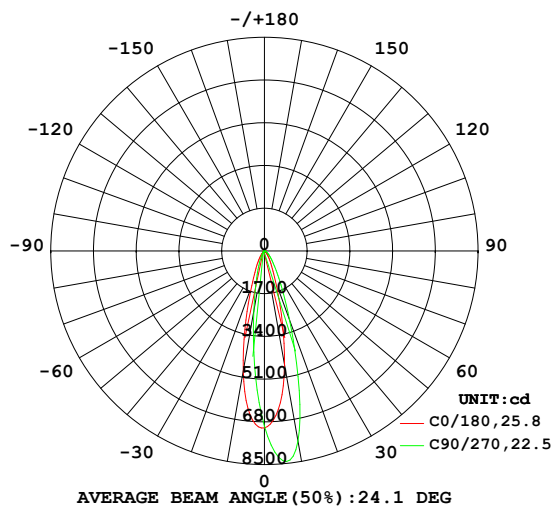


LUMINAIRE PHOTOMETRIC TEST REPORT

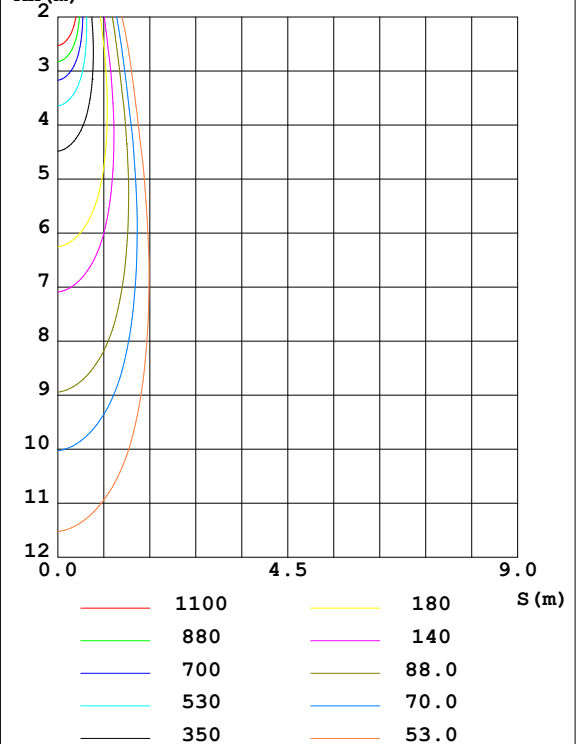
Test:U:220.7V I:0.1157A P:23.90W PF:0.9359 Freq:59.98Hz Lamp Flux:2281.91x1 lm					
NAME: 11171LED		TYPE:		WEIGHT:	
SPEC.:P-11171LED-25W275-CI60037R90-JG000		DIM.:		SERIAL No.:	
MFR.: CETTIGA		SUR.:0.0001		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 95.48 lm/W
MODEL	CLU038 1206	I _{max} (cd)	8423	S/MH (C0/180)	0.45	
NOMINAL POWER (W)	25W	LOR (%)	100.0	S/MH (C90/270)	0.25	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	2281.9	η UP, DN (C0-180)	0.2, 63.6	
NOMINAL FLUX (lm)	2281.91	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.2, 36.0	
LAMPS INSIDE	1	η up (%)	0.3	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	220.2	η down (%)	99.7	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Xie Bi
Test Date: 2019-10-13

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 6.900m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

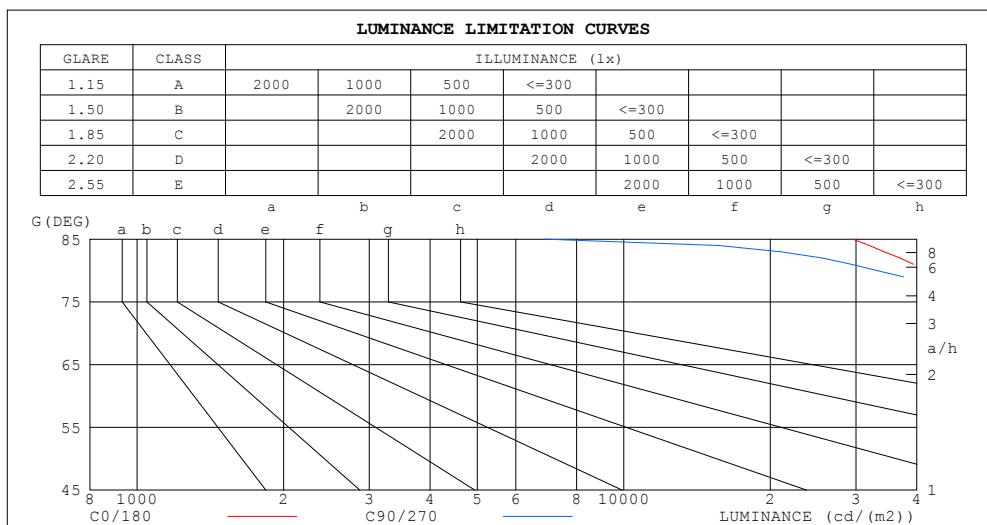
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	4608	7684	4855	2435					0- 10	565.5	565.5	24.8,24.8
20	1289	2930	1476	703.0					10- 20	820.0	1386	60.7,60.7
30	426.4	1005	527.0	231.4					20- 30	429.9	1815	79.6,79.6
40	158.6	433.3	196.1	93.88					30- 40	219.3	2035	89.2,89.2
50	67.69	217.1	78.63	52.09					40- 50	117.6	2152	94.3,94.3
60	35.29	106.7	38.43	30.02					50- 60	66.99	2219	97.3,97.3
70	18.73	46.65	19.33	17.26					60- 70	37.56	2257	98.9,98.9
80	7.134	5.753	7.451	4.705					70- 80	15.49	2272	99.6,99.6
90	0.0584	0.2029	0.0990	0.0581					80- 90	2.483	2275	99.7,99.7
100	0.1045	0.0580	0.1335	0.0754					90-100	0.1083	2275	99.7,99.7
110	0.0870	0.0871	0.1102	0.1681					100-110	0.1062	2275	99.7,99.7
120	0.2030	0.1509	0.2265	0.3598					110-120	0.1550	2275	99.7,99.7
130	0.5102	0.2728	0.3425	0.6787					120-130	0.2954	2276	99.7,99.7
140	1.247	0.6505	0.6737	1.474					130-140	0.5624	2276	99.7,99.7
150	3.514	1.875	1.736	3.481					140-150	1.035	2277	99.8,99.8
160	7.456	5.389	4.536	6.912					150-160	1.930	2279	99.9,99.9
170	8.995	9.001	7.266	7.904					160-170	2.075	2281	100,100
180	8.397	8.658	8.368	8.647					170-180	0.7993	2282	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2019-10-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:6.900m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.7V I:0.1157A P:23.90W PF:0.9359 Freq:59.98Hz Lamp Flux:2281.91x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-25W275-CI60037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	29579	6916
80	41084	33131
75	48537	76522
70	54762	136384
65	61672	172393
60	70576	213334
55	83735	266906
50	105311	337772
45	142244	431464

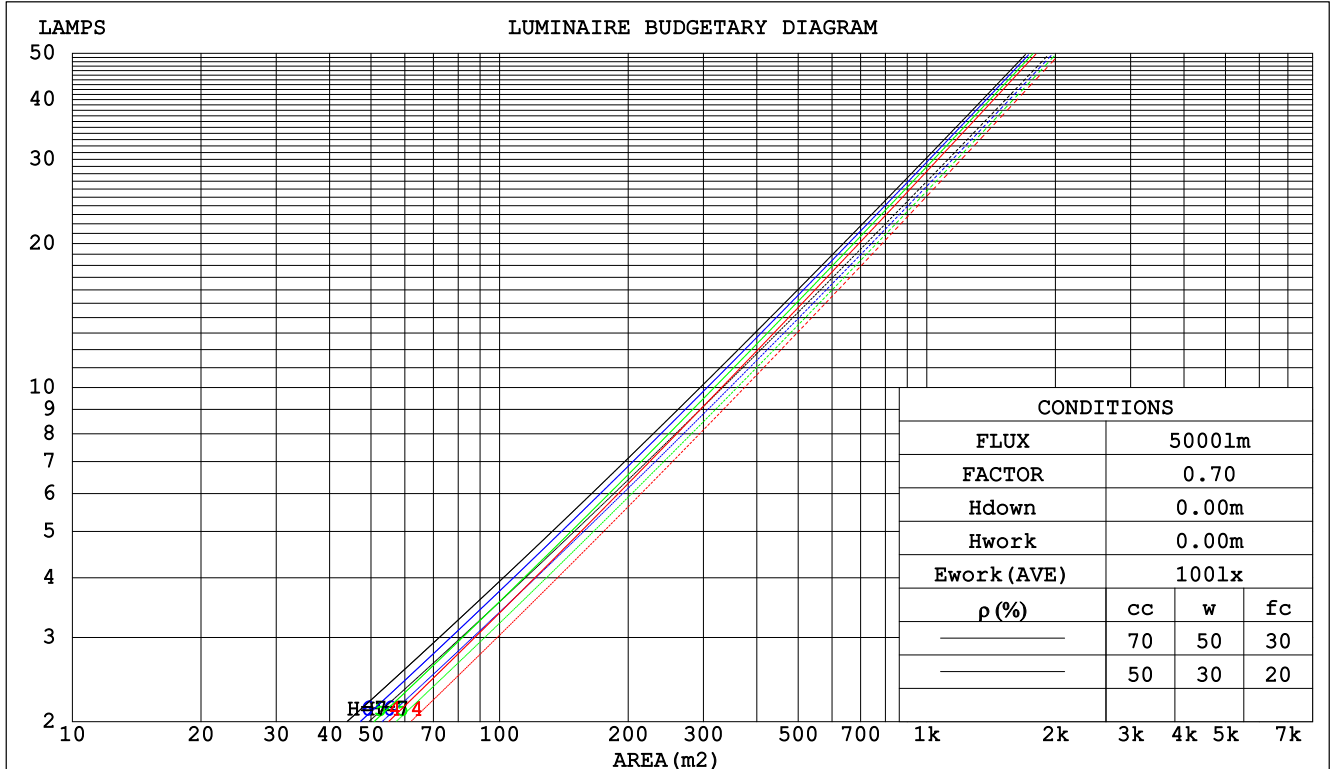
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2019-10-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.7V I:0.1157A P:23.90W PF:0.9359 Freq:59.98Hz Lamp Flux:2281.91x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-25W275-CI60037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	1.01	.97	1.03	.99	.96	.99	.97	.94	.96	.94	.92	.94	.92	.90	.89
3.0	.98	.94	.90	.97	.93	.89	.94	.91	.88	.92	.89	.86	.90	.87	.85	.84
4.0	.93	.88	.84	.92	.87	.84	.90	.86	.83	.88	.84	.82	.86	.83	.81	.79
5.0	.88	.83	.79	.87	.82	.79	.86	.81	.78	.84	.80	.77	.82	.79	.77	.75
6.0	.84	.79	.75	.83	.78	.75	.82	.77	.74	.80	.77	.74	.79	.76	.73	.72
7.0	.80	.75	.71	.80	.75	.71	.78	.74	.71	.77	.73	.70	.76	.73	.70	.69
8.0	.77	.72	.68	.76	.71	.68	.75	.71	.68	.74	.70	.67	.73	.70	.67	.66
9.0	.74	.69	.65	.73	.69	.65	.72	.68	.65	.72	.68	.65	.71	.67	.65	.63
10.0	.71	.66	.63	.71	.66	.63	.70	.66	.63	.69	.65	.62	.68	.65	.62	.61



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2019-10-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:6.900m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.7V I:0.1157A P:23.90W PF:0.9359 Freq:59.98Hz Lamp Flux:2281.91x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-25W275-CI60037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:

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	.167	.095	.030	.161	.092	.029	.148	.085	.027	.136	.079	.025	.125	.073	.023		
2.0	.158	.087	.027	.153	.084	.026	.142	.079	.025	.132	.074	.023	.123	.070	.022		
3.0	.149	.079	.024	.144	.077	.023	.135	.073	.022	.126	.069	.021	.119	.066	.020		
4.0	.140	.073	.021	.136	.071	.021	.128	.068	.020	.121	.065	.020	.114	.062	.019		
5.0	.132	.067	.019	.128	.066	.019	.122	.063	.019	.115	.061	.018	.110	.059	.018		
6.0	.125	.062	.018	.122	.061	.018	.116	.059	.017	.110	.057	.017	.105	.055	.016		
7.0	.118	.058	.017	.115	.058	.016	.110	.056	.016	.106	.054	.016	.101	.052	.015		
8.0	.112	.055	.015	.110	.054	.015	.105	.053	.015	.101	.051	.015	.097	.050	.015		
9.0	.107	.052	.014	.105	.051	.014	.101	.050	.014	.097	.049	.014	.093	.047	.014		
10.0	.102	.049	.014	.100	.048	.014	.097	.047	.013	.093	.046	.013	.090	.045	.013		

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	.193	.193	.193	.165	.165	.165	.112	.112	.112	.065	.065	.065	.021	.021	.021	
1.0	.173	.160	.148	.148	.137	.127	.101	.094	.088	.058	.055	.051	.019	.018	.017	
2.0	.157	.135	.117	.134	.116	.101	.092	.080	.070	.053	.047	.041	.017	.015	.013	
3.0	.144	.116	.094	.123	.100	.081	.084	.069	.057	.049	.041	.034	.016	.013	.011	
4.0	.132	.101	.077	.114	.087	.067	.078	.061	.047	.045	.036	.028	.015	.012	.009	
5.0	.123	.089	.064	.105	.077	.056	.073	.054	.039	.042	.032	.023	.014	.010	.008	
6.0	.115	.080	.054	.098	.069	.047	.068	.048	.034	.039	.028	.020	.013	.009	.007	
7.0	.107	.072	.047	.092	.062	.041	.064	.044	.029	.037	.026	.017	.012	.008	.006	
8.0	.101	.065	.040	.087	.057	.035	.060	.040	.025	.035	.023	.015	.011	.008	.005	
9.0	.096	.060	.036	.082	.052	.031	.057	.036	.022	.033	.022	.013	.011	.007	.004	
10.0	.091	.055	.032	.078	.048	.028	.054	.034	.020	.032	.020	.012	.010	.007	.004	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2019-10-13

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.7V I:0.1157A P:23.90W PF:0.9359 Freq:59.98Hz Lamp Flux:2281.91x1 lm											
NAME.: 11171LED						TYPE:		WEIGHT:			
SPEC.:P-11171LED-25W275-CI60037R90-JG000						DIM.:		SERIAL No.:			
MFR.: CETTIGA						SUR.:0.0001		Shielding Angle:			
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		22.5	23.3	22.7	23.5	23.6	26.3	27.1	26.5	27.3	27.4
3H		22.8	23.6	23.0	23.8	24.0	26.7	27.5	27.0	27.7	27.9
4H		22.9	23.6	23.2	23.8	24.1	26.8	27.6	27.1	27.8	28.0
6H		22.9	23.6	23.2	23.9	24.1	26.8	27.5	27.1	27.7	28.0
8H		22.9	23.6	23.2	23.8	24.1	26.7	27.4	27.0	27.7	27.9
12H		22.9	23.5	23.2	23.8	24.1	26.7	27.3	27.0	27.6	27.9
4H	2H	23.0	23.7	23.2	23.9	24.1	26.3	27.0	26.5	27.2	27.4
	3H	23.4	24.1	23.7	24.3	24.6	26.9	27.5	27.2	27.8	28.0
	4H	23.6	24.1	23.9	24.4	24.8	27.0	27.6	27.3	27.9	28.2
	6H	23.6	24.1	24.0	24.5	24.8	26.9	27.4	27.3	27.8	28.1
	8H	23.6	24.1	24.0	24.5	24.8	26.9	27.4	27.3	27.7	28.1
	12H	23.6	24.0	24.0	24.4	24.8	26.8	27.3	27.2	27.7	28.0
8H	4H	23.6	24.1	24.0	24.5	24.8	26.9	27.4	27.3	27.7	28.1
	6H	23.7	24.1	24.1	24.5	24.9	26.8	27.2	27.3	27.6	28.1
	8H	23.7	24.1	24.2	24.5	24.9	26.8	27.2	27.3	27.6	28.0
	12H	23.7	24.0	24.2	24.5	24.9	26.8	27.1	27.2	27.5	28.0
12H	4H	23.6	24.0	24.0	24.4	24.8	26.8	27.3	27.2	27.7	28.0
	6H	23.7	24.0	24.1	24.4	24.9	26.8	27.2	27.3	27.6	28.0
	8H	23.7	24.0	24.2	24.4	24.9	26.8	27.1	27.2	27.5	28.0
Variations with the observer position at spacings:											
S = 1.0H		+ 1.2 / - 1.6					+ 1.4 / - 1.2				
1.5H		+ 1.1 / - 1.8					+ 2.1 / - 1.5				
2.0H		+ 1.3 / - 2.2					+ 2.7 / - 2.2				

CIE Pub.117, 2282 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.9)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2019-10-13

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.7V I:0.1157A P:23.90W PF:0.9359 Freq:59.98Hz Lamp Flux:2281.91x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-25W275-CI60037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:

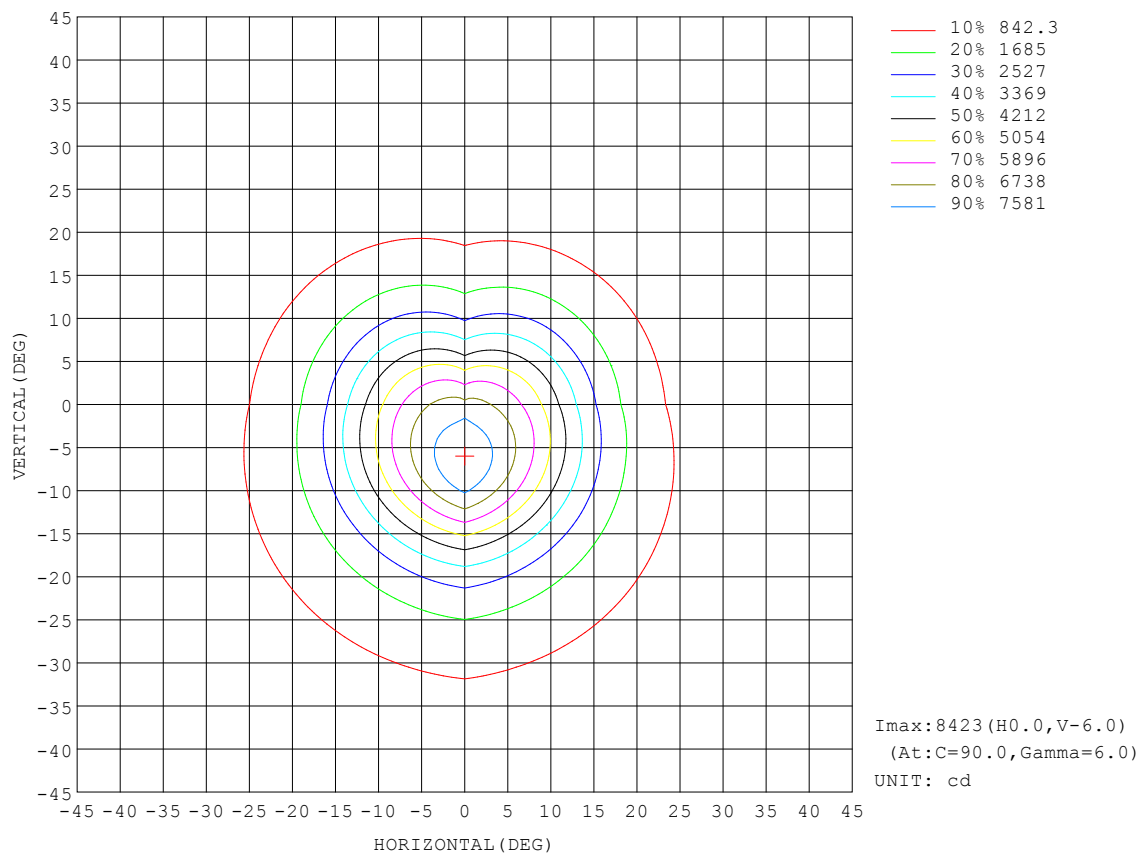
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	85	78	74	84	78	74	83	77	74	70
0.80	92	86	82	92	86	82	90	85	82	78
1.00	97	91	87	96	91	87	95	91	86	82
1.25	101	96	92	100	95	92	98	94	91	86
1.50	104	99	96	103	98	95	101	97	94	89
2.00	107	103	100	106	102	99	103	100	97	92
2.50	109	105	102	108	104	101	104	101	99	93
3.00	111	107	104	109	106	103	106	103	101	94
4.00	113	110	108	111	109	106	107	105	104	96
5.00	115	112	110	112	110	108	108	107	105	98
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2019-10-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.7V I:0.1157A P:23.90W PF:0.9359 Freq:59.98Hz Lamp Flux:2281.91x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-25W275-CI60037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:

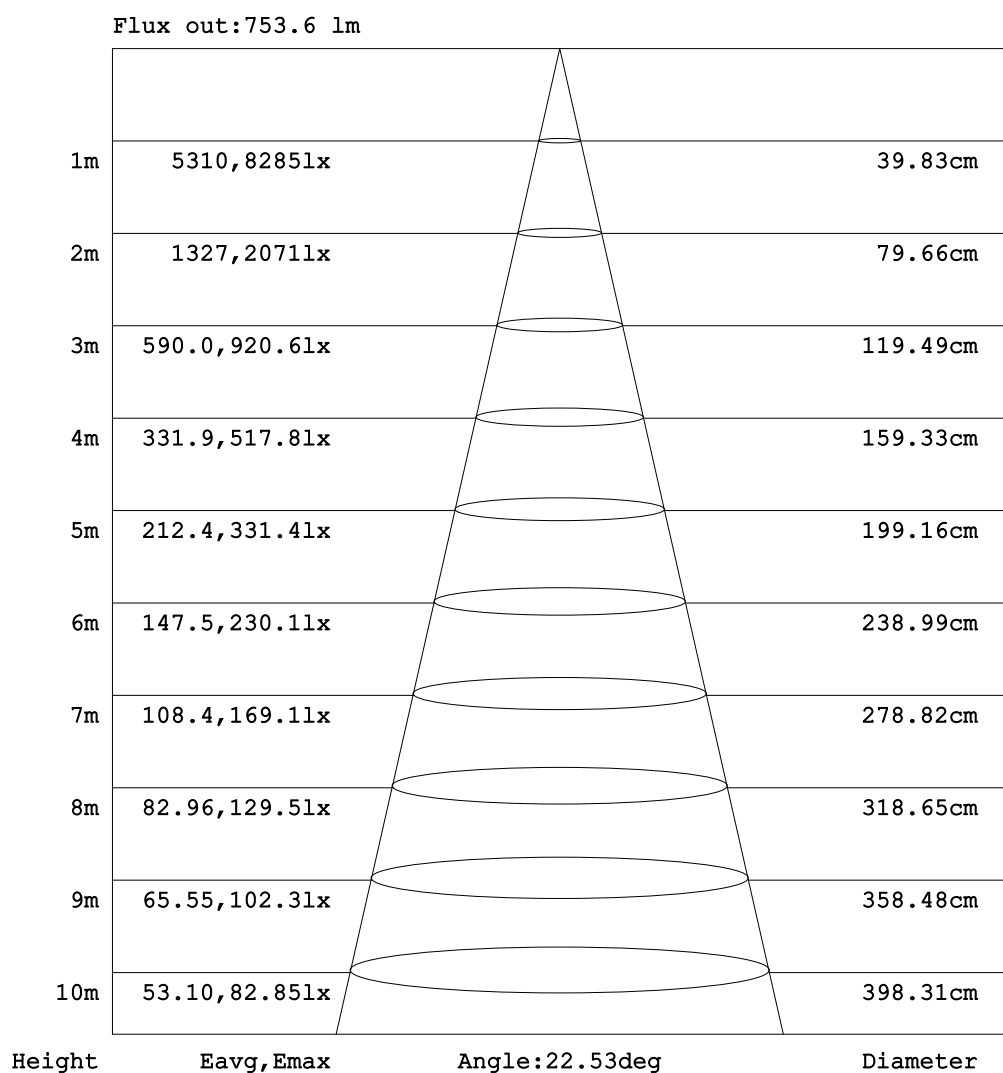


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2019-10-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.7V I:0.1157A P:23.90W PF:0.9359 Freq:59.98Hz Lamp Flux:2281.91x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-25W275-CI60037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:



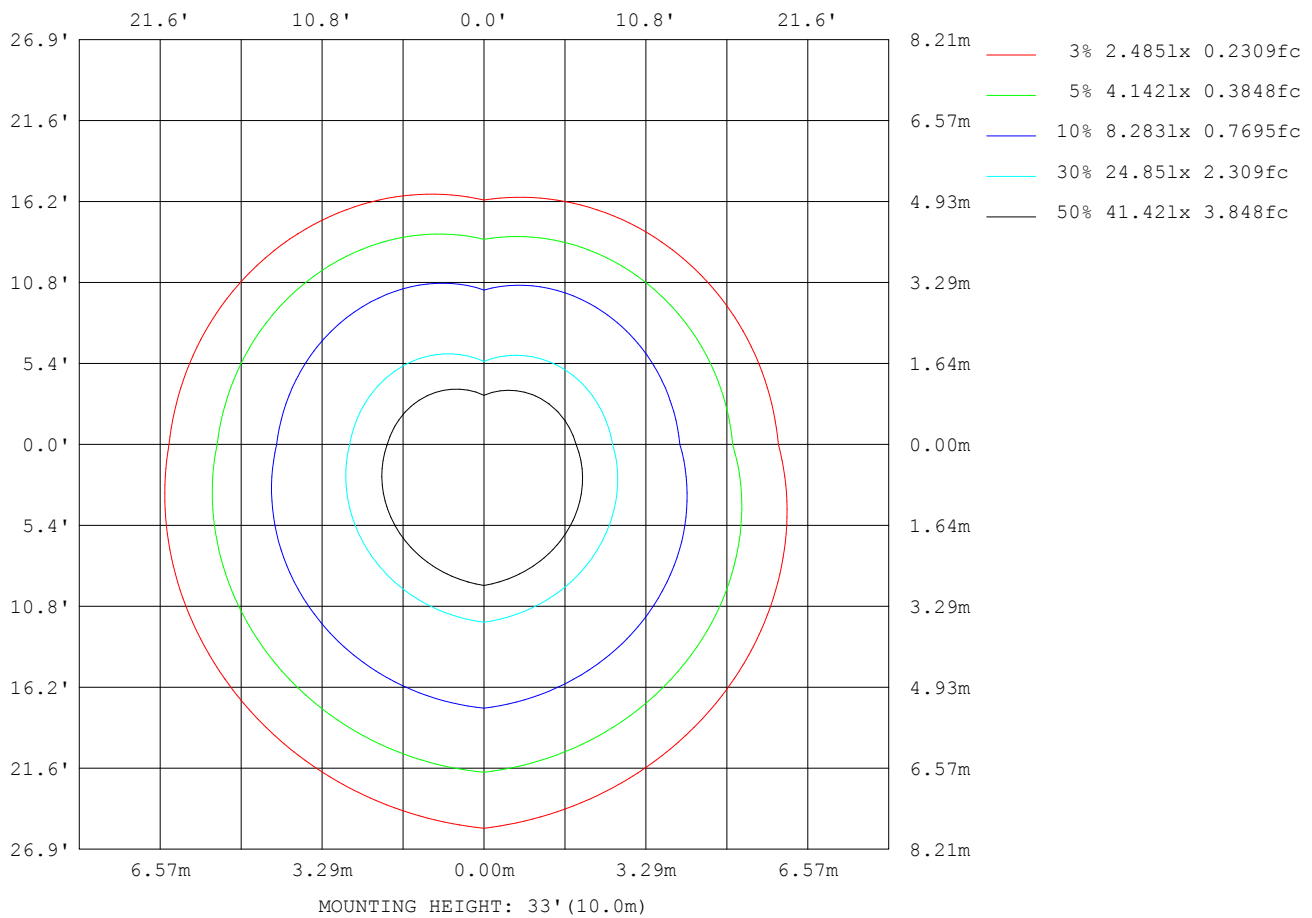
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2019-10-13

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:220.7V I:0.1157A P:23.90W PF:0.9359 Freq:59.98Hz Lamp Flux:2281.91x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-25W275-CI60037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2019-10-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.7V I:0.1157A P:23.90W PF:0.9359 Freq:59.98Hz Lamp Flux:2281.91x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-25W275-CI60037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:

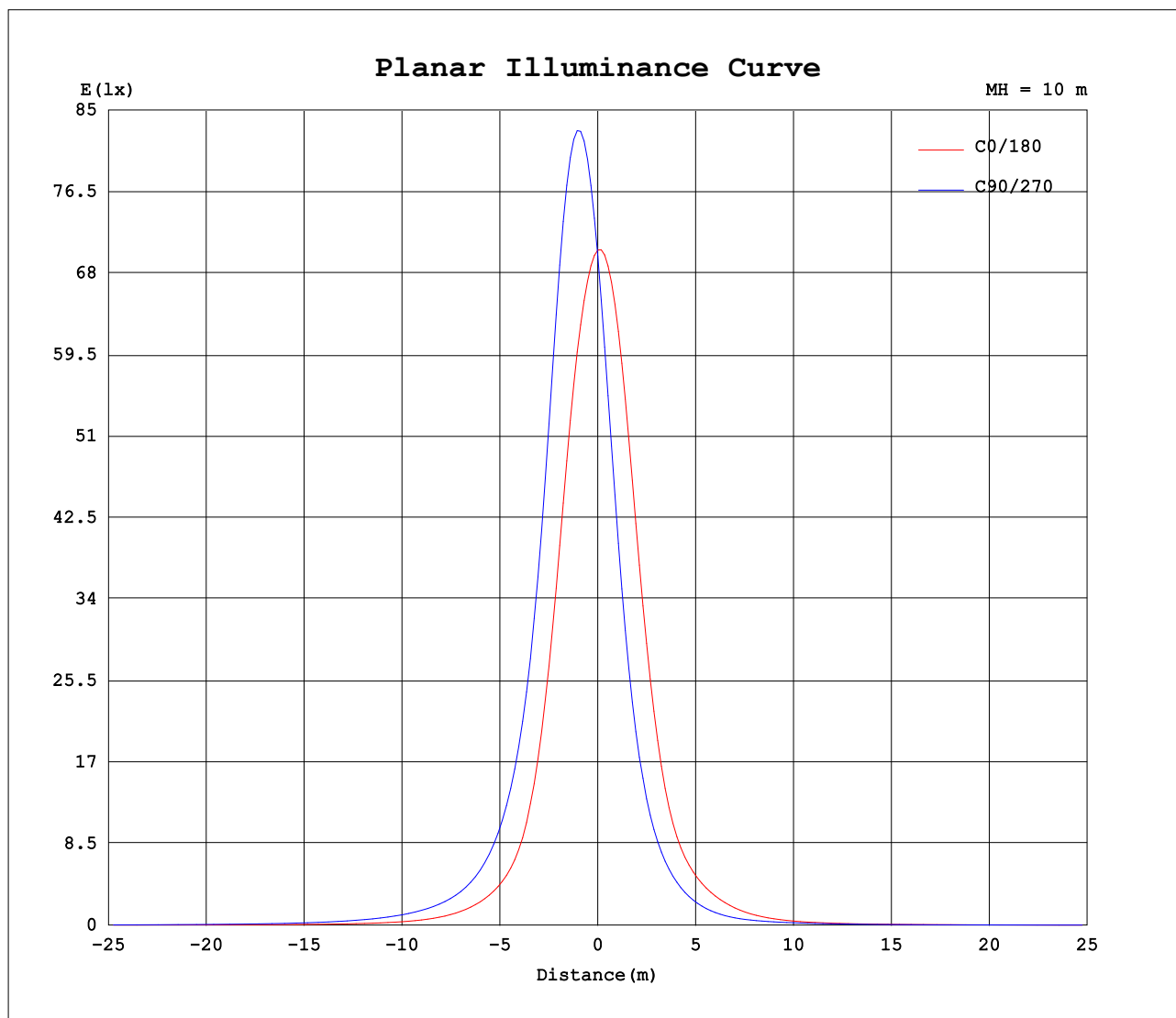
AvgL	cd/m2
L_0~180 (65) av	63423
L_0~180 (75) av	49075
L_0~180 (85) av	31118
L_90~270 (65) av	114056
L_90~270 (75) av	58017
L_90~270 (85) av	4468
L_45 (65) av	95178
L_45 (75) av	54697
L_45 (85) av	14558

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2019-10-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Xie Bi
Test Date: 2019-10-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 6.900m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.7V I:0.1157A P:23.90W PF:0.9359 Freq:59.98Hz Lamp Flux:2281.91x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-25W275-CI60037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	7040	6970	7040	6970															
5	6333	8372	6549	4540															
10	4608	7684	4855	2435															
15	2613	5177	2845	1271															
20	1289	2930	1476	703															
25	697	1677	840	401															
30	426	1005	527	231															
35	262	637	326	139															
40	159	433	196	93.9															
45	101	305	120	69.4															
50	67.7	217	78.6	52.1															
55	48.0	153	54.1	39.1															
60	35.3	107	38.4	30.0															
65	26.1	72.9	27.5	23.5															
70	18.7	46.6	19.3	17.3															
75	12.6	19.8	12.8	10.2															
80	7.13	5.75	7.45	4.71															
85	2.58	0.60	2.85	0.18															
90	0.06	0.20	0.10	0.06															
95	0.10	0.04	0.13	0.06															
100	0.10	0.06	0.13	0.08															
105	0.13	0.07	0.12	0.10															
110	0.09	0.09	0.11	0.17															
115	0.11	0.12	0.14	0.24															
120	0.20	0.15	0.23	0.36															
125	0.35	0.20	0.27	0.48															
130	0.51	0.27	0.34	0.68															
135	0.99	0.41	0.63	0.96															
140	1.25	0.65	0.67	1.47															
145	2.08	1.09	1.03	2.22															
150	3.51	1.87	1.74	3.48															
155	5.48	3.28	2.92	5.21															
160	7.46	5.39	4.54	6.91															
165	8.72	7.63	6.16	7.83															
170	8.99	9.00	7.27	7.90															
175	8.67	9.10	7.86	7.87															
180	8.40	8.66	8.37	8.65															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2019-10-13

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks: