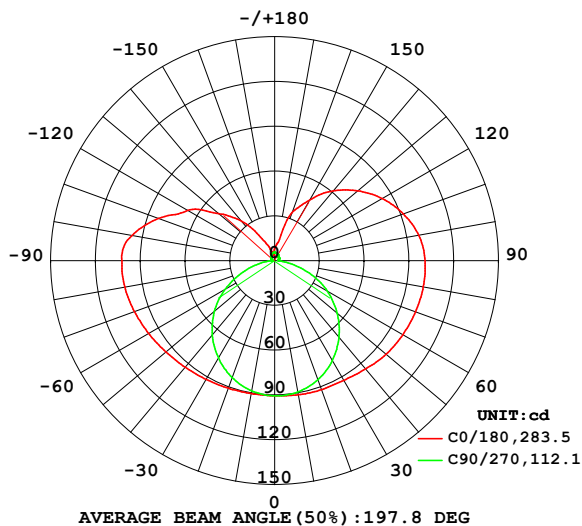


LUMINAIRE PHOTOMETRIC TEST REPORT

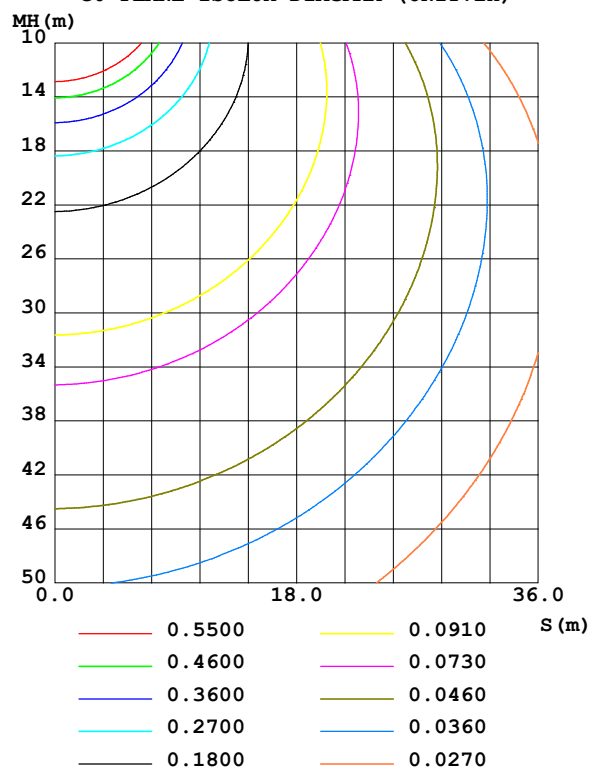
Test:U:101.40V I:0.1540A P:14.500W PF:0.9280 Freq:50.00Hz Lamp Flux:664.87x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 45.85 lm/W
MODEL	100283-D18	I _{max} (cd)	102.5	S/MH(C0/180)	1.59	
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.27	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	664.87	η UP,DN(C0-180)	15.5,32.5	
NOMINAL FLUX(lm)	664.87	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	18.9,33.1	
LAMPS INSIDE	1	η up (%)	34.4	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	100	η down (%)	65.6	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°C
Operators:DAMIN
Test Date:06 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	90.48	88.65	91.23	89.38					0- 10	8.616	8.616	1.3,1.3
20	90.95	83.35	91.99	84.98					10- 20	25.20	33.82	5.09,5.09
30	91.91	75.35	92.68	77.41					20- 30	39.84	73.65	11.1,11.1
40	93.28	65.07	94.78	67.05					30- 40	51.65	125.3	18.8,18.8
50	95.20	52.64	97.58	54.69					40- 50	60.13	185.4	27.9,27.9
60	97.58	38.29	99.22	40.68					50- 60	64.75	250.2	37.6,37.6
70	100.0	22.58	100.5	24.88					60- 70	65.19	315.4	47.4,47.4
80	102.0	9.165	101.1	9.340					70- 80	62.25	377.6	56.8,56.8
90	102.4	1.759	100.8	2.759					80- 90	58.32	435.9	65.6,65.6
100	97.20	2.076	98.09	2.386					90-100	56.34	492.3	74,74
110	82.83	2.612	91.82	2.917					100-110	50.67	542.9	81.7,81.7
120	67.48	2.984	83.37	3.236					110-120	41.92	584.9	88,88
130	49.01	3.360	72.83	3.480					120-130	32.42	617.3	92.8,92.8
140	34.56	4.255	61.04	3.719					130-140	22.69	640.0	96.3,96.3
150	16.84	4.959	46.85	4.533					140-150	14.10	654.1	98.4,98.4
160	7.192	5.375	34.43	5.025					150-160	7.323	661.4	99.5,99.5
170	3.876	5.596	12.15	5.392					160-170	2.827	664.2	99.9,99.9
180	8.948	5.848	8.453	5.538					170-180	0.6434	664.9	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 154.54 lm

%lum = 23.2%

%lamp = 23.2%

Conical surface Flux(130deg): 282.97 lm

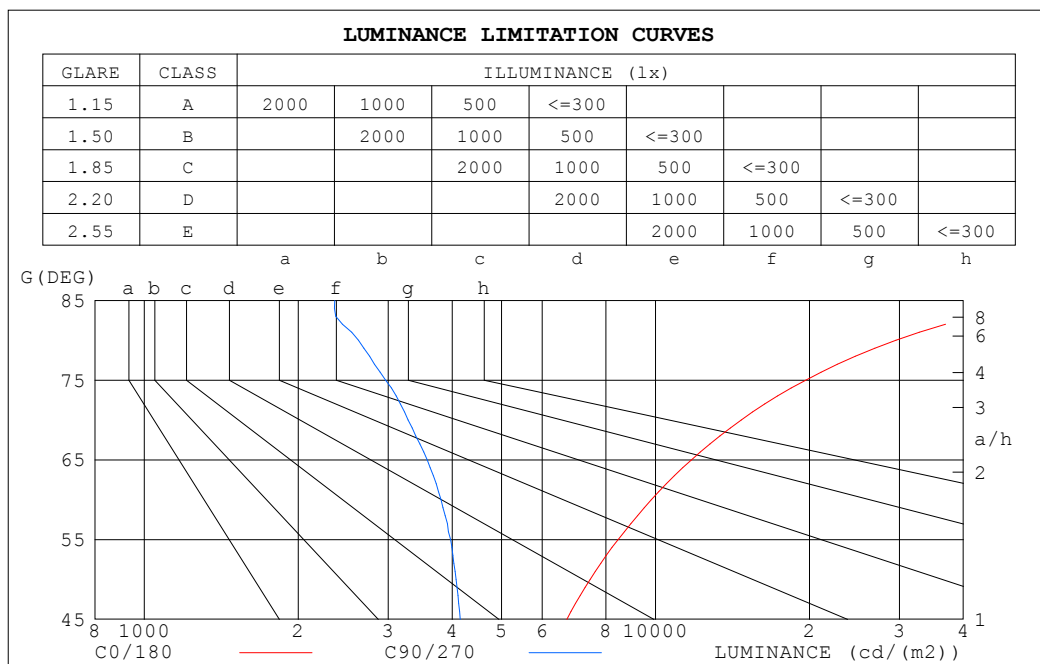
%lum = 42.6%

%lamp = 42.6%

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:06 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



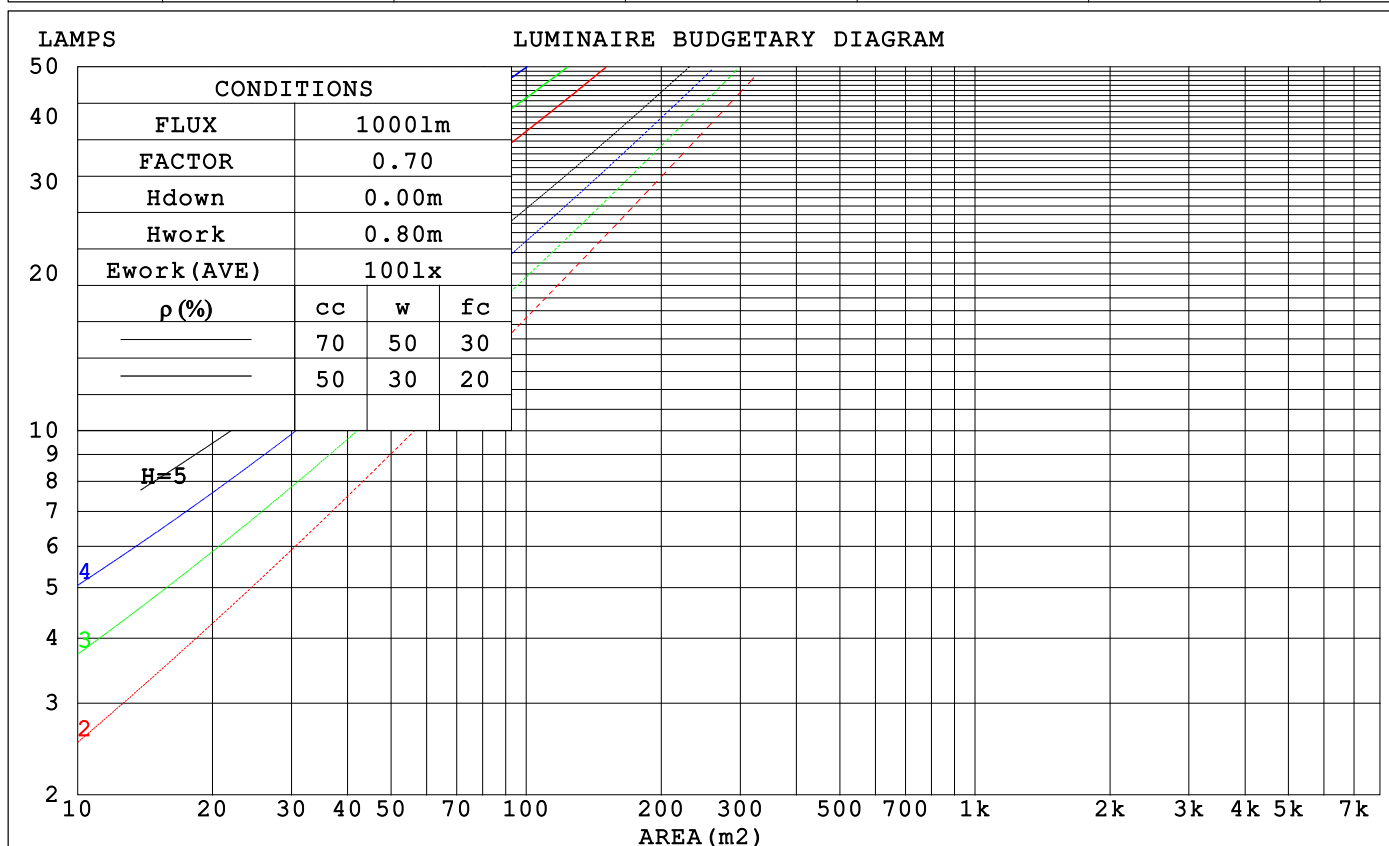
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	59108	2358
80	29534	2624
75	19657	2967
70	14706	3282
65	11757	3574
60	9815	3807
55	8450	3972
50	7449	4070
45	6702	4150

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 06 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	1.11	1.11	1.11	1.04	1.04	1.04	.92	.92	.92	.81	.81	.81	.70	.70	.70	.66
1.0	.91	.85	.80	.85	.80	.76	.75	.71	.67	.65	.62	.59	.56	.53	.51	.47
2.0	.77	.69	.62	.72	.65	.59	.63	.57	.52	.55	.50	.46	.47	.43	.40	.36
3.0	.67	.58	.50	.62	.54	.48	.54	.48	.42	.47	.42	.37	.40	.36	.33	.29
4.0	.58	.49	.42	.55	.46	.39	.48	.41	.35	.41	.36	.31	.35	.31	.27	.24
5.0	.52	.42	.35	.48	.40	.33	.42	.35	.30	.37	.31	.26	.31	.27	.23	.20
6.0	.46	.37	.30	.43	.35	.29	.38	.31	.26	.33	.27	.23	.28	.24	.20	.17
7.0	.41	.32	.26	.39	.31	.25	.34	.27	.22	.30	.24	.20	.26	.21	.17	.15
8.0	.37	.29	.23	.35	.27	.22	.31	.24	.20	.27	.22	.17	.23	.19	.15	.13
9.0	.34	.26	.20	.32	.24	.19	.28	.22	.17	.25	.19	.16	.22	.17	.14	.11
10.0	.31	.23	.18	.29	.22	.17	.26	.20	.16	.23	.18	.14	.20	.16	.12	.10



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:06 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	.400	.228	.072	.382	.218	.069	.349	.200	.064	.319	.184	.059	.291	.168	.054		
2.0	.339	.186	.057	.323	.178	.055	.293	.163	.051	.265	.149	.046	.239	.135	.043		
3.0	.298	.159	.047	.283	.152	.046	.256	.139	.042	.230	.126	.039	.207	.114	.035		
4.0	.266	.138	.041	.253	.132	.039	.228	.121	.036	.205	.110	.033	.183	.099	.030		
5.0	.241	.123	.036	.229	.118	.034	.206	.107	.032	.184	.097	.029	.164	.088	.026		
6.0	.220	.110	.032	.209	.106	.030	.188	.096	.028	.168	.087	.026	.150	.079	.023		
7.0	.203	.100	.028	.192	.096	.027	.173	.087	.025	.155	.079	.023	.137	.071	.021		
8.0	.188	.092	.026	.178	.088	.025	.160	.080	.023	.143	.073	.021	.127	.065	.019		
9.0	.175	.084	.024	.166	.081	.023	.149	.074	.021	.133	.067	.019	.118	.060	.017		
10.0	.163	.078	.022	.155	.075	.021	.139	.068	.019	.125	.062	.018	.111	.056	.016		

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						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.453	.453	.453	.387	.387	.387	.264	.264	.264	.152	.152	.152	.049	.049	.049		
1.0	.451	.420	.392	.386	.360	.337	.264	.248	.233	.152	.143	.136	.049	.046	.044		
2.0	.445	.398	.359	.381	.343	.310	.261	.237	.216	.151	.138	.127	.048	.045	.041		
3.0	.438	.382	.338	.375	.330	.293	.258	.229	.206	.149	.134	.121	.048	.043	.040		
4.0	.430	.370	.325	.369	.320	.282	.254	.223	.199	.147	.131	.117	.047	.043	.039		
5.0	.422	.361	.315	.363	.312	.274	.250	.218	.194	.145	.128	.115	.047	.042	.038		
6.0	.415	.353	.309	.357	.306	.269	.246	.214	.190	.143	.126	.113	.046	.041	.037		
7.0	.408	.347	.304	.351	.301	.265	.243	.211	.188	.141	.124	.112	.046	.041	.037		
8.0	.402	.342	.300	.346	.296	.262	.239	.208	.186	.139	.123	.111	.045	.040	.037		
9.0	.395	.337	.297	.341	.292	.259	.236	.206	.184	.137	.121	.110	.045	.040	.036		
10.0	.390	.333	.295	.336	.289	.258	.233	.203	.183	.136	.120	.109	.044	.040	.036		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: DAMIN
 Test Date: 06 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	18.6	19.8	19.3	20.5	21.4	15.2	16.4	15.9	17.2	18.0
	3H	22.0	23.1	22.7	23.8	24.7	16.8	17.9	17.5	18.6	19.5
	4H	23.9	25.0	24.7	25.8	26.7	17.4	18.5	18.2	19.2	20.2
	6H	26.2	27.1	26.9	27.9	28.9	17.9	18.9	18.6	19.7	20.6
	8H	27.4	28.3	28.2	29.1	30.1	18.0	19.0	18.8	19.8	20.7
	12H	28.8	29.7	29.6	30.5	31.5	18.1	19.0	18.9	19.8	20.8
4H	2H	19.0	20.1	19.8	20.9	21.8	16.7	17.8	17.5	18.6	19.5
	3H	22.6	23.6	23.4	24.4	25.3	18.6	19.5	19.4	20.4	21.3
	4H	24.8	25.6	25.6	26.4	27.4	19.5	20.4	20.3	21.2	22.2
	6H	27.2	27.9	28.0	28.8	29.8	20.3	21.0	21.1	21.9	22.9
	8H	28.6	29.3	29.4	30.1	31.2	20.5	21.2	21.4	22.1	23.2
	12H	30.1	30.8	31.0	31.7	32.7	20.8	21.4	21.6	22.3	23.3
8H	4H	25.0	25.7	25.9	26.6	27.6	21.1	21.8	21.9	22.6	23.7
	6H	27.7	28.3	28.6	29.2	30.3	22.3	22.9	23.1	23.8	24.8
	8H	29.3	29.8	30.2	30.7	31.8	22.8	23.4	23.7	24.3	25.4
	12H	31.1	31.6	32.0	32.5	33.6	23.3	23.8	24.2	24.7	25.8
12H	4H	25.0	25.7	25.9	26.5	27.6	21.6	22.3	22.5	23.1	24.2
	6H	27.8	28.3	28.7	29.2	30.3	23.1	23.7	24.0	24.6	25.7
	8H	29.5	30.0	30.4	30.9	32.0	23.9	24.4	24.8	25.3	26.4
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		+ 0.3 / - 0.3					+ 0.3 / - 0.4				

CIE Pub.117, 664.9 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -1.4$)
Area: 0.02 m²

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:06 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:

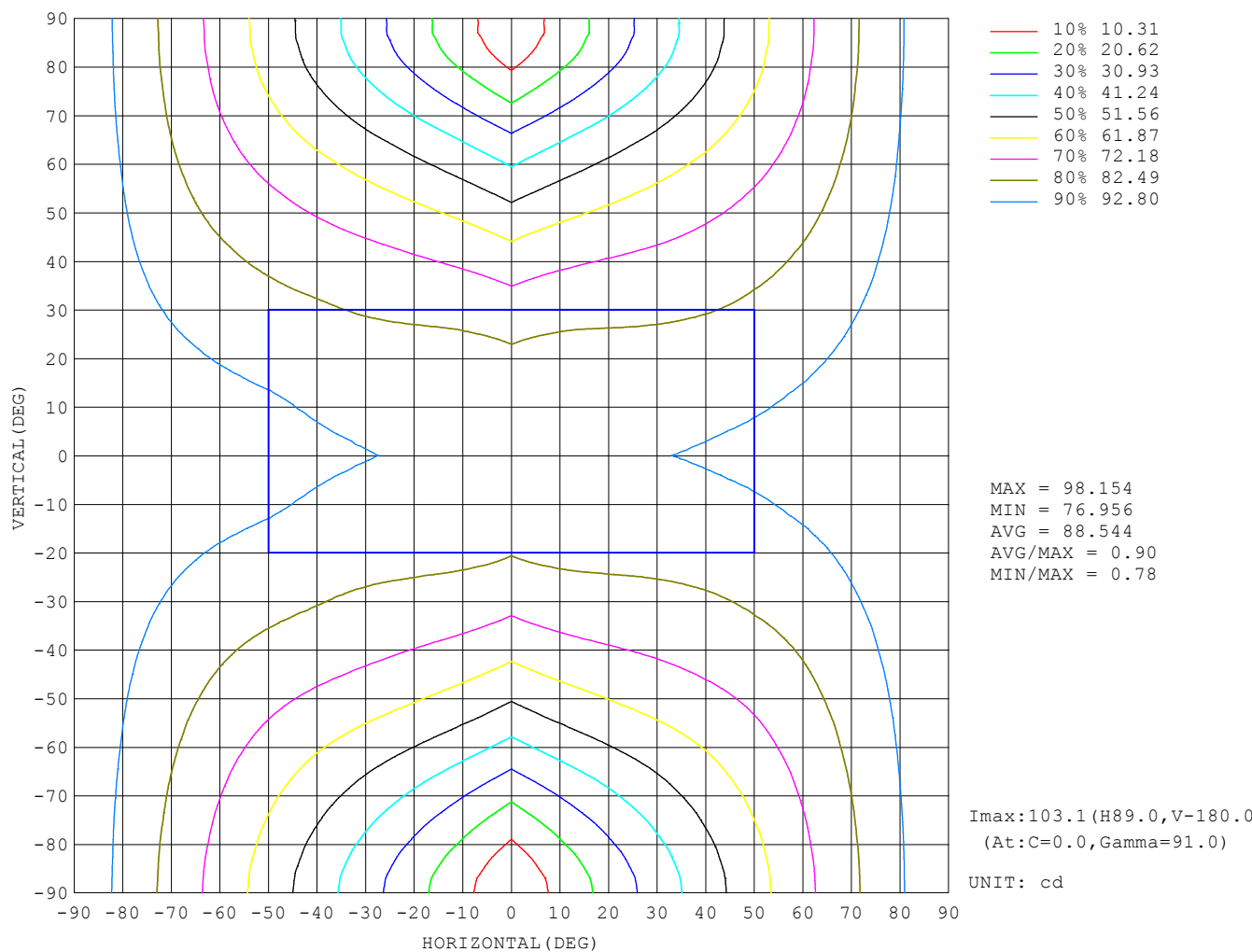
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	41	29	22	40	28	21	37	27	20	14
0.80	50	37	29	48	36	28	44	33	26	18
1.00	58	44	35	55	42	34	50	42	32	22
1.25	65	51	42	61	49	41	56	45	38	26
1.50	70	57	47	66	54	46	59	50	42	30
2.00	77	65	56	73	62	54	65	56	50	35
2.50	82	71	62	77	67	59	69	61	54	38
3.00	86	76	67	81	72	64	72	65	59	41
4.00	91	82	75	86	78	71	76	70	64	45
5.00	94	86	80	89	82	76	78	73	68	48
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: 06 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:

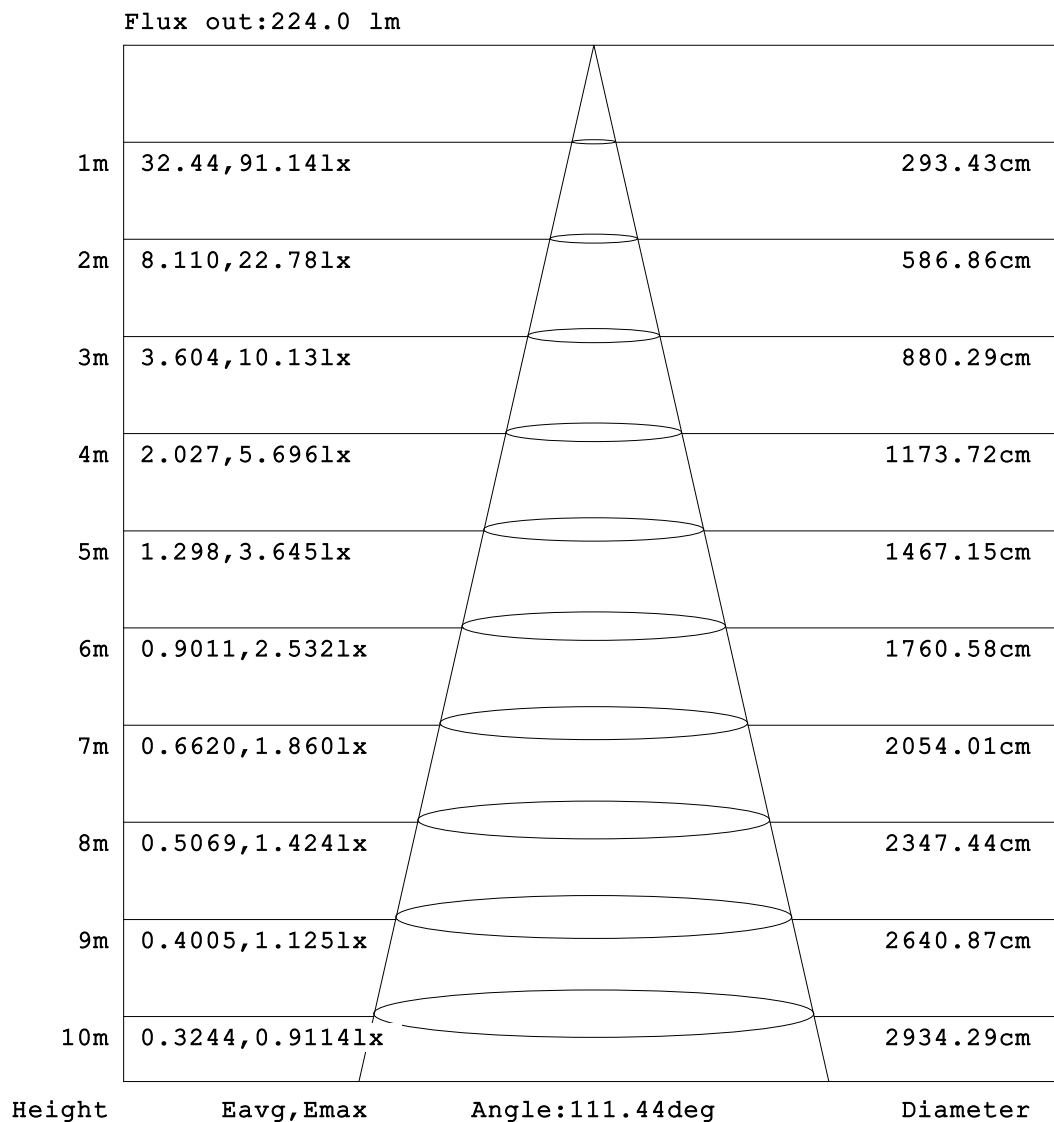
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:06 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

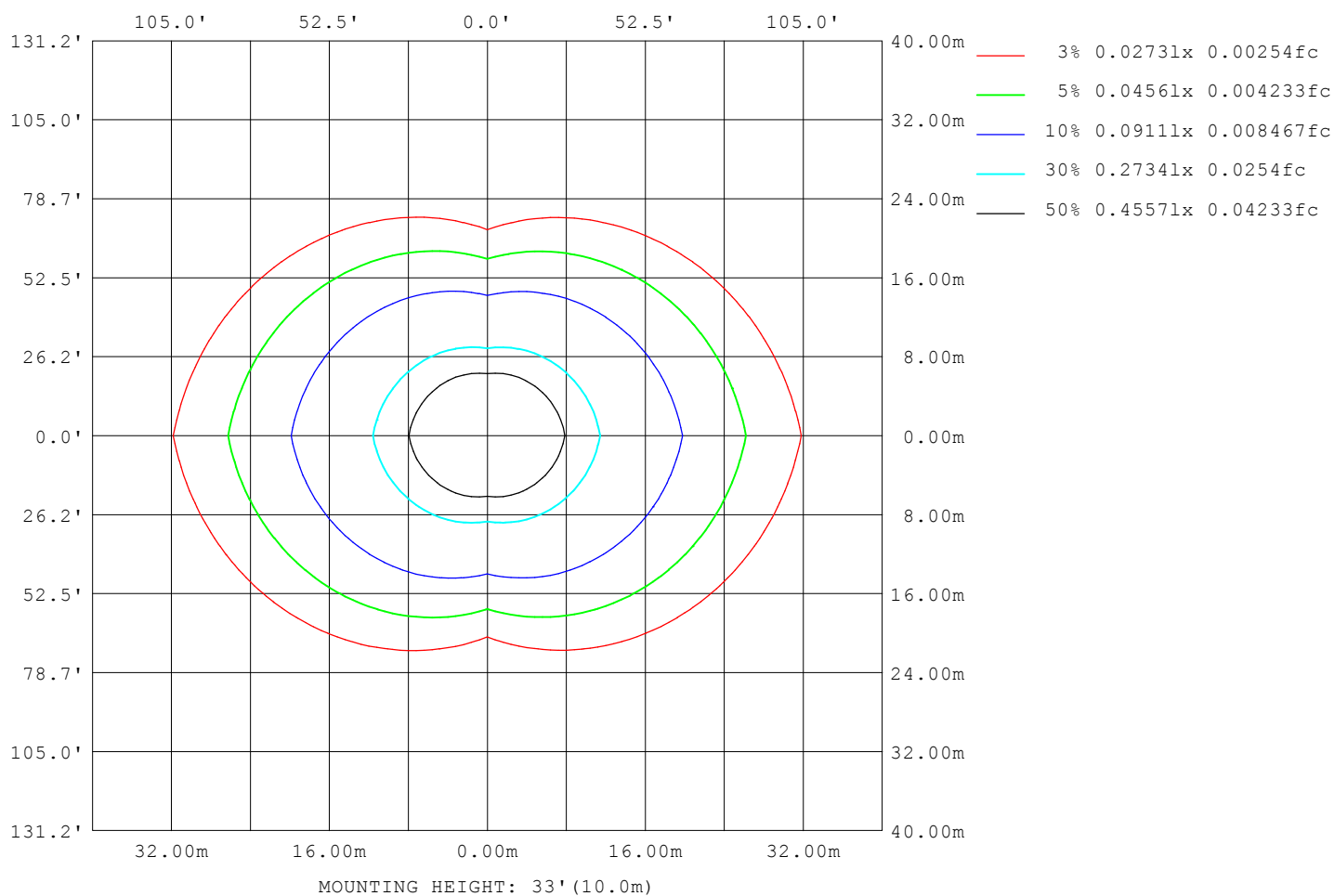


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:06 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: 06 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:0.1540A P:14.500W PF:0.9280 Freq:50.00Hz Lamp Flux:664.87x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

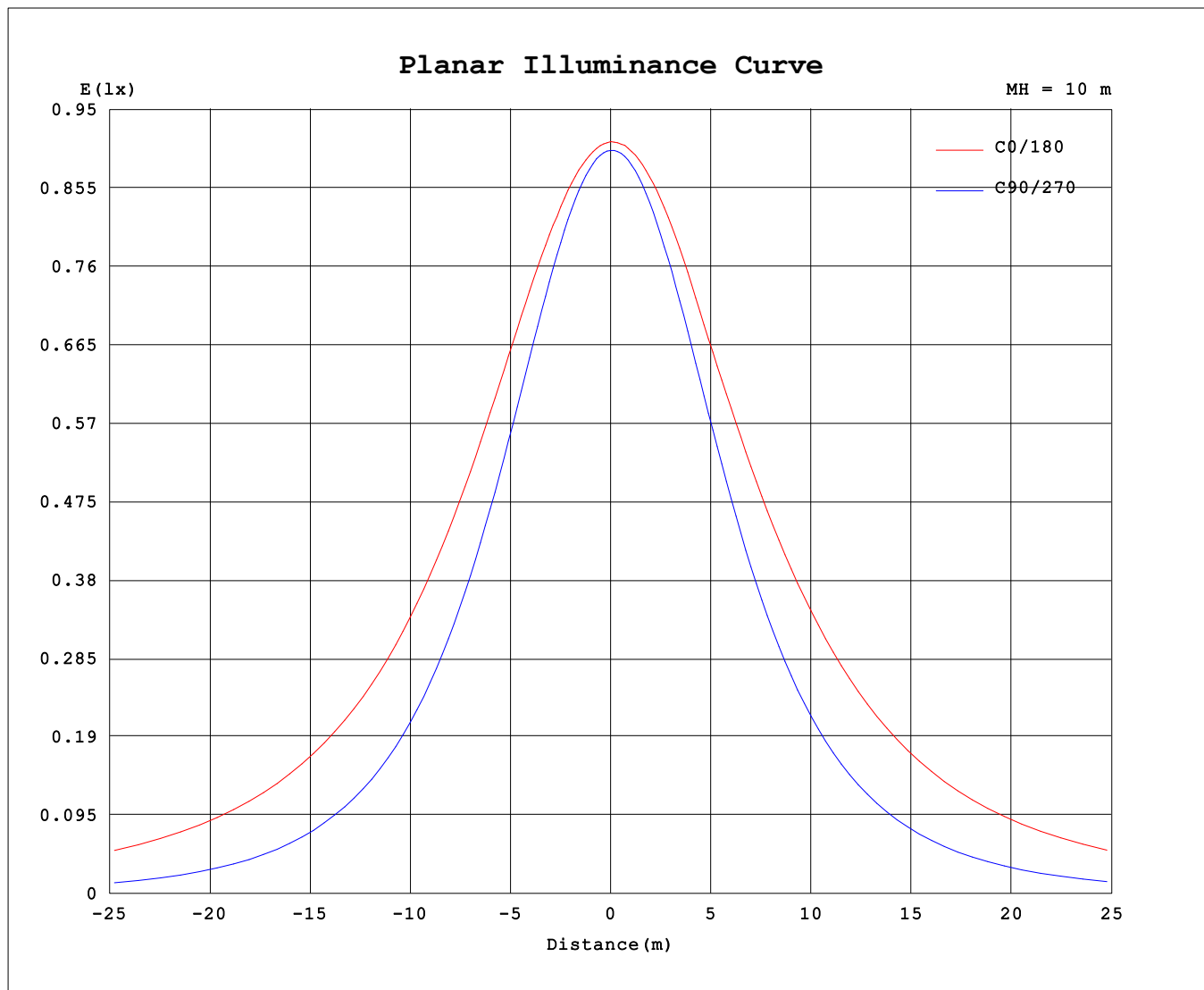
AvgL	cd/m2
L_0~180 (65) av	11753
L_0~180 (75) av	19517
L_0~180 (85) av	58400
L_90~270 (65) av	3759
L_90~270 (75) av	3112
L_90~270 (85) av	2384
L_45 (65) av	6781
L_45 (75) av	9305
L_45 (85) av	23512

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:06 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: 06 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	90.6	90.6	90.6	90.6															
5	90.4	90.0	90.8	90.4															
10	90.5	88.6	91.2	89.4															
15	90.5	86.4	91.7	87.5															
20	91.0	83.3	92.0	85.0															
25	91.4	79.7	92.0	81.5															
30	91.9	75.4	92.7	77.4															
35	92.5	70.5	93.6	72.5															
40	93.3	65.1	94.8	67.1															
45	94.2	59.0	96.2	61.1															
50	95.2	52.6	97.6	54.7															
55	96.4	45.8	98.5	47.8															
60	97.6	38.3	99.2	40.7															
65	98.8	30.4	99.9	33.2															
70	100	22.6	101	24.9															
75	101	15.4	101	16.8															
80	102	9.17	101	9.34															
85	102	4.13	101	4.18															
90	102	1.76	101	2.76															
95	102	2.20	99.9	2.52															
100	97.2	2.08	98.1	2.39															
105	90.4	2.28	95.3	2.64															
110	82.8	2.61	91.8	2.92															
115	73.5	2.81	87.8	3.08															
120	67.5	2.98	83.4	3.24															
125	59.1	3.17	78.3	3.37															
130	49.0	3.36	72.8	3.48															
135	41.9	3.54	67.1	3.60															
140	34.6	4.25	61.0	3.72															
145	26.1	4.53	54.6	3.94															
150	16.8	4.96	46.8	4.53															
155	11.9	5.23	40.4	4.71															
160	7.19	5.37	34.4	5.02															
165	5.94	5.49	21.8	5.29															
170	3.88	5.60	12.1	5.39															
175	5.73	5.64	10.1	5.46															
180	8.95	5.85	8.45	5.54															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:06 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: