

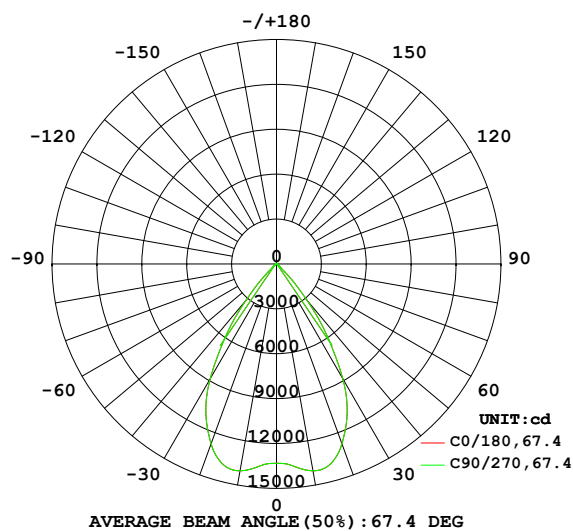
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

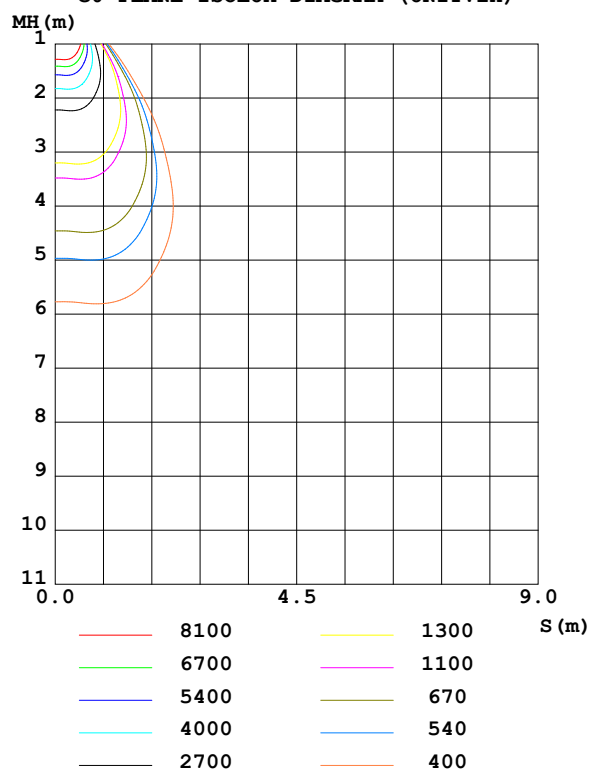
Test:U:230.1V I:0.4609A P:101.23W PF:0.9544 Freq:50.00Hz Lamp Flux:15074.4x1 lm		
NAME: HB01-100-5070-H00C10+H00B20	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 148.91 lm/W			
MODEL	3030	Imax (cd)	14073	S/MH (C0/180)	0.99
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	0.99
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	15074	η UP,DN (C0-180)	0.0,50.0
NOMINAL FLUX (lm)	15074.4	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,50.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	/	η down (%)	100.0	CIBSE SHR MAX	1.05

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2022-06-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

Checker: LI

Assessor:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1404	1404	1404	1404	1404	1404	1404	1404	0- 10	1313	1313	8.71,8.71
20	1278	1278	1278	1278	1278	1278	1278	1278	10- 20	3867	5180	34.4,34.4
30	886.4	886.4	886.4	886.4	886.4	886.4	886.4	886.4	20- 30	5058	10238	67.9,67.9
40	316.7	316.7	316.7	316.7	316.7	316.7	316.7	316.7	30- 40	3690	13928	92.4,92.4
50	30.30	30.30	30.30	30.30	30.30	30.30	30.30	30.30	40- 50	987.8	14916	98.9,98.9
60	4.296	4.296	4.296	4.296	4.296	4.296	4.296	4.296	50- 60	126.9	15043	99.8,99.8
70	1.437	1.437	1.437	1.437	1.437	1.437	1.437	1.437	60- 70	23.56	15066	99.9,99.9
80	0.2229	0.2229	0.2229	0.2229	0.2229	0.2229	0.2229	0.2229	70- 80	7.599	15074	100,100
90	0	0	0	0	0	0	0	0	80- 90	0.5663	15074	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:X10cd									UNIT:lm		

Conical surface Flux(90deg): 14690 lm

%lum = 97.4%

%lamp = 97.4%

Conical surface Flux(120deg): 15043 lm

%lum = 99.8%

%lamp = 99.8%

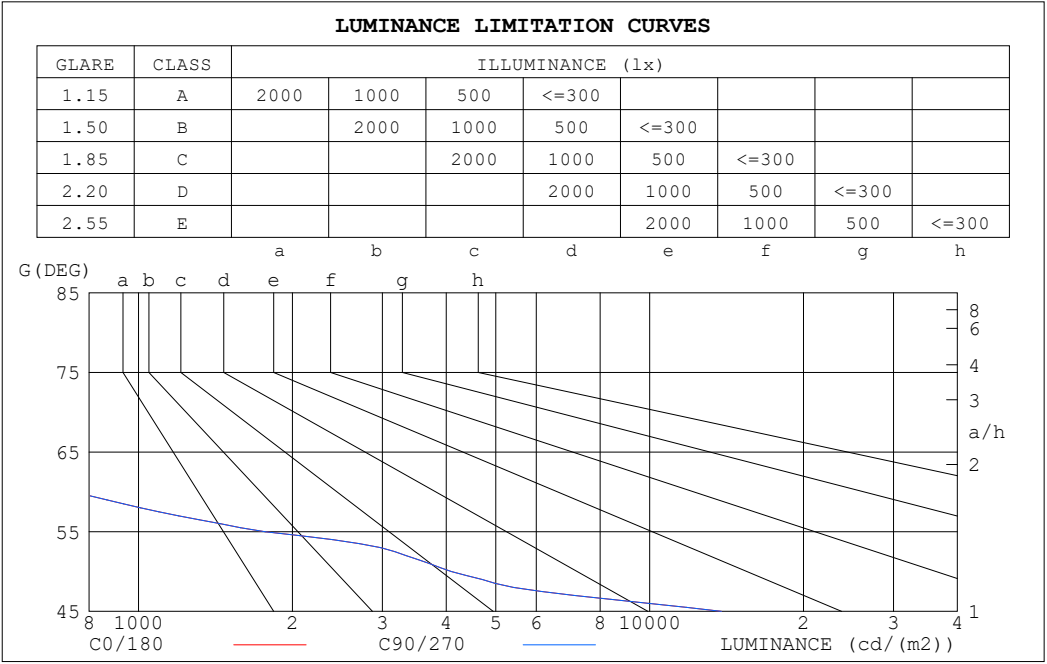
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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

Checker: LI

Assessor:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	27	27
80	111	111
75	218	218
70	365	365
65	439	439
60	746	746
55	1769	1769
50	4092	4092
45	13819	13819

C Range: 0 - 360DEG

C Interval: 2.5DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:LYJ

Test Date:2022-06-29

Checker: LI

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295

Humidity:65.0%

Test Distance:9.500m [K=1.0000]

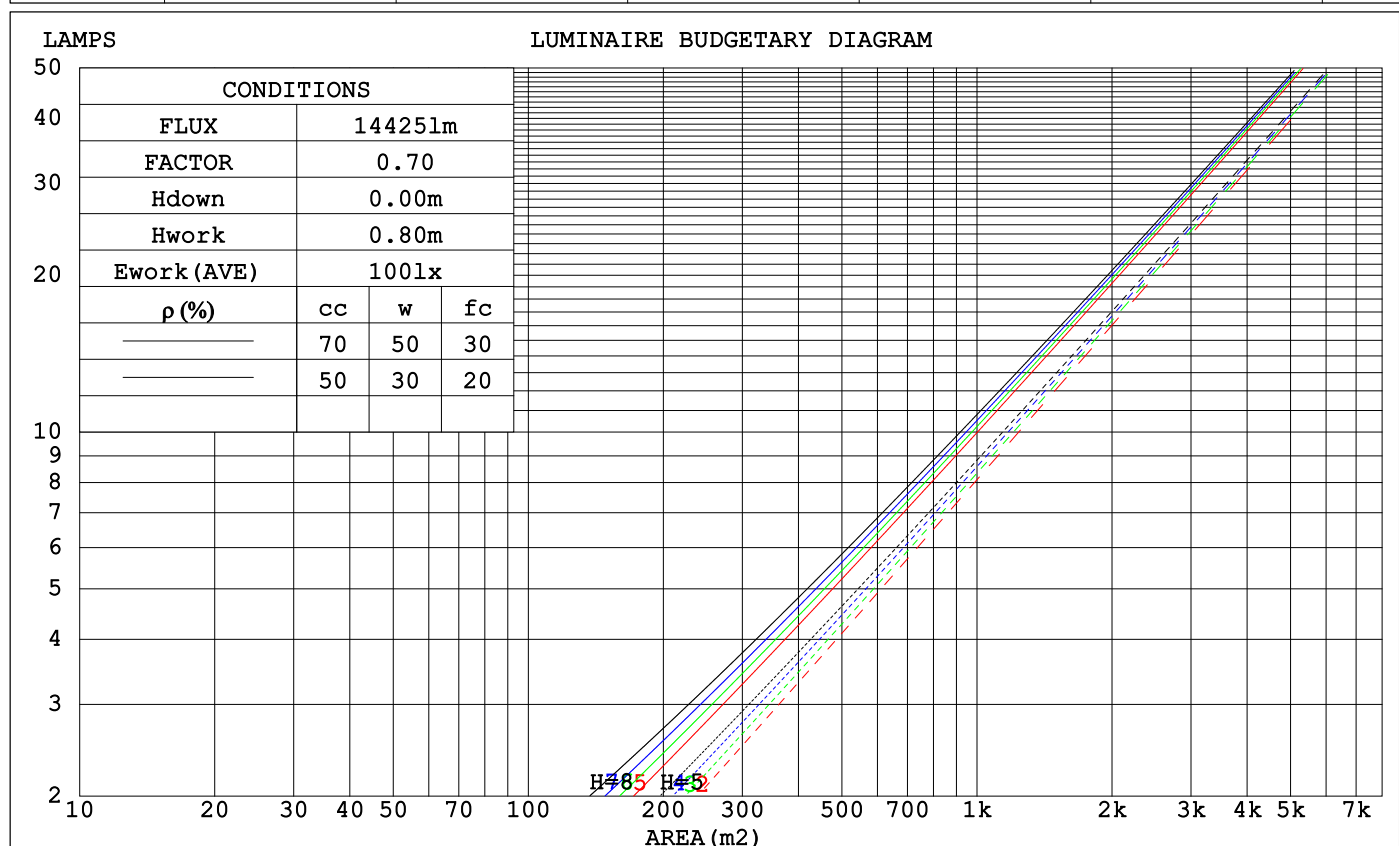
Remarks:

Assessor:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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	1.00
1.0	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.95	1.01	.97	.94	.98	.95	.92	.95	.92	.90	.92	.90	.88	.87
3.0	.96	.90	.86	.94	.90	.86	.92	.88	.84	.89	.86	.83	.87	.84	.82	.80
4.0	.89	.83	.79	.88	.83	.79	.86	.81	.78	.84	.80	.77	.82	.79	.76	.74
5.0	.83	.77	.73	.82	.77	.72	.80	.75	.72	.79	.74	.71	.77	.73	.70	.69
6.0	.78	.72	.67	.77	.71	.67	.75	.70	.67	.74	.69	.66	.73	.69	.66	.64
7.0	.73	.67	.62	.72	.66	.62	.71	.66	.62	.70	.65	.61	.69	.64	.61	.60
8.0	.68	.62	.58	.68	.62	.58	.67	.61	.58	.66	.61	.57	.65	.60	.57	.56
9.0	.64	.58	.54	.64	.58	.54	.63	.58	.54	.62	.57	.54	.61	.57	.53	.52
10.0	.61	.55	.51	.60	.54	.51	.59	.54	.50	.59	.54	.50	.58	.53	.50	.49



C Range: 0 - 360DEG
C Interval: 2.5DEG
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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

Checker: LI

Assessor:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

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						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.181	.103	.033	.174	.099	.031	.161	.092	.030	.150	.086	.028	.139	.081	.026		
2.0	.174	.095	.029	.168	.093	.029	.157	.088	.027	.148	.083	.026	.139	.078	.025		
3.0	.166	.088	.026	.161	.086	.026	.152	.083	.025	.144	.079	.024	.136	.075	.023		
4.0	.159	.083	.024	.155	.081	.024	.147	.078	.023	.139	.075	.023	.133	.072	.022		
5.0	.152	.077	.022	.148	.076	.022	.141	.074	.022	.135	.071	.021	.129	.069	.021		
6.0	.145	.073	.021	.142	.072	.021	.136	.070	.020	.130	.068	.020	.125	.066	.020		
7.0	.139	.069	.019	.136	.068	.019	.131	.066	.019	.126	.064	.019	.121	.063	.018		
8.0	.133	.065	.018	.131	.064	.018	.126	.063	.018	.121	.061	.018	.117	.060	.018		
9.0	.128	.062	.017	.125	.061	.017	.121	.060	.017	.117	.059	.017	.113	.057	.017		
10.0	.123	.059	.016	.121	.058	.016	.117	.057	.016	.113	.056	.016	.109	.055	.016		

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						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.171	.157	.145	.147	.135	.124	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.132	.112	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.135	.099	.072	.115	.086	.062	.079	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.126	.087	.059	.108	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007	
6.0	.119	.078	.049	.102	.068	.043	.071	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.113	.071	.041	.097	.061	.036	.067	.043	.026	.039	.025	.015	.013	.008	.005	
8.0	.107	.065	.035	.092	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.102	.060	.031	.088	.052	.027	.061	.036	.019	.036	.021	.011	.012	.007	.004	
10.0	.098	.055	.027	.084	.048	.023	.059	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
 C Interval: 2.5DEG
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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:9.500m [K=1.0000]
 Remarks:

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Assessor:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

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	2H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	3H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	4H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	6H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	8H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	12H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
4H	2H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	3H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	4H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	6H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	8H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	12H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
8H	4H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	6H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	8H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	12H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
12H	4H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	6H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	8H	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
CIE190: 2010											

CIE190: 2010
Area: 0.1152 m2

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UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	87	80	76	86	80	76	85	80	76	73
0.80	94	88	85	94	88	85	93	88	84	80
1.00	99	93	90	98	93	90	97	93	89	85
1.25	103	98	95	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	109	104	101	107	103	101	104	101	99	94
2.50	110	106	104	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004						Suspended			SHRNOM = 1.25	

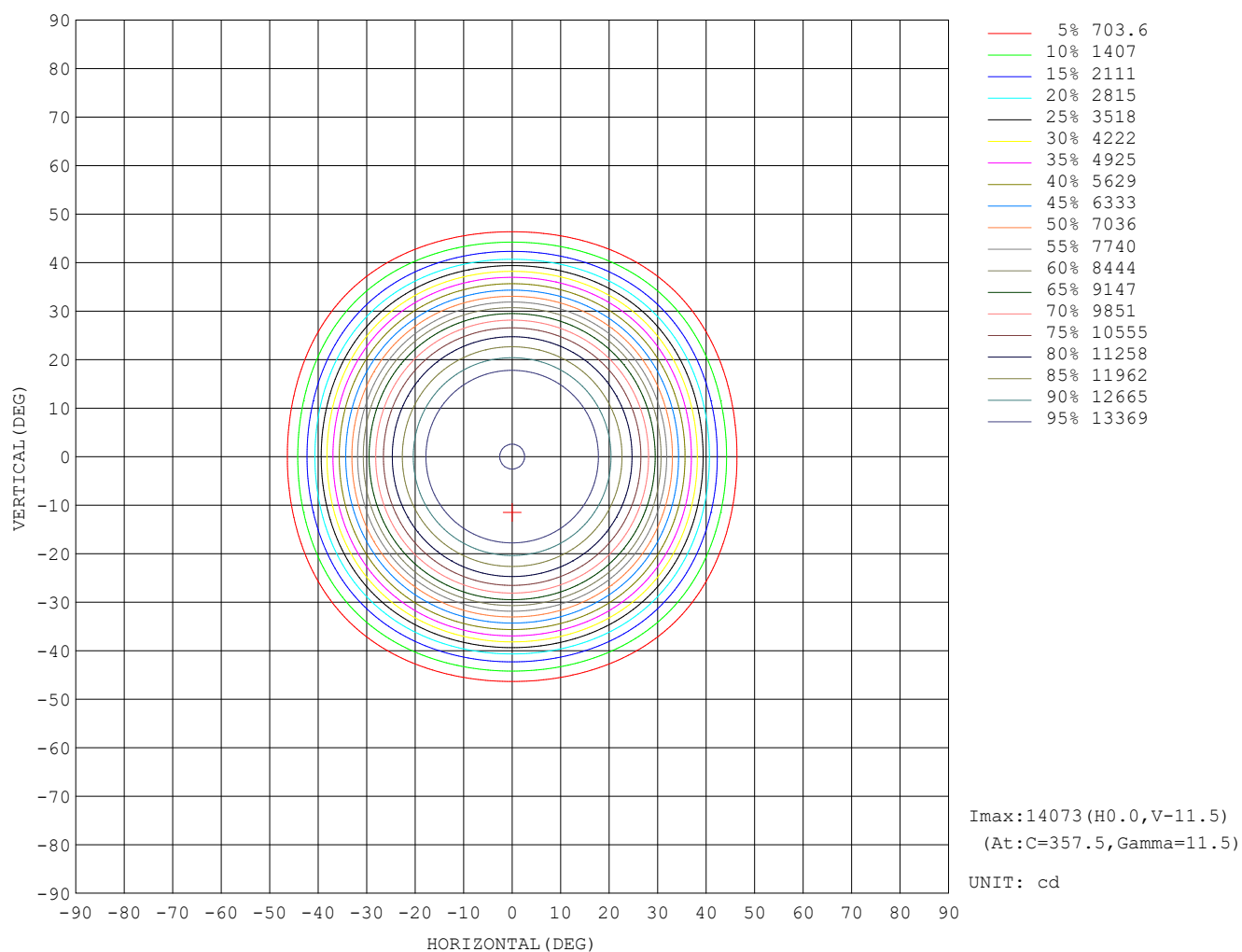
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 Remarks:

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ISOCANDELA DIAGRAM



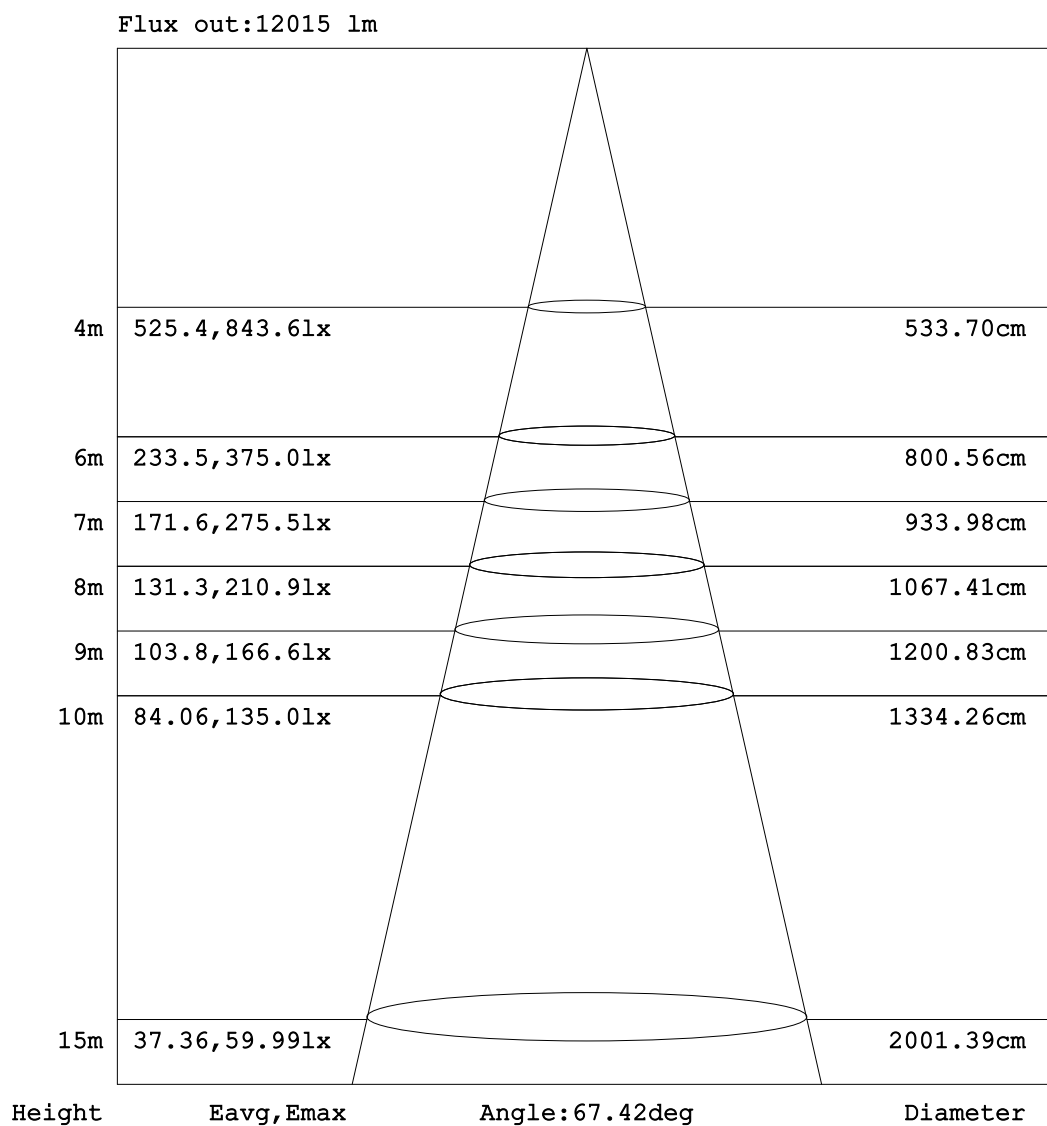
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Checker: LI

Assessor:

AAI Figure



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

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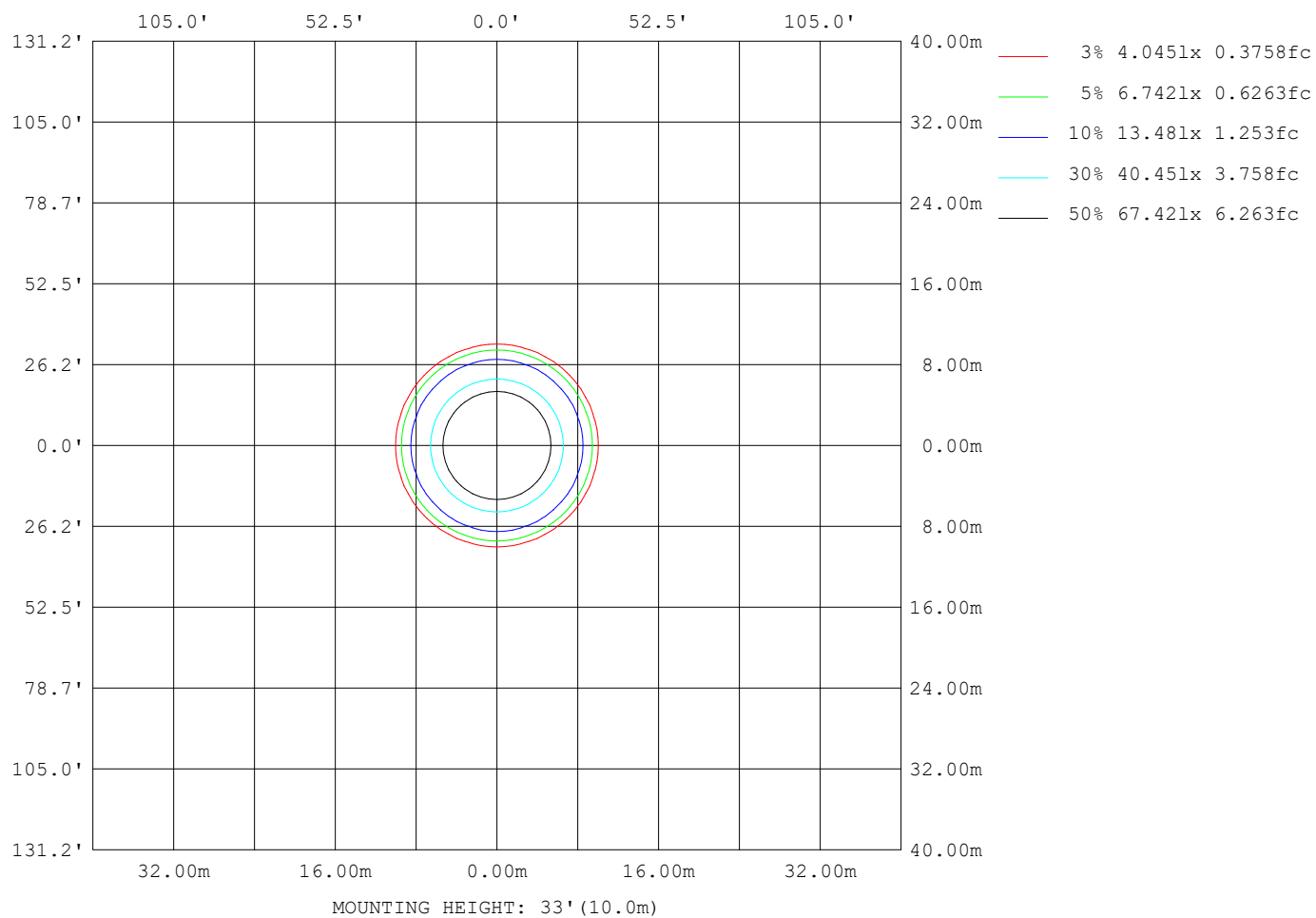
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ISOLUX DIAGRAM



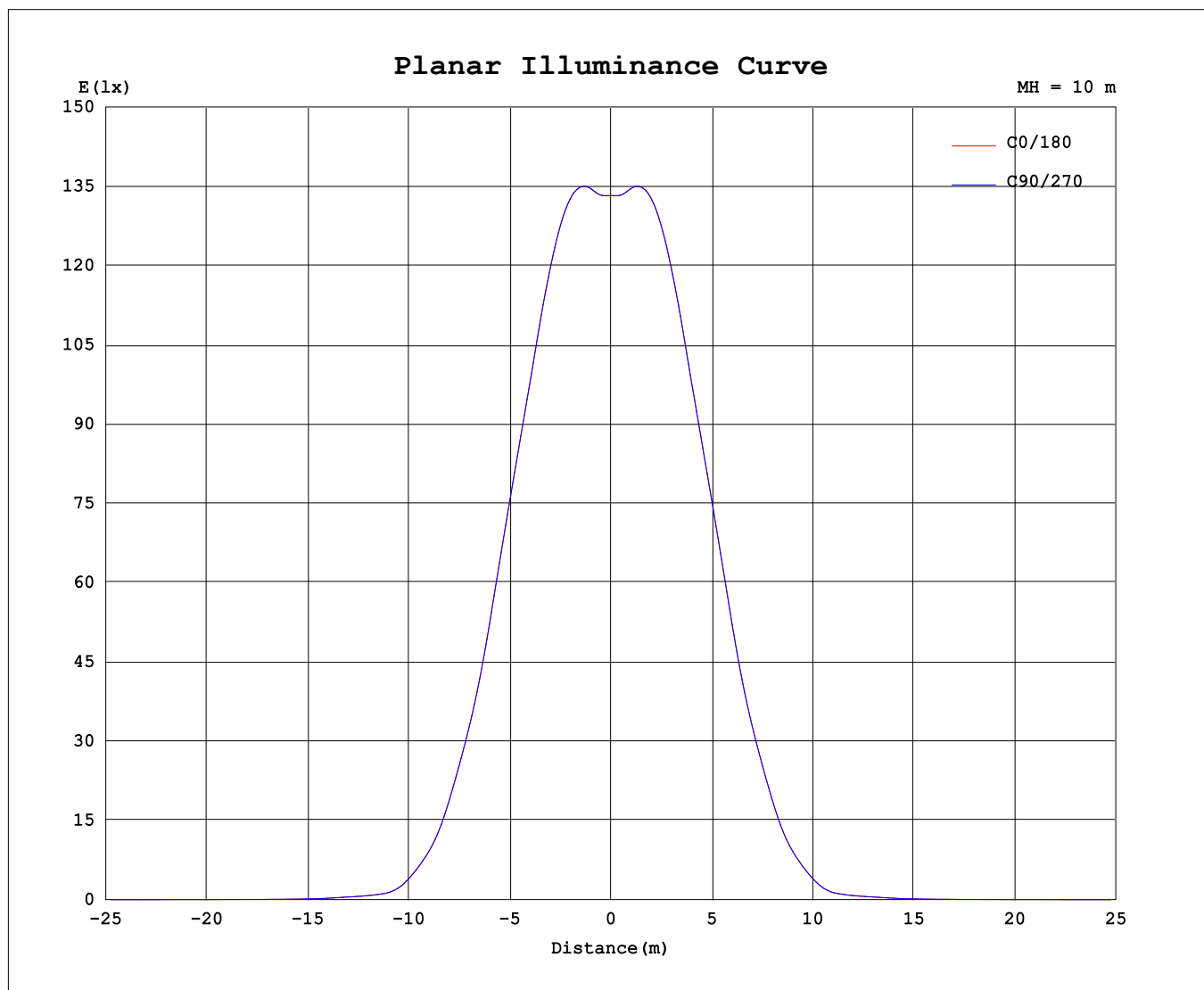
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C Interval: 2.5DEG
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Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-06-29

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
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Humidity: 65.0%
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Assessor:

Planar Illuminance Curve



C Range: 0 - 360DEG
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γ Range: 0 - 90DEG
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Humidity: 65.0%
Test Distance: 9.500m [K=1.0000]
Remarks:

Checker: LI

Assessor: