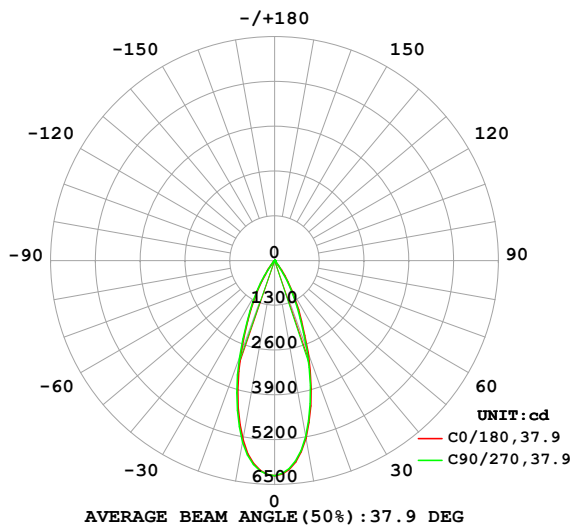


## LUMINAIRE PHOTOMETRIC TEST REPORT

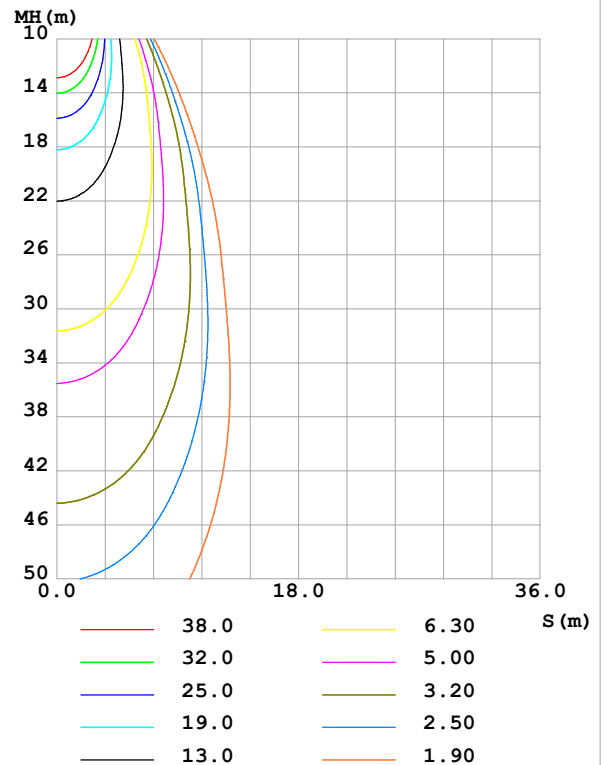
Test:U:230.22V I:0.116A P:24.84W PF:0.934 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-36D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 114.31 lm/W			
MODEL	PW 1205 G7N HE+	I <sub>max</sub> (cd)	6246	S/MH (C0/180)	0.61
NOMINAL POWER (W)	24	LOR (%)	84.9	S/MH (C90/270)	0.62
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	2839.2	η UP, DN (C0-180)	0.0, 41.8
NOMINAL FLUX (lm)	3344.6	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 43.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	230	η down (%)	84.9	CIBSE SHR MAX	0.65

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: 2025-01-07

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	5241	5187	5188	5247	5294	5349	5356	5295	0- 10	550.1	550.1	19.4,16.4
20	2854	2772	2751	2812	2866	2934	2965	2919	10- 20	1129	1680	59.2,50.2
30	987.5	940.9	916.8	924.0	950.8	994.8	1029	1018	20- 30	810.9	2490	87.7,74.5
40	100.5	91.98	89.86	91.24	94.10	100.2	107.5	106.7	30- 40	275.2	2766	97.4,82.7
50	33.00	31.30	30.60	31.00	30.81	31.07	32.42	32.76	40- 50	43.82	2809	99,84
60	12.52	12.40	11.43	10.58	10.65	10.71	10.86	11.09	50- 60	17.61	2827	99.6,84.5
70	5.507	5.447	5.298	5.228	5.351	5.437	5.478	5.429	60- 70	7.798	2835	99.8,84.8
80	1.727	1.657	1.584	1.632	1.645	1.706	1.741	1.687	70- 80	3.627	2838	100,84.9
90	0.2771	0.2739	0.2805	0.2714	0.2620	0.2536	0.2499	0.2509	80- 90	0.7013	2839	100,84.9
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): 2796.6 lm

%lum = 98.5%

%lamp = 83.6%

Conical surface Flux(130deg): 2832.3 lm

%lum = 99.8%

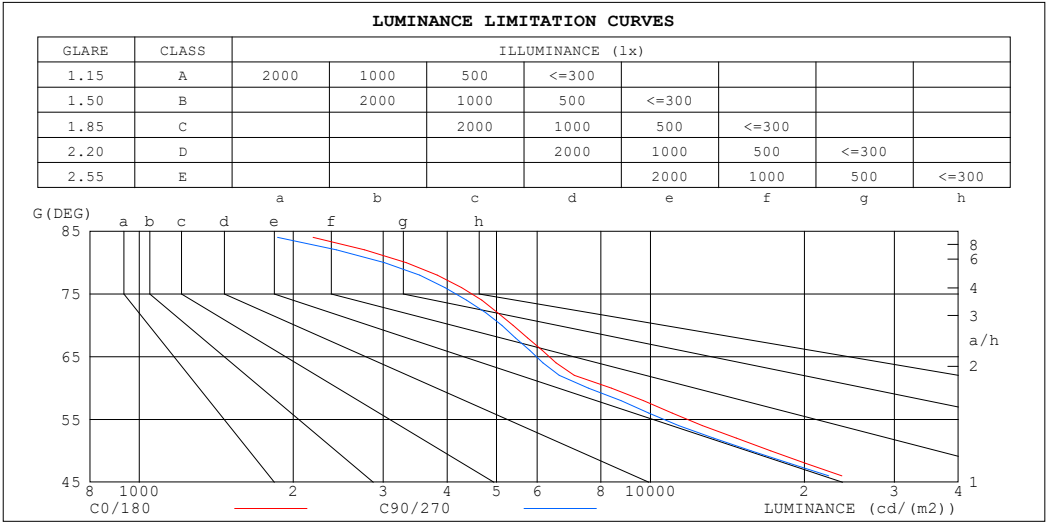
%lamp = 84.7%

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:230.22V I:0.116A P:24.84W PF:0.934 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-36D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2624	2236
80	3329	3018
75	4979	4646
70	5390	5123
65	6779	6391
60	8382	7562
55	12949	11640
50	17187	15747
45	28522	27094

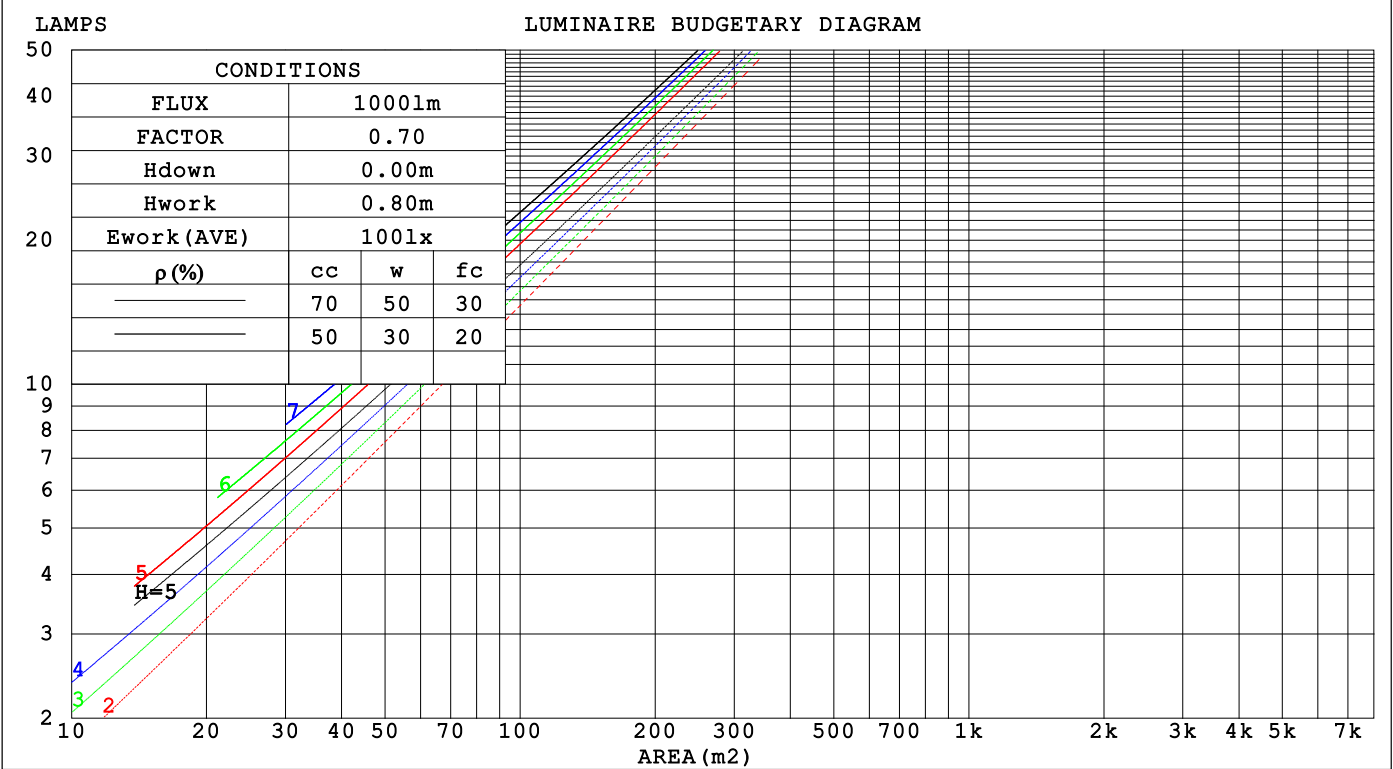
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:28℃  
Operators:Li  
Test Date:2025-01-07

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:230.22V I:0.116A P:24.84W PF:0.934 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0		
Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-36D-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	.94	.94	.94	.90	.90	.90	.87	.87	.87	.85
1.0	.95	.93	.91	.93	.91	.90	.90	.88	.87	.87	.86	.85	.84	.83	.82	.81
2.0	.89	.87	.84	.88	.85	.83	.85	.83	.81	.83	.81	.80	.81	.79	.78	.77
3.0	.85	.81	.78	.83	.80	.78	.81	.79	.76	.79	.77	.75	.77	.76	.74	.73
4.0	.80	.76	.73	.79	.76	.73	.78	.74	.72	.76	.73	.71	.74	.72	.70	.69
5.0	.76	.72	.69	.76	.72	.69	.74	.71	.68	.73	.70	.68	.72	.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	.61	.66	.63	.61	.60
8.0	.66	.62	.59	.66	.62	.59	.65	.61	.59	.64	.61	.59	.64	.61	.58	.57
9.0	.64	.59	.57	.63	.59	.56	.63	.59	.56	.62	.58	.56	.61	.58	.56	.55
10.0	.61	.57	.54	.61	.57	.54	.60	.56	.54	.59	.56	.54	.59	.56	.54	.53



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:230.22V I:0.116A P:24.84W PF:0.934 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-36D-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	.133	.076	.024	.128	.073	.023	.117	.067	.021	.107	.062	.020	.098	.057	.018	
2.0	.126	.069	.021	.121	.067	.021	.112	.062	.019	.104	.058	.018	.096	.055	.017	
3.0	.119	.063	.019	.115	.061	.018	.107	.058	.018	.100	.055	.017	.094	.052	.016	
4.0	.112	.058	.017	.109	.057	.017	.103	.054	.016	.097	.052	.016	.091	.050	.015	
5.0	.107	.054	.016	.104	.053	.016	.098	.051	.015	.093	.049	.015	.088	.047	.014	
6.0	.102	.051	.015	.099	.050	.014	.094	.048	.014	.090	.047	.014	.086	.045	.013	
7.0	.097	.048	.014	.095	.047	.013	.091	.046	.013	.087	.044	.013	.083	.043	.013	
8.0	.093	.045	.013	.091	.045	.013	.087	.044	.012	.084	.042	.012	.080	.041	.012	
9.0	.089	.043	.012	.087	.043	.012	.084	.041	.012	.081	.040	.012	.078	.040	.011	
10.0	.085	.041	.011	.084	.041	.011	.081	.040	.011	.078	.039	.011	.075	.038	.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	.162	.162	.162	.138	.138	.138	.094	.094	.094	.054	.054	.054	.017	.017	.017	
1.0	.144	.134	.124	.123	.115	.107	.084	.079	.074	.049	.046	.043	.016	.015	.014	
2.0	.130	.113	.098	.111	.097	.085	.076	.067	.059	.044	.039	.035	.014	.013	.011	
3.0	.118	.096	.079	.101	.083	.068	.070	.058	.048	.040	.034	.028	.013	.011	.009	
4.0	.109	.084	.064	.093	.072	.056	.064	.050	.039	.037	.029	.023	.012	.010	.008	
5.0	.101	.073	.053	.086	.063	.046	.060	.044	.033	.034	.026	.019	.011	.008	.006	
6.0	.094	.065	.045	.081	.056	.039	.056	.040	.028	.032	.023	.016	.010	.008	.005	
7.0	.088	.059	.038	.076	.051	.033	.052	.036	.023	.030	.021	.014	.010	.007	.005	
8.0	.083	.053	.033	.071	.046	.028	.049	.032	.020	.029	.019	.012	.009	.006	.004	
9.0	.078	.048	.028	.067	.042	.025	.047	.030	.018	.027	.017	.010	.009	.006	.003	
10.0	.074	.045	.025	.064	.039	.022	.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:230.22V I:0.116A P:24.84W PF:0.934 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm										
NAME: T1241-600mA-36D-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	18.6	19.4	18.8	19.6	19.7	18.0	18.8	18.2	18.9	19.1
3H	18.5	19.2	18.7	19.4	19.6	17.9	18.6	18.1	18.8	19.0
4H	18.4	19.1	18.7	19.4	19.6	17.8	18.5	18.1	18.7	18.9
6H	18.4	19.0	18.7	19.3	19.5	17.7	18.4	18.0	18.6	18.9
8H	18.3	19.0	18.6	19.2	19.5	17.7	18.3	18.0	18.6	18.8
12H	18.3	18.9	18.6	19.2	19.4	17.7	18.3	18.0	18.5	18.8
4H 2H	18.4	19.1	18.7	19.3	19.5	17.8	18.5	18.0	18.7	18.9
3H	18.3	18.9	18.6	19.2	19.4	17.7	18.3	18.0	18.6	18.8
4H	18.2	18.8	18.6	19.1	19.4	17.6	18.2	18.0	18.5	18.8
6H	18.2	18.7	18.5	19.0	19.3	17.6	18.1	17.9	18.4	18.7
8H	18.1	18.6	18.5	18.9	19.3	17.5	18.0	17.9	18.3	18.7
12H	18.1	18.5	18.5	18.9	19.3	17.5	17.9	17.9	18.3	18.6
8H 4H	18.1	18.6	18.5	18.9	19.3	17.5	18.0	17.9	18.3	18.7
6H	18.0	18.4	18.5	18.8	19.2	17.4	17.8	17.9	18.2	18.6
8H	18.0	18.3	18.4	18.7	19.2	17.4	17.7	17.8	18.1	18.6
12H	17.9	18.2	18.4	18.7	19.1	17.3	17.6	17.8	18.1	18.5
12H 4H	18.1	18.5	18.5	18.9	19.2	17.5	17.9	17.9	18.2	18.6
6H	18.0	18.3	18.4	18.7	19.2	17.4	17.7	17.8	18.1	18.6
8H	17.9	18.2	18.4	18.7	19.1	17.3	17.6	17.8	18.1	18.5
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 4.4 / - 4.3					+ 4.5 / - 4.4				
1.5H	+ 6.3 / - 3.5					+ 6.4 / - 3.5				
2.0H	+ 3.2 / - 2.5					+ 3.2 / - 2.4				

CIE Pub.117, 3345 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 4.2$ )  
 Area: 0.00301754 m<sup>2</sup>

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:230.22V I:0.116A P:24.84W PF:0.934 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-36D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

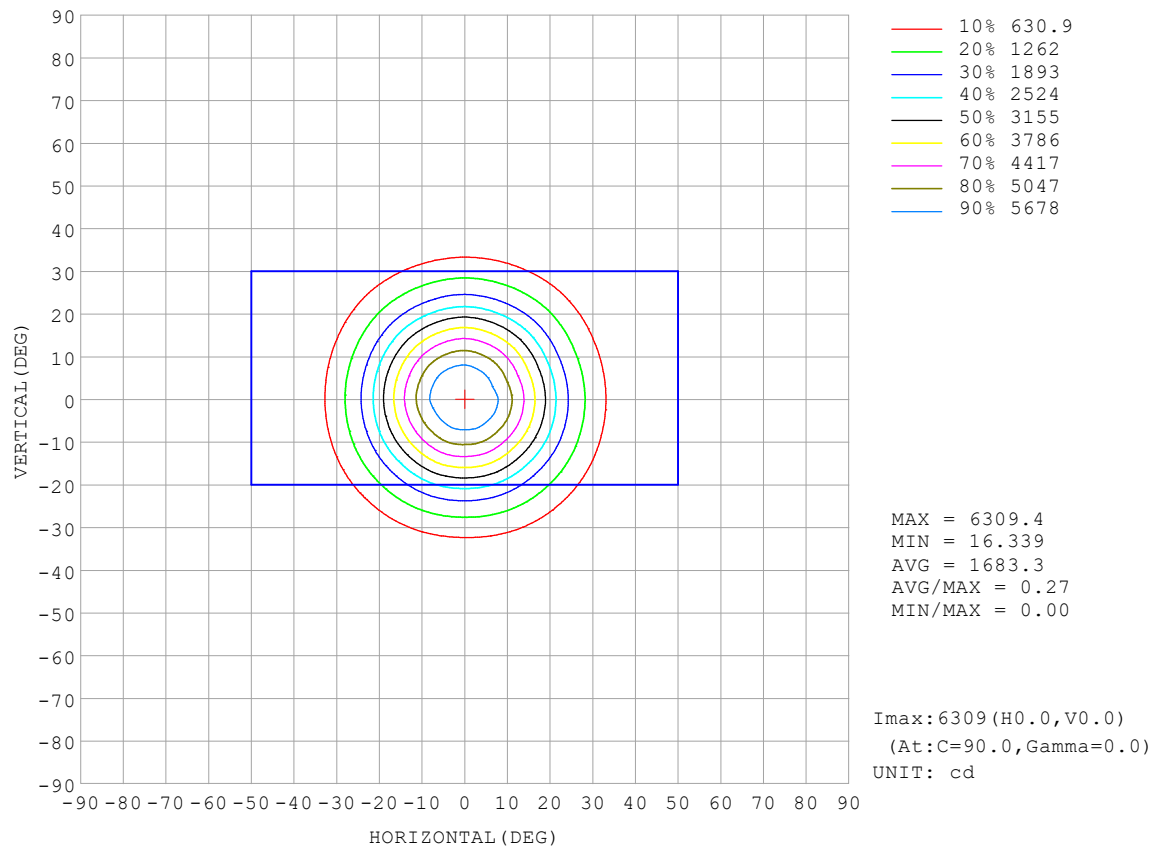
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	76	71	68	76	71	68	75	71	68	65
0.80	82	78	75	82	78	75	81	77	74	72
1.00	86	81	78	85	81	78	84	81	78	75
1.25	89	85	82	88	84	82	86	83	81	78
1.50	91	87	85	90	87	84	88	85	83	80
2.00	93	90	87	92	89	86	89	87	85	81
2.50	94	91	89	93	90	88	90	88	86	82
3.00	95	93	91	94	92	90	91	89	88	82
4.00	97	95	93	95	93	92	92	91	90	84
5.00	98	96	95	96	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: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 28°C  
 Operators: Li  
 Test Date: 2025-01-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:230.22V I:0.116A P:24.84W PF:0.934 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-36D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

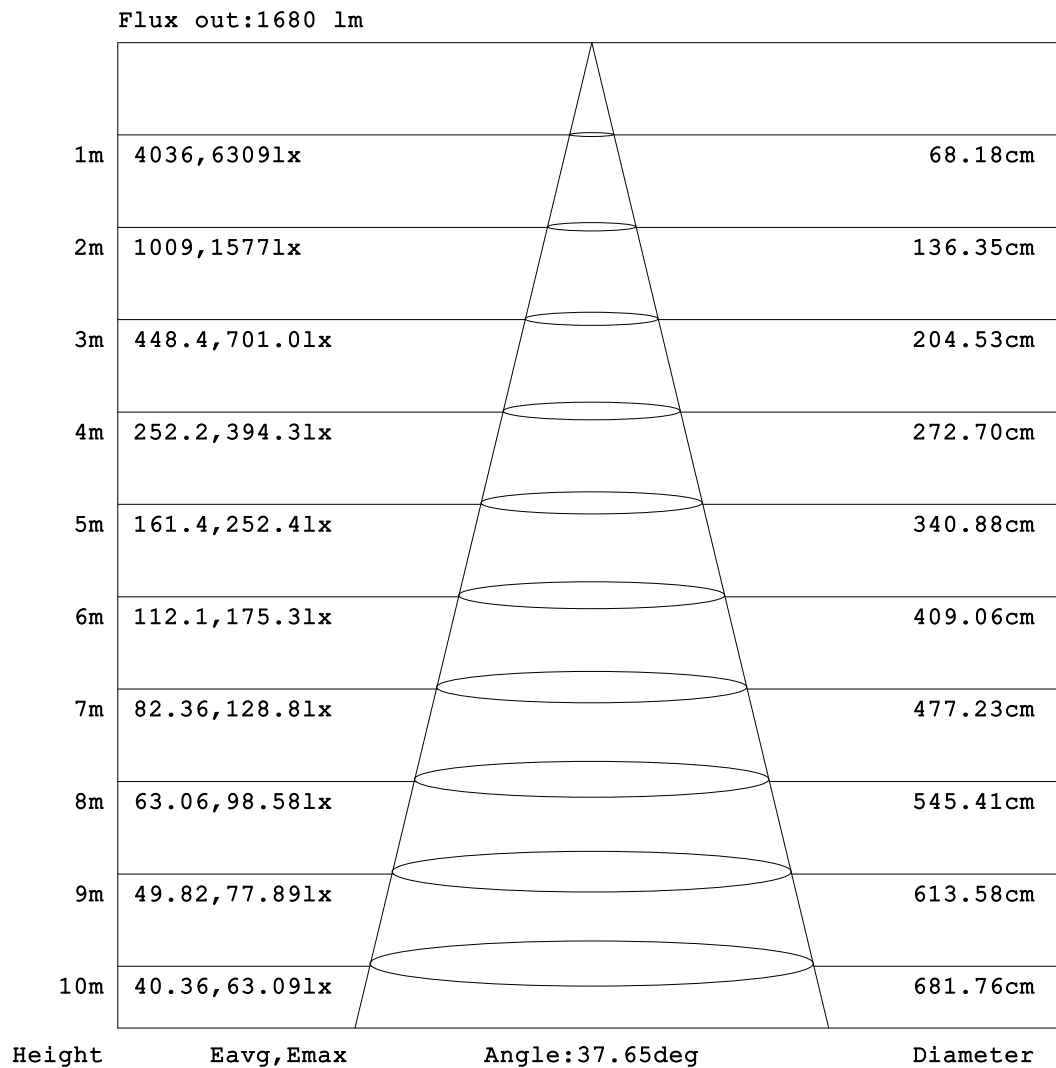


C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 28°C  
 Operators: Li  
 Test Date: 2025-01-07

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:

### AAI Figure

Test:U:230.22V I:0.116A P:24.84W PF:0.934 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-36D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		



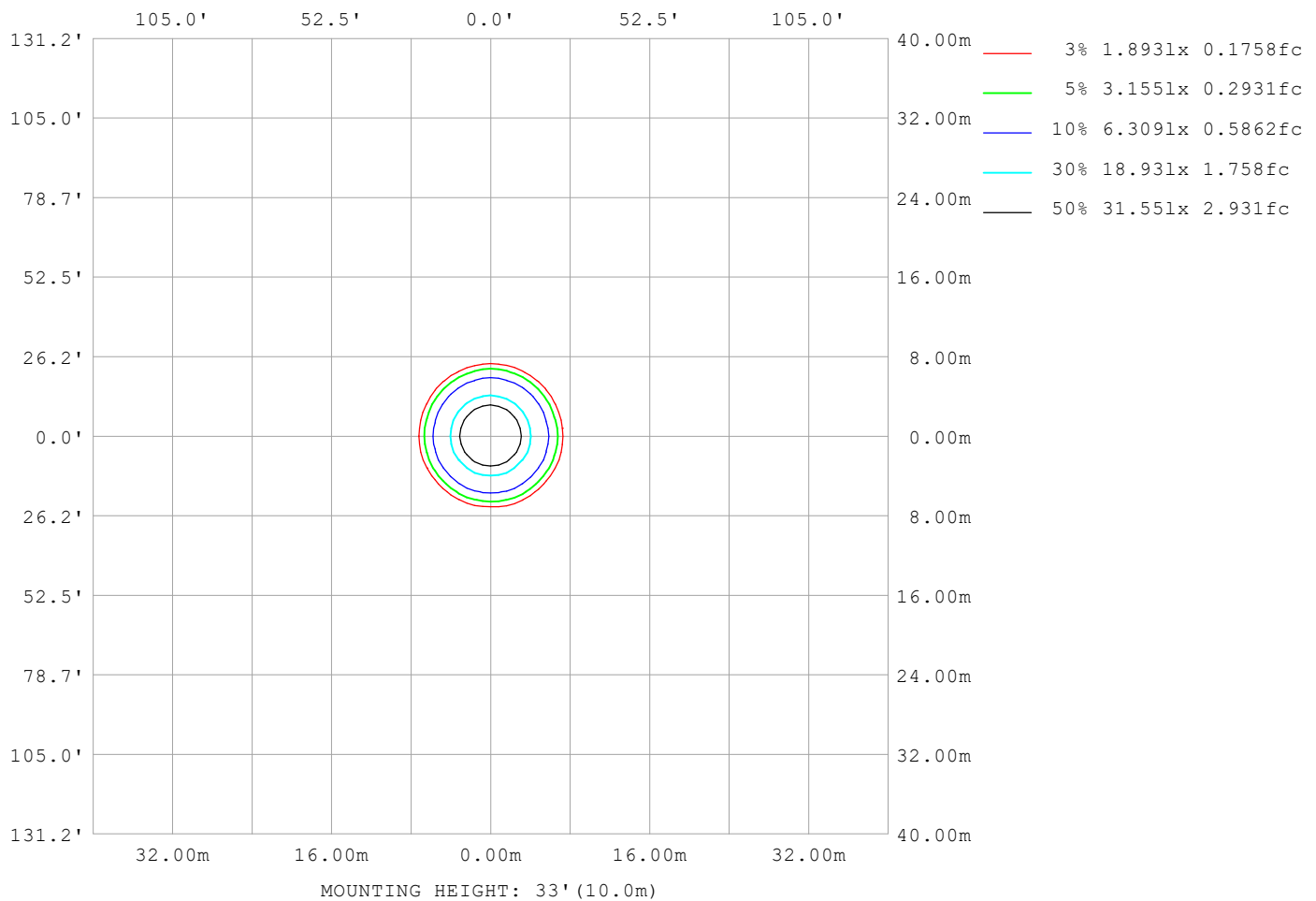
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:230.22V I:0.116A P:24.84W PF:0.934 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-36D-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:230.22V I:0.116A P:24.84W PF:0.934 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3344.6x1 lm		
NAME: T1241-600mA-36D-3090		
SPEC.: Xi 24W/600mA		
MFR.: SOTEN		

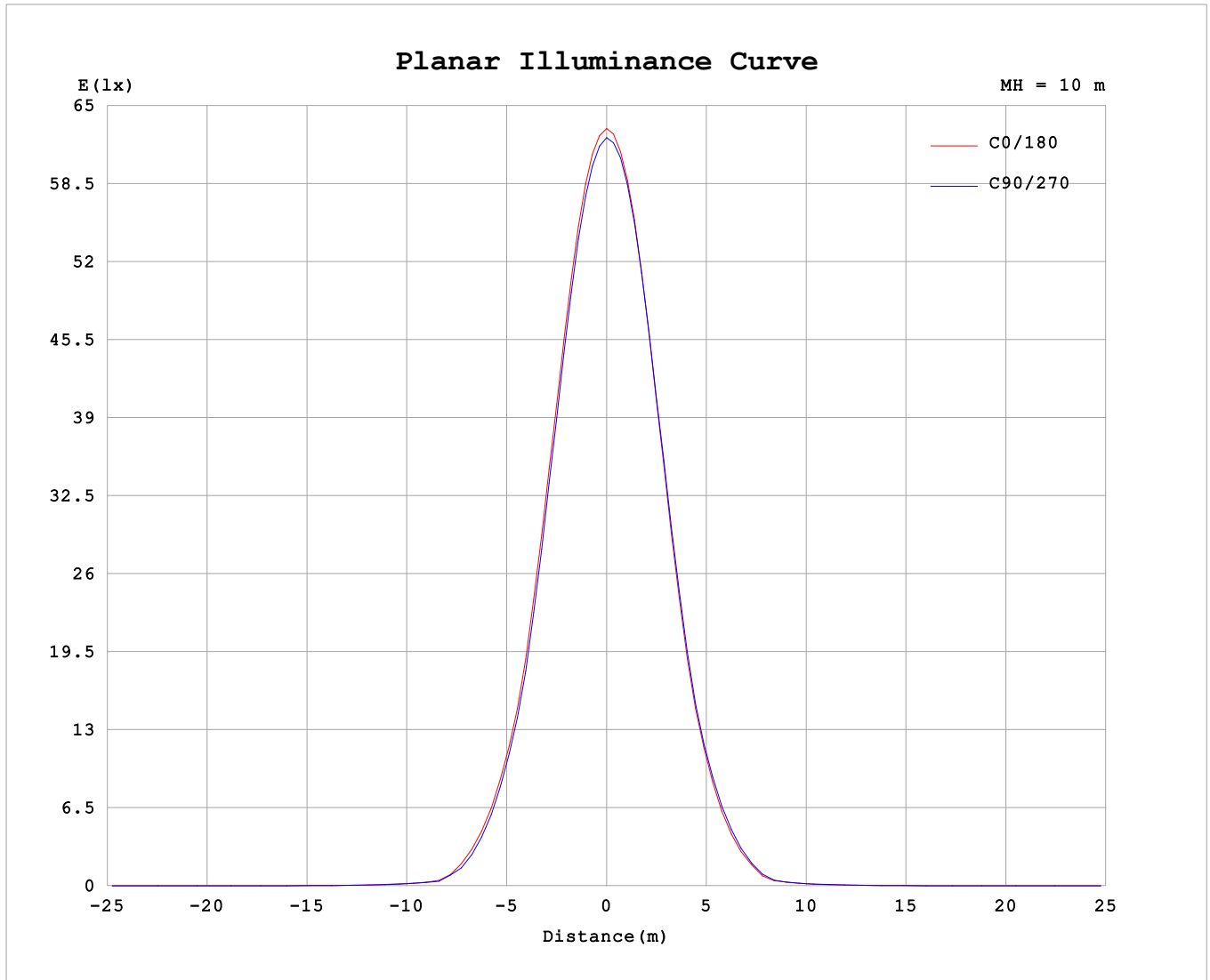
AvgL	cd/m2
L_0~180 (65) av	6127
L_0~180 (75) av	4347
L_0~180 (85) av	1646
L_90~270 (65) av	6012
L_90~270 (75) av	4333
L_90~270 (85) av	1563
L_45 (65) av	6017
L_45 (75) av	4361
L_45 (85) av	1563

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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:

```