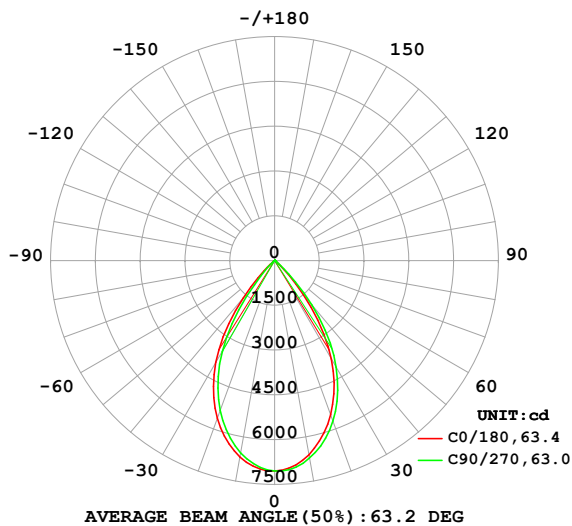


LUMINAIRE PHOTOMETRIC TEST REPORT

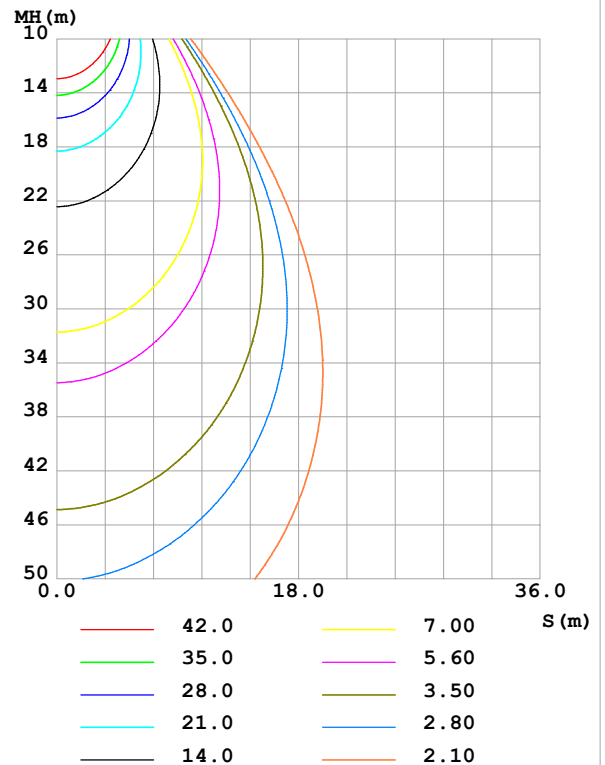
Test:U:230.07V I:0.229A P:52.13W PF:0.990 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-60D-3090-silver		
SPEC.: KGP CC60W1400CGA37-56W/1400mA		
MFR.: SOTEN		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 137.05 lm/W			
MODEL	JF DC2835	I _{max} (cd)	7053	S/MH (C0/180)	0.95
NOMINAL POWER (W)	50	LOR (%)	84.1	S/MH (C90/270)	0.90
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	7144.3	η UP, DN (C0-180)	0.0, 44.5
NOMINAL FLUX (lm)	8495.6	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 39.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	230	η down (%)	84.1	CIBSE SHR MAX	1.05

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 28 °C
Operators: Li
Test Date: 2025-06-05

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity: 75%
Test Distance: 8.458m [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	6605	6681	6723	6745	6683	6609	6544	6543	0- 10	653.0	653.0	9.14,7.69
20	5491	5679	5717	5779	5621	5502	5337	5401	10- 20	1728	2381	33.3,28
30	3809	4115	4130	4241	3946	3810	3507	3707	20- 30	2190	4571	64,53.8
40	1509	2212	1941	2333	1641	1838	1064	1766	30- 40	1771	6342	88.8,74.7
50	184.7	600.4	264.9	678.7	200.3	373.2	108.1	341.6	40- 50	695.3	7037	98.5,82.8
60	7.908	40.96	20.02	47.76	8.862	14.18	2.296	12.48	50- 60	99.96	7137	99.9,84
70	1.442	1.559	1.669	1.448	1.394	1.007	1.118	1.227	60- 70	4.884	7142	100,84.1
80	0.9626	0.9114	0.9159	0.8508	0.8708	0.7125	0.6761	0.9280	70- 80	1.108	7143	100,84.1
90	1.650	1.038	0.6712	1.054	1.212	1.170	0.7628	1.273	80- 90	0.9878	7144	100,84.1
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): 6878.5 lm

%lum = 96.3%

%lamp = 81.0%

Conical surface Flux(130deg): 7141.6 lm

%lum = 100.0%

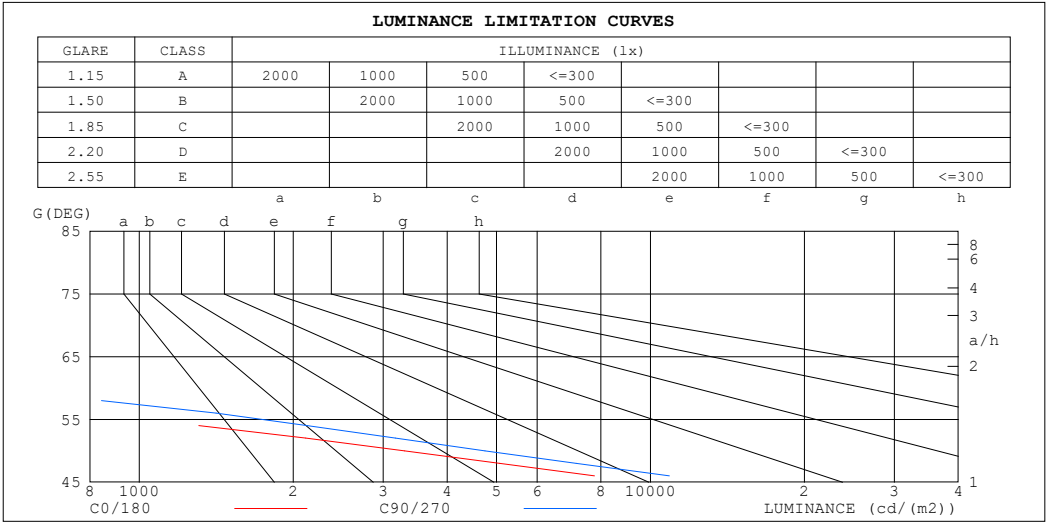
%lamp = 84.1%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-06-05

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:75%
 Test Distance:8.458m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.07V I:0.229A P:52.13W PF:0.990 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-60D-3090-silver		
SPEC.: KGP CC60W1400CGA37-56W/1400mA		
MFR.: SOTEN		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	136	101
80	64	61
75	50	57
70	48	56
65	59	72
60	182	461
55	1340	2179
50	3302	4741
45	11787	16366

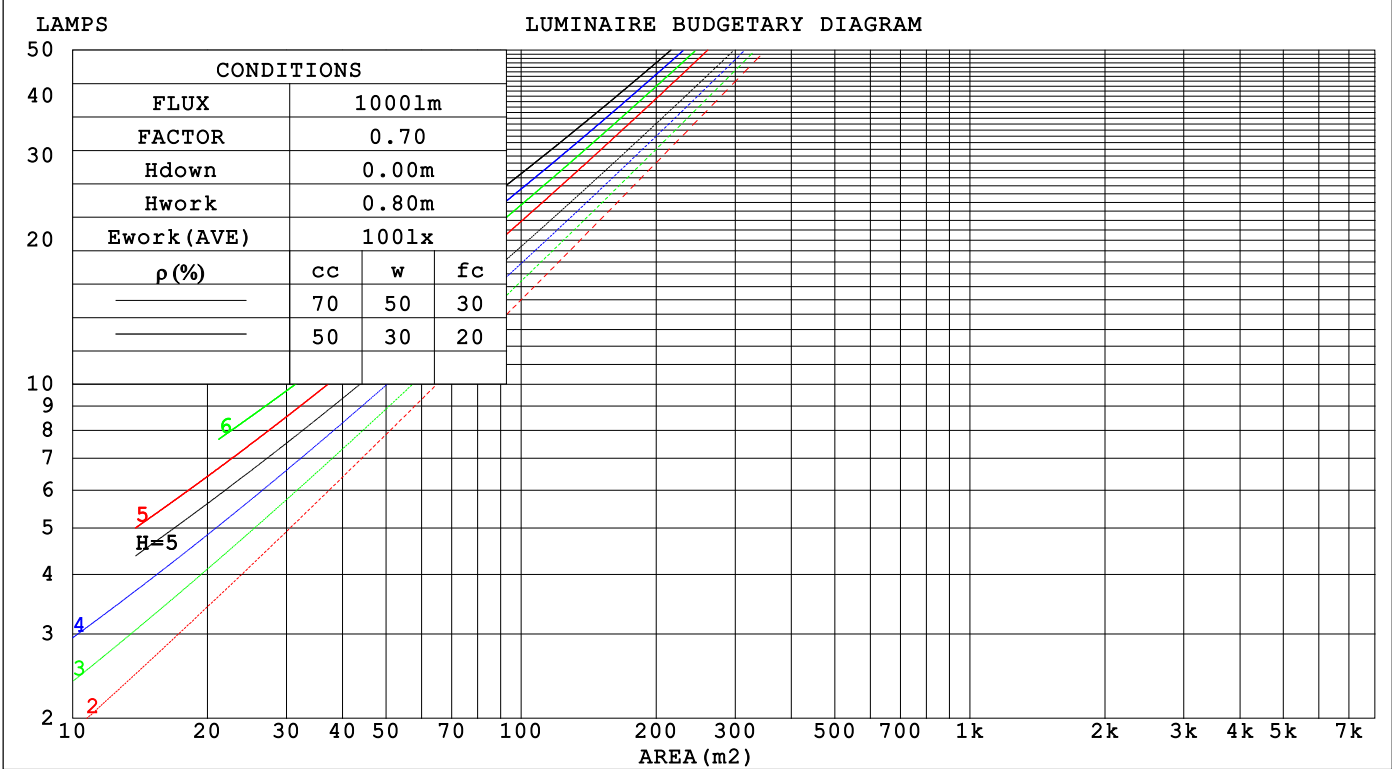
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:28℃
Operators:Li
Test Date:2025-06-05

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity:75%
Test Distance:8.458m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.07V I:0.229A P:52.13W PF:0.990 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-60D-3090-silver		
SPEC.: KGP CC60W1400CGA37-56W/1400mA		
MFR.: SOTEN		

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 Coefficients of Utilization(CU)															
0.0	1.00	1.00	1.00	.98	.98	.98	.93	.93	.93	.89	.89	.89	.86	.86	.86	.84
1.0	.93	.91	.89	.91	.89	.87	.88	.86	.85	.85	.83	.82	.82	.81	.80	.78
2.0	.86	.83	.80	.85	.81	.79	.82	.79	.77	.79	.77	.75	.77	.75	.74	.72
3.0	.80	.76	.72	.79	.75	.71	.76	.73	.70	.74	.72	.69	.72	.70	.68	.67
4.0	.74	.69	.66	.73	.69	.65	.71	.68	.64	.70	.66	.64	.68	.65	.63	.62
5.0	.69	.64	.60	.68	.64	.60	.67	.63	.59	.65	.62	.59	.64	.61	.58	.57
6.0	.65	.59	.55	.64	.59	.55	.63	.58	.55	.61	.57	.55	.60	.57	.54	.53
7.0	.60	.55	.51	.60	.55	.51	.59	.54	.51	.58	.54	.51	.57	.53	.50	.49
8.0	.57	.51	.48	.56	.51	.48	.55	.51	.47	.54	.50	.47	.53	.50	.47	.46
9.0	.53	.48	.44	.53	.48	.44	.52	.47	.44	.51	.47	.44	.50	.47	.44	.43
10.0	.50	.45	.42	.50	.45	.41	.49	.44	.41	.48	.44	.41	.48	.44	.41	.40



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:28℃
Operators:Li
Test Date:2025-06-05

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity:75%
Test Distance:8.458m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.07V I:0.229A P:52.13W PF:0.990 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-60D-3090-silver		
SPEC.: KGP CC60W1400CGA37-56W/1400mA		
MFR.: SOTEN		

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	.155	.088	.028	.149	.085	.027	.138	.079	.025	.129	.074	.024	.120	.069	.022	
2.0	.149	.082	.025	.144	.080	.025	.135	.075	.023	.127	.071	.022	.120	.068	.021	
3.0	.143	.076	.023	.139	.074	.022	.131	.071	.022	.124	.068	.021	.117	.065	.020	
4.0	.137	.071	.021	.133	.070	.021	.126	.067	.020	.120	.065	.019	.114	.062	.019	
5.0	.131	.067	.019	.127	.065	.019	.122	.063	.019	.116	.061	.018	.111	.059	.018	
6.0	.125	.063	.018	.122	.062	.018	.117	.060	.017	.112	.058	.017	.108	.057	.017	
7.0	.119	.059	.017	.117	.058	.017	.112	.057	.016	.108	.055	.016	.104	.054	.016	
8.0	.114	.056	.016	.112	.055	.016	.108	.054	.015	.104	.053	.015	.101	.052	.015	
9.0	.110	.053	.015	.108	.052	.015	.104	.051	.015	.100	.050	.014	.097	.049	.014	
10.0	.105	.050	.014	.103	.050	.014	.100	.049	.014	.097	.048	.014	.094	.047	.014	

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	.160	.160	.160	.137	.137	.137	.093	.093	.093	.054	.054	.054	.017	.017	.017	
1.0	.144	.132	.121	.123	.113	.104	.084	.078	.072	.049	.045	.042	.016	.015	.014	
2.0	.132	.111	.094	.113	.096	.081	.077	.066	.057	.045	.039	.033	.014	.012	.011	
3.0	.122	.096	.074	.105	.082	.064	.072	.057	.045	.042	.033	.027	.013	.011	.009	
4.0	.114	.083	.060	.098	.072	.052	.067	.050	.037	.039	.029	.022	.013	.010	.007	
5.0	.107	.074	.049	.092	.064	.043	.063	.045	.030	.037	.026	.018	.012	.009	.006	
6.0	.101	.066	.041	.087	.057	.036	.060	.040	.025	.035	.024	.015	.011	.008	.005	
7.0	.096	.060	.034	.082	.052	.030	.057	.036	.021	.033	.021	.013	.011	.007	.004	
8.0	.091	.055	.029	.078	.047	.026	.054	.033	.018	.032	.020	.011	.010	.006	.004	
9.0	.087	.050	.026	.075	.044	.022	.052	.031	.016	.030	.018	.009	.010	.006	.003	
10.0	.083	.047	.022	.072	.041	.020	.050	.029	.014	.029	.017	.008	.009	.006	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-06-05

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:75%
 Test Distance:8.458m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.07V I:0.229A P:52.13W PF:0.990 Freq:49.99Hz										
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm										
NAME: P1116-60D-3090-silver										
SPEC.: KGP CC60W1400CGA37-56W/1400mA										
MFR.: SOTEN										
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	18.0	19.0	18.2	19.1	19.3	18.6	19.7	18.9	19.8	20.0
3H	17.8	18.7	18.0	18.9	19.1	18.5	19.4	18.7	19.6	19.8
4H	17.7	18.6	18.0	18.8	19.0	18.4	19.3	18.7	19.5	19.7
6H	17.6	18.4	17.9	18.7	18.9	18.3	19.1	18.6	19.3	19.6
8H	17.6	18.3	17.9	18.6	18.9	18.2	19.0	18.6	19.3	19.5
12H	17.5	18.3	17.8	18.5	18.8	18.2	18.9	18.5	19.2	19.5
4H 2H	17.7	18.6	18.0	18.8	19.0	18.4	19.3	18.7	19.5	19.7
3H	17.5	18.3	17.8	18.5	18.8	18.2	19.0	18.5	19.2	19.5
4H	17.4	18.1	17.8	18.4	18.7	18.1	18.8	18.5	19.1	19.4
6H	17.3	17.9	17.7	18.3	18.6	18.0	18.6	18.4	18.9	19.3
8H	17.3	17.8	17.7	18.2	18.6	18.0	18.5	18.4	18.9	19.2
12H	17.2	17.7	17.6	18.1	18.5	17.9	18.4	18.3	18.8	19.2
8H 4H	17.3	17.8	17.7	18.2	18.6	18.0	18.5	18.4	18.9	19.2
6H	17.2	17.6	17.6	18.0	18.4	17.9	18.3	18.3	18.7	19.1
8H	17.1	17.5	17.6	17.9	18.4	17.8	18.2	18.3	18.6	19.1
12H	17.1	17.4	17.5	17.9	18.3	17.8	18.1	18.2	18.5	19.0
12H 4H	17.2	17.7	17.6	18.1	18.5	17.9	18.4	18.3	18.8	19.2
6H	17.1	17.5	17.6	17.9	18.4	17.8	18.2	18.3	18.6	19.1
8H	17.1	17.4	17.5	17.9	18.3	17.8	18.1	18.2	18.5	19.0
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.7 / -20.8					+ 2.6 / -18.1				
1.5H	+ 4.2 / -11.4					+ 4.3 / -10.2				
2.0H	+ 6.3 / -23.2					+ 6.7 / -20.8				

CIE Pub.117, 8496 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 7.4$)
 Area: 0.087 m²

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-06-05

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:75%
 Test Distance:8.458m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test: U:230.07V I:0.229A P:52.13W PF:0.990 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-60D-3090-silver		
SPEC.: KGP CC60W1400CGA37-56W/1400mA		
MFR.: SOTEN		

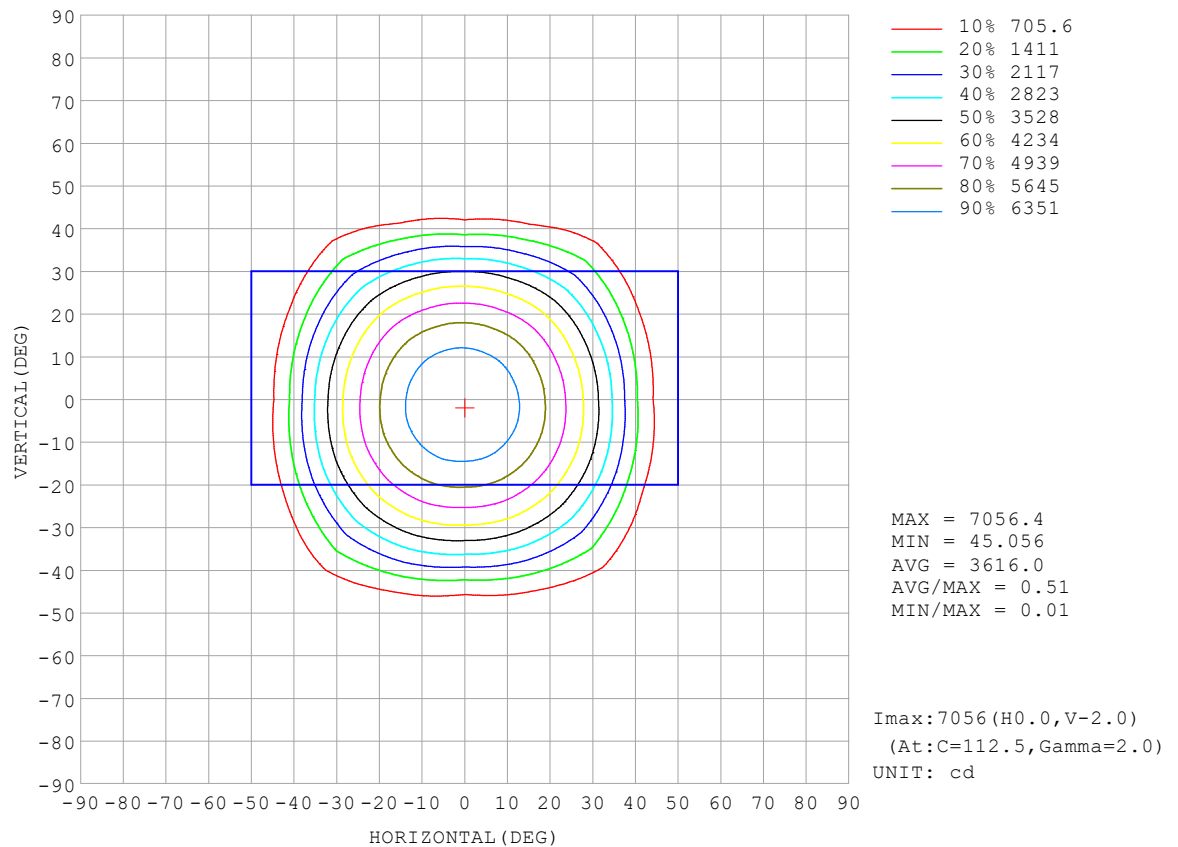
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	71	65	62	71	65	62	70	65	62	58
0.80	78	72	69	77	72	69	76	72	69	65
1.00	82	77	74	81	77	74	80	77	73	70
1.25	86	81	78	85	81	78	83	80	77	73
1.50	88	84	81	87	83	81	85	82	80	76
2.00	91	87	84	90	86	84	87	85	82	78
2.50	92	89	86	91	88	86	88	86	84	79
3.00	94	91	88	92	89	87	89	87	86	80
4.00	95	93	91	94	92	90	91	89	88	81
5.00	96	94	93	95	93	91	91	90	89	82
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 28°C
 Operators: Li
 Test Date: 2025-06-05

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 75%
 Test Distance: 8.458m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.07V I:0.229A P:52.13W PF:0.990 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-60D-3090-silver		
SPEC.: KGP CC60W1400CGA37-56W/1400mA		
MFR.: SOTEN		

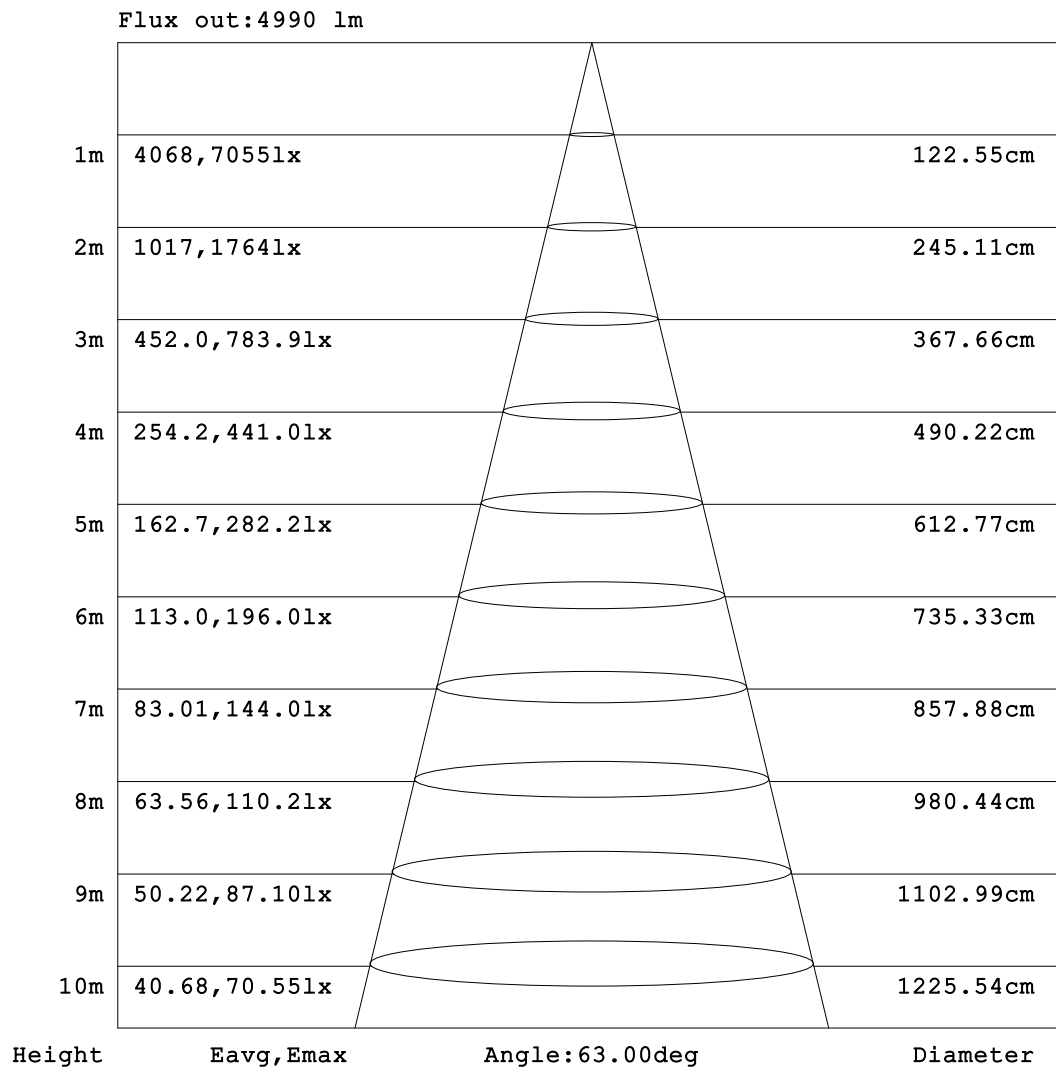


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-06-05

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:75%
 Test Distance:8.458m [K=1.0000]
 Remarks:

AAI Figure

Test:U:230.07V I:0.229A P:52.13W PF:0.990 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-60D-3090-silver		
SPEC.: KGP CC60W1400CGA37-56W/1400mA		
MFR.: SOTEN		



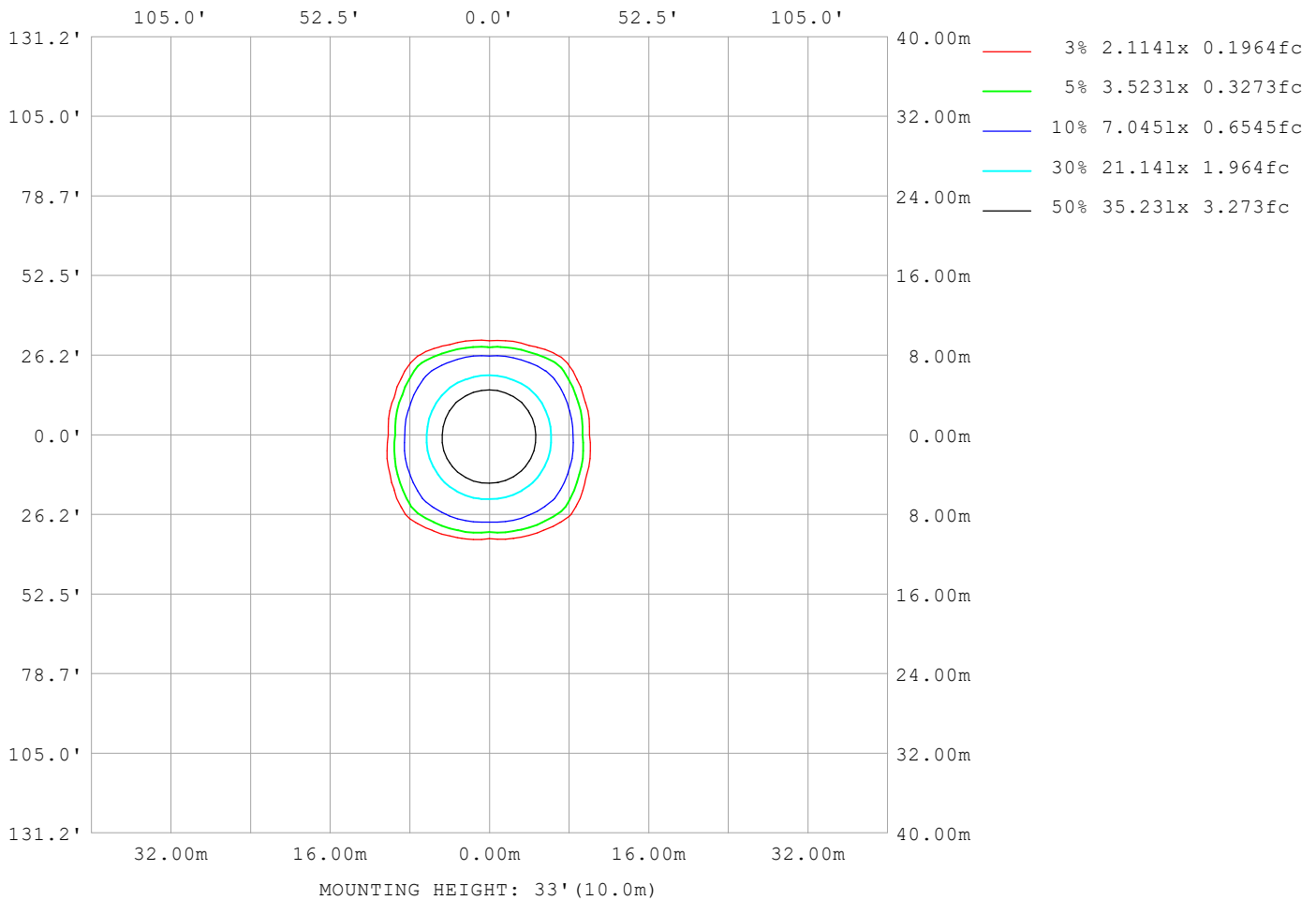
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 28°C
 Operators: Li
 Test Date: 2025-06-05

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 75%
 Test Distance: 8.458m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.07V I:0.229A P:52.13W PF:0.990 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-60D-3090-silver		
SPEC.: KGP CC60W1400CGA37-56W/1400mA		
MFR.: SOTEN		



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 28°C
 Operators: Li
 Test Date: 2025-06-05

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 75%
 Test Distance: 8.458m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:230.07V I:0.229A P:52.13W PF:0.990 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-60D-3090-silver		
SPEC.: KGP CC60W1400CGA37-56W/1400mA		
MFR.: SOTEN		

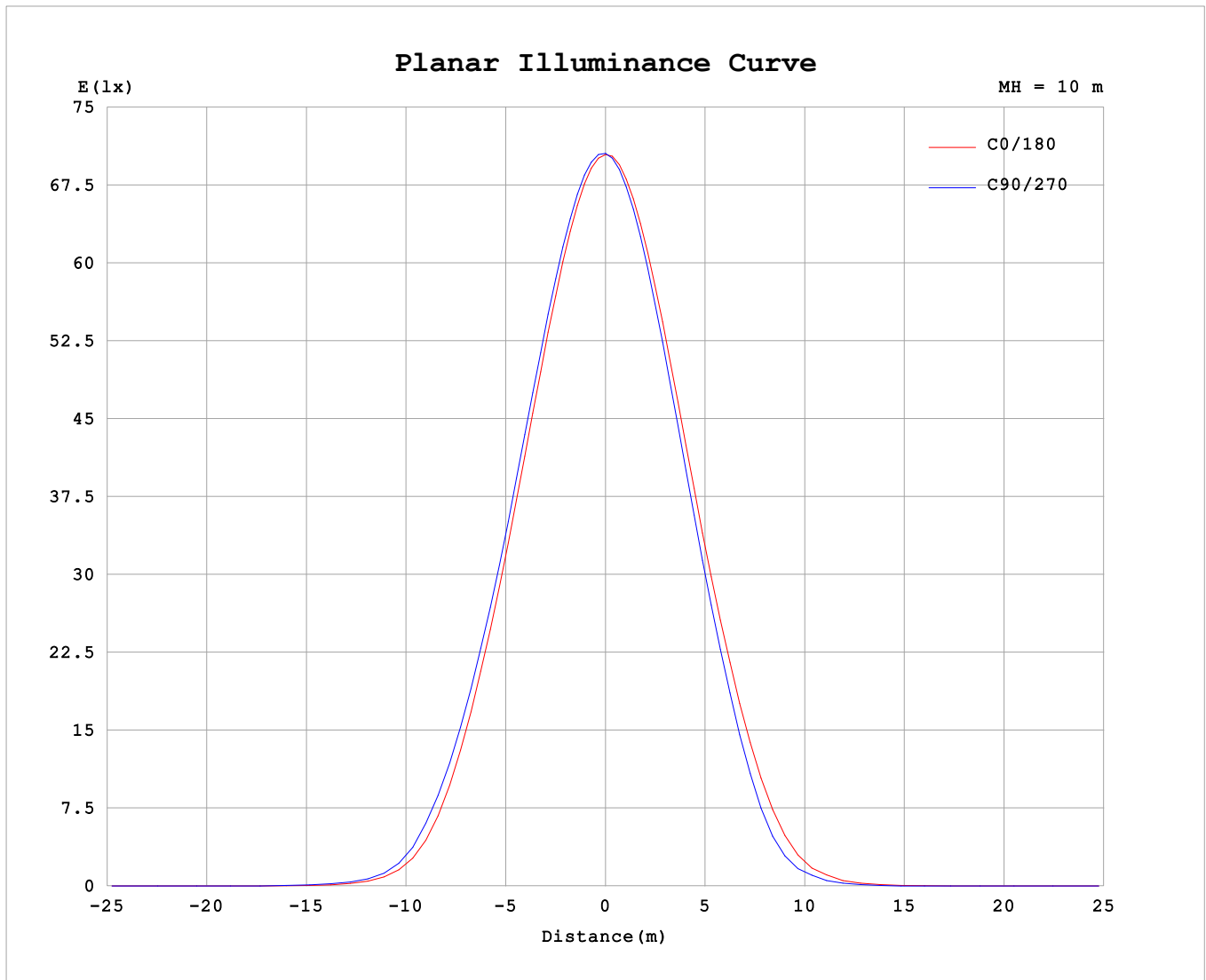
AvgL	cd/m2
L_0~180 (65) av	54
L_0~180 (75) av	47
L_0~180 (85) av	134
L_90~270 (65) av	52
L_90~270 (75) av	46
L_90~270 (85) av	90
L_45 (65) av	93
L_45 (75) av	44
L_45 (85) av	111

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 28℃
 Operators: Li
 Test Date: 2025-06-05

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 75%
 Test Distance: 8.458m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 28°C
Operators: Li
Test Date: 2025-06-05

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity: 75%
Test Distance: 8.458m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity:75%
Test Distance:8.458m [K=1.0000]
Remarks:

```