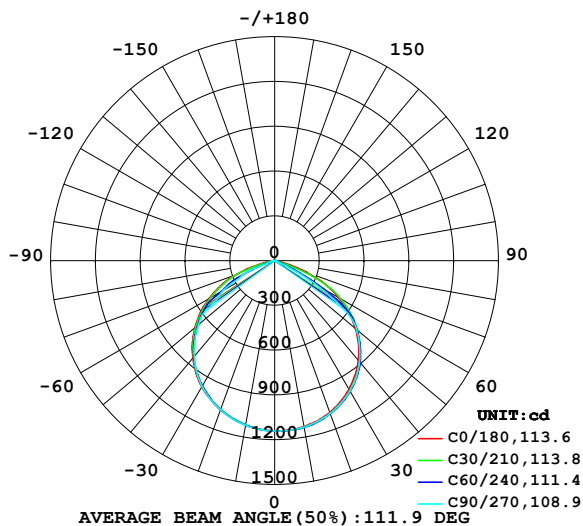


LUMINAIRE PHOTOMETRIC TEST REPORT

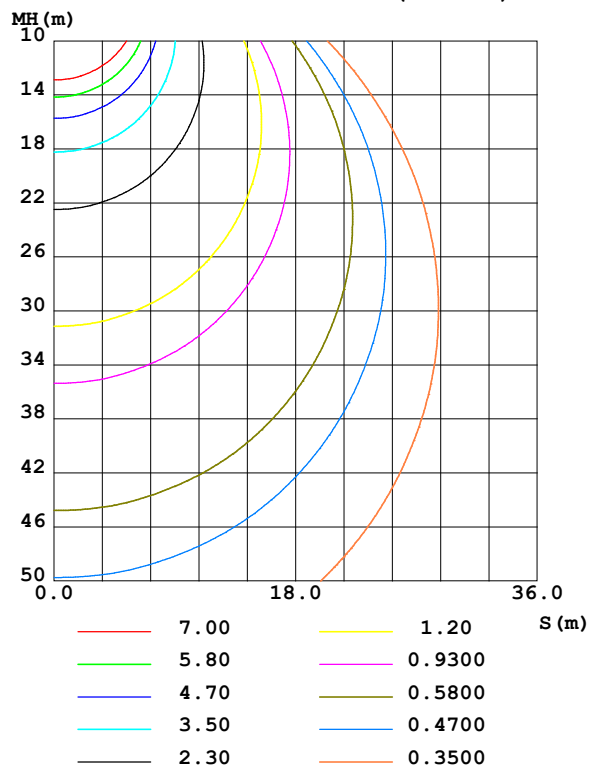
Test:U:230.31V I:0.2122A P:28.578W PF:0.5847 Freq:50.00Hz Lamp Flux:2952.18x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 103.30 lm/W
MODEL	422E-30W	I _{max} (cd)	1142	S/MH (C0/180)	1.27	
NOMINAL POWER(W)	30	LOR (%)	100.0	S/MH (C90/270)	1.27	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	2952.2	η UP,DN (C0-180)	0.0,49.7	
NOMINAL FLUX(lm)	2952.18	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,50.3	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	230	η down (%)	100.0	CIBSE SHR MAX	1.35	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2025-09-04

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-994 柬埔寨

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1128	1135	1133	1127	1120	1118	1120	1124	0- 10	108.2	108.2	3.67,3.67
20	1082	1092	1090	1078	1063	1060	1063	1072	10- 20	311.9	420.2	14.2,14.2
30	995.1	1014	1009	996.6	975.9	967.2	972.9	983.2	20- 30	477.9	898.0	30.4,30.4
40	873.1	895.0	885.2	877.8	852.8	843.6	839.1	855.1	30- 40	583.0	1481	50.2,50.2
50	706.8	728.0	717.2	713.3	698.3	678.7	668.4	684.2	40- 50	606.7	2088	70.7,70.7
60	494.6	475.5	312.6	413.9	508.6	481.6	397.1	474.6	50- 60	518.6	2606	88.3,88.3
70	224.1	36.72	25.38	37.03	267.7	177.7	90.40	170.6	60- 70	279.8	2886	97.8,97.8
80	14.22	2.289	2.878	2.667	42.88	11.06	12.72	11.61	70- 80	60.34	2946	99.8,99.8
90	1.371	1.252	0.9739	1.179	1.583	1.360	1.022	1.301	80- 90	5.732	2952	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): 1787.1 lm

%lum = 60.5%

%lamp = 60.5%

Conical surface Flux(130deg): 2780.8 lm

%lum = 94.2%

%lamp = 94.2%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:2025-09-04

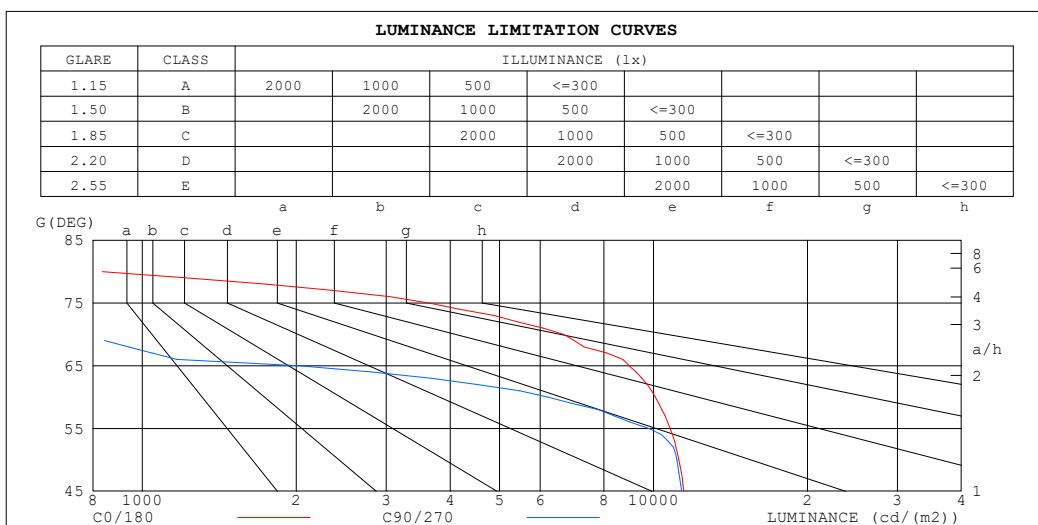
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks: M-994柬埔寨

LUMINANCE LIMITATION CURVES

Test:U:230.31V I:0.2122A P:28.578W PF:0.5847 Freq:50.00Hz

Lamp Flux:2952.18x1 lm

NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	432	252
80	835	165
75	3638	195
70	6677	739
65	8958	2029
60	10082	6223
55	10781	9804
50	11208	11107
45	11469	11345

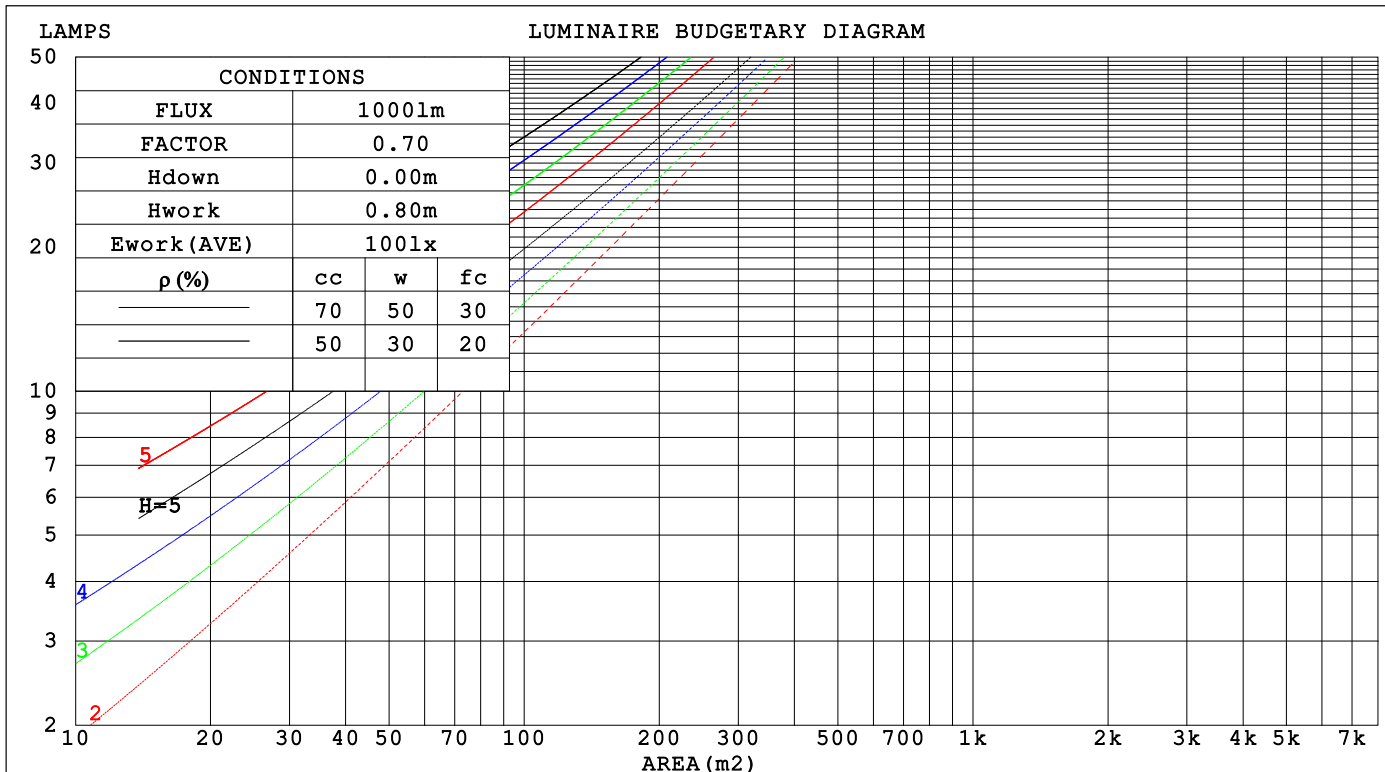
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-09-04

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-994柬埔寨

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.31V I:0.2122A P:28.578W PF:0.5847 Freq:50.00Hz Lamp Flux:2952.18x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	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															



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-09-04

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-994柬埔寨

WEC AND CCEC

Test:U:230.31V I:0.2122A P:28.578W PF:0.5847 Freq:50.00Hz Lamp Flux:2952.18x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	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	.261	.149	.047	.254	.145	.046	.241	.138	.044	.229	.132	.042	.218	.127	.041		
2.0	.257	.141	.043	.251	.138	.043	.239	.133	.041	.229	.128	.040	.219	.124	.039		
3.0	.244	.130	.039	.239	.128	.039	.229	.124	.038	.220	.120	.037	.211	.117	.036		
4.0	.230	.120	.035	.225	.118	.035	.216	.115	.034	.208	.112	.034	.200	.109	.033		
5.0	.216	.110	.032	.212	.109	.032	.204	.106	.031	.196	.104	.031	.189	.101	.030		
6.0	.202	.101	.029	.199	.100	.029	.192	.098	.029	.185	.096	.028	.179	.094	.028		
7.0	.190	.094	.027	.187	.093	.027	.180	.091	.026	.174	.089	.026	.169	.088	.026		
8.0	.179	.087	.025	.176	.086	.024	.170	.085	.024	.165	.083	.024	.160	.082	.024		
9.0	.168	.081	.023	.166	.081	.023	.160	.079	.022	.156	.078	.022	.151	.077	.022		
10.0	.159	.076	.021	.156	.076	.021	.152	.074	.021	.148	.073	.021	.143	.072	.021		

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	.177	.157	.138	.151	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015		
2.0	.168	.132	.102	.144	.114	.088	.098	.079	.062	.057	.046	.036	.018	.015	.012		
3.0	.160	.114	.078	.137	.098	.068	.094	.068	.047	.054	.040	.028	.017	.013	.009		
4.0	.152	.101	.061	.131	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007		
5.0	.145	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006		
6.0	.138	.082	.041	.119	.071	.035	.082	.049	.025	.048	.029	.015	.015	.010	.005		
7.0	.132	.075	.034	.114	.065	.030	.078	.045	.021	.046	.027	.013	.015	.009	.004		
8.0	.126	.069	.030	.108	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004		
9.0	.120	.064	.026	.104	.055	.023	.072	.039	.016	.042	.023	.010	.014	.008	.003		
10.0	.115	.060	.023	.099	.052	.020	.069	.036	.014	.040	.022	.008	.013	.007	.003		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-09-04

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-994柬埔寨

UGR(Unified Glare Rating) Table

Test:U:230.31V I:0.2122A P:28.578W PF:0.5847 Freq:50.00Hz Lamp Flux:2952.18x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.: 3000K			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	17.9	19.3	18.1	19.5	19.7	16.7	18.1	16.9	18.3	18.5
3H	18.8	20.2	19.1	20.4	20.6	16.5	17.8	16.8	18.0	18.3
4H	19.0	20.2	19.3	20.4	20.7	16.4	17.6	16.7	17.9	18.1
6H	18.9	20.0	19.2	20.3	20.6	16.3	17.4	16.6	17.7	18.0
8H	18.8	20.0	19.2	20.2	20.5	16.2	17.4	16.6	17.6	17.9
12H	18.8	19.9	19.1	20.1	20.4	16.2	17.3	16.5	17.5	17.8
4H 2H	18.1	19.3	18.4	19.6	19.8	17.0	18.2	17.3	18.5	18.7
3H	19.1	20.2	19.4	20.4	20.7	16.8	17.9	17.2	18.2	18.5
4H	19.2	20.2	19.6	20.5	20.8	16.7	17.7	17.1	18.0	18.4
6H	19.2	20.0	19.5	20.4	20.7	16.7	17.5	17.0	17.9	18.2
8H	19.1	19.9	19.5	20.3	20.6	16.6	17.4	17.0	17.8	18.1
12H	19.1	19.8	19.5	20.2	20.6	16.6	17.3	17.0	17.7	18.1
8H 4H	19.1	19.9	19.5	20.2	20.6	16.7	17.5	17.1	17.8	18.2
6H	19.0	19.7	19.5	20.1	20.5	16.6	17.2	17.0	17.6	18.1
8H	19.0	19.6	19.4	20.0	20.4	16.5	17.1	17.0	17.5	18.0
12H	19.0	19.4	19.4	19.9	20.4	16.5	17.0	17.0	17.4	17.9
12H 4H	19.0	19.8	19.5	20.1	20.5	16.6	17.3	17.0	17.7	18.1
6H	19.0	19.6	19.4	20.0	20.4	16.5	17.1	17.0	17.5	18.0
8H	19.0	19.4	19.4	19.9	20.4	16.5	17.0	17.0	17.4	17.9
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.4 / - 0.5					+ 0.5 / - 0.7				
1.5H	+ 0.6 / - 0.8					+ 1.0 / - 1.8				
2.0H	+ 0.4 / - 0.6					+ 1.6 / - 3.7				

CIE Pub.117, 2952 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.8)
Area: 0.1 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-09-04

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-994柬埔寨

UTILIZATION FACTORS TABLE

Test:U:230.31V I:0.2122A P:28.578W PF:0.5847 Freq:50.00Hz Lamp Flux:2952.18x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

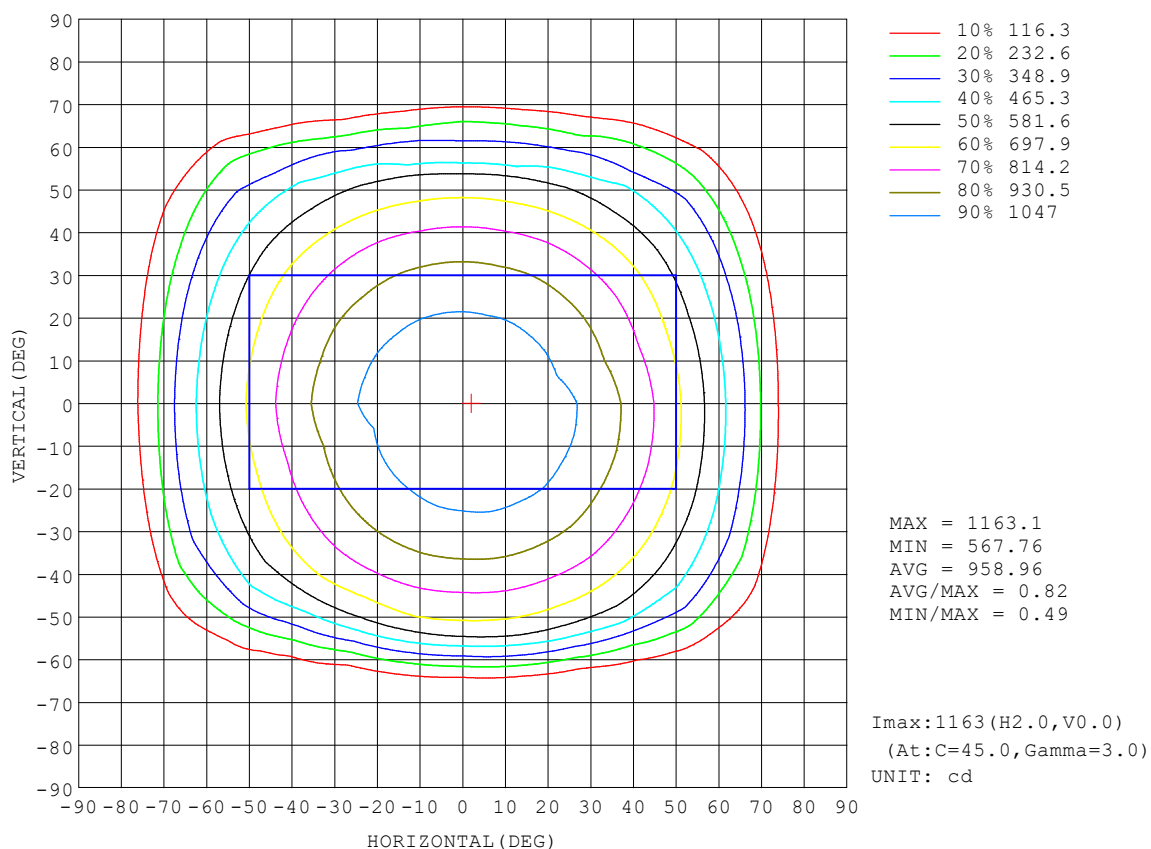
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	60	49	42	59	49	42	58	48	42	36
0.80	71	60	53	70	59	53	68	59	52	46
1.00	80	70	63	79	69	63	76	70	62	55
1.25	87	77	71	86	77	71	83	75	70	63
1.50	92	83	77	90	82	76	87	80	75	68
2.00	98	91	85	97	90	85	93	88	83	76
2.50	102	95	90	100	94	89	96	91	87	79
3.00	105	99	94	103	98	93	99	95	91	83
4.00	108	104	100	106	102	98	102	98	95	87
5.00	110	106	103	108	104	101	104	101	98	89
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: 2025-09-04

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-994 柬埔寨

ISOCANDELA DIAGRAM

Test:U:230.31V I:0.2122A P:28.578W PF:0.5847 Freq:50.00Hz Lamp Flux:2952.18x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

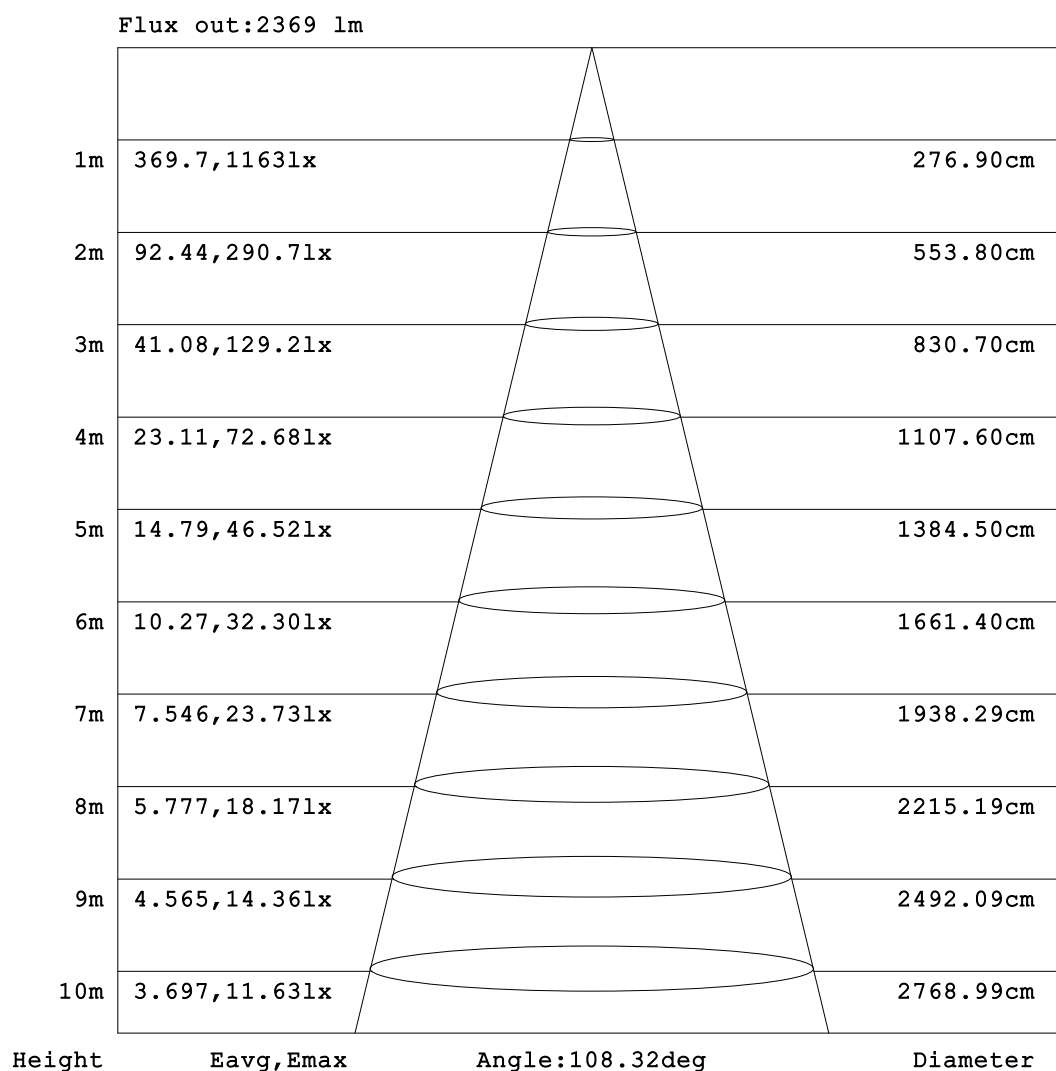


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2025-09-04

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-994柬埔寨

AAI Figure

Test:U:230.31V I:0.2122A P:28.578W PF:0.5847 Freq:50.00Hz Lamp Flux:2952.18x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



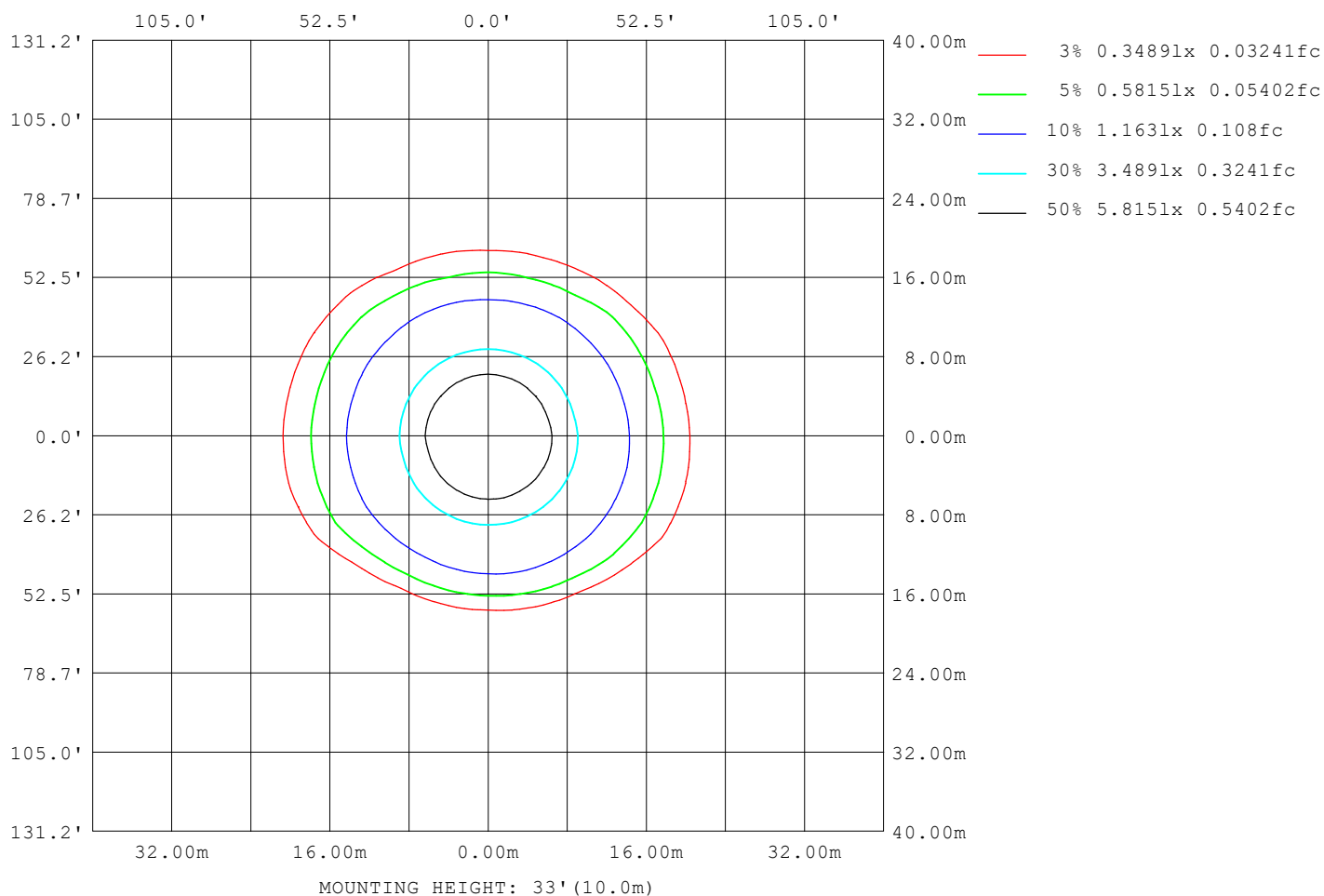
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-09-04

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-994柬埔寨

ISOLUX DIAGRAM

Test:U:230.31V I:0.2122A P:28.578W PF:0.5847 Freq:50.00Hz Lamp Flux:2952.18x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	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:2025-09-04

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-994柬埔寨

LED Avg.L Report

Test:U:230.31V I:0.2122A P:28.578W PF:0.5847 Freq:50.00Hz Lamp Flux:2952.18x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

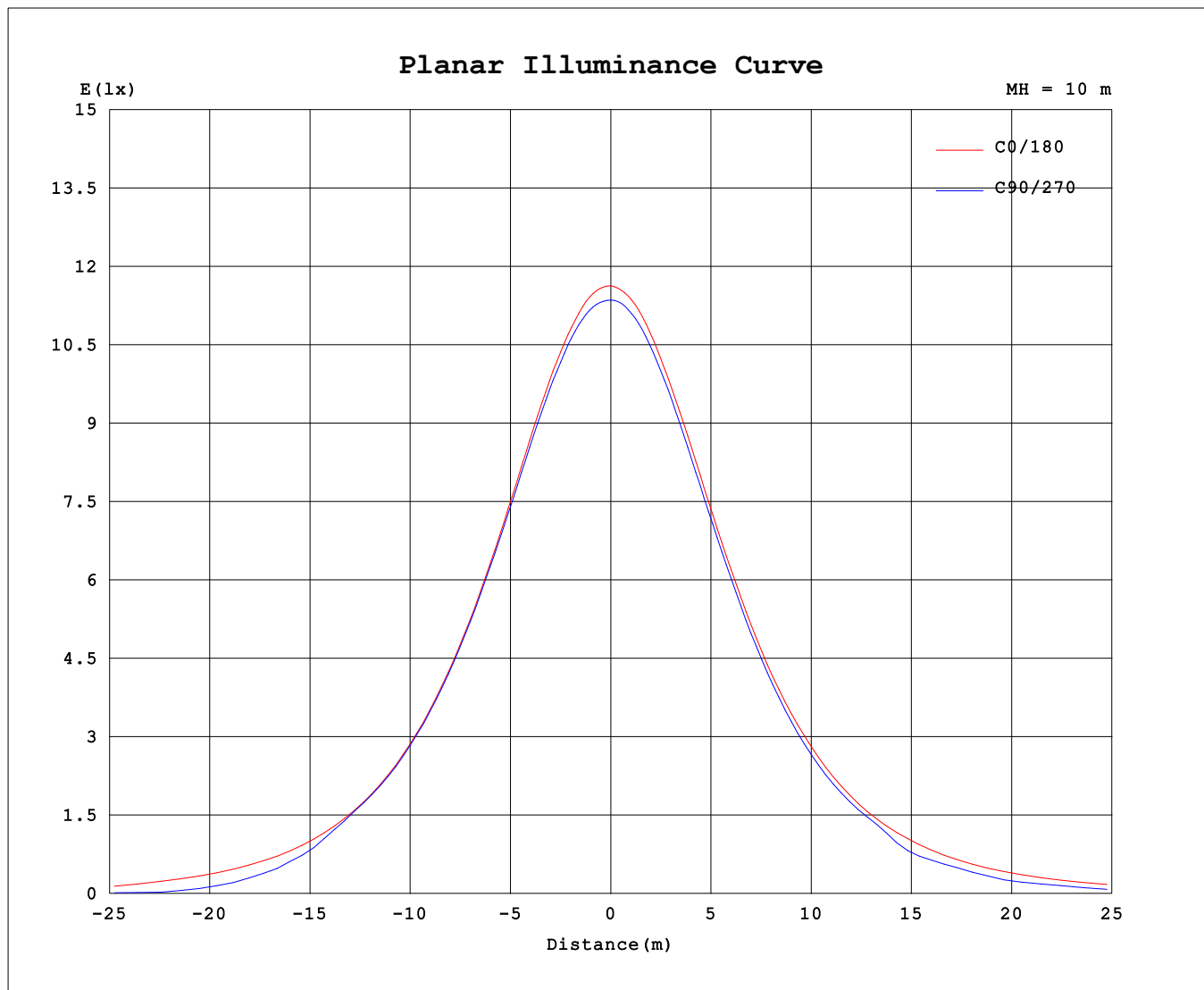
AvgL	cd/m2
L_0~180 (65) av	9137
L_0~180 (75) av	4518
L_0~180 (85) av	410
L_90~270 (65) av	3974
L_90~270 (75) av	652
L_90~270 (85) av	635
L_45 (65) av	6232
L_45 (75) av	894
L_45 (85) av	625

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-09-04

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-994柬埔寨

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2025-09-04

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-994 柬埔寨

Test:U:230.31V I:0.2122A P:28.578W PF:0.5847 Freq:50.00Hz Lamp Flux:2952.18x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	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-994柬埔寨

```

```

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-994柬埔寨

```