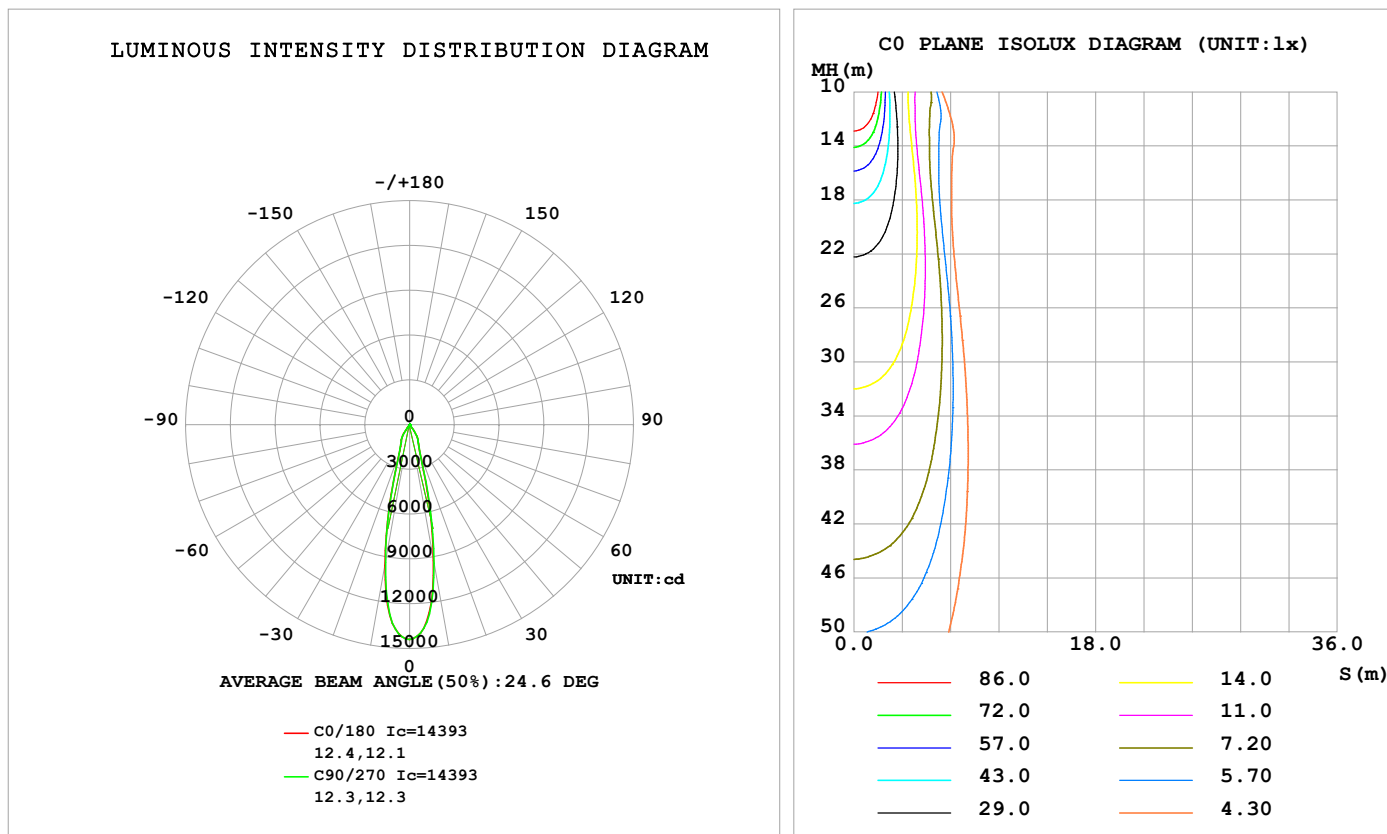


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.52V I:0.1298A P:28.161W PF:0.9410 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2906-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C007
MFR.: NATA	SUR.:	shielding angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 123.51 lm/W			
MODEL	CITIZEN CLU038	Imax (cd)	14393	S/MH(C0/180)	0.41
NOMINAL POWER(W)	430	LOR(%)	97.4	S/MH(C90/270)	0.40
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	3478.0	η UP,DN(C0-180)	0.0,48.8
NOMINAL FLUX(lm)	3570.9	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	219.5	η down (%)	97.4	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators: 杨泽全
Test Date: 2025-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity: 65.0%
Test Distance: 7.710m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	925.0	938.8	943.1	943.9	958.2	950.2	937.0	923.7	0- 10	1144	1144	32.9,32
20	211.0	206.3	208.2	210.5	209.3	206.0	207.7	208.4	10- 20	1322	2466	70.9,69.1
30	110.2	108.9	109.8	109.7	109.4	108.3	109.1	109.0	20- 30	664.4	3130	90,87.7
40	5.373	4.927	5.127	5.820	5.816	5.292	5.470	5.823	30- 40	332.2	3462	99.6,97
50	0.7802	0.7186	0.7203	0.7526	0.4942	0.4323	0.4391	0.4508	40- 50	11.37	3474	99.9,97.3
60	0.1471	0.1259	0.1223	0.1318	0.1410	0.1131	0.1122	0.1194	50- 60	2.626	3476	100,97.4
70	0.0628	0.0579	0.0558	0.0594	0.0618	0.0505	0.0484	0.0504	60- 70	0.8832	3477	100,97.4
80	0.0279	0.0295	0.0284	0.0290	0.0232	0.0204	0.0204	0.0210	70- 80	0.3876	3478	100,97.4
90	0.0225	0.1041	0.0765	0.0300	0.0269	0.0927	0.1800	0.0154	80- 90	0.2875	3478	100,97.4
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:X10cd									UNIT:lm		

Conical surface Flux(90deg): 3470.5 lm

%lum = 99.8%

%lamp = 97.2%

Conical surface Flux(130deg): 3477 lm

%lum = 100.0%

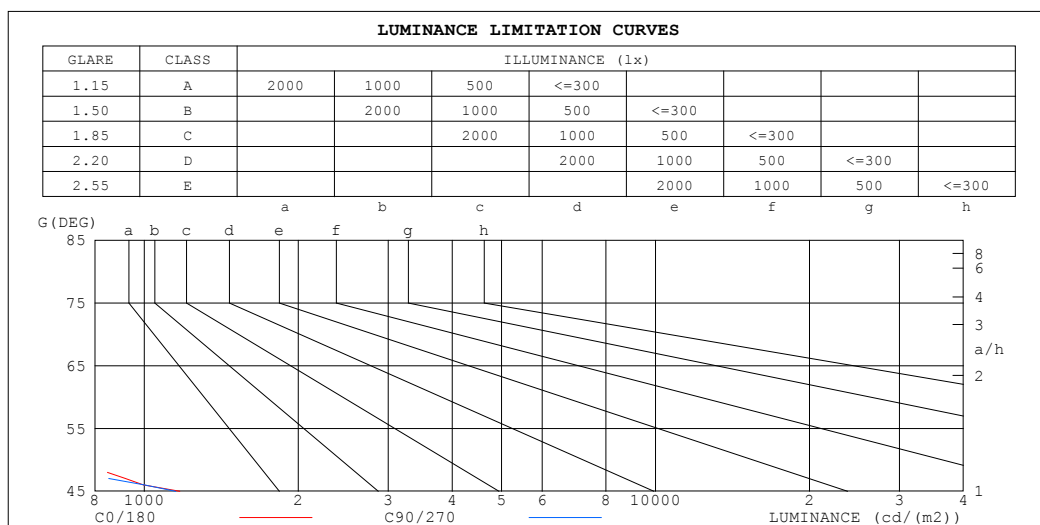
%lamp = 97.4%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:杨泽全
Test Date:2025-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:7.710m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.52V I:0.1298A P:28.161W PF:0.9410 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2906-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C007
MFR.: NATA	SUR.:	shielding angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	135	164
80	91	93
75	86	81
70	104	93
65	134	115
60	167	139
55	314	277
50	687	638
45	1173	1151

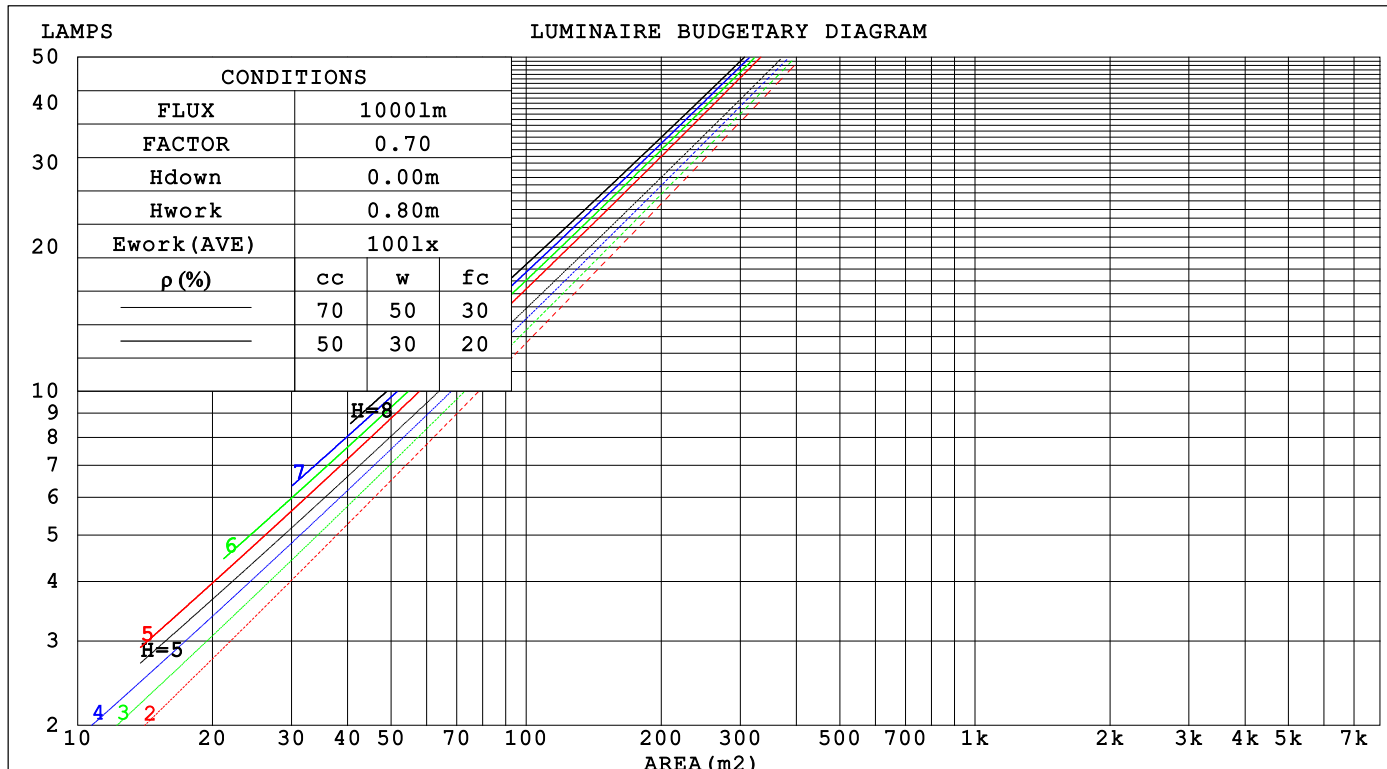
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:杨泽全
Test Date:2025-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:7.710m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.52V I:0.1298A P:28.161W PF:0.9410 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2906-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C007
MFR.: NATA	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	1.16	1.16	1.16	1.13	1.13	1.13	1.08	1.08	1.08	1.04	1.04	1.04	.99	.99	.99	.97
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	.94
2.0	1.04	1.01	.99	1.03	.99	.98	.99	.97	.95	.97	.95	.93	.94	.93	.91	.90
3.0	.99	.96	.93	.98	.95	.92	.96	.93	.91	.93	.91	.89	.91	.90	.88	.87
4.0	.95	.91	.88	.94	.90	.87	.92	.89	.86	.90	.88	.86	.89	.86	.85	.83
5.0	.91	.87	.84	.90	.86	.84	.89	.85	.83	.87	.84	.82	.86	.83	.81	.80
6.0	.88	.83	.80	.87	.83	.80	.86	.82	.80	.85	.81	.79	.83	.81	.79	.78
7.0	.85	.80	.77	.84	.80	.77	.83	.79	.77	.82	.79	.76	.81	.78	.76	.75
8.0	.82	.77	.74	.81	.77	.74	.80	.77	.74	.79	.76	.74	.79	.76	.73	.72
9.0	.79	.75	.72	.79	.75	.72	.78	.74	.72	.77	.74	.71	.76	.73	.71	.70
10.0	.77	.72	.70	.76	.72	.70	.75	.72	.69	.75	.72	.69	.74	.71	.69	.68



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:杨泽全
Test Date:2025-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:7.710m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.52V I:0.1298A P:28.161W PF:0.9410 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2906-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C007
MFR.: NATA	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	.139	.079	.025	.132	.075	.024	.120	.069	.022	.109	.063	.020	.099	.057	.018		
2.0	.129	.071	.022	.124	.068	.021	.114	.063	.020	.105	.059	.018	.096	.054	.017		
3.0	.121	.065	.019	.117	.063	.019	.108	.059	.018	.101	.055	.017	.094	.052	.016		
4.0	.114	.059	.017	.110	.058	.017	.103	.055	.016	.097	.052	.016	.091	.049	.015		
5.0	.108	.055	.016	.105	.054	.016	.099	.051	.015	.093	.049	.015	.088	.047	.014		
6.0	.102	.051	.015	.100	.050	.014	.094	.048	.014	.090	.047	.014	.085	.045	.013		
7.0	.098	.048	.014	.095	.047	.014	.091	.046	.013	.086	.044	.013	.082	.043	.013		
8.0	.093	.046	.013	.091	.045	.013	.087	.043	.012	.083	.042	.012	.080	.041	.012		
9.0	.089	.043	.012	.087	.043	.012	.084	.041	.012	.080	.040	.012	.077	.039	.011		
10.0	.086	.041	.011	.084	.041	.011	.081	.040	.011	.078	.039	.011	.075	.038	.011		

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	.186	.186	.186	.159	.159	.159	.108	.108	.108	.062	.062	.062	.020	.020	.020	
1.0	.164	.154	.144	.141	.132	.124	.096	.091	.086	.055	.052	.050	.018	.017	.016	
2.0	.147	.129	.114	.126	.111	.099	.086	.077	.069	.050	.045	.040	.016	.014	.013	
3.0	.133	.110	.092	.114	.095	.080	.078	.066	.056	.045	.039	.033	.015	.013	.011	
4.0	.121	.095	.076	.104	.083	.066	.071	.058	.046	.041	.034	.027	.013	.011	.009	
5.0	.111	.084	.063	.095	.072	.055	.066	.051	.039	.038	.030	.023	.012	.010	.008	
6.0	.103	.074	.053	.088	.064	.046	.061	.045	.033	.035	.026	.020	.011	.009	.006	
7.0	.096	.066	.045	.082	.057	.040	.057	.040	.028	.033	.024	.017	.011	.008	.006	
8.0	.089	.060	.039	.077	.052	.034	.053	.036	.024	.031	.021	.014	.010	.007	.005	
9.0	.084	.054	.034	.072	.047	.030	.050	.033	.021	.029	.020	.013	.009	.006	.004	
10.0	.079	.050	.030	.068	.043	.026	.047	.030	.018	.028	.018	.011	.009	.006	.004	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:杨泽全
Test Date:2025-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:7.710m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.52V I:0.1298A P:28.161W PF:0.9410 Freq:49.99Hz										
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm										
NameAA: 2-2906-LM2					Type: 铝反杯			Weight:		
SPEC.: 75					DIM.:			SERIAL No.: 20251125-C007		
MFR.: NATA					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	18.6	18.1	18.8	18.9	18.0	18.6	18.2	18.8	19.0
3H	17.8	18.4	18.0	18.6	18.8	17.8	18.4	18.0	18.6	18.8
4H	17.7	18.3	17.9	18.5	18.7	17.7	18.3	18.0	18.5	18.8
6H	17.6	18.2	17.9	18.4	18.7	17.6	18.2	17.9	18.4	18.7
8H	17.6	18.1	17.9	18.4	18.6	17.6	18.2	17.9	18.4	18.6
12H	17.5	18.1	17.8	18.3	18.6	17.5	18.1	17.9	18.3	18.6
4H 2H	17.7	18.3	17.9	18.5	18.7	17.7	18.3	18.0	18.5	18.8
3H	17.5	18.1	17.8	18.3	18.6	17.5	18.1	17.9	18.3	18.6
4H	17.4	17.9	17.8	18.2	18.5	17.5	17.9	17.8	18.2	18.5
6H	17.3	17.8	17.7	18.1	18.4	17.4	17.8	17.7	18.1	18.5
8H	17.3	17.7	17.6	18.0	18.4	17.3	17.7	17.7	18.0	18.4
12H	17.2	17.6	17.6	17.9	18.3	17.2	17.6	17.6	18.0	18.4
8H 4H	17.3	17.7	17.6	18.0	18.4	17.3	17.7	17.7	18.0	18.4
6H	17.2	17.5	17.6	17.9	18.3	17.2	17.5	17.6	17.9	18.3
8H	17.1	17.4	17.5	17.8	18.2	17.1	17.4	17.6	17.8	18.3
12H	17.0	17.3	17.5	17.7	18.2	17.1	17.3	17.5	17.8	18.2
12H 4H	17.2	17.6	17.6	17.9	18.3	17.2	17.6	17.6	18.0	18.4
6H	17.1	17.4	17.5	17.8	18.2	17.1	17.4	17.6	17.8	18.3
8H	17.0	17.3	17.5	17.7	18.2	17.1	17.3	17.5	17.8	18.2
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 5.8 / -18.6					+ 5.8 / -18.7				
1.5H	+ 8.5 / -16.9					+ 8.5 / -16.9				
2.0H	+ 5.6 / - 5.0					+ 5.5 / - 5.0				

CIE Pub.117, 3571 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 4.4)
Area: 0.0176 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:杨泽全
Test Date:2025-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:7.710m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.52V I:0.1298A P:28.161W PF:0.9410 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2906-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C007
MFR.: NATA	SUR.:	shielding angle:

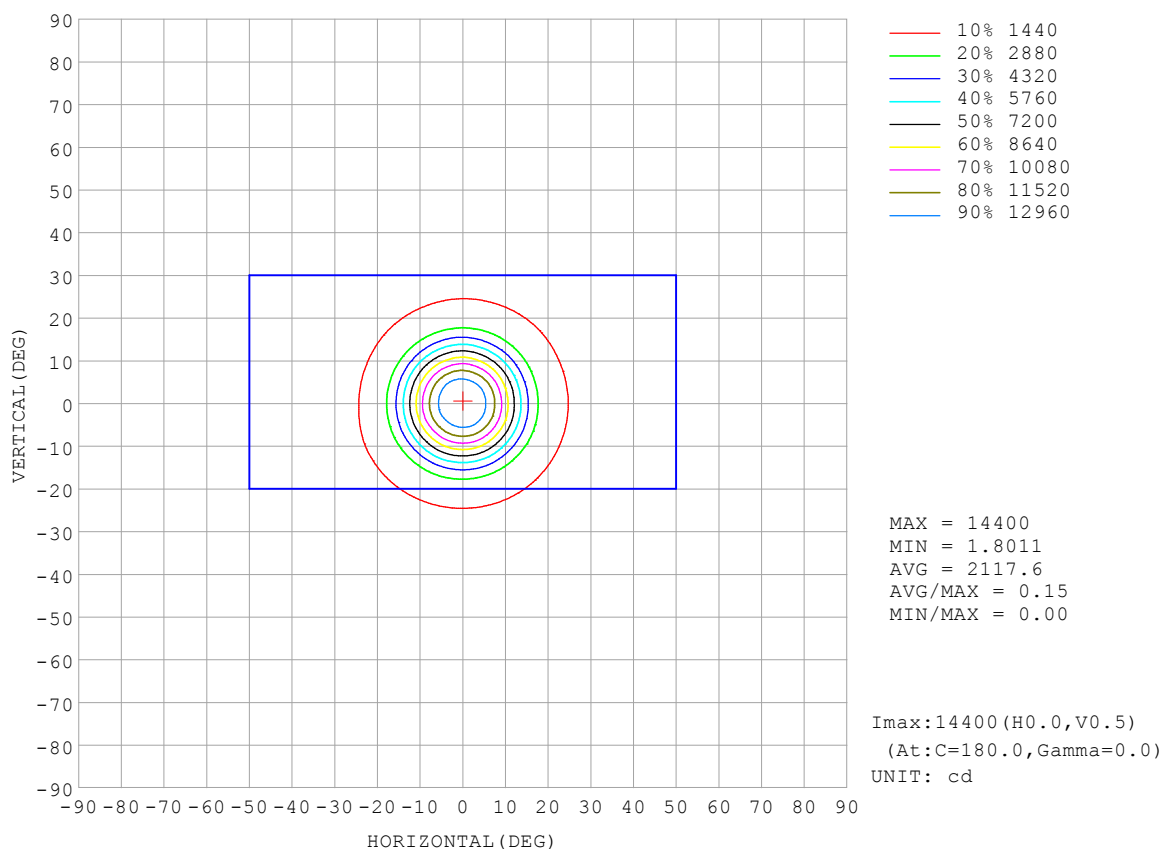
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	80	88	83	80	88	83	80	77
0.80	96	91	87	95	90	87	94	90	87	84
1.00	99	94	91	98	94	91	97	94	91	87
1.25	103	98	95	102	98	95	100	97	94	90
1.50	105	101	98	104	100	98	102	99	97	93
2.00	107	103	101	106	102	100	103	101	98	94
2.50	108	105	103	107	104	102	104	102	100	94
3.00	110	107	104	108	105	103	105	103	101	95
4.00	112	109	107	110	108	106	106	105	103	97
5.00	113	111	109	111	109	108	107	106	105	97
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators: 杨泽全
Test Date: 2025-11-24

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 γ Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity: 65.0%
Test Distance: 7.710m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.52V I:0.1298A P:28.161W PF:0.9410 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2906-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C007
MFR.: NATA	SUR.:	shielding angle:

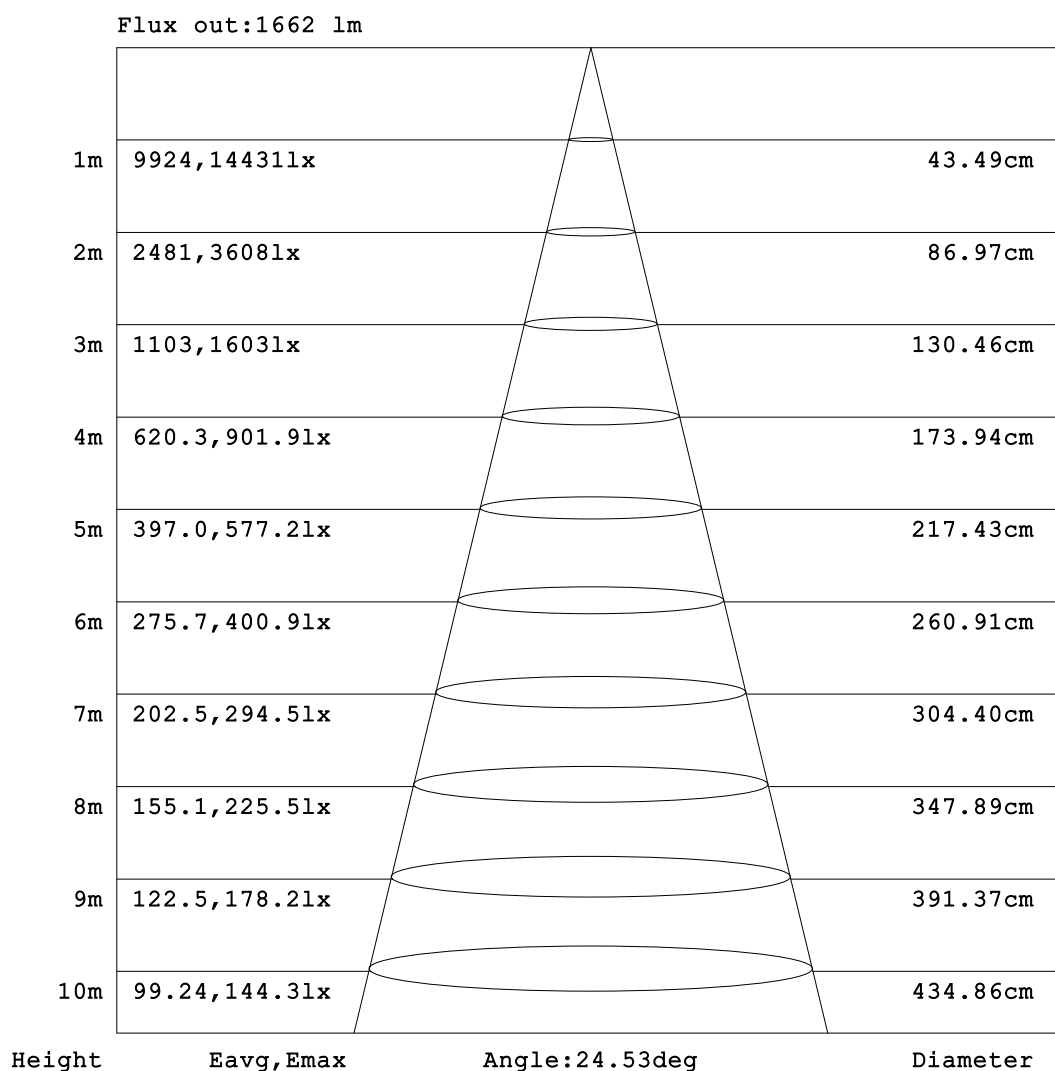


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:杨泽全
Test Date:2025-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:7.710m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.52V I:0.1298A P:28.161W PF:0.9410 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2906-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C007
MFR.: NATA	SUR.:	shielding angle:



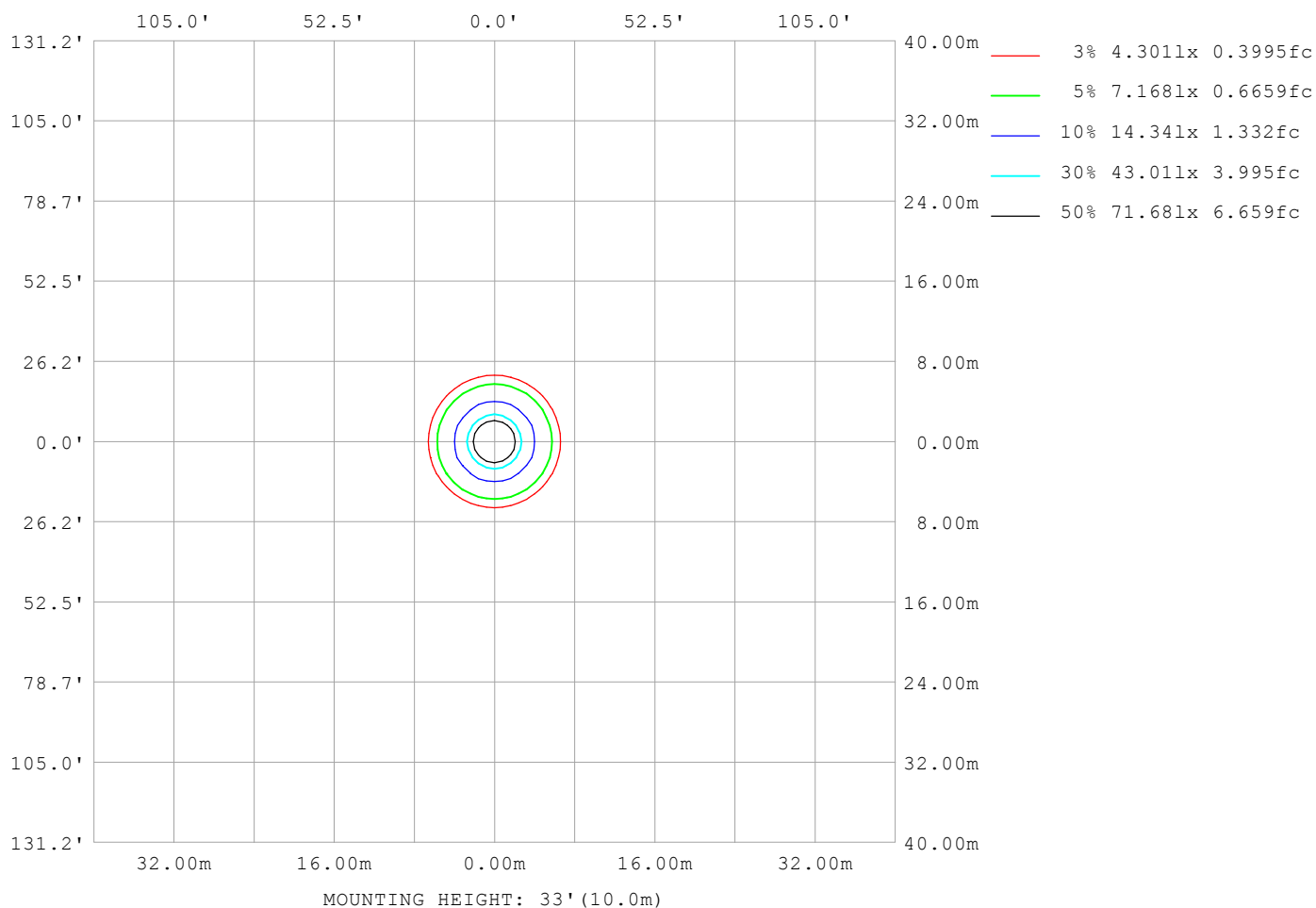
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:杨泽全
Test Date:2025-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:7.710m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:230.52V I:0.1298A P:28.161W PF:0.9410 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2906-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C007
MFR.: NATA	SUR.:	shielding angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:杨泽全
Test Date:2025-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:7.710m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.52V I:0.1298A P:28.161W PF:0.9410 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2906-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C007
MFR.: NATA	SUR.:	shielding angle:

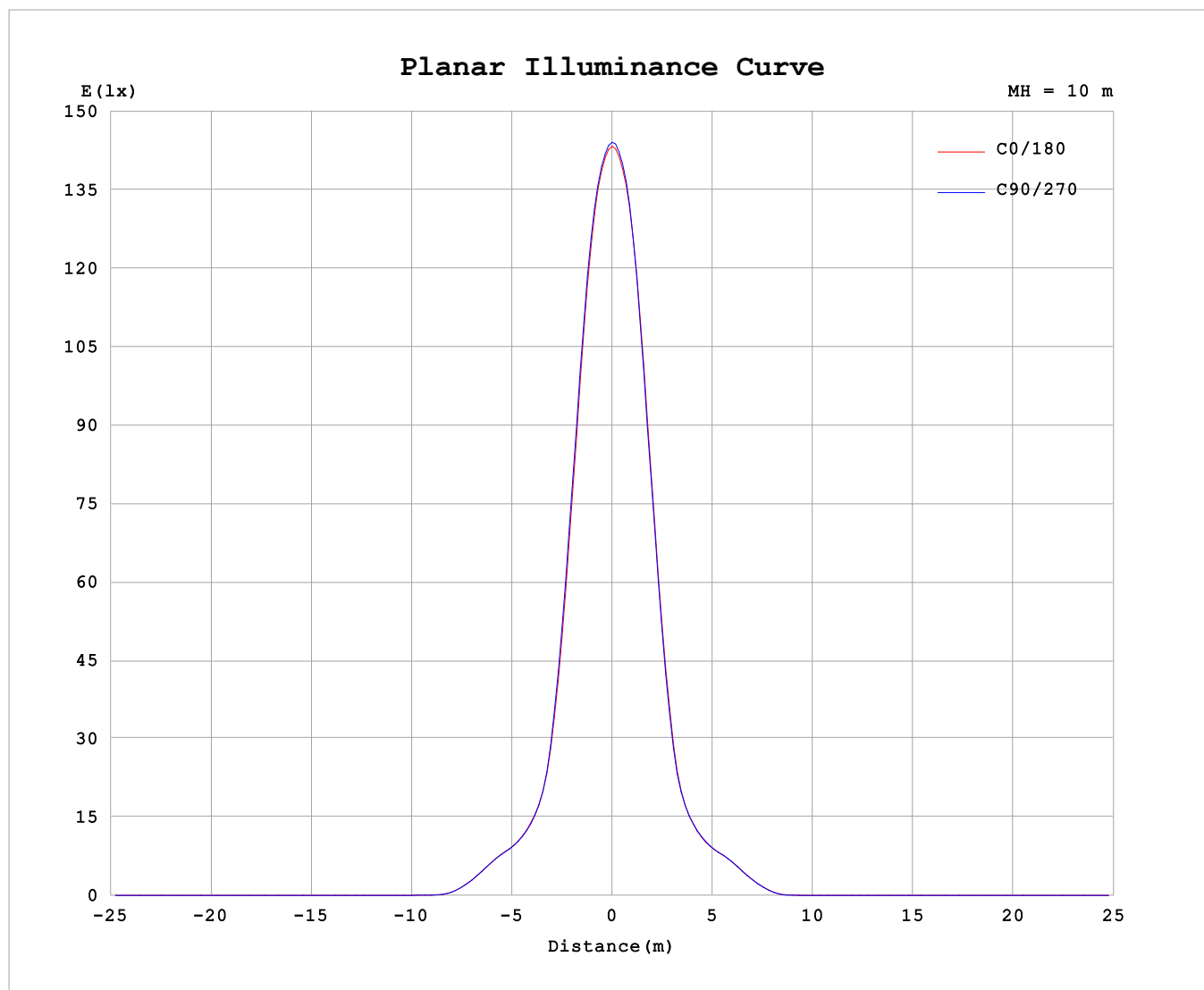
AvgL	cd/m2
L_0~180 (65) av	134
L_0~180 (75) av	81
L_0~180 (85) av	117
L_90~270 (65) av	109
L_90~270 (75) av	71
L_90~270 (85) av	131
L_45 (65) av	115
L_45 (75) av	74
L_45 (85) av	125

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:杨泽全
Test Date:2025-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:7.710m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators: 杨泽全
Test Date: 2025-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity: 65.0%
Test Distance: 7.710m [K=1.0000]
Remarks:

Test:U:230.52V I:0.1298A P:28.161W PF:0.9410 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2906-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C007
MFR.: NATA	SUR.:	shielding angle:

UNIT: X10cd

[illegible]

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:7.710m [K=1.0000]
Remarks:

```