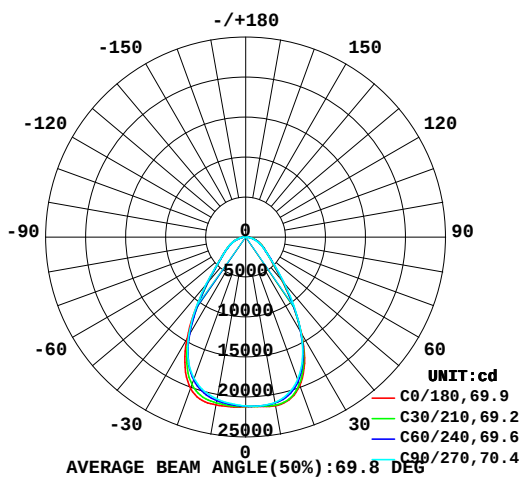


LUMINAIRE PHOTOMETRIC TEST REPORT

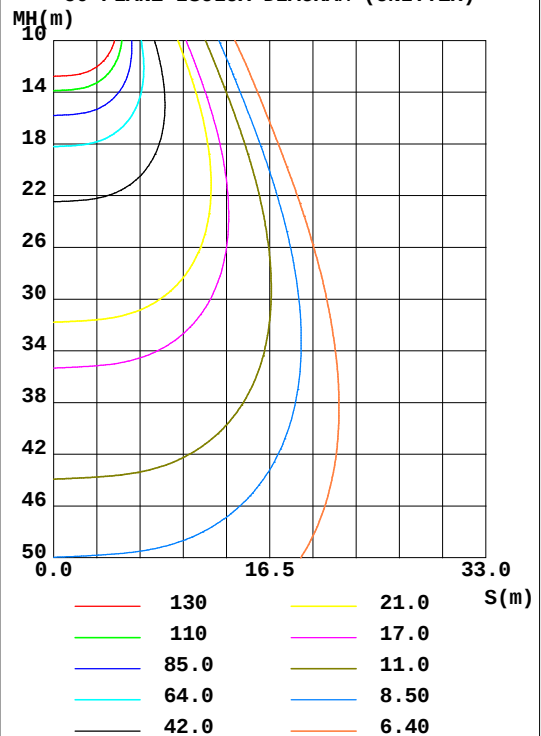
Test:U:220.87V I:1.2680A P:277.70W PF:0.9916 Freq:50.00Hz Lamp Flux:32598.1x1 lm		
NAME: GGL-508-250W 4000K	TYPE:	WEIGHT:
SPEC.:250W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*390mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 117.38 lm/W			
MODEL		I _{max} (cd)	21427	S/MH(C0/180)	1.04
NOMINAL POWER(W)	--	LOR(%)	100.0	S/MH(C90/270)	1.04
RATED VOLTAGE(V)	--	TOTAL FLUX(lm)	32598	η UP, DN(C0-180)	0.0,49.5
NOMINAL FLUX(lm)	32598.1	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,50.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	--	η down(%)	100.0	CIBSE SHR MAX	1.05

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-02-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-3000H_V1 SYSTEM V2.00.411
 Humidity: 65.0%
 Test Distance: 9.000m [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	2143	2121	2100	2108	2131	2090	2057	2075	0- 10	2012	2012	6.17, 6.17
20	1979	1944	1898	1919	2016	1927	1885	1922	10- 20	5762	7774	23.8, 23.8
30	1402	1388	1388	1363	1472	1403	1425	1421	20- 30	7787	15561	47.7, 47.7
40	707.2	727.1	748.8	712.9	759.2	726.9	771.7	745.7	30- 40	6543	22104	67.8, 67.8
50	381.2	393.5	385.8	386.6	402.0	390.1	397.5	396.9	40- 50	4093	26197	80.4, 80.4
60	254.1	254.0	246.2	246.8	259.3	252.7	259.5	261.2	50- 60	2813	29010	89, 89
70	163.4	159.1	148.8	150.3	161.0	157.2	158.6	167.2	60- 70	2022	31033	95.2, 95.2
80	69.56	74.00	59.12	65.55	64.96	70.79	66.89	80.51	70- 80	1191	32223	98.9, 98.9
90	10.85	8.454	0.3435	5.963	9.364	7.359	0.5843	11.29	80- 90	374.7	32598	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: $\times 10$ cd									UNIT: lm		

Conical surface Flux(90deg): 24386 lm

%lum = 74.8%

%lamp = 74.8%

Conical surface Flux(120deg): 29010 lm

%lum = 89.0%

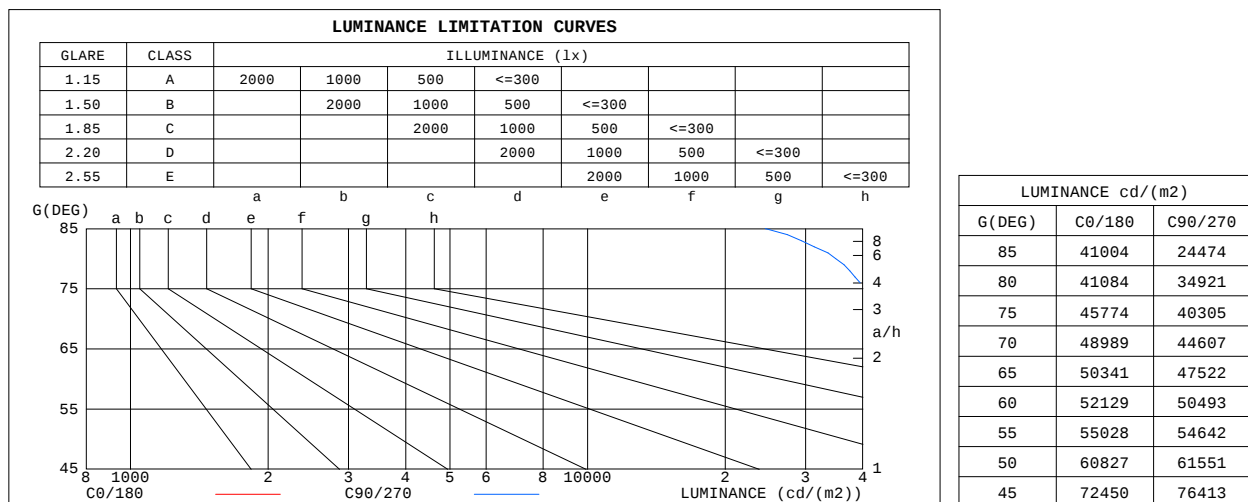
%lamp = 89.0%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-02-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-3000H_V1 SYSTEM V2.00.411
 Humidity: 65.0%
 Test Distance: 9.000m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.87V I:1.2680A P:277.70W PF:0.9916 Freq:50.00Hz Lamp Flux:32598.1x1 lm		
NAME: GGL-508-250W 4000K	TYPE:	WEIGHT:
SPEC.:250W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*390mm	Shielding Angle:



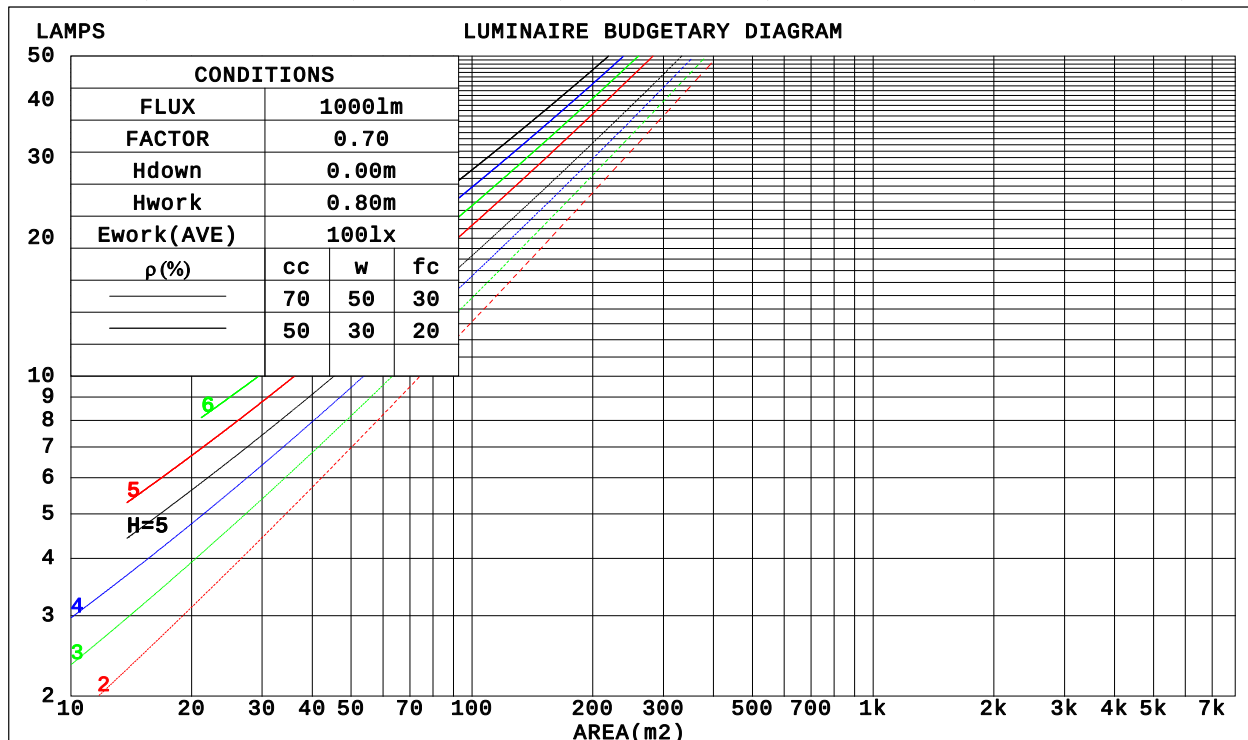
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-02-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-3000H_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.87V I:1.2680A P:277.70W PF:0.9916 Freq:50.00Hz Lamp Flux:32598.1x1 lm		
NAME: GGL-508-250W 4000K	TYPE:	WEIGHT:
SPEC.:250W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*390mm	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	1.07	1.04	1.01	1.05	1.02	.99	1.01	.98	.96	.97	.95	.93	.93	.92	.90	.88
2.0	.96	.91	.86	.95	.90	.85	.91	.87	.83	.88	.85	.81	.85	.82	.80	.78
3.0	.87	.81	.75	.86	.80	.75	.83	.78	.73	.80	.76	.72	.78	.74	.71	.69
4.0	.80	.72	.67	.78	.71	.66	.76	.70	.65	.74	.69	.65	.72	.67	.64	.62
5.0	.73	.65	.60	.72	.65	.59	.70	.64	.59	.68	.63	.58	.66	.61	.58	.56
6.0	.67	.59	.54	.66	.59	.54	.64	.58	.53	.63	.57	.53	.61	.56	.53	.51
7.0	.62	.54	.49	.61	.54	.49	.60	.53	.49	.58	.53	.48	.57	.52	.48	.46
8.0	.57	.50	.45	.57	.50	.45	.56	.49	.45	.54	.49	.44	.53	.48	.44	.43
9.0	.54	.46	.42	.53	.46	.41	.52	.46	.41	.51	.45	.41	.50	.45	.41	.39
10.0	.50	.43	.38	.50	.43	.38	.49	.43	.38	.48	.42	.38	.47	.42	.38	.36



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-02-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.87V I:1.2680A P:277.70W PF:0.9916 Freq:50.00Hz Lamp Flux:32598.1x1 lm					
NAME: GGL-508-250W 4000K			TYPE:		WEIGHT:
SPEC.:250W			DIM.:		SERIAL No.:
MFR.:			SUR.:250*390mm		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						Wall Exitance Coefficients(WEC)												
0.0																			
1.0	.248	.141	.045	.241	.137	.044	.228	.131	.042	.216	.125	.040	.205	.119	.038				
2.0	.234	.128	.039	.228	.126	.039	.217	.121	.038	.207	.116	.036	.197	.112	.035				
3.0	.219	.117	.035	.214	.115	.034	.204	.111	.034	.195	.107	.033	.187	.103	.032				
4.0	.205	.106	.031	.200	.105	.031	.192	.102	.030	.184	.099	.030	.176	.096	.029				
5.0	.192	.098	.028	.188	.096	.028	.180	.094	.028	.173	.091	.027	.167	.089	.027				
6.0	.180	.090	.026	.176	.089	.026	.170	.087	.025	.163	.085	.025	.157	.083	.025				
7.0	.169	.084	.024	.166	.083	.024	.160	.081	.023	.155	.079	.023	.149	.078	.023				
8.0	.160	.078	.022	.157	.077	.022	.151	.076	.022	.146	.074	.021	.142	.073	.021				
9.0	.151	.073	.020	.148	.072	.020	.144	.071	.020	.139	.070	.020	.135	.069	.020				
10.0	.143	.069	.019	.141	.068	.019	.137	.067	.019	.133	.066	.019	.129	.065	.019				

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			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	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.165	.132	.105	.141	.114	.091	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.155	.114	.081	.133	.098	.071	.091	.068	.050	.053	.040	.029	.017	.013	.010	
4.0	.146	.100	.065	.125	.086	.056	.086	.060	.040	.050	.035	.024	.016	.011	.008	
5.0	.138	.089	.053	.118	.077	.046	.082	.054	.033	.047	.032	.019	.015	.010	.006	
6.0	.131	.080	.044	.112	.070	.038	.078	.049	.027	.045	.029	.016	.015	.009	.005	
7.0	.124	.073	.037	.107	.063	.032	.074	.044	.023	.043	.026	.014	.014	.009	.005	
8.0	.118	.067	.032	.102	.058	.028	.070	.041	.020	.041	.024	.012	.013	.008	.004	
9.0	.113	.062	.028	.097	.054	.024	.067	.038	.017	.039	.022	.010	.013	.007	.003	
10.0	.108	.058	.025	.093	.050	.021	.064	.035	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-02-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.87V I:1.2680A P:277.70W PF:0.9916 Freq:50.00Hz Lamp Flux:32598.1x1 lm											
NAME: GGL-508-250W 4000K						TYPE:			WEIGHT:		
SPEC.:250W						DIM.:			SERIAL No.:		
MFR.:						SUR.:250*390mm			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	25.5	26.7	25.7	26.9	27.1	25.5	26.7	25.7	26.9	27.1	
	3H	26.7	27.8	26.9	28.0	28.3	26.5	27.7	26.8	27.9	28.1
	4H	27.2	28.3	27.5	28.5	28.8	27.0	28.1	27.3	28.3	28.5
	6H	27.6	28.7	27.9	28.9	29.2	27.3	28.3	27.6	28.6	28.8
	8H	27.8	28.8	28.1	29.0	29.3	27.4	28.3	27.7	28.6	28.9
	12H	27.9	28.8	28.2	29.1	29.4	27.4	28.3	27.7	28.6	28.9
4H	2H	25.9	27.0	26.2	27.2	27.4	25.9	27.0	26.2	27.2	27.4
	3H	27.3	28.3	27.7	28.6	28.9	27.2	28.1	27.5	28.4	28.7
	4H	28.0	28.9	28.4	29.2	29.5	27.7	28.6	28.1	28.9	29.2
	6H	28.6	29.4	29.0	29.7	30.1	28.2	29.0	28.6	29.3	29.7
	8H	28.8	29.5	29.2	29.9	30.3	28.3	29.0	28.7	29.4	29.8
	12H	29.0	29.6	29.4	30.0	30.4	28.4	29.0	28.8	29.4	29.8
8H	4H	28.3	29.0	28.7	29.3	29.7	28.0	28.7	28.4	29.1	29.5
	6H	29.0	29.6	29.4	30.0	30.4	28.6	29.2	29.0	29.6	30.0
	8H	29.3	29.9	29.8	30.3	30.7	28.8	29.3	29.3	29.8	30.2
	12H	29.6	30.1	30.1	30.5	31.0	29.0	29.4	29.4	29.8	30.3
12H	4H	28.3	28.9	28.7	29.3	29.7	28.0	28.7	28.5	29.1	29.5
	6H	29.1	29.6	29.5	30.0	30.5	28.7	29.2	29.1	29.6	30.1
	8H	29.4	29.9	29.9	30.3	30.8	28.9	29.4	29.4	29.8	30.3
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.4					+ 0.4 / - 0.5					
1.5H	+ 0.3 / - 0.3					+ 0.5 / - 0.4					
2.0H	+ 0.3 / - 0.3					+ 0.5 / - 0.4					

CIE Pub.117, 32598 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 12.1)
Area: 0.0975 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-02-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.87V I:1.2680A P:277.70W PF:0.9916 Freq:50.00Hz Lamp Flux:32598.1x1 lm		
NAME: GGL-508-250W 4000K	TYPE:	WEIGHT:
SPEC.:250W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*390mm	Shielding Angle:

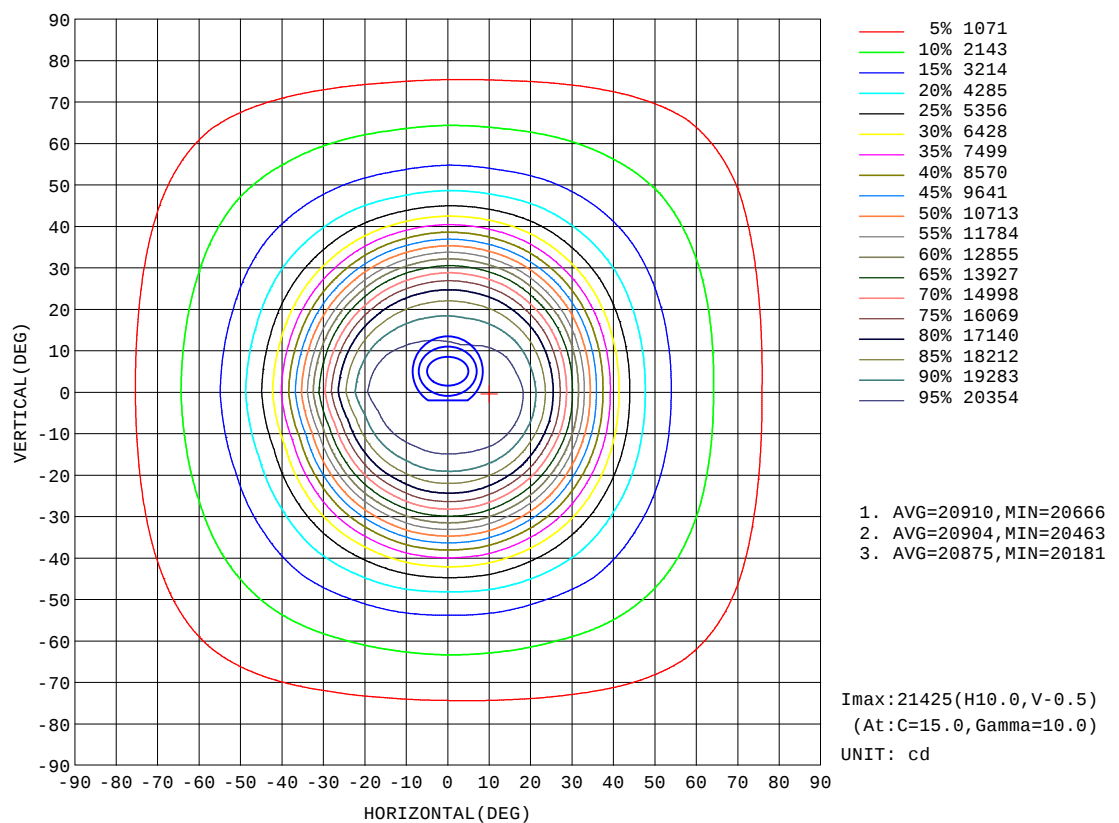
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	72	63	57	71	62	57	70	62	57	52
0.80	81	72	66	80	71	66	78	71	66	60
1.00	87	79	73	86	78	73	84	79	72	67
1.25	93	85	80	92	84	79	89	83	78	73
1.50	97	89	84	95	88	84	93	87	83	76
2.00	102	95	90	100	94	89	97	92	88	81
2.50	104	99	94	103	97	93	99	95	91	84
3.00	107	102	97	105	100	96	101	97	94	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	103	100	92
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-02-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-3000H_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.87V I:1.2680A P:277.70W PF:0.9916 Freq:50.00Hz Lamp Flux:32598.1x1 lm		
NAME: GGL-508-250W 4000K	TYPE:	WEIGHT:
SPEC.:250W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*390mm	Shielding Angle:



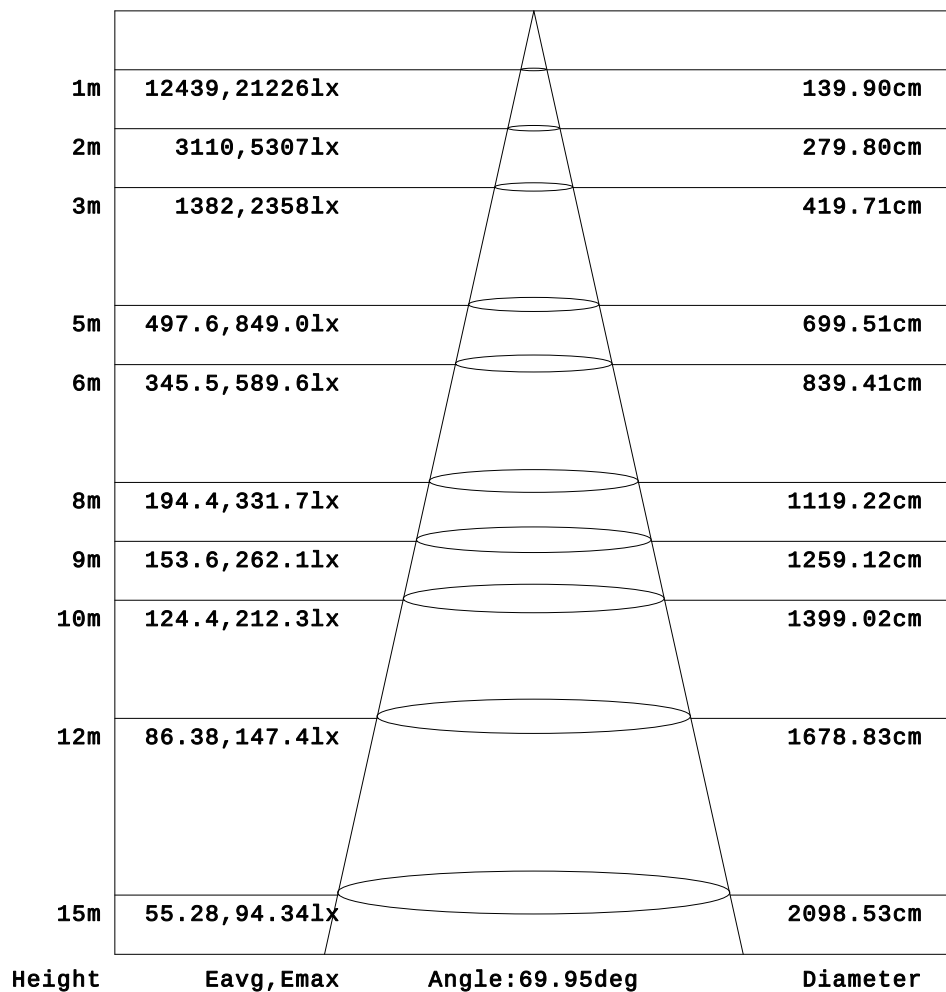
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-02-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-3000H_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 9.000m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.87V I:1.2680A P:277.70W PF:0.9916 Freq:50.00Hz Lamp Flux:32598.1x1 lm		
NAME: GGL-508-250W 4000K	TYPE:	WEIGHT:
SPEC.:250W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*390mm	Shielding Angle:

Flux out:19160 lm



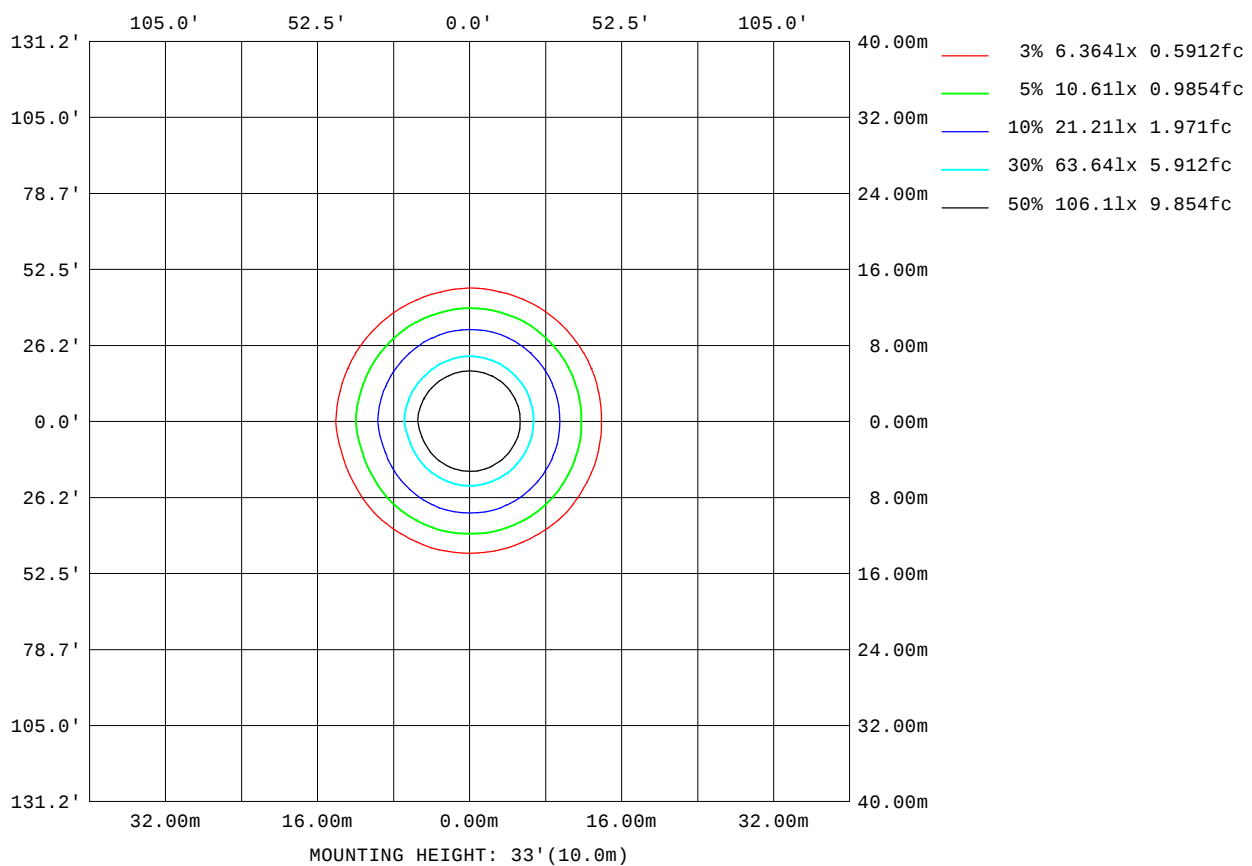
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-02-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-3000H_V1 SYSTEM V2.00.411
 Humidity: 65.0%
 Test Distance: 9.000m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.87V I:1.2680A P:277.70W PF:0.9916 Freq:50.00Hz Lamp Flux:32598.1x1 lm		
NAME: GGL-508-250W 4000K	TYPE:	WEIGHT:
SPEC.:250W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*390mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-02-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-3000H_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.87V I:1.2680A P:277.70W PF:0.9916 Freq:50.00Hz Lamp Flux:32598.1x1 lm		
NAME: GGL-508-250W 4000K	TYPE:	WEIGHT:
SPEC.:250W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*390mm	Shielding Angle:

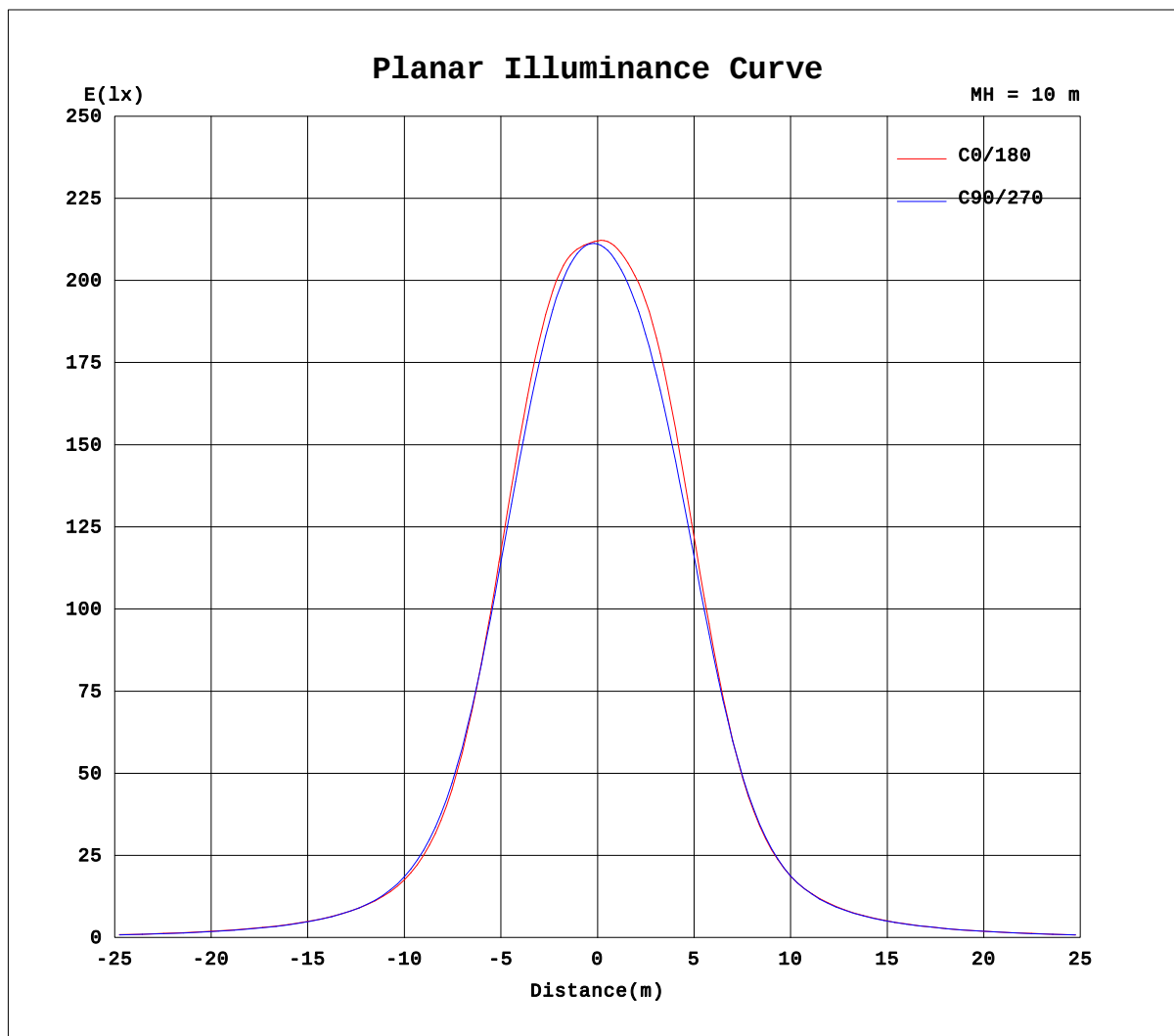
AvgL	cd/m2
L_0~180(65)av	50425
L_0~180(75)av	44842
L_0~180(85)av	38561
L_90~270(65)av	48882
L_90~270(75)av	42005
L_90~270(85)av	28329
L_45(65)av	49302
L_45(75)av	45168
L_45(85)av	39287

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-02-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-3000H_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:9.000m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-02-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-3000H_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 9.000m [K=1.0000]
Remarks:

```

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