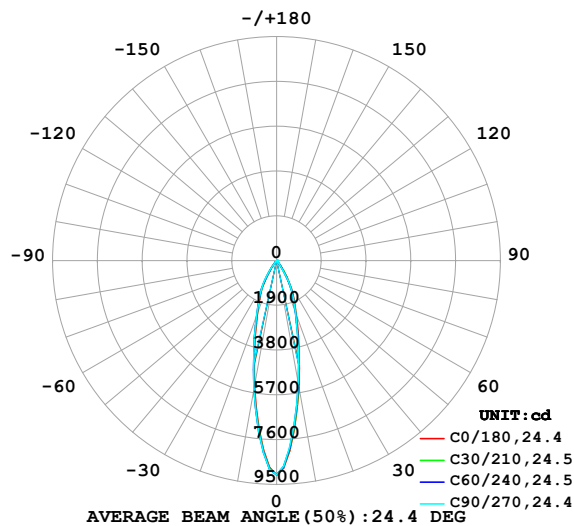


LUMINAIRE PHOTOMETRIC TEST REPORT

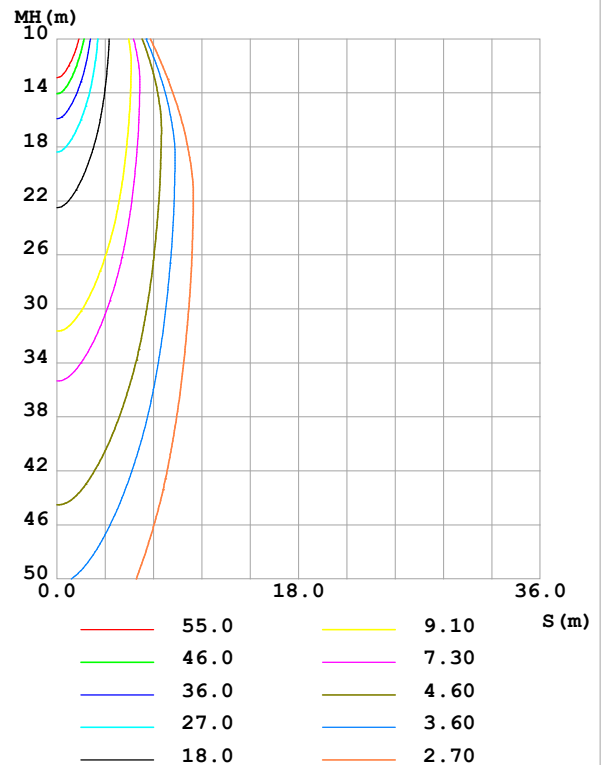
Test:U:230.23V I:0.116A P:24.78W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-24D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 113.59 lm/W			
MODEL	PW 1205 G7N HE+	Imax (cd)	9091	S/MH (C0/180)	0.41
NOMINAL POWER(W)	24	LOR (%)	84.2	S/MH (C90/270)	0.42
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	2814.6	η UP,DN (C0-180)	0.0,41.4
NOMINAL FLUX(lm)	3344.6	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,42.8
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down (%)	84.2	CIBSE SHR MAX	0.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5473	5429	5306	5388	5411	5493	5552	5465	0- 10	658.3	658.3	23.4,19.7
20	2453	2402	2346	2374	2403	2456	2515	2480	10- 20	1014	1672	59.4,50
30	1084	1027	979.4	1014	1029	1089	1143	1114	20- 30	774.8	2447	86.9,73.2
40	97.56	90.66	83.62	85.78	88.66	93.78	105.0	99.49	30- 40	296.6	2743	97.5,82
50	26.69	28.46	28.35	27.06	26.04	24.98	24.99	24.70	40- 50	38.38	2782	98.8,83.2
60	17.54	17.99	17.88	17.29	16.89	16.72	17.00	17.14	50- 60	17.27	2799	99.4,83.7
70	4.641	4.565	4.500	4.498	4.571	4.590	4.731	4.615	60- 70	11.68	2811	99.9,84
80	1.766	1.595	1.674	1.685	1.708	1.804	1.794	1.787	70- 80	3.271	2814	100,84.1
90	0.2692	0.2697	0.2699	0.2651	0.2539	0.2442	0.2495	0.2498	80- 90	0.7036	2815	100,84.2
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): 2770.9 lm

%lum = 98.4%

%lamp = 82.8%

Conical surface Flux(130deg): 2807.8 lm

%lum = 99.8%

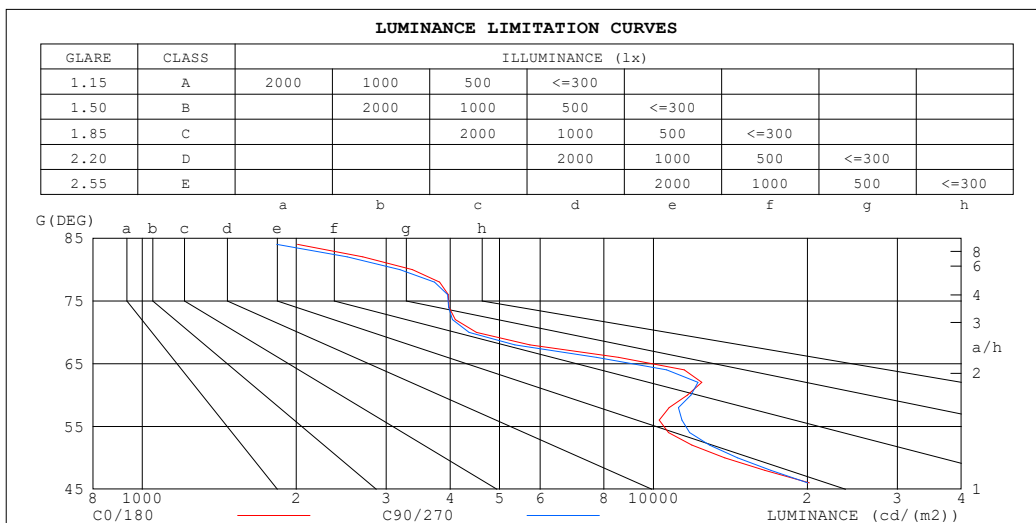
%lamp = 84.0%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 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:24.78W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-24D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2412	2198
80	3377	3193
75	4240	4233
70	4507	4357
65	11909	11007
60	11654	11841
55	10961	12061
50	13792	14606
45	25098	24212

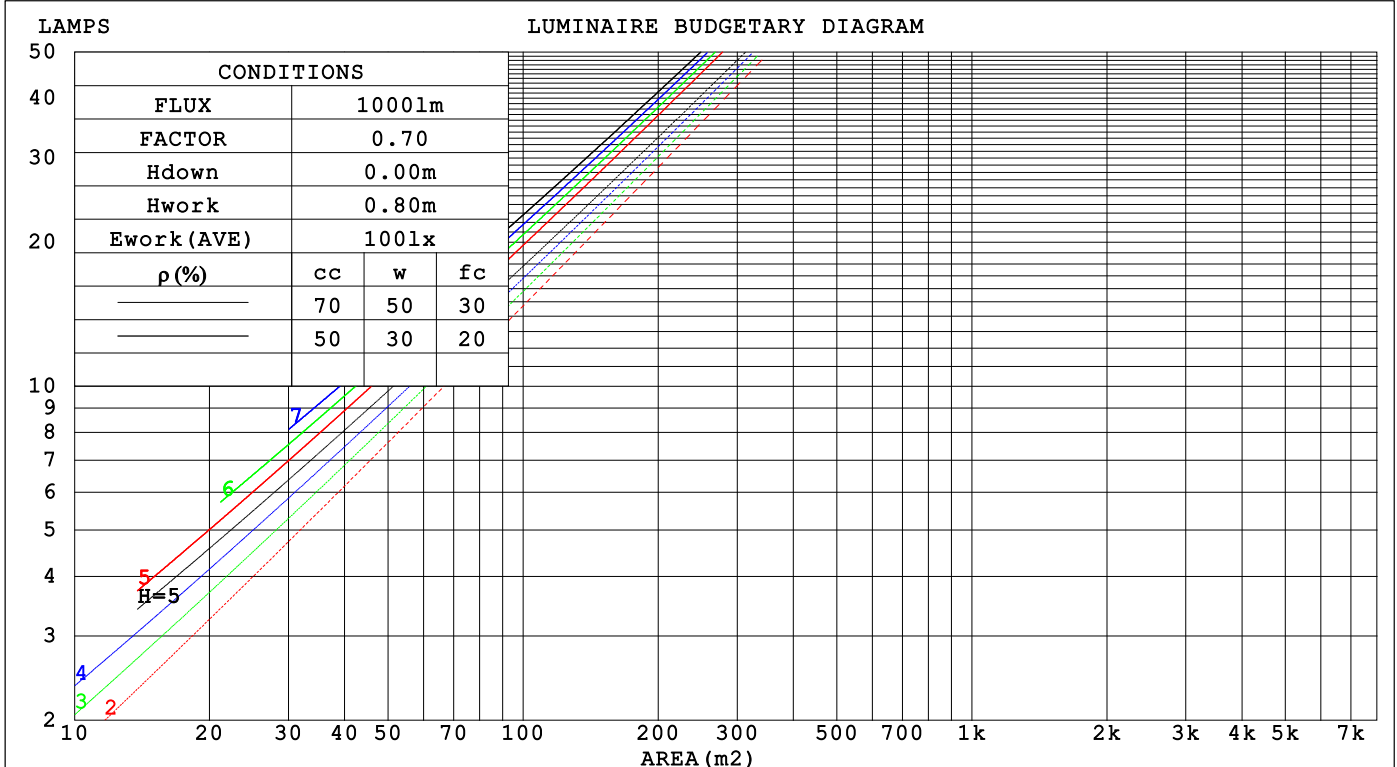
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:28℃
Operators:Li
Test Date:2025-01-07

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:24.78W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-24D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.94	.94	.94	.90	.90	.90	.86	.86	.86	.84
1.0	.94	.92	.91	.92	.91	.89	.89	.88	.87	.86	.85	.84	.83	.82	.82	.80
2.0	.89	.86	.84	.87	.85	.83	.85	.83	.81	.82	.81	.79	.80	.79	.77	.76
3.0	.84	.81	.78	.83	.80	.77	.81	.78	.76	.79	.77	.75	.77	.75	.74	.72
4.0	.80	.76	.73	.79	.75	.73	.77	.74	.72	.76	.73	.71	.74	.72	.70	.69
5.0	.76	.72	.69	.75	.72	.69	.74	.71	.68	.73	.70	.67	.71	.69	.67	.66
6.0	.73	.68	.65	.72	.68	.65	.71	.67	.65	.70	.67	.64	.69	.66	.64	.63
7.0	.69	.65	.62	.69	.65	.62	.68	.64	.62	.67	.64	.62	.66	.63	.61	.60
8.0	.67	.62	.60	.66	.62	.59	.65	.62	.59	.64	.61	.59	.64	.61	.59	.58
9.0	.64	.60	.57	.63	.60	.57	.63	.59	.57	.62	.59	.57	.61	.59	.56	.55
10.0	.61	.57	.55	.61	.57	.55	.60	.57	.54	.60	.57	.54	.59	.56	.54	.53



C Range: 0 - 360DEG
C Interval: 15.0DEG
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:24.78W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-24D-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	.131	.074	.024	.125	.071	.023	.115	.066	.021	.105	.061	.019	.096	.056	.018															
2.0	.123	.067	.021	.118	.065	.020	.110	.061	.019	.102	.057	.018	.094	.053	.017															
3.0	.116	.062	.019	.112	.060	.018	.105	.057	.017	.098	.054	.016	.092	.051	.016															
4.0	.110	.057	.017	.106	.056	.016	.100	.053	.016	.094	.051	.015	.089	.048	.015															
5.0	.104	.053	.015	.101	.052	.015	.096	.050	.015	.091	.048	.014	.086	.046	.014															
6.0	.099	.050	.014	.097	.049	.014	.092	.047	.014	.087	.045	.013	.083	.044	.013															
7.0	.094	.047	.013	.092	.046	.013	.088	.045	.013	.084	.043	.013	.081	.042	.012															
8.0	.090	.044	.012	.088	.044	.012	.085	.042	.012	.081	.041	.012	.078	.040	.012															
9.0	.087	.042	.012	.085	.041	.012	.082	.040	.011	.079	.039	.011	.076	.038	.011															
10.0	.083	.040	.011	.082	.039	.011	.079	.039	.011	.076	.038	.011	.073	.037	.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	.160	.160	.160	.137	.137	.137	.094	.094	.094	.054	.054	.054	.017	.017	.017	
1.0	.143	.133	.123	.122	.114	.106	.084	.078	.073	.048	.045	.043	.015	.015	.014	
2.0	.129	.112	.097	.110	.096	.084	.075	.066	.059	.044	.039	.034	.014	.013	.011	
3.0	.117	.095	.078	.100	.082	.068	.069	.057	.048	.040	.033	.028	.013	.011	.009	
4.0	.107	.083	.064	.092	.072	.056	.063	.050	.039	.037	.029	.023	.012	.010	.008	
5.0	.099	.073	.053	.085	.063	.046	.059	.044	.033	.034	.026	.019	.011	.008	.006	
6.0	.092	.065	.045	.079	.056	.039	.055	.039	.027	.032	.023	.016	.010	.008	.005	
7.0	.086	.058	.038	.074	.050	.033	.051	.035	.023	.030	.021	.014	.010	.007	.005	
8.0	.081	.052	.033	.070	.045	.028	.048	.032	.020	.028	.019	.012	.009	.006	.004	
9.0	.077	.048	.028	.066	.042	.025	.046	.029	.018	.027	.017	.010	.009	.006	.003	
10.0	.073	.044	.025	.063	.038	.022	.044	.027	.015	.025	.016	.009	.008	.005	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 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:24.78W PF:0.931 Freq:49.99Hz										
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm										
NAME: T1241-600mA-24D-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	19.2	19.9	19.4	20.1	20.3	18.3	19.1	18.5	19.3	19.4
3H	19.1	19.8	19.3	20.0	20.2	18.2	19.0	18.5	19.2	19.3
4H	19.0	19.7	19.3	19.9	20.1	18.2	18.9	18.4	19.1	19.3
6H	18.9	19.6	19.2	19.8	20.0	18.1	18.8	18.4	19.0	19.2
8H	18.9	19.5	19.2	19.8	20.0	18.1	18.7	18.4	18.9	19.2
12H	18.8	19.4	19.1	19.7	20.0	18.0	18.6	18.3	18.9	19.2
4H 2H	19.0	19.7	19.3	19.9	20.1	18.2	18.9	18.4	19.1	19.3
3H	18.9	19.5	19.2	19.7	20.0	18.1	18.7	18.4	18.9	19.2
4H	18.8	19.4	19.2	19.7	20.0	18.0	18.6	18.4	18.9	19.2
6H	18.7	19.2	19.1	19.6	19.9	18.0	18.4	18.3	18.8	19.1
8H	18.7	19.1	19.1	19.5	19.9	17.9	18.4	18.3	18.7	19.1
12H	18.6	19.1	19.1	19.4	19.8	17.9	18.3	18.3	18.6	19.0
8H 4H	18.7	19.1	19.1	19.5	19.8	17.9	18.3	18.3	18.7	19.0
6H	18.6	19.0	19.0	19.4	19.8	17.8	18.2	18.2	18.6	19.0
8H	18.6	18.9	19.0	19.3	19.7	17.8	18.1	18.2	18.5	19.0
12H	18.5	18.8	19.0	19.2	19.7	17.7	18.0	18.2	18.4	18.9
12H 4H	18.6	19.0	19.0	19.4	19.8	17.8	18.2	18.2	18.6	19.0
6H	18.5	18.9	19.0	19.3	19.7	17.8	18.1	18.2	18.5	18.9
8H	18.5	18.8	19.0	19.2	19.7	17.7	18.0	18.2	18.4	18.9
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 4.3 / - 4.0					+ 4.3 / - 3.6				
1.5H	+ 6.7 / - 3.7					+ 6.7 / - 3.3				
2.0H	+ 2.0 / - 2.0					+ 1.8 / - 2.0				

CIE Pub.117, 3345 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 4.2)
 Area: 0.00301754 m2

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 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:24.78W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-24D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

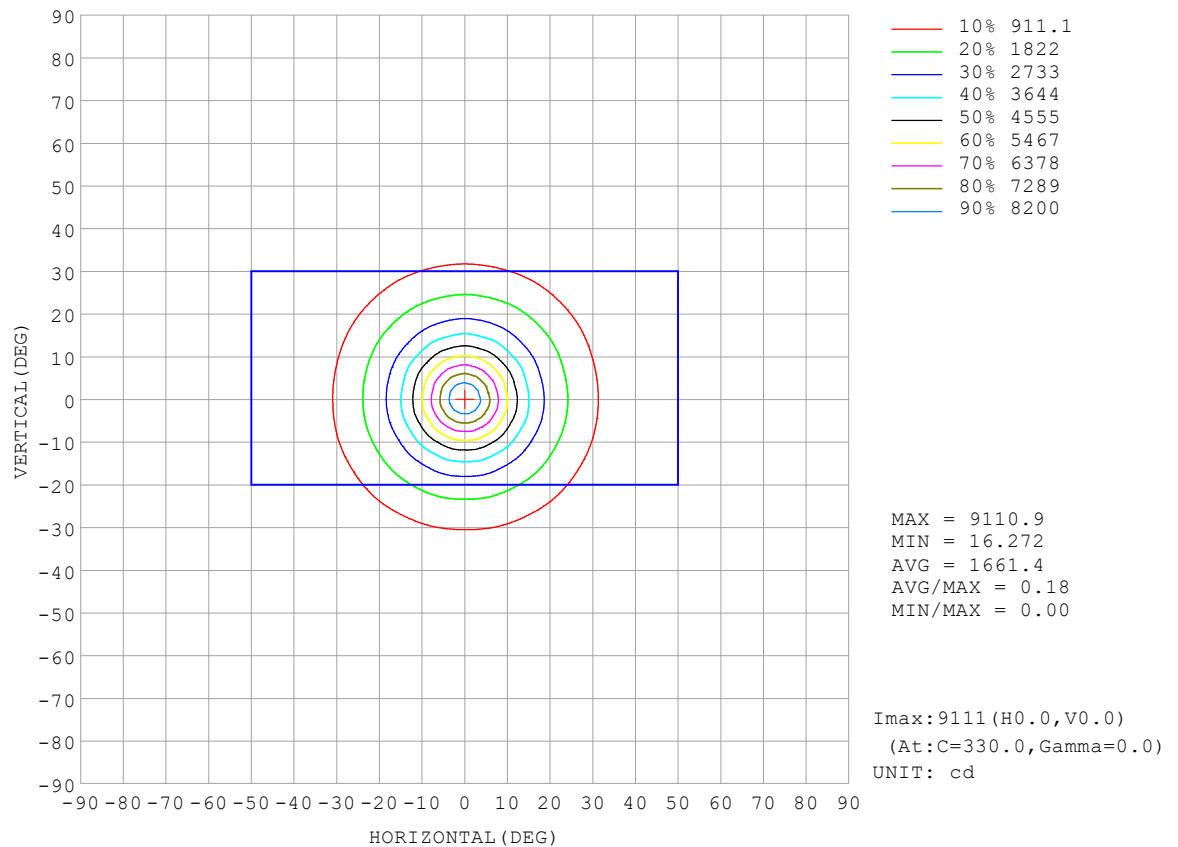
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	76	71	68	75	71	68	75	70	68	65
0.80	82	77	74	81	77	74	80	76	74	71
1.00	85	81	78	84	80	78	83	80	77	74
1.25	88	84	81	87	84	81	86	83	80	77
1.50	90	86	84	89	86	83	87	85	83	79
2.00	92	89	86	91	88	86	89	86	84	80
2.50	93	90	88	92	89	87	90	87	86	81
3.00	95	92	90	93	91	89	90	89	87	82
4.00	96	94	92	94	93	91	92	90	89	83
5.00	97	95	94	95	94	93	92	91	90	84
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: 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:24.78W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-24D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

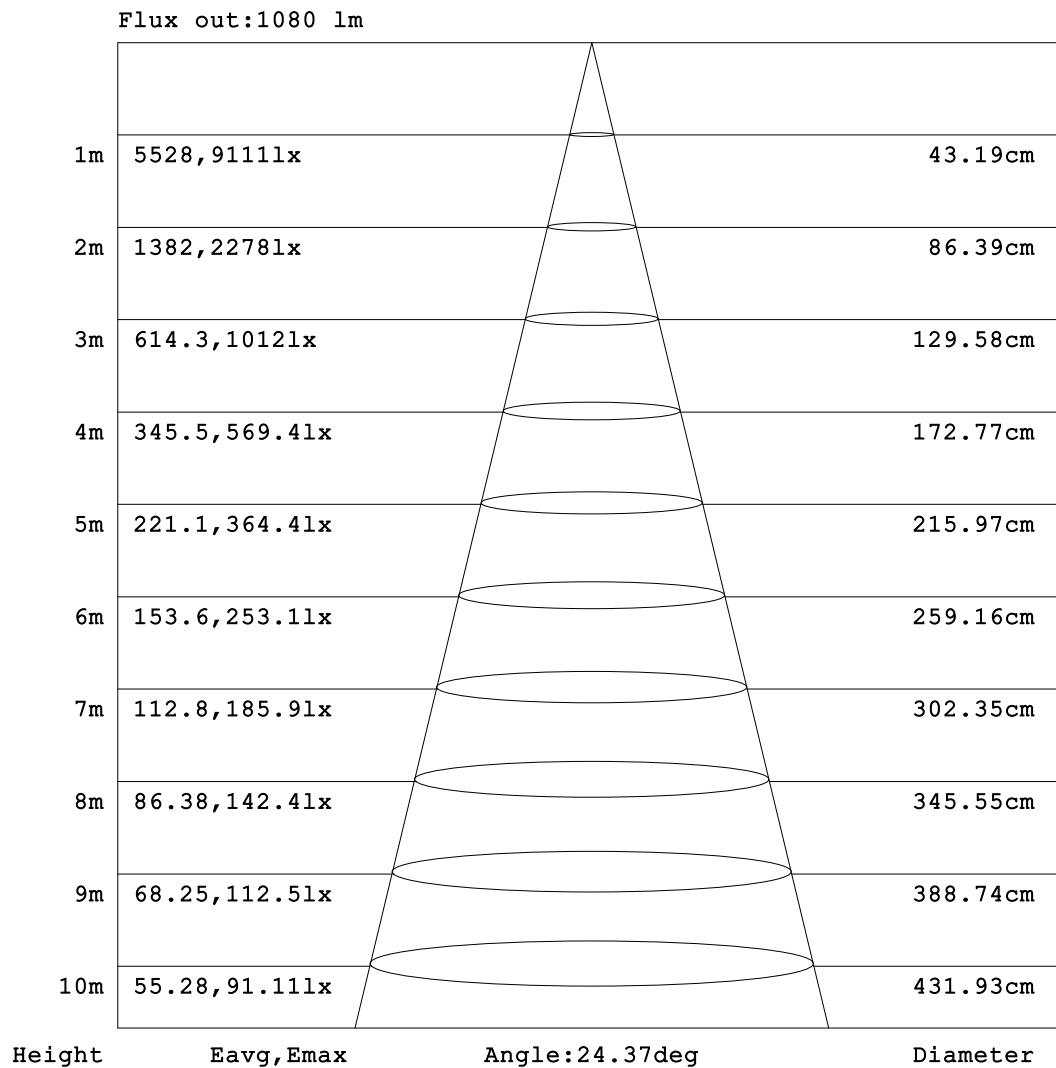


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-01-07

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:24.78W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-24D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		



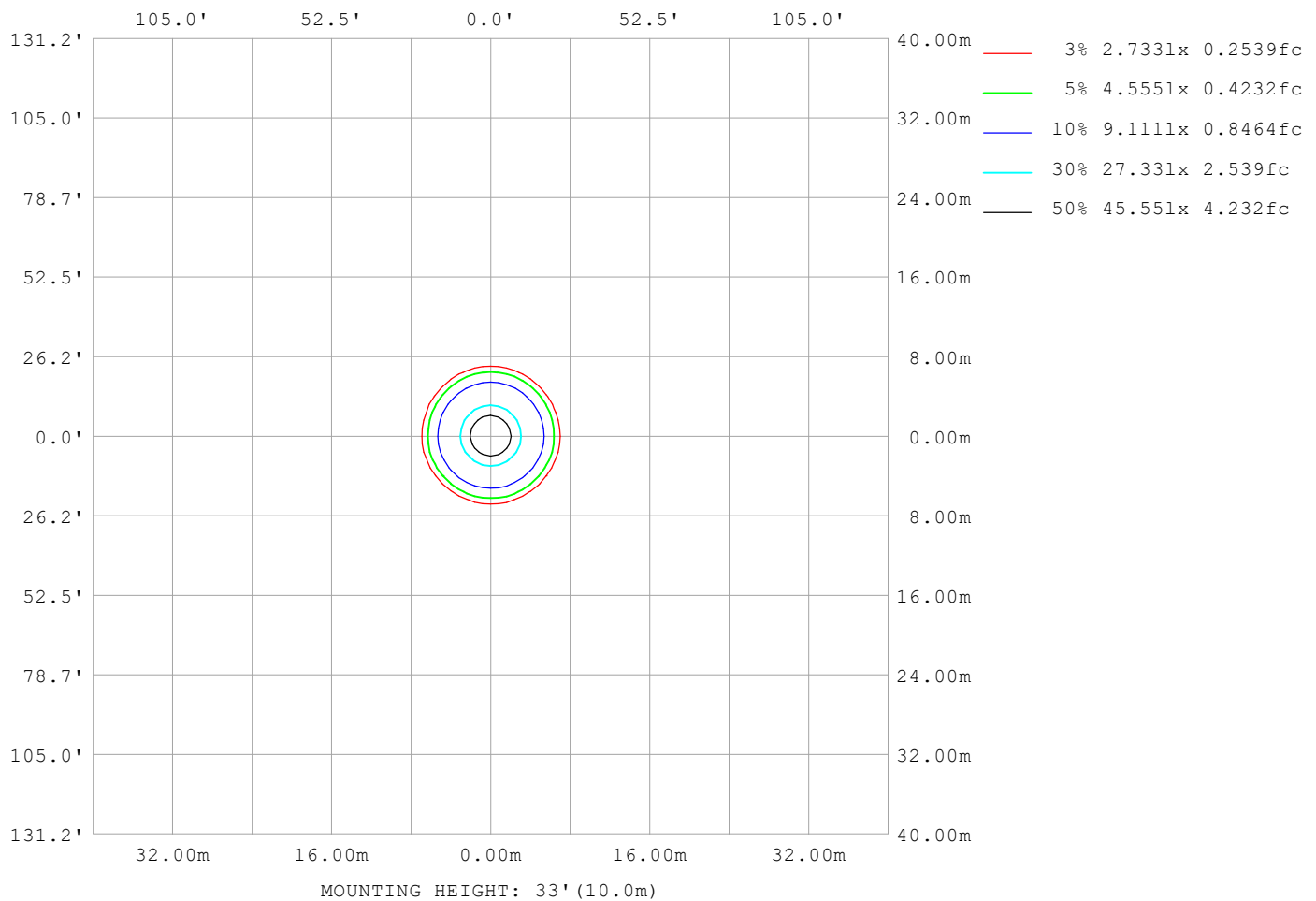
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 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:24.78W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-24D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 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:24.78W PF:0.931 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-24D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

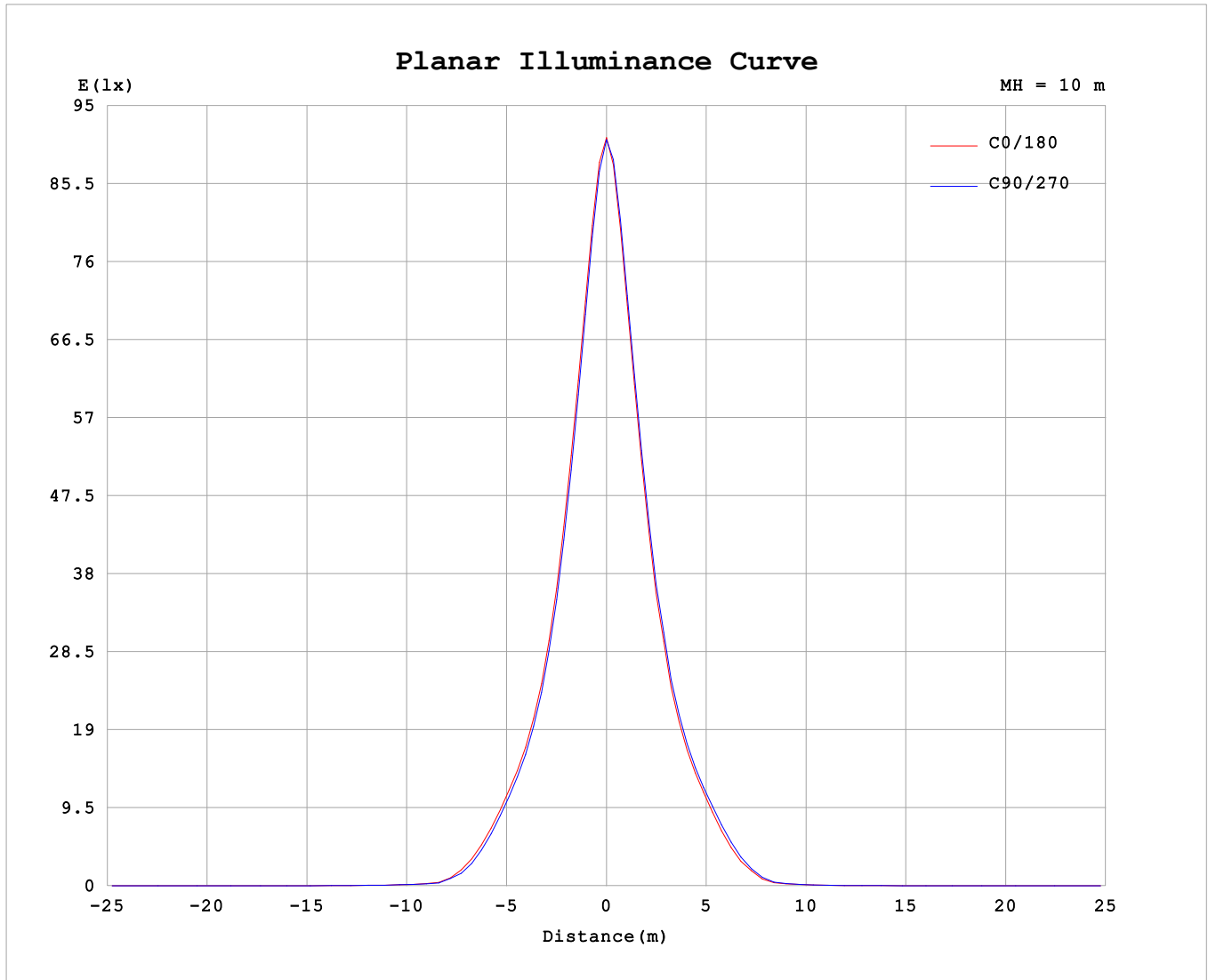
AvgL	cd/m2
L_0~180 (65) av	9834
L_0~180 (75) av	3996
L_0~180 (85) av	1548
L_90~270 (65) av	9789
L_90~270 (75) av	4001
L_90~270 (85) av	1569
L_45 (65) av	9724
L_45 (75) av	3965
L_45 (85) av	1539

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 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: 15.0DEG
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:

```

```

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:

```