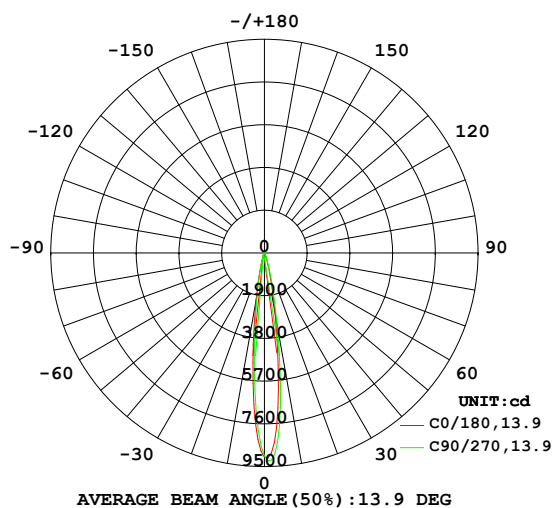


LUMINAIRE PHOTOMETRIC TEST REPORT

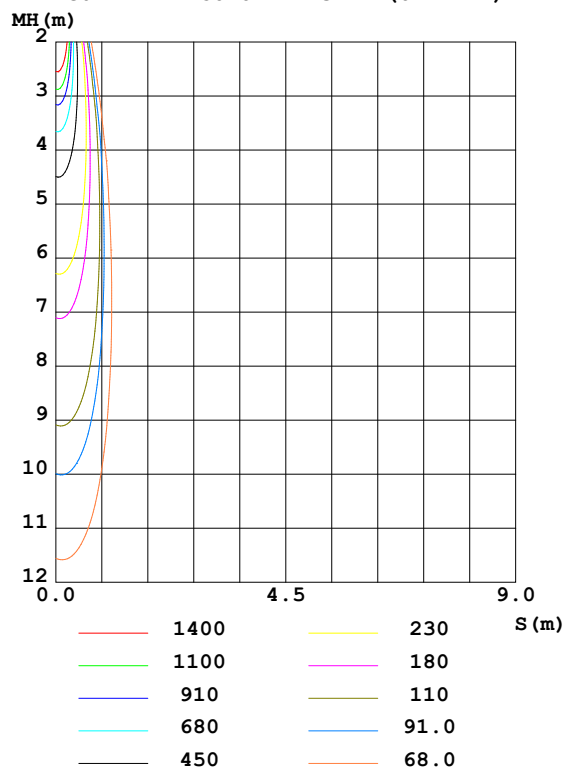
Test:U:220.6V I:0.0592A P:12.11W PF:0.9272 Freq:59.98Hz Lamp Flux:802.309x1 lm					
NAME: G503LED		TYPE:		WEIGHT:	
SPEC.: P-G503LED-12W2715-CI35031R90-HEK700		DIM.:		SERIAL No.:	
MFR.: CETTIGA		SUR.:		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 66.25 lm/W
MODEL	CLU701 1002	I _{max} (cd)	9238	S/MH (C0/180)	0.22	
NOMINAL POWER (W)	12W	LOR (%)	100.0	S/MH (C90/270)	0.20	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	802.31	η UP, DN (C0-180)	0.2, 57.7	
NOMINAL FLUX (lm)	802.309	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.1, 41.9	
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: 2020-05-04

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:

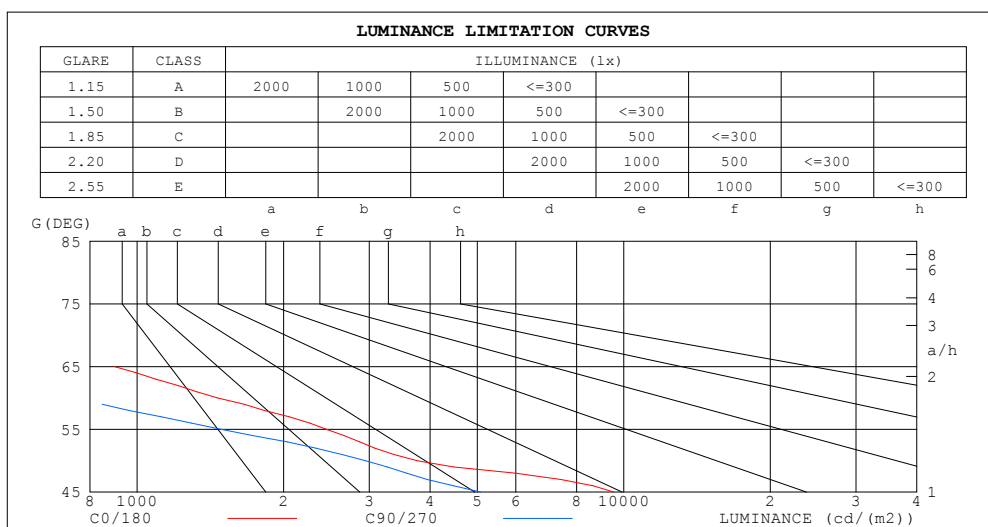
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	2709	3251	2134	1848					0- 10	474.6	474.6	59.2, 59.2
20	263.8	369.8	217.7	227.1					10- 20	250.4	725.1	90.4, 90.4
30	45.30	50.11	38.81	37.38					20- 30	51.81	776.9	96.8, 96.8
40	14.89	13.37	14.23	12.97					30- 40	15.19	792.1	98.7, 98.7
50	3.630	2.841	3.073	2.275					40- 50	5.773	797.9	99.4, 99.4
60	1.098	0.5570	0.9455	0.4356					50- 60	1.469	799.3	99.6, 99.6
70	0.1045	0.0058	0.0174	0.0754					60- 70	0.3234	799.7	99.7, 99.7
80	0.0290	0	0.0058	0.0348					70- 80	0.0316	799.7	99.7, 99.7
90	0.0059	0	0.0058	0.0232					80- 90	0.0114	799.7	99.7, 99.7
100	0	0	0.0116	0.0174					90-100	0.0055	799.7	99.7, 99.7
110	0	0	0.0174	0.0174					100-110	0.0084	799.7	99.7, 99.7
120	0	0.0058	0.0348	0.0174					110-120	0.0099	799.7	99.7, 99.7
130	0.0116	0.0290	0.0522	0.0174					120-130	0.0175	799.7	99.7, 99.7
140	0.0928	0.1337	0.1046	0.0754					130-140	0.0369	799.8	99.7, 99.7
150	0.8752	0.8416	0.4356	0.4754					140-150	0.1739	799.9	99.7, 99.7
160	4.073	3.874	2.505	2.751					150-160	0.7879	800.7	99.8, 99.8
170	4.789	4.926	4.126	4.074					160-170	1.203	801.9	100, 100
180	3.151	3.081	3.157	3.064					170-180	0.3720	802.3	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: 2020-05-04

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:220.6V I:0.0592A P:12.11W PF:0.9272 Freq:59.98Hz Lamp Flux:802.309x1 lm		
NAME: G503LED	TYPE:	WEIGHT:
SPEC.: P-G503LED-12W2715-CI35031R90-HEK700	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	89	0
80	111	0
75	120	15
70	204	11
65	899	146
60	1464	743
55	2450	1489
50	3765	2947
45	9542	5083

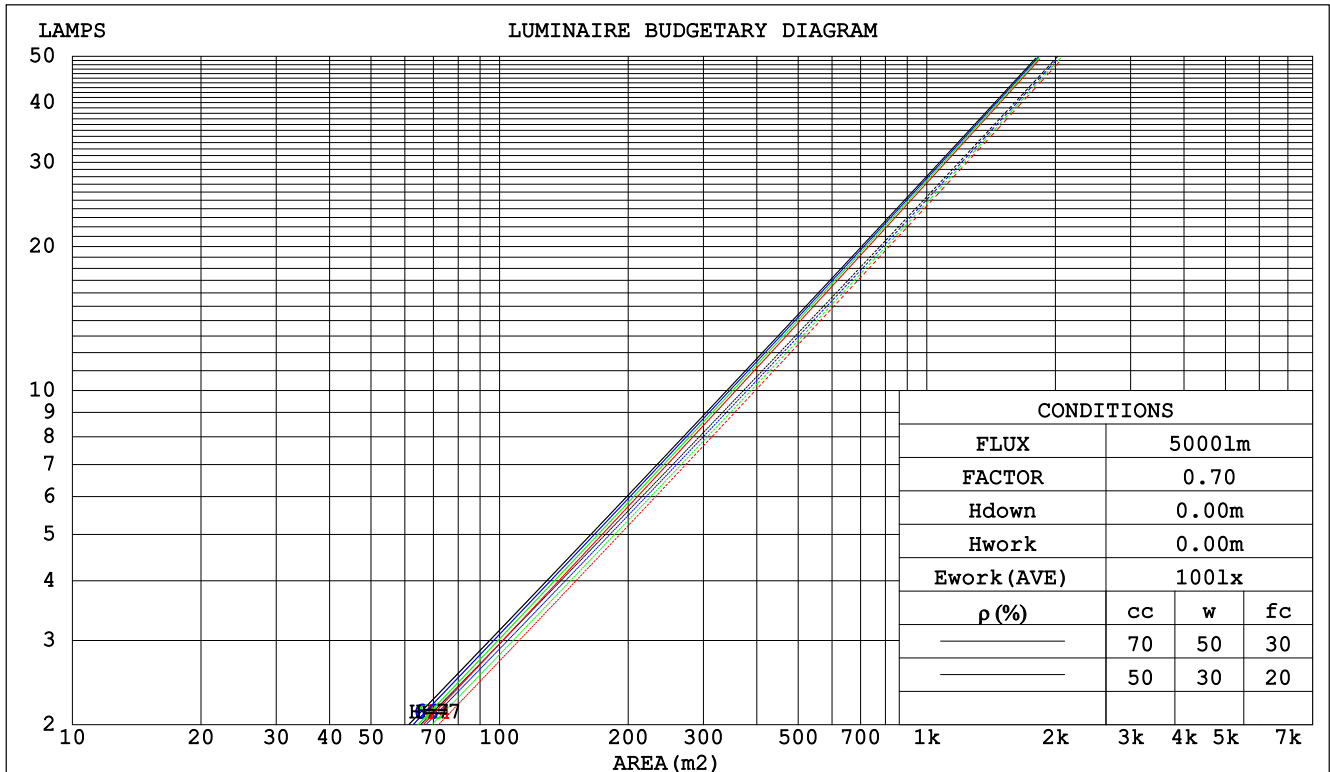
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2020-05-04

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:220.6V I:0.0592A P:12.11W PF:0.9272 Freq:59.98Hz Lamp Flux:802.309x1 lm		
NAME: G503LED	TYPE:	WEIGHT:
SPEC.:P-G503LED-12W2715-CI35031R90-HEK700	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	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	1.14	1.12	1.11	1.12	1.10	1.09	1.08	1.06	1.05	1.04	1.03	1.02	1.01	.00	.99	.98
2.0	1.09	1.07	1.05	1.08	1.06	1.04	1.05	1.03	1.01	1.02	1.00	.99	.99	.98	.97	.96
3.0	1.06	1.03	1.00	1.05	1.02	.00	1.02	.00	.98	.00	.98	.97	.98	.96	.95	.94
4.0	1.03	.00	.97	1.02	.99	.96	.00	.97	.95	.98	.96	.94	.96	.95	.93	.92
5.0	1.00	.97	.94	.99	.96	.94	.98	.95	.93	.96	.94	.92	.95	.93	.92	.91
6.0	.98	.94	.92	.97	.94	.92	.96	.93	.91	.95	.92	.90	.94	.92	.90	.89
7.0	.96	.92	.90	.95	.92	.90	.94	.91	.89	.93	.91	.89	.92	.90	.88	.88
8.0	.94	.90	.88	.93	.90	.88	.92	.90	.88	.92	.89	.87	.91	.89	.87	.86
9.0	.92	.89	.87	.92	.89	.87	.91	.88	.86	.90	.88	.86	.90	.87	.86	.85
10.0	.90	.87	.85	.90	.87	.85	.89	.87	.85	.89	.86	.85	.88	.86	.85	.84



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2020-05-04

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:220.6V I:0.0592A P:12.11W PF:0.9272 Freq:59.98Hz Lamp Flux:802.309x1 lm		
NAME: G503LED	TYPE:	WEIGHT:
SPEC.:P-G503LED-12W2715-CI35031R90-HEK700	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	.119	.068	.021	.112	.064	.020	.100	.057	.018	.088	.051	.016	.078	.045	.015		
2.0	.108	.059	.018	.103	.057	.017	.093	.052	.016	.083	.047	.015	.075	.042	.013		
3.0	.100	.053	.016	.095	.051	.015	.087	.047	.014	.079	.043	.013	.072	.040	.012		
4.0	.092	.048	.014	.088	.046	.014	.081	.043	.013	.075	.040	.012	.069	.037	.011		
5.0	.086	.044	.013	.083	.042	.012	.077	.040	.012	.071	.038	.011	.066	.035	.011		
6.0	.080	.040	.012	.078	.039	.011	.073	.037	.011	.068	.035	.010	.063	.033	.010		
7.0	.076	.037	.011	.073	.037	.010	.069	.035	.010	.065	.033	.010	.061	.032	.009		
8.0	.071	.035	.010	.070	.034	.010	.066	.033	.009	.062	.031	.009	.059	.030	.009		
9.0	.068	.033	.009	.066	.032	.009	.063	.031	.009	.060	.030	.009	.057	.029	.008		
10.0	.065	.031	.009	.063	.030	.008	.060	.029	.008	.057	.028	.008	.055	.028	.008		

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	.113	.113	.113	.065	.065	.065	.021	.021	.021	
1.0	.170	.160	.152	.145	.138	.131	.099	.095	.090	.057	.055	.053	.018	.018	.017	
2.0	.150	.135	.123	.129	.116	.106	.088	.081	.074	.051	.047	.043	.016	.015	.014	
3.0	.134	.116	.101	.115	.100	.087	.079	.069	.061	.046	.040	.036	.015	.013	.012	
4.0	.121	.100	.084	.104	.086	.073	.071	.060	.052	.041	.035	.030	.013	.011	.010	
5.0	.109	.087	.071	.094	.076	.062	.065	.053	.044	.037	.031	.026	.012	.010	.009	
6.0	.100	.077	.061	.086	.067	.053	.059	.047	.038	.034	.027	.022	.011	.009	.007	
7.0	.091	.069	.053	.079	.059	.046	.054	.042	.032	.032	.025	.019	.010	.008	.006	
8.0	.084	.062	.046	.073	.053	.040	.050	.037	.028	.029	.022	.017	.009	.007	.006	
9.0	.078	.056	.040	.068	.048	.035	.047	.034	.025	.027	.020	.015	.009	.007	.005	
10.0	.073	.051	.036	.063	.044	.031	.044	.031	.022	.026	.018	.013	.008	.006	.004	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2020-05-04

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:220.6V I:0.0592A P:12.11W PF:0.9272 Freq:59.98Hz Lamp Flux:802.309x1 lm											
NAME: G503LED						TYPE:			WEIGHT:		
SPEC.:P-G503LED-12W2715-CI35031R90-HEK700						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		7.9	8.4	8.1	8.6	8.7	7.4	7.9	7.6	8.1	8.2
	3H	7.8	8.3	8.0	8.5	8.6	7.3	7.8	7.5	7.9	8.1
	4H	7.7	8.2	8.0	8.4	8.6	7.2	7.7	7.4	7.9	8.1
	6H	7.6	8.1	7.9	8.3	8.5	7.1	7.6	7.4	7.8	8.0
	8H	7.6	8.0	7.9	8.3	8.5	7.1	7.5	7.4	7.7	8.0
	12H	7.5	7.9	7.8	8.2	8.5	7.0	7.4	7.3	7.7	8.0
4H	2H	7.7	8.2	8.0	8.4	8.6	7.2	7.7	7.5	7.9	8.1
	3H	7.6	8.0	7.9	8.2	8.5	7.1	7.5	7.4	7.7	8.0
	4H	7.5	7.9	7.8	8.1	8.4	7.0	7.3	7.3	7.6	7.9
	6H	7.4	7.7	7.7	8.0	8.4	6.9	7.2	7.2	7.5	7.9
	8H	7.3	7.6	7.7	8.0	8.3	6.8	7.1	7.2	7.5	7.8
	12H	7.2	7.5	7.6	7.9	8.3	6.7	7.0	7.1	7.4	7.8
8H	4H	7.3	7.6	7.7	8.0	8.3	6.8	7.1	7.2	7.5	7.8
	6H	7.2	7.5	7.6	7.8	8.3	6.7	7.0	7.1	7.3	7.8
	8H	7.1	7.4	7.6	7.8	8.2	6.6	6.9	7.1	7.3	7.7
	12H	7.0	7.3	7.5	7.7	8.2	6.5	6.8	7.0	7.2	7.7
12H	4H	7.2	7.5	7.6	7.9	8.3	6.7	7.0	7.1	7.4	7.8
	6H	7.1	7.4	7.6	7.8	8.2	6.6	6.9	7.1	7.3	7.7
	8H	7.0	7.3	7.5	7.7	8.2	6.5	6.8	7.0	7.2	7.7
Variations with the observer position at spacings:											
S = 1.0H	+ 2.6 / - 7.6					+ 2.6 / -10.3					
1.5H	+ 3.9 / - 6.4					+ 4.5 / - 6.6					
2.0H	+ 6.6 / - 8.5					+ 5.3 / -10.0					

CIE Pub.117, 802.3 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.8)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2020-05-04

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:

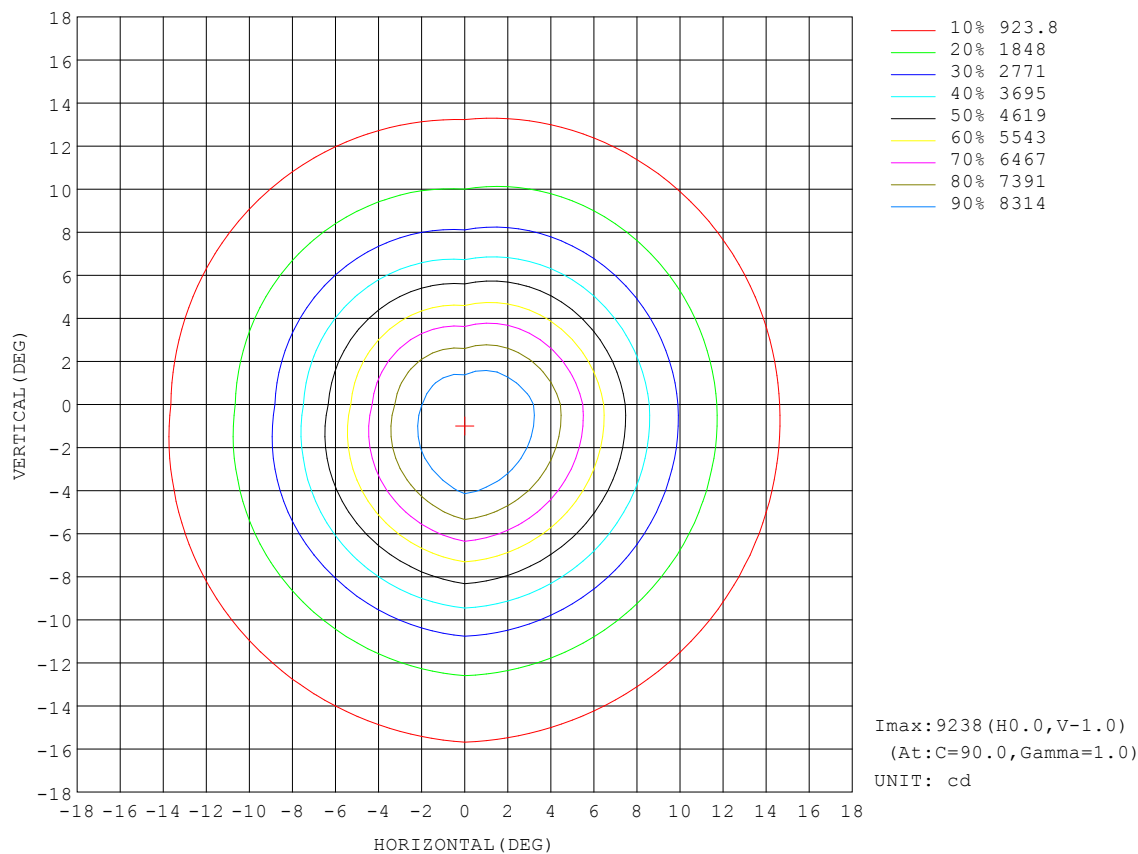
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γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

```

ISOCANDELA DIAGRAM

Test:U:220.6V I:0.0592A P:12.11W PF:0.9272 Freq:59.98Hz Lamp Flux:802.309x1 lm		
NAME: G503LED	TYPE:	WEIGHT:
SPEC.: P-G503LED-12W2715-CI35031R90-HEK700	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:



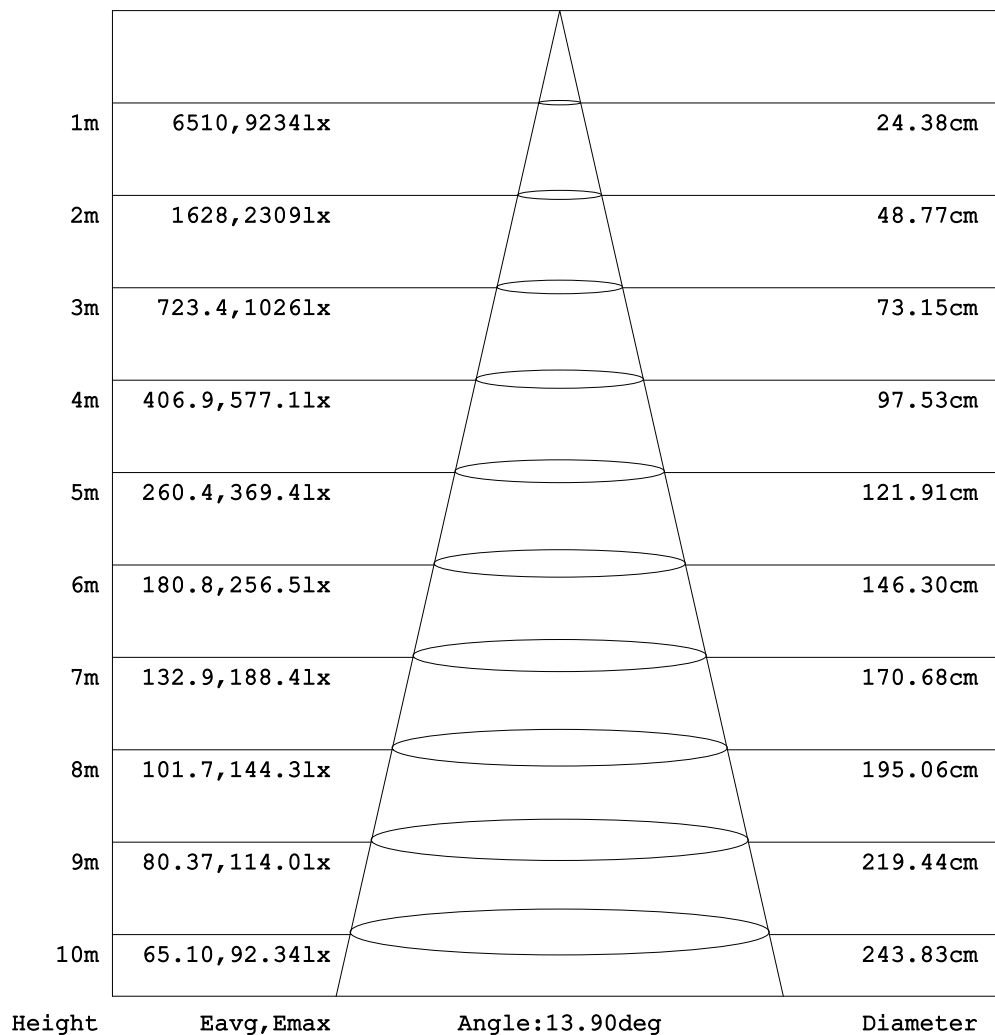
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Xie Bi
Test Date: 2020-05-04

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:220.6V I:0.0592A P:12.11W PF:0.9272 Freq:59.98Hz Lamp Flux:802.309x1 lm		
NAME: G503LED	TYPE:	WEIGHT:
SPEC.:P-G503LED-12W2715-CI35031R90-HEK700	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

Flux out:308.3 lm



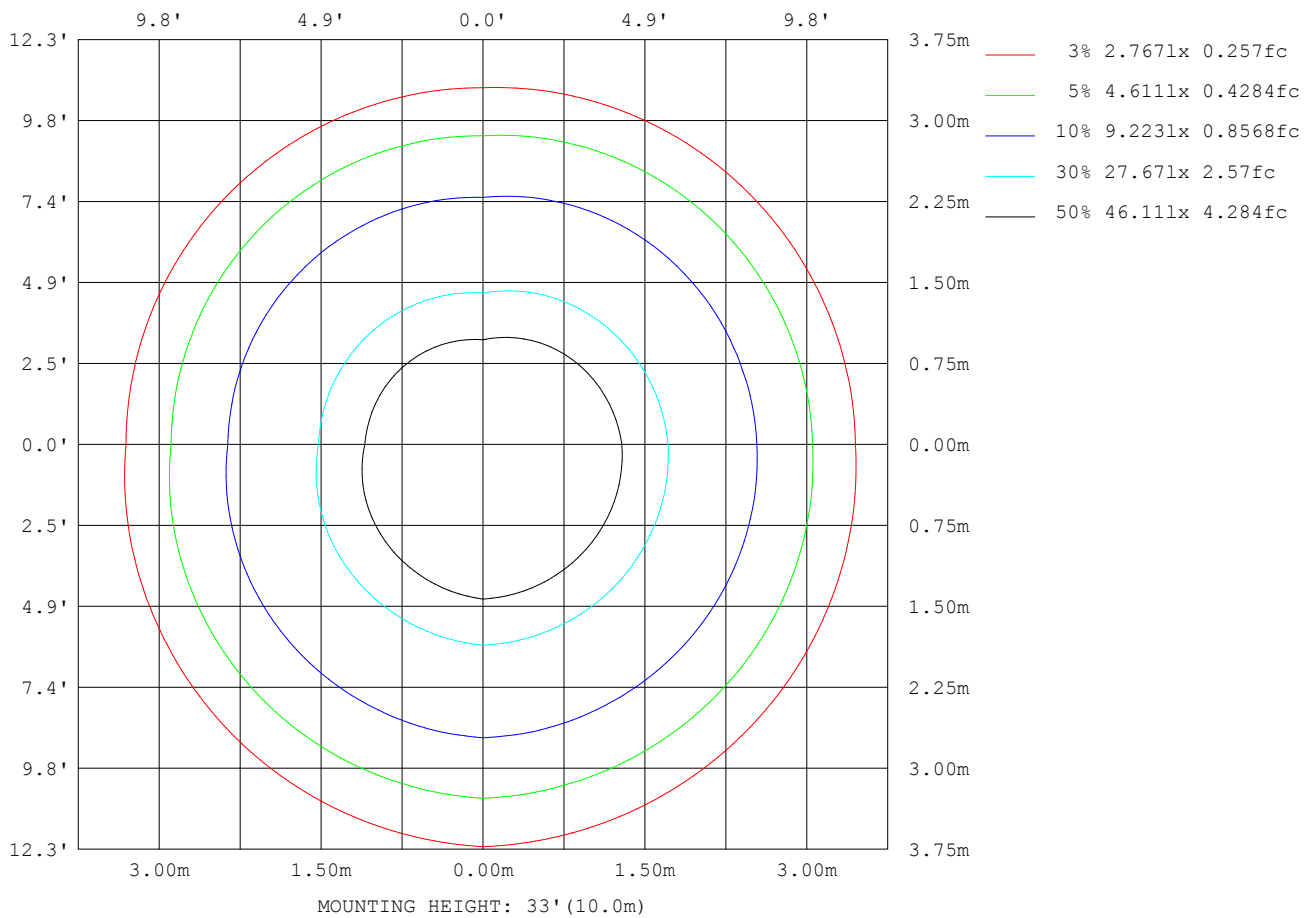
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Xie Bi
 Test Date: 2020-05-04

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:220.6V I:0.0592A P:12.11W PF:0.9272 Freq:59.98Hz Lamp Flux:802.309x1 lm		
NAME: G503LED	TYPE:	WEIGHT:
SPEC.: P-G503LED-12W2715-CI35031R90-HEK700	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: 2020-05-04

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:220.6V I:0.0592A P:12.11W PF:0.9272 Freq:59.98Hz Lamp Flux:802.309x1 lm		
NAME: G503LED	TYPE:	WEIGHT:
SPEC.:P-G503LED-12W2715-CI35031R90-HEK700	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

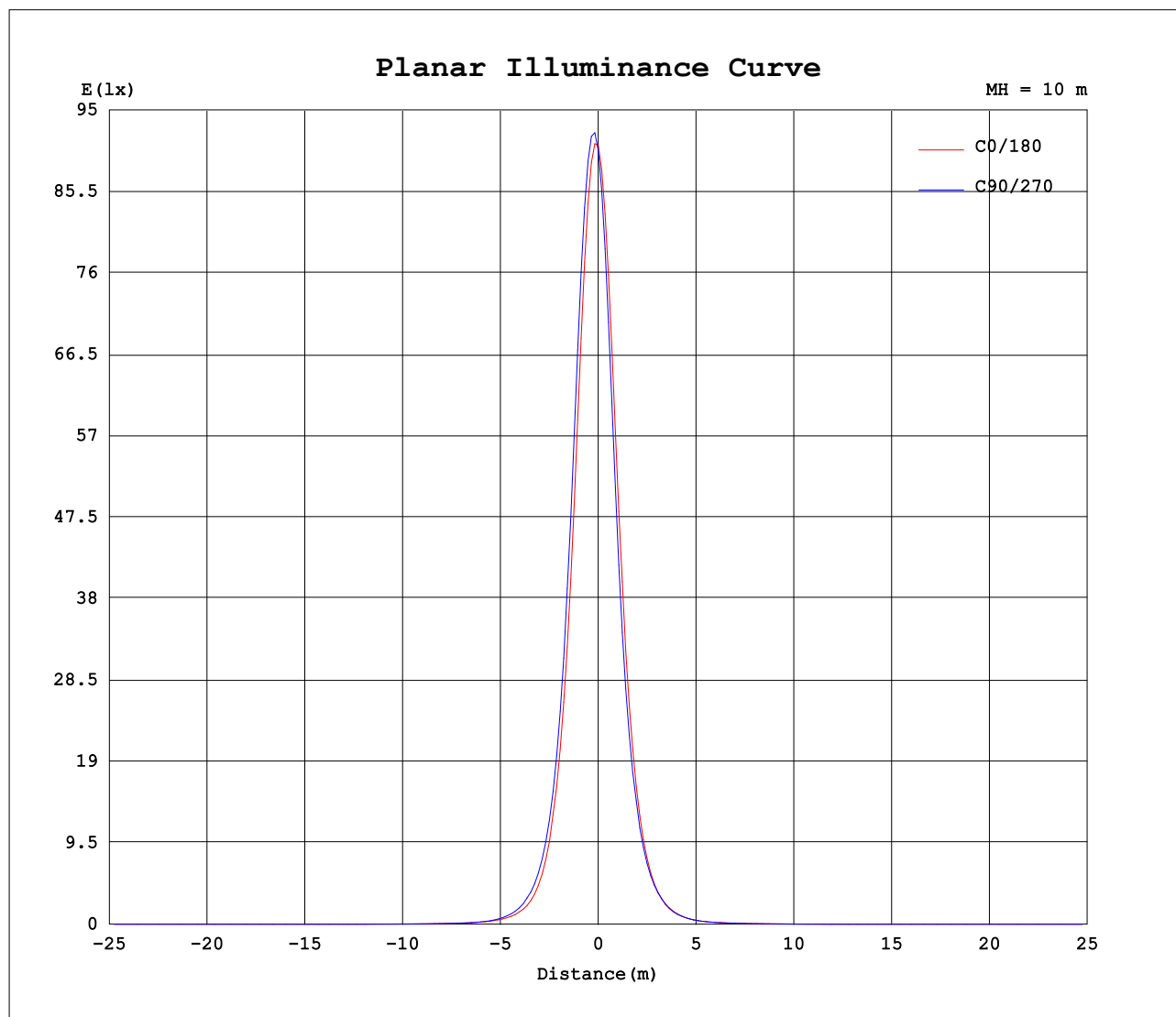
AvgL	cd/m2
L_0~180 (65) av	852
L_0~180 (75) av	67
L_0~180 (85) av	67
L_90~270 (65) av	179
L_90~270 (75) av	75
L_90~270 (85) av	89
L_45 (65) av	428
L_45 (75) av	69
L_45 (85) av	79

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2020-05-04

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: 2020-05-04

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:220.6V I:0.0592A P:12.11W PF:0.9272 Freq:59.98Hz Lamp Flux:802.309x1 lm		
NAME: G503LED	TYPE:	WEIGHT:
SPEC.:P-G503LED-12W2715-CI35031R90-HEK700	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	9082	9023	9082	9023															
5	6915	7692	5812	5156															
10	2709	3251	2134	1848															
15	840	1069	667	630															
20	264	370	218	227															
25	103	131	84.1	85.0															
30	45.3	50.1	38.8	37.4															
35	25.4	23.8	21.8	20.7															
40	14.9	13.4	14.2	13.0															
45	10.1	5.39	8.48	4.35															
50	3.63	2.84	3.07	2.28															
55	2.11	1.28	1.82	1.01															
60	1.10	0.56	0.95	0.44															
65	0.57	0.09	0.51	0.13															
70	0.10	0.01	0.02	0.08															
75	0.05	0.01	0.01	0.05															
80	0.03	0.00	0.01	0.03															
85	0.01	0.00	0.01	0.02															
90	0.01	0.00	0.01	0.02															
95	0.00	0.00	0.01	0.01															
100	0.00	0.00	0.01	0.02															
105	0.00	0.00	0.01	0.02															
110	0.00	0.00	0.02	0.02															
115	0.00	0.01	0.02	0.02															
120	0.00	0.01	0.03	0.02															
125	0.01	0.01	0.03	0.02															
130	0.01	0.03	0.05	0.02															
135	0.01	0.06	0.08	0.02															
140	0.09	0.13	0.10	0.08															
145	0.28	0.33	0.19	0.17															
150	0.88	0.84	0.44	0.48															
155	2.22	2.03	1.13	1.29															
160	4.07	3.87	2.50	2.75															
165	5.12	5.15	3.90	3.98															
170	4.79	4.93	4.13	4.07															
175	3.69	3.81	3.51	3.24															
180	3.15	3.08	3.16	3.06															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2020-05-04

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: