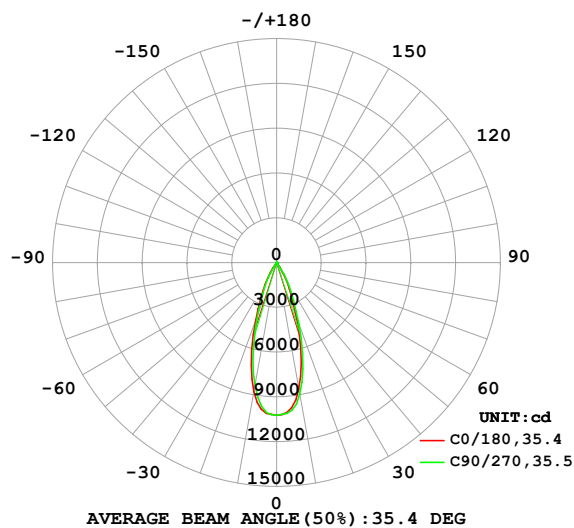


LUMINAIRE PHOTOMETRIC TEST REPORT

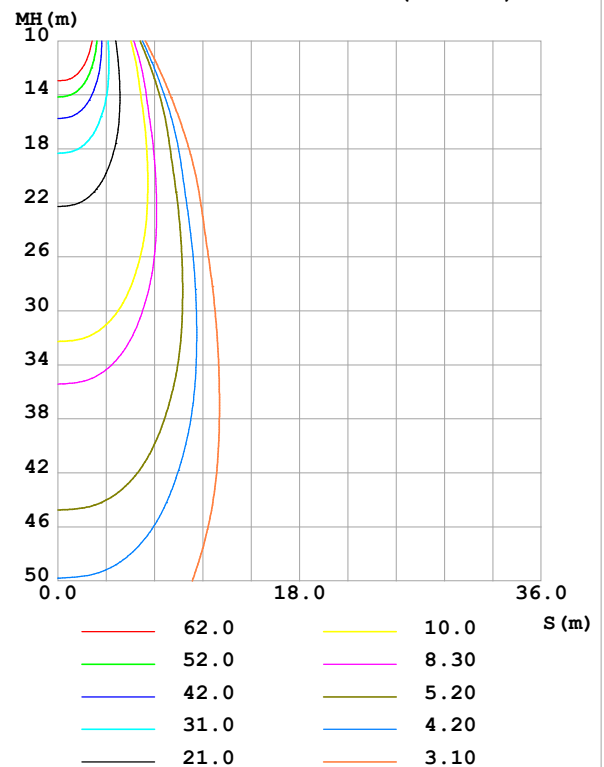
Test:U:230.16V I:0.157A P:33.68W PF:0.930 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:4694.6x1 lm		
NAME: T1242-900mA-36D-3090		
SPEC.: Xi 42W/a0.9-1.05A 40V		
MFR.: SOTEN		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 118.74 lm/W			
MODEL	PW 1208	Imax (cd)	10232	S/MH (C0/180)	0.58
NOMINAL POWER (W)	36	LOR (%)	85.2	S/MH (C90/270)	0.55
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	3999.4	η UP, DN (C0-180)	0.0, 45.1
NOMINAL FLUX (lm)	4694.6	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 40.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	230	η down (%)	85.2	CIBSE SHR MAX	0.60

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 25.3 °C
Operators: Li
Test Date: 2024-08-29

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity: 65.0%
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	861.2	872.9	896.0	921.9	877.8	862.5	836.0	815.8	0- 10	911.5	911.5	22.8,19.4
20	393.6	408.9	440.1	473.1	412.0	393.3	370.1	347.3	10- 20	1756	2668	66.7,56.8
30	112.8	120.3	133.7	150.0	123.3	112.9	100.3	88.15	20- 30	1081	3748	93.7,79.8
40	0.9141	1.033	1.283	1.571	0.9723	0.8997	0.8397	0.7805	30- 40	242.7	3991	99.8,85
50	0.3310	0.3518	0.3840	0.4167	0.3542	0.3415	0.3368	0.3128	40- 50	4.536	3996	99.9,85.1
60	0.1415	0.1478	0.1626	0.1748	0.1522	0.1490	0.1413	0.1276	50- 60	2.108	3998	100,85.2
70	0.0640	0.0678	0.0721	0.0753	0.0634	0.0616	0.0566	0.0515	60- 70	1.004	3999	100,85.2
80	0.0310	0.0329	0.0332	0.0330	0.0265	0.0248	0.0245	0.0242	70- 80	0.4586	3999	100,85.2
90	0.0270	0.0258	0.0266	0.0258	0.0255	0.0248	0.0245	0.0252	80- 90	0.2822	3999	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): 3994.1 lm

%lum = 99.9%

%lamp = 85.1%

Conical surface Flux(130deg): 3998.3 lm

%lum = 100.0%

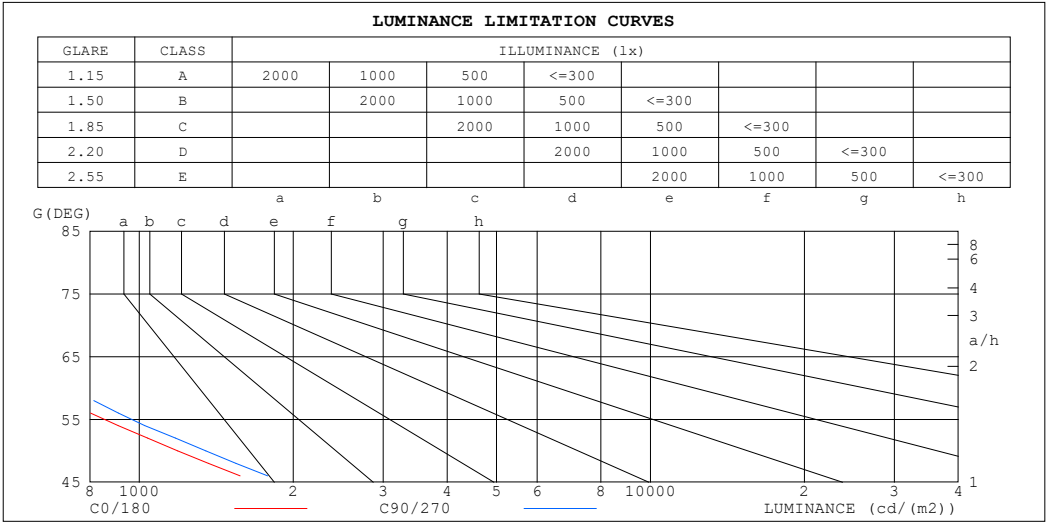
%lamp = 85.2%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:25.3℃
 Operators:Li
 Test Date:2024-08-29

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:65.0%
 Test Distance:8.458m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.16V I:0.157A P:33.68W PF:0.930 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:4694.6x1 lm		
NAME: T1242-900mA-36D-3090		
SPEC.: Xi 42W/a0.9-1.05A 40V		
MFR.: SOTEN		



LUMINANCE cd/ (m2)		
G (DEG)	C0/180	C90/270
85	714	688
80	412	432
75	419	473
70	432	476
65	557	623
60	653	734
55	931	1050
50	1189	1348
45	1862	2099

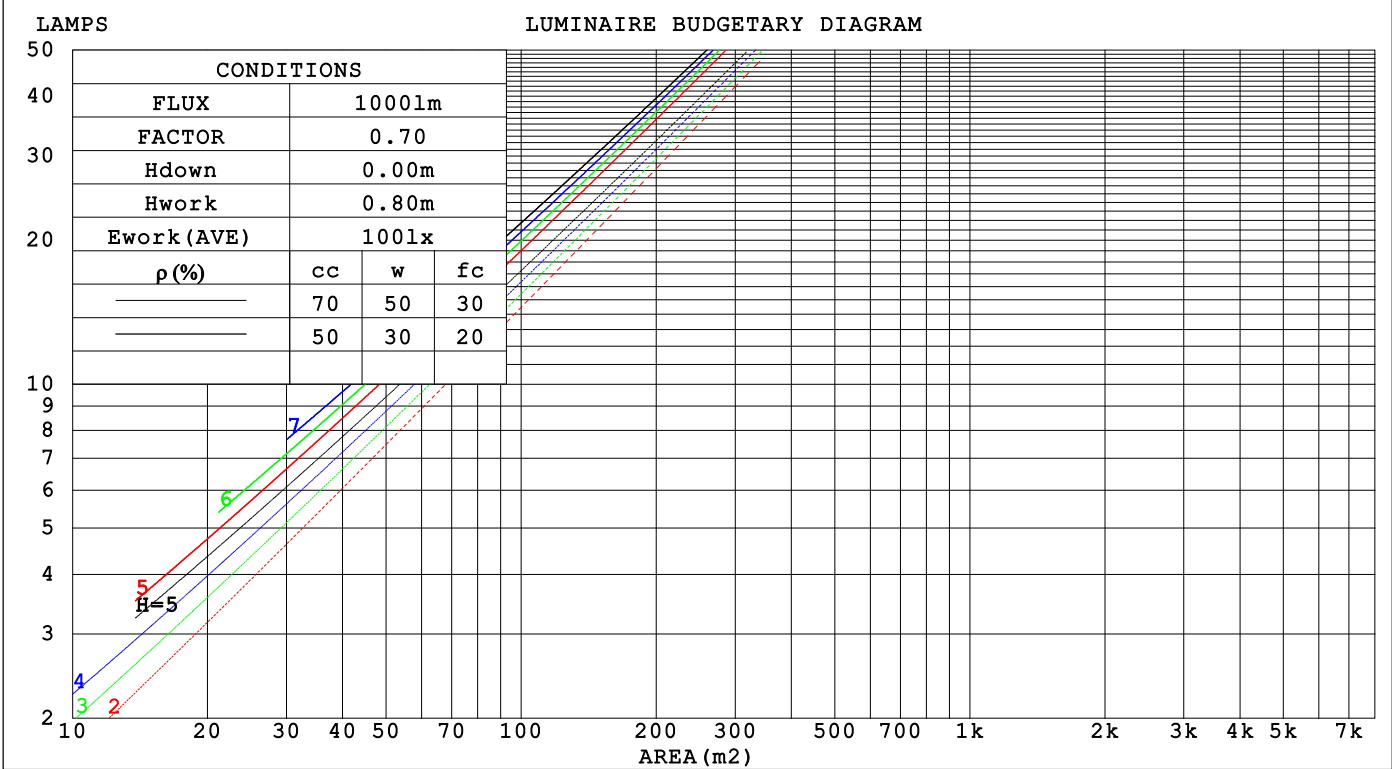
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:Li
Test Date:2024-08-29

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity:65.0%
Test Distance:8.458m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.16V I:0.157A P:33.68W PF:0.930 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0		
Lamp Flux:4694.6x1 lm		
NAME: T1242-900mA-36D-3090		
SPEC.: Xi 42W/a0.9-1.05A 40V		
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	.86	.84	.84	.83	.82
2.0	.91	.88	.86	.89	.87	.85	.87	.85	.83	.84	.82	.81	.82	.81	.79	.78
3.0	.86	.83	.80	.85	.82	.80	.83	.80	.78	.81	.79	.77	.79	.77	.76	.75
4.0	.82	.79	.76	.81	.78	.75	.80	.77	.74	.78	.76	.74	.77	.74	.73	.72
5.0	.79	.75	.72	.78	.74	.72	.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	.65	.72	.68	.65	.71	.67	.65	.70	.67	.65	.69	.66	.64	.63
8.0	.69	.65	.63	.69	.65	.63	.68	.65	.62	.67	.64	.62	.67	.64	.62	.61
9.0	.67	.63	.60	.66	.63	.60	.66	.62	.60	.65	.62	.60	.64	.62	.60	.59
10.0	.64	.61	.58	.64	.60	.58	.63	.60	.58	.63	.60	.58	.62	.60	.57	.57



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:Li
Test Date:2024-08-29

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity:65.0%
Test Distance:8.458m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.16V I:0.157A P:33.68W PF:0.930 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:4694.6x1 lm		
NAME: T1242-900mA-36D-3090		
SPEC.: Xi 42W/a0.9-1.05A 40V		
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	.126	.072	.023	.120	.069	.022	.110	.063	.020	.100	.058	.018	.091	.053	.017															
2.0	.118	.065	.020	.113	.062	.019	.104	.058	.018	.096	.054	.017	.089	.050	.016															
3.0	.111	.059	.018	.107	.057	.017	.099	.054	.016	.093	.051	.016	.086	.048	.015															
4.0	.105	.054	.016	.101	.053	.016	.095	.050	.015	.089	.048	.014	.084	.046	.014															
5.0	.099	.051	.015	.096	.049	.014	.091	.047	.014	.086	.045	.013	.081	.043	.013															
6.0	.094	.047	.014	.092	.046	.013	.087	.045	.013	.083	.043	.013	.079	.042	.012															
7.0	.090	.045	.013	.088	.044	.012	.084	.042	.012	.080	.041	.012	.077	.040	.012															
8.0	.086	.042	.012	.084	.042	.012	.081	.040	.012	.077	.039	.011	.074	.038	.011															
9.0	.083	.040	.011	.081	.040	.011	.078	.039	.011	.075	.038	.011	.072	.037	.011															
10.0	.080	.038	.011	.078	.038	.011	.075	.037	.010	.073	.036	.010	.070	.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	.100	.083	.070	.069	.058	.049	.040	.034	.029	.013	.011	.009	
4.0	.107	.084	.066	.092	.072	.057	.063	.050	.040	.037	.029	.024	.012	.010	.008	
5.0	.099	.073	.055	.085	.063	.048	.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	.074	.050	.034	.051	.035	.024	.030	.021	.014	.010	.007	.005	
8.0	.080	.053	.034	.069	.046	.029	.048	.032	.021	.028	.019	.012	.009	.006	.004	
9.0	.076	.048	.029	.065	.042	.025	.045	.029	.018	.026	.017	.011	.009	.006	.004	
10.0	.072	.044	.026	.062	.038	.022	.043	.027	.016	.025	.016	.009	.008	.005	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:25.3℃
 Operators:Li
 Test Date:2024-08-29

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:65.0%
 Test Distance:8.458m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.16V I:0.157A P:33.68W PF:0.930 Freq:49.99Hz										
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:4694.6x1 lm										
NAME: T1242-900mA-36D-3090										
SPEC.: Xi 42W/a0.9-1.05A 40V										
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	14.3	15.0	14.5	15.2	15.3	16.2	16.9	16.4	17.0	17.2
3H	14.1	14.8	14.4	15.0	15.2	16.0	16.7	16.2	16.9	17.1
4H	14.0	14.7	14.3	14.9	15.1	15.9	16.6	16.2	16.8	17.0
6H	13.9	14.5	14.2	14.8	15.0	15.8	16.4	16.1	16.7	16.9
8H	13.9	14.5	14.2	14.7	15.0	15.8	16.4	16.1	16.6	16.9
12H	13.9	14.4	14.2	14.7	14.9	15.7	16.3	16.1	16.6	16.8
4H 2H	14.0	14.7	14.3	14.9	15.1	15.9	16.6	16.2	16.8	17.0
3H	13.9	14.4	14.2	14.7	14.9	15.7	16.3	16.1	16.6	16.8
4H	13.8	14.3	14.1	14.6	14.9	15.7	16.2	16.0	16.5	16.8
6H	13.7	14.1	14.0	14.4	14.8	15.6	16.0	15.9	16.3	16.7
8H	13.6	14.0	14.0	14.4	14.7	15.5	15.9	15.9	16.3	16.6
12H	13.6	13.9	14.0	14.3	14.7	15.4	15.8	15.8	16.2	16.6
8H 4H	13.6	14.0	14.0	14.4	14.7	15.5	15.9	15.9	16.3	16.6
6H	13.5	13.8	13.9	14.2	14.6	15.4	15.7	15.8	16.1	16.5
8H	13.4	13.7	13.9	14.2	14.6	15.3	15.6	15.8	16.1	16.5
12H	13.4	13.6	13.8	14.1	14.6	15.3	15.5	15.7	16.0	16.4
12H 4H	13.6	13.9	14.0	14.3	14.7	15.4	15.8	15.8	16.2	16.6
6H	13.4	13.7	13.9	14.2	14.6	15.3	15.6	15.8	16.1	16.5
8H	13.4	13.6	13.8	14.1	14.6	15.3	15.5	15.7	16.0	16.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 3.8 / - 3.2					+ 6.5 / - 7.7				
1.5H	+ 5.8 / - 2.6					+ 9.1 / - 6.8				
2.0H	+ 2.3 / - 1.4					+ 2.5 / - 1.6				

CIE Pub.117, 4695 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.4$)
 Area: 0.00441562 m²

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:25.3℃
 Operators:Li
 Test Date:2024-08-29

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:65.0%
 Test Distance:8.458m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test: U:230.16V I:0.157A P:33.68W PF:0.930 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:4694.6x1 lm		
NAME: T1242-900mA-36D-3090		
SPEC.: Xi 42W/a0.9-1.05A 40V		
MFR.: SOTEN		

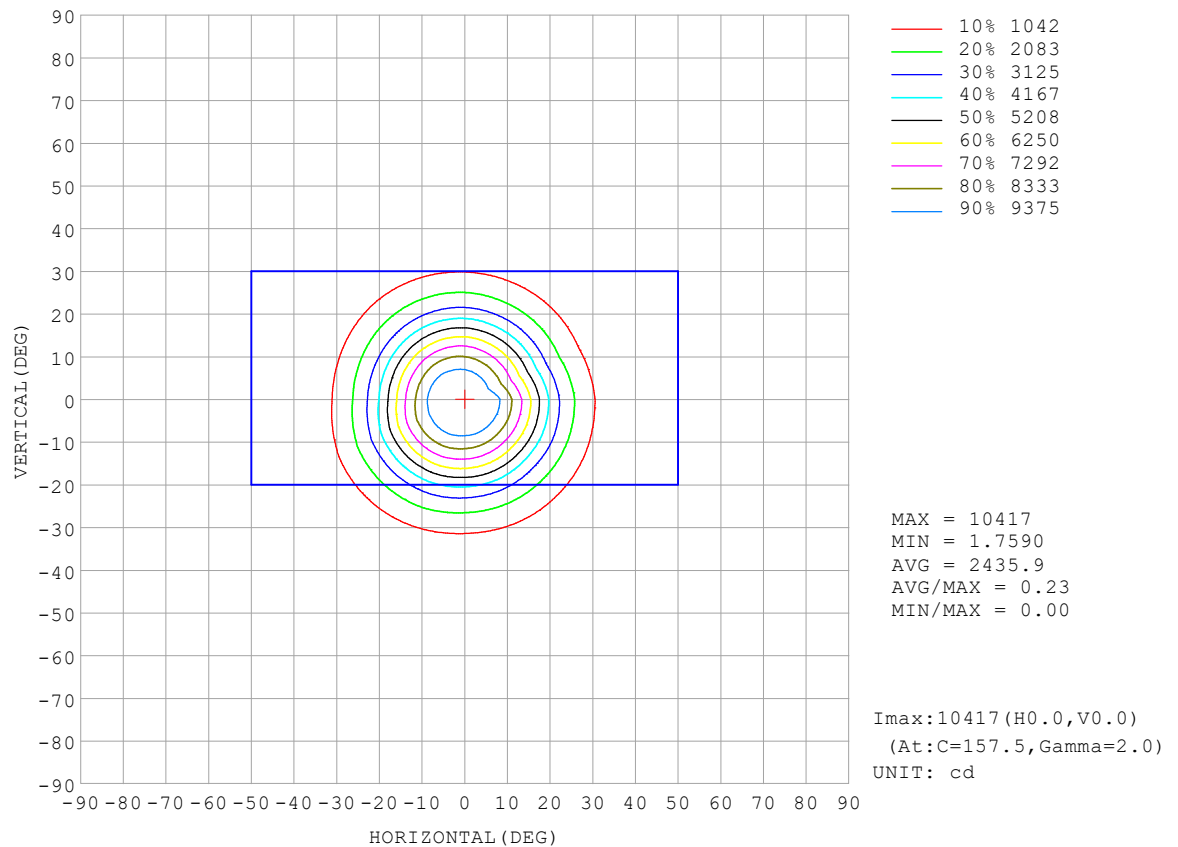
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	78	73	70	78	73	70	77	73	70	67
0.80	84	79	77	83	79	77	82	79	76	73
1.00	87	83	80	86	82	80	85	82	79	76
1.25	90	86	83	89	85	83	87	85	82	79
1.50	92	88	86	91	88	85	89	86	85	81
2.00	94	91	88	93	90	87	90	88	86	82
2.50	95	92	90	94	91	89	91	89	87	83
3.00	96	93	91	95	92	90	92	90	89	83
4.00	98	96	94	96	94	93	93	92	90	85
5.00	99	97	96	97	95	94	94	93	92	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: MEDIUM
 Temperature: 25.3°C
 Operators: Li
 Test Date: 2024-08-29

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 γ Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 65.0%
 Test Distance: 8.458m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.16V I:0.157A P:33.68W PF:0.930 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:4694.6x1 lm		
NAME: T1242-900mA-36D-3090		
SPEC.: Xi 42W/a0.9-1.05A 40V		
MFR.: SOTEN		

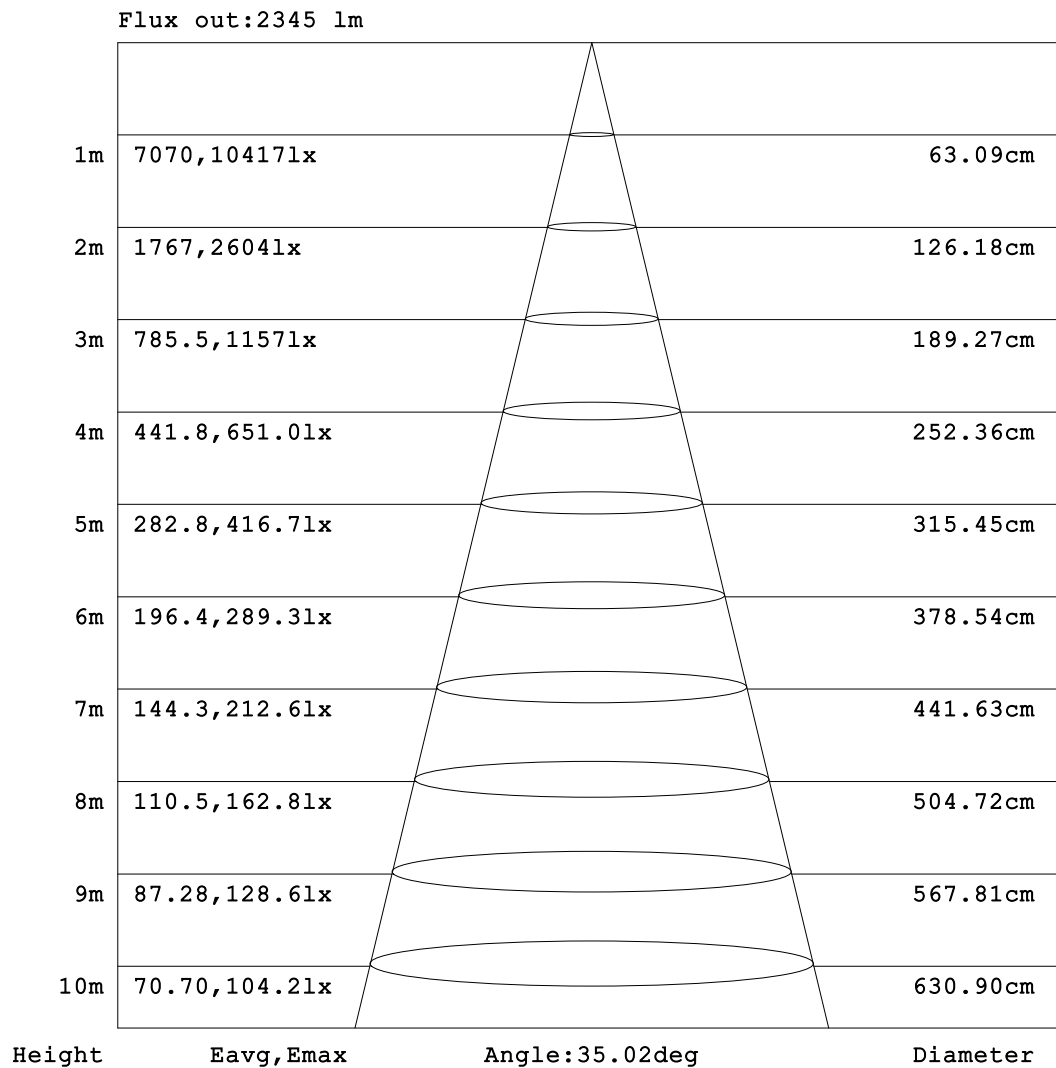


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:25.3℃
 Operators:Li
 Test Date:2024-08-29

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:65.0%
 Test Distance:8.458m [K=1.0000]
 Remarks:

AAI Figure

Test:U:230.16V I:0.157A P:33.68W PF:0.930 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:4694.6x1 lm		
NAME: T1242-900mA-36D-3090		
SPEC.: Xi 42W/a0.9-1.05A 40V		
MFR.: SOTEN		



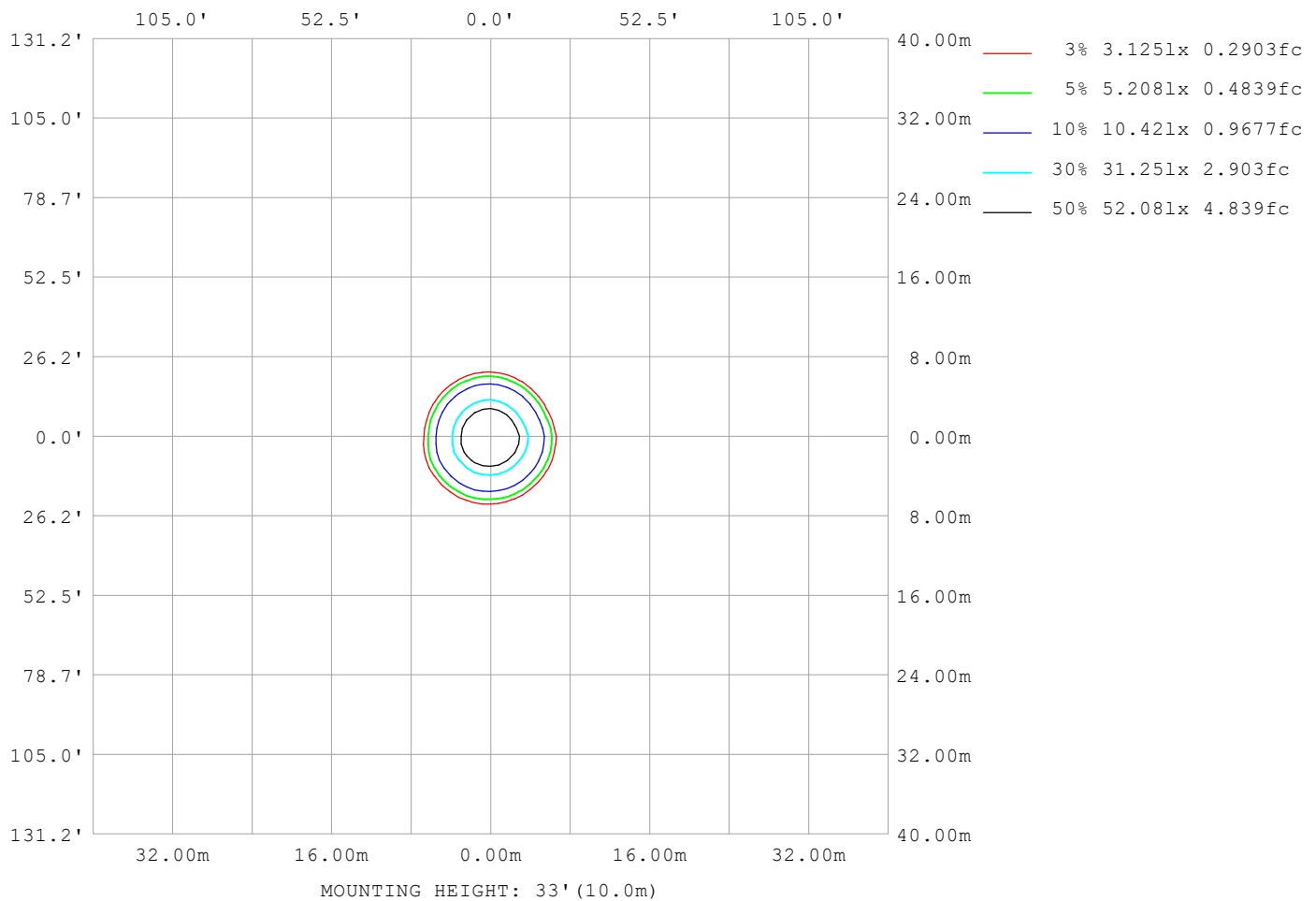
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators: Li
 Test Date: 2024-08-29

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 65.0%
 Test Distance: 8.458m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test: U:230.16V I:0.157A P:33.68W PF:0.930 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:4694.6x1 lm		
NAME: T1242-900mA-36D-3090		
SPEC.: Xi 42W/a0.9-1.05A 40V		
MFR.: SOTEN		



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators: Li
 Test Date: 2024-08-29

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 65.0%
 Test Distance: 8.458m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:230.16V I:0.157A P:33.68W PF:0.930 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:4694.6x1 lm		
NAME: T1242-900mA-36D-3090		
SPEC.: Xi 42W/a0.9-1.05A 40V		
MFR.: SOTEN		

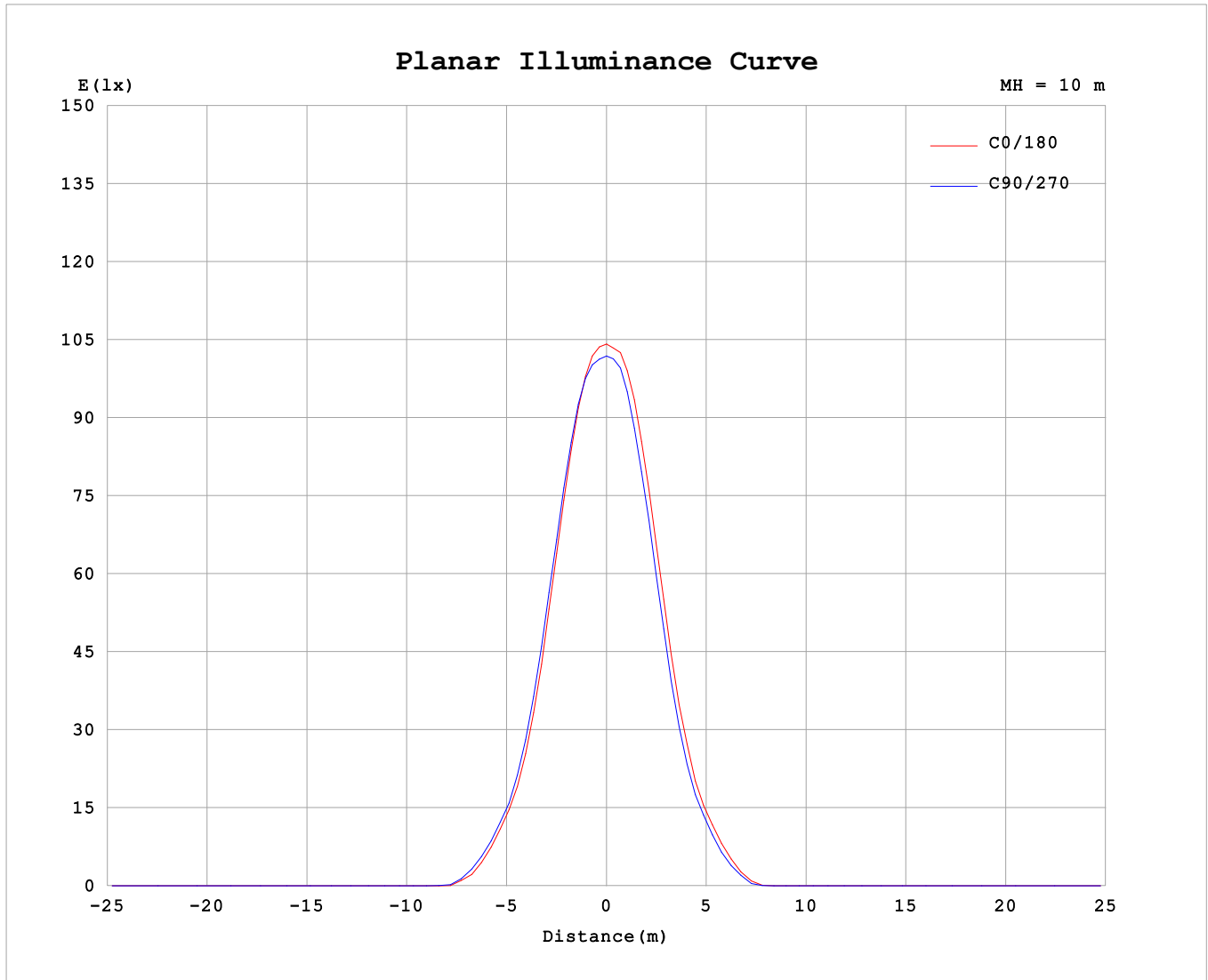
AvgL	cd/m2
L_0~180 (65) av	519
L_0~180 (75) av	367
L_0~180 (85) av	681
L_90~270 (65) av	530
L_90~270 (75) av	380
L_90~270 (85) av	662
L_45 (65) av	528
L_45 (75) av	360
L_45 (85) av	655

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:25.3℃
 Operators:Li
 Test Date:2024-08-29

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:65.0%
 Test Distance:8.458m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators: Li
Test Date: 2024-08-29

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity: 65.0%
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:65.0%
Test Distance:8.458m [K=1.0000]
Remarks:

```