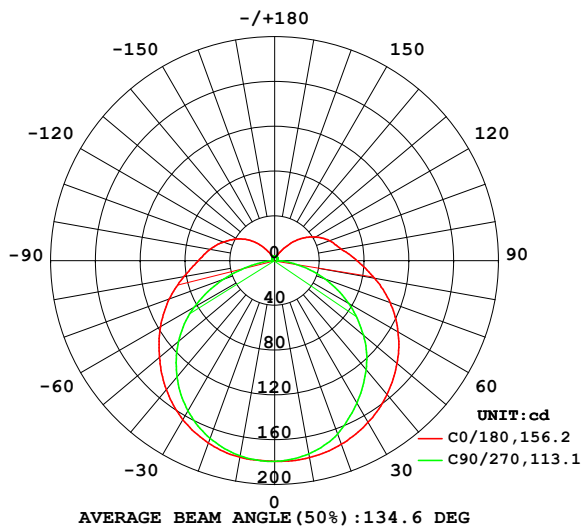


LUMINAIRE PHOTOMETRIC TEST REPORT

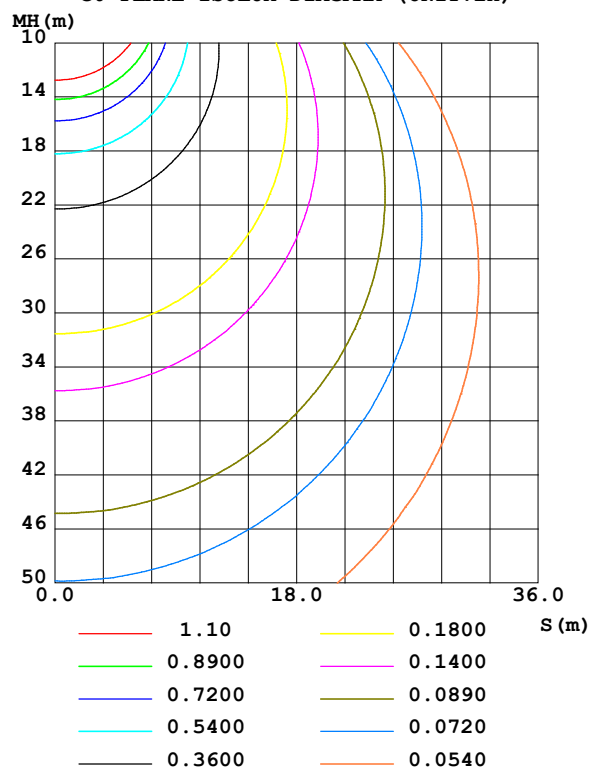
Test:U:99.000V I:0.1340A P:11.900W PF:0.9000 Freq:50.00Hz Lamp Flux:769.698x1 lm		
NAME: 3	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 64.68 lm/W			
MODEL		I _{max} (cd)	179.4	S/MH(C0/180)	1.36
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	769.70	η UP,DN(C0-180)	8.5,42.1
NOMINAL FLUX(lm)	769.698	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	8.0,41.4
LAMPS INSIDE	1	η up (%)	16.5	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	100	η down (%)	83.5	CIBSE SHR MAX	1.50

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:20 December 2023

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	178.6	175.3	178.3	177.1					0- 10	17.02	17.02	2.21,2.21
20	174.5	164.7	173.4	168.9					10- 20	49.30	66.32	8.62,8.62
30	166.8	146.9	164.2	155.0					20- 30	76.00	142.3	18.5,18.5
40	156.2	127.2	150.5	135.8					30- 40	94.39	236.7	30.8,30.8
50	142.8	103.7	134.4	112.0					40- 50	102.9	339.6	44.1,44.1
60	127.3	76.33	117.7	83.05					50- 60	100.6	440.2	57.2,57.2
70	109.8	47.60	100.1	48.26					60- 70	88.01	528.2	68.6,68.6
80	90.67	19.97	82.13	15.62					70- 80	67.57	595.7	77.4,77.4
90	73.71	3.073	68.28	3.056					80- 90	47.02	642.8	83.5,83.5
100	60.47	2.110	58.73	2.465					90-100	36.80	679.6	88.3,88.3
110	52.40	2.461	48.85	2.685					100-110	30.38	709.9	92.2,92.2
120	42.32	2.681	38.90	2.975					110-120	24.03	734.0	95.4,95.4
130	30.79	2.949	28.10	3.256					120-130	17.11	751.1	97.6,97.6
140	17.40	3.318	15.40	3.568					130-140	10.28	761.4	98.9,98.9
150	7.406	3.647	5.654	3.889					140-150	4.624	766.0	99.5,99.5
160	4.073	3.995	4.469	4.315					150-160	2.102	768.1	99.8,99.8
170	4.161	4.307	4.289	4.460					160-170	1.205	769.3	99.9,99.9
180	4.315	4.540	4.311	4.487					170-180	0.4144	769.7	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 287.75 lm

%lum = 37.4%

%lamp = 37.4%

Conical surface Flux(130deg): 486.32 lm

%lum = 63.2%

%lamp = 63.2%

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:20 December 2023

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

Test:U:99.000V I:0.1340A P:11.900W PF:0.9000 Freq:50.00Hz

Lamp Flux:769.698x1 lm

NAME: 3

TYPE:

WEIGHT:

SPEC.:

DIM.:

SERIAL No.:

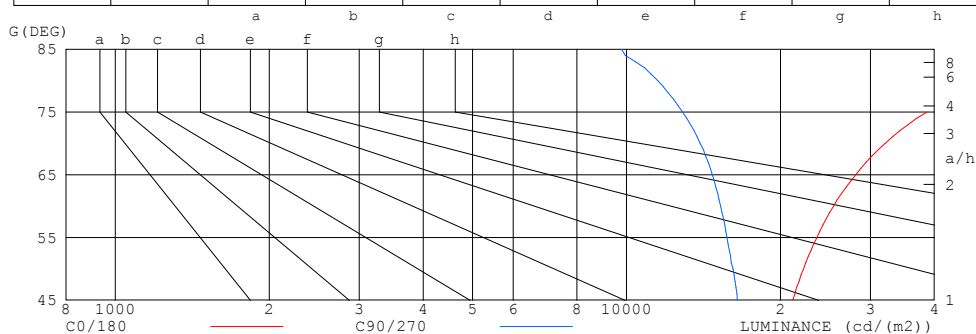
MFR.: EVERFINE

SUR.:

Shielding Angle:

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300



LUMINANCE cd/ (m2)		
G (DEG)	C0/180	C90/270
85	93480	9779
80	52136	11515
75	38701	12873
70	32047	13939
65	28069	14707
60	25420	15288
55	23570	15735
50	22184	16159
45	21142	16477

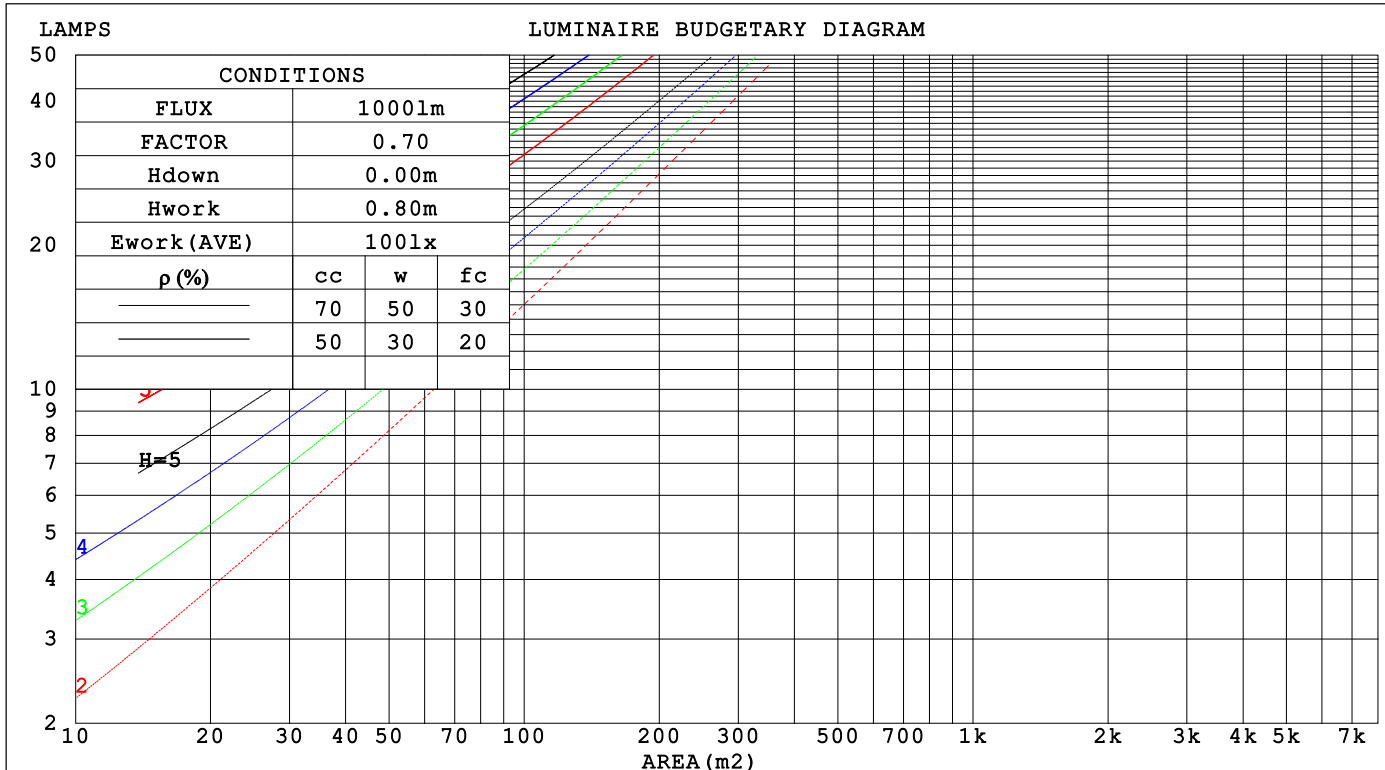
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:20 December 2023

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

Test:U:99.000V I:0.1340A P:11.900W PF:0.9000 Freq:50.00Hz Lamp Flux:769.698x1 lm		
NAME: 3	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

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	1.15	1.15	1.15	1.11	1.11	1.11	1.02	1.02	1.02	.94	.94	.94	.87	.87	.87	.84														
1.0	.97	.92	.87	.93	.88	.84	.86	.82	.79	.79	.76	.73	.73	.70	.68	.65														
2.0	.83	.76	.69	.80	.73	.67	.74	.68	.63	.68	.63	.59	.62	.59	.55	.52														
3.0	.72	.63	.56	.69	.61	.55	.64	.57	.52	.59	.53	.49	.54	.50	.46	.43														
4.0	.64	.54	.47	.61	.53	.46	.56	.49	.43	.52	.46	.41	.48	.43	.39	.36														
5.0	.56	.47	.40	.54	.46	.39	.50	.43	.37	.47	.40	.35	.43	.38	.33	.31														
6.0	.51	.41	.35	.49	.40	.34	.45	.38	.32	.42	.36	.31	.39	.33	.29	.27														
7.0	.46	.37	.30	.44	.36	.30	.41	.34	.28	.38	.32	.27	.35	.30	.26	.23														
8.0	.41	.33	.27	.40	.32	.26	.37	.30	.25	.35	.29	.24	.32	.27	.23	.21														
9.0	.38	.30	.24	.37	.29	.23	.34	.27	.22	.32	.26	.21	.30	.24	.21	.19														
10.0	.35	.27	.22	.34	.26	.21	.32	.25	.20	.30	.24	.19	.28	.22	.19	.17														



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:20 December 2023

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

Test:U:99.000V I:0.1340A P:11.900W PF:0.9000 Freq:50.00Hz Lamp Flux:769.698x1 lm		
NAME: 3	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.367	.209	.066	.355	.202	.064	.332	.191	.061	.311	.179	.058	.292	.169	.055		
2.0	.323	.177	.054	.312	.172	.053	.292	.162	.050	.273	.153	.048	.255	.144	.045		
3.0	.290	.154	.046	.280	.150	.045	.261	.141	.043	.244	.134	.041	.228	.126	.039		
4.0	.262	.136	.040	.253	.132	.039	.236	.125	.037	.221	.118	.036	.206	.112	.034		
5.0	.239	.122	.035	.231	.119	.035	.216	.112	.033	.201	.106	.032	.188	.100	.030		
6.0	.220	.110	.032	.212	.107	.031	.198	.102	.030	.185	.096	.028	.173	.091	.027		
7.0	.203	.100	.028	.196	.098	.028	.183	.093	.027	.172	.088	.026	.160	.083	.024		
8.0	.189	.092	.026	.182	.090	.025	.171	.085	.024	.160	.081	.023	.149	.077	.022		
9.0	.176	.085	.024	.170	.083	.023	.159	.079	.022	.149	.075	.021	.140	.071	.021		
10.0	.165	.079	.022	.160	.077	.021	.150	.073	.021	.140	.070	.020	.131	.066	.019		

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	.316	.316	.316	.270	.270	.270	.184	.184	.184	.106	.106	.106	.034	.034	.034		
1.0	.311	.282	.257	.266	.242	.221	.182	.167	.153	.105	.096	.089	.034	.031	.029		
2.0	.304	.259	.222	.260	.223	.192	.178	.154	.134	.103	.090	.078	.033	.029	.026		
3.0	.296	.243	.200	.254	.209	.173	.175	.145	.121	.101	.085	.072	.032	.028	.023		
4.0	.289	.230	.185	.248	.199	.161	.170	.139	.113	.099	.081	.067	.032	.026	.022		
5.0	.281	.220	.175	.242	.191	.152	.166	.133	.108	.096	.078	.064	.031	.025	.021		
6.0	.274	.212	.168	.235	.184	.146	.162	.129	.103	.094	.076	.061	.030	.025	.020		
7.0	.267	.206	.163	.230	.178	.142	.159	.125	.100	.092	.074	.060	.030	.024	.020		
8.0	.260	.200	.159	.224	.173	.138	.155	.122	.098	.090	.072	.058	.029	.024	.019		
9.0	.254	.195	.155	.219	.169	.136	.152	.119	.096	.088	.070	.057	.029	.023	.019		
10.0	.248	.191	.153	.214	.166	.133	.149	.117	.095	.087	.069	.057	.028	.023	.019		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:20 December 2023

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

Test:U:99.000V I:0.1340A P:11.900W PF:0.9000 Freq:50.00Hz Lamp Flux:769.698x1 lm										
NAME: 3			TYPE:			WEIGHT:				
SPEC.:			DIM.:			SERIAL No.:				
MFR.: EVERFINE			SUR.:			Shielding Angle:				
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	23.2	24.5	23.6	25.0	25.5	21.4	22.7	21.8	23.2	23.7
3H	25.7	27.0	26.3	27.5	28.1	22.9	24.2	23.4	24.7	25.3
4H	27.2	28.4	27.7	28.9	29.5	23.5	24.7	24.1	25.3	25.9
6H	28.7	29.9	29.3	30.4	31.0	24.0	25.1	24.5	25.7	26.3
8H	29.6	30.7	30.2	31.3	31.9	24.1	25.2	24.7	25.8	26.4
12H	30.6	31.7	31.2	32.2	32.9	24.2	25.2	24.8	25.8	26.5
4H 2H	23.7	24.9	24.2	25.4	26.0	22.4	23.6	22.9	24.1	24.7
3H	26.5	27.5	27.0	28.1	28.7	24.2	25.2	24.7	25.8	26.4
4H	28.0	29.0	28.6	29.6	30.3	25.0	25.9	25.6	26.5	27.2
6H	29.8	30.7	30.4	31.3	32.0	25.6	26.5	26.2	27.1	27.8
8H	30.8	31.6	31.4	32.2	33.0	25.8	26.6	26.5	27.3	28.0
12H	31.9	32.7	32.6	33.3	34.1	26.0	26.7	26.6	27.4	28.1
8H 4H	28.3	29.1	29.0	29.8	30.5	25.8	26.6	26.4	27.2	28.0
6H	30.3	31.0	31.0	31.7	32.4	26.7	27.4	27.4	28.1	28.9
8H	31.5	32.1	32.2	32.8	33.6	27.2	27.8	27.9	28.5	29.2
12H	32.9	33.4	33.6	34.1	34.9	27.5	28.0	28.2	28.7	29.5
12H 4H	28.3	29.1	29.0	29.7	30.5	26.0	26.8	26.7	27.4	28.2
6H	30.4	31.0	31.1	31.7	32.5	27.2	27.8	27.9	28.5	29.3
8H	31.7	32.2	32.4	32.9	33.7	27.7	28.3	28.4	29.0	29.8
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.5				

CIE Pub.117, 769.7 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -0.9)
Area: 0.01 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:20 December 2023

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

Test:U:99.000V I:0.1340A P:11.900W PF:0.9000 Freq:50.00Hz Lamp Flux:769.698x1 lm		
NAME: 3	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

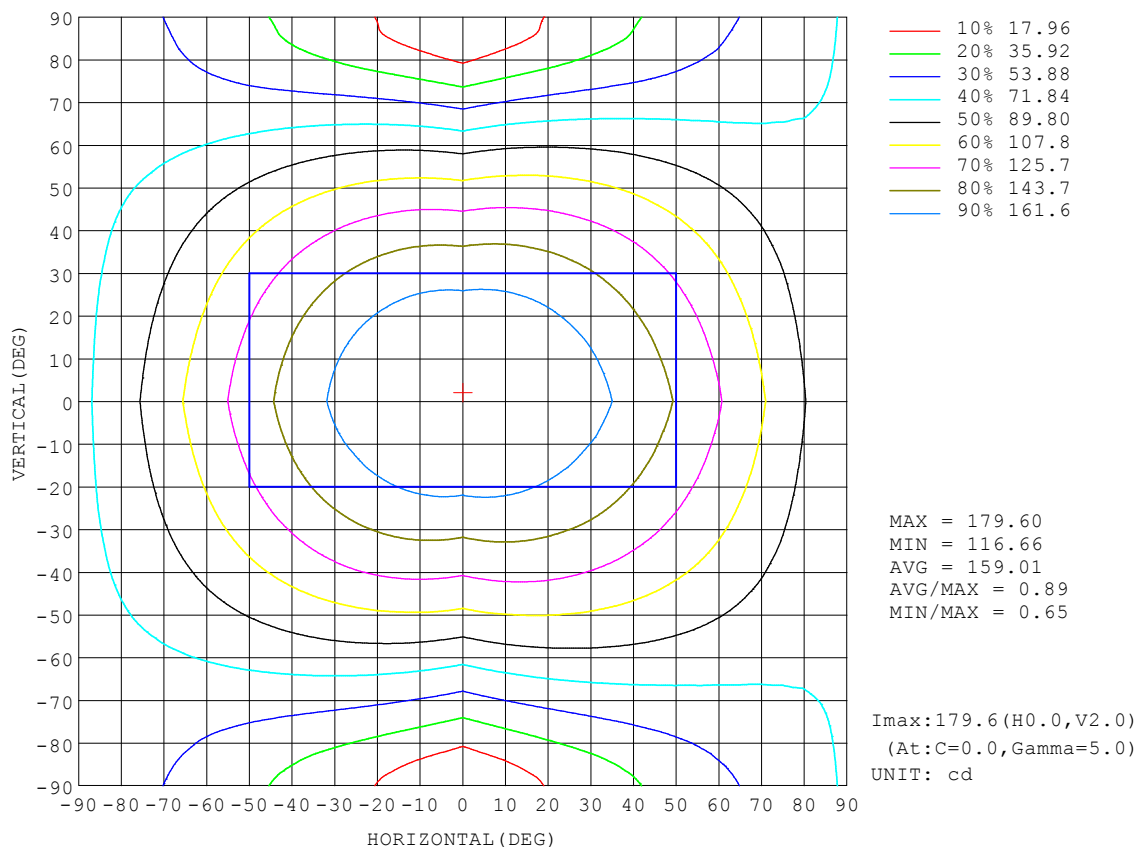
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	49	37	29	48	36	29	46	35	29	22
0.80	58	46	38	57	45	37	54	43	36	29
1.00	66	54	45	64	53	45	61	53	44	35
1.25	73	61	53	71	60	52	67	57	50	41
1.50	78	66	58	76	65	57	71	62	55	45
2.00	86	75	67	83	73	65	77	69	63	51
2.50	90	80	73	87	78	71	81	73	68	55
3.00	94	85	78	90	82	76	84	77	72	59
4.00	98	91	84	94	88	82	88	82	77	64
5.00	101	95	89	97	91	86	90	85	81	67
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:20 December 2023

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

Test:U:99.000V I:0.1340A P:11.900W PF:0.9000 Freq:50.00Hz Lamp Flux:769.698x1 lm		
NAME: 3	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

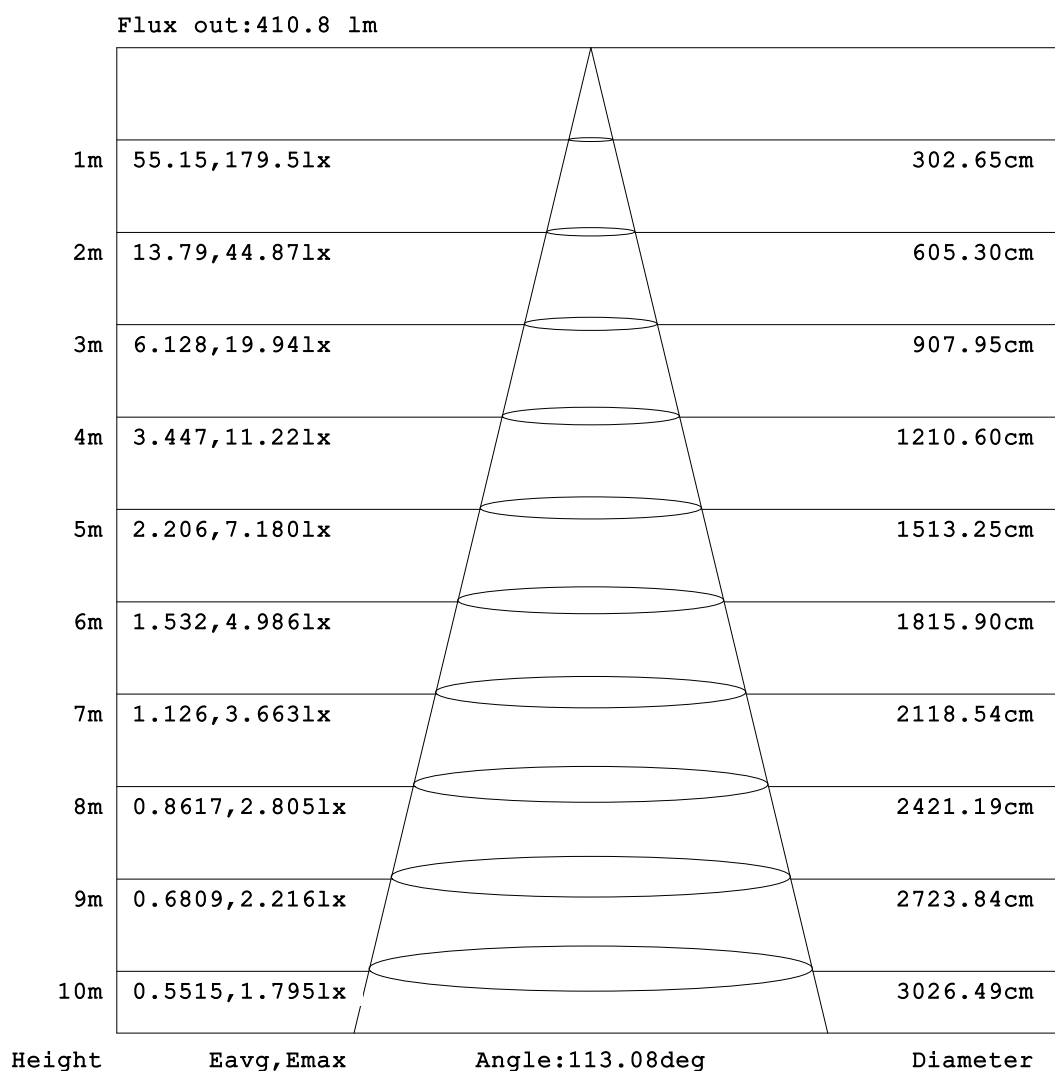


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:20 December 2023

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

Test:U:99.000V I:0.1340A P:11.900W PF:0.9000 Freq:50.00Hz Lamp Flux:769.698x1 lm		
NAME: 3	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



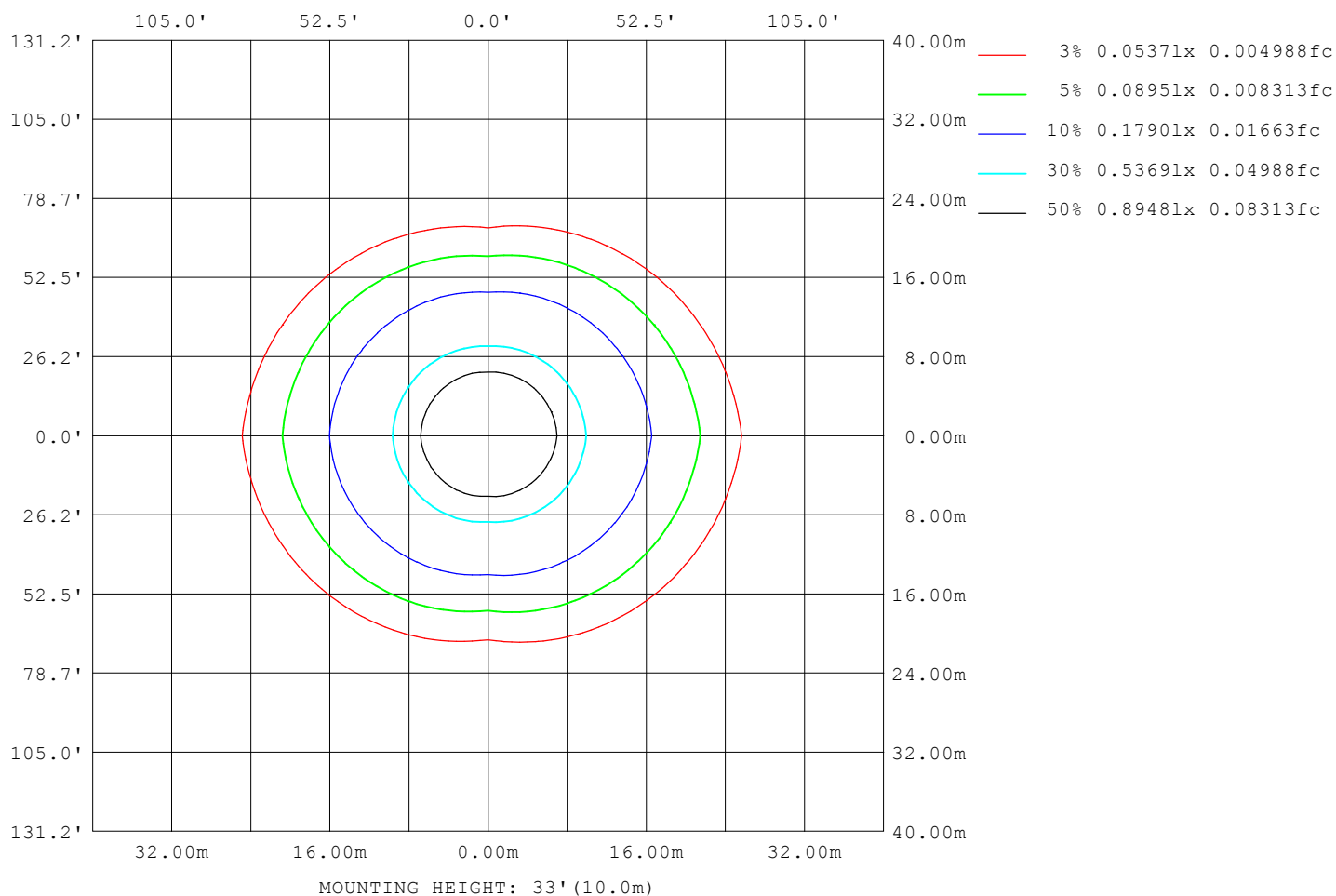
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:20 December 2023

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

Test:U:99.000V I:0.1340A P:11.900W PF:0.9000 Freq:50.00Hz Lamp Flux:769.698x1 lm		
NAME: 3	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:20 December 2023

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:99.000V I:0.1340A P:11.900W PF:0.9000 Freq:50.00Hz Lamp Flux:769.698x1 lm		
NAME: 3	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

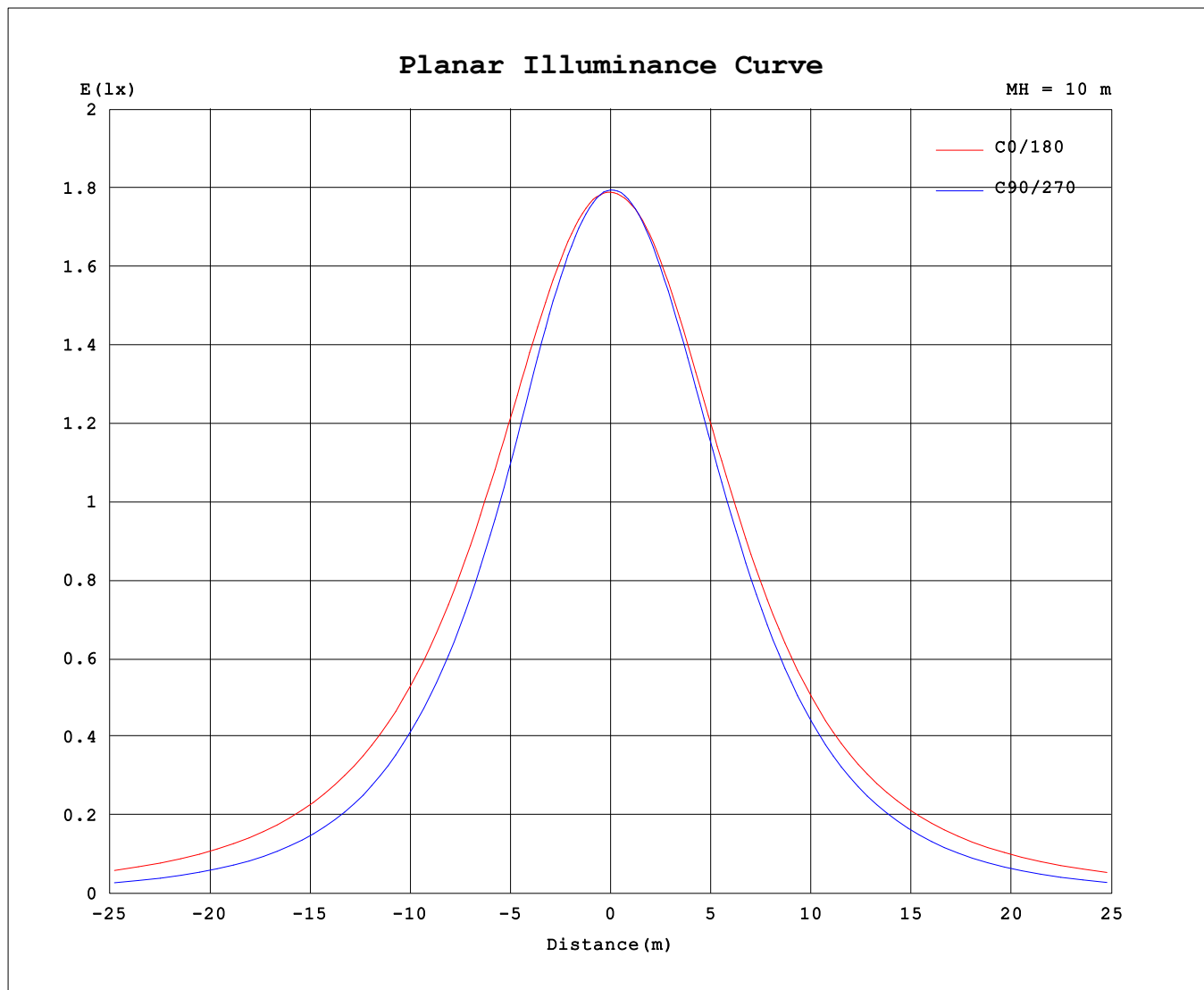
AvgL	cd/m2
L_0~180 (65) av	26939
L_0~180 (75) av	36967
L_0~180 (85) av	89501
L_90~270 (65) av	15145
L_90~270 (75) av	12422
L_90~270 (85) av	7739
L_45 (65) av	19487
L_45 (75) av	21498
L_45 (85) av	38088

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:20 December 2023

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: 20 December 2023

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

Test:U:99.000V I:0.1340A P:11.900W PF:0.9000 Freq:50.00Hz Lamp Flux:769.698x1 lm		
NAME: 3	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270														
0	179	179	179	179														
5	179	178	179	179														
10	179	175	178	177														
15	177	171	176	174														
20	175	165	173	169														
25	171	156	169	163														
30	167	147	164	155														
35	162	137	158	146														
40	156	127	151	136														
45	150	116	143	124														
50	143	104	134	112														
55	135	90.1	126	98.6														
60	127	76.3	118	83.1														
65	119	62.1	109	66.0														
70	110	47.6	100	48.3														
75	100	33.3	91.0	31.0														
80	90.7	20.0	82.1	15.6														
85	81.6	8.51	74.4	4.98														
90	73.7	3.07	68.3	3.06														
95	66.9	2.02	63.4	2.46														
100	60.5	2.11	58.7	2.47														
105	56.2	2.26	53.9	2.55														
110	52.4	2.46	48.9	2.68														
115	47.6	2.58	44.0	2.83														
120	42.3	2.68	38.9	2.98														
125	36.7	2.82	33.7	3.12														
130	30.8	2.95	28.1	3.26														
135	24.6	3.11	22.0	3.41														
140	17.4	3.32	15.4	3.57														
145	11.7	3.48	9.59	3.69														
150	7.41	3.65	5.65	3.89														
155	5.08	3.83	4.62	4.17														
160	4.07	3.99	4.47	4.32														
165	4.09	4.17	4.38	4.40														
170	4.16	4.31	4.29	4.46														
175	4.22	4.45	4.30	4.48														
180	4.32	4.54	4.31	4.49														

C Range: 0 - 360DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:20 December 2023

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: