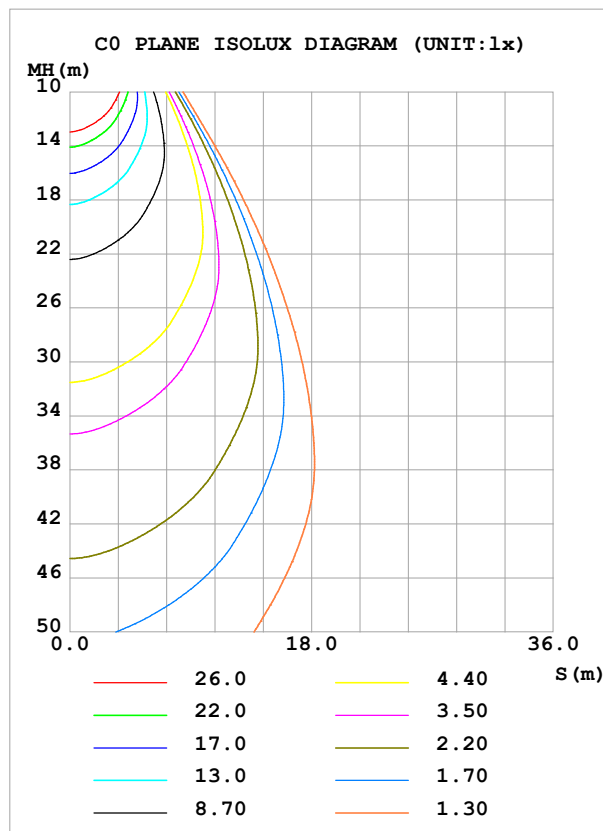
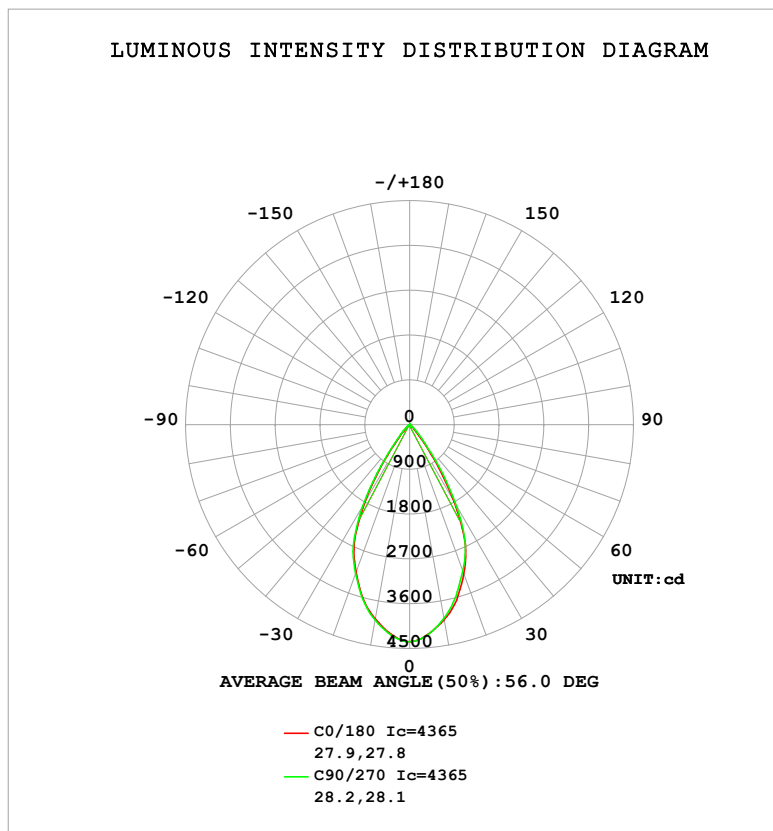


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.54V I:0.1294A P:28.102W PF:0.9418 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2908-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C005
MFR.: NATA	SUR.:	shielding angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 119.66 lm/W			
MODEL	CITIZEN CLU038	Imax (cd)	4365	S/MH(C0/180)	0.84
NOMINAL POWER(W)	430	LOR(%)	94.2	S/MH(C90/270)	0.85
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	3362.7	η UP,DN(C0-180)	0.0,47.1
NOMINAL FLUX(lm)	3570.9	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	219.5	η down (%)	94.2	CIBSE SHR MAX	0.85



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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	3984	3953	3957	3967	3968	3971	3993	4002	0- 10	395.9	395.9	11.8,11.1
20	3185	3127	3129	3158	3156	3147	3186	3211	10- 20	1008	1404	41.7,39.3
30	1790	1858	1877	1823	1805	1864	1884	1817	20- 30	1181	2584	76.9,72.4
40	299.2	389.8	427.8	351.2	307.1	375.4	405.5	314.8	30- 40	612.7	3197	95.1,89.5
50	45.86	77.34	94.15	61.94	45.15	74.25	90.48	51.45	40- 50	135.2	3332	99.1,93.3
60	6.072	9.975	12.57	8.278	6.147	10.32	12.36	6.924	50- 60	26.95	3359	99.9,94.1
70	0.3779	0.5191	0.6065	0.4822	0.3074	0.3544	0.3913	0.2940	60- 70	3.019	3362	100,94.2
80	0.1370	0.1538	0.1706	0.1473	0.0735	0.0970	0.0970	0.0837	70- 80	0.2090	3362	100,94.2
90	0.1437	0.2107	0.2375	0.2141	0.1403	0.2575	0.2275	0.1271	80- 90	0.1935	3363	100,94.2
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): 3288.7 lm

%lum = 97.8%

%lamp = 92.1%

Conical surface Flux(130deg): 3361.7 lm

%lum = 100.0%

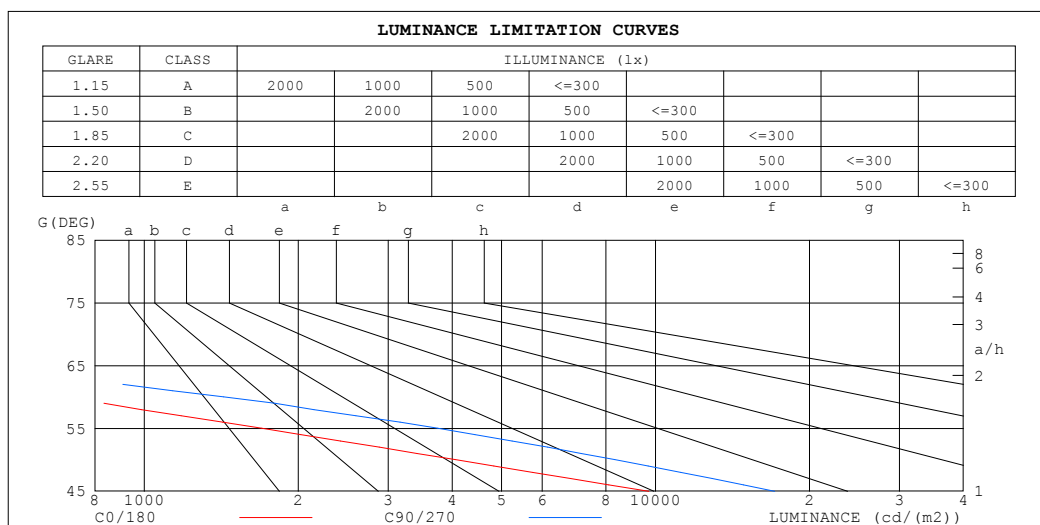
%lamp = 94.1%

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:230.54V I:0.1294A P:28.102W PF:0.9418 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2908-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C005
MFR.: NATA	SUR.:	shielding angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	96	129
80	45	56
75	38	55
70	63	101
65	242	383
60	691	1428
55	1698	3748
50	4058	8321
45	9706	17086

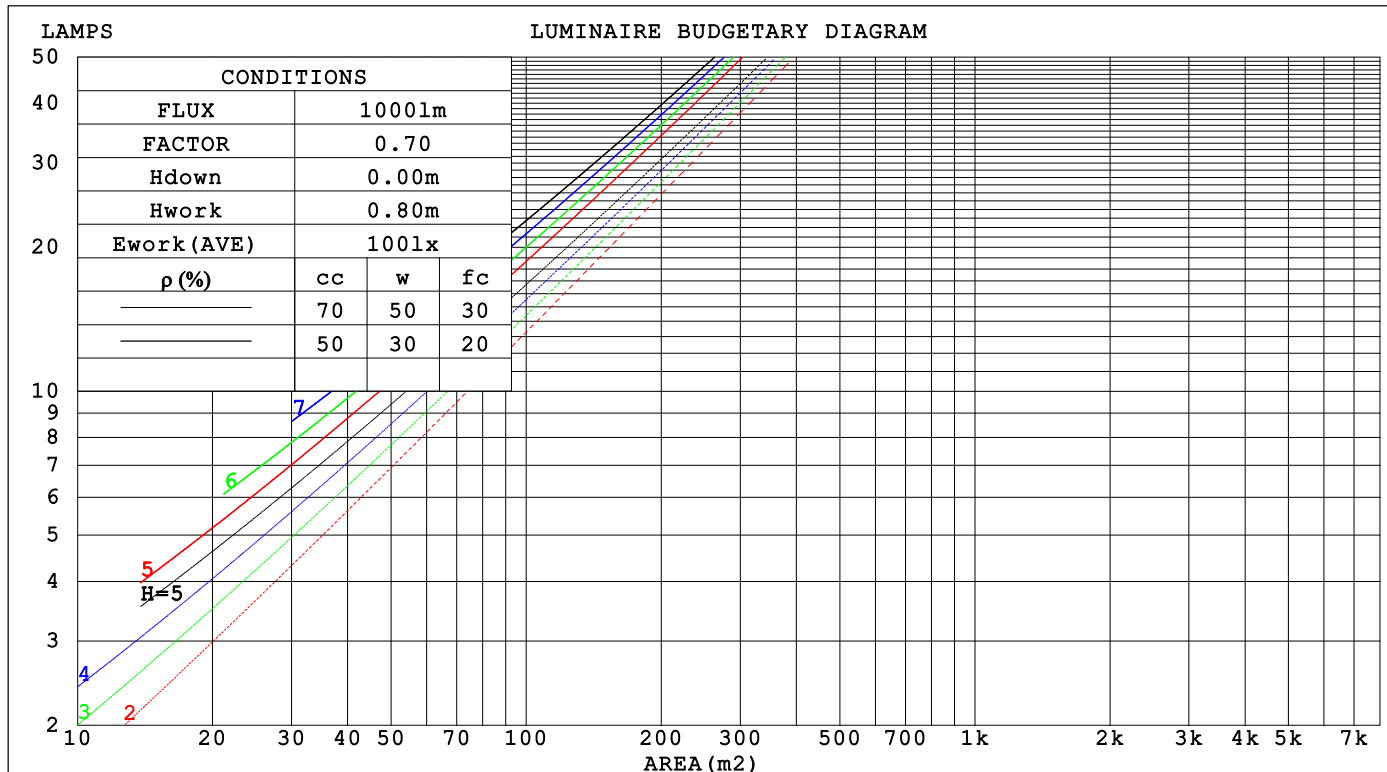
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:杨泽全
Test Date:2025-11-24

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:230.54V I:0.1294A P:28.102W PF:0.9418 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2908-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C005
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															



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:230.54V I:0.1294A P:28.102W PF:0.9418 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2908-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C005
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	.161	.092	.029	.155	.088	.028	.143	.082	.026	.132	.076	.025	.122	.071	.023															
2.0	.154	.085	.026	.149	.082	.025	.139	.077	.024	.130	.073	.023	.122	.069	.022															
3.0	.147	.078	.023	.143	.076	.023	.134	.073	.022	.126	.069	.021	.119	.066	.020															
4.0	.140	.073	.021	.136	.071	.021	.129	.068	.020	.122	.066	.020	.116	.063	.019															
5.0	.134	.068	.020	.130	.067	.020	.124	.065	.019	.118	.062	.019	.113	.060	.018															
6.0	.128	.064	.018	.125	.063	.018	.119	.061	.018	.114	.059	.017	.109	.058	.017															
7.0	.122	.061	.017	.120	.060	.017	.115	.058	.017	.110	.057	.016	.106	.055	.016															
8.0	.117	.057	.016	.115	.057	.016	.111	.055	.016	.107	.054	.016	.103	.053	.015															
9.0	.113	.054	.015	.111	.054	.015	.107	.053	.015	.103	.052	.015	.099	.051	.015															
10.0	.108	.052	.014	.106	.051	.014	.103	.050	.014	.099	.049	.014	.096	.048	.014															

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	.179	.179	.179	.153	.153	.153	.105	.105	.105	.060	.060	.060	.019	.019	.019	
1.0	.161	.148	.137	.138	.127	.118	.094	.087	.081	.054	.051	.047	.017	.016	.015	
2.0	.146	.125	.107	.125	.107	.092	.086	.074	.064	.049	.043	.038	.016	.014	.012	
3.0	.134	.107	.085	.115	.092	.074	.079	.064	.052	.046	.037	.031	.015	.012	.010	
4.0	.124	.093	.069	.107	.080	.060	.073	.056	.042	.042	.033	.025	.014	.011	.008	
5.0	.116	.082	.057	.100	.071	.049	.069	.050	.035	.040	.029	.021	.013	.009	.007	
6.0	.109	.073	.047	.094	.063	.041	.065	.044	.029	.038	.026	.017	.012	.009	.006	
7.0	.103	.066	.040	.089	.057	.035	.061	.040	.025	.036	.024	.015	.011	.008	.005	
8.0	.098	.060	.034	.084	.052	.030	.058	.037	.021	.034	.022	.013	.011	.007	.004	
9.0	.093	.055	.030	.080	.048	.026	.056	.034	.018	.032	.020	.011	.010	.007	.004	
10.0	.089	.051	.026	.077	.044	.023	.053	.031	.016	.031	.018	.010	.010	.006	.003	

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:230.54V I:0.1294A P:28.102W PF:0.9418 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm										
NameAA: 2-2908-LM2					Type: 铝反杯			Weight:		
SPEC.: 75					DIM.:			SERIAL No.: 20251125-C005		
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	22.2	23.1	22.4	23.3	23.5	23.0	23.9	23.2	24.1	24.2
3H	22.1	22.9	22.3	23.1	23.3	22.8	23.7	23.1	23.9	24.1
4H	22.0	22.8	22.2	23.0	23.2	22.7	23.5	23.0	23.7	24.0
6H	21.9	22.6	22.2	22.9	23.1	22.6	23.4	22.9	23.6	23.9
8H	21.8	22.5	22.1	22.8	23.1	22.6	23.3	22.9	23.6	23.8
12H	21.8	22.5	22.1	22.7	23.0	22.6	23.2	22.9	23.5	23.8
4H 2H	22.0	22.8	22.2	23.0	23.2	22.7	23.5	23.0	23.7	24.0
3H	21.8	22.5	22.1	22.7	23.0	22.6	23.2	22.9	23.5	23.8
4H	21.7	22.3	22.0	22.6	22.9	22.5	23.1	22.8	23.4	23.7
6H	21.6	22.1	22.0	22.5	22.8	22.4	22.9	22.7	23.2	23.6
8H	21.6	22.1	21.9	22.4	22.8	22.3	22.8	22.7	23.2	23.5
12H	21.5	22.0	21.9	22.3	22.7	22.3	22.7	22.7	23.1	23.5
8H 4H	21.6	22.1	21.9	22.4	22.8	22.3	22.8	22.7	23.2	23.5
6H	21.4	21.9	21.9	22.3	22.7	22.2	22.6	22.6	23.0	23.4
8H	21.4	21.8	21.8	22.2	22.6	22.2	22.5	22.6	22.9	23.4
12H	21.3	21.7	21.8	22.1	22.6	22.1	22.4	22.6	22.9	23.3
12H 4H	21.5	22.0	21.9	22.3	22.7	22.3	22.7	22.7	23.1	23.5
6H	21.4	21.8	21.8	22.2	22.6	22.2	22.5	22.6	22.9	23.4
8H	21.3	21.7	21.8	22.1	22.6	22.1	22.4	22.6	22.9	23.3
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 3.7 / -16.1					+ 3.7 / -12.9				
1.5H	+ 6.0 / -10.3					+ 5.7 / - 9.6				
2.0H	+ 6.1 / -13.7					+ 6.5 / -15.4				

CIE Pub.117, 3571 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.4$)
 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:230.54V I:0.1294A P:28.102W PF:0.9418 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2908-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C005
MFR.: NATA	SUR.:	shielding angle:

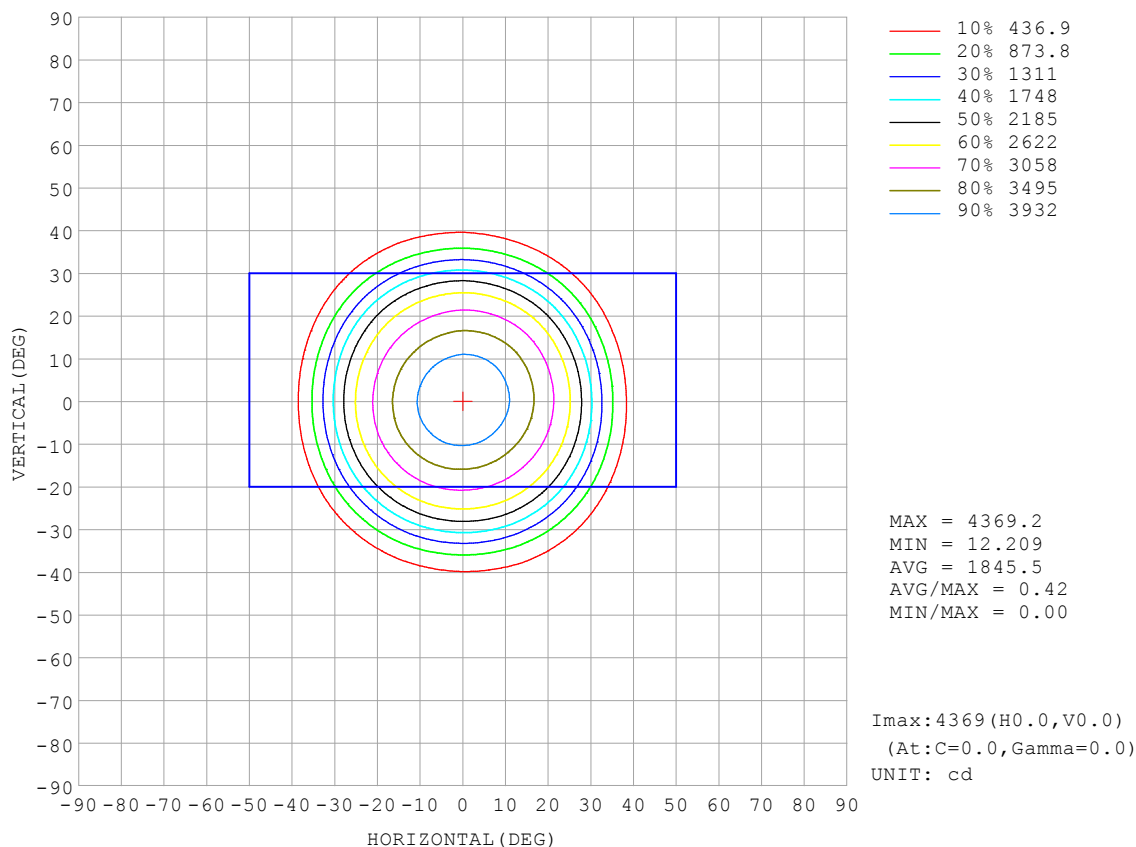
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	83	77	74	83	77	74	82	77	74	71
0.80	90	85	82	90	85	81	88	84	81	78
1.00	94	89	86	93	89	86	92	89	85	82
1.25	98	93	90	97	93	90	95	92	89	85
1.50	100	96	93	99	95	93	97	94	92	88
2.00	103	99	96	101	98	95	99	96	94	89
2.50	104	101	98	103	100	97	100	97	95	90
3.00	106	103	100	104	101	99	101	99	97	91
4.00	107	105	103	106	103	102	102	100	99	93
5.00	109	107	105	107	105	103	103	102	100	93
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:230.54V I:0.1294A P:28.102W PF:0.9418 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2908-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C005
MFR.: NATA	SUR.:	shielding angle:

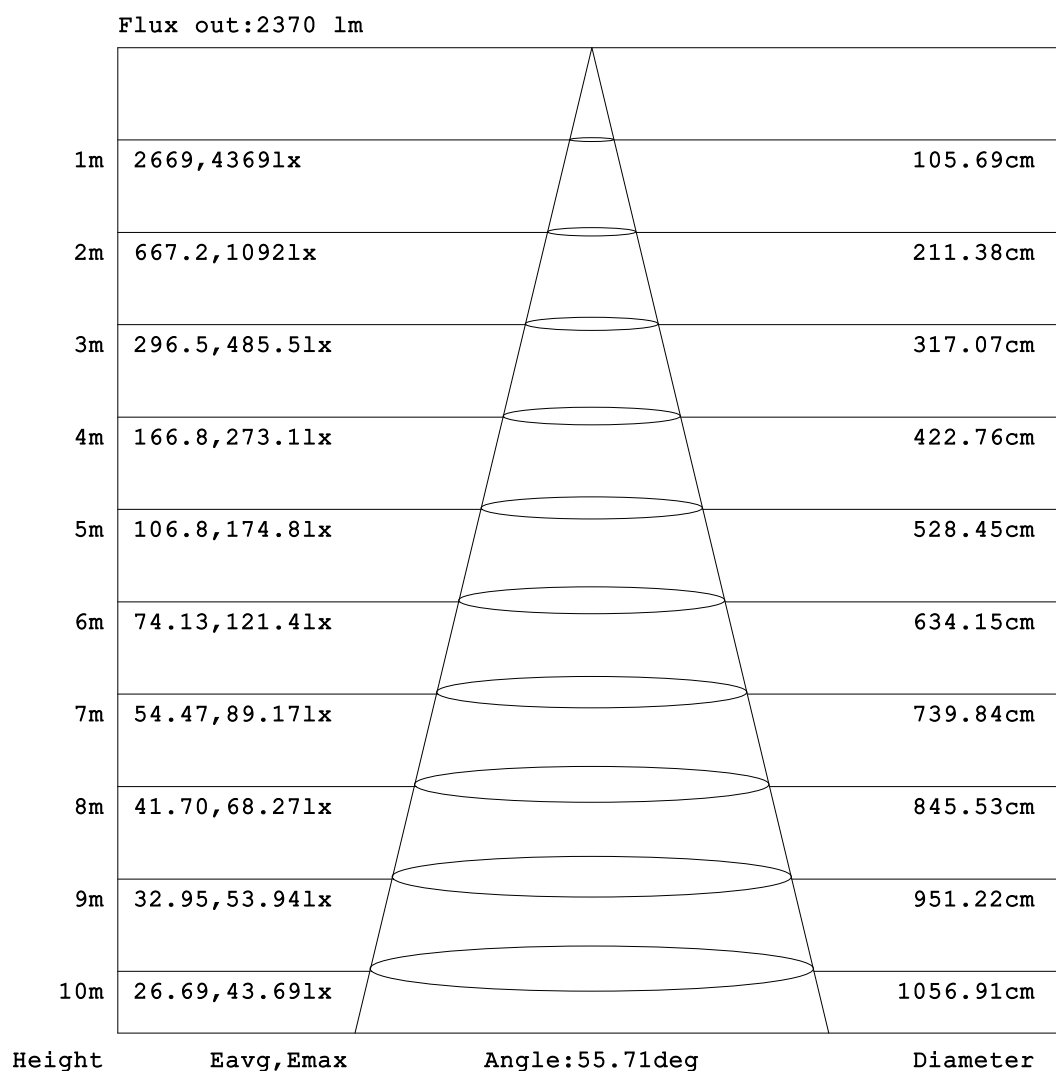


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:25.3℃
 Operators:杨泽全
 Test Date:2025-11-24

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:230.54V I:0.1294A P:28.102W PF:0.9418 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2908-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C005
MFR.: NATA	SUR.:	shielding angle:



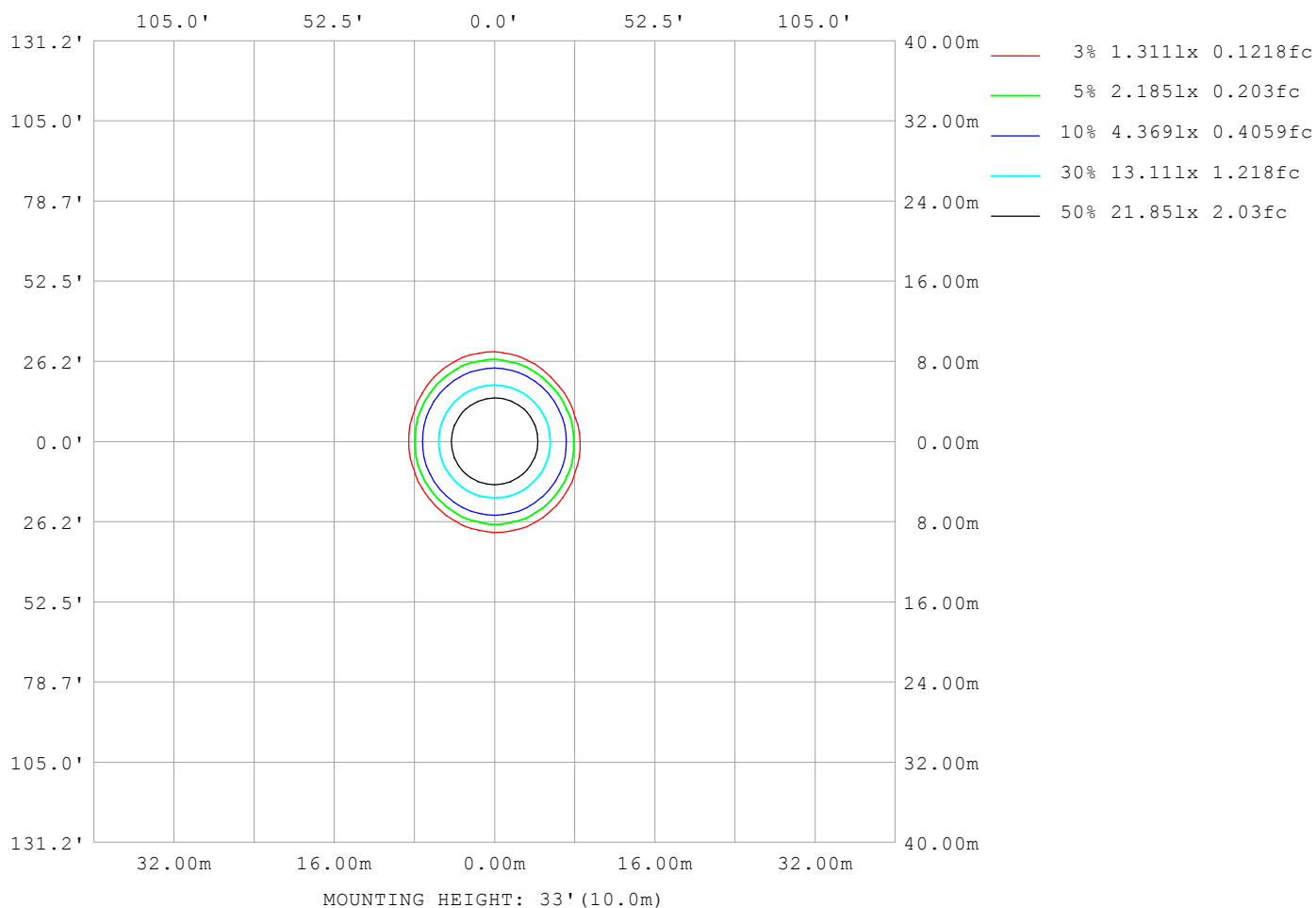
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:230.54V I:0.1294A P:28.102W PF:0.9418 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2908-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C005
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:230.54V I:0.1294A P:28.102W PF:0.9418 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2908-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C005
MFR.: NATA	SUR.:	shielding angle:

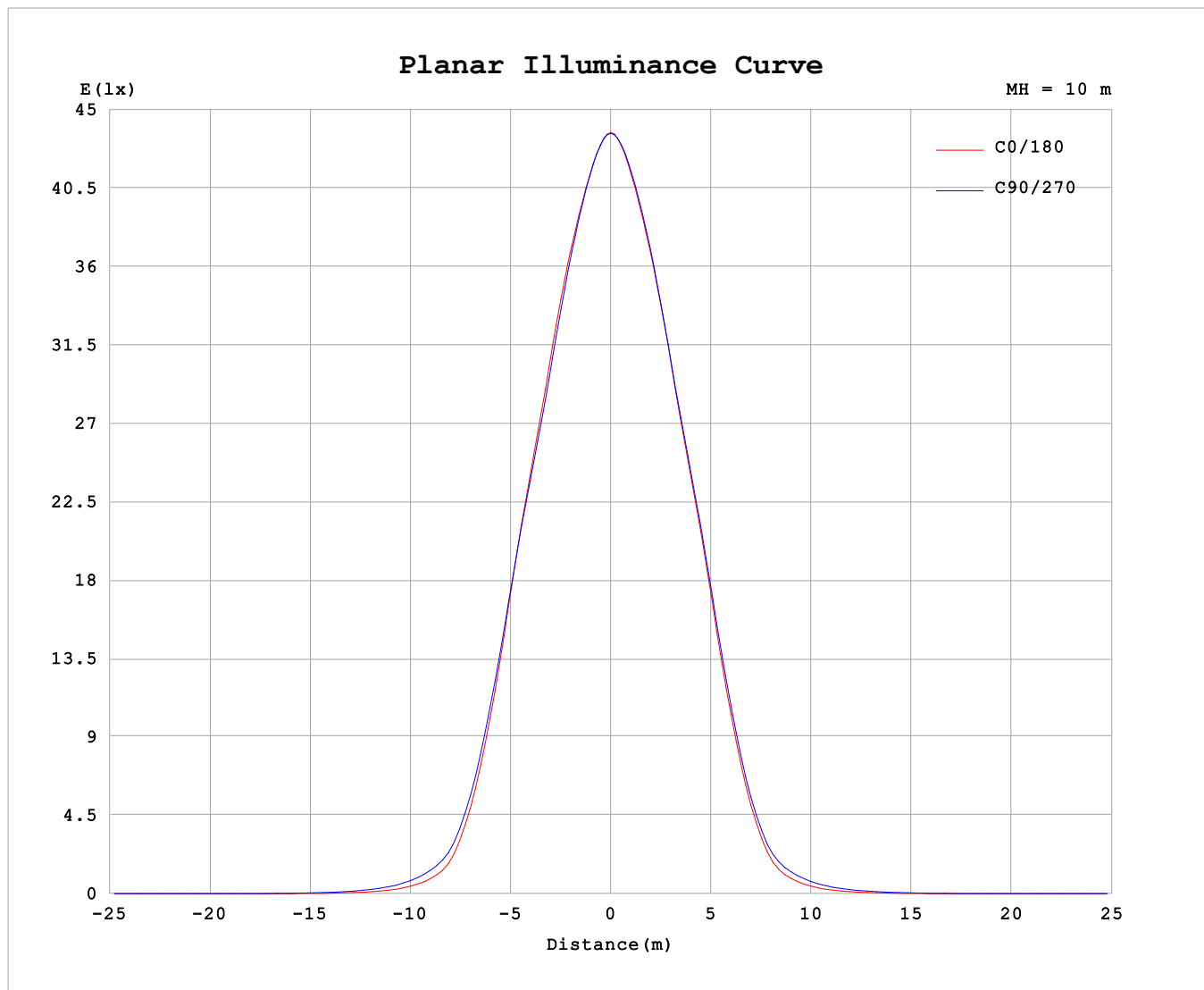
AvgL	cd/m2
L_0~180 (65) av	239
L_0~180 (75) av	31
L_0~180 (85) av	77
L_90~270 (65) av	358
L_90~270 (75) av	44
L_90~270 (85) av	107
L_45 (65) av	291
L_45 (75) av	36
L_45 (85) av	94

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:230.54V I:0.1294A P:28.102W PF:0.9418 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3570.9x1 lm		
NameAA: 2-2908-LM2	Type: 铝反杯	Weight:
SPEC.: 75	DIM.:	SERIAL No.: 20251125-C005
MFR.: NATA	SUR.:	shielding angle:

UNIT: cd

[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:

```