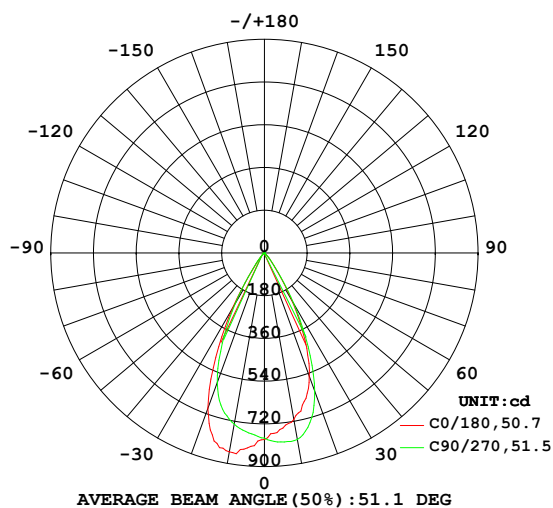


LUMINAIRE PHOTOMETRIC TEST REPORT

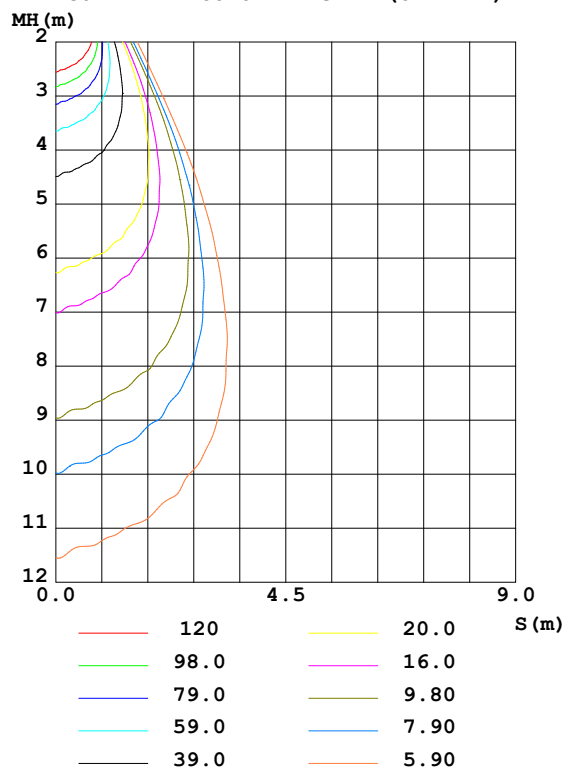
Test:U:231.2V I:0.0460A P:9.388W PF:0.8830 Freq:49.99Hz Lamp Flux:552.114x1 lm					
NAME: 11133LED		TYPE:		WEIGHT:	
SPEC.:P-11133LED-10W2750-RY70012R90-LDY700		DIM.:		SERIAL No.:	
MFR.: CETTIGA		SUR.:		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 58.81 lm/W
MODEL	RY 3535	I _{max} (cd)	854.3	S/MH (C0/180)	0.80	
NOMINAL POWER (W)	10W	LOR (%)	100.0	S/MH (C90/270)	0.78	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	552.11	η UP, DN (C0-180)	0.0, 48.5	
NOMINAL FLUX (lm)	552.114	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.5	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	220.2	η down (%)	100.0	CIBSE SHR MAX	0.80	

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: 2021-12-27

γ Range: 0 - 90DEG
 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:

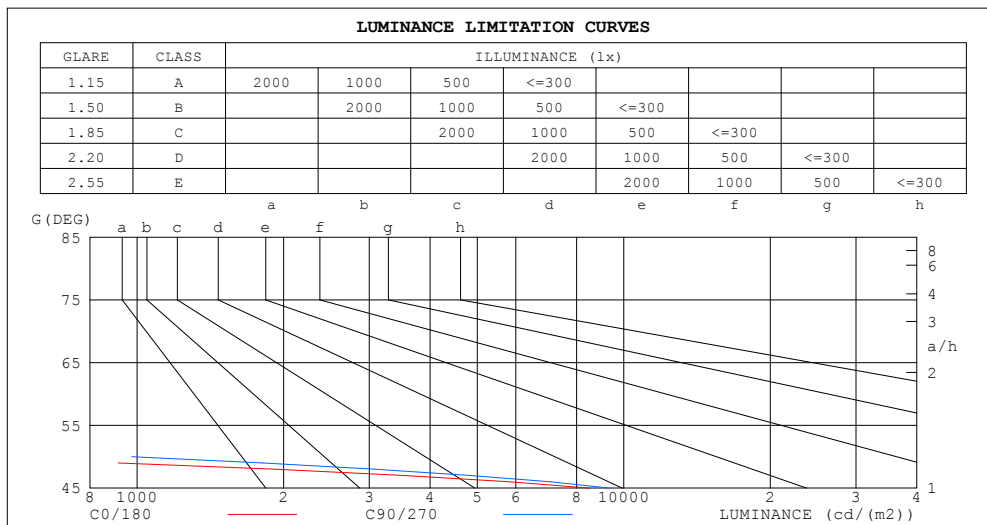
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	712.4	798.0	850.6	731.9					0- 10	74.52	74.52	13.5,13.5
20	551.7	619.6	696.9	580.7					10- 20	199.4	273.9	49.6,49.6
30	232.7	249.3	269.6	244.3					20- 30	196.0	469.9	85.1,85.1
40	38.88	40.38	37.91	42.62					30- 40	69.79	539.7	97.7,97.7
50	0.6833	1.485	0.4214	1.514					40- 50	12.12	551.8	99.9,99.9
60	0.0587	0.0708	0.0397	0.1468					50- 60	0.2036	552.0	100,100
70	0.0328	0.0345	0.0173	0.1157					60- 70	0.0623	552.1	100,100
80	0.0138	0.0103	0.0052	0.0932					70- 80	0.0411	552.1	100,100
90	0	0	0.0052	0.0052					80- 90	0.0193	552.1	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
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:2021-12-27

γ Range: 0 - 90DEG
 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:231.2V I:0.0460A P:9.388W PF:0.8830 Freq:49.99Hz Lamp Flux:552.114x1 lm		
NAME: 11133LED	TYPE:	WEIGHT:
SPEC.:P-11133LED-10W2750-RY70012R90-LDY700	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	25	0
80	34	25
75	39	34
70	40	43
65	43	48
60	50	60
55	55	91
50	449	975
45	8488	9339

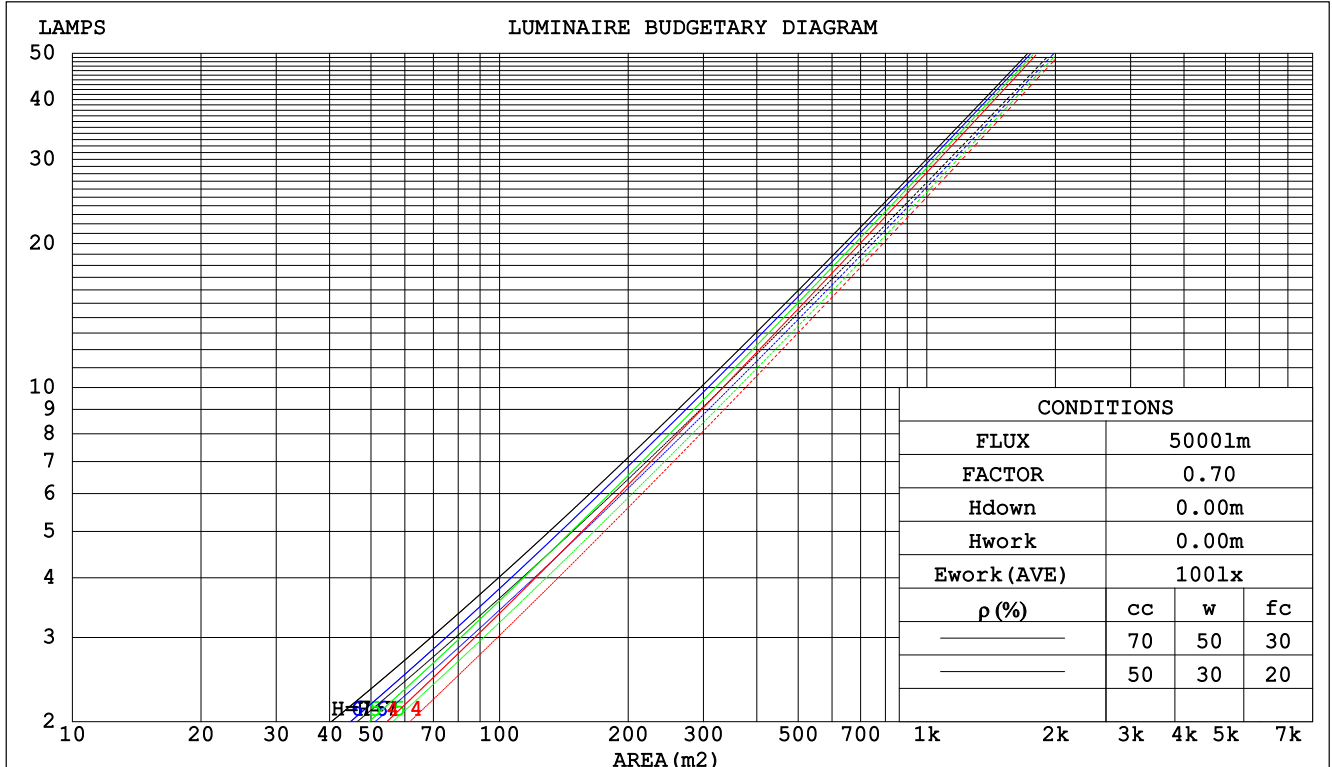
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2021-12-27

γ Range: 0 - 90DEG
 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:231.2V I:0.0460A P:9.388W PF:0.8830 Freq:49.99Hz Lamp Flux:552.114x1 lm		
NAME: 11133LED	TYPE:	WEIGHT:
SPEC.:P-11133LED-10W2750-RY70012R90-LDY700	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	1.00
1.0	1.12	1.09	1.07	1.09	1.07	1.06	1.05	1.04	1.02	1.02	1.00	.99	.98	.97	.96	.95
2.0	1.05	1.01	.98	1.03	.90	.97	.90	.97	.95	.97	.95	.93	.94	.92	.91	.89
3.0	.99	.94	.91	.97	.93	.90	.95	.91	.88	.92	.89	.87	.90	.88	.86	.84
4.0	.93	.88	.84	.92	.87	.84	.90	.86	.83	.88	.85	.82	.86	.83	.81	.80
5.0	.88	.83	.79	.87	.82	.79	.85	.81	.78	.84	.80	.77	.82	.79	.77	.75
6.0	.83	.78	.74	.83	.78	.74	.81	.77	.73	.80	.76	.73	.79	.75	.72	.71
7.0	.79	.74	.70	.78	.73	.70	.77	.73	.69	.76	.72	.69	.75	.71	.69	.67
8.0	.75	.70	.66	.75	.70	.66	.74	.69	.66	.73	.68	.65	.72	.68	.65	.64
9.0	.72	.66	.63	.71	.66	.63	.70	.66	.62	.69	.65	.62	.69	.65	.62	.61
10.0	.68	.63	.60	.68	.63	.59	.67	.62	.59	.66	.62	.59	.66	.62	.59	.58



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2021-12-27

γ Range: 0 - 90DEG
 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:231.2V I:0.0460A P:9.388W PF:0.8830 Freq:49.99Hz Lamp Flux:552.114x1 lm					
NAME: 11133LED			TYPE:		WEIGHT:
SPEC.:P-11133LED-10W2750-RY70012R90-LDY700			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	.163	.093	.029	.156	.089	.028	.144	.082	.026	.132	.076	.024	.122	.070	.023		
2.0	.154	.085	.026	.149	.082	.025	.138	.077	.024	.129	.072	.023	.120	.068	.021		
3.0	.147	.078	.023	.142	.076	.023	.133	.072	.022	.125	.068	.021	.117	.065	.020		
4.0	.139	.072	.021	.135	.071	.021	.128	.068	.020	.121	.065	.020	.114	.062	.019		
5.0	.133	.068	.020	.129	.066	.019	.123	.064	.019	.117	.062	.018	.111	.059	.018		
6.0	.127	.064	.018	.124	.063	.018	.118	.061	.018	.113	.059	.017	.108	.057	.017		
7.0	.122	.060	.017	.119	.059	.017	.114	.058	.017	.109	.056	.016	.105	.054	.016		
8.0	.117	.057	.016	.114	.056	.016	.110	.055	.016	.106	.053	.015	.102	.052	.015		
9.0	.112	.054	.015	.110	.054	.015	.106	.052	.015	.102	.051	.015	.099	.050	.014		
10.0	.108	.052	.014	.106	.051	.014	.102	.050	.014	.099	.049	.014	.096	.048	.014		

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.170	.157	.146	.146	.135	.126	.100	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013	
3.0	.141	.113	.092	.121	.098	.080	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.130	.099	.075	.111	.085	.065	.077	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.121	.087	.062	.104	.075	.054	.071	.052	.038	.041	.031	.022	.013	.010	.007	
6.0	.113	.077	.052	.097	.067	.045	.067	.047	.032	.039	.028	.019	.013	.009	.006	
7.0	.106	.070	.044	.091	.060	.038	.063	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.101	.063	.037	.087	.055	.033	.060	.038	.023	.035	.023	.014	.011	.007	.005	
9.0	.095	.058	.033	.082	.050	.028	.057	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.091	.053	.028	.078	.046	.025	.054	.033	.018	.032	.019	.011	.010	.006	.003	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2021-12-27

γ Range: 0 - 90DEG
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:231.2V I:0.0460A P:9.388W PF:0.8830 Freq:49.99Hz Lamp Flux:552.114x1 lm												
NAME: 11133LED						TYPE:			WEIGHT:			
SPEC.:P-11133LED-10W2750-RY70012R90-LDY700						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		17.4	18.2	17.6	18.4	18.5	17.7	18.5	17.9	18.7	18.8	
		3H	17.2	18.0	17.4	18.2	18.4	17.5	18.3	17.8	18.5	18.7
		4H	17.1	17.9	17.4	18.1	18.3	17.4	18.2	17.7	18.4	18.6
		6H	17.0	17.7	17.3	18.0	18.2	17.3	18.0	17.6	18.3	18.5
		8H	17.0	17.6	17.3	17.9	18.2	17.3	18.0	17.6	18.2	18.5
		12H	16.9	17.6	17.2	17.8	18.1	17.2	17.9	17.6	18.2	18.4
4H	2H	17.1	17.9	17.4	18.1	18.3	17.4	18.2	17.7	18.4	18.6	
	3H	16.9	17.6	17.2	17.8	18.1	17.2	17.9	17.6	18.2	18.4	
	4H	16.8	17.4	17.2	17.7	18.0	17.2	17.7	17.5	18.0	18.3	
	6H	16.7	17.3	17.1	17.6	17.9	17.1	17.6	17.4	17.9	18.2	
	8H	16.7	17.2	17.1	17.5	17.9	17.0	17.5	17.4	17.8	18.2	
	12H	16.6	17.1	17.0	17.4	17.8	17.0	17.4	17.4	17.8	18.1	
8H	4H	16.7	17.2	17.1	17.5	17.9	17.0	17.5	17.4	17.8	18.2	
	6H	16.6	17.0	17.0	17.4	17.8	16.9	17.3	17.3	17.7	18.1	
	8H	16.5	16.9	17.0	17.3	17.7	16.8	17.2	17.3	17.6	18.0	
	12H	16.5	16.8	16.9	17.2	17.7	16.8	17.1	17.3	17.5	18.0	
12H	4H	16.6	17.1	17.0	17.4	17.8	17.0	17.4	17.4	17.8	18.1	
	6H	16.5	16.9	17.0	17.3	17.7	16.8	17.2	17.3	17.6	18.0	
	8H	16.5	16.8	16.9	17.2	17.7	16.8	17.1	17.3	17.5	18.0	
Variations with the observer position at spacings:												
S = 1.0H		+ 3.6 / -31.5					+ 3.7 / -31.7					
1.5H		+ 6.1 / -30.7					+ 6.2 / -30.7					
2.0H		+ 9.1 / -22.2					+ 9.0 / -23.2					

CIE Pub.117, 552.1 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -2.1$)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2021-12-27

γ Range: 0 - 90DEG
 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:231.2V I:0.0460A P:9.388W PF:0.8830 Freq:49.99Hz Lamp Flux:552.114x1 lm		
NAME: 11133LED	TYPE:	WEIGHT:
SPEC.:P-11133LED-10W2750-RY70012R90-LDY700	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

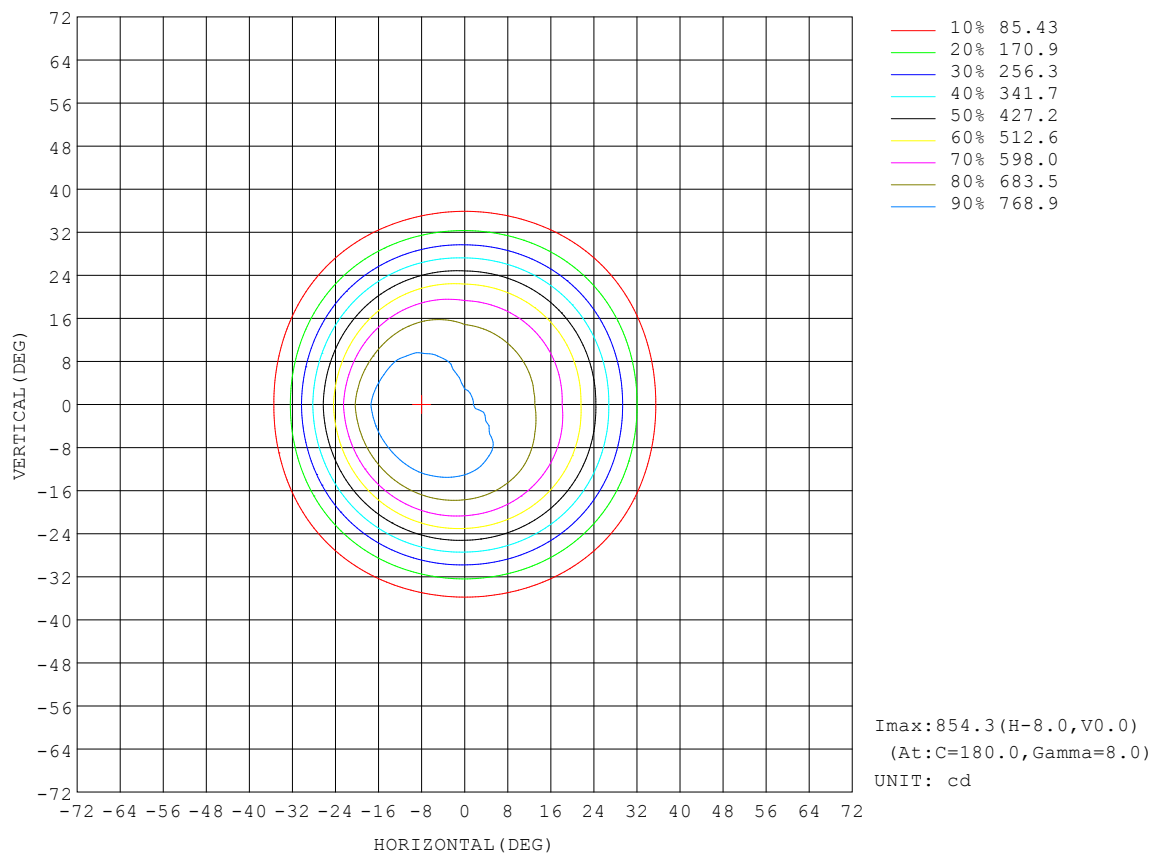
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	90	84	81	90	84	81	89	84	81	77
0.80	97	92	89	97	92	88	95	91	88	85
1.00	101	96	93	100	96	93	99	95	92	88
1.25	105	100	97	104	100	97	102	98	96	92
1.50	107	103	100	106	102	100	104	101	98	94
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	106	104	107	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	110	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:2021-12-27

γ Range: 0 - 90DEG
 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:231.2V I:0.0460A P:9.388W PF:0.8830 Freq:49.99Hz Lamp Flux:552.114x1 lm		
NAME: 11133LED	TYPE:	WEIGHT:
SPEC.:P-11133LED-10W2750-RY70012R90-LDY700	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

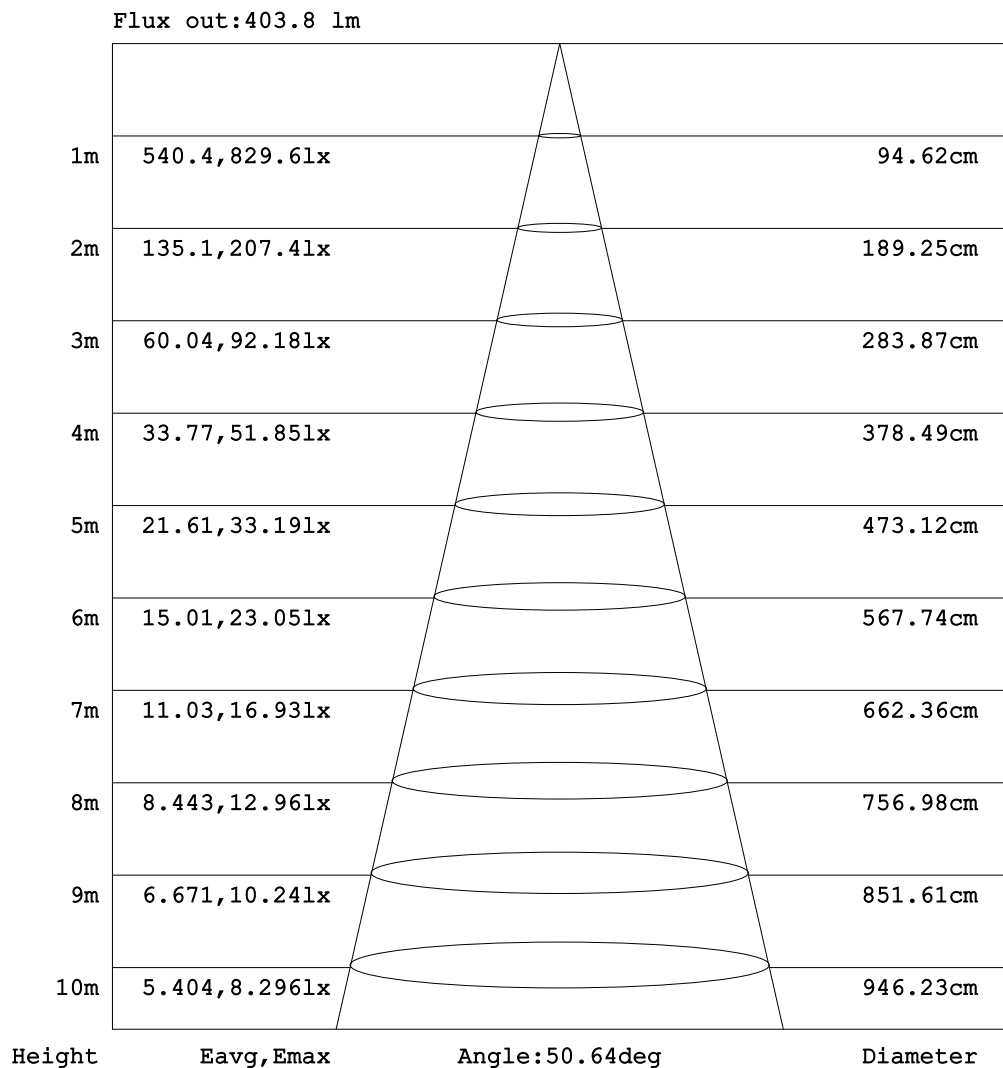


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Xie Bi
Test Date: 2021-12-27

γ Range: 0 - 90DEG
 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:231.2V I:0.0460A P:9.388W PF:0.8830 Freq:49.99Hz Lamp Flux:552.114x1 lm		
NAME: 11133LED	TYPE:	WEIGHT:
SPEC.:P-11133LED-10W2750-RY70012R90-LDY700	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:



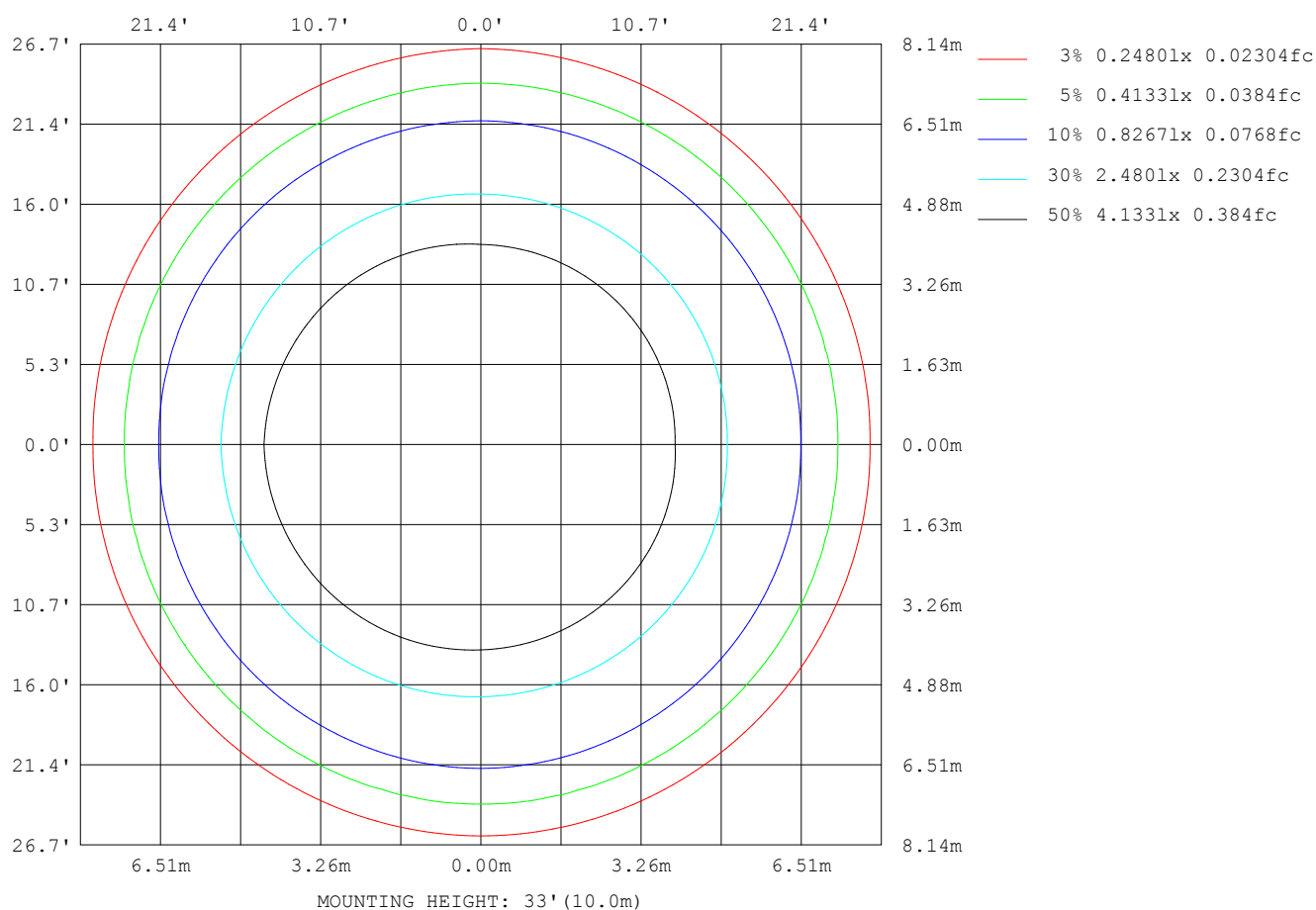
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Xie Bi
 Test Date: 2021-12-27

γ Range: 0 - 90DEG
 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:231.2V I:0.0460A P:9.388W PF:0.8830 Freq:49.99Hz Lamp Flux:552.114x1 lm		
NAME: 11133LED	TYPE:	WEIGHT:
SPEC.:P-11133LED-10W2750-RY70012R90-LDY700	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: 2021-12-27

γ Range: 0 - 90DEG
 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:231.2V I:0.0460A P:9.388W PF:0.8830 Freq:49.99Hz Lamp Flux:552.114x1 lm		
NAME: 11133LED	TYPE:	WEIGHT:
SPEC.:P-11133LED-10W2750-RY70012R90-LDY700	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

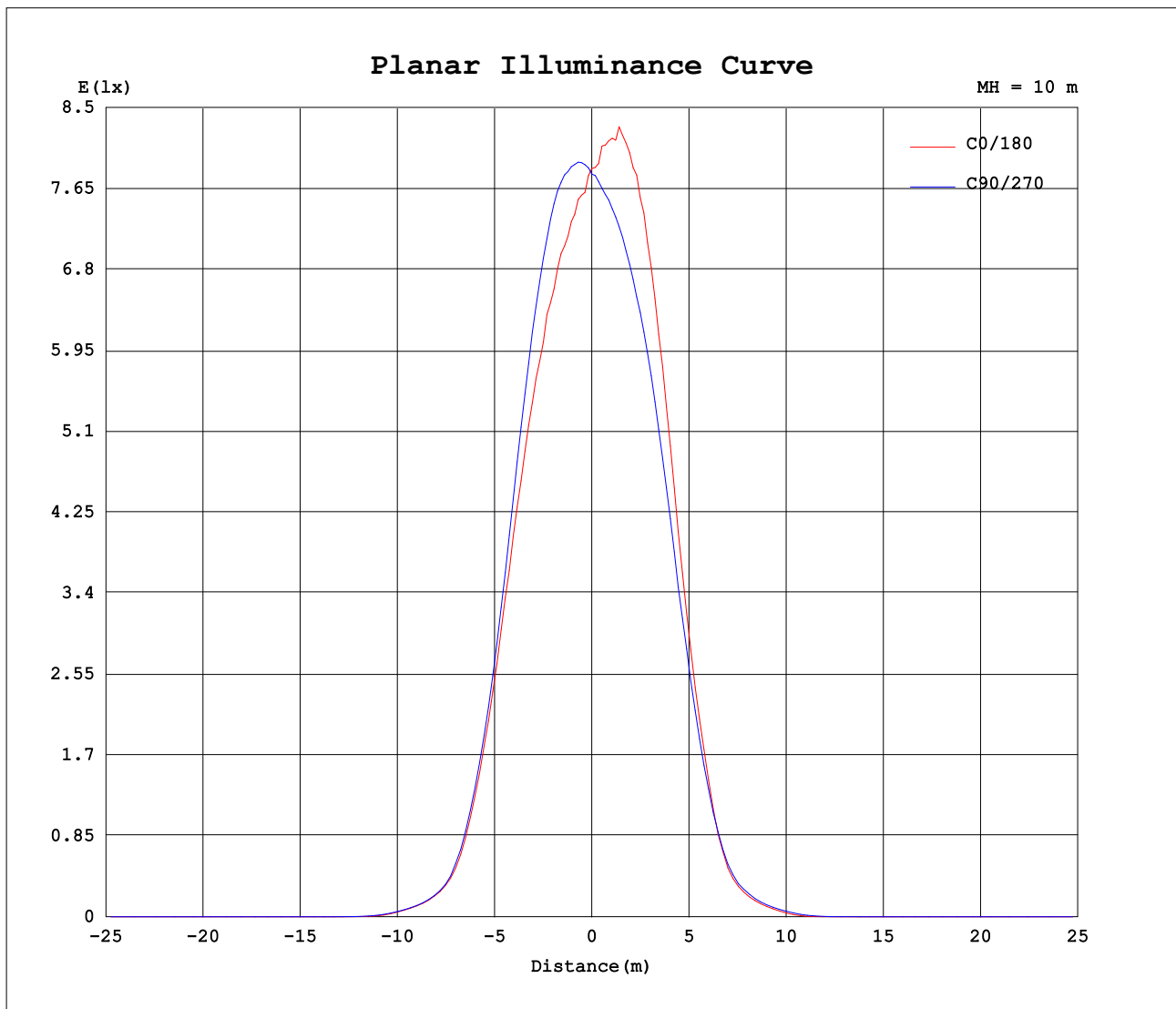
AvgL	cd/m2
L_0~180 (65) av	36
L_0~180 (75) av	28
L_0~180 (85) av	25
L_90~270 (65) av	88
L_90~270 (75) av	99
L_90~270 (85) av	201
L_45 (65) av	68
L_45 (75) av	72
L_45 (85) av	138

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2021-12-27

γ Range: 0 - 90DEG
 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: 2021-12-27

γ Range: 0 - 90DEG
 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:

```

γ Range: 0 - 90DEG
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:

```