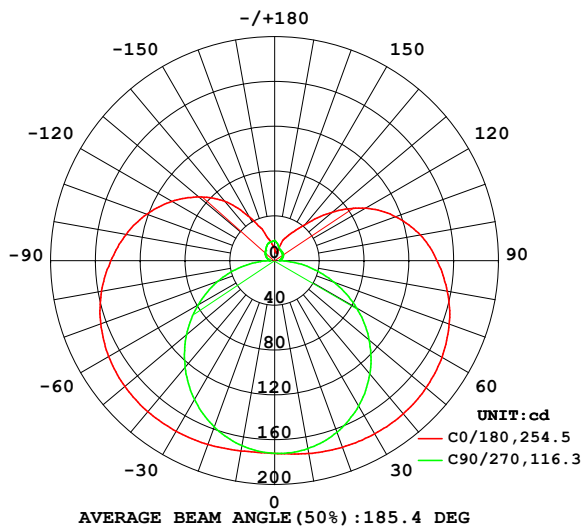


LUMINAIRE PHOTOMETRIC TEST REPORT

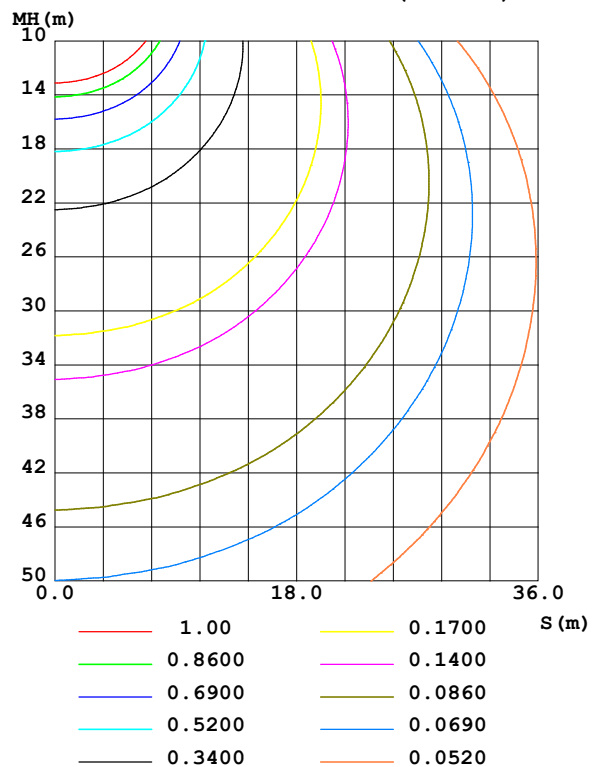
Test:U:101.30V I:0.1770A P:15.800W PF:0.8820 Freq:50.00Hz Lamp Flux:1105.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 69.99 lm/W
MODEL	80027-27MP	I _{max} (cd)	178.9	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)	1105.8	η UP,DN(C0-180)	15.2,35.4	
NOMINAL FLUX(lm)	1105.8	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	13.3,36.1	
LAMPS INSIDE	1	η up (%)	28.5	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	100	η down (%)	71.5	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	172.8	167.8	174.9	170.5					0- 10	16.40	16.40	1.48,1.48
20	174.7	158.0	177.4	163.1					10- 20	48.17	64.57	5.84,5.84
30	176.0	143.2	178.7	150.0					20- 30	76.46	141.0	12.8,12.8
40	176.2	124.6	178.7	132.2					30- 40	98.93	240.0	21.7,21.7
50	174.7	102.6	176.6	110.3					40- 50	113.9	353.8	32,32
60	171.3	78.82	172.7	84.58					50- 60	120.2	474.0	42.9,42.9
70	165.2	53.86	165.9	56.33					60- 70	117.7	591.8	53.5,53.5
80	157.1	28.14	156.6	29.44					70- 80	107.5	699.2	63.2,63.2
90	146.3	5.124	145.1	5.812					80- 90	91.20	790.4	71.5,71.5
100	134.9	5.573	132.2	5.237					90-100	78.86	869.3	78.6,78.6
110	121.5	7.394	115.2	6.834					100-110	70.09	939.4	85,85
120	106.1	9.454	93.77	8.256					110-120	58.38	997.8	90.2,90.2
130	88.54	11.02	67.50	9.303					120-130	44.39	1042	94.2,94.2
140	69.09	12.47	42.04	10.01					130-140	30.11	1072	97,97
150	45.21	14.70	27.38	10.58					140-150	18.17	1090	98.6,98.6
160	26.17	16.71	12.49	12.26					150-160	9.848	1100	99.5,99.5
170	15.52	17.30	7.545	15.38					160-170	4.183	1104	99.9,99.9
180	10.59	17.99	10.55	18.30					170-180	1.324	1106	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 295.56 lm

%lum = 26.7%

%lamp = 26.7%

Conical surface Flux(130deg): 533.75 lm

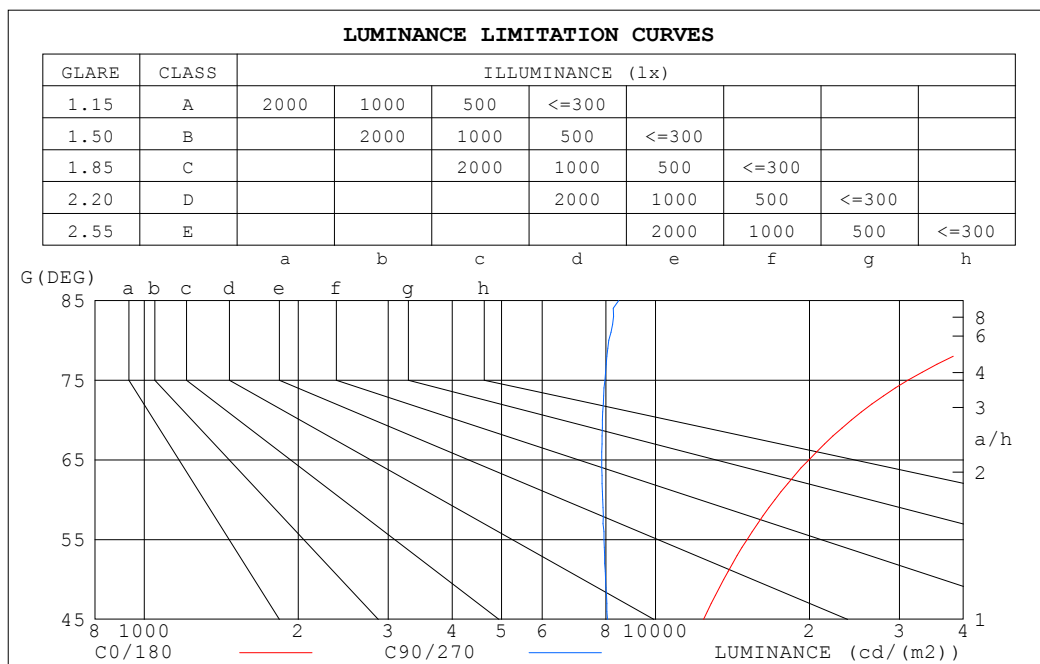
%lum = 48.3%

%lamp = 48.3%

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



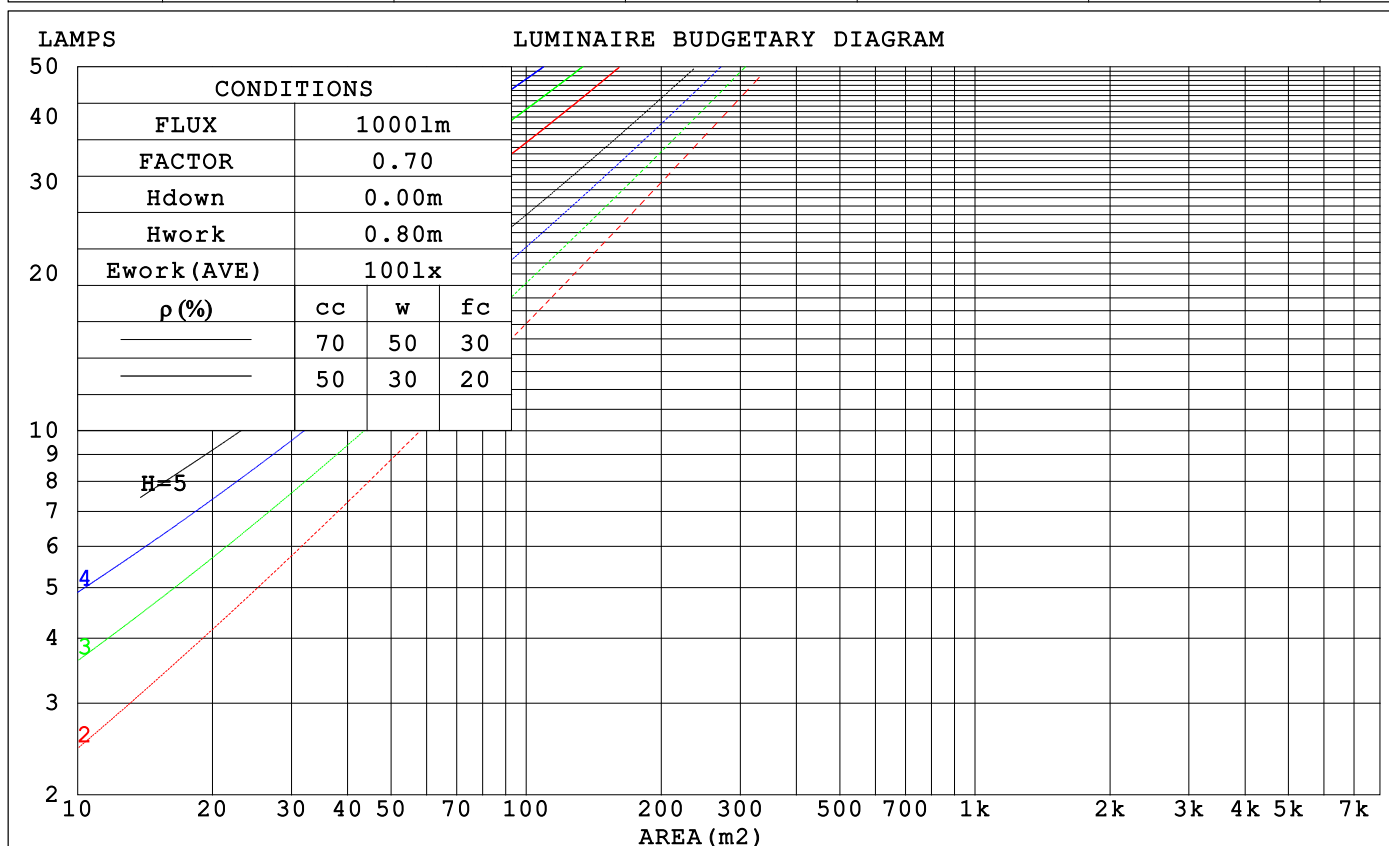
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	87130	8472
80	45235	8103
75	31159	7965
70	24155	7874
65	19937	7849
60	17130	7882
55	15100	7927
50	13588	7985
45	12416	8050

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	1.12	1.12	1.12	1.06	1.06	1.06	.95	.95	.95	.85	.85	.85	.76	.76	.76	.71
1.0	.92	.87	.82	.87	.82	.78	.78	.74	.70	.69	.66	.63	.61	.58	.56	.52
2.0	.79	.71	.64	.74	.67	.61	.66	.60	.55	.58	.54	.50	.51	.48	.44	.41
3.0	.68	.59	.52	.64	.56	.49	.57	.50	.45	.50	.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	.28	.35	.30	.26	.23
6.0	.47	.38	.31	.44	.36	.30	.40	.32	.27	.35	.29	.25	.31	.26	.22	.19
7.0	.42	.33	.27	.40	.32	.26	.36	.29	.24	.32	.26	.21	.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	.27	.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	.397	.226	.072	.381	.217	.069	.351	.201	.064	.324	.187	.060	.298	.173	.056		
2.0	.339	.186	.057	.325	.179	.055	.298	.165	.051	.273	.153	.048	.249	.141	.044		
3.0	.299	.159	.048	.286	.153	.046	.261	.142	.043	.239	.131	.040	.217	.120	.037		
4.0	.268	.139	.041	.256	.134	.040	.234	.124	.037	.213	.114	.034	.193	.105	.032		
5.0	.243	.124	.036	.232	.119	.035	.211	.110	.032	.192	.102	.030	.175	.093	.028		
6.0	.222	.111	.032	.212	.107	.031	.193	.099	.029	.176	.091	.027	.159	.084	.025		
7.0	.204	.101	.029	.195	.097	.028	.178	.090	.026	.162	.083	.024	.146	.076	.022		
8.0	.189	.092	.026	.181	.089	.025	.165	.082	.024	.150	.076	.022	.136	.070	.020		
9.0	.176	.085	.024	.168	.082	.023	.154	.076	.022	.140	.070	.020	.126	.064	.019		
10.0	.165	.079	.022	.157	.076	.021	.144	.070	.020	.131	.065	.018	.118	.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	.408	.408	.408	.348	.348	.348	.238	.238	.238	.137	.137	.137	.044	.044	.044		
1.0	.405	.374	.347	.347	.321	.298	.237	.221	.206	.137	.128	.120	.044	.041	.039		
2.0	.399	.352	.313	.342	.303	.270	.234	.210	.189	.135	.122	.111	.043	.039	.036		
3.0	.392	.336	.292	.336	.290	.253	.231	.202	.178	.133	.118	.105	.043	.038	.034		
4.0	.384	.324	.278	.330	.280	.242	.227	.195	.170	.131	.114	.101	.042	.037	.033		
5.0	.377	.315	.269	.323	.272	.234	.223	.190	.165	.129	.112	.098	.042	.036	.032		
6.0	.369	.307	.262	.317	.266	.228	.219	.186	.161	.127	.109	.096	.041	.036	.032		
7.0	.362	.300	.257	.312	.260	.224	.215	.183	.159	.125	.108	.095	.040	.035	.031		
8.0	.356	.295	.253	.306	.256	.221	.212	.180	.157	.123	.106	.093	.040	.035	.031		
9.0	.349	.290	.250	.301	.252	.219	.209	.177	.155	.121	.105	.093	.039	.034	.031		
10.0	.344	.286	.248	.296	.249	.217	.205	.175	.154	.120	.103	.092	.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	20.9	22.2	21.6	22.9	23.6	18.1	19.4	18.8	20.1	20.8
3H	24.1	25.2	24.7	25.9	26.7	19.9	21.1	20.6	21.8	22.6
4H	25.9	27.0	26.5	27.7	28.5	20.7	21.8	21.4	22.5	23.3
6H	27.8	28.9	28.5	29.6	30.4	21.4	22.4	22.1	23.1	24.0
8H	28.9	30.0	29.7	30.7	31.5	21.6	22.7	22.4	23.4	24.2
12H	30.2	31.2	30.9	31.9	32.8	21.8	22.8	22.6	23.5	24.4
4H 2H	21.4	22.6	22.1	23.3	24.1	19.5	20.6	20.2	21.3	22.1
3H	24.8	25.7	25.5	26.5	27.4	21.5	22.5	22.3	23.2	24.1
4H	26.7	27.6	27.5	28.4	29.3	22.5	23.4	23.3	24.2	25.1
6H	28.9	29.7	29.7	30.5	31.4	23.4	24.2	24.2	25.0	25.9
8H	30.1	30.9	30.9	31.7	32.6	23.8	24.5	24.6	25.3	26.3
12H	31.6	32.3	32.4	33.1	34.0	24.1	24.8	24.9	25.6	26.5
8H 4H	27.0	27.8	27.8	28.5	29.5	23.8	24.5	24.5	25.3	26.2
6H	29.5	30.1	30.3	30.9	31.9	25.0	25.7	25.8	26.5	27.5
8H	30.9	31.5	31.7	32.3	33.3	25.6	26.2	26.4	27.0	28.0
12H	32.6	33.1	33.4	33.9	34.9	26.1	26.6	27.0	27.5	28.5
12H 4H	27.0	27.7	27.8	28.5	29.5	24.2	24.9	25.0	25.7	26.6
6H	29.6	30.1	30.4	31.0	32.0	25.7	26.2	26.5	27.1	28.1
8H	31.1	31.6	31.9	32.4	33.5	26.4	26.9	27.3	27.8	28.8
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, 1106 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 0.3)
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:

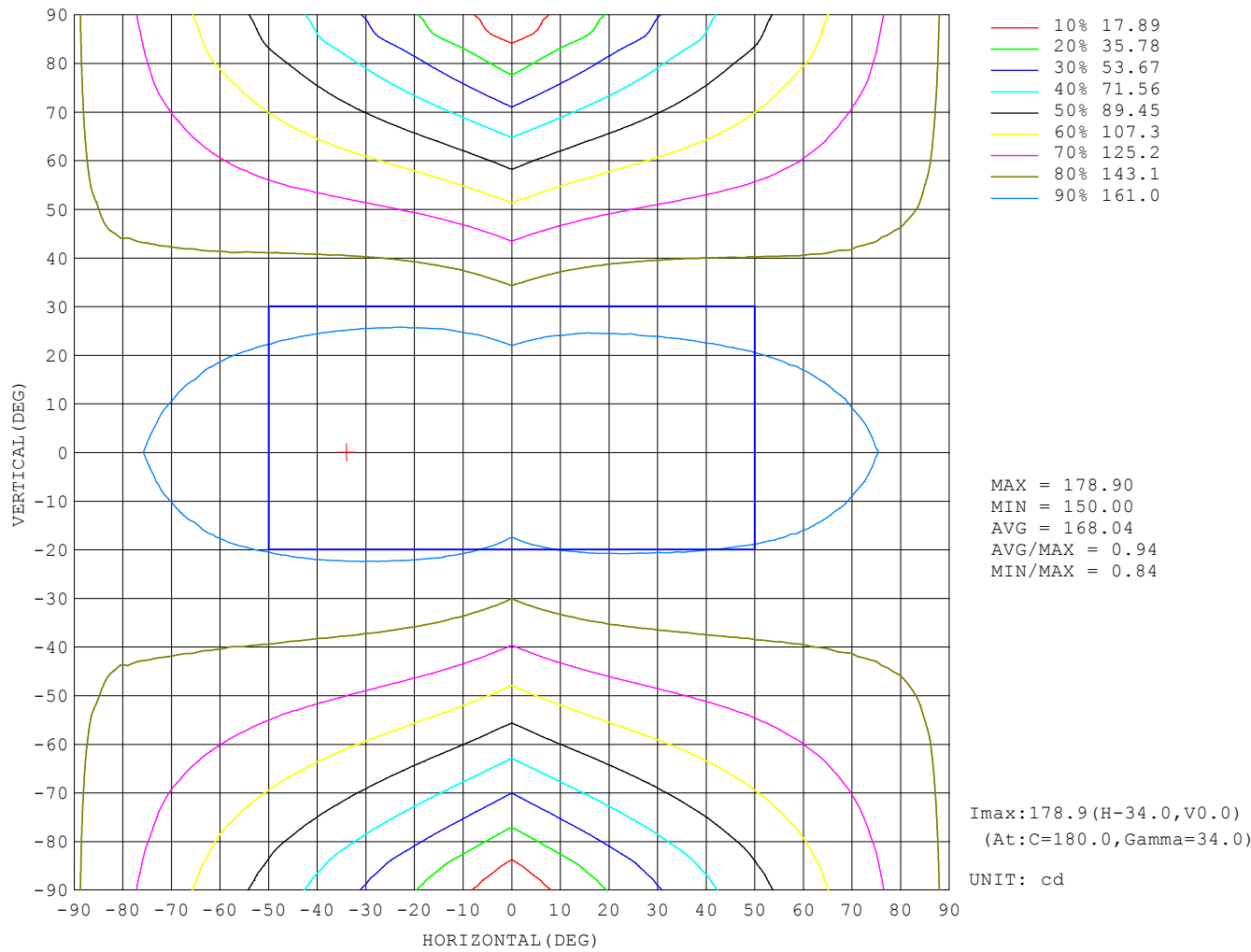
UTILIZATION FACTORS TABLE

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	22	16
0.80	52	39	31	50	38	30	47	36	29	21
1.00	60	46	38	57	45	37	53	45	35	26
1.25	67	53	45	64	52	43	59	48	41	30
1.50	72	59	50	69	57	49	63	53	46	34
2.00	79	68	59	76	65	57	69	60	53	39
2.50	84	73	65	80	70	62	72	64	58	43
3.00	88	78	70	84	75	67	75	68	62	46
4.00	93	84	77	88	81	74	79	73	68	50
5.00	96	89	82	91	85	79	82	77	72	53
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:

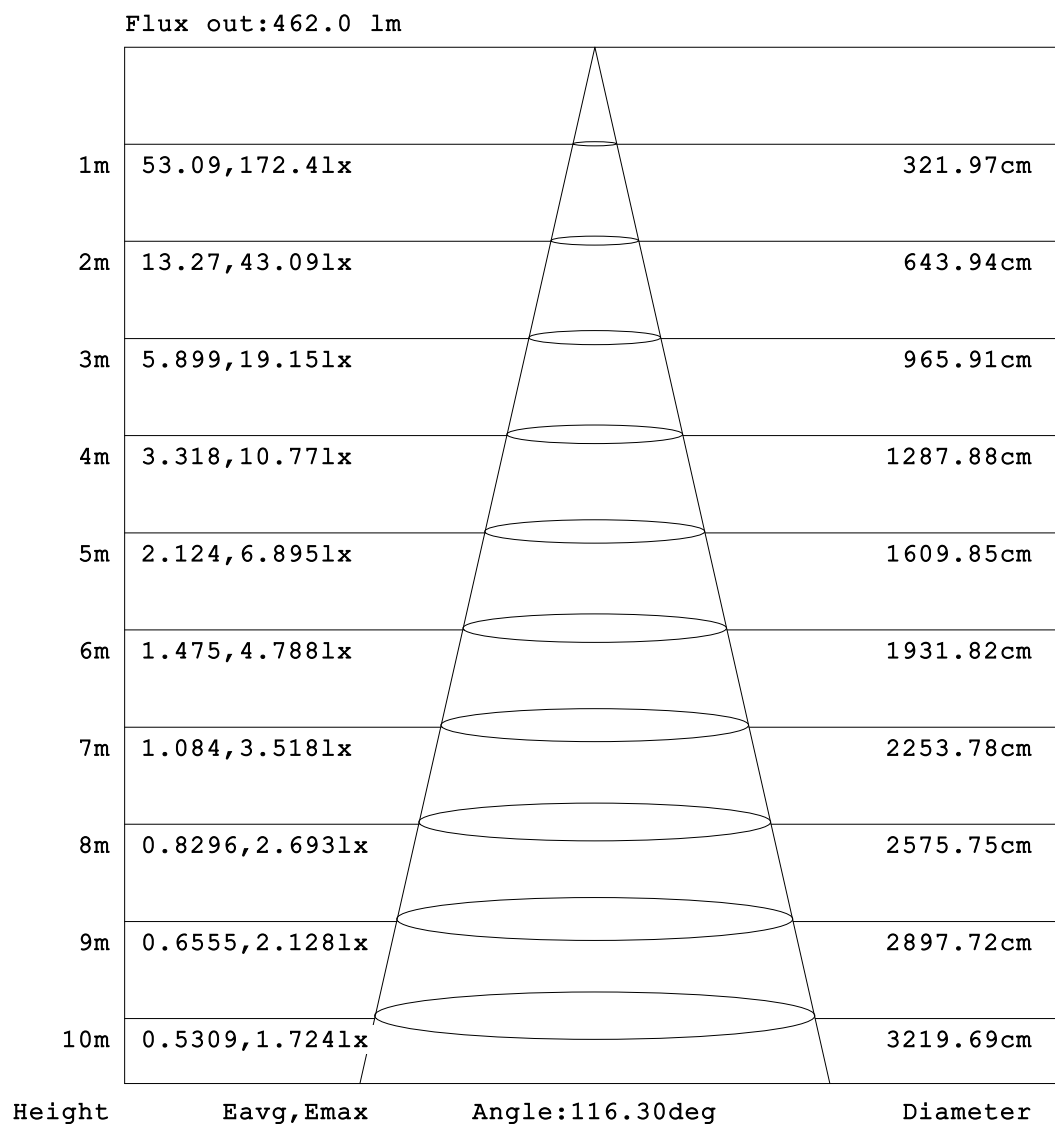
ISOCANDELA DIAGRAM



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

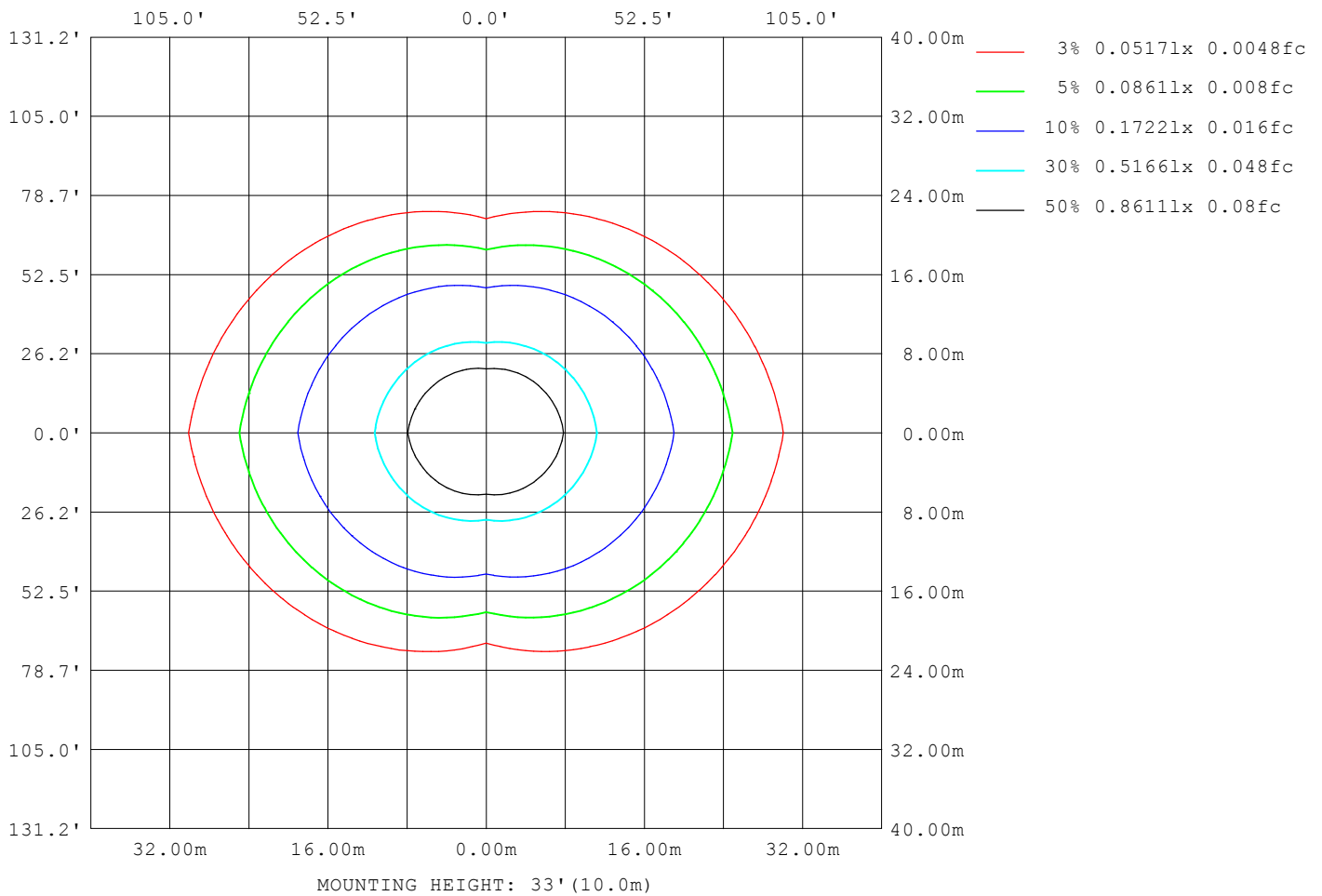


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:101.30V I:0.1770A P:15.800W PF:0.8820 Freq:50.00Hz Lamp Flux:1105.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

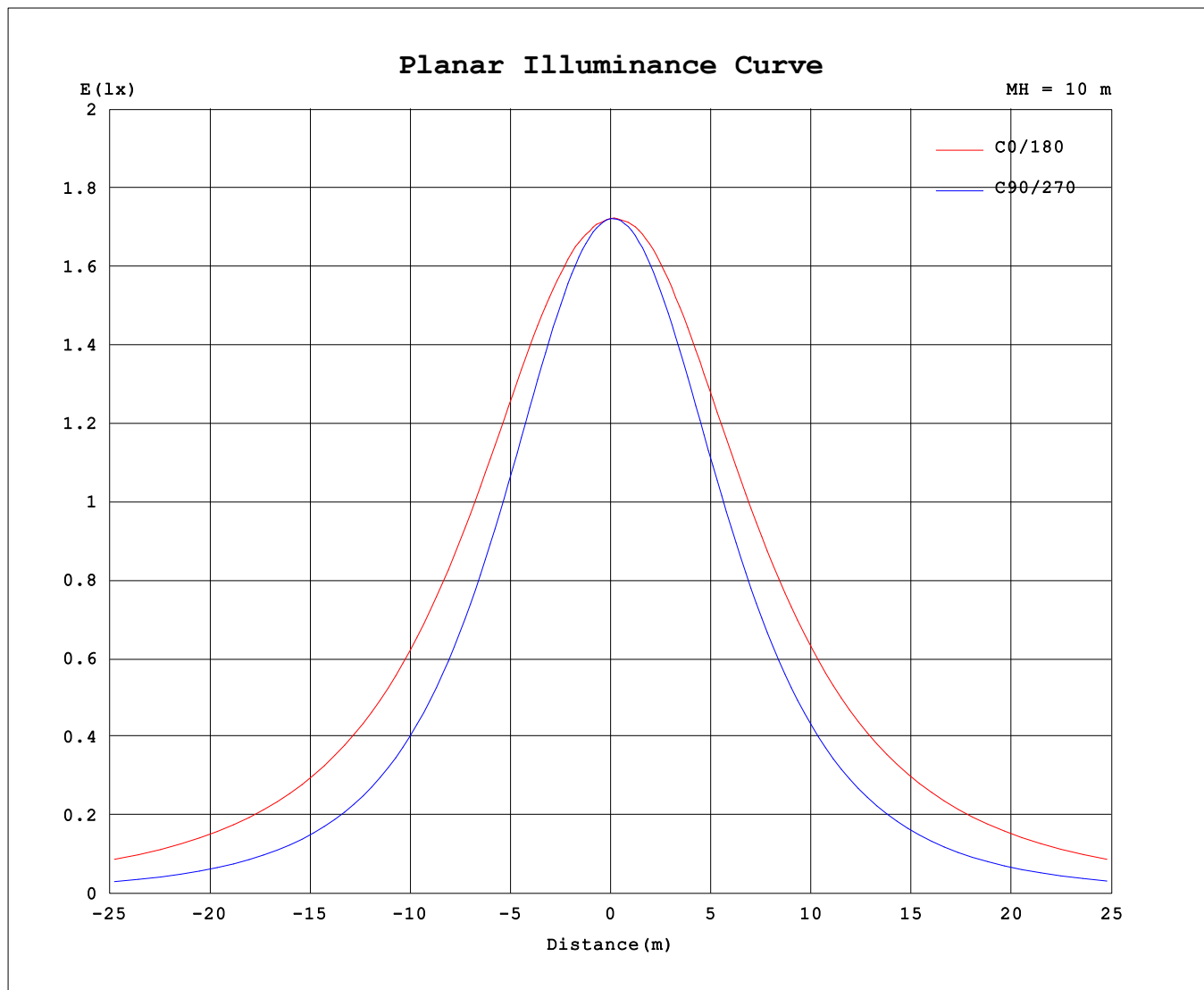
AvgL	cd/m2
L_0~180 (65) av	19996
L_0~180 (75) av	31199
L_0~180 (85) av	86857
L_90~270 (65) av	8105
L_90~270 (75) av	8089
L_90~270 (85) av	8428
L_45 (65) av	12568
L_45 (75) av	16757
L_45 (85) av	37821

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	172	172	172	172															
5	172	171	173	172															
10	173	168	175	171															
15	174	164	176	168															
20	175	158	177	163															
25	176	151	178	157															
30	176	143	179	150															
35	176	134	179	142															
40	176	125	179	132															
45	176	114	178	122															
50	175	103	177	110															
55	173	90.9	175	97.8															
60	171	78.8	173	84.6															
65	169	66.3	170	70.7															
70	165	53.9	166	56.3															
75	161	41.2	162	42.5															
80	157	28.1	157	29.4															
85	152	14.8	151	14.6															
90	146	5.12	145	5.81															
95	141	4.18	139	4.46															
100	135	5.57	132	5.24															
105	129	6.43	124	6.07															
110	122	7.39	115	6.83															
115	114	8.59	105	7.60															
120	106	9.45	93.8	8.26															
125	97.6	10.3	81.1	8.85															
130	88.5	11.0	67.5	9.30															
135	79.2	11.8	54.3	9.66															
140	69.1	12.5	42.0	10.0															
145	57.4	13.5	33.7	10.3															
150	45.2	14.7	27.4	10.6															
155	34.7	15.8	22.2	11.1															
160	26.2	16.7	12.5	12.3															
165	19.8	17.1	7.44	13.7															
170	15.5	17.3	7.54	15.4															
175	12.9	17.6	8.17	16.9															
180	10.6	18.0	10.5	18.3															

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: