

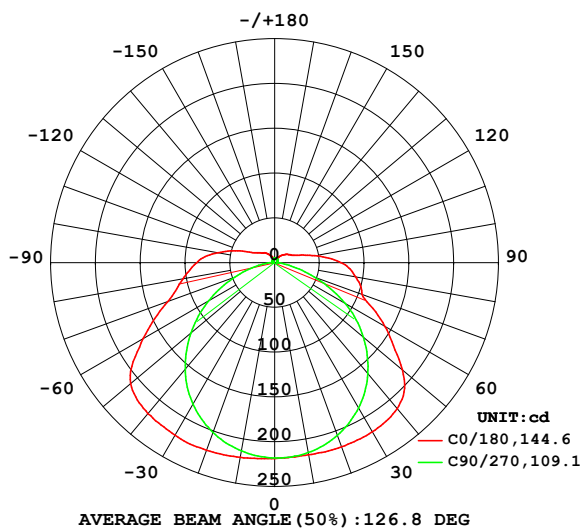
## LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:99.100V I:0.1370A P:12.300W PF:0.9040 Freq:50.00Hz  
Lamp Flux:891.19x1 lm

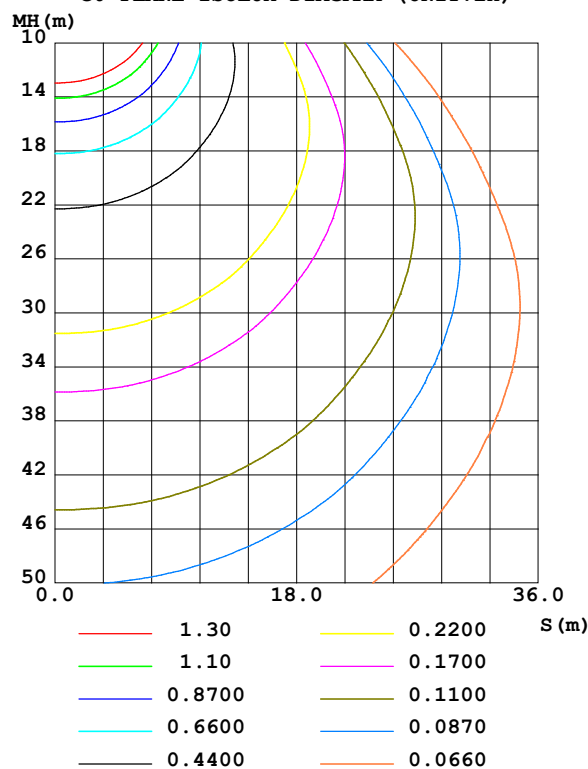
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Everfine	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 72.45 lm/W
MODEL	灯条样品	I <sub>max</sub> (cd)	223.5	S/MH(C0/180)	1.51	
NOMINAL POWER(W)	24	LOR(%)	100.0	S/MH(C90/270)	1.27	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	891.19	η UP,DN(C0-180)	6.4,45.4	
NOMINAL FLUX(lm)	891.19	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	5.0,43.1	
LAMPS INSIDE	1	η up (%)	11.5	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	100	η down (%)	88.5	CIBSE SHR MAX	1.50	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:07 August 2024

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity:65.0%  
Test Distance:8.186m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C90	C180	C270					$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	220.8	213.5	217.8	215.3					0- 10	20.77	20.77	2.33,2.33
20	222.7	201.7	218.7	205.1					10- 20	60.83	81.60	9.16,9.16
30	222.4	182.5	218.0	187.4					20- 30	96.07	177.7	19.9,19.9
40	220.1	155.4	212.9	161.9					30- 40	122.7	300.4	33.7,33.7
50	209.9	122.0	186.0	129.3					40- 50	136.0	436.4	49,49
60	169.5	84.94	142.2	90.74					50- 60	127.3	563.6	63.2,63.2
70	126.8	47.39	103.8	47.46					60- 70	99.99	663.6	74.5,74.5
80	104.0	18.33	91.81	14.11					70- 80	72.33	736.0	82.6,82.6
90	87.11	2.159	74.08	2.549					80- 90	53.10	789.1	88.5,88.5
100	64.50	2.320	45.58	2.698					90-100	38.87	827.9	92.9,92.9
110	38.25	2.676	24.28	3.089					100-110	23.96	851.9	95.6,95.6
120	22.28	3.112	18.46	3.534					110-120	13.74	865.6	97.1,97.1
130	16.91	3.521	14.21	3.912					120-130	9.617	875.2	98.2,98.2
140	13.64	3.997	9.775	4.318					130-140	6.889	882.1	99,99
150	9.470	4.467	6.495	4.731					140-150	4.441	886.6	99.5,99.5
160	5.229	4.947	5.031	5.048					150-160	2.664	889.2	99.8,99.8
170	5.140	5.304	5.233	5.295					160-170	1.452	890.7	99.9,99.9
180	5.369	5.590	5.387	5.515					170-180	0.5068	891.2	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 367.85 lm

%lum = 41.3%

%lamp = 41.3%

Conical surface Flux(130deg): 617.74 lm

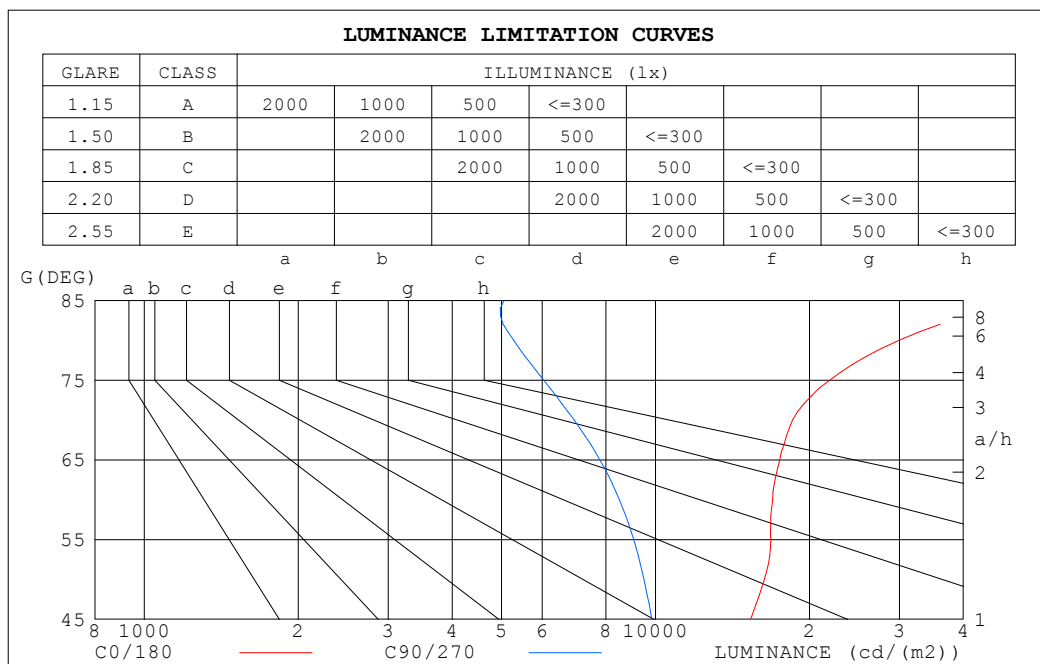
%lum = 69.3%

%lamp = 69.3%

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:07 August 2024

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
 Humidity:65.0%  
 Test Distance:8.186m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES



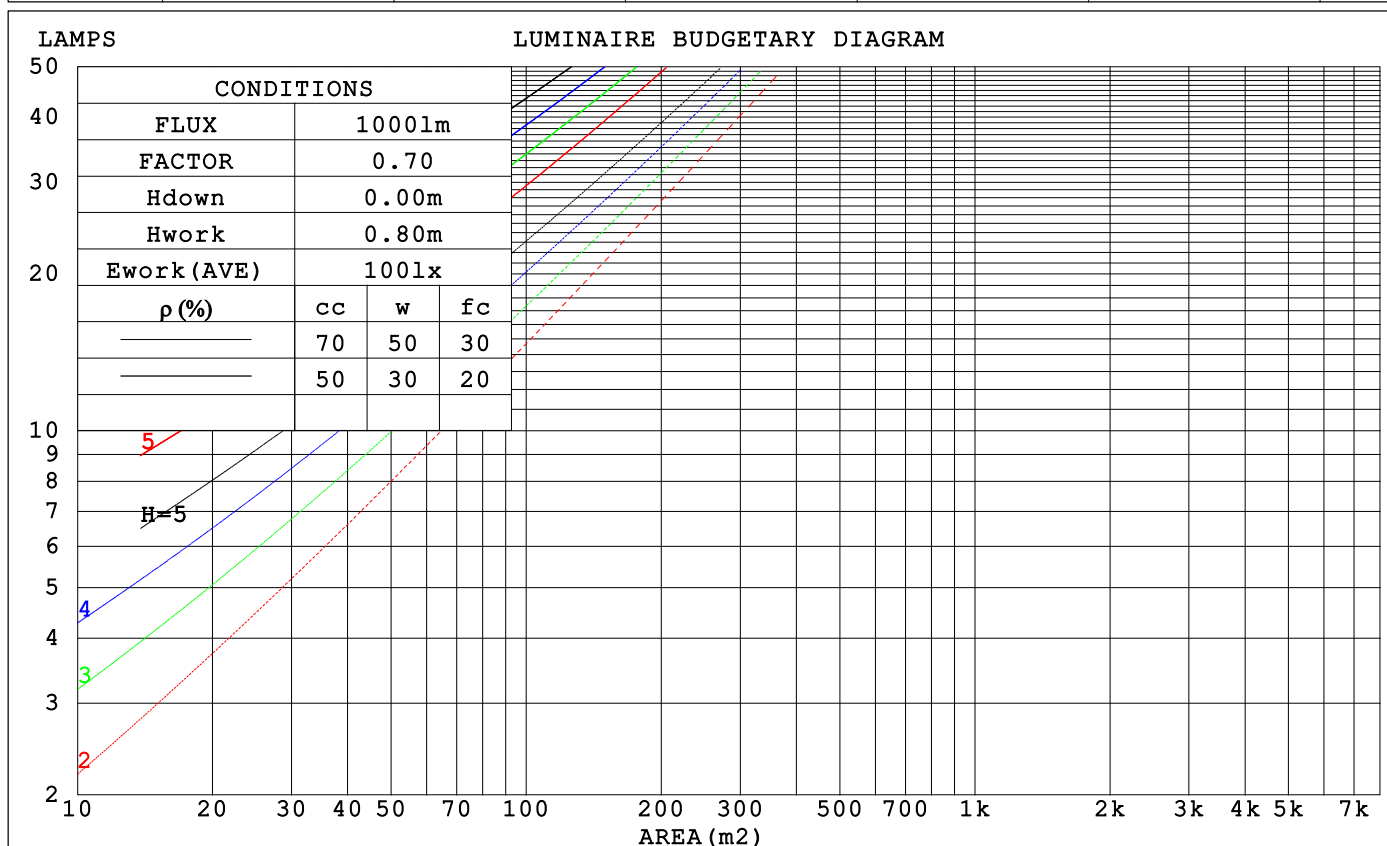
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	54540	5056
80	29958	5278
75	21911	6047
70	18537	6928
65	17508	7783
60	16950	8494
55	16801	9064
50	16329	9489
45	15344	9843

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 07 August 2024

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity: 65.0%  
Test Distance: 8.186m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.16	1.16	1.16	1.12	1.12	1.12	1.05	1.05	1.05	.98	.98	.98	.92	.92	.92	.89
1.0	.98	.93	.89	.95	.90	.86	.89	.85	.82	.83	.80	.77	.77	.75	.73	.70
2.0	.85	.77	.71	.82	.75	.69	.76	.71	.66	.71	.67	.63	.67	.63	.60	.57
3.0	.74	.65	.58	.71	.63	.57	.67	.60	.54	.62	.57	.52	.58	.54	.50	.47
4.0	.65	.56	.49	.63	.54	.48	.59	.52	.46	.55	.49	.44	.52	.46	.42	.39
5.0	.58	.48	.41	.56	.47	.41	.52	.45	.39	.49	.43	.38	.46	.41	.36	.34
6.0	.52	.42	.36	.50	.41	.35	.47	.40	.34	.44	.38	.33	.42	.36	.32	.29
7.0	.47	.38	.31	.45	.37	.31	.43	.35	.30	.40	.34	.29	.38	.32	.28	.26
8.0	.42	.34	.28	.41	.33	.27	.39	.32	.26	.37	.30	.26	.35	.29	.25	.23
9.0	.39	.30	.25	.38	.30	.24	.36	.29	.24	.34	.27	.23	.32	.26	.22	.20
10.0	.36	.28	.22	.35	.27	.22	.33	.26	.21	.31	.25	.21	.30	.24	.20	.18



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 07 August 2024

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity: 65.0%  
Test Distance: 8.186m [K=1.0000]  
Remarks:

### WEC AND CCEC

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.361	.205	.065	.350	.200	.063	.330	.190	.061	.312	.180	.058	.295	.171	.055	
2.0	.320	.175	.054	.310	.171	.053	.292	.162	.050	.275	.155	.048	.260	.147	.046	
3.0	.288	.153	.046	.279	.149	.045	.263	.142	.043	.248	.136	.042	.234	.130	.040	
4.0	.261	.136	.040	.253	.133	.039	.239	.127	.038	.225	.121	.036	.213	.116	.035	
5.0	.239	.122	.035	.232	.119	.035	.219	.114	.034	.206	.109	.032	.195	.104	.031	
6.0	.220	.110	.032	.214	.108	.031	.202	.103	.030	.190	.099	.029	.180	.095	.028	
7.0	.203	.101	.029	.198	.099	.028	.187	.094	.027	.177	.091	.026	.167	.087	.026	
8.0	.189	.092	.026	.184	.091	.026	.174	.087	.025	.165	.083	.024	.156	.080	.023	
9.0	.177	.085	.024	.172	.084	.024	.163	.081	.023	.154	.077	.022	.146	.074	.021	
10.0	.166	.079	.022	.161	.078	.022	.153	.075	.021	.145	.072	.020	.138	.069	.020	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.278	.278	.278	.237	.237	.237	.162	.162	.162	.093	.093	.093	.030	.030	.030	
1.0	.272	.244	.218	.233	.209	.188	.159	.144	.130	.092	.083	.076	.029	.027	.024	
2.0	.265	.220	.183	.227	.190	.158	.155	.131	.111	.090	.076	.065	.029	.025	.021	
3.0	.257	.204	.161	.220	.176	.140	.151	.122	.098	.087	.071	.058	.028	.023	.019	
4.0	.249	.191	.146	.214	.165	.127	.147	.115	.089	.085	.067	.053	.027	.022	.017	
5.0	.242	.181	.136	.208	.156	.118	.143	.109	.083	.083	.064	.049	.027	.021	.016	
6.0	.234	.173	.128	.202	.150	.112	.139	.105	.079	.081	.062	.047	.026	.020	.016	
7.0	.227	.166	.123	.196	.144	.107	.135	.101	.076	.079	.059	.045	.025	.019	.015	
8.0	.221	.160	.119	.190	.139	.104	.132	.098	.073	.077	.058	.044	.025	.019	.014	
9.0	.215	.155	.116	.185	.135	.101	.128	.095	.072	.075	.056	.043	.024	.018	.014	
10.0	.209	.151	.113	.180	.131	.099	.125	.092	.070	.073	.055	.042	.024	.018	.014	

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 07 August 2024

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
 Humidity: 65.0%  
 Test Distance: 8.186m [K=1.0000]  
 Remarks:

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	22.3	23.8	22.8	24.2	24.6	19.9	21.3	20.3	21.7	22.1
	3H	24.5	25.8	24.9	26.2	26.7	21.1	22.4	21.5	22.8	23.3
	4H	25.7	26.9	26.1	27.4	27.9	21.5	22.8	22.0	23.2	23.7
	6H	27.1	28.3	27.6	28.7	29.3	21.8	23.0	22.3	23.5	24.0
	8H	27.9	29.1	28.4	29.5	30.1	21.9	23.1	22.4	23.6	24.1
	12H	28.9	30.0	29.4	30.5	31.1	22.0	23.1	22.5	23.6	24.1
4H	2H	22.7	24.0	23.2	24.4	24.9	20.9	22.1	21.3	22.6	23.1
	3H	25.1	26.2	25.6	26.7	27.2	22.3	23.4	22.8	23.9	24.5
	4H	26.4	27.4	27.0	28.0	28.5	23.0	24.0	23.5	24.5	25.1
	6H	28.1	29.0	28.7	29.5	30.2	23.5	24.4	24.0	24.9	25.5
	8H	29.1	29.9	29.6	30.5	31.1	23.7	24.5	24.2	25.1	25.7
	12H	30.2	31.0	30.8	31.6	32.2	23.8	24.6	24.4	25.2	25.8
8H	4H	26.7	27.5	27.2	28.1	28.7	23.8	24.6	24.3	25.2	25.8
	6H	28.6	29.3	29.2	29.9	30.5	24.6	25.3	25.2	25.9	26.6
	8H	29.7	30.4	30.4	31.0	31.7	25.0	25.6	25.6	26.3	26.9
	12H	31.2	31.7	31.8	32.4	33.1	25.3	25.9	26.0	26.5	27.3
12H	4H	26.7	27.4	27.3	28.0	28.7	24.0	24.8	24.6	25.4	26.0
	6H	28.7	29.3	29.3	29.9	30.6	25.1	25.7	25.7	26.3	27.0
	8H	29.9	30.5	30.6	31.1	31.8	25.6	26.2	26.3	26.8	27.5
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H		+ 0.2 / - 0.2					+ 0.3 / - 0.4				
2.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.5				

CIE Pub.117, 891.2 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -0.4$ )  
Area: 0.02 m<sup>2</sup>

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:07 August 2024

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity:65.0%  
Test Distance:8.186m [K=1.0000]  
Remarks:

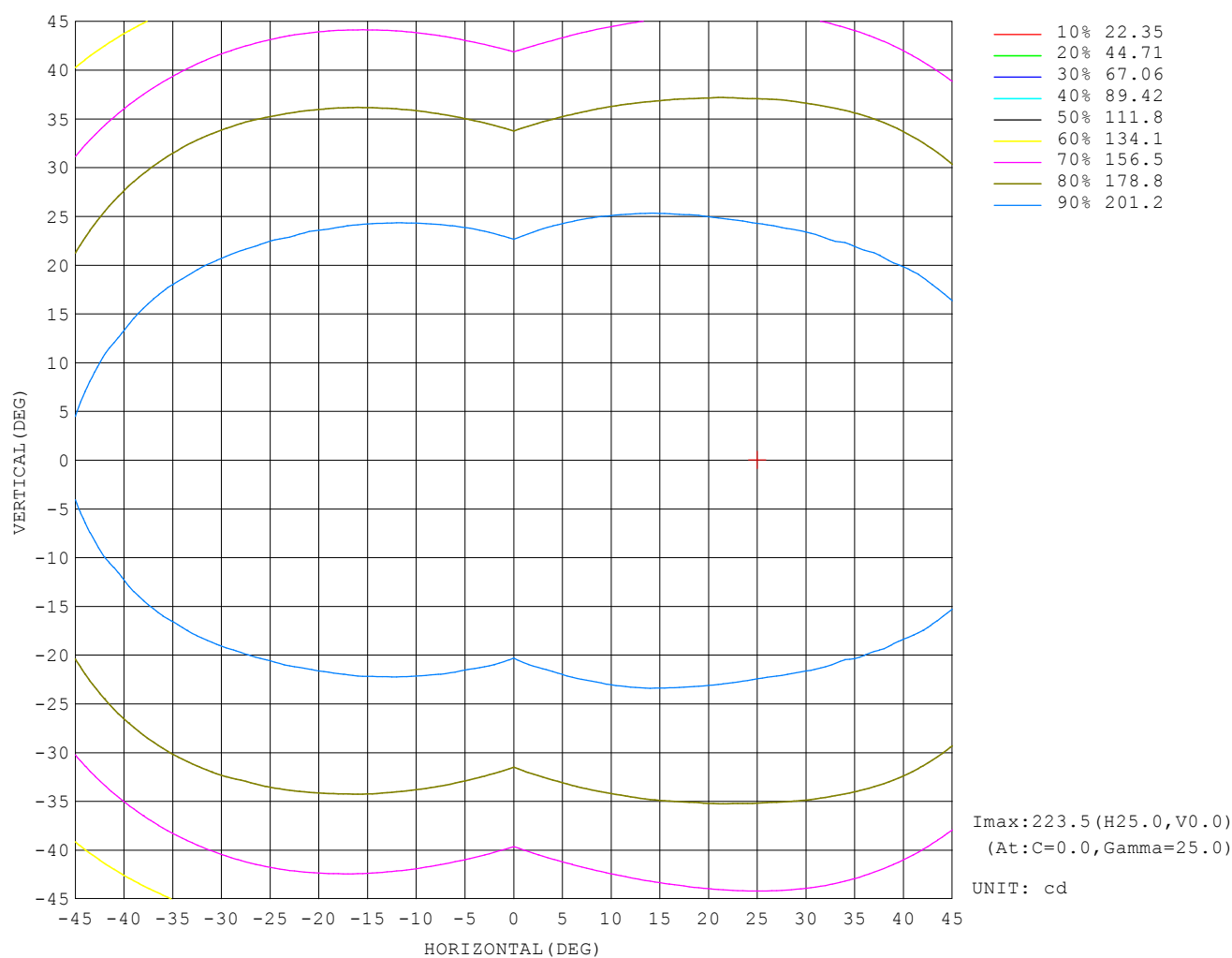
### UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	51	38	31	50	38	31	48	37	31	24
0.80	60	48	40	59	47	39	57	46	39	31
1.00	68	56	48	67	55	48	64	56	47	39
1.25	75	64	55	73	62	55	70	60	53	45
1.50	81	69	61	78	68	60	74	65	59	49
2.00	88	77	70	85	76	69	80	72	66	56
2.50	92	83	75	89	81	74	84	77	71	60
3.00	96	87	80	93	85	79	87	81	75	64
4.00	100	93	87	97	90	85	91	85	81	68
5.00	103	96	91	99	94	89	93	88	84	71
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: 25.3°C  
 Operators: DAMIN  
 Test Date: 07 August 2024

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
 Humidity: 65.0%  
 Test Distance: 8.186m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

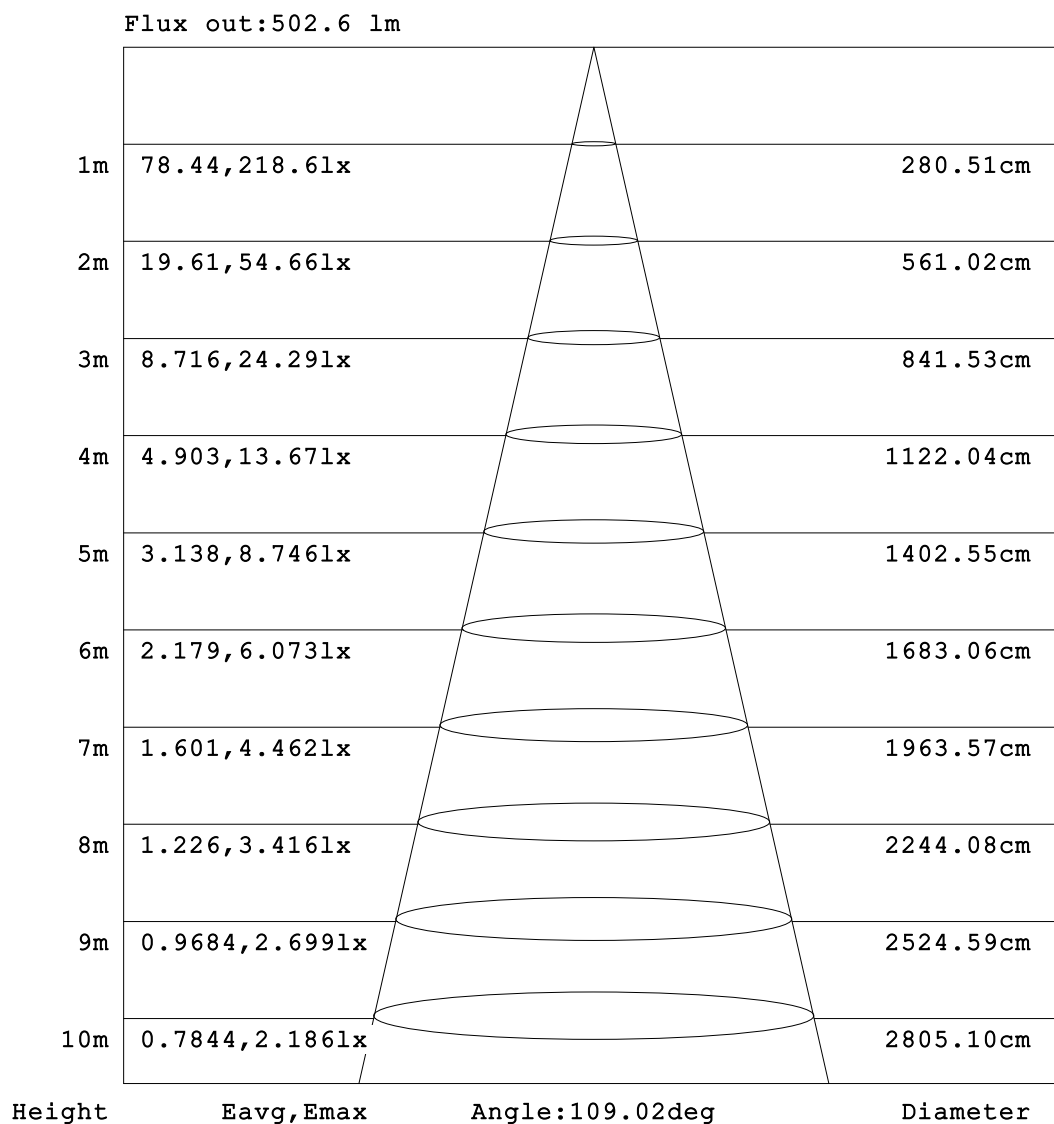


C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 07 August 2024

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity: 65.0%  
Test Distance: 8.186m [K=1.0000]  
Remarks:



### AAI Figure



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:25.3°C

Operators:DAMIN

Test Date:07 August 2024

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

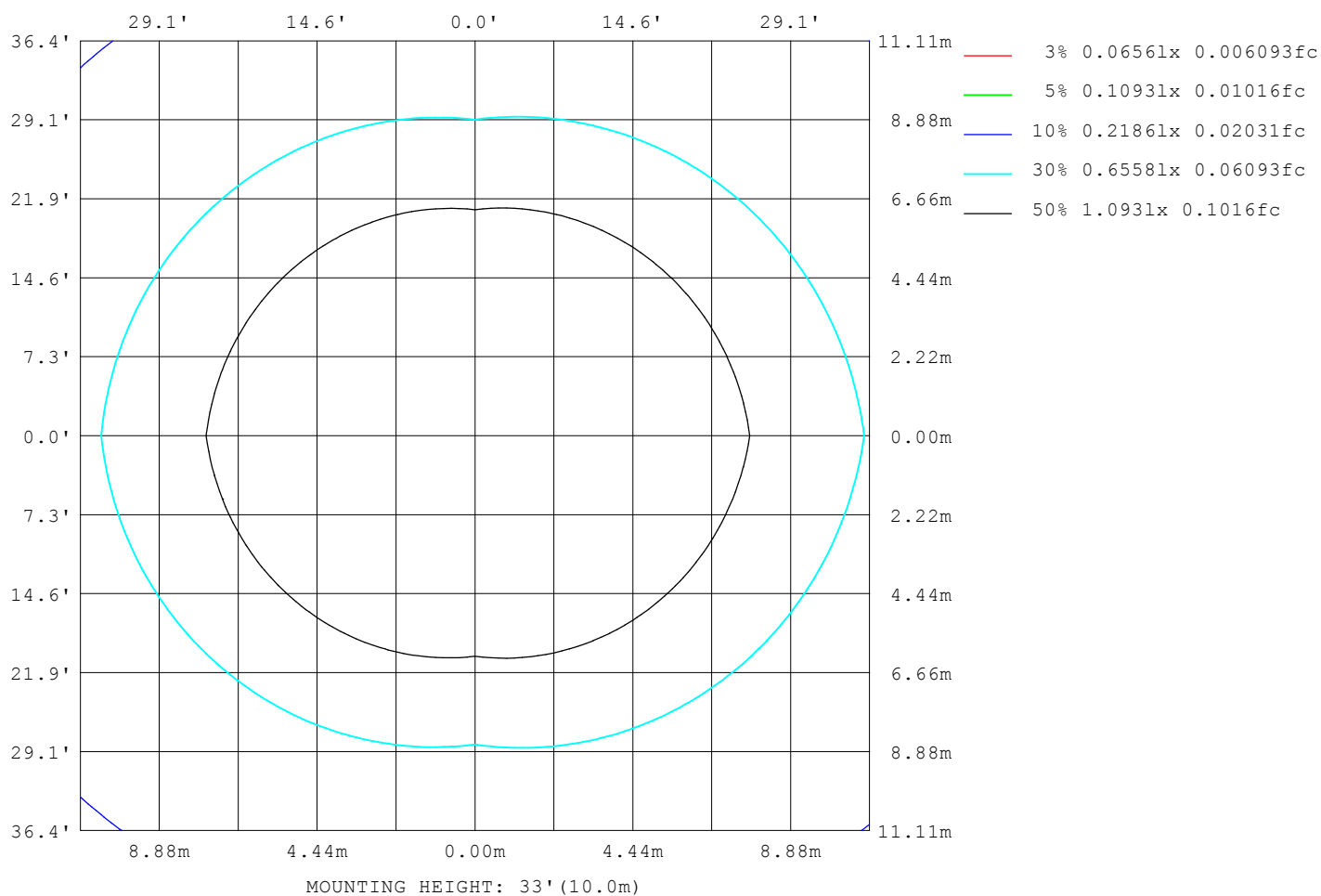
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459

Humidity:65.0%

Test Distance:8.186m [K=1.0000]

Remarks:

# ISOLUX DIAGRAM



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 07 August 2024

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity: 65.0%  
Test Distance: 8.186m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:99.100V I:0.1370A P:12.300W PF:0.9040 Freq:50.00Hz Lamp Flux:891.19x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Everfine	SUR.:	Shielding Angle:

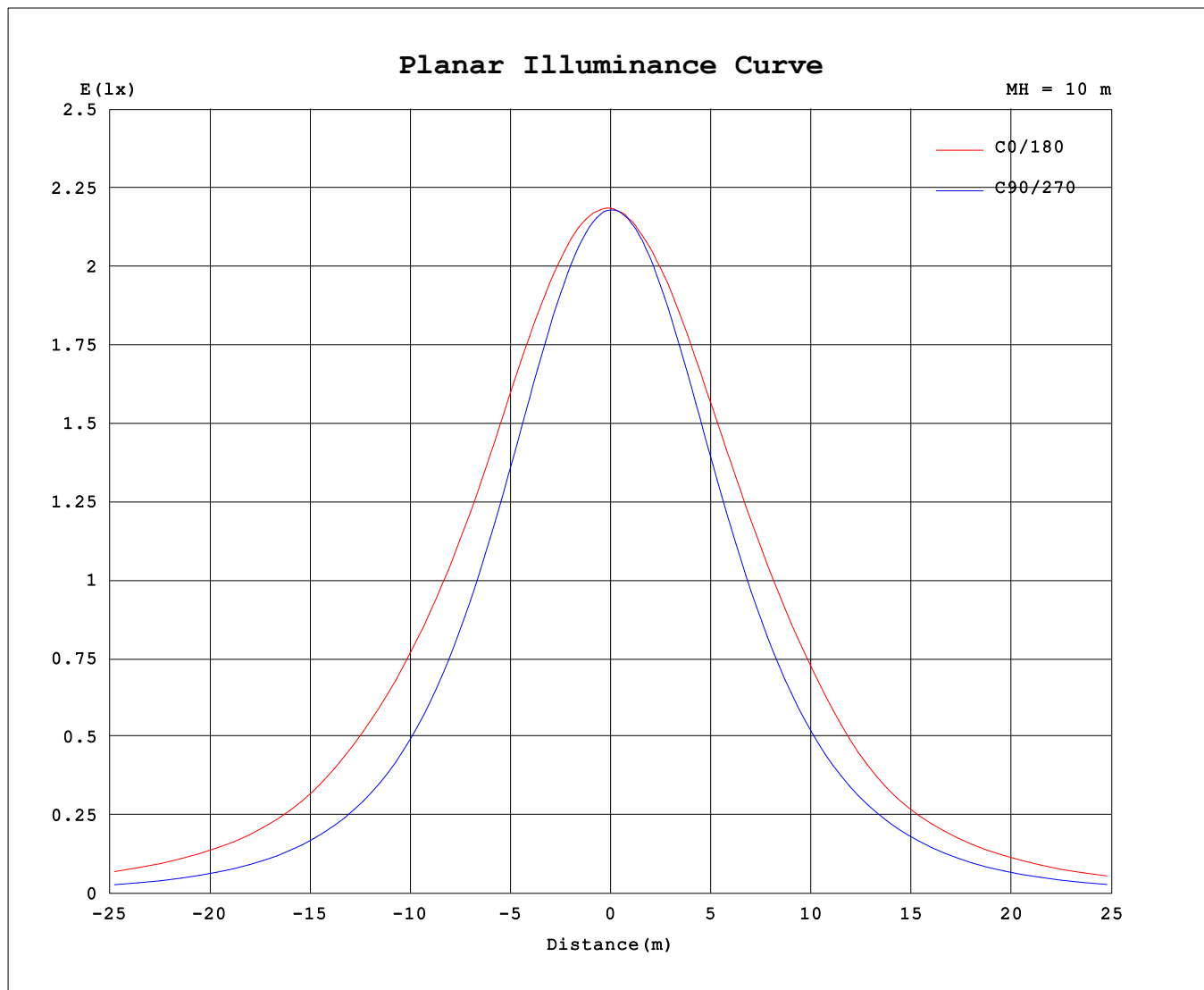
AvgL	cd/m2
L_0~180 (65) av	15917
L_0~180 (75) av	20560
L_0~180 (85) av	51613
L_90~270 (65) av	7970
L_90~270 (75) av	5788
L_90~270 (85) av	3928
L_45 (65) av	10851
L_45 (75) av	11243
L_45 (85) av	21627

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:DAMIN  
 Test Date:07 August 2024

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
 Humidity:65.0%  
 Test Distance:8.186m [K=1.0000]  
 Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 07 August 2024

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
 Humidity: 65.0%  
 Test Distance: 8.186m [K=1.0000]  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	219	218	219	218															
5	220	217	218	218															
10	221	214	218	215															
15	222	209	219	211															
20	223	202	219	205															
25	224	193	219	197															
30	222	182	218	187															
35	221	170	217	176															
40	220	155	213	162															
45	217	139	205	146															
50	210	122	186	129															
55	193	104	162	111															
60	169	84.9	142	90.7															
65	148	65.8	121	68.9															
70	127	47.4	104	47.5															
75	113	31.3	99.4	28.6															
80	104	18.3	91.8	14.1															
85	95.1	8.81	84.9	4.88															
90	87.1	2.16	74.1	2.55															
95	78.2	2.11	60.9	2.53															
100	64.5	2.32	45.6	2.70															
105	51.4	2.51	33.2	2.87															
110	38.2	2.68	24.3	3.09															
115	26.9	2.86	20.5	3.34															
120	22.3	3.11	18.5	3.53															
125	19.5	3.29	16.3	3.73															
130	16.9	3.52	14.2	3.91															
135	15.8	3.79	12.0	4.09															
140	13.6	4.00	9.78	4.32															
145	11.4	4.23	7.91	4.48															
150	9.47	4.47	6.50	4.73															
155	7.84	4.70	5.61	4.91															
160	5.23	4.95	5.03	5.05															
165	5.04	5.14	5.13	5.20															
170	5.14	5.30	5.23	5.29															
175	5.28	5.42	5.28	5.36															
180	5.37	5.59	5.39	5.51															

C Range: 0 - 360DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:07 August 2024

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459

Humidity:65.0%

Test Distance:8.186m [K=1.0000]

Remarks: