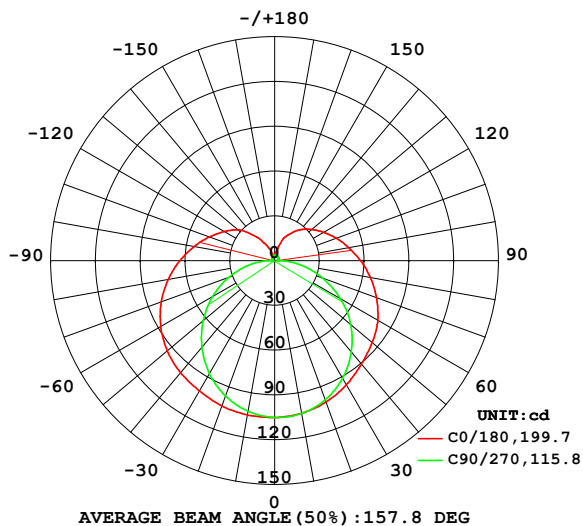


LUMINAIRE PHOTOMETRIC TEST REPORT

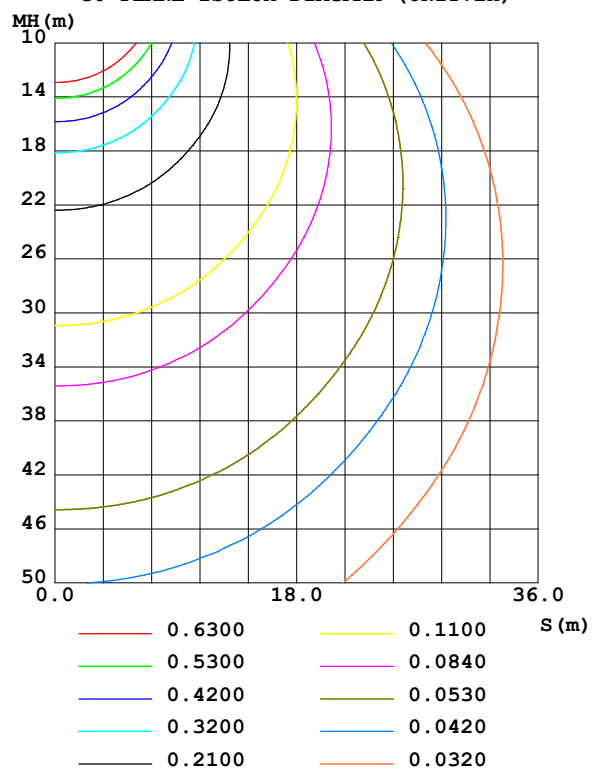
Test:U:101.40V I:0.1790A P:16.000W PF:0.8830 Freq:50.00Hz Lamp Flux:545.35x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 34.08 lm/W
MODEL	80010-60P	I _{max} (cd)	105.2	S/MH(C0/180)	1.37	
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.29	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	545.35	η UP,DN(C0-180)	11.3,39.3	
NOMINAL FLUX(lm)	545.35	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	11.4,38.0	
LAMPS INSIDE	1	η up (%)	22.8	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	100	η down (%)	77.2	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:03 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	105.0	102.6	103.8	104.0					0- 10	9.969	9.969	1.83,1.83
20	103.6	96.58	100.8	99.24					10- 20	28.90	38.87	7.13,7.13
30	100.8	87.43	96.00	91.02					20- 30	44.86	83.73	15.4,15.4
40	98.10	75.84	90.56	79.98					30- 40	56.48	140.2	25.7,25.7
50	93.99	62.41	85.33	66.51					40- 50	63.16	203.4	37.3,37.3
60	88.16	47.91	79.92	50.74					50- 60	64.56	267.9	49.1,49.1
70	80.81	32.70	72.63	34.15					60- 70	60.42	328.4	60.2,60.2
80	72.35	17.49	65.10	18.26					70- 80	52.03	380.4	69.8,69.8
90	63.55	2.961	57.62	3.465					80- 90	40.89	421.3	77.2,77.2
100	54.83	1.742	50.48	2.069					90-100	32.08	453.4	83.1,83.1
110	46.66	2.060	44.12	2.320					100-110	27.03	480.4	88.1,88.1
120	39.18	2.303	38.05	2.819					110-120	22.06	502.4	92.1,92.1
130	32.30	2.457	32.66	3.070					120-130	17.19	519.6	95.3,95.3
140	22.12	2.651	27.24	3.198					130-140	12.27	531.9	97.5,97.5
150	13.46	2.876	20.86	3.344					140-150	7.573	539.5	98.9,98.9
160	5.353	3.371	14.29	3.511					150-160	4.026	543.5	99.7,99.7
170	2.930	3.679	6.009	3.511					160-170	1.479	545.0	99.9,99.9
180	3.952	3.736	3.899	3.485					170-180	0.3602	545.3	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 171.29 lm

%lum = 31.4%

%lamp = 31.4%

Conical surface Flux(130deg): 298.97 lm

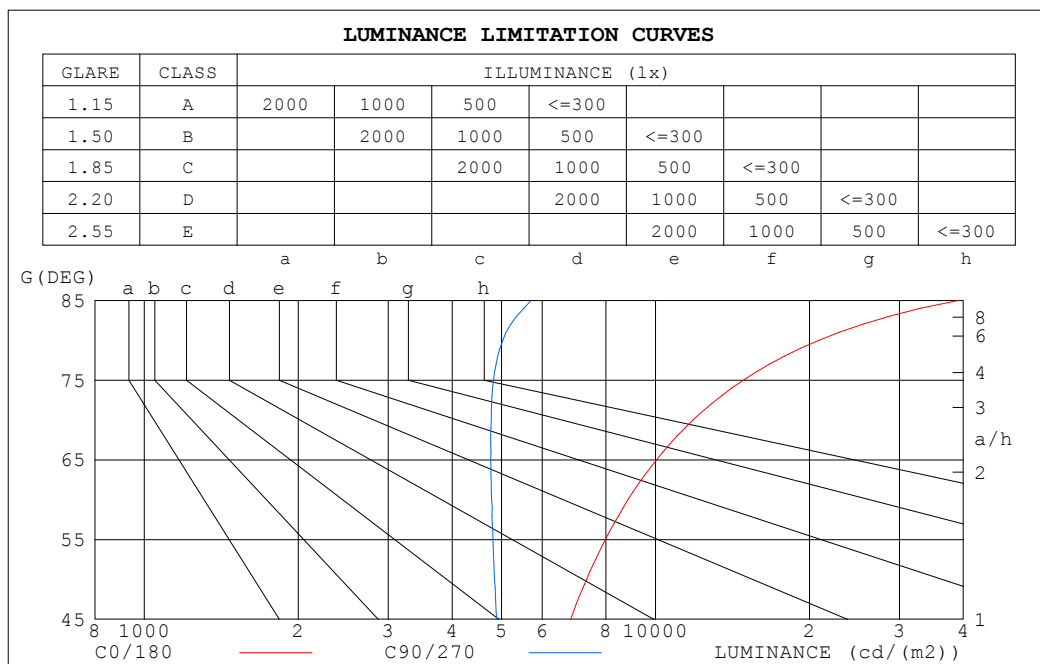
%lum = 54.8%

%lamp = 54.8%

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:03 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



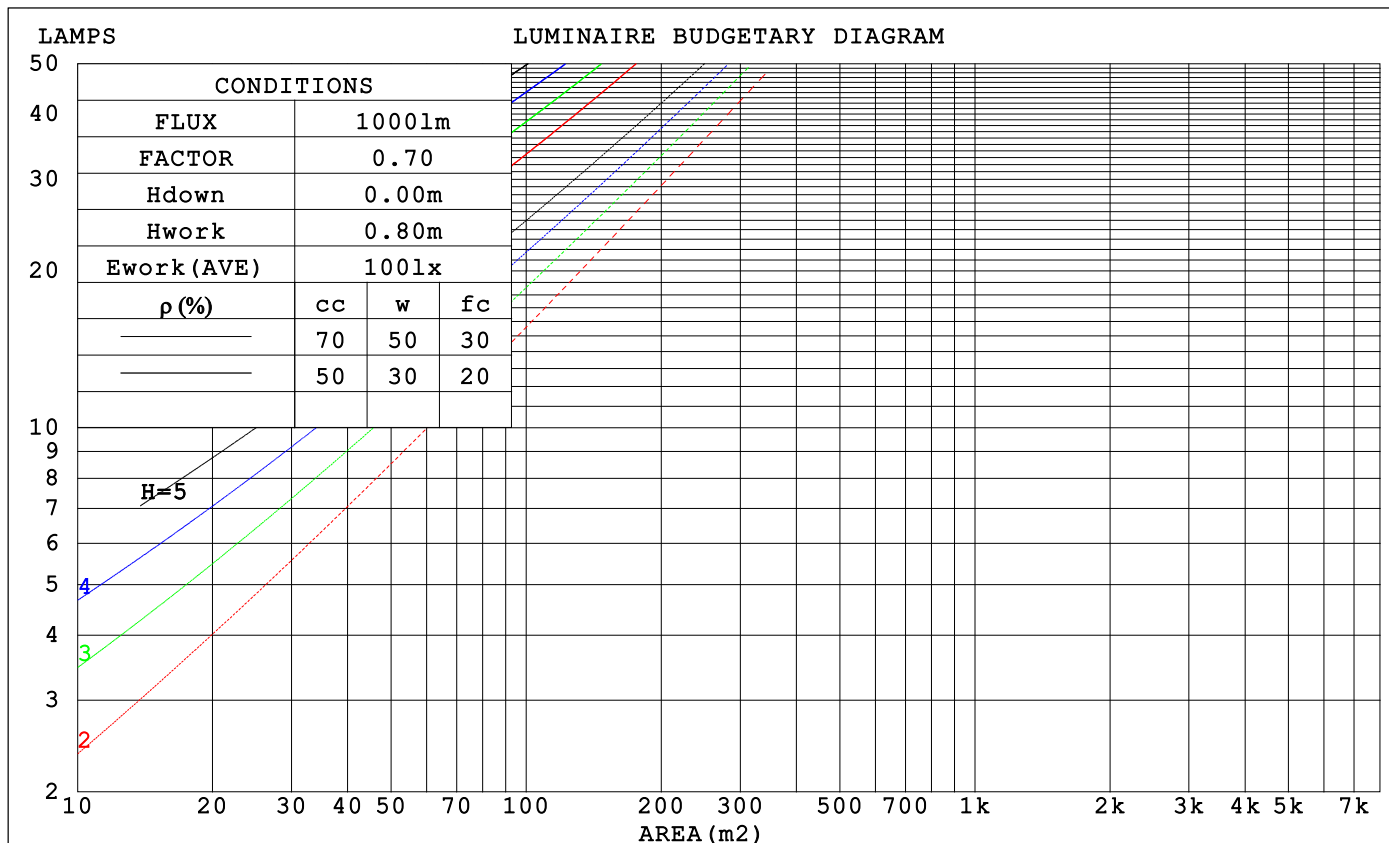
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	39073	5710
80	20880	5023
75	14844	4820
70	11840	4770
65	10036	4761
60	8836	4780
55	7977	4806
50	7328	4844
45	6819	4890

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 03 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	1.14	1.14	1.14	1.08	1.08	1.08	.98	.98	.98	.89	.89	.89	.81	.81	.81	.77
1.0	.94	.89	.84	.90	.85	.81	.81	.77	.74	.73	.70	.68	.66	.64	.62	.58
2.0	.81	.73	.66	.77	.70	.63	.69	.64	.59	.63	.58	.54	.56	.53	.49	.46
3.0	.70	.61	.53	.66	.58	.52	.60	.53	.48	.54	.49	.44	.49	.44	.40	.37
4.0	.61	.52	.44	.58	.50	.43	.53	.46	.40	.48	.42	.37	.43	.38	.34	.31
5.0	.54	.45	.38	.52	.43	.36	.47	.40	.34	.43	.36	.31	.38	.33	.29	.26
6.0	.48	.39	.32	.46	.38	.31	.42	.35	.29	.38	.32	.27	.35	.29	.25	.23
7.0	.44	.35	.28	.42	.33	.27	.38	.31	.26	.35	.28	.24	.31	.26	.22	.20
8.0	.40	.31	.25	.38	.30	.24	.35	.28	.23	.32	.26	.21	.29	.24	.20	.17
9.0	.36	.28	.22	.35	.27	.21	.32	.25	.20	.29	.23	.19	.27	.21	.18	.16
10.0	.33	.25	.20	.32	.24	.19	.29	.23	.18	.27	.21	.17	.25	.20	.16	.14



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:03 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	.387	.220	.070	.373	.213	.068	.346	.199	.063	.322	.186	.060	.299	.174	.056			
2.0	.334	.183	.056	.321	.177	.055	.297	.165	.051	.275	.154	.048	.255	.144	.045			
3.0	.296	.158	.047	.285	.153	.046	.263	.143	.043	.243	.133	.041	.224	.124	.038			
4.0	.266	.138	.041	.256	.134	.040	.236	.125	.037	.218	.117	.035	.201	.109	.033			
5.0	.242	.123	.036	.232	.119	.035	.214	.112	.033	.198	.104	.031	.182	.097	.029			
6.0	.222	.111	.032	.213	.108	.031	.196	.101	.029	.181	.094	.028	.166	.088	.026			
7.0	.204	.101	.029	.196	.098	.028	.181	.092	.026	.167	.086	.025	.154	.080	.023			
8.0	.189	.093	.026	.182	.090	.025	.168	.084	.024	.155	.079	.023	.143	.073	.021			
9.0	.176	.085	.024	.170	.083	.023	.157	.077	.022	.145	.072	.021	.133	.068	.020			
10.0	.165	.079	.022	.159	.077	.021	.147	.072	.020	.136	.067	.019	.125	.063	.018			

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	.364	.364	.364	.311	.311	.311	.212	.212	.212	.122	.122	.122	.039	.039	.039	
1.0	.360	.330	.303	.308	.283	.261	.211	.195	.180	.121	.113	.105	.039	.036	.034	
2.0	.354	.308	.269	.303	.265	.232	.208	.183	.162	.120	.107	.095	.038	.034	.031	
3.0	.346	.291	.247	.297	.251	.215	.204	.175	.150	.118	.102	.089	.038	.033	.029	
4.0	.339	.279	.233	.291	.241	.203	.200	.168	.143	.116	.098	.084	.037	.032	.028	
5.0	.331	.269	.224	.284	.233	.195	.196	.163	.137	.113	.096	.082	.037	.031	.027	
6.0	.324	.262	.217	.278	.226	.189	.192	.159	.134	.111	.093	.079	.036	.030	.026	
7.0	.317	.255	.212	.272	.221	.185	.188	.155	.131	.109	.091	.078	.035	.030	.026	
8.0	.310	.249	.208	.267	.216	.181	.185	.152	.129	.107	.090	.077	.035	.029	.025	
9.0	.304	.245	.205	.262	.212	.179	.181	.149	.127	.106	.088	.076	.034	.029	.025	
10.0	.298	.241	.202	.257	.209	.177	.178	.147	.126	.104	.087	.075	.034	.029	.025	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: DAMIN
 Test Date: 03 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	2H	19.1	20.4	19.7	21.0	21.7	16.9	18.2	17.4	18.8	19.4
	3H	22.0	23.2	22.6	23.8	24.5	18.6	19.9	19.2	20.5	21.2
	4H	23.6	24.8	24.2	25.4	26.1	19.4	20.6	20.0	21.2	21.9
	6H	25.4	26.5	26.0	27.1	27.9	20.1	21.2	20.7	21.8	22.6
	8H	26.4	27.4	27.0	28.1	28.9	20.4	21.4	21.0	22.1	22.8
	12H	27.5	28.6	28.2	29.2	30.0	20.6	21.6	21.3	22.3	23.1
4H	2H	19.6	20.8	20.2	21.4	22.1	18.0	19.2	18.7	19.8	20.5
	3H	22.7	23.7	23.4	24.4	25.1	20.1	21.1	20.7	21.7	22.5
	4H	24.5	25.4	25.2	26.1	26.9	21.0	22.0	21.7	22.7	23.5
	6H	26.5	27.3	27.2	28.0	28.9	21.9	22.8	22.6	23.5	24.3
	8H	27.6	28.4	28.3	29.1	30.0	22.3	23.1	23.0	23.8	24.6
	12H	28.9	29.6	29.6	30.4	31.2	22.6	23.3	23.4	24.1	24.9
8H	4H	24.8	25.6	25.5	26.3	27.1	22.0	22.8	22.8	23.5	24.4
	6H	27.0	27.7	27.8	28.4	29.3	23.3	23.9	24.0	24.7	25.6
	8H	28.4	29.0	29.1	29.7	30.6	23.9	24.5	24.6	25.2	26.1
	12H	29.9	30.4	30.7	31.2	32.2	24.4	24.9	25.2	25.7	26.6
12H	4H	24.8	25.5	25.5	26.3	27.1	22.4	23.1	23.1	23.8	24.7
	6H	27.1	27.7	27.9	28.5	29.4	23.8	24.4	24.6	25.2	26.1
	8H	28.6	29.1	29.3	29.9	30.8	24.5	25.1	25.3	25.8	26.8
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, 545.3 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -2.1$)
Area: 0.02 m²

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:03 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:

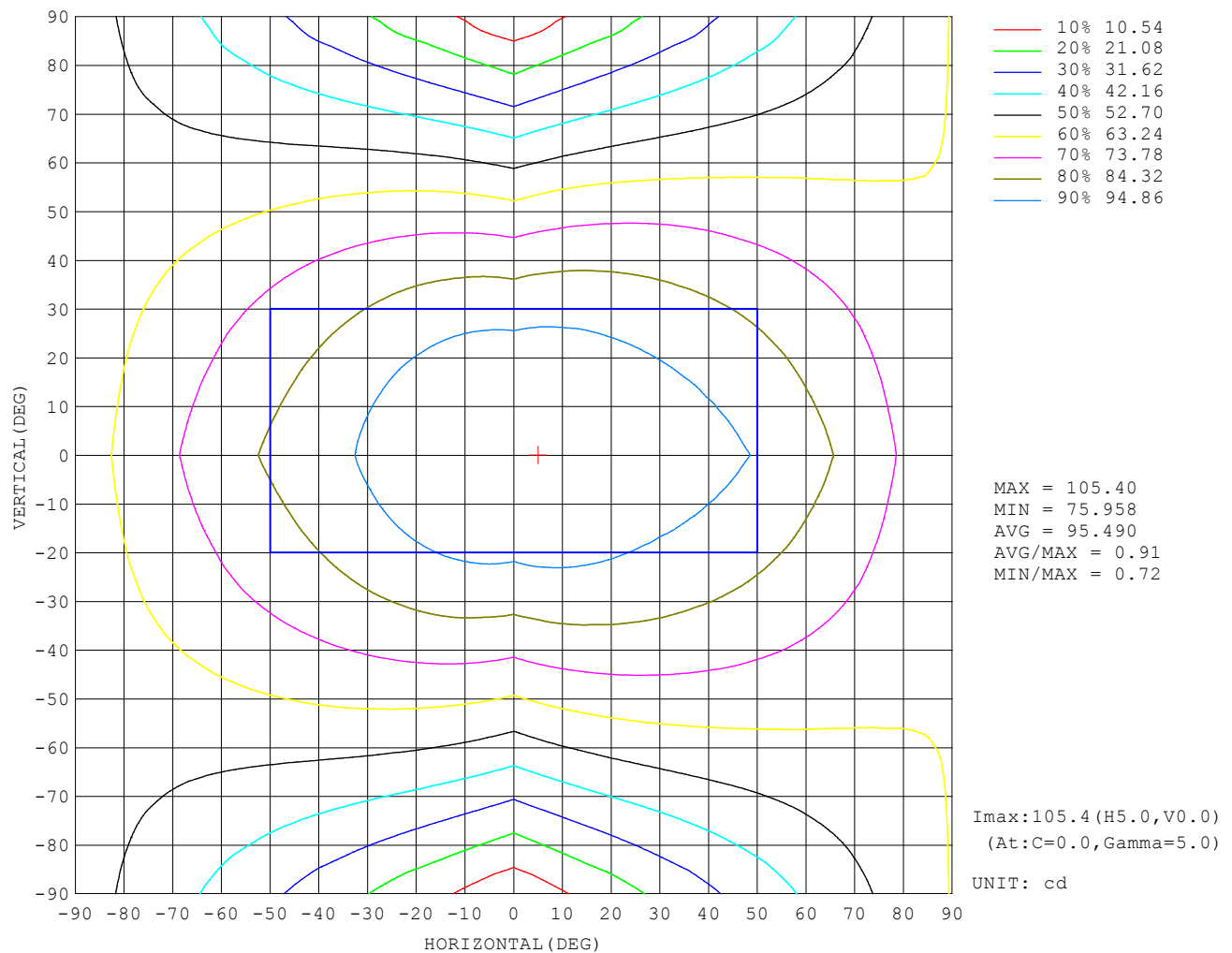
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	46	33	26	45	33	26	43	32	25	18
0.80	55	42	34	53	41	33	50	39	32	24
1.00	63	50	41	61	48	40	57	48	39	30
1.25	70	57	48	67	55	47	62	52	45	35
1.50	75	62	54	72	60	52	66	57	50	39
2.00	82	71	62	79	68	61	72	64	57	45
2.50	87	76	68	83	74	66	76	68	62	48
3.00	91	81	73	87	78	71	79	72	67	52
4.00	95	87	81	91	84	78	83	77	72	56
5.00	98	91	85	94	88	82	86	81	76	59
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: 03 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:

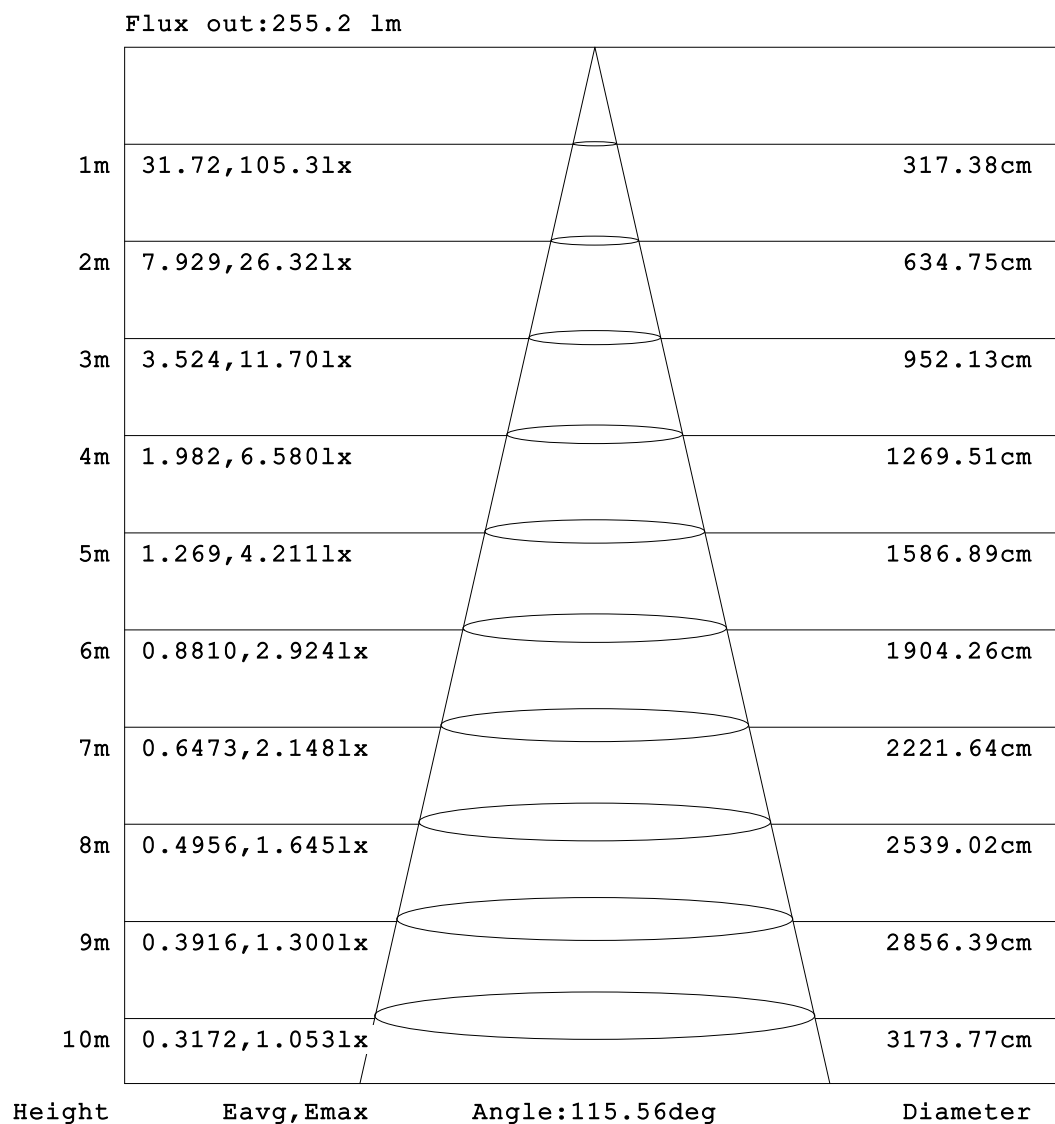
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:03 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

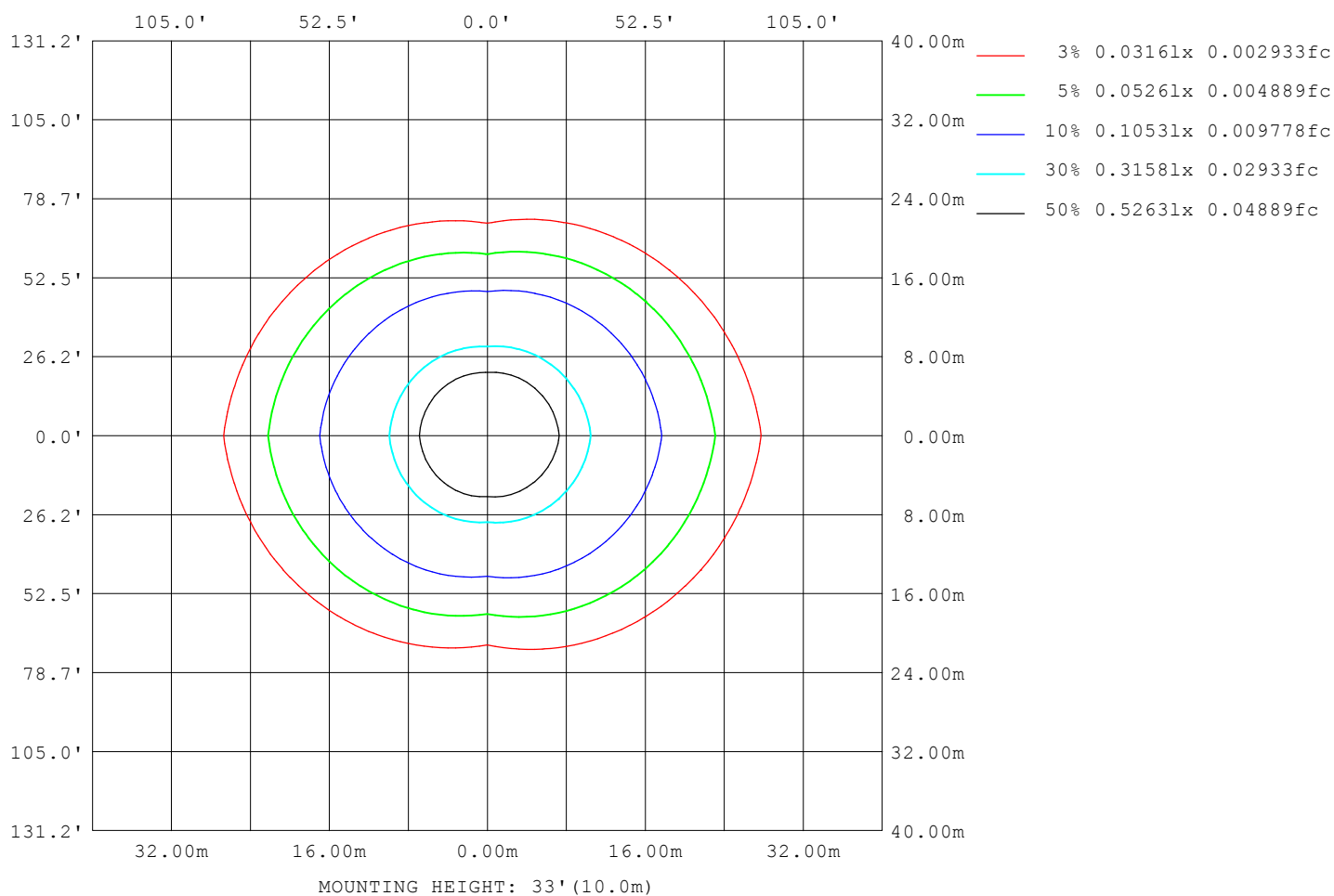


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:03 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: 03 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:0.1790A P:16.000W PF:0.8830 Freq:50.00Hz Lamp Flux:545.35x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

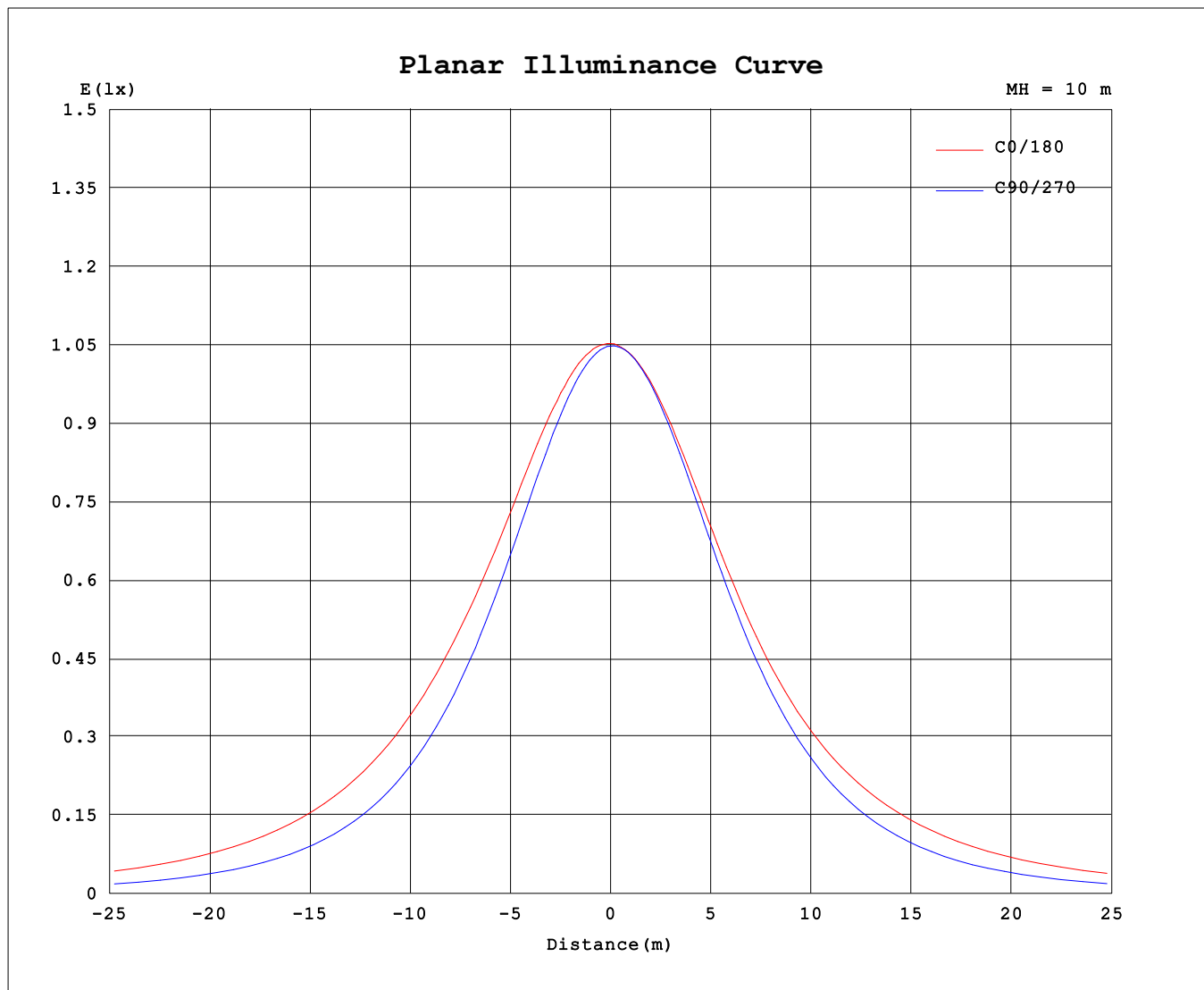
AvgL	cd/m2
L_0~180 (65) av	9521
L_0~180 (75) av	14058
L_0~180 (85) av	37081
L_90~270 (65) av	4894
L_90~270 (75) av	4938
L_90~270 (85) av	5881
L_45 (65) av	6604
L_45 (75) av	8320
L_45 (85) av	17493

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:03 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: 03 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	105	105	105	105															
5	105	104	105	105															
10	105	103	104	104															
15	104	100.0	103	102															
20	104	96.6	101	99.2															
25	102	92.3	98.7	95.6															
30	101	87.4	96.0	91.0															
35	99.5	81.9	93.3	85.8															
40	98.1	75.8	90.6	80.0															
45	96.2	69.3	87.9	73.4															
50	94.0	62.4	85.3	66.5															
55	91.3	55.3	82.8	59.2															
60	88.2	47.9	79.9	50.7															
65	84.6	40.3	76.3	42.4															
70	80.8	32.7	72.6	34.1															
75	76.7	25.0	68.9	26.1															
80	72.4	17.5	65.1	18.3															
85	68.0	9.98	61.3	10.5															
90	63.5	2.96	57.6	3.46															
95	59.1	1.61	54.0	2.11															
100	54.8	1.74	50.5	2.07															
105	50.6	1.89	47.3	2.11															
110	46.7	2.06	44.1	2.32															
115	42.8	2.20	41.0	2.62															
120	39.2	2.30	38.0	2.82															
125	35.7	2.39	35.3	2.96															
130	32.3	2.46	32.7	3.07															
135	27.5	2.57	30.0	3.11															
140	22.1	2.65	27.2	3.20															
145	17.9	2.71	24.3	3.27															
150	13.5	2.88	20.9	3.34															
155	9.80	3.11	17.9	3.49															
160	5.35	3.37	14.3	3.51															
165	3.94	3.64	8.78	3.53															
170	2.93	3.68	6.01	3.51															
175	2.87	3.71	4.66	3.48															
180	3.95	3.74	3.90	3.48															

C Range: 0 - 360DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:03 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: