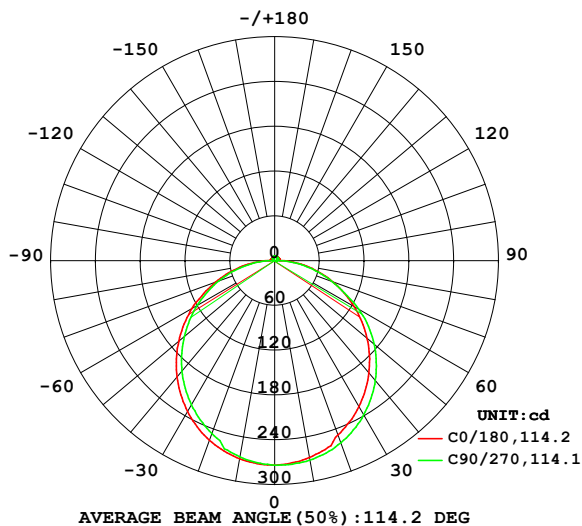


LUMINAIRE PHOTOMETRIC TEST REPORT

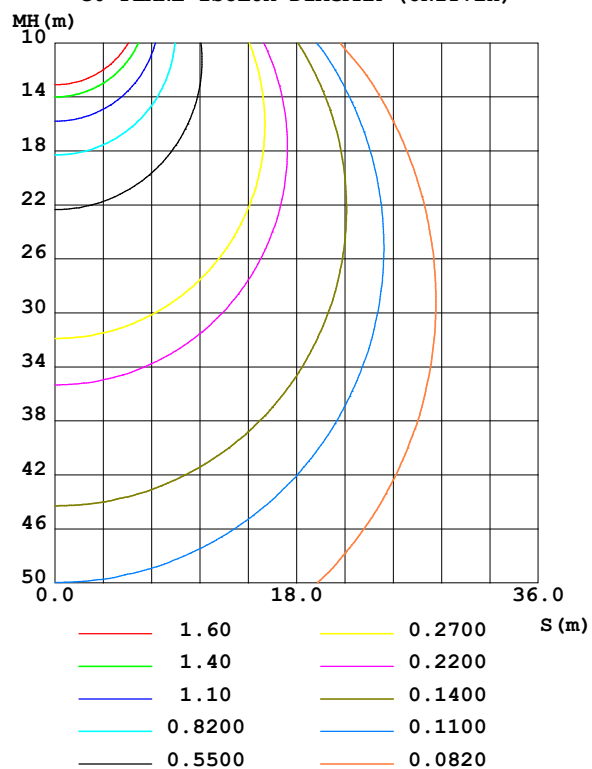
Test:U:101.50V I:0.1810A P:16.200W PF:0.8840 Freq:50.00Hz Lamp Flux:842.972x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 52.04 lm/W
MODEL	80014-60MP	I _{max} (cd)	274.1	S/MH(C0/180)	1.23	
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.29	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	842.97	η UP,DN(C0-180)	1.7,47.7	
NOMINAL FLUX(lm)	842.972	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	269.7	267.0	267.9	271.5					0- 10	25.91	25.91	3.07,3.07
20	256.1	246.5	248.5	259.6					10- 20	74.03	99.94	11.9,11.9
30	233.3	223.1	226.0	238.5					20- 30	111.7	211.7	25.1,25.1
40	203.5	193.4	196.6	209.6					30- 40	135.4	347.1	41.2,41.2
50	167.7	158.2	161.6	174.1					40- 50	141.7	488.8	58,58
60	128.0	119.8	123.0	130.3					50- 60	130.3	619.1	73.4,73.4
70	84.48	79.48	82.78	81.71					60- 70	102.3	721.4	85.6,85.6
80	44.06	39.64	43.88	41.13					70- 80	65.39	786.8	93.3,93.3
90	11.09	3.382	11.34	3.874					80- 90	25.62	812.4	96.4,96.4
100	5.790	2.224	5.900	2.789					90-100	5.134	817.5	97,97
110	5.373	2.705	6.137	3.239					100-110	4.528	822.0	97.5,97.5
120	5.154	3.288	6.145	4.611					110-120	4.530	826.6	98.1,98.1
130	5.026	3.822	5.974	5.150					120-130	4.404	831.0	98.6,98.6
140	5.074	4.616	5.843	5.313					130-140	3.958	834.9	99,99
150	5.158	5.123	5.812	5.591					140-150	3.329	838.3	99.4,99.4
160	5.404	5.600	5.618	5.803					150-160	2.560	840.8	99.7,99.7
170	5.676	5.997	5.364	5.931					160-170	1.603	842.4	99.9,99.9
180	5.509	6.151	5.548	6.160					170-180	0.5477	843.0	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 418.24 lm

%lum = 49.6%

%lamp = 49.6%

Conical surface Flux(130deg): 674.56 lm

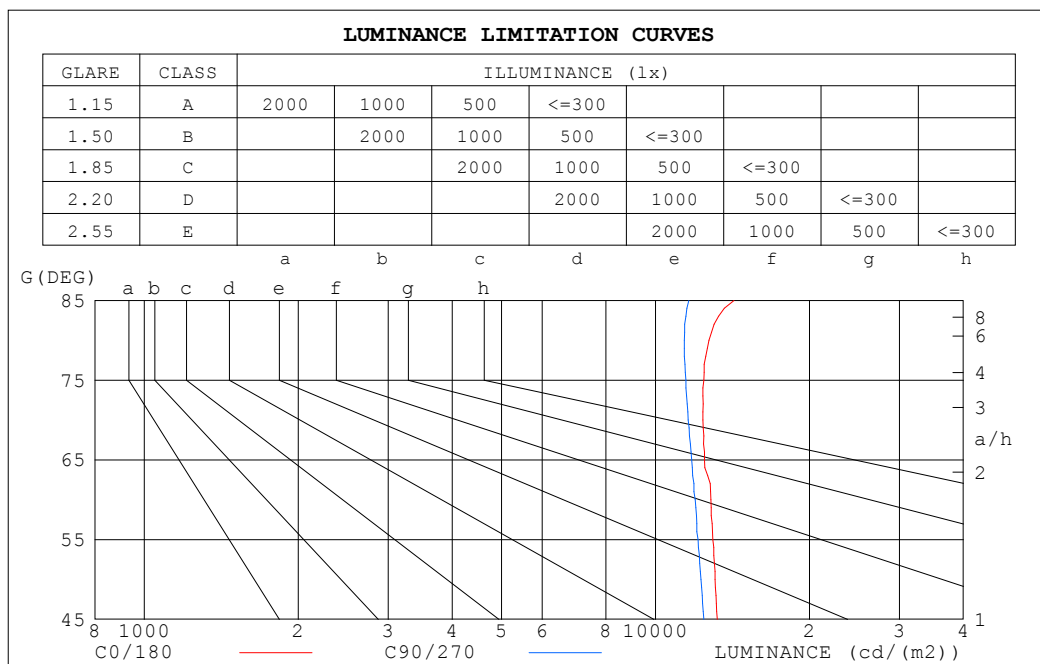
%lum = 80.0%

%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



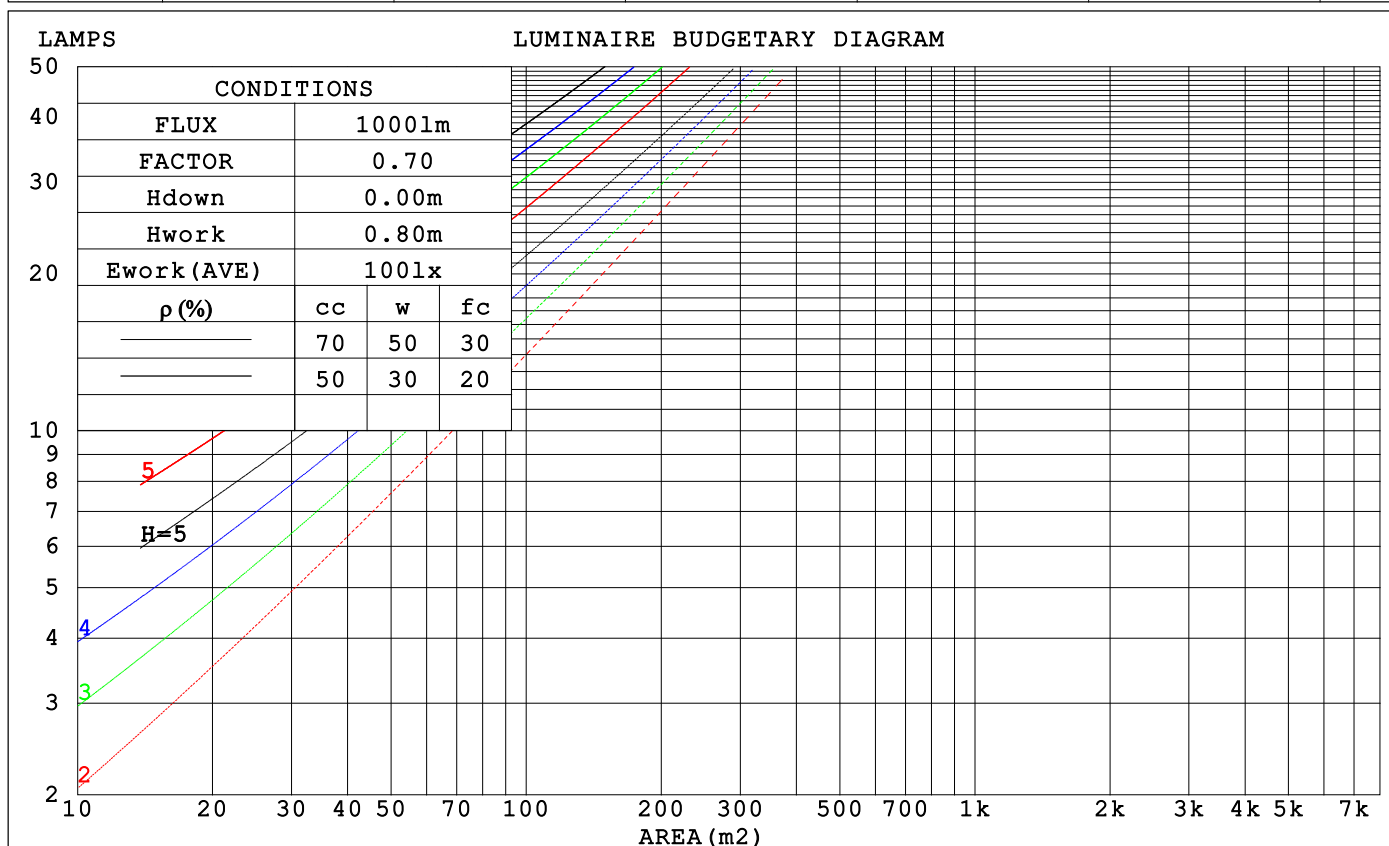
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	14233	11614
80	12719	11384
75	12426	11460
70	12383	11589
65	12470	11761
60	12833	11951
55	12947	12104
50	13079	12271
45	13203	12436

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

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	1.18	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	.93	.99	.95	.92	.95	.91	.88	.90	.87	.85	.86	.84	.82	.79
2.0	.89	.81	.76	.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	.59	.66	.61	.57	.55
4.0	.69	.60	.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	.28	.39	.32	.27	.38	.32	.27	.37	.31	.27	.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℃
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	.327	.186	.059	.318	.182	.058	.303	.174	.056	.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	.257	.140	.042	.246	.135	.041	.236	.131	.040	
4.0	.253	.132	.039	.248	.130	.038	.237	.126	.037	.227	.122	.037	.217	.118	.036	
5.0	.233	.119	.034	.228	.117	.034	.218	.114	.033	.209	.110	.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	.171	.084	.023	.165	.082	.023	.159	.080	.023	.153	.078	.022	
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	.123	.109	.096	.071	.063	.056	.023	.020	.018	
2.0	.202	.160	.125	.173	.138	.108	.118	.095	.075	.068	.055	.044	.022	.018	.014	
3.0	.194	.143	.102	.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	.042	.059	.040	.025	.019	.013	.008	
7.0	.165	.104	.062	.142	.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	.045	.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	21.5	23.0	21.9	23.3	23.6	21.3	22.8	21.6	23.0	23.3
3H	23.2	24.6	23.6	24.9	25.2	22.9	24.3	23.3	24.6	24.9
4H	24.0	25.3	24.3	25.6	25.9	23.7	25.0	24.0	25.3	25.6
6H	24.6	25.9	25.0	26.2	26.6	24.2	25.5	24.6	25.8	26.2
8H	24.9	26.1	25.3	26.4	26.8	24.5	25.7	24.9	26.0	26.4
12H	25.1	26.3	25.5	26.6	27.0	24.7	25.8	25.1	26.2	26.6
4H 2H	22.1	23.5	22.5	23.8	24.1	21.9	23.3	22.3	23.6	23.9
3H	24.0	25.2	24.4	25.5	25.9	23.8	24.9	24.2	25.3	25.7
4H	24.9	26.0	25.4	26.4	26.8	24.7	25.7	25.1	26.1	26.5
6H	25.7	26.7	26.2	27.1	27.5	25.4	26.3	25.9	26.8	27.2
8H	26.1	26.9	26.5	27.4	27.8	25.7	26.6	26.2	27.0	27.5
12H	26.4	27.2	26.8	27.6	28.1	25.9	26.7	26.4	27.2	27.7
8H 4H	25.2	26.1	25.7	26.5	27.0	25.0	25.9	25.5	26.3	26.8
6H	26.2	27.0	26.7	27.4	27.9	25.9	26.7	26.4	27.1	27.6
8H	26.7	27.3	27.2	27.8	28.4	26.4	27.0	26.9	27.5	28.0
12H	27.1	27.7	27.6	28.2	28.7	26.7	27.3	27.2	27.8	28.3
12H 4H	25.3	26.1	25.8	26.5	27.0	25.0	25.8	25.5	26.3	26.8
6H	26.3	27.0	26.8	27.5	28.0	26.0	26.7	26.6	27.2	27.7
8H	26.8	27.4	27.4	27.9	28.5	26.5	27.1	27.1	27.6	28.1
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, 843.0 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -0.6$)
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:

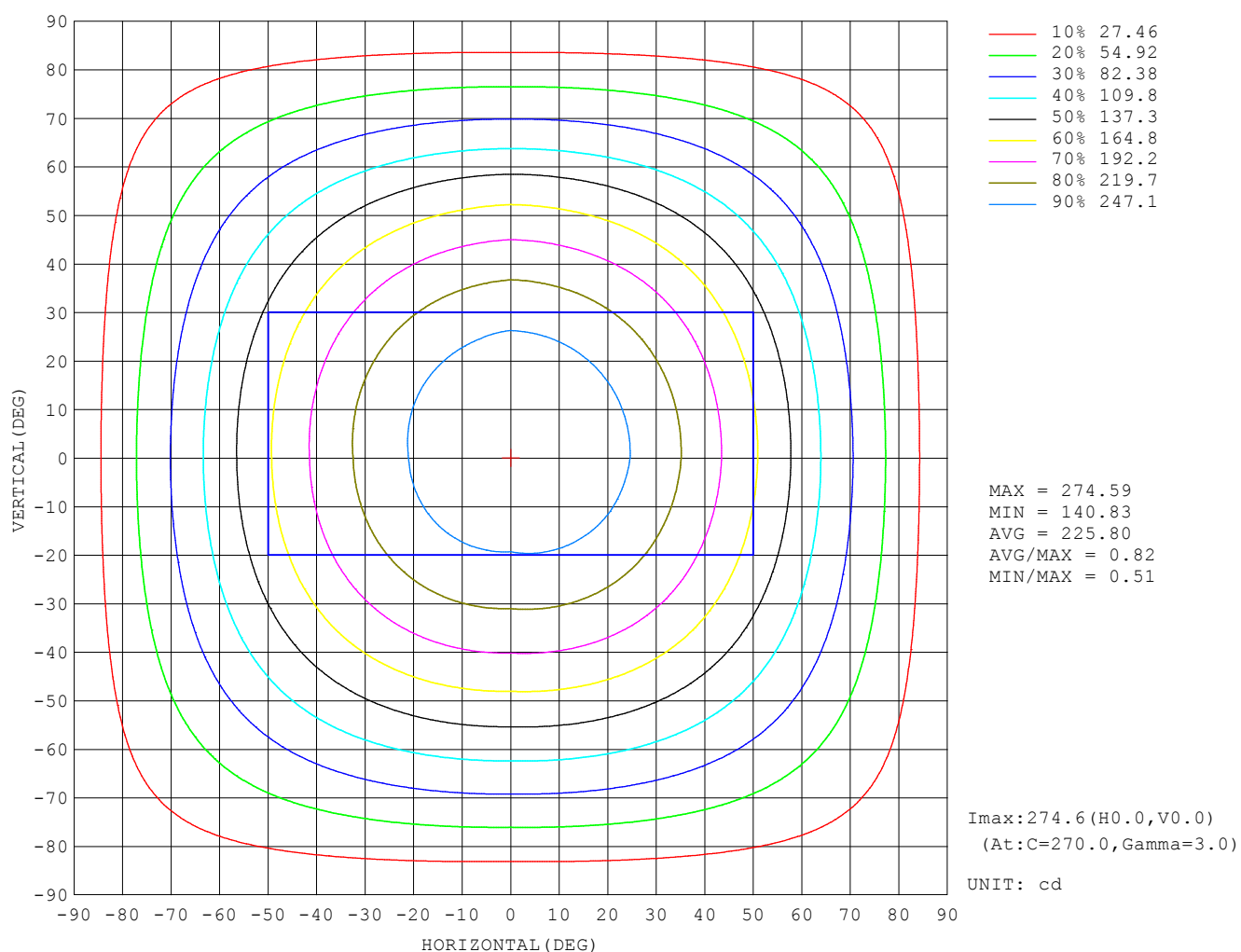
UTILIZATION FACTORS TABLE

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	88	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:

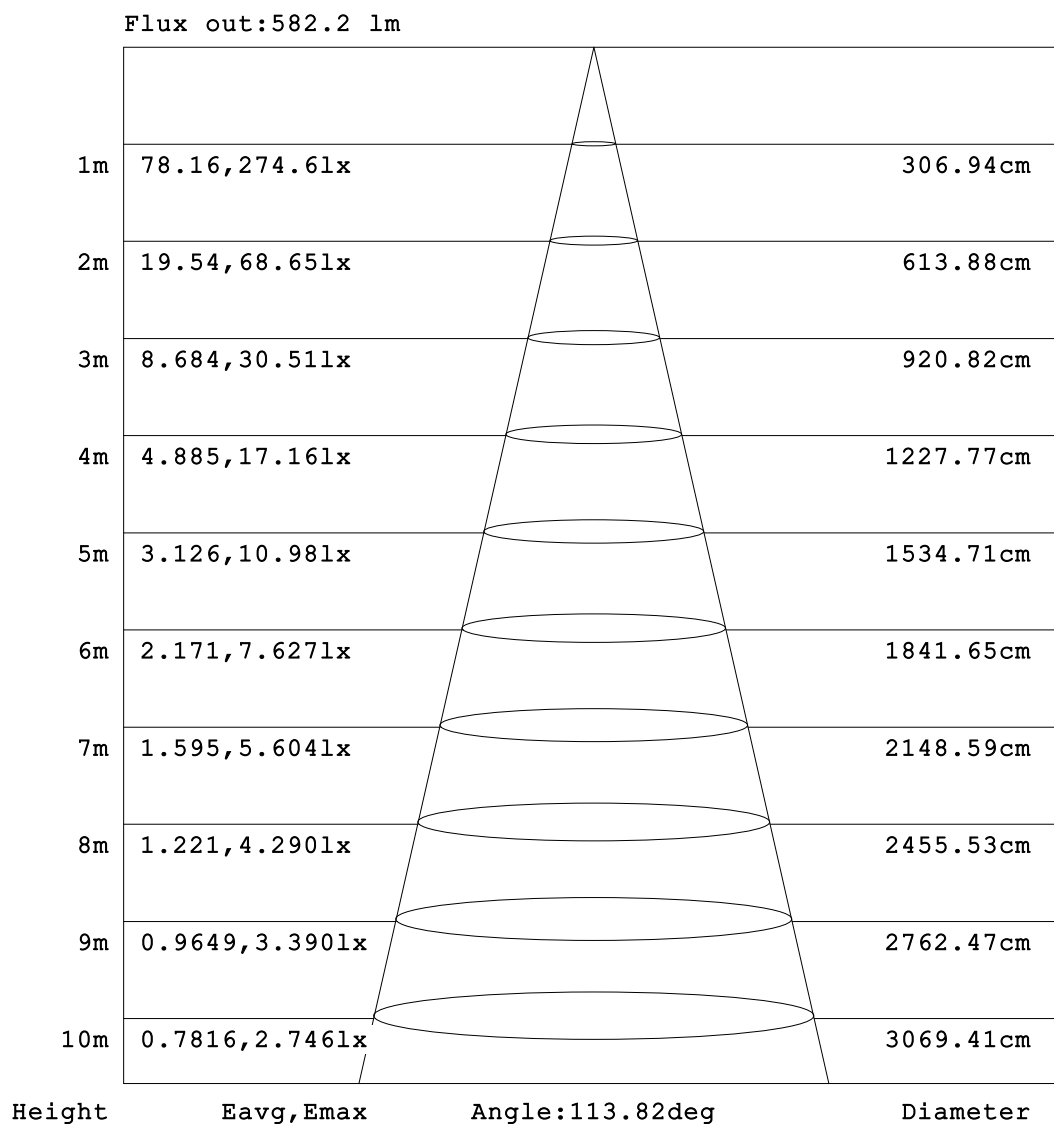
ISOCANDELA DIAGRAM



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

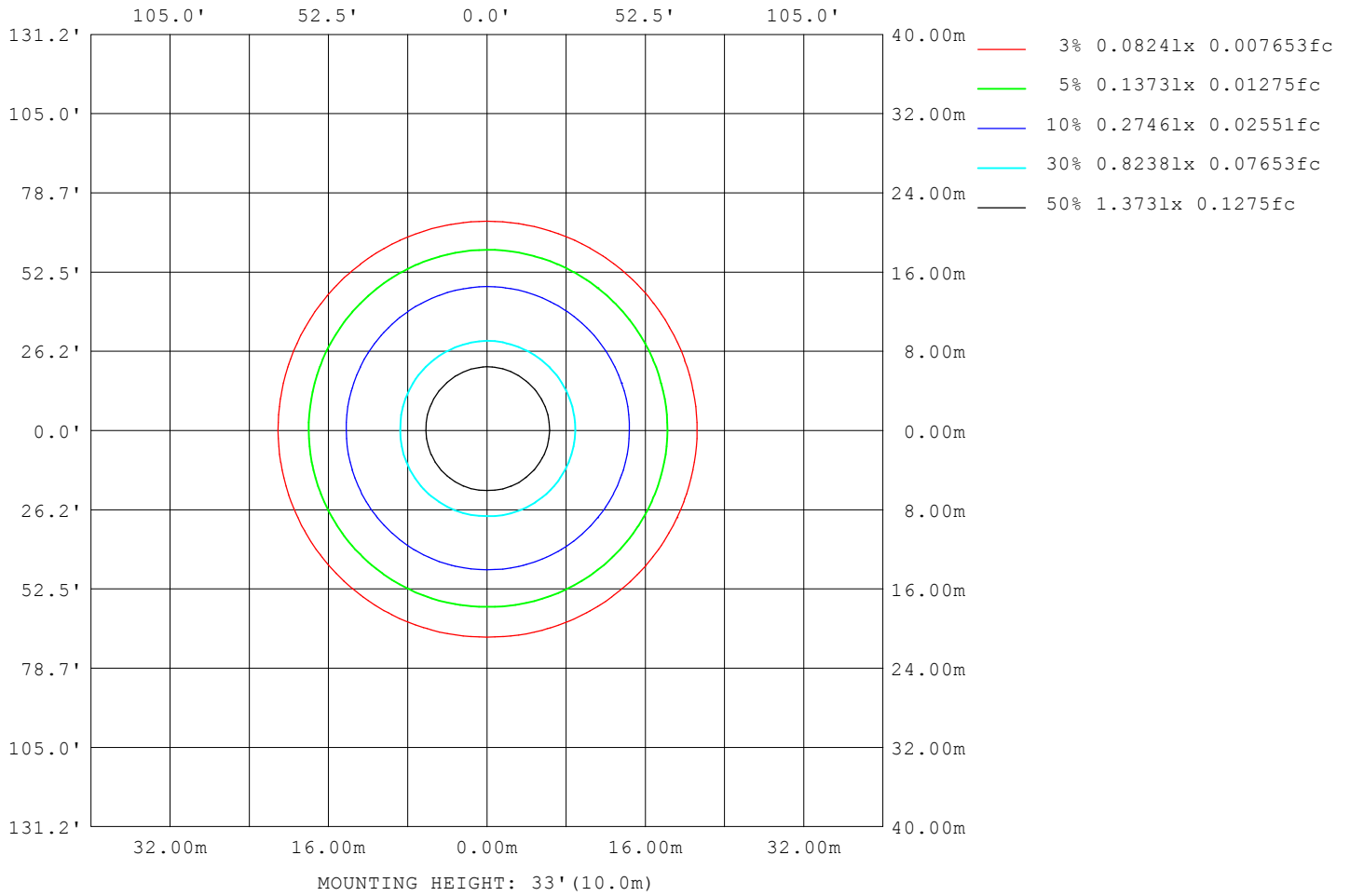


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1810A P:16.200W PF:0.8840 Freq:50.00Hz Lamp Flux:842.972x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

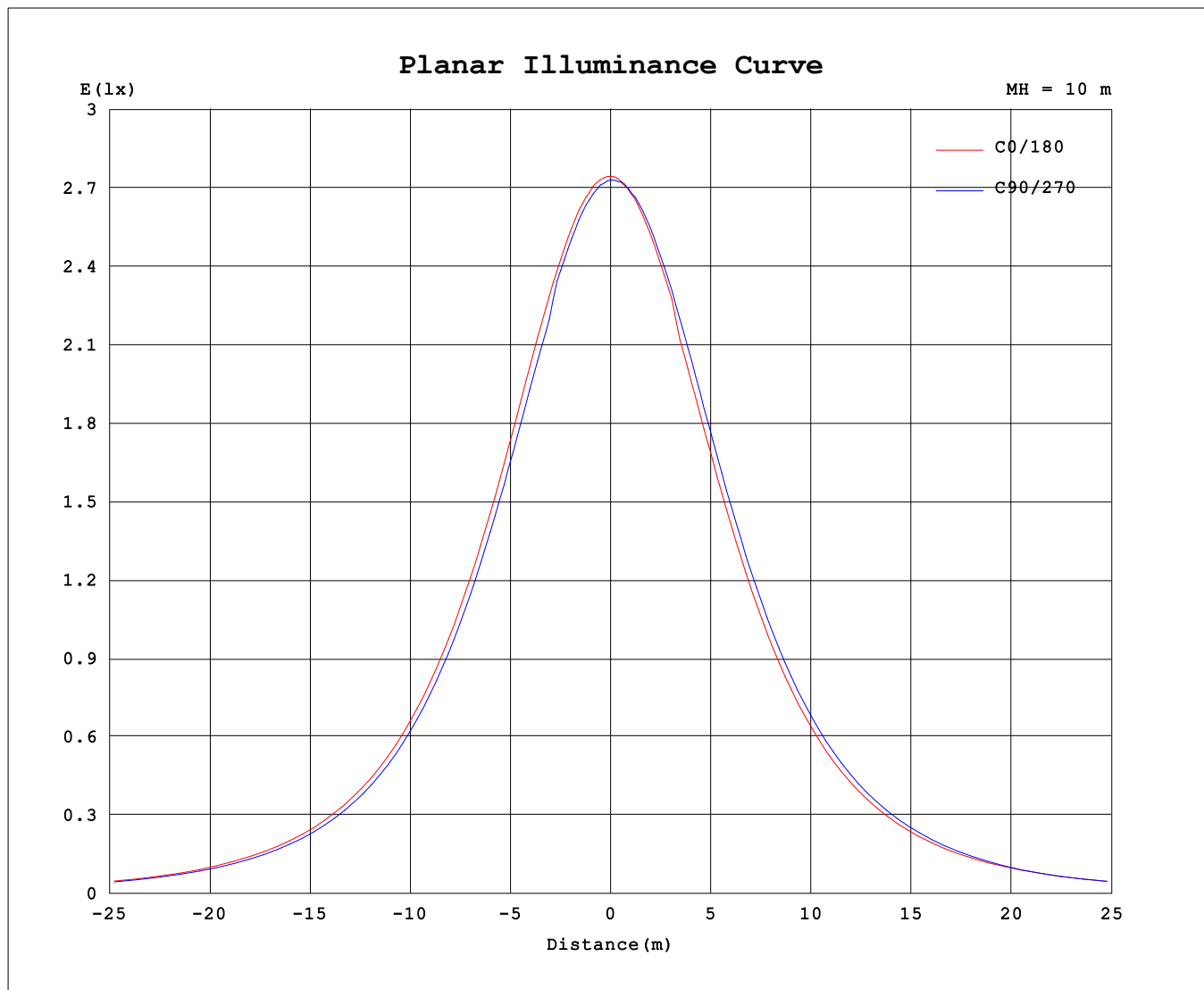
AvgL	cd/m2
L_0~180 (65) av	12303
L_0~180 (75) av	12290
L_0~180 (85) av	14401
L_90~270 (65) av	12038
L_90~270 (75) av	11633
L_90~270 (85) av	11918
L_45 (65) av	12129
L_45 (75) av	11874
L_45 (85) av	12865

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	274	274	274	274															
5	273	272	272	274															
10	270	267	268	271															
15	264	261	262	267															
20	256	247	249	260															
25	246	236	238	250															
30	233	223	226	238															
35	219	209	212	225															
40	204	193	197	210															
45	186	176	180	193															
50	168	158	162	174															
55	148	139	143	153															
60	128	120	123	130															
65	105	99.7	103	104															
70	84.5	79.5	82.8	81.7															
75	64.2	59.5	63.1	61.0															
80	44.1	39.6	43.9	41.1															
85	24.7	20.3	25.5	21.3															
90	11.1	3.38	11.3	3.87															
95	6.32	2.02	6.04	2.55															
100	5.79	2.22	5.90	2.79															
105	5.53	2.55	6.01	3.08															
110	5.37	2.71	6.14	3.24															
115	5.26	2.93	6.19	3.80															
120	5.15	3.29	6.15	4.61															
125	5.07	3.57	6.05	4.96															
130	5.03	3.82	5.97	5.15															
135	5.07	4.30	5.92	5.24															
140	5.07	4.62	5.84	5.31															
145	5.08	4.86	5.81	5.44															
150	5.16	5.12	5.81	5.59															
155	5.29	5.36	5.84	5.71															
160	5.40	5.60	5.62	5.80															
165	5.56	5.77	5.37	5.89															
170	5.68	6.00	5.36	5.93															
175	5.46	6.12	5.35	5.96															
180	5.51	6.15	5.55	6.16															

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: