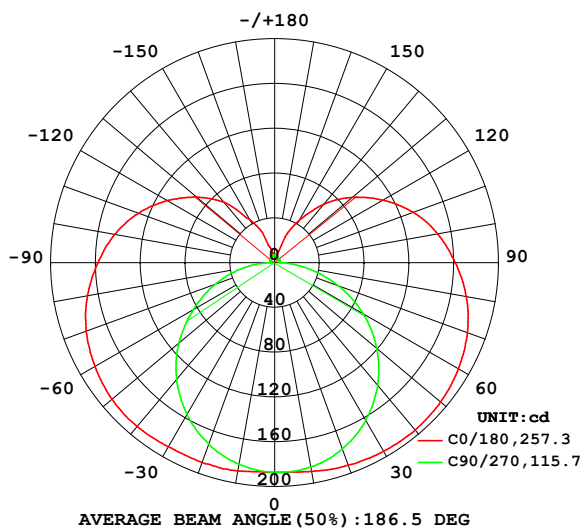


LUMINAIRE PHOTOMETRIC TEST REPORT

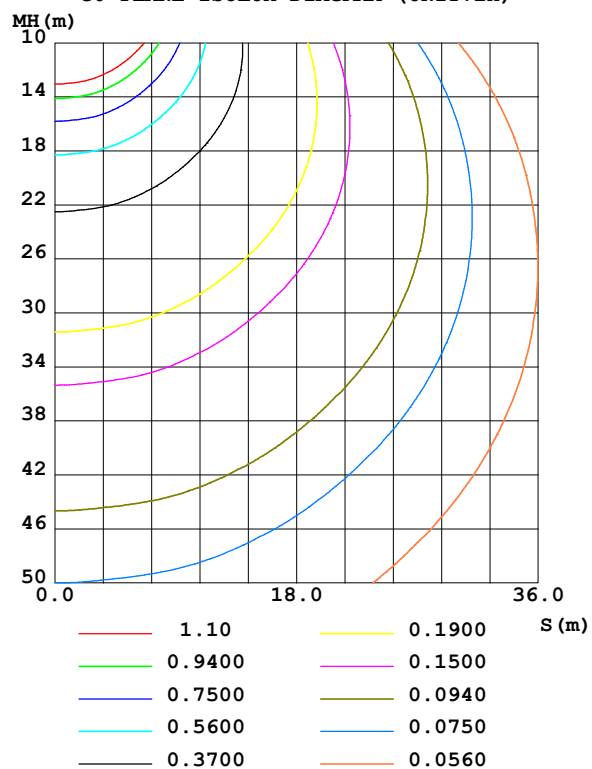
Test:U:101.40V I:0.1800A P:16.200W PF:0.8840 Freq:50.00Hz Lamp Flux:1195.6x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 73.80 lm/W			
MODEL	80030-60P	I _{max} (cd)	195.2	S/MH(C0/180)	1.59
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	1195.6	η UP,DN(C0-180)	14.1,35.4
NOMINAL FLUX(lm)	1195.6	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	14.1,36.5
LAMPS INSIDE	1	η up (%)	28.1	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	100	η down (%)	71.9	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℃
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	188.9	183.0	189.4	185.4					0- 10	17.84	17.84	1.49,1.49
20	189.8	172.4	192.4	177.0					10- 20	52.43	70.27	5.88,5.88
30	189.8	156.6	194.5	162.8					20- 30	83.08	153.4	12.8,12.8
40	191.0	136.2	195.2	143.2					30- 40	107.6	260.9	21.8,21.8
50	189.6	111.6	193.5	119.1					40- 50	124.0	384.9	32.2,32.2
60	185.3	83.75	189.4	91.38					50- 60	130.6	515.5	43.1,43.1
70	179.1	56.44	183.1	60.48					60- 70	127.8	643.2	53.8,53.8
80	169.8	28.87	173.8	29.71					70- 80	116.6	759.8	63.6,63.6
90	157.8	4.469	161.3	6.951					80- 90	99.36	859.2	71.9,71.9
100	145.2	3.857	148.1	4.024					90-100	85.88	945.1	79,79
110	129.2	4.561	131.8	4.112					100-110	75.72	1021	85.4,85.4
120	110.9	5.120	111.8	4.446					110-120	62.47	1083	90.6,90.6
130	91.12	5.450	90.76	4.697					120-130	47.71	1131	94.6,94.6
140	70.54	5.965	68.06	4.878					130-140	33.26	1164	97.4,97.4
150	44.41	6.304	43.13	5.164					140-150	19.47	1184	99,99
160	17.02	6.533	11.78	5.498					150-160	9.010	1193	99.8,99.8
170	7.825	6.661	4.893	5.855					160-170	2.316	1195	100,100
180	5.307	6.564	5.315	6.678					170-180	0.5828	1196	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 321.44 lm

%lum = 26.9%

%lamp = 26.9%

Conical surface Flux(130deg): 580.26 lm

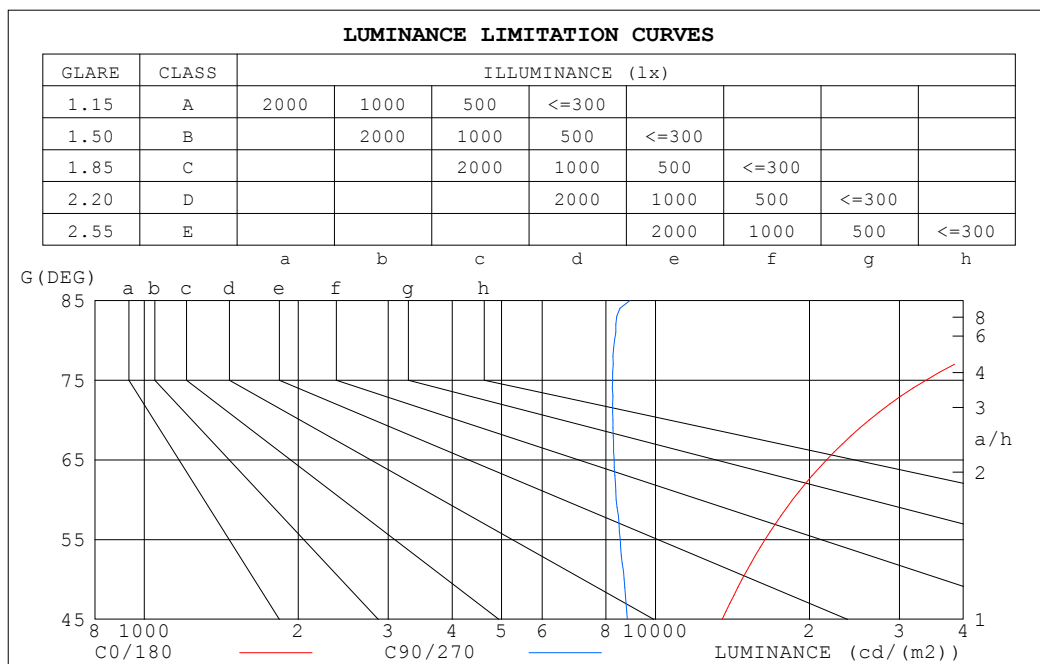
%lum = 48.5%

%lamp = 48.5%

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



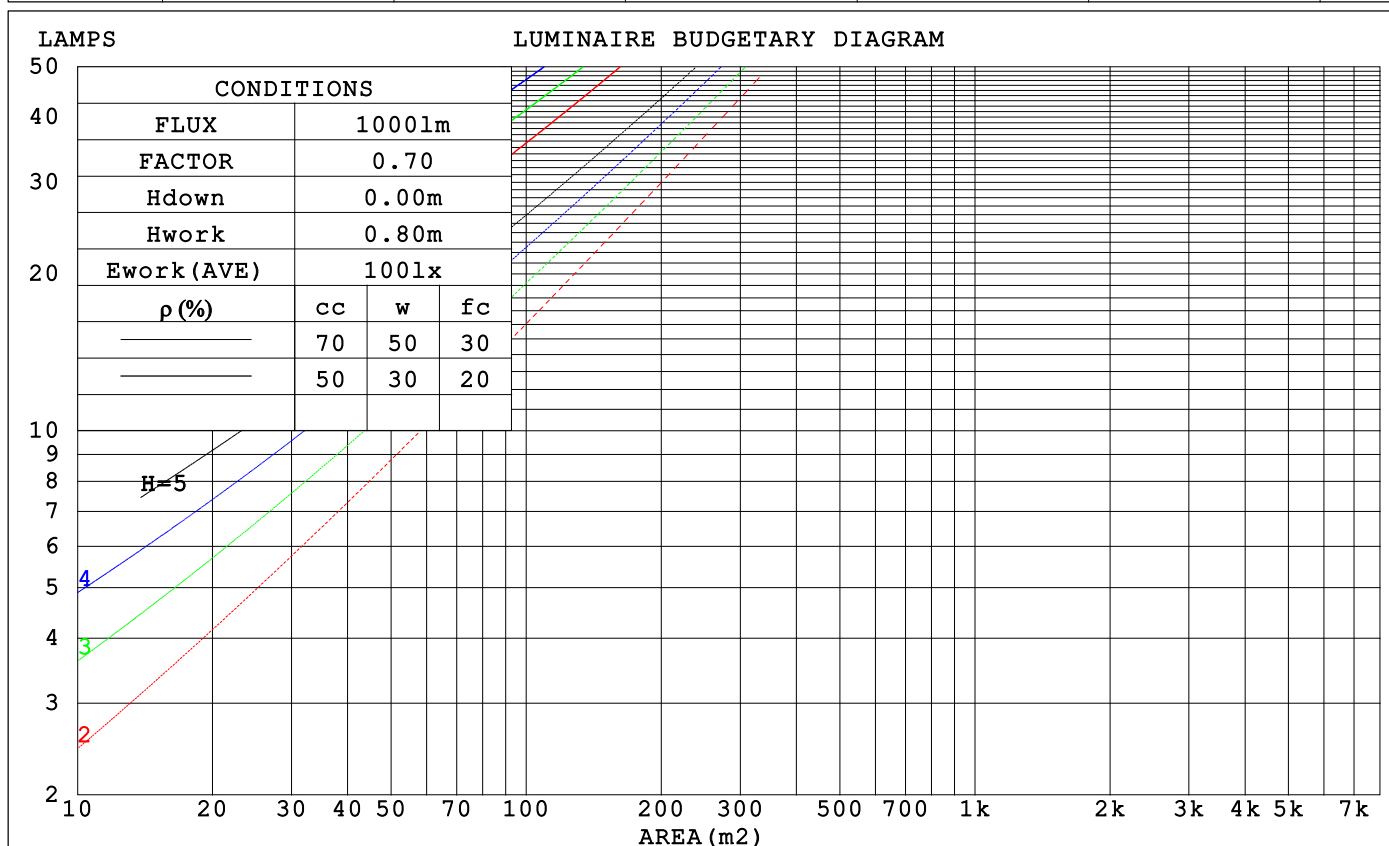
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	94042	8906
80	48905	8310
75	33796	8246
70	26195	8249
65	21598	8298
60	18539	8373
55	16383	8527
50	14753	8682
45	13499	8804

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
p _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
p _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.12	1.12	1.12	1.06	1.06	1.06	.95	.95	.95	.85	.85	.85	.76	.76	.76	.72
1.0	.93	.87	.82	.87	.83	.78	.78	.74	.70	.69	.66	.63	.61	.59	.57	.52
2.0	.79	.71	.64	.74	.67	.61	.66	.60	.55	.59	.54	.50	.52	.48	.45	.41
3.0	.68	.59	.52	.64	.56	.49	.57	.50	.45	.51	.45	.40	.44	.40	.36	.33
4.0	.59	.50	.43	.56	.47	.41	.50	.43	.37	.44	.38	.34	.39	.34	.30	.27
5.0	.53	.43	.36	.50	.41	.34	.44	.37	.31	.39	.33	.29	.35	.30	.26	.23
6.0	.47	.38	.31	.44	.36	.30	.40	.32	.27	.35	.29	.25	.31	.26	.22	.20
7.0	.42	.33	.27	.40	.32	.26	.36	.29	.24	.32	.26	.22	.28	.23	.19	.17
8.0	.38	.29	.23	.36	.28	.23	.33	.26	.21	.29	.23	.19	.26	.21	.17	.15
9.0	.35	.26	.21	.33	.25	.20	.30	.23	.18	.27	.21	.17	.24	.19	.15	.13
10.0	.32	.24	.19	.30	.23	.18	.28	.21	.17	.25	.19	.15	.22	.17	.14	.12



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	.398	.226	.072	.382	.218	.069	.352	.202	.065	.325	.187	.060	.300	.174	.056	
2.0	.340	.186	.057	.325	.179	.055	.298	.166	.052	.274	.153	.048	.251	.142	.045	
3.0	.300	.159	.048	.287	.153	.046	.262	.142	.043	.239	.131	.040	.218	.121	.037	
4.0	.268	.139	.041	.257	.134	.040	.234	.124	.037	.214	.115	.035	.194	.106	.032	
5.0	.243	.124	.036	.232	.119	.035	.212	.110	.032	.193	.102	.030	.175	.094	.028	
6.0	.222	.111	.032	.212	.107	.031	.194	.099	.029	.176	.092	.027	.160	.084	.025	
7.0	.205	.101	.029	.196	.097	.028	.178	.090	.026	.162	.083	.024	.147	.076	.022	
8.0	.189	.093	.026	.181	.089	.025	.165	.083	.024	.150	.076	.022	.136	.070	.020	
9.0	.176	.085	.024	.169	.082	.023	.154	.076	.022	.140	.070	.020	.127	.065	.019	
10.0	.165	.079	.022	.158	.076	.021	.144	.071	.020	.131	.065	.019	.119	.060	.017	

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	.405	.405	.405	.346	.346	.346	.236	.236	.236	.136	.136	.136	.043	.043	.043	
1.0	.403	.372	.344	.344	.319	.296	.236	.219	.204	.136	.127	.119	.043	.041	.038	
2.0	.396	.349	.310	.339	.301	.268	.233	.208	.187	.134	.121	.110	.043	.039	.036	
3.0	.389	.333	.289	.333	.288	.250	.229	.200	.176	.132	.117	.104	.042	.038	.034	
4.0	.381	.321	.275	.327	.278	.239	.225	.193	.168	.130	.113	.100	.042	.037	.033	
5.0	.374	.312	.266	.321	.270	.231	.221	.188	.163	.128	.111	.097	.041	.036	.032	
6.0	.366	.304	.259	.315	.263	.226	.217	.184	.160	.126	.108	.095	.041	.035	.031	
7.0	.359	.297	.254	.309	.258	.221	.214	.181	.157	.124	.107	.093	.040	.035	.031	
8.0	.353	.292	.250	.304	.253	.218	.210	.178	.155	.122	.105	.092	.040	.034	.031	
9.0	.346	.287	.247	.298	.249	.216	.207	.175	.153	.120	.104	.091	.039	.034	.030	
10.0	.341	.283	.245	.294	.246	.214	.204	.173	.152	.119	.102	.091	.039	.034	.030	

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	21.2	22.5	21.9	23.2	23.9	18.4	19.7	19.0	20.3	21.1
3H	24.4	25.5	25.0	26.2	27.0	20.1	21.3	20.8	22.0	22.8
4H	26.1	27.3	26.8	27.9	28.8	20.9	22.0	21.6	22.7	23.5
6H	28.1	29.2	28.8	29.9	30.7	21.5	22.6	22.2	23.3	24.1
8H	29.2	30.2	29.9	31.0	31.8	21.8	22.8	22.5	23.5	24.4
12H	30.5	31.5	31.2	32.2	33.1	22.0	22.9	22.7	23.7	24.5
4H 2H	21.7	22.8	22.4	23.5	24.4	19.7	20.8	20.4	21.5	22.4
3H	25.0	26.0	25.8	26.8	27.6	21.7	22.7	22.5	23.4	24.3
4H	27.0	27.9	27.7	28.6	29.5	22.7	23.6	23.5	24.4	25.3
6H	29.2	30.0	29.9	30.8	31.7	23.6	24.4	24.3	25.2	26.1
8H	30.4	31.2	31.2	32.0	32.9	23.9	24.7	24.7	25.5	26.4
12H	31.8	32.5	32.6	33.3	34.3	24.2	24.9	25.0	25.7	26.7
8H 4H	27.3	28.0	28.1	28.8	29.8	24.0	24.7	24.7	25.5	26.4
6H	29.7	30.4	30.5	31.2	32.2	25.2	25.9	26.0	26.7	27.6
8H	31.2	31.7	32.0	32.6	33.6	25.8	26.4	26.6	27.2	28.2
12H	32.8	33.3	33.7	34.2	35.2	26.3	26.8	27.1	27.6	28.7
12H 4H	27.3	28.0	28.1	28.8	29.7	24.4	25.1	25.2	25.9	26.8
6H	29.8	30.4	30.6	31.2	32.2	25.9	26.4	26.7	27.3	28.3
8H	31.4	31.9	32.2	32.7	33.7	26.6	27.1	27.5	28.0	29.0
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, 1196 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:

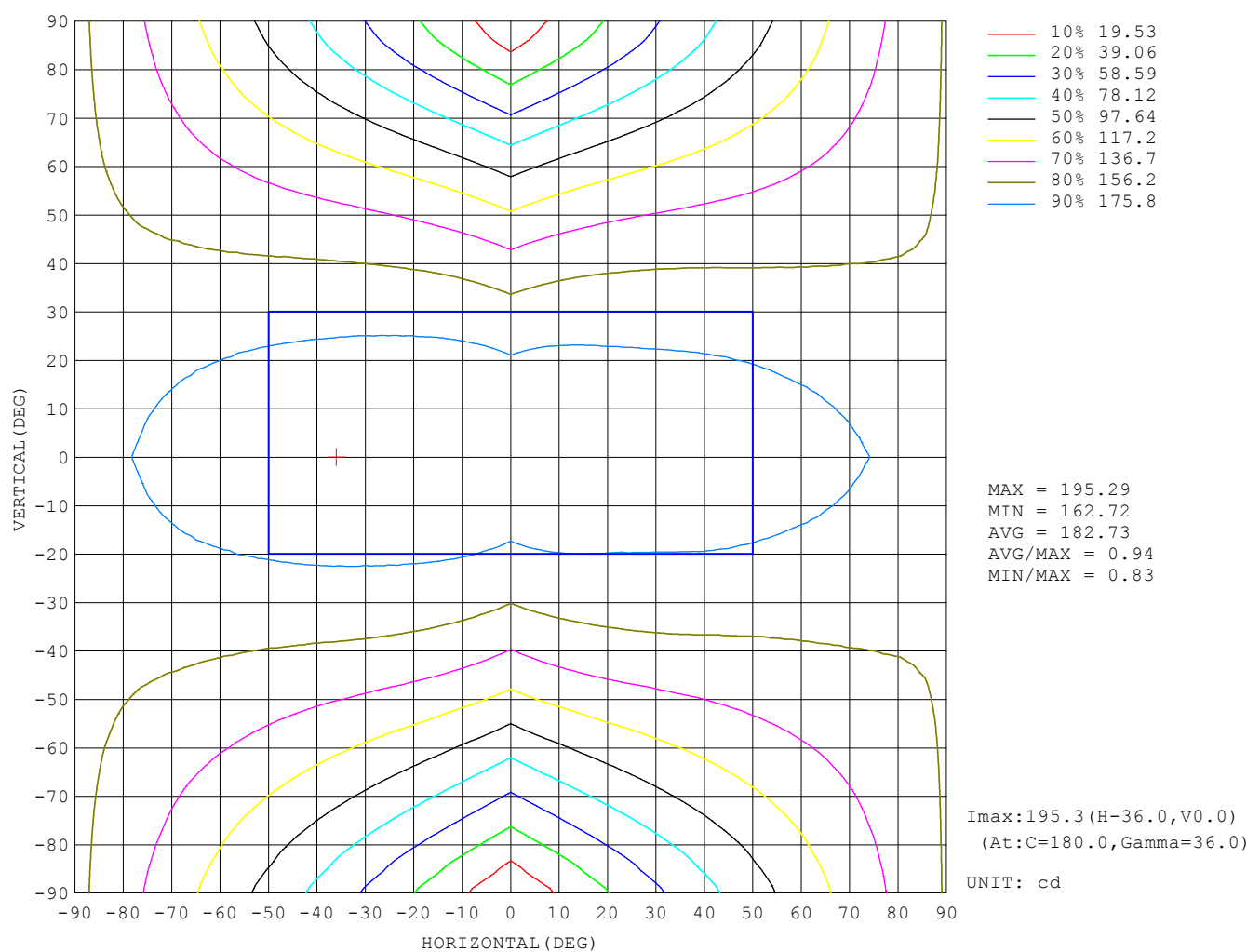
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	43	31	24	42	30	23	40	29	23	16
0.80	52	39	31	50	38	30	47	36	29	21
1.00	60	46	38	58	45	37	53	45	35	26
1.25	67	54	45	64	52	43	59	49	41	30
1.50	72	59	50	69	57	49	63	53	46	34
2.00	80	68	59	76	65	57	69	60	53	40
2.50	84	73	65	80	70	63	72	64	58	43
3.00	88	78	70	84	75	68	76	68	62	46
4.00	93	85	77	88	81	74	79	73	68	51
5.00	96	89	82	91	85	79	82	77	72	54
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:

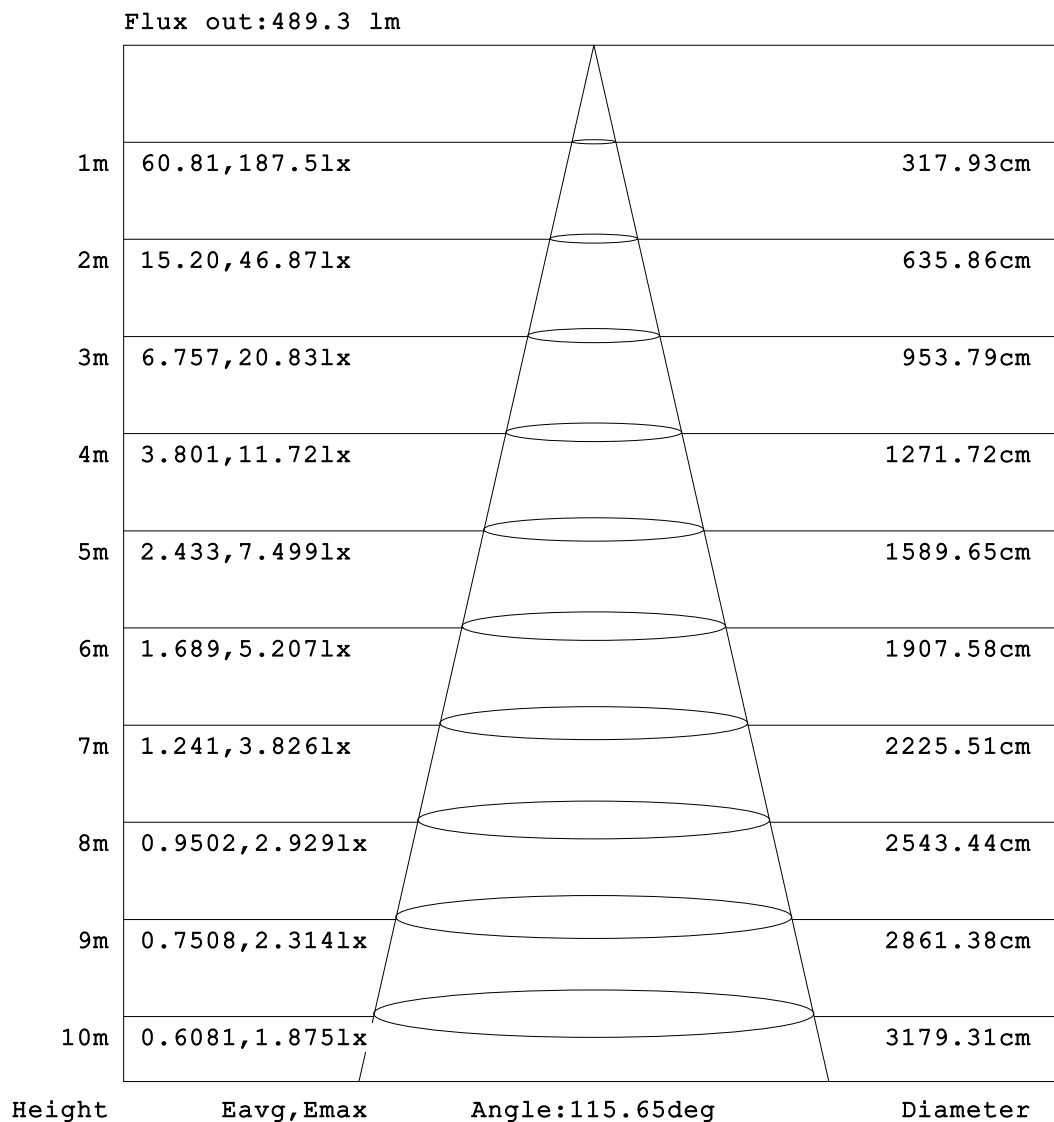
ISOCANDELA DIAGRAM



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

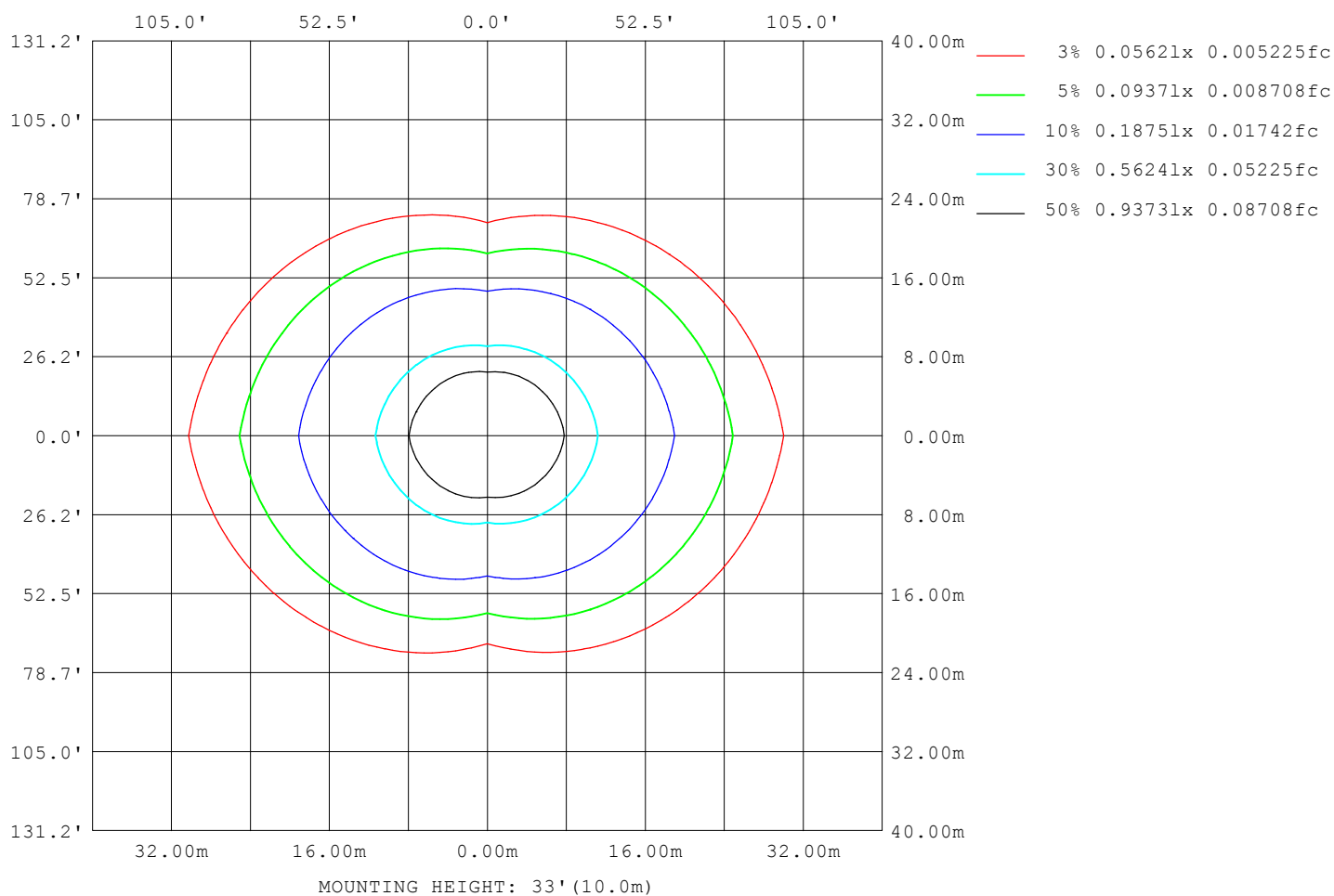


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:101.40V I:0.1800A P:16.200W PF:0.8840 Freq:50.00Hz Lamp Flux:1195.6x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

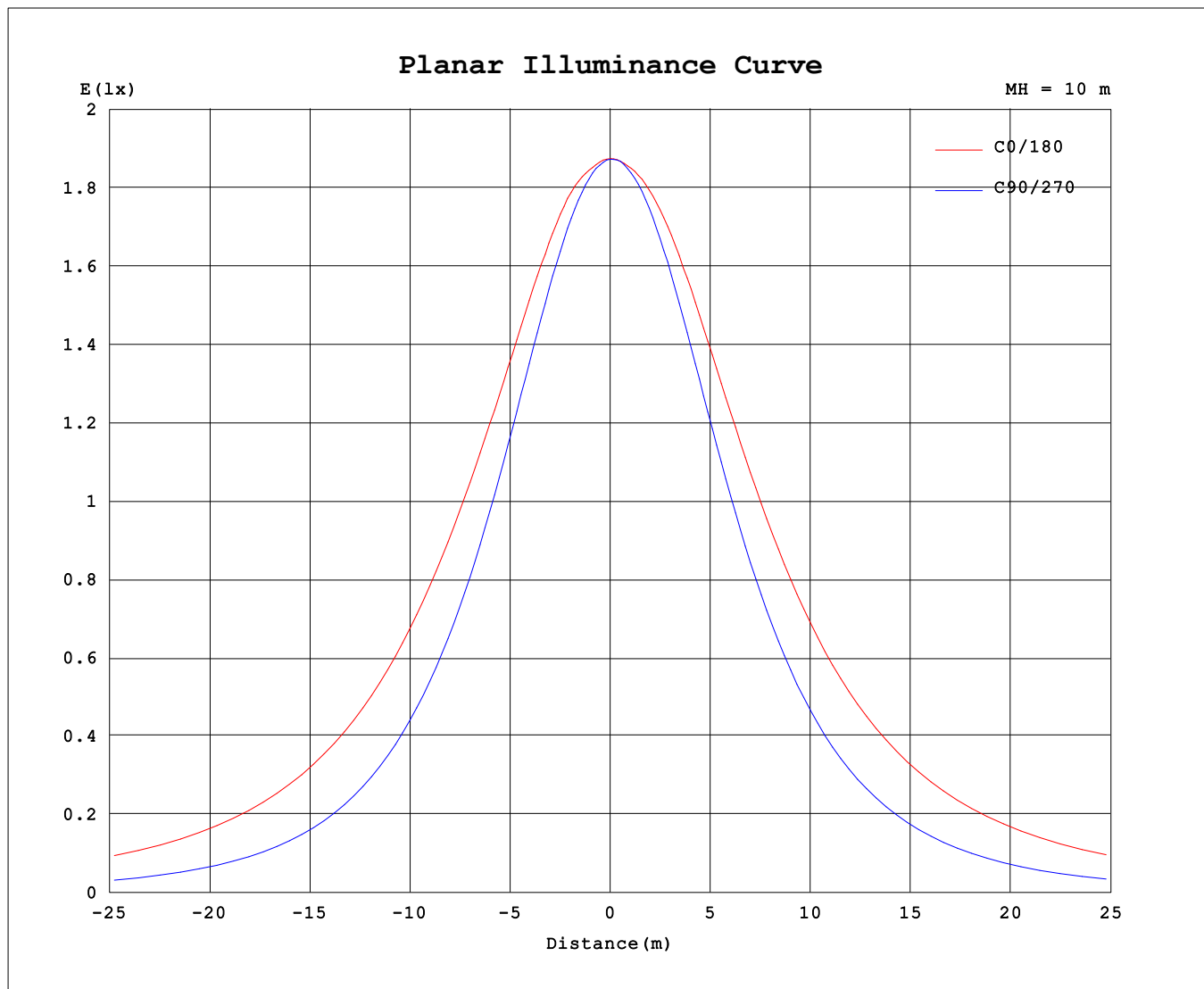
AvgL	cd/m2
L_0~180 (65) av	21838
L_0~180 (75) av	34187
L_0~180 (85) av	95162
L_90~270 (65) av	8660
L_90~270 (75) av	8453
L_90~270 (85) av	9031
L_45 (65) av	13618
L_45 (75) av	18131
L_45 (85) av	41411

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	187	187	187	187															
5	187	186	188	187															
10	189	183	189	185															
15	190	178	191	182															
20	190	172	192	177															
25	190	165	194	171															
30	190	157	195	163															
35	191	147	195	153															
40	191	136	195	143															
45	191	125	195	132															
50	190	112	194	119															
55	188	97.8	192	106															
60	185	83.7	189	91.4															
65	183	70.2	187	76.2															
70	179	56.4	183	60.5															
75	175	42.7	179	44.8															
80	170	28.9	174	29.7															
85	164	15.5	168	16.0															
90	158	4.47	161	6.95															
95	152	3.53	155	4.35															
100	145	3.86	148	4.02															
105	138	4.16	140	4.03															
110	129	4.56	132	4.11															
115	120	4.90	122	4.28															
120	111	5.12	112	4.45															
125	101	5.27	101	4.59															
130	91.1	5.45	90.8	4.70															
135	80.9	5.73	79.8	4.79															
140	70.5	5.97	68.1	4.88															
145	56.4	6.17	54.9	5.01															
150	44.4	6.30	43.1	5.16															
155	34.3	6.41	32.1	5.41															
160	17.0	6.53	11.8	5.50															
165	12.5	6.62	6.56	5.62															
170	7.82	6.66	4.89	5.85															
175	6.21	6.70	4.99	6.19															
180	5.31	6.56	5.32	6.68															

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: