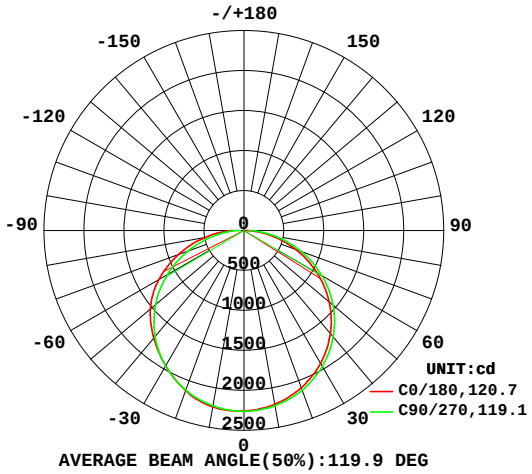
LUMINAIRE PHOTOMETRIC TEST REPORT

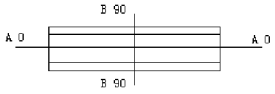
Test:U:120.21V I:0.4556A P:54.583W PF:0.9966 Freq:59.98Hz Lamp Flux:7094.86x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:60w 4000k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA		Eff: 129.98 lm/W	
MODEL		Imax(cd)	2261	S/MH(C0/180)	1.29
NOMINAL POWER(W)	60w	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	120-277v	TOTAL FLUX(lm)	7094.9	h UP,DN(C0-180)	0.0,48.7
NOMINAL FLUX(lm)	7094.86	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,51.3
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

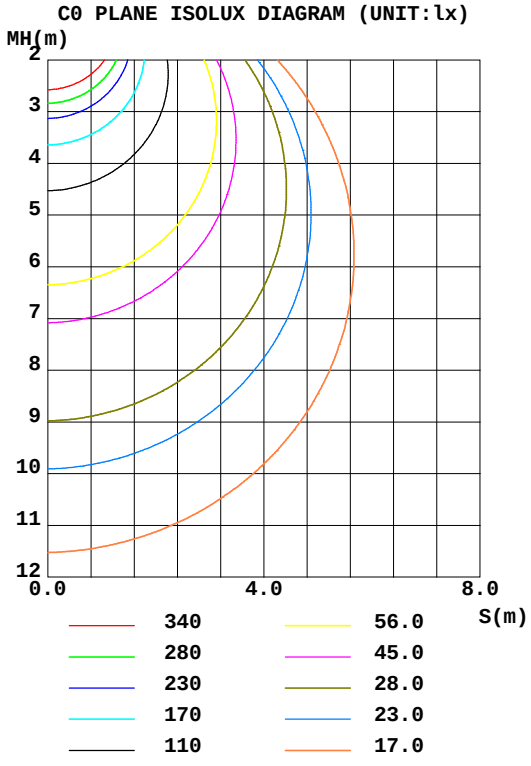
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



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	2207	2227	2241	2227					0- 10	214.1	214.1	3.02,3.02
20	2094	2126	2133	2126					10- 20	616.0	830.1	11.7,11.7
30	1918	1961	1959	1960					20- 30	941.3	1771	25,25
40	1682	1735	1755	1731					30- 40	1154	2926	41.2,41.2
50	1394	1454	1529	1445					40- 50	1232	4158	58.6,58.6
60	1056	1124	1231	1107					50- 60	1160	5318	75,75
70	683.7	754.0	868.8	736.5					60- 70	937.6	6256	88.2,88.2
80	314.4	379.1	486.6	365.5					70- 80	604.1	6860	96.7,96.7
90	4.182	57.25	128.2	48.01					80- 90	235.0	7095	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

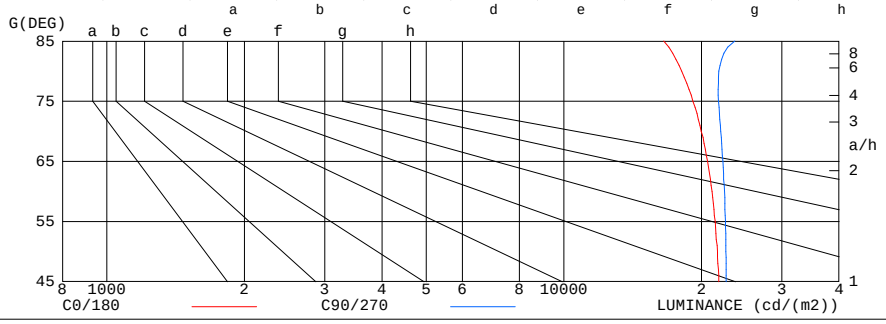
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.21V I:0.4556A P:54.583W PF:0.9966 Freq:59.98Hz Lamp Flux:7094.86x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:60w 4000k	DIM.:	SERIAL No.:
MFR.:	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
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	16540	23661
80	18107	21831
75	19164	21788
70	19990	22045
65	20639	22285
60	21113	22475
55	21434	22586
50	21679	22626
45	21831	22652

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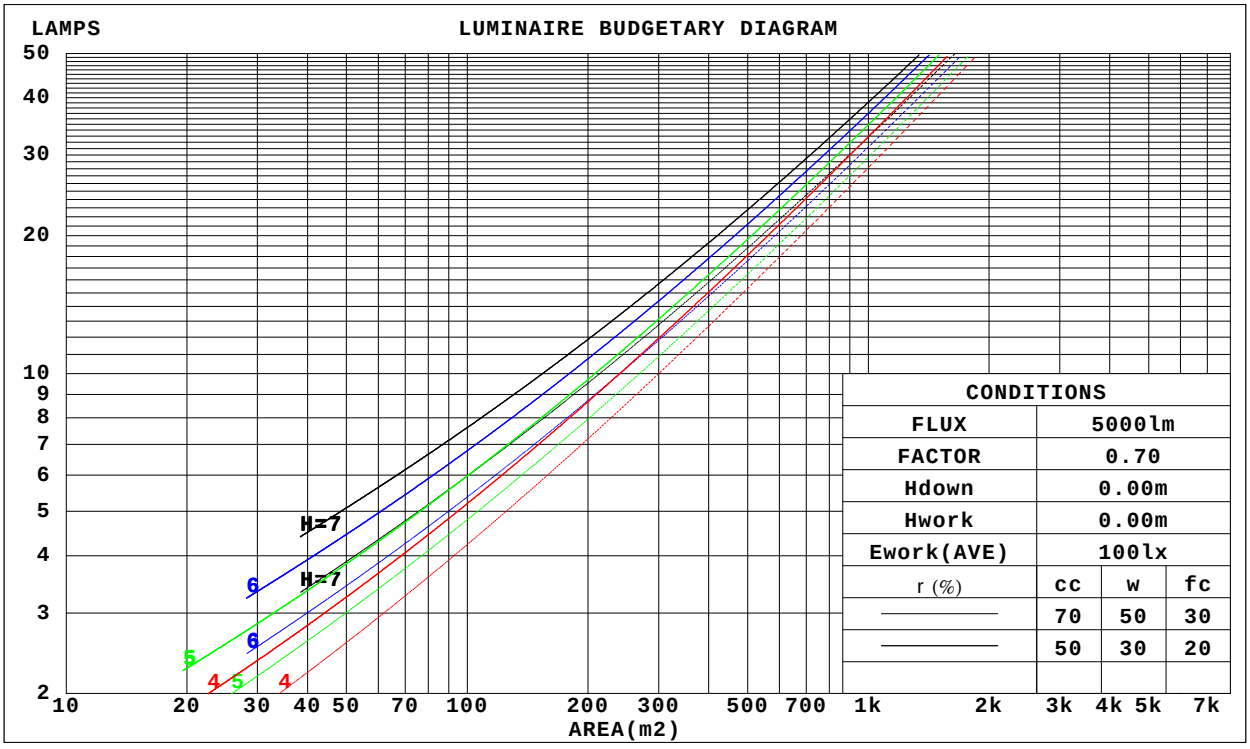
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.21V I:0.4556A P:54.583W PF:0.9966 Freq:59.98Hz Lamp Flux:7094.86x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:60w 4000k	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



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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:

WEC AND CCEC

Test:U:120.21V I:0.4556A P:54.583W PF:0.9966 Freq:59.98Hz Lamp Flux:7094.86x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:60w 4000k	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	.328	.187	.060	.315	.181	.058	.303	.175	.056	.291	.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	.144	.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	.177	.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	.073	.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:120.21V I:0.4556A P:54.583W PF:0.9966 Freq:59.98Hz Lamp Flux:7094.86x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:60w 4000k	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	23.5	25.0	23.7	25.2	25.4	23.7	25.2	23.9	25.5	25.7
	3H	25.1	26.5	25.4	26.8	27.0	25.4	26.9	25.7	27.1	27.4
	4H	25.8	27.2	26.1	27.4	27.7	26.2	27.6	26.5	27.8	28.1
	6H	26.3	27.6	26.6	27.9	28.2	26.8	28.1	27.1	28.4	28.7
	8H	26.5	27.7	26.8	28.0	28.3	27.1	28.3	27.4	28.6	28.9
	12H	26.6	27.8	26.9	28.1	28.4	27.3	28.5	27.6	28.8	29.1
4H	2H	24.1	25.5	24.5	25.8	26.0	24.3	25.7	24.6	26.0	26.2
	3H	26.0	27.2	26.3	27.5	27.8	26.2	27.5	26.6	27.8	28.1
	4H	26.8	27.9	27.2	28.2	28.6	27.1	28.3	27.5	28.6	28.9
	6H	27.4	28.4	27.8	28.8	29.2	27.9	28.9	28.3	29.3	29.6
	8H	27.7	28.6	28.1	29.0	29.4	28.2	29.2	28.6	29.5	29.9
	12H	27.9	28.7	28.3	29.1	29.5	28.5	29.4	28.9	29.8	30.2
8H	4H	27.1	28.1	27.5	28.4	28.8	27.4	28.4	27.9	28.7	29.1
	6H	28.0	28.8	28.4	29.2	29.6	28.4	29.2	28.8	29.6	30.0
	8H	28.3	29.0	28.8	29.5	29.9	28.8	29.5	29.3	29.9	30.4
	12H	28.6	29.2	29.1	29.7	30.1	29.2	29.8	29.7	30.3	30.7
12H	4H	27.2	28.0	27.6	28.4	28.8	27.5	28.3	27.9	28.7	29.1
	6H	28.1	28.8	28.5	29.2	29.7	28.5	29.2	28.9	29.6	30.1
	8H	28.5	29.1	29.0	29.5	30.0	29.0	29.6	29.4	30.0	30.5
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, 7095 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 6.8)

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:

UTILIZATION FACTORS TABLE

Test:U:120.21V I:0.4556A P:54.583W PF:0.9966 Freq:59.98Hz Lamp Flux:7094.86x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:60w 4000k	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 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:

ISOCANDELA DIAGRAM

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SPEC.:60w 4000k	DIM.:	SERIAL No.:
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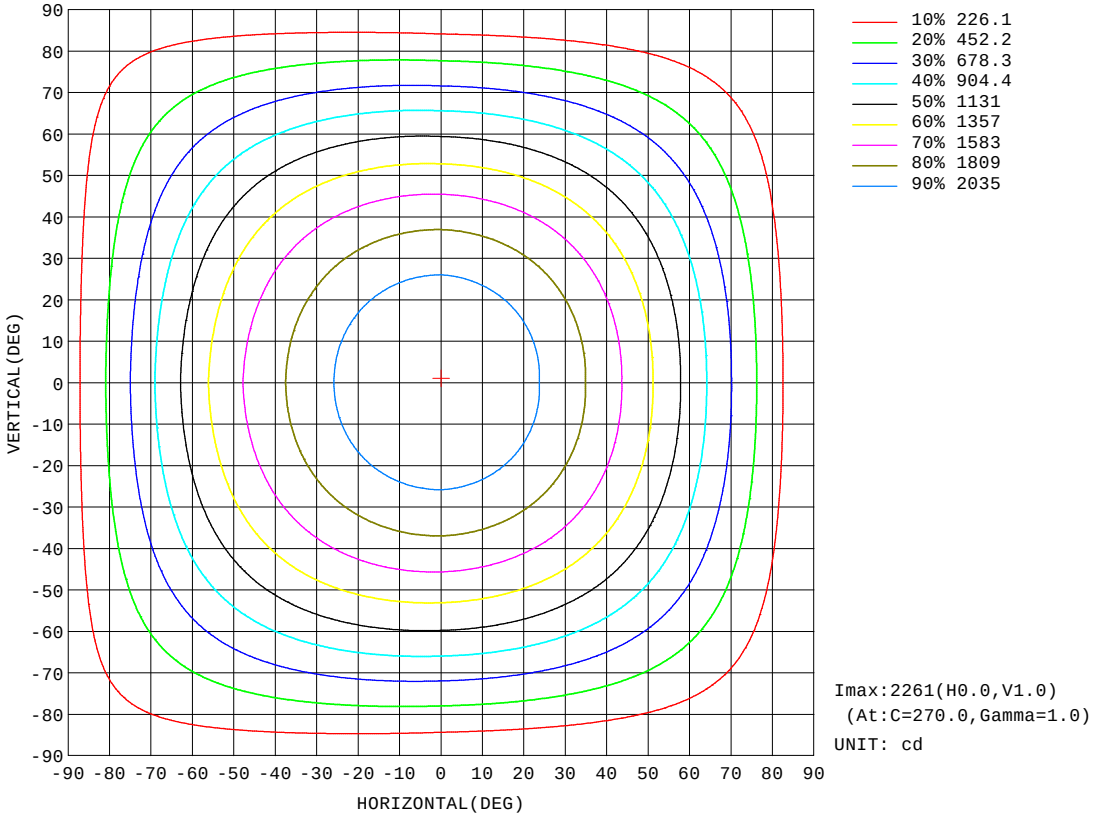

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

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:120.21V I:0.4556A P:54.583W PF:0.9966 Freq:59.98Hz Lamp Flux:7094.86x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:60w 4000k	DIM.:	SERIAL No.:
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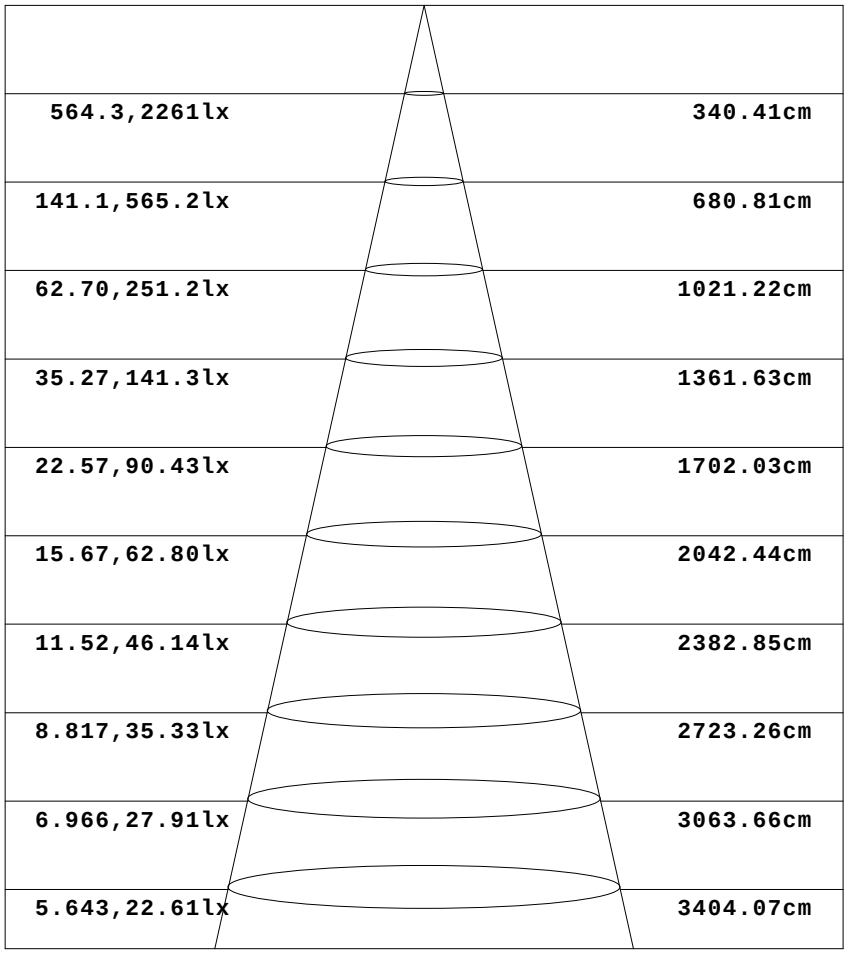
Flux out:5318 lm



Height Eavg,Emax Angle:119.13deg Diameter

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
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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

Test:U:120.21V I:0.4556A P:54.583W PF:0.9966 Freq:59.98Hz Lamp Flux:7094.86x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:60w 4000k	DIM.:	SERIAL No.:
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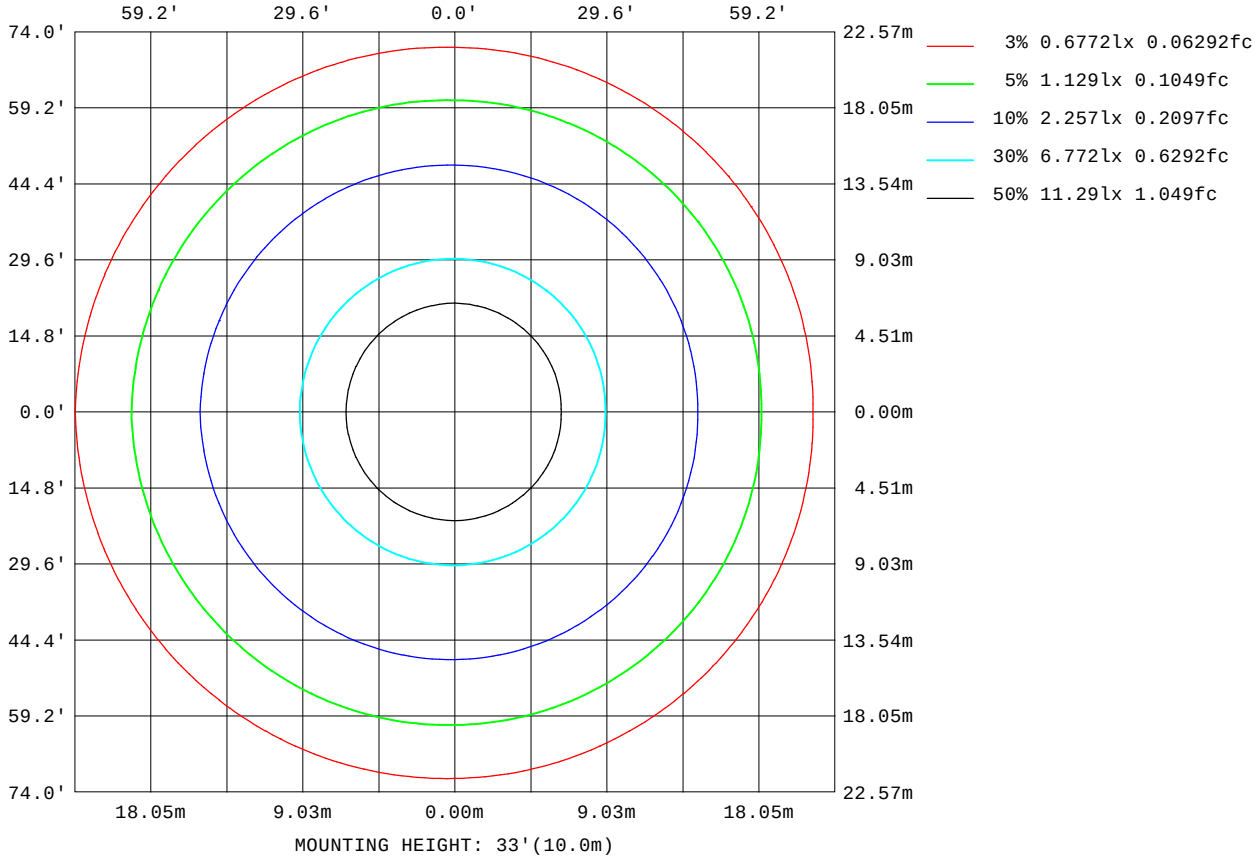

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g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.21V I:0.4556A P:54.583W PF:0.9966 Freq:59.98Hz Lamp Flux:7094.86x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:60w 4000k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

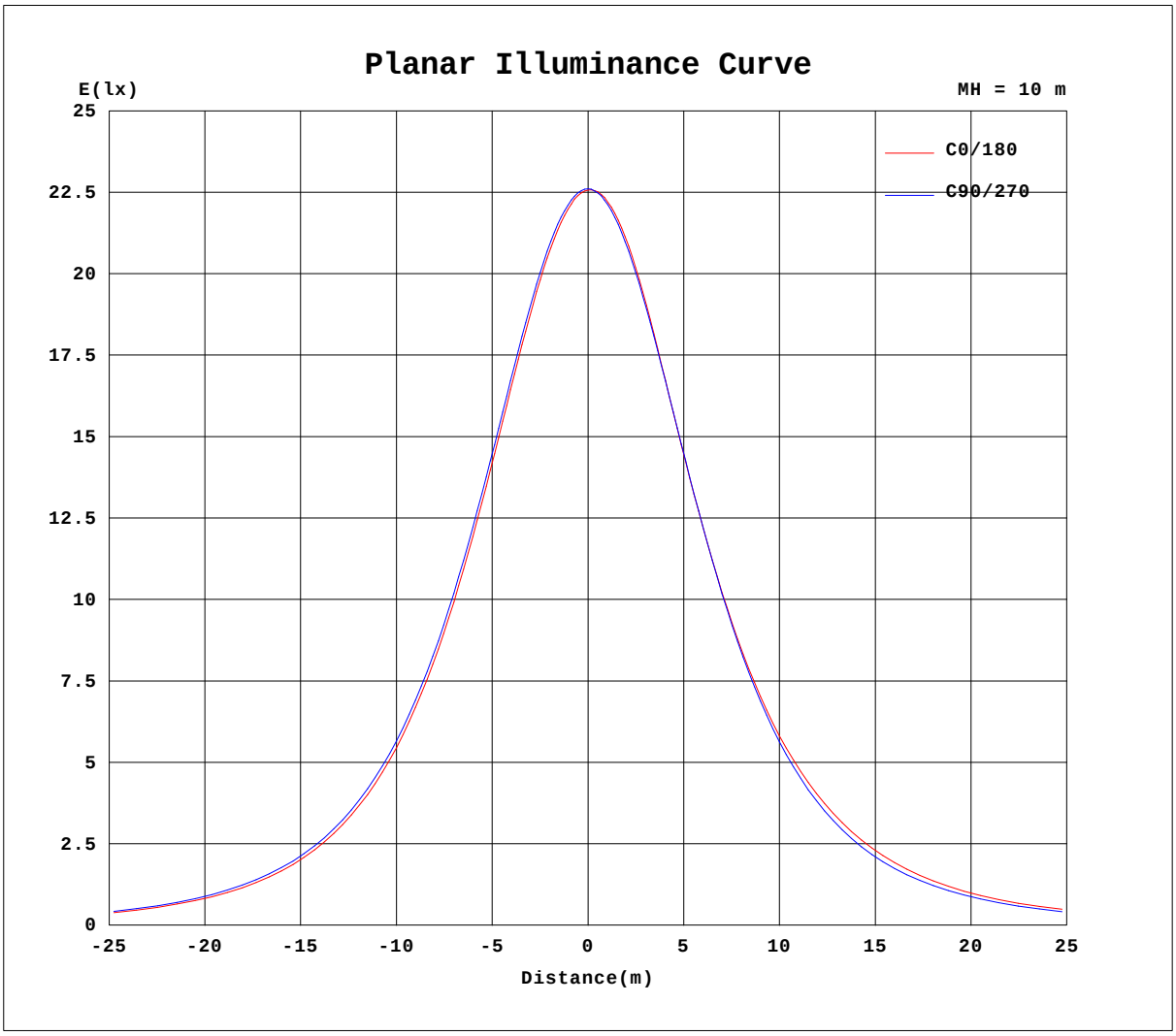
AvgL	cd/m2
L_0~180(65)av	22794
L_0~180(75)av	22670
L_0~180(85)av	25542
L_90~270(65)av	22078
L_90~270(75)av	21485
L_90~270(85)av	23076
L_45(65)av	22481
L_45(75)av	22149
L_45(85)av	24563

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:120.21V I:0.4556A P:54.583W PF:0.9966 Freq:59.98Hz Lamp Flux:7094.86x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:60w 4000k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1 UNIT: cd

g \ C	0	90	180	270
0	2257	2261	2257	2261
5	2240	2252	2260	2252
10	2207	2227	2241	2227
15	2159	2184	2199	2186
20	2094	2126	2133	2126
25	2012	2051	2050	2051
30	1918	1961	1959	1960
35	1806	1856	1860	1853
40	1682	1735	1755	1731
45	1544	1602	1646	1594
50	1394	1454	1529	1445
55	1229	1295	1391	1281
60	1056	1124	1231	1107
65	872	942	1054	924
70	684	754	869	736
75	496	564	677	548
80	314	379	487	366
85	144	206	301	196
90	4.18	57.3	128	48.0

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

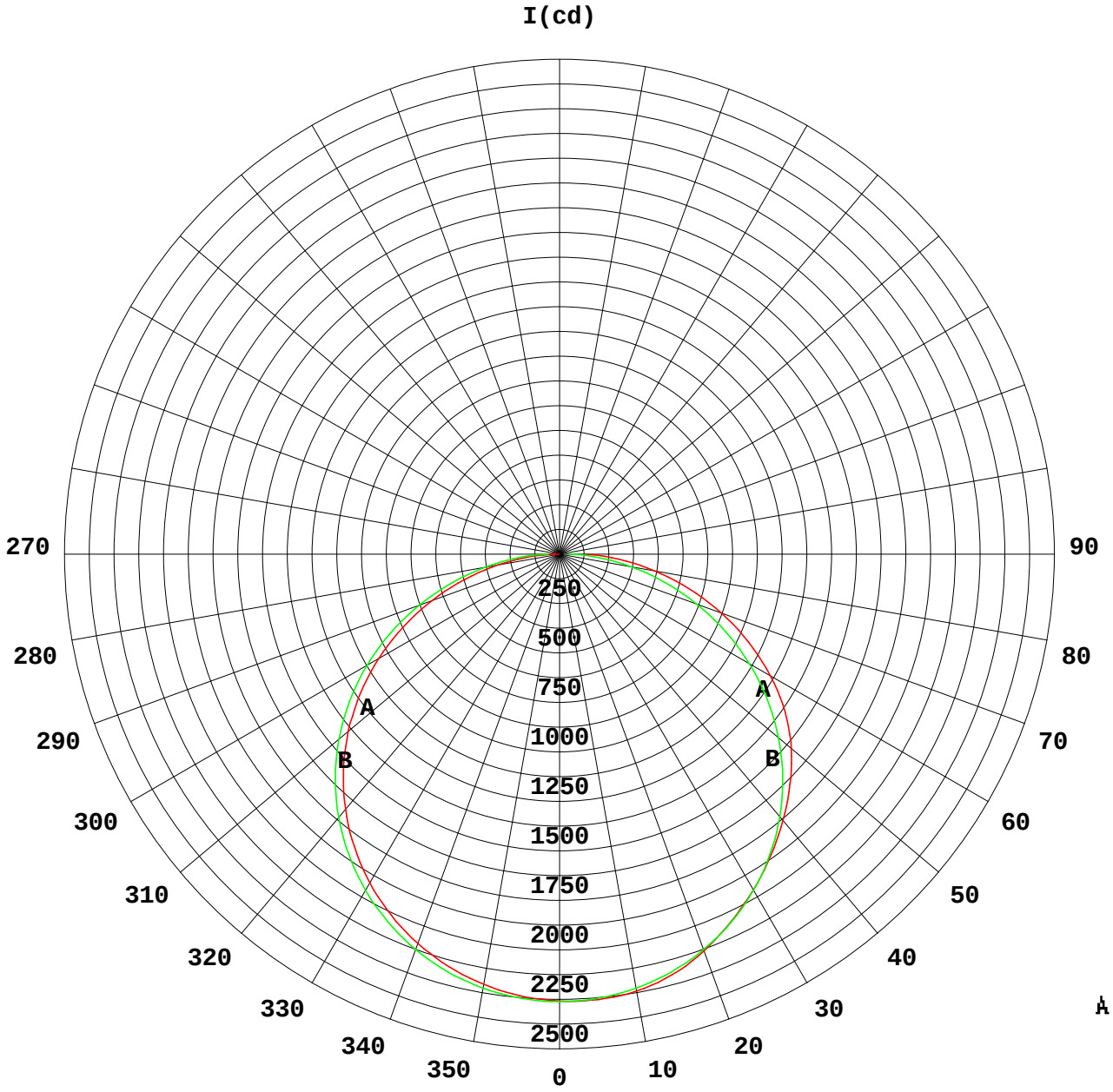
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

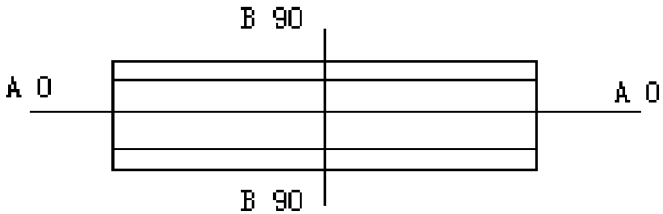
Photometric Data Table [cd]

G/C	0.0	90.0	180.0	270.0
0.0	2257	2261	2257	2261
3.0	2249	2258	2261	2257
6.0	2235	2248	2257	2248
9.0	2215	2234	2247	2234
12.0	2189	2211	2228	2212
15.0	2159	2184	2199	2186
18.0	2120	2151	2163	2152
21.0	2079	2113	2117	2112
24.0	2031	2067	2067	2069
27.0	1976	2016	2014	2018
30.0	1918	1961	1959	1960
33.0	1854	1900	1901	1899
36.0	1783	1833	1840	1829
39.0	1708	1761	1777	1756
42.0	1630	1685	1713	1678
45.0	1544	1602	1646	1594
48.0	1454	1515	1578	1505
51.0	1363	1424	1504	1413
54.0	1264	1328	1419	1315
57.0	1160	1227	1328	1213
60.0	1056	1124	1231	1107
63.0	945.5	1015	1126	998.3
66.0	833.9	904.5	1018	887.2
69.0	722.9	792.1	906.5	774.6
72.0	608.6	677.7	792.7	661.1
75.0	496.0	563.9	677.5	548.2
78.0	386.3	452.9	563.4	437.9
81.0	279.7	343.9	449.4	330.6
84.0	177.5	238.7	338.6	228.5
87.0	82.81	143.7	230.9	133.1
90.0	4.182	57.25	128.2	48.01

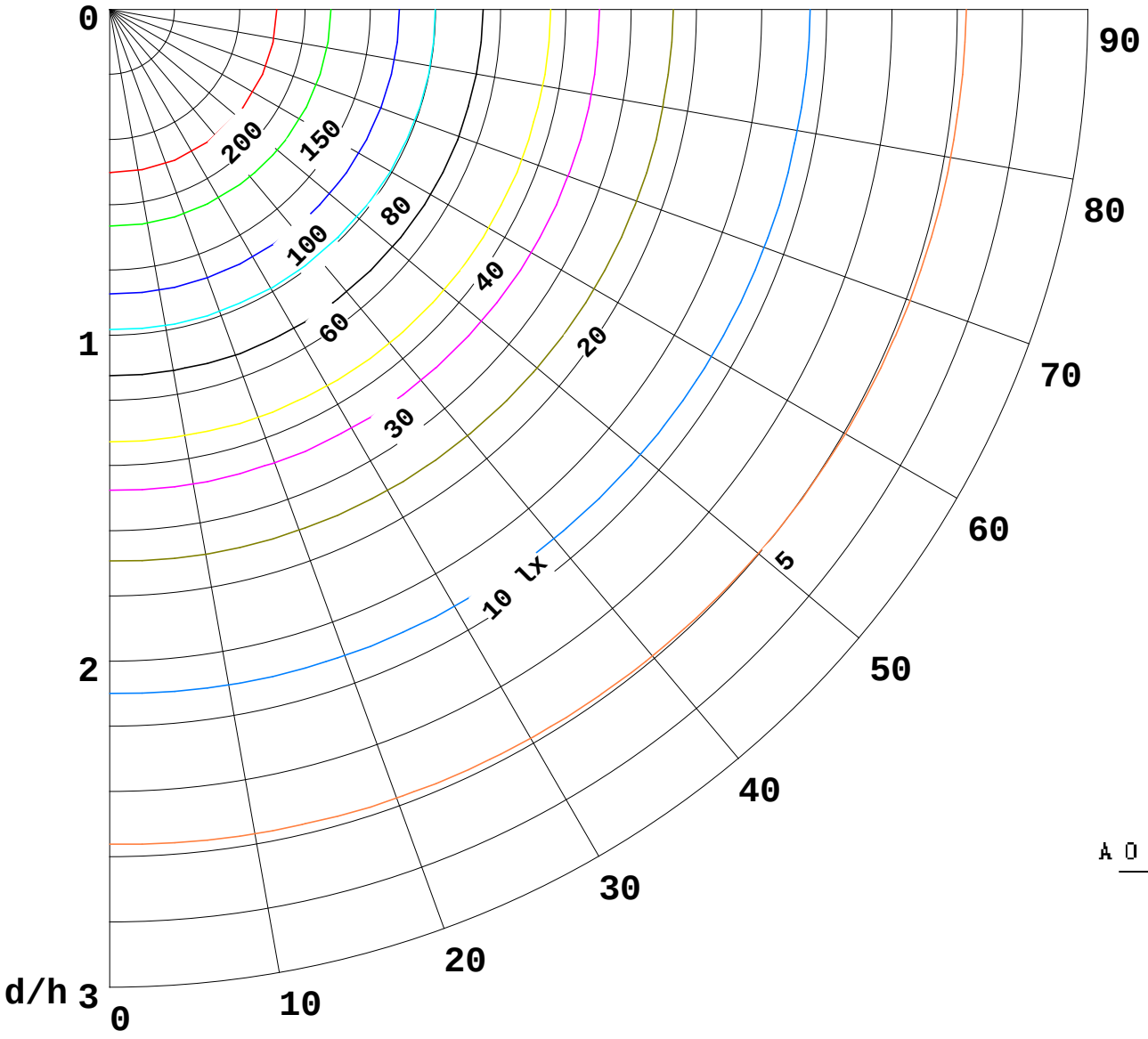
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

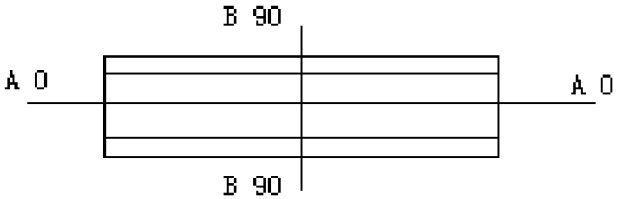
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

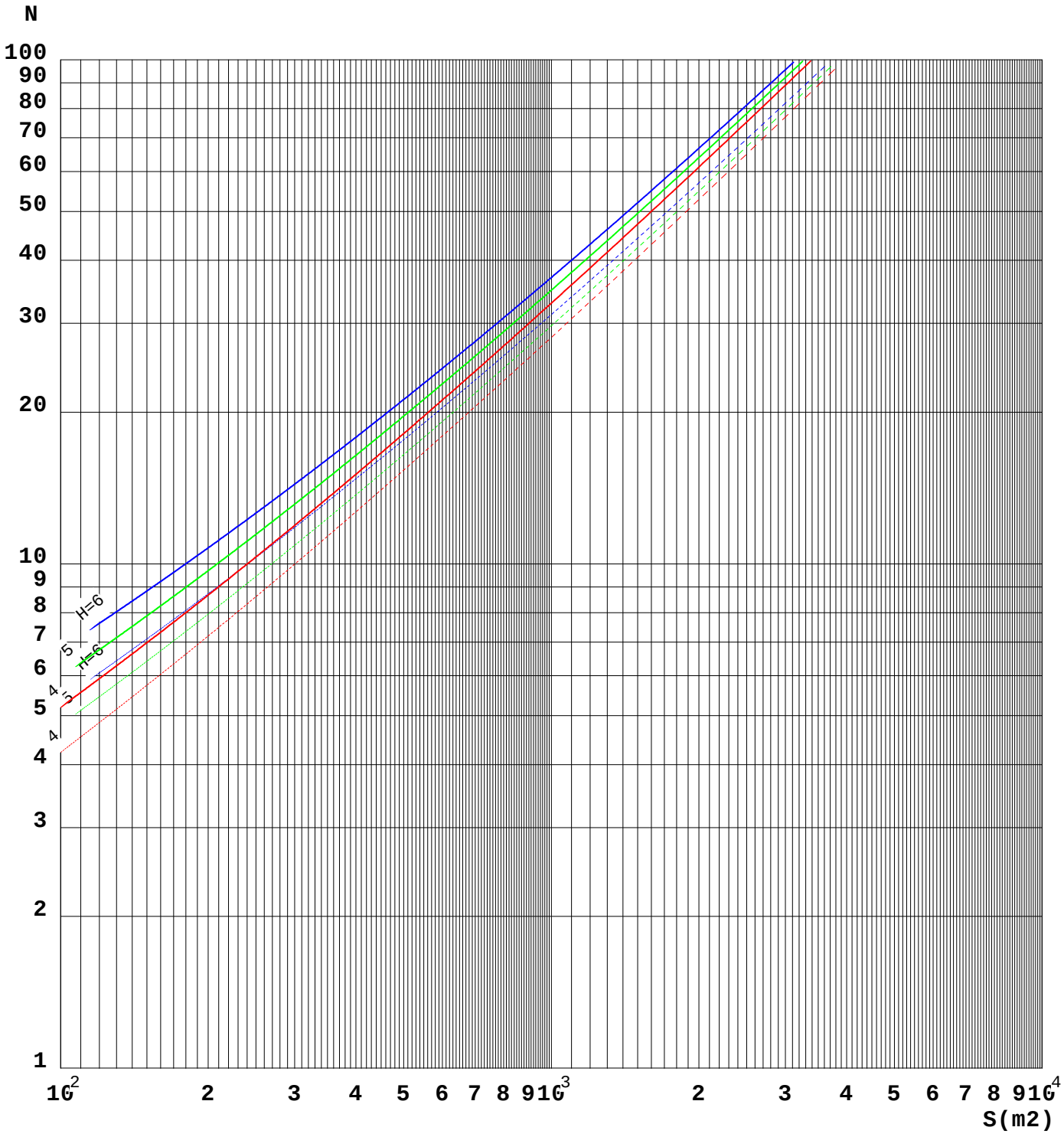

I(cd)
270
90
280
80
290
70
300
60
310
50
320
40
330
30
340
20
350
10
0
250
500
750
1000
1250
1500
1750
2000
2250
2500
A
B
A
B


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