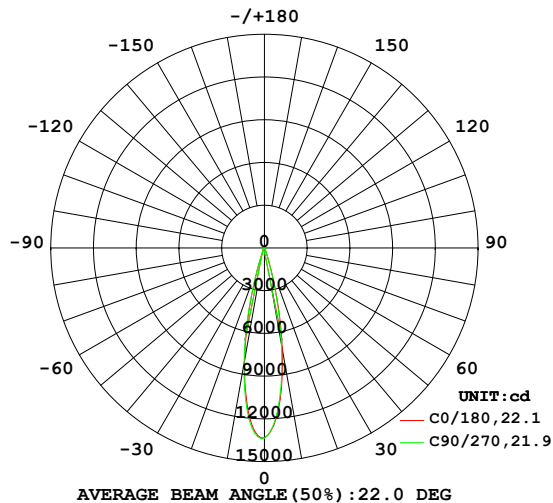


LUMINAIRE PHOTOMETRIC TEST REPORT

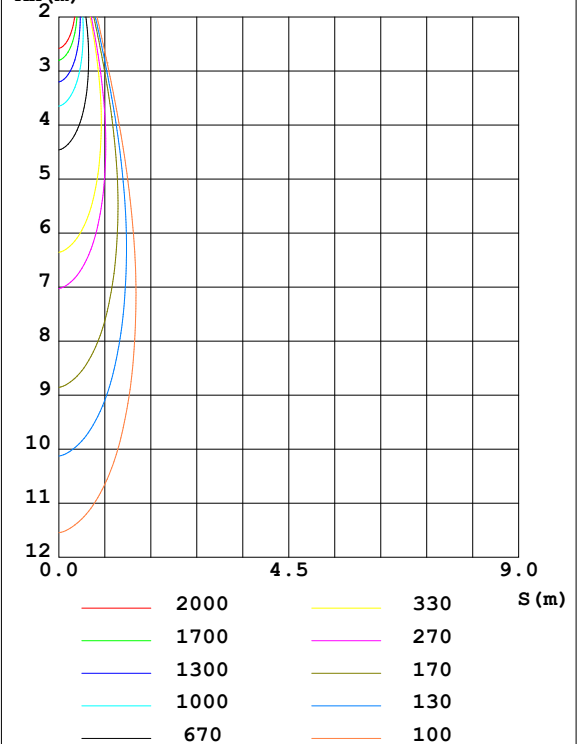
Test:U:231.40V I:0.1138A P:24.847W PF:0.9437 Freq:49.37Hz Lamp Flux:2053.67x1 lm					
NAME: 11361LED-X		TYPE:		WEIGHT:	
SPEC.:P-11361LED-X-25W2724-CI60036R90-OS600		DIM.:		SERIAL No.:	
MFR.: CETTIGA		SUR.:		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 82.65 lm/W
MODEL	CLU028 1204	I _{max} (cd)	13385	S/MH (C0/180)	0.38	
NOMINAL POWER (W)	25W	LOR (%)	100.0	S/MH (C90/270)	0.38	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	2053.7	η UP, DN (C0-180)	0.2, 45.3	
NOMINAL FLUX (lm)	2053.67	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.1, 54.4	
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: 2023-03-02

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:

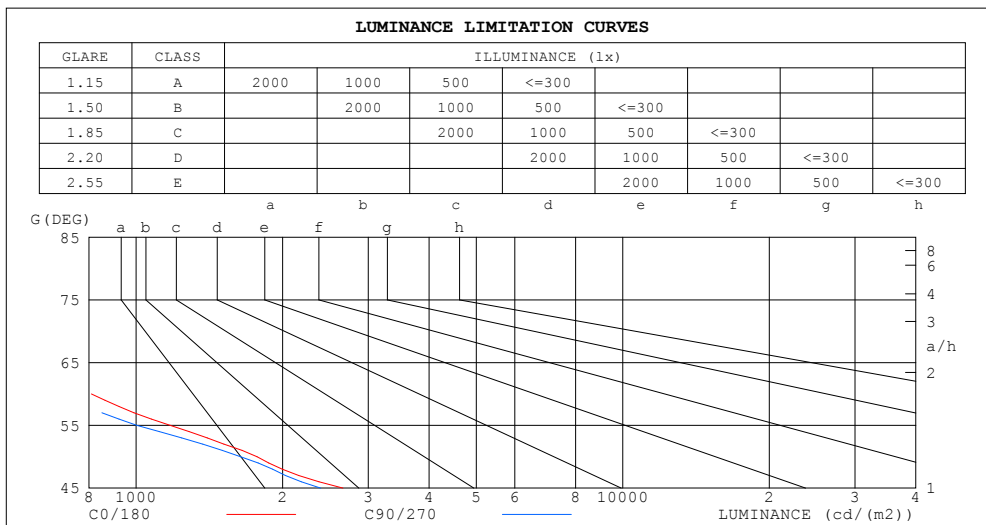
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum,lamp
10	719.6	688.4	804.1	824.6					0- 10	980.0	980.0	47.7,47.7
20	55.18	57.22	92.77	95.76					10- 20	891.3	1871	91.1,91.1
30	7.651	7.636	8.784	9.980					20- 30	118.6	1990	96.9,96.9
40	2.960	3.020	3.187	3.327					30- 40	30.64	2021	98.4,98.4
50	1.173	1.085	1.268	1.269					40- 50	15.63	2036	99.1,99.1
60	0.4169	0.3433	0.4218	0.3771					50- 60	6.413	2043	99.5,99.5
70	0.1802	0.1419	0.1746	0.1428					60- 70	2.549	2045	99.6,99.6
80	0.0941	0.0769	0.0803	0.0705					70- 80	1.262	2046	99.6,99.6
90	0.0008	0.0052	0.0024	0.0011					80- 90	0.3684	2047	99.7,99.7
100	0	0	0.0024	0.0014					90-100	0.0121	2047	99.7,99.7
110	0.0007	0.0003	0.0044	0.0031					100-110	0.0143	2047	99.7,99.7
120	0.0019	0.0028	0.0063	0.0056					110-120	0.0294	2047	99.7,99.7
130	0.0064	0.0080	0.0108	0.0103					120-130	0.0553	2047	99.7,99.7
140	0.0460	0.0482	0.0197	0.0201					130-140	0.1297	2047	99.7,99.7
150	0.3630	0.3734	0.1204	0.1136					140-150	0.6548	2048	99.7,99.7
160	1.012	1.035	0.5810	0.5664					150-160	2.259	2050	99.8,99.8
170	1.156	1.184	0.9689	0.9794					160-170	2.771	2053	100,100
180	0.9516	0.9891	0.9523	0.9886					170-180	0.9757	2054	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:2023-03-02

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:231.40V I:0.1138A P:24.847W PF:0.9437 Freq:49.37Hz Lamp Flux:2053.67x1 lm		
NAME: 11361LED-X	TYPE:	WEIGHT:
SPEC.:P-11361LED-X-25W2724-CI60036R90-OS600	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:



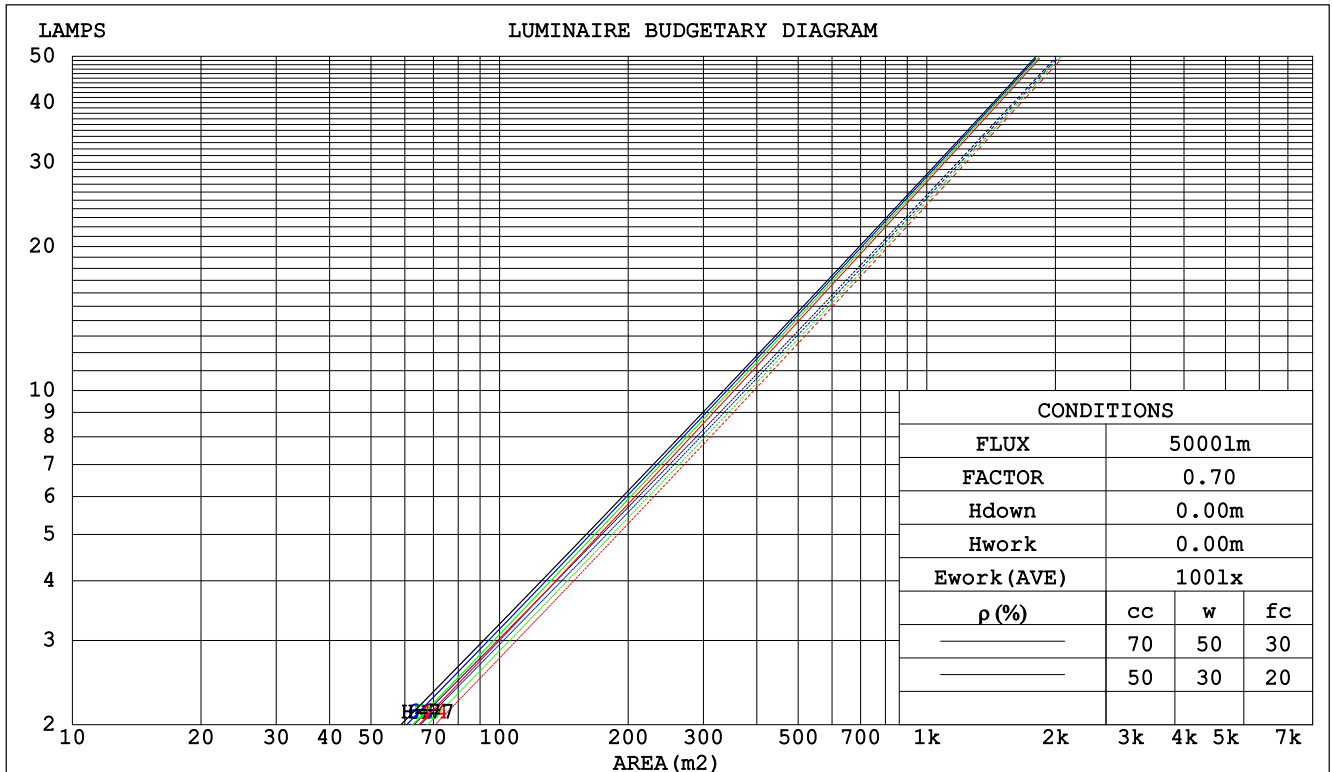
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2023-03-02

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:231.40V I:0.1138A P:24.847W PF:0.9437 Freq:49.37Hz Lamp Flux:2053.67x1 lm		
NAME: 11361LED-X	TYPE:	WEIGHT:
SPEC.:P-11361LED-X-25W2724-CI60036R90-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	1.13	1.12	1.10	1.11	1.10	1.08	1.07	1.06	1.05	1.04	1.03	1.02	1.00	.99	.99	.97
2.0	1.09	1.06	1.04	1.07	1.05	1.03	1.04	1.02	1.00	1.01	.99	.98	.98	.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	1.01	.98	.95	1.00	.97	.95	.98	.96	.94	.97	.94	.93	.95	.93	.92	.90
5.0	.98	.95	.92	.98	.94	.92	.96	.93	.91	.95	.92	.90	.93	.91	.90	.88
6.0	.96	.92	.90	.95	.92	.89	.94	.91	.89	.93	.90	.88	.91	.89	.88	.87
7.0	.93	.90	.87	.93	.89	.87	.92	.89	.87	.91	.88	.86	.90	.88	.86	.85
8.0	.91	.88	.85	.91	.87	.85	.90	.87	.85	.89	.86	.84	.88	.86	.84	.83
9.0	.89	.86	.83	.89	.86	.83	.88	.85	.83	.87	.85	.83	.87	.84	.82	.82
10.0	.87	.84	.82	.87	.84	.82	.86	.83	.81	.86	.83	.81	.85	.83	.81	.80



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2023-03-02

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:231.40V I:0.1138A P:24.847W PF:0.9437 Freq:49.37Hz Lamp Flux:2053.67x1 lm		
NAME: 11361LED-X	TYPE:	WEIGHT:
SPEC.:P-11361LED-X-25W2724-CI60036R90-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	.126	.071	.023	.119	.068	.022	.106	.061	.019	.095	.055	.018	.084	.049	.016		
2.0	.115	.063	.019	.109	.060	.019	.099	.055	.017	.090	.050	.016	.081	.046	.014		
3.0	.106	.056	.017	.102	.054	.016	.093	.050	.015	.085	.047	.014	.078	.043	.013		
4.0	.099	.051	.015	.095	.050	.015	.088	.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	.087	.043	.012	.084	.042	.012	.079	.040	.012	.074	.038	.011	.069	.036	.011		
7.0	.082	.040	.011	.079	.040	.011	.075	.038	.011	.071	.036	.011	.067	.035	.010		
8.0	.078	.038	.011	.076	.037	.011	.072	.036	.010	.068	.034	.010	.064	.033	.010		
9.0	.074	.036	.010	.072	.035	.010	.069	.034	.010	.065	.033	.009	.062	.032	.009		
10.0	.071	.034	.009	.069	.033	.009	.066	.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	.113	.113	.113	.065	.065	.065	.021	.021	.021	
1.0	.170	.160	.152	.146	.138	.130	.100	.095	.090	.057	.055	.052	.018	.018	.017	
2.0	.151	.135	.122	.130	.117	.105	.089	.081	.074	.051	.047	.043	.016	.015	.014	
3.0	.136	.116	.100	.116	.100	.087	.080	.069	.061	.046	.041	.036	.015	.013	.012	
4.0	.122	.100	.083	.105	.087	.072	.072	.060	.051	.042	.035	.030	.013	.012	.010	
5.0	.111	.088	.070	.096	.076	.061	.066	.053	.043	.038	.031	.026	.012	.010	.008	
6.0	.102	.078	.060	.088	.067	.052	.060	.047	.037	.035	.028	.022	.011	.009	.007	
7.0	.094	.069	.052	.081	.060	.045	.056	.042	.032	.032	.025	.019	.010	.008	.006	
8.0	.087	.062	.045	.075	.054	.039	.052	.038	.028	.030	.022	.017	.010	.007	.006	
9.0	.081	.056	.040	.070	.049	.035	.048	.034	.025	.028	.020	.015	.009	.007	.005	
10.0	.076	.051	.035	.066	.045	.031	.045	.031	.022	.027	.019	.013	.009	.006	.004	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2023-03-02

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:231.40V I:0.1138A P:24.847W PF:0.9437 Freq:49.37Hz Lamp Flux:2053.67x1 lm										
NAME.: 11361LED-X					TYPE:			WEIGHT:		
SPEC.:P-11361LED-X-25W2724-CI60036R90-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	0.0	0.6	0.2	0.7	0.9	-0.2	0.4	-0.0	0.5	0.7
3H	0.1	0.7	0.4	0.8	1.0	-0.1	0.4	0.1	0.6	0.8
4H	0.2	0.7	0.4	0.9	1.1	-0.1	0.4	0.2	0.6	0.8
6H	0.2	0.7	0.5	1.0	1.2	-0.1	0.4	0.2	0.7	0.9
8H	0.3	0.7	0.6	1.0	1.2	-0.1	0.4	0.2	0.7	0.9
12H	0.3	0.7	0.6	1.0	1.3	-0.1	0.4	0.2	0.6	0.9
4H 2H	-0.0	0.5	0.2	0.7	0.9	-0.2	0.3	0.0	0.5	0.7
3H	0.1	0.6	0.4	0.8	1.1	-0.1	0.3	0.2	0.6	0.8
4H	0.2	0.6	0.5	0.9	1.2	-0.0	0.4	0.3	0.7	1.0
6H	0.3	0.7	0.7	1.0	1.4	0.1	0.4	0.4	0.8	1.1
8H	0.4	0.8	0.8	1.1	1.5	0.1	0.4	0.5	0.8	1.1
12H	0.4	0.8	0.9	1.1	1.5	0.1	0.4	0.5	0.8	1.1
8H 4H	0.2	0.5	0.6	0.9	1.2	-0.1	0.3	0.3	0.6	1.0
6H	0.4	0.7	0.8	1.0	1.5	0.1	0.4	0.5	0.8	1.2
8H	0.5	0.7	0.9	1.1	1.6	0.1	0.4	0.6	0.8	1.3
12H	0.5	0.8	1.0	1.2	1.7	0.1	0.4	0.6	0.8	1.3
12H 4H	0.1	0.4	0.5	0.8	1.2	-0.1	0.2	0.3	0.6	1.0
6H	0.3	0.6	0.8	1.0	1.5	0.1	0.3	0.5	0.7	1.2
8H	0.5	0.7	0.9	1.1	1.6	0.1	0.4	0.6	0.8	1.3
Variations with the observer position at spacings:										
S = 1.0H	+ 1.4 / - 2.4					+ 1.5 / - 2.7				
1.5H	+ 2.1 / - 2.1					+ 2.3 / - 2.3				
2.0H	+ 3.2 / - 2.2					+ 3.0 / - 2.2				

CIE Pub.117, 2054 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.5)
Area: 0.0103 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2023-03-02

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:231.40V I:0.1138A P:24.847W PF:0.9437 Freq:49.37Hz Lamp Flux:2053.67x1 lm		
NAME: 11361LED-X	TYPE:	WEIGHT:
SPEC.:P-11361LED-X-25W2724-CI60036R90-OS600	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

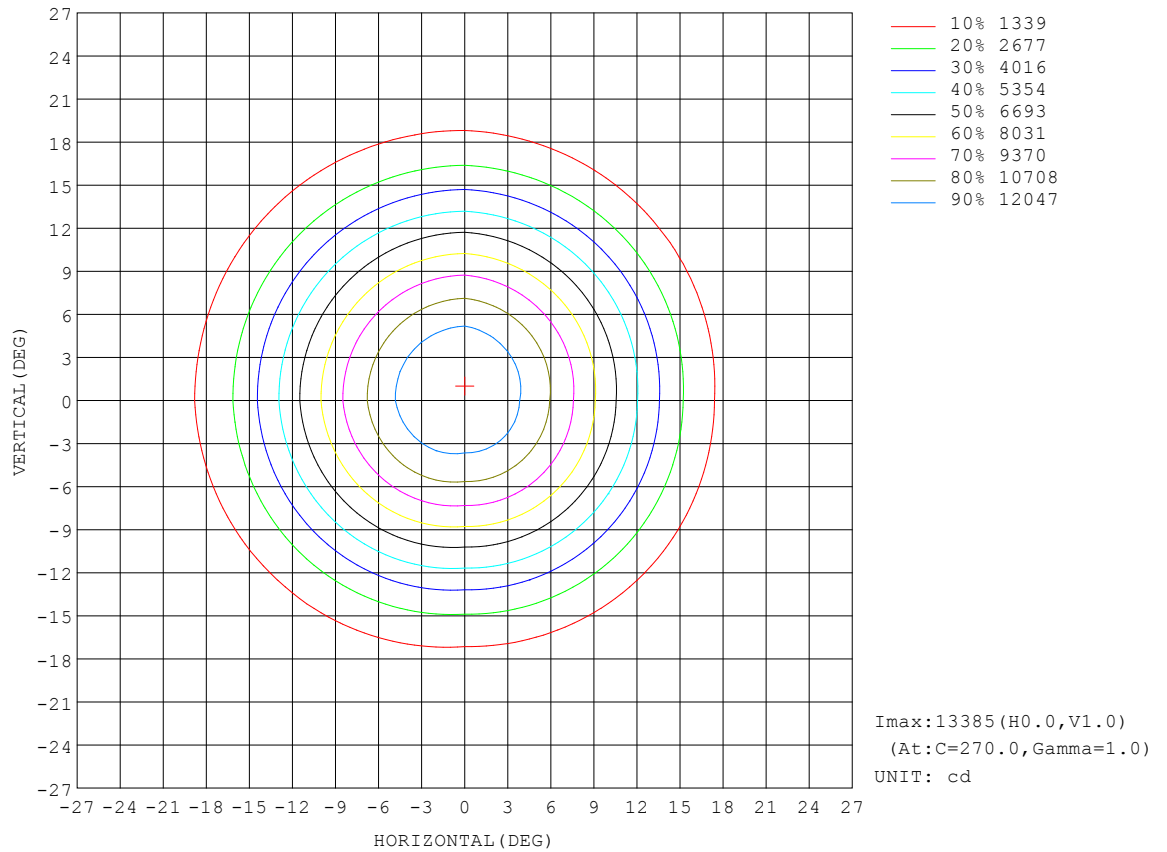
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	91	85	81	90	85	81	89	84	81	78
0.80	98	92	89	97	92	89	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	98	96	92
1.50	107	103	100	106	102	100	104	101	98	94
2.00	110	106	103	108	105	102	105	103	101	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	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:2023-03-02

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:231.40V I:0.1138A P:24.847W PF:0.9437 Freq:49.37Hz Lamp Flux:2053.67x1 lm		
NAME: 11361LED-X	TYPE:	WEIGHT:
SPEC.:P-11361LED-X-25W2724-CI60036R90-OS600	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

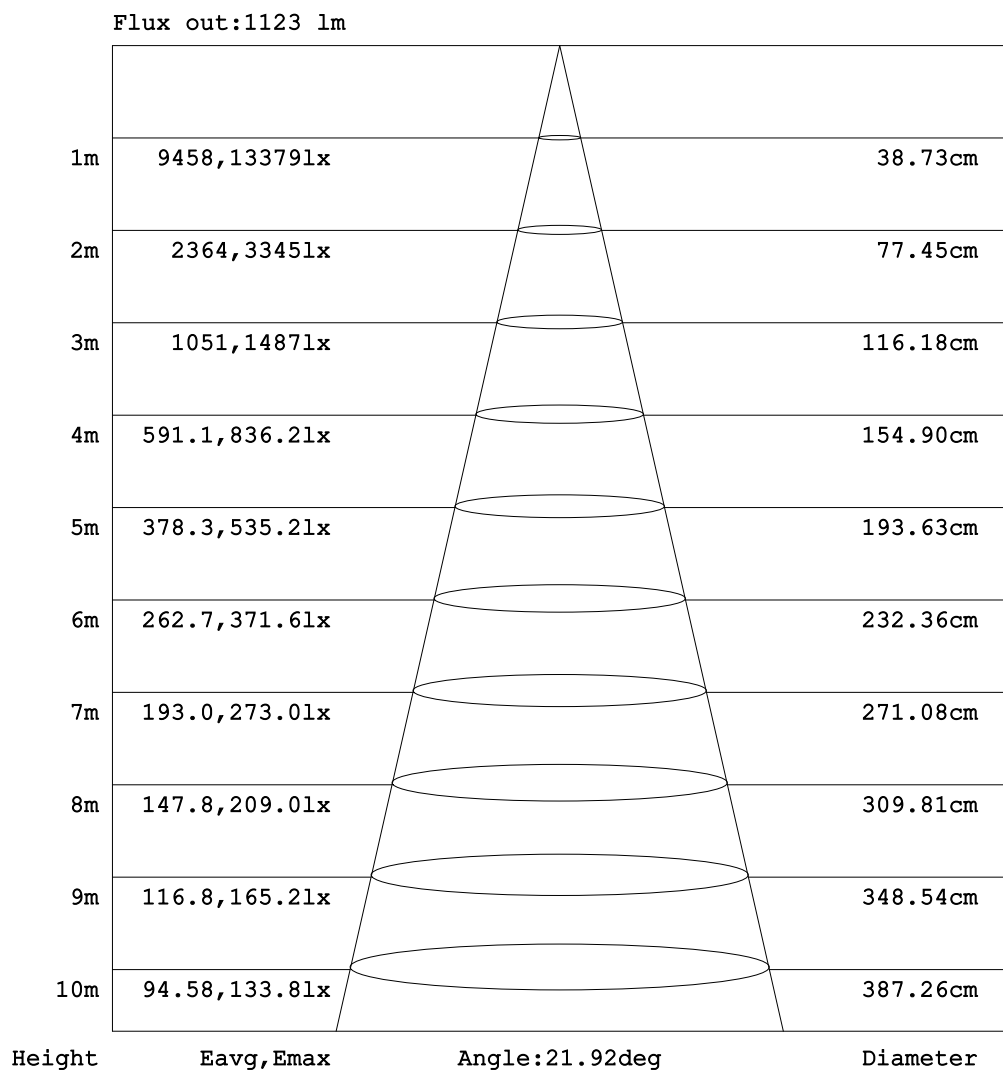


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2023-03-02

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:231.40V I:0.1138A P:24.847W PF:0.9437 Freq:49.37Hz Lamp Flux:2053.67x1 lm		
NAME: 11361LED-X	TYPE:	WEIGHT:
SPEC.:P-11361LED-X-25W2724-CI60036R90-OS600	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:



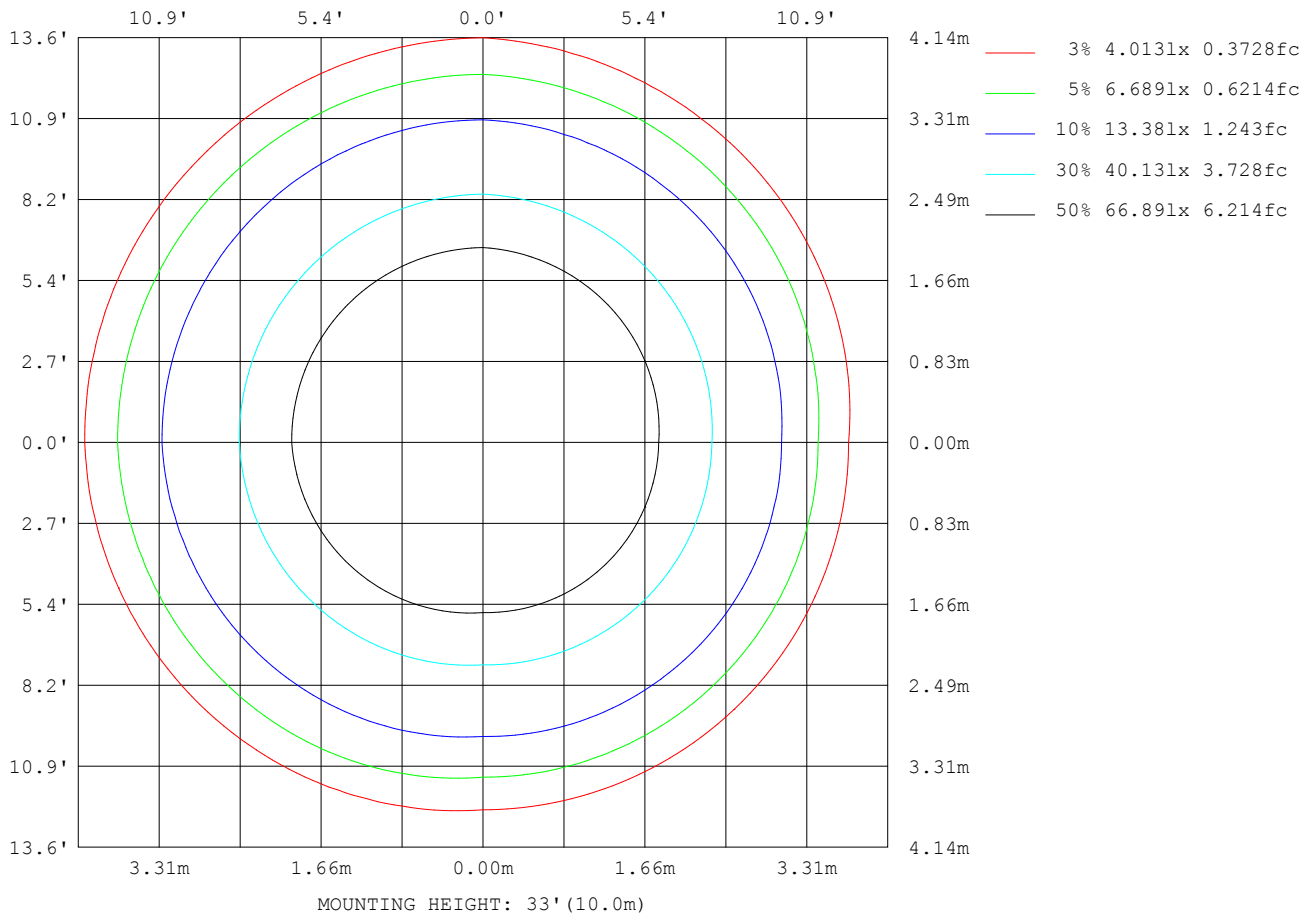
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Xie Bi
Test Date:2023-03-02

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:231.40V I:0.1138A P:24.847W PF:0.9437 Freq:49.37Hz Lamp Flux:2053.67x1 lm		
NAME: 11361LED-X	TYPE:	WEIGHT:
SPEC.:P-11361LED-X-25W2724-CI60036R90-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:2023-03-02

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:231.40V I:0.1138A P:24.847W PF:0.9437 Freq:49.37Hz Lamp Flux:2053.67x1 lm		
NAME: 11361LED-X	TYPE:	WEIGHT:
SPEC.:P-11361LED-X-25W2724-CI60036R90-OS600	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

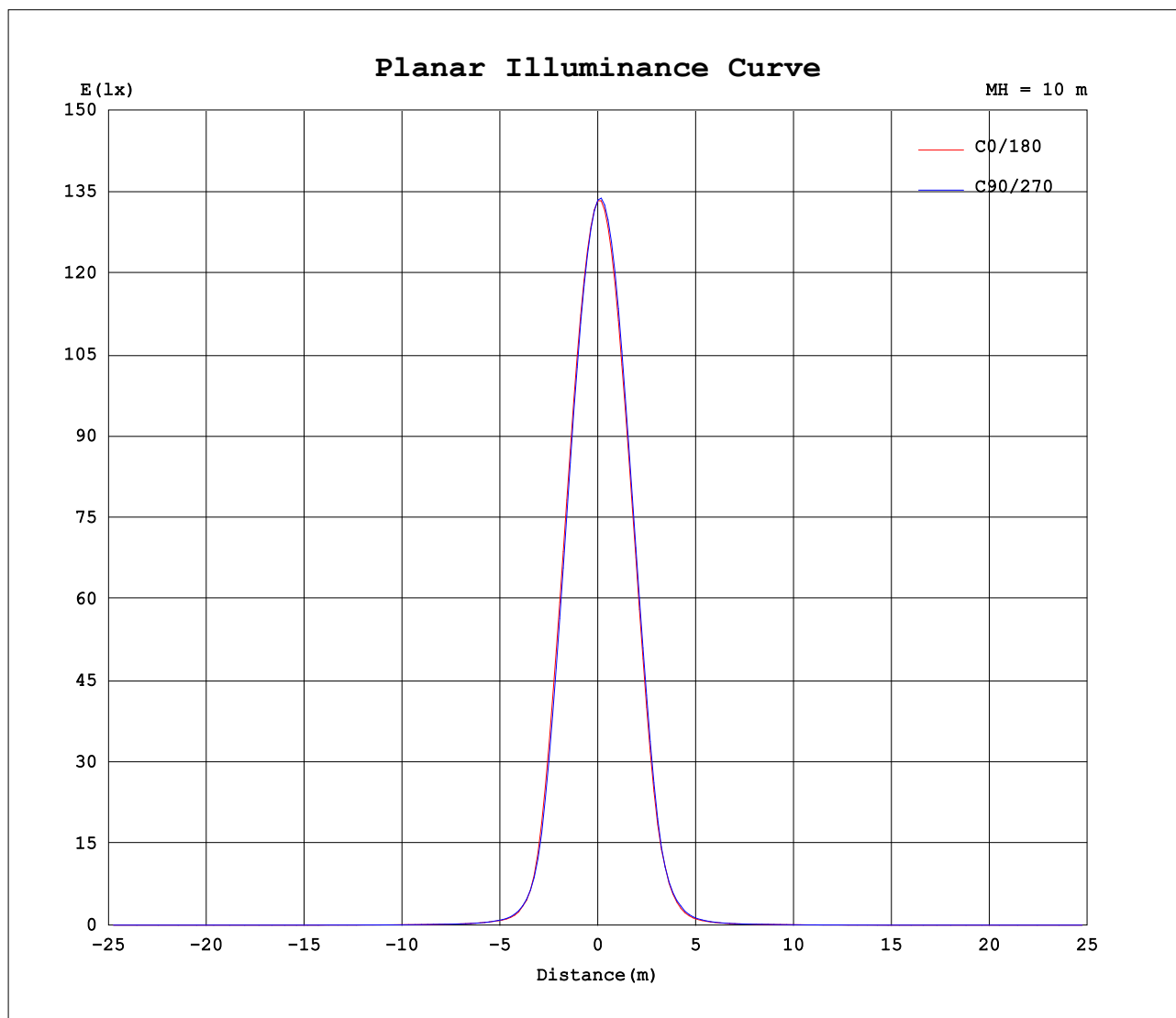
AvgL	cd/m2
L_0~180 (65) av	617
L_0~180 (75) av	465
L_0~180 (85) av	449
L_90~270 (65) av	533
L_90~270 (75) av	447
L_90~270 (85) av	231
L_45 (65) av	565
L_45 (75) av	454
L_45 (85) av	308

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Xie Bi
 Test Date:2023-03-02

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: 2023-03-02

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:231.40V I:0.1138A P:24.847W PF:0.9437 Freq:49.37Hz Lamp Flux:2053.67x1 lm		
NAME: 11361LED-X	TYPE:	WEIGHT:
SPEC.:P-11361LED-X-25W2724-CI60036R90-OS600	DIM.:	SERIAL No.:
MFR.: CETTIGA	SUR.:	Shielding Angle:

Table--1

UNIT: ×10cd

C (DEG) γ (DEG)	0	90	180	270															
0	1333	1334	1333	1334															
5	1135	1121	1196	1216															
10	720	688	804	825															
15	283	259	354	375															
20	55.2	57.2	92.8	95.8															
25	15.2	16.6	23.1	26.4															
30	7.65	7.64	8.78	9.98															
35	4.31	4.34	4.67	5.05															
40	2.96	3.02	3.19	3.33															
45	1.94	1.74	2.06	2.09															
50	1.17	1.09	1.27	1.27															
55	0.69	0.59	0.75	0.69															
60	0.42	0.34	0.42	0.38															
65	0.27	0.22	0.27	0.24															
70	0.18	0.14	0.17	0.14															
75	0.13	0.12	0.12	0.12															
80	0.09	0.08	0.08	0.07															
85	0.05	0.02	0.03	0.02															
90	0.00	0.01	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	0.01	0.01															
125	0.00	0.00	0.01	0.01															
130	0.01	0.01	0.01	0.01															
135	0.02	0.02	0.01	0.01															
140	0.05	0.05	0.02	0.02															
145	0.14	0.15	0.04	0.04															
150	0.36	0.37	0.12	0.11															
155	0.69	0.70	0.31	0.29															
160	1.01	1.03	0.58	0.57															
165	1.19	1.22	0.85	0.84															
170	1.16	1.18	0.97	0.98															
175	1.00	1.03	0.95	0.98															
180	0.95	0.99	0.95	0.99															

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%
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Remarks: