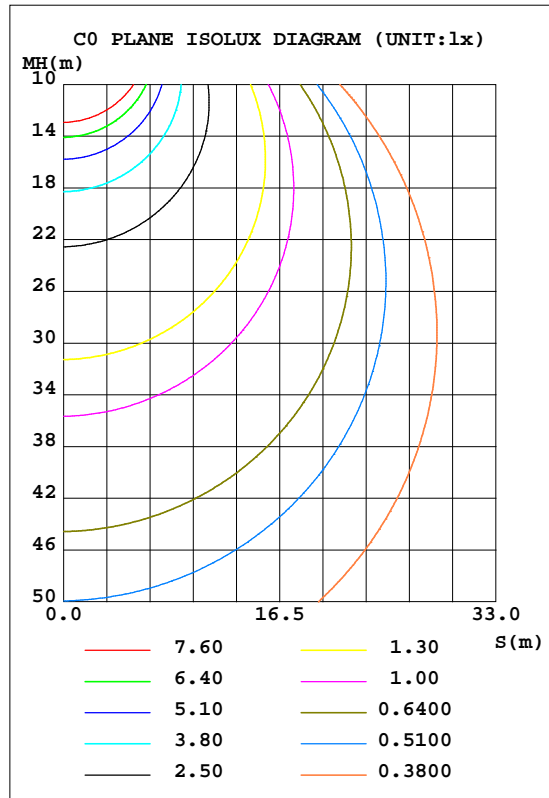
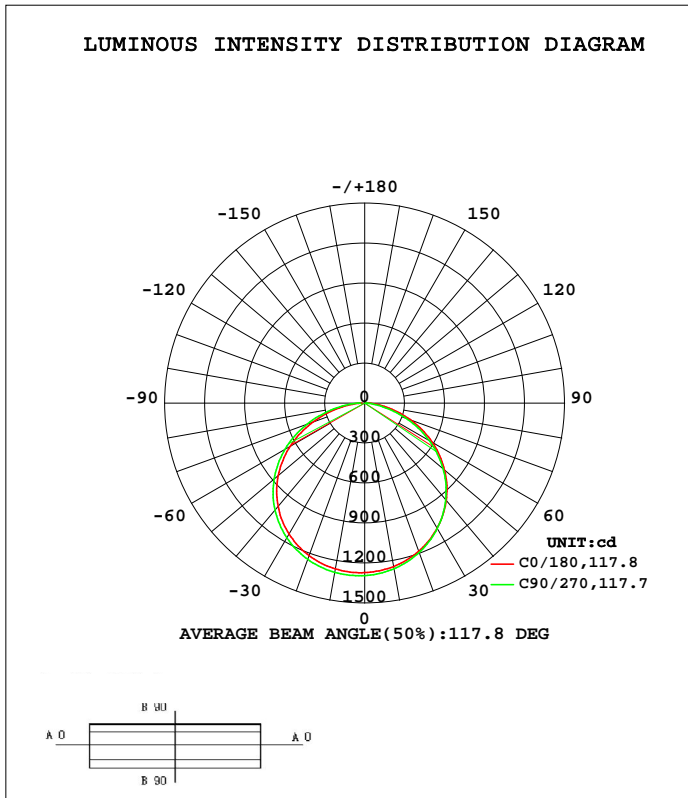


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.34V I:0.3266A P:28.000W PF:0.4310 Freq:50.00Hz Lamp Flux:3908.62x1 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: 139.59 lm/W			
MODEL:2835304-ML-NW-28W-10mm		I _{max} (cd)	1301	S/MH(C0/180)	1.32
NOMINAL POWER(W)	28	LOR(%)	100.0	S/MH(C90/270)	1.34
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	3908.6	η UP, DN(C0-180)	0.0,47.0
NOMINAL FLUX(lm)	3908.62	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,53.0
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	1246	1251	1263	1278	1264	1280	1290	1288	0- 10	122.1	122.1	3.12,3.12
20	1184	1183	1194	1217	1219	1241	1248	1238	10- 20	352.3	474.4	12.1,12.1
30	1086	1079	1089	1117	1135	1162	1168	1151	20- 30	541.4	1016	26,26
40	953.0	940.2	946.7	978.8	1012	1042	1048	1024	30- 40	665.1	1681	43,43
50	783.1	766.5	769.0	801.6	847.2	881.6	887.5	860.8	40- 50	704.4	2385	61,61
60	584.1	559.5	557.5	587.6	644.0	681.5	689.2	662.5	50- 60	649.0	3034	77.6,77.6
70	364.3	329.8	322.7	345.9	409.7	445.7	458.4	436.3	60- 70	501.2	3535	90.5,90.5
80	150.2	118.5	104.2	121.2	172.3	202.9	214.6	205.3	70- 80	287.1	3823	97.8,97.8
90	8.164	9.235	6.959	16.09	19.40	32.67	30.95	32.91	80- 90	86.08	3909	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): 2033.9 lm

%lum = 52.0%
 %lamp = 52.0%

Conical surface Flux(120deg): 3034.2 lm

%lum = 77.6%
 %lamp = 77.6%

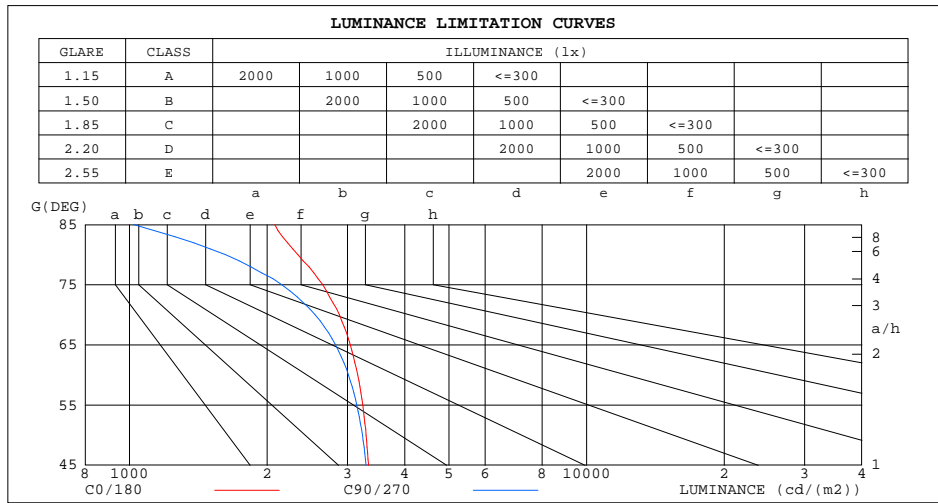
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

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:230.34V I:0.3266A P:28.000W PF:0.4310 Freq:50.00Hz Lamp Flux:3908.62x1 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	2081	1022
80	2337	1622
75	2648	2156
70	2879	2550
65	3041	2824
60	3157	3014
55	3239	3144
50	3293	3233
45	3336	3296

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

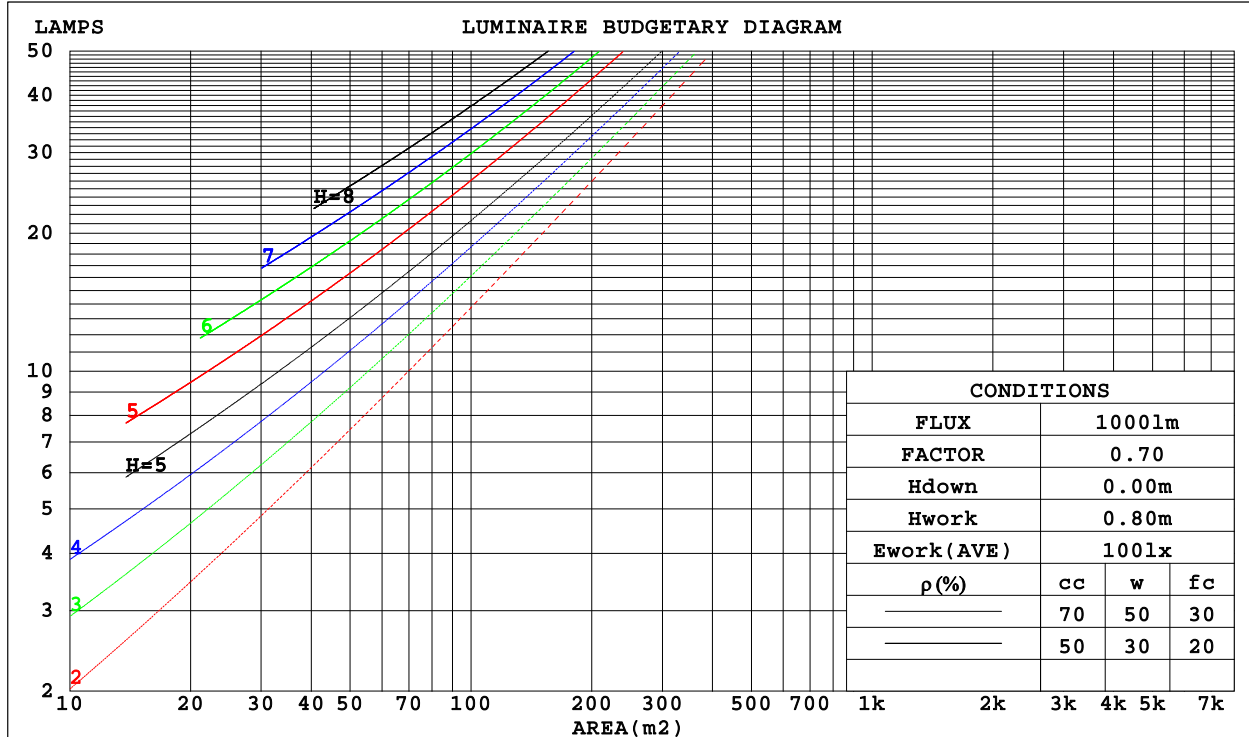
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.34V I:0.3266A P:28.000W PF:0.4310 Freq:50.00Hz Lamp Flux:3908.62x1 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	1.03	.99	.95	1.01	.97	.94	.97	.94	.91	.93	.90	.88	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.82	.76	.84	.79	.74	.81	.77	.73	.78	.74	.71	.69
3.0	.79	.70	.64	.77	.69	.63	.74	.67	.62	.71	.66	.61	.69	.64	.60	.58
4.0	.69	.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	.39	.51	.44	.39	.50	.43	.39	.37
7.0	.50	.41	.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	.33	.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:230.34V I:0.3266A P:28.000W PF:0.4310 Freq:50.00Hz Lamp Flux:3908.62x1 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	.317	.180	.057	.310	.177	.056	.297	.170	.054	.285	.164	.053	.273	.158	.051	
2.0	.297	.163	.050	.291	.160	.049	.279	.155	.048	.269	.151	.047	.258	.146	.046	
3.0	.275	.146	.044	.269	.144	.043	.259	.140	.043	.249	.136	.042	.240	.133	.041	
4.0	.253	.131	.039	.248	.130	.038	.239	.127	.038	.230	.124	.037	.222	.121	.037	
5.0	.233	.119	.034	.229	.118	.034	.221	.115	.034	.213	.113	.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	.185	.091	.026	.179	.089	.025	.173	.088	.025	.168	.086	.025	
9.0	.176	.085	.024	.173	.084	.024	.168	.083	.024	.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	.020	.017	.015	
2.0	.173	.132	.097	.148	.114	.084	.102	.079	.059	.059	.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	.052	.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	.040	.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:230.34V I:0.3266A P:28.000W PF:0.4310 Freq:50.00Hz Lamp Flux:3908.62x1 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	16.7	18.3	17.0	18.5	18.7	16.6	18.1	16.9	18.3	18.6
3H	18.3	19.7	18.6	19.9	20.2	18.0	19.4	18.3	19.6	19.9
4H	18.8	20.2	19.2	20.5	20.7	18.4	19.8	18.7	20.0	20.3
6H	19.3	20.5	19.6	20.8	21.1	18.7	19.9	19.0	20.2	20.5
8H	19.4	20.6	19.7	20.9	21.2	18.7	19.9	19.1	20.2	20.5
12H	19.5	20.7	19.8	21.0	21.3	18.7	19.9	19.1	20.2	20.5
4H 2H	17.3	18.7	17.6	18.9	19.2	17.2	18.5	17.5	18.8	19.1
3H	19.0	20.2	19.3	20.5	20.8	18.7	19.9	19.1	20.2	20.5
4H	19.7	20.8	20.1	21.1	21.4	19.3	20.4	19.7	20.7	21.0
6H	20.2	21.2	20.6	21.5	21.9	19.6	20.6	20.0	20.9	21.3
8H	20.4	21.3	20.8	21.6	22.0	19.7	20.6	20.1	21.0	21.4
12H	20.5	21.3	20.9	21.7	22.1	19.7	20.6	20.2	20.9	21.3
8H 4H	19.9	20.8	20.3	21.1	21.5	19.5	20.4	19.9	20.8	21.2
6H	20.5	21.3	20.9	21.7	22.1	20.0	20.7	20.4	21.1	21.5
8H	20.7	21.4	21.2	21.8	22.3	20.1	20.8	20.6	21.2	21.6
12H	20.9	21.5	21.4	22.0	22.4	20.2	20.7	20.6	21.2	21.7
12H 4H	19.8	20.7	20.3	21.1	21.5	19.5	20.3	19.9	20.7	21.1
6H	20.5	21.2	21.0	21.6	22.1	20.0	20.7	20.5	21.1	21.5
8H	20.8	21.4	21.3	21.8	22.3	20.2	20.7	20.6	21.2	21.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 3909 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 4.7)

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:230.34V I:0.3266A P:28.000W PF:0.4310 Freq:50.00Hz Lamp Flux:3908.62x1 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	69	63	56
1.50	87	77	70	86	76	70	83	75	69	61
2.00	94	86	79	92	84	78	89	82	77	69
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	100	93	88	96	90	86	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	98	101	98	95	85
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

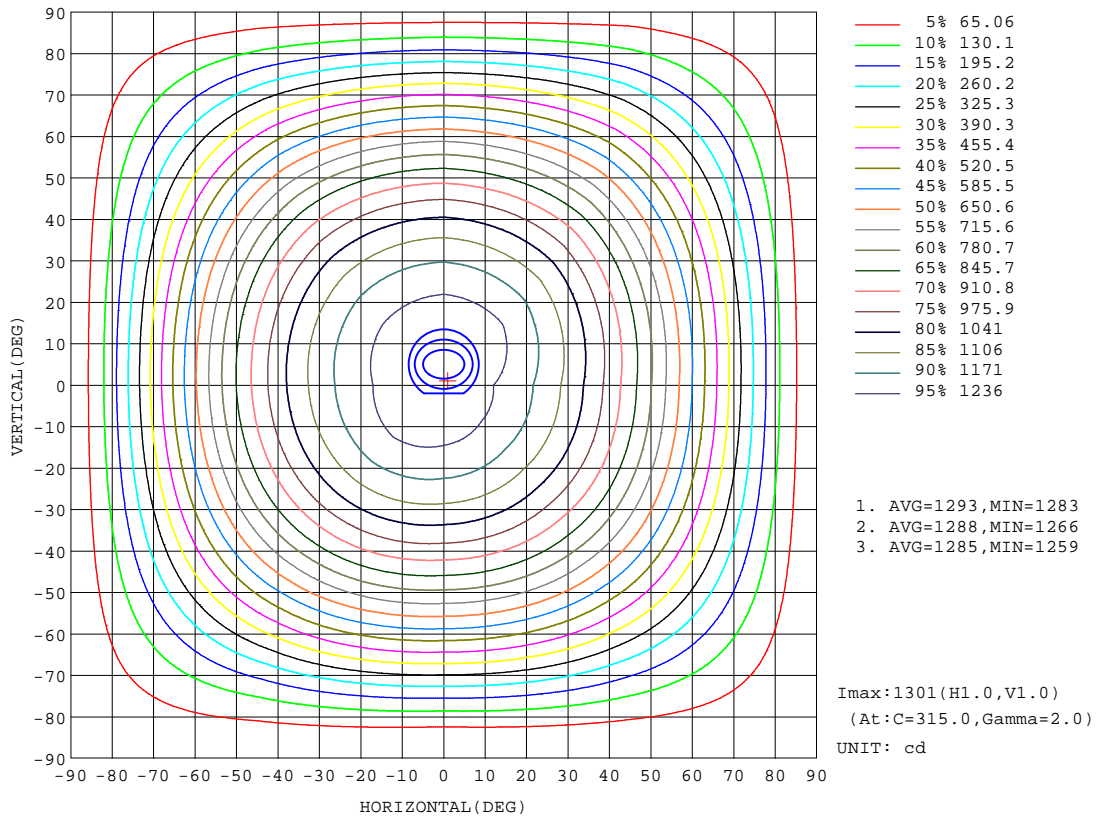
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

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:230.34V I:0.3266A P:28.000W PF:0.4310 Freq:50.00Hz Lamp Flux:3908.62x1 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

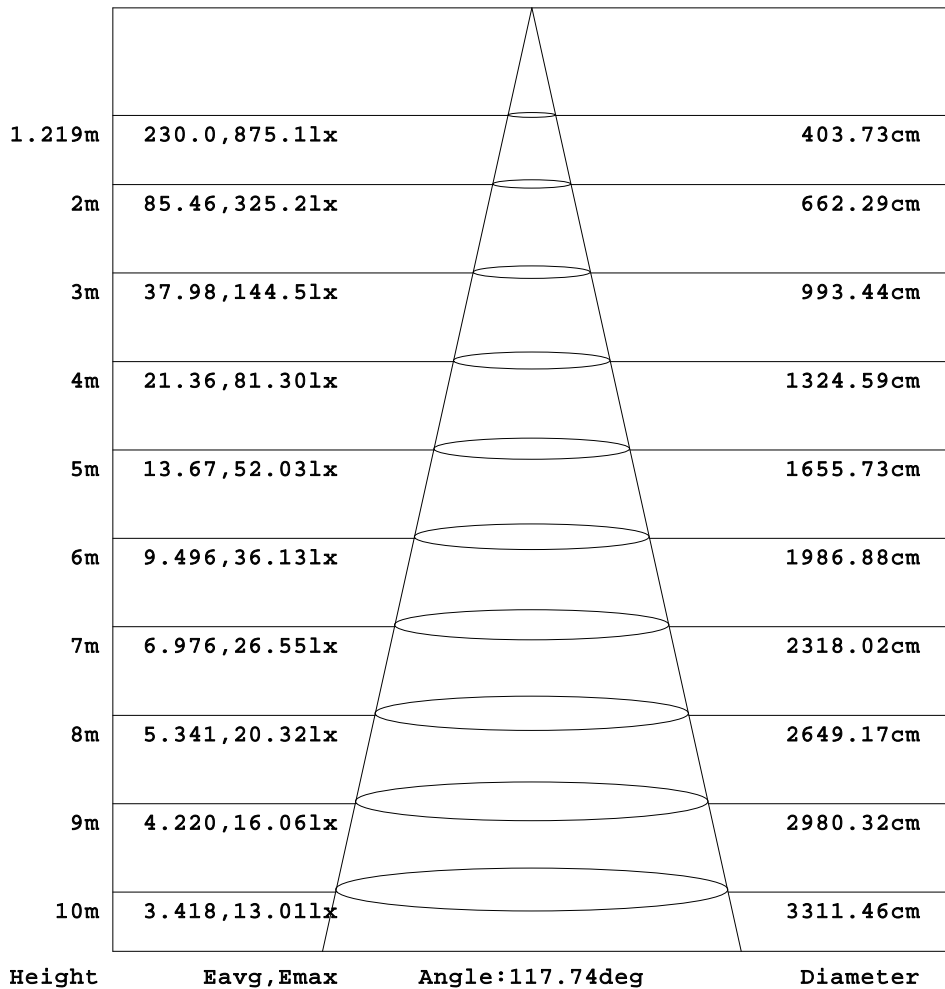
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:230.34V I:0.3266A P:28.000W PF:0.4310 Freq:50.00Hz Lamp Flux:3908.62x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*10MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:

Flux out:2975 lm



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

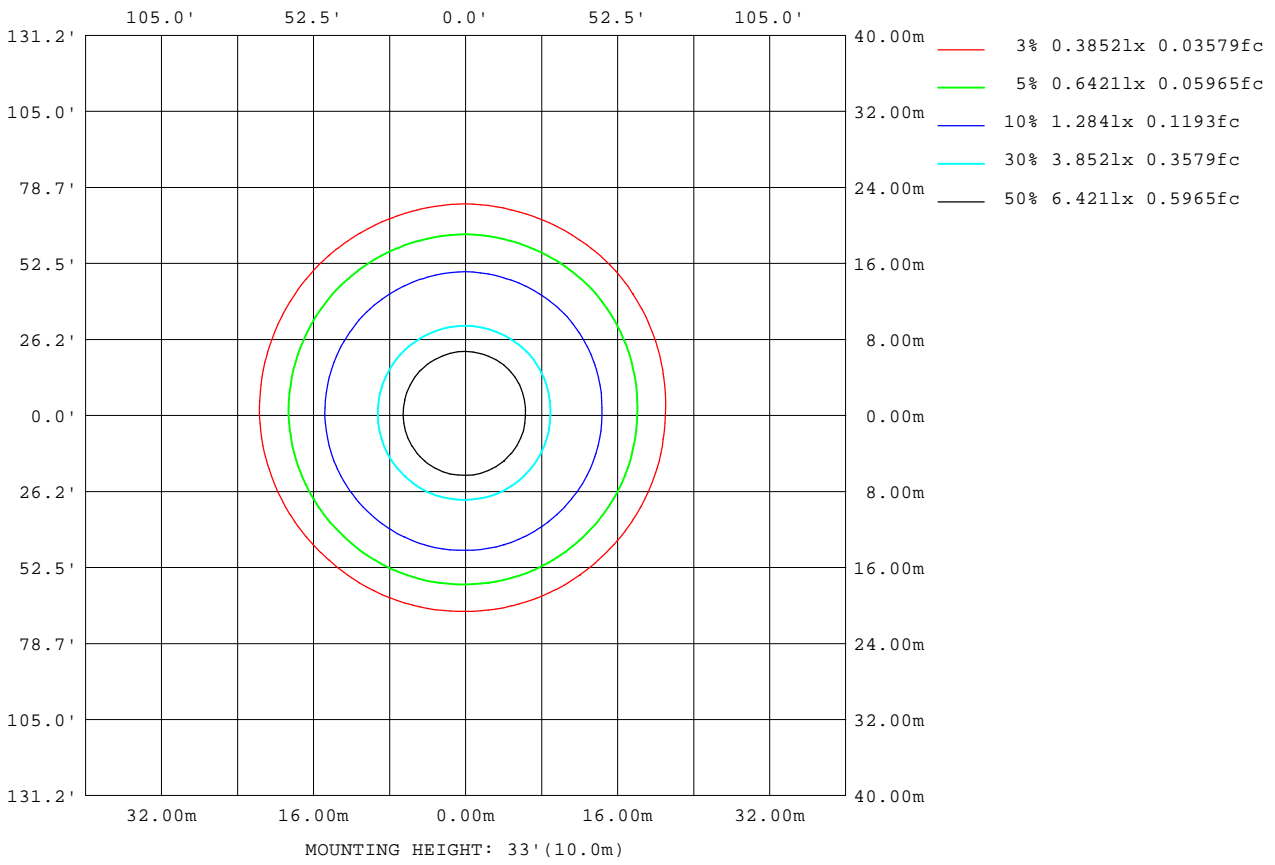
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:28DEG
 Operators:
 Test Date:2024-03-16

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:230.34V I:0.3266A P:28.000W PF:0.4310 Freq:50.00Hz Lamp Flux:3908.62x1 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:230.34V I:0.3266A P:28.000W PF:0.4310 Freq:50.00Hz Lamp Flux:3908.62x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*10MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:

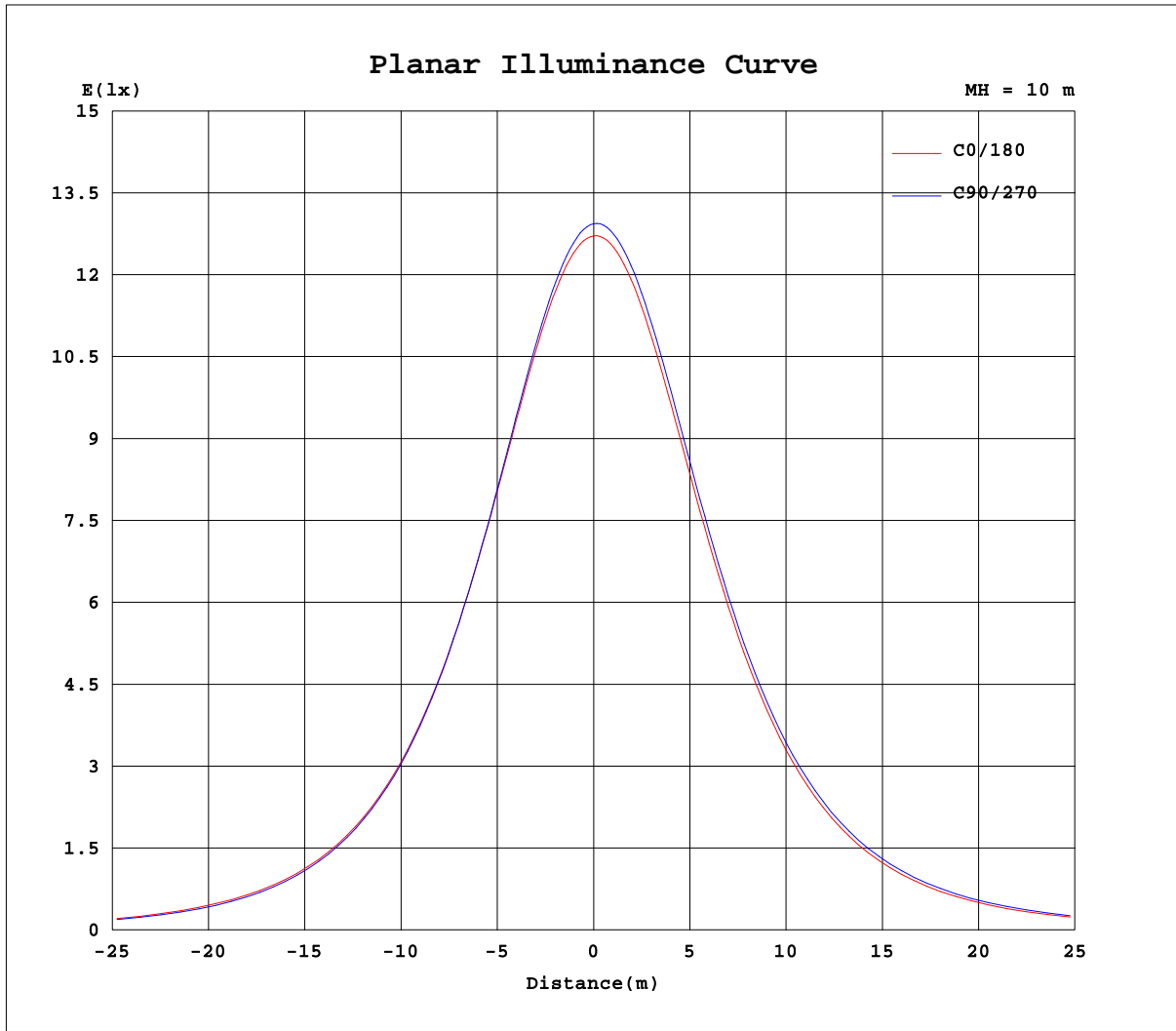
AvgL	cd/m2
L_0~180(65)av	3214
L_0~180(75)av	2822
L_0~180(85)av	2235
L_90~270(65)av	3258
L_90~270(75)av	2824
L_90~270(85)av	2202
L_45(65)av	3253
L_45(75)av	2837
L_45(85)av	2320

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:

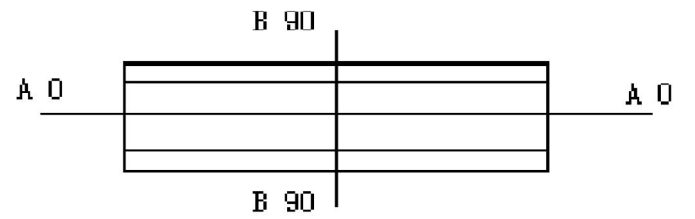
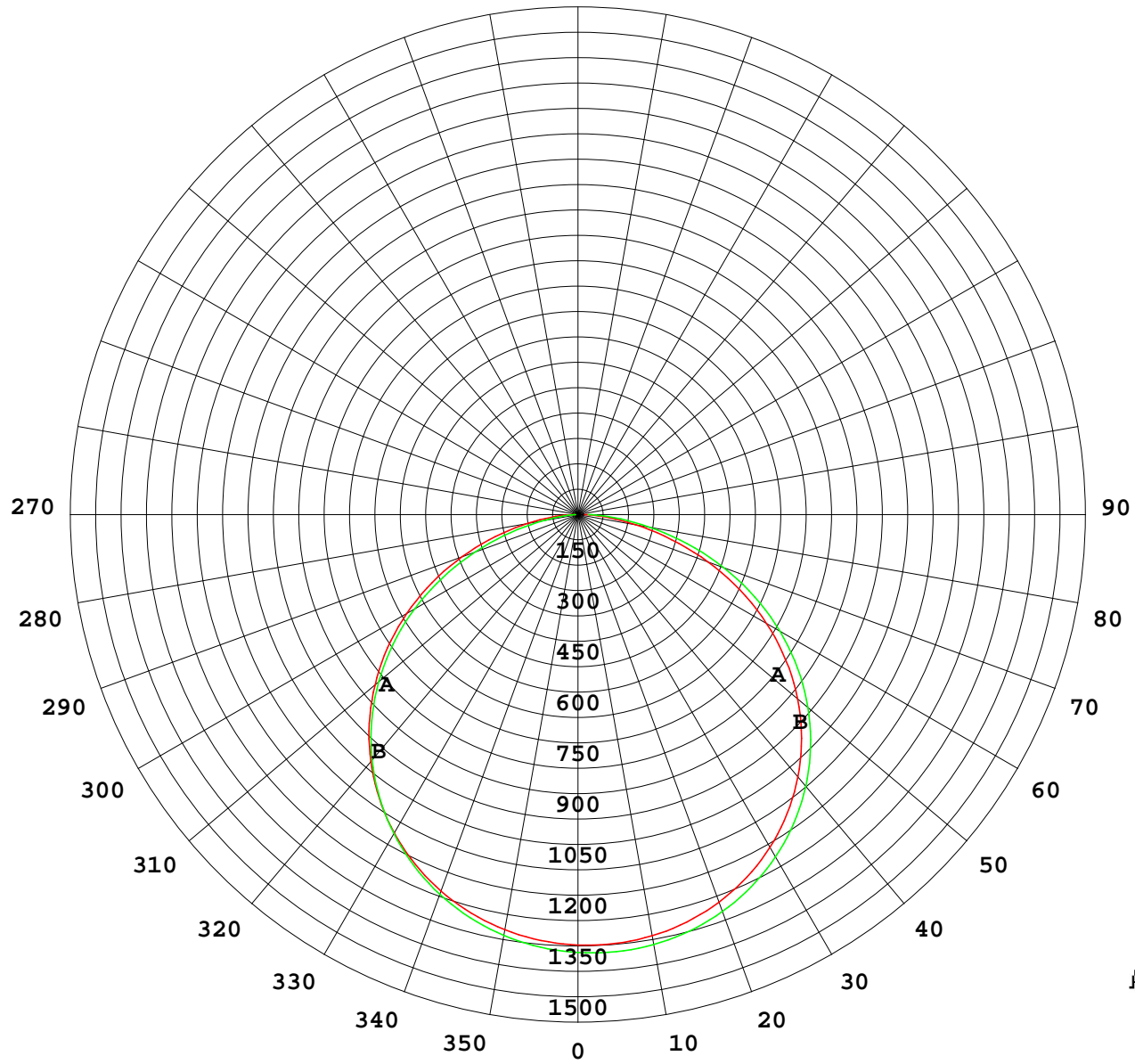
Planar Illuminance Curve



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

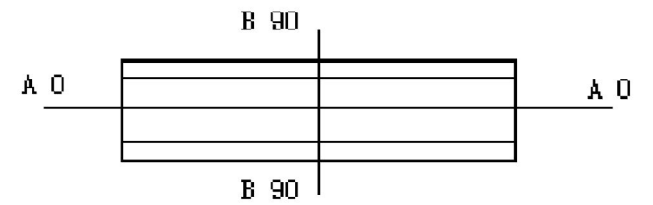
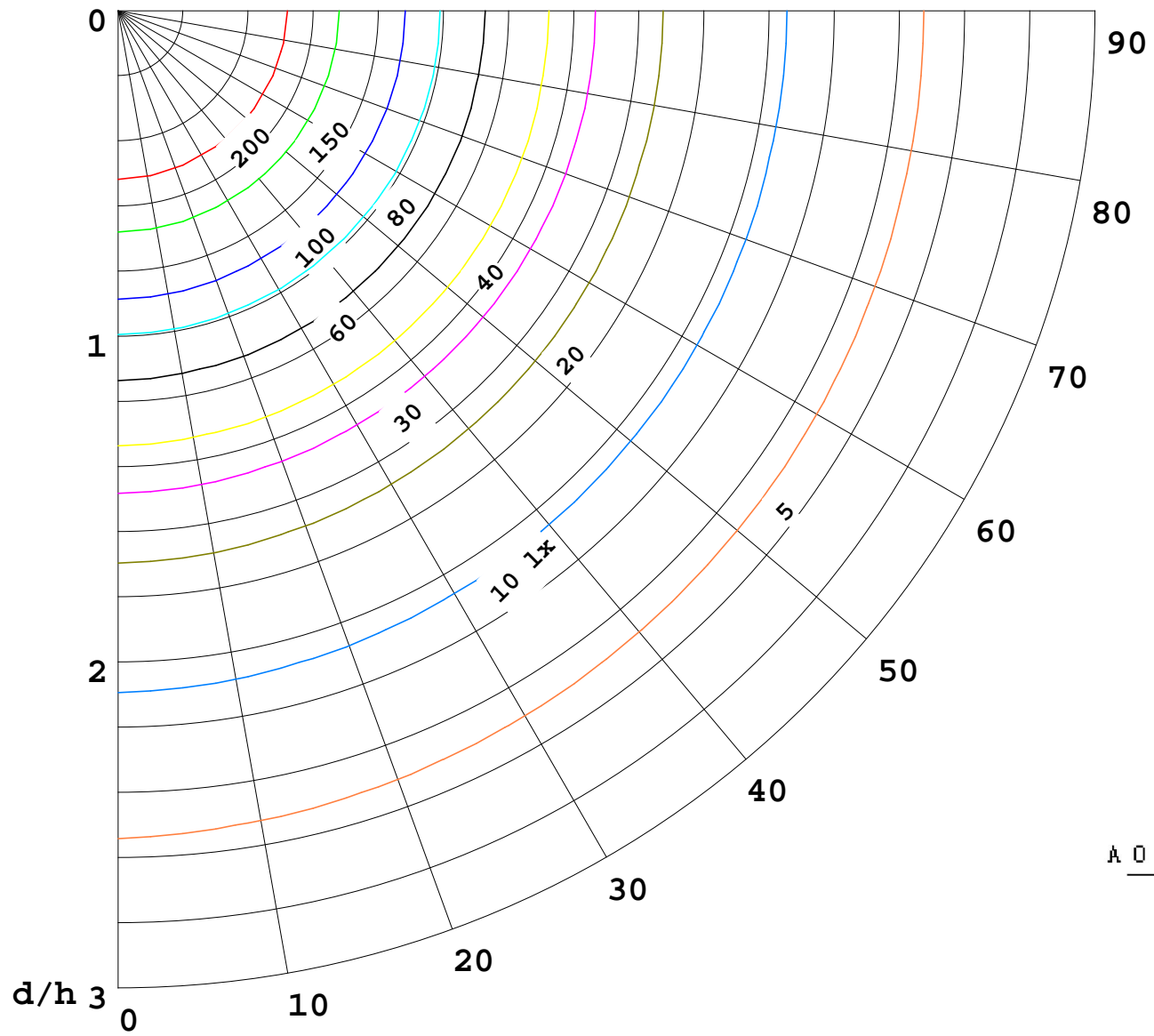
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.401
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks:

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

