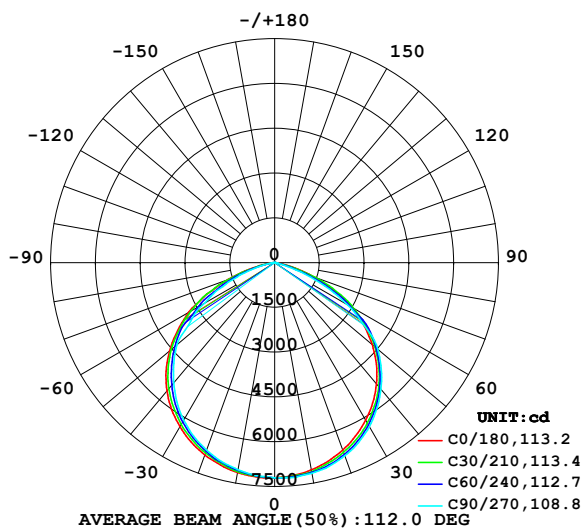


LUMINAIRE PHOTOMETRIC TEST REPORT

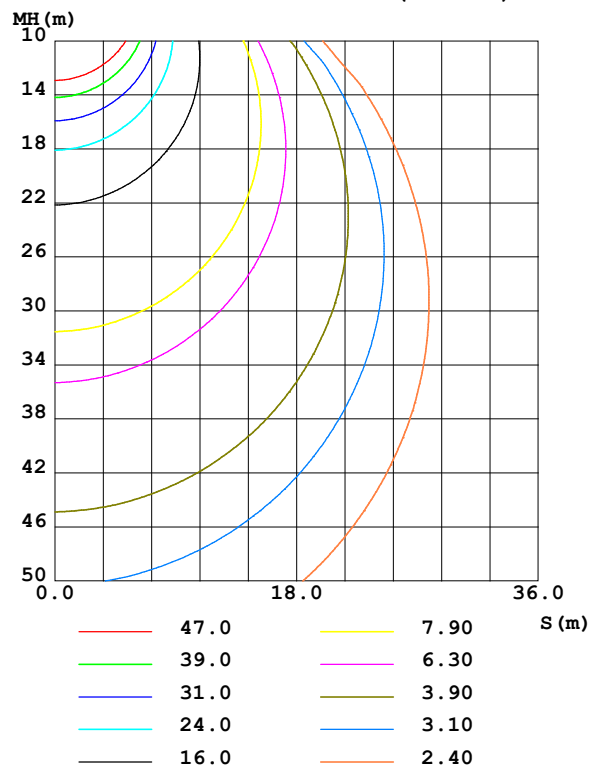
Test:U:229.94V I:1.4584A P:187.21W PF:0.5583 Freq:50.00Hz Lamp Flux:19412.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 103.69 lm/W
MODEL	422E-200W	I _{max} (cd)	7231	S/MH (C0/180)	1.31	
NOMINAL POWER(W)	200	LOR (%)	100.0	S/MH (C90/270)	1.26	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	19412	η UP,DN (C0-180)	0.0,50.3	
NOMINAL FLUX(lm)	19412.3	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,49.7	
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℃
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	7048	7127	7162	7173	7142	7080	7045	7026	0- 10	682.8	682.8	3.52,3.52
20	6678	6820	6885	6915	6853	6735	6676	6643	10- 20	1967	2650	13.6,13.6
30	6099	6276	6346	6419	6346	6188	6092	6053	20- 30	3010	5660	29.2,29.2
40	5307	5482	5538	5666	5613	5418	5264	5251	30- 40	3668	9328	48.1,48.1
50	4266	4438	4512	4640	4597	4396	4269	4212	40- 50	3824	13152	67.8,67.8
60	2994	3162	2819	3315	3319	3167	2692	2981	50- 60	3356	16508	85,85
70	1412	1300	936.6	1389	1656	1480	1249	1349	60- 70	2170	18678	96.2,96.2
80	218.6	71.15	50.84	78.63	300.6	182.8	112.0	172.1	70- 80	691.3	19370	99.8,99.8
90	9.800	9.380	8.007	8.964	10.69	13.25	9.922	13.34	80- 90	42.65	19412	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): 11255 lm

%lum = 58.0%

%lamp = 58.0%

Conical surface Flux(130deg): 17780 lm

%lum = 91.6%

%lamp = 91.6%

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:229.94V I:1.4584A P:187.21W PF:0.5583 Freq:50.00Hz

Lamp Flux:19412.3x1 lm

NAME:

TYPE:

WEIGHT:

SPEC.: 3000K

DIM.:

SERIAL No.:

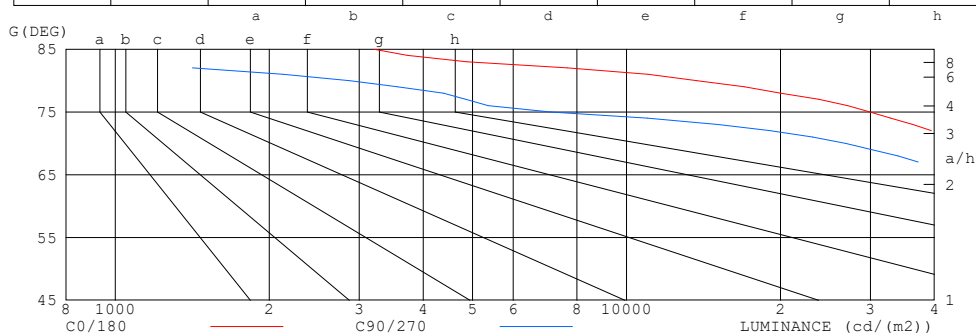
MFR.: EVERFINE

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	3208	807
80	13729	2871
75	29965	7121
70	45017	26856
65	55477	43083
60	65304	55284
55	69325	61960
50	72383	68841
45	74388	70174

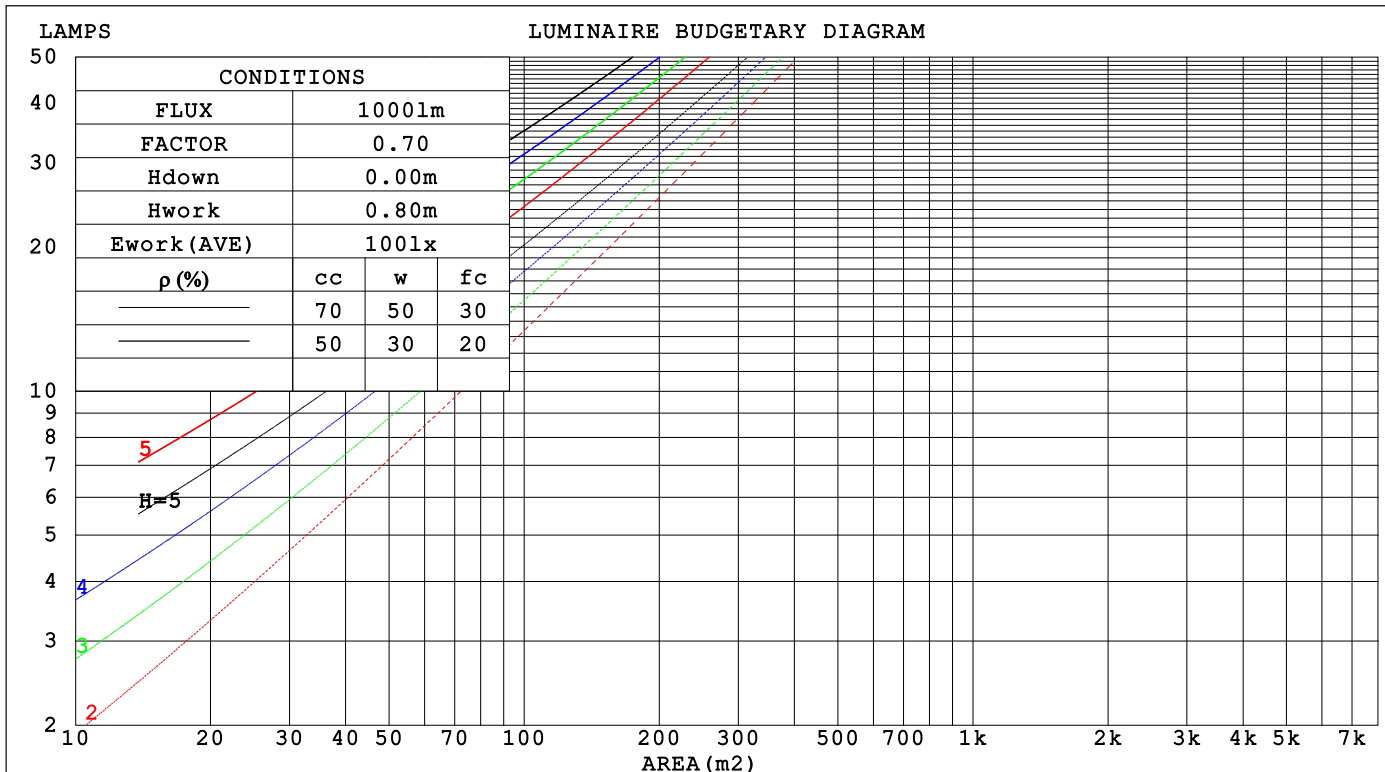
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-09-04

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:229.94V I:1.4584A P:187.21W PF:0.5583 Freq:50.00Hz Lamp Flux:19412.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	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	.95	.93	.91	.92	.90	.88	.86														
2.0	.93	.87	.81	.91	.85	.80	.88	.83	.79	.84	.80	.77	.81	.78	.75	.73														
3.0	.82	.74	.68	.81	.73	.68	.78	.71	.66	.75	.70	.65	.72	.68	.64	.62														
4.0	.73	.64	.58	.72	.64	.58	.69	.62	.57	.67	.61	.56	.65	.60	.55	.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	.42	.40														
7.0	.53	.45	.39	.52	.44	.38	.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:229.94V I:1.4584A P:187.21W PF:0.5583 Freq:50.00Hz Lamp Flux:19412.3x1 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	.273	.155	.049	.266	.152	.048	.253	.145	.046	.241	.139	.045	.230	.133	.043		
2.0	.267	.146	.045	.261	.144	.044	.249	.139	.043	.239	.134	.042	.229	.130	.041		
3.0	.253	.134	.040	.247	.132	.040	.237	.128	.039	.228	.125	.038	.219	.121	.038		
4.0	.237	.123	.036	.232	.121	.036	.223	.118	.035	.214	.115	.035	.207	.112	.034		
5.0	.221	.113	.033	.217	.111	.032	.209	.109	.032	.201	.106	.032	.194	.104	.031		
6.0	.206	.103	.030	.203	.102	.029	.196	.100	.029	.189	.098	.029	.183	.096	.029		
7.0	.193	.096	.027	.190	.095	.027	.183	.093	.027	.178	.091	.026	.172	.089	.026		
8.0	.181	.089	.025	.178	.088	.025	.173	.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:229.94V I:1.4584A P:187.21W PF:0.5583 Freq:50.00Hz Lamp Flux:19412.3x1 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	17.6	19.0	17.8	19.2	19.4	17.1	18.5	17.3	18.7	18.9
3H	18.6	19.9	18.9	20.2	20.4	17.6	19.0	17.9	19.2	19.4
4H	18.8	20.1	19.1	20.3	20.6	17.6	18.9	17.9	19.1	19.4
6H	18.8	20.0	19.1	20.3	20.5	17.5	18.7	17.8	18.9	19.2
8H	18.7	19.9	19.1	20.2	20.5	17.4	18.6	17.8	18.9	19.1
12H	18.7	19.8	19.0	20.1	20.4	17.4	18.5	17.7	18.8	19.1
4H 2H	18.0	19.3	18.3	19.5	19.8	17.6	18.9	17.9	19.1	19.4
3H	19.1	20.2	19.5	20.5	20.8	18.2	19.3	18.6	19.6	19.9
4H	19.4	20.4	19.7	20.7	21.0	18.2	19.2	18.6	19.5	19.8
6H	19.4	20.3	19.8	20.6	21.0	18.1	19.0	18.5	19.3	19.7
8H	19.4	20.2	19.8	20.6	20.9	18.1	18.9	18.5	19.2	19.6
12H	19.3	20.1	19.8	20.5	20.9	18.0	18.8	18.4	19.1	19.6
8H 4H	19.3	20.1	19.7	20.5	20.9	18.2	19.0	18.6	19.4	19.8
6H	19.4	20.0	19.8	20.4	20.9	18.1	18.8	18.6	19.2	19.6
8H	19.3	19.9	19.8	20.4	20.8	18.1	18.7	18.5	19.1	19.5
12H	19.3	19.8	19.8	20.3	20.7	18.0	18.5	18.5	19.0	19.5
12H 4H	19.3	20.0	19.7	20.4	20.8	18.1	18.9	18.6	19.3	19.7
6H	19.3	19.9	19.8	20.3	20.8	18.1	18.7	18.5	19.1	19.5
8H	19.3	19.8	19.8	20.3	20.7	18.0	18.5	18.5	19.0	19.5
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.3 / - 0.4					+ 0.4 / - 0.5				
1.5H	+ 0.3 / - 0.5					+ 0.5 / - 0.8				
2.0H	+ 0.4 / - 0.5					+ 0.7 / - 0.9				

CIE Pub.117, 19412 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.3)
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:229.94V I:1.4584A P:187.21W PF:0.5583 Freq:50.00Hz Lamp Flux:19412.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

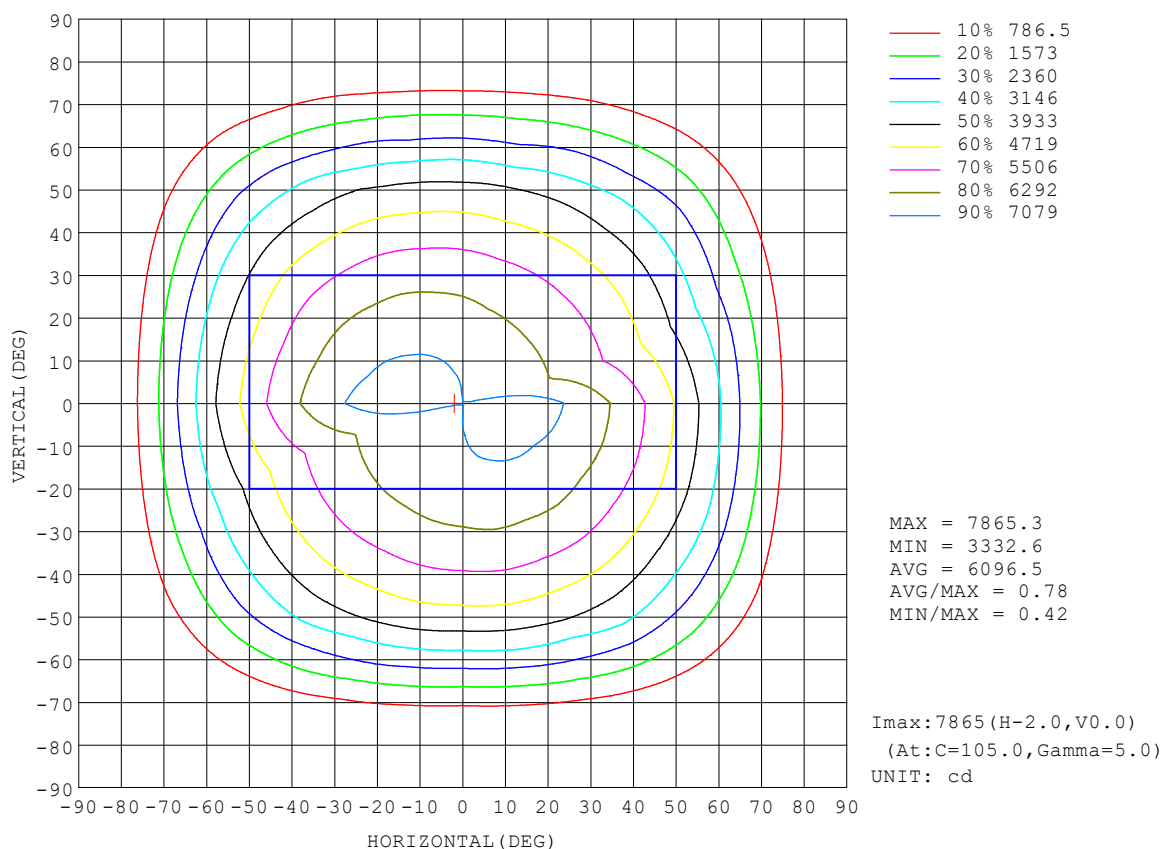
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	48	41	58	47	41	57	47	41	34
0.80	70	58	51	69	58	51	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	81	75	89	81	74	86	79	73	66
2.00	97	90	84	96	88	83	92	86	81	74
2.50	101	94	88	99	93	88	95	90	86	78
3.00	104	98	93	102	96	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	97	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:229.94V I:1.4584A P:187.21W PF:0.5583 Freq:50.00Hz Lamp Flux:19412.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

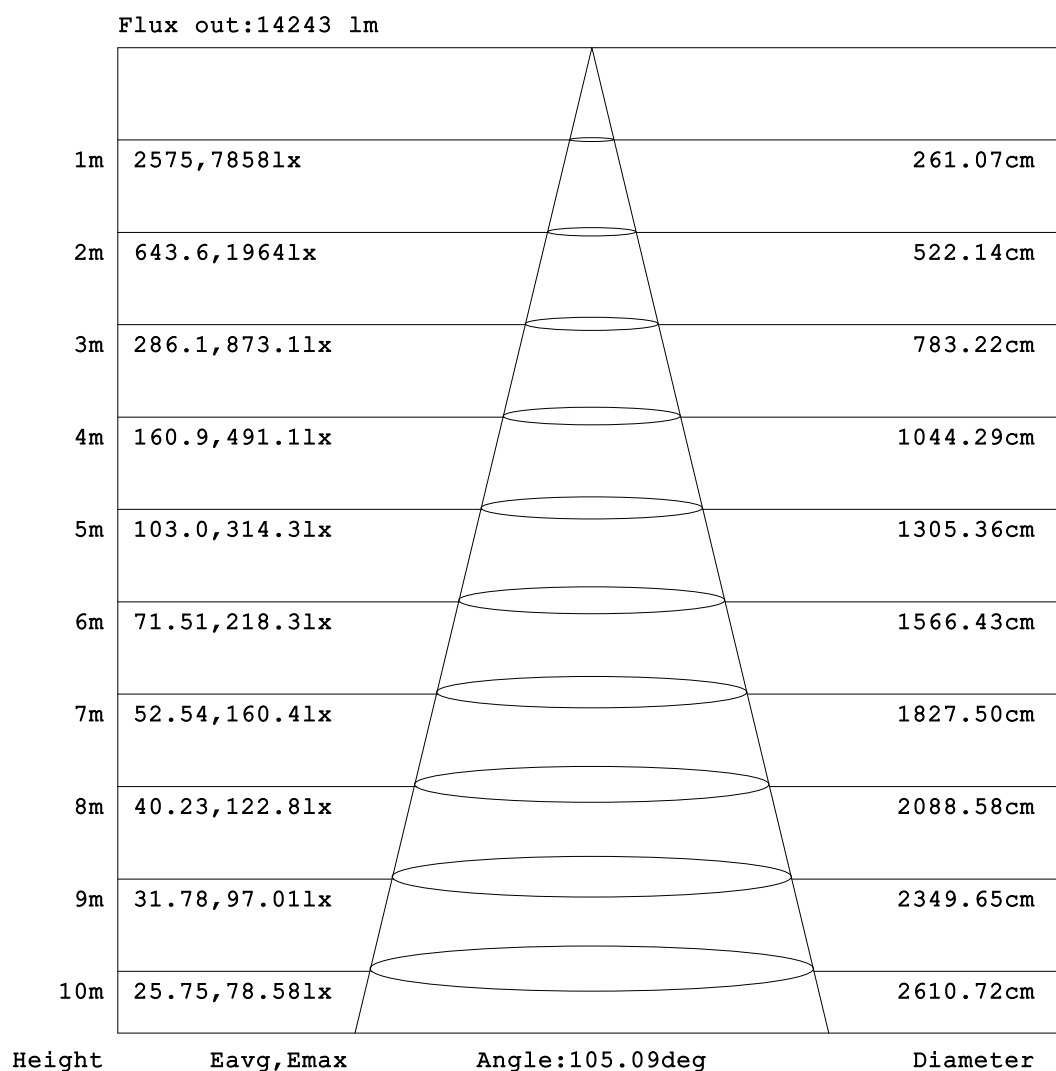


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-09-04

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:229.94V I:1.4584A P:187.21W PF:0.5583 Freq:50.00Hz Lamp Flux:19412.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



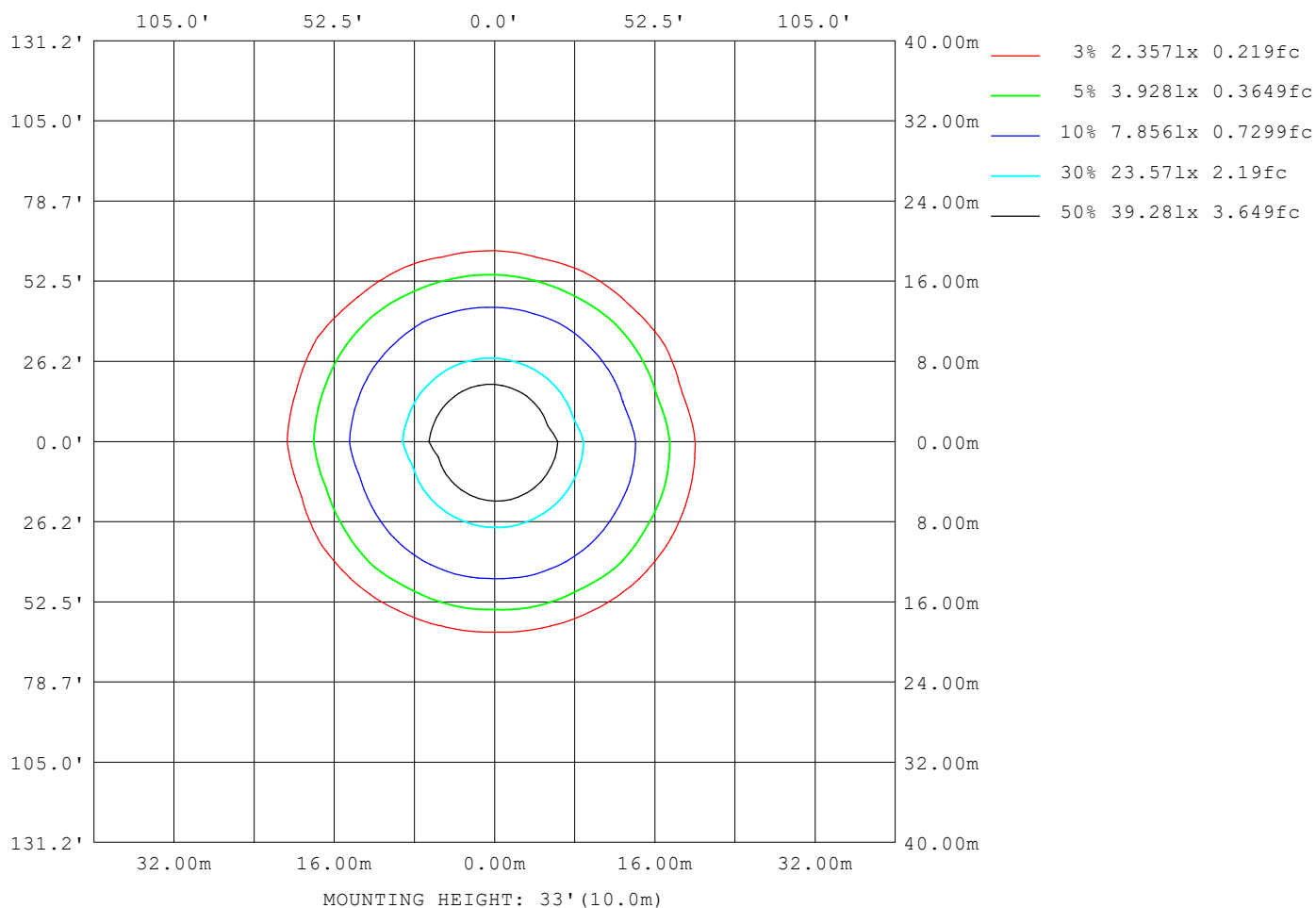
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:229.94V I:1.4584A P:187.21W PF:0.5583 Freq:50.00Hz Lamp Flux:19412.3x1 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:229.94V I:1.4584A P:187.21W PF:0.5583 Freq:50.00Hz Lamp Flux:19412.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

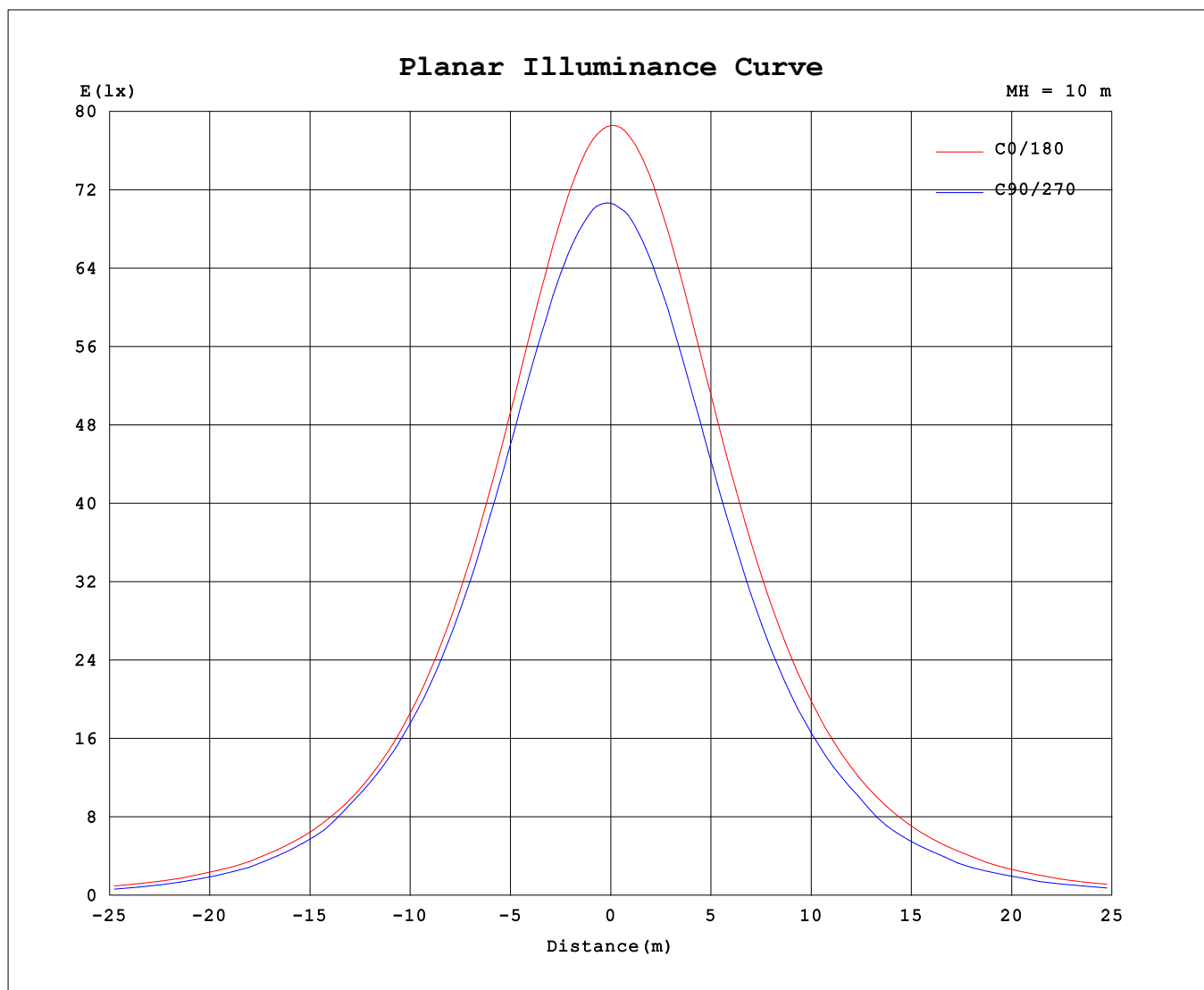
AvgL	cd/m2
L_0~180 (65) av	55126
L_0~180 (75) av	30895
L_0~180 (85) av	3006
L_90~270 (65) av	44730
L_90~270 (75) av	14649
L_90~270 (85) av	1505
L_45 (65) av	53361
L_45 (75) av	22642
L_45 (85) av	1941

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

```

Test:U:229.94V I:1.4584A P:187.21W PF:0.5583 Freq:50.00Hz Lamp Flux:19412.3x1 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

```