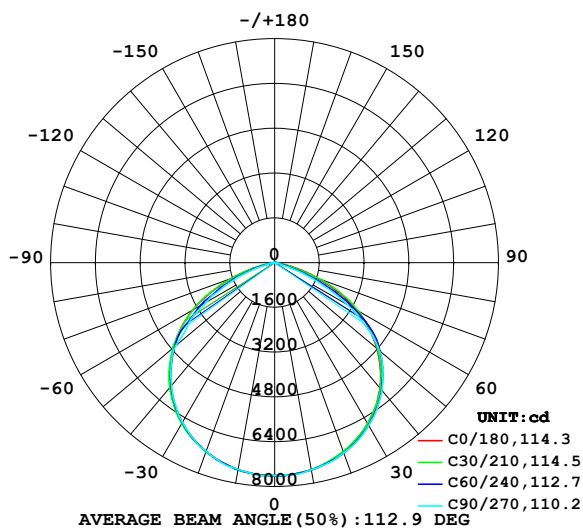


LUMINAIRE PHOTOMETRIC TEST REPORT

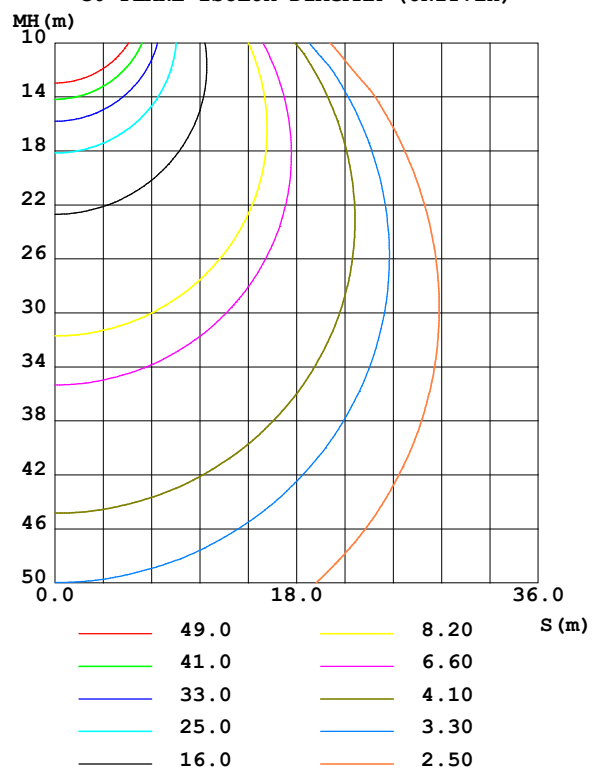
Test:U:229.93V I:1.4448A P:186.20W PF:0.5605 Freq:50.00Hz Lamp Flux:20674.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6500K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 111.04 lm/W
MODEL	422E-200W	I _{max} (cd)	7622	S/MH (C0/180)	1.29	
NOMINAL POWER(W)	200	LOR (%)	100.0	S/MH (C90/270)	1.29	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	20674	η UP,DN (C0-180)	0.0,50.6	
NOMINAL FLUX(lm)	20674.5	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,49.4	
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	7507	7500	7519	7527	7501	7513	7505	7499	0- 10	722.1	722.1	3.49,3.49
20	7189	7188	7231	7217	7175	7183	7176	7177	10- 20	2085	2807	13.6,13.6
30	6643	6653	6720	6692	6613	6628	6597	6612	20- 30	3205	6012	29.1,29.1
40	5852	5875	5960	5927	5804	5812	5741	5786	30- 40	3926	9938	48.1,48.1
50	4770	4826	4892	4894	4729	4712	4612	4662	40- 50	4118	14057	68,68
60	3423	3509	2997	3513	3383	3349	2821	3122	50- 60	3610	17666	85.5,85.5
70	1672	1466	920.8	1420	1638	1500	1118	1297	60- 70	2292	19958	96.5,96.5
80	264.9	92.90	58.48	94.27	207.5	125.1	80.93	95.88	70- 80	676.9	20635	99.8,99.8
90	10.13	10.18	8.340	10.15	12.04	15.34	10.63	16.49	80- 90	39.41	20674	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): 12011 lm

%lum = 58.1%

%lamp = 58.1%

Conical surface Flux(130deg): 19020 lm

%lum = 92.0%

%lamp = 92.0%

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:229.93V I:1.4448A P:186.20W PF:0.5605 Freq:50.00Hz

Lamp Flux:20674.5x1 lm

NAME:

TYPE:

WEIGHT:

SPEC.: 6500K

DIM.:

SERIAL No.:

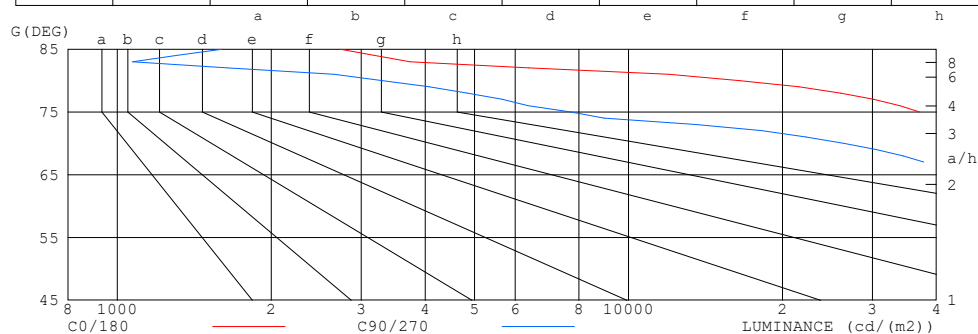
MFR.: EVERFINE

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



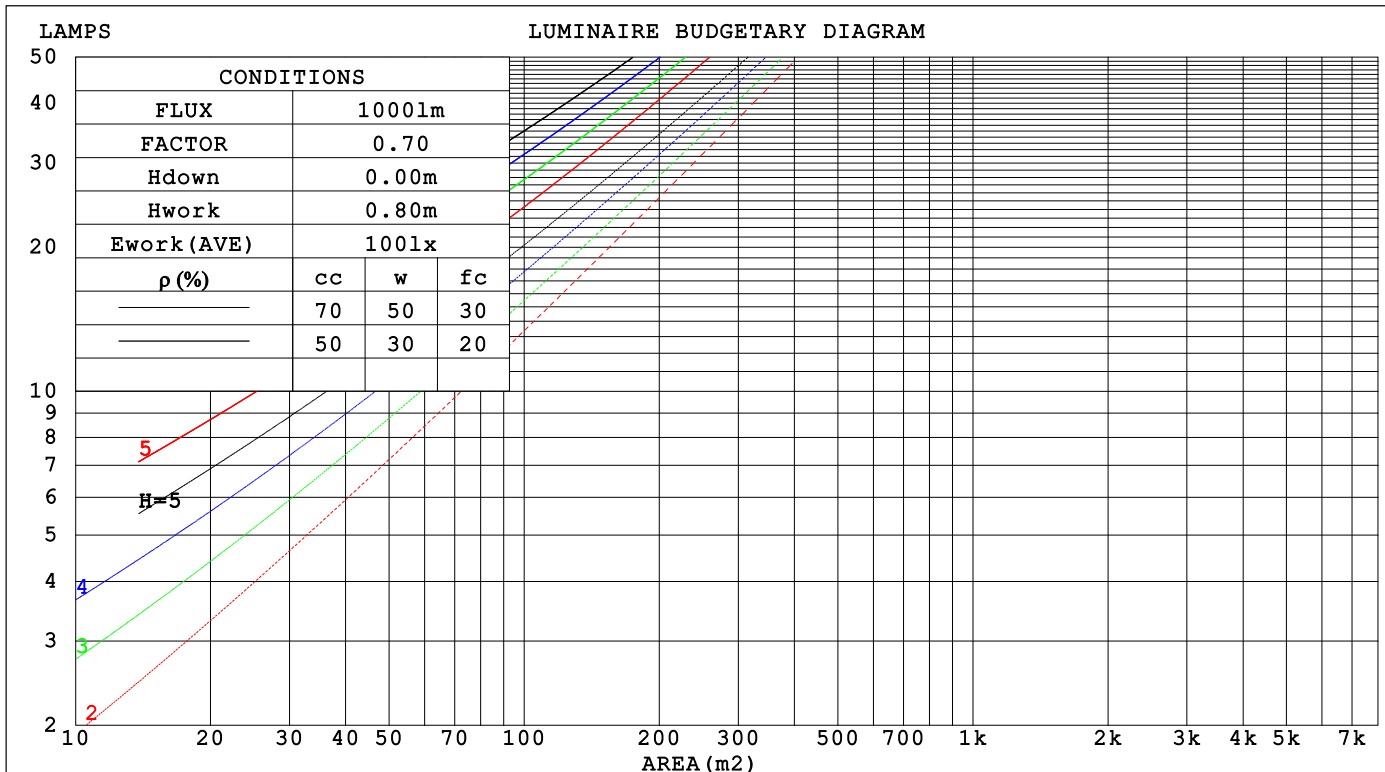
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2025-09-04

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

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.93V I:1.4448A P:186.20W PF:0.5605 Freq:50.00Hz Lamp Flux:20674.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6500K	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	1.19	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	1.06	1.02	.99	1.04	1.00	.97	.99	.97	.94	.96	.93	.91	.92	.90	.88	.86														
2.0	.93	.87	.82	.91	.86	.81	.88	.83	.79	.85	.81	.77	.82	.78	.75	.73														
3.0	.82	.75	.68	.81	.74	.68	.78	.72	.67	.75	.70	.65	.72	.68	.64	.62														
4.0	.73	.65	.58	.72	.64	.58	.69	.62	.57	.67	.61	.56	.65	.60	.56	.53														
5.0	.65	.57	.50	.64	.56	.50	.62	.55	.49	.60	.54	.49	.58	.53	.48	.46														
6.0	.59	.50	.44	.58	.50	.44	.56	.49	.43	.54	.48	.43	.53	.47	.43	.40														
7.0	.53	.45	.39	.52	.44	.39	.51	.44	.38	.49	.43	.38	.48	.42	.38	.36														
8.0	.49	.40	.34	.48	.40	.34	.47	.39	.34	.45	.39	.34	.44	.38	.34	.32														
9.0	.45	.36	.31	.44	.36	.31	.43	.36	.31	.42	.35	.31	.41	.35	.30	.29														
10.0	.41	.33	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.28	.26														



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:229.93V I:1.4448A P:186.20W PF:0.5605 Freq:50.00Hz Lamp Flux:20674.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6500K	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	.272	.154	.049	.265	.151	.048	.252	.144	.046	.240	.138	.044	.229	.132	.043		
2.0	.266	.146	.045	.260	.143	.044	.248	.138	.043	.238	.133	.042	.228	.129	.041		
3.0	.252	.134	.040	.246	.132	.040	.236	.128	.039	.227	.124	.038	.218	.121	.037		
4.0	.236	.123	.036	.231	.121	.036	.222	.118	.035	.214	.115	.035	.206	.112	.034		
5.0	.221	.112	.033	.216	.111	.032	.208	.109	.032	.201	.106	.032	.194	.104	.031		
6.0	.206	.103	.030	.202	.102	.029	.195	.100	.029	.189	.098	.029	.182	.096	.029		
7.0	.193	.095	.027	.190	.095	.027	.183	.093	.027	.177	.091	.026	.172	.089	.026		
8.0	.181	.089	.025	.178	.088	.025	.172	.086	.025	.167	.085	.024	.162	.083	.024		
9.0	.170	.082	.023	.168	.082	.023	.163	.080	.023	.158	.079	.023	.153	.078	.022		
10.0	.161	.077	.021	.158	.076	.021	.154	.075	.021	.149	.074	.021	.145	.073	.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	.178	.156	.137	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015		
2.0	.169	.132	.101	.145	.114	.087	.099	.079	.061	.057	.046	.036	.018	.015	.012		
3.0	.161	.114	.077	.138	.098	.067	.095	.068	.047	.055	.040	.028	.018	.013	.009		
4.0	.154	.101	.060	.132	.087	.052	.091	.061	.037	.052	.036	.022	.017	.012	.007		
5.0	.147	.090	.049	.126	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006		
6.0	.140	.082	.040	.120	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005		
7.0	.133	.075	.034	.115	.065	.030	.079	.046	.021	.046	.027	.012	.015	.009	.004		
8.0	.127	.069	.029	.109	.060	.026	.076	.042	.018	.044	.025	.011	.014	.008	.004		
9.0	.121	.064	.026	.104	.056	.022	.072	.039	.016	.042	.023	.009	.014	.008	.003		
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.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:229.93V I:1.4448A P:186.20W PF:0.5605 Freq:50.00Hz Lamp Flux:20674.5x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.: 6500K			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	19.4	18.2	19.5	19.8	17.2	18.7	17.5	18.9	19.1
3H	19.0	20.4	19.3	20.6	20.8	17.7	19.0	18.0	19.3	19.5
4H	19.3	20.5	19.6	20.8	21.0	17.6	18.9	17.9	19.1	19.4
6H	19.3	20.5	19.6	20.7	21.0	17.5	18.7	17.9	19.0	19.3
8H	19.2	20.4	19.6	20.7	21.0	17.5	18.6	17.8	18.9	19.2
12H	19.2	20.3	19.5	20.6	20.9	17.4	18.5	17.8	18.8	19.1
4H 2H	18.3	19.6	18.6	19.9	20.1	17.8	19.0	18.1	19.3	19.5
3H	19.6	20.7	19.9	20.9	21.2	18.3	19.4	18.7	19.7	20.0
4H	19.9	20.9	20.2	21.2	21.5	18.3	19.3	18.6	19.6	19.9
6H	19.9	20.8	20.3	21.1	21.5	18.2	19.1	18.6	19.4	19.8
8H	19.9	20.7	20.3	21.1	21.4	18.1	19.0	18.5	19.3	19.7
12H	19.8	20.6	20.3	21.0	21.4	18.1	18.8	18.5	19.2	19.6
8H 4H	19.8	20.6	20.2	21.0	21.4	18.3	19.1	18.7	19.5	19.8
6H	19.9	20.5	20.3	20.9	21.4	18.2	18.9	18.6	19.3	19.7
8H	19.8	20.4	20.3	20.8	21.3	18.2	18.8	18.6	19.2	19.6
12H	19.8	20.3	20.3	20.7	21.2	18.1	18.6	18.6	19.1	19.6
12H 4H	19.8	20.5	20.2	20.9	21.3	18.2	19.0	18.7	19.4	19.8
6H	19.8	20.4	20.3	20.8	21.3	18.2	18.8	18.6	19.2	19.6
8H	19.8	20.3	20.3	20.7	21.2	18.1	18.6	18.6	19.1	19.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.3 / - 0.3					+ 0.4 / - 0.5				
1.5H	+ 0.3 / - 0.5					+ 0.6 / - 0.9				
2.0H	+ 0.4 / - 0.5					+ 0.7 / - 0.9				

CIE Pub.117, 20674 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.5)
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:229.93V I:1.4448A P:186.20W PF:0.5605 Freq:50.00Hz Lamp Flux:20674.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6500K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

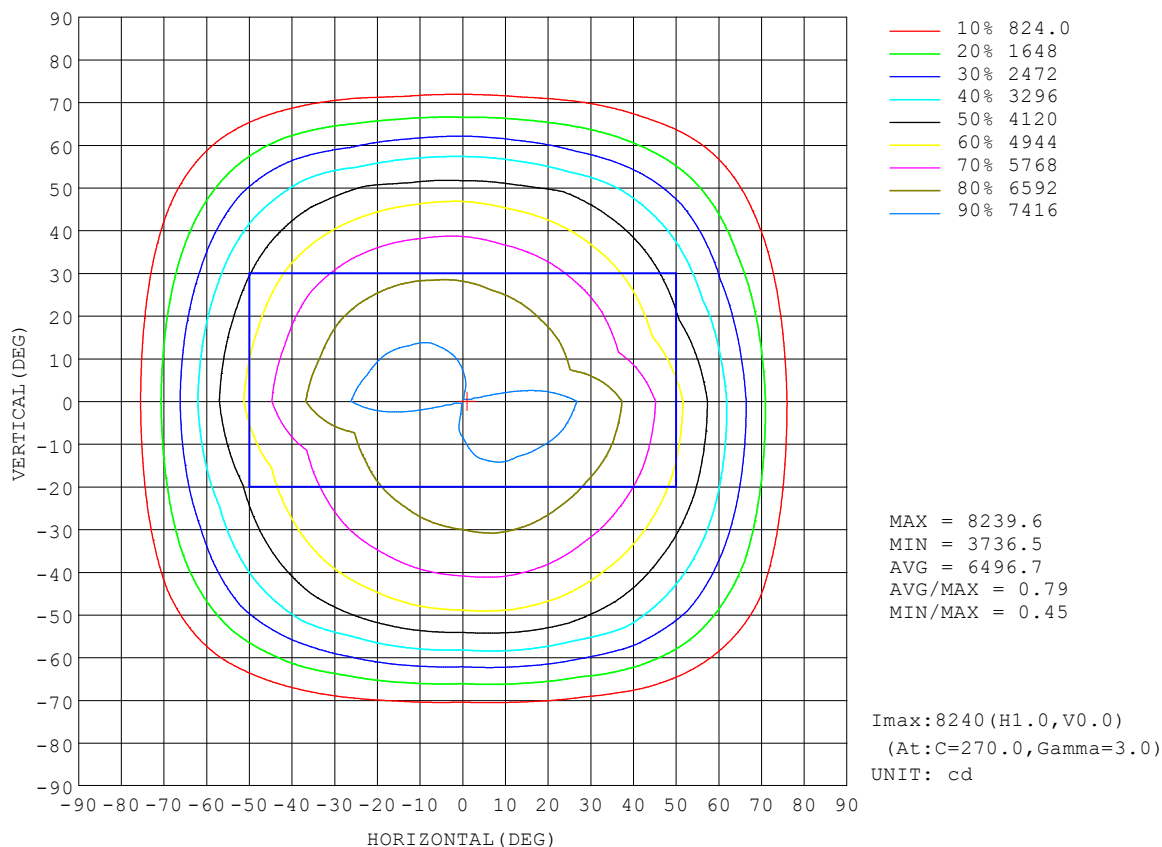
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	48	41	58	47	41	57	47	41	34
0.80	70	58	51	69	58	51	67	57	51	44
1.00	78	68	61	77	67	61	75	69	60	53
1.25	86	76	69	84	75	69	82	74	68	61
1.50	91	82	75	89	81	75	86	79	74	66
2.00	97	90	84	96	88	83	92	86	82	74
2.50	101	94	89	99	93	88	95	90	86	78
3.00	104	98	93	102	97	92	98	94	90	82
4.00	108	103	99	106	101	97	101	98	95	86
5.00	110	106	102	108	104	101	103	100	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:229.93V I:1.4448A P:186.20W PF:0.5605 Freq:50.00Hz Lamp Flux:20674.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6500K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

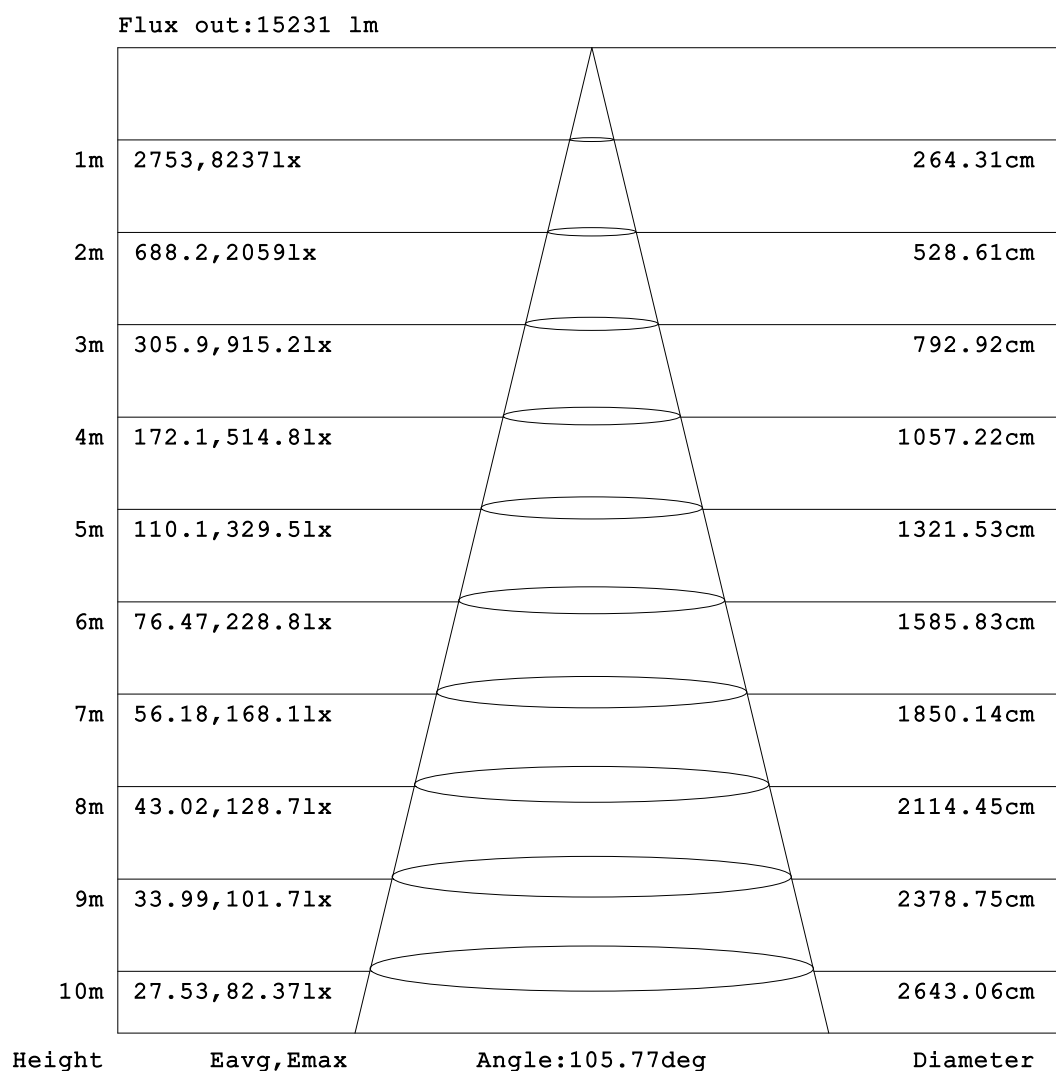


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2025-09-04

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:229.93V I:1.4448A P:186.20W PF:0.5605 Freq:50.00Hz Lamp Flux:20674.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6500K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



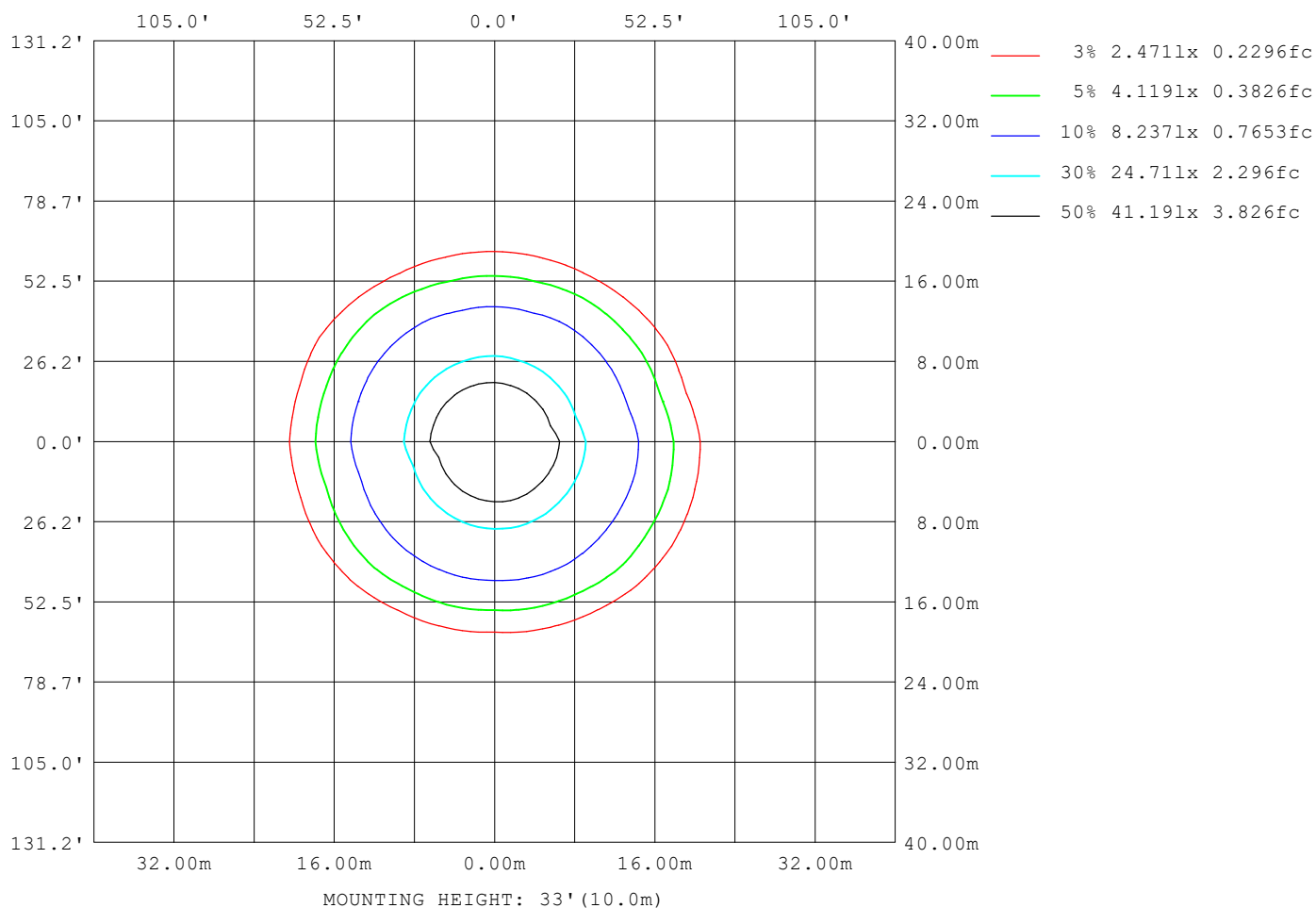
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:229.93V I:1.4448A P:186.20W PF:0.5605 Freq:50.00Hz Lamp Flux:20674.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6500K	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:229.93V I:1.4448A P:186.20W PF:0.5605 Freq:50.00Hz Lamp Flux:20674.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6500K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

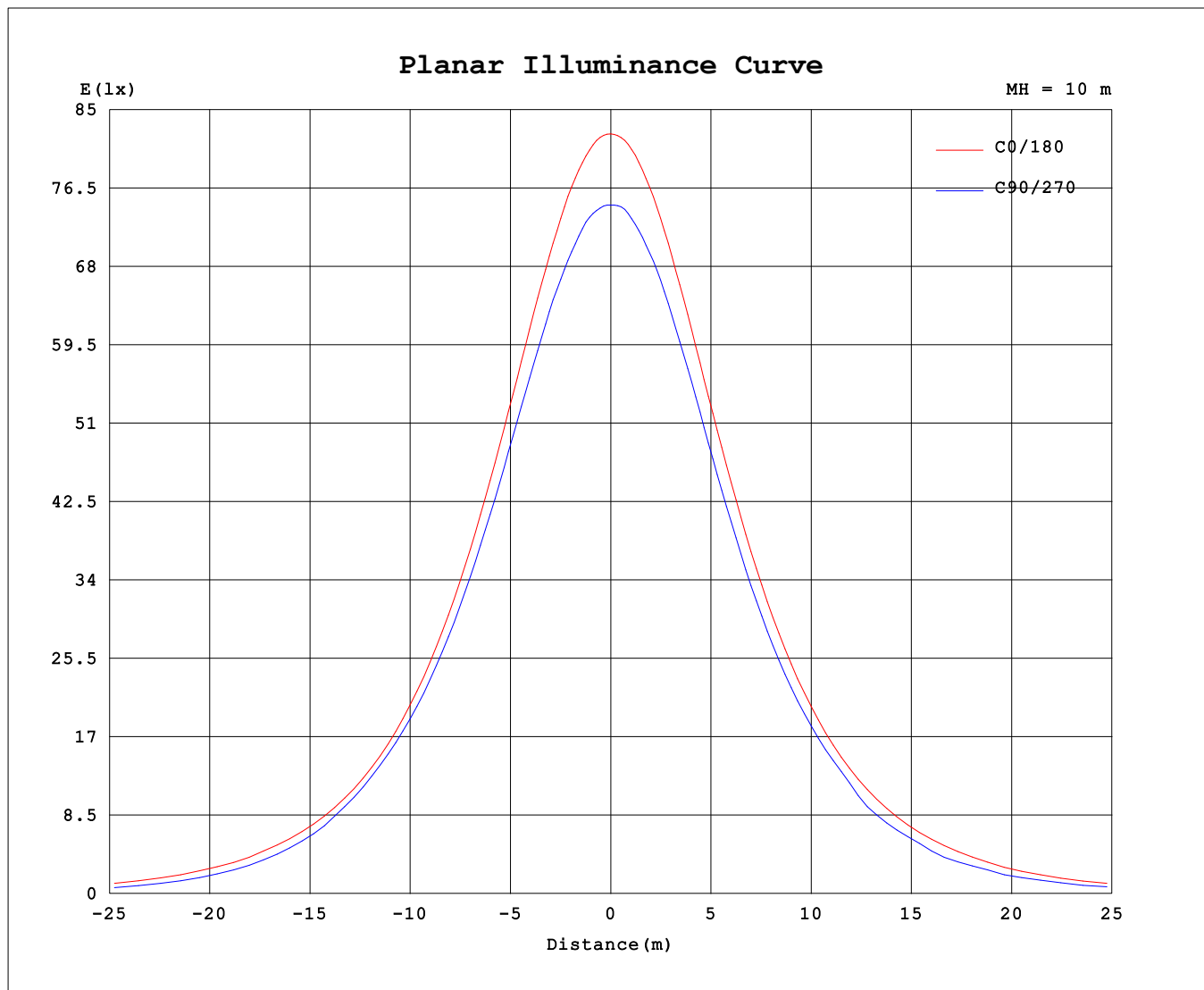
AvgL	cd/m2
L_0~180 (65) av	59614
L_0~180 (75) av	33248
L_0~180 (85) av	2541
L_90~270 (65) av	45936
L_90~270 (75) av	11778
L_90~270 (85) av	2874
L_45 (65) av	57368
L_45 (75) av	21811
L_45 (85) av	2071

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

```

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

```