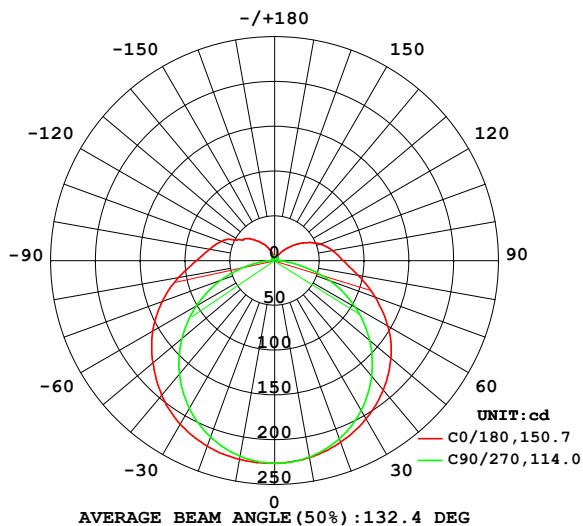


## LUMINAIRE PHOTOMETRIC TEST REPORT

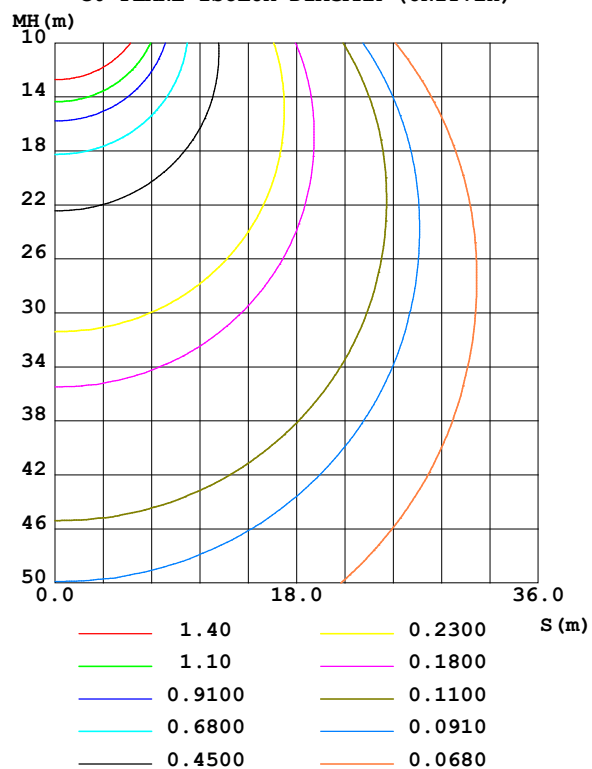
Test:U:101.30V I:0.1700A P:15.200W PF:0.8820 Freq:50.00Hz Lamp Flux:955.195x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Everfine	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 62.84 lm/W
MODEL	202412028	I <sub>max</sub> (cd)	226.4	S/MH(C0/180)	1.35	
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.27	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	955.20	η UP,DN(C0-180)	8.5,42.9	
NOMINAL FLUX(lm)	955.195	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	7.0,41.5	
LAMPS INSIDE	1	η up (%)	15.6	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	100	η down (%)	84.4	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 April 2025

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	225.3	221.8	223.3	222.8					0- 10	21.45	21.45	2.25,2.25
20	220.4	209.5	215.8	211.7					10- 20	62.02	83.48	8.74,8.74
30	210.8	190.5	204.1	193.0					20- 30	95.82	179.3	18.8,18.8
40	196.3	165.4	188.4	168.6					30- 40	119.2	298.5	31.2,31.2
50	177.5	135.1	169.4	138.5					40- 50	129.6	428.1	44.8,44.8
60	157.1	100.8	145.9	103.8					50- 60	126.7	554.8	58.1,58.1
70	133.8	63.87	119.5	65.68					60- 70	110.5	665.2	69.6,69.6
80	108.9	27.55	94.76	25.67					70- 80	84.17	749.4	78.5,78.5
90	87.37	3.453	76.60	4.515					80- 90	57.07	806.5	84.4,84.4
100	74.00	2.532	65.76	3.083					90-100	42.95	849.4	88.9,88.9
110	63.41	2.884	54.39	3.290					100-110	35.80	885.2	92.7,92.7
120	47.19	3.295	40.54	3.682					110-120	27.32	912.5	95.5,95.5
130	38.64	3.683	26.12	4.084					120-130	18.70	931.2	97.5,97.5
140	28.15	4.111	14.18	4.432					130-140	11.97	943.2	98.7,98.7
150	19.06	4.521	5.029	4.820					140-150	6.543	949.7	99.4,99.4
160	10.96	4.900	5.082	5.045					150-160	3.388	953.1	99.8,99.8
170	5.126	5.222	5.130	5.195					160-170	1.561	954.7	99.9,99.9
180	5.297	5.442	5.284	5.394					170-180	0.4979	955.2	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 362.83 lm

%lum = 38.0%

%lamp = 38.0%

Conical surface Flux(130deg): 612.74 lm

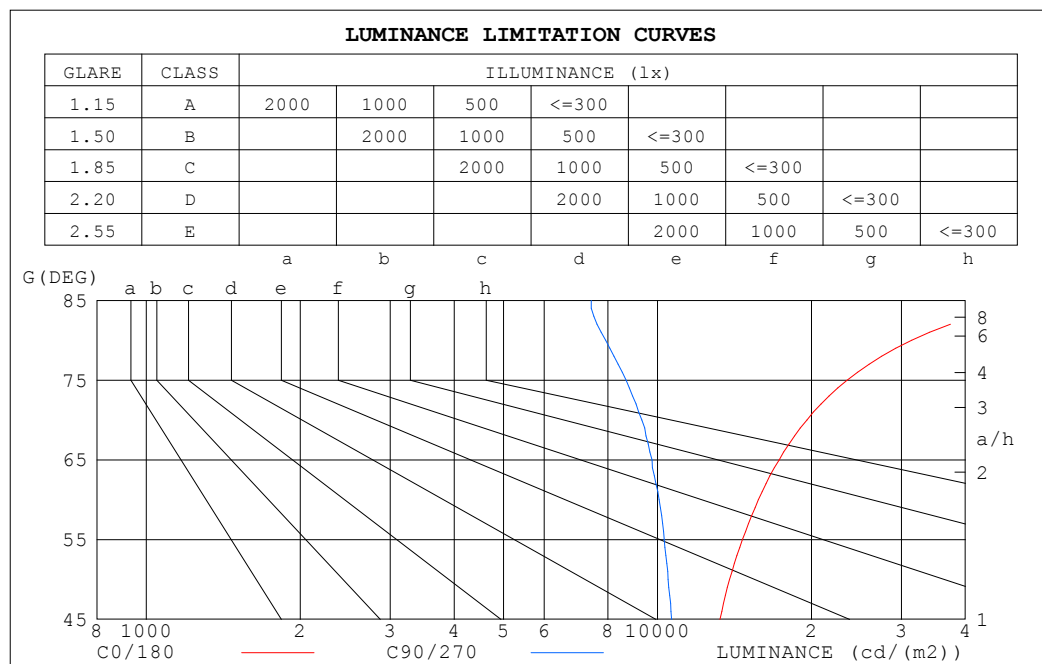
%lum = 64.1%

%lamp = 64.1%

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:07 April 2025

$\gamma$  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



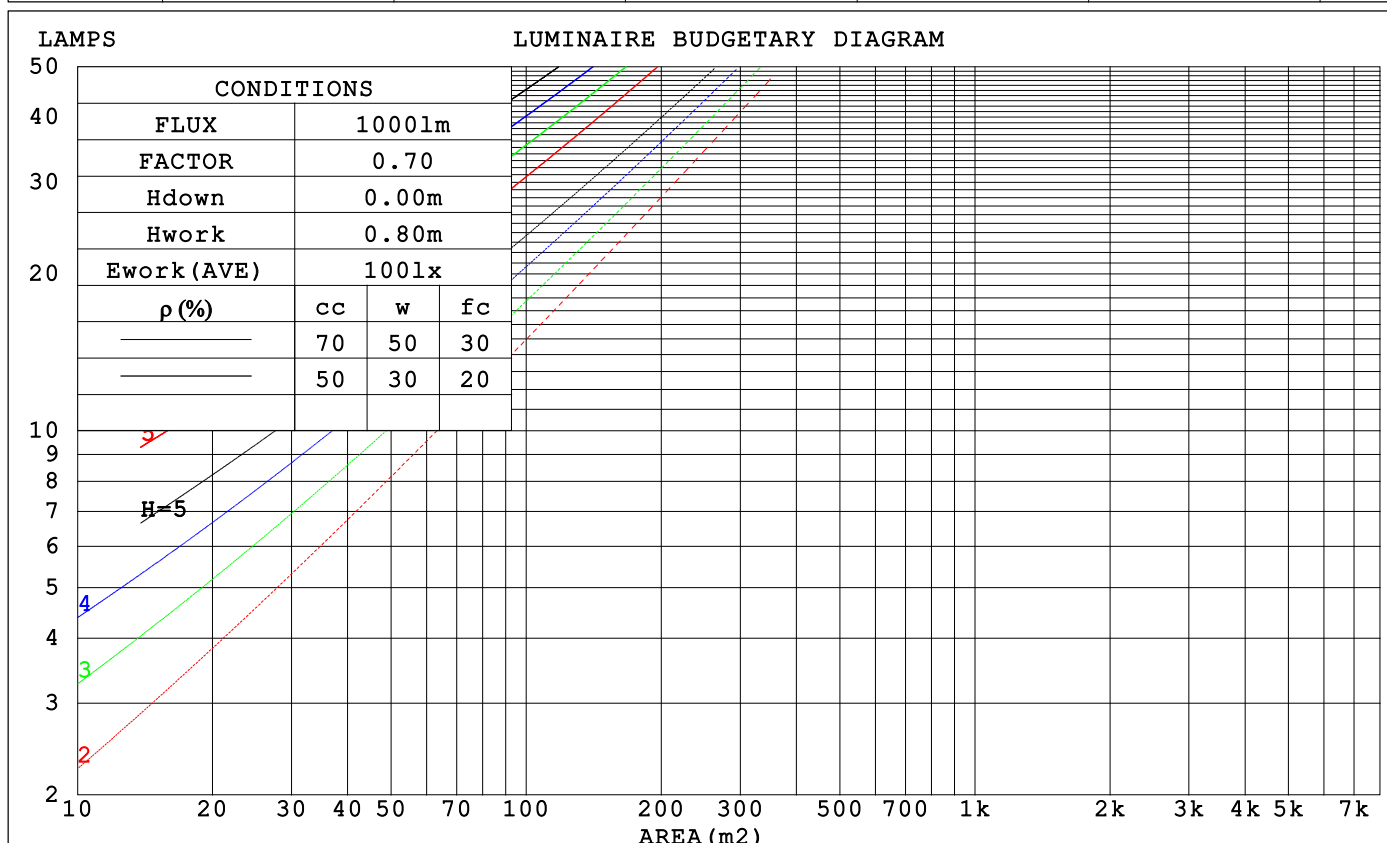
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	55825	7416
80	31415	7916
75	23492	8681
70	19597	9318
65	17284	9757
60	15747	10064
55	14660	10301
50	13833	10485
45	13252	10654

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 07 April 2025

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

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			Coefficients of Utilization(CU)												
0.0	1.15	1.15	1.15	1.11	1.11	1.11	1.02	1.02	1.02	.95	.95	.95	.88	.88	.88	.84
1.0	.97	.92	.88	.93	.89	.85	.86	.82	.79	.80	.77	.74	.74	.71	.69	.66
2.0	.83	.76	.69	.80	.73	.67	.74	.68	.63	.68	.64	.60	.63	.59	.56	.53
3.0	.73	.64	.57	.70	.62	.55	.64	.58	.52	.60	.54	.49	.55	.50	.47	.44
4.0	.64	.54	.47	.61	.53	.46	.57	.50	.44	.53	.47	.42	.49	.44	.39	.37
5.0	.57	.47	.40	.55	.46	.39	.51	.43	.37	.47	.41	.36	.44	.38	.34	.31
6.0	.51	.41	.35	.49	.40	.34	.46	.38	.32	.42	.36	.31	.39	.34	.30	.27
7.0	.46	.37	.30	.44	.36	.30	.41	.34	.29	.38	.32	.27	.36	.30	.26	.24
8.0	.42	.33	.27	.40	.32	.26	.38	.30	.25	.35	.29	.24	.33	.27	.23	.21
9.0	.38	.30	.24	.37	.29	.24	.35	.28	.23	.32	.26	.22	.30	.25	.21	.19
10.0	.35	.27	.22	.34	.26	.21	.32	.25	.20	.30	.24	.20	.28	.23	.19	.17



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:DAMIN  
 Test Date:07 April 2025

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:

### 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	.366	.208	.066	.354	.202	.064	.332	.190	.061	.311	.179	.058	.292	.169	.055		
2.0	.323	.177	.054	.312	.172	.053	.292	.162	.050	.273	.153	.048	.256	.145	.046		
3.0	.290	.154	.046	.280	.150	.045	.262	.142	.043	.245	.134	.041	.229	.127	.039		
4.0	.262	.136	.040	.253	.133	.039	.237	.126	.038	.222	.119	.036	.207	.113	.034		
5.0	.239	.122	.035	.231	.119	.035	.216	.113	.033	.202	.107	.032	.189	.101	.030		
6.0	.220	.110	.032	.213	.107	.031	.199	.102	.030	.186	.097	.028	.174	.092	.027		
7.0	.203	.100	.028	.197	.098	.028	.184	.093	.027	.173	.088	.026	.162	.084	.025		
8.0	.189	.092	.026	.183	.090	.025	.171	.086	.024	.161	.081	.023	.151	.077	.023		
9.0	.176	.085	.024	.171	.083	.023	.160	.079	.022	.150	.075	.022	.141	.072	.021		
10.0	.165	.079	.022	.160	.077	.022	.150	.074	.021	.141	.070	.020	.133	.067	.019		

$\rho_{cc}$	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	.309	.309	.309	.264	.264	.264	.180	.180	.180	.104	.104	.104	.033	.033	.033		
1.0	.304	.275	.250	.260	.236	.215	.178	.163	.149	.102	.094	.086	.033	.030	.028		
2.0	.297	.252	.215	.254	.217	.186	.174	.150	.129	.100	.087	.076	.032	.028	.025		
3.0	.289	.235	.193	.248	.203	.167	.170	.141	.117	.098	.082	.069	.032	.027	.023		
4.0	.282	.223	.178	.242	.193	.155	.166	.134	.109	.096	.079	.064	.031	.026	.021		
5.0	.274	.213	.168	.235	.184	.146	.162	.129	.103	.094	.076	.061	.030	.025	.020		
6.0	.267	.205	.161	.229	.178	.140	.158	.124	.099	.092	.073	.059	.030	.024	.019		
7.0	.260	.198	.155	.223	.172	.135	.154	.121	.096	.090	.071	.057	.029	.023	.019		
8.0	.253	.193	.151	.218	.167	.132	.151	.117	.094	.088	.069	.056	.028	.023	.018		
9.0	.247	.188	.148	.213	.163	.129	.147	.115	.092	.086	.068	.055	.028	.022	.018		
10.0	.241	.184	.146	.208	.160	.127	.144	.112	.090	.084	.066	.054	.027	.022	.018		

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 07 April 2025

$\gamma$  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	21.6	23.0	22.0	23.4	23.9	20.0	21.4	20.5	21.8	22.4
3H	24.1	25.4	24.6	25.9	26.4	21.6	22.8	22.1	23.3	23.9
4H	25.5	26.7	26.0	27.2	27.8	22.2	23.4	22.7	23.9	24.5
6H	27.0	28.1	27.5	28.7	29.3	22.7	23.8	23.2	24.4	25.0
8H	27.8	28.9	28.4	29.5	30.1	22.8	23.9	23.4	24.5	25.1
12H	28.8	29.9	29.4	30.4	31.1	22.9	24.0	23.5	24.6	25.2
4H 2H	22.1	23.3	22.6	23.8	24.4	20.9	22.2	21.5	22.7	23.3
3H	24.8	25.9	25.4	26.5	27.1	22.8	23.8	23.3	24.4	25.0
4H	26.4	27.3	27.0	27.9	28.6	23.6	24.6	24.2	25.2	25.8
6H	28.1	29.0	28.7	29.6	30.3	24.3	25.1	24.9	25.7	26.4
8H	29.0	29.9	29.7	30.5	31.2	24.5	25.3	25.1	25.9	26.6
12H	30.2	30.9	30.8	31.6	32.3	24.7	25.4	25.3	26.1	26.8
8H 4H	26.7	27.5	27.3	28.1	28.8	24.4	25.2	25.0	25.8	26.5
6H	28.6	29.3	29.3	29.9	30.7	25.3	26.0	26.0	26.7	27.4
8H	29.8	30.4	30.4	31.0	31.8	25.8	26.4	26.4	27.0	27.8
12H	31.1	31.6	31.8	32.3	33.1	26.1	26.6	26.8	27.3	28.1
12H 4H	26.7	27.4	27.3	28.1	28.8	24.6	25.3	25.2	26.0	26.7
6H	28.7	29.3	29.4	30.0	30.8	25.7	26.3	26.4	27.0	27.8
8H	29.9	30.5	30.6	31.2	31.9	26.3	26.8	27.0	27.5	28.3
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					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.5				

CIE Pub.117, 955.2 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -0.2$ )

Area: 0.02 m2

C Range: 0 - 360DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:07 April 2025

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:

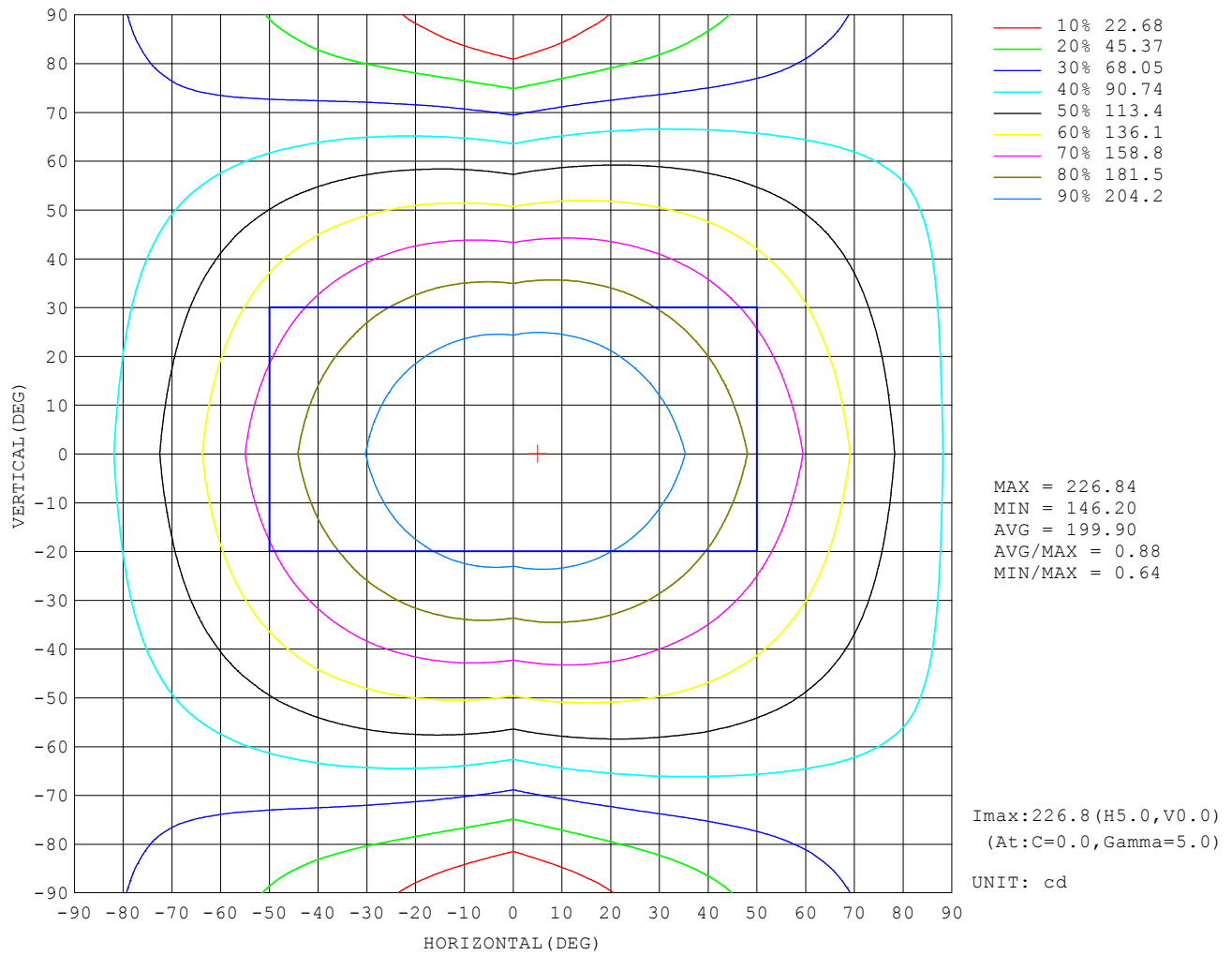
### UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	49	37	30	48	37	30	46	36	29	22
0.80	59	46	38	57	45	38	54	44	37	29
1.00	67	54	46	65	53	45	61	54	44	36
1.25	74	61	53	71	60	52	67	58	51	41
1.50	79	67	59	76	65	58	71	62	56	46
2.00	86	75	67	83	73	66	78	70	63	52
2.50	90	81	73	87	78	71	81	74	68	56
3.00	94	85	78	91	83	76	84	78	72	60
4.00	99	91	85	95	88	83	88	83	78	64
5.00	101	95	89	98	92	87	90	86	82	68
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 April 2025

$\gamma$  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

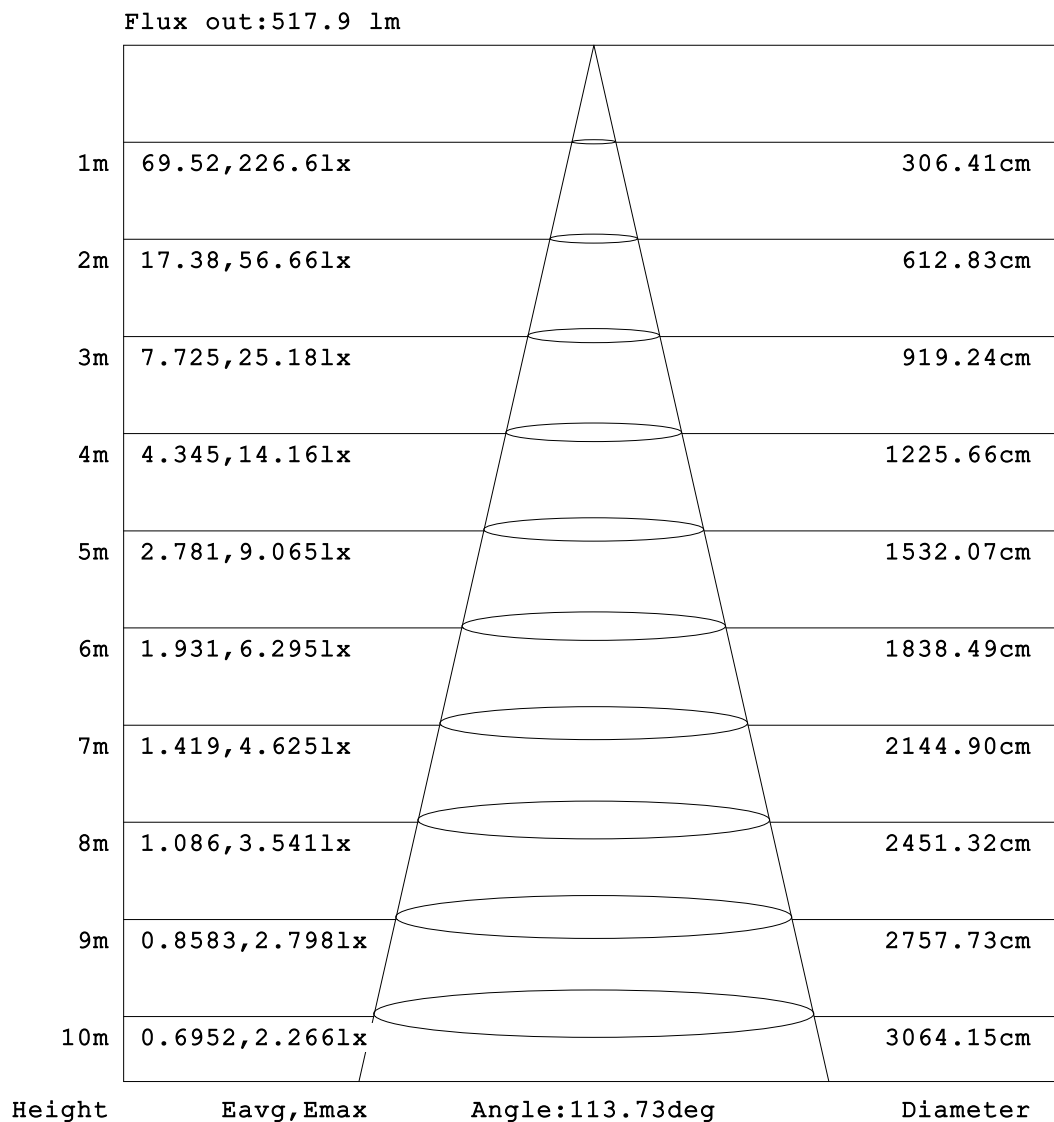


C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:DAMIN  
Test Date:07 April 2025

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

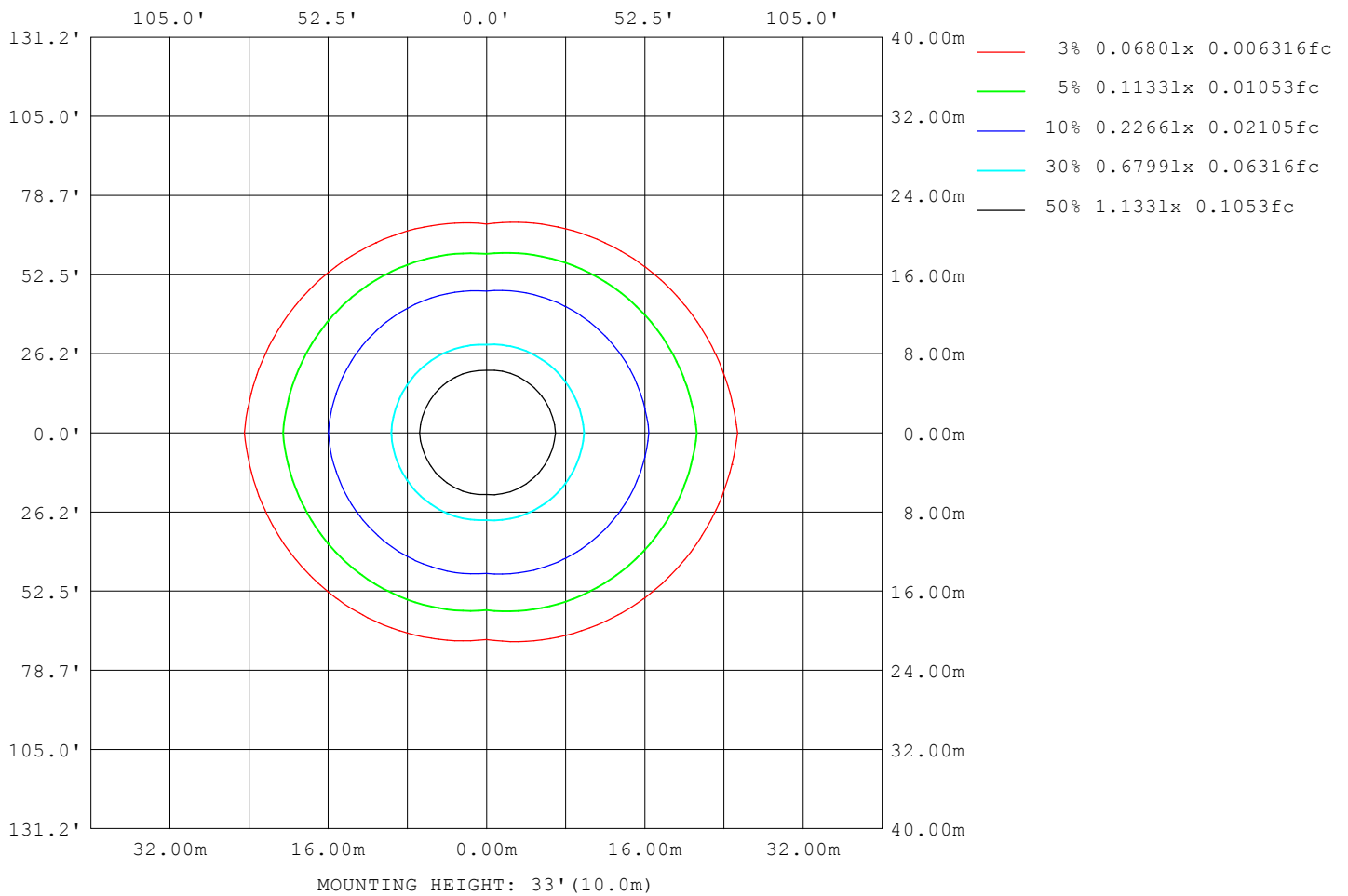


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:07 April 2025

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 April 2025

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:101.30V I:0.1700A P:15.200W PF:0.8820 Freq:50.00Hz Lamp Flux:955.195x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Everfine	SUR.:	Shielding Angle:

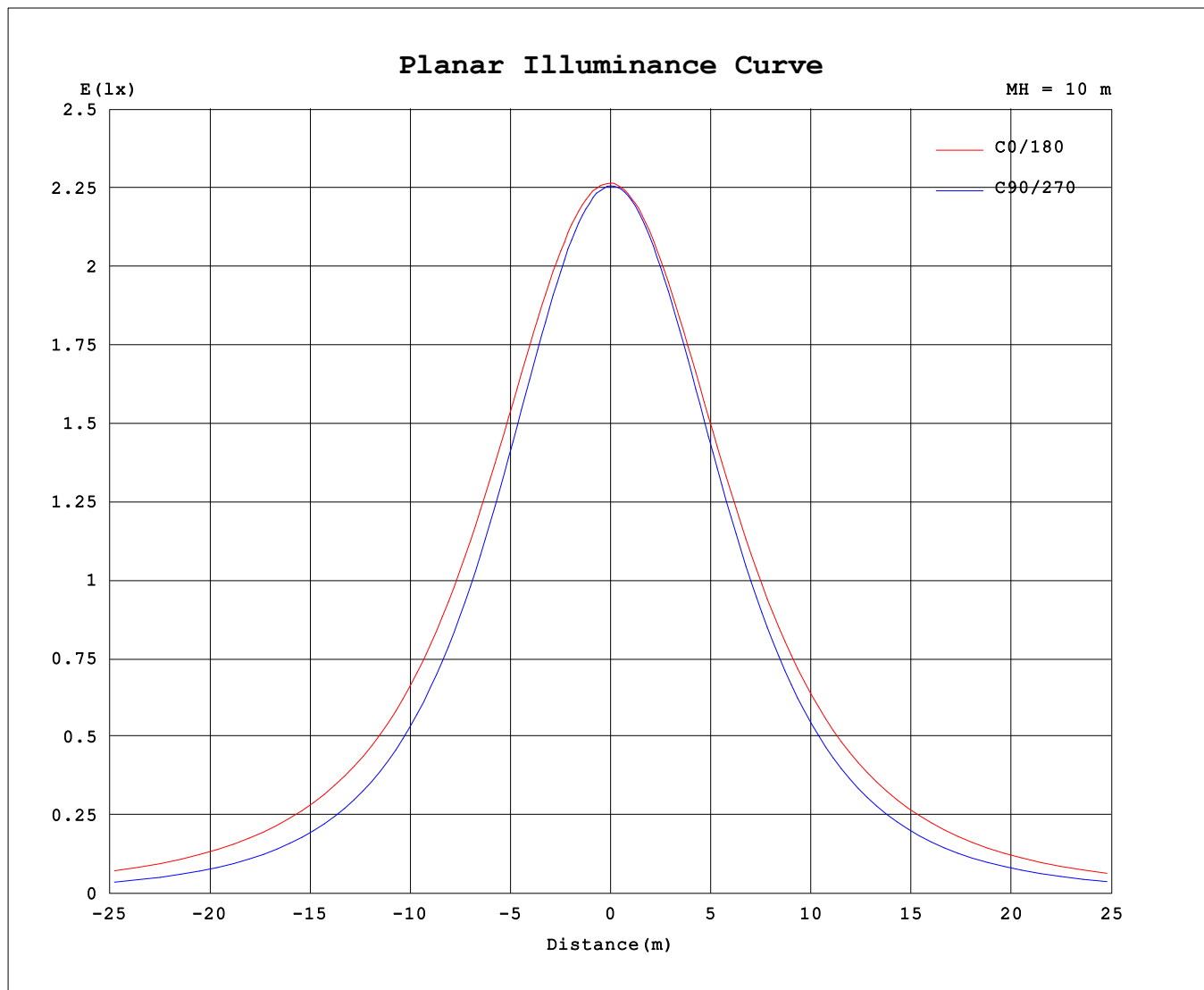
AvgL	cd/m2
L_0~180 (65) av	16458
L_0~180 (75) av	22035
L_0~180 (85) av	52020
L_90~270 (65) av	9945
L_90~270 (75) av	8672
L_90~270 (85) av	7114
L_45 (65) av	12344
L_45 (75) av	13607
L_45 (85) av	23764

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:DAMIN  
 Test Date:07 April 2025

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 April 2025

$\gamma$  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:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	226	226	226	226															
5	226	225	225	226															
10	225	222	223	223															
15	223	216	220	218															
20	220	209	216	212															
25	216	201	210	203															
30	211	191	204	193															
35	204	179	197	182															
40	196	165	188	169															
45	187	151	179	154															
50	177	135	169	138															
55	168	118	158	122															
60	157	101	146	104															
65	146	82.6	132	85.5															
70	134	63.9	119	65.7															
75	121	45.0	107	44.7															
80	109	27.5	94.8	25.7															
85	97.1	13.0	84.2	11.8															
90	87.4	3.45	76.6	4.52															
95	80.1	2.38	71.1	3.19															
100	74.0	2.53	65.8	3.08															
105	68.8	2.70	60.5	3.15															
110	63.4	2.88	54.4	3.29															
115	56.8	3.06	47.4	3.46															
120	47.2	3.29	40.5	3.68															
125	42.3	3.47	33.3	3.86															
130	38.6	3.68	26.1	4.08															
135	33.4	3.89	19.8	4.25															
140	28.1	4.11	14.2	4.43															
145	23.4	4.34	8.35	4.60															
150	19.1	4.52	5.03	4.82															
155	14.1	4.72	4.99	4.93															
160	11.0	4.90	5.08	5.05															
165	5.56	5.07	5.12	5.13															
170	5.13	5.22	5.13	5.20															
175	5.20	5.36	5.14	5.23															
180	5.30	5.44	5.28	5.39															

C Range: 0 - 360DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:07 April 2025

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: