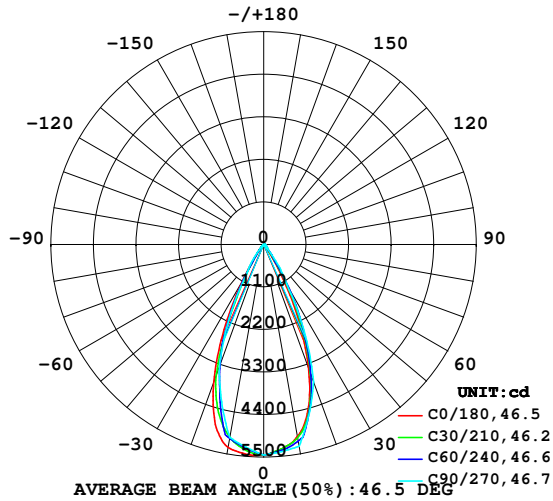


LUMINAIRE PHOTOMETRIC TEST REPORT

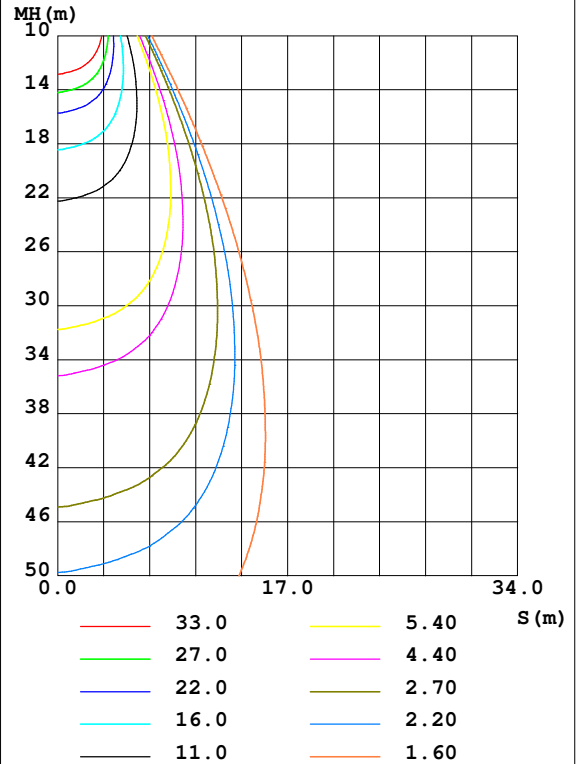
Test:U:230.18V I:0.1588A P:34.560W PF:0.9454 Freq:50.01Hz Lamp Flux:3143.97x1 lm		
NAME: PGR60-1	TYPE:LED	WEIGHT:4kg
SPEC.:35W	DIM.: 600x600x125	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	PGR60-1	Imax (cd)	5460	S/MH (C0/180)	0.72
NOMINAL POWER (W)	35W	LOR (%)	100.0	S/MH (C90/270)	0.69
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm)	3144.0	η UP, DN (C0-180)	0.0, 52.0
NOMINAL FLUX (lm)	3143.97	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 48.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	0.70

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(β) Range: -90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: LITPA
Test Date: 03.06.2020

V(B) Range: -80 - 80DEG
V(B) Interval: 5.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 5.680m [K=1.0000]
Remarks: PGR60-1 35W

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5038	5101	5295	5247	5333	5068	5069	4973	0- 10	502.3	502.3	16,16
20	3397	3589	3780	3575	3777	3289	3361	3367	10- 20	1230	1732	55.1,55.1
30	916.9	1222	1212	1271	1136	1059	888.7	998.9	20- 30	1014	2746	87.3,87.3
40	111.2	162.1	149.0	174.1	141.8	147.5	117.6	137.0	30- 40	296.4	3042	96.8,96.8
50	34.14	50.14	44.81	54.26	39.78	49.77	38.31	45.11	40- 50	65.85	3108	98.9,98.9
60	9.881	17.80	16.71	18.39	11.64	15.70	11.96	15.21	50- 60	24.60	3133	99.6,99.6
70	1.135	6.237	4.598	6.240	0.9736	2.733	0.6233	2.974	60- 70	7.882	3140	99.9,99.9
80	0.8726	4.210	4.438	4.231	0.7865	0.6479	0.3663	0.6442	70- 80	2.387	3143	100,100
90	0.0924	0	0	0	0.6856	0	0	0	80- 90	1.133	3144	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): 3083.2 lm

%lum = 98.1%

%lamp = 98.1%

Conical surface Flux(120deg): 3132.6 lm

%lum = 99.6%

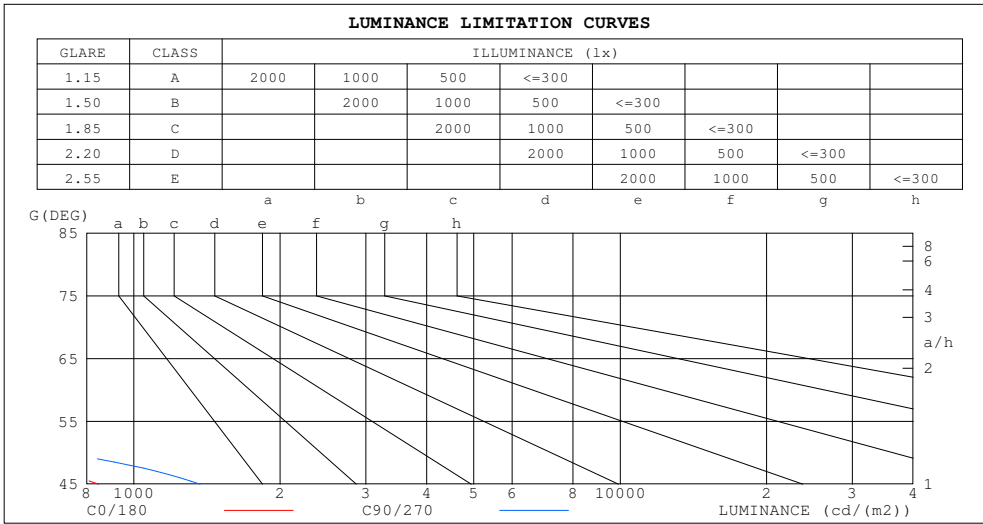
%lamp = 99.6%

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:LITPA
Test Date:03.06.2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: PGR60-1 35W

LUMINANCE LIMITATION CURVES

Test:U:230.18V I:0.1588A P:34.560W PF:0.9454 Freq:50.01Hz Lamp Flux:3143.97x1 lm		
NAME: PGR60-1	TYPE:LED	WEIGHT:4kg
SPEC.:35W	DIM.: 600x600x125	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	33	0
80	50	256
75	40	175
70	33	134
65	89	252
60	198	334
55	322	535
50	531	697
45	846	1369

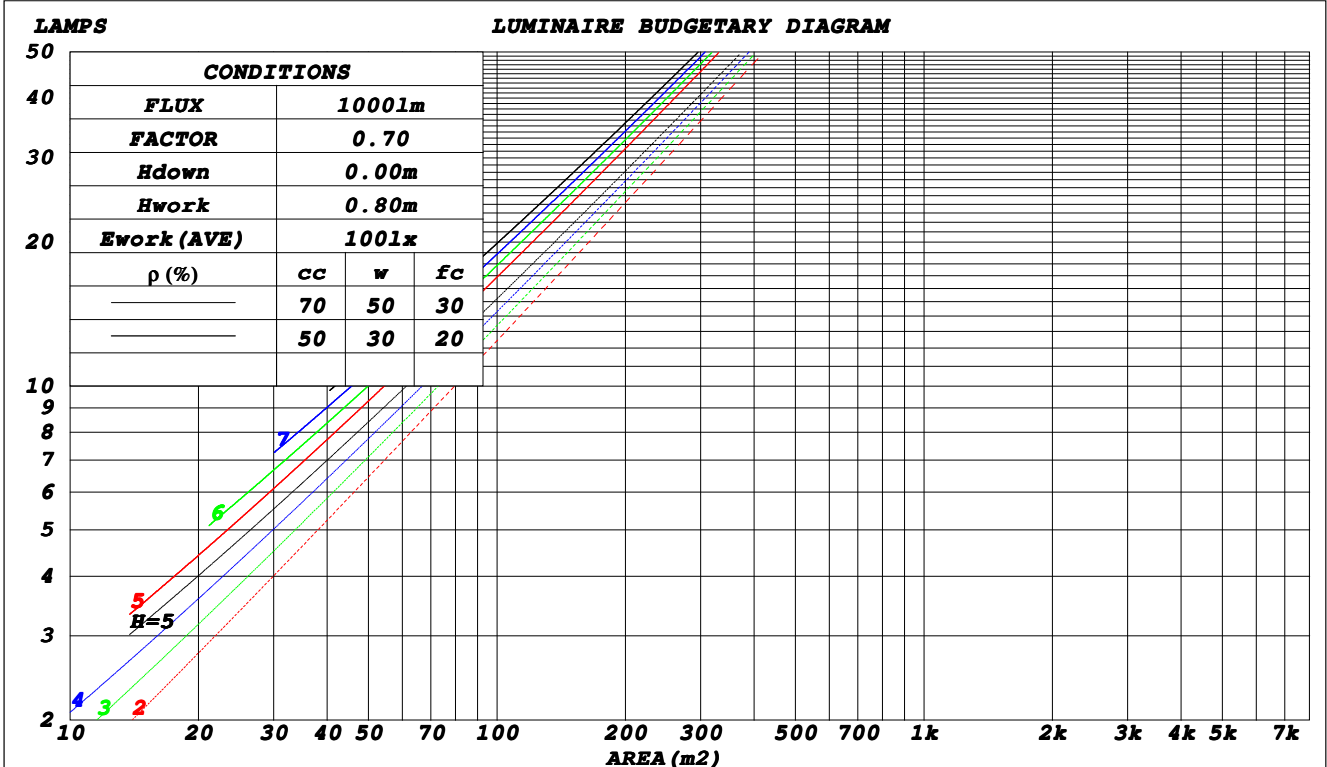
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:LITPA
Test Date:03.06.2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: PGR60-1 35W

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.18V I:0.1588A P:34.560W PF:0.9454 Freq:50.01Hz Lamp Flux:3143.97x1 lm		
NAME: PGR60-1	TYPE:LED	WEIGHT:4kg
SPEC.:35W	DIM.: 600x600x125	SERIAL No.:
MFR.: LITPA AYDINLATMA	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	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	1.12	1.09	1.07	1.10	1.08	1.06	1.05	1.04	1.02	1.02	1.01	.99	.98	.97	.97	.95
2.0	1.05	1.01	.98	1.03	1.00	.97	1.00	.97	.95	.97	.95	.93	.95	.93	.91	.90
3.0	.99	.95	.91	.98	.94	.90	.95	.92	.89	.93	.90	.88	.91	.88	.86	.85
4.0	.94	.89	.85	.93	.88	.85	.91	.87	.84	.89	.85	.83	.87	.84	.82	.80
5.0	.89	.84	.80	.88	.83	.80	.86	.82	.79	.85	.81	.78	.83	.80	.78	.76
6.0	.84	.79	.76	.84	.79	.75	.82	.78	.75	.81	.77	.74	.80	.76	.74	.73
7.0	.80	.75	.72	.80	.75	.71	.79	.74	.71	.77	.74	.71	.76	.73	.70	.69
8.0	.77	.71	.68	.76	.71	.68	.75	.71	.67	.74	.70	.67	.73	.70	.67	.66
9.0	.73	.68	.65	.73	.68	.65	.72	.67	.64	.71	.67	.64	.70	.67	.64	.63
10.0	.70	.65	.62	.70	.65	.62	.69	.64	.61	.68	.64	.61	.68	.64	.61	.60



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:LITPA
Test Date:03.06.2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: PGR60-1 35W

WEC AND CCEC

Test:U:230.18V I:0.1588A P:34.560W PF:0.9454 Freq:50.01Hz Lamp Flux:3143.97x1 lm		
NAME: PGR60-1	TYPE:LED	WEIGHT:4kg
SPEC.:35W	DIM.: 600x600x125	SERIAL No.:
MFR.: LITPA AYDINLATMA	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	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.161	.091	.029	.154	.088	.028	.141	.081	.026	.130	.075	.024	.119	.069	.022	
2.0	.152	.083	.026	.146	.081	.025	.136	.076	.023	.126	.071	.022	.117	.066	.021	
3.0	.144	.076	.023	.139	.074	.022	.130	.071	.021	.122	.067	.020	.114	.063	.020	
4.0	.136	.071	.021	.132	.069	.020	.125	.066	.020	.118	.063	.019	.111	.060	.018	
5.0	.130	.066	.019	.126	.065	.019	.120	.062	.018	.113	.060	.018	.108	.058	.017	
6.0	.124	.062	.018	.121	.061	.018	.115	.059	.017	.109	.057	.017	.104	.055	.016	
7.0	.118	.058	.017	.115	.057	.016	.110	.056	.016	.106	.054	.016	.101	.053	.015	
8.0	.113	.055	.016	.111	.055	.015	.106	.053	.015	.102	.052	.015	.098	.050	.015	
9.0	.108	.052	.015	.106	.052	.015	.102	.051	.014	.099	.049	.014	.095	.048	.014	
10.0	.104	.050	.014	.102	.049	.014	.099	.048	.014	.095	.047	.013	.092	.046	.013	

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	.170	.157	.146	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013	
3.0	.140	.113	.092	.120	.098	.080	.082	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.098	.075	.111	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.120	.087	.062	.103	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007	
6.0	.112	.077	.052	.096	.067	.045	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.105	.069	.044	.090	.060	.039	.062	.042	.027	.036	.025	.016	.012	.008	.005	
8.0	.099	.063	.038	.085	.054	.033	.059	.038	.023	.034	.023	.014	.011	.007	.005	
9.0	.094	.057	.033	.081	.050	.029	.056	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.089	.053	.029	.077	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:LITPA
Test Date:03.06.2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: PGR60-1 35W

UGR(Unified Glare Rating) Table

Test:U:230.18V I:0.1588A P:34.560W PF:0.9454 Freq:50.01Hz Lamp Flux:3143.97x1 lm										
NAME: PGR60-1					TYPE:LED			WEIGHT:4kg		
SPEC.:35W					DIM.: 600x600x125			SERIAL No.:		
MFR.: LITPA AYDINLATMA					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	6.0	6.8	6.2	7.0	7.1	8.5	9.3	8.7	9.5	9.6
3H	5.8	6.6	6.1	6.8	7.0	8.4	9.1	8.6	9.3	9.5
4H	5.7	6.5	6.0	6.7	6.9	8.3	9.0	8.6	9.2	9.4
6H	5.7	6.3	6.0	6.6	6.8	8.2	8.9	8.5	9.2	9.4
8H	5.6	6.3	5.9	6.5	6.8	8.2	8.9	8.5	9.1	9.4
12H	5.6	6.2	5.9	6.5	6.7	8.2	8.8	8.5	9.1	9.3
4H 2H	5.8	6.5	6.1	6.8	7.0	8.3	9.0	8.5	9.2	9.4
3H	5.7	6.3	6.0	6.6	6.8	8.2	8.8	8.5	9.0	9.3
4H	5.6	6.1	5.9	6.4	6.7	8.1	8.7	8.4	9.0	9.3
6H	5.5	6.0	5.9	6.3	6.7	8.1	8.6	8.4	8.9	9.2
8H	5.5	5.9	5.9	6.3	6.7	8.0	8.5	8.4	8.8	9.2
12H	5.5	5.9	5.9	6.2	6.6	8.0	8.4	8.4	8.8	9.2
8H 4H	5.5	5.9	5.9	6.3	6.7	8.0	8.4	8.3	8.8	9.1
6H	5.4	5.8	5.9	6.2	6.6	8.0	8.3	8.4	8.7	9.1
8H	5.5	5.8	5.9	6.2	6.7	7.9	8.3	8.4	8.7	9.1
12H	5.5	5.8	6.0	6.3	6.7	7.9	8.2	8.4	8.6	9.1
12H 4H	5.4	5.9	5.8	6.2	6.6	7.9	8.3	8.3	8.7	9.1
6H	5.4	5.8	5.9	6.2	6.6	7.9	8.3	8.4	8.7	9.1
8H	5.5	5.8	6.0	6.2	6.7	7.9	8.2	8.4	8.6	9.1
Variations with the observer position at spacings:										
S = 1.0H	+ 2.3 / - 4.7					+ 3.5 / - 6.3				
1.5H	+ 3.5 / - 3.7					+ 5.7 / - 5.3				
2.0H	+ 3.1 / - 2.8					+ 3.6 / - 2.6				

CIE Pub.117, 3144 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.0$)

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:LITPA
Test Date:03.06.2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: PGR60-1 35W

UTILIZATION FACTORS TABLE

Test:U:230.18V I:0.1588A P:34.560W PF:0.9454 Freq:50.01Hz Lamp Flux:3143.97x1 lm		
NAME: PGR60-1	TYPE:LED	WEIGHT:4kg
SPEC.:35W	DIM.: 600x600x125	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

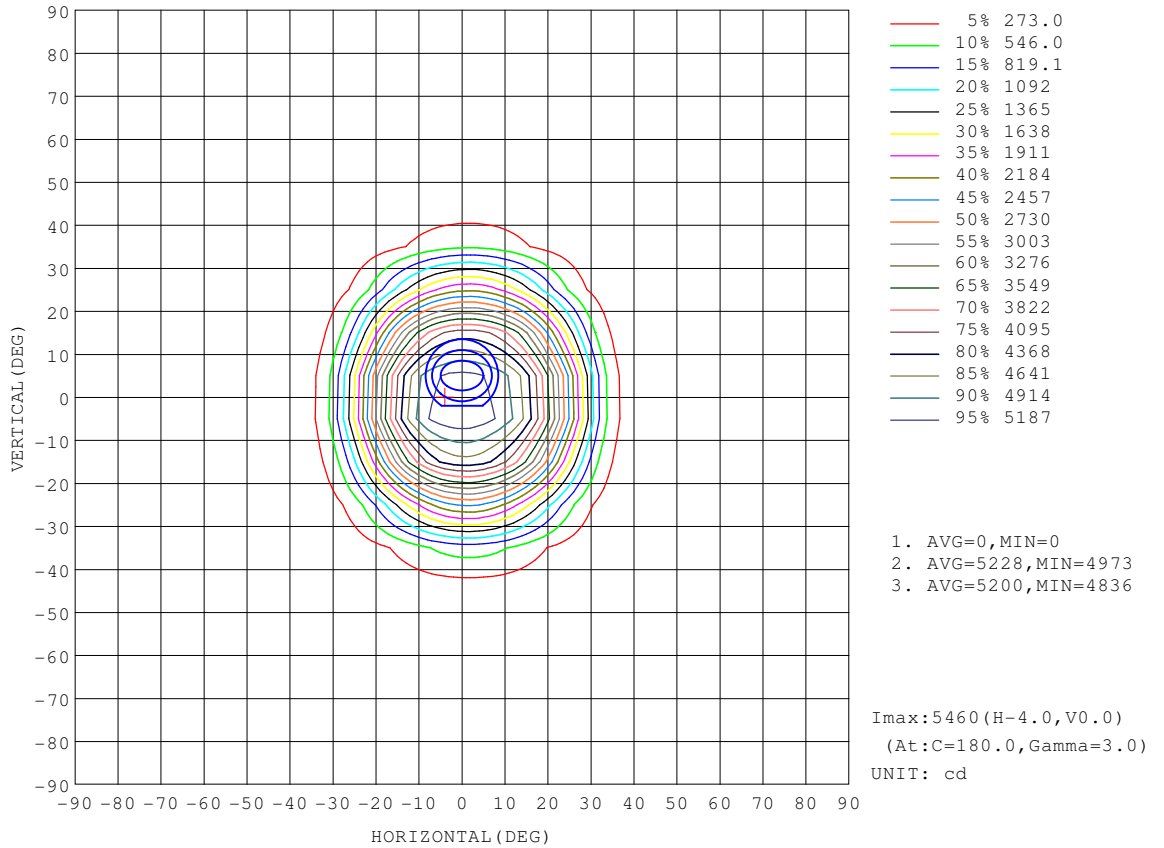
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	90	84	80	89	83	80	88	83	80	76
0.80	97	91	88	96	91	88	95	90	87	84
1.00	101	96	92	100	95	92	98	95	91	88
1.25	104	100	96	103	99	96	102	98	95	91
1.50	107	103	99	106	102	99	104	100	98	94
2.00	109	105	102	108	104	102	105	102	100	95
2.50	111	107	105	109	106	104	106	104	102	96
3.00	112	109	107	111	108	105	107	105	103	97
4.00	114	112	110	112	110	108	109	107	106	99
5.00	115	113	112	113	112	110	109	108	107	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:LITPA
Test Date:03.06.2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: PGR60-1 35W

ISOCANDELA DIAGRAM

Test:U:230.18V I:0.1588A P:34.560W PF:0.9454 Freq:50.01Hz Lamp Flux:3143.97x1 lm		
NAME: PGR60-1	TYPE:LED	WEIGHT:4kg
SPEC.:35W	DIM.: 600x600x125	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

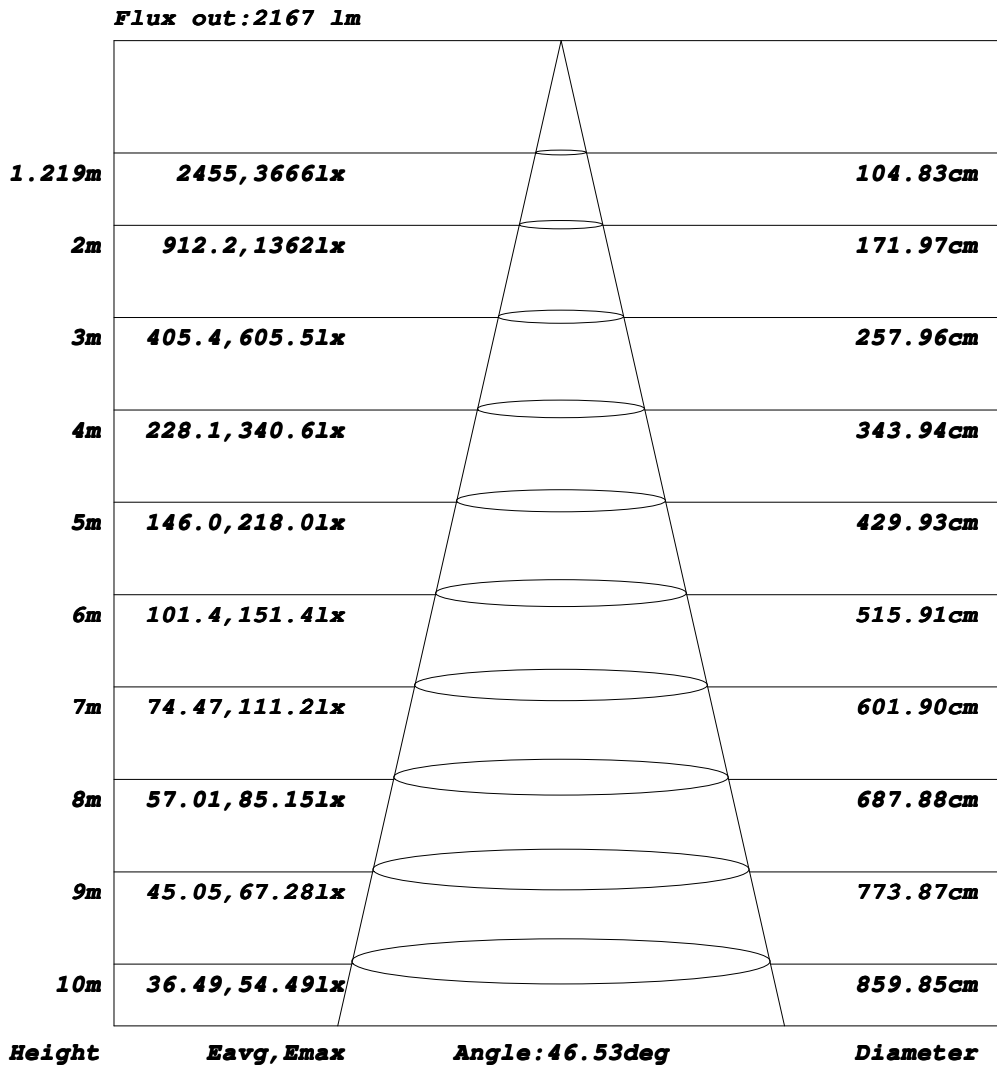


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:LITPA
Test Date:03.06.2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: PGR60-1 35W

AAI Figure

Test:U:230.18V I:0.1588A P:34.560W PF:0.9454 Freq:50.01Hz Lamp Flux:3143.97x1 lm		
NAME: PGR60-1	TYPE:LED	WEIGHT:4kg
SPEC.:35W	DIM.: 600x600x125	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:



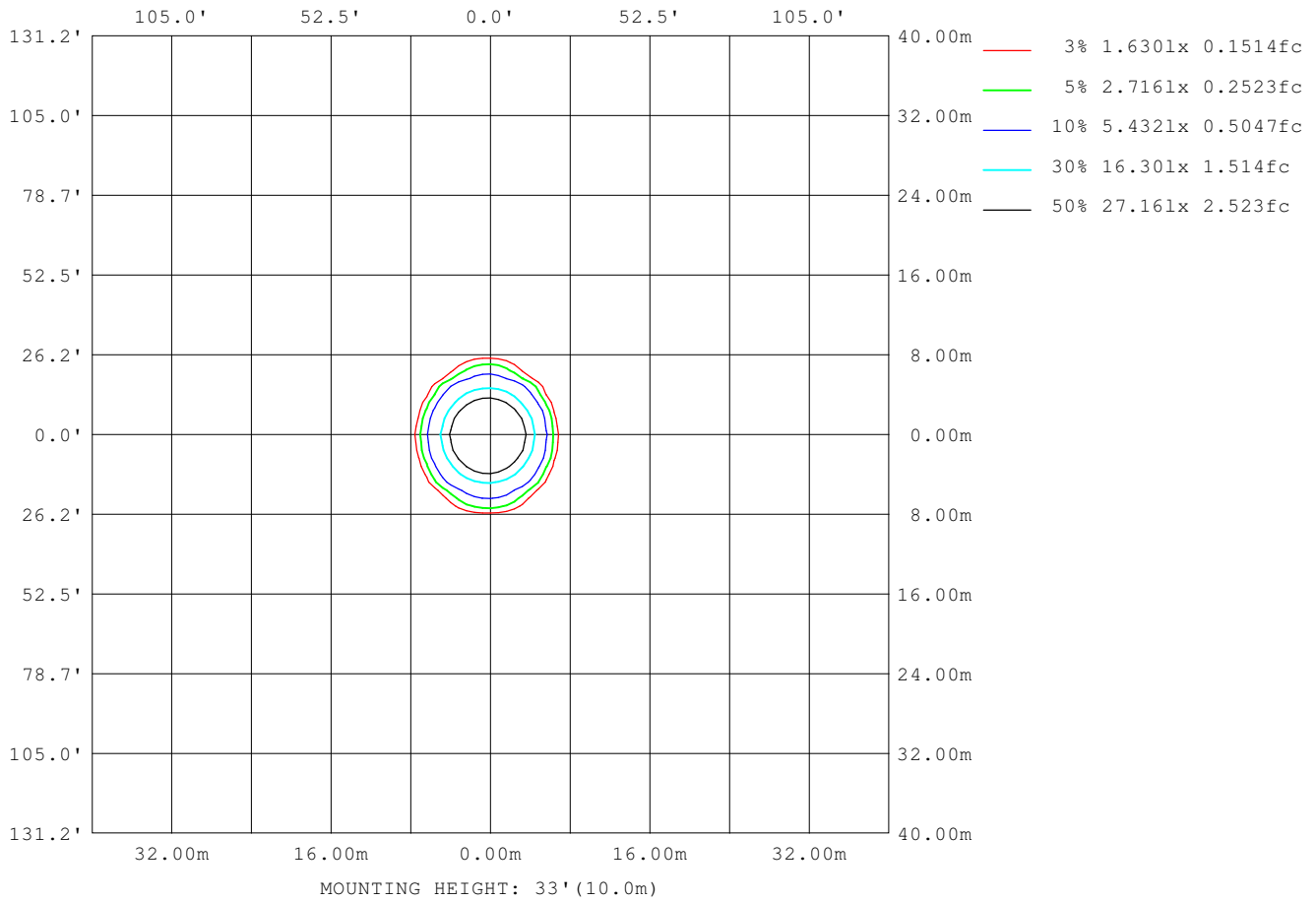
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range: -90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: LITPA
Test Date: 03.06.2020

V(B) Range: -80 - 80DEG
V(B) Interval: 5.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 5.680m [K=1.0000]
Remarks: PGR60-1 35W

ISOLUX DIAGRAM

Test:U:230.18V I:0.1588A P:34.560W PF:0.9454 Freq:50.01Hz Lamp Flux:3143.97x1 lm		
NAME: PGR60-1	TYPE:LED	WEIGHT:4kg
SPEC.:35W	DIM.: 600x600x125	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:LITPA
Test Date:03.06.2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: PGR60-1 35W

LED Avg.L Report

Test:U:230.18V I:0.1588A P:34.560W PF:0.9454 Freq:50.01Hz Lamp Flux:3143.97x1 lm		
NAME: PGR60-1	TYPE:LED	WEIGHT:4kg
SPEC.:35W	DIM.: 600x600x125	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

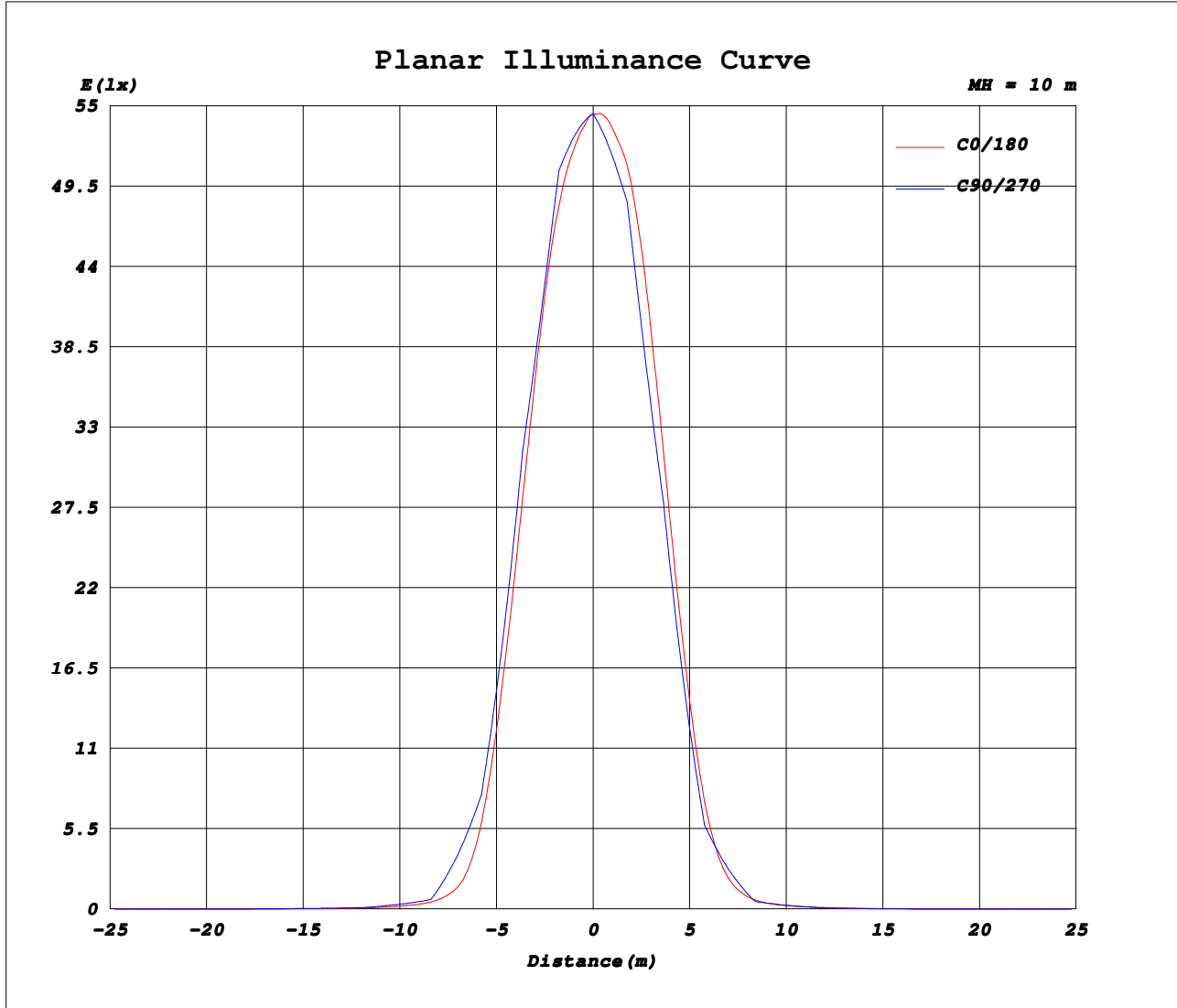
AvgL	cd/m2
L_0~180 (65) av	96
L_0~180 (75) av	37
L_0~180 (85) av	39
L_90~270 (65) av	200
L_90~270 (75) av	97
L_90~270 (85) av	0
L_45 (65) av	217
L_45 (75) av	103
L_45 (85) av	112

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:LITPA
Test Date:03.06.2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: PGR60-1 35W

Planar Illuminance Curve



$H(\beta)$ Range: -90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: LITPA
Test Date: 03.06.2020

$V(B)$ Range: -80 - 80DEG
 $V(B)$ Interval: 5.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 5.680m [K=1.0000]
Remarks: PGR60-1 35W

