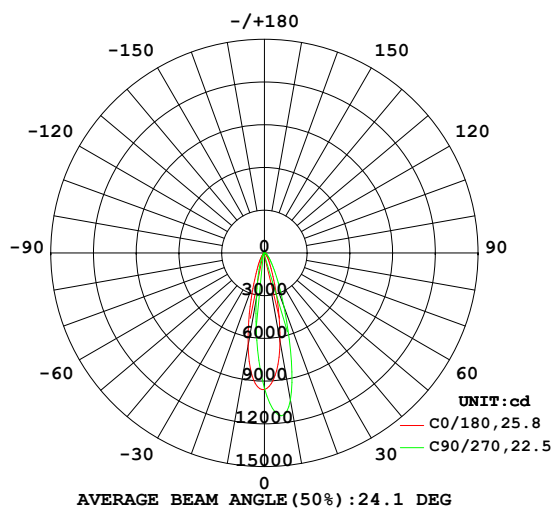


LUMINAIRE PHOTOMETRIC TEST REPORT

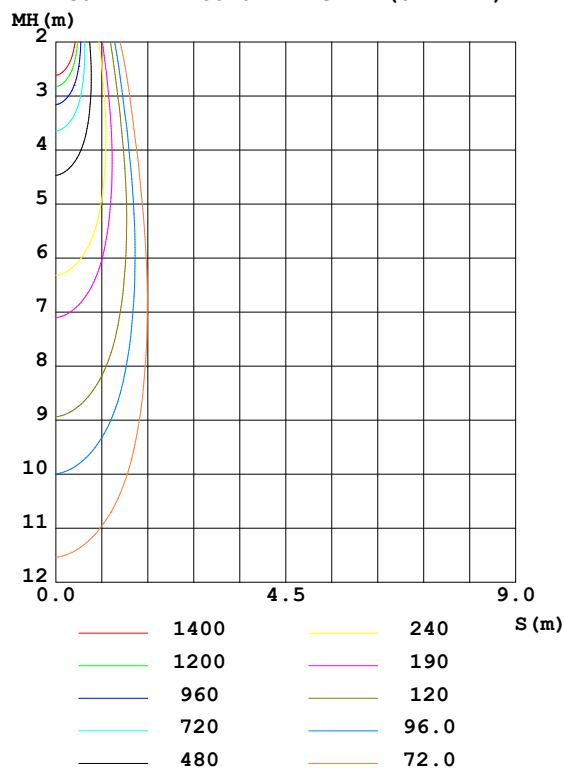
Test:U:220.7V I:0.1695A P:36.01W PF:0.9631 Freq:59.98Hz Lamp Flux:3114.39x1 lm					
NAME: 11171LED		TYPE:		WEIGHT:	
SPEC.:P-11171LED-36W275-CI90037R90-JG000		DIM.:		SERIAL No.:	
MFR.: CETTIGA		SUR.:0.0001		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 86.48 lm/W
MODEL	CLU038 1206	I _{max} (cd)	11494	S/MH (C0/180)	0.45	
NOMINAL POWER (W)	36W	LOR (%)	100.0	S/MH (C90/270)	0.25	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	3114.4	η UP, DN (C0-180)	0.2, 63.7	
NOMINAL FLUX (lm)	3114.39	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: 2020-03-09

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:

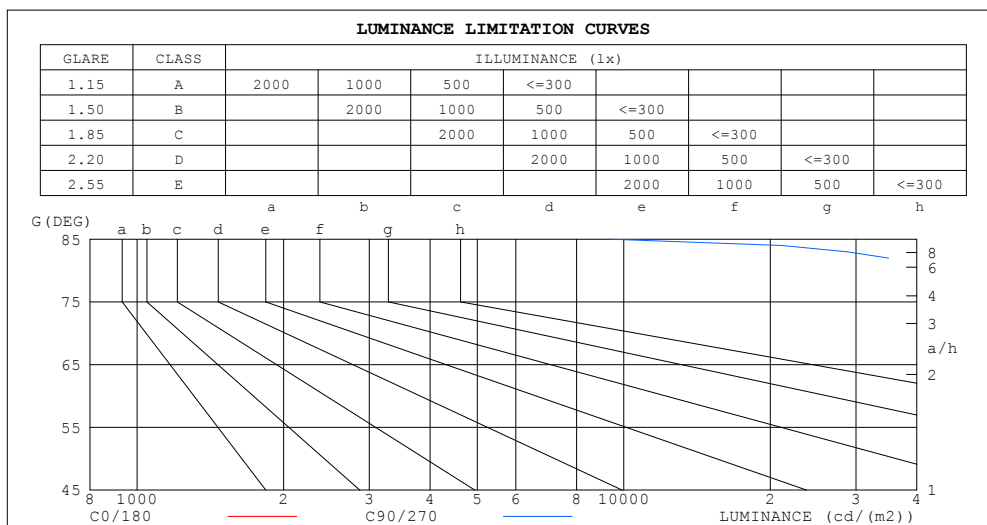
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	628.7	1050	660.8	330.3					0- 10	770.7	770.7	24.7,24.7
20	176.4	403.6	201.2	95.67					10- 20	1119	1890	60.7,60.7
30	58.32	137.1	71.82	31.58					20- 30	587.2	2477	79.5,79.5
40	21.82	59.14	26.75	12.82					30- 40	299.4	2776	89.1,89.1
50	9.266	29.65	10.72	7.119					40- 50	160.8	2937	94.3,94.3
60	4.837	14.58	5.261	4.106					50- 60	91.56	3029	97.2,97.2
70	2.565	6.378	2.646	2.357					60- 70	51.39	3080	98.9,98.9
80	0.9842	0.7928	1.015	0.6483					70- 80	21.21	3101	99.6,99.6
90	0.0093	0.0301	0.0140	0.0081					80- 90	3.408	3105	99.7,99.7
100	0.0191	0.0076	0.0209	0.0110					90-100	0.1559	3105	99.7,99.7
110	0.0128	0.0122	0.0145	0.0232					100-110	0.1586	3105	99.7,99.7
120	0.0290	0.0197	0.0308	0.0482					110-120	0.2191	3105	99.7,99.7
130	0.0748	0.0377	0.0459	0.0946					120-130	0.4130	3106	99.7,99.7
140	0.1729	0.0894	0.0918	0.1967					130-140	0.7762	3106	99.7,99.7
150	0.4819	0.2542	0.2357	0.4774					140-150	1.416	3108	99.8,99.8
160	1.016	0.7347	0.6197	0.9425					150-160	2.635	3110	99.9,99.9
170	1.223	1.230	0.9901	1.074					160-170	2.827	3113	100,100
180	1.141	1.187	1.136	1.183					170-180	1.088	3114	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2020-03-09

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:0.1695A P:36.01W PF:0.9631 Freq:59.98Hz Lamp Flux:3114.39x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-36W275-CI90037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	40801	9376
80	56676	45655
75	66592	105009
70	74990	186478
65	84511	235698
60	96736	291590
55	114727	364557
50	144154	461339
45	194551	591670

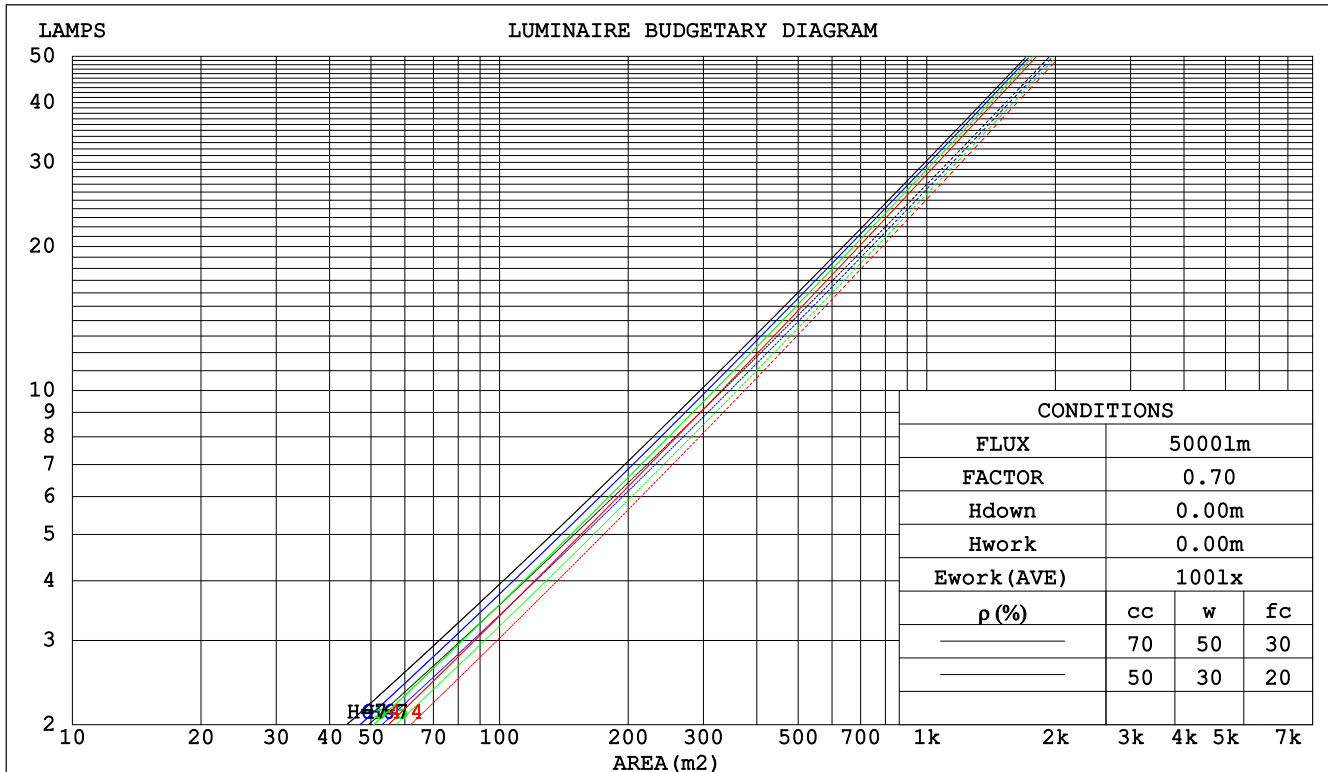
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2020-03-09

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:0.1695A P:36.01W PF:0.9631 Freq:59.98Hz Lamp Flux:3114.39x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-36W275-CI90037R90-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	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
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	.85	.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	.65	.62	.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:2020-03-09

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:0.1695A P:36.01W PF:0.9631 Freq:59.98Hz Lamp Flux:3114.39x1 lm					
NAME: 11171LED			TYPE:		WEIGHT:
SPEC.:P-11171LED-36W275-CI90037R90-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	.168	.095	.030	.161	.092	.029	.148	.085	.027	.136	.079	.025	.126	.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	.127	.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	.063	.018	.122	.061	.018	.116	.059	.017	.110	.057	.017	.105	.055	.016		
7.0	.118	.058	.017	.116	.058	.016	.110	.056	.016	.106	.054	.016	.101	.053	.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	.041	.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:2020-03-09

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:0.1695A P:36.01W PF:0.9631 Freq:59.98Hz Lamp Flux:3114.39x1 lm											
NAME.: 11171LED						TYPE:			WEIGHT:		
SPEC.:P-11171LED-36W275-CI90037R90-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	23.7	26.3	27.1	26.5	27.3	27.4	
	3H	22.8	23.6	23.1	23.8	24.0	26.8	27.5	27.0	27.7	27.9
	4H	22.9	23.6	23.2	23.9	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	23.3	23.9	24.1	26.8	27.4	27.1	27.7	27.9
	12H	22.9	23.6	23.2	23.8	24.1	26.7	27.3	27.0	27.6	27.9
4H	2H	23.0	23.7	23.3	23.9	24.2	26.3	27.0	26.6	27.2	27.5
	3H	23.4	24.1	23.8	24.4	24.6	26.9	27.5	27.2	27.8	28.1
	4H	23.6	24.2	23.9	24.5	24.8	27.0	27.6	27.3	27.9	28.2
	6H	23.6	24.2	24.0	24.5	24.9	26.9	27.5	27.3	27.8	28.1
	8H	23.6	24.1	24.0	24.5	24.9	26.9	27.4	27.3	27.7	28.1
	12H	23.6	24.1	24.0	24.4	24.8	26.8	27.3	27.3	27.7	28.1
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	24.2	24.5	25.0	26.9	27.3	27.3	27.7	28.1
	8H	23.8	24.1	24.2	24.5	25.0	26.8	27.2	27.3	27.6	28.0
	12H	23.7	24.0	24.2	24.5	25.0	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	27.3	27.7	28.1
	6H	23.7	24.0	24.1	24.5	24.9	26.8	27.2	27.3	27.6	28.0
	8H	23.7	24.0	24.2	24.5	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					+ 1.3 / - 1.2					
1.5H	+ 1.1 / - 1.8					+ 2.1 / - 1.5					
2.0H	+ 1.3 / - 2.2					+ 2.8 / - 2.2					

CIE Pub.117, 3114 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.9)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2020-03-09

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:0.1695A P:36.01W PF:0.9631 Freq:59.98Hz Lamp Flux:3114.39x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-36W275-CI90037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:

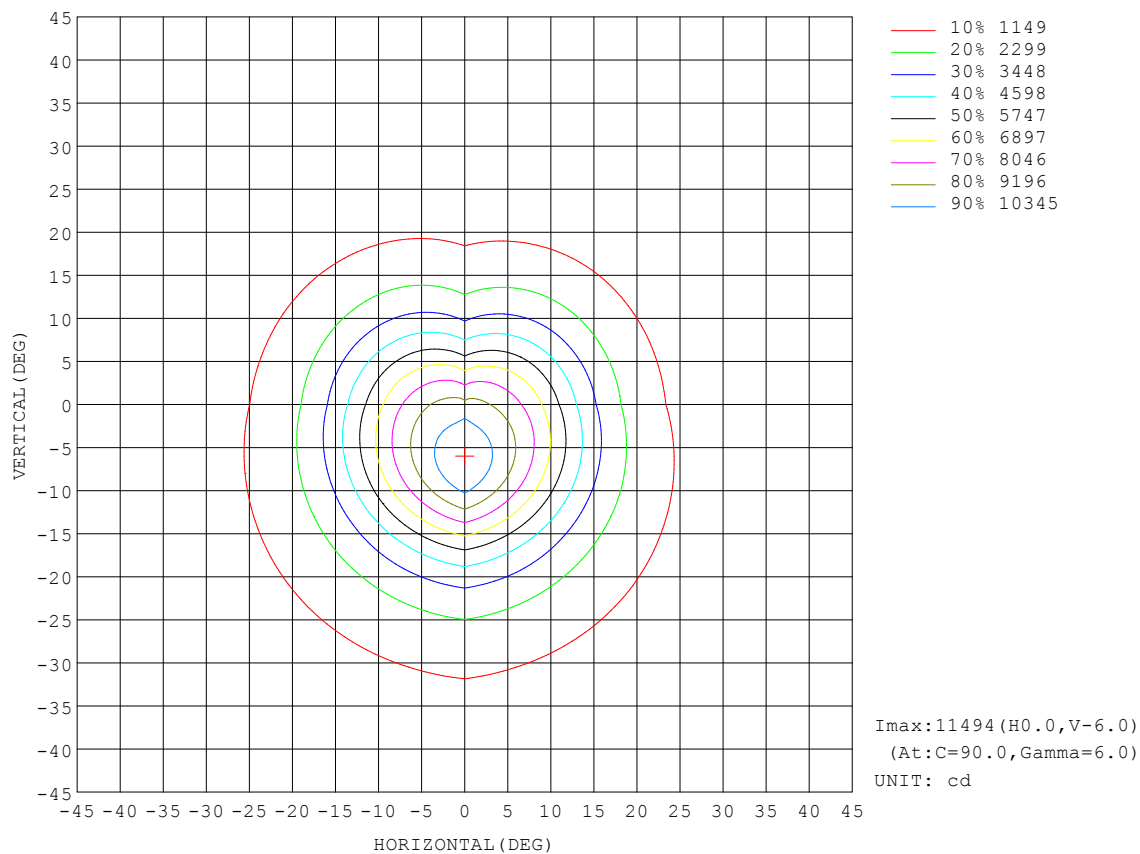
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	85	78	74	84	78	74	83	77	74	70
0.80	92	86	82	92	86	82	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	99	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	114	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:2020-03-09

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:0.1695A P:36.01W PF:0.9631 Freq:59.98Hz Lamp Flux:3114.39x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-36W275-CI90037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:

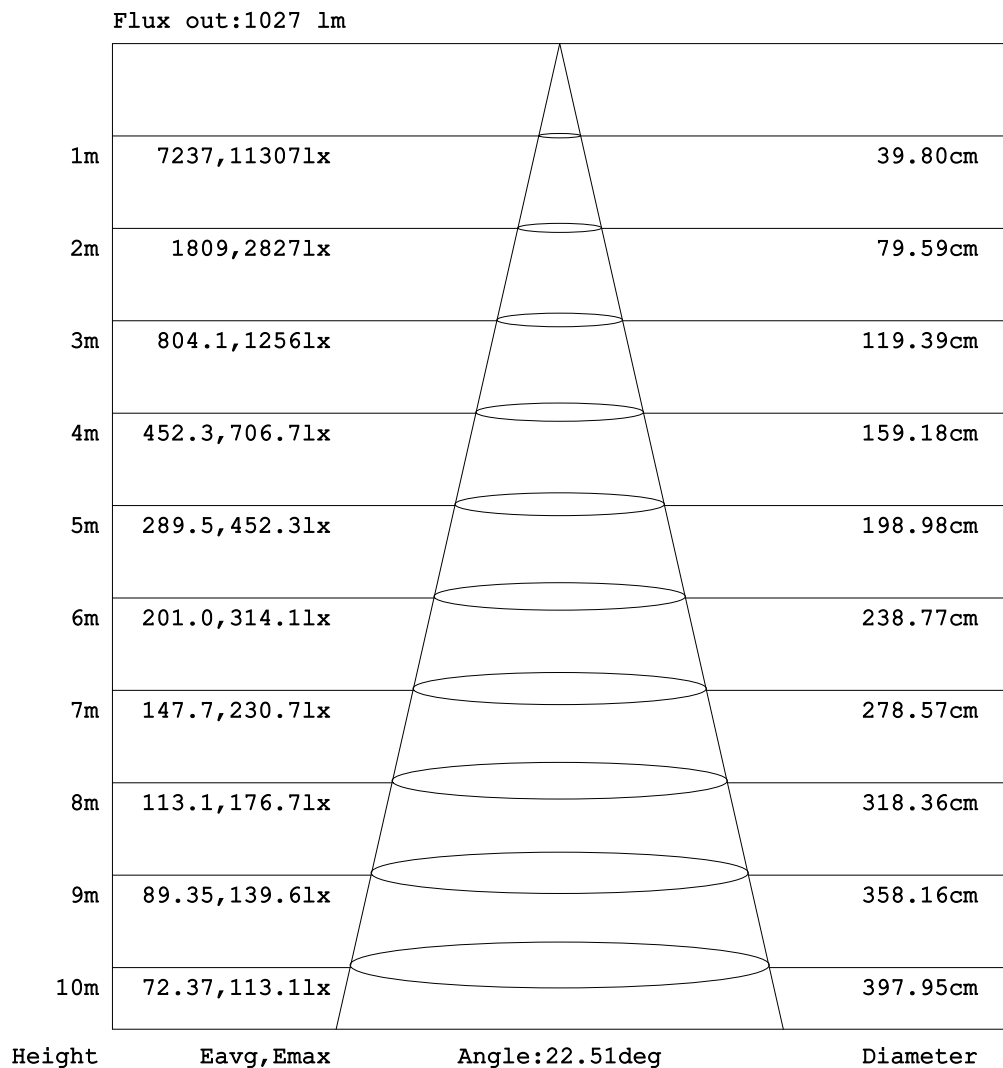


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2020-03-09

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:0.1695A P:36.01W PF:0.9631 Freq:59.98Hz Lamp Flux:3114.39x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-36W275-CI90037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:



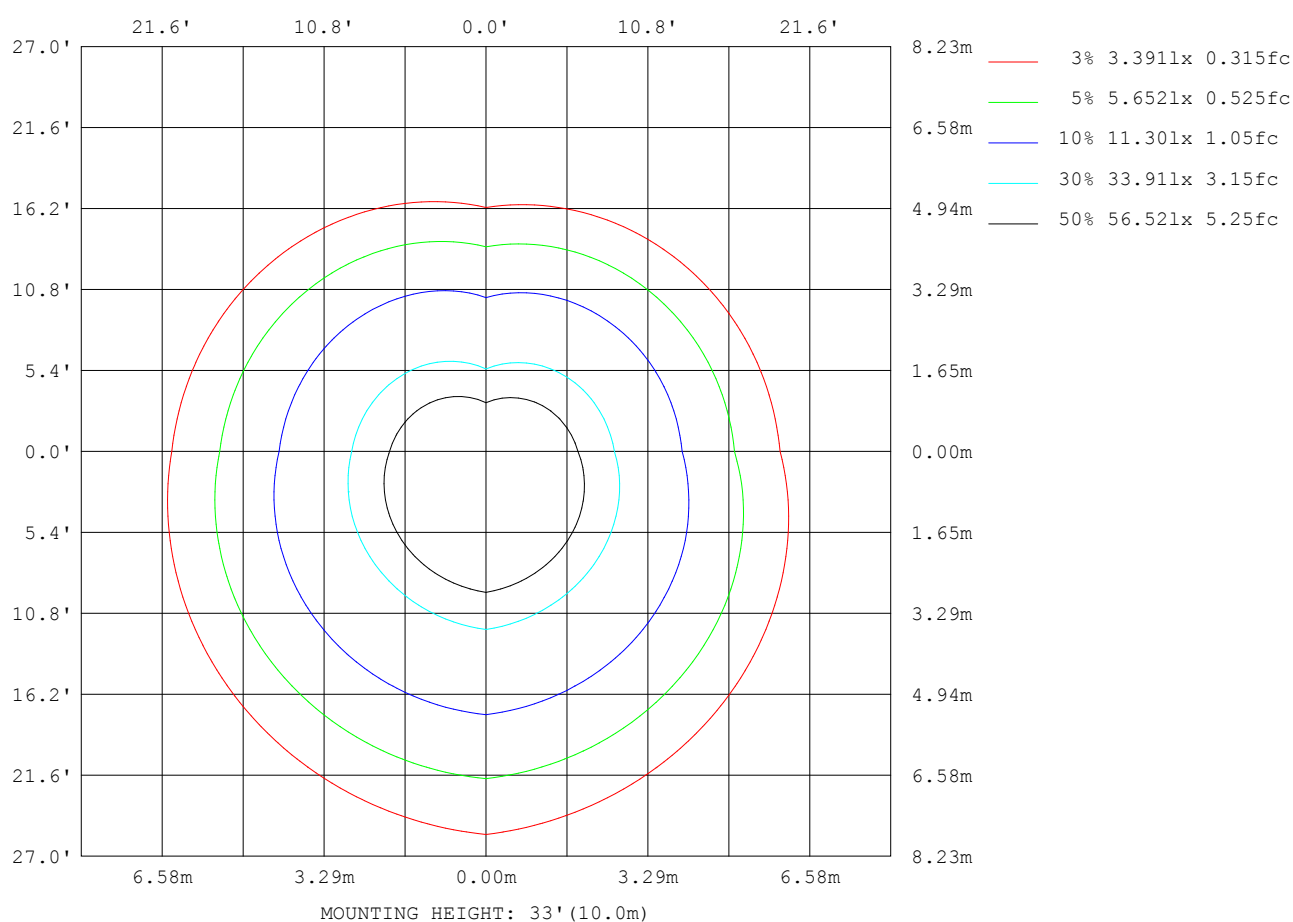
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Xie Bi
Test Date: 2020-03-09

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:0.1695A P:36.01W PF:0.9631 Freq:59.98Hz Lamp Flux:3114.39x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-36W275-CI90037R90-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:2020-03-09

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:0.1695A P:36.01W PF:0.9631 Freq:59.98Hz Lamp Flux:3114.39x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-36W275-CI90037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:

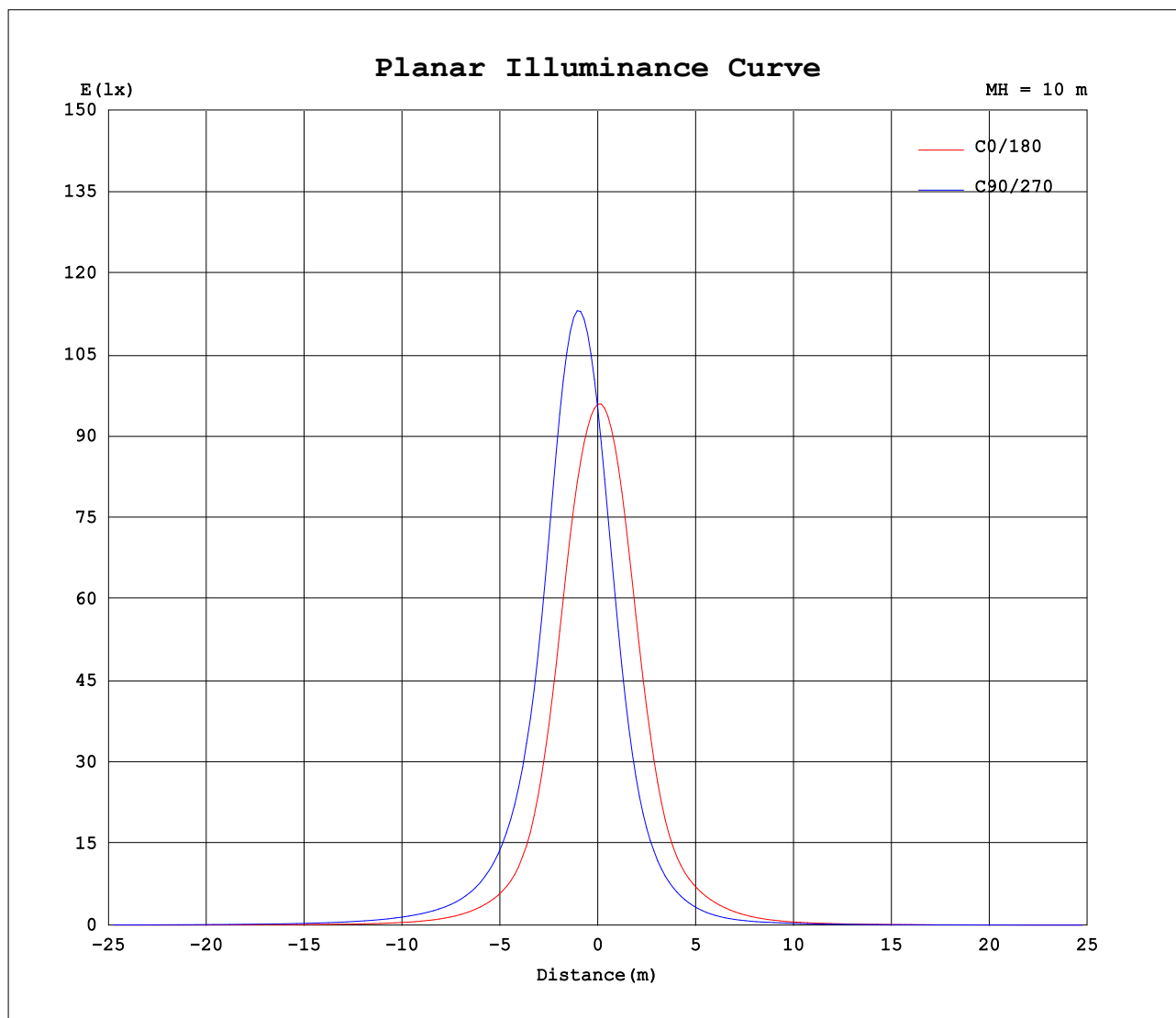
AvgL	cd/m2
L_0~180 (65) av	86842
L_0~180 (75) av	67166
L_0~180 (85) av	42848
L_90~270 (65) av	155971
L_90~270 (75) av	79413
L_90~270 (85) av	6080
L_45 (65) av	130193
L_45 (75) av	74857
L_45 (85) av	19996

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2020-03-09

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: 2020-03-09

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:0.1695A P:36.01W PF:0.9631 Freq:59.98Hz Lamp Flux:3114.39x1 lm		
NAME: 11171LED	TYPE:	WEIGHT:
SPEC.:P-11171LED-36W275-CI90037R90-JG000	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:0.0001	Shielding Angle:

Table--1

UNIT: ×10cd

C (DEG) γ (DEG)	0	90	180	270															
0	959	949	959	949															
5	863	1142	892	617															
10	629	1050	661	330															
15	357	708	390	173															
20	176	404	201	95.7															
25	95.3	229	114	54.7															
30	58.3	137	71.8	31.6															
35	35.9	86.9	44.7	19.1															
40	21.8	59.1	26.8	12.8															
45	13.8	41.8	16.4	9.47															
50	9.27	29.7	10.7	7.12															
55	6.58	20.9	7.39	5.35															
60	4.84	14.6	5.26	4.11															
65	3.57	9.96	3.77	3.22															
70	2.56	6.38	2.65	2.36															
75	1.72	2.72	1.75	1.39															
80	0.98	0.79	1.01	0.65															
85	0.36	0.08	0.39	0.02															
90	0.01	0.03	0.01	0.01															
95	0.01	0.01	0.02	0.01															
100	0.02	0.01	0.02	0.01															
105	0.02	0.01	0.02	0.02															
110	0.01	0.01	0.01	0.02															
115	0.02	0.02	0.02	0.04															
120	0.03	0.02	0.03	0.05															
125	0.05	0.03	0.04	0.07															
130	0.07	0.04	0.05	0.09															
135	0.14	0.06	0.09	0.13															
140	0.17	0.09	0.09	0.20															
145	0.29	0.15	0.14	0.30															
150	0.48	0.25	0.24	0.48															
155	0.75	0.45	0.40	0.71															
160	1.02	0.73	0.62	0.94															
165	1.19	1.04	0.84	1.07															
170	1.22	1.23	0.99	1.07															
175	1.18	1.24	1.07	1.07															
180	1.14	1.19	1.14	1.18															

C Range: 0 - 360DEG
C Interval: 90.0DEG
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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: