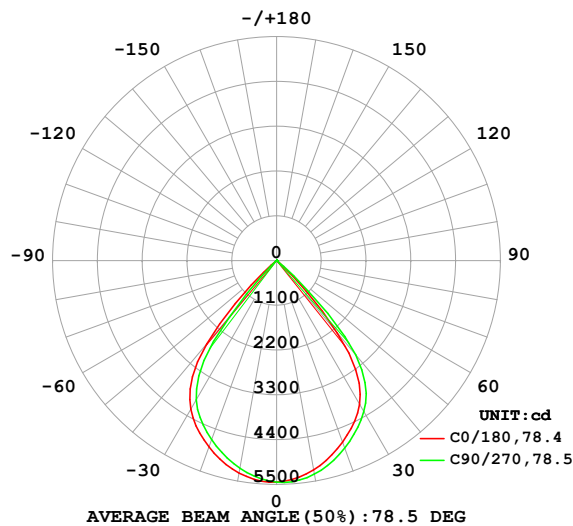


LUMINAIRE PHOTOMETRIC TEST REPORT

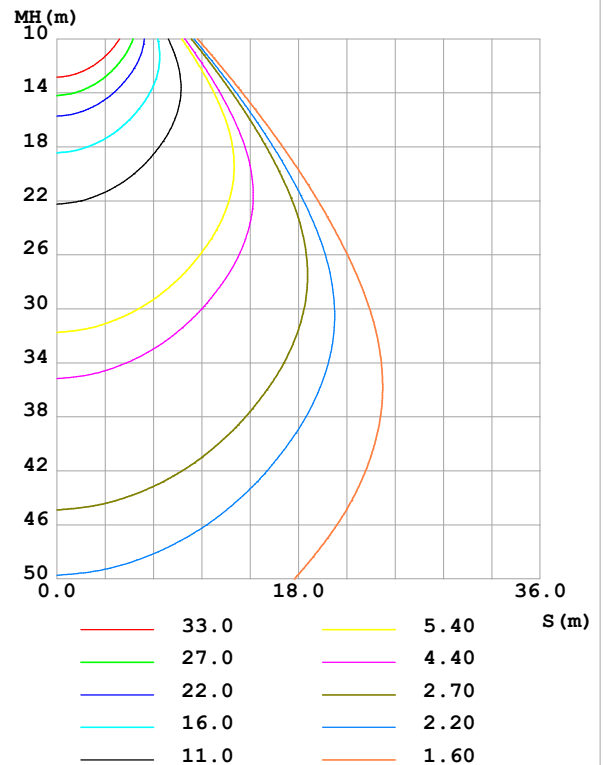
Test:U:230.09V I:0.230A P:52.13W PF:0.985 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-80D-3090-silver		
SPEC.: KGP 56W/1400mA		
MFR.: SOTEN		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 147.89 lm/W			
MODEL	JF 2835	I _{max} (cd)	5456	S/MH (C0/180)	1.15
NOMINAL POWER (W)	50	LOR (%)	90.7	S/MH (C90/270)	1.08
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	7709.7	η UP, DN (C0-180)	0.0, 47.9
NOMINAL FLUX (lm)	8495.6	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 42.9
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	90.7	CIBSE SHR MAX	1.30

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: 2025-06-17

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	5221	5274	5330	5347	5303	5236	5182	5176	0- 10	510.6	510.6	6.62,6.01
20	4745	4851	4898	4954	4868	4799	4677	4705	10- 20	1425	1936	25.1,22.8
30	4075	4314	4290	4423	4216	4249	3951	4163	20- 30	2086	4022	52.2,47.3
40	2319	3615	3025	3713	2675	3335	1807	3252	30- 40	2304	6326	82.1,74.5
50	84.10	1440	226.6	1738	175.6	779.4	23.99	691.0	40- 50	1260	7587	98.4,89.3
60	2.411	6.908	3.271	24.77	3.127	2.935	2.193	2.587	50- 60	119.0	7706	99.9,90.7
70	1.207	1.324	1.485	1.238	1.312	0.9768	1.087	1.135	60- 70	1.967	7707	100,90.7
80	0.9771	0.9165	0.8541	0.8553	0.8554	0.7587	0.6806	0.9422	70- 80	1.050	7709	100,90.7
90	2.403	1.456	0.6250	1.507	1.527	1.547	0.7724	1.980	80- 90	1.159	7710	100,90.7
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): 7295.6 lm

%lum = 94.6%

%lamp = 85.9%

Conical surface Flux(130deg): 7706.9 lm

%lum = 100.0%

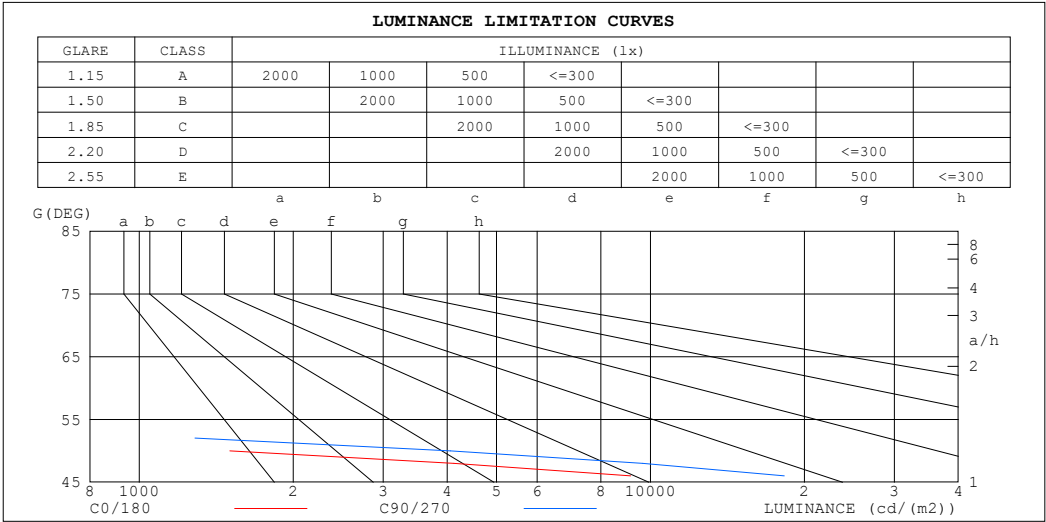
%lamp = 90.7%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-06-17

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:230.09V I:0.230A P:52.13W PF:0.985 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-80D-3090-silver		
SPEC.: KGP 56W/1400mA		
MFR.: SOTEN		



LUMINANCE cd/ (m2)		
G (DEG)	C0/180	C90/270
85	175	95
80	65	57
75	44	51
70	41	50
65	48	61
60	55	75
55	231	460
50	1504	4059
45	17041	29504

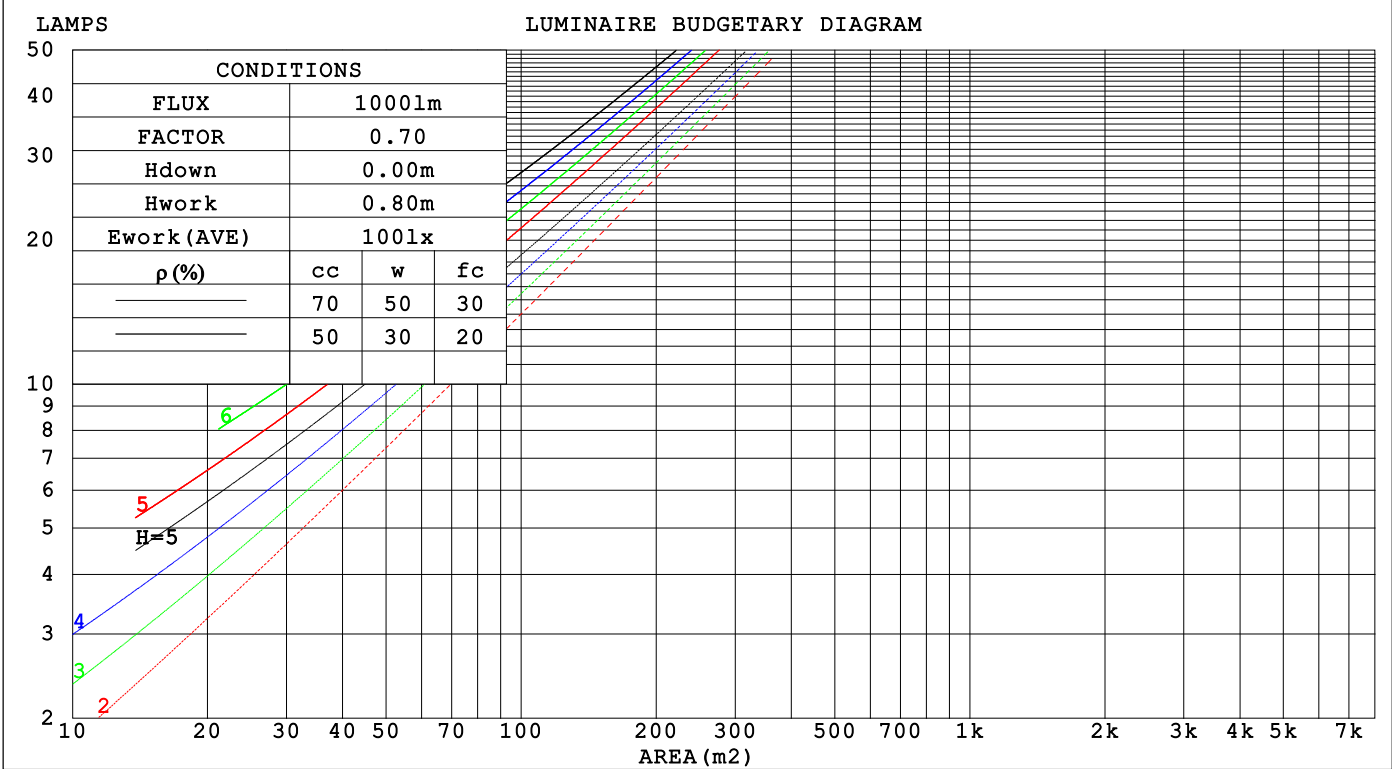
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:28℃
Operators:Li
Test Date:2025-06-17

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:230.09V I:0.230A P:52.13W PF:0.985 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0		
Lamp Flux:8495.6x1 lm		
NAME: P1116-80D-3090-silver		
SPEC.: KGP 56W/1400mA		
MFR.: SOTEN		

pcc	80%			70%			50%			30%			10%			0
p _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
p _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:28℃
Operators:Li
Test Date:2025-06-17

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:230.09V I:0.230A P:52.13W PF:0.985 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-80D-3090-silver		
SPEC.: KGP 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	.177	.101	.032	.171	.098	.031	.160	.092	.029	.149	.086	.028	.139	.081	.026															
2.0	.172	.095	.029	.167	.092	.028	.158	.088	.027	.148	.083	.026	.140	.079	.025															
3.0	.166	.088	.026	.161	.086	.026	.153	.083	.025	.145	.080	.024	.138	.076	.024															
4.0	.159	.083	.024	.155	.081	.024	.148	.078	.023	.141	.076	.023	.135	.073	.022															
5.0	.152	.078	.022	.149	.076	.022	.142	.074	.022	.136	.072	.021	.131	.070	.021															
6.0	.145	.073	.021	.142	.072	.021	.137	.070	.020	.131	.068	.020	.126	.067	.020															
7.0	.139	.069	.019	.136	.068	.019	.131	.066	.019	.126	.065	.019	.122	.063	.019															
8.0	.133	.065	.018	.131	.064	.018	.126	.063	.018	.122	.062	.018	.118	.060	.018															
9.0	.127	.062	.017	.125	.061	.017	.121	.060	.017	.117	.059	.017	.113	.058	.017															
10.0	.122	.058	.016	.120	.058	.016	.116	.057	.016	.113	.056	.016	.109	.055	.016															

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	.173	.173	.173	.148	.148	.148	.101	.101	.101	.058	.058	.058	.019	.019	.019	
1.0	.156	.143	.130	.134	.122	.112	.092	.084	.077	.053	.049	.045	.017	.016	.015	
2.0	.144	.120	.100	.123	.103	.087	.085	.072	.060	.049	.042	.035	.016	.013	.012	
3.0	.134	.103	.079	.115	.089	.068	.079	.062	.048	.046	.036	.028	.015	.012	.009	
4.0	.126	.090	.063	.108	.078	.055	.074	.054	.038	.043	.032	.023	.014	.010	.007	
5.0	.119	.080	.051	.102	.069	.045	.070	.048	.031	.041	.028	.019	.013	.009	.006	
6.0	.113	.072	.042	.097	.062	.037	.067	.044	.026	.039	.026	.016	.013	.008	.005	
7.0	.107	.065	.036	.092	.057	.031	.064	.040	.022	.037	.023	.013	.012	.008	.004	
8.0	.102	.060	.031	.088	.052	.027	.061	.036	.019	.035	.021	.011	.011	.007	.004	
9.0	.098	.055	.026	.084	.048	.023	.058	.034	.016	.034	.020	.010	.011	.007	.003	
10.0	.094	.051	.023	.081	.045	.020	.056	.031	.014	.033	.019	.009	.011	.006	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-06-17

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:230.09V I:0.230A P:52.13W PF:0.985 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm										
NAME: P1116-80D-3090-silver										
SPEC.: KGP 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	20.5	21.6	20.8	21.8	22.0	21.2	22.3	21.5	22.5	22.7
3H	20.3	21.3	20.6	21.5	21.8	21.0	22.0	21.3	22.2	22.5
4H	20.2	21.2	20.5	21.4	21.6	20.9	21.9	21.2	22.1	22.3
6H	20.2	21.0	20.5	21.3	21.5	20.9	21.7	21.2	22.0	22.2
8H	20.1	21.0	20.4	21.2	21.5	20.8	21.7	21.1	21.9	22.2
12H	20.1	20.9	20.4	21.1	21.4	20.8	21.6	21.1	21.8	22.1
4H 2H	20.3	21.2	20.5	21.4	21.7	21.0	21.9	21.2	22.1	22.4
3H	20.1	20.9	20.4	21.1	21.4	20.8	21.6	21.1	21.8	22.1
4H	20.0	20.7	20.3	21.0	21.3	20.7	21.4	21.0	21.7	22.0
6H	19.9	20.5	20.3	20.9	21.2	20.6	21.2	21.0	21.6	21.9
8H	19.8	20.4	20.2	20.8	21.1	20.5	21.1	20.9	21.5	21.8
12H	19.8	20.3	20.2	20.7	21.1	20.5	21.0	20.9	21.4	21.8
8H 4H	19.8	20.4	20.2	20.8	21.1	20.5	21.1	20.9	21.5	21.8
6H	19.7	20.2	20.2	20.6	21.0	20.4	20.9	20.9	21.3	21.7
8H	19.7	20.1	20.1	20.5	21.0	20.4	20.8	20.8	21.2	21.7
12H	19.6	20.0	20.1	20.4	20.9	20.3	20.7	20.8	21.1	21.6
12H 4H	19.8	20.3	20.2	20.7	21.1	20.5	21.0	20.9	21.4	21.8
6H	19.7	20.1	20.1	20.5	21.0	20.4	20.8	20.8	21.2	21.7
8H	19.6	20.0	20.1	20.4	20.9	20.3	20.7	20.8	21.1	21.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 3.0 / -33.3					+ 3.1 / -32.3				
1.5H	+ 3.6 / -24.6					+ 3.3 / -20.3				
2.0H	+ 6.5 / -27.3					+ 7.1 / -28.8				

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:2025-06-17

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:230.09V I:0.230A P:52.13W PF:0.985 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-80D-3090-silver		
SPEC.: KGP 56W/1400mA		
MFR.: SOTEN		

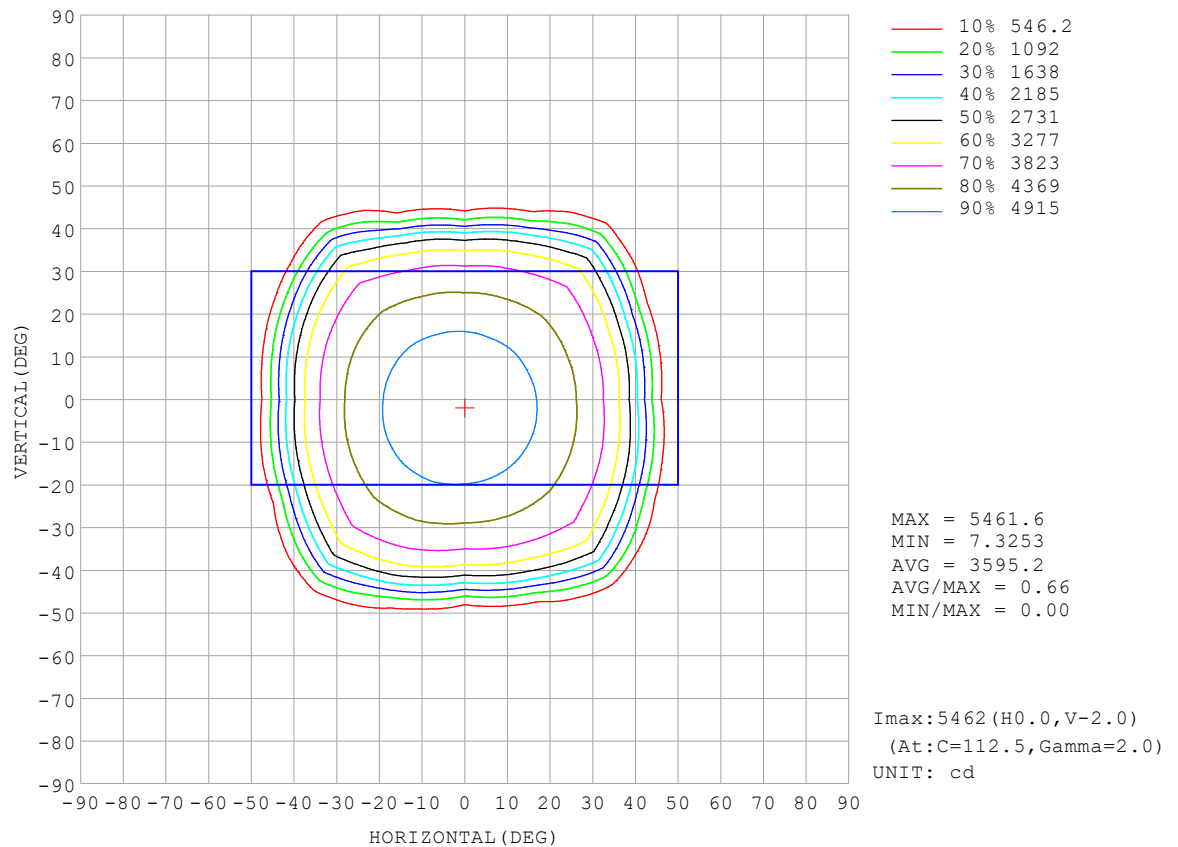
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	73	66	62	72	66	62	71	65	61	58
0.80	81	74	70	80	74	70	79	73	70	66
1.00	86	80	76	85	80	76	84	80	76	72
1.25	91	85	82	90	85	81	88	84	81	76
1.50	94	89	85	93	88	85	90	87	84	79
2.00	97	93	89	96	92	89	93	90	87	82
2.50	99	95	92	97	94	91	94	91	89	84
3.00	100	97	94	99	96	93	96	93	91	85
4.00	102	99	97	100	98	96	97	95	93	87
5.00	103	101	99	101	99	98	98	96	95	88
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: 2025-06-17

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:230.09V I:0.230A P:52.13W PF:0.985 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-80D-3090-silver		
SPEC.: KGP 56W/1400mA		
MFR.: SOTEN		

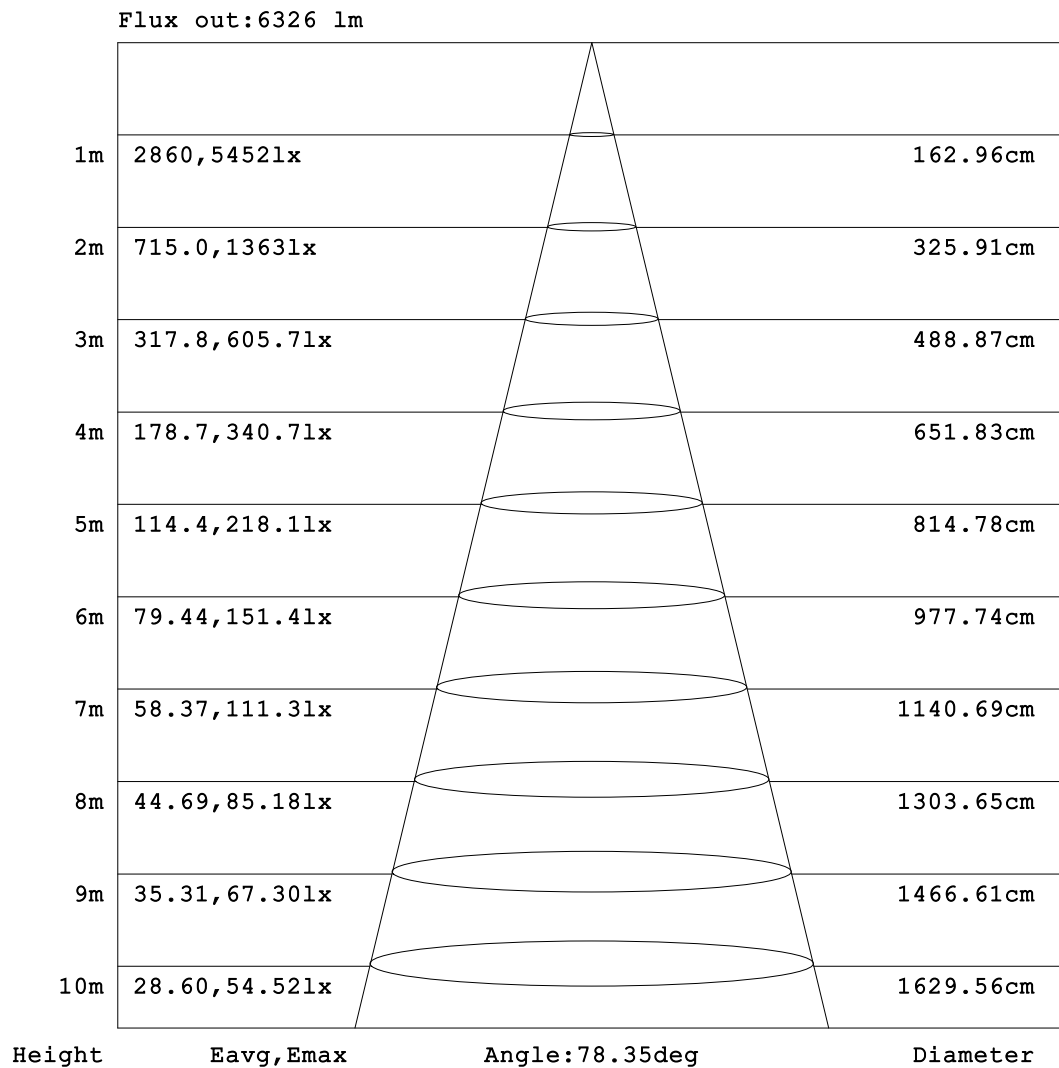


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-06-17

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:230.09V I:0.230A P:52.13W PF:0.985 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-80D-3090-silver		
SPEC.: KGP 56W/1400mA		
MFR.: SOTEN		

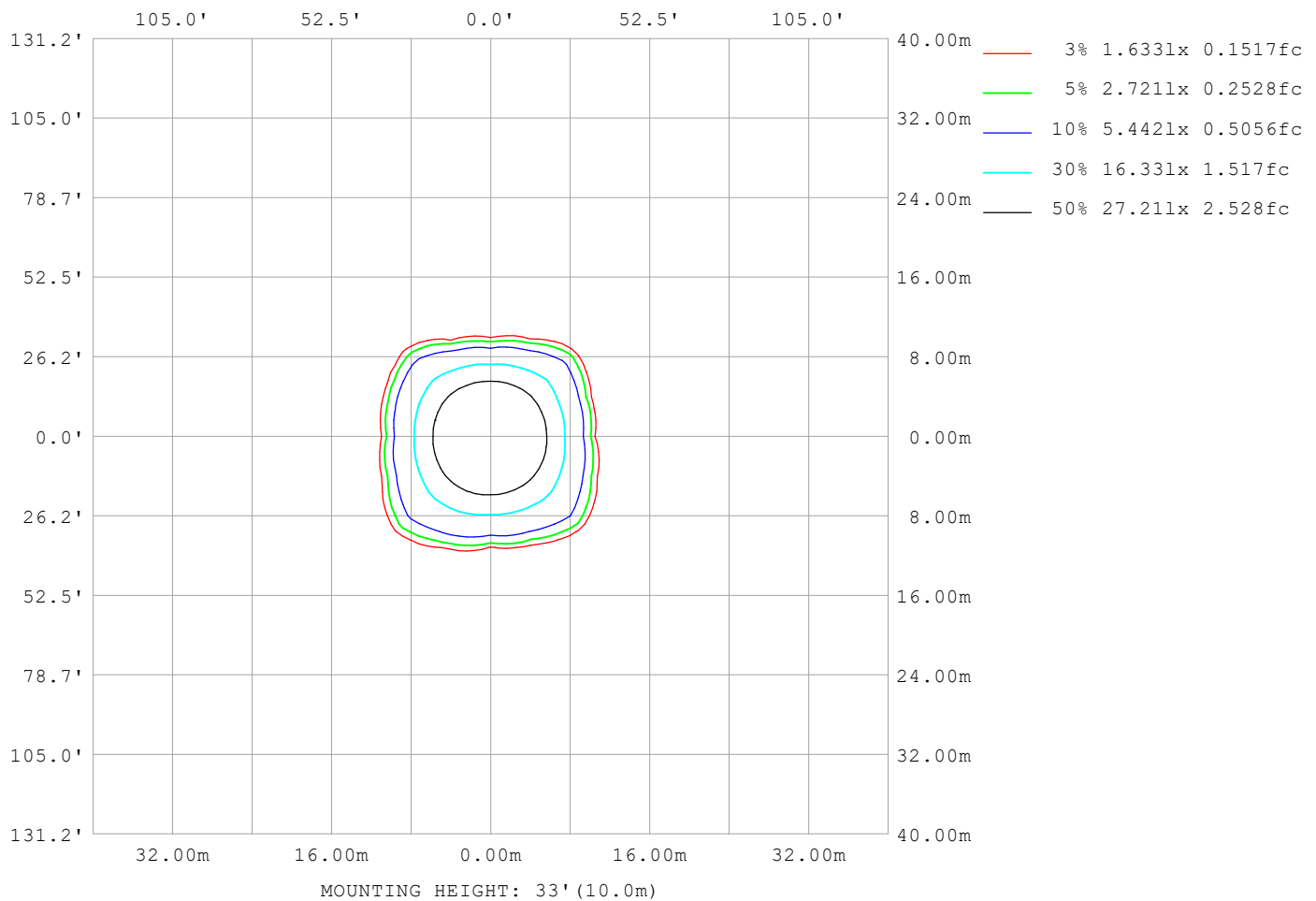


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 28°C
 Operators: Li
 Test Date: 2025-06-17

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:230.09V I:0.230A P:52.13W PF:0.985 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-80D-3090-silver		
SPEC.: KGP 56W/1400mA		
MFR.: SOTEN		



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 28°C
 Operators: Li
 Test Date: 2025-06-17

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:230.09V I:0.230A P:52.13W PF:0.985 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:8495.6x1 lm		
NAME: P1116-80D-3090-silver		
SPEC.: KGP 56W/1400mA		
MFR.: SOTEN		

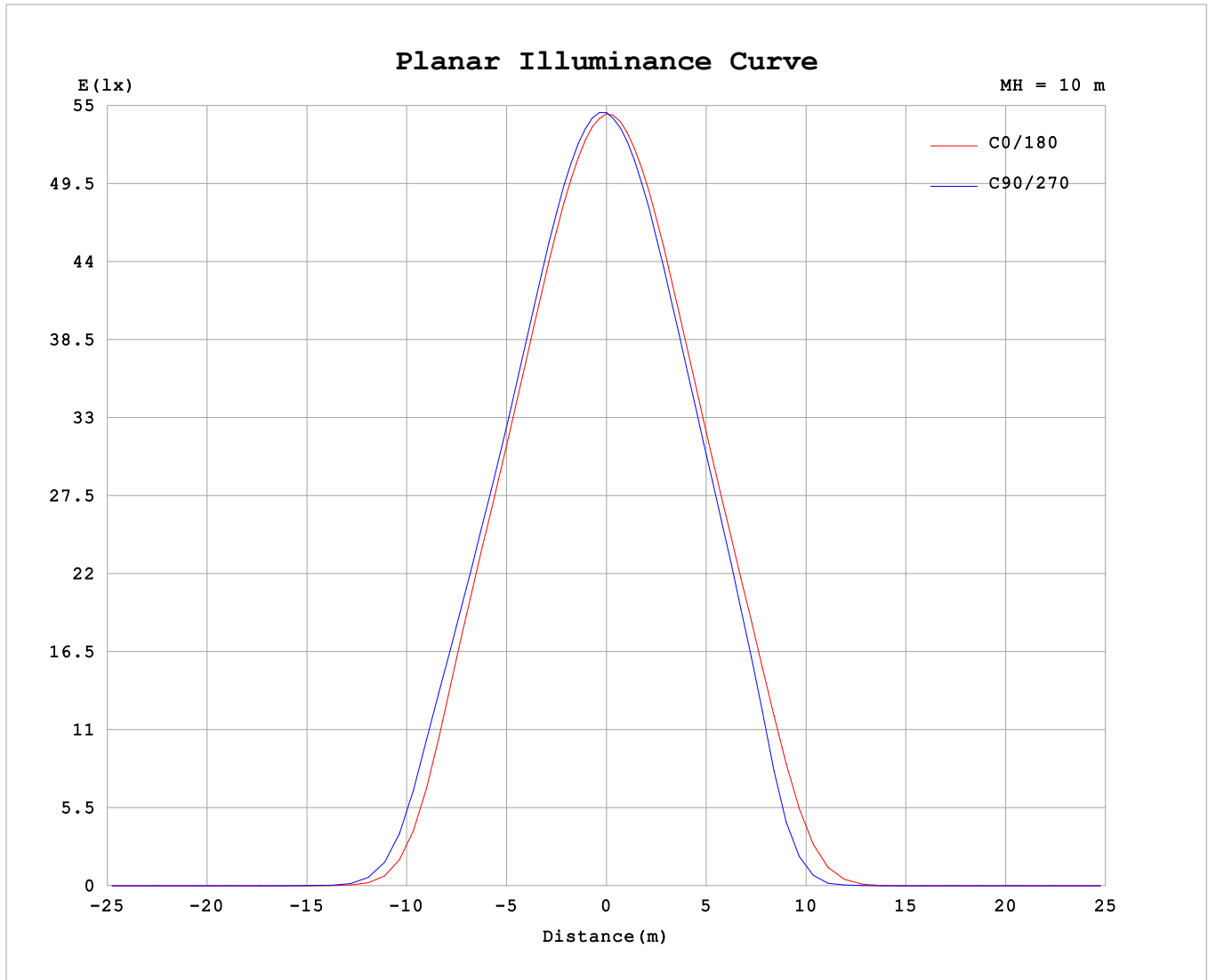
AvgL	cd/m2
L_0~180 (65) av	49
L_0~180 (75) av	42
L_0~180 (85) av	164
L_90~270 (65) av	49
L_90~270 (75) av	43
L_90~270 (85) av	85
L_45 (65) av	43
L_45 (75) av	41
L_45 (85) av	136

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 28°C
 Operators: Li
 Test Date: 2025-06-17

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: 2025-06-17

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:

```