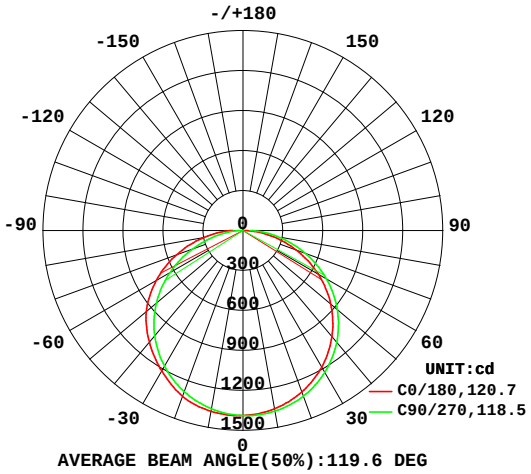
LUMINAIRE PHOTOMETRIC TEST REPORT

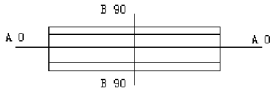
Test:U:120.32V I:0.2570A P:30.680W PF:0.9922 Freq:59.98Hz Lamp Flux:4346.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA		Eff: 141.66 lm/W	
MODEL		Imax(cd)	1390	S/MH(C0/180)	1.31
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	4346.2	h UP,DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	4346.2	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,50.1
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

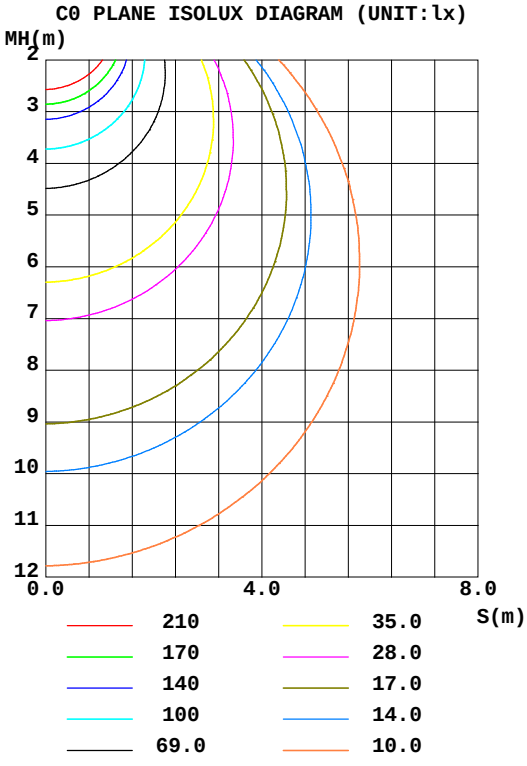
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):119.6 DEG



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	1359	1377	1378	1359					0- 10	131.6	131.6	3.03,3.03
20	1290	1324	1326	1288					10- 20	379.2	510.8	11.8,11.8
30	1184	1229	1219	1178					20- 30	580.5	1091	25.1,25.1
40	1039	1095	1093	1031					30- 40	711.9	1803	41.5,41.5
50	860.1	924.8	948.6	849.0					40- 50	759.3	2562	59,59
60	652.4	722.8	751.8	634.0					50- 60	711.5	3274	75.3,75.3
70	423.4	495.4	528.6	400.3					60- 70	571.3	3845	88.5,88.5
80	194.0	260.6	292.7	171.5					70- 80	364.1	4209	96.9,96.9
90	1.787	54.04	74.28	2.655					80- 90	136.8	4346	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:
Test Date:2024-03-20

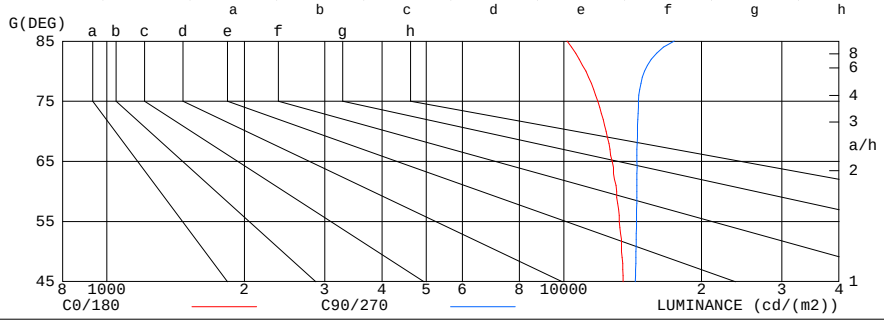
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0964]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.32V I:0.2570A P:30.680W PF:0.9922 Freq:59.98Hz Lamp Flux:4346.2x1 lm		
NAME:	**TYPE:**	**WEIGHT:**
SPEC.:100-277v	**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	10171	17434
80	11174	15010
75	11867	14572
70	12380	14485
65	12753	14459
60	13048	14456
55	13228	14428
50	13380	14387
45	13477	14336

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

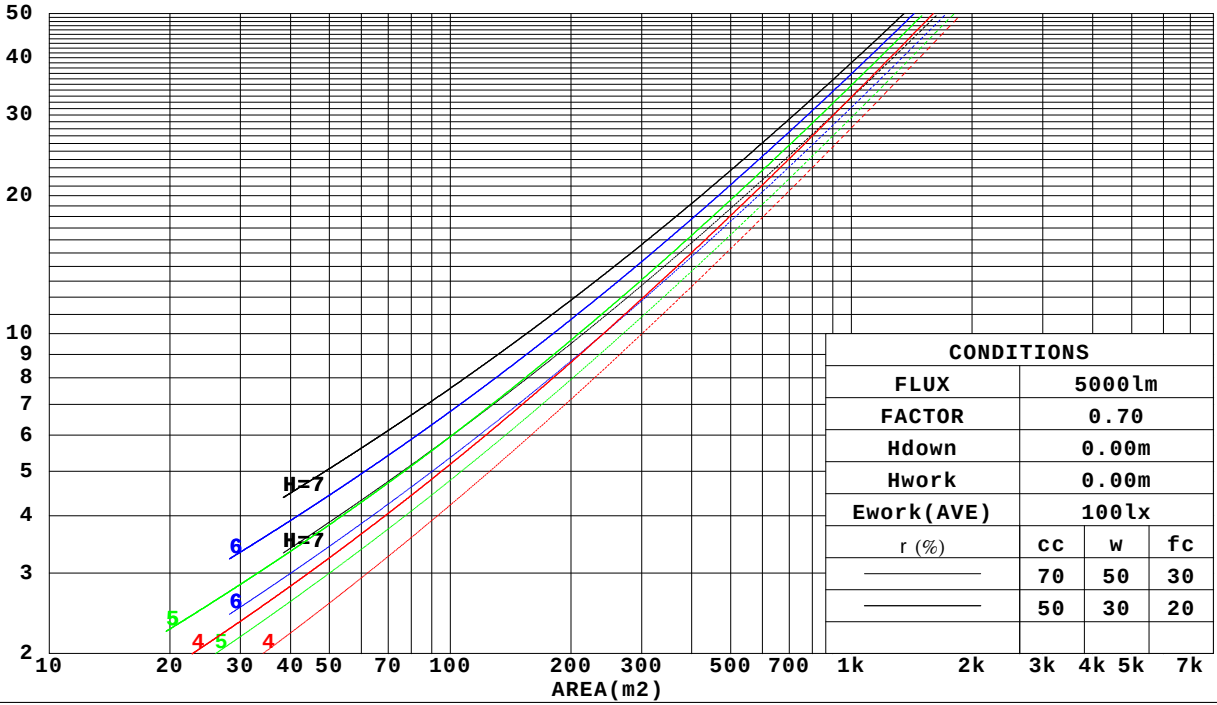
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.32V I:0.2570A P:30.680W PF:0.9922 Freq:59.98Hz Lamp Flux:4346.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	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	.93	.89	.92	.89	.87	.88	.86	.84	.82
2.0	.89	.82	.75	.87	.80	.75	.83	.78	.73	.80	.75	.71	.77	.73	.69	.67
3.0	.78	.69	.62	.76	.68	.62	.73	.66	.60	.70	.64	.59	.67	.63	.58	.56
4.0	.68	.59	.52	.67	.59	.52	.65	.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	.49	.42	.38	.35
7.0	.50	.41	.34	.49	.40	.34	.47	.39	.34	.46	.39	.34	.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		
r (%)	cc	w	fc
———	70	50	30
———	50	30	20

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

WEC AND CCEC

Test:U:120.32V I:0.2570A P:30.680W PF:0.9922 Freq:59.98Hz Lamp Flux:4346.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coeffcients(WEC)									
0.0																
1.0	.333	.189	.060	.326	.186	.059	.313	.179	.057	.300	.173	.056	.289	.167	.054	
2.0	.307	.168	.052	.301	.166	.051	.289	.161	.050	.278	.156	.049	.268	.152	.048	
3.0	.282	.150	.045	.276	.148	.044	.265	.144	.044	.256	.140	.043	.247	.137	.042	
4.0	.258	.134	.039	.253	.132	.039	.244	.129	.039	.235	.126	.038	.227	.123	.038	
5.0	.237	.121	.035	.233	.120	.035	.225	.117	.034	.217	.114	.034	.210	.112	.034	
6.0	.219	.110	.031	.215	.109	.031	.208	.107	.031	.201	.105	.031	.195	.103	.030	
7.0	.203	.101	.029	.200	.100	.028	.193	.098	.028	.187	.096	.028	.181	.094	.028	
8.0	.190	.093	.026	.186	.092	.026	.181	.090	.026	.175	.089	.026	.170	.087	.025	
9.0	.177	.086	.024	.174	.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	.150	.076	.022	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	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	.133	.156	.134	.114	.106	.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	.136	.087	.050	.094	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.151	.091	.046	.130	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.006	
6.0	.144	.083	.038	.124	.071	.033	.085	.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	.118	.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:
Test Date:2024-03-20

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=1.0964]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.32V I:0.2570A P:30.680W PF:0.9922 Freq:59.98Hz Lamp Flux:4346.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	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	21.9	23.4	22.1	23.6	23.8	22.2	23.8	22.5	24.0	24.2
	3H	23.5	25.0	23.8	25.2	25.4	24.0	25.5	24.3	25.7	26.0
	4H	24.2	25.6	24.5	25.8	26.1	24.8	26.2	25.2	26.5	26.7
	6H	24.7	26.0	25.0	26.3	26.6	25.5	26.8	25.9	27.1	27.4
	8H	24.9	26.2	25.2	26.4	26.7	25.8	27.1	26.2	27.4	27.7
	12H	25.0	26.2	25.4	26.5	26.8	26.1	27.3	26.4	27.6	27.9
4H	2H	22.6	24.0	22.9	24.2	24.5	22.9	24.2	23.2	24.5	24.8
	3H	24.4	25.6	24.8	25.9	26.2	24.9	26.1	25.2	26.4	26.7
	4H	25.2	26.4	25.6	26.7	27.0	25.8	26.9	26.2	27.2	27.6
	6H	25.9	26.9	26.3	27.2	27.6	26.6	27.6	27.0	28.0	28.4
	8H	26.1	27.1	26.6	27.4	27.8	27.0	27.9	27.4	28.3	28.7
	12H	26.3	27.2	26.7	27.6	28.0	27.3	28.2	27.8	28.6	29.0
8H	4H	25.6	26.5	26.0	26.9	27.3	26.1	27.0	26.5	27.4	27.8
	6H	26.5	27.2	26.9	27.6	28.1	27.1	27.9	27.6	28.3	28.8
	8H	26.8	27.5	27.3	27.9	28.4	27.6	28.3	28.1	28.7	29.2
	12H	27.1	27.7	27.6	28.1	28.6	28.1	28.7	28.6	29.1	29.6
12H	4H	25.7	26.5	26.1	26.9	27.3	26.1	27.0	26.6	27.4	27.8
	6H	26.6	27.3	27.0	27.7	28.2	27.2	27.9	27.7	28.3	28.8
	8H	27.0	27.6	27.5	28.0	28.5	27.8	28.4	28.2	28.8	29.3
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.1 / - 0.4					+ 0.1 / - 0.3				

CIE Pub.117, 4346 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 5.1)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.32V I:0.2570A P:30.680W PF:0.9922 Freq:59.98Hz Lamp Flux:4346.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

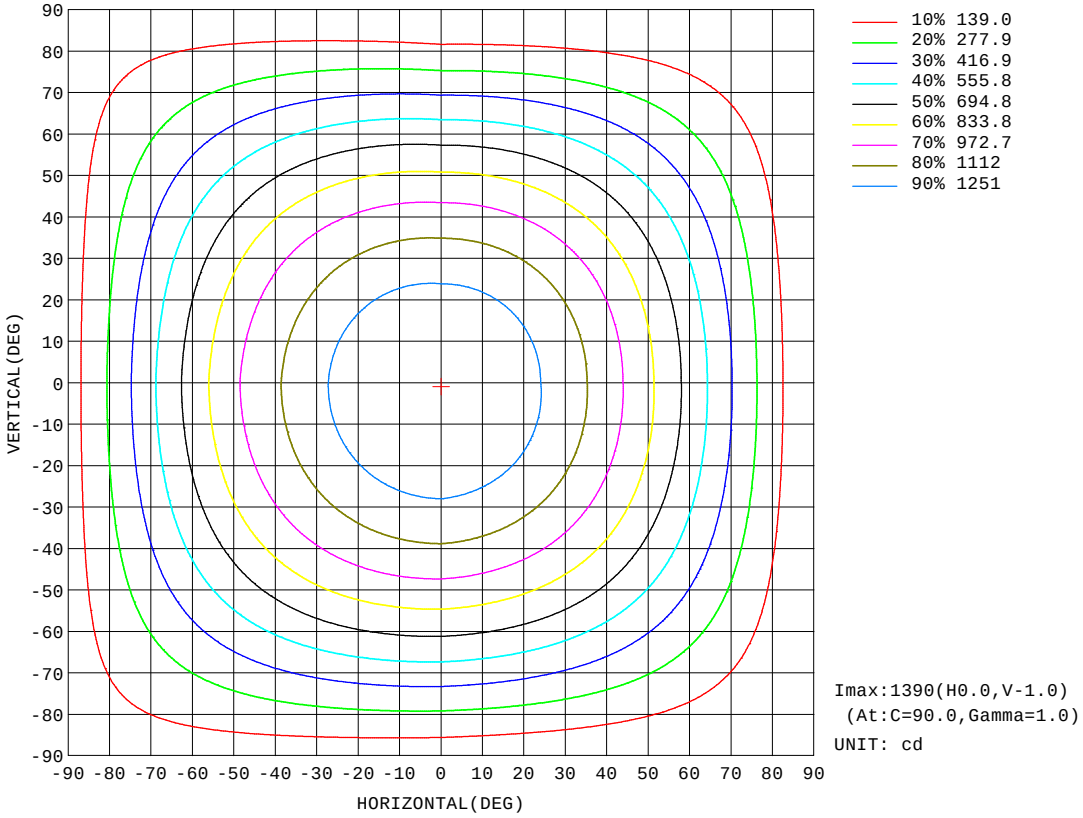
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	56	44	37	55	44	37	54	43	36	30
0.80	66	54	46	65	53	46	63	52	46	38
1.00	74	63	55	73	62	55	71	63	54	47
1.25	81	70	63	80	70	62	77	68	62	54
1.50	86	76	69	85	75	68	82	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	103	98	105	101	97	101	97	94	84
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended					SHRNOM = 1.25	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.32V I:0.2570A P:30.680W PF:0.9922 Freq:59.98Hz Lamp Flux:4346.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



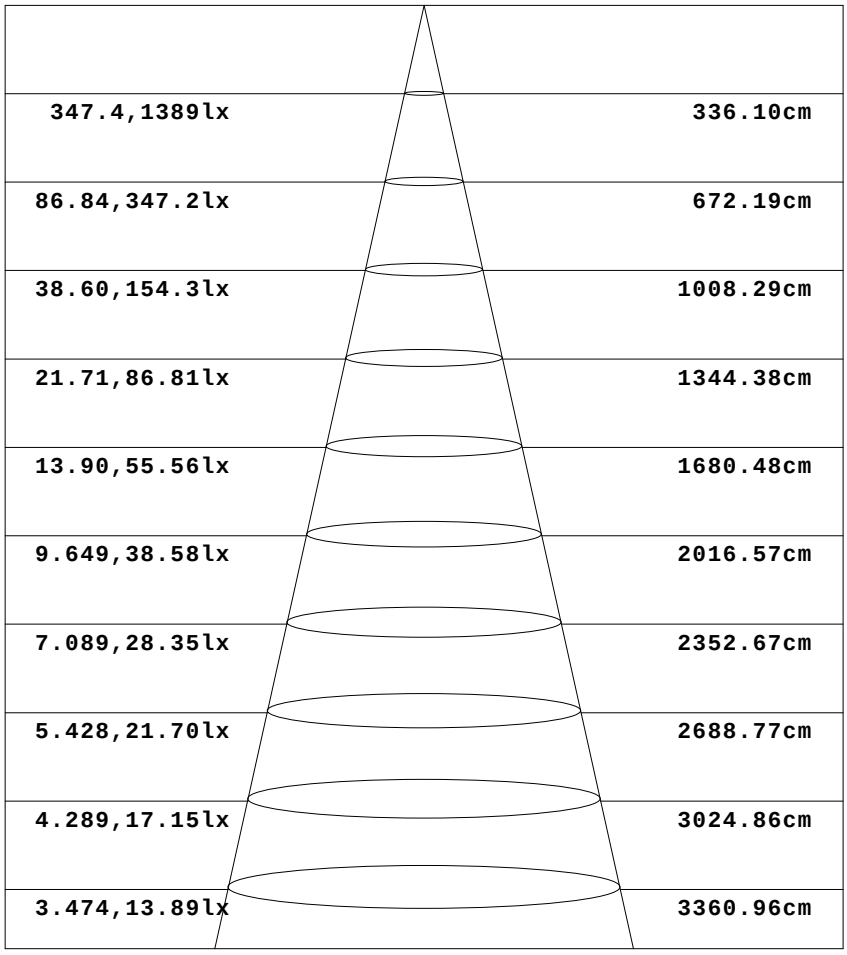
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

AAI Figure

Test:U:120.32V I:0.2570A P:30.680W PF:0.9922 Freq:59.98Hz Lamp Flux:4346.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:3274 lm



Height Eavg,Emax Angle:118.49deg Diameter

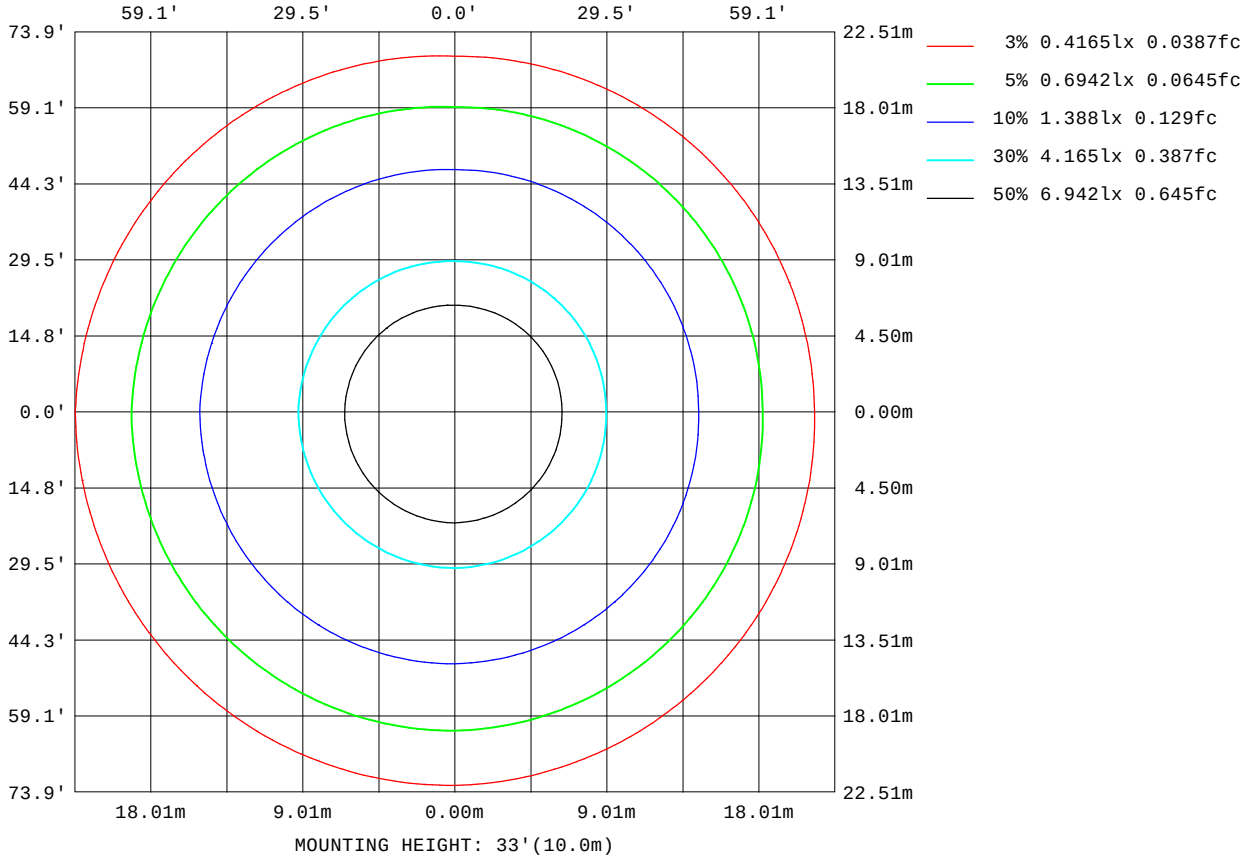
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

ISOLUX DIAGRAM

Test:U:120.32V I:0.2570A P:30.680W PF:0.9922 Freq:59.98Hz Lamp Flux:4346.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

LED Avg.L Report

Test:U:120.32V I:0.2570A P:30.680W PF:0.9922 Freq:59.98Hz Lamp Flux:4346.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

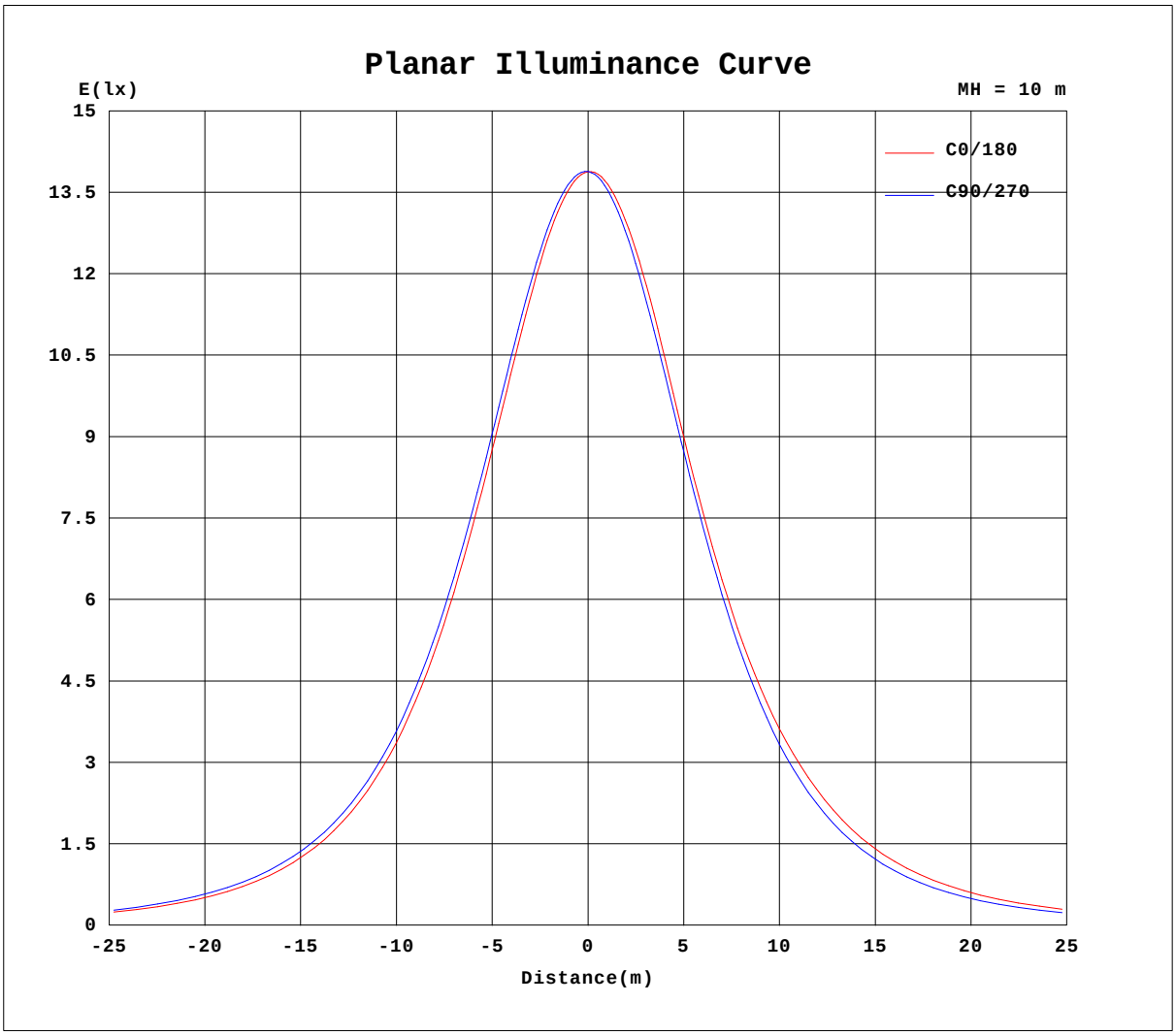
AvgL	cd/m2
L_0~180(65)av	13981
L_0~180(75)av	13874
L_0~180(85)av	15403
L_90~270(65)av	13360
L_90~270(75)av	12754
L_90~270(85)av	12830
L_45(65)av	13670
L_45(75)av	13300
L_45(85)av	14122

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.32V I:0.2570A P:30.680W PF:0.9922 Freq:59.98Hz Lamp Flux:4346.2x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1 UNIT: cd

g \ C(DEG)	0	90	180	270
0	1388	1389	1388	1389
5	1379	1388	1388	1379
10	1359	1377	1378	1359
15	1330	1356	1358	1329
20	1290	1324	1326	1288
25	1241	1282	1275	1237
30	1184	1229	1219	1178
35	1116	1167	1158	1109
40	1039	1095	1093	1031
45	953	1014	1024	944
50	860	925	949	849
55	759	828	854	744
60	652	723	752	634
65	539	611	643	518
70	423	495	529	400
75	307	377	411	283
80	194	261	293	171
85	88.6	152	180	71.7
90	1.79	54.0	74.3	2.66

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

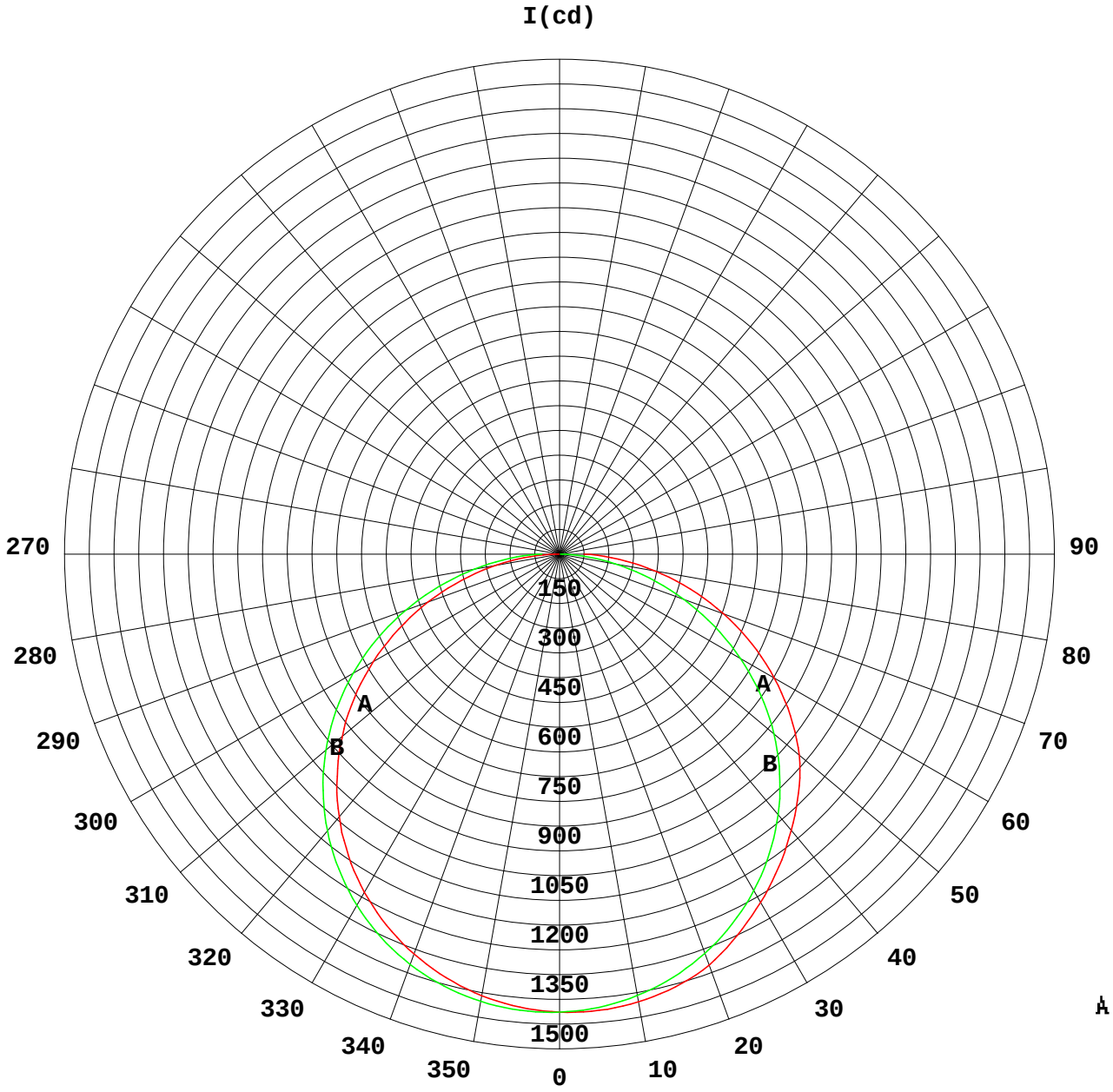
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0964]
Remarks:

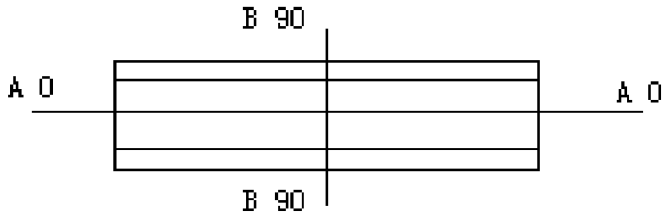
Photometric Data Table [cd]

G/C	0.0	90.0	180.0	270.0
0.0	1388	1389	1388	1389
3.0	1384	1390	1390	1384
6.0	1375	1387	1387	1376
9.0	1363	1380	1381	1364
12.0	1348	1369	1371	1348
15.0	1330	1356	1358	1329
18.0	1306	1338	1341	1306
21.0	1282	1316	1316	1279
24.0	1251	1291	1286	1249
27.0	1219	1262	1253	1215
30.0	1184	1229	1219	1178
33.0	1145	1193	1183	1137
36.0	1101	1153	1146	1094
39.0	1055	1110	1106	1047
42.0	1007	1064	1066	997.6
45.0	953.0	1014	1024	943.9
48.0	899.9	961.4	980.8	887.9
51.0	841.0	905.9	930.7	828.6
54.0	779.4	847.5	873.7	766.0
57.0	718.0	786.1	813.7	700.3
60.0	652.4	722.8	751.8	634.0
63.0	583.2	656.4	687.2	564.5
66.0	514.5	588.1	620.3	494.4
69.0	446.5	519.3	551.7	424.1
72.0	377.0	448.3	482.0	353.1
75.0	307.1	377.1	411.0	283.1
78.0	238.9	306.7	339.7	216.0
81.0	171.9	238.4	269.7	150.6
84.0	108.7	172.7	201.9	90.48
87.0	50.38	111.5	137.0	36.93
90.0	1.787	54.04	74.28	2.655

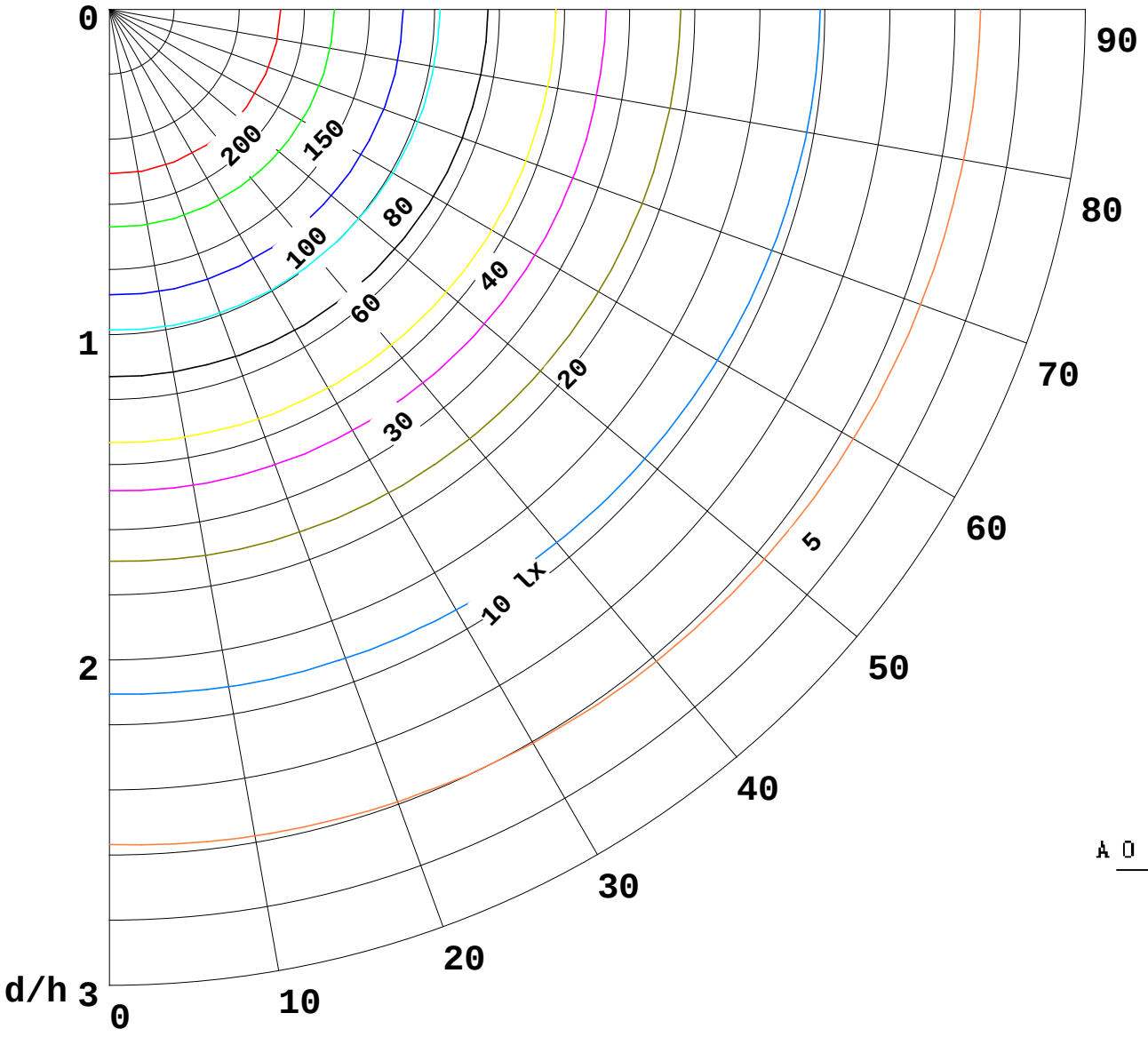
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

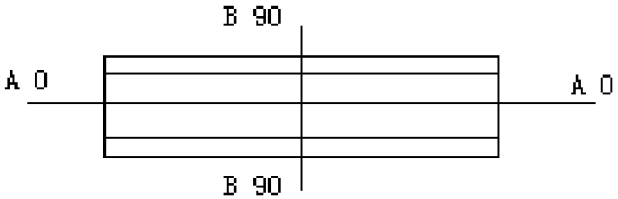
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0964]
Remarks:

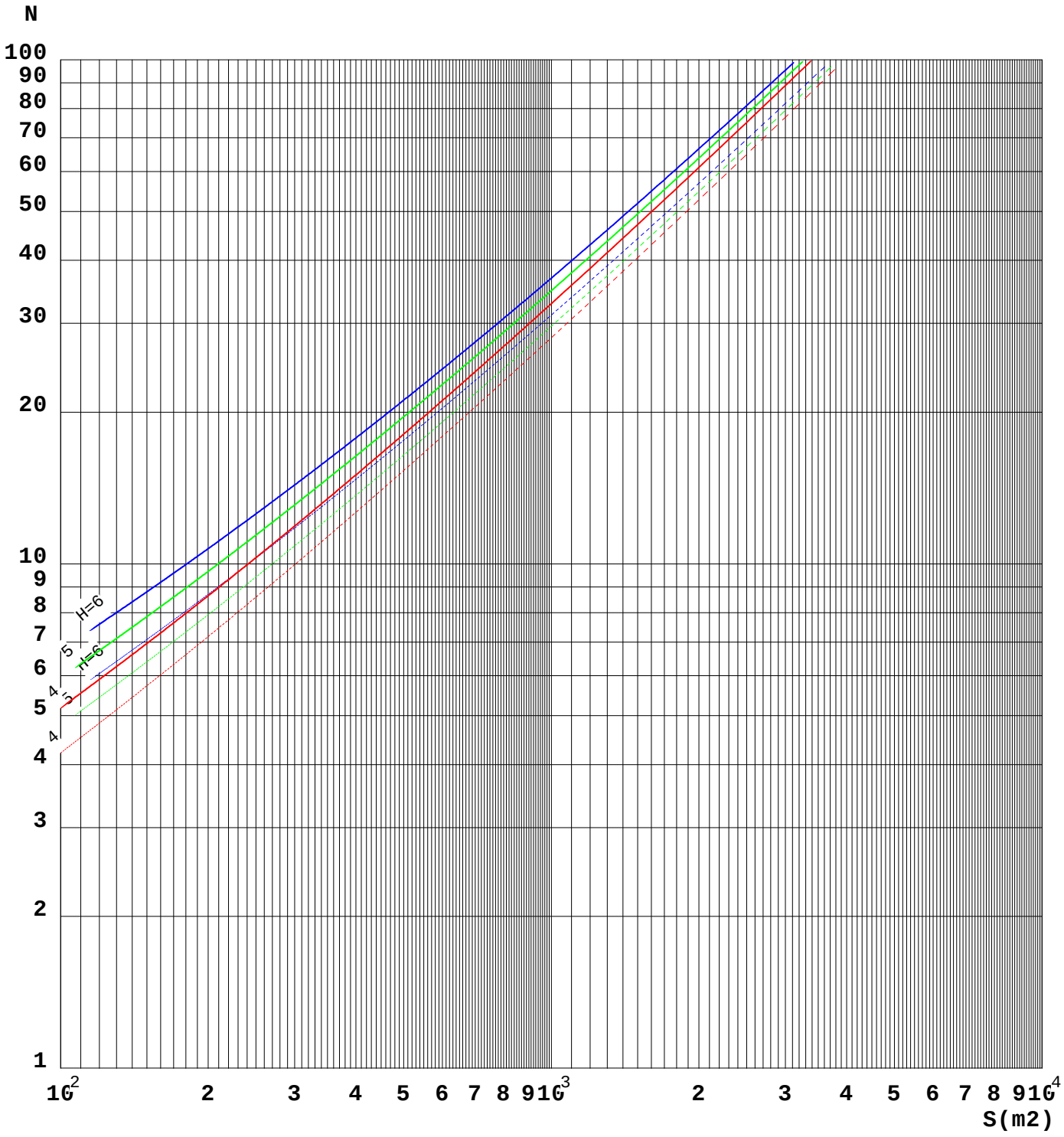

I(cd)
270
90
280
80
290
70
300
60
310
50
320
40
330
30
340
20
350
10
0
150
300
450
600
750
900
1050
1200
1350
1500
A
B
A
B


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