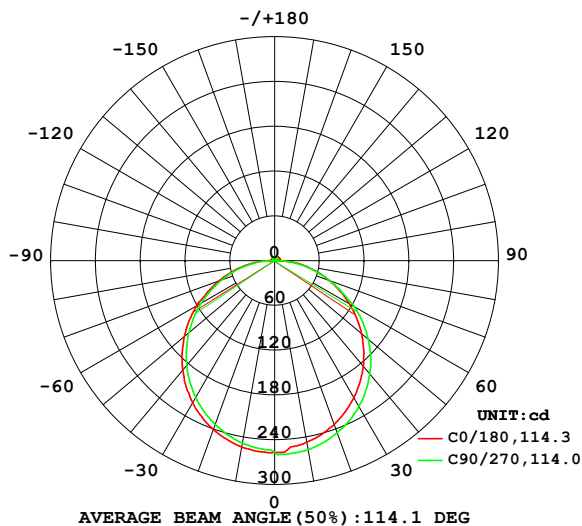


LUMINAIRE PHOTOMETRIC TEST REPORT

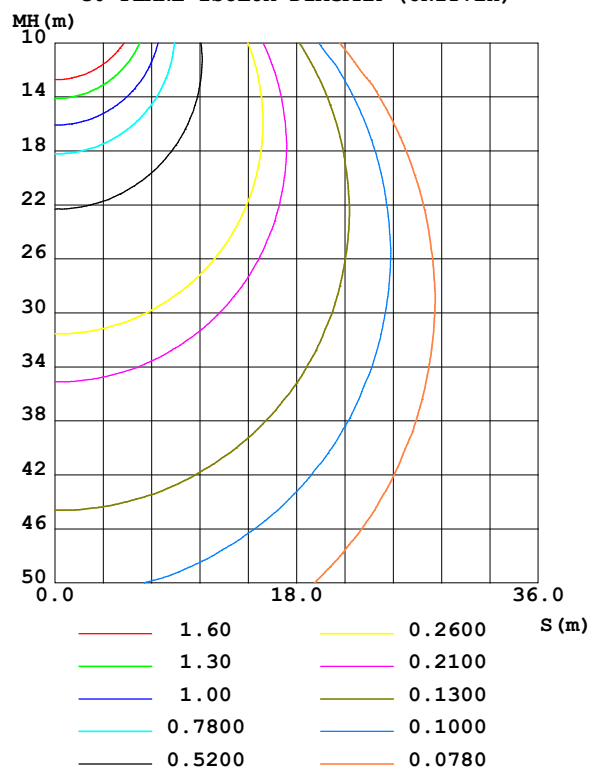
Test:U:101.50V I:0.1790A P:16.100W PF:0.8830 Freq:50.00Hz Lamp Flux:794.469x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 49.35 lm/W
MODEL	80012-30MP	I _{max} (cd)	260.0	S/MH(C0/180)	1.24	
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.30	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	794.47	η UP,DN(C0-180)	1.7,47.8	
NOMINAL FLUX(lm)	794.469	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.9,48.6	
LAMPS INSIDE	1	η up (%)	3.6	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	100	η down (%)	96.4	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:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	253.8	248.1	247.2	256.9					0- 10	24.24	24.24	3.05,3.05
20	240.9	233.6	233.6	245.3					10- 20	69.40	93.64	11.8,11.8
30	220.0	211.6	212.2	225.9					20- 30	105.5	199.1	25.1,25.1
40	191.6	183.3	184.7	198.5					30- 40	127.8	326.8	41.1,41.1
50	158.0	150.1	151.8	163.9					40- 50	133.7	460.6	58,58
60	120.4	113.5	115.6	123.2					50- 60	122.9	583.4	73.4,73.4
70	79.48	75.35	77.97	78.61					60- 70	96.64	680.1	85.6,85.6
80	41.42	37.63	40.93	39.35					70- 80	61.91	742.0	93.4,93.4
90	8.828	3.520	9.297	2.935					80- 90	23.80	765.8	96.4,96.4
100	5.257	2.241	6.163	2.325					90-100	4.633	770.4	97,97
110	4.934	2.914	6.486	2.794					100-110	4.387	774.8	97.5,97.5
120	4.723	3.269	6.503	3.353					110-120	4.344	779.2	98.1,98.1
130	4.649	3.867	6.272	3.919					120-130	4.091	783.2	98.6,98.6
140	4.732	4.478	6.066	4.239					130-140	3.712	787.0	99.1,99.1
150	4.745	4.921	5.830	4.766					140-150	3.113	790.1	99.4,99.4
160	4.990	5.280	5.431	5.151					150-160	2.391	792.5	99.7,99.7
170	5.222	5.541	5.244	5.417					160-170	1.494	794.0	99.9,99.9
180	5.358	5.669	5.362	5.687					170-180	0.5145	794.5	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 394.04 lm

%lum = 49.6%

%lamp = 49.6%

Conical surface Flux(130deg): 635.72 lm

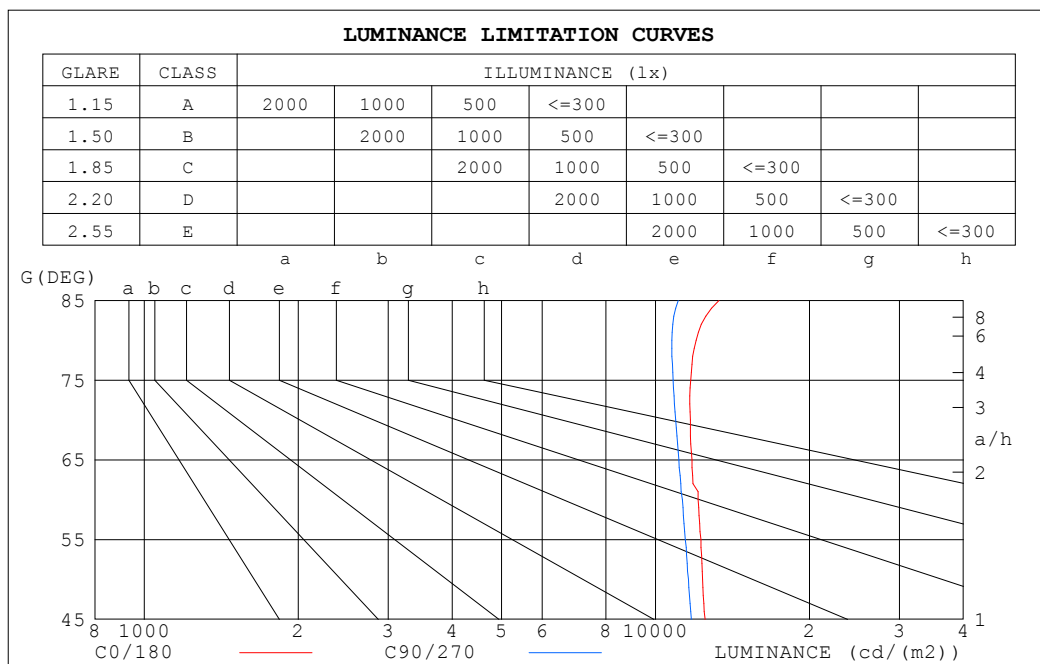
%lum = 80.0%

%lamp = 80.0%

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:

LUMINANCE LIMITATION CURVES



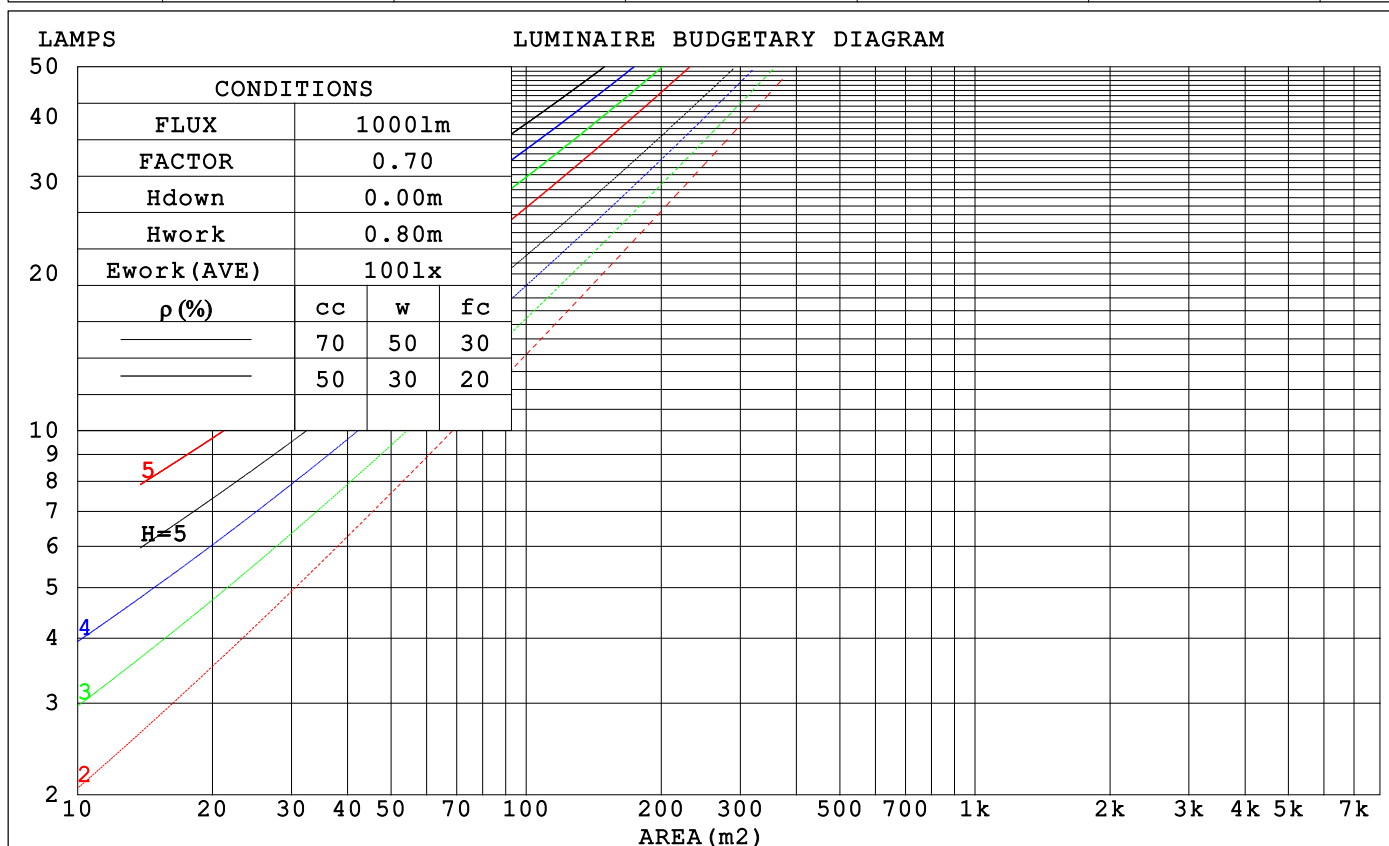
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	13309	11079
80	12002	10767
75	11716	10823
70	11693	10946
65	11778	11102
60	12117	11280
55	12264	11430
50	12368	11602
45	12506	11750

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

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	.98	.94	.99	.95	.92	.95	.91	.88	.90	.87	.85	.86	.84	.82	.79
2.0	.89	.81	.75	.86	.80	.74	.82	.77	.72	.78	.74	.70	.75	.71	.68	.65
3.0	.78	.69	.62	.76	.68	.62	.72	.65	.60	.69	.63	.58	.66	.61	.57	.55
4.0	.68	.59	.53	.67	.59	.52	.64	.57	.51	.61	.55	.50	.59	.53	.49	.46
5.0	.61	.52	.45	.60	.51	.45	.57	.50	.44	.55	.48	.43	.53	.47	.42	.40
6.0	.55	.46	.39	.54	.45	.39	.52	.44	.38	.50	.43	.38	.48	.42	.37	.35
7.0	.50	.41	.35	.49	.40	.34	.47	.39	.34	.45	.38	.33	.43	.37	.33	.31
8.0	.45	.37	.31	.44	.36	.31	.43	.35	.30	.41	.35	.30	.40	.34	.29	.27
9.0	.42	.33	.28	.41	.33	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.25
10.0	.38	.30	.25	.38	.30	.25	.36	.29	.25	.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

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

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.326	.186	.059	.318	.182	.058	.303	.174	.055	.289	.167	.053	.276	.160	.052	
2.0	.301	.165	.051	.294	.162	.050	.280	.156	.048	.268	.150	.047	.256	.145	.046	
3.0	.276	.147	.044	.270	.144	.043	.258	.140	.042	.246	.135	.041	.236	.131	.040	
4.0	.253	.132	.039	.248	.130	.038	.237	.126	.038	.227	.122	.037	.217	.118	.036	
5.0	.233	.119	.034	.228	.117	.034	.219	.114	.033	.209	.111	.033	.201	.107	.032	
6.0	.216	.108	.031	.211	.107	.031	.202	.104	.030	.194	.101	.030	.187	.098	.029	
7.0	.200	.099	.028	.196	.098	.028	.188	.095	.027	.181	.093	.027	.174	.090	.027	
8.0	.187	.091	.026	.183	.090	.025	.176	.088	.025	.169	.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	

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.218	.218	.218	.186	.186	.186	.127	.127	.127	.073	.073	.073	.023	.023	.023	
1.0	.209	.184	.161	.179	.158	.138	.122	.108	.096	.070	.063	.056	.023	.020	.018	
2.0	.201	.160	.125	.173	.138	.108	.118	.095	.075	.068	.055	.044	.022	.018	.014	
3.0	.194	.142	.101	.166	.123	.088	.114	.085	.062	.066	.050	.036	.021	.016	.012	
4.0	.186	.129	.086	.160	.112	.075	.110	.078	.053	.064	.046	.031	.020	.015	.010	
5.0	.179	.119	.075	.153	.103	.065	.106	.072	.046	.061	.042	.027	.020	.014	.009	
6.0	.171	.111	.067	.147	.096	.059	.102	.067	.041	.059	.039	.025	.019	.013	.008	
7.0	.164	.104	.061	.141	.090	.054	.098	.063	.038	.057	.037	.023	.018	.012	.007	
8.0	.158	.098	.057	.136	.085	.050	.094	.060	.035	.055	.035	.021	.018	.012	.007	
9.0	.152	.093	.054	.131	.081	.047	.091	.057	.033	.053	.034	.020	.017	.011	.007	
10.0	.146	.089	.051	.126	.077	.044	.087	.054	.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

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:

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	22.8	21.7	23.1	23.4	21.1	22.6	21.4	22.8	23.1
3H	23.0	24.4	23.4	24.7	25.0	22.7	24.1	23.1	24.4	24.7
4H	23.8	25.1	24.1	25.4	25.7	23.5	24.8	23.8	25.1	25.4
6H	24.4	25.7	24.8	26.0	26.4	24.1	25.3	24.4	25.6	26.0
8H	24.7	25.9	25.1	26.2	26.6	24.3	25.5	24.7	25.8	26.2
12H	24.9	26.1	25.3	26.4	26.8	24.5	25.6	24.9	26.0	26.4
4H 2H	21.9	23.3	22.3	23.6	23.9	21.7	23.1	22.1	23.4	23.7
3H	23.8	25.0	24.2	25.3	25.7	23.6	24.7	24.0	25.1	25.5
4H	24.7	25.8	25.2	26.2	26.6	24.5	25.5	24.9	25.9	26.3
6H	25.5	26.5	26.0	26.9	27.3	25.2	26.1	25.7	26.6	27.0
8H	25.9	26.7	26.3	27.2	27.6	25.5	26.4	26.0	26.8	27.3
12H	26.2	27.0	26.7	27.4	27.9	25.8	26.6	26.2	27.0	27.5
8H 4H	25.0	25.9	25.5	26.4	26.8	24.8	25.7	25.3	26.1	26.6
6H	26.0	26.8	26.5	27.2	27.7	25.7	26.5	26.2	26.9	27.5
8H	26.5	27.1	27.0	27.6	28.2	26.2	26.8	26.7	27.3	27.8
12H	26.9	27.5	27.5	28.0	28.5	26.5	27.1	27.1	27.6	28.2
12H 4H	25.1	25.9	25.6	26.3	26.8	24.9	25.7	25.3	26.1	26.6
6H	26.1	26.8	26.6	27.3	27.8	25.9	26.5	26.4	27.0	27.5
8H	26.6	27.2	27.2	27.7	28.3	26.3	26.9	26.9	27.4	28.0
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, 794.5 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -0.8$)
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

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:

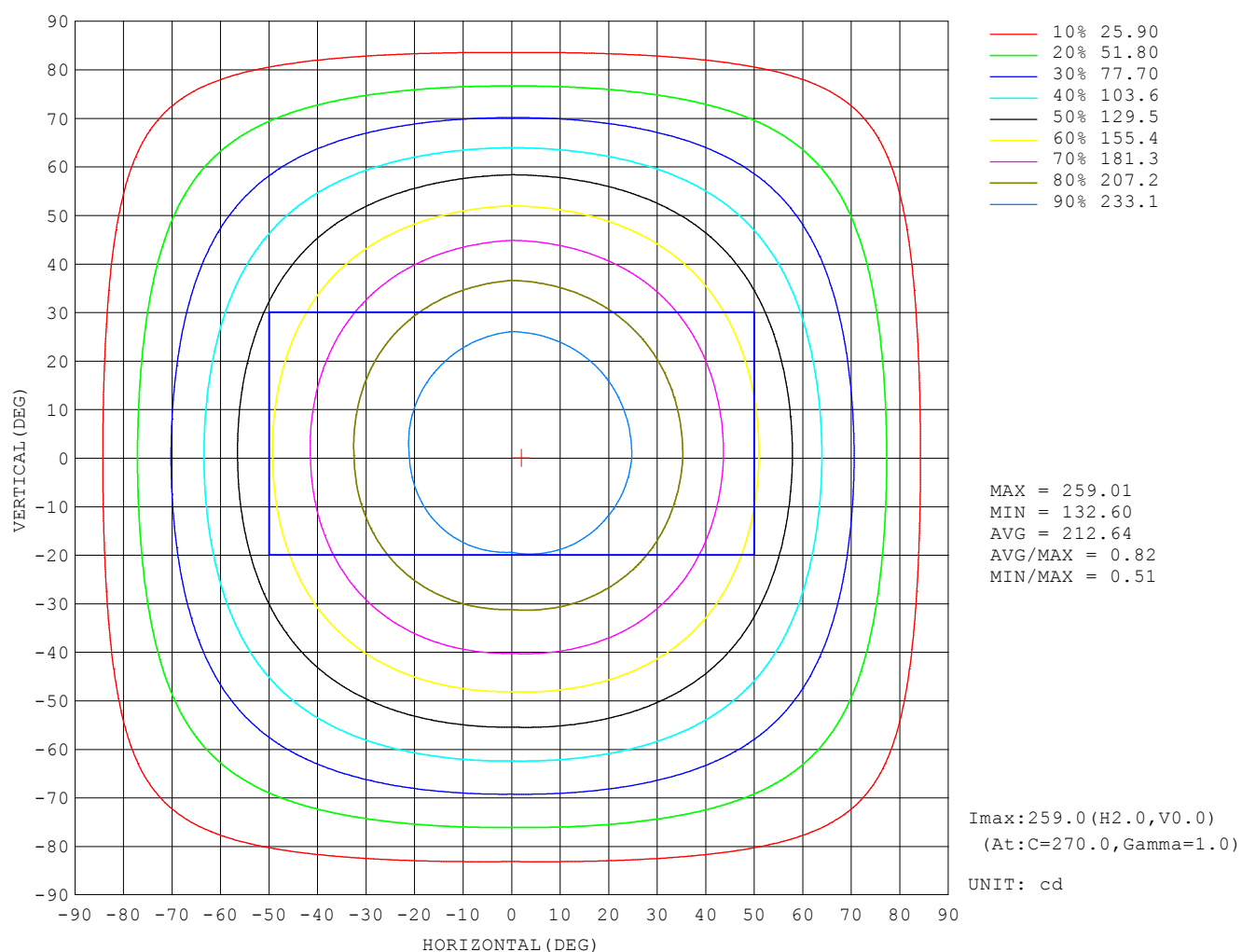
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	55	44	37	55	43	37	53	43	36	30
0.80	65	53	46	64	53	46	62	52	45	38
1.00	74	62	55	72	61	54	70	63	54	46
1.25	81	70	62	79	69	62	76	67	61	53
1.50	86	75	68	84	74	67	80	72	66	58
2.00	93	84	77	91	82	76	87	80	74	65
2.50	97	89	82	94	87	81	90	84	79	69
3.00	100	93	87	98	91	86	93	88	83	73
4.00	104	98	93	102	96	92	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:

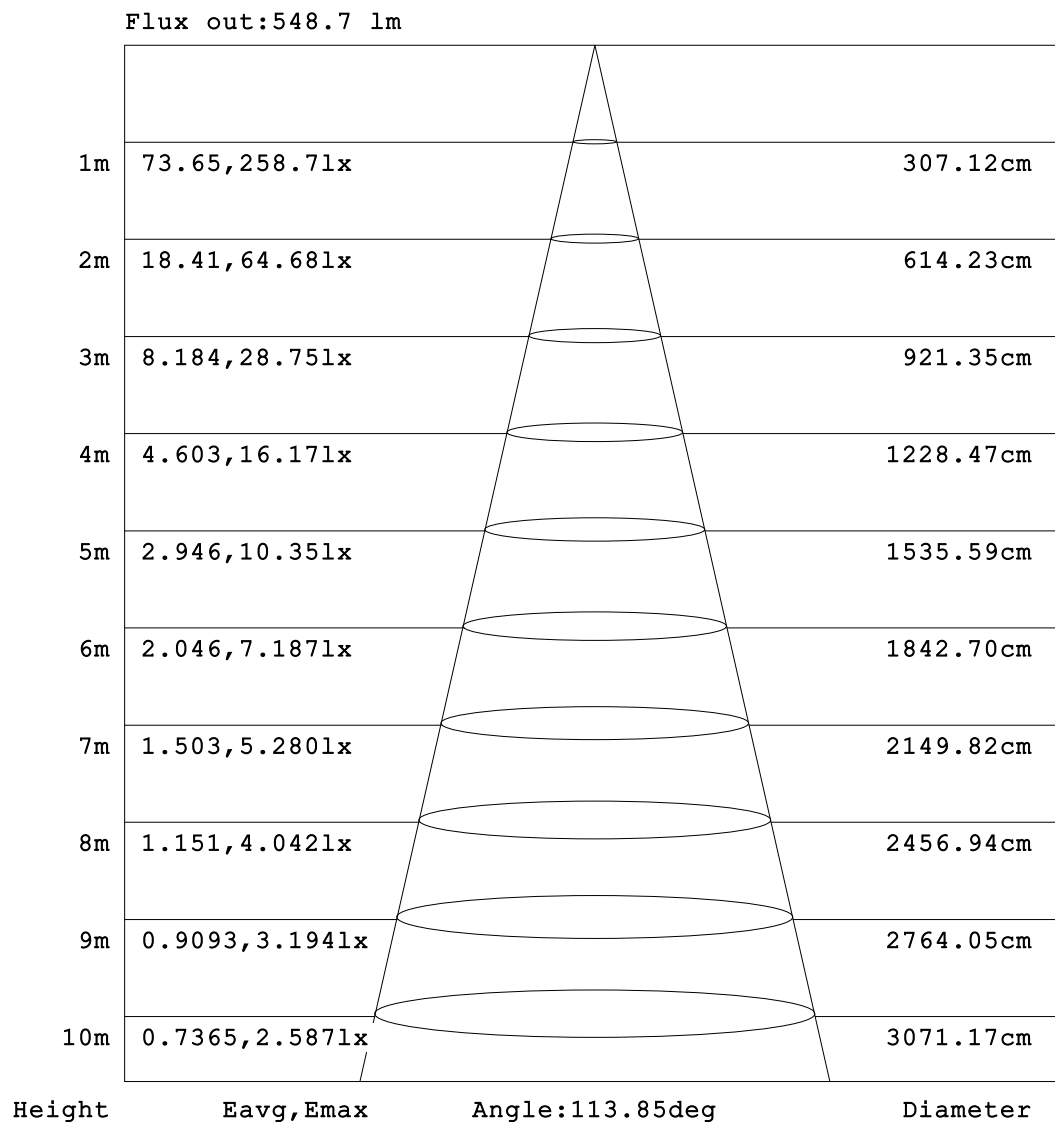
ISOCANDELA DIAGRAM



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

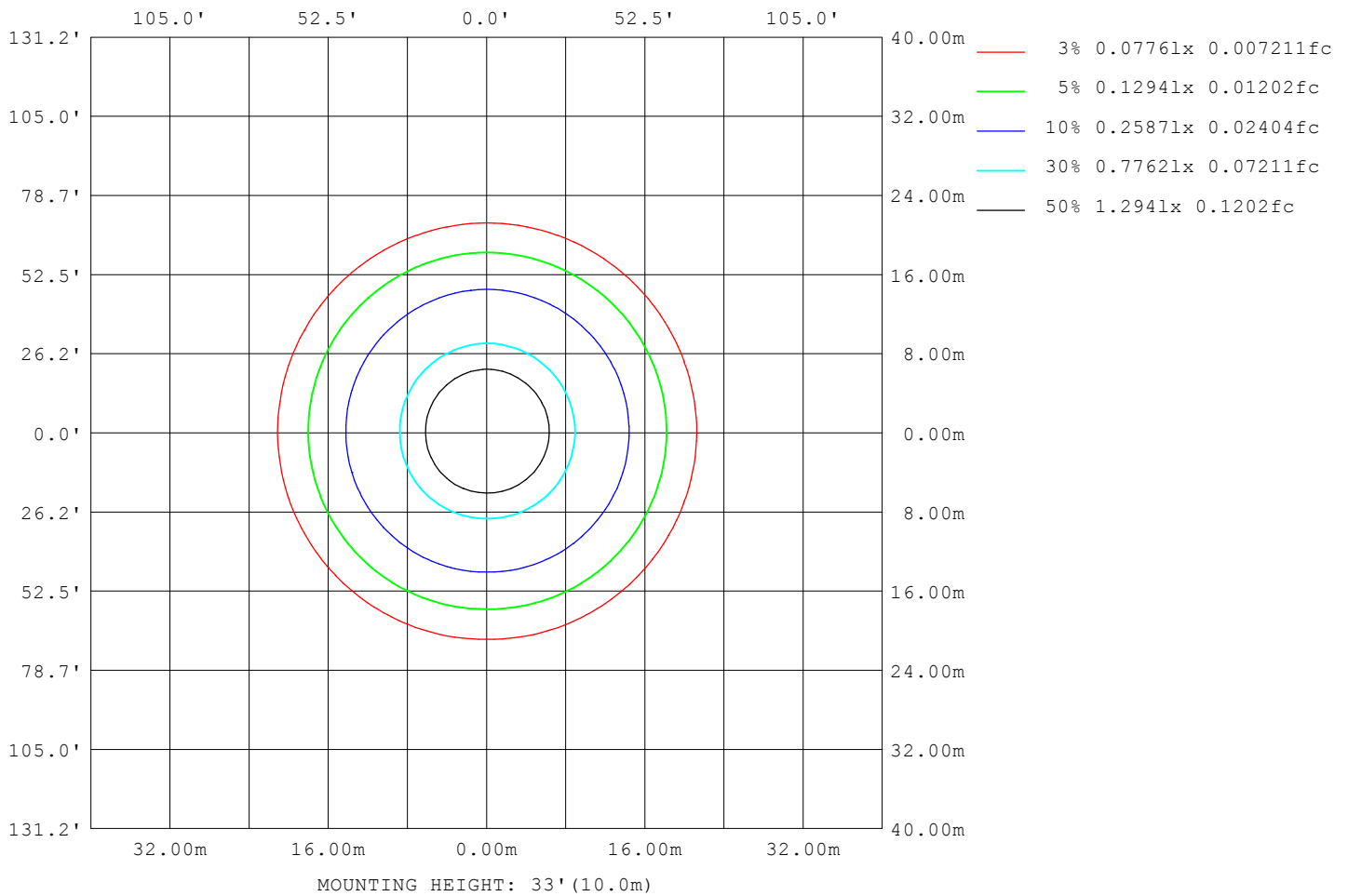


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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:101.50V I:0.1790A P:16.100W PF:0.8830 Freq:50.00Hz Lamp Flux:794.469x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

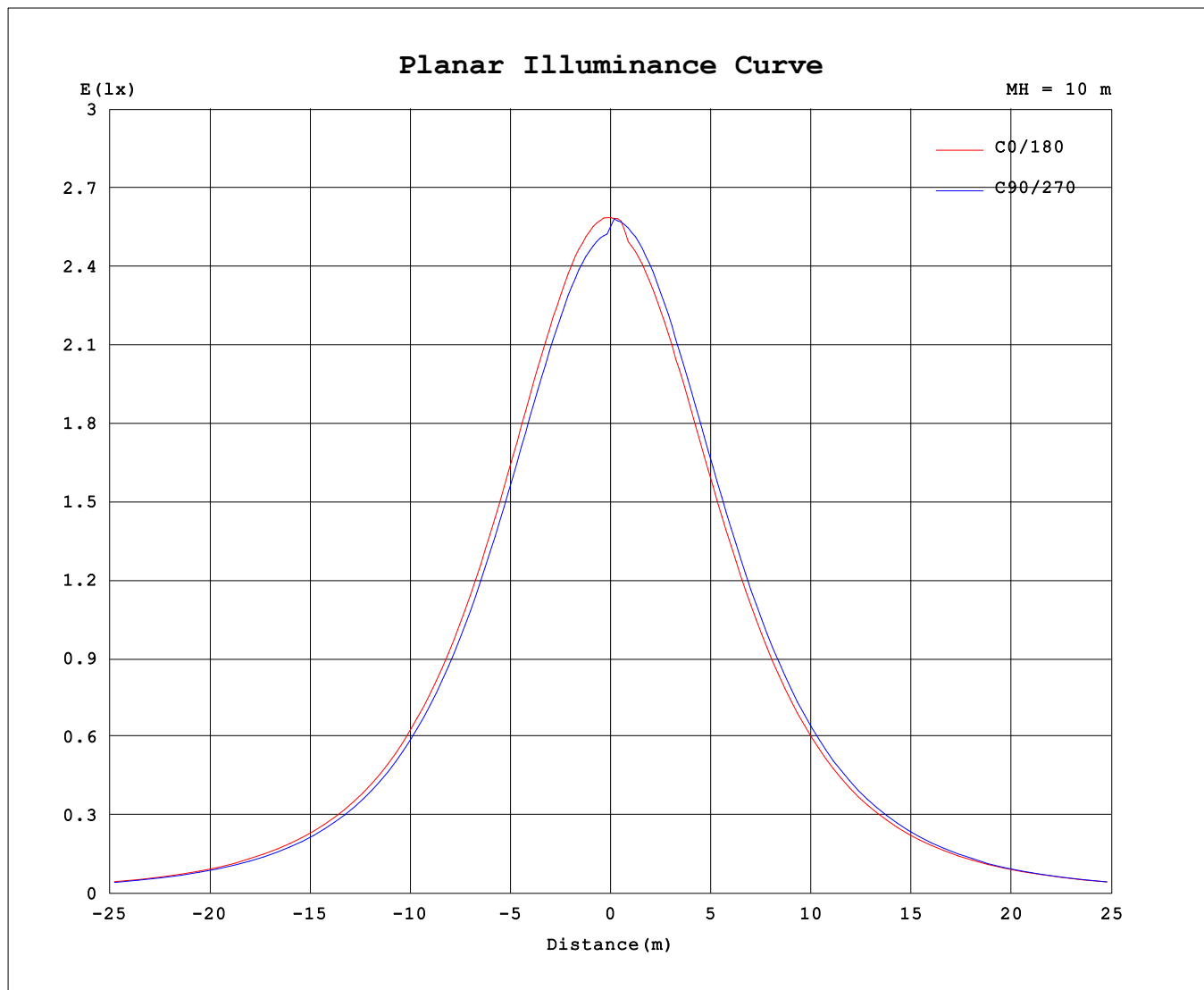
AvgL	cd/m2
L_0~180 (65) av	11579
L_0~180 (75) av	11543
L_0~180 (85) av	13270
L_90~270 (65) av	11480
L_90~270 (75) av	11084
L_90~270 (85) av	11285
L_45 (65) av	11510
L_45 (75) av	11251
L_45 (85) av	12037

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	257	257	257	257															
5	257	252	251	259															
10	254	248	247	257															
15	248	242	241	252															
20	241	234	234	245															
25	231	223	224	237															
30	220	212	212	226															
35	207	198	199	213															
40	192	183	185	198															
45	176	167	169	182															
50	158	150	152	164															
55	140	132	134	144															
60	120	114	116	123															
65	98.9	94.4	96.8	99.6															
70	79.5	75.4	78.0	78.6															
75	60.3	56.4	59.2	58.4															
80	41.4	37.6	40.9	39.4															
85	23.1	19.4	23.2	19.9															
90	8.83	3.52	9.30	2.93															
95	5.54	2.03	6.18	2.13															
100	5.26	2.24	6.16	2.33															
105	5.06	2.62	6.33	2.54															
110	4.93	2.91	6.49	2.79															
115	4.82	3.04	6.55	3.04															
120	4.72	3.27	6.50	3.35															
125	4.64	3.56	6.37	3.64															
130	4.65	3.87	6.27	3.92															
135	4.69	4.26	6.19	4.09															
140	4.73	4.48	6.07	4.24															
145	4.72	4.70	5.97	4.42															
150	4.75	4.92	5.83	4.77															
155	4.84	5.11	5.76	4.95															
160	4.99	5.28	5.43	5.15															
165	5.15	5.41	5.24	5.29															
170	5.22	5.54	5.24	5.42															
175	5.28	5.64	5.20	5.48															
180	5.36	5.67	5.36	5.69															

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: