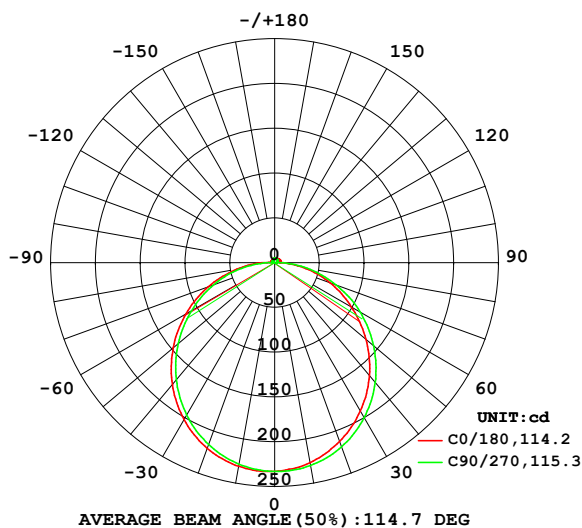


## LUMINAIRE PHOTOMETRIC TEST REPORT

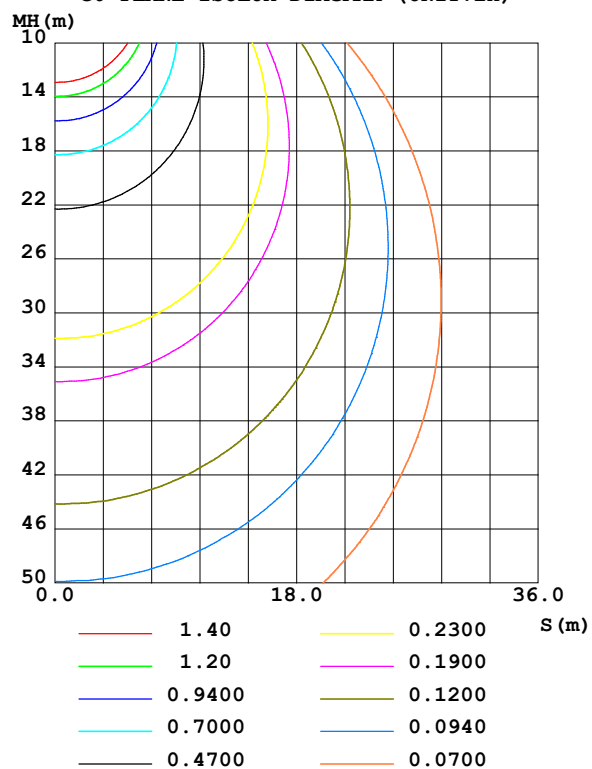
Test:U:101.30V I:0.1800A P:16.100W PF:0.8820 Freq:50.00Hz Lamp Flux:727.135x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 45.16 lm/W
MODEL	80011-27MP	I <sub>max</sub> (cd)	233.4	S/MH(C0/180)	1.23	
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.28	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	727.14	η UP,DN(C0-180)	1.7,49.2	
NOMINAL FLUX(lm)	727.135	CIE CLASS	DIRECT	η UP,DN(C180-360)	2.0,47.1	
LAMPS INSIDE	1	η up (%)	3.7	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	100	η down (%)	96.3	CIBSE SHR MAX	1.35	

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: 02 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	231.0	228.6	227.0	230.0					0- 10	22.06	22.06	3.03,3.03
20	220.6	216.0	212.4	218.9					10- 20	63.21	85.27	11.7,11.7
30	202.3	196.5	191.4	199.9					20- 30	95.91	181.2	24.9,24.9
40	177.7	171.0	164.7	174.8					30- 40	116.0	297.2	40.9,40.9
50	147.8	140.4	133.1	144.2					40- 50	121.3	418.5	57.6,57.6
60	114.4	107.2	98.83	110.2					50- 60	111.6	530.1	72.9,72.9
70	78.72	72.57	65.92	72.79					60- 70	89.32	619.4	85.2,85.2
80	42.88	37.48	32.62	36.91					70- 80	57.88	677.3	93.1,93.1
90	11.98	3.615	7.146	3.306					80- 90	22.88	700.2	96.3,96.3
100	4.501	1.847	6.150	2.234					90-100	4.559	704.7	96.9,96.9
110	4.369	2.764	6.334	2.945					100-110	4.154	708.9	97.5,97.5
120	4.286	2.818	6.255	3.467					110-120	4.104	713.0	98.1,98.1
130	4.224	3.498	5.974	3.855					120-130	3.868	716.8	98.6,98.6
140	4.246	3.847	5.715	4.098					130-140	3.417	720.3	99.1,99.1
150	4.400	4.363	5.448	4.478					140-150	2.854	723.1	99.4,99.4
160	4.566	4.708	5.193	4.725					150-160	2.193	725.3	99.7,99.7
170	4.747	4.968	4.838	4.858					160-170	1.368	726.7	99.9,99.9
180	4.878	5.087	4.904	5.056					170-180	0.4647	727.1	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 358.17 lm

%lum = 49.3%

%lamp = 49.3%

Conical surface Flux(130deg): 578.19 lm

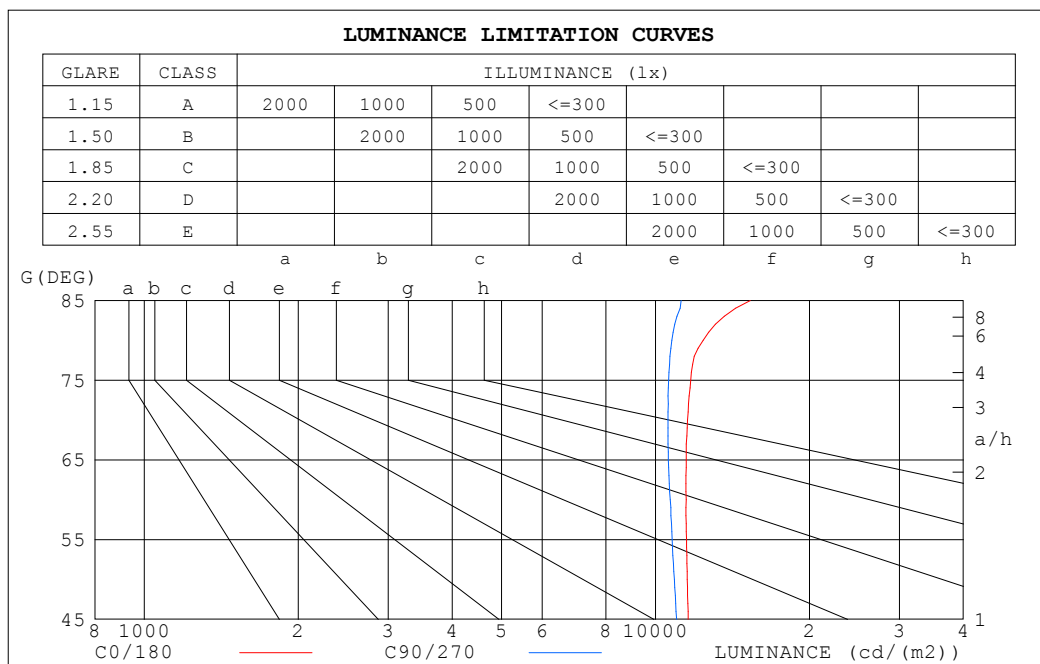
%lum = 79.5%

%lamp = 79.5%

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:02 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



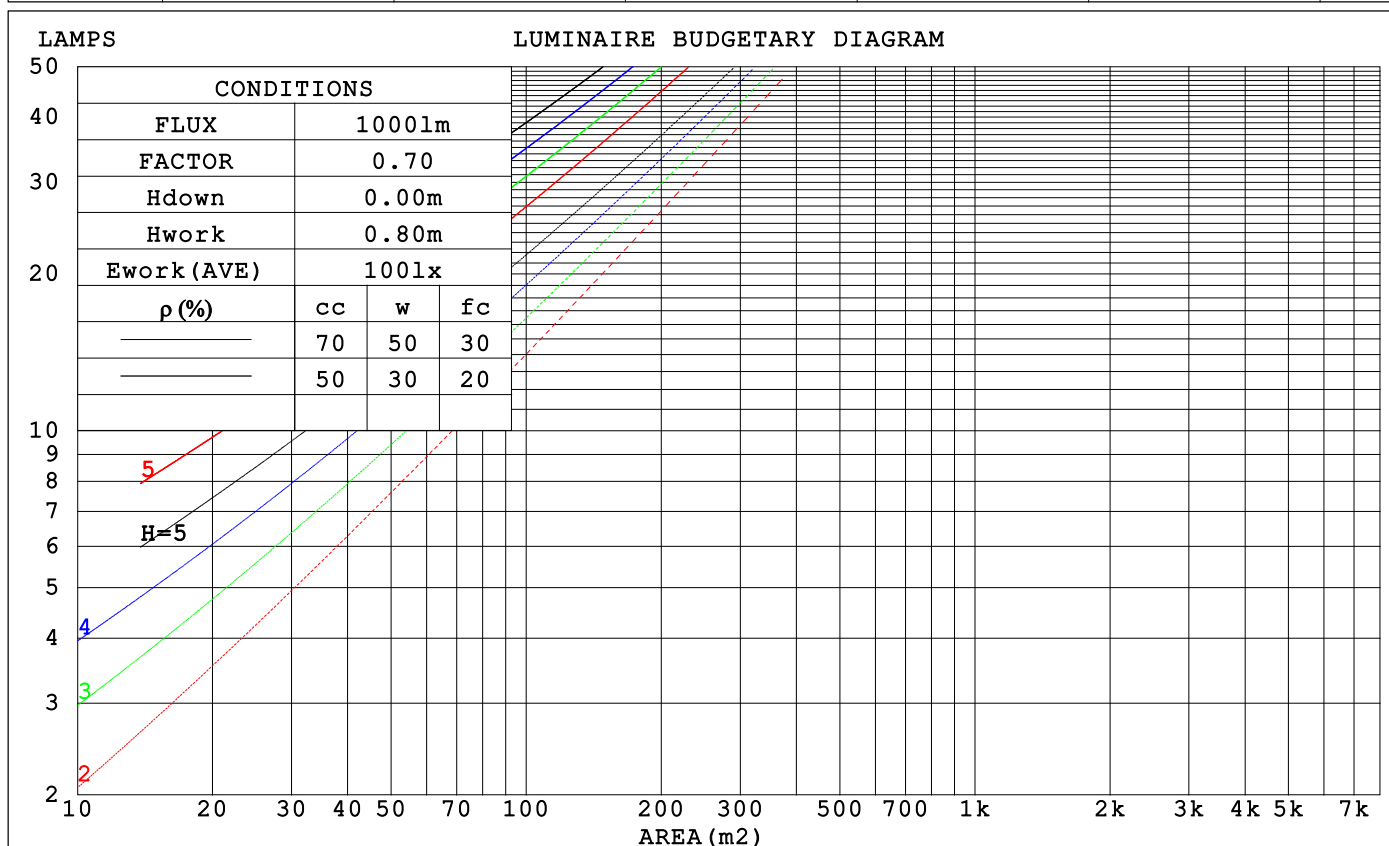
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	15311	11222
80	12389	10756
75	11711	10608
70	11547	10574
65	11481	10597
60	11483	10679
55	11500	10771
50	11538	10881
45	11580	11000

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 02 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	1.18	1.18	1.18	1.15	1.15	1.15	1.09	1.09	1.09	1.04	1.04	1.04	.99	.99	.99	.96
1.0	1.02	.97	.93	.99	.95	.91	.94	.91	.88	.90	.87	.84	.86	.83	.81	.79
2.0	.88	.81	.75	.86	.80	.74	.82	.76	.72	.78	.74	.70	.75	.71	.67	.65
3.0	.77	.69	.62	.75	.68	.61	.72	.65	.60	.69	.63	.58	.66	.61	.57	.54
4.0	.68	.59	.52	.67	.58	.52	.64	.56	.51	.61	.55	.50	.58	.53	.48	.46
5.0	.61	.52	.45	.60	.51	.44	.57	.49	.44	.55	.48	.43	.52	.47	.42	.40
6.0	.55	.46	.39	.54	.45	.39	.51	.44	.38	.49	.43	.37	.47	.41	.37	.35
7.0	.50	.41	.34	.49	.40	.34	.47	.39	.34	.45	.38	.33	.43	.37	.33	.31
8.0	.45	.37	.31	.44	.36	.30	.43	.35	.30	.41	.34	.30	.40	.34	.29	.27
9.0	.41	.33	.28	.41	.33	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.24
10.0	.38	.30	.25	.38	.30	.25	.36	.29	.24	.35	.29	.24	.34	.28	.24	.22



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 02 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	.329	.187	.059	.321	.183	.058	.305	.175	.056	.291	.168	.054	.278	.161	.052	
2.0	.303	.166	.051	.296	.163	.050	.282	.157	.049	.269	.151	.047	.258	.146	.046	
3.0	.277	.148	.044	.271	.145	.044	.259	.140	.043	.247	.136	.042	.237	.131	.041	
4.0	.254	.132	.039	.249	.130	.038	.238	.126	.038	.227	.122	.037	.218	.118	.036	
5.0	.234	.119	.035	.229	.117	.034	.219	.114	.034	.210	.111	.033	.201	.108	.032	
6.0	.216	.108	.031	.212	.107	.031	.203	.104	.030	.195	.101	.030	.187	.098	.029	
7.0	.201	.099	.028	.197	.098	.028	.189	.095	.027	.181	.093	.027	.174	.091	.027	
8.0	.187	.091	.026	.183	.090	.026	.176	.088	.025	.170	.086	.025	.163	.084	.024	
9.0	.175	.085	.024	.172	.084	.023	.165	.082	.023	.159	.080	.023	.153	.078	.023	
10.0	.164	.079	.022	.161	.078	.022	.155	.076	.021	.150	.074	.021	.145	.073	.021	

$\rho_{cc}$	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	.219	.219	.219	.187	.187	.187	.128	.128	.128	.073	.073	.073	.023	.023	.023	
1.0	.210	.184	.161	.180	.158	.139	.123	.109	.096	.071	.063	.056	.023	.020	.018	
2.0	.202	.161	.125	.173	.138	.108	.119	.096	.076	.069	.056	.044	.022	.018	.014	
3.0	.195	.143	.102	.167	.124	.089	.115	.086	.062	.066	.050	.037	.021	.016	.012	
4.0	.187	.130	.087	.161	.112	.075	.110	.078	.053	.064	.046	.031	.021	.015	.010	
5.0	.180	.120	.076	.154	.104	.066	.106	.072	.047	.062	.043	.028	.020	.014	.009	
6.0	.172	.112	.068	.148	.097	.059	.102	.068	.042	.059	.040	.025	.019	.013	.008	
7.0	.165	.105	.062	.142	.091	.054	.098	.064	.038	.057	.037	.023	.018	.012	.008	
8.0	.159	.099	.058	.137	.086	.050	.095	.060	.036	.055	.036	.021	.018	.012	.007	
9.0	.153	.094	.054	.132	.082	.047	.091	.057	.034	.053	.034	.020	.017	.011	.007	
10.0	.147	.090	.052	.127	.078	.045	.088	.055	.032	.051	.032	.019	.017	.011	.006	

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 02 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	21.3	22.7	21.6	23.0	23.3	21.0	22.5	21.3	22.7	23.0
3H	23.0	24.4	23.4	24.7	25.0	22.7	24.1	23.1	24.4	24.7
4H	23.9	25.2	24.2	25.5	25.8	23.5	24.8	23.8	25.1	25.4
6H	24.6	25.8	25.0	26.2	26.5	24.1	25.4	24.5	25.7	26.1
8H	24.9	26.1	25.3	26.4	26.8	24.4	25.6	24.8	25.9	26.3
12H	25.2	26.3	25.6	26.7	27.1	24.6	25.7	25.0	26.1	26.5
4H 2H	21.9	23.2	22.2	23.5	23.9	21.7	23.0	22.0	23.3	23.7
3H	23.9	25.0	24.3	25.4	25.8	23.6	24.7	24.0	25.1	25.5
4H	24.8	25.9	25.3	26.3	26.7	24.5	25.6	24.9	26.0	26.4
6H	25.7	26.6	26.2	27.1	27.5	25.3	26.2	25.8	26.7	27.1
8H	26.1	27.0	26.6	27.4	27.9	25.6	26.5	26.1	26.9	27.4
12H	26.5	27.3	27.0	27.8	28.2	25.9	26.7	26.4	27.2	27.7
8H 4H	25.2	26.0	25.6	26.5	26.9	24.9	25.8	25.4	26.2	26.7
6H	26.2	27.0	26.7	27.4	28.0	25.9	26.6	26.4	27.1	27.6
8H	26.8	27.4	27.3	27.9	28.4	26.3	27.0	26.9	27.5	28.0
12H	27.3	27.9	27.8	28.4	28.9	26.7	27.3	27.3	27.8	28.4
12H 4H	25.2	26.0	25.7	26.5	26.9	24.9	25.7	25.4	26.2	26.7
6H	26.3	27.0	26.9	27.5	28.0	26.0	26.7	26.5	27.1	27.7
8H	26.9	27.5	27.5	28.0	28.6	26.5	27.1	27.1	27.6	28.2
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 727.1 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -1.1$ )  
Area: 0.02 m2

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:02 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:

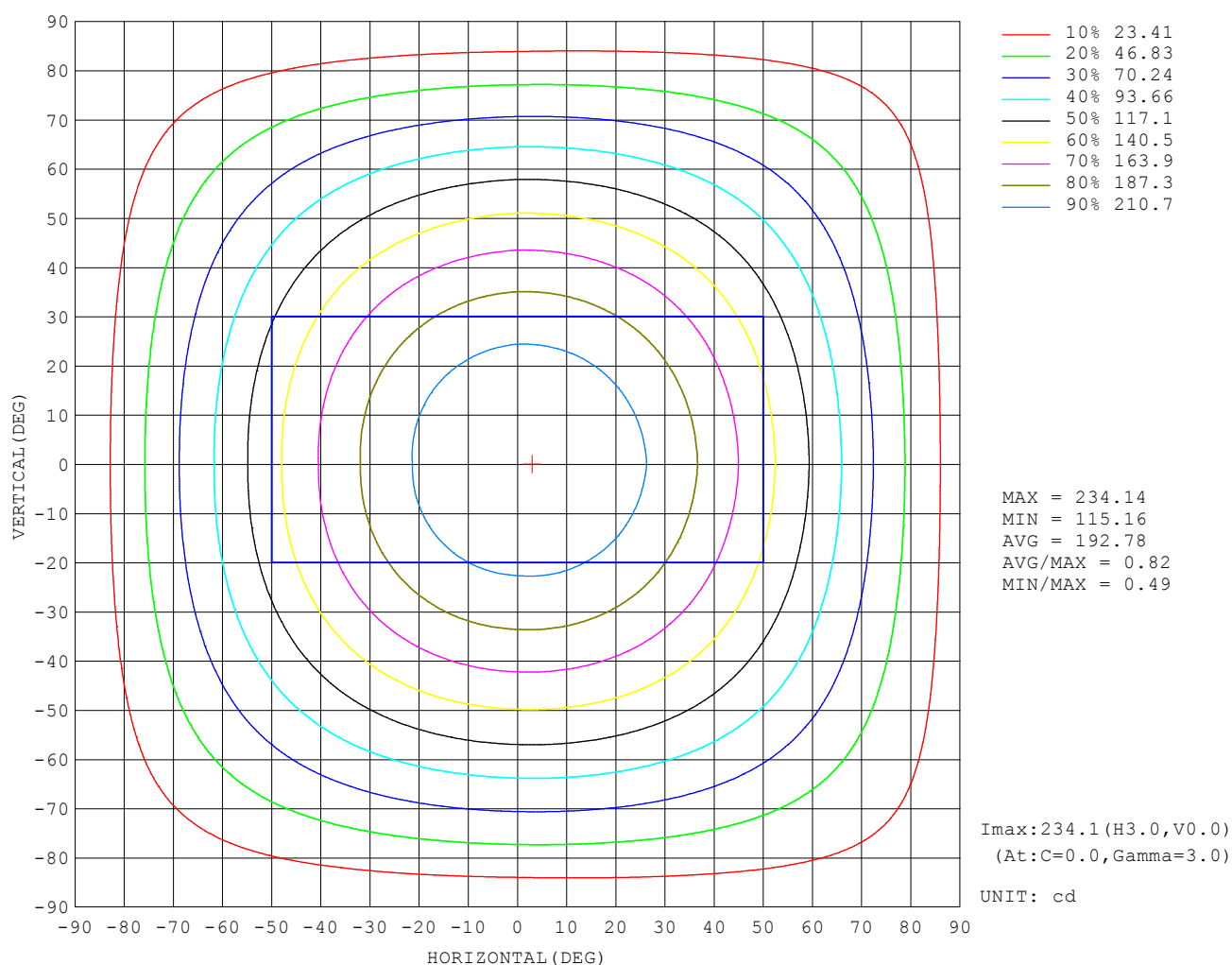
### UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	55	44	37	55	43	36	53	43	36	30
0.80	65	53	46	64	53	45	62	52	45	38
1.00	73	62	54	72	61	54	69	62	53	46
1.25	80	70	62	79	69	62	76	67	61	53
1.50	86	75	68	84	74	67	80	72	66	57
2.00	93	83	77	90	82	76	86	79	74	65
2.50	97	88	82	94	87	81	90	84	78	69
3.00	100	93	87	98	91	85	93	87	83	73
4.00	104	98	93	101	96	91	97	92	88	78
5.00	107	102	97	104	99	95	99	95	92	81
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: 02 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:

# ISOCANDELA DIAGRAM

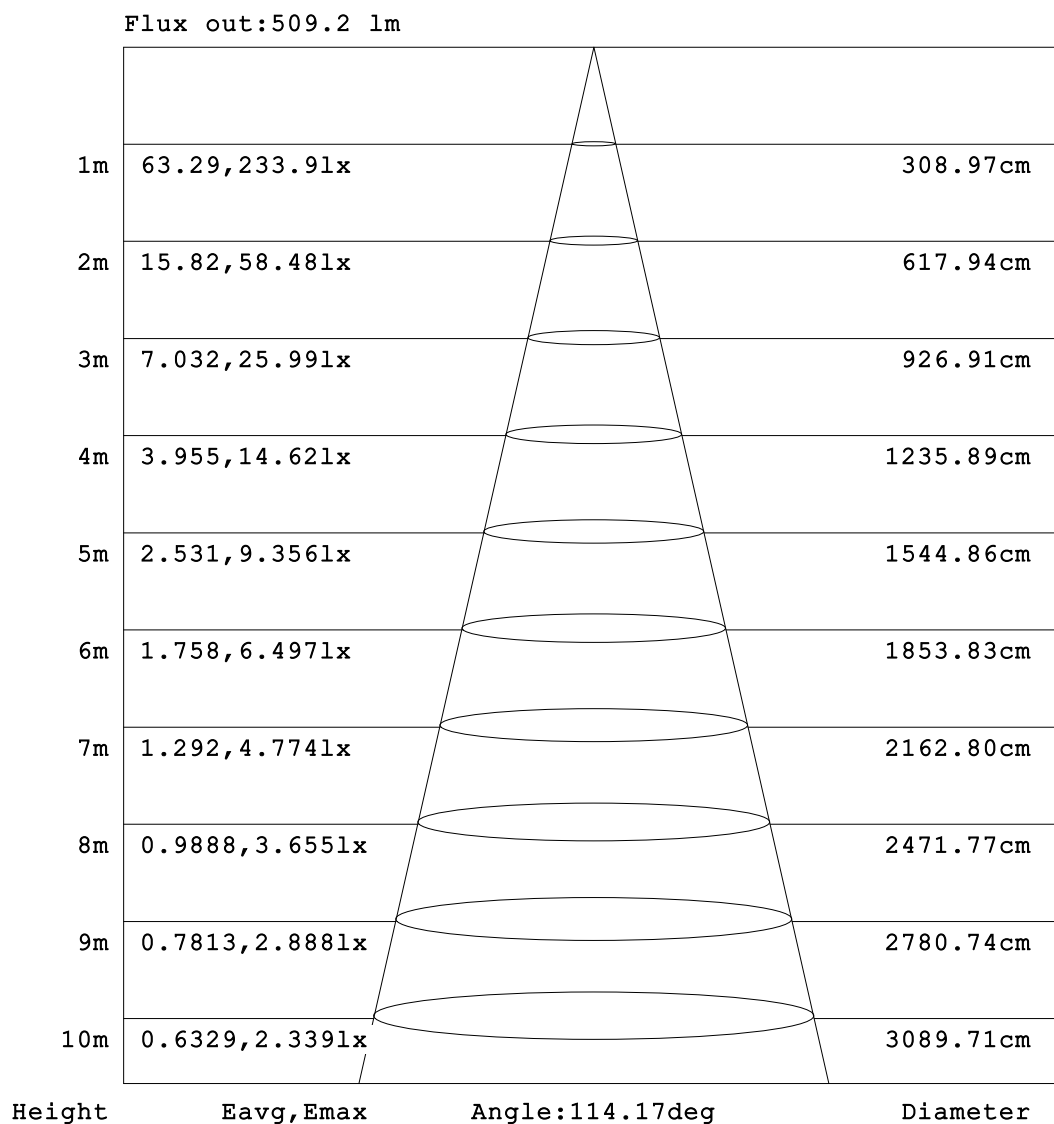


C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 02 January 2025

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

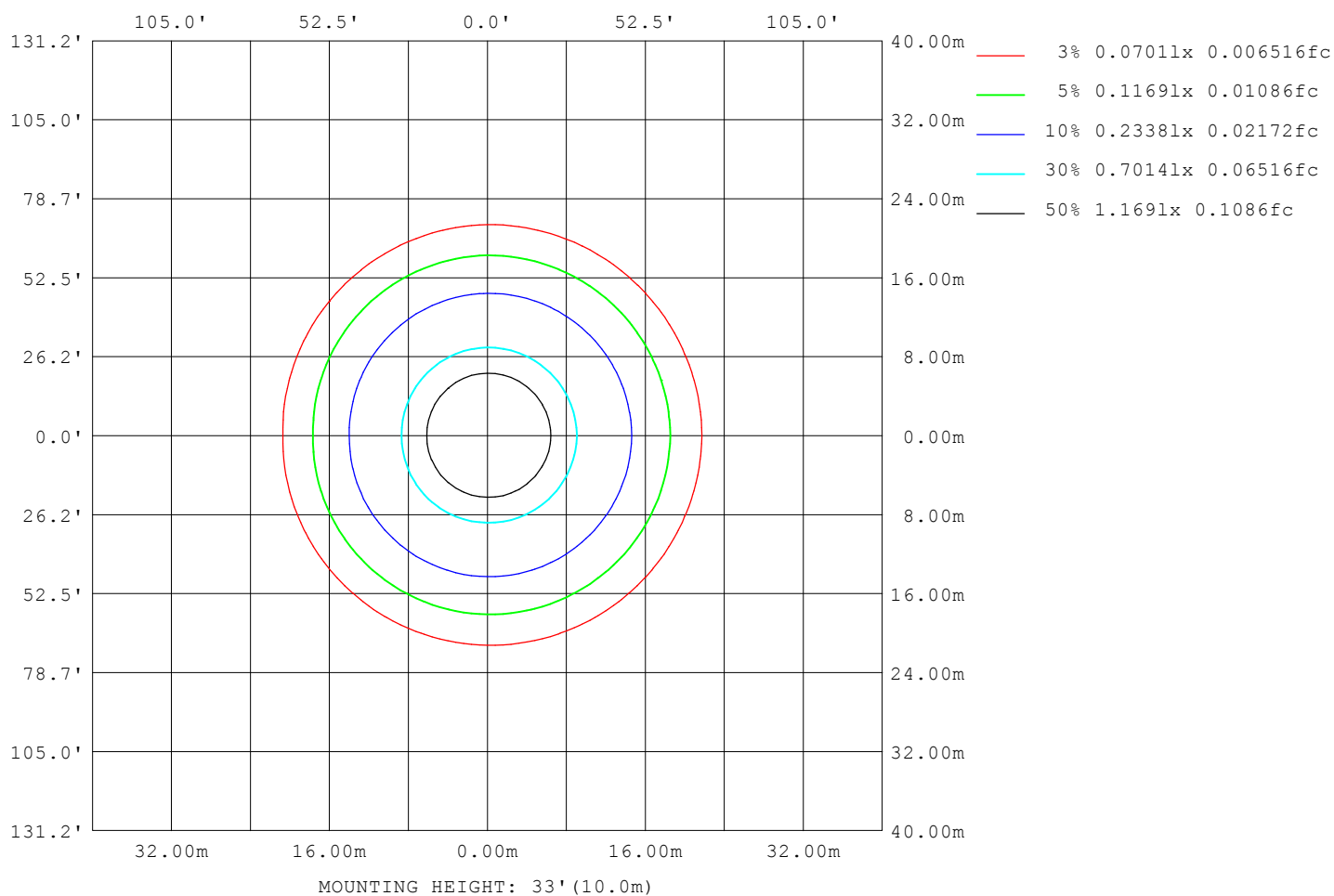


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:DAMIN  
 Test Date:02 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: 02 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:101.30V I:0.1800A P:16.100W PF:0.8820 Freq:50.00Hz Lamp Flux:727.135x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

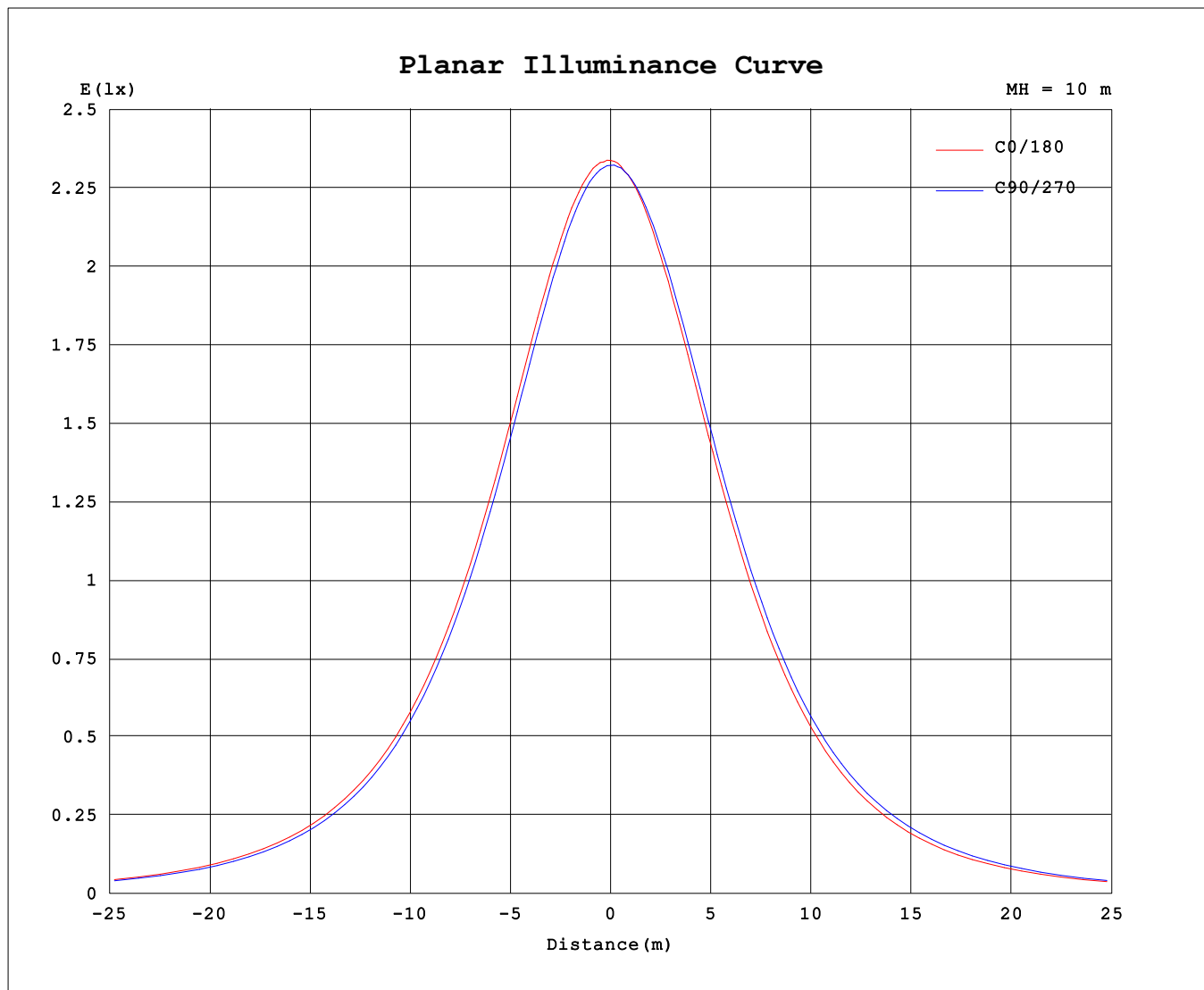
AvgL	cd/m2
L_0~180 (65) av	10605
L_0~180 (75) av	10594
L_0~180 (85) av	12379
L_90~270 (65) av	10764
L_90~270 (75) av	10580
L_90~270 (85) av	11175
L_45 (65) av	10652
L_45 (75) av	10518
L_45 (85) av	11449

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:02 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: 02 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	233	233	233	233															
5	233	232	231	233															
10	231	229	227	230															
15	226	223	220	225															
20	221	216	212	219															
25	212	207	203	210															
30	202	196	191	200															
35	191	184	179	188															
40	178	171	165	175															
45	163	156	149	160															
50	148	140	133	144															
55	131	124	116	128															
60	114	107	98.8	110															
65	96.7	89.9	82.6	92.1															
70	78.7	72.6	65.9	72.8															
75	60.4	55.1	49.3	54.4															
80	42.9	37.5	32.6	36.9															
85	26.6	19.6	16.6	19.3															
90	12.0	3.62	7.15	3.31															
95	4.97	1.81	6.01	2.02															
100	4.50	1.85	6.15	2.23															
105	4.40	2.57	6.26	2.49															
110	4.37	2.76	6.33	2.94															
115	4.34	2.52	6.36	3.23															
120	4.29	2.82	6.25	3.47															
125	4.24	3.26	6.10	3.67															
130	4.22	3.50	5.97	3.86															
135	4.22	3.49	5.84	3.97															
140	4.25	3.85	5.72	4.10															
145	4.30	3.96	5.58	4.27															
150	4.40	4.36	5.45	4.48															
155	4.50	4.54	5.36	4.61															
160	4.57	4.71	5.19	4.73															
165	4.72	4.85	4.88	4.80															
170	4.75	4.97	4.84	4.86															
175	4.79	5.05	4.75	4.88															
180	4.88	5.09	4.90	5.06															

C Range: 0 - 360DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:02 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: