

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	9.549	9.386	9.056	8.931	9.438	9.157	9.072	9.151	0- 10	0.8840	0.8840	1.96,1.96
20	9.323	9.072	8.483	8.456	9.167	8.659	8.429	8.838	10- 20	2.548	3.432	7.6,7.6
30	9.012	8.504	7.573	7.773	8.794	7.968	7.444	8.300	20- 30	3.921	7.353	16.3,16.3
40	8.529	7.798	6.402	6.936	8.226	7.106	6.223	7.646	30- 40	4.871	12.22	27.1,27.1
50	7.906	6.951	5.024	5.988	7.658	6.166	4.831	6.862	40- 50	5.344	17.57	38.9,38.9
60	7.213	6.019	3.562	5.013	6.975	5.189	3.318	5.953	50- 60	5.332	22.90	50.7,50.7
70	6.494	5.054	2.019	4.081	6.281	4.224	1.765	5.028	60- 70	4.904	27.81	61.5,61.5
80	5.735	4.164	0.6172	3.264	5.538	3.387	0.4532	4.149	70- 80	4.200	32.01	70.8,70.8
90	4.926	3.420	0.0955	2.573	4.743	2.681	0.0452	3.415	80- 90	3.438	35.44	78.4,78.4
100	4.042	2.671	0.1207	1.993	3.894	2.070	0.0502	2.684	90-100	2.800	38.24	84.6,84.6
110	3.328	2.237	0.1609	1.543	3.155	1.611	0.0503	2.279	100-110	2.149	40.39	89.4,89.4
120	2.760	1.882	0.1960	1.299	2.583	1.365	0.0603	1.885	110-120	1.672	42.06	93.1,93.1
130	2.287	1.460	0.2312	1.066	2.125	1.128	0.1320	1.546	120-130	1.261	43.32	95.9,95.9
140	1.704	0.9798	0.2574	0.8417	1.597	0.8971	0.1658	1.106	130-140	0.8559	44.18	97.8,97.8
150	1.322	0.7713	0.3137	0.6081	1.206	0.6660	0.2311	0.8360	140-150	0.5250	44.71	98.9,98.9
160	0.9701	0.6289	0.3668	0.3819	0.9039	0.4600	0.2956	0.6687	150-160	0.3050	45.01	99.6,99.6
170	0.4072	0.5503	0.3748	0.2059	0.3565	0.2651	0.3266	0.5671	160-170	0.1365	45.15	99.9,99.9
180	0.1860	0.2639	0.3719	0.3543	0.1960	0.2010	0.3920	0.3694	170-180	0.0343	45.18	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 14.868 lm

%lum = 32.9%

%lamp = 32.9%

Conical surface Flux(120deg): 22.901 lm

%lum = 50.7%

%lamp = 50.7%

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:LPC
 Test Date:2021-12-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:9.200m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:24.00V I:0.3205A P:7.692W PF:1.000 Freq:50.00Hz Lamp Flux:45.1818x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000)-R	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121701
MFR.: OLYMPIA	SUR.:1*0.016	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	.385	.219	.069	.372	.212	.067	.346	.198	.063	.322	.186	.060	.300	.174	.056		
2.0	.332	.182	.056	.320	.176	.054	.297	.165	.051	.275	.154	.048	.255	.144	.045		
3.0	.295	.157	.047	.284	.152	.046	.262	.142	.043	.243	.133	.041	.225	.124	.038		
4.0	.265	.138	.041	.255	.133	.039	.236	.125	.037	.218	.117	.035	.201	.109	.033		
5.0	.241	.123	.036	.232	.119	.035	.214	.112	.033	.198	.104	.031	.183	.098	.029		
6.0	.221	.111	.032	.212	.107	.031	.196	.101	.029	.181	.094	.028	.167	.088	.026		
7.0	.204	.101	.029	.196	.098	.028	.181	.092	.026	.167	.086	.025	.154	.080	.024		
8.0	.189	.092	.026	.182	.089	.025	.168	.084	.024	.155	.079	.023	.144	.074	.021		
9.0	.176	.085	.024	.169	.083	.023	.157	.078	.022	.145	.073	.021	.134	.068	.020		
10.0	.165	.079	.022	.159	.077	.021	.147	.072	.020	.136	.068	.019	.126	.063	.018		

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	.355	.355	.355	.303	.303	.303	.207	.207	.207	.119	.119	.119	.038	.038	.038	
1.0	.351	.321	.294	.300	.276	.253	.205	.190	.175	.118	.110	.102	.038	.035	.033	
2.0	.344	.298	.260	.295	.257	.225	.202	.178	.157	.117	.103	.092	.037	.033	.030	
3.0	.337	.282	.238	.289	.243	.207	.198	.169	.145	.115	.099	.085	.037	.032	.028	
4.0	.329	.270	.224	.282	.233	.195	.194	.162	.137	.112	.095	.081	.036	.031	.027	
5.0	.321	.260	.215	.276	.225	.187	.190	.157	.132	.110	.092	.078	.036	.030	.026	
6.0	.314	.252	.208	.270	.218	.181	.186	.153	.128	.108	.090	.076	.035	.029	.025	
7.0	.307	.246	.202	.264	.213	.176	.182	.149	.125	.106	.088	.074	.034	.029	.025	
8.0	.300	.240	.198	.259	.208	.173	.179	.146	.123	.104	.086	.073	.034	.028	.024	
9.0	.294	.235	.195	.253	.204	.170	.176	.144	.121	.102	.085	.072	.033	.028	.024	
10.0	.288	.231	.193	.249	.201	.168	.172	.141	.120	.101	.083	.071	.033	.027	.024	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:LPC
 Test Date:2021-12-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:9.200m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.3205A P:7.692W PF:1.000 Freq:50.00Hz Lamp Flux:45.1818x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000)-R	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121701
MFR.: OLYMPIA	SUR.:1*0.016	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) $k(RI) \times RCR = 5$									
$k = 0.60$	47	34	27	45	34	27	43	33	26	20
0.80	56	43	35	54	42	34	51	40	33	25
1.00	63	50	42	61	49	41	58	49	40	31
1.25	70	58	49	68	56	48	63	53	46	36
1.50	75	63	54	73	61	53	67	58	51	40
2.00	83	72	63	79	69	62	73	65	58	46
2.50	87	77	69	84	74	67	77	69	63	50
3.00	91	82	74	87	79	72	80	73	67	53
4.00	96	88	81	92	84	78	84	78	73	58
5.00	99	92	86	94	88	83	86	81	77	61
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LPC
Test Date:2021-12-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

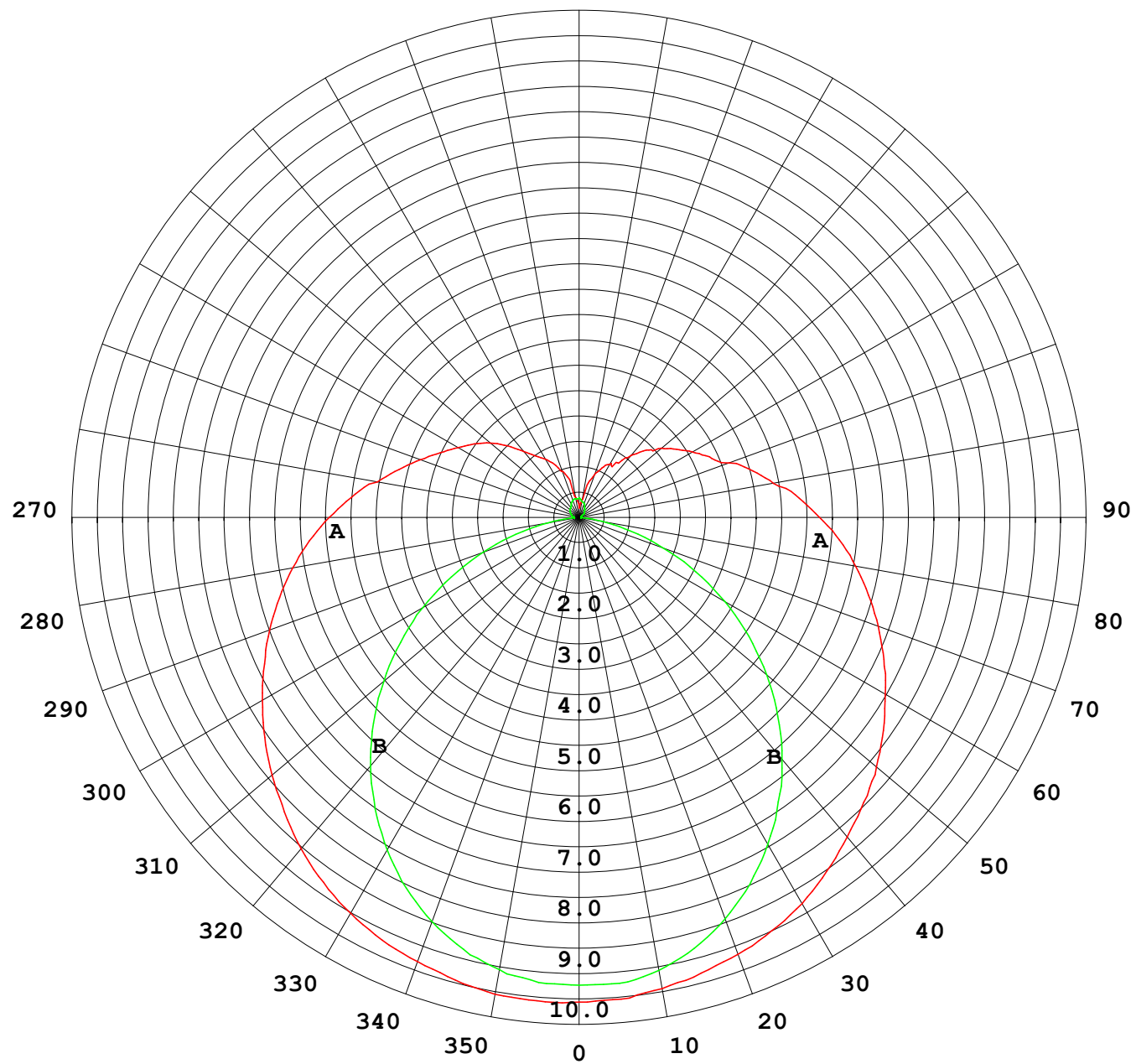
Photometric Data Table [cd]

G/C	0.0	30.0	60.0	90.0	120.0	150.0	180.0	210.0	240.0	270.0
0.0	9.559	9.468	9.308	9.222	9.212	9.132	9.559	9.468	9.308	9.222
3.0	9.579	9.468	9.338	9.212	9.187	9.076	9.534	9.428	9.282	9.222
6.0	9.566	9.469	9.368	9.167	9.112	9.006	9.533	9.353	9.212	9.212
9.0	9.553	9.463	9.333	9.116	9.022	8.910	9.448	9.283	9.116	9.112
12.0	9.509	9.443	9.258	8.971	8.886	8.815	9.378	9.177	8.960	8.966
15.0	9.444	9.383	9.137	8.815	8.730	8.719	9.302	9.062	8.794	8.796
18.0	9.363	9.307	9.002	8.624	8.555	8.584	9.217	8.941	8.603	8.580
21.0	9.303	9.212	8.831	8.407	8.359	8.443	9.137	8.805	8.387	8.338
24.0	9.228	9.091	8.640	8.156	8.142	8.272	9.036	8.640	8.171	8.077
27.0	9.122	8.951	8.419	7.869	7.912	8.086	8.925	8.469	7.925	7.766
30.0	9.012	8.830	8.178	7.573	7.655	7.890	8.794	8.268	7.668	7.444
33.0	8.886	8.689	7.922	7.246	7.379	7.669	8.634	8.052	7.392	7.112
36.0	8.745	8.528	7.660	6.884	7.087	7.448	8.468	7.826	7.100	6.740
39.0	8.585	8.357	7.369	6.532	6.781	7.256	8.287	7.595	6.794	6.364
42.0	8.409	8.181	7.077	6.140	6.469	7.030	8.111	7.373	6.487	5.977
45.0	8.218	7.990	6.781	5.733	6.133	6.794	7.945	7.157	6.155	5.545
48.0	8.032	7.769	6.484	5.326	5.791	6.578	7.774	6.921	5.813	5.122
51.0	7.841	7.548	6.188	4.889	5.444	6.337	7.588	6.695	5.461	4.690
54.0	7.640	7.302	5.856	4.457	5.107	6.086	7.392	6.444	5.120	4.233
57.0	7.429	7.065	5.545	4.009	4.766	5.849	7.191	6.187	4.773	3.776
60.0	7.213	6.824	5.213	3.562	4.424	5.603	6.975	5.936	4.441	3.318
63.0	6.997	6.598	4.871	3.089	4.092	5.362	6.784	5.690	4.090	2.861
66.0	6.775	6.362	4.524	2.622	3.761	5.136	6.563	5.449	3.758	2.389
69.0	6.564	6.106	4.193	2.175	3.439	4.904	6.347	5.212	3.426	1.926
72.0	6.343	5.864	3.876	1.722	3.142	4.678	6.131	4.976	3.120	1.499
75.0	6.117	5.628	3.565	1.296	2.861	4.452	5.910	4.745	2.844	1.057
78.0	5.886	5.392	3.283	0.8734	2.599	4.226	5.688	4.514	2.567	0.6946
81.0	5.650	5.166	3.001	0.5067	2.368	4.005	5.462	4.288	2.336	0.3526
84.0	5.419	4.935	2.765	0.2153	2.152	3.779	5.236	4.057	2.125	0.1113
87.0	5.172	4.699	2.549	0.0955	1.961	3.568	5.005	3.825	1.919	0.0604
90.0	4.926	4.472	2.368	0.0955	1.795	3.352	4.743	3.609	1.753	0.0452
93.0	4.675	4.256	2.207	0.0955	1.664	3.136	4.512	3.408	1.608	0.0452
96.0	4.439	4.050	2.066	0.1086	1.563	2.995	4.291	3.212	1.507	0.0452
99.0	4.197	3.812	1.945	0.1177	1.473	2.578	3.984	2.796	1.402	0.0452
102.0	3.891	3.357	1.820	0.1398	1.272	2.487	3.758	2.689	1.225	0.0503
105.0	3.675	3.211	1.609	0.1500	1.056	2.377	3.552	2.558	1.065	0.0503
108.0	3.464	3.065	1.588	0.1565	1.035	2.220	3.346	2.338	1.005	0.0503
111.0	3.262	2.909	1.503	0.1658	0.9804	2.040	3.015	2.247	0.9297	0.0503
114.0	3.081	2.759	1.431	0.1759	0.9500	1.909	2.864	2.146	0.8844	0.0503
117.0	2.916	2.623	1.406	0.1860	0.9047	1.809	2.724	2.011	0.8643	0.0552
120.0	2.760	2.502	1.262	0.1960	0.8796	1.719	2.583	1.890	0.8393	0.0603
123.0	2.614	2.377	1.071	0.2112	0.8294	1.628	2.437	1.764	0.8038	0.0803
126.0	2.478	2.271	0.9401	0.2211	0.7942	1.533	2.296	1.664	0.7689	0.1055
129.0	2.343	2.140	0.8896	0.2312	0.7591	1.432	2.161	1.588	0.7153	0.1298
132.0	2.177	1.859	0.8635	0.2413	0.7138	1.337	1.965	1.473	0.6762	0.1363
135.0	2.001	1.522	0.8454	0.2473	0.6786	1.246	1.884	1.342	0.6380	0.1507
138.0	1.815	1.296	0.8243	0.2534	0.6484	1.125	1.688	1.217	0.6230	0.1607
141.0	1.649	1.095	0.7843	0.2594	0.6033	1.020	1.518	1.151	0.6081	0.1858
144.0	1.513	1.005	0.7539	0.2764	0.5631	0.9446	1.327	1.066	0.5526	0.2009
147.0	1.408	0.9646	0.6987	0.2816	0.5079	0.8390	1.196	0.9551	0.5171	0.2060
150.0	1.322	0.8792	0.6635	0.3137	0.4525	0.7636	1.206	0.8947	0.4372	0.2311
153.0	1.227	0.7939	0.6466	0.3317	0.4071	0.6884	1.160	0.8244	0.3768	0.2411
156.0	1.121	0.7135	0.6438	0.3468	0.3520	0.6129	1.035	0.7742	0.3315	0.2812
159.0	0.9804	0.6281	0.6409	0.3569	0.2868	0.5175	0.9444	0.6837	0.2204	0.2920
162.0	0.9100	0.5525	0.6381	0.3669	0.2062	0.4318	0.8087	0.5833	0.2818	0.3028
165.0	0.7945	0.5105	0.6352	0.3769	0.1977	0.3517	0.7032	0.4978	0.1813	0.3122
168.0	0.4332	0.4997	0.6283	0.3757	0.1927	0.2359	0.3768	0.4072	0.1825	0.3208
171.0	0.3922	0.4824	0.6031	0.3744	0.1876	0.2159	0.3315	0.3069	0.1836	0.3317
174.0	0.3418	0.4523	0.5780	0.3732	0.1839	0.1959	0.2808	0.2264	0.1848	0.3568
177.0	0.2866	0.4321	0.5480	0.3719	0.1809	0.1759	0.2161	0.1960	0.1860	0.3768
180.0	0.1860	0.1860	0.3418	0.3719	0.3769	0.3317	0.1960	0.1910	0.2111	0.3920
G/C	300.0	330.0								
0.0	9.212	9.132								
3.0	9.207	9.172								
6.0	9.167	9.212								
9.0	9.126	9.205								
12.0	9.041	9.194								
15.0	8.915	9.172								
18.0	8.764	9.097								
21.0	8.583	8.996								
24.0	8.387	8.906								
27.0	8.166	8.785								
30.0	7.935	8.665								

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: LPC
 Test Date: 2021-12-17

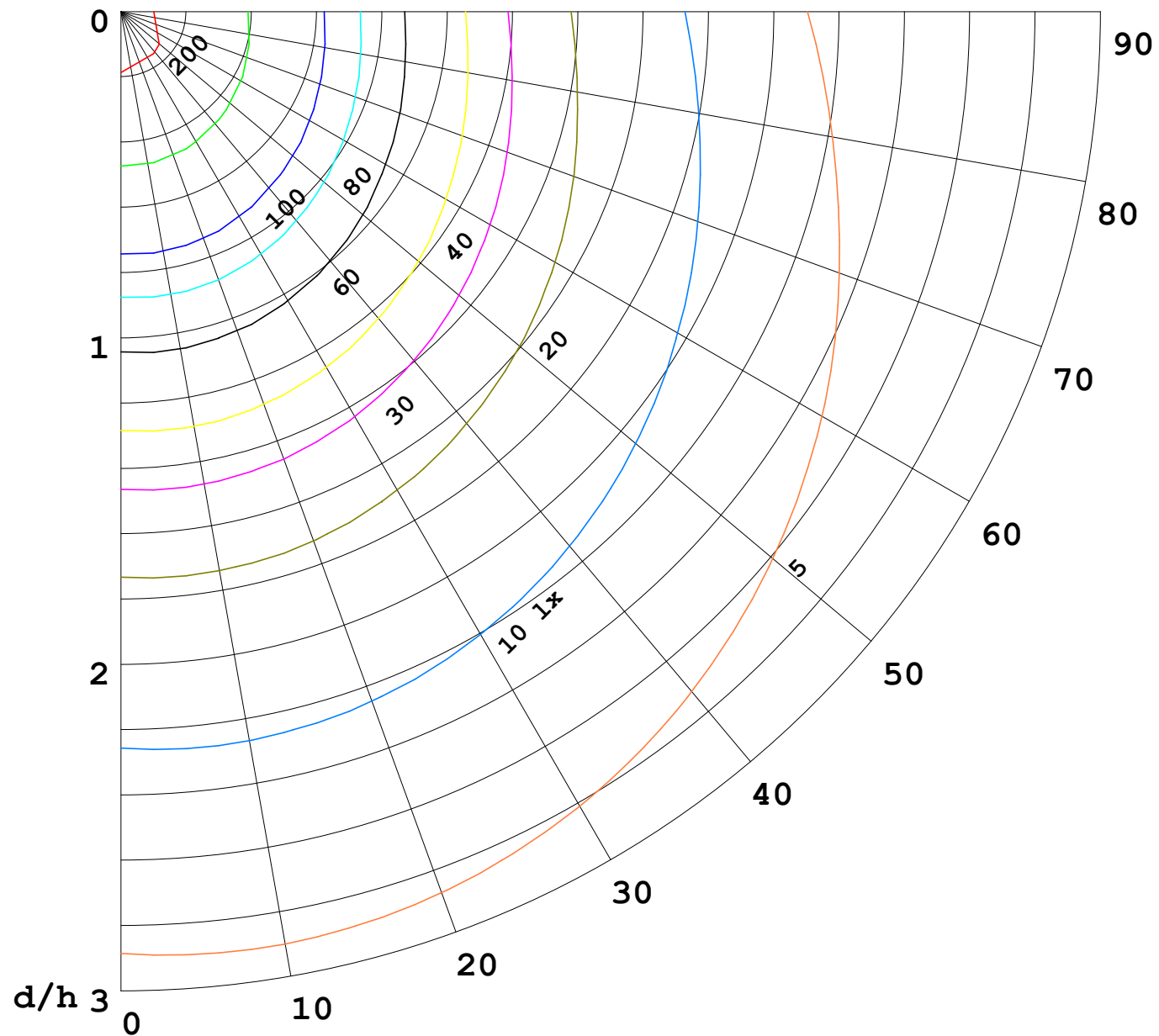
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 9.200m [K=1.0000]
 Remarks:

I (cd)



1000 lm

$\kappa = 1$



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

