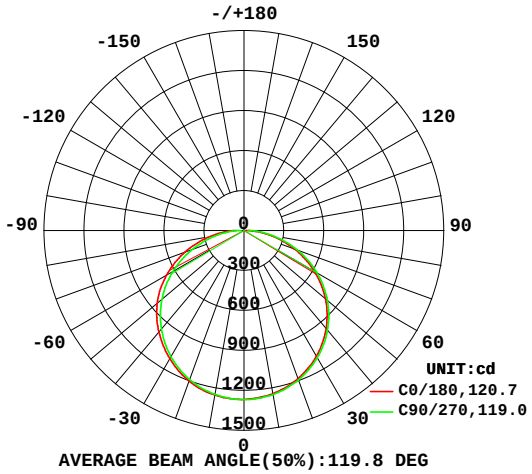
LUMINAIRE PHOTOMETRIC TEST REPORT

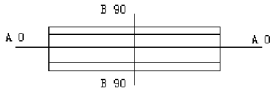
Test:U:120.24V I:0.2376A P:28.137W PF:0.9848 Freq:59.98Hz Lamp Flux:3984.62x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:30w 4000k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA		Eff: 141.61 lm/W	
MODEL		Imax(cd)	1269	S/MH(C0/180)	1.31
NOMINAL POWER(W)	30w	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	120-277v	TOTAL FLUX(lm)	3984.6	h UP,DN(C0-180)	0.0,49.2
NOMINAL FLUX(lm)	3984.62	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,50.8
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

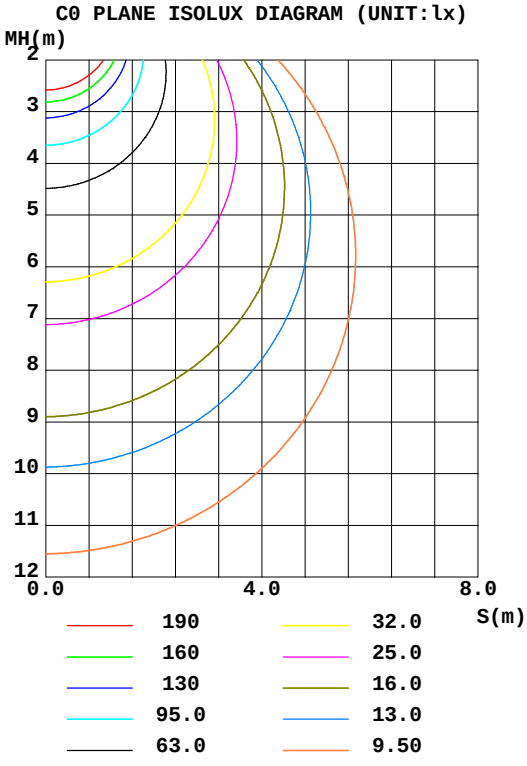
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):119.8 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	1244	1250	1255	1250					0- 10	120.2	120.2	3.02,3.02
20	1184	1194	1203	1192					10- 20	346.2	466.4	11.7,11.7
30	1088	1102	1112	1095					20- 30	530.5	996.9	25,25
40	959.7	975.5	994.2	965.0					30- 40	651.2	1648	41.4,41.4
50	799.5	818.2	850.4	805.0					40- 50	694.0	2342	58.8,58.8
60	609.5	632.5	671.5	616.5					50- 60	651.0	2993	75.1,75.1
70	400.0	424.6	468.3	409.2					60- 70	524.9	3518	88.3,88.3
80	189.5	212.5	255.0	201.6					70- 80	337.2	3855	96.8,96.8
90	8.428	31.47	59.25	23.82					80- 90	129.4	3985	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

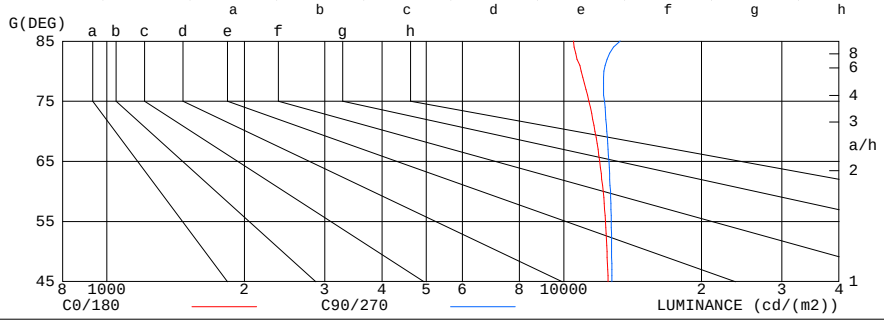
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.24V I:0.2376A P:28.137W PF:0.9848 Freq:59.98Hz Lamp Flux:3984.62x1 lm		
NAME:	**TYPE:**	**WEIGHT:**
SPEC.:30w 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	10496	13294
80	10912	12235
75	11337	12267
70	11695	12415
65	11981	12548
60	12190	12651
55	12340	12699
50	12438	12729
45	12496	12733

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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:

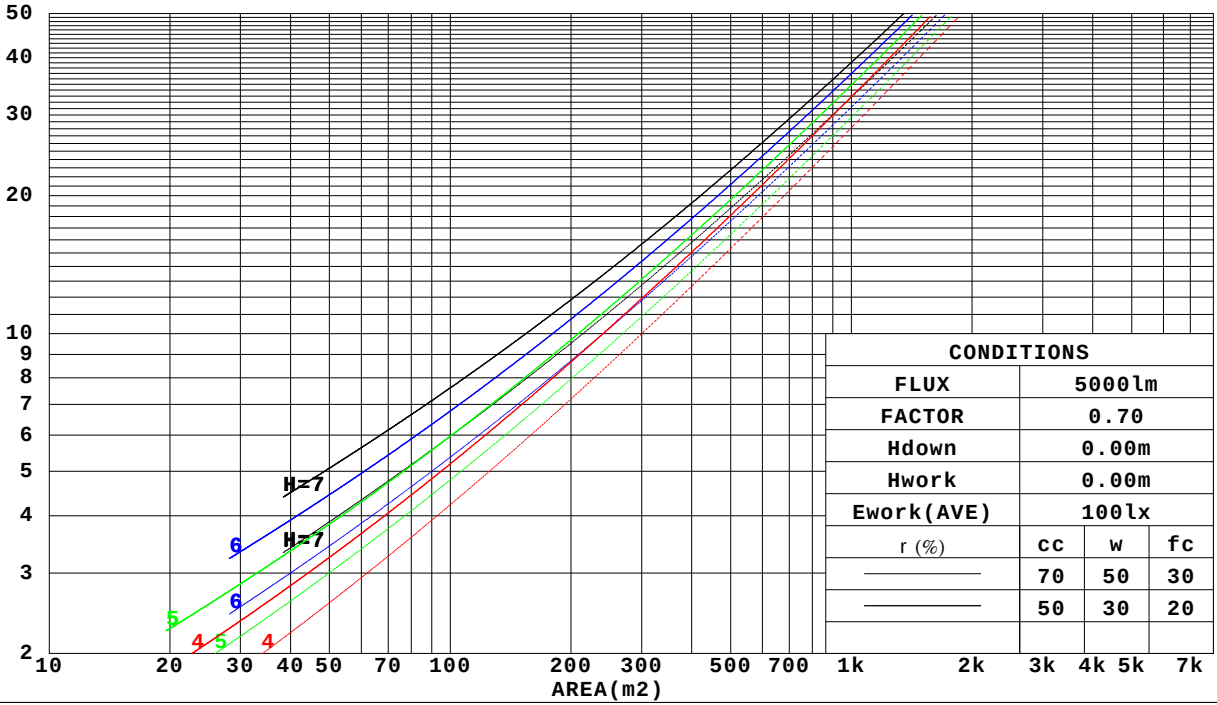
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.24V I:0.2376A P:28.137W PF:0.9848 Freq:59.98Hz Lamp Flux:3984.62x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:30w 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			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	.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	.78	.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	.56	.50	.60	.54	.50	.47
5.0	.61	.52	.45	.60	.51	.44	.58	.50	.44	.56	.49	.43	.54	.48	.43	.41
6.0	.55	.45	.39	.54	.45	.39	.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	.41	.34	.30	.28
9.0	.41	.33	.27	.41	.33	.27	.40	.32	.27	.38	.32	.27	.37	.31	.27	.25
10.0	.38	.30	.25	.38	.30	.25	.37	.29	.24	.36	.29	.24	.35	.29	.24	.22

LAMPS

LUMINAIRE BUDGETARY DIAGRAM



CONDITIONS			
FLUX	5000lm		
FACTOR	0.70		
Hdown	0.00m		
Hwork	0.00m		
Ework(AVE)	100lx		
ρ (%)	cc	w	fc
———	70	50	30
———	50	30	20

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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
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Humidity:65.0%
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Remarks:

WEC AND CCEC

Test:U:120.24V I:0.2376A P:28.137W PF:0.9848 Freq:59.98Hz Lamp Flux:3984.62x1 lm		
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SPEC.:30w 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	.335	.190	.060	.327	.187	.059	.314	.180	.058	.302	.174	.056	.290	.168	.054	
2.0	.308	.169	.052	.302	.166	.051	.290	.161	.050	.279	.157	.049	.269	.152	.048	
3.0	.282	.150	.045	.277	.148	.045	.266	.144	.044	.256	.141	.043	.247	.137	.042	
4.0	.258	.134	.039	.254	.133	.039	.244	.130	.039	.236	.127	.038	.228	.124	.038	
5.0	.238	.121	.035	.233	.120	.035	.225	.117	.034	.217	.115	.034	.210	.112	.034	
6.0	.220	.110	.031	.216	.109	.031	.208	.107	.031	.201	.105	.031	.195	.103	.030	
7.0	.204	.101	.029	.200	.100	.028	.194	.098	.028	.187	.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	.166	.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	.174	.132	.096	.149	.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	.071	.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:120.24V I:0.2376A P:28.137W PF:0.9848 Freq:59.98Hz Lamp Flux:3984.62x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:30w 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	21.6	23.2	21.9	23.4	23.6	21.7	23.3	22.0	23.5	23.7
	3H	23.3	24.7	23.6	25.0	25.2	23.5	24.9	23.8	25.1	25.4
	4H	24.0	25.4	24.3	25.6	25.9	24.2	25.6	24.5	25.9	26.1
	6H	24.5	25.8	24.9	26.1	26.4	24.8	26.1	25.2	26.4	26.7
	8H	24.7	26.0	25.1	26.3	26.6	25.1	26.4	25.4	26.6	26.9
	12H	24.9	26.1	25.2	26.4	26.7	25.3	26.5	25.6	26.8	27.1
4H	2H	22.3	23.7	22.6	23.9	24.2	22.4	23.8	22.7	24.0	24.3
	3H	24.1	25.4	24.5	25.7	26.0	24.3	25.5	24.7	25.8	26.1
	4H	25.0	26.1	25.4	26.4	26.8	25.2	26.3	25.6	26.6	27.0
	6H	25.7	26.7	26.1	27.0	27.4	26.0	27.0	26.4	27.3	27.7
	8H	25.9	26.9	26.4	27.3	27.6	26.3	27.2	26.7	27.6	28.0
	12H	26.1	27.0	26.6	27.4	27.8	26.6	27.4	27.0	27.8	28.2
8H	4H	25.3	26.3	25.7	26.6	27.0	25.5	26.4	25.9	26.8	27.2
	6H	26.2	27.0	26.7	27.4	27.8	26.5	27.2	26.9	27.7	28.1
	8H	26.6	27.3	27.0	27.7	28.2	26.9	27.6	27.4	28.0	28.5
	12H	26.9	27.5	27.4	27.9	28.4	27.3	27.9	27.8	28.3	28.8
12H	4H	25.4	26.2	25.8	26.6	27.0	25.5	26.4	26.0	26.8	27.2
	6H	26.3	27.0	26.8	27.4	27.9	26.6	27.2	27.0	27.7	28.1
	8H	26.7	27.3	27.2	27.8	28.3	27.0	27.6	27.5	28.1	28.6
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, 3985 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 4.8)

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C Interval: 90.0DEG
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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:

UTILIZATION FACTORS TABLE

Test:U:120.24V I:0.2376A P:28.137W PF:0.9848 Freq:59.98Hz Lamp Flux:3984.62x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:30w 4000k	DIM.:	SERIAL No.:
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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	37	54	43	36	30
0.80	66	54	46	65	53	46	63	52	45	38
1.00	74	62	55	73	62	55	70	63	54	47
1.25	81	70	63	80	69	62	77	68	61	54
1.50	86	76	68	85	75	68	81	73	67	59
2.00	93	84	77	91	83	77	88	81	75	67
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	94	88	99	92	87	95	89	84	76
4.00	105	99	94	103	97	93	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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Humidity:65.0%
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ISOCANDELA DIAGRAM

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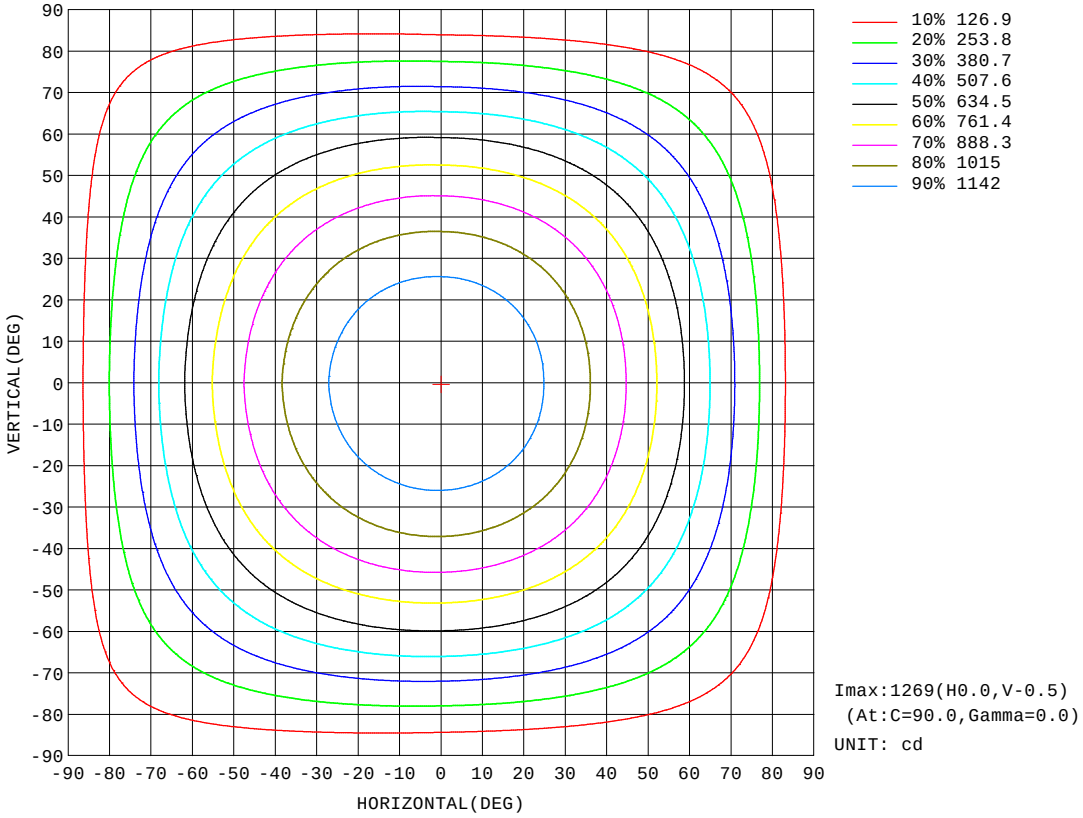

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Temperature:25.3DEG
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g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

AAI Figure

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NAME:	TYPE:	WEIGHT:
SPEC.:30w 4000k	DIM.:	SERIAL No.:
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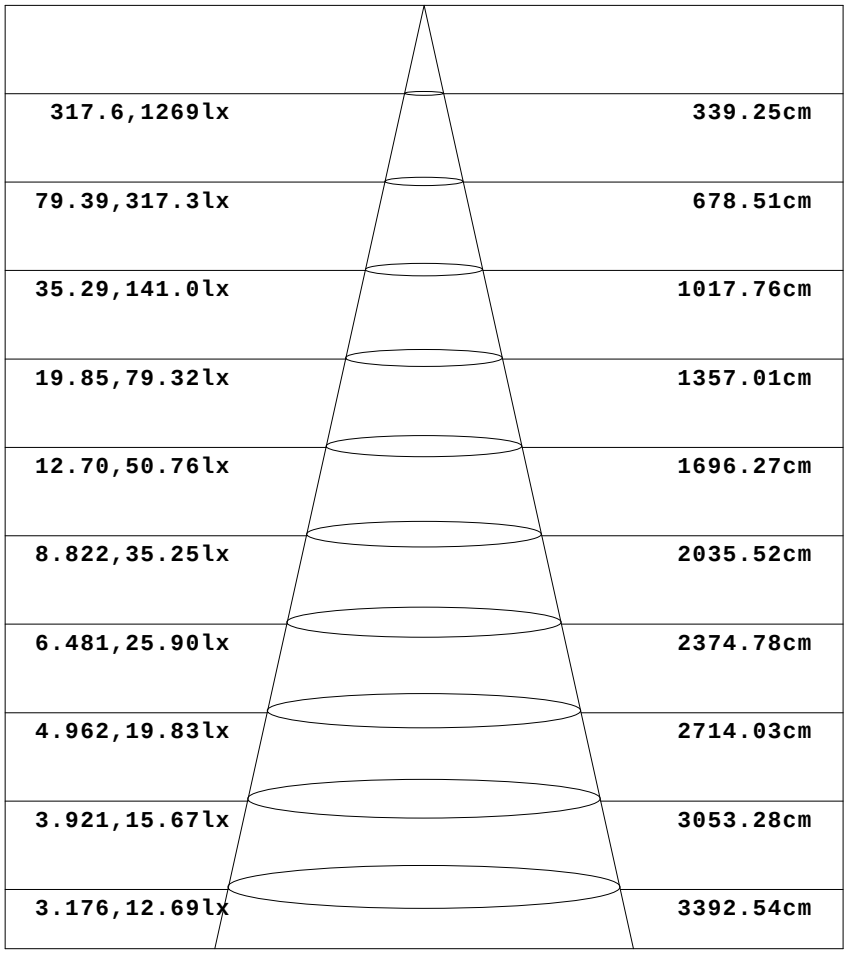
Flux out:2993 lm



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

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ISOLUX DIAGRAM

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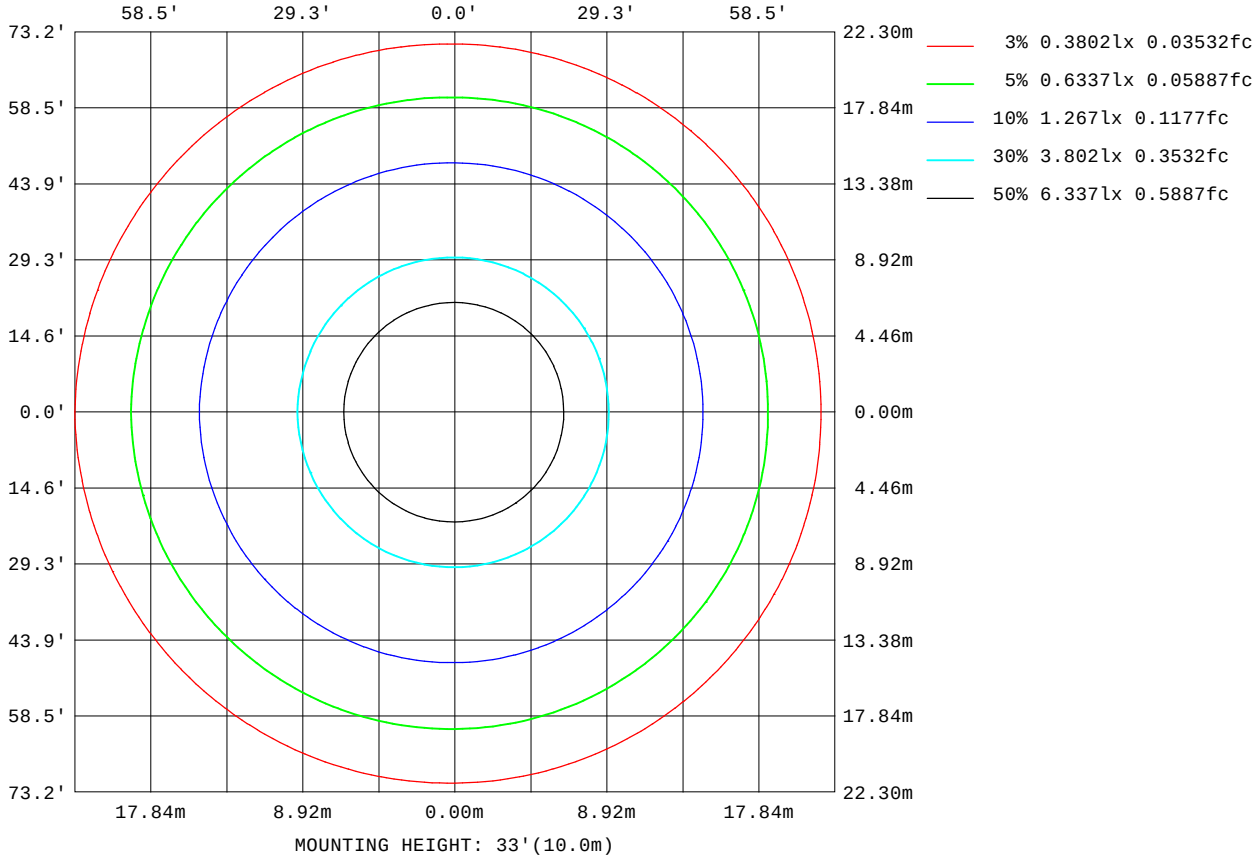

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Test Distance:8.300m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.24V I:0.2376A P:28.137W PF:0.9848 Freq:59.98Hz Lamp Flux:3984.62x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:30w 4000k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

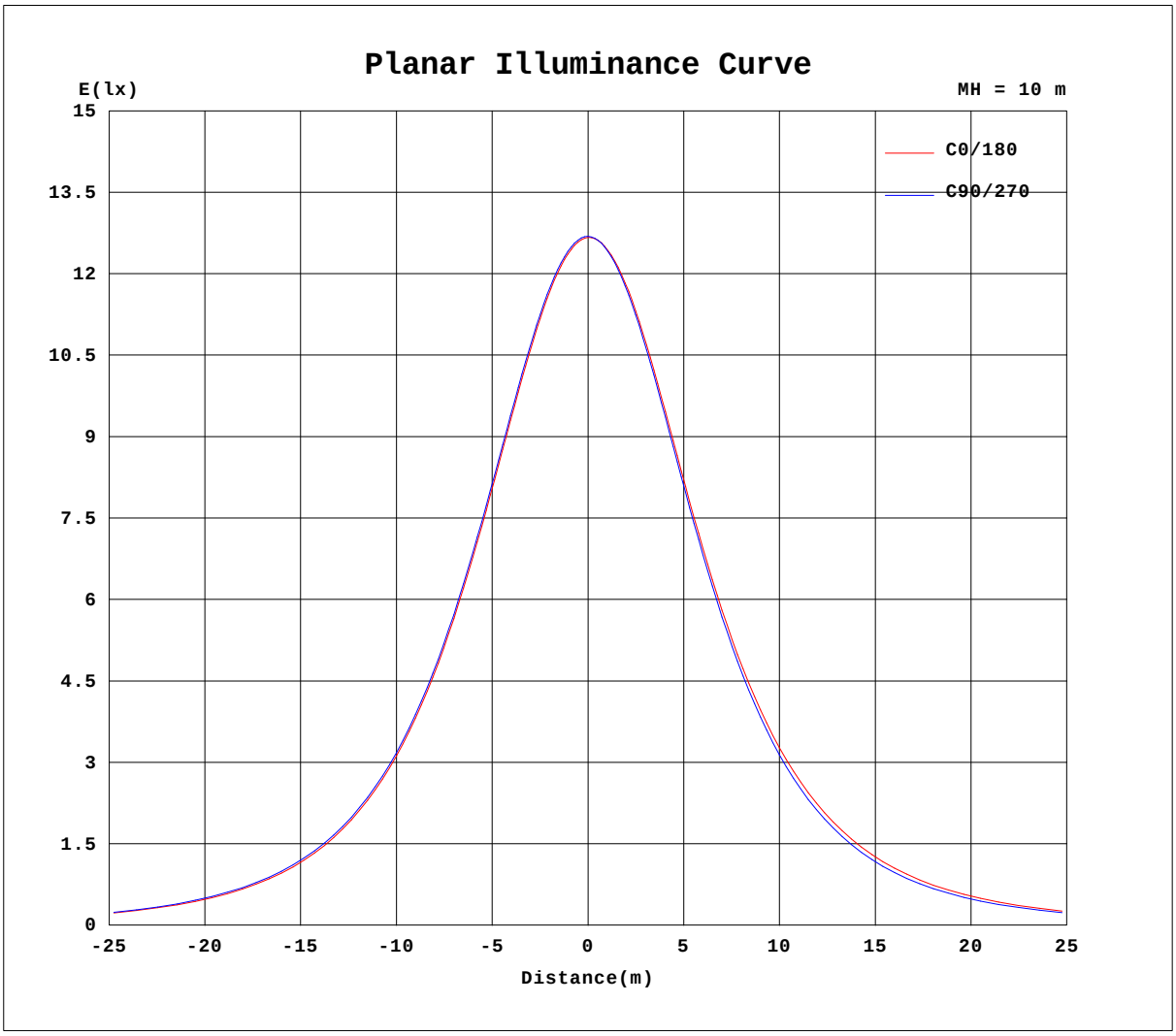
AvgL	cd/m2
L_0~180(65)av	12762
L_0~180(75)av	12661
L_0~180(85)av	14063
L_90~270(65)av	12357
L_90~270(75)av	12006
L_90~270(85)av	12731
L_45(65)av	12558
L_45(75)av	12334
L_45(85)av	13453

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:120.24V I:0.2376A P:28.137W PF:0.9848 Freq:59.98Hz Lamp Flux:3984.62x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:30w 4000k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1 UNIT: cd

g \ C	0	90	180	270
0	1267	1269	1267	1269
5	1260	1264	1265	1264
10	1244	1250	1255	1250
15	1218	1227	1234	1225
20	1184	1194	1203	1192
25	1140	1152	1163	1147
30	1088	1102	1112	1095
35	1029	1042	1056	1034
40	960	976	994	965
45	884	900	926	889
50	799	818	850	805
55	708	728	765	714
60	609	633	671	617
65	506	530	572	514
70	400	425	468	409
75	293	318	362	304
80	189	212	255	202
85	91.5	116	154	106
90	8.43	31.5	59.2	23.8

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

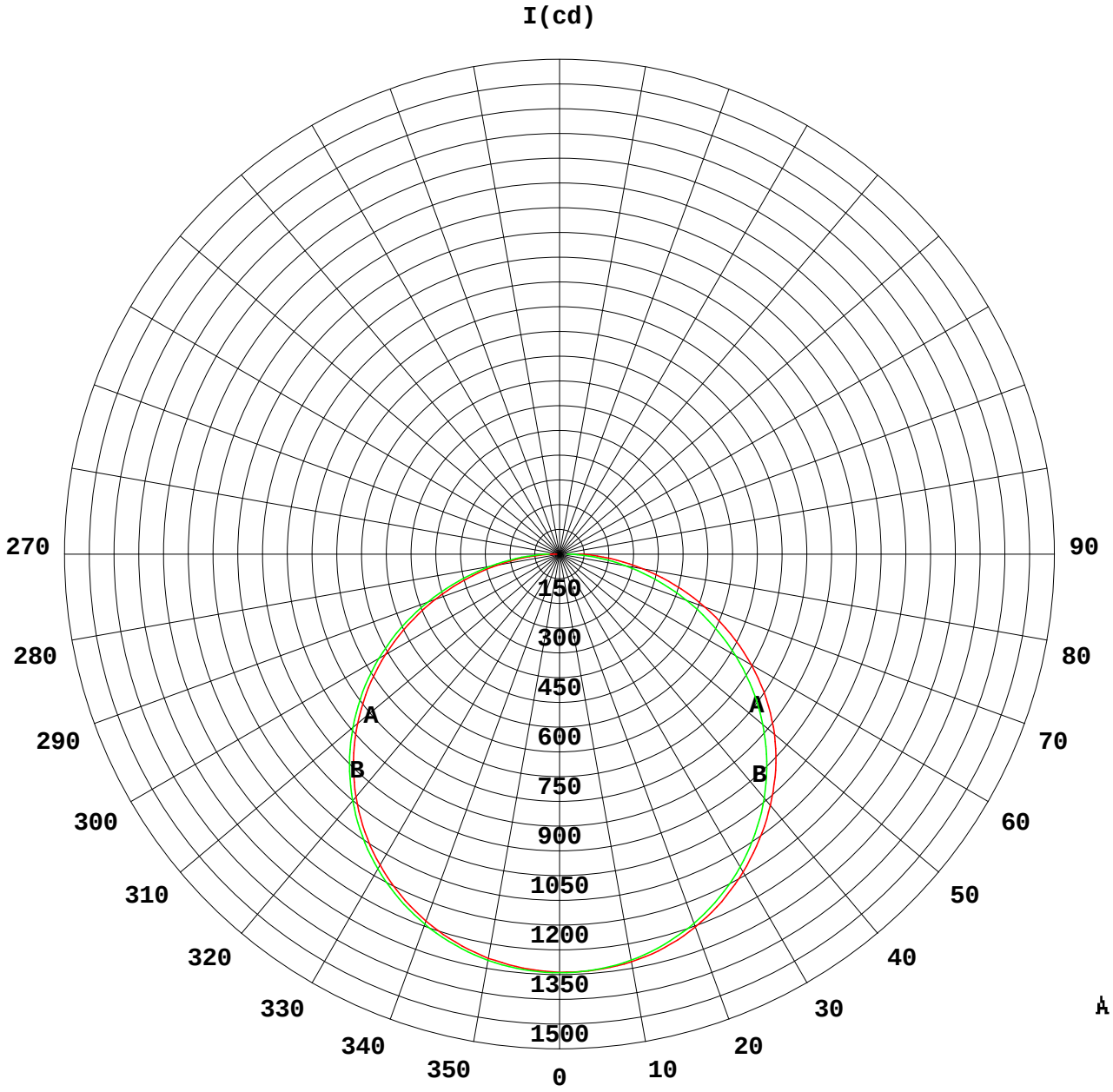
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

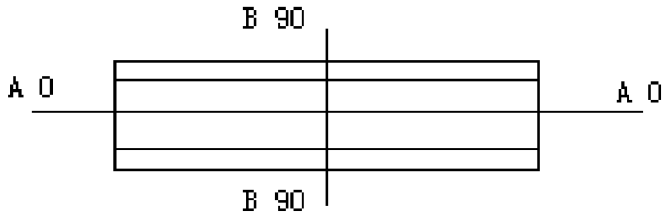
Photometric Data Table [cd]

G/C	0.0	90.0	180.0	270.0
0.0	1267	1269	1267	1269
3.0	1264	1267	1267	1267
6.0	1257	1262	1264	1262
9.0	1247	1254	1258	1253
12.0	1234	1242	1248	1241
15.0	1218	1227	1234	1225
18.0	1198	1208	1217	1206
21.0	1175	1186	1195	1183
24.0	1150	1161	1171	1157
27.0	1121	1133	1143	1128
30.0	1088	1102	1112	1095
33.0	1054	1068	1080	1060
36.0	1016	1031	1044	1021
39.0	974.2	989.6	1007	979.4
42.0	930.4	946.8	967.7	935.3
45.0	883.6	900.4	926.1	888.6
48.0	833.5	851.9	881.1	838.9
51.0	781.2	800.8	834.2	787.1
54.0	726.5	746.6	783.2	732.9
57.0	668.8	690.5	728.1	674.9
60.0	609.5	632.5	671.5	616.5
63.0	548.3	571.5	612.5	555.2
66.0	485.0	509.3	551.4	493.2
69.0	421.9	446.5	489.5	430.6
72.0	357.3	381.9	426.2	367.0
75.0	293.4	317.5	361.9	304.0
78.0	230.5	254.0	297.4	242.3
81.0	169.6	192.7	234.4	182.3
84.0	110.2	134.2	173.6	124.3
87.0	55.89	80.54	115.3	71.32
90.0	8.428	31.47	59.25	23.82

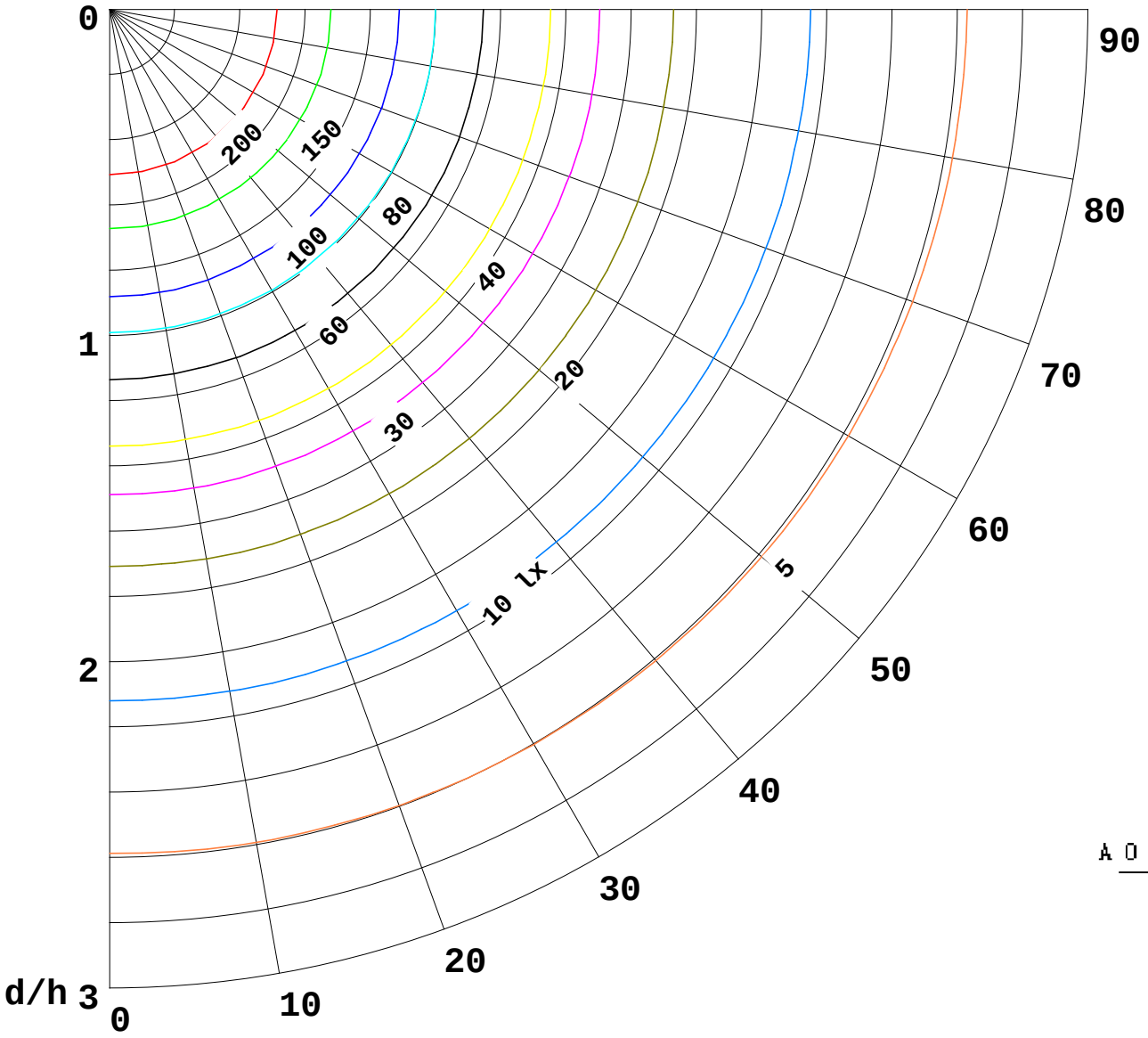
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

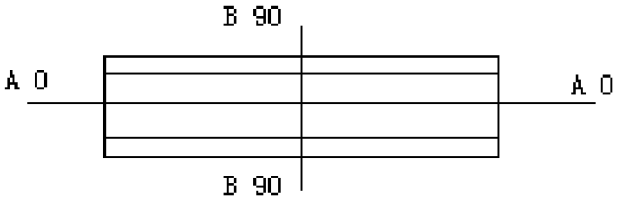
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

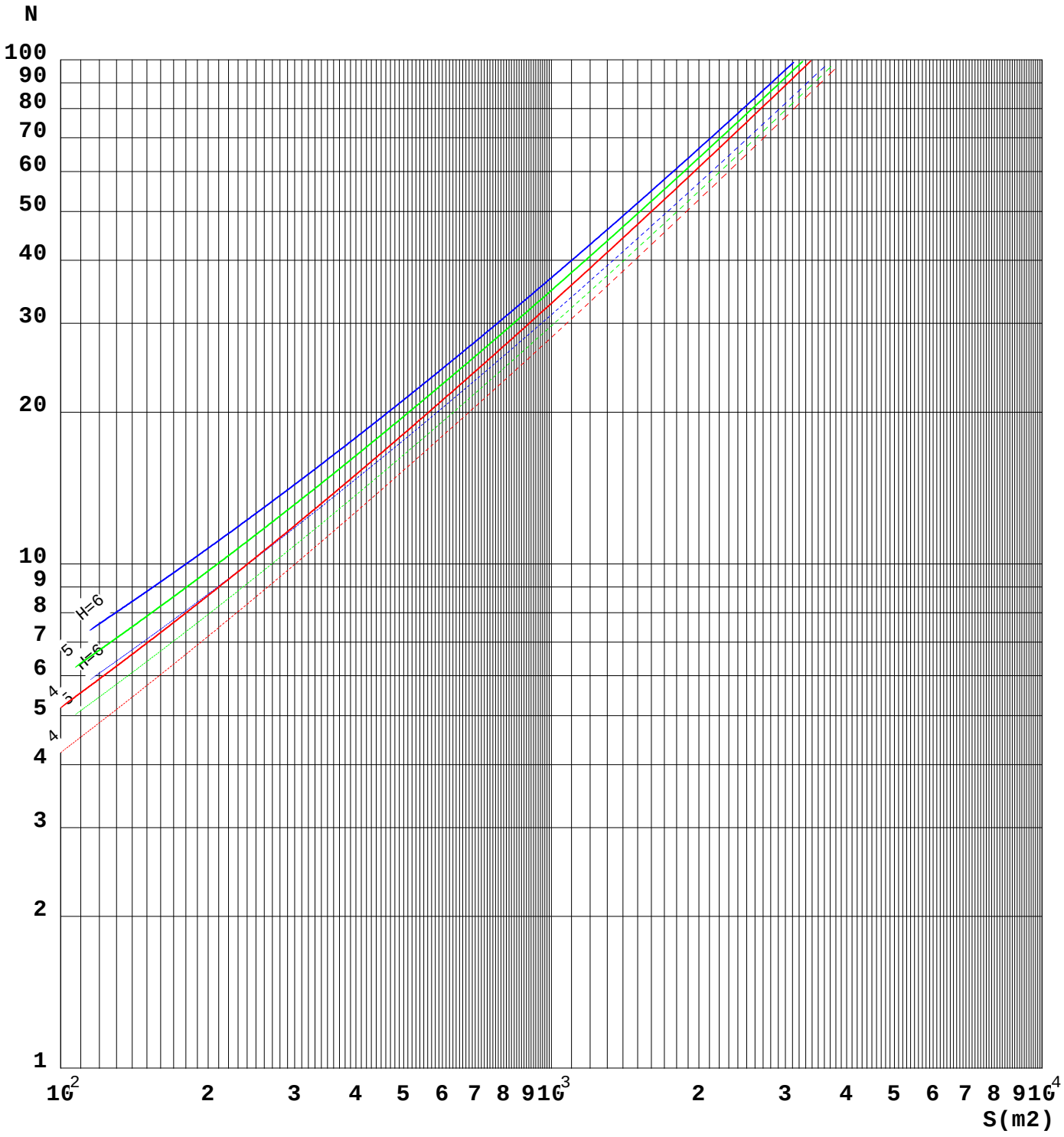

I(cd)
270
280
290
300
310
320
330
340
350
0
10
20
30
40
50
60
70
80
90
150
300
450
600
750
900
1050
1200
1350
1500
A
B
A
B


B 90
A 0
A 0
B 90

1000 lm K = 1


0
1
2
3
d/h
0
10
20
30
40
50
60
70
80
90
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