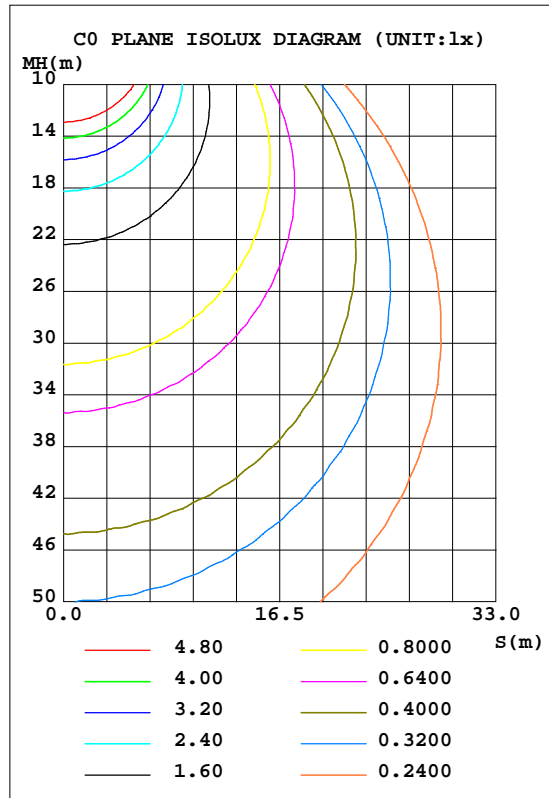
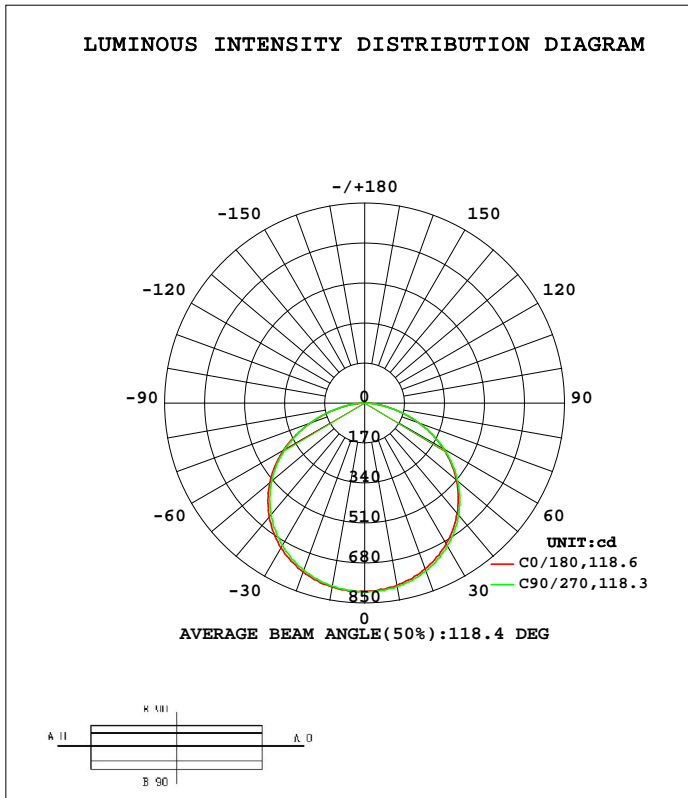


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.48V I:0.2039A P:19.274W PF:0.4102 Freq:50.00Hz Lamp Flux:2437.44x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*10MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 126.46 lm/W			
MODEL	YM2835176-ML-NW-15W	I _{max} (cd)	803.5	S/MH(C0/180)	1.32
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	2437.4	η UP, DN(C0-180)	0.0,49.8
NOMINAL FLUX(lm)	2437.44	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,50.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	787.0	790.8	792.0	794.2	794.9	792.7	790.8	788.5	0- 10	76.01	76.01	3.12,3.12
20	750.4	753.8	760.2	763.1	764.9	759.0	756.6	756.9	10- 20	219.6	295.6	12.1,12.1
30	691.7	699.8	701.7	705.8	711.4	704.8	699.7	697.4	20- 30	337.9	633.5	26,26
40	612.5	617.7	622.8	624.4	630.8	622.1	618.7	618.6	30- 40	415.7	1049	43,43
50	508.5	517.6	516.0	517.8	526.7	519.7	515.4	516.6	40- 50	441.3	1491	61.2,61.2
60	386.1	391.5	389.0	387.6	397.8	390.8	391.3	394.0	50- 60	407.9	1898	77.9,77.9
70	243.9	248.2	243.0	234.8	244.0	242.0	245.0	252.4	60- 70	315.2	2214	90.8,90.8
80	98.67	102.6	95.25	85.18	91.26	91.18	98.52	107.8	70- 80	178.0	2392	98.1,98.1
90	2.772	6.935	6.533	2.358	1.194	4.472	6.370	10.35	80- 90	45.82	2437	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		

Conical surface Flux(90deg): 1270.3 lm

%lum = 52.1%
%lamp = 52.1%

Conical surface Flux(120deg): 1898.5 lm

%lum = 77.9%
%lamp = 77.9%

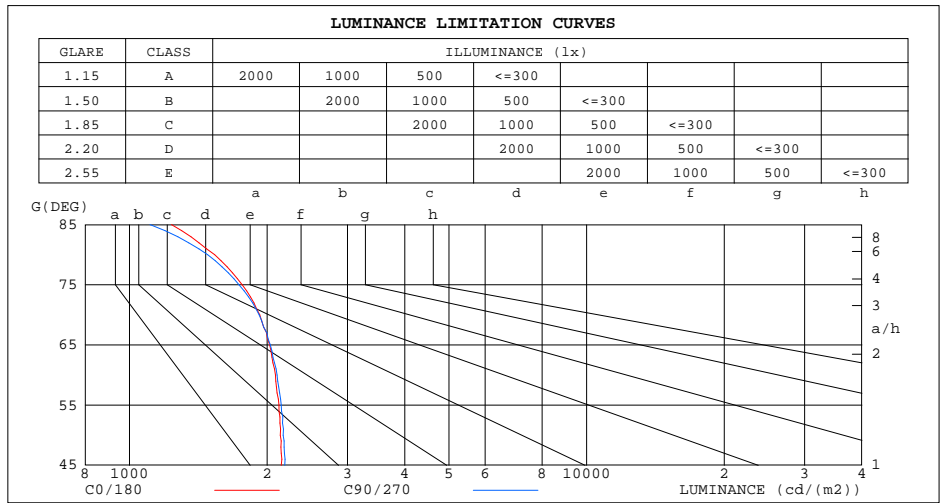
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:28DEG
Operators:
Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Test:U:230.48V I:0.2039A P:19.274W PF:0.4102 Freq:50.00Hz Lamp Flux:2437.44x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*10MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1235	1109
80	1536	1482
75	1766	1737
70	1927	1920
65	2028	2035
60	2087	2102
55	2124	2148
50	2138	2170
45	2149	2185

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

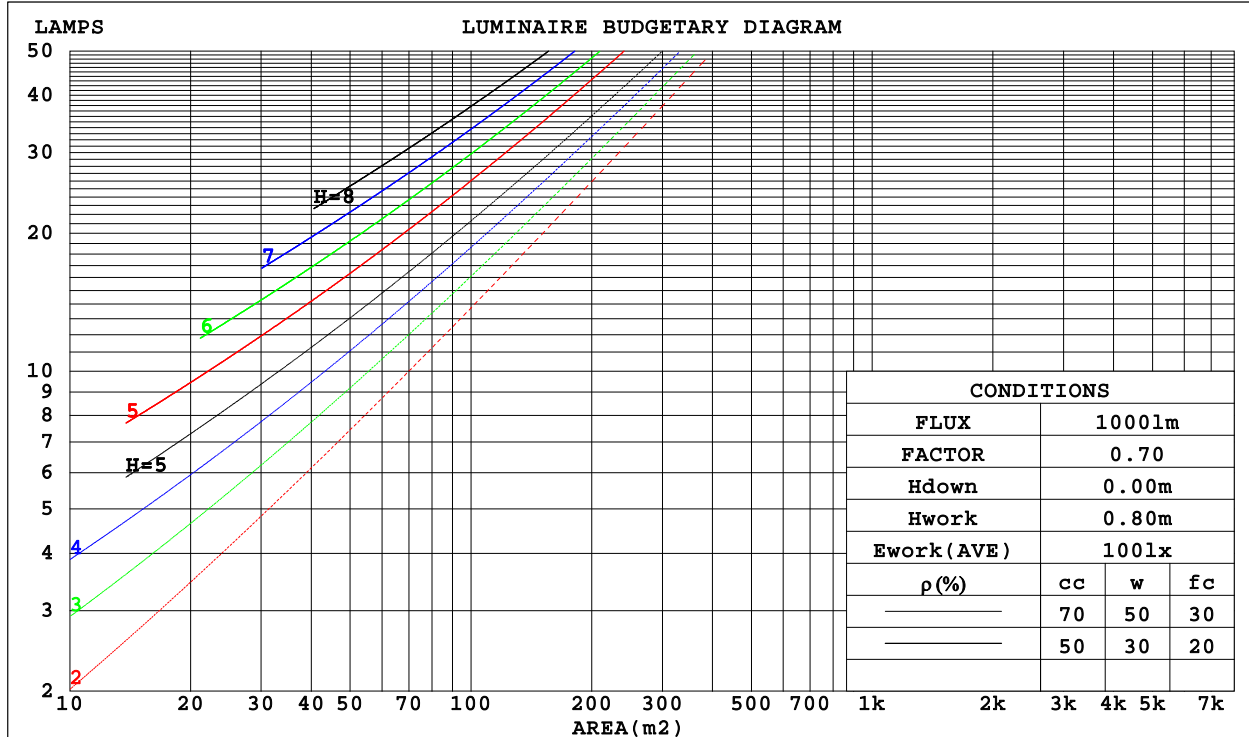
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.48V I:0.2039A P:19.274W PF:0.4102 Freq:50.00Hz Lamp Flux:2437.44x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*10MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	1.04	.99	.95	1.01	.97	.94	.97	.94	.91	.93	.91	.88	.90	.87	.85	.83
2.0	.90	.83	.77	.88	.82	.76	.85	.79	.74	.81	.77	.73	.78	.74	.71	.69
3.0	.79	.70	.64	.77	.69	.63	.74	.68	.62	.71	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.68	.60	.53	.66	.58	.53	.63	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.59	.51	.45	.57	.50	.45	.55	.49	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.40	.51	.44	.39	.50	.44	.39	.37
7.0	.50	.42	.35	.50	.41	.35	.48	.40	.35	.47	.40	.35	.45	.39	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.44	.36	.31	.43	.36	.31	.41	.35	.31	.29
9.0	.42	.34	.28	.41	.34	.28	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.25	.38	.31	.25	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Test:U:230.48V I:0.2039A P:19.274W PF:0.4102 Freq:50.00Hz Lamp Flux:2437.44x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*10MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	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	.314	.179	.057	.307	.175	.056	.294	.169	.054	.281	.162	.052	.270	.157	.051	
2.0	.296	.162	.050	.290	.160	.049	.278	.155	.048	.267	.150	.047	.257	.145	.046	
3.0	.274	.146	.044	.268	.144	.043	.258	.140	.042	.248	.136	.042	.239	.132	.041	
4.0	.252	.131	.039	.248	.130	.038	.238	.126	.038	.230	.123	.037	.222	.121	.037	
5.0	.233	.119	.034	.229	.117	.034	.221	.115	.034	.213	.112	.033	.206	.110	.033	
6.0	.216	.108	.031	.212	.107	.031	.205	.105	.031	.198	.103	.030	.192	.101	.030	
7.0	.201	.099	.028	.198	.098	.028	.191	.097	.028	.185	.095	.028	.179	.093	.027	
8.0	.188	.092	.026	.184	.091	.026	.179	.089	.025	.173	.088	.025	.168	.086	.025	
9.0	.176	.085	.024	.173	.084	.024	.168	.083	.023	.163	.082	.023	.158	.080	.023	
10.0	.165	.079	.022	.163	.079	.022	.158	.077	.022	.153	.076	.022	.149	.075	.022	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.181	.156	.134	.155	.134	.115	.106	.092	.080	.061	.053	.046	.019	.017	.015	
2.0	.173	.132	.098	.148	.114	.084	.101	.079	.059	.058	.046	.034	.019	.015	.011	
3.0	.165	.114	.074	.142	.099	.064	.097	.069	.045	.056	.040	.026	.018	.013	.009	
4.0	.158	.101	.058	.135	.087	.050	.093	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.011	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.028	.112	.060	.025	.077	.042	.018	.045	.025	.010	.015	.008	.003	
9.0	.124	.065	.025	.106	.056	.022	.074	.039	.015	.043	.023	.009	.014	.008	.003	
10.0	.118	.060	.022	.102	.053	.019	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

Test:U:230.48V I:0.2039A P:19.274W PF:0.4102 Freq:50.00Hz Lamp Flux:2437.44x1 lm										
NAME: LED灯带					TYPE:2835			WEIGHT:		
SPEC.:4000K					DIM.: 500*10MM 1M			SERIAL No.:		
MFR.:					SUR.:0.32			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	15.6	17.1	15.9	17.3	17.5	15.6	17.2	15.9	17.4	17.6
3H	17.2	18.6	17.5	18.8	19.1	17.2	18.6	17.5	18.9	19.1
4H	17.8	19.1	18.1	19.4	19.6	17.8	19.1	18.1	19.4	19.7
6H	18.2	19.5	18.5	19.7	20.0	18.2	19.5	18.5	19.7	20.0
8H	18.3	19.5	18.7	19.8	20.1	18.3	19.5	18.6	19.8	20.1
12H	18.4	19.6	18.7	19.9	20.2	18.3	19.5	18.7	19.8	20.1
4H 2H	16.2	17.6	16.6	17.8	18.1	16.3	17.6	16.6	17.9	18.1
3H	18.0	19.2	18.4	19.5	19.8	18.0	19.2	18.4	19.5	19.8
4H	18.7	19.8	19.1	20.1	20.5	18.7	19.8	19.1	20.1	20.5
6H	19.3	20.2	19.7	20.6	21.0	19.2	20.2	19.6	20.6	20.9
8H	19.4	20.3	19.8	20.7	21.1	19.4	20.3	19.8	20.7	21.0
12H	19.5	20.4	20.0	20.8	21.2	19.5	20.3	19.9	20.7	21.1
8H 4H	19.0	19.9	19.4	20.3	20.7	19.0	19.9	19.4	20.3	20.7
6H	19.7	20.4	20.1	20.8	21.3	19.7	20.4	20.1	20.8	21.2
8H	19.9	20.6	20.4	21.0	21.5	19.9	20.6	20.4	21.0	21.4
12H	20.1	20.7	20.6	21.1	21.6	20.0	20.6	20.5	21.1	21.5
12H 4H	19.0	19.8	19.4	20.2	20.6	19.0	19.8	19.4	20.2	20.6
6H	19.7	20.4	20.2	20.8	21.3	19.7	20.4	20.2	20.8	21.3
8H	20.0	20.6	20.5	21.1	21.5	20.0	20.6	20.5	21.0	21.5
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	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 2437 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 3.1)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:230.48V I:0.2039A P:19.274W PF:0.4102 Freq:50.00Hz Lamp Flux:2437.44x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*10MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	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	57	45	38	56	45	38	55	44	37	31
0.80	67	55	47	66	54	47	64	54	47	40
1.00	75	64	56	74	63	56	72	65	56	48
1.25	82	72	64	81	71	64	78	70	63	56
1.50	87	77	70	86	76	70	83	75	69	61
2.00	94	86	79	93	85	78	89	82	77	69
2.50	98	91	84	96	89	83	93	86	82	73
3.00	102	95	89	100	93	88	96	90	86	77
4.00	106	100	95	104	98	94	99	95	91	82
5.00	108	104	99	106	102	98	101	98	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

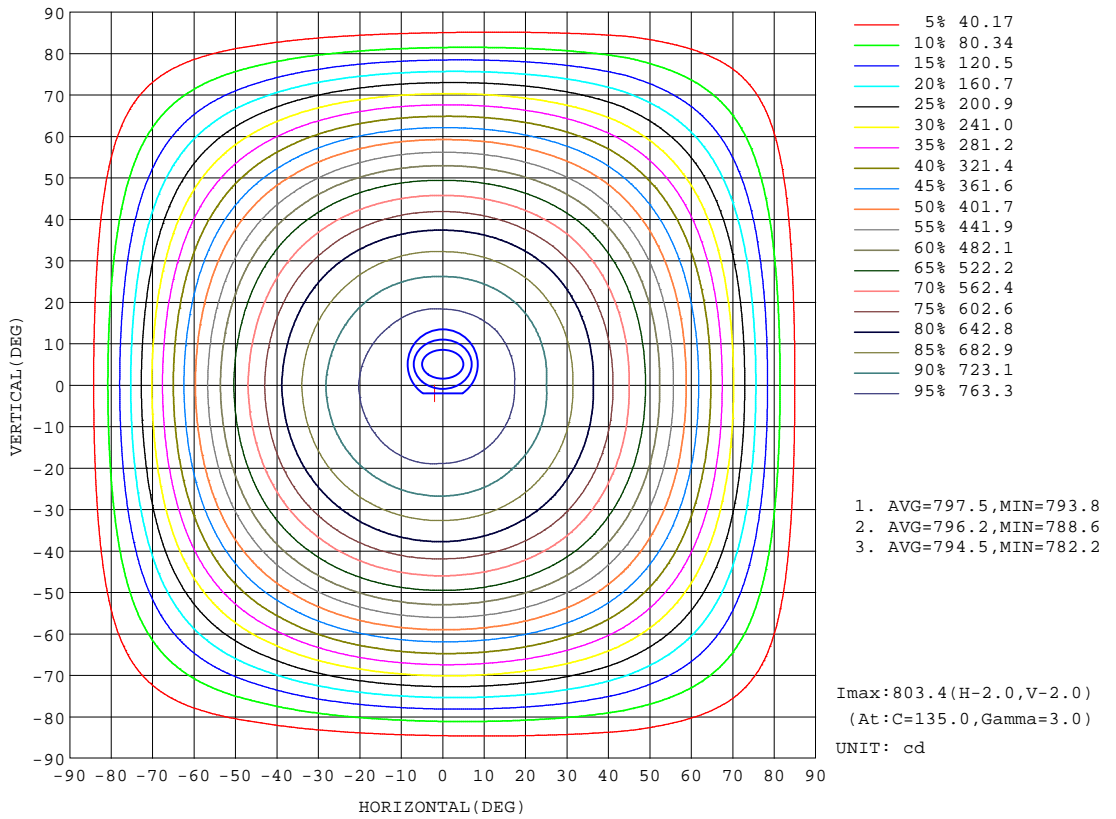
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:230.48V I:0.2039A P:19.274W PF:0.4102 Freq:50.00Hz Lamp Flux:2437.44x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*10MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

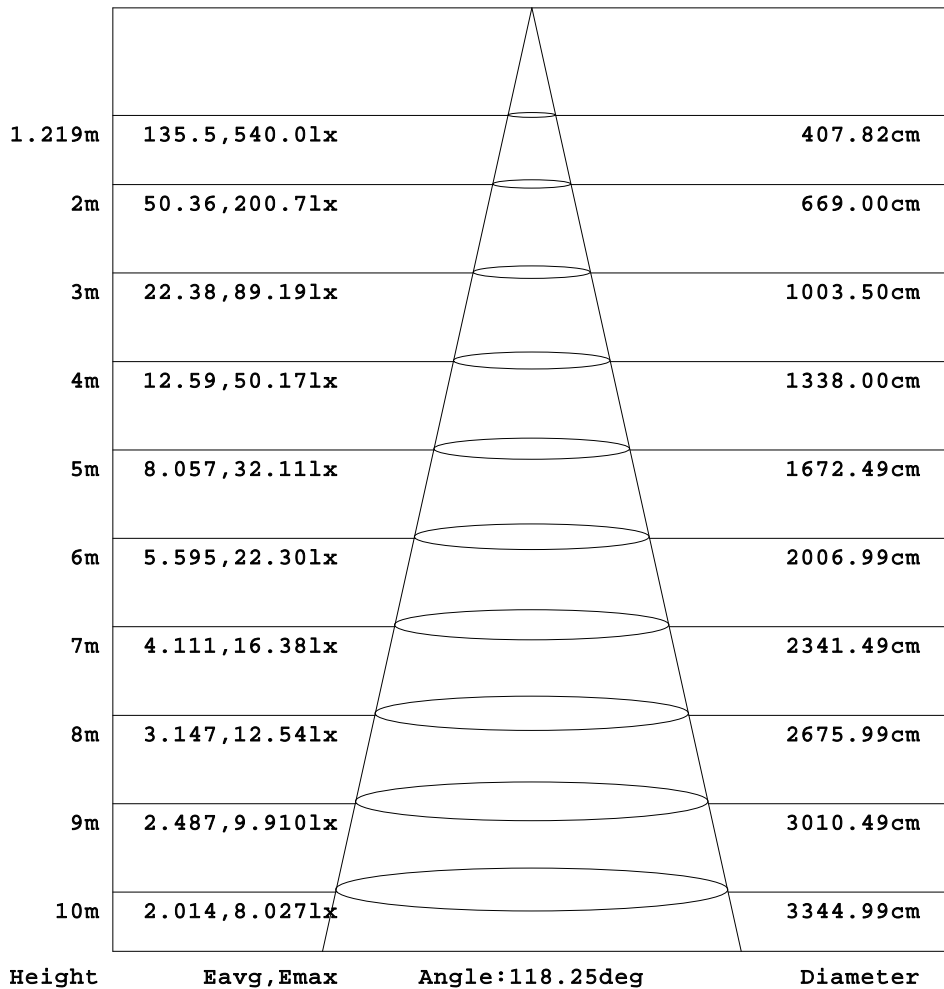
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:230.48V I:0.2039A P:19.274W PF:0.4102 Freq:50.00Hz Lamp Flux:2437.44x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*10MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:

Flux out:1898 lm



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

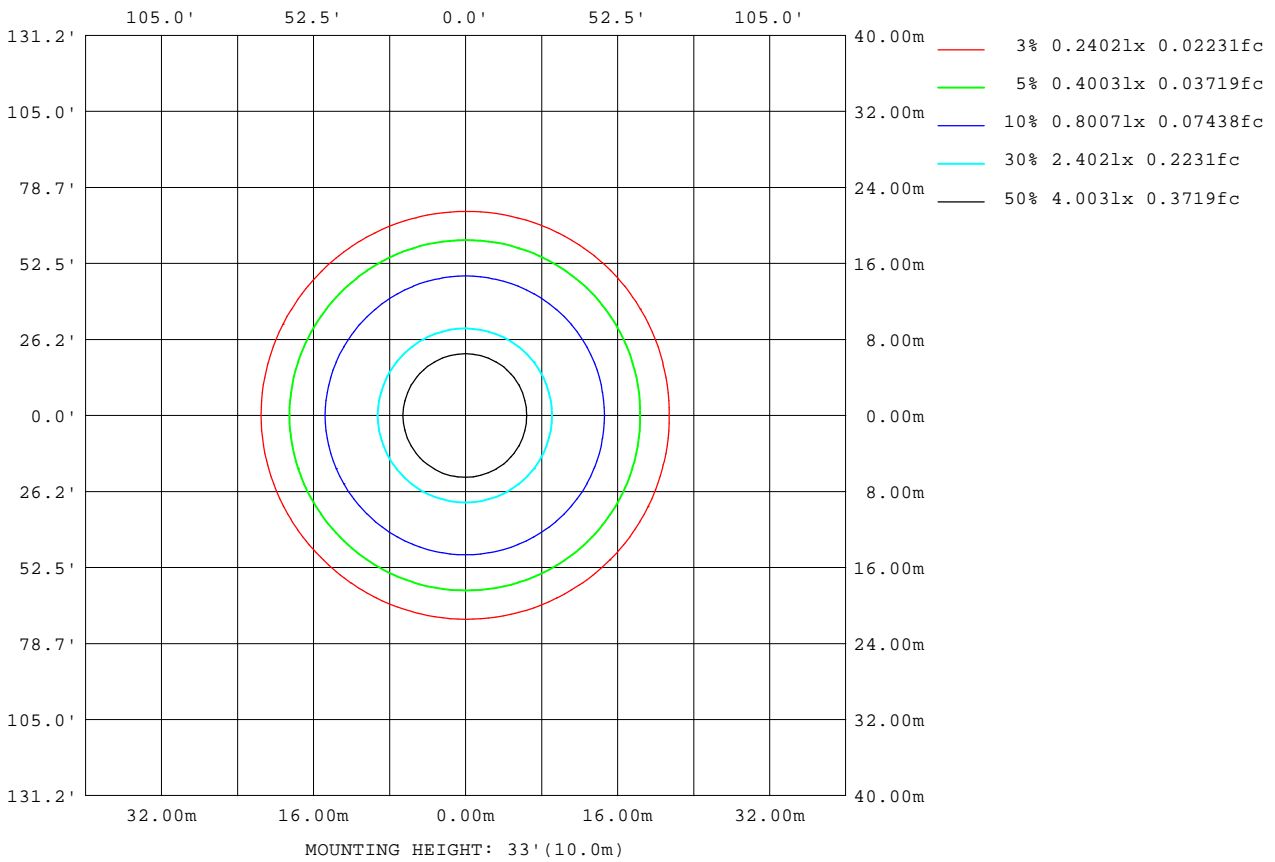
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Test:U:230.48V I:0.2039A P:19.274W PF:0.4102 Freq:50.00Hz Lamp Flux:2437.44x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*10MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

Test:U:230.48V I:0.2039A P:19.274W PF:0.4102 Freq:50.00Hz Lamp Flux:2437.44x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*10MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:

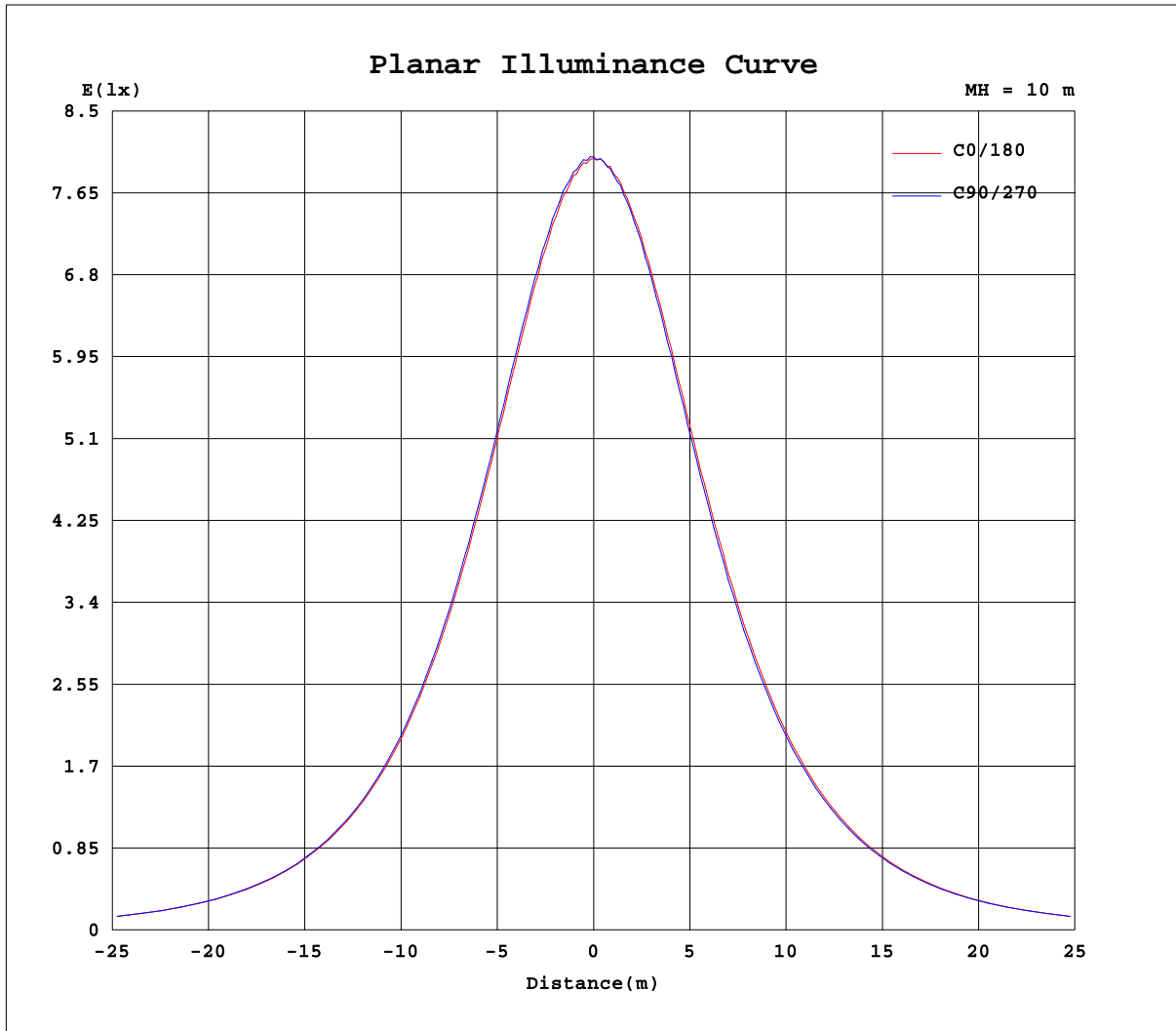
AvgL	cd/m2
L_0~180(65)av	2043
L_0~180(75)av	1745
L_0~180(85)av	1123
L_90~270(65)av	2037
L_90~270(75)av	1756
L_90~270(85)av	1178
L_45(65)av	2040
L_45(75)av	1758
L_45(85)av	1192

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

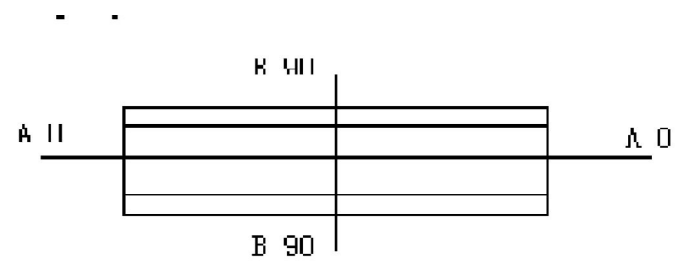
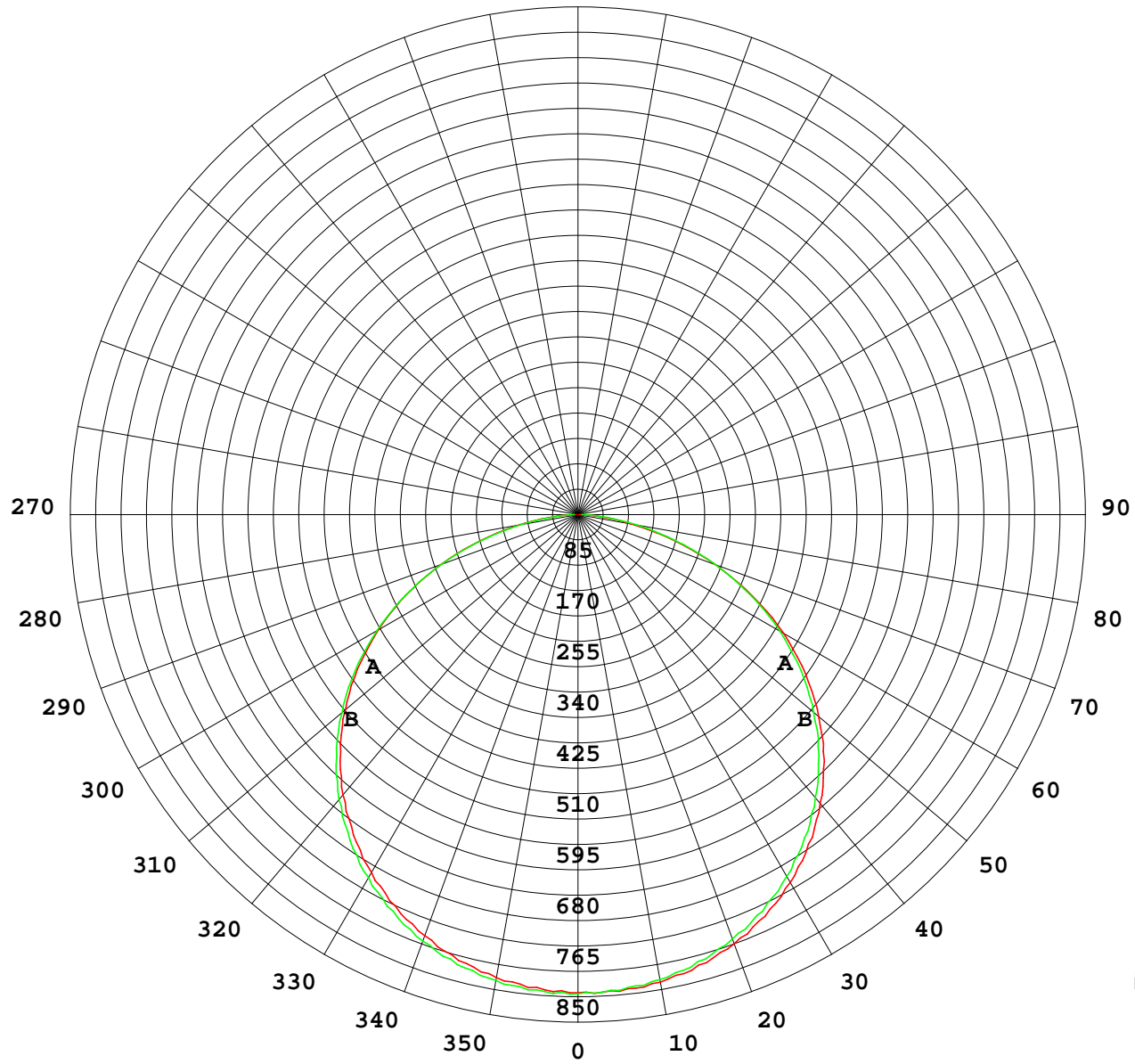
Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 28DEG
Operators:
Test Date: 2024-03-16

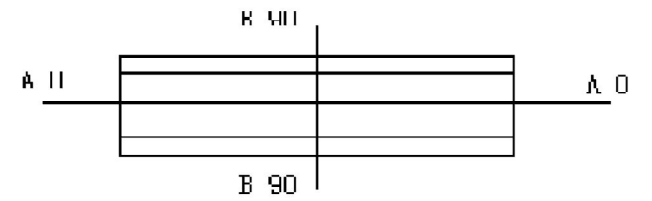
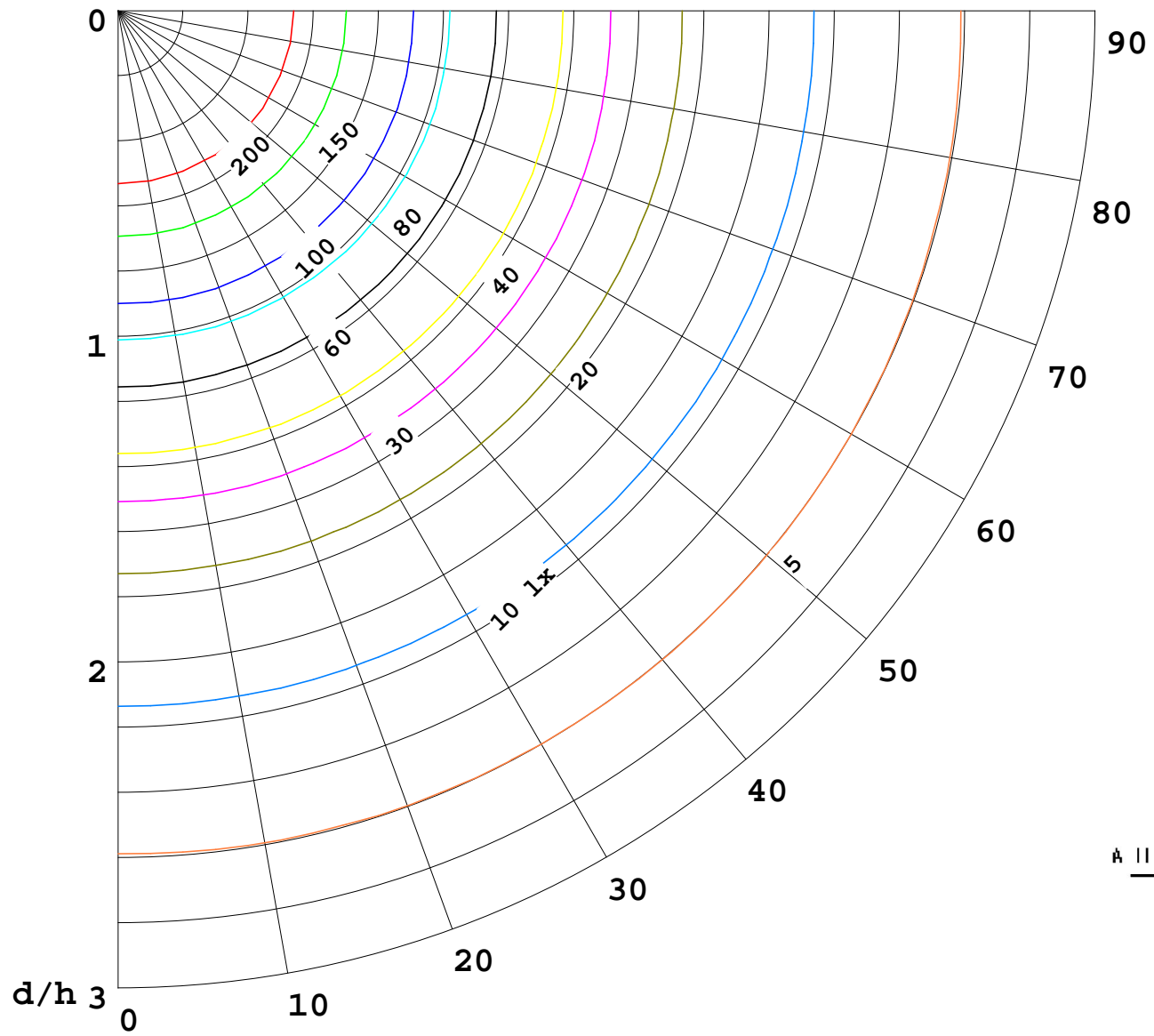
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.401
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks:

I (cd)



1000 lm

$K = 1$



F = 1000 lm
K = 0.7
Hcc = 0.8 m
Hfc = 0.0 m
Eave = 100 lx

	Pcc	Pw	Pfc
—	70	50	30
—	50	30	20

