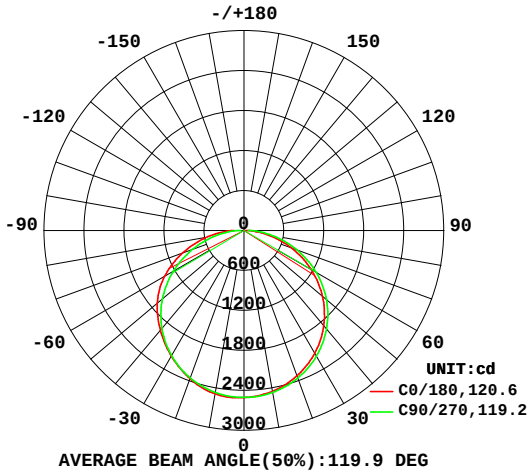
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

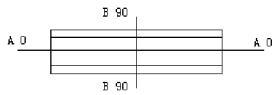
Test:U:120.22V I:0.5626A P:67.461W PF:0.9973 Freq:59.98Hz Lamp Flux:7874.43x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:72w 6500k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 116.72 lm/W			
MODEL		Imax(cd)	2513	S/MH(C0/180)	1.30
NOMINAL POWER(W)	72w	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	120-277v	TOTAL FLUX(lm)	7874.4	h UP,DN(C0-180)	0.0,48.6
NOMINAL FLUX(lm)	7874.43	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,51.4
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	h down(%)	100.0	CIBSE SHR MAX	1.50

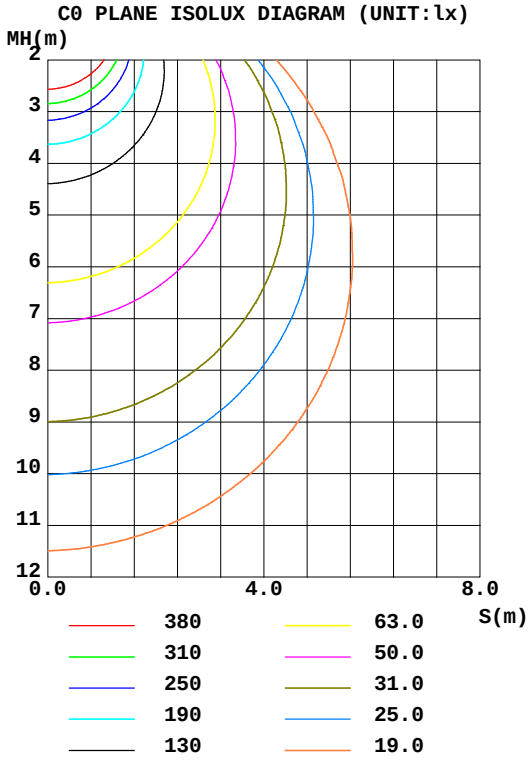
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):119.9 DEG



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

α Range: 0 - 90DEG
α Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

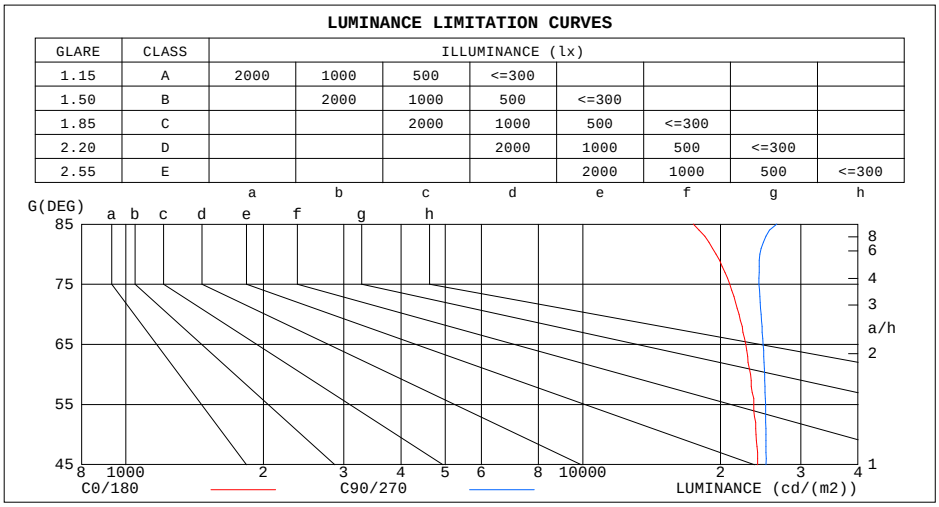
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	2452	2469	2490	2468					0- 10	237.6	237.6	3.02,3.02
20	2323	2359	2367	2356					10- 20	683.4	920.9	11.7,11.7
30	2128	2176	2179	2172					20- 30	1045	1966	25,25
40	1862	1928	1954	1917					30- 40	1281	3247	41.2,41.2
50	1538	1617	1703	1599					40- 50	1367	4614	58.6,58.6
60	1165	1249	1376	1225					50- 60	1287	5901	74.9,74.9
70	751.1	839.3	976.3	813.5					60- 70	1041	6942	88.2,88.2
80	340.0	423.8	551.7	401.6					70- 80	671.0	7613	96.7,96.7
90	4.355	65.50	152.5	50.77					80- 90	261.7	7874	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		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.22V I:0.5626A P:67.461W PF:0.9973 Freq:59.98Hz Lamp Flux:7874.43x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:72w 6500k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	17456	26575
80	19579	24408
75	20963	24300
70	21961	24540
65	22714	24798
60	23302	24983
55	23657	25106
50	23923	25157
45	24141	25171

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g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

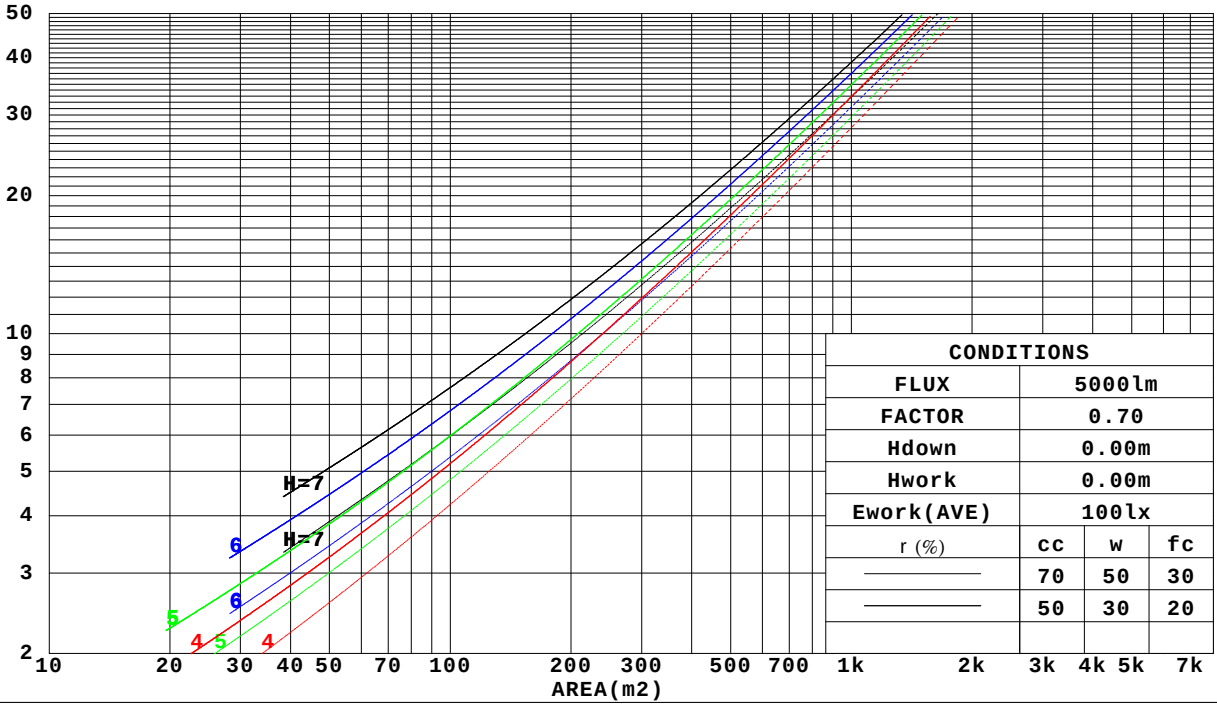
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.22V I:0.5626A P:67.461W PF:0.9973 Freq:59.98Hz Lamp Flux:7874.43x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:72w 6500k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

r cc	80%			70%			50%			30%			10%			0
r w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r 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	1.03	.98	.94	1.00	.96	.92	.96	.92	.89	.92	.89	.86	.88	.86	.84	.82
2.0	.89	.81	.75	.87	.80	.74	.83	.77	.73	.80	.75	.71	.77	.73	.69	.67
3.0	.77	.69	.62	.76	.68	.61	.73	.66	.60	.70	.64	.59	.67	.62	.58	.56
4.0	.68	.59	.52	.67	.58	.52	.64	.57	.51	.62	.55	.50	.60	.54	.49	.47
5.0	.61	.51	.45	.60	.51	.44	.57	.50	.44	.55	.49	.43	.54	.48	.43	.41
6.0	.55	.45	.39	.54	.45	.38	.52	.44	.38	.50	.43	.38	.48	.42	.37	.35
7.0	.49	.40	.34	.49	.40	.34	.47	.39	.34	.46	.39	.33	.44	.38	.33	.31
8.0	.45	.36	.30	.44	.36	.30	.43	.35	.30	.42	.35	.30	.40	.34	.30	.28
9.0	.41	.33	.27	.41	.33	.27	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25
10.0	.38	.30	.25	.37	.30	.24	.36	.29	.24	.36	.29	.24	.35	.29	.24	.22

LAMPS

LUMINAIRE BUDGETARY DIAGRAM



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.22V I:0.5626A P:67.461W PF:0.9973 Freq:59.98Hz Lamp Flux:7874.43x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:72w 6500k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coeffcients(WEC)									
0.0																
1.0	.336	.191	.060	.329	.187	.060	.315	.181	.058	.303	.175	.056	.292	.169	.054	
2.0	.309	.169	.052	.303	.167	.051	.291	.162	.050	.280	.157	.049	.270	.153	.048	
3.0	.283	.150	.045	.277	.148	.045	.267	.145	.044	.257	.141	.043	.248	.137	.042	
4.0	.259	.135	.040	.254	.133	.039	.245	.130	.039	.236	.127	.038	.228	.124	.038	
5.0	.238	.121	.035	.234	.120	.035	.225	.117	.035	.218	.115	.034	.210	.112	.034	
6.0	.220	.110	.032	.216	.109	.031	.208	.107	.031	.202	.105	.031	.195	.103	.031	
7.0	.204	.101	.029	.200	.100	.028	.194	.098	.028	.188	.096	.028	.182	.094	.028	
8.0	.190	.093	.026	.187	.092	.026	.181	.090	.026	.175	.089	.026	.170	.087	.025	
9.0	.178	.086	.024	.175	.085	.024	.169	.084	.024	.164	.082	.024	.160	.081	.023	
10.0	.167	.080	.022	.164	.079	.022	.159	.078	.022	.155	.077	.022	.151	.076	.022	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.182	.156	.132	.156	.134	.114	.107	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.175	.132	.096	.150	.113	.083	.102	.079	.058	.059	.046	.034	.019	.015	.011	
3.0	.167	.114	.072	.143	.099	.063	.098	.069	.044	.057	.040	.026	.018	.013	.009	
4.0	.159	.101	.057	.137	.087	.049	.094	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.152	.091	.046	.130	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.006	
6.0	.144	.083	.038	.124	.072	.033	.086	.050	.024	.050	.029	.014	.016	.010	.005	
7.0	.137	.076	.033	.118	.066	.028	.082	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.131	.070	.028	.112	.061	.025	.078	.043	.017	.045	.025	.010	.015	.008	.003	
9.0	.124	.065	.025	.107	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.119	.061	.022	.102	.053	.019	.071	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.22V I:0.5626A P:67.461W PF:0.9973 Freq:59.98Hz Lamp Flux:7874.43x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:72w 6500k	DIM.:	SERIAL No.:
MFR.:	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	23.8	25.4	24.1	25.6	25.8	24.0	25.6	24.3	25.8	26.0
	3H	25.4	26.9	25.7	27.1	27.3	25.8	27.2	26.1	27.5	27.7
	4H	26.1	27.5	26.4	27.7	28.0	26.5	27.9	26.9	28.2	28.5
	6H	26.6	27.9	26.9	28.2	28.5	27.2	28.5	27.5	28.8	29.0
	8H	26.8	28.0	27.1	28.3	28.6	27.4	28.7	27.8	29.0	29.3
	12H	26.9	28.1	27.2	28.4	28.7	27.6	28.9	28.0	29.2	29.5
4H	2H	24.5	25.9	24.8	26.1	26.4	24.7	26.1	25.0	26.3	26.6
	3H	26.3	27.5	26.6	27.8	28.1	26.6	27.8	27.0	28.1	28.4
	4H	27.1	28.2	27.5	28.5	28.9	27.5	28.6	27.9	28.9	29.3
	6H	27.7	28.7	28.1	29.1	29.5	28.3	29.3	28.7	29.6	30.0
	8H	28.0	28.9	28.4	29.3	29.7	28.6	29.5	29.0	29.9	30.3
	12H	28.1	29.0	28.6	29.4	29.8	28.9	29.7	29.3	30.1	30.5
8H	4H	27.4	28.4	27.9	28.8	29.1	27.8	28.7	28.2	29.1	29.5
	6H	28.3	29.1	28.7	29.5	29.9	28.8	29.5	29.2	29.9	30.4
	8H	28.6	29.3	29.1	29.7	30.2	29.2	29.9	29.7	30.3	30.8
	12H	28.9	29.5	29.4	29.9	30.4	29.6	30.2	30.1	30.6	31.1
12H	4H	27.5	28.3	27.9	28.7	29.1	27.8	28.7	28.2	29.1	29.5
	6H	28.4	29.1	28.8	29.5	30.0	28.8	29.5	29.3	30.0	30.4
	8H	28.8	29.4	29.2	29.8	30.3	29.3	29.9	29.8	30.4	30.9
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 7874 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 7.2)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.22V I:0.5626A P:67.461W PF:0.9973 Freq:59.98Hz Lamp Flux:7874.43x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:72w 6500k	DIM.:	SERIAL No.:
MFR.:	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) x RCR = 5									
k = 0.60	56	44	37	55	44	36	54	43	36	30
0.80	66	54	46	65	53	46	63	52	45	38
1.00	74	62	55	73	62	54	70	63	54	46
1.25	81	70	63	80	69	62	77	68	61	54
1.50	86	76	68	84	75	68	81	73	67	59
2.00	93	84	77	91	83	76	88	81	75	67
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	93	88	99	92	86	94	89	84	75
4.00	105	99	94	103	97	92	98	94	90	81
5.00	108	102	98	105	100	96	101	97	93	84
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended					SHRNOM = 1.25	

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g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.22V I:0.5626A P:67.461W PF:0.9973 Freq:59.98Hz Lamp Flux:7874.43x1 lm		
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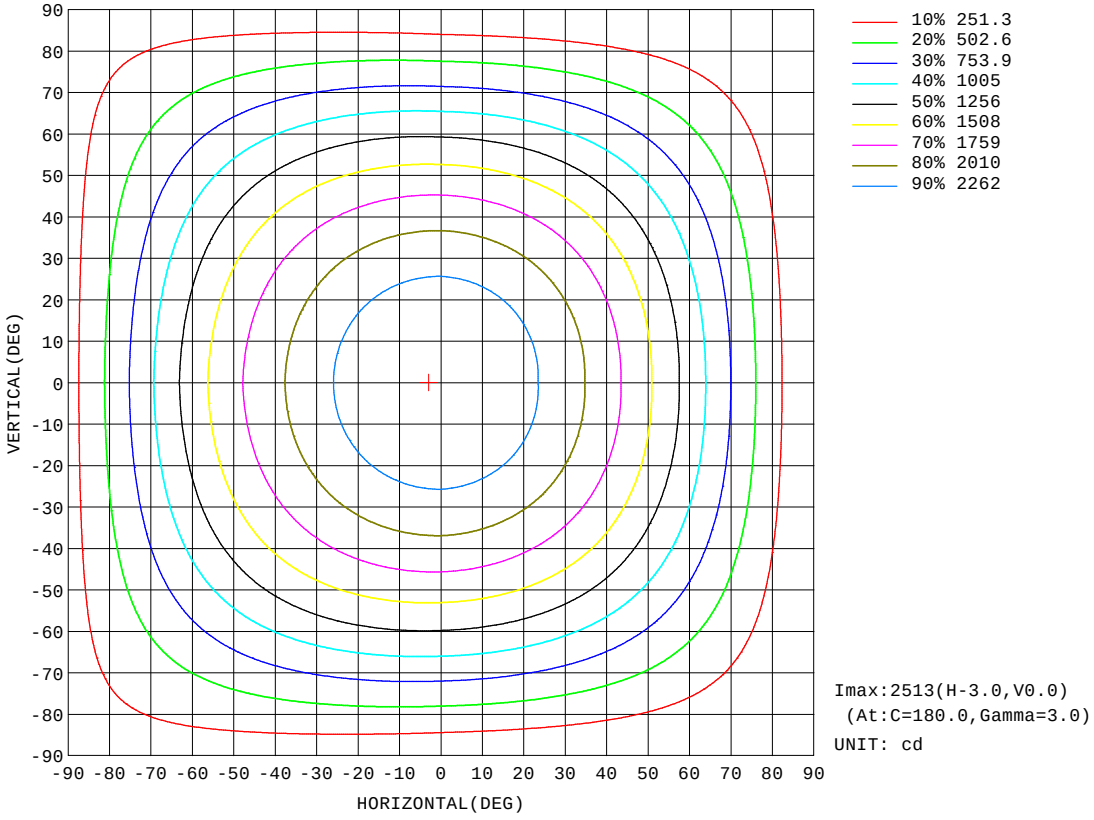

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.22V I:0.5626A P:67.461W PF:0.9973 Freq:59.98Hz Lamp Flux:7874.43x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:72w 6500k	DIM.:	SERIAL No.:
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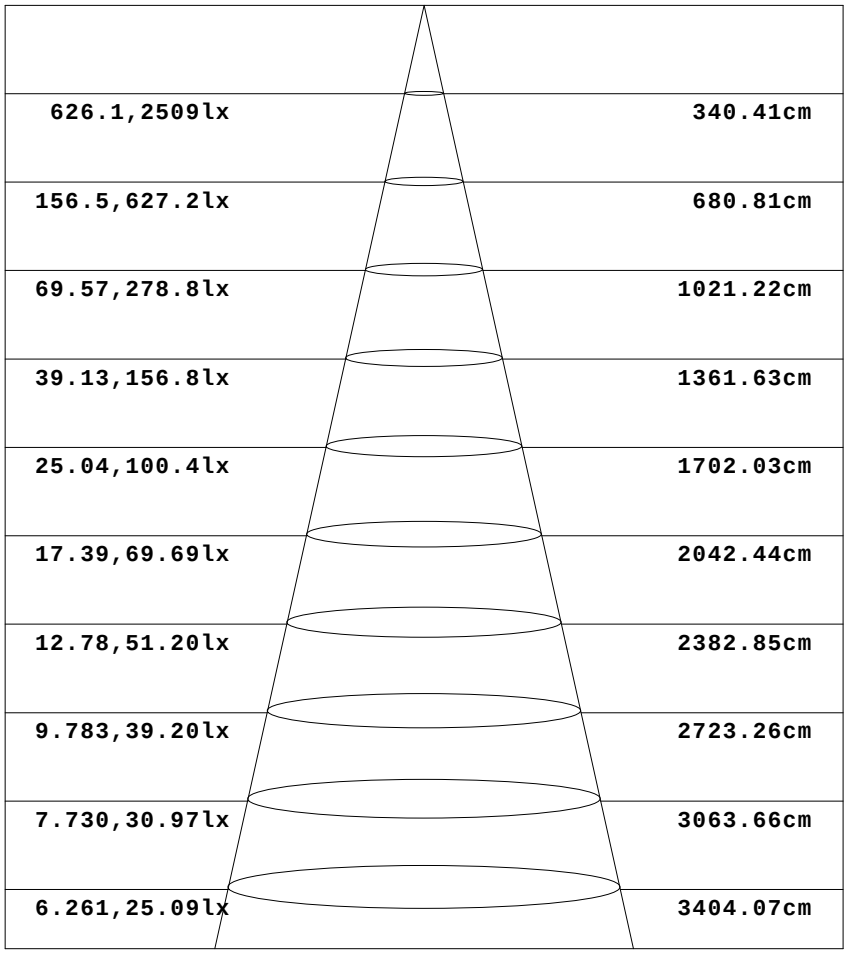
Flux out:5901 lm



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

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C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

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SPEC.:72w 6500k	DIM.:	SERIAL No.:
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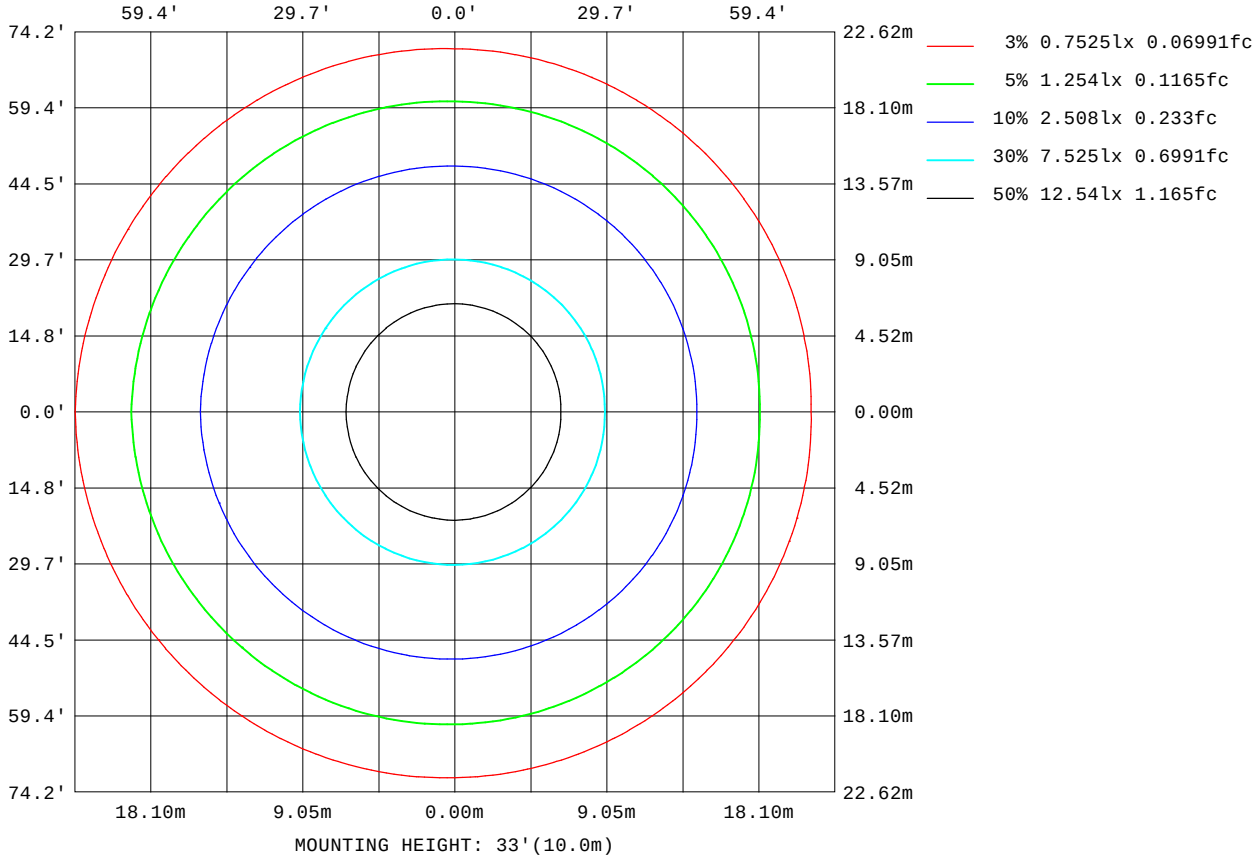

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LED Avg.L Report

Test:U:120.22V I:0.5626A P:67.461W PF:0.9973 Freq:59.98Hz Lamp Flux:7874.43x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:72w 6500k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

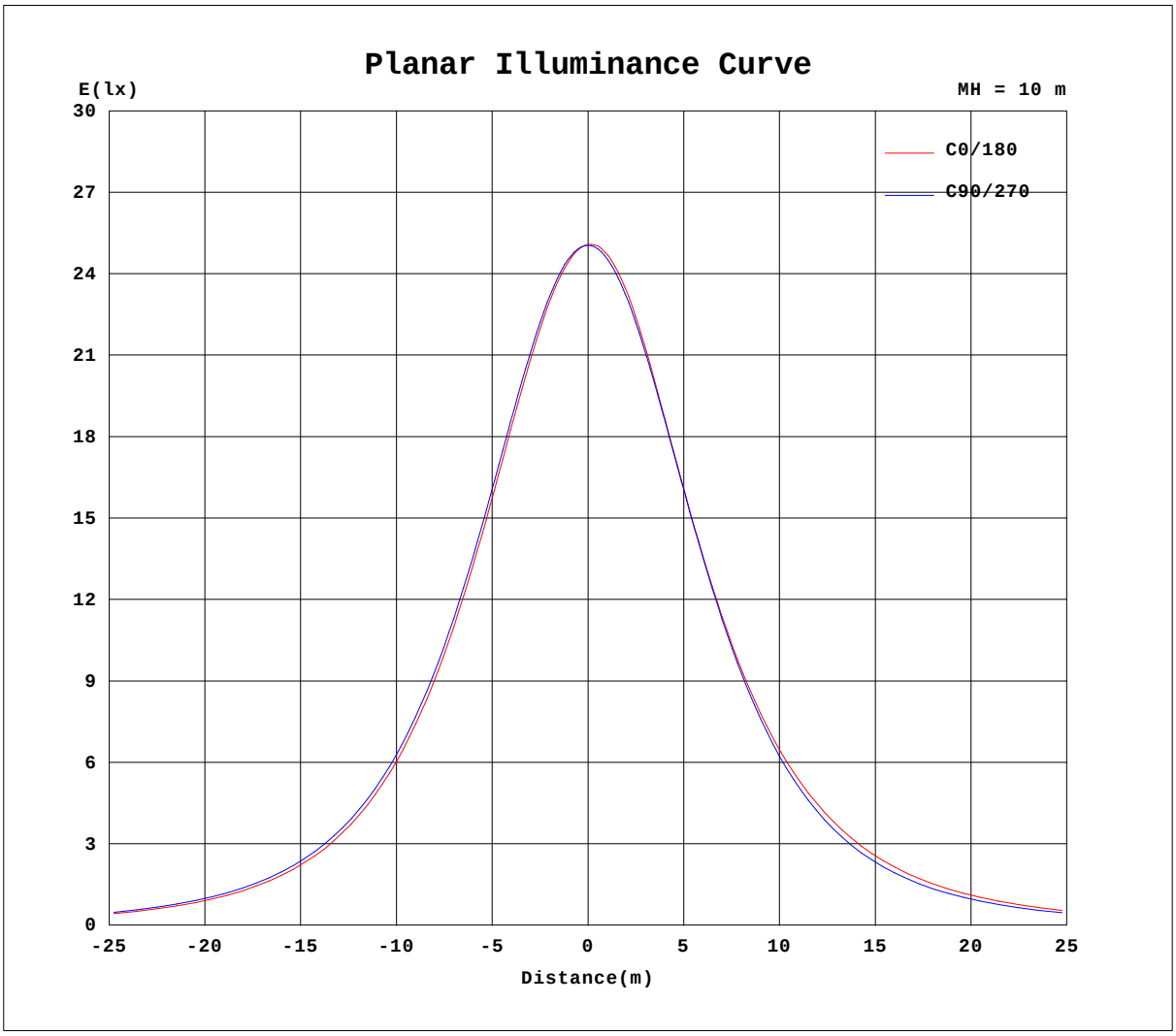
AvgL	cd/m2
L_0~180(65)av	25342
L_0~180(75)av	25236
L_0~180(85)av	28618
L_90~270(65)av	24479
L_90~270(75)av	23822
L_90~270(85)av	25582
L_45(65)av	24967
L_45(75)av	24619
L_45(85)av	27418

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.22V I:0.5626A P:67.461W PF:0.9973 Freq:59.98Hz Lamp Flux:7874.43x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:72w 6500k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1 UNIT: cd

g \ C	0	90	180	270
0	2508	2506	2508	2506
5	2489	2497	2510	2496
10	2452	2469	2490	2468
15	2396	2422	2443	2421
20	2323	2359	2367	2356
25	2234	2276	2280	2273
30	2128	2176	2179	2172
35	2003	2059	2071	2053
40	1862	1928	1954	1917
45	1707	1780	1831	1765
50	1538	1617	1703	1599
55	1357	1440	1551	1418
60	1165	1249	1376	1225
65	960	1048	1182	1021
70	751	839	976	813
75	543	629	764	604
80	340	424	552	402
85	152	232	347	214
90	4.36	65.5	153	50.8

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

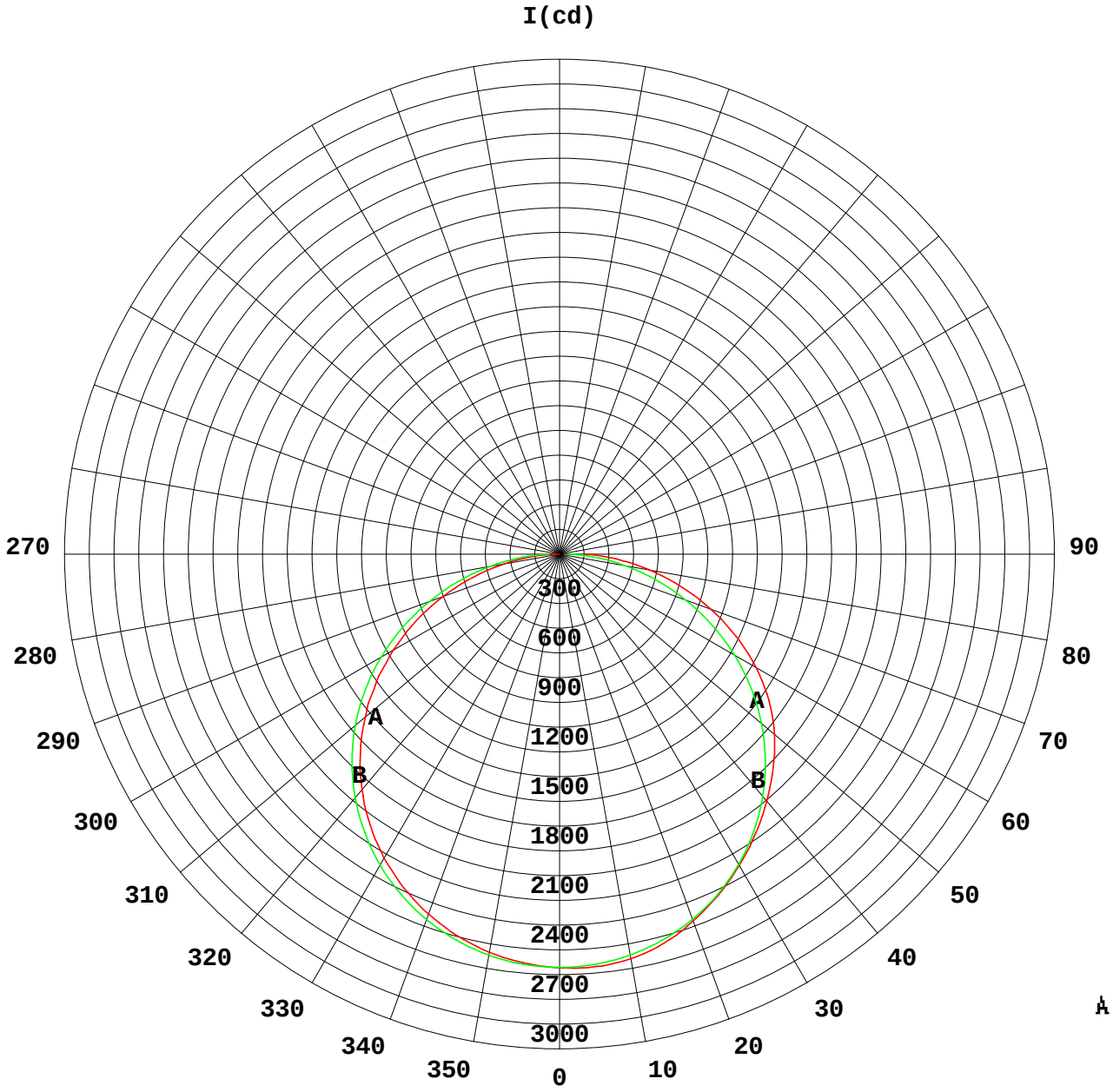
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

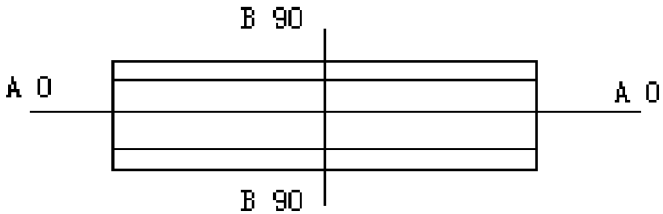
Photometric Data Table [cd]

G/C	0.0	90.0	180.0	270.0
0.0	2508	2506	2508	2506
3.0	2499	2502	2513	2502
6.0	2482	2493	2510	2492
9.0	2460	2476	2497	2475
12.0	2431	2452	2475	2452
15.0	2396	2422	2443	2421
18.0	2353	2385	2401	2385
21.0	2308	2343	2351	2341
24.0	2251	2294	2298	2292
27.0	2192	2238	2241	2235
30.0	2128	2176	2179	2172
33.0	2057	2110	2117	2103
36.0	1976	2035	2048	2026
39.0	1893	1955	1978	1945
42.0	1805	1871	1906	1859
45.0	1707	1780	1831	1765
48.0	1610	1683	1755	1667
51.0	1504	1582	1673	1563
54.0	1391	1476	1583	1455
57.0	1279	1365	1483	1341
60.0	1165	1249	1376	1225
63.0	1042	1129	1262	1104
66.0	919.3	1007	1140	979.7
69.0	792.9	881.9	1018	855.5
72.0	667.3	755.1	892.2	729.3
75.0	542.6	628.9	763.8	604.2
78.0	419.3	505.4	637.2	482.0
81.0	300.8	384.5	510.8	363.3
84.0	187.7	267.6	387.2	250.1
87.0	84.08	162.0	267.2	144.9
90.0	4.355	65.50	152.5	50.77

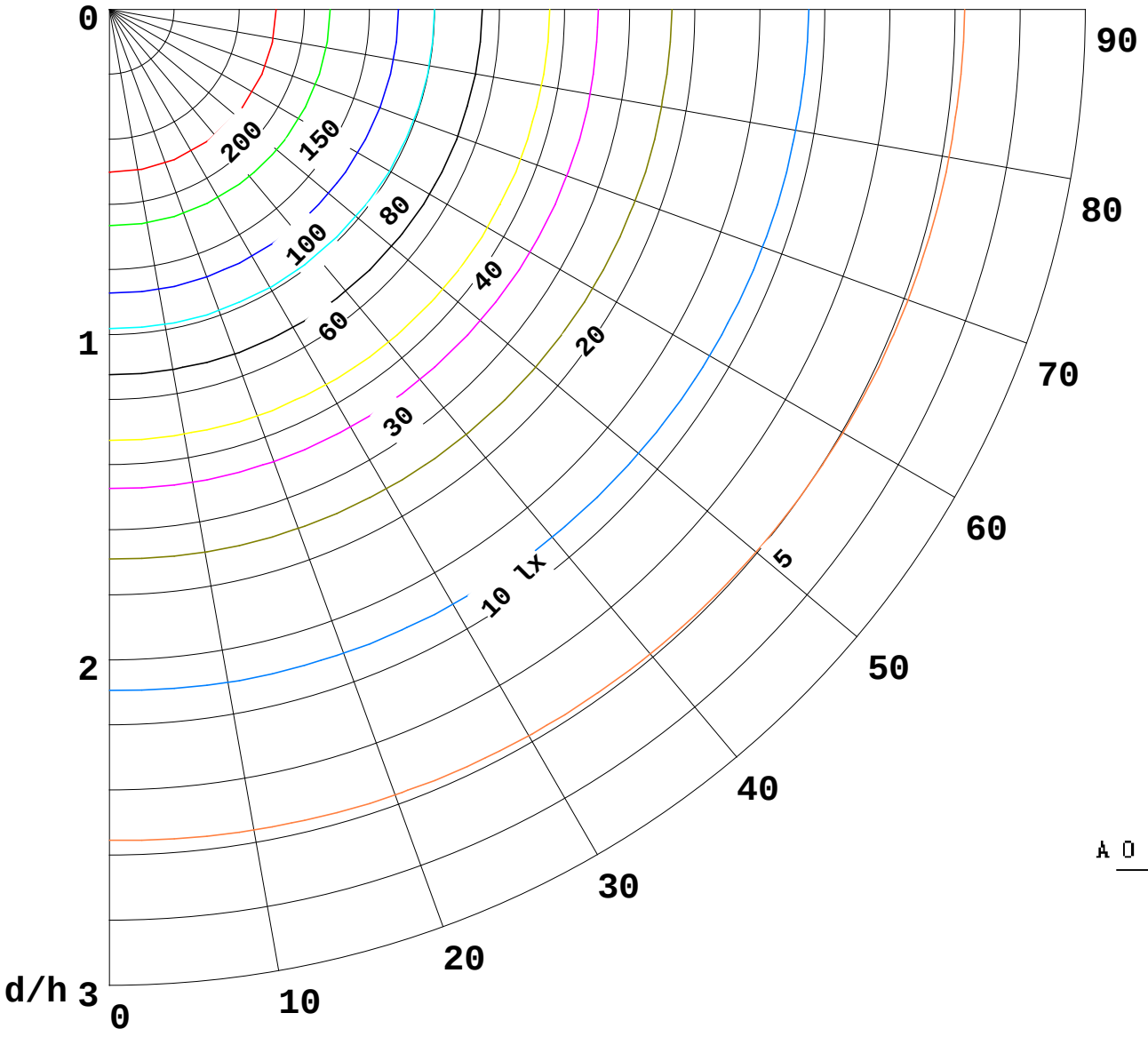
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

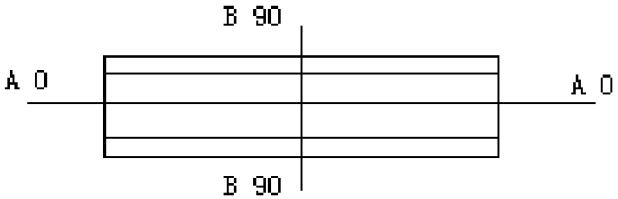
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

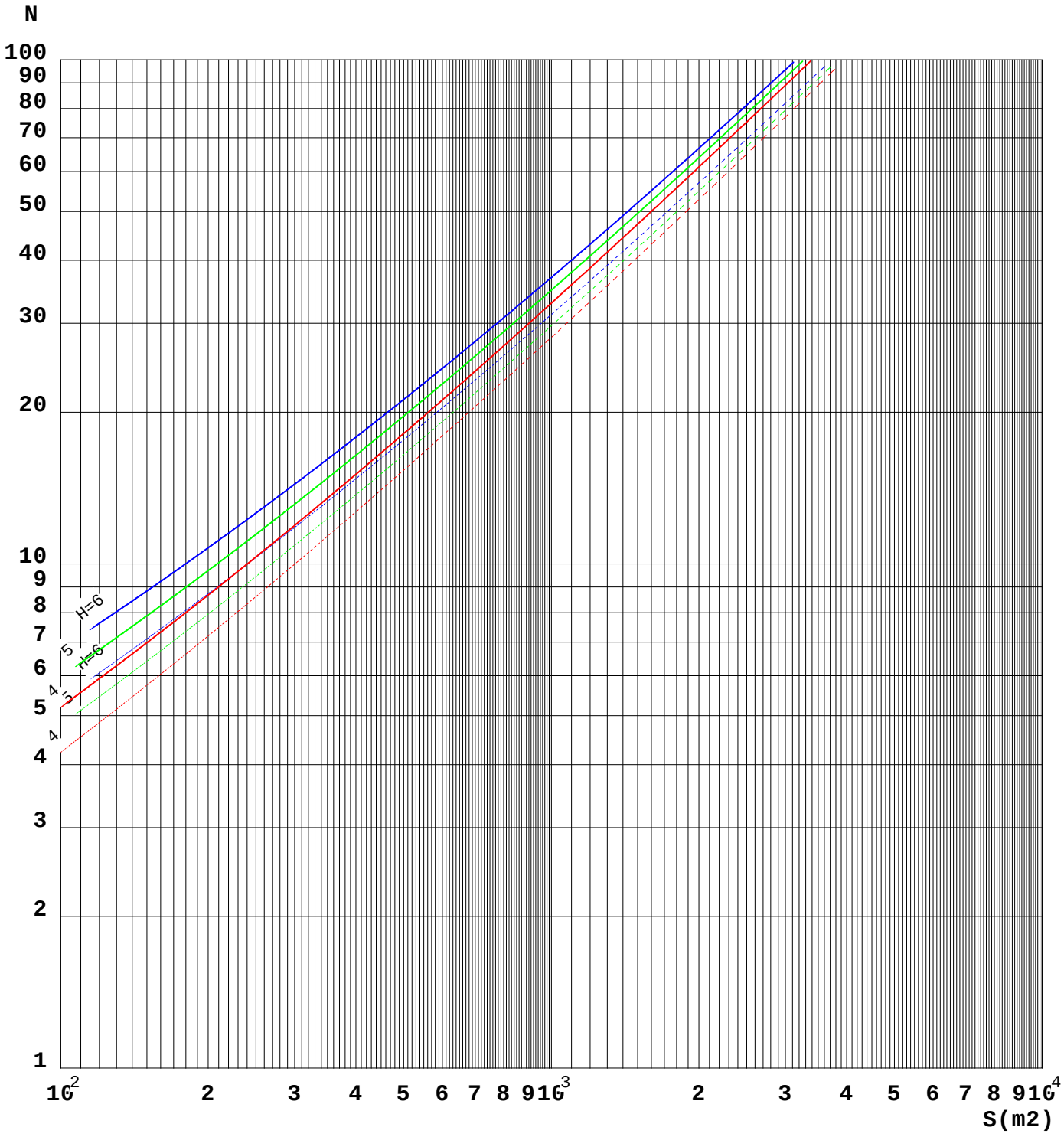

I(cd)
270
90
280
80
290
70
300
60
310
50
320
40
330
30
340
20
350
10
0
300
600
900
1200
1500
1800
2100
2400
2700
3000
A
B
A
B


B 90
A 0
A 0
B 90

1000 lm K = 1


0
90
80
70
60
50
40
30
20
10
0
1
2
3
d/h
200
150
100
80
60
40
30
20
10 lx
5


B 90
A 0
A 0
B 90

F = 5000 lm
K = 0.7
Hcc = 0.0 m
Hfc = 0.0 m
Eave = 100 lx

	Pcc	Pw	Pfc
———	70	50	30
———	50	30	20