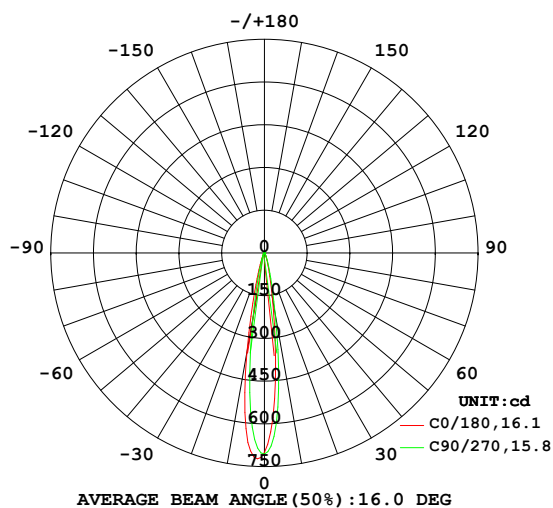


LUMINAIRE PHOTOMETRIC TEST REPORT

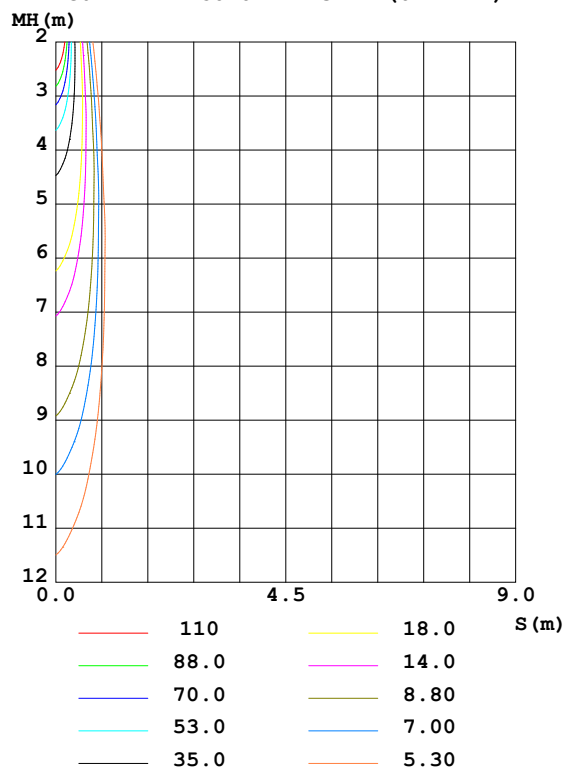
Test:U:220.7V I:0.0194A P:1.738W PF:0.4068 Freq:59.98Hz Lamp Flux:78.8562x1 lm					
NAME: 1394LED		TYPE:		WEIGHT:	
SPEC.:P-1394LED-1W2715-CR7004R90-LDY701		DIM.:		SERIAL No.:	
MFR.: CETTIGA		SUR.:		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 45.38 lm/W
MODEL	CREE XPG-2	I _{max} (cd)	723.0	S/MH (C0/180)	0.32	
NOMINAL POWER (W)	1W	LOR (%)	100.0	S/MH (C90/270)	0.27	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	78.856	η UP, DN (C0-180)	0.2, 42.5	
NOMINAL FLUX (lm)	78.8562	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.1, 57.3	
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: 2020-03-27

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:

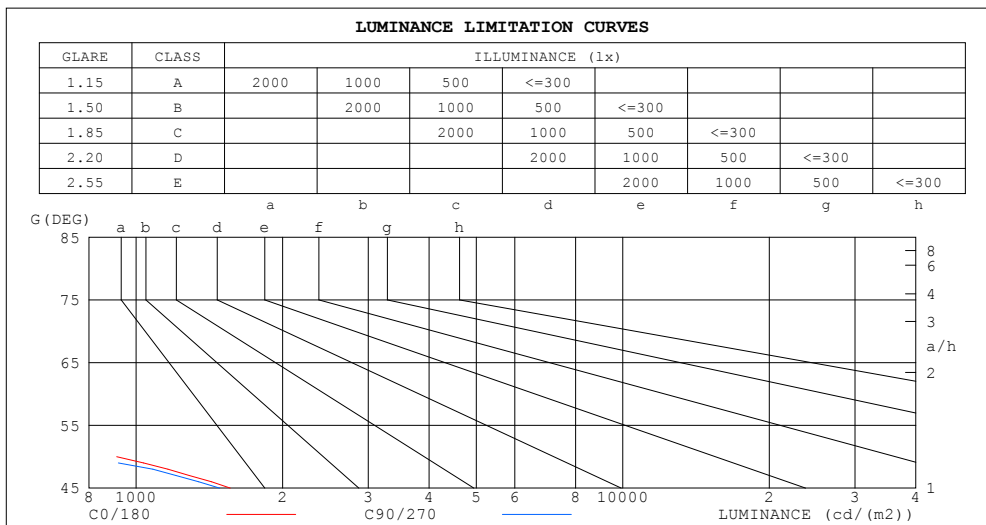
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	165.9	219.1	355.7	232.6					0- 10	42.07	42.07	53.3,53.3
20	25.13	32.14	43.67	31.08					10- 20	25.38	67.45	85.5,85.5
30	6.219	7.484	10.13	8.154					20- 30	7.722	75.17	95.3,95.3
40	1.748	1.752	2.210	1.974					30- 40	2.347	77.52	98.3,98.3
50	0.5865	0.5101	0.7476	0.7198					40- 50	0.9329	78.45	99.5,99.5
60	0	0	0	0.0001					50- 60	0.1901	78.64	99.7,99.7
70	0	0	0	0					60- 70	0.0001	78.64	99.7,99.7
80	0	0	0	0					70- 80	0	78.64	99.7,99.7
90	0	0	0	0					80- 90	0	78.64	99.7,99.7
100	0	0	0	0					90-100	0	78.64	99.7,99.7
110	0	0	0	0					100-110	0	78.64	99.7,99.7
120	0	0	0	0					110-120	0	78.64	99.7,99.7
130	0	0	0	0					120-130	0.0003	78.64	99.7,99.7
140	0	0.0174	0.0058	0					130-140	0.0026	78.64	99.7,99.7
150	0.0985	0.1045	0.0406	0.0116					140-150	0.0145	78.66	99.7,99.7
160	0.3714	0.4006	0.1860	0.1509					150-160	0.0696	78.73	99.8,99.8
170	0.4005	0.3888	0.3250	0.3540					160-170	0.0967	78.82	100,100
180	0.2960	0.3018	0.3018	0.3134					170-180	0.0322	78.86	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:2020-03-27

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:0.0194A P:1.738W PF:0.4068 Freq:59.98Hz Lamp Flux:78.8562x1 lm		
NAME: 1394LED	TYPE:	WEIGHT:
SPEC.:P-1394LED-1W2715-CR7004R90-LDY701	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	0	0
80	0	0
75	0	0
70	0	0
65	0	0
60	0	0
55	133	0
50	912	794
45	1561	1484

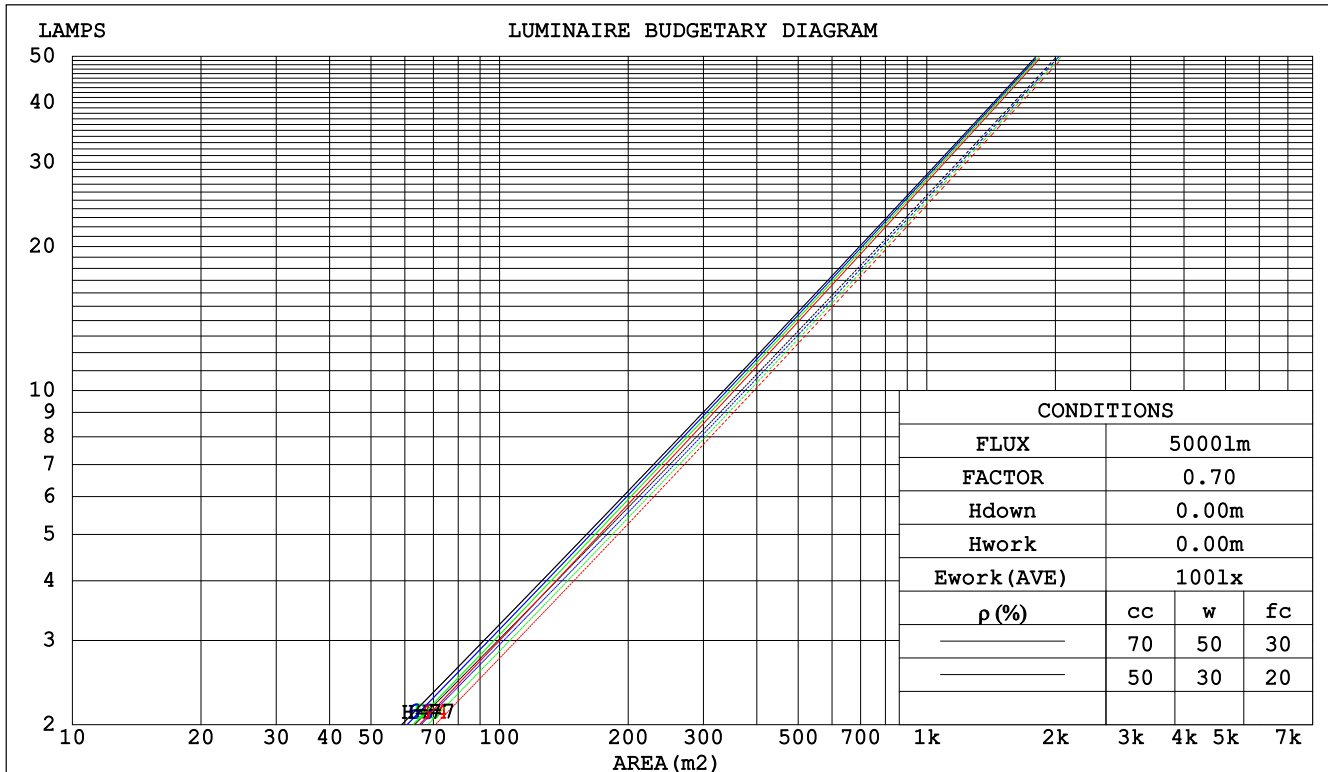
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2020-03-27

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:0.0194A P:1.738W PF:0.4068 Freq:59.98Hz Lamp Flux:78.8562x1 lm		
NAME: 1394LED	TYPE:	WEIGHT:
SPEC.:P-1394LED-1W2715-CR7004R90-LDY701	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	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	1.13	1.12	1.10	1.11	1.10	1.08	1.07	1.06	1.05	1.04	1.03	1.02	1.00	.00	.99	.97
2.0	1.09	1.06	1.04	1.07	1.05	1.03	1.04	1.02	1.01	1.01	.00	.98	.99	.97	.96	.95
3.0	1.05	1.02	.99	1.04	1.01	.98	1.01	.99	.97	.99	.97	.95	.97	.95	.94	.93
4.0	1.02	.98	.95	1.01	.97	.95	.99	.96	.94	.97	.95	.93	.95	.93	.92	.91
5.0	.99	.95	.92	.98	.94	.92	.96	.93	.91	.95	.92	.90	.93	.91	.90	.89
6.0	.96	.92	.90	.95	.92	.89	.94	.91	.89	.93	.90	.88	.92	.89	.88	.87
7.0	.94	.90	.87	.93	.90	.87	.92	.89	.87	.91	.88	.86	.90	.88	.86	.85
8.0	.91	.88	.85	.91	.88	.85	.90	.87	.85	.89	.87	.85	.88	.86	.84	.83
9.0	.89	.86	.84	.89	.86	.83	.88	.85	.83	.88	.85	.83	.87	.85	.83	.82
10.0	.88	.84	.82	.87	.84	.82	.87	.84	.82	.86	.83	.82	.85	.83	.81	.81



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2020-03-27

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:0.0194A P:1.738W PF:0.4068 Freq:59.98Hz Lamp Flux:78.8562x1 lm		
NAME: 1394LED	TYPE:	WEIGHT:
SPEC.:P-1394LED-1W2715-CR7004R90-LDY701	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	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	.124	.071	.022	.118	.067	.021	.105	.060	.019	.094	.054	.017	.083	.048	.016		
2.0	.114	.063	.019	.109	.060	.018	.099	.055	.017	.089	.050	.016	.080	.045	.014		
3.0	.106	.056	.017	.101	.054	.016	.093	.050	.015	.085	.046	.014	.077	.043	.013		
4.0	.098	.051	.015	.094	.049	.015	.087	.046	.014	.081	.043	.013	.075	.041	.012		
5.0	.092	.047	.014	.089	.046	.013	.083	.043	.013	.077	.041	.012	.072	.038	.012		
6.0	.086	.043	.012	.084	.042	.012	.078	.040	.012	.074	.038	.011	.069	.036	.011		
7.0	.081	.040	.011	.079	.039	.011	.075	.038	.011	.070	.036	.011	.067	.035	.010		
8.0	.077	.038	.011	.075	.037	.010	.071	.036	.010	.068	.034	.010	.064	.033	.010		
9.0	.073	.036	.010	.072	.035	.010	.068	.034	.010	.065	.033	.009	.062	.031	.009		
10.0	.070	.034	.009	.068	.033	.009	.065	.032	.009	.063	.031	.009	.060	.030	.009		

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	.170	.160	.151	.145	.137	.130	.099	.094	.090	.057	.055	.052	.018	.018	.017	
2.0	.151	.135	.122	.129	.116	.105	.088	.080	.073	.051	.047	.043	.016	.015	.014	
3.0	.135	.115	.100	.116	.099	.086	.079	.069	.061	.046	.040	.036	.015	.013	.012	
4.0	.122	.100	.083	.104	.086	.072	.072	.060	.051	.042	.035	.030	.013	.011	.010	
5.0	.111	.087	.070	.095	.075	.061	.065	.053	.043	.038	.031	.025	.012	.010	.008	
6.0	.101	.077	.060	.087	.067	.052	.060	.047	.037	.035	.027	.022	.011	.009	.007	
7.0	.093	.069	.051	.080	.059	.045	.055	.042	.032	.032	.025	.019	.010	.008	.006	
8.0	.086	.062	.045	.074	.053	.039	.051	.038	.028	.030	.022	.016	.010	.007	.005	
9.0	.080	.056	.039	.069	.048	.034	.048	.034	.024	.028	.020	.014	.009	.007	.005	
10.0	.075	.051	.035	.065	.044	.030	.045	.031	.022	.026	.018	.013	.009	.006	.004	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2020-03-27

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:0.0194A P:1.738W PF:0.4068 Freq:59.98Hz Lamp Flux:78.8562x1 lm											
NAME: 1394LED					TYPE:			WEIGHT:			
SPEC.:P-1394LED-1W2715-CR7004R90-LDY701					DIM.:			SERIAL No.:			
MFR.: CETTIGA					SUR.:			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		10.5	11.1	10.7	11.2	11.4	10.7	11.2	10.9	11.4	11.5
	3H	10.4	10.9	10.6	11.1	11.3	10.5	11.1	10.8	11.3	11.4
	4H	10.3	10.8	10.6	11.0	11.2	10.5	11.0	10.7	11.2	11.4
	6H	10.2	10.7	10.5	10.9	11.2	10.4	10.9	10.7	11.1	11.3
	8H	10.2	10.6	10.5	10.9	11.1	10.3	10.8	10.6	11.1	11.3
	12H	10.1	10.6	10.4	10.8	11.1	10.3	10.7	10.6	11.0	11.3
4H	2H	10.3	10.8	10.6	11.0	11.2	10.5	11.0	10.7	11.2	11.4
	3H	10.1	10.6	10.4	10.8	11.1	10.3	10.8	10.6	11.0	11.3
	4H	10.0	10.4	10.4	10.7	11.0	10.2	10.6	10.5	10.9	11.2
	6H	9.9	10.3	10.3	10.6	11.0	10.1	10.5	10.5	10.8	11.1
	8H	9.9	10.2	10.3	10.6	10.9	10.0	10.4	10.4	10.7	11.1
	12H	9.8	10.1	10.2	10.5	10.9	10.0	10.3	10.4	10.7	11.1
8H	4H	9.9	10.2	10.3	10.6	10.9	10.0	10.4	10.4	10.7	11.1
	6H	9.8	10.0	10.2	10.4	10.9	9.9	10.2	10.4	10.6	11.0
	8H	9.7	9.9	10.1	10.4	10.8	9.9	10.1	10.3	10.5	11.0
	12H	9.6	9.8	10.1	10.3	10.8	9.8	10.0	10.3	10.5	10.9
12H	4H	9.8	10.1	10.2	10.5	10.9	10.0	10.3	10.4	10.7	11.1
	6H	9.7	9.9	10.1	10.4	10.8	9.9	10.1	10.3	10.5	11.0
	8H	9.6	9.8	10.1	10.3	10.8	9.8	10.0	10.3	10.5	10.9
Variations with the observer position at spacings:											
S = 1.0H	+ 2.6 / -25.6					+ 2.7 / - 1.\$					
1.5H	+ 3.5 / -26.2					+ 3.8 / -30.5					
2.0H	+ 6.2 / - 1.\$					+ 6.3 / - 1.\$					

CIE Pub.117, 78.86 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -8.8)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2020-03-27

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:0.0194A P:1.738W PF:0.4068 Freq:59.98Hz Lamp Flux:78.8562x1 lm		
NAME: 1394LED	TYPE:	WEIGHT:
SPEC.:P-1394LED-1W2715-CR7004R90-LDY701	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

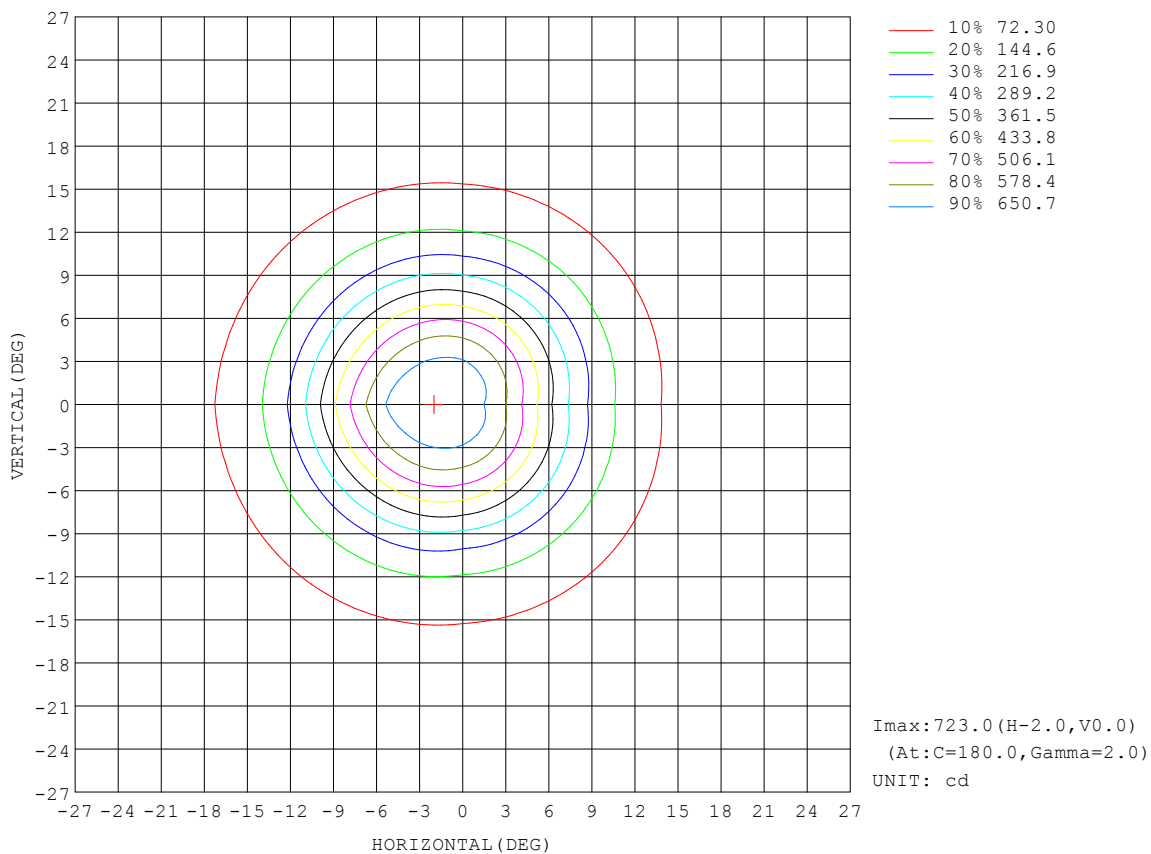
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	91	85	81	90	85	81	89	84	81	78
0.80	98	92	89	97	92	89	96	91	88	85
1.00	101	96	93	101	96	93	99	96	92	89
1.25	105	100	97	104	100	97	102	99	96	92
1.50	107	103	100	106	102	100	104	101	99	94
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	106	104	106	104	102	96
3.00	112	109	107	111	108	106	107	105	104	97
4.00	114	112	110	112	110	108	109	107	106	99
5.00	116	114	112	113	112	110	109	108	107	100
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:2020-03-27

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:0.0194A P:1.738W PF:0.4068 Freq:59.98Hz Lamp Flux:78.8562x1 lm		
NAME: 1394LED	TYPE:	WEIGHT:
SPEC.:P-1394LED-1W2715-CR7004R90-LDY701	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:



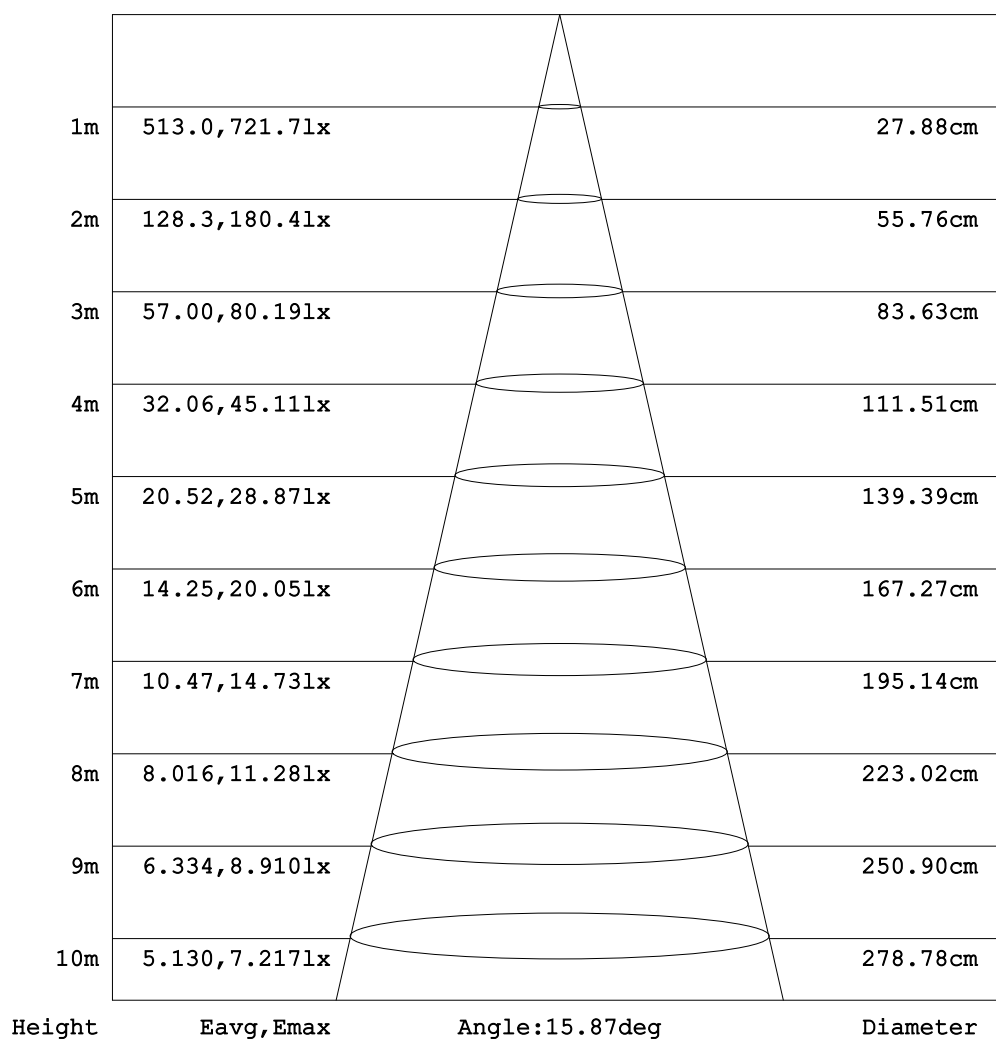
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2020-03-27

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:0.0194A P:1.738W PF:0.4068 Freq:59.98Hz Lamp Flux:78.8562x1 lm		
NAME: 1394LED	TYPE:	WEIGHT:
SPEC.:P-1394LED-1W2715-CR7004R90-LDY701	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

Flux out:31.83 lm



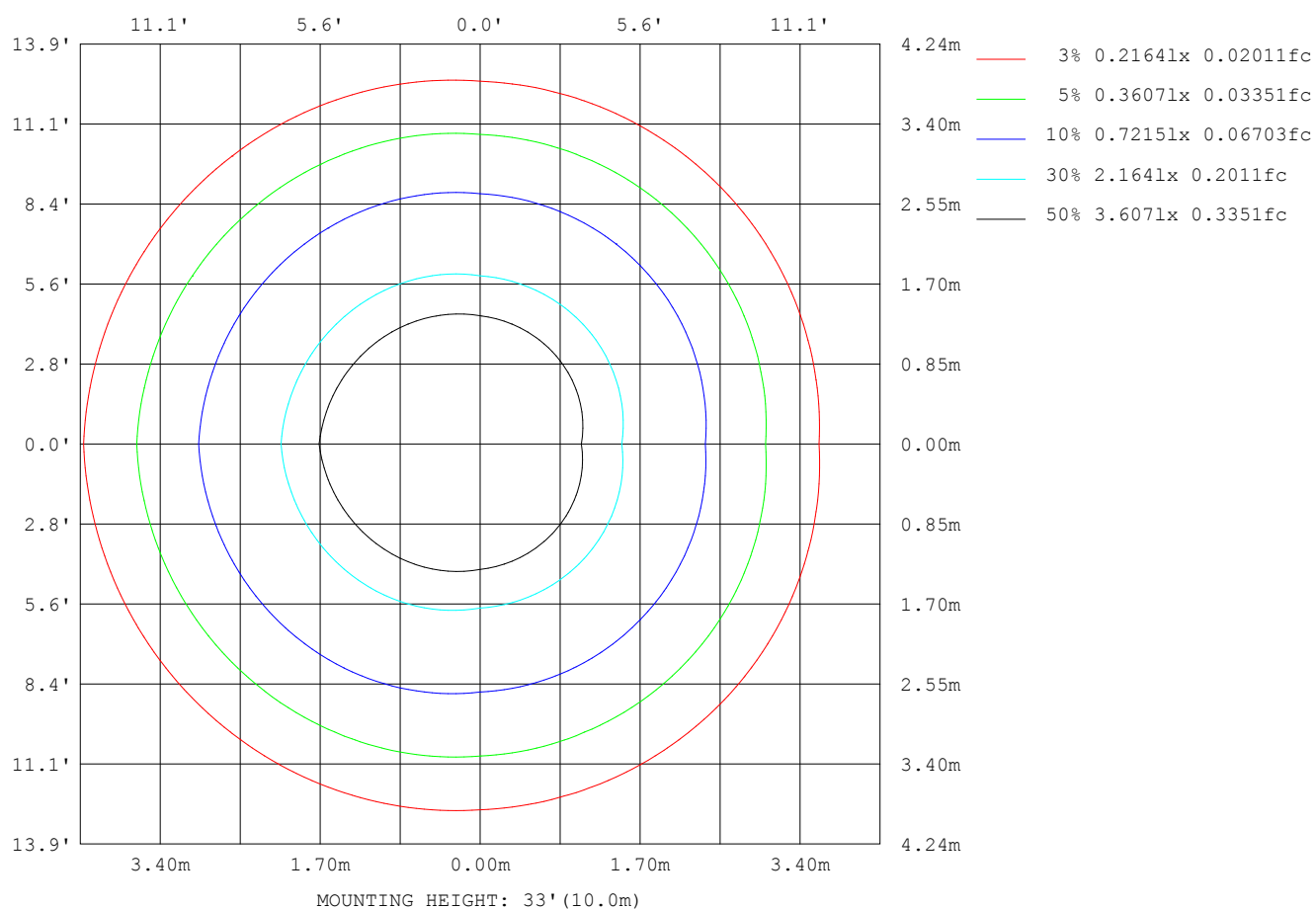
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2020-03-27

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:0.0194A P:1.738W PF:0.4068 Freq:59.98Hz Lamp Flux:78.8562x1 lm		
NAME: 1394LED	TYPE:	WEIGHT:
SPEC.: P-1394LED-1W2715-CR7004R90-LDY701	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Xie Bi
Test Date: 2020-03-27

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:0.0194A P:1.738W PF:0.4068 Freq:59.98Hz Lamp Flux:78.8562x1 lm		
NAME: 1394LED	TYPE:	WEIGHT:
SPEC.:P-1394LED-1W2715-CR7004R90-LDY701	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

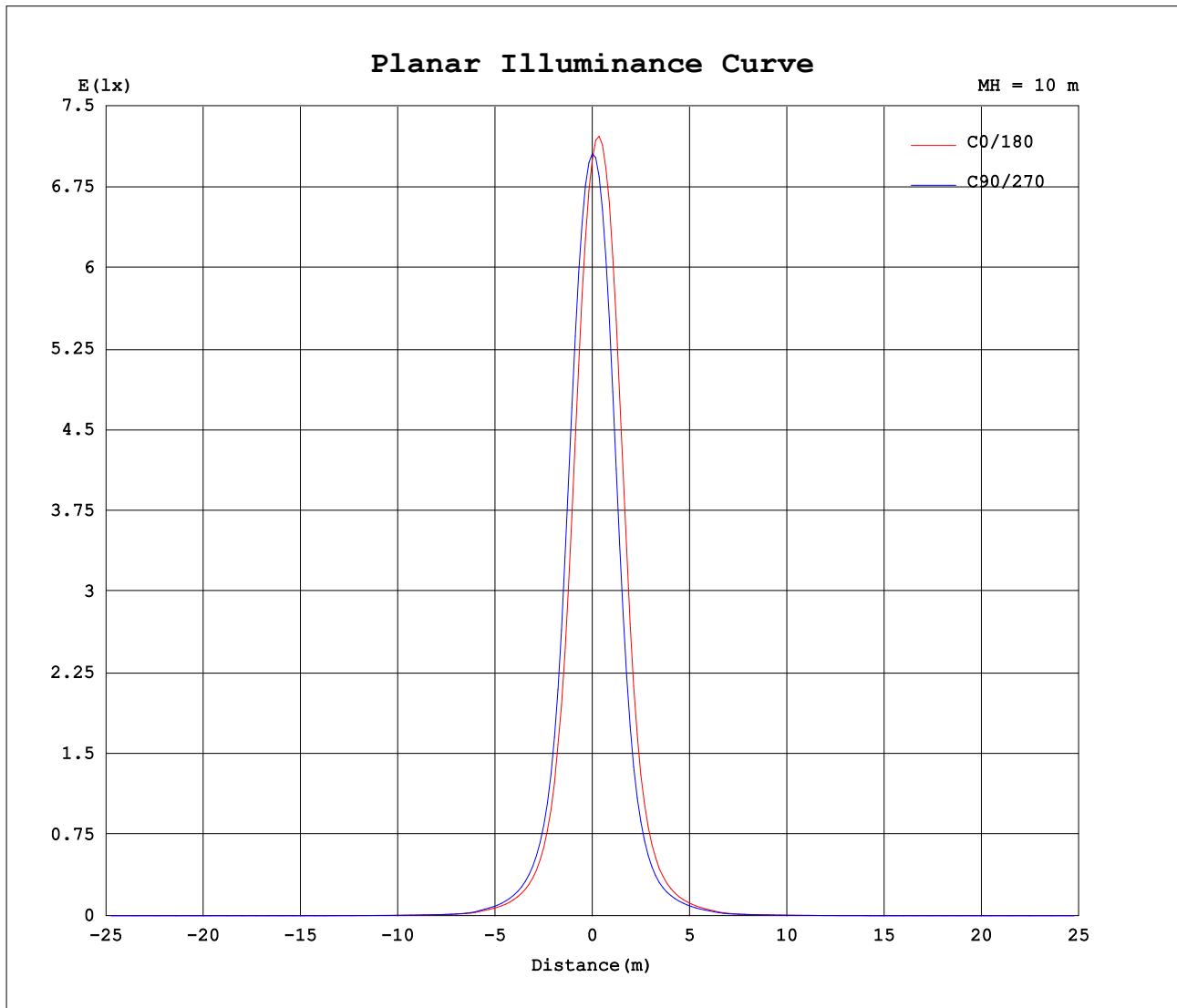
AvgL	cd/m2
L_0~180 (65) av	0
L_0~180 (75) av	0
L_0~180 (85) av	0
L_90~270 (65) av	0
L_90~270 (75) av	0
L_90~270 (85) av	0
L_45 (65) av	0
L_45 (75) av	0
L_45 (85) av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2020-03-27

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: 2020-03-27

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:0.0194A P:1.738W PF:0.4068 Freq:59.98Hz Lamp Flux:78.8562x1 lm		
NAME: 1394LED	TYPE:	WEIGHT:
SPEC.: P-1394LED-1W2715-CR7004R90-LDY701	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	700	706	700	706															
5	446	543	668	559															
10	166	219	356	233															
15	57.6	75.7	115	77.5															
20	25.1	32.1	43.7	31.1															
25	12.3	15.5	20.2	15.6															
30	6.22	7.48	10.1	8.15															
35	2.75	2.94	4.05	3.30															
40	1.75	1.75	2.21	1.97															
45	1.10	1.05	1.36	1.27															
50	0.59	0.51	0.75	0.72															
55	0.08	0.00	0.26	0.24															
60	0.00	0.00	0.00	0.00															
65	0.00	0.00	0.00	0.00															
70	0.00	0.00	0.00	0.00															
75	0.00	0.00	0.00	0.00															
80	0.00	0.00	0.00	0.00															
85	0.00	0.00	0.00	0.00															
90	0.00	0.00	0.00	0.00															
95	0.00	0.00	0.00	0.00															
100	0.00	0.00	0.00	0.00															
105	0.00	0.00	0.00	0.00															
110	0.00	0.00	0.00	0.00															
115	0.00	0.00	0.00	0.00															
120	0.00	0.00	0.00	0.00															
125	0.00	0.00	0.00	0.00															
130	0.00	0.00	0.00	0.00															
135	0.00	0.01	0.01	0.00															
140	0.00	0.02	0.01	0.00															
145	0.01	0.05	0.02	0.00															
150	0.10	0.10	0.04	0.01															
155	0.23	0.24	0.08	0.04															
160	0.37	0.40	0.19	0.15															
165	0.41	0.43	0.30	0.28															
170	0.40	0.39	0.33	0.35															
175	0.31	0.30	0.30	0.35															
180	0.30	0.30	0.30	0.31															

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: