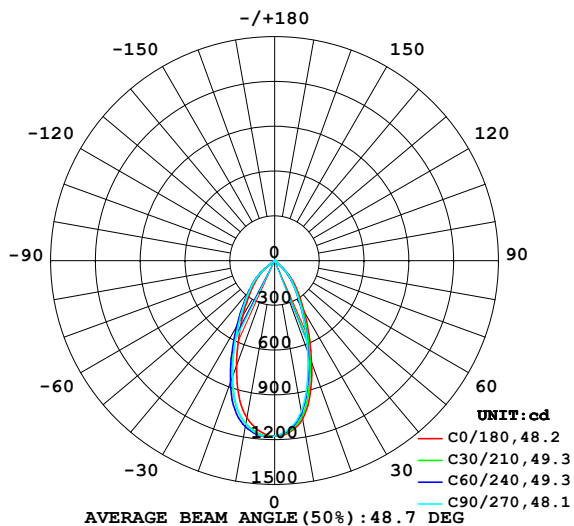


LUMINAIRE PHOTOMETRIC TEST REPORT

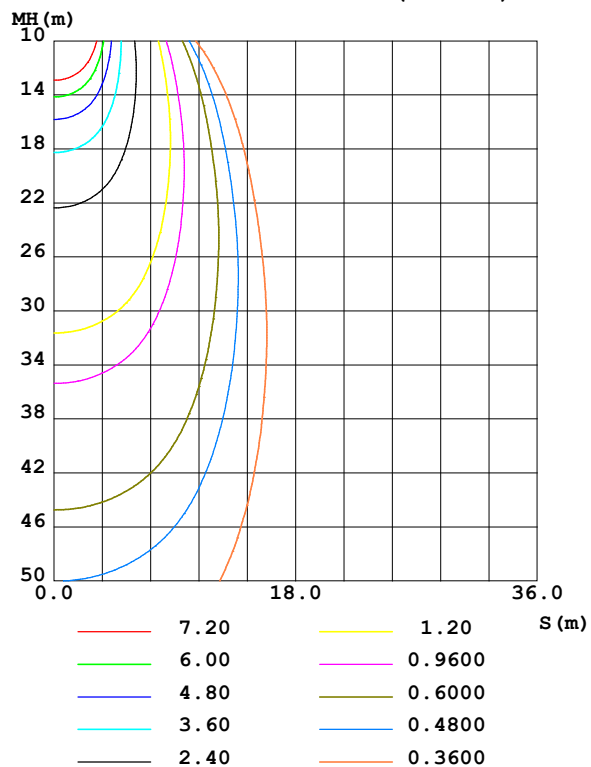
Test:U:230.35V I:0.0865A P:11.980W PF:0.6012 Freq:50.00Hz Lamp Flux:949.038x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 79.22 lm/W
MODEL	HYD-371-12W	I _{max} (cd)	1181	S/MH(C0/180)	0.76	
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	0.82	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	949.04	η UP,DN(C0-180)	0.0,45.9	
NOMINAL FLUX(lm)	949.038	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,54.1	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	230	η down (%)	100.0	CIBSE SHR MAX	0.75	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks: M-1025

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1077	1053	1027	1042	1070	1123	1113	1079	0- 10	107.4	107.4	11.3,11.3
20	725.7	677.5	650.3	696.8	750.0	859.1	825.3	752.9	10- 20	256.1	363.5	38.3,38.3
30	398.7	362.3	352.6	390.6	430.2	502.0	483.1	429.8	20- 30	259.0	622.5	65.6,65.6
40	207.6	179.8	177.7	204.2	232.2	267.6	266.2	235.1	30- 40	192.3	814.8	85.9,85.9
50	12.37	12.03	14.06	64.14	89.47	114.5	63.15	29.99	40- 50	111.0	925.8	97.6,97.6
60	9.378	10.30	11.02	11.19	10.54	9.004	8.175	8.199	50- 60	13.19	939.0	98.9,98.9
70	4.741	4.741	3.828	5.935	7.287	4.602	3.210	3.726	60- 70	7.536	946.5	99.7,99.7
80	0.5097	0.2505	0.2245	0.3512	1.641	0.4147	0.2108	0.3113	70- 80	2.376	948.9	100,100
90	0	0	0	0	0	0	0	0	80- 90	0.1294	949.0	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 883.59 lm

%lum = 93.1%

%lamp = 93.1%

Conical surface Flux(130deg): 943.34 lm

%lum = 99.4%

%lamp = 99.4%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2025-10-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks: M-1025

LUMINANCE LIMITATION CURVES

Test:U:230.35V I:0.0865A P:11.980W PF:0.6012 Freq:50.00Hz

Lamp Flux:949.038x1 lm

NAME:

TYPE:

WEIGHT:

SPEC.: 4000K

DIM.:

SERIAL No.:

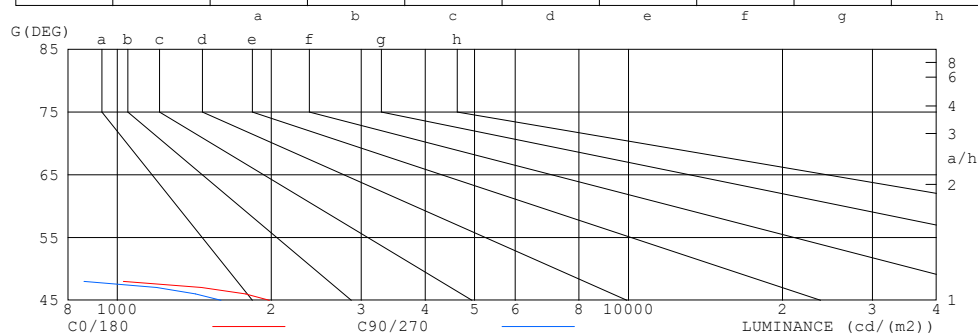
MFR.: EVERFINE

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	1	13
80	30	13
75	86	46
70	142	111
65	185	178
60	192	220
55	179	211
50	196	218
45	1984	1596

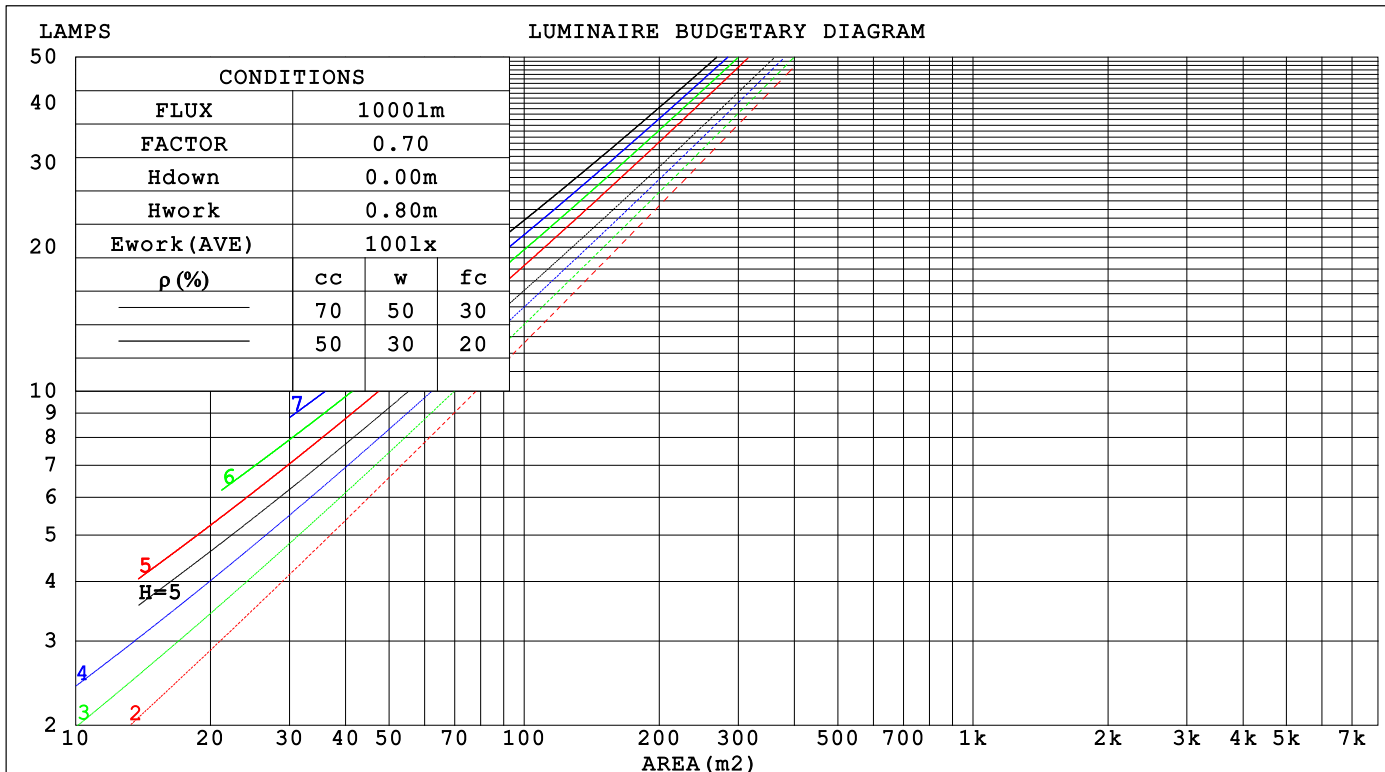
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2025-10-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks: M-1025

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.35V I:0.0865A P:11.980W PF:0.6012 Freq:50.00Hz Lamp Flux:949.038x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 4000K	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			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.10	1.08	1.06	1.08	1.06	1.04	1.04	1.02	1.01	1.00	.99	.98	.97	.96	.95	.93
2.0	1.02	.98	.95	1.01	.97	.94	.97	.94	.92	.94	.92	.90	.92	.90	.88	.86
3.0	.95	.90	.86	.94	.89	.85	.91	.87	.84	.89	.85	.82	.86	.84	.81	.80
4.0	.89	.83	.78	.87	.82	.78	.85	.81	.77	.83	.79	.76	.81	.78	.75	.74
5.0	.83	.77	.72	.82	.76	.72	.80	.75	.71	.78	.74	.71	.77	.73	.70	.68
6.0	.77	.71	.67	.77	.71	.67	.75	.70	.66	.74	.69	.66	.72	.68	.65	.64
7.0	.73	.66	.62	.72	.66	.62	.71	.65	.62	.69	.65	.61	.68	.64	.61	.59
8.0	.68	.62	.58	.68	.62	.58	.67	.61	.58	.66	.61	.57	.65	.60	.57	.56
9.0	.64	.58	.54	.64	.58	.54	.63	.58	.54	.62	.57	.54	.61	.57	.54	.52
10.0	.61	.55	.51	.60	.55	.51	.60	.54	.51	.59	.54	.51	.58	.54	.50	.49



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks: M-1025

WEC AND CCEC

Test:U:230.35V I:0.0865A P:11.980W PF:0.6012 Freq:50.00Hz Lamp Flux:949.038x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 4000K	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	.184	.105	.033	.177	.101	.032	.165	.094	.030	.153	.088	.028	.142	.082	.027		
2.0	.177	.097	.030	.171	.094	.029	.161	.089	.028	.151	.085	.027	.142	.080	.025		
3.0	.169	.090	.027	.164	.088	.026	.155	.084	.026	.147	.080	.025	.139	.077	.024		
4.0	.161	.084	.025	.157	.082	.024	.149	.079	.024	.142	.076	.023	.135	.073	.022		
5.0	.153	.078	.023	.150	.077	.022	.143	.074	.022	.136	.072	.021	.130	.070	.021		
6.0	.146	.073	.021	.143	.072	.021	.137	.070	.020	.131	.068	.020	.126	.066	.020		
7.0	.140	.069	.020	.137	.068	.019	.131	.066	.019	.126	.065	.019	.122	.063	.019		
8.0	.133	.065	.018	.131	.064	.018	.126	.063	.018	.122	.062	.018	.117	.060	.018		
9.0	.128	.062	.017	.125	.061	.017	.121	.060	.017	.117	.059	.017	.113	.057	.017		
10.0	.122	.059	.016	.120	.058	.016	.116	.057	.016	.113	.056	.016	.109	.055	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020		
1.0	.172	.157	.144	.147	.135	.124	.100	.093	.086	.058	.054	.050	.019	.017	.016		
2.0	.157	.132	.112	.134	.114	.097	.092	.079	.067	.053	.046	.040	.017	.015	.013		
3.0	.145	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010		
4.0	.135	.099	.071	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.008		
5.0	.127	.088	.059	.109	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007		
6.0	.119	.078	.049	.103	.068	.043	.071	.047	.030	.041	.028	.018	.013	.009	.006		
7.0	.113	.071	.041	.097	.061	.036	.067	.043	.025	.039	.025	.015	.013	.008	.005		
8.0	.107	.065	.035	.092	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004		
9.0	.102	.060	.031	.088	.052	.027	.061	.036	.019	.036	.021	.011	.012	.007	.004		
10.0	.098	.055	.027	.084	.048	.023	.058	.034	.017	.034	.020	.010	.011	.007	.003		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks: M-1025

UGR(Unified Glare Rating) Table

Test:U:230.35V I:0.0865A P:11.980W PF:0.6012 Freq:50.00Hz Lamp Flux:949.038x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.: 4000K			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	8.9	9.9	9.2	10.1	10.3	8.3	9.3	8.5	9.5	9.6
3H	8.8	9.8	9.1	10.0	10.2	8.2	9.1	8.5	9.3	9.5
4H	8.8	9.6	9.1	9.9	10.1	8.1	9.0	8.4	9.2	9.4
6H	8.7	9.5	9.0	9.7	10.0	8.0	8.8	8.3	9.1	9.3
8H	8.6	9.4	9.0	9.7	9.9	8.0	8.8	8.3	9.0	9.3
12H	8.6	9.3	8.9	9.6	9.9	7.9	8.7	8.3	8.9	9.2
4H 2H	8.7	9.6	9.0	9.8	10.0	8.1	9.0	8.4	9.2	9.4
3H	8.7	9.4	9.0	9.7	9.9	8.0	8.7	8.3	9.0	9.3
4H	8.6	9.3	8.9	9.6	9.9	7.9	8.6	8.3	8.9	9.2
6H	8.5	9.1	8.9	9.4	9.8	7.8	8.4	8.2	8.8	9.1
8H	8.4	9.0	8.8	9.3	9.7	7.8	8.3	8.2	8.7	9.0
12H	8.4	8.9	8.8	9.3	9.7	7.7	8.2	8.1	8.6	9.0
8H 4H	8.5	9.0	8.8	9.4	9.7	7.8	8.3	8.2	8.7	9.1
6H	8.4	8.8	8.8	9.2	9.6	7.7	8.1	8.1	8.5	9.0
8H	8.3	8.7	8.8	9.1	9.6	7.6	8.0	8.1	8.5	8.9
12H	8.3	8.6	8.7	9.0	9.5	7.6	7.9	8.1	8.4	8.8
12H 4H	8.4	8.9	8.8	9.3	9.7	7.7	8.2	8.2	8.6	9.0
6H	8.3	8.7	8.8	9.1	9.6	7.6	8.0	8.1	8.5	8.9
8H	8.3	8.6	8.7	9.0	9.5	7.6	7.9	8.1	8.4	8.8
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.5 / - 8.8					+ 2.4 / - 8.3				
1.5H	+ 4.0 / - 9.9					+ 3.7 / - 9.2				
2.0H	+ 7.9 / - 6.3					+ 7.2 / - 6.0				

CIE Pub.117, 949.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.2)
Area: 0.1 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks: M-1025

UTILIZATION FACTORS TABLE

Test:U:230.35V I:0.0865A P:11.980W PF:0.6012 Freq:50.00Hz Lamp Flux:949.038x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

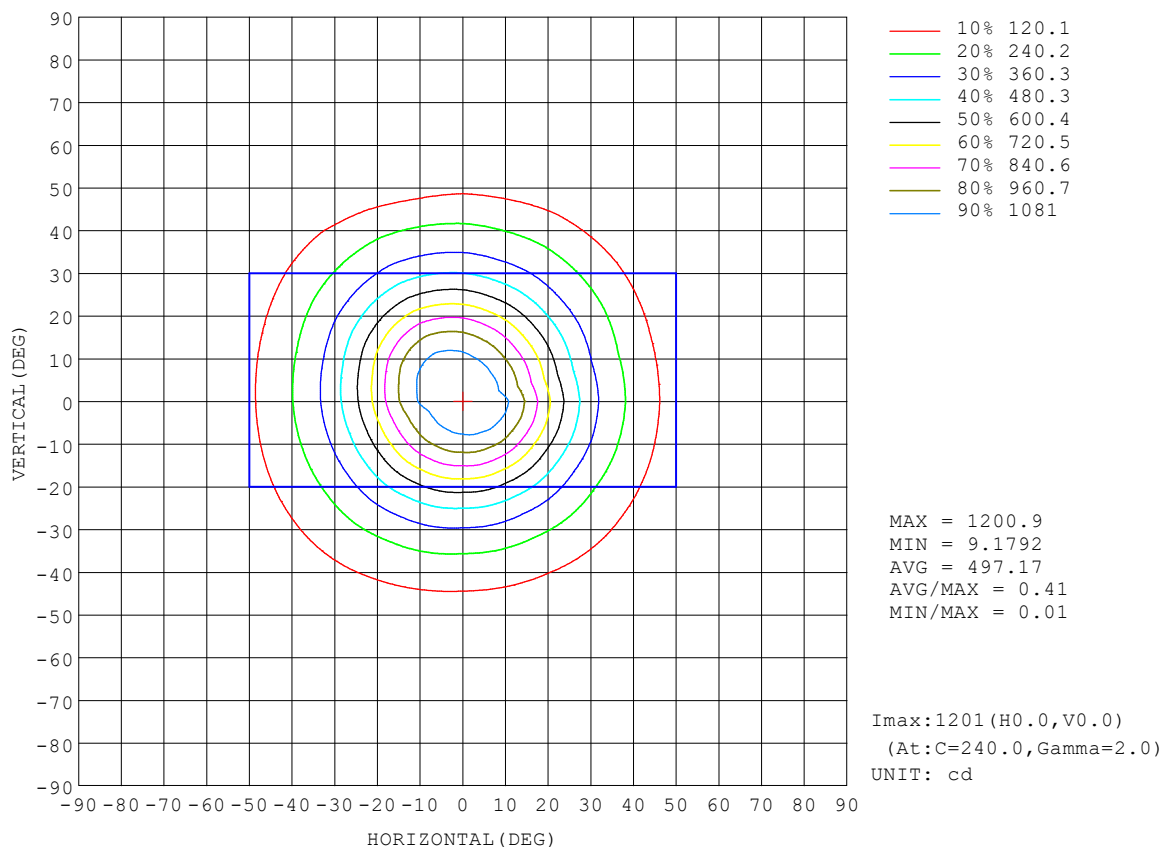
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	83	75	71	82	75	71	81	75	71	67
0.80	91	84	80	90	84	80	89	83	79	75
1.00	96	90	86	95	90	86	94	90	85	81
1.25	101	95	91	100	95	91	98	93	90	86
1.50	104	99	95	103	98	95	100	96	93	89
2.00	107	103	99	106	102	98	103	100	97	92
2.50	109	105	102	107	104	101	104	101	99	93
3.00	111	107	104	109	106	103	106	103	101	94
4.00	113	110	108	111	108	106	107	105	103	96
5.00	114	112	110	112	110	108	108	107	105	97
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2025-10-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity: 65.0%
Test Distance: 9.401m [K=1.0000]
Remarks: M-1025

ISOCANDELA DIAGRAM

Test:U:230.35V I:0.0865A P:11.980W PF:0.6012 Freq:50.00Hz Lamp Flux:949.038x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

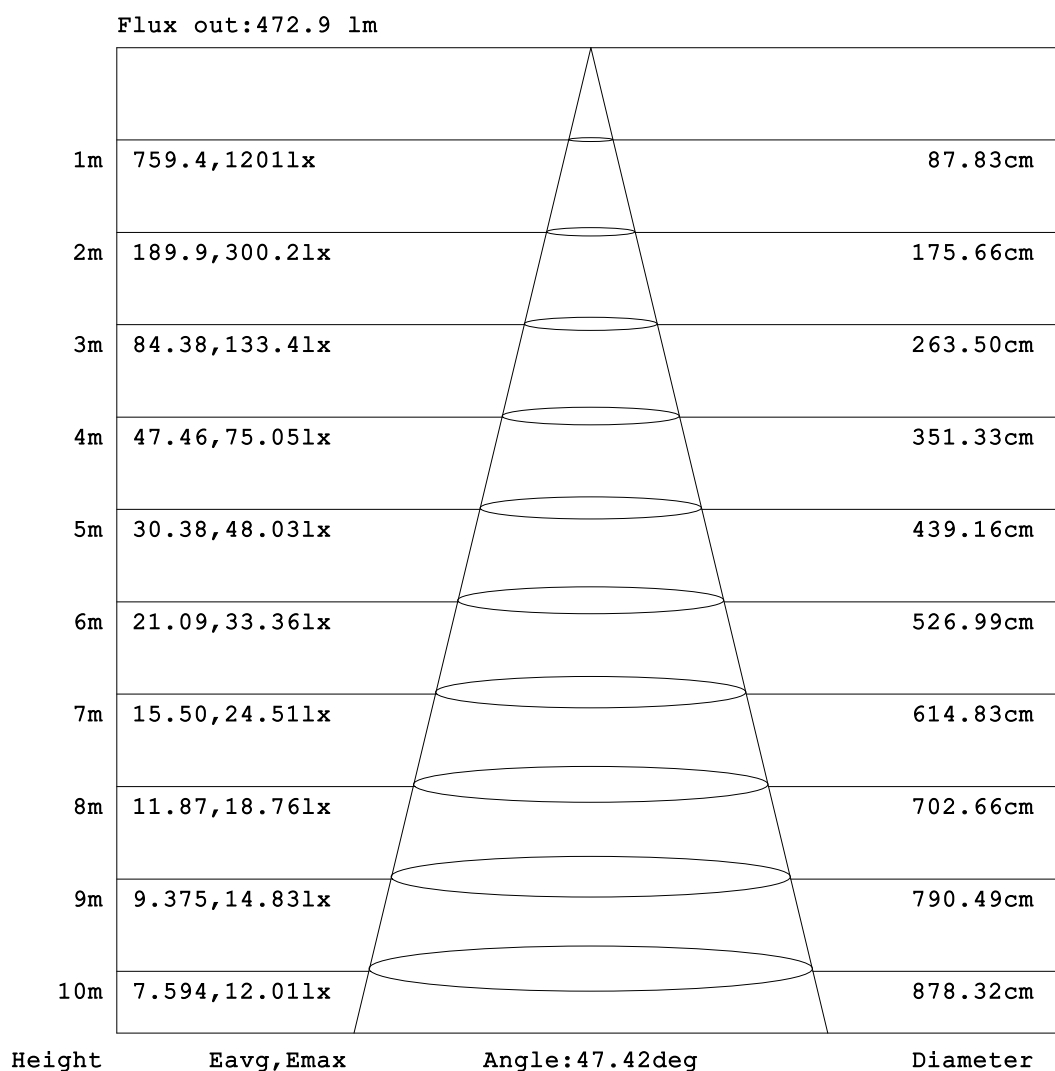


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2025-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks: M-1025

AAI Figure

Test:U:230.35V I:0.0865A P:11.980W PF:0.6012 Freq:50.00Hz Lamp Flux:949.038x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



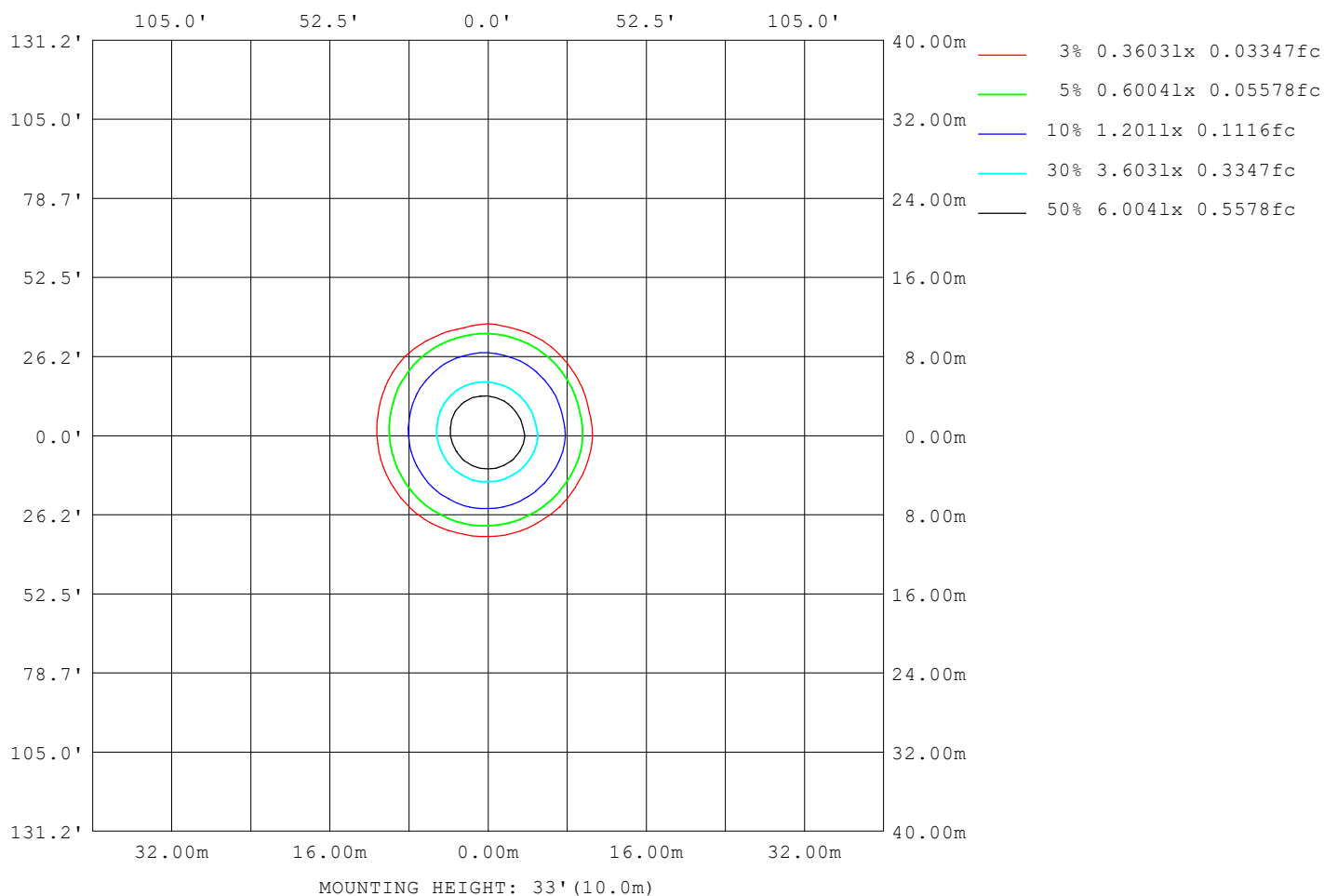
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2025-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks: M-1025

ISOLUX DIAGRAM

Test:U:230.35V I:0.0865A P:11.980W PF:0.6012 Freq:50.00Hz Lamp Flux:949.038x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2025-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks: M-1025

LED Avg.L Report

Test:U:230.35V I:0.0865A P:11.980W PF:0.6012 Freq:50.00Hz Lamp Flux:949.038x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

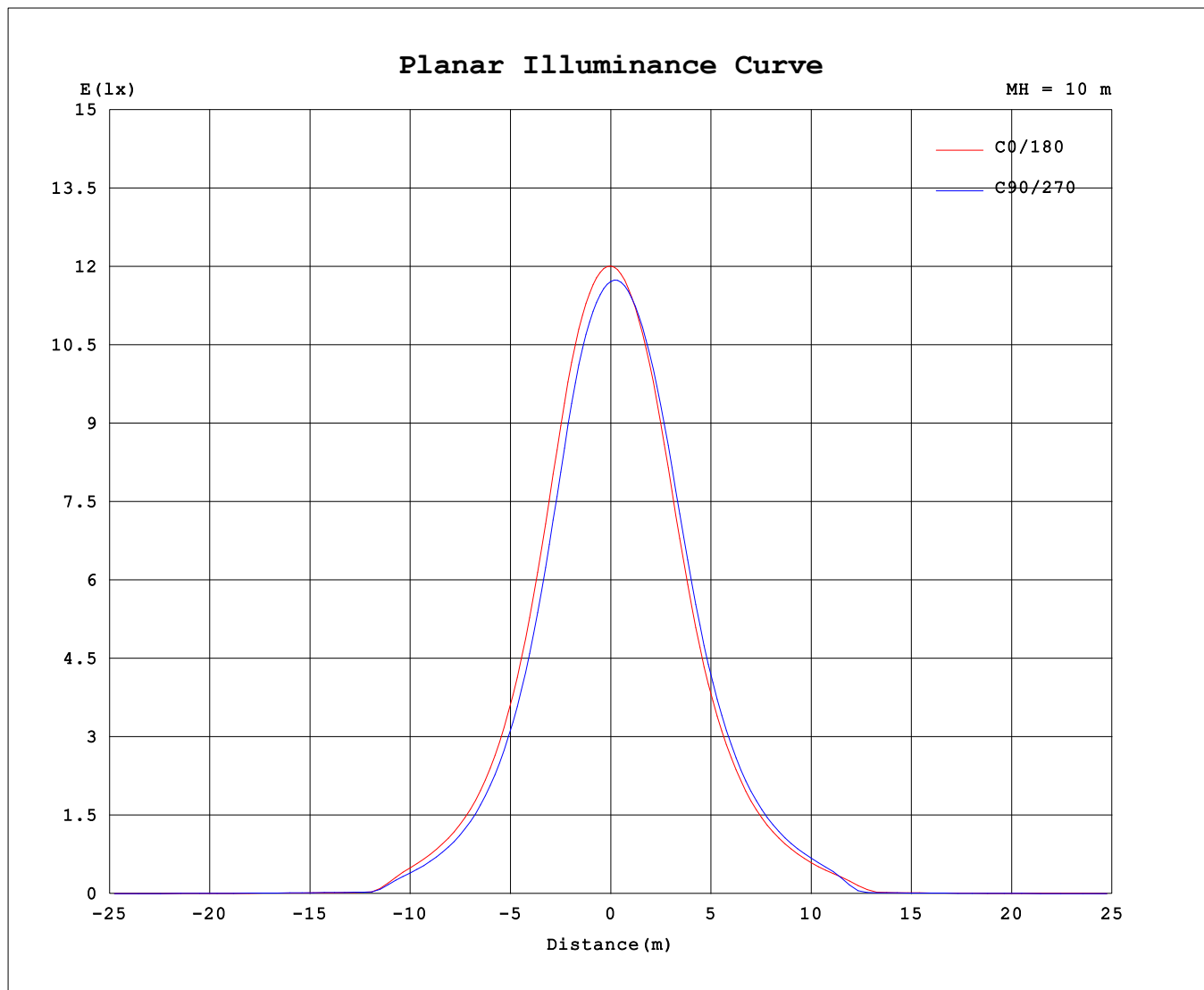
AvgL	cd/m2
L_0~180 (65) av	205
L_0~180 (75) av	124
L_0~180 (85) av	8
L_90~270 (65) av	160
L_90~270 (75) av	46
L_90~270 (85) av	10
L_45 (65) av	187
L_45 (75) av	75
L_45 (85) av	5

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks: M-1025

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2025-10-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity: 65.0%
Test Distance: 9.401m [K=1.0000]
Remarks: M-1025

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks: M-1025

```

Test:U:230.35V I:0.0865A P:11.980W PF:0.6012 Freq:50.00Hz Lamp Flux:949.038x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

UNIT: cd

[illegible]

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks: M-1025

```