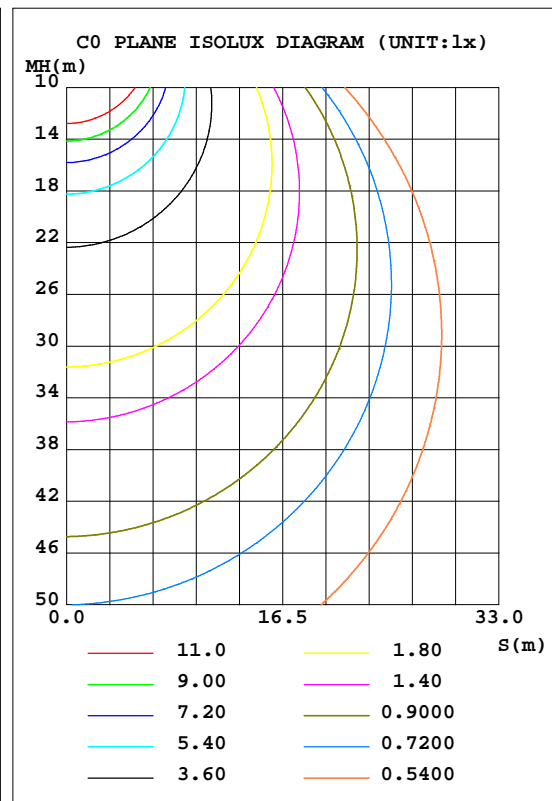
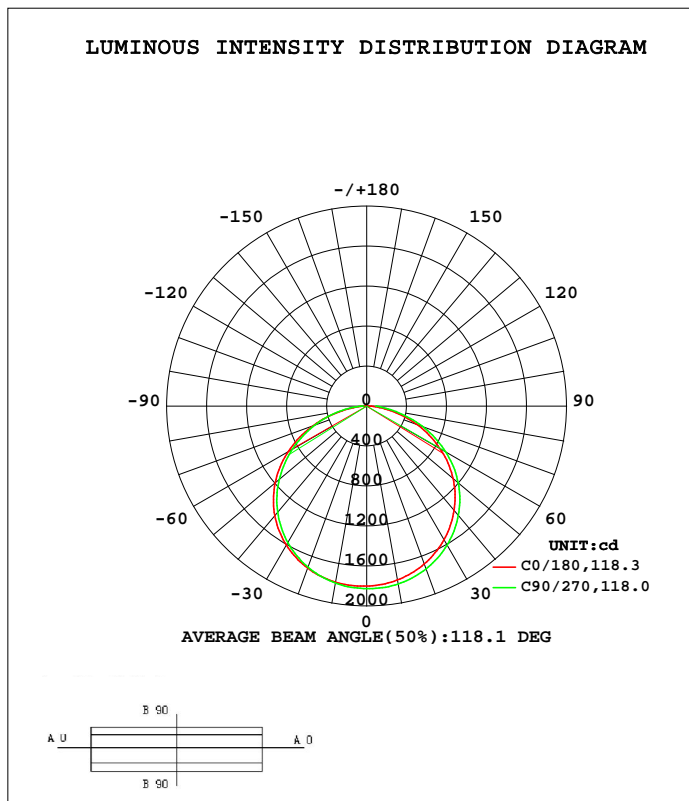


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.41V I:0.4819A P:48.023W PF:0.4325 Freq:50.00Hz Lamp Flux:5560.22x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*18MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 115.78 lm/W			
MODEL:2835320-ML-NW-40W-18mm		I <sub>max</sub> (cd)	1829	S/MH(C0/180)	1.32
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	5560.2	η UP, DN(C0-180)	0.0,50.4
NOMINAL FLUX(lm)	5560.22	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,49.6
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:2024-03-15

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:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	1767	1785	1807	1814	1790	1792	1798	1795	0- 10	172.3	172.3	3.1,3.1
20	1681	1708	1734	1744	1726	1719	1716	1709	10- 20	497.6	670.0	12,12
30	1547	1580	1608	1620	1607	1591	1579	1570	20- 30	765.0	1435	25.8,25.8
40	1362	1402	1428	1439	1431	1406	1387	1380	30- 40	940.1	2375	42.7,42.7
50	1129	1175	1195	1201	1196	1165	1143	1137	40- 50	996.6	3372	60.6,60.6
60	846.0	899.5	912.2	908.2	904.0	871.4	854.5	850.6	50- 60	919.7	4291	77.2,77.2
70	529.9	585.3	589.4	571.9	564.9	544.1	547.8	540.1	60- 70	714.4	5006	90,90
80	213.9	267.8	271.7	239.9	220.3	229.2	246.0	242.2	70- 80	418.3	5424	97.6,97.6
90	5.829	69.39	92.47	60.20	3.628	20.15	29.40	35.57	80- 90	136.1	5560	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): 2874.5 lm

%lum = 51.7%  
%lamp = 51.7%

Conical surface Flux(120deg): 4291.5 lm

%lum = 77.2%  
%lamp = 77.2%

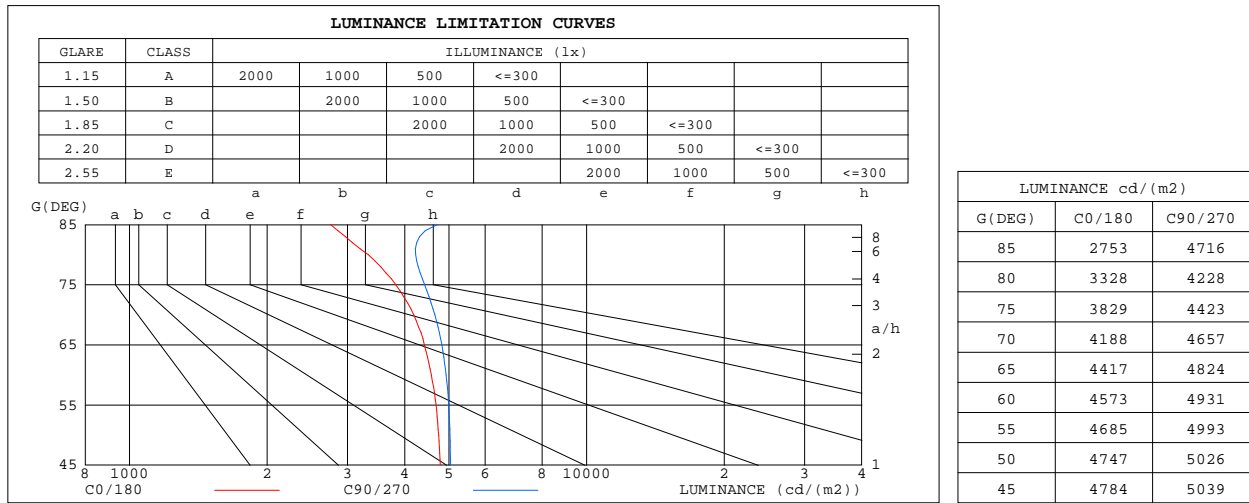
C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:  
Test Date:2024-03-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:230.41V I:0.4819A P:48.023W PF:0.4325 Freq:50.00Hz Lamp Flux:5560.22x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*18MM 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:2024-03-15

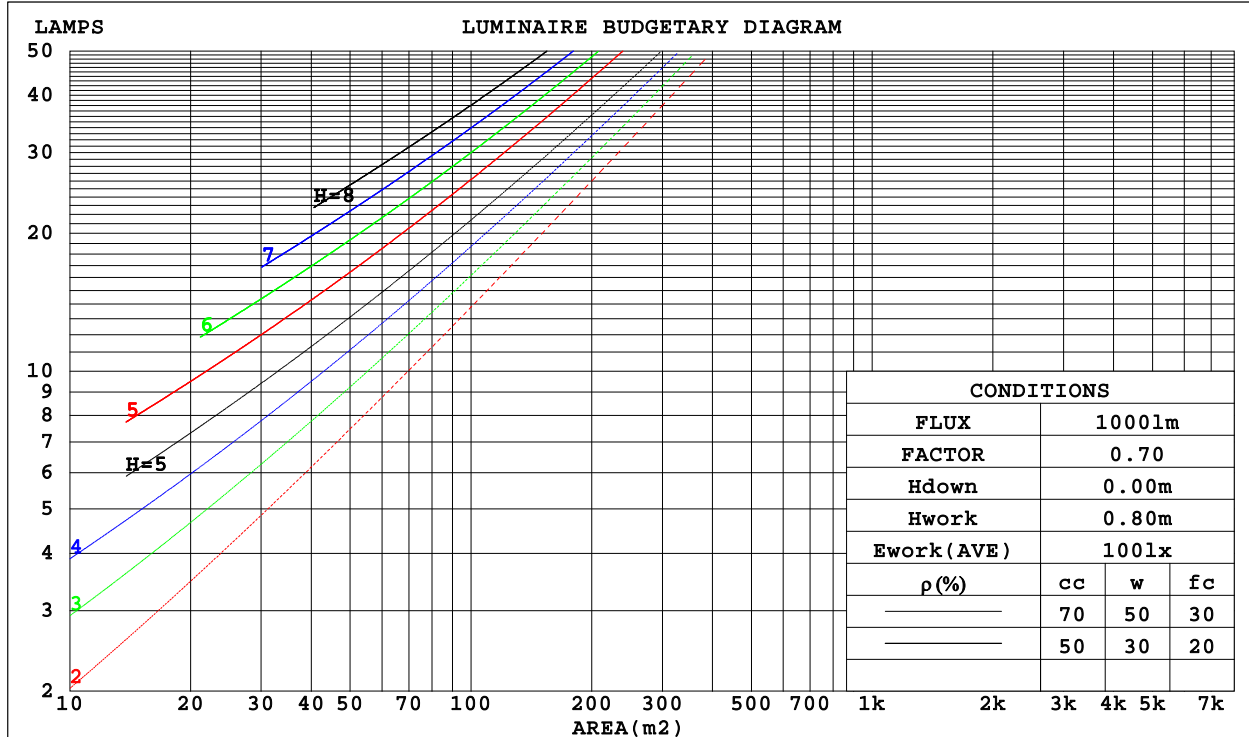
γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.401  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.41V I:0.4819A P:48.023W PF:0.4325 Freq:50.00Hz Lamp Flux:5560.22x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*18MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	.93	.97	.93	.90	.93	.90	.88	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.81	.76	.84	.79	.74	.81	.76	.72	.78	.74	.71	.68
3.0	.78	.70	.63	.77	.69	.63	.74	.67	.62	.71	.65	.61	.68	.64	.59	.57
4.0	.69	.60	.53	.68	.59	.53	.65	.58	.52	.63	.57	.52	.61	.55	.51	.49
5.0	.62	.53	.46	.61	.52	.45	.58	.51	.45	.56	.50	.44	.55	.49	.44	.42
6.0	.55	.46	.40	.54	.46	.40	.53	.45	.39	.51	.44	.39	.49	.43	.38	.36
7.0	.50	.41	.35	.49	.41	.35	.48	.40	.35	.46	.39	.34	.45	.39	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.44	.36	.31	.42	.36	.31	.41	.35	.30	.28
9.0	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.26
10.0	.39	.31	.25	.38	.30	.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:2024-03-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:230.41V I:0.4819A P:48.023W PF:0.4325 Freq:50.00Hz Lamp Flux:5560.22x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*18MM 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	.321	.182	.058	.314	.179	.057	.300	.172	.055	.288	.166	.053	.277	.160	.052	
2.0	.299	.164	.050	.293	.161	.050	.281	.156	.049	.271	.152	.048	.261	.147	.046	
3.0	.276	.147	.044	.270	.145	.044	.260	.141	.043	.250	.137	.042	.241	.134	.041	
4.0	.254	.132	.039	.249	.130	.039	.240	.127	.038	.231	.124	.037	.223	.121	.037	
5.0	.234	.119	.035	.230	.118	.034	.222	.115	.034	.214	.113	.034	.207	.111	.033	
6.0	.217	.109	.031	.213	.108	.031	.206	.105	.031	.199	.103	.030	.192	.101	.030	
7.0	.202	.100	.028	.198	.099	.028	.192	.097	.028	.185	.095	.028	.180	.093	.027	
8.0	.188	.092	.026	.185	.091	.026	.179	.089	.026	.174	.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	.154	.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	.133	.155	.134	.115	.106	.092	.079	.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	.166	.114	.073	.142	.099	.064	.097	.069	.045	.056	.040	.026	.018	.013	.009	
4.0	.158	.101	.058	.136	.087	.050	.093	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.151	.091	.047	.129	.079	.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	.076	.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	.107	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.118	.060	.022	.102	.053	.019	.071	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28DEG  
 Operators:  
 Test Date:2024-03-15

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:230.41V I:0.4819A P:48.023W PF:0.4325 Freq:50.00Hz Lamp Flux:5560.22x1 lm										
NAME: LED灯带				TYPE:2835			WEIGHT:			
SPEC.:4000K				DIM.: 500*18MM 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	18.3	19.9	18.6	20.1	20.3	18.6	20.1	18.9	20.3	20.6
3H	19.9	21.3	20.2	21.5	21.8	20.2	21.7	20.5	21.9	22.2
4H	20.5	21.8	20.8	22.1	22.4	20.9	22.3	21.2	22.5	22.8
6H	20.9	22.2	21.2	22.4	22.7	21.4	22.7	21.8	23.0	23.3
8H	21.0	22.2	21.3	22.5	22.8	21.6	22.9	22.0	23.2	23.5
12H	21.1	22.3	21.4	22.6	22.9	21.8	23.0	22.2	23.3	23.6
4H 2H	19.0	20.4	19.3	20.6	20.9	19.2	20.6	19.5	20.8	21.1
3H	20.8	22.0	21.1	22.3	22.6	21.1	22.3	21.4	22.6	22.9
4H	21.5	22.6	21.9	22.9	23.3	21.9	23.0	22.3	23.3	23.6
6H	22.0	23.0	22.4	23.4	23.7	22.5	23.5	22.9	23.9	24.2
8H	22.2	23.1	22.6	23.5	23.9	22.8	23.7	23.2	24.1	24.5
12H	22.3	23.2	22.8	23.5	24.0	23.0	23.9	23.5	24.3	24.7
8H 4H	21.8	22.8	22.3	23.1	23.5	22.2	23.1	22.6	23.5	23.8
6H	22.5	23.3	23.0	23.7	24.1	23.0	23.8	23.4	24.2	24.6
8H	22.8	23.5	23.3	23.9	24.4	23.4	24.0	23.8	24.5	24.9
12H	23.0	23.6	23.5	24.0	24.5	23.7	24.3	24.2	24.8	25.2
12H 4H	21.9	22.7	22.3	23.1	23.5	22.2	23.0	22.6	23.4	23.8
6H	22.6	23.3	23.1	23.7	24.2	23.1	23.8	23.5	24.2	24.6
8H	23.0	23.5	23.4	24.0	24.5	23.5	24.1	24.0	24.5	25.0
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 / - 0.4					+ 0.1 / - 0.3				

CIE Pub.117, 5560 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 6.0)

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28DEG  
 Operators:  
 Test Date:2024-03-15

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:230.41V I:0.4819A P:48.023W PF:0.4325 Freq:50.00Hz Lamp Flux:5560.22x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*18MM 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	56	45	38	56	44	37	54	44	37	31
0.80	66	55	47	65	54	47	64	53	47	39
1.00	75	64	56	74	63	56	71	64	55	48
1.25	82	71	64	81	71	64	78	69	63	55
1.50	87	77	70	85	76	69	82	74	68	61
2.00	94	85	79	92	84	78	89	82	76	68
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	99	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	97	101	98	94	85
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

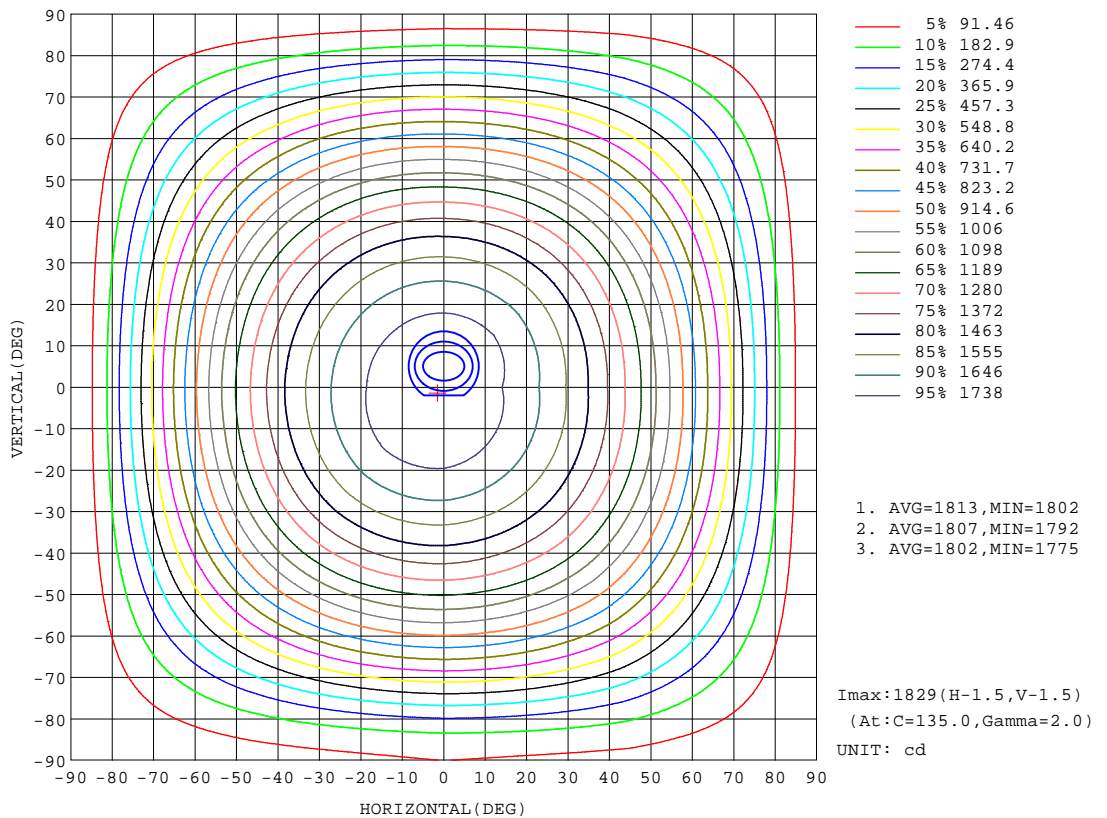
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28DEG  
 Operators:  
 Test Date:2024-03-15

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:230.41V I:0.4819A P:48.023W PF:0.4325 Freq:50.00Hz Lamp Flux:5560.22x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*18MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:



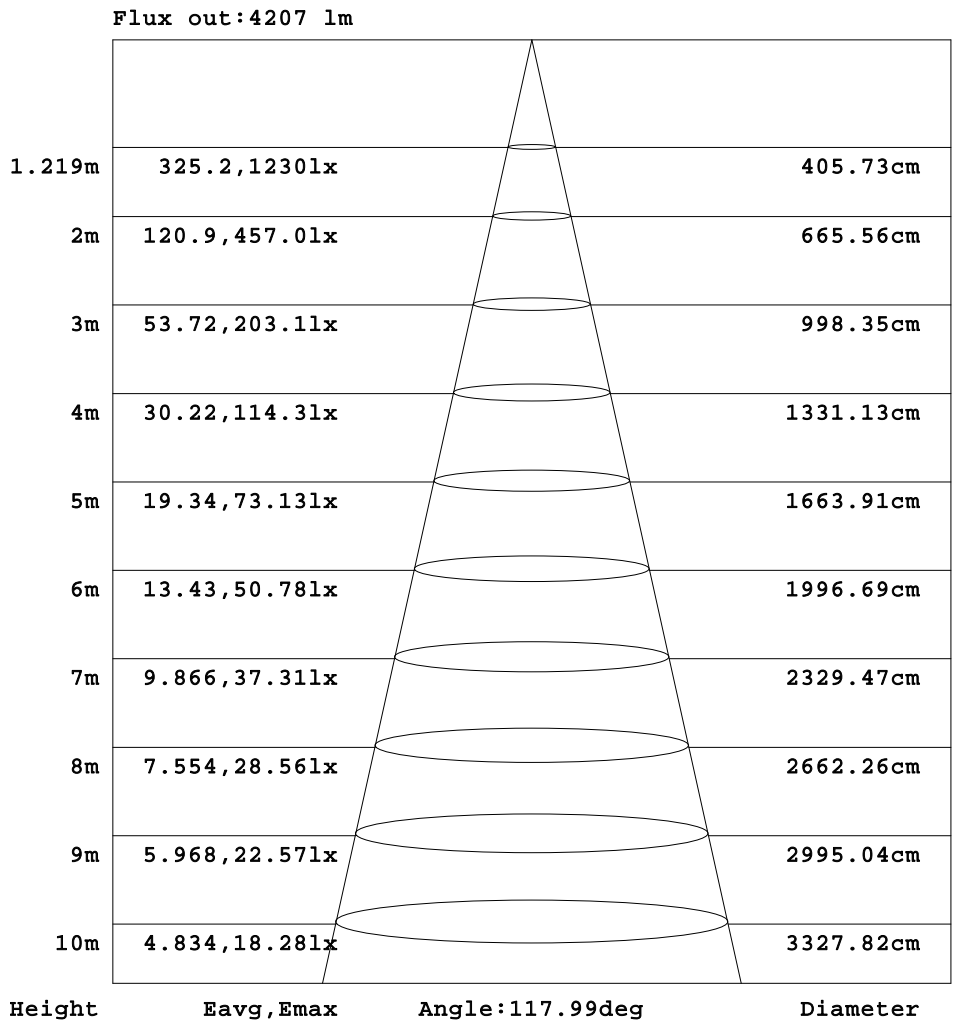
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28DEG  
 Operators:  
 Test Date:2024-03-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:230.41V I:0.4819A P:48.023W PF:0.4325 Freq:50.00Hz Lamp Flux:5560.22x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*18MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:



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

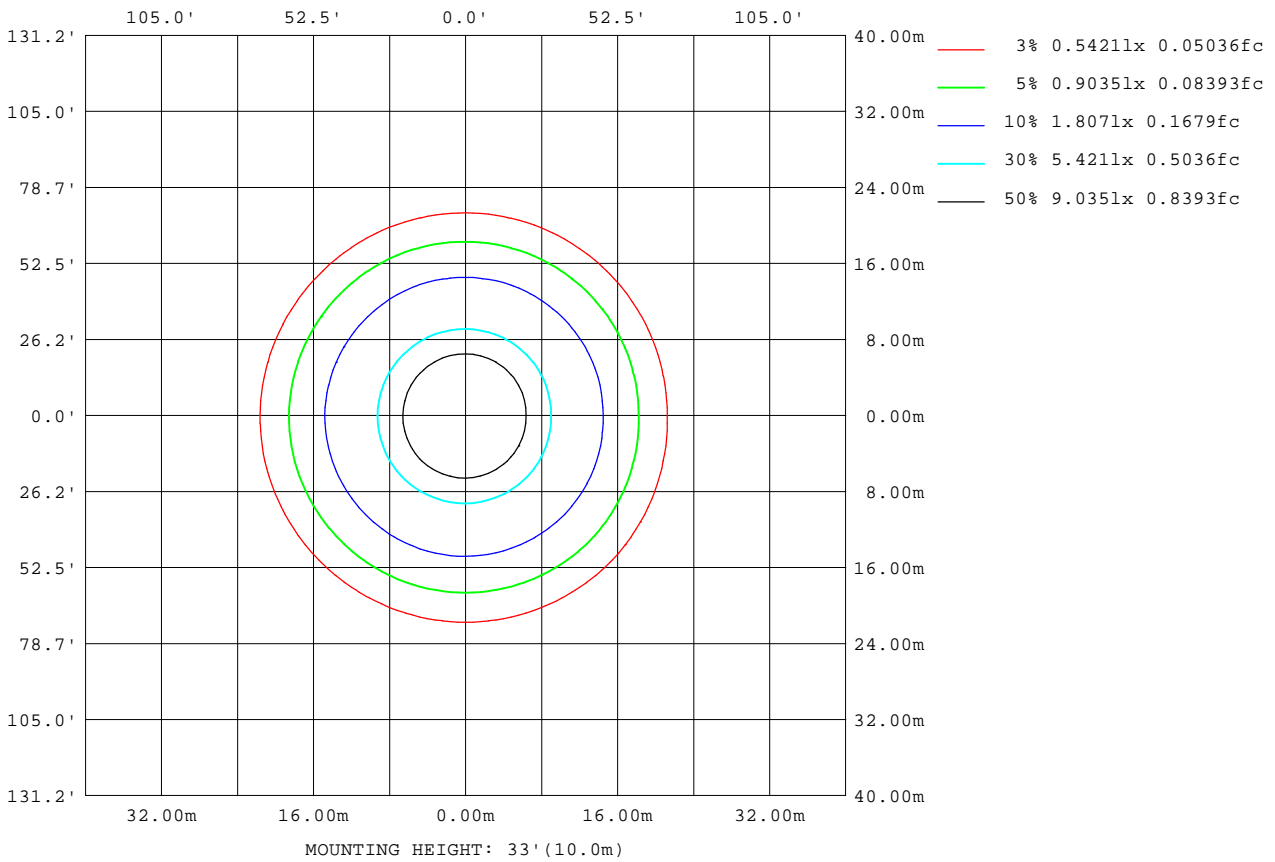
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28DEG  
 Operators:  
 Test Date:2024-03-15

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:230.41V I:0.4819A P:48.023W PF:0.4325 Freq:50.00Hz Lamp Flux:5560.22x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*18MM 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:2024-03-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:230.41V I:0.4819A P:48.023W PF:0.4325 Freq:50.00Hz Lamp Flux:5560.22x1 lm		
NAME: LED灯带	TYPE:2835	WEIGHT:
SPEC.:4000K	DIM.: 500*18MM 1M	SERIAL No.:
MFR.:	SUR.:0.32	Shielding Angle:

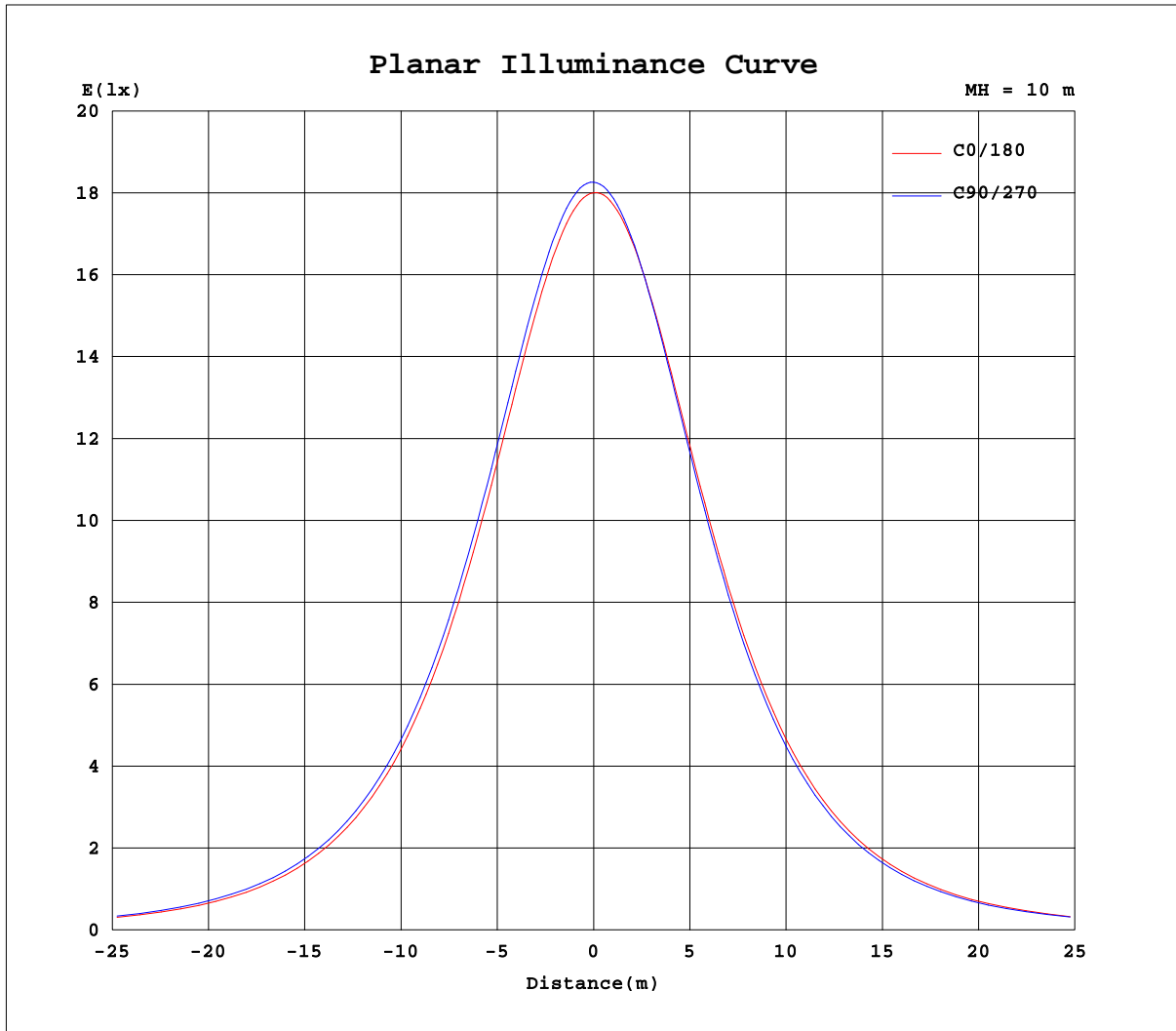
AvgL	cd/m2
L_0~180(65)av	4571
L_0~180(75)av	3940
L_0~180(85)av	2726
L_90~270(65)av	4657
L_90~270(75)av	4266
L_90~270(85)av	4246
L_45(65)av	4630
L_45(75)av	4149
L_45(85)av	3761

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28DEG  
 Operators:  
 Test Date:2024-03-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.401  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks:

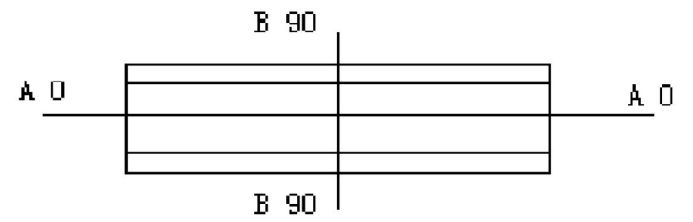
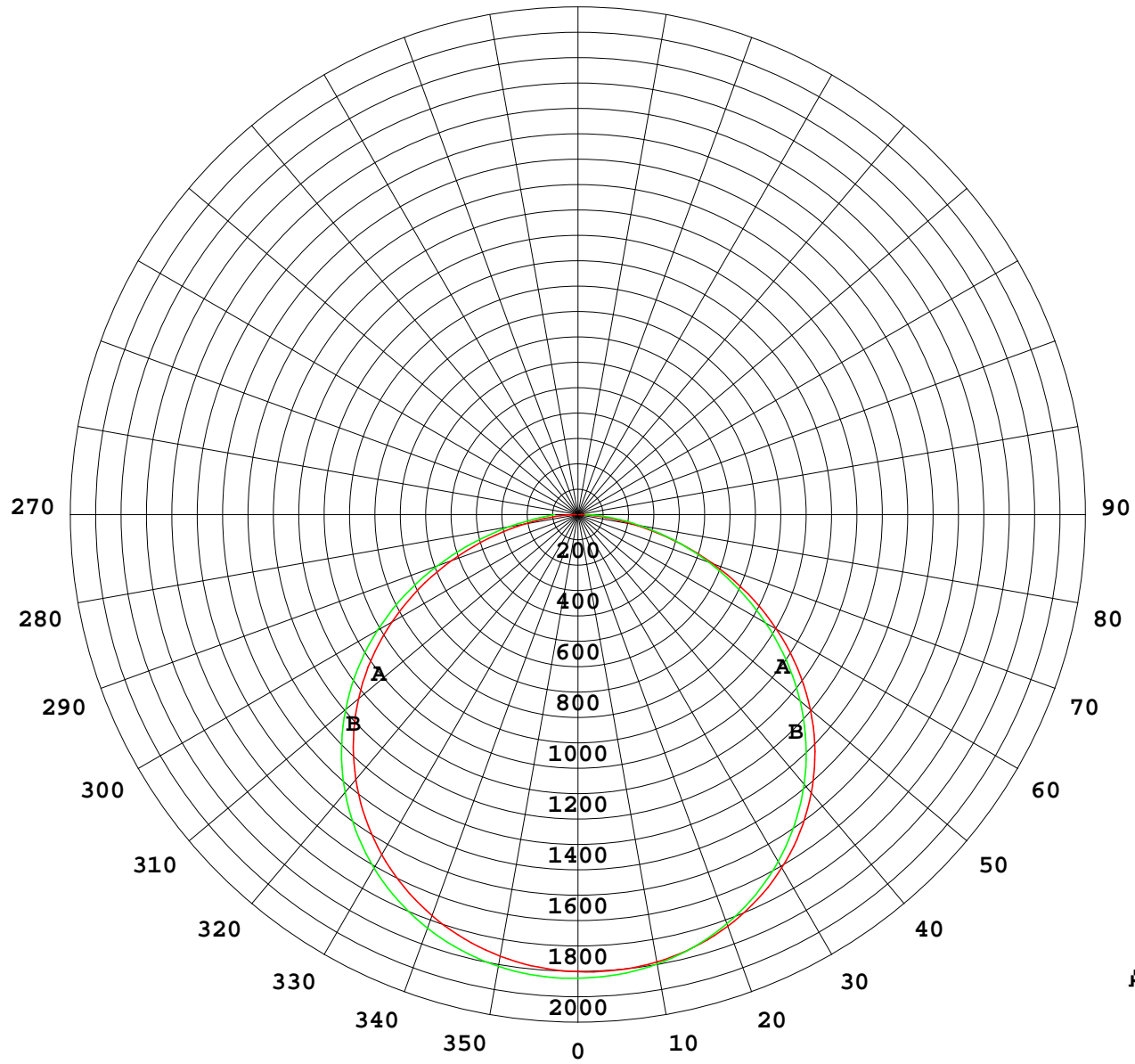
Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 28DEG  
Operators:  
Test Date: 2024-03-15

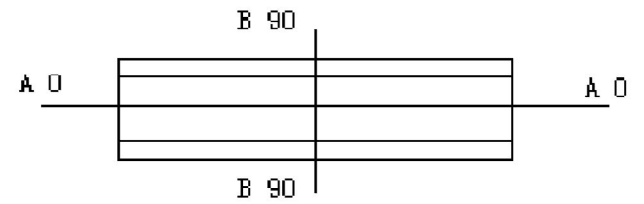
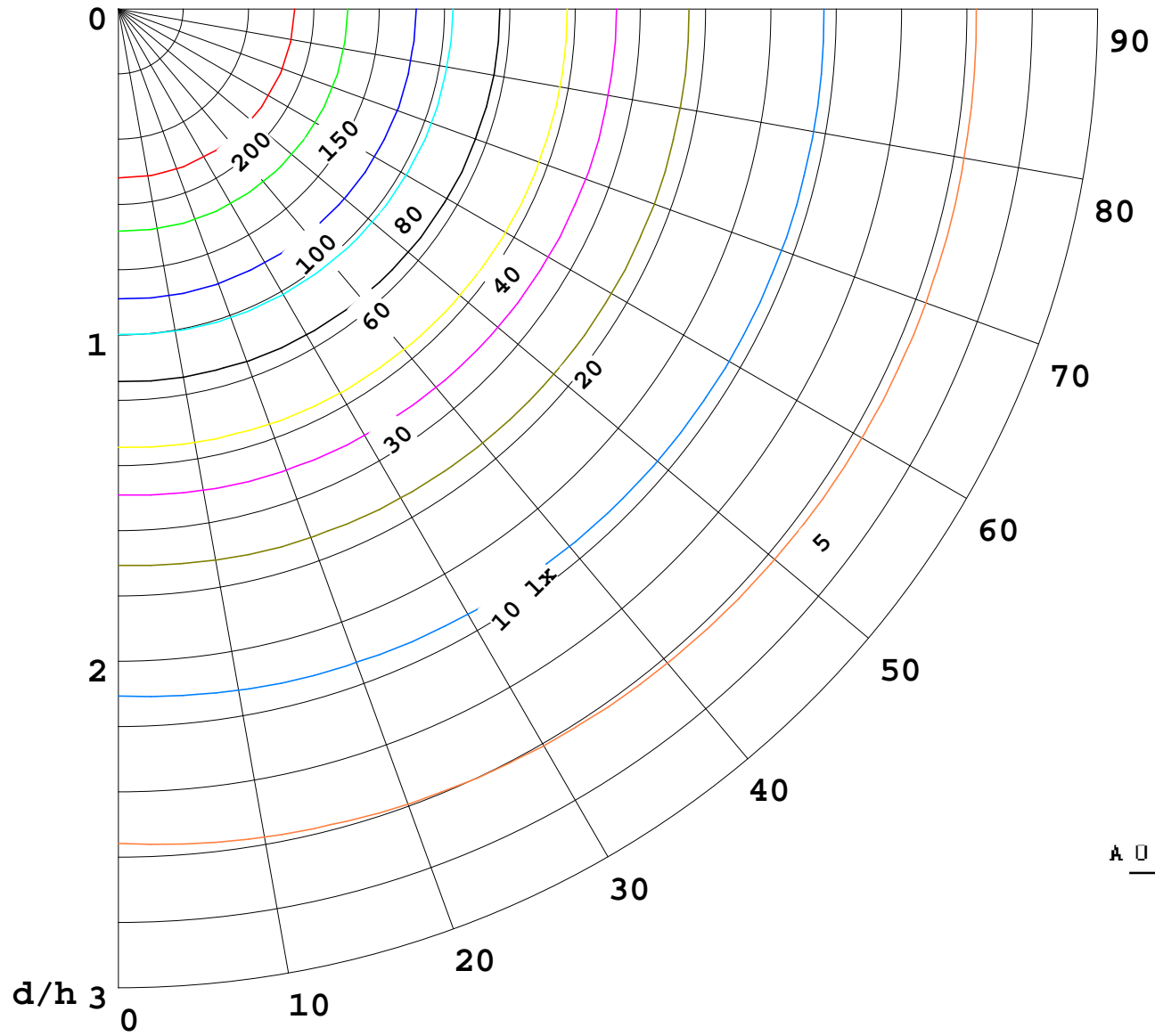
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.401  
Humidity: 65.0%  
Test Distance: 8.000m [K=1.0000]  
Remarks:

I (cd)



1000 lm

$K = 1$



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

	<b>Pcc</b>	<b>Pw</b>	<b>Pfc</b>
—	70	50	30
—	50	30	20

