

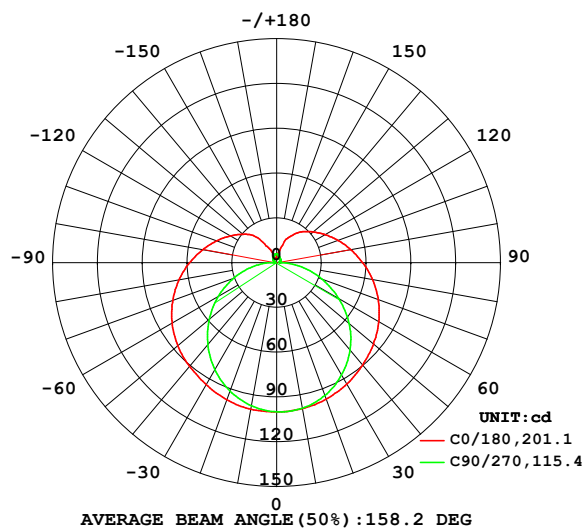
## LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:101.40V I:0.1800A P:16.100W PF:0.8820 Freq:50.00Hz  
Lamp Flux:521.72x1 lm

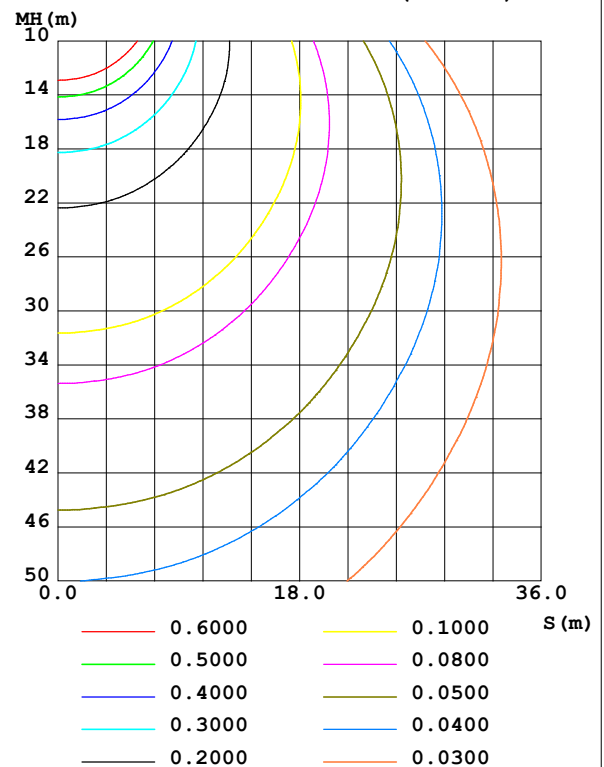
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 32.40 lm/W
MODEL	80008-27MP	I <sub>max</sub> (cd)	100.1	S/MH(C0/180)	1.42	
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.29	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	521.72	η UP,DN(C0-180)	11.2,38.3	
NOMINAL FLUX(lm)	521.72	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	11.9,38.6	
LAMPS INSIDE	1	η up (%)	23.1	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	100	η down (%)	76.9	CIBSE SHR MAX	1.55	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 03 January 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	99.75	97.34	99.27	99.07					0- 10	9.491	9.491	1.82,1.82
20	97.82	91.56	97.25	94.72					10- 20	27.53	37.02	7.1,7.1
30	94.39	82.88	94.02	86.96					20- 30	42.78	79.80	15.3,15.3
40	90.72	71.83	89.69	76.54					30- 40	53.91	133.7	25.6,25.6
50	86.53	58.97	84.79	63.41					40- 50	60.26	194.0	37.2,37.2
60	80.89	45.18	79.03	48.09					50- 60	61.32	255.3	48.9,48.9
70	74.05	30.86	72.51	32.18					60- 70	57.40	312.7	59.9,59.9
80	66.38	16.60	65.18	17.05					70- 80	49.56	362.3	69.4,69.4
90	58.34	3.094	57.54	3.154					80- 90	39.03	401.3	76.9,76.9
100	50.33	1.568	50.55	2.000					90-100	30.63	431.9	82.8,82.8
110	42.87	1.925	43.84	2.145					100-110	25.82	457.7	87.7,87.7
120	36.01	2.551	37.64	2.559					110-120	21.05	478.8	91.8,91.8
130	29.66	3.119	32.14	2.894					120-130	16.47	495.3	94.9,94.9
140	23.36	3.665	27.16	3.237					130-140	12.21	507.5	97.3,97.3
150	12.28	4.678	21.20	3.568					140-150	7.856	515.3	98.8,98.8
160	3.795	5.506	15.09	4.361					150-160	4.249	519.6	99.6,99.6
170	2.569	5.858	6.593	5.276					160-170	1.660	521.2	99.9,99.9
180	4.543	6.012	4.534	5.924					170-180	0.4818	521.7	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 163.37 lm

%lum = 31.3%

%lamp = 31.3%

Conical surface Flux(130deg): 284.77 lm

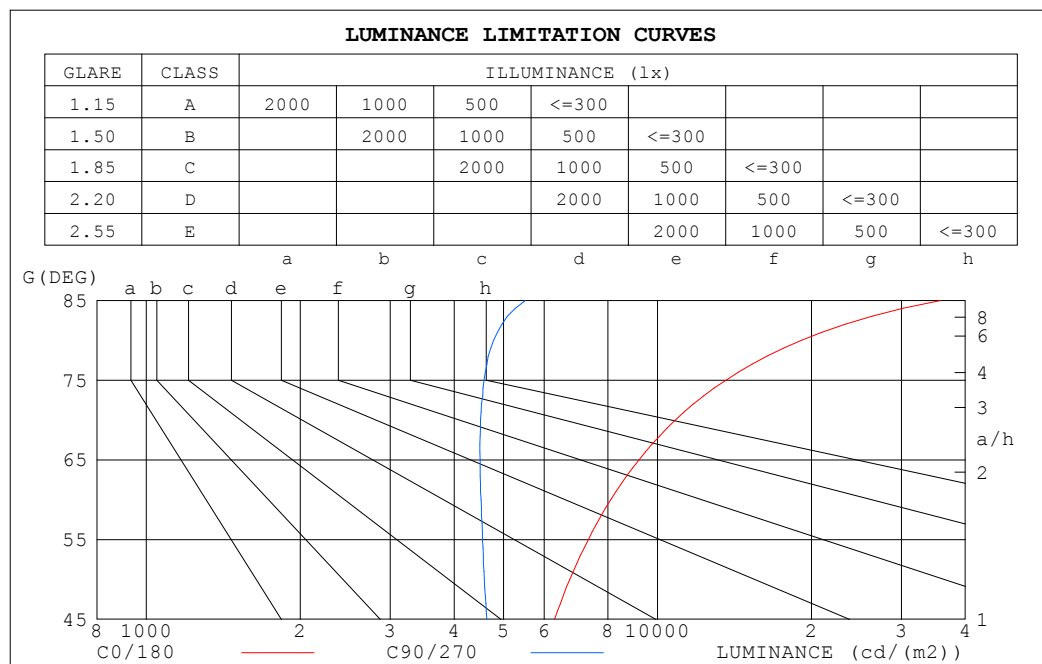
%lum = 54.6%

%lamp = 54.6%

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:03 January 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



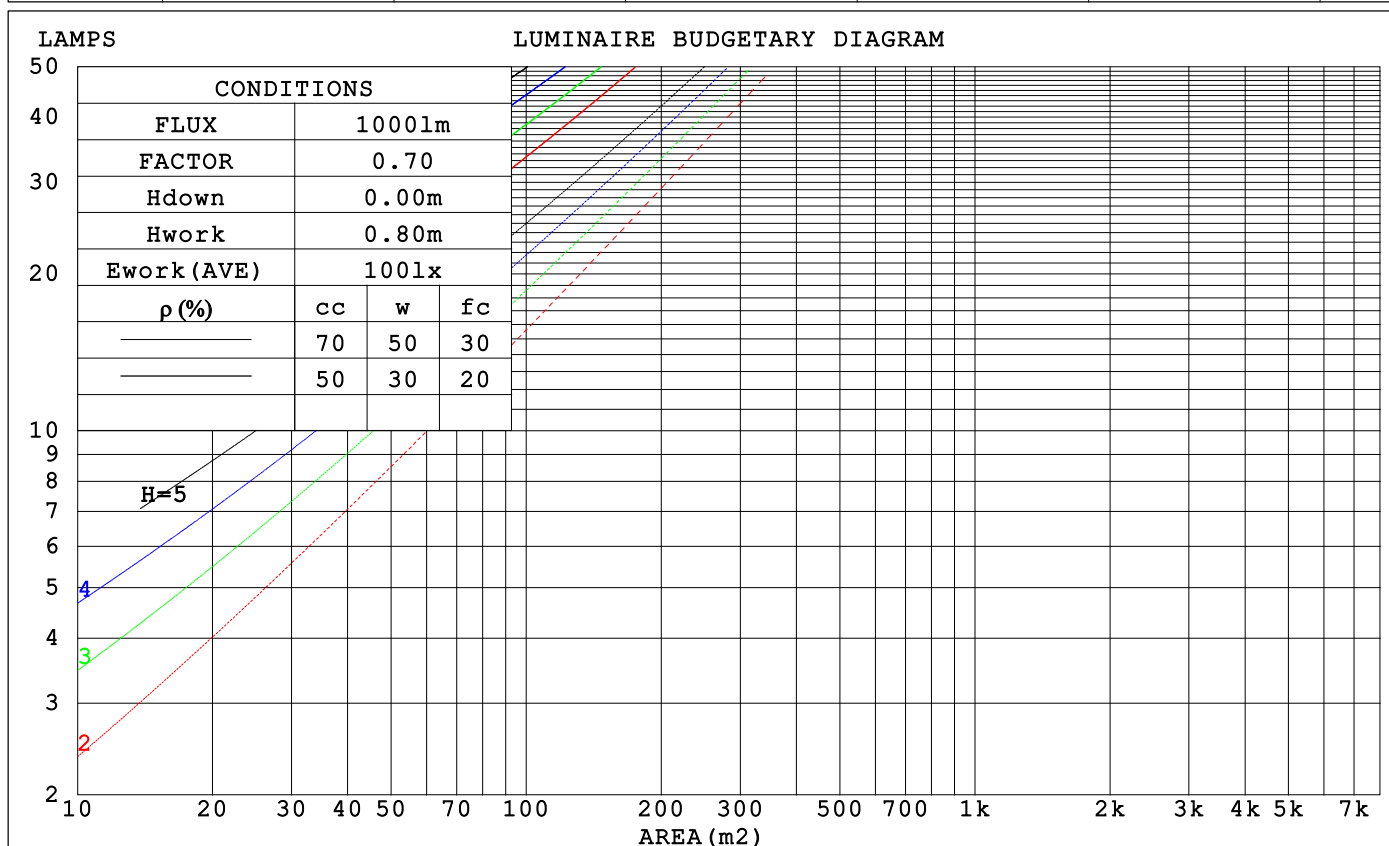
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	35752	5511
80	19128	4776
75	13604	4579
70	10833	4507
65	9190	4497
60	8096	4514
55	7321	4542
50	6736	4584
45	6287	4634

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 03 January 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

$\rho_{cc}$	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	1.14	1.14	1.14	1.08	1.08	1.08	.98	.98	.98	.89	.89	.89	.81	.81	.81	.77
1.0	.94	.89	.84	.90	.85	.81	.81	.77	.74	.73	.70	.67	.66	.64	.61	.58
2.0	.80	.73	.66	.77	.69	.63	.69	.63	.58	.62	.58	.54	.56	.52	.49	.46
3.0	.70	.61	.53	.66	.58	.52	.60	.53	.48	.54	.49	.44	.49	.44	.40	.37
4.0	.61	.52	.44	.58	.50	.43	.53	.45	.40	.48	.42	.37	.43	.38	.34	.31
5.0	.54	.45	.38	.52	.43	.36	.47	.39	.34	.42	.36	.31	.38	.33	.29	.26
6.0	.48	.39	.32	.46	.38	.31	.42	.35	.29	.38	.32	.27	.35	.29	.25	.23
7.0	.44	.35	.28	.42	.33	.27	.38	.31	.26	.35	.28	.24	.31	.26	.22	.20
8.0	.40	.31	.25	.38	.30	.24	.35	.28	.23	.32	.26	.21	.29	.24	.20	.17
9.0	.36	.28	.22	.35	.27	.21	.32	.25	.20	.29	.23	.19	.26	.21	.18	.16
10.0	.33	.25	.20	.32	.24	.19	.29	.23	.18	.27	.21	.17	.25	.20	.16	.14



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 03 January 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:

### 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	.386	.220	.070	.372	.212	.067	.345	.198	.063	.321	.185	.059	.298	.173	.056		
2.0	.334	.183	.056	.321	.177	.054	.297	.165	.051	.274	.154	.048	.254	.143	.045		
3.0	.296	.158	.047	.284	.152	.046	.262	.142	.043	.242	.133	.041	.223	.124	.038		
4.0	.266	.138	.041	.256	.134	.040	.236	.125	.037	.217	.117	.035	.200	.109	.033		
5.0	.242	.123	.036	.232	.119	.035	.214	.111	.033	.197	.104	.031	.181	.097	.029		
6.0	.221	.111	.032	.213	.107	.031	.196	.100	.029	.180	.094	.028	.166	.087	.026		
7.0	.204	.101	.029	.196	.098	.028	.181	.091	.026	.166	.085	.025	.153	.079	.023		
8.0	.189	.092	.026	.182	.089	.025	.168	.084	.024	.154	.078	.023	.142	.073	.021		
9.0	.176	.085	.024	.169	.083	.023	.156	.077	.022	.144	.072	.021	.133	.067	.019		
10.0	.165	.079	.022	.159	.077	.021	.147	.072	.020	.135	.067	.019	.124	.063	.018		

$\rho_{cc}$	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	.366	.366	.366	.313	.313	.313	.214	.214	.214	.123	.123	.123	.039	.039	.039		
1.0	.363	.333	.306	.311	.286	.263	.212	.196	.182	.122	.114	.106	.039	.037	.034		
2.0	.356	.310	.271	.305	.267	.235	.209	.185	.164	.121	.107	.096	.039	.035	.031		
3.0	.349	.294	.250	.299	.254	.217	.205	.176	.152	.119	.103	.090	.038	.033	.029		
4.0	.341	.282	.236	.293	.243	.205	.201	.170	.144	.116	.099	.085	.037	.032	.028		
5.0	.334	.272	.226	.287	.235	.197	.197	.164	.139	.114	.097	.082	.037	.031	.027		
6.0	.326	.264	.219	.280	.229	.191	.193	.160	.135	.112	.094	.080	.036	.031	.027		
7.0	.319	.258	.214	.275	.223	.187	.190	.157	.132	.110	.092	.079	.036	.030	.026		
8.0	.313	.252	.210	.269	.219	.184	.186	.154	.130	.108	.091	.078	.035	.030	.026		
9.0	.306	.247	.207	.264	.215	.181	.183	.151	.129	.107	.089	.077	.035	.029	.025		
10.0	.301	.243	.205	.259	.211	.179	.180	.149	.127	.105	.088	.076	.034	.029	.025		

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 03 January 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	18.7	20.0	19.2	20.6	21.2	16.6	17.9	17.1	18.5	19.1
3H	21.5	22.8	22.1	23.4	24.1	18.3	19.5	18.9	20.1	20.9
4H	23.1	24.3	23.8	24.9	25.6	19.1	20.3	19.7	20.9	21.6
6H	24.9	26.0	25.6	26.7	27.4	19.8	20.9	20.5	21.5	22.3
8H	25.9	27.0	26.6	27.6	28.4	20.1	21.2	20.8	21.8	22.6
12H	27.1	28.1	27.8	28.8	29.5	20.3	21.4	21.0	22.0	22.8
4H 2H	19.2	20.4	19.8	21.0	21.7	17.7	18.9	18.3	19.5	20.2
3H	22.3	23.3	22.9	23.9	24.7	19.7	20.7	20.4	21.4	22.2
4H	24.0	25.0	24.7	25.6	26.5	20.7	21.6	21.4	22.3	23.1
6H	26.0	26.9	26.7	27.6	28.4	21.6	22.4	22.3	23.1	24.0
8H	27.2	27.9	27.9	28.7	29.5	22.0	22.8	22.7	23.5	24.3
12H	28.5	29.2	29.2	29.9	30.8	22.3	23.0	23.0	23.8	24.6
8H 4H	24.3	25.1	25.1	25.8	26.7	21.7	22.5	22.4	23.2	24.0
6H	26.6	27.3	27.3	28.0	28.9	22.9	23.6	23.7	24.3	25.2
8H	27.9	28.5	28.7	29.3	30.2	23.5	24.1	24.3	24.9	25.8
12H	29.5	30.0	30.3	30.8	31.7	24.1	24.6	24.8	25.4	26.3
12H 4H	24.4	25.1	25.1	25.8	26.7	22.0	22.7	22.7	23.5	24.3
6H	26.7	27.3	27.5	28.1	29.0	23.4	24.0	24.2	24.8	25.7
8H	28.1	28.6	28.9	29.4	30.3	24.2	24.7	25.0	25.5	26.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.5				

CIE Pub.117, 521.7 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -2.3$ )  
Area: 0.02 m<sup>2</sup>

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:DAMIN  
Test Date:03 January 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:

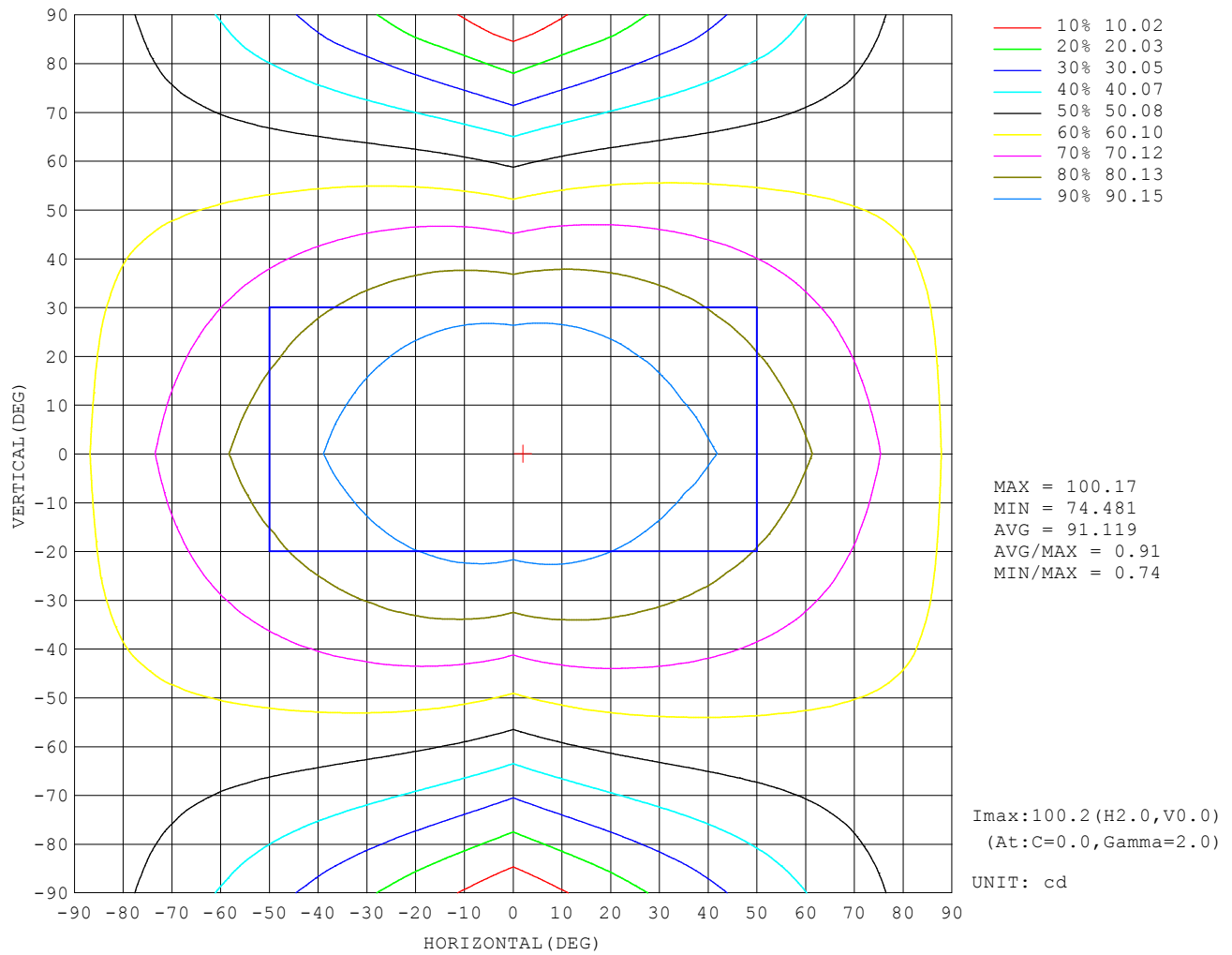
### UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	46	33	26	45	33	26	42	32	25	18
0.80	55	42	34	53	41	33	50	39	32	24
1.00	63	50	41	60	48	40	56	48	39	30
1.25	70	57	48	67	55	47	62	52	45	35
1.50	75	62	54	72	60	52	66	57	50	39
2.00	82	71	62	79	68	61	72	64	57	45
2.50	87	76	68	83	73	66	76	68	62	48
3.00	90	81	73	86	78	71	79	72	66	52
4.00	95	87	80	91	84	78	83	77	72	56
5.00	98	91	85	94	87	82	85	80	76	59
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: 03 January 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

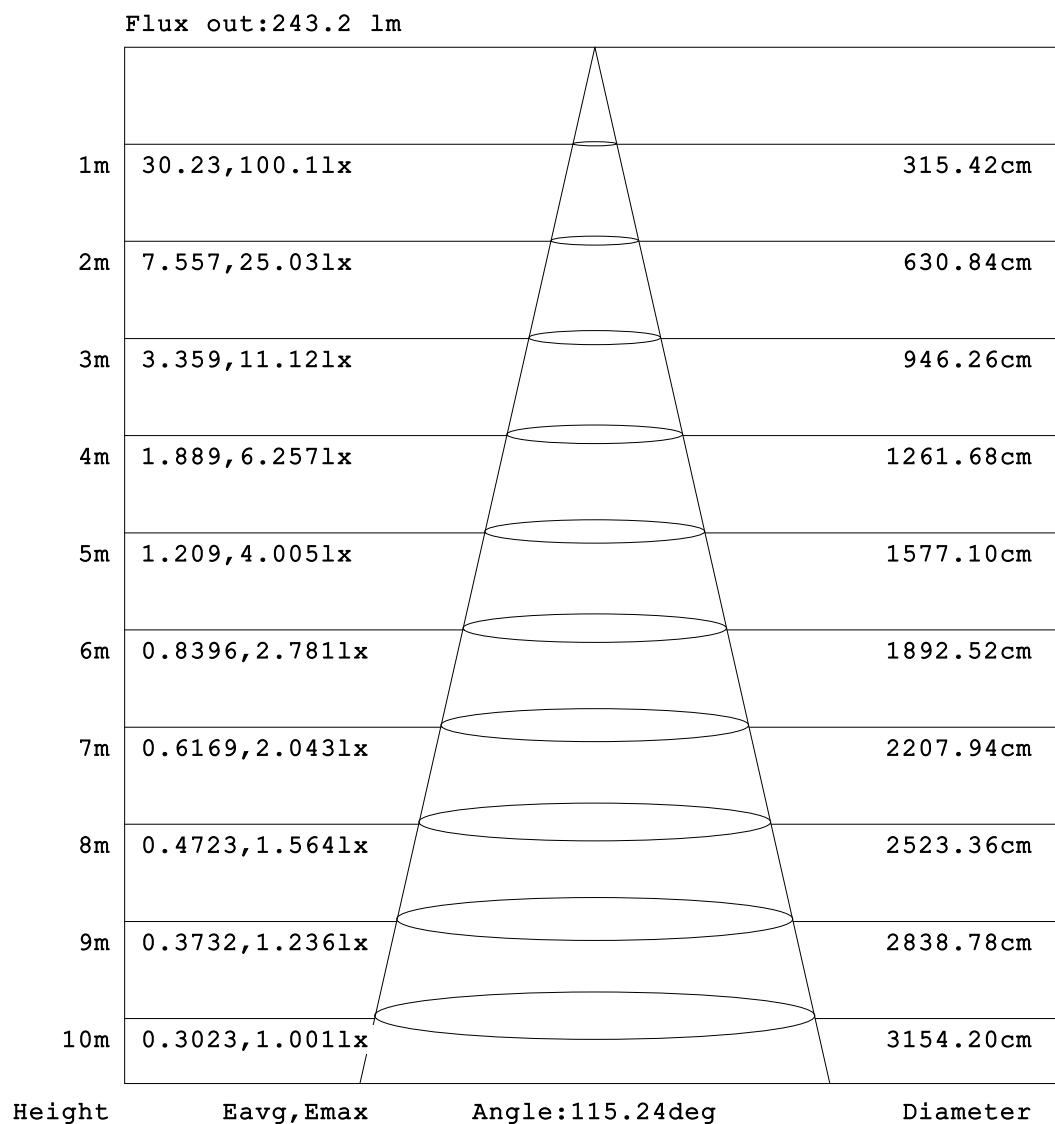


C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:03 January 2025

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

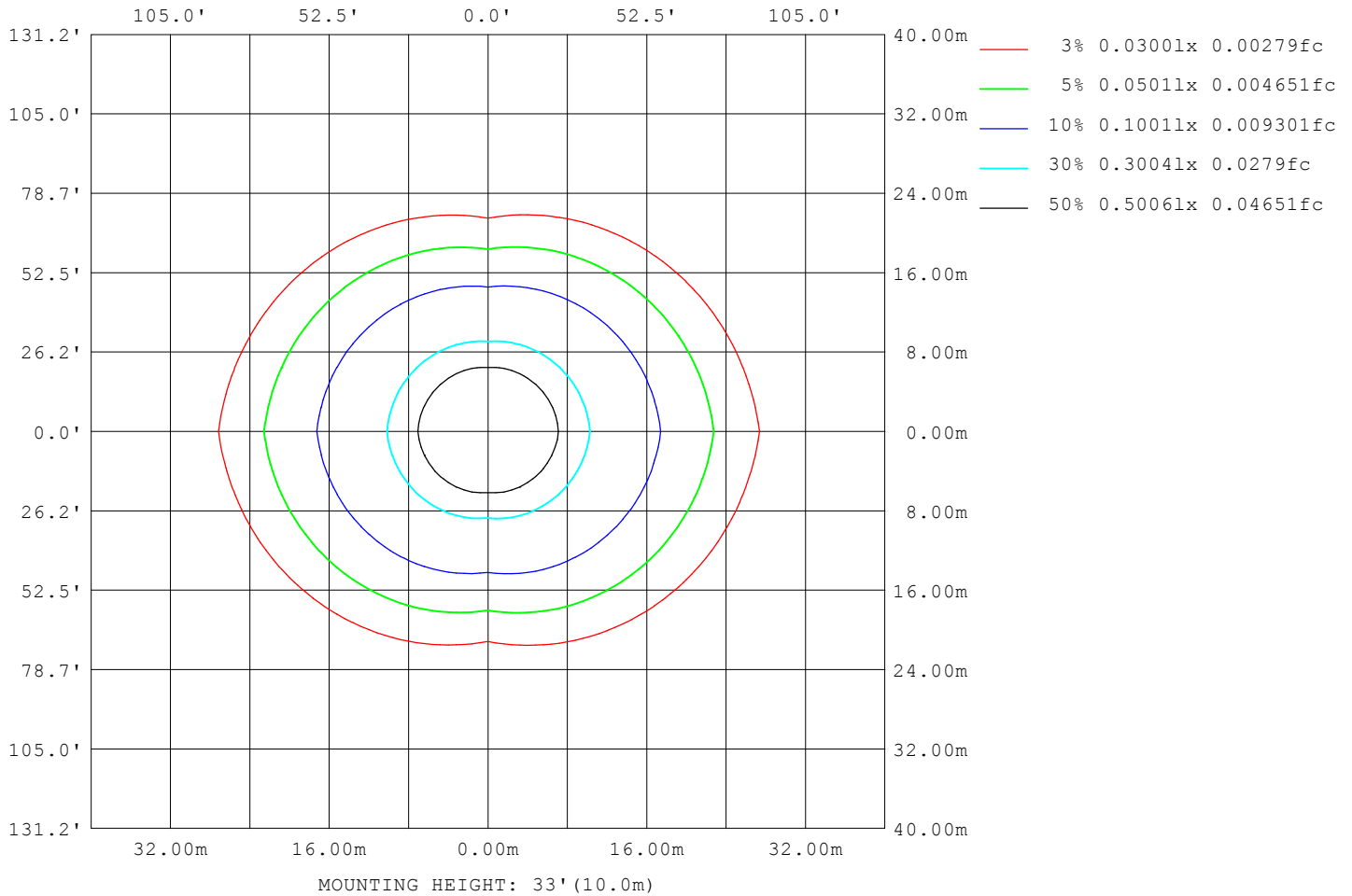


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:03 January 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: 03 January 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:101.40V I:0.1800A P:16.100W PF:0.8820 Freq:50.00Hz Lamp Flux:521.72x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

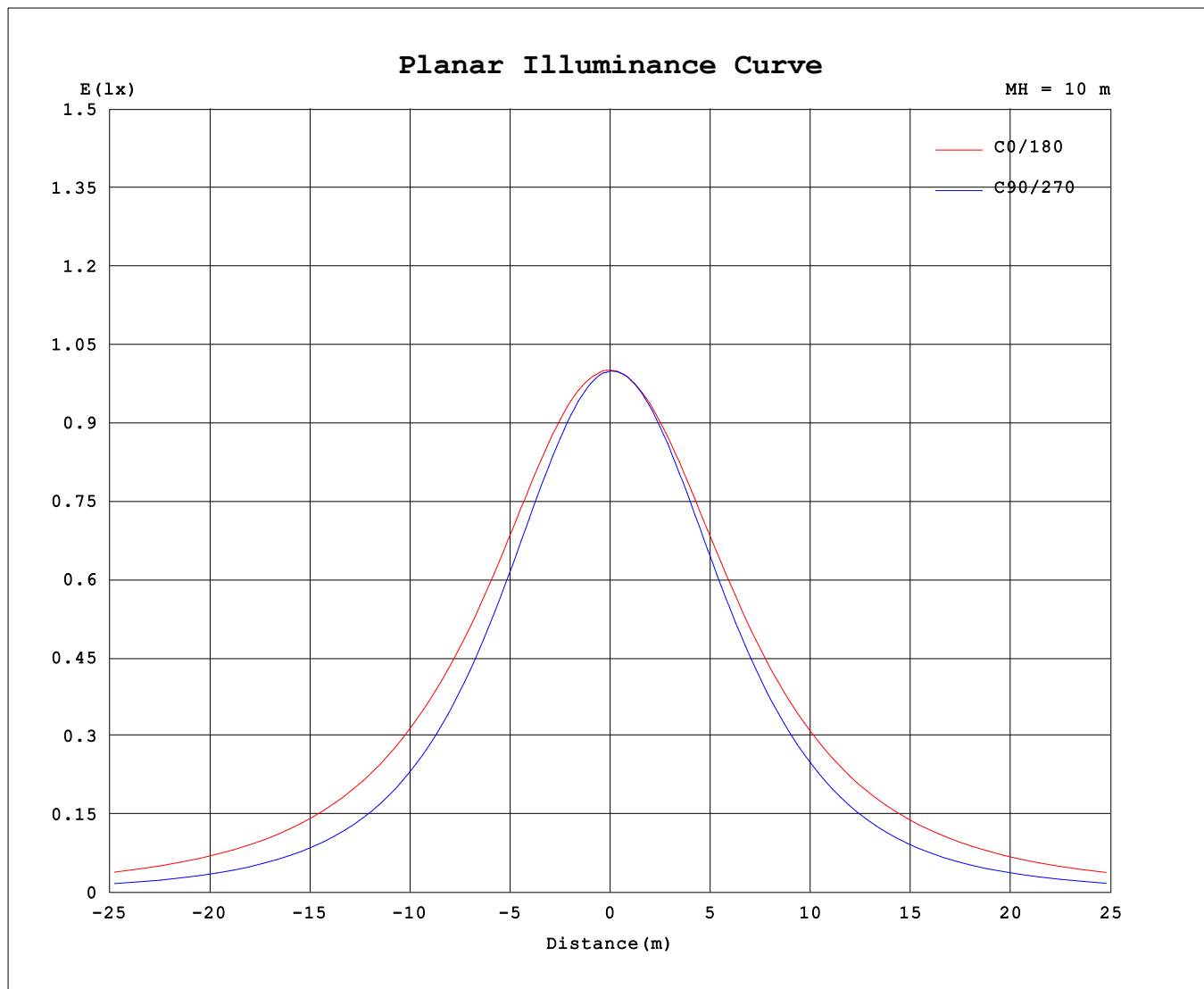
AvgL	cd/m2
L_0~180 (65) av	9078
L_0~180 (75) av	13458
L_0~180 (85) av	35490
L_90~270 (65) av	4621
L_90~270 (75) av	4662
L_90~270 (85) av	5395
L_45 (65) av	6288
L_45 (75) av	7955
L_45 (85) av	16676

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:03 January 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: 03 January 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:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	100	100	100	100															
5	100.0	99.1	99.9	100.0															
10	99.8	97.3	99.3	99.1															
15	99.0	94.9	98.5	97.3															
20	97.8	91.6	97.3	94.7															
25	96.2	87.5	95.8	91.3															
30	94.4	82.9	94.0	87.0															
35	92.5	77.6	91.9	82.1															
40	90.7	71.8	89.7	76.5															
45	88.8	65.6	87.3	70.3															
50	86.5	59.0	84.8	63.4															
55	83.9	52.1	82.0	55.8															
60	80.9	45.2	79.0	48.1															
65	77.6	38.0	75.9	40.1															
70	74.0	30.9	72.5	32.2															
75	70.4	23.7	69.0	24.5															
80	66.4	16.6	65.2	17.1															
85	62.3	9.61	61.5	9.20															
90	58.3	3.09	57.5	3.15															
95	54.3	1.45	54.0	2.07															
100	50.3	1.57	50.6	2.00															
105	46.5	1.67	47.2	2.06															
110	42.9	1.92	43.8	2.14															
115	39.4	2.23	40.7	2.40															
120	36.0	2.55	37.6	2.56															
125	32.8	2.88	34.8	2.70															
130	29.7	3.12	32.1	2.89															
135	26.9	3.44	29.6	3.07															
140	23.4	3.67	27.2	3.24															
145	17.6	4.18	24.4	3.40															
150	12.3	4.68	21.2	3.57															
155	9.12	5.16	18.5	3.87															
160	3.80	5.51	15.1	4.36															
165	2.93	5.70	8.65	4.84															
170	2.57	5.86	6.59	5.28															
175	3.42	5.99	5.25	5.64															
180	4.54	6.01	4.53	5.92															

C Range: 0 - 360DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:03 January 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: