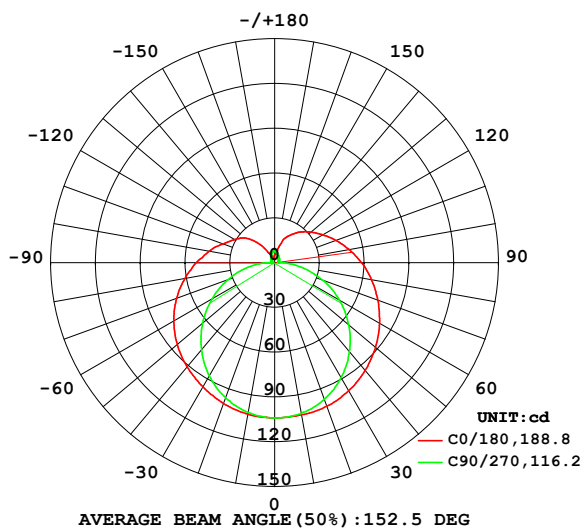


## LUMINAIRE PHOTOMETRIC TEST REPORT

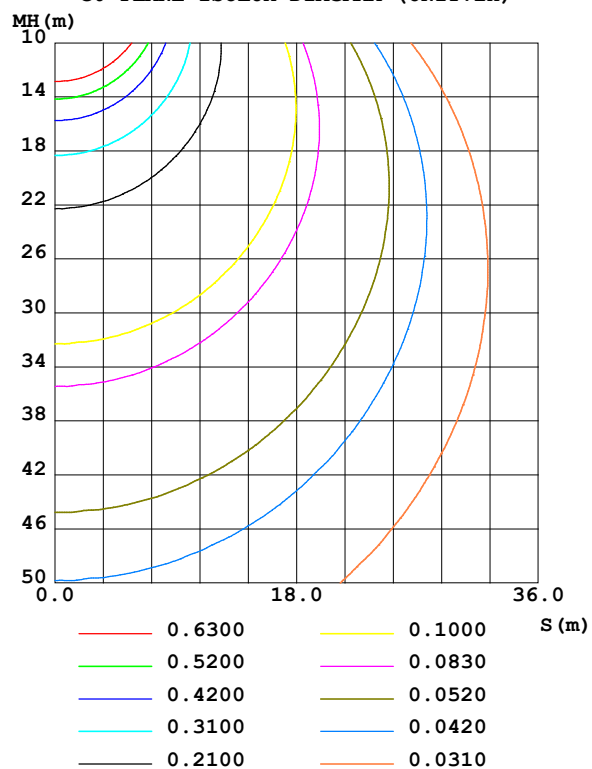
Test:U:101.40V I:0.1800A P:16.100W PF:0.8820 Freq:50.00Hz Lamp Flux:524.03lx1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 32.55 lm/W
MODEL	80007-27MP	I <sub>max</sub> (cd)	104.2	S/MH(C0/180)	1.43	
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.27	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	524.03	η UP,DN(C0-180)	9.8,38.4	
NOMINAL FLUX(lm)	524.031	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	12.1,39.8	
LAMPS INSIDE	1	η up (%)	21.9	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	100	η down (%)	78.1	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℃  
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	103.3	101.9	103.5	102.6					0- 10	9.873	9.873	1.88,1.88
20	100.4	96.37	102.4	97.49					10- 20	28.63	38.50	7.35,7.35
30	96.23	87.60	99.19	89.12					20- 30	44.48	82.98	15.8,15.8
40	91.30	76.28	94.29	77.91					30- 40	55.90	138.9	26.5,26.5
50	85.29	62.97	88.25	64.82					40- 50	62.07	201.0	38.3,38.3
60	78.03	48.46	81.18	50.08					50- 60	62.69	263.7	50.3,50.3
70	69.96	33.26	73.64	34.08					60- 70	58.17	321.8	61.4,61.4
80	61.14	18.08	65.89	18.17					70- 80	49.41	371.2	70.8,70.8
90	52.69	3.187	58.28	3.532					80- 90	38.17	409.4	78.1,78.1
100	44.52	1.508	50.73	2.376					90-100	29.35	438.8	83.7,83.7
110	36.85	2.284	43.82	2.712					100-110	24.53	463.3	88.4,88.4
120	31.03	2.906	37.41	3.060					110-120	19.86	483.1	92.2,92.2
130	25.78	3.453	31.93	3.554					120-130	15.66	498.8	95.2,95.2
140	17.02	4.220	26.91	3.964					130-140	11.37	510.2	97.4,97.4
150	7.212	5.393	21.51	4.859					140-150	7.090	517.3	98.7,98.7
160	3.302	6.739	15.38	6.041					150-160	4.194	521.5	99.5,99.5
170	2.776	7.633	7.278	7.125					160-170	1.970	523.4	99.9,99.9
180	5.425	7.924	5.430	7.558					170-180	0.6040	524.0	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 169.5 lm

%lum = 32.3%

%lamp = 32.3%

Conical surface Flux(130deg): 293.59 lm

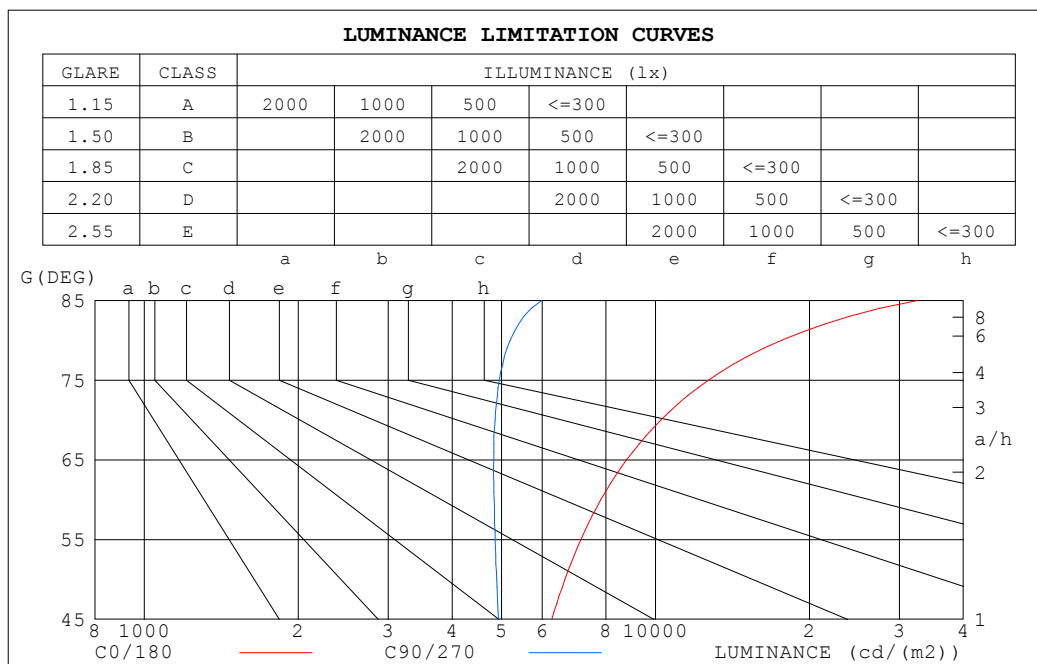
%lum = 56.0%

%lamp = 56.0%

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



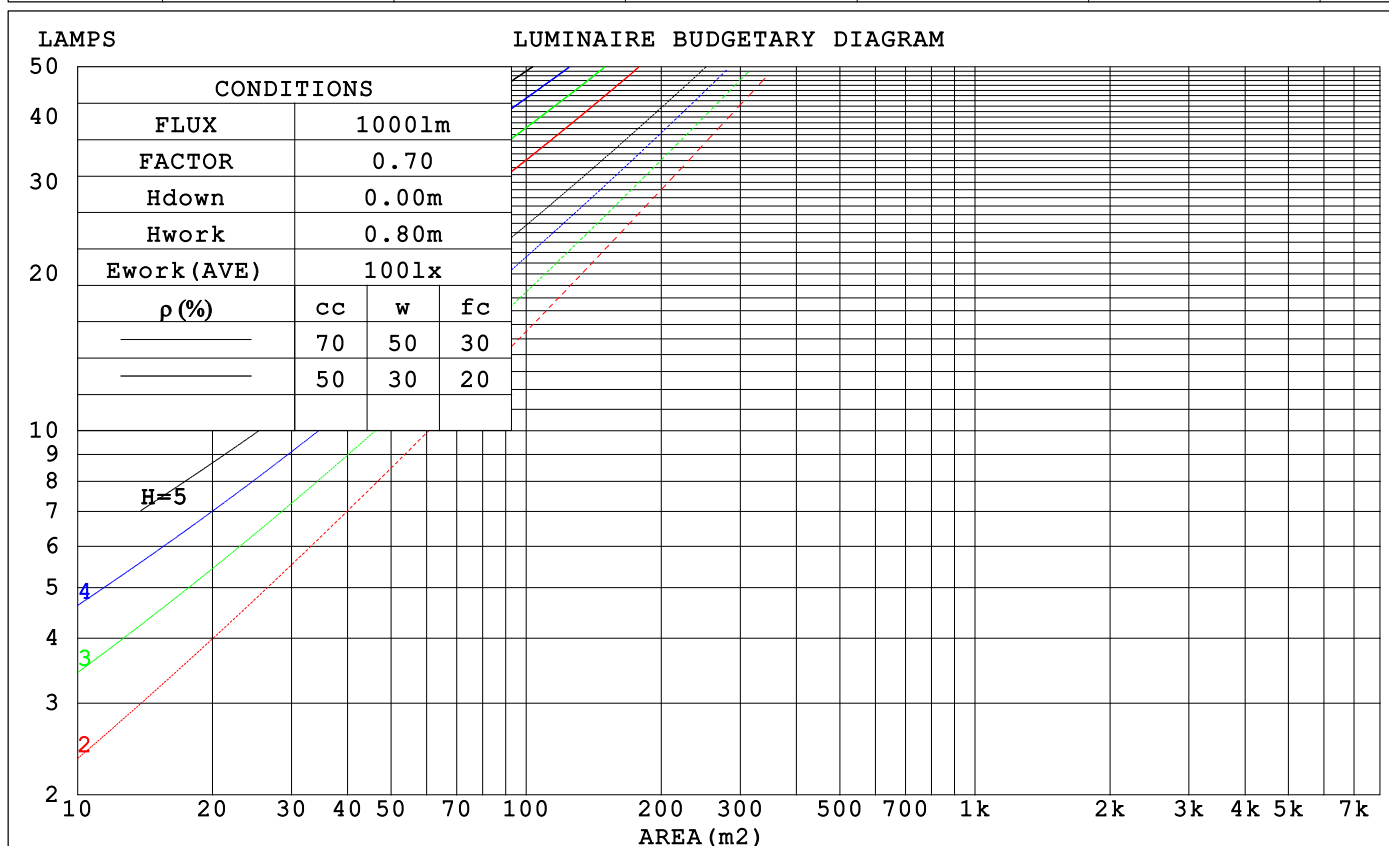
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	32507	5985
80	17636	5196
75	12686	4948
70	10246	4853
65	8773	4828
60	7817	4837
55	7145	4853
50	6647	4889
45	6268	4931

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	1.09	1.09	1.09	.99	.99	.99	.90	.90	.90	.82	.82	.82	.78
1.0	.95	.89	.85	.90	.86	.81	.82	.78	.75	.74	.71	.68	.67	.65	.63	.59
2.0	.81	.73	.67	.77	.70	.64	.70	.64	.59	.63	.59	.55	.57	.53	.50	.47
3.0	.70	.61	.54	.67	.59	.52	.61	.54	.48	.55	.49	.45	.50	.45	.41	.38
4.0	.62	.52	.45	.59	.50	.43	.53	.46	.40	.48	.42	.38	.44	.39	.35	.32
5.0	.55	.45	.38	.52	.43	.37	.47	.40	.34	.43	.37	.32	.39	.34	.30	.27
6.0	.49	.39	.33	.47	.38	.32	.43	.35	.30	.39	.33	.28	.35	.30	.26	.23
7.0	.44	.35	.29	.42	.34	.28	.39	.31	.26	.35	.29	.24	.32	.27	.23	.20
8.0	.40	.31	.25	.38	.30	.24	.35	.28	.23	.32	.26	.22	.29	.24	.20	.18
9.0	.36	.28	.22	.35	.27	.22	.32	.25	.21	.30	.24	.19	.27	.22	.18	.16
10.0	.33	.25	.20	.32	.25	.20	.30	.23	.18	.27	.22	.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	.384	.218	.069	.370	.211	.067	.344	.197	.063	.320	.185	.059	.298	.173	.056		
2.0	.332	.182	.056	.320	.176	.054	.296	.165	.051	.275	.154	.048	.254	.144	.045		
3.0	.295	.157	.047	.284	.152	.046	.262	.142	.043	.243	.133	.041	.224	.124	.038		
4.0	.266	.138	.041	.255	.134	.040	.236	.125	.037	.218	.117	.035	.201	.109	.033		
5.0	.241	.123	.036	.232	.119	.035	.214	.112	.033	.198	.104	.031	.183	.098	.029		
6.0	.221	.111	.032	.213	.107	.031	.197	.101	.029	.181	.094	.028	.167	.088	.026		
7.0	.204	.101	.029	.196	.098	.028	.181	.092	.026	.167	.086	.025	.154	.080	.024		
8.0	.189	.092	.026	.182	.090	.025	.168	.084	.024	.156	.079	.023	.143	.074	.021		
9.0	.176	.085	.024	.170	.083	.023	.157	.078	.022	.145	.073	.021	.134	.068	.020		
10.0	.165	.079	.022	.159	.077	.021	.147	.072	.020	.136	.068	.019	.126	.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	.357	.357	.357	.305	.305	.305	.208	.208	.208	.120	.120	.120	.038	.038	.038		
1.0	.353	.324	.297	.302	.278	.255	.207	.191	.177	.119	.111	.103	.038	.036	.033		
2.0	.347	.301	.262	.297	.259	.227	.204	.179	.158	.117	.104	.093	.038	.034	.030		
3.0	.339	.285	.241	.291	.245	.209	.200	.171	.146	.115	.100	.086	.037	.032	.028		
4.0	.332	.272	.227	.285	.235	.197	.196	.164	.139	.113	.096	.082	.036	.031	.027		
5.0	.324	.262	.217	.278	.227	.189	.192	.159	.133	.111	.093	.079	.036	.030	.026		
6.0	.317	.255	.210	.272	.220	.183	.188	.154	.129	.109	.091	.077	.035	.030	.025		
7.0	.310	.248	.205	.266	.215	.179	.184	.151	.126	.107	.089	.075	.035	.029	.025		
8.0	.303	.243	.201	.261	.210	.175	.181	.148	.124	.105	.087	.074	.034	.029	.025		
9.0	.297	.238	.198	.256	.206	.173	.177	.145	.123	.103	.086	.073	.033	.028	.024		
10.0	.291	.234	.196	.251	.203	.171	.174	.143	.121	.102	.084	.072	.033	.028	.024		

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	18.6	19.9	19.1	20.5	21.1	16.8	18.2	17.4	18.7	19.4
3H	21.3	22.5	21.9	23.1	23.8	18.6	19.8	19.2	20.4	21.1
4H	22.8	24.0	23.5	24.6	25.3	19.4	20.6	20.0	21.2	21.9
6H	24.6	25.6	25.2	26.3	27.0	20.1	21.2	20.8	21.9	22.6
8H	25.5	26.6	26.1	27.2	27.9	20.4	21.5	21.1	22.1	22.9
12H	26.6	27.6	27.2	28.3	29.0	20.7	21.7	21.3	22.3	23.1
4H 2H	19.1	20.3	19.7	20.9	21.6	17.9	19.0	18.5	19.7	20.4
3H	22.1	23.1	22.7	23.7	24.5	19.9	20.9	20.6	21.6	22.3
4H	23.8	24.7	24.4	25.4	26.1	20.9	21.8	21.6	22.5	23.3
6H	25.7	26.5	26.4	27.2	28.0	21.8	22.6	22.5	23.3	24.1
8H	26.7	27.5	27.4	28.2	29.1	22.2	23.0	22.9	23.7	24.5
12H	28.0	28.7	28.7	29.4	30.3	22.5	23.2	23.2	24.0	24.8
8H 4H	24.1	24.9	24.8	25.6	26.4	21.8	22.6	22.5	23.3	24.1
6H	26.2	26.9	27.0	27.6	28.5	23.0	23.7	23.7	24.4	25.3
8H	27.5	28.1	28.3	28.8	29.7	23.6	24.2	24.3	24.9	25.8
12H	29.0	29.5	29.8	30.3	31.2	24.1	24.6	24.9	25.4	26.3
12H 4H	24.1	24.8	24.8	25.5	26.4	22.0	22.8	22.8	23.5	24.3
6H	26.3	26.9	27.1	27.7	28.6	23.4	24.0	24.2	24.8	25.7
8H	27.7	28.2	28.5	29.0	29.9	24.2	24.7	24.9	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					+ 0.2 / - 0.4				

CIE Pub.117, 524.0 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -2.2$ )  
Area: 0.02 m2

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
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:

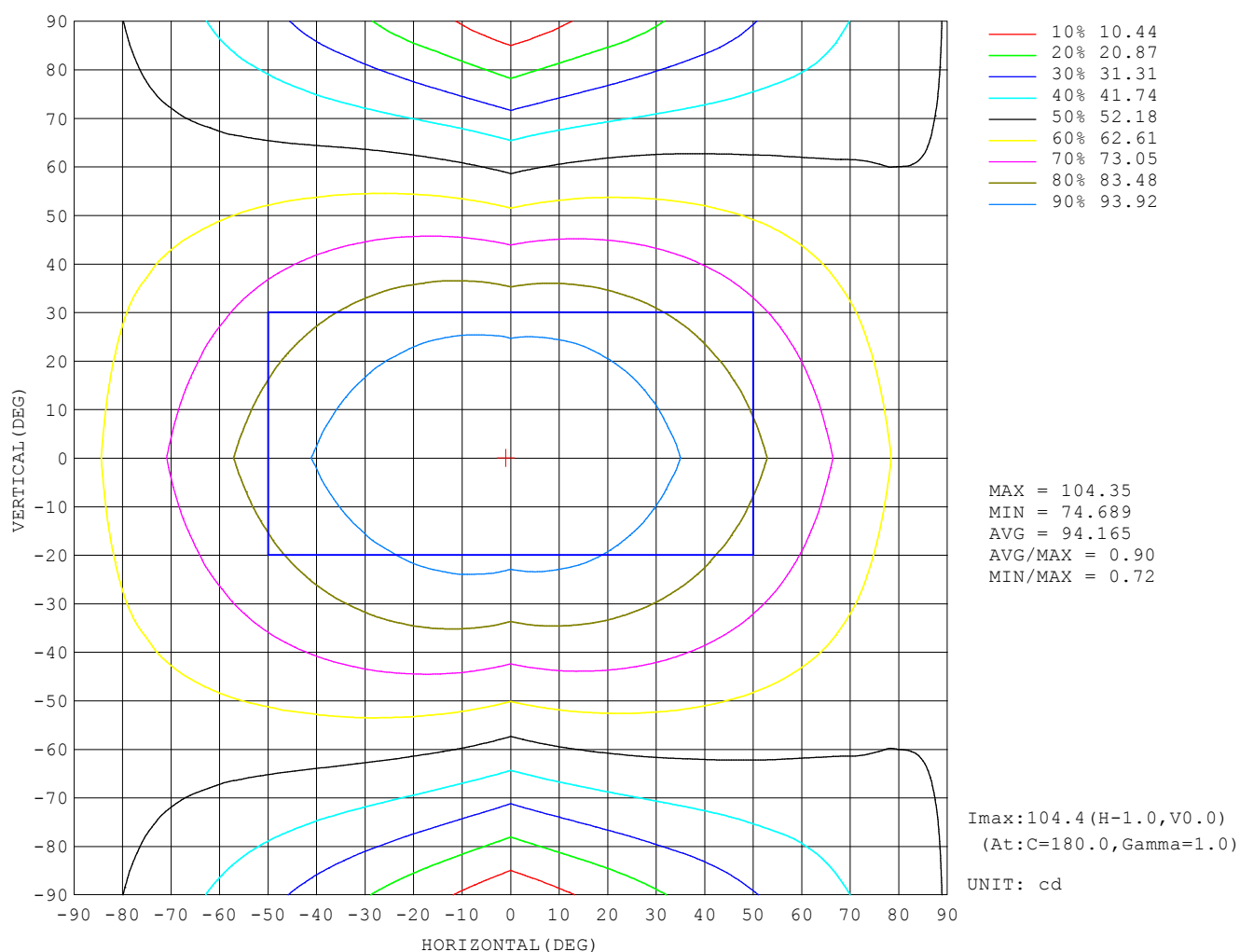
### UTILIZATION FACTORS TABLE

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	34	27	45	33	26	43	32	26	19
0.80	56	43	34	54	42	34	51	40	33	25
1.00	63	50	42	61	49	41	57	49	40	31
1.25	70	57	49	68	56	48	63	53	46	36
1.50	75	63	54	72	61	53	67	58	51	40
2.00	83	72	63	79	69	61	73	65	58	46
2.50	87	77	69	84	74	67	77	69	63	49
3.00	91	82	74	87	79	72	80	73	67	53
4.00	96	88	81	92	84	78	84	78	73	57
5.00	99	92	86	94	88	83	86	81	77	60
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

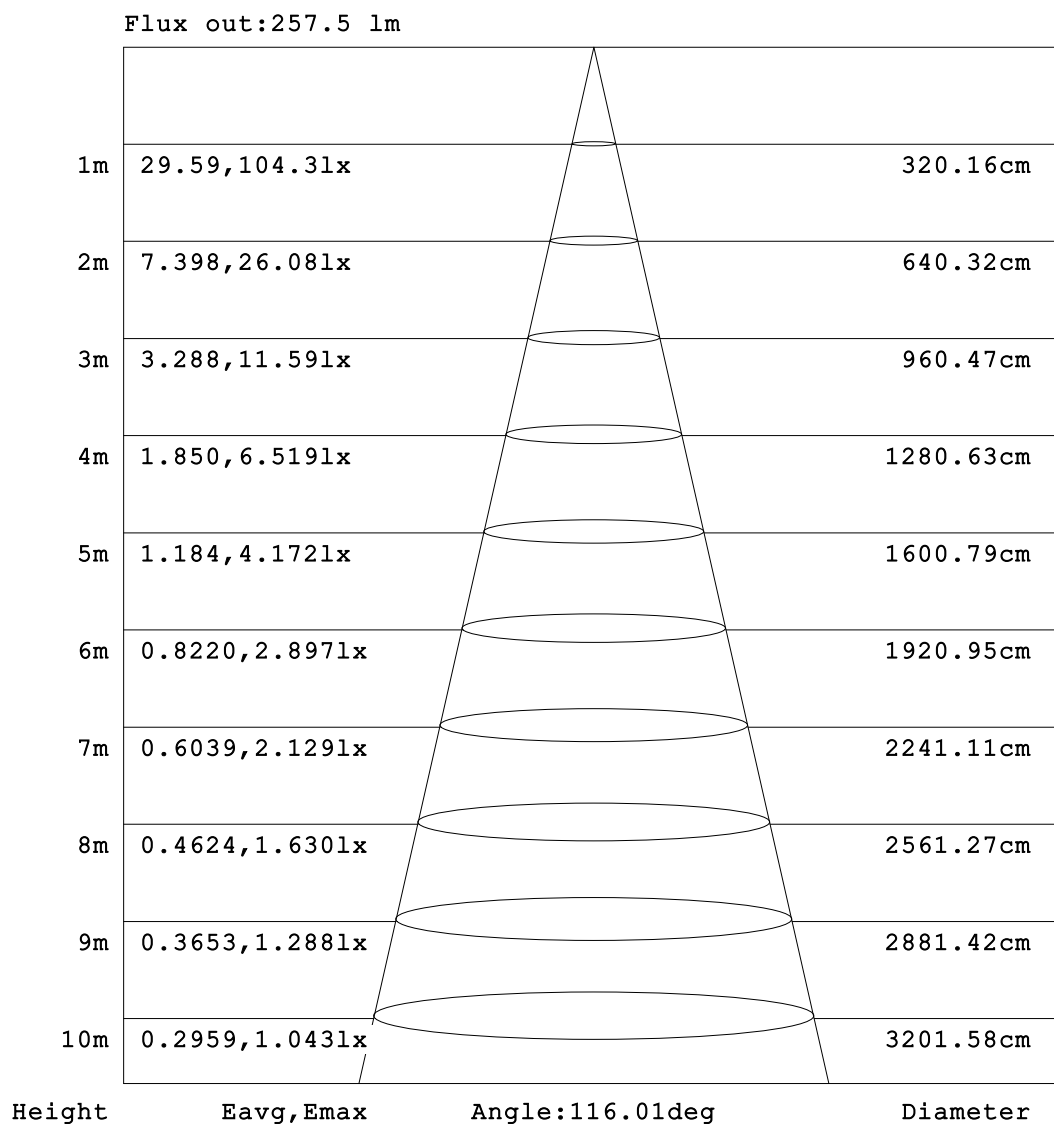


C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:03 January 2025

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

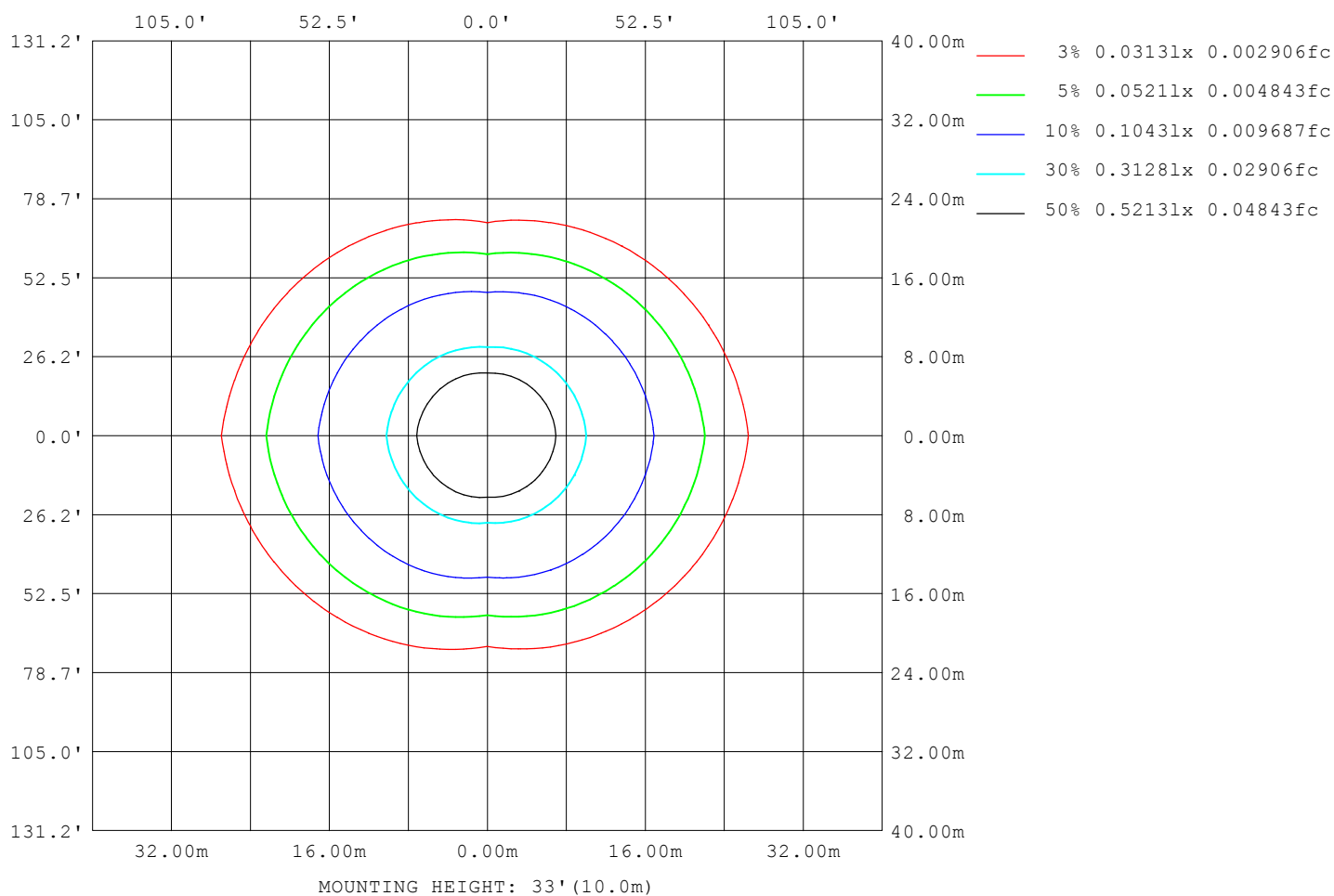


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:524.03lx1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

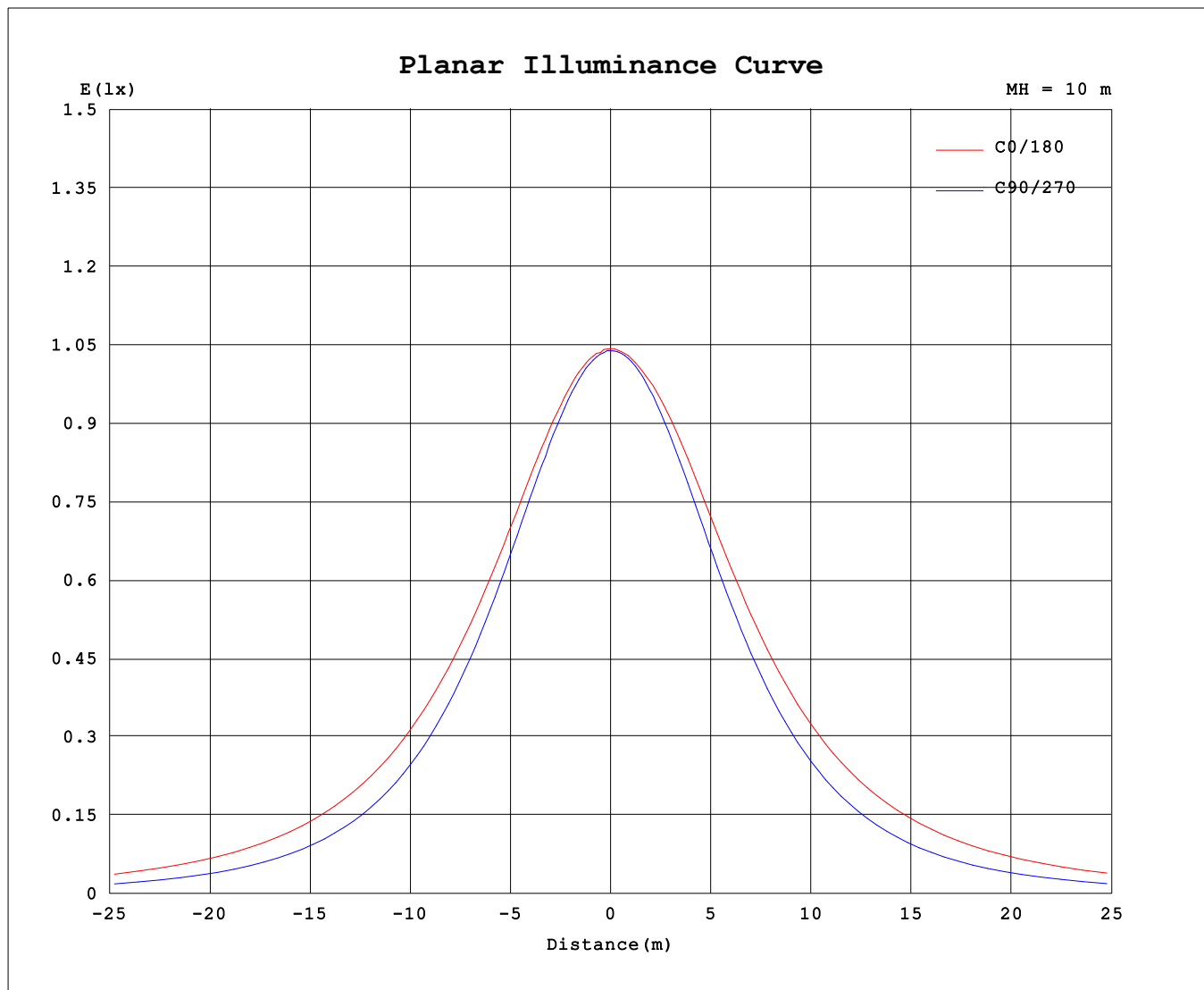
AvgL	cd/m2
L_0~180 (65) av	8961
L_0~180 (75) av	13066
L_0~180 (85) av	34016
L_90~270 (65) av	4929
L_90~270 (75) av	4976
L_90~270 (85) av	5984
L_45 (65) av	6457
L_45 (75) av	8042
L_45 (85) av	16617

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

$\gamma$  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	104	104	104	104															
5	104	103	104	104															
10	103	102	103	103															
15	102	99.6	103	100															
20	100	96.4	102	97.5															
25	98.3	92.3	101	93.8															
30	96.2	87.6	99.2	89.1															
35	93.7	82.3	97.0	83.9															
40	91.3	76.3	94.3	77.9															
45	88.5	69.9	91.4	71.6															
50	85.3	63.0	88.2	64.8															
55	81.8	55.8	84.8	57.6															
60	78.0	48.5	81.2	50.1															
65	74.0	40.9	77.5	42.4															
70	70.0	33.3	73.6	34.1															
75	65.5	25.7	69.7	25.9															
80	61.1	18.1	65.9	18.2															
85	56.6	10.5	62.0	10.4															
90	52.7	3.19	58.3	3.53															
95	48.2	1.99	54.4	2.41															
100	44.5	1.51	50.7	2.38															
105	41.1	1.87	47.2	2.53															
110	36.8	2.28	43.8	2.71															
115	33.8	2.66	40.5	2.85															
120	31.0	2.91	37.4	3.06															
125	28.6	3.21	34.5	3.29															
130	25.8	3.45	31.9	3.55															
135	21.4	3.79	29.4	3.75															
140	17.0	4.22	26.9	3.96															
145	11.1	4.66	24.3	4.39															
150	7.21	5.39	21.5	4.86															
155	5.63	6.08	19.0	5.45															
160	3.30	6.74	15.4	6.04															
165	2.88	7.33	10.8	6.60															
170	2.78	7.63	7.28	7.13															
175	4.13	7.81	6.24	7.46															
180	5.43	7.92	5.43	7.56															

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: