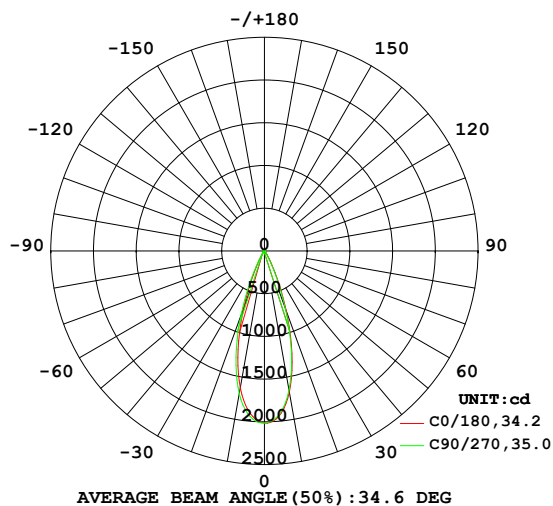


LUMINAIRE PHOTOMETRIC TEST REPORT

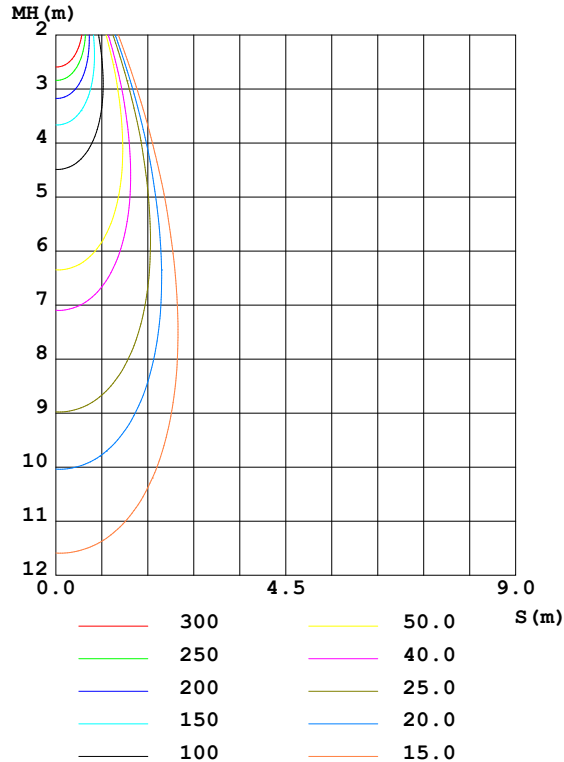
Test:U:231.31V I:0.0406A P:8.5462W PF:0.9102 Freq:49.37Hz Lamp Flux:716.896x1 lm					
NAME: 11014LED-X		TYPE:		WEIGHT:	
SPEC.:P-11014LED-X-8W3036-CI20036R90-OS600		DIM.:		SERIAL No.:	
MFR.: CETTIGA		SUR.:		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 83.89 lm/W
MODEL	CLU028 1202	I _{max} (cd)	2015	S/MH (C0/180)	0.54	
NOMINAL POWER (W)	8W	LOR (%)	100.0	S/MH (C90/270)	0.57	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	716.90	η UP, DN (C0-180)	0.2, 49.3	
NOMINAL FLUX (lm)	716.896	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.1, 50.4	
LAMPS INSIDE	1	η up (%)	0.3	CIBSE SHR NOM	0.50	
TEST VOLTAGE (V)	220.2	η down (%)	99.7	CIBSE SHR MAX	0.55	

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: 2022-11-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 6.810m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

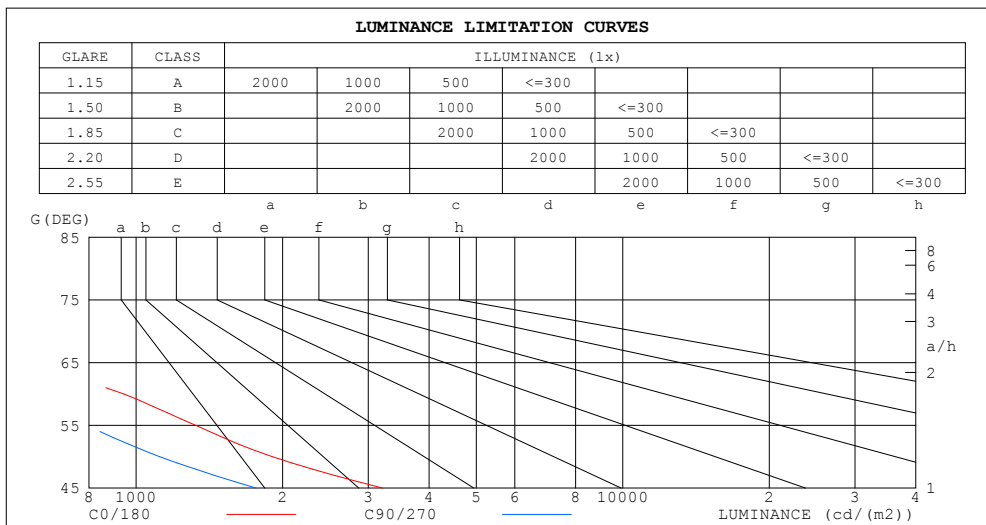
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum,lamp
10	1677	1652	1626	1695					0- 10	175.8	175.8	24.5,24.5
20	745.1	714.0	702.2	803.8					10- 20	332.6	508.4	70.9,70.9
30	127.5	104.1	118.2	132.6					20- 30	162.2	670.6	93.5,93.5
40	23.76	12.62	22.56	16.66					30- 40	31.73	702.3	98,98
50	6.127	3.593	6.214	4.451					40- 50	7.677	710.0	99,99
60	2.359	1.325	2.343	1.458					50- 60	2.866	712.9	99.4,99.4
70	0.8616	0.6116	0.8519	0.6800					60- 70	1.186	714.1	99.6,99.6
80	0.3003	0.1481	0.2246	0.2112					70- 80	0.5009	714.6	99.7,99.7
90	0	0	0	0					80- 90	0.0741	714.6	99.7,99.7
100	0	0	0	0					90-100	0	714.6	99.7,99.7
110	0	0	0.0122	0.0017					100-110	0.0010	714.6	99.7,99.7
120	0.0035	0	0.0209	0.0140					110-120	0.0063	714.7	99.7,99.7
130	0.0609	0.0593	0.0471	0.0366					120-130	0.0211	714.7	99.7,99.7
140	0.3886	0.4469	0.1922	0.1848					130-140	0.1088	714.8	99.7,99.7
150	1.330	1.432	0.7780	0.7285					140-150	0.3920	715.2	99.8,99.8
160	2.490	2.582	1.752	1.697					150-160	0.7276	715.9	99.9,99.9
170	3.154	3.216	2.517	2.464					160-170	0.7032	716.6	100,100
180	3.292	3.310	3.289	3.311					170-180	0.2882	716.9	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:2022-11-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.810m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:231.31V I:0.0406A P:8.5462W PF:0.9102 Freq:49.37Hz Lamp Flux:716.896x1 lm		
NAME: 11014LED-X	TYPE:	WEIGHT:
SPEC.:P-11014LED-X-8W3036-CI20036R90-OS600	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	249	0
80	346	171
75	425	279
70	504	358
65	658	439
60	944	530
55	1326	771
50	1906	1118
45	3211	1764

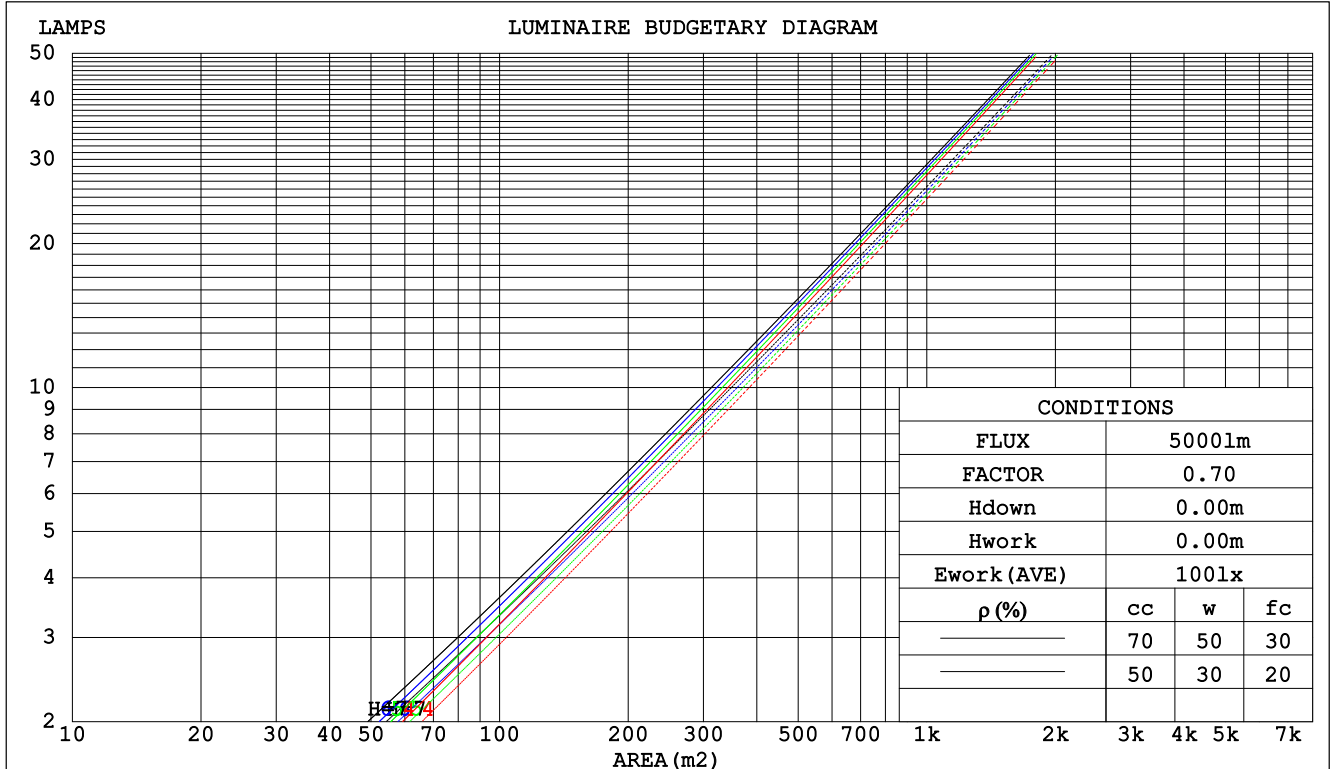
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2022-11-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.810m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:231.31V I:0.0406A P:8.5462W PF:0.9102 Freq:49.37Hz Lamp Flux:716.896x1 lm		
NAME: 11014LED-X	TYPE:	WEIGHT:
SPEC.:P-11014LED-X-8W3036-CI20036R90-OS600	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	1.12	1.10	1.08	1.10	1.08	1.07	1.06	1.05	1.03	1.02	1.01	1.00	.99	.98	.97	.96
2.0	1.06	1.03	1.01	1.05	1.02	.99	1.02	.99	.97	.99	.97	.95	.96	.94	.93	.92
3.0	1.01	.97	.94	.90	.96	.94	.97	.94	.92	.95	.93	.91	.93	.91	.89	.88
4.0	.97	.92	.89	.96	.92	.89	.94	.90	.88	.92	.89	.87	.90	.88	.86	.84
5.0	.93	.88	.85	.92	.88	.84	.90	.86	.84	.88	.85	.83	.87	.84	.82	.81
6.0	.89	.84	.81	.88	.84	.81	.87	.83	.80	.85	.82	.80	.84	.81	.79	.78
7.0	.85	.81	.78	.85	.80	.77	.84	.80	.77	.83	.79	.77	.82	.78	.76	.75
8.0	.82	.78	.75	.82	.77	.74	.81	.77	.74	.80	.76	.74	.79	.76	.73	.72
9.0	.79	.75	.72	.79	.75	.72	.78	.74	.71	.77	.74	.71	.76	.73	.71	.70
10.0	.77	.72	.69	.76	.72	.69	.75	.72	.69	.75	.71	.69	.74	.71	.69	.68



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2022-11-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:6.810m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:231.31V I:0.0406A P:8.5462W PF:0.9102 Freq:49.37Hz Lamp Flux:716.896x1 lm		
NAME: 11014LED-X	TYPE:	WEIGHT:
SPEC.:P-11014LED-X-8W3036-CI20036R90-OS600	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	.147	.084	.026	.140	.080	.025	.128	.073	.023	.116	.067	.021	.105	.061	.020		
2.0	.137	.075	.023	.132	.072	.022	.121	.067	.021	.111	.063	.020	.103	.058	.018		
3.0	.129	.068	.021	.124	.066	.020	.115	.062	.019	.107	.059	.018	.100	.055	.017		
4.0	.121	.063	.019	.117	.061	.018	.110	.058	.017	.103	.055	.017	.096	.052	.016		
5.0	.115	.058	.017	.111	.057	.017	.105	.055	.016	.099	.052	.016	.093	.050	.015		
6.0	.109	.055	.016	.106	.054	.015	.101	.052	.015	.095	.050	.015	.090	.048	.014		
7.0	.104	.051	.015	.101	.051	.014	.097	.049	.014	.092	.047	.014	.088	.046	.013		
8.0	.099	.049	.014	.097	.048	.014	.093	.046	.013	.089	.045	.013	.085	.044	.013		
9.0	.095	.046	.013	.093	.045	.013	.089	.044	.013	.086	.043	.012	.082	.042	.012		
10.0	.091	.044	.012	.090	.043	.012	.086	.042	.012	.083	.041	.012	.080	.040	.012		

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	.171	.160	.150	.147	.137	.129	.100	.094	.089	.058	.055	.052	.018	.018	.017	
2.0	.154	.135	.119	.132	.116	.103	.090	.080	.072	.052	.047	.042	.017	.015	.014	
3.0	.140	.116	.097	.120	.100	.084	.082	.069	.059	.047	.041	.035	.015	.013	.011	
4.0	.128	.101	.080	.110	.087	.069	.075	.061	.049	.044	.035	.029	.014	.012	.009	
5.0	.118	.088	.067	.101	.077	.058	.070	.053	.041	.040	.031	.024	.013	.010	.008	
6.0	.109	.079	.057	.094	.068	.049	.065	.048	.035	.038	.028	.021	.012	.009	.007	
7.0	.102	.071	.049	.088	.061	.042	.061	.043	.030	.035	.025	.018	.011	.008	.006	
8.0	.096	.064	.042	.083	.056	.037	.057	.039	.026	.033	.023	.016	.011	.008	.005	
9.0	.090	.059	.037	.078	.051	.032	.054	.036	.023	.031	.021	.014	.010	.007	.005	
10.0	.086	.054	.033	.074	.047	.029	.051	.033	.020	.030	.019	.012	.010	.006	.004	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2022-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.810m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:231.31V I:0.0406A P:8.5462W PF:0.9102 Freq:49.37Hz Lamp Flux:716.896x1 lm											
NAME: 11014LED-X						TYPE:			WEIGHT:		
SPEC.:P-11014LED-X-8W3036-CI20036R90-OS600						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		8.6	9.3	8.8	9.5	9.6	6.9	7.6	7.1	7.8	8.0
	3H	8.5	9.2	8.8	9.4	9.6	6.8	7.5	7.1	7.7	7.9
	4H	8.5	9.1	8.7	9.3	9.5	6.8	7.4	7.1	7.6	7.9
	6H	8.4	9.0	8.7	9.3	9.5	6.7	7.3	7.0	7.6	7.8
	8H	8.4	9.0	8.7	9.2	9.5	6.7	7.3	7.0	7.5	7.8
	12H	8.3	8.9	8.7	9.2	9.4	6.6	7.2	6.9	7.5	7.7
4H	2H	8.4	9.1	8.7	9.3	9.5	6.8	7.4	7.0	7.6	7.8
	3H	8.4	8.9	8.7	9.2	9.4	6.7	7.3	7.0	7.5	7.8
	4H	8.3	8.8	8.7	9.1	9.4	6.7	7.2	7.0	7.5	7.8
	6H	8.3	8.7	8.6	9.0	9.4	6.6	7.0	7.0	7.4	7.7
	8H	8.2	8.6	8.6	9.0	9.4	6.5	7.0	6.9	7.3	7.7
	12H	8.2	8.6	8.6	8.9	9.3	6.5	6.9	6.9	7.2	7.6
8H	4H	8.2	8.6	8.6	8.9	9.3	6.5	7.0	6.9	7.3	7.7
	6H	8.1	8.5	8.6	8.9	9.3	6.5	6.8	6.9	7.2	7.6
	8H	8.1	8.4	8.5	8.8	9.3	6.4	6.7	6.9	7.1	7.6
	12H	8.0	8.3	8.5	8.7	9.2	6.4	6.6	6.8	7.1	7.5
12H	4H	8.1	8.5	8.5	8.9	9.3	6.5	6.9	6.9	7.2	7.6
	6H	8.1	8.4	8.5	8.8	9.2	6.4	6.7	6.9	7.1	7.6
	8H	8.0	8.3	8.5	8.7	9.2	6.4	6.6	6.8	7.1	7.6
Variations with the observer position at spacings:											
S = 1.0H	+ 3.3 / - 4.9					+ 2.2 / - 4.7					
1.5H	+ 5.2 / - 4.3					+ 3.9 / - 3.6					
2.0H	+ 4.4 / - 3.1					+ 3.2 / - 3.0					

CIE Pub.117, 716.9 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.2)
Area: 0.005 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2022-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.810m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:231.31V I:0.0406A P:8.5462W PF:0.9102 Freq:49.37Hz Lamp Flux:716.896x1 lm		
NAME: 11014LED-X	TYPE:	WEIGHT:
SPEC.:P-11014LED-X-8W3036-CI20036R90-OS600	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

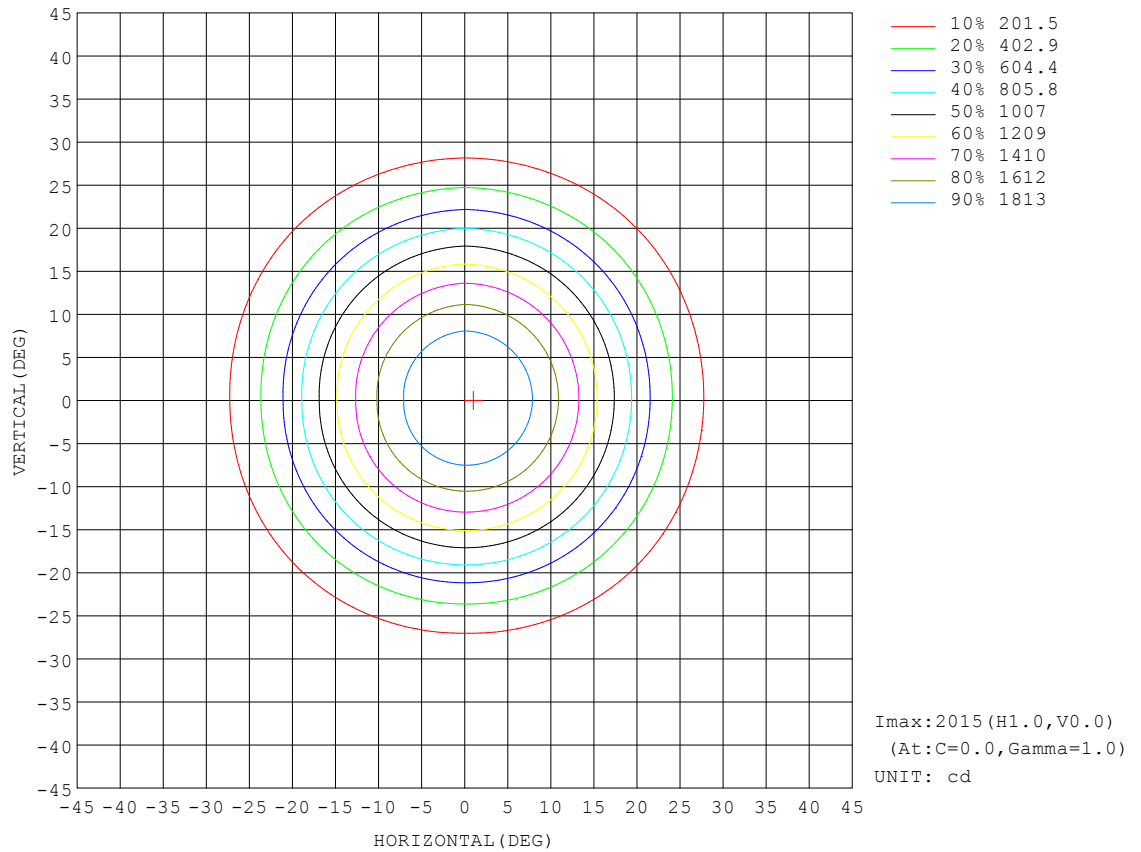
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	90	84	81	90	84	81	89	84	81	78
0.80	97	92	89	97	92	89	96	91	88	85
1.00	101	96	93	100	96	93	99	95	92	88
1.25	105	100	97	104	99	97	102	98	96	92
1.50	107	103	100	106	102	99	104	101	98	94
2.00	109	106	103	108	105	102	105	103	100	95
2.50	111	108	105	109	106	104	106	104	102	96
3.00	112	109	107	111	108	106	107	105	103	97
4.00	114	112	110	112	110	108	109	107	106	99
5.00	116	113	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:2022-11-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.810m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:231.31V I:0.0406A P:8.5462W PF:0.9102 Freq:49.37Hz Lamp Flux:716.896x1 lm		
NAME: 11014LED-X	TYPE:	WEIGHT:
SPEC.:P-11014LED-X-8W3036-CI20036R90-OS600	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

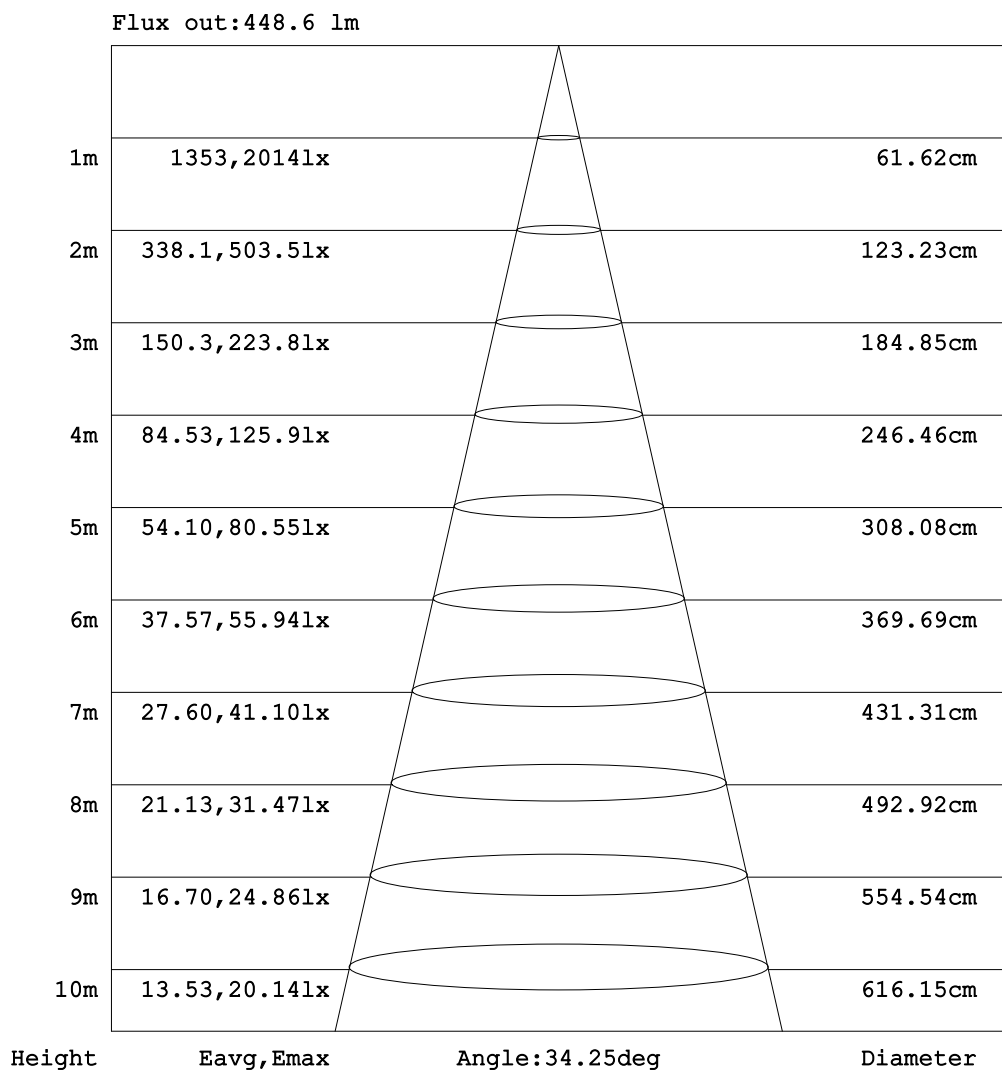


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2022-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.810m [K=1.0000]
Remarks:

AAI Figure

Test:U:231.31V I:0.0406A P:8.5462W PF:0.9102 Freq:49.37Hz Lamp Flux:716.896x1 lm		
NAME: 11014LED-X	TYPE:	WEIGHT:
SPEC.:P-11014LED-X-8W3036-CI20036R90-OS600	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:



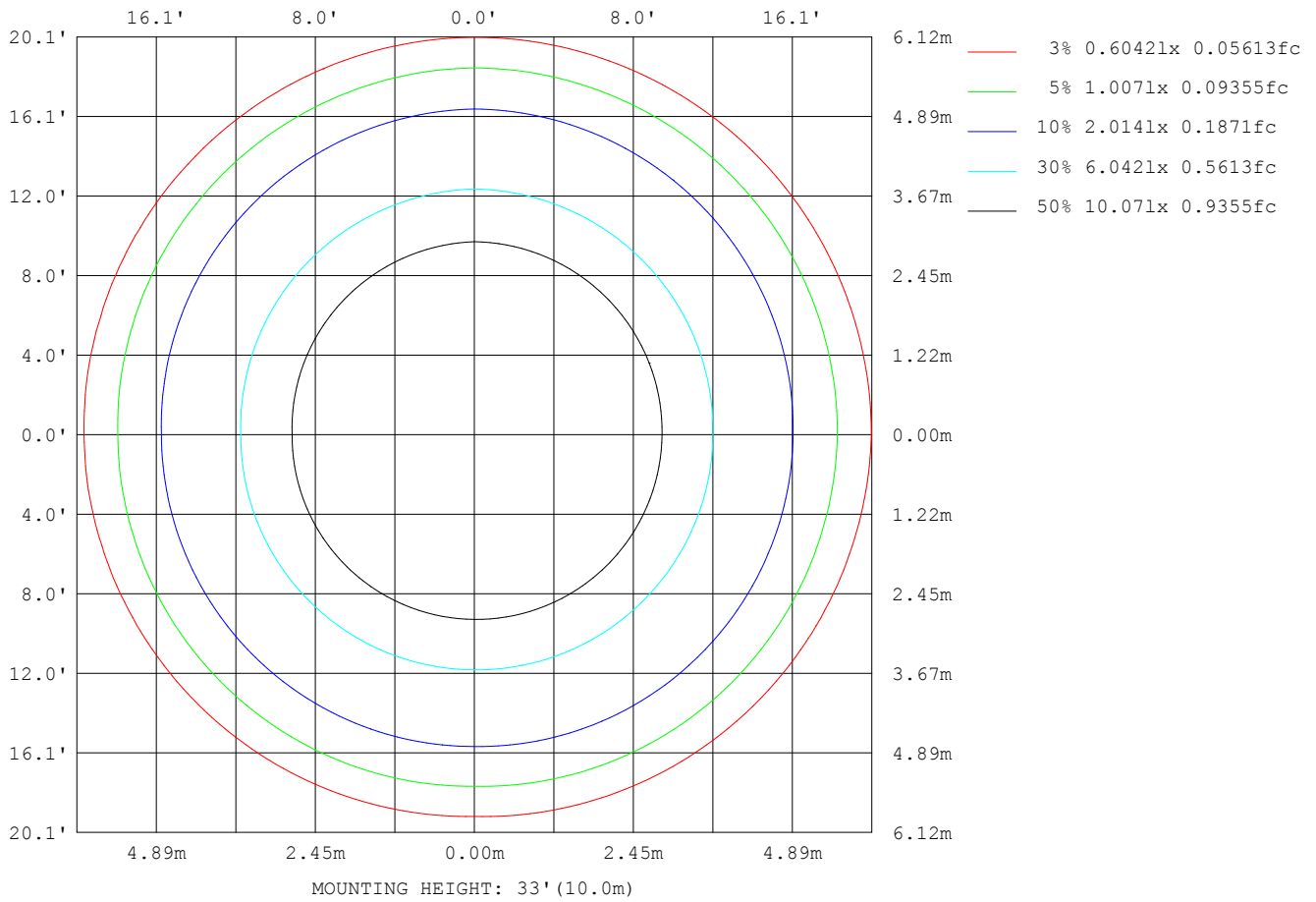
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2022-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.810m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:231.31V I:0.0406A P:8.5462W PF:0.9102 Freq:49.37Hz Lamp Flux:716.896x1 lm		
NAME: 11014LED-X	TYPE:	WEIGHT:
SPEC.:P-11014LED-X-8W3036-CI20036R90-OS600	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:2022-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:6.810m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:231.31V I:0.0406A P:8.5462W PF:0.9102 Freq:49.37Hz Lamp Flux:716.896x1 lm		
NAME: 11014LED-X	TYPE:	WEIGHT:
SPEC.:P-11014LED-X-8W3036-CI20036R90-OS600	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

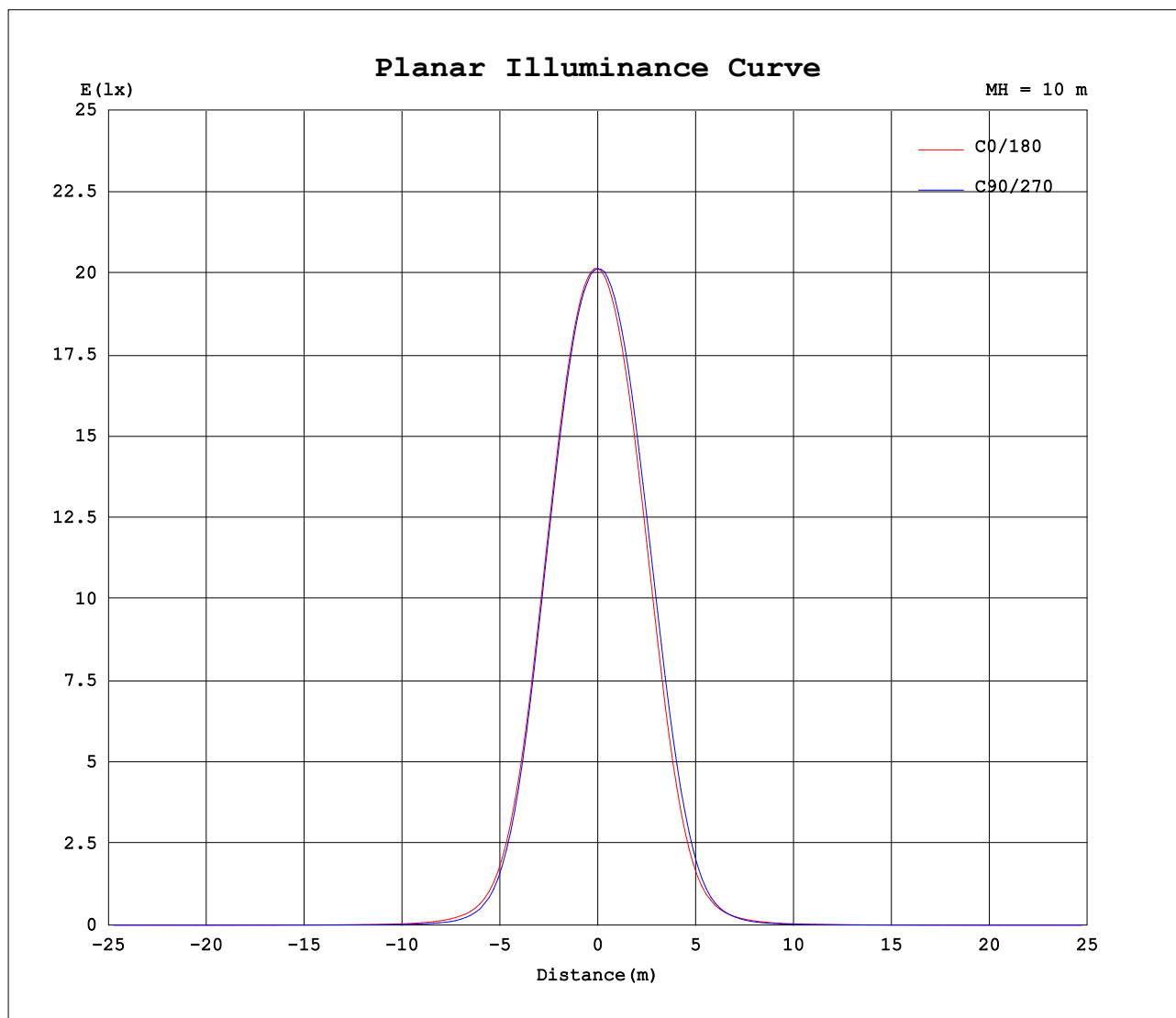
AvgL	cd/m2
L_0~180 (65) av	652
L_0~180 (75) av	420
L_0~180 (85) av	162
L_90~270 (65) av	455
L_90~270 (75) av	303
L_90~270 (85) av	46
L_45 (65) av	529
L_45 (75) av	347
L_45 (85) av	84

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2022-11-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:6.810m [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: 2022-11-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 6.810m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:231.31V I:0.0406A P:8.5462W PF:0.9102 Freq:49.37Hz Lamp Flux:716.896x1 lm		
NAME: 11014LED-X	TYPE:	WEIGHT:
SPEC.: P-11014LED-X-8W3036-CI20036R90-OS600	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	2014	2014	2014	2014															
5	1942	1928	1910	1943															
10	1677	1652	1626	1695															
15	1245	1219	1192	1287															
20	745	714	702	804															
25	342	311	314	382															
30	128	104	118	133															
35	52.2	32.8	47.7	45.8															
40	23.8	12.6	22.6	16.7															
45	11.4	6.24	11.1	7.89															
50	6.13	3.59	6.21	4.45															
55	3.80	2.21	3.86	2.57															
60	2.36	1.33	2.34	1.46															
65	1.39	0.93	1.37	1.00															
70	0.86	0.61	0.85	0.68															
75	0.55	0.36	0.54	0.42															
80	0.30	0.15	0.22	0.21															
85	0.11	0.00	0.03	0.04															
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	0.01	0.00															
115	0.00	0.00	0.02	0.01															
120	0.00	0.00	0.02	0.01															
125	0.02	0.01	0.03	0.02															
130	0.06	0.06	0.05	0.04															
135	0.16	0.19	0.09	0.08															
140	0.39	0.45	0.19	0.18															
145	0.78	0.87	0.42	0.40															
150	1.33	1.43	0.78	0.73															
155	1.93	2.04	1.25	1.20															
160	2.49	2.58	1.75	1.70															
165	2.89	2.98	2.17	2.11															
170	3.15	3.22	2.52	2.46															
175	3.30	3.34	2.91	2.90															
180	3.29	3.31	3.29	3.31															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
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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:6.810m [K=1.0000]
Remarks: