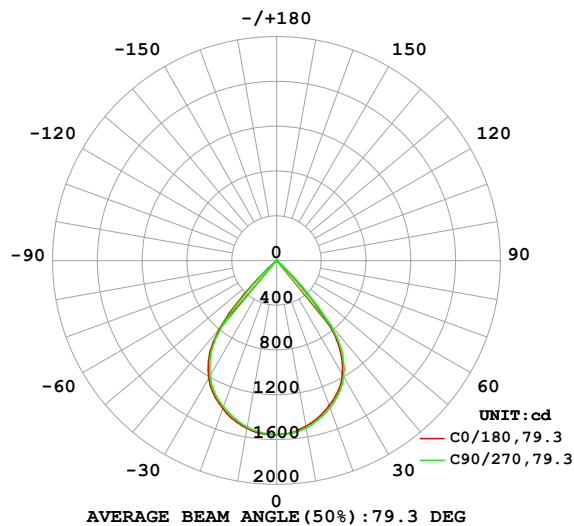


## LUMINAIRE PHOTOMETRIC TEST REPORT

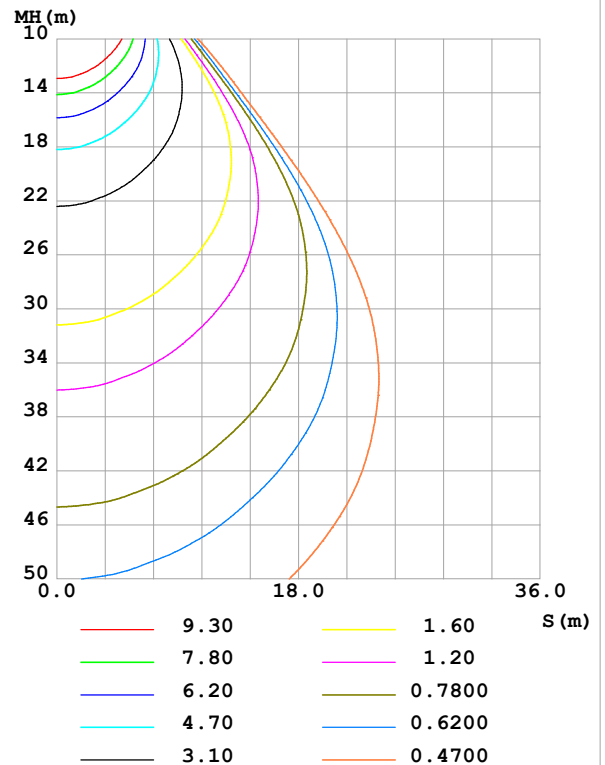
Test:U:229.61V I:0.065A P:14.48W PF:0.975 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2454.1x1 lm		
NAME: T1271-80D-3090-silver		
SPEC.: KGP 16W/400mA		
MFR.: SOTEN		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 155.47 lm/W			
MODEL	JF 2835	I <sub>max</sub> (cd)	1558	S/MH (C0/180)	1.16
NOMINAL POWER (W)	15	LOR (%)	91.7	S/MH (C90/270)	1.15
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	2250.7	η UP, DN (C0-180)	0.0, 45.6
NOMINAL FLUX (lm)	2454.1	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 46.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	91.7	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25°C  
Operators: LI  
Test Date: 2025-06-18

γ Range: 0 - 90DEG  
γ Interval: 2.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
Humidity: 65.0%  
Test Distance: 8.300m [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	1504	1513	1519	1525	1523	1521	1513	1512	0- 10	146.7	146.7	6.52, 5.98
20	1378	1404	1396	1416	1405	1414	1392	1401	10- 20	413.2	559.9	24.9, 22.8
30	1174	1261	1197	1274	1215	1272	1192	1258	20- 30	609.7	1170	52, 47.7
40	694.0	1017	745.7	1042	799.6	1042	752.3	1013	30- 40	675.2	1845	82, 75.2
50	14.45	339.8	21.40	402.6	36.28	398.3	20.79	351.6	40- 50	376.0	2221	98.7, 90.5
60	0.3174	0.6418	0.3281	0.8828	0.2853	0.9941	0.2960	0.7153	50- 60	29.49	2250	100, 91.7
70	0.1559	0.1404	0.1457	0.1301	0.1304	0.1647	0.1415	0.1663	60- 70	0.2008	2250	100, 91.7
80	0.1039	0.0988	0.1040	0.0989	0.1189	0.1362	0.1184	0.1405	70- 80	0.1274	2251	100, 91.7
90	0.0935	0.1403	0.0936	0.1300	0.1143	0.1507	0.1092	0.1560	80- 90	0.1210	2251	100, 91.7
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): 2136.4 lm

%lum = 94.9%

%lamp = 87.1%

Conical surface Flux(130deg): 2250.4 lm

%lum = 100.0%

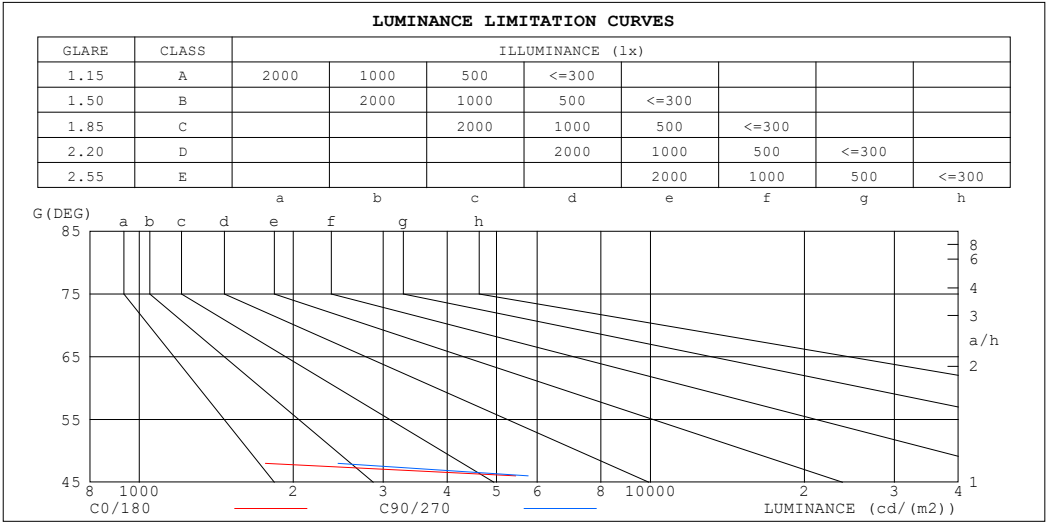
%lamp = 91.7%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25℃  
 Operators: LI  
 Test Date: 2025-06-18

γ Range: 0 - 90DEG  
 γ Interval: 2.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity: 65.0%  
 Test Distance: 8.300m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:229.61V I:0.065A P:14.48W PF:0.975 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2454.1x1 lm		
NAME: T1271-80D-3090-silver		
SPEC.: KGP 16W/400mA		
MFR.: SOTEN		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	25	24
80	13	13
75	11	10
70	10	9
65	11	11
60	14	15
55	105	131
50	500	740
45	9052	10603

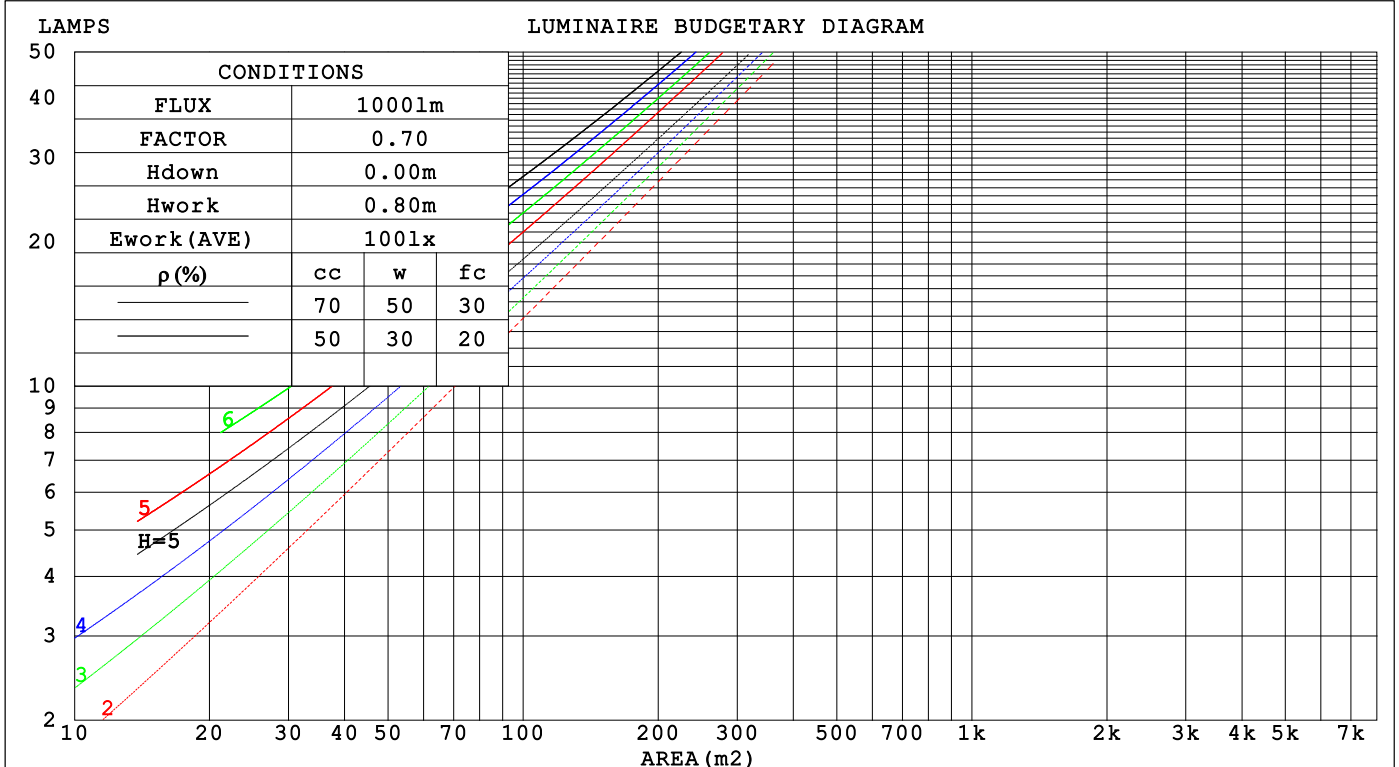
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25℃  
Operators:LI  
Test Date:2025-06-18

γ Range: 0 - 90DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
Humidity:65.0%  
Test Distance:8.300m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.61V I:0.065A P:14.48W PF:0.975 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2454.1lx1 lm		
NAME: T1271-80D-3090-silver		
SPEC.: KGP 16W/400mA		
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	1.09	1.09	1.09	1.07	1.07	1.07	1.02	1.02	1.02	.98	.98	.98	.94	.94	.94	.92
1.0	1.01	.98	.96	.99	.97	.94	.95	.93	.92	.92	.90	.89	.88	.87	.86	.85
2.0	.93	.89	.85	.91	.87	.84	.88	.85	.82	.85	.83	.80	.83	.81	.79	.77
3.0	.85	.80	.76	.84	.79	.75	.81	.77	.74	.79	.76	.73	.77	.74	.72	.70
4.0	.79	.73	.68	.77	.72	.68	.75	.71	.67	.73	.70	.66	.72	.68	.66	.64
5.0	.72	.66	.62	.72	.66	.62	.70	.65	.61	.68	.64	.60	.67	.63	.60	.58
6.0	.67	.61	.56	.66	.60	.56	.65	.60	.56	.63	.59	.55	.62	.58	.55	.53
7.0	.62	.56	.51	.61	.55	.51	.60	.55	.51	.59	.54	.51	.58	.54	.50	.49
8.0	.58	.51	.47	.57	.51	.47	.56	.51	.47	.55	.50	.47	.54	.50	.46	.45
9.0	.54	.47	.43	.53	.47	.43	.52	.47	.43	.51	.46	.43	.50	.46	.43	.41
10.0	.50	.44	.40	.50	.44	.40	.49	.43	.40	.48	.43	.40	.47	.43	.40	.38



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25℃  
Operators:LI  
Test Date:2025-06-18

γ Range: 0 - 90DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
Humidity:65.0%  
Test Distance:8.300m [K=1.0000]  
Remarks:

WEC AND CCEC

Test:U:229.61V I:0.065A P:14.48W PF:0.975 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2454.1x1 lm		
NAME: T1271-80D-3090-silver		
SPEC.: KGP 16W/400mA		
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	.179	.102	.032	.173	.099	.031	.161	.093	.030	.151	.087	.028	.141	.082	.026															
2.0	.174	.096	.029	.169	.093	.029	.159	.089	.027	.150	.084	.026	.142	.080	.025															
3.0	.168	.089	.027	.163	.087	.026	.155	.084	.025	.147	.080	.025	.139	.077	.024															
4.0	.161	.084	.025	.157	.082	.024	.149	.079	.024	.143	.077	.023	.136	.074	.023															
5.0	.154	.078	.023	.150	.077	.022	.144	.075	.022	.138	.073	.022	.132	.071	.021															
6.0	.147	.074	.021	.144	.073	.021	.138	.071	.021	.133	.069	.020	.128	.067	.020															
7.0	.141	.070	.020	.138	.069	.020	.133	.067	.019	.128	.066	.019	.123	.064	.019															
8.0	.135	.066	.018	.132	.065	.018	.128	.064	.018	.123	.062	.018	.119	.061	.018															
9.0	.129	.062	.017	.127	.062	.017	.122	.061	.017	.118	.059	.017	.115	.058	.017															
10.0	.123	.059	.016	.121	.059	.016	.118	.058	.016	.114	.057	.016	.111	.056	.016															

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	.175	.175	.175	.149	.149	.149	.102	.102	.102	.059	.059	.059	.019	.019	.019	
1.0	.158	.144	.132	.135	.124	.113	.093	.085	.078	.053	.049	.046	.017	.016	.015	
2.0	.146	.121	.101	.125	.105	.087	.085	.072	.061	.049	.042	.036	.016	.014	.012	
3.0	.135	.104	.079	.116	.090	.069	.080	.062	.048	.046	.036	.028	.015	.012	.009	
4.0	.127	.091	.064	.109	.079	.055	.075	.055	.039	.043	.032	.023	.014	.010	.008	
5.0	.120	.081	.052	.103	.070	.045	.071	.049	.032	.041	.029	.019	.013	.009	.006	
6.0	.114	.073	.043	.098	.063	.037	.068	.044	.026	.039	.026	.016	.013	.008	.005	
7.0	.108	.066	.036	.093	.057	.031	.064	.040	.022	.037	.024	.013	.012	.008	.004	
8.0	.104	.060	.031	.089	.052	.027	.062	.037	.019	.036	.022	.011	.012	.007	.004	
9.0	.099	.056	.027	.085	.049	.023	.059	.034	.017	.034	.020	.010	.011	.007	.003	
10.0	.095	.052	.023	.082	.045	.020	.057	.032	.015	.033	.019	.009	.011	.006	.003	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25℃  
 Operators:LI  
 Test Date:2025-06-18

γ Range: 0 - 90DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity:65.0%  
 Test Distance:8.300m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:229.61V I:0.065A P:14.48W PF:0.975 Freq:49.99Hz										
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2454.1x1 lm										
NAME: T1271-80D-3090-silver										
SPEC.: KGP 16W/400mA										
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	18.1	19.2	18.3	19.4	19.6	18.3	19.4	18.5	19.6	19.7
3H	17.9	18.9	18.2	19.1	19.3	18.1	19.1	18.4	19.3	19.5
4H	17.8	18.8	18.1	19.0	19.2	18.0	18.9	18.3	19.2	19.4
6H	17.7	18.6	18.0	18.9	19.1	17.9	18.8	18.2	19.0	19.3
8H	17.7	18.5	18.0	18.8	19.1	17.9	18.7	18.2	19.0	19.2
12H	17.6	18.4	18.0	18.7	19.0	17.8	18.6	18.1	18.9	19.2
4H 2H	17.8	18.8	18.1	19.0	19.2	18.0	18.9	18.3	19.2	19.4
3H	17.6	18.5	18.0	18.7	19.0	17.8	18.6	18.1	18.9	19.2
4H	17.6	18.3	17.9	18.6	18.9	17.7	18.4	18.1	18.8	19.1
6H	17.5	18.1	17.8	18.4	18.8	17.6	18.3	18.0	18.6	18.9
8H	17.4	18.0	17.8	18.3	18.7	17.6	18.2	18.0	18.5	18.9
12H	17.4	17.9	17.8	18.3	18.7	17.5	18.1	17.9	18.4	18.8
8H 4H	17.4	18.0	17.8	18.3	18.7	17.6	18.2	18.0	18.5	18.9
6H	17.3	17.8	17.7	18.2	18.6	17.5	18.0	17.9	18.4	18.8
8H	17.3	17.7	17.7	18.1	18.5	17.4	17.9	17.9	18.3	18.7
12H	17.2	17.6	17.7	18.0	18.5	17.4	17.7	17.9	18.2	18.7
12H 4H	17.4	17.9	17.8	18.3	18.7	17.5	18.1	17.9	18.4	18.8
6H	17.3	17.7	17.7	18.1	18.5	17.4	17.9	17.9	18.3	18.7
8H	17.2	17.6	17.7	18.0	18.5	17.4	17.7	17.9	18.2	18.7
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.8 / -40.0					+ 2.8 / -40.2				
1.5H	+ 4.0 / -27.3					+ 3.9 / -27.0				
2.0H	+ 7.4 / -33.3					+ 7.5 / -33.9				

CIE Pub.117, 2454 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 3.1$ )  
 Area: 0.045 m<sup>2</sup>

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25℃  
 Operators:LI  
 Test Date:2025-06-18

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity:65.0%  
 Test Distance:8.300m [K=1.0000]  
 Remarks:

### UTILIZATION FACTORS TABLE

Test:U:229.61V I:0.065A P:14.48W PF:0.975 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2454.1x1 lm		
NAME: T1271-80D-3090-silver		
SPEC.: KGP 16W/400mA		
MFR.: SOTEN		

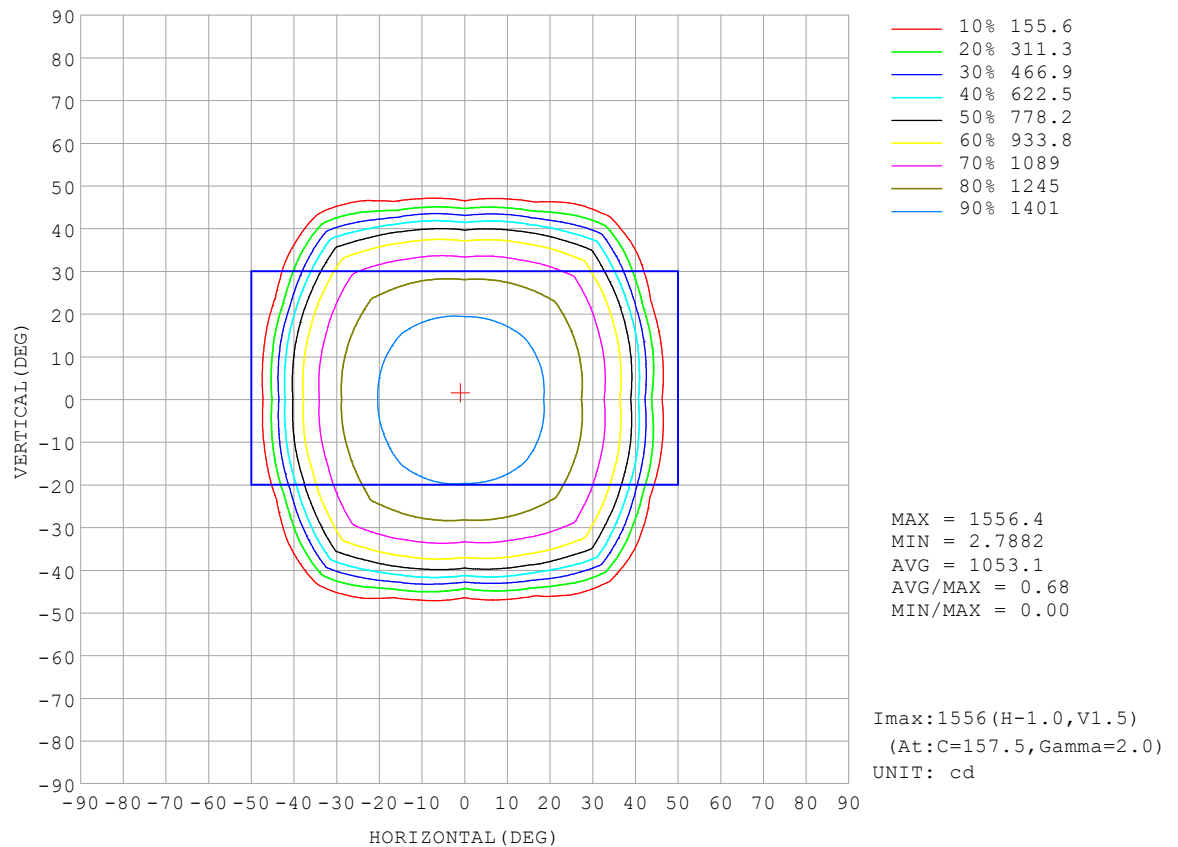
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	73	66	62	73	66	62	72	66	62	58
0.80	82	75	71	81	75	71	80	74	70	66
1.00	87	81	77	86	81	77	85	81	76	72
1.25	92	86	82	91	86	82	89	85	81	77
1.50	95	90	86	93	89	86	91	88	85	80
2.00	98	94	90	97	93	90	94	91	88	83
2.50	100	96	93	98	95	92	95	92	90	84
3.00	101	98	95	100	97	94	97	94	92	86
4.00	103	100	98	101	99	97	98	96	94	88
5.00	105	102	100	103	100	99	99	97	96	89
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: 25°C  
 Operators: LI  
 Test Date: 2025-06-18

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity: 65.0%  
 Test Distance: 8.300m [K=1.0000]  
 Remarks:

### ISOCANDELA DIAGRAM

Test:U:229.61V I:0.065A P:14.48W PF:0.975 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2454.1x1 lm		
NAME: T1271-80D-3090-silver		
SPEC.: KGP 16W/400mA		
MFR.: SOTEN		



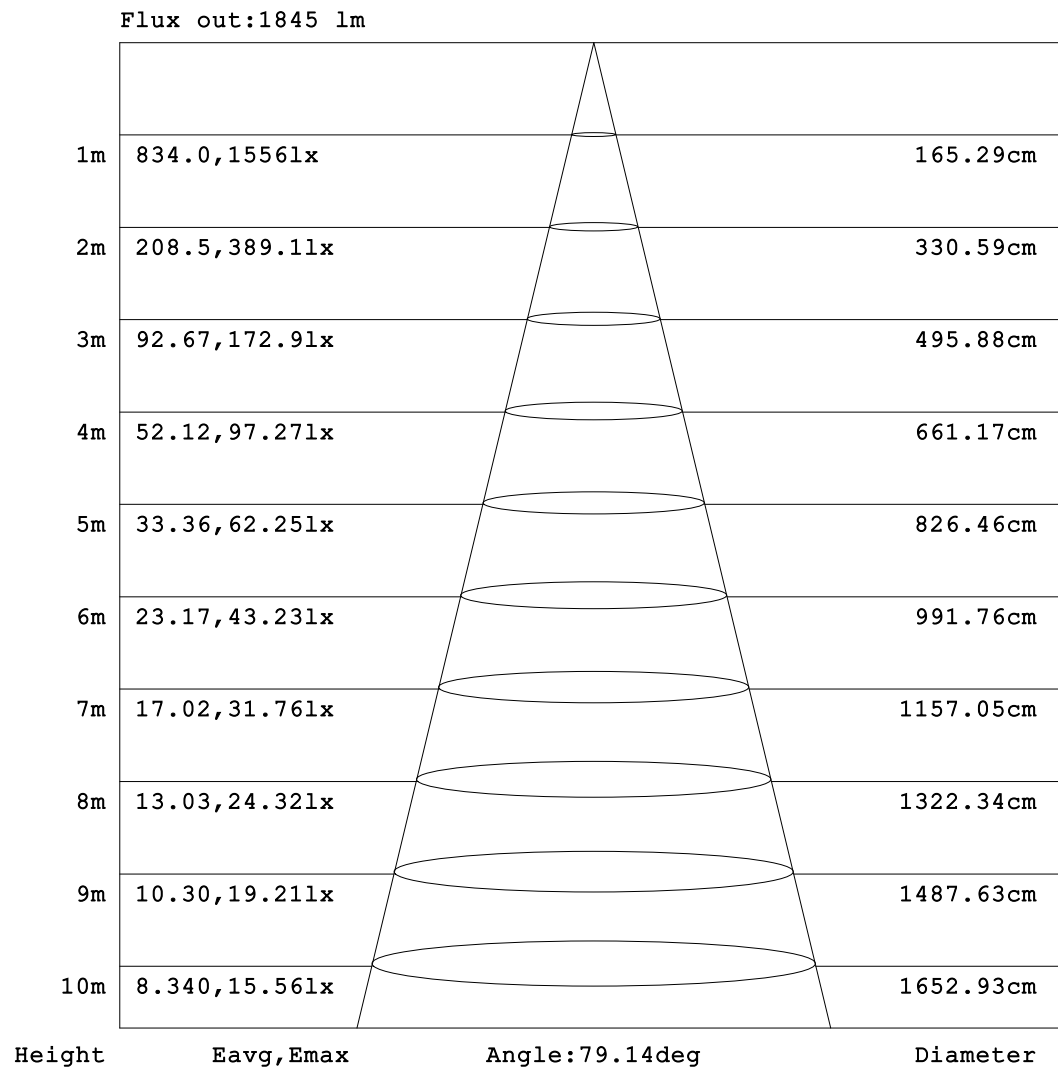
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25℃  
Operators:LI  
Test Date:2025-06-18

γ Range: 0 - 90DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
Humidity:65.0%  
Test Distance:8.300m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:229.61V I:0.065A P:14.48W PF:0.975 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2454.1x1 lm		
NAME: T1271-80D-3090-silver		
SPEC.: KGP 16W/400mA		
MFR.: SOTEN		



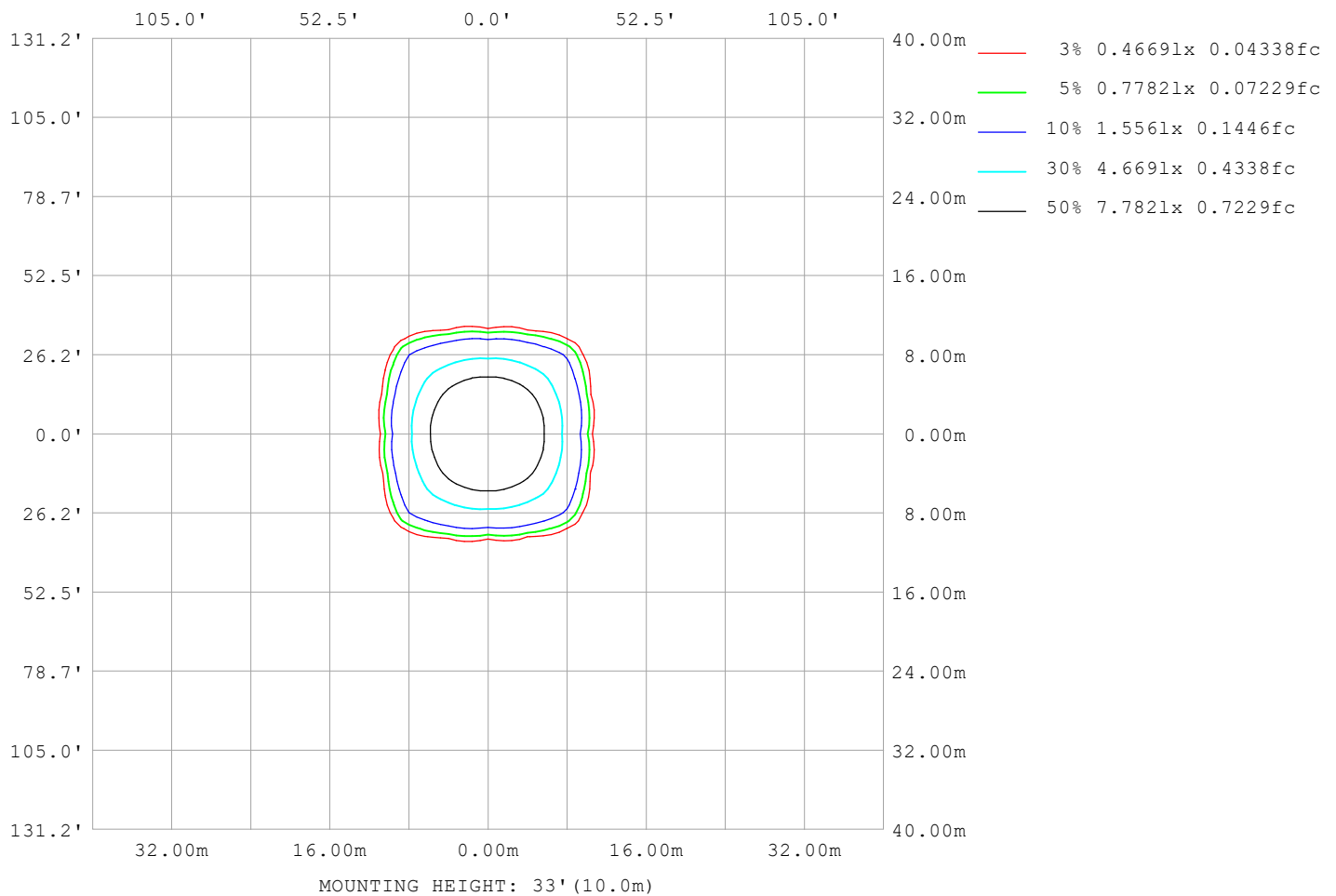
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25°C  
 Operators: LI  
 Test Date: 2025-06-18

γ Range: 0 - 90DEG  
 γ Interval: 2.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity: 65.0%  
 Test Distance: 8.300m [K=1.0000]  
 Remarks:

# ISOLUX DIAGRAM

Test:U:229.61V I:0.065A P:14.48W PF:0.975 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2454.1x1 lm		
NAME: T1271-80D-3090-silver		
SPEC.: KGP 16W/400mA		
MFR.: SOTEN		



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25°C  
 Operators: LI  
 Test Date: 2025-06-18

γ Range: 0 - 90DEG  
 γ Interval: 2.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity: 65.0%  
 Test Distance: 8.300m [K=1.0000]  
 Remarks:

### LED Avg.L Report

Test:U:229.61V I:0.065A P:14.48W PF:0.975 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2454.1x1 lm		
NAME: T1271-80D-3090-silver		
SPEC.: KGP 16W/400mA		
MFR.: SOTEN		

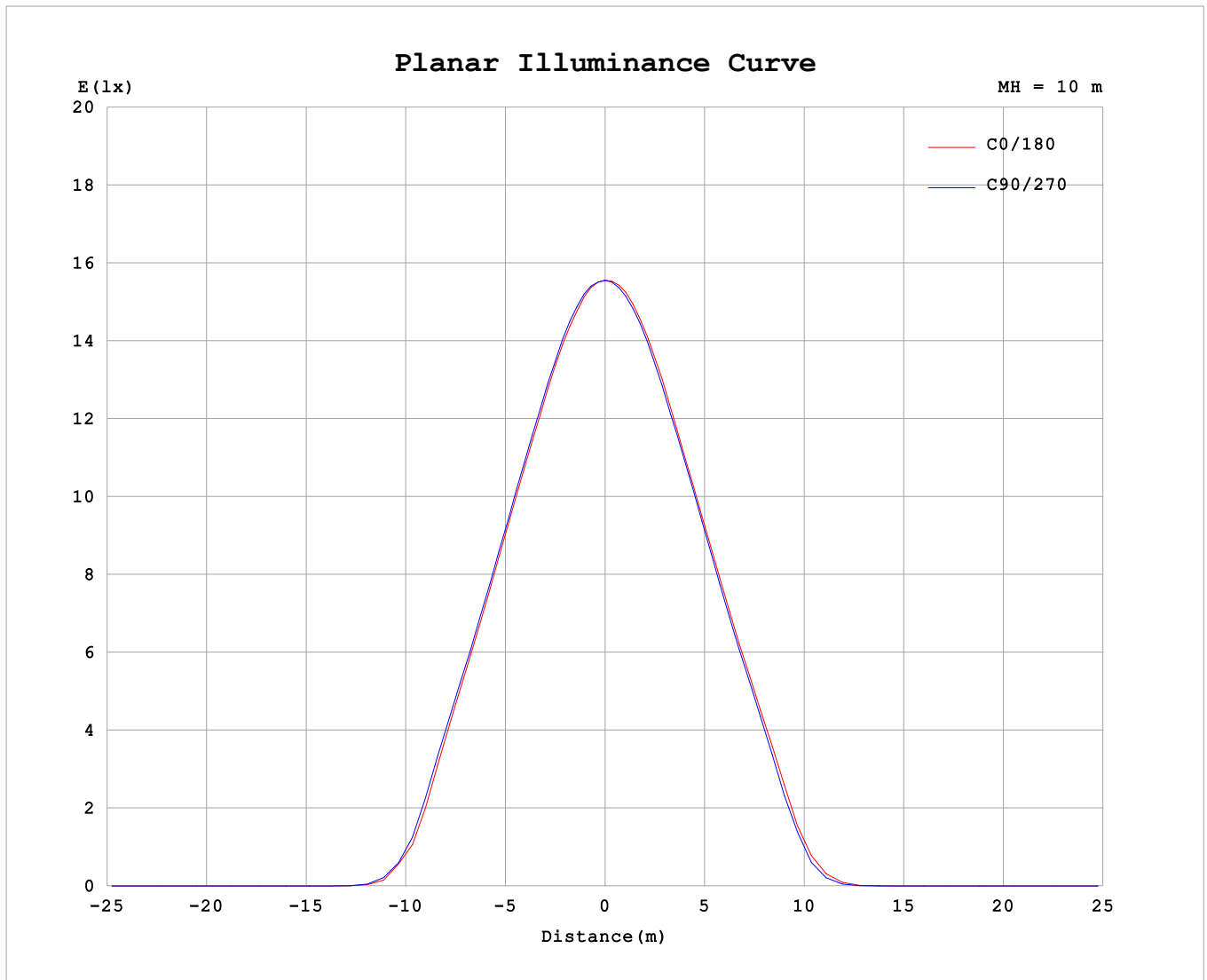
AvgL	cd/m2
L_0~180 (65) av	9
L_0~180 (75) av	11
L_0~180 (85) av	27
L_90~270 (65) av	10
L_90~270 (75) av	11
L_90~270 (85) av	26
L_45 (65) av	9
L_45 (75) av	11
L_45 (85) av	29

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25℃  
 Operators:LI  
 Test Date:2025-06-18

γ Range: 0 - 90DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity:65.0%  
 Test Distance:8.300m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25°C  
Operators: LI  
Test Date: 2025-06-18

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
Humidity: 65.0%  
Test Distance: 8.300m [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:8.300m [K=1.0000]
Remarks:

```