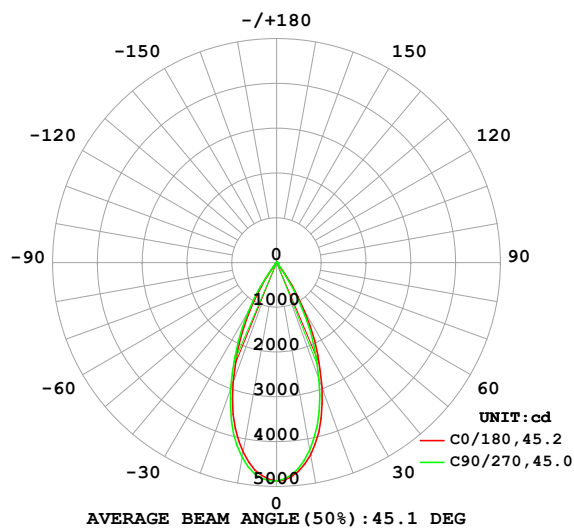


LUMINAIRE PHOTOMETRIC TEST REPORT

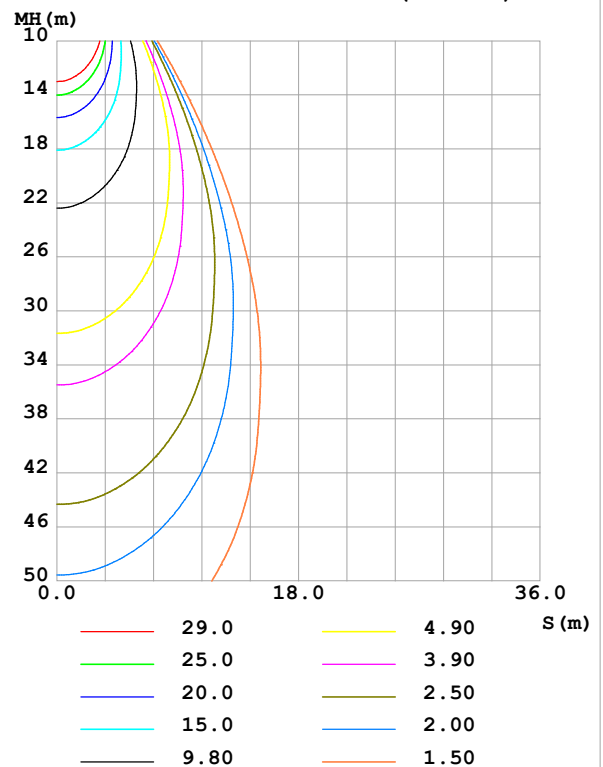
Test:U:230.23V I:0.116A P:24.80W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-45D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 110.86 lm/W			
MODEL	PW 1205 G7N HE+	Imax (cd)	4876	S/MH(C0/180)	0.71
NOMINAL POWER(W)	24	LOR(%)	82.2	S/MH(C90/270)	0.73
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	2749.2	η UP,DN(C0-180)	0.0,40.1
NOMINAL FLUX(lm)	3344.6	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,42.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230	η down (%)	82.2	CIBSE SHR MAX	0.75

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:28℃
Operators:Li
Test Date:2025-01-07

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	4361	4295	4251	4269	4305	4379	4424	4412	0- 10	439.6	439.6	16,13.1
20	2968	2833	2768	2789	2848	2941	3015	3018	10- 20	1022	1461	53.2,43.7
30	1240	1120	1041	1040	1087	1198	1280	1272	20- 30	914.2	2376	86.4,71
40	75.84	62.90	56.90	57.54	62.08	74.75	90.44	85.98	30- 40	299.5	2675	97.3,80
50	27.62	27.27	26.47	26.48	26.64	27.02	27.56	26.89	40- 50	30.74	2706	98.4,80.9
60	17.52	16.08	16.56	17.51	16.87	16.83	16.93	16.91	50- 60	19.08	2725	99.1,81.5
70	11.98	11.33	11.20	11.30	11.44	11.70	12.31	12.67	60- 70	14.53	2739	99.6,81.9
80	5.321	4.953	4.785	4.456	4.489	5.013	5.143	6.043	70- 80	8.198	2748	99.9,82.2
90	0.2931	0.2896	0.3007	0.2913	0.2830	0.2744	0.2702	0.2709	80- 90	1.586	2749	100,82.2
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): 2696 lm

%lum = 98.1%

%lamp = 80.6%

Conical surface Flux(130deg): 2734.1 lm

%lum = 99.4%

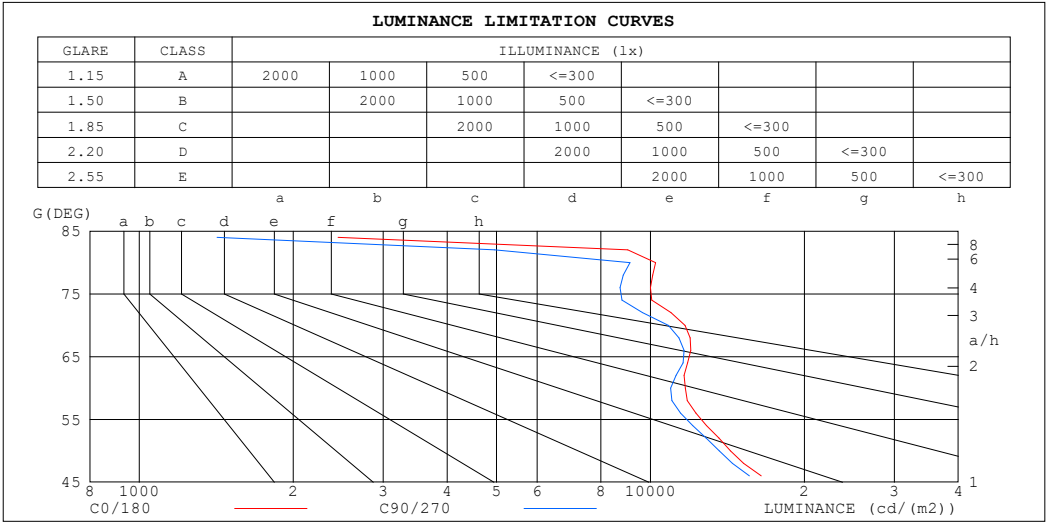
%lamp = 81.7%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-01-07

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:230.23V I:0.116A P:24.80W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-45D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2936	1703
80	10228	9119
75	10715	9371
70	11690	10833
65	12252	12020
60	11696	10957
55	13194	12397
50	14342	13625
45	18604	17398

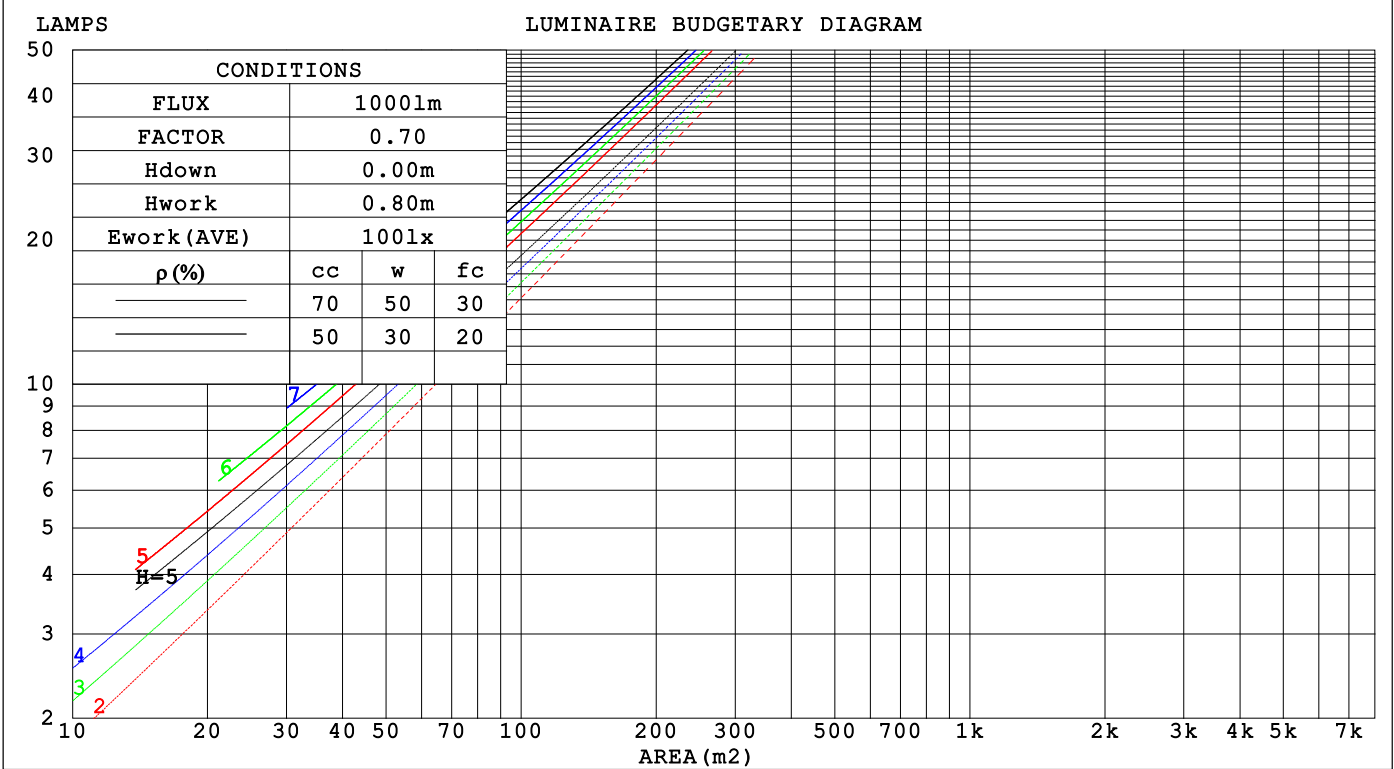
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:28℃
Operators:Li
Test Date:2025-01-07

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:230.23V I:0.116A P:24.80W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-45D-3090		
SPEC.: Xi 24W/600mA		
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	.98	.98	.98	.96	.96	.96	.91	.91	.91	.87	.87	.87	.84	.84	.84	.82
1.0	.92	.90	.88	.90	.88	.87	.87	.85	.84	.84	.83	.82	.81	.80	.79	.78
2.0	.86	.83	.81	.85	.82	.80	.82	.80	.78	.80	.78	.76	.77	.76	.75	.73
3.0	.81	.78	.75	.80	.77	.74	.78	.75	.73	.76	.74	.72	.74	.72	.71	.69
4.0	.77	.73	.70	.76	.72	.69	.74	.71	.68	.73	.70	.68	.71	.69	.67	.66
5.0	.73	.69	.65	.72	.68	.65	.71	.67	.65	.69	.66	.64	.68	.65	.63	.62
6.0	.69	.65	.62	.68	.64	.61	.67	.64	.61	.66	.63	.61	.65	.62	.60	.59
7.0	.66	.61	.58	.65	.61	.58	.64	.61	.58	.63	.60	.58	.62	.60	.57	.56
8.0	.63	.58	.55	.62	.58	.55	.61	.58	.55	.61	.57	.55	.60	.57	.55	.54
9.0	.60	.56	.53	.59	.55	.53	.59	.55	.52	.58	.55	.52	.57	.54	.52	.51
10.0	.57	.53	.50	.57	.53	.50	.56	.53	.50	.56	.52	.50	.55	.52	.50	.49



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:28℃
Operators:Li
Test Date:2025-01-07

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:230.23V I:0.116A P:24.80W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-45D-3090		
SPEC.: Xi 24W/600mA		
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	.134	.076	.024	.129	.073	.023	.118	.068	.022	.109	.063	.020	.100	.058	.019	
2.0	.127	.069	.021	.122	.067	.021	.114	.063	.020	.106	.059	.019	.098	.056	.018	
3.0	.120	.064	.019	.116	.062	.019	.109	.059	.018	.102	.056	.017	.096	.053	.016	
4.0	.113	.059	.017	.110	.058	.017	.104	.055	.016	.098	.053	.016	.093	.050	.015	
5.0	.108	.055	.016	.105	.054	.016	.099	.052	.015	.094	.050	.015	.090	.048	.014	
6.0	.103	.051	.015	.100	.051	.015	.095	.049	.014	.091	.047	.014	.087	.046	.014	
7.0	.098	.048	.014	.096	.048	.014	.092	.046	.013	.088	.045	.013	.084	.044	.013	
8.0	.094	.046	.013	.092	.045	.013	.088	.044	.013	.085	.043	.012	.082	.042	.012	
9.0	.090	.044	.012	.088	.043	.012	.085	.042	.012	.082	.041	.012	.079	.040	.012	
10.0	.087	.041	.012	.085	.041	.011	.082	.040	.011	.079	.039	.011	.077	.039	.011	

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	.157	.157	.157	.134	.134	.134	.091	.091	.091	.052	.052	.052	.017	.017	.017	
1.0	.140	.129	.120	.120	.111	.103	.082	.076	.071	.047	.044	.042	.015	.014	.013	
2.0	.126	.109	.094	.108	.094	.081	.074	.065	.057	.043	.038	.033	.014	.012	.011	
3.0	.116	.093	.076	.099	.080	.065	.068	.056	.046	.039	.033	.027	.013	.011	.009	
4.0	.106	.081	.062	.091	.070	.053	.063	.049	.038	.036	.029	.022	.012	.009	.007	
5.0	.099	.071	.051	.085	.062	.044	.058	.043	.031	.034	.025	.019	.011	.008	.006	
6.0	.092	.063	.043	.079	.055	.037	.055	.038	.026	.032	.023	.016	.010	.007	.005	
7.0	.087	.057	.036	.075	.049	.032	.051	.035	.022	.030	.020	.013	.010	.007	.004	
8.0	.082	.052	.031	.070	.045	.027	.049	.031	.019	.028	.019	.011	.009	.006	.004	
9.0	.077	.047	.027	.067	.041	.024	.046	.029	.017	.027	.017	.010	.009	.006	.003	
10.0	.074	.044	.024	.064	.038	.021	.044	.027	.015	.026	.016	.009	.008	.005	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-01-07

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:230.23V I:0.116A P:24.80W PF:0.931 Freq:49.99Hz										
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm										
NAME: T1241-600mA-45D-3090										
SPEC.: Xi 24W/600mA										
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	19.5	20.4	19.8	20.5	20.7	18.2	19.0	18.4	19.2	19.3
3H	19.6	20.3	19.8	20.5	20.7	18.3	19.0	18.5	19.2	19.4
4H	19.6	20.3	19.8	20.5	20.7	18.3	19.0	18.6	19.2	19.5
6H	19.6	20.3	19.9	20.5	20.8	18.3	19.0	18.6	19.3	19.5
8H	19.6	20.2	19.9	20.5	20.7	18.3	19.0	18.6	19.2	19.5
12H	19.5	20.2	19.9	20.4	20.7	18.3	18.9	18.6	19.2	19.4
4H 2H	19.4	20.1	19.6	20.3	20.5	18.1	18.8	18.3	19.0	19.2
3H	19.5	20.1	19.8	20.4	20.6	18.2	18.9	18.5	19.1	19.4
4H	19.5	20.1	19.9	20.4	20.7	18.3	18.9	18.6	19.2	19.5
6H	19.6	20.1	20.0	20.4	20.8	18.4	18.9	18.8	19.2	19.6
8H	19.6	20.0	20.0	20.4	20.8	18.4	18.8	18.8	19.2	19.6
12H	19.5	20.0	19.9	20.3	20.7	18.3	18.8	18.7	19.1	19.5
8H 4H	19.4	19.9	19.8	20.3	20.6	18.3	18.7	18.6	19.1	19.4
6H	19.6	19.9	20.0	20.3	20.8	18.4	18.8	18.8	19.2	19.6
8H	19.6	19.9	20.0	20.3	20.8	18.4	18.7	18.8	19.2	19.6
12H	19.5	19.8	20.0	20.2	20.7	18.3	18.6	18.8	19.1	19.5
12H 4H	19.4	19.8	19.8	20.2	20.6	18.2	18.7	18.6	19.0	19.4
6H	19.5	19.9	20.0	20.3	20.7	18.4	18.7	18.8	19.1	19.6
8H	19.5	19.8	20.0	20.3	20.7	18.4	18.7	18.8	19.1	19.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 3.3 / - 1.6					+ 3.0 / - 1.3				
1.5H	+ 5.4 / - 1.5					+ 4.9 / - 1.4				
2.0H	+ 0.7 / - 0.6					+ 0.8 / - 0.5				

CIE Pub.117, 3345 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.2$)
 Area: 0.00301754 m²

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-01-07

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:230.23V I:0.116A P:24.80W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-45D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

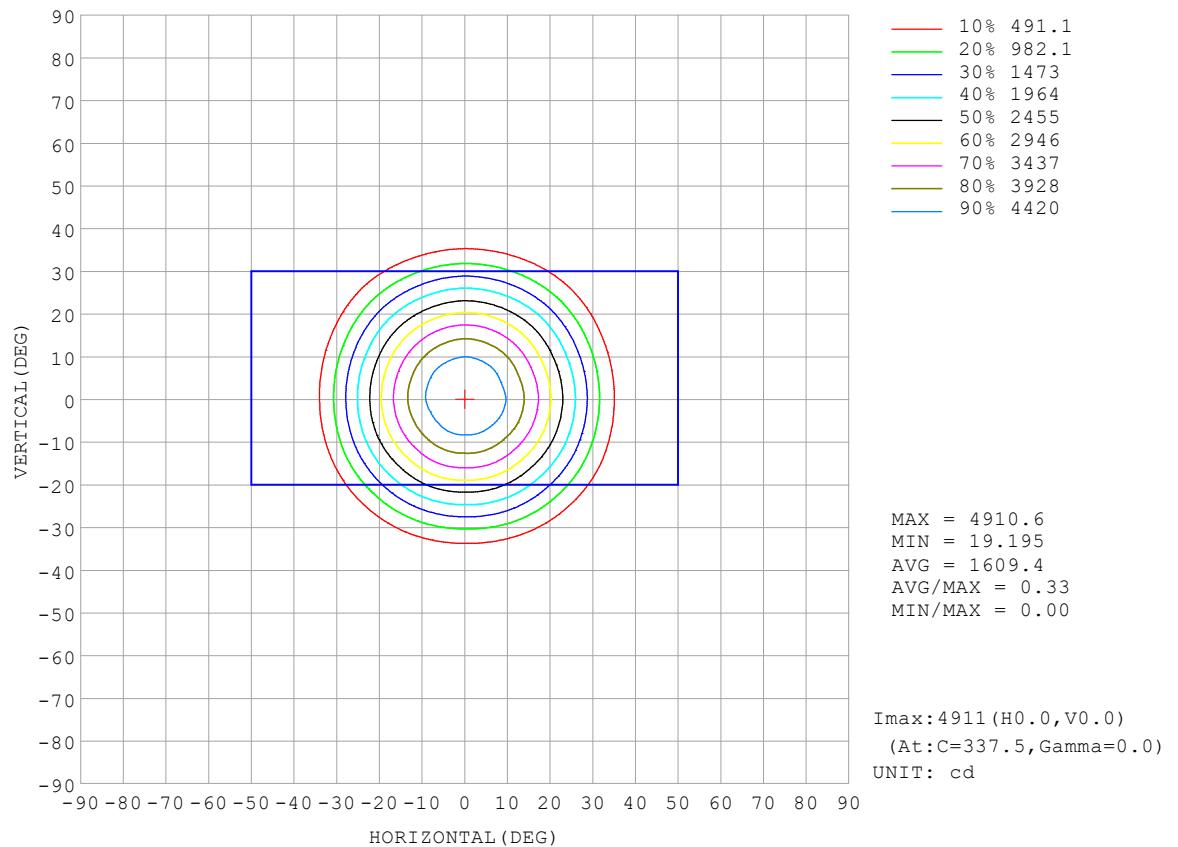
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	74	69	66	74	69	66	73	69	66	63
0.80	80	75	72	79	75	72	78	75	72	69
1.00	83	79	76	82	78	76	81	78	75	72
1.25	86	82	79	85	81	79	83	81	78	75
1.50	88	84	82	87	84	81	85	83	80	77
2.00	90	87	84	89	86	84	87	84	82	78
2.50	91	88	86	90	87	85	87	85	84	79
3.00	92	90	88	91	89	87	88	86	85	80
4.00	94	92	90	92	90	89	89	88	87	81
5.00	95	93	92	93	92	90	90	89	88	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: 2025-01-07

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:230.23V I:0.116A P:24.80W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-45D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

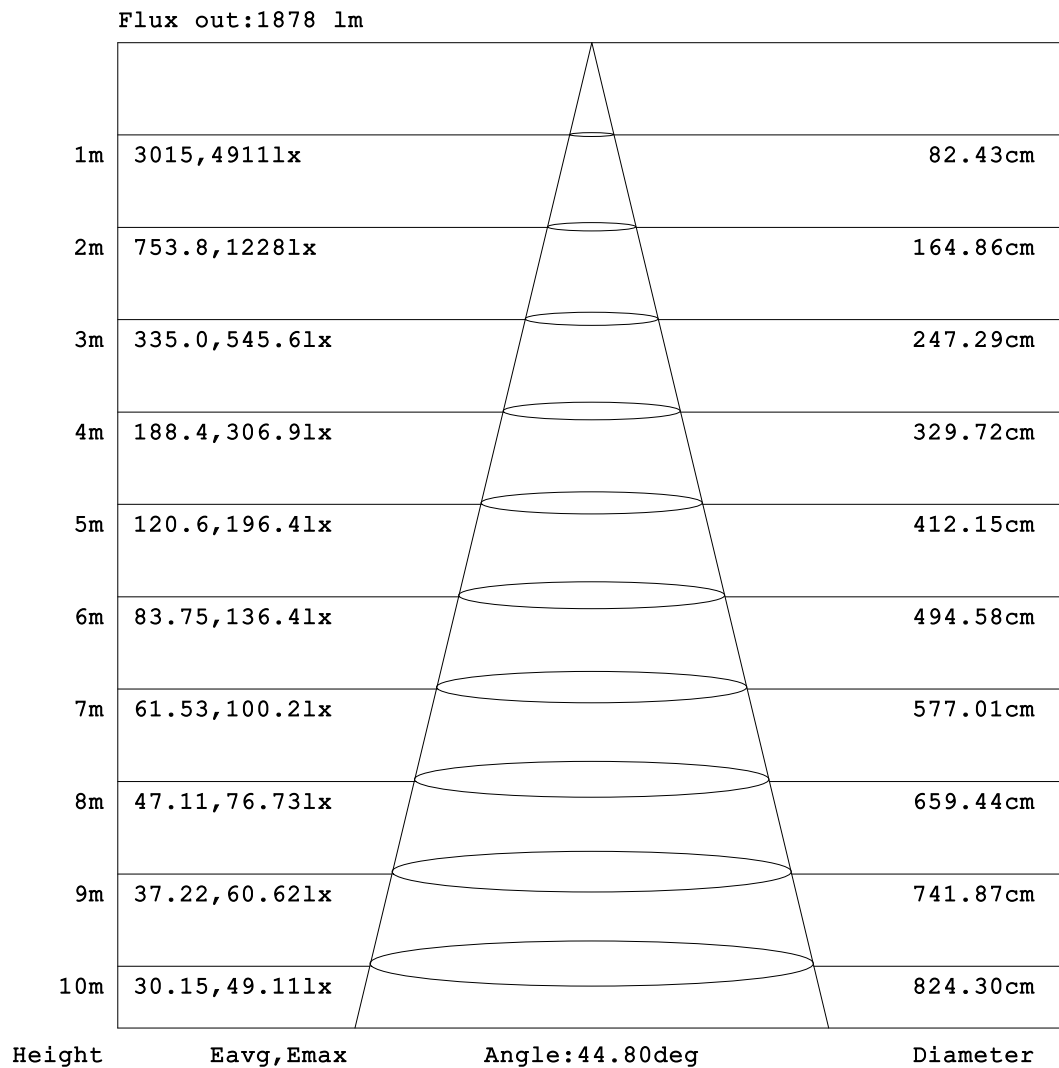


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-01-07

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:230.23V I:0.116A P:24.80W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-45D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		



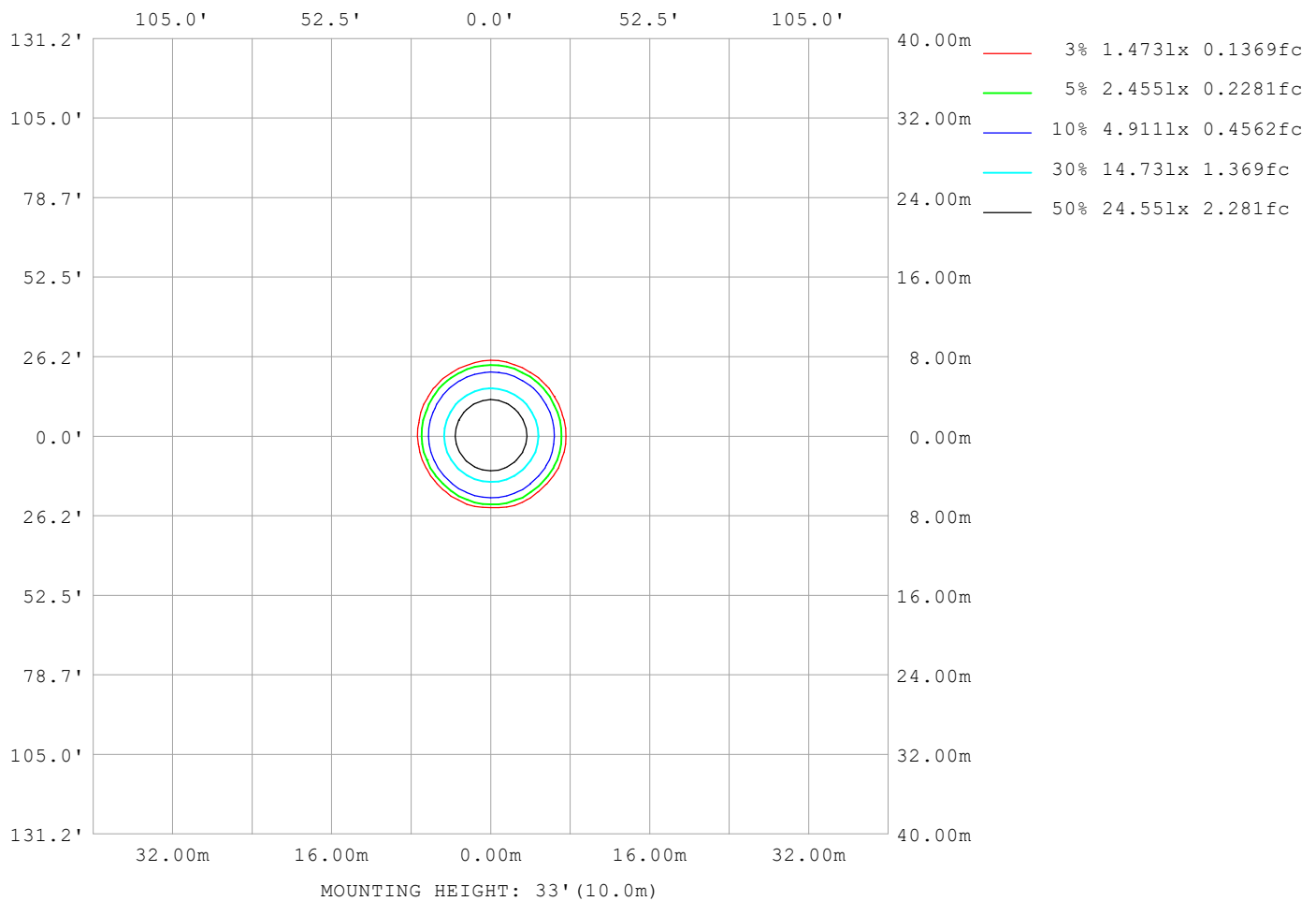
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 28°C
 Operators: Li
 Test Date: 2025-01-07

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:230.23V I:0.116A P:24.80W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-45D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 28°C
 Operators: Li
 Test Date: 2025-01-07

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:230.23V I:0.116A P:24.80W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-45D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

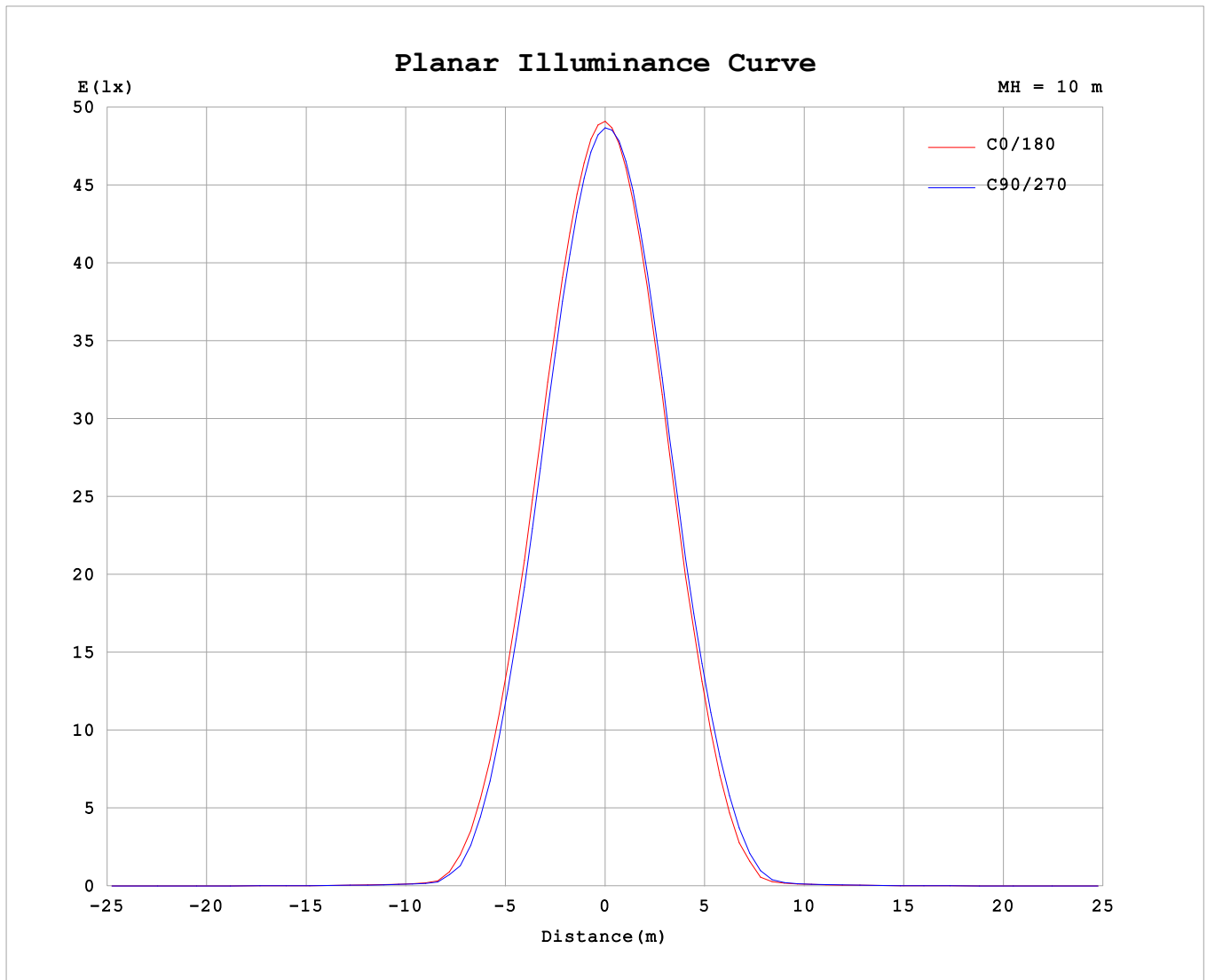
AvgL	cd/m2
L_0~180 (65) av	11802
L_0~180 (75) av	9201
L_0~180 (85) av	1090
L_90~270 (65) av	11691
L_90~270 (75) av	9243
L_90~270 (85) av	1409
L_45 (65) av	11632
L_45 (75) av	9424
L_45 (85) av	1361

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 28℃
 Operators: Li
 Test Date: 2025-01-07

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: 2025-01-07

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:

```