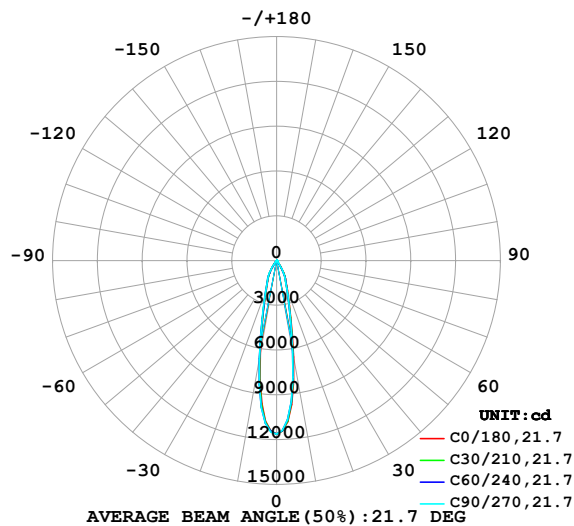


LUMINAIRE PHOTOMETRIC TEST REPORT

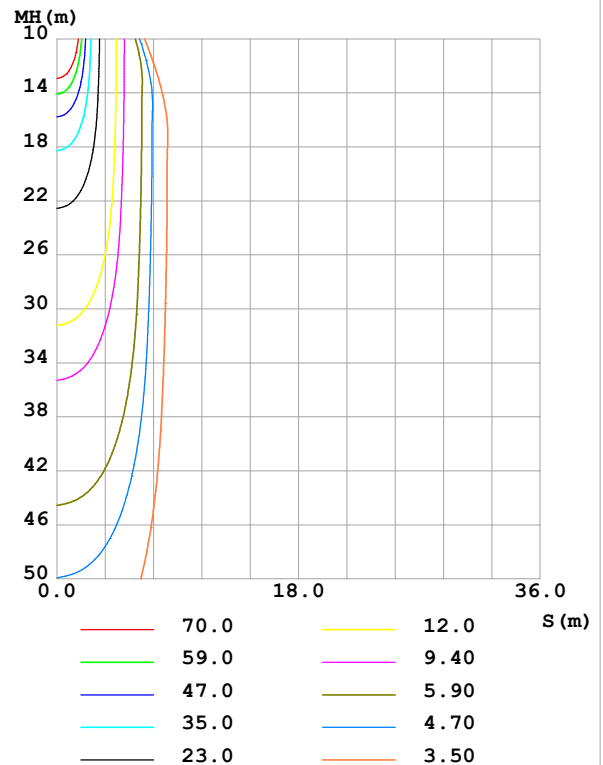
Test:U:230.24V I:0.116A P:24.78W PF:0.932 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-18D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 115.01 lm/W			
MODEL	PW 1205 G7N HE+	Imax (cd)	11632	S/MH (C0/180)	0.37
NOMINAL POWER(W)	24	LOR (%)	85.2	S/MH (C90/270)	0.38
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	2850.1	η UP,DN (C0-180)	0.0,42.0
NOMINAL FLUX(lm)	3344.6	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,43.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down (%)	85.2	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	655.5	643.7	623.7	640.3	639.5	655.7	674.7	656.9	0- 10	857.0	857.0	30.1,25.6
20	213.0	207.1	201.9	205.0	206.5	211.4	216.0	213.3	10- 20	1004	1861	65.3,55.6
30	94.65	91.33	88.27	90.82	92.07	95.01	98.78	97.63	20- 30	663.6	2524	88.6,75.5
40	7.500	6.941	6.509	6.594	6.462	6.919	7.752	7.751	30- 40	262.4	2787	97.8,83.3
50	2.742	2.726	2.546	2.364	2.212	2.165	2.266	2.447	40- 50	31.16	2818	98.9,84.3
60	1.936	1.935	1.888	1.790	1.746	1.722	1.767	1.862	50- 60	18.52	2837	99.5,84.8
70	0.3995	0.3861	0.3714	0.3732	0.3707	0.3832	0.3980	0.3959	60- 70	10.22	2847	99.9,85.1
80	0.1625	0.1541	0.1475	0.1475	0.1408	0.1515	0.1582	0.1555	70- 80	2.719	2849	100,85.2
90	0.0273	0.0269	0.0275	0.0266	0.0258	0.0249	0.0250	0.0245	80- 90	0.6547	2850	100,85.2
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:X10cd									UNIT:lm		

Conical surface Flux(90deg): 2808.6 lm

%lum = 98.5%

%lamp = 84.0%

Conical surface Flux(130deg): 2844.6 lm

%lum = 99.8%

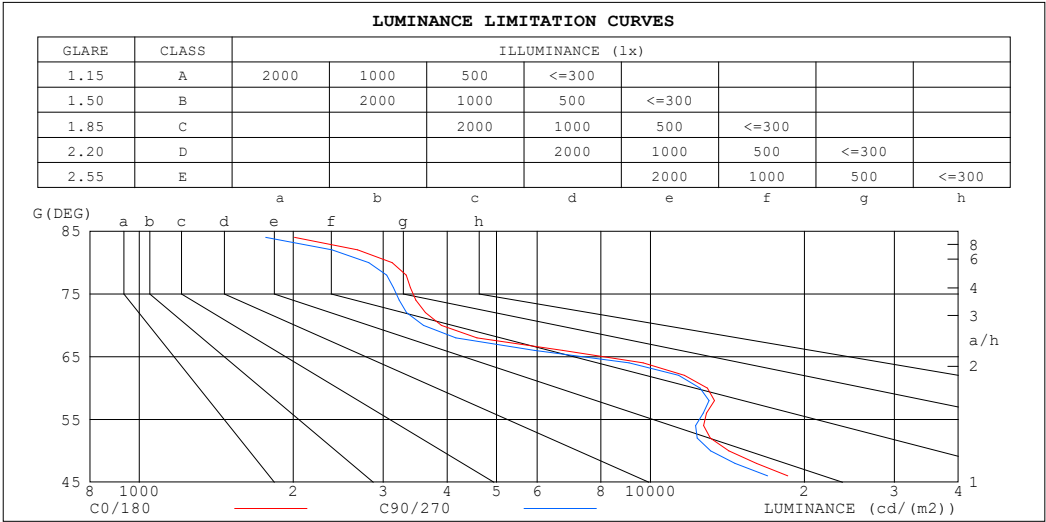
%lamp = 85.0%

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:230.24V I:0.116A P:24.78W PF:0.932 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-18D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2411	2120
80	3123	2812
75	3699	3431
70	3897	3595
65	10039	9422
60	12919	12498
55	13010	12555
50	14230	13112
45	21868	20185

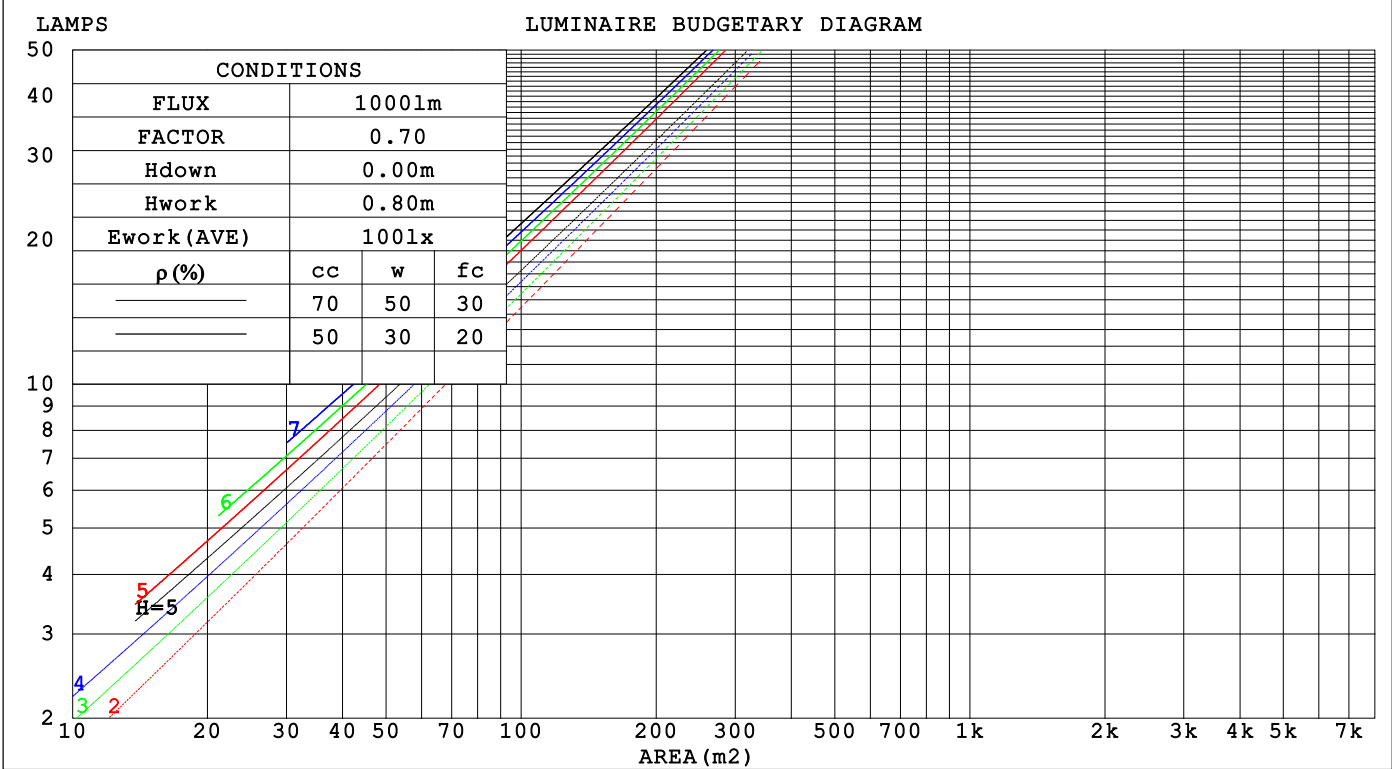
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:28℃
Operators:Li
Test Date:2025-01-07

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:230.24V I:0.116A P:24.78W PF:0.932 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0		
Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-18D-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	1.01	1.01	1.01	.99	.99	.99	.95	.95	.95	.91	.91	.91	.87	.87	.87	.85
1.0	.96	.94	.92	.94	.92	.91	.90	.89	.88	.87	.86	.85	.84	.84	.83	.82
2.0	.91	.88	.85	.89	.87	.85	.86	.84	.83	.84	.82	.81	.82	.80	.79	.78
3.0	.86	.83	.80	.85	.82	.79	.83	.80	.78	.81	.79	.77	.79	.77	.76	.75
4.0	.82	.78	.76	.81	.78	.75	.79	.77	.74	.78	.75	.73	.76	.74	.73	.72
5.0	.79	.75	.72	.78	.74	.71	.76	.73	.71	.75	.72	.70	.74	.72	.70	.69
6.0	.75	.71	.68	.75	.71	.68	.74	.70	.68	.72	.70	.67	.71	.69	.67	.66
7.0	.72	.68	.66	.72	.68	.65	.71	.68	.65	.70	.67	.65	.69	.66	.64	.64
8.0	.70	.66	.63	.69	.66	.63	.68	.65	.63	.68	.65	.62	.67	.64	.62	.61
9.0	.67	.63	.61	.67	.63	.61	.66	.63	.60	.65	.62	.60	.65	.62	.60	.59
10.0	.65	.61	.59	.65	.61	.58	.64	.61	.58	.63	.60	.58	.63	.60	.58	.57



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:230.24V I:0.116A P:24.78W PF:0.932 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-18D-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	.127	.072	.023	.121	.069	.022	.110	.063	.020	.101	.058	.019	.092	.053	.017															
2.0	.119	.065	.020	.114	.063	.019	.105	.059	.018	.097	.055	.017	.090	.051	.016															
3.0	.112	.059	.018	.108	.058	.017	.100	.054	.017	.093	.051	.016	.087	.048	.015															
4.0	.105	.055	.016	.102	.053	.016	.096	.051	.015	.090	.048	.015	.084	.046	.014															
5.0	.100	.051	.015	.097	.050	.014	.091	.048	.014	.086	.046	.014	.082	.044	.013															
6.0	.094	.047	.014	.092	.046	.013	.087	.045	.013	.083	.043	.013	.079	.042	.012															
7.0	.090	.044	.013	.088	.044	.012	.084	.042	.012	.080	.041	.012	.076	.040	.012															
8.0	.086	.042	.012	.084	.041	.012	.080	.040	.011	.077	.039	.011	.074	.038	.011															
9.0	.082	.040	.011	.080	.039	.011	.077	.038	.011	.074	.037	.011	.071	.036	.010															
10.0	.079	.038	.010	.077	.037	.010	.074	.036	.010	.072	.036	.010	.069	.035	.010															

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	.162	.162	.162	.139	.139	.139	.095	.095	.095	.054	.054	.054	.017	.017	.017	
1.0	.144	.134	.125	.123	.115	.108	.084	.079	.075	.049	.046	.043	.016	.015	.014	
2.0	.129	.113	.099	.111	.097	.086	.076	.067	.060	.044	.039	.035	.014	.013	.011	
3.0	.117	.097	.080	.101	.083	.069	.069	.058	.049	.040	.034	.029	.013	.011	.009	
4.0	.107	.084	.066	.092	.072	.057	.063	.050	.040	.037	.030	.024	.012	.010	.008	
5.0	.099	.073	.055	.085	.063	.047	.058	.044	.034	.034	.026	.020	.011	.008	.007	
6.0	.092	.065	.046	.079	.056	.040	.054	.039	.028	.031	.023	.017	.010	.008	.006	
7.0	.085	.058	.039	.073	.050	.034	.051	.035	.024	.029	.021	.014	.010	.007	.005	
8.0	.080	.053	.034	.069	.046	.029	.048	.032	.021	.028	.019	.012	.009	.006	.004	
9.0	.075	.048	.029	.065	.042	.026	.045	.029	.018	.026	.017	.011	.008	.006	.004	
10.0	.071	.044	.026	.061	.038	.022	.043	.027	.016	.025	.016	.010	.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:230.24V I:0.116A P:24.78W PF:0.932 Freq:49.99Hz										
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm										
NAME: T1241-600mA-18D-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	18.5	19.2	18.7	19.4	19.5	17.9	18.6	18.1	18.8	18.9
3H	18.4	19.0	18.6	19.2	19.4	17.8	18.5	18.0	18.7	18.8
4H	18.3	18.9	18.6	19.2	19.4	17.7	18.4	18.0	18.6	18.8
6H	18.2	18.8	18.5	19.1	19.3	17.6	18.3	17.9	18.5	18.7
8H	18.2	18.8	18.5	19.0	19.3	17.6	18.2	17.9	18.4	18.7
12H	18.1	18.7	18.5	19.0	19.2	17.6	18.1	17.9	18.4	18.7
4H 2H	18.3	19.0	18.6	19.2	19.4	17.7	18.4	18.0	18.6	18.8
3H	18.2	18.8	18.5	19.0	19.3	17.6	18.2	17.9	18.5	18.7
4H	18.1	18.6	18.5	18.9	19.2	17.6	18.1	17.9	18.4	18.7
6H	18.0	18.5	18.4	18.8	19.2	17.5	17.9	17.9	18.3	18.6
8H	18.0	18.4	18.4	18.8	19.1	17.4	17.9	17.8	18.2	18.6
12H	17.9	18.3	18.4	18.7	19.1	17.4	17.8	17.8	18.1	18.5
8H 4H	18.0	18.4	18.4	18.8	19.1	17.4	17.8	17.8	18.2	18.6
6H	17.9	18.3	18.3	18.6	19.1	17.3	17.7	17.8	18.1	18.5
8H	17.9	18.2	18.3	18.6	19.0	17.3	17.6	17.7	18.0	18.5
12H	17.8	18.1	18.3	18.5	19.0	17.2	17.5	17.7	17.9	18.4
12H 4H	17.9	18.3	18.3	18.7	19.1	17.4	17.8	17.8	18.1	18.5
6H	17.8	18.2	18.3	18.6	19.0	17.3	17.6	17.7	18.0	18.5
8H	17.8	18.1	18.3	18.5	19.0	17.2	17.5	17.7	17.9	18.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 4.0 / - 2.8					+ 4.3 / - 2.8				
1.5H	+ 6.4 / - 2.6					+ 6.7 / - 2.6				
2.0H	+ 1.2 / - 1.3					+ 0.9 / - 1.2				

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: 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:230.24V I:0.116A P:24.78W PF:0.932 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-18D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

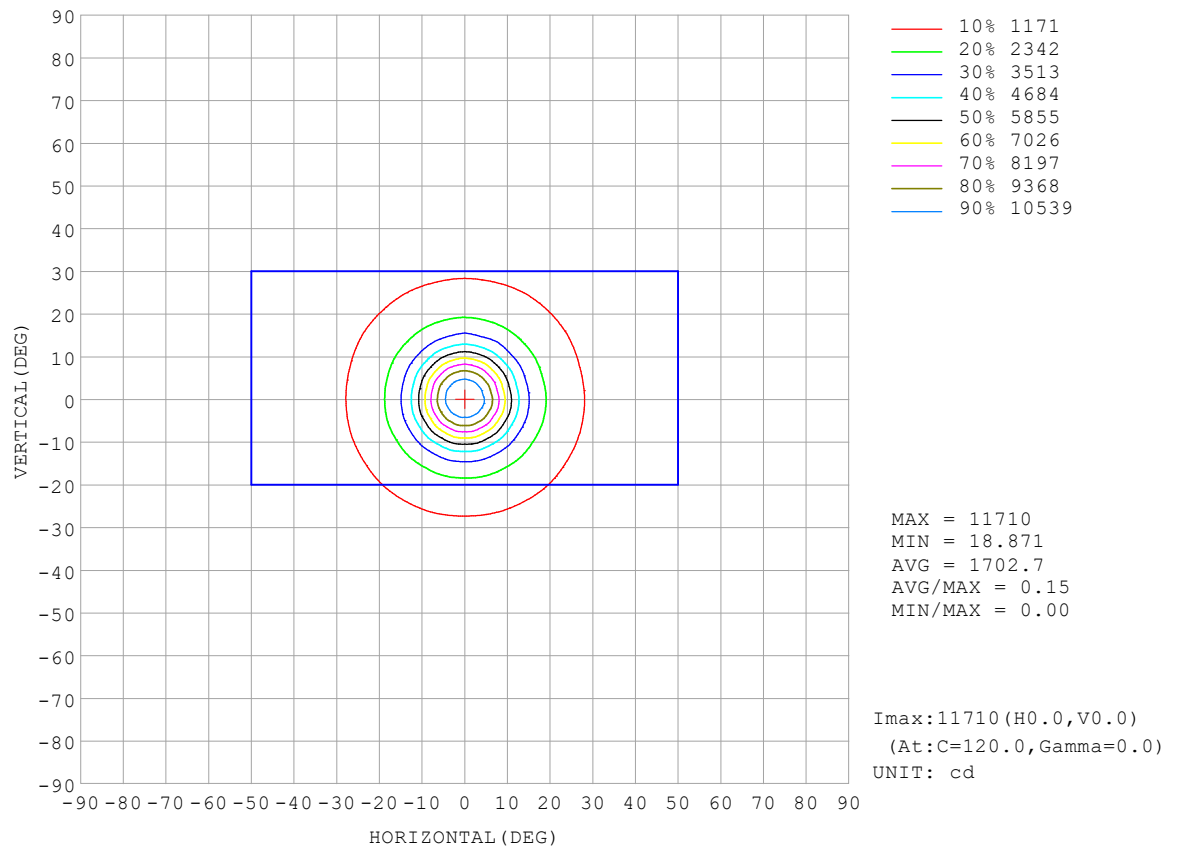
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	72	69	76	72	69	76	71	69	66
0.80	83	78	75	82	78	75	81	78	75	72
1.00	86	82	79	85	81	79	84	81	78	75
1.25	89	85	82	88	85	82	87	84	81	78
1.50	91	88	85	90	87	85	89	86	84	80
2.00	93	90	88	92	89	87	90	87	86	81
2.50	95	92	89	93	91	89	91	89	87	82
3.00	96	93	91	94	92	90	91	90	88	83
4.00	97	95	94	96	94	92	93	91	90	84
5.00	98	97	95	97	95	94	93	92	91	85
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:230.24V I:0.116A P:24.78W PF:0.932 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-18D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

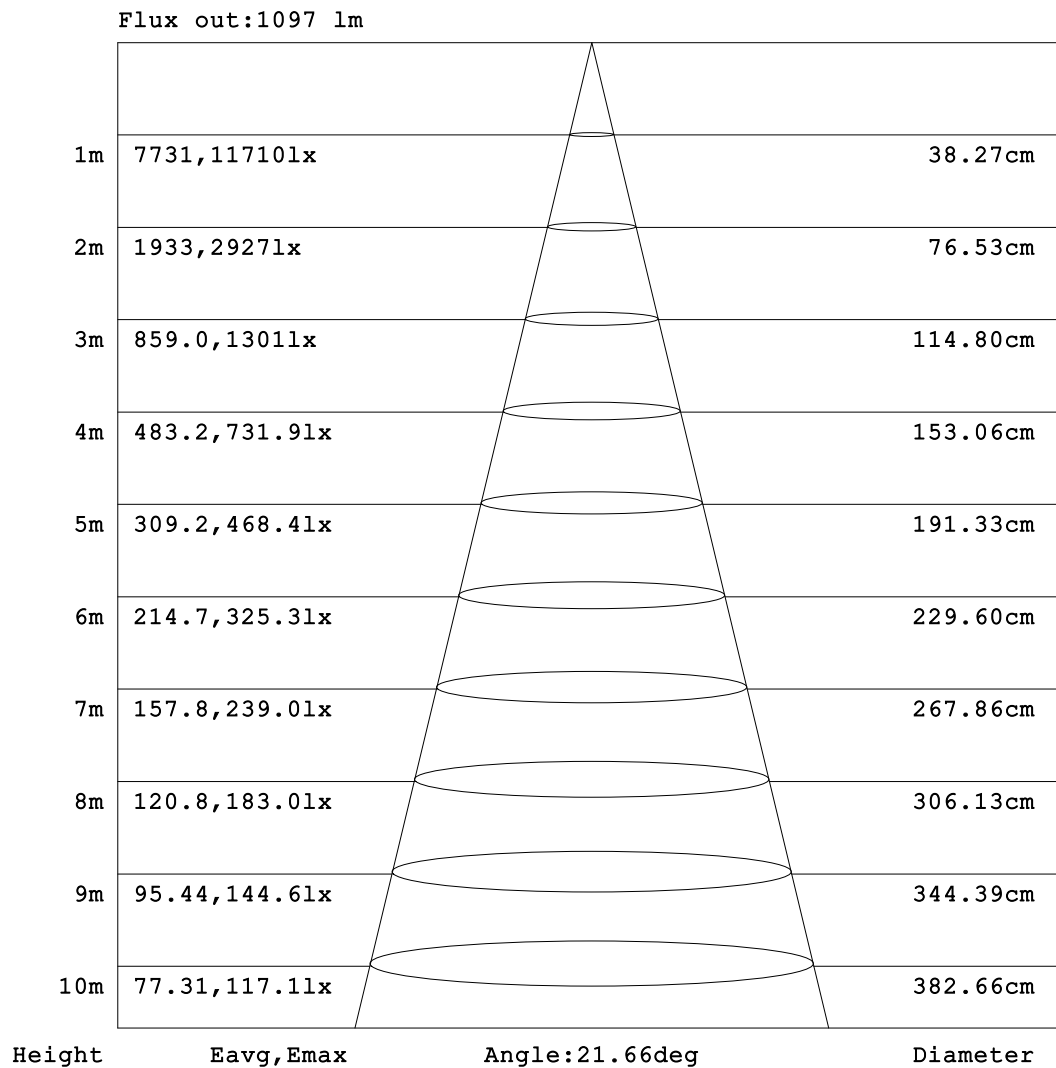


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:28℃
 Operators:Li
 Test Date:2025-01-07

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:230.24V I:0.116A P:24.78W PF:0.932 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-18D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		



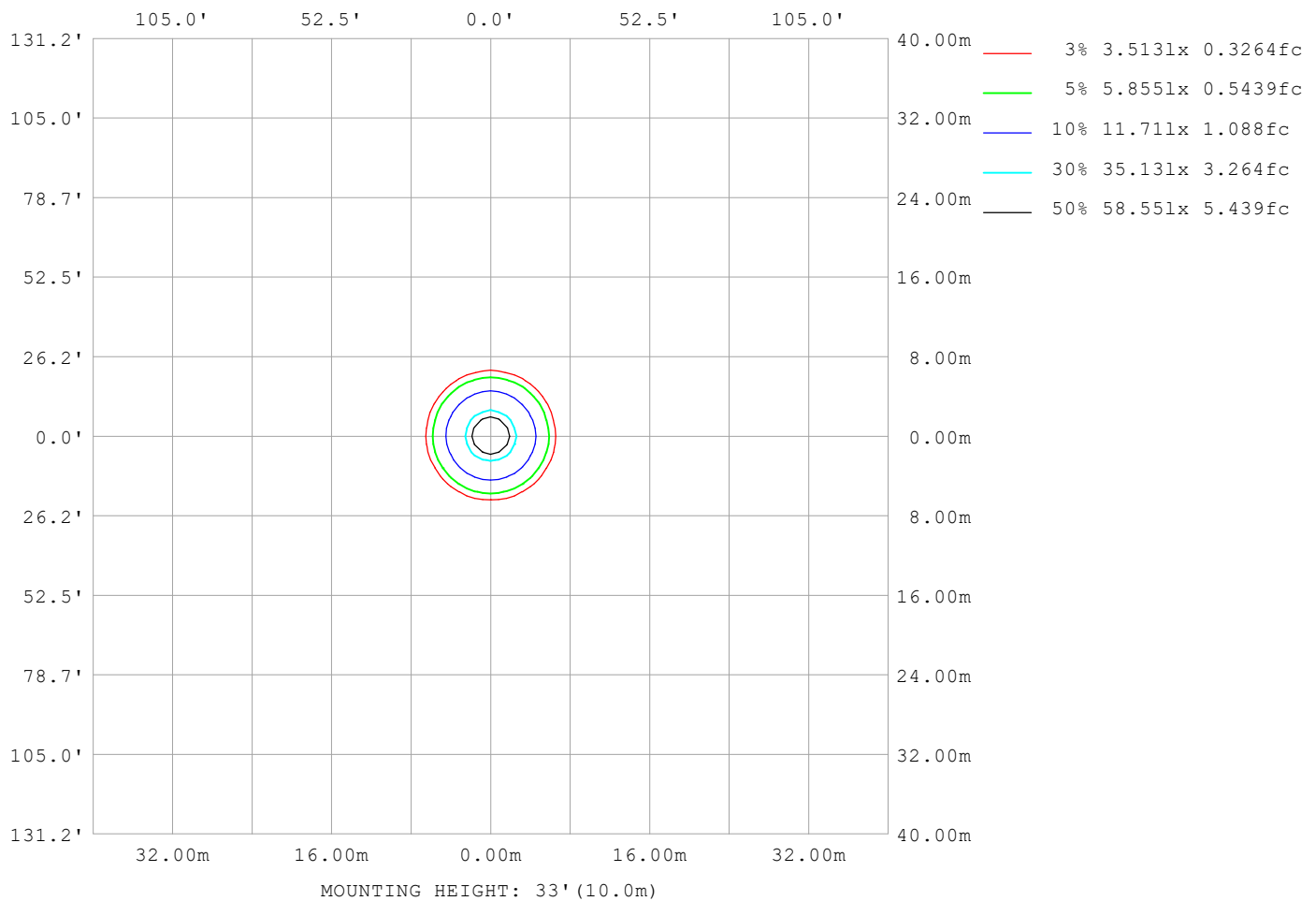
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:28℃
 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:230.24V I:0.116A P:24.78W PF:0.932 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-18D-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:230.24V I:0.116A P:24.78W PF:0.932 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-18D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

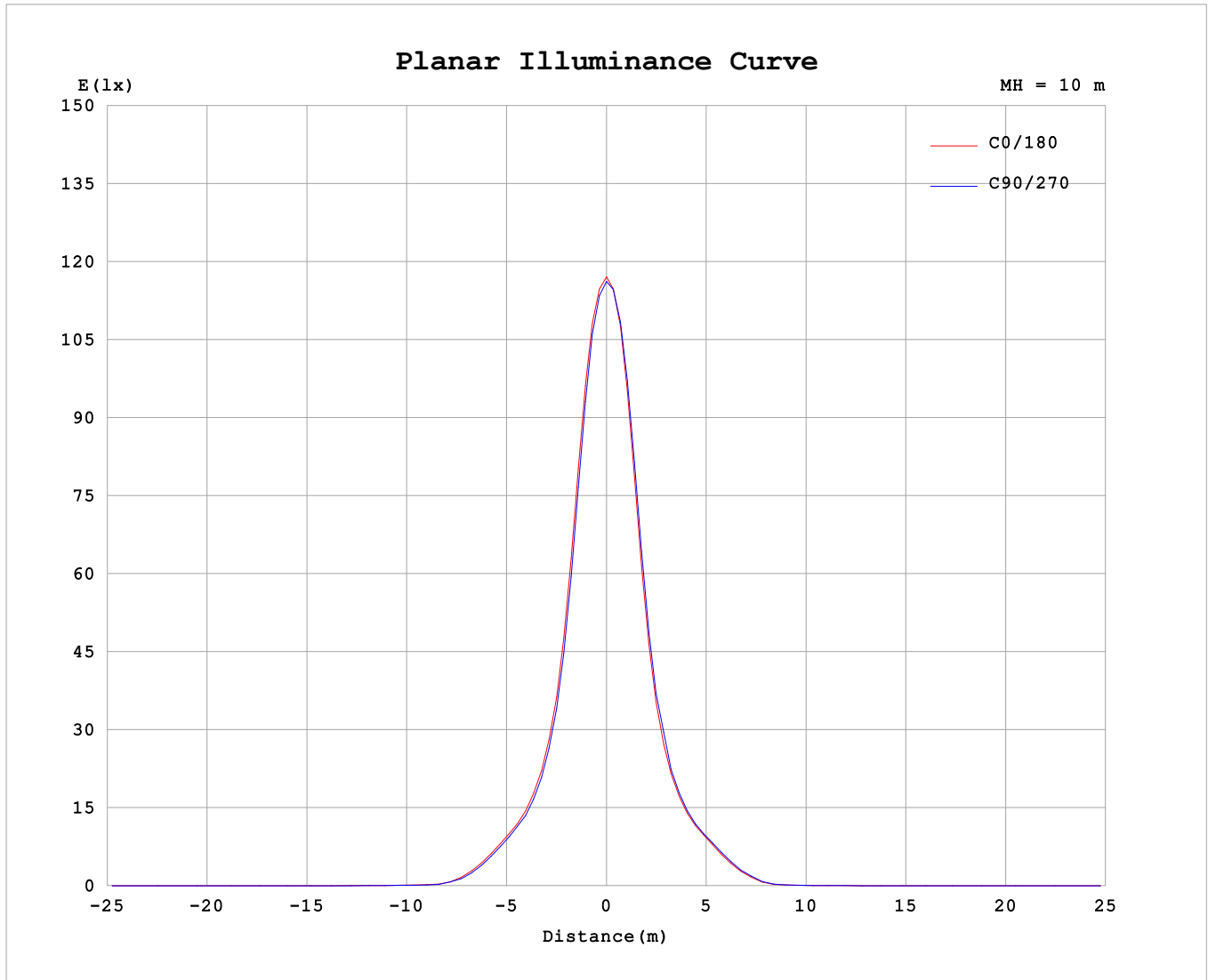
AvgL	cd/m2
L_0~180 (65) av	7806
L_0~180 (75) av	3244
L_0~180 (85) av	1471
L_90~270 (65) av	7910
L_90~270 (75) av	3227
L_90~270 (85) av	1495
L_45 (65) av	7835
L_45 (75) av	3243
L_45 (85) av	1452

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:

```