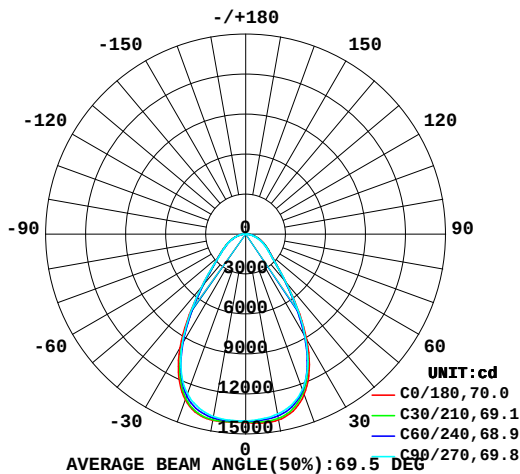


LUMINAIRE PHOTOMETRIC TEST REPORT

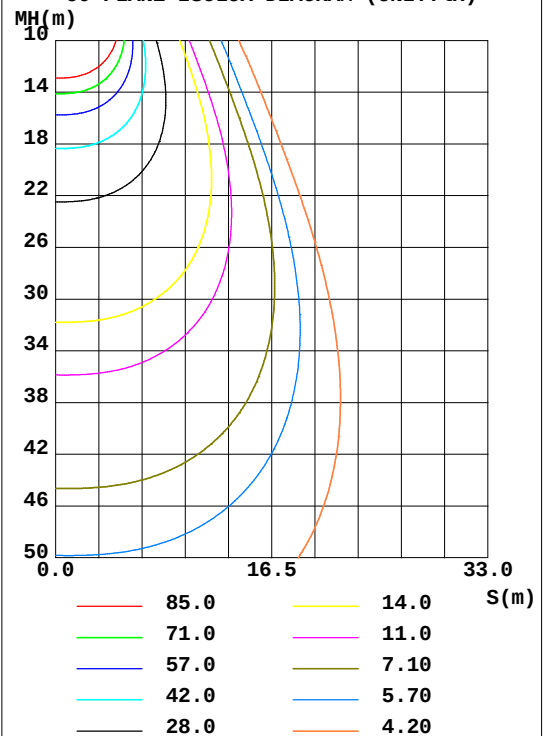
Test:U:221.04V I:0.9001A P:195.01W PF:0.9802 Freq:50.00Hz Lamp Flux:21468.1x1 lm		
NAME: GGL-508-200W 6500K	TYPE:	WEIGHT:
SPEC.:200W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*310mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 110.08 lm/W			
MODEL		I _{max} (cd)	14226	S/MH(C0/180)	1.04
NOMINAL POWER(W)	--	LOR(%)	100.0	S/MH(C90/270)	1.04
RATED VOLTAGE(V)	--	TOTAL FLUX(lm)	21468	η UP, DN(C0-180)	0.0,48.9
NOMINAL FLUX(lm)	21468.1	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,51.1
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	1416	1396	1372	1377	1418	1408	1389	1393	0- 10	1336	1336	6.23, 6.23
20	1282	1255	1243	1249	1324	1301	1276	1269	10- 20	3805	5142	24, 24
30	917.3	888.2	897.3	893.6	984.1	941.5	952.5	932.3	20- 30	5120	10262	47.8, 47.8
40	468.0	461.5	464.8	463.5	509.9	487.7	514.2	499.7	30- 40	4294	14555	67.8, 67.8
50	256.2	254.4	246.3	253.4	270.4	262.9	265.3	268.2	40- 50	2690	17246	80.3, 80.3
60	172.1	168.6	161.2	161.7	172.6	168.3	170.2	175.4	50- 60	1871	19117	89, 89
70	109.5	104.0	95.80	97.35	106.6	101.9	102.5	109.1	60- 70	1330	20447	95.2, 95.2
80	46.91	48.20	37.73	42.15	45.40	46.05	43.70	51.97	70- 80	776.7	21224	98.9, 98.9
90	7.536	5.640	0.2027	4.350	6.765	5.107	0.3440	7.440	80- 90	244.5	21468	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: ×10cd									UNIT: lm		

Conical surface Flux(90deg): 16052 lm

%lum = 74.8%

%lamp = 74.8%

Conical surface Flux(120deg): 19117 lm

%lum = 89.0%

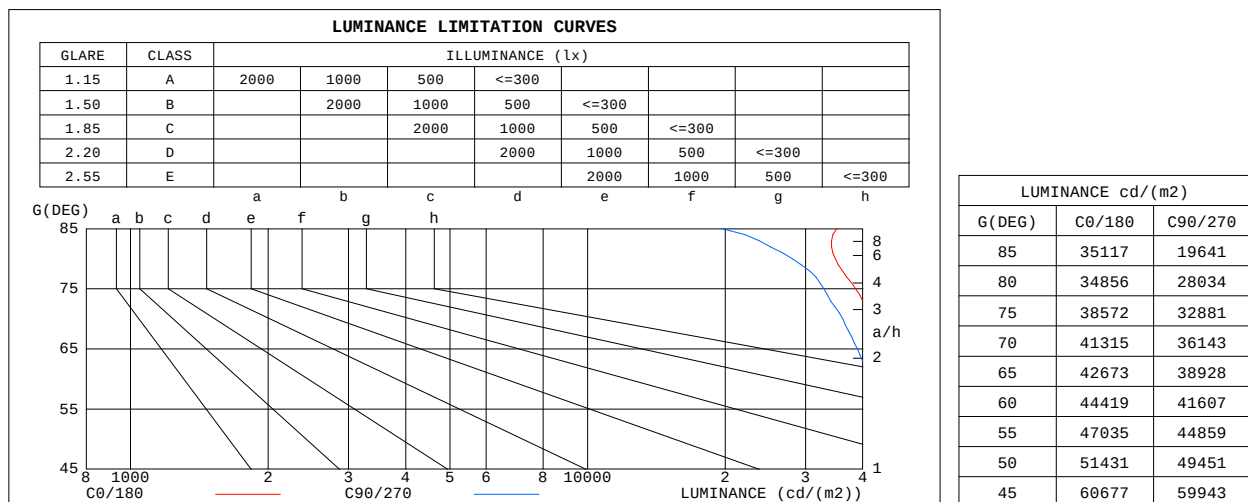
%lamp = 89.0%

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:221.04V I:0.9001A P:195.01W PF:0.9802 Freq:50.00Hz Lamp Flux:21468.1x1 lm		
NAME: GGL-508-200W 6500K	TYPE:	WEIGHT:
SPEC.:200W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*310mm	Shielding Angle:



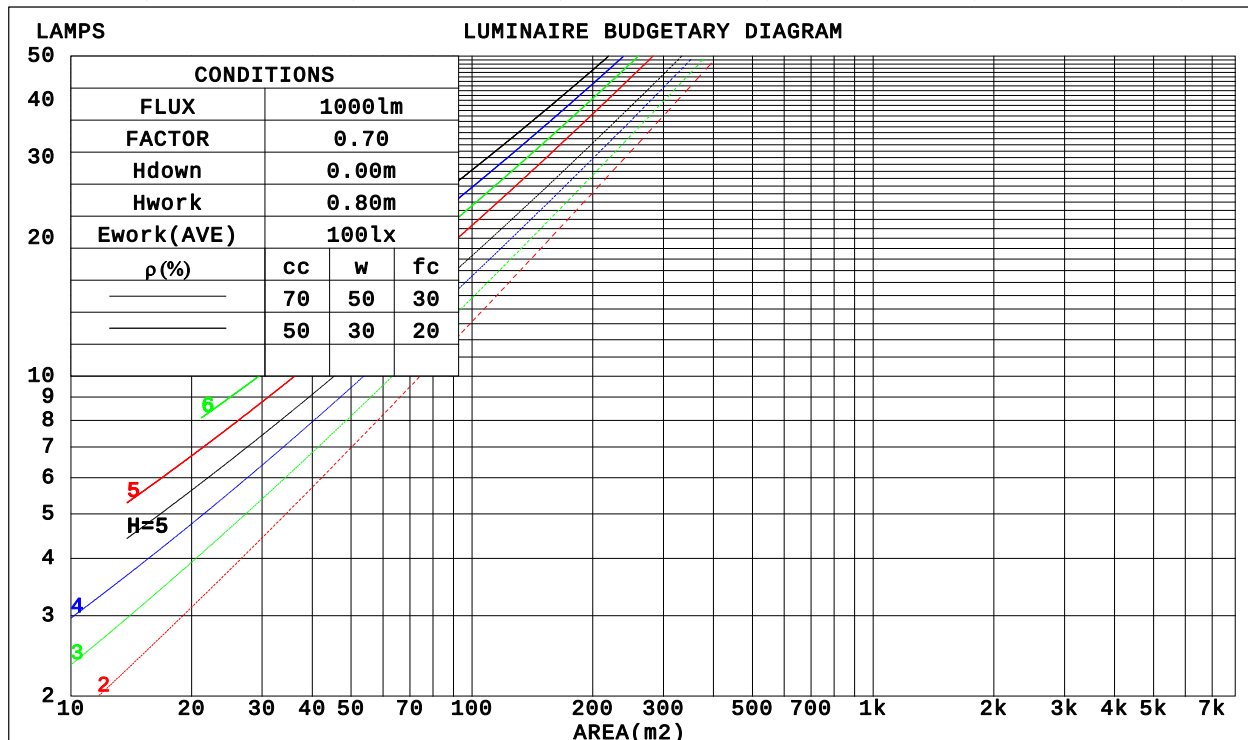
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-02-24

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:221.04V I:0.9001A P:195.01W PF:0.9802 Freq:50.00Hz Lamp Flux:21468.1x1 lm		
NAME: GGL-508-200W 6500K	TYPE:	WEIGHT:
SPEC.:200W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*310mm	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	.82	.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	.72	.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	.62	.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	.58	.50	.45	.57	.50	.45	.56	.49	.45	.54	.49	.45	.53	.48	.44	.43
9.0	.54	.46	.42	.53	.46	.42	.52	.46	.41	.51	.45	.41	.50	.45	.41	.39
10.0	.50	.43	.39	.50	.43	.38	.49	.43	.38	.48	.42	.38	.47	.42	.38	.37



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:221.04V I:0.9001A P:195.01W PF:0.9802 Freq:50.00Hz Lamp Flux:21468.1x1 lm					
NAME: GGL-508-200W 6500K			TYPE:		WEIGHT:
SPEC.:200W			DIM.:		SERIAL No.:
MFR.:			SUR.:250*310mm		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	.124	.040	.205	.119	.038		
2.0	.234	.128	.039	.228	.126	.039	.217	.121	.037	.207	.116	.036	.197	.111	.035		
3.0	.219	.117	.035	.214	.114	.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	.191	.098	.028	.187	.096	.028	.180	.094	.028	.173	.091	.027	.166	.089	.027		
6.0	.180	.090	.026	.176	.089	.026	.169	.087	.025	.163	.085	.025	.157	.083	.025		
7.0	.169	.084	.024	.166	.083	.024	.160	.081	.023	.154	.079	.023	.149	.078	.023		
8.0	.159	.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	.132	.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	.082	.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	.022	.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:221.04V I:0.9001A P:195.01W PF:0.9802 Freq:50.00Hz Lamp Flux:21468.1x1 lm											
NAME: GGL-508-200W 6500K						TYPE:		WEIGHT:			
SPEC.:200W						DIM.:		SERIAL No.:			
MFR.:						SUR.:250*310mm		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	24.8	26.1	25.1	26.3	26.5	24.6	25.9	24.9	26.1	26.3	
	3H	26.1	27.2	26.3	27.4	27.7	25.7	26.9	26.0	27.1	27.3
	4H	26.6	27.7	26.9	28.0	28.2	26.2	27.2	26.4	27.5	27.7
	6H	27.0	28.1	27.4	28.3	28.6	26.5	27.5	26.8	27.8	28.0
	8H	27.2	28.2	27.5	28.4	28.7	26.5	27.5	26.9	27.8	28.1
	12H	27.3	28.2	27.6	28.5	28.8	26.6	27.5	26.9	27.8	28.1
4H	2H	25.3	26.3	25.5	26.6	26.8	25.1	26.2	25.4	26.4	26.7
	3H	26.7	27.7	27.0	27.9	28.2	26.4	27.3	26.7	27.6	27.9
	4H	27.4	28.3	27.8	28.6	28.9	27.0	27.8	27.3	28.1	28.5
	6H	28.0	28.8	28.4	29.1	29.5	27.4	28.2	27.8	28.5	28.9
	8H	28.2	28.9	28.6	29.3	29.7	27.5	28.3	27.9	28.6	29.0
	12H	28.4	29.0	28.8	29.4	29.8	27.6	28.3	28.0	28.6	29.0
8H	4H	27.6	28.4	28.0	28.7	29.1	27.2	27.9	27.6	28.3	28.7
	6H	28.4	29.0	28.8	29.4	29.8	27.8	28.4	28.3	28.8	29.2
	8H	28.7	29.2	29.2	29.7	30.1	28.0	28.6	28.5	29.0	29.4
	12H	29.0	29.5	29.5	29.9	30.4	28.2	28.6	28.6	29.1	29.5
12H	4H	27.6	28.3	28.1	28.7	29.1	27.3	27.9	27.7	28.3	28.7
	6H	28.4	29.0	28.9	29.4	29.8	27.9	28.4	28.4	28.9	29.3
	8H	28.8	29.3	29.3	29.7	30.2	28.2	28.6	28.6	29.0	29.5
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4					
1.5H	+ 0.3 / - 0.3					+ 0.4 / - 0.4					
2.0H	+ 0.3 / - 0.3					+ 0.4 / - 0.4					

CIE Pub.117, 21468 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 10.7)
Area: 0.0775 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:221.04V I:0.9001A P:195.01W PF:0.9802 Freq:50.00Hz Lamp Flux:21468.1x1 lm		
NAME: GGL-508-200W 6500K	TYPE:	WEIGHT:
SPEC.:200W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*310mm	Shielding Angle:

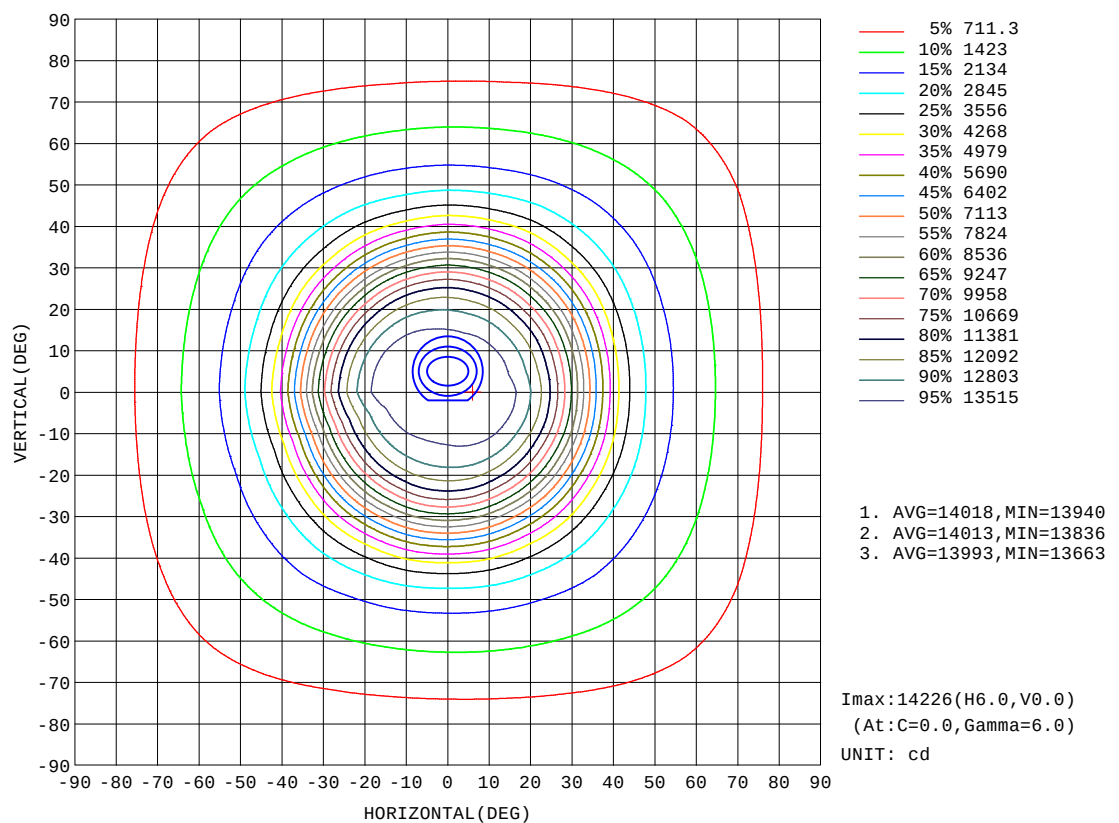
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	72	63	57	71	62	57	70	62	57	52
0.80	81	72	66	80	71	66	78	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	89	84	93	87	83	76
2.00	102	95	90	100	94	90	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:221.04V I:0.9001A P:195.01W PF:0.9802 Freq:50.00Hz Lamp Flux:21468.1x1 lm		
NAME: GGL-508-200W 6500K	TYPE:	WEIGHT:
SPEC.:200W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*310mm	Shielding Angle:



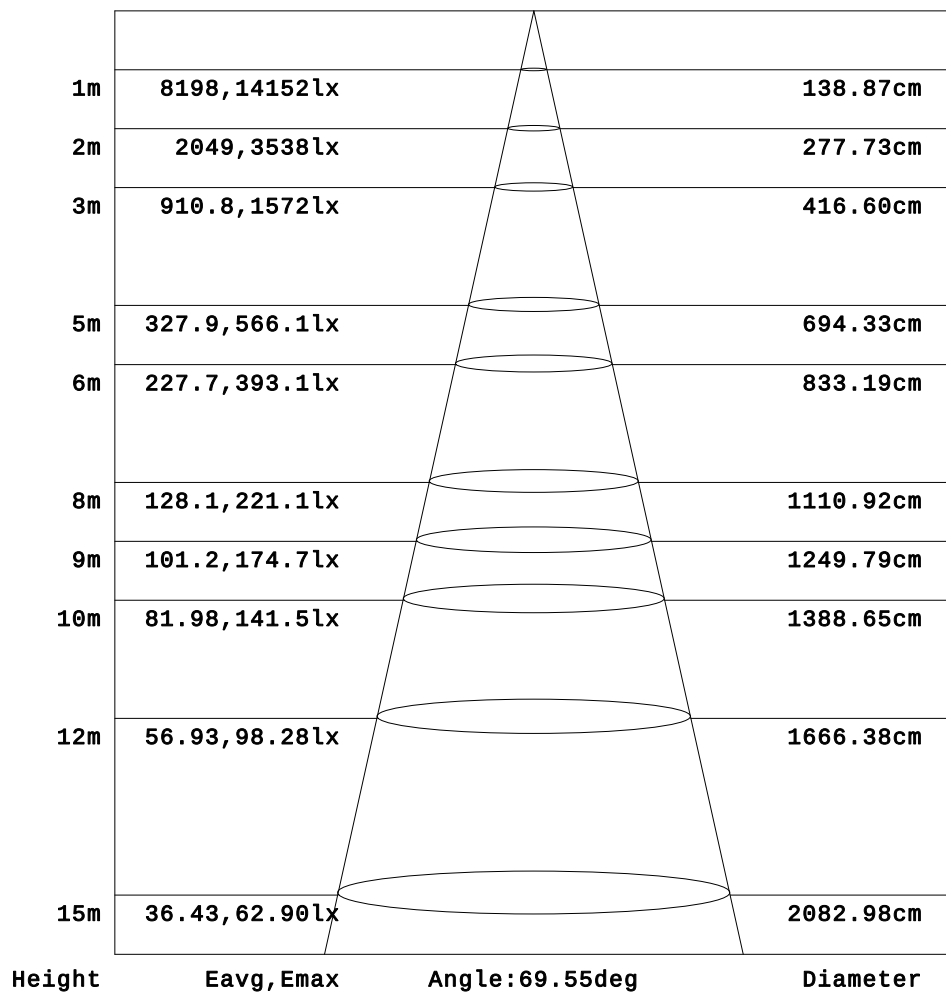
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-02-24

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:221.04V I:0.9001A P:195.01W PF:0.9802 Freq:50.00Hz Lamp Flux:21468.1x1 lm		
NAME: GGL-508-200W 6500K	TYPE:	WEIGHT:
SPEC.:200W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*310mm	Shielding Angle:

Flux out:12627 lm



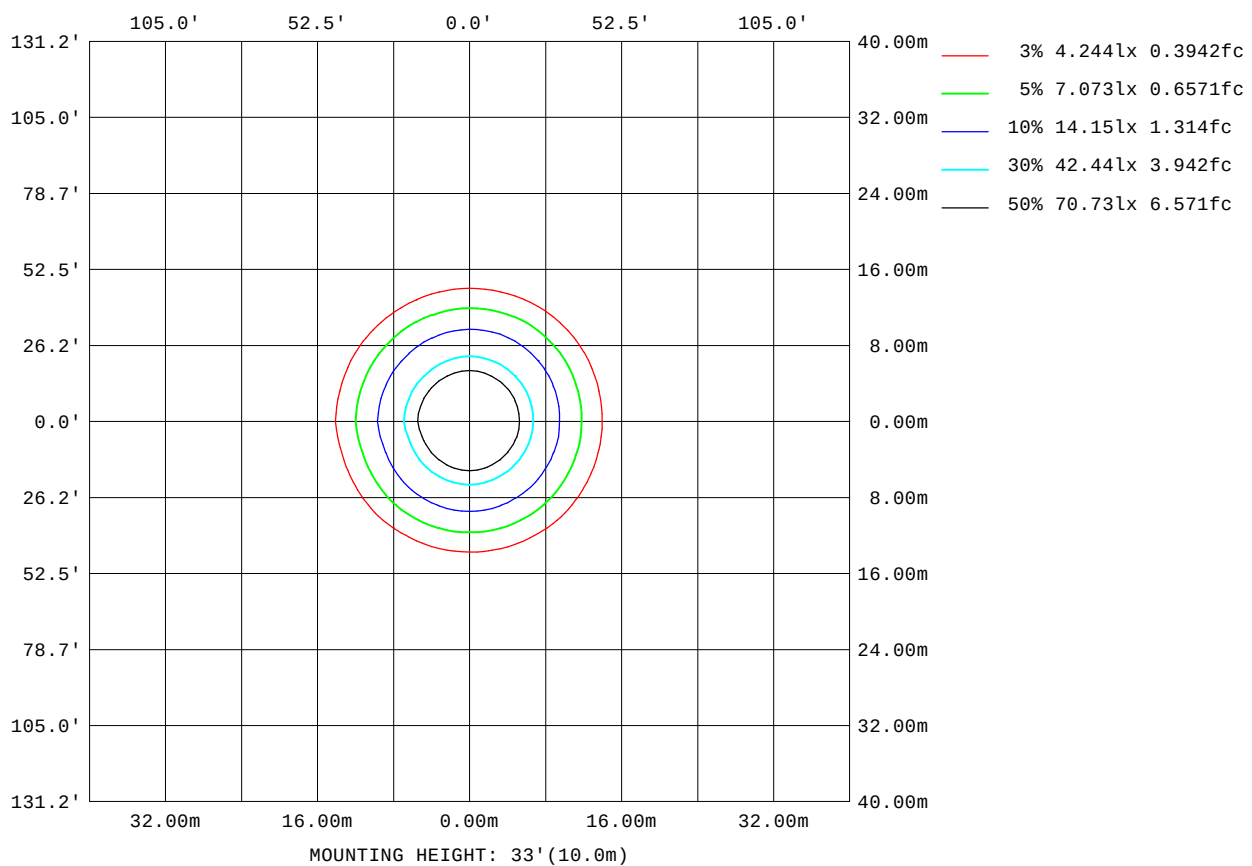
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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 G0-3000H_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:9.000m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:221.04V I:0.9001A P:195.01W PF:0.9802 Freq:50.00Hz Lamp Flux:21468.1x1 lm		
NAME: GGL-508-200W 6500K	TYPE:	WEIGHT:
SPEC.:200W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*310mm	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:221.04V I:0.9001A P:195.01W PF:0.9802 Freq:50.00Hz Lamp Flux:21468.1x1 lm		
NAME: GGL-508-200W 6500K	TYPE:	WEIGHT:
SPEC.:200W	DIM.:	SERIAL No.:
MFR.:	SUR.:250*310mm	Shielding Angle:

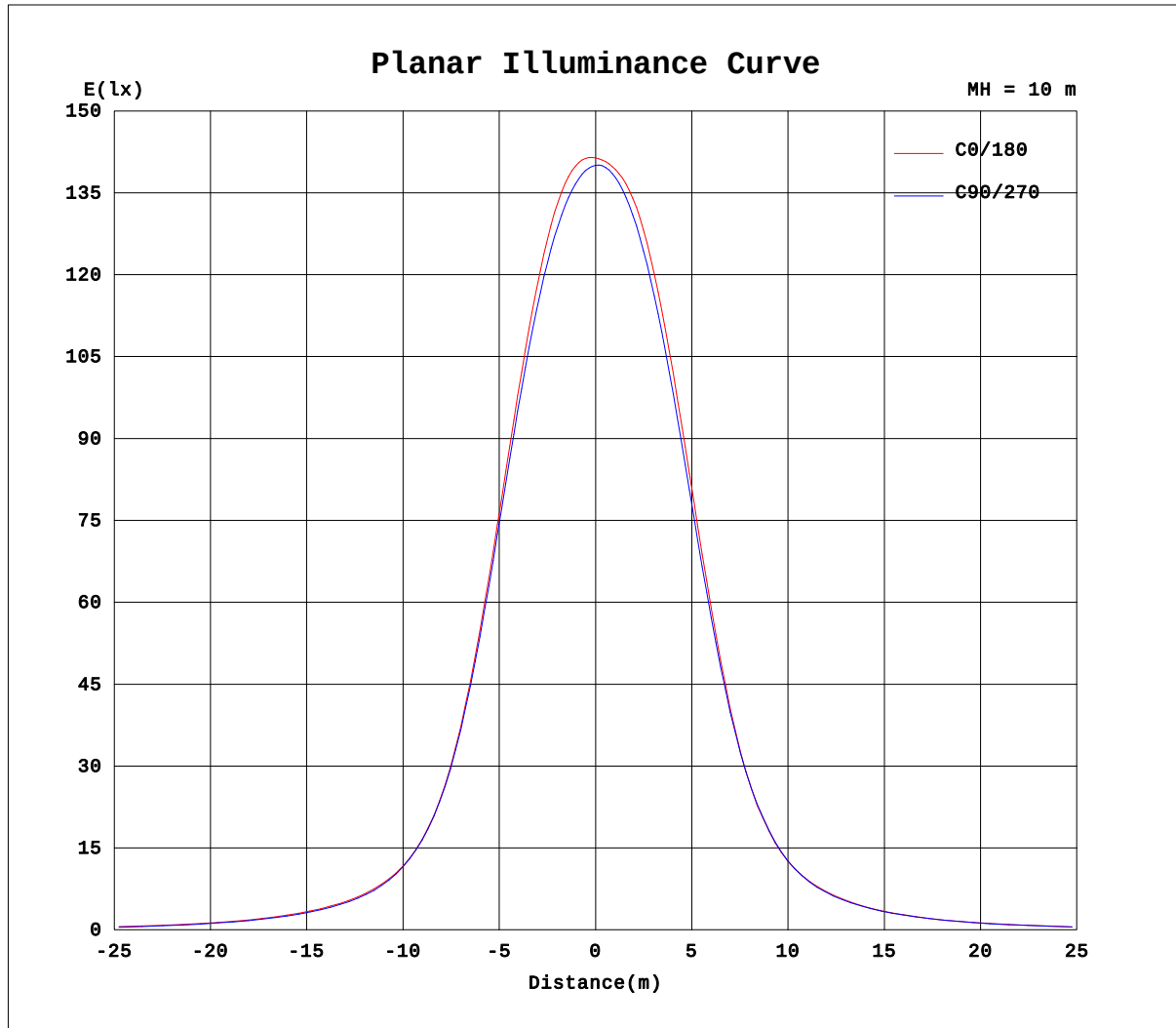
AvgL	cd/m2
L_0~180(65)av	42369
L_0~180(75)av	37860
L_0~180(85)av	34278
L_90~270(65)av	40062
L_90~270(75)av	34134
L_90~270(85)av	22626
L_45(65)av	40736
L_45(75)av	36844
L_45(85)av	32413

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:

```

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:

```

```

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

```