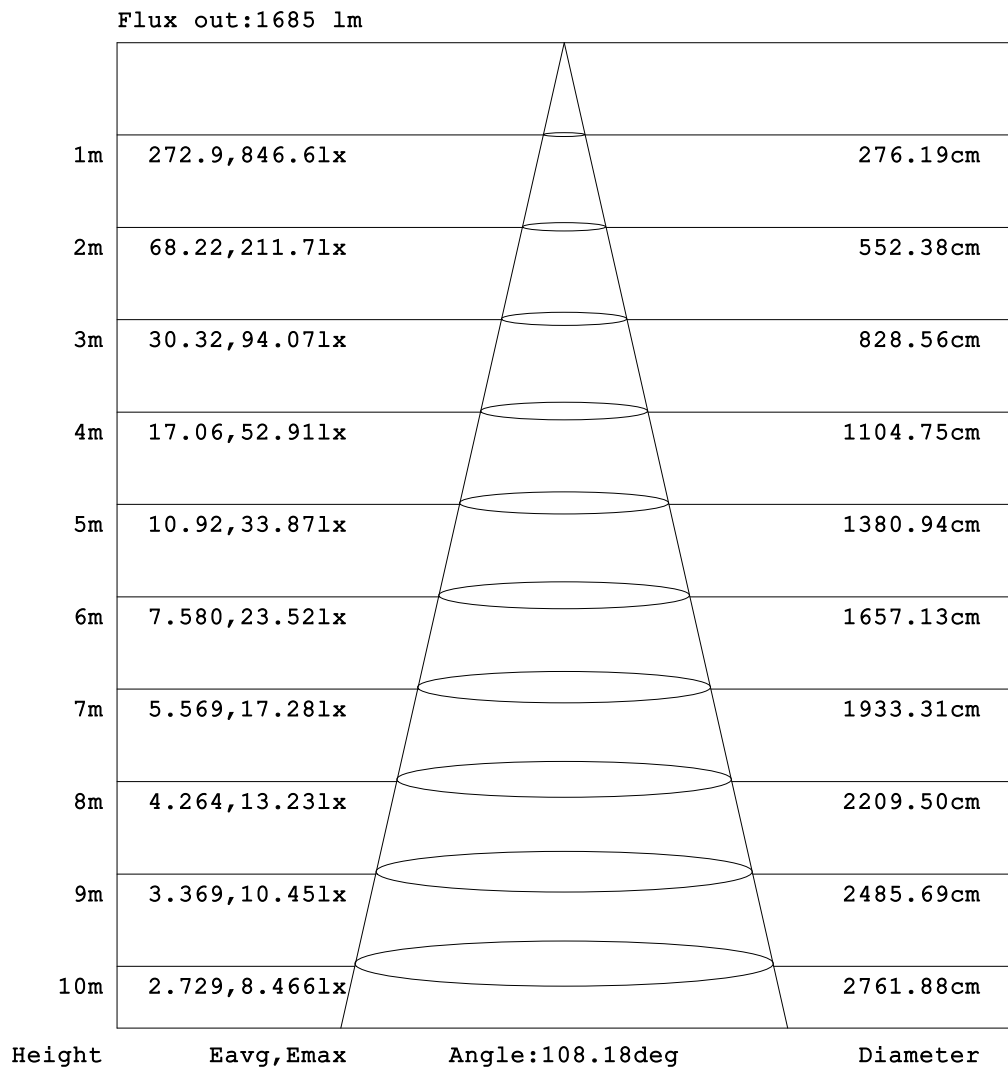


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:03 March 2025

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=1.0000]
Remarks:

AAI Figure

Test:U:220.33V I:0.0887A P:19.121W PF:0.9738 Freq:49.99Hz Lamp Flux:2370.9x1 lm		
NAME: GLM-PLS128C300 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:19.1W Current:280mA Voltage:63V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



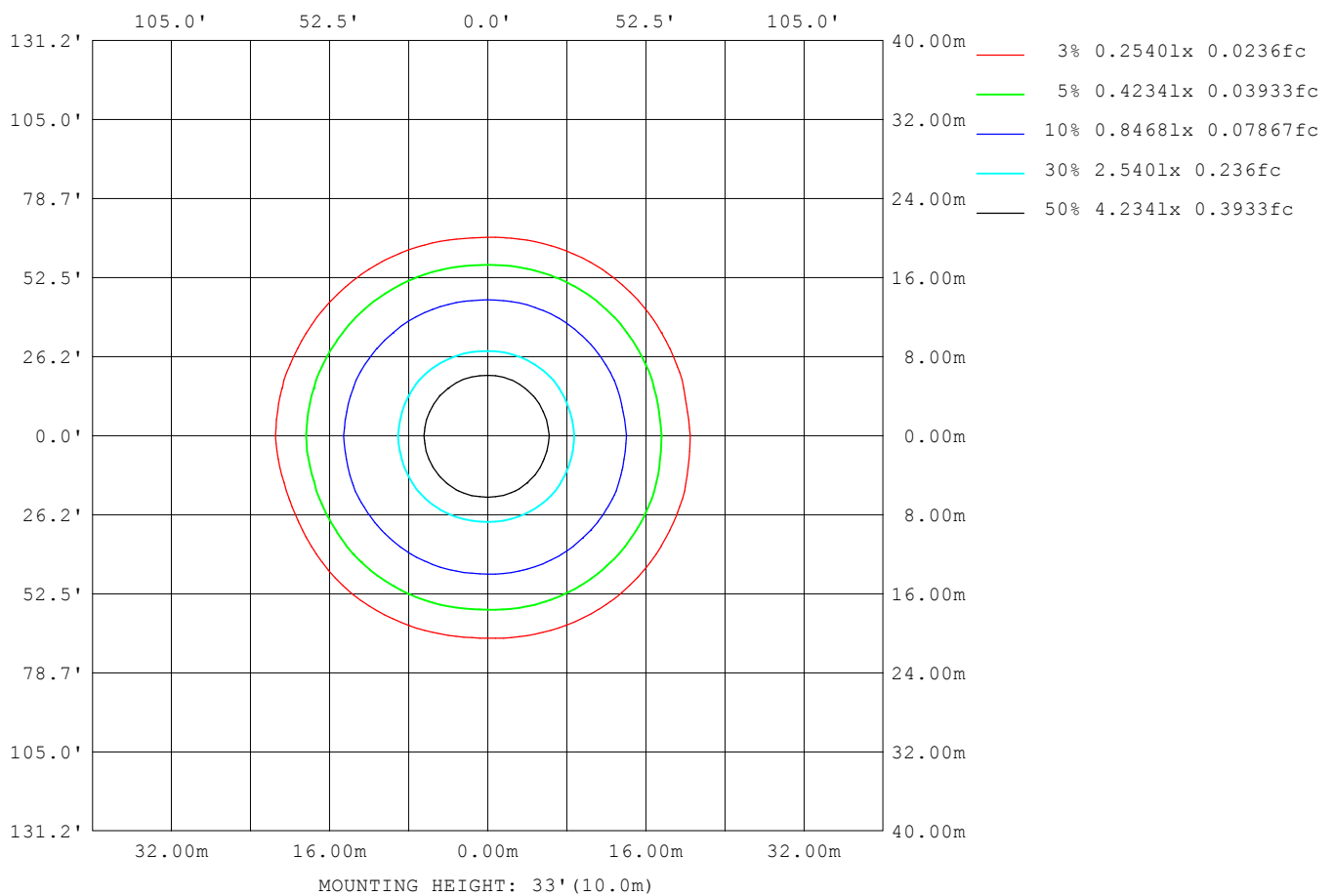
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:03 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=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:220.33V I:0.0887A P:19.121W PF:0.9738 Freq:49.99Hz Lamp Flux:2370.9x1 lm		
NAME: GLM-PLS128C300(4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:19.1W Current:280mA Voltage:63V	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:03 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=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.33V I:0.0887A P:19.121W PF:0.9738 Freq:49.99Hz Lamp Flux:2370.9x1 lm		
NAME: GLM-PLS128C300 (4000K)	TYPE:LED	WEIGHT:
SPEC.:Power:19.1W Current:280mA Voltage:63V	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

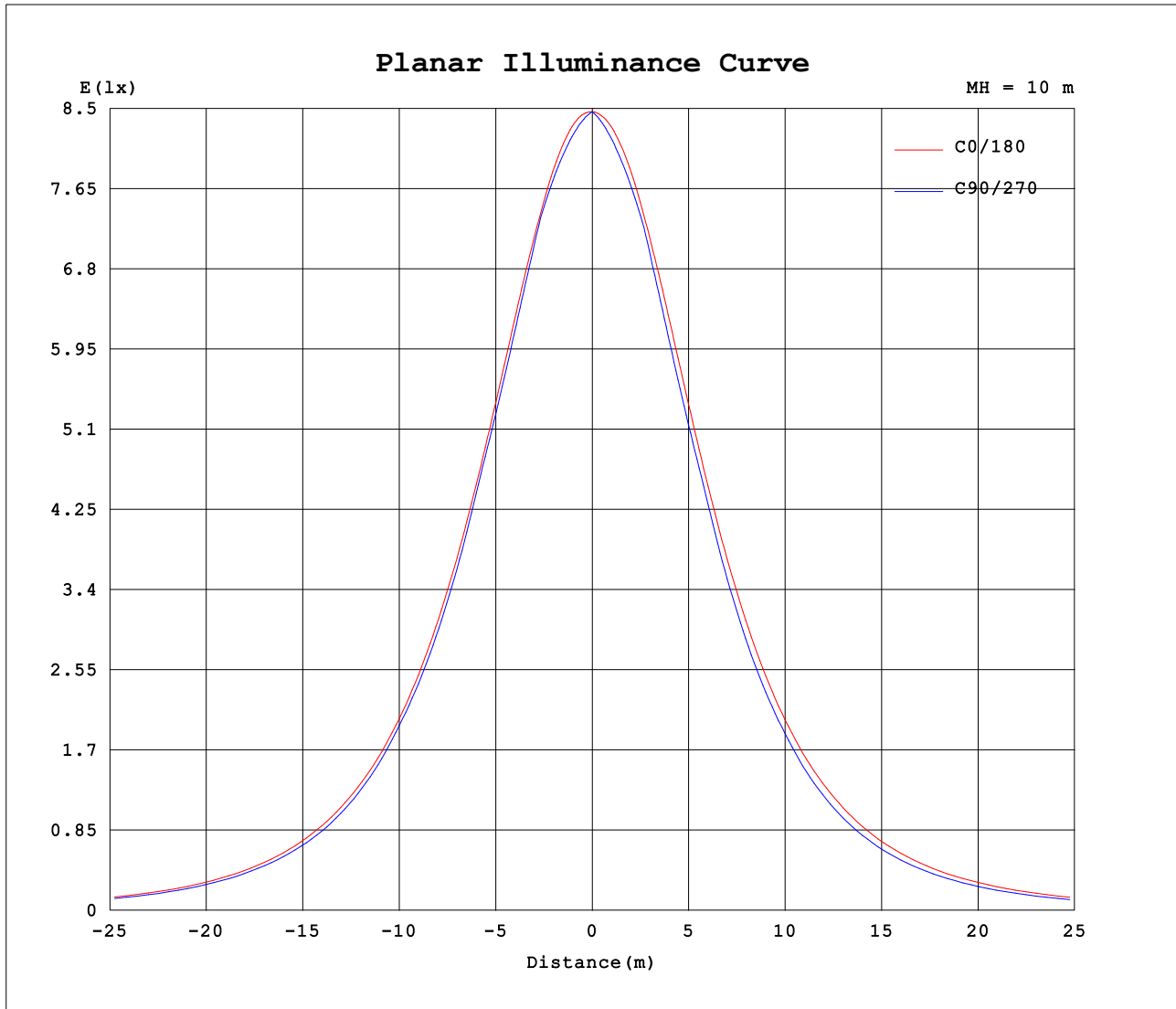
AvgL	cd/m2
L_0~180 (65) av	19742
L_0~180 (75) av	17673
L_0~180 (85) av	16303
L_90~270 (65) av	17346
L_90~270 (75) av	13666
L_90~270 (85) av	0
L_45 (65) av	19153
L_45 (75) av	17122
L_45 (85) av	0

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:03 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=1.0000]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:03 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=1.0000]
Remarks:

