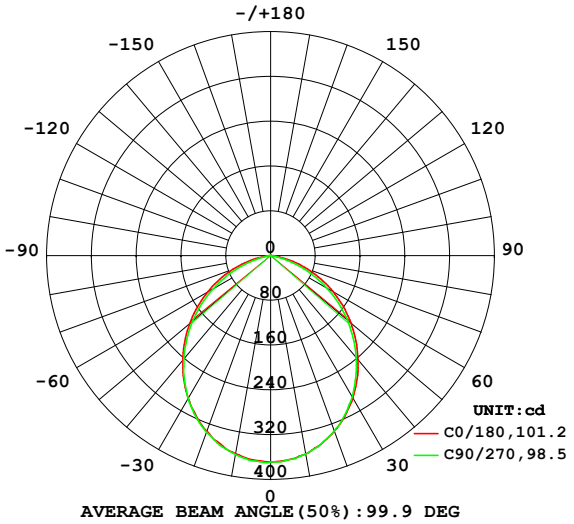
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.37V I:0.0363A P:7.6517W PF:0.9143 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:877.573x1 lm		
NAME: LopezB	TYPE: 8W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.039	Shielding Angle:

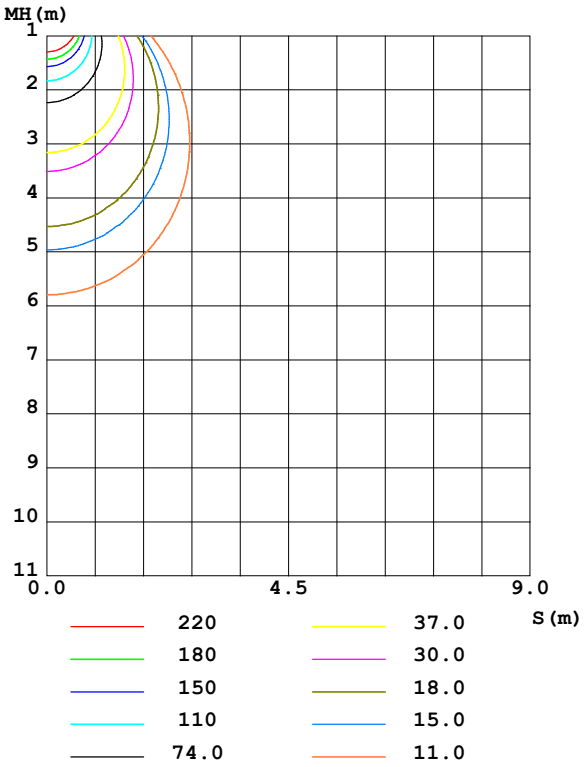
DATA OF LAMP		PHOTOMETRIC DATA Eff: 114.69 lm/W			
MODEL	LopezB	Imax(cd)	369.9	S/MH(C0/180)	1.19
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	1.18
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	877.57	η UP,DN(C0-180)	0.0,50.3
NOMINAL FLUX(lm)	877.573	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.7
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):99.9 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-08-06

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	359.5	360.9	361.2	360.5	360.2	359.8	360.0	359.3	0- 10	34.79	34.79	3.96,3.96
20	333.8	336.1	335.7	334.8	333.6	332.6	333.1	333.2	10- 20	98.36	133.2	15.2,15.2
30	294.5	295.4	294.9	294.7	294.1	292.2	291.5	292.8	20- 30	145.3	278.4	31.7,31.7
40	244.1	244.5	241.2	242.8	243.4	240.3	237.7	241.0	30- 40	168.0	446.4	50.9,50.9
50	188.4	187.0	181.5	185.0	187.4	182.4	179.1	183.1	40- 50	164.6	611.0	69.6,69.6
60	129.9	125.8	118.0	123.8	128.9	121.3	115.8	122.4	50- 60	137.5	748.6	85.3,85.3
70	71.21	63.70	55.36	61.74	69.59	60.11	52.82	60.76	60- 70	91.35	839.9	95.7,95.7
80	16.95	9.109	4.710	8.763	16.22	8.022	3.780	7.702	70- 80	35.71	875.6	99.8,99.8
90	0.2171	0.1925	0.1675	0.1705	0.1762	0.1672	0.1454	0.1642	80- 90	1.969	877.6	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		

Conical surface Flux(90deg): 530.71 lm

%lum = 60.5%
%lamp = 60.5%

Conical surface Flux(120deg): 748.55 lm

%lum = 85.3%
%lamp = 85.3%

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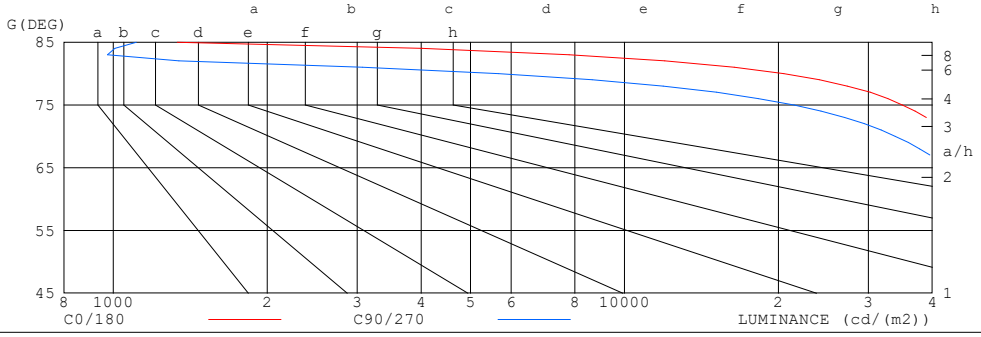
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.37V I:0.0363A P:7.6517W PF:0.9143 Freq:49.99Hz **UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:877.573x1 lm**		
NAME: LopezB	**TYPE: 8W**	**WEIGHT:**
SPEC.: 4000K	**DIM.:**	**SERIAL No.:**
MFR.: EVERFINE	**SUR.: 0.039**	**Shielding Angle:**

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1334	1109
80	20512	5677
75	34953	21467
70	43761	33882
65	49925	42839
60	54588	49384
55	58303	54830
50	61596	59107
45	64527	62701

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γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
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Remarks:

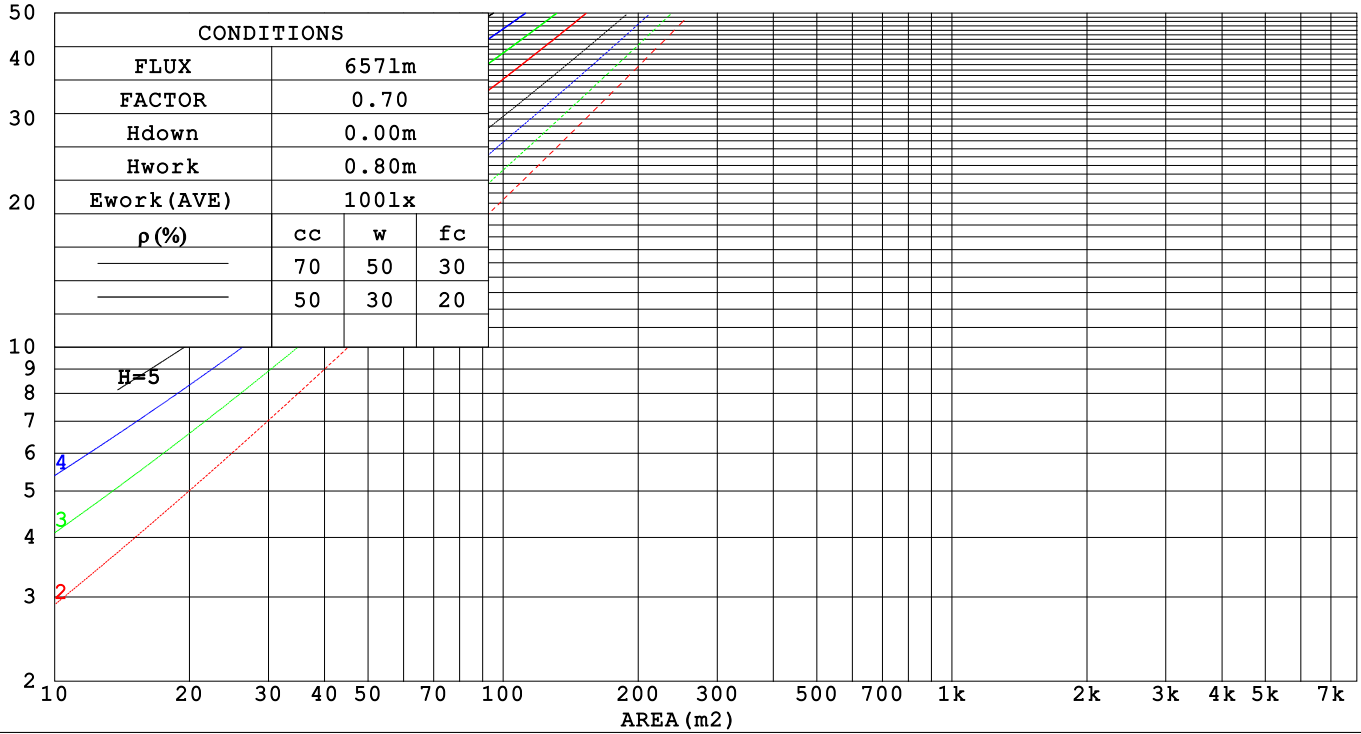
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.37V I:0.0363A P:7.6517W PF:0.9143 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:877.573x1 lm		
NAME: LopezB	TYPE: 8W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.039	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	1.06	1.02	.99	1.04	1.00	.97	.99	.97	.94	.96	.93	.91	.92	.90	.89	.87
2.0	.93	.87	.82	.92	.86	.81	.88	.83	.79	.85	.81	.77	.82	.79	.76	.74
3.0	.83	.75	.69	.81	.74	.69	.78	.72	.67	.76	.70	.66	.73	.69	.65	.63
4.0	.74	.66	.59	.72	.65	.59	.70	.63	.58	.68	.62	.57	.66	.61	.57	.54
5.0	.66	.58	.51	.65	.57	.51	.63	.56	.51	.61	.55	.50	.59	.54	.50	.48
6.0	.60	.51	.45	.59	.51	.45	.57	.50	.45	.56	.49	.44	.54	.48	.44	.42
7.0	.54	.46	.40	.54	.46	.40	.52	.45	.40	.51	.44	.39	.49	.44	.39	.37
8.0	.50	.42	.36	.49	.41	.36	.48	.41	.36	.47	.40	.35	.45	.40	.35	.33
9.0	.46	.38	.32	.45	.38	.32	.44	.37	.32	.43	.37	.32	.42	.36	.32	.30
10.0	.42	.35	.30	.42	.34	.29	.41	.34	.29	.40	.34	.29	.39	.33	.29	.27

LAMPS

LUMINAIRE BUDGETARY DIAGRAM



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Remarks:

WEC AND CCEC

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NAME: LopezB	TYPE: 8W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.039	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coeffcients(WEC)									
0.0																
1.0	.270	.154	.049	.263	.150	.048	.250	.144	.046	.238	.137	.044	.227	.132	.042	
2.0	.263	.144	.044	.257	.142	.044	.246	.137	.042	.235	.132	.041	.225	.127	.040	
3.0	.248	.132	.040	.243	.130	.039	.233	.126	.038	.223	.122	.038	.215	.119	.037	
4.0	.232	.121	.035	.228	.119	.035	.219	.116	.035	.210	.113	.034	.203	.110	.034	
5.0	.217	.111	.032	.213	.109	.032	.205	.107	.031	.197	.104	.031	.190	.102	.031	
6.0	.203	.102	.029	.199	.101	.029	.192	.098	.029	.185	.096	.028	.179	.094	.028	
7.0	.190	.094	.027	.186	.093	.026	.180	.091	.026	.174	.089	.026	.169	.088	.026	
8.0	.178	.087	.024	.175	.086	.024	.170	.085	.024	.164	.083	.024	.159	.082	.024	
9.0	.168	.081	.023	.165	.080	.023	.160	.079	.022	.155	.078	.022	.151	.076	.022	
10.0	.158	.076	.021	.156	.075	.021	.151	.074	.021	.147	.073	.021	.143	.072	.021	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.178	.156	.137	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.132	.101	.144	.114	.088	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.160	.114	.077	.137	.098	.067	.094	.068	.047	.054	.040	.028	.018	.013	.009	
4.0	.153	.101	.061	.131	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007	
5.0	.145	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.082	.041	.119	.071	.035	.082	.049	.025	.048	.029	.015	.015	.010	.005	
7.0	.132	.075	.034	.114	.065	.030	.078	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.126	.069	.030	.108	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.120	.064	.026	.103	.055	.023	.072	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.052	.020	.069	.036	.014	.040	.022	.009	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
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Operators:DAMIN
Test Date:2023-08-06

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.37V I:0.0363A P:7.6517W PF:0.9143 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:877.573x1 lm		
NAME: LopezB	TYPE: 8W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.039	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	26.9	28.4	27.2	28.6	28.8	26.7	28.1	26.9	28.3	28.5
3H	28.1	29.4	28.4	29.7	29.9	27.6	28.9	27.9	29.1	29.4
4H	28.5	29.7	28.8	30.0	30.2	27.7	29.0	28.1	29.2	29.5
6H	28.6	29.7	28.9	30.0	30.3	27.7	28.9	28.0	29.1	29.4
8H	28.5	29.7	28.9	30.0	30.2	27.7	28.8	28.0	29.1	29.4
12H	28.5	29.6	28.8	29.9	30.2	27.6	28.7	28.0	29.0	29.3
4H 2H	27.4	28.7	27.7	28.9	29.2	27.2	28.4	27.5	28.7	28.9
3H	28.7	29.8	29.0	30.1	30.4	28.2	29.3	28.6	29.6	29.9
4H	29.1	30.1	29.5	30.4	30.8	28.5	29.4	28.8	29.8	30.1
6H	29.3	30.2	29.7	30.5	30.9	28.4	29.3	28.8	29.7	30.0
8H	29.3	30.1	29.7	30.4	30.8	28.4	29.2	28.8	29.6	30.0
12H	29.2	30.0	29.6	30.3	30.7	28.4	29.1	28.8	29.5	29.9
8H 4H	29.2	30.0	29.6	30.3	30.7	28.5	29.3	29.0	29.7	30.1
6H	29.4	30.0	29.8	30.4	30.8	28.6	29.2	29.0	29.6	30.0
8H	29.4	29.9	29.8	30.4	30.8	28.5	29.1	29.0	29.5	30.0
12H	29.3	29.8	29.8	30.3	30.7	28.5	29.0	29.0	29.4	29.9
12H 4H	29.1	29.9	29.6	30.2	30.6	28.5	29.2	28.9	29.6	30.0
6H	29.3	29.9	29.8	30.3	30.8	28.5	29.1	29.0	29.5	30.0
8H	29.3	29.8	29.8	30.3	30.7	28.5	29.0	29.0	29.4	29.9

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 0.3 / - 0.3	+ 0.3 / - 0.4
1.5H	+ 0.2 / - 0.4	+ 0.2 / - 0.5
2.0H	+ 0.5 / - 0.4	+ 0.5 / - 0.6

CIE Pub.117, 877.6 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -0.5)
Area: 0.00477 m2

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Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

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MFR.: EVERFINE	SUR.: 0.039	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) x RCR = 5									
k = 0.60	61	50	43	60	50	43	59	49	43	37
0.80	71	60	53	70	60	53	68	59	53	46
1.00	80	69	63	78	69	62	76	70	62	55
1.25	87	77	71	85	76	70	83	75	69	63
1.50	91	82	76	90	82	76	87	80	75	68
2.00	98	90	84	96	89	84	93	87	82	75
2.50	101	94	89	99	93	88	96	91	86	79
3.00	104	98	94	102	97	93	99	94	90	82
4.00	108	103	99	106	101	98	102	98	95	87
5.00	110	106	103	108	104	101	103	101	98	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended					SHRNOM = 1.25	

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ISOCANDELA DIAGRAM

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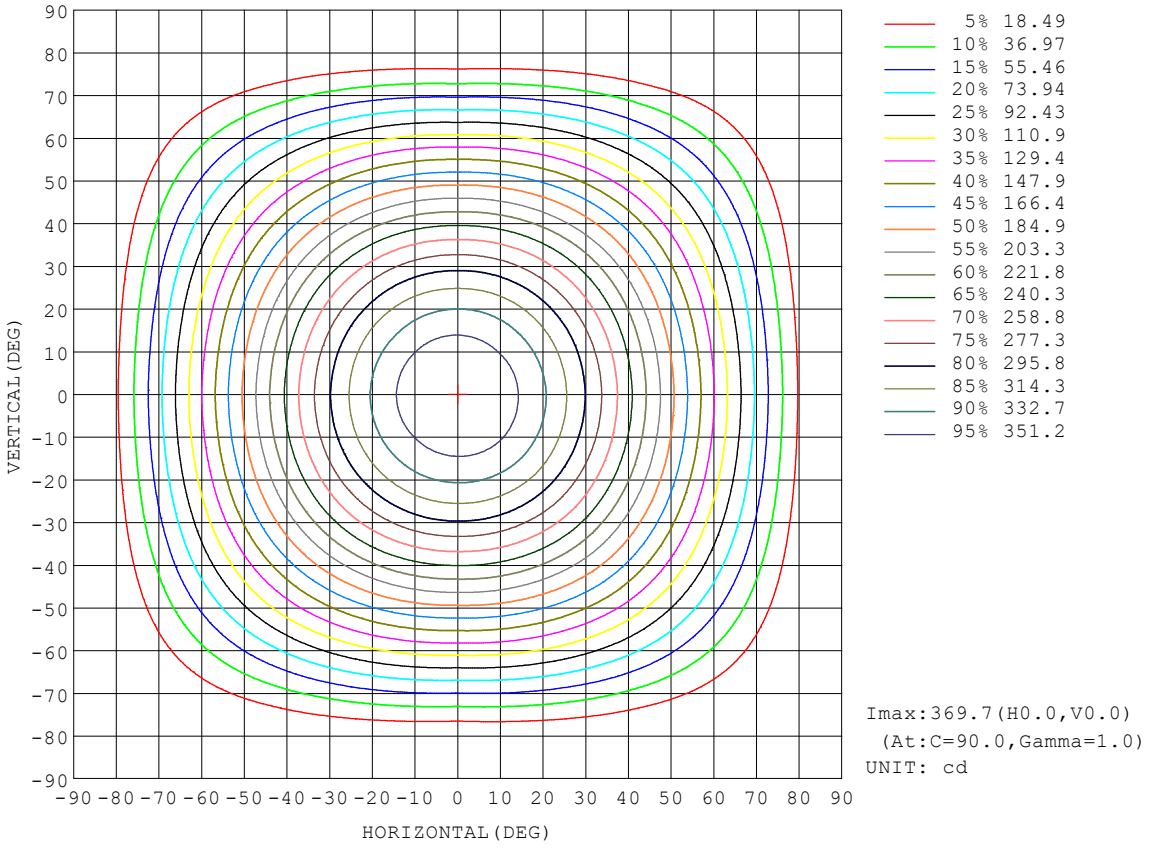

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AAI Figure

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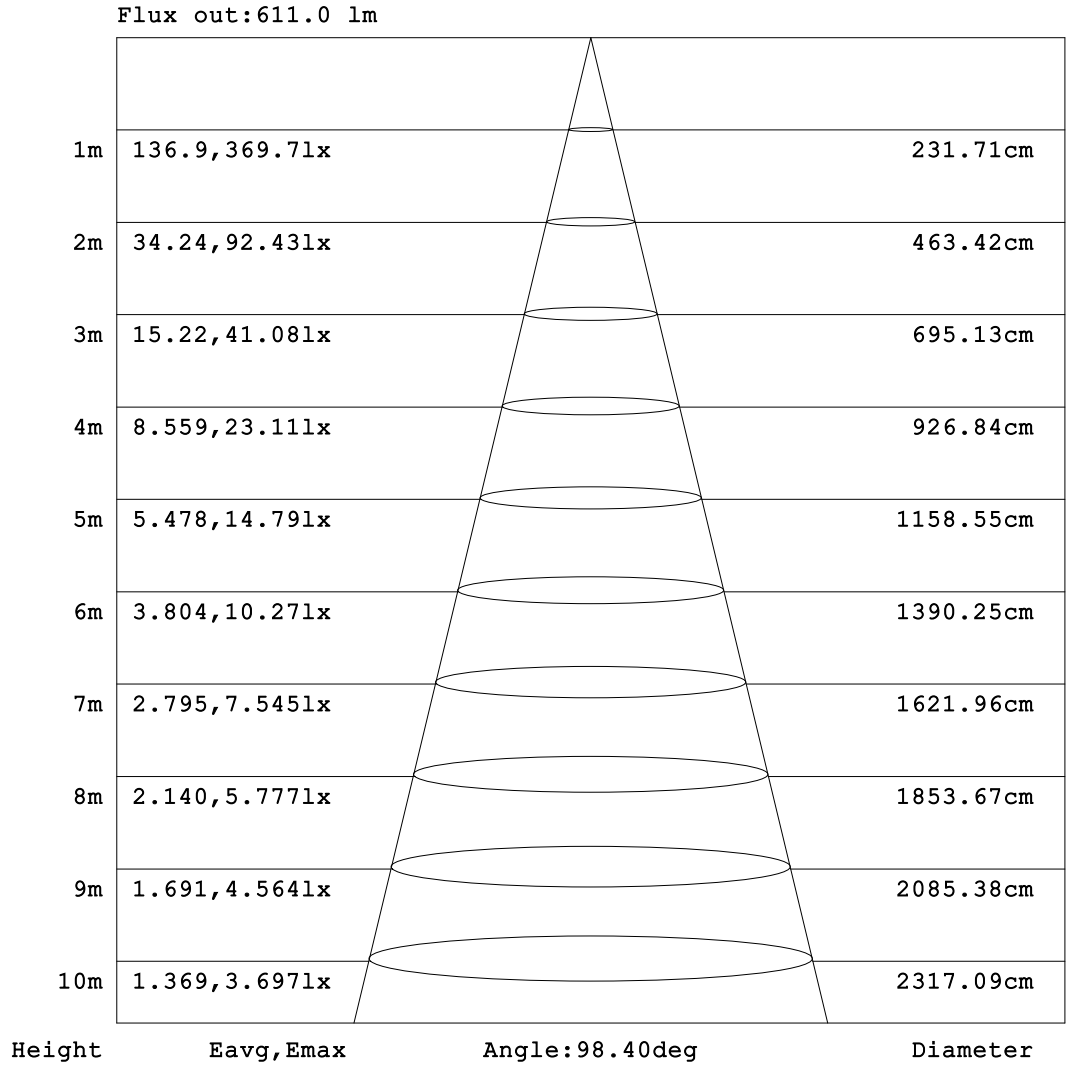

Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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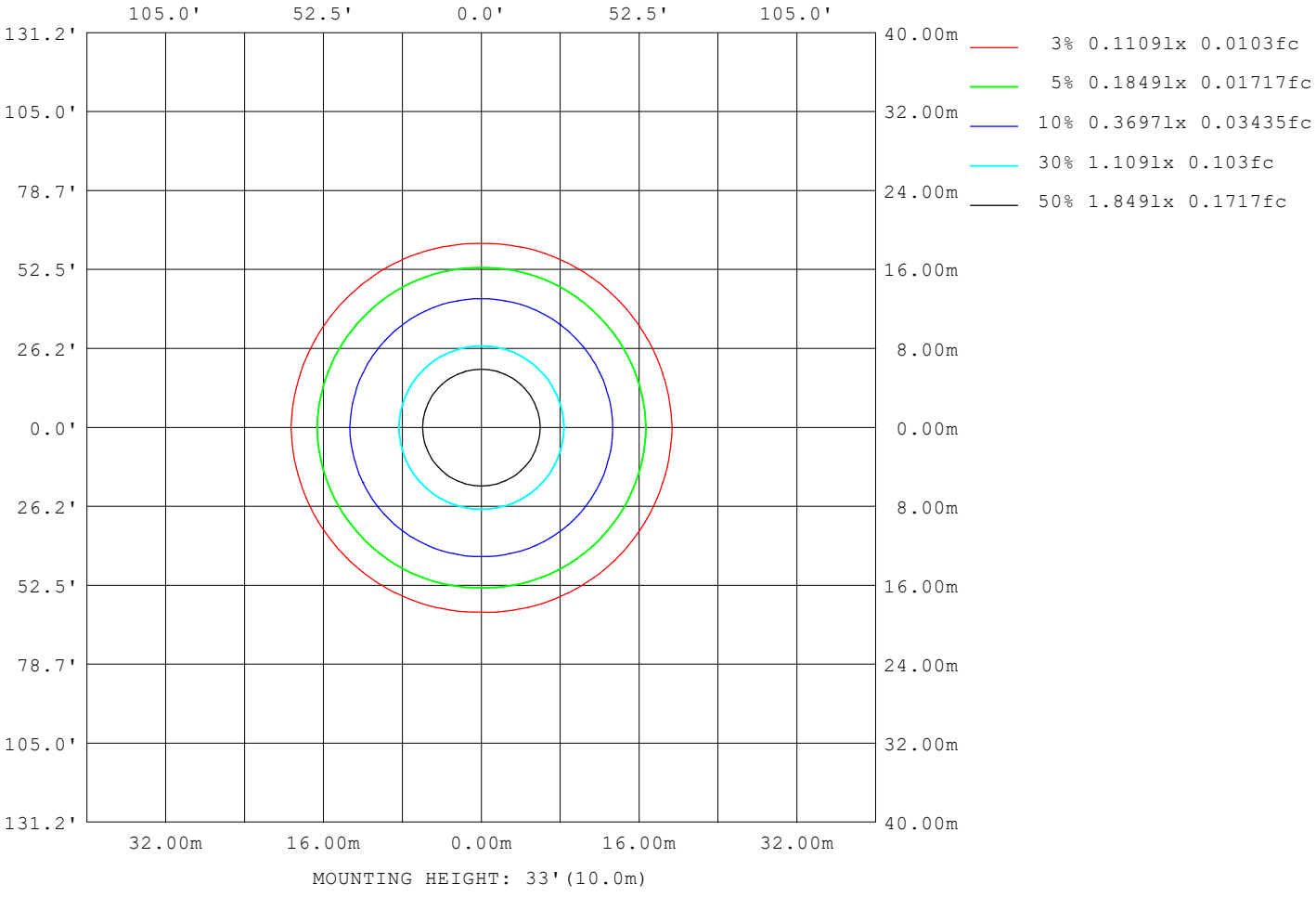
Test:U:230.37V I:0.0363A P:7.6517W PF:0.9143 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:877.573x1 lm		
NAME: LopezB	TYPE: 8W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.039	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-08-06

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.37V I:0.0363A P:7.6517W PF:0.9143 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:877.573x1 lm		
NAME: LopezB	TYPE: 8W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.039	Shielding Angle:

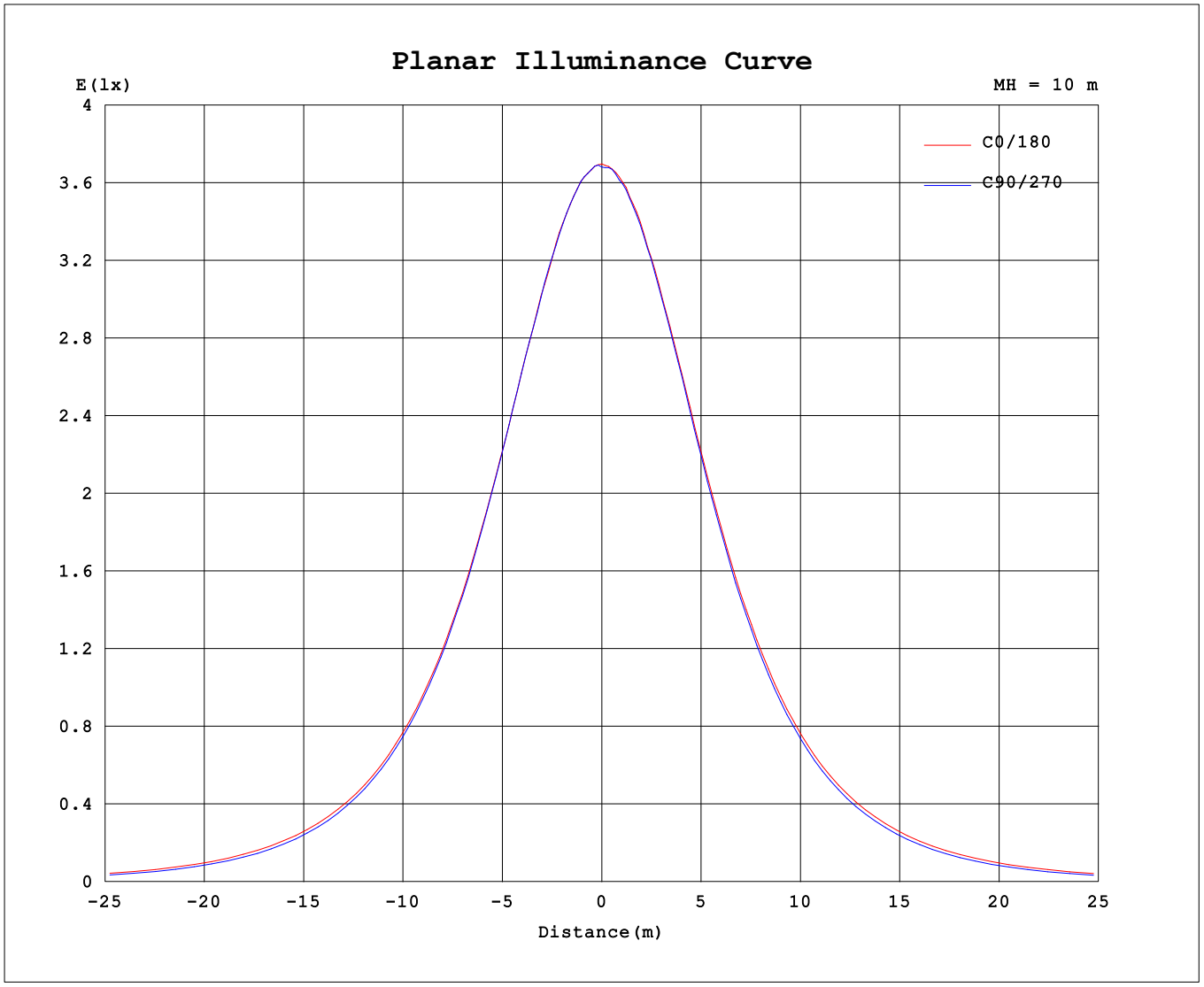
AvgL	cd/m2
L_0~180(65)av	49491
L_0~180(75)av	34226
L_0~180(85)av	1457
L_90~270(65)av	42314
L_90~270(75)av	20577
L_90~270(85)av	1042
L_45(65)av	45745
L_45(75)av	26264
L_45(85)av	763

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-08-06

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
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Test Date:2023-08-06

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.37V I:0.0363A P:7.6517W PF:0.9143 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:877.573x1 lm		
NAME: LopezB	TYPE: 8W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.039	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	45	90	135	180	225	270	315
0	369	369	369	369	369	369	369	369
5	366	367	368	367	366	367	366	366
10	360	361	361	360	360	360	360	359
15	348	350	351	350	349	348	349	349
20	334	336	336	335	334	333	333	333
25	316	318	317	316	315	315	314	315
30	294	295	295	295	294	292	291	293
35	270	271	269	269	269	267	266	268
40	244	245	241	243	243	240	238	241
45	217	216	212	214	215	212	209	213
50	188	187	182	185	187	182	179	183
55	159	156	150	154	158	152	148	153
60	130	126	118	124	129	121	116	122
65	100	94.4	86.5	92.4	99.2	90.7	84.1	91.4
70	71.2	63.7	55.4	61.7	69.6	60.1	52.8	60.8
75	43.0	34.0	26.5	32.8	41.5	31.2	24.3	31.7
80	16.9	9.11	4.71	8.76	16.2	8.02	3.78	7.70
85	0.55	0.32	0.46	0.31	0.66	0.31	0.40	0.33
90	0.22	0.19	0.17	0.17	0.18	0.17	0.15	0.16

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-08-06

γ Range: 0 - 90DEG
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Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
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Remarks: