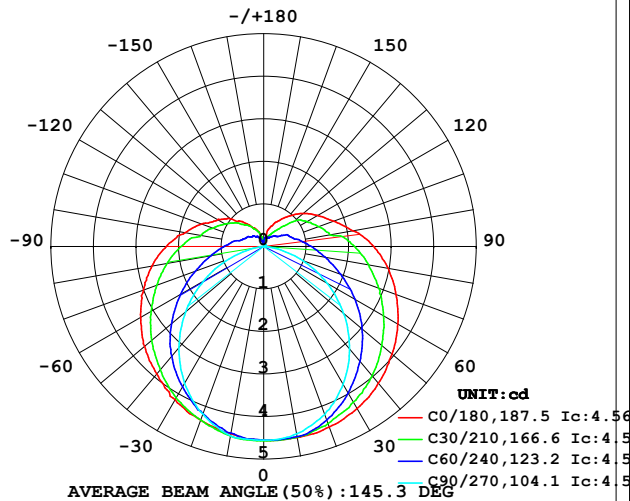


LUMINAIRE PHOTOMETRIC TEST REPORT

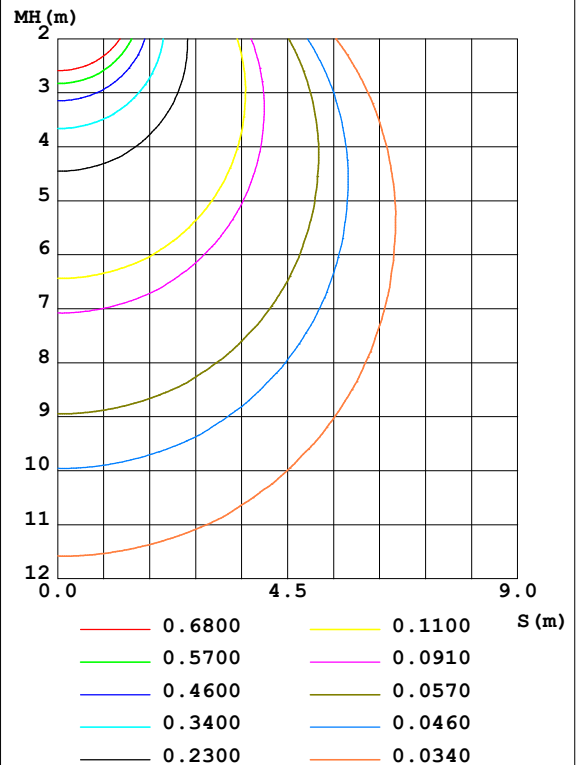
Test:U:24.00V I:0.3197A P:7.673W PF:1.000 Freq:50.00Hz Lamp Flux:22.3898x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(3000)-B	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121609
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 2.92 lm/W
MODEL	5050	I _{max} (cd)	4.568	S/MH (C0/180)	1.37	
NOMINAL POWER (W)	4.5	LOR (%)	100.0	S/MH (C90/270)	1.22	
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	22.390	η UP, DN (C0-180)	11.0, 39.7	
NOMINAL FLUX (lm)	22.3898	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	10.5, 38.8	
LAMPS INSIDE	1	η up (%)	21.5	CIBSE SHR NOM	1.50	
TEST VOLTAGE (V)	24	η down (%)	78.5	CIBSE SHR MAX	1.55	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



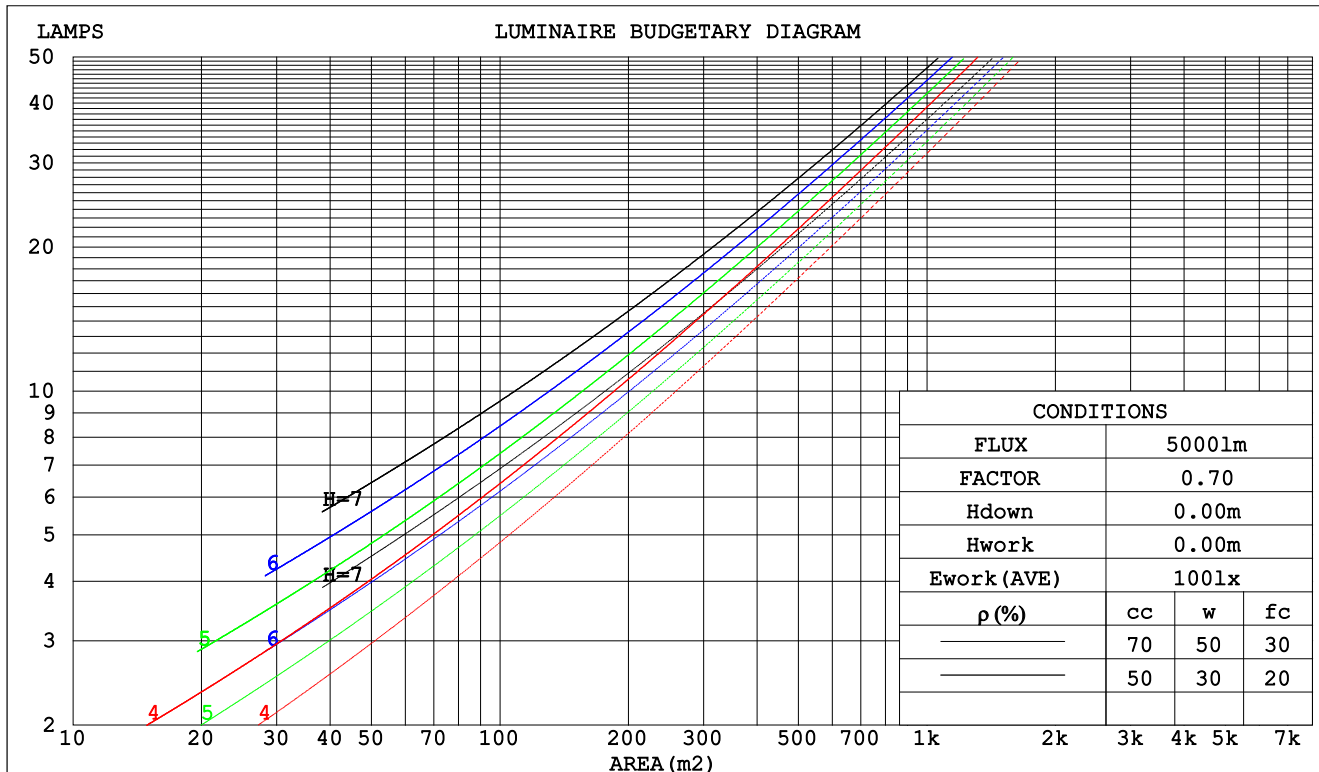
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LPC
Test Date:2021-12-16

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.3197A P:7.673W PF:1.000 Freq:50.00Hz Lamp Flux:22.3898x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(3000)-B	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121609
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						Coefficients of Utilization(CU)									
0.0	1.14	1.14	1.14	1.09	1.09	1.09	.99	.99	.99	.90	.90	.90	.82	.82	.82	.78
1.0	.95	.89	.84	.90	.85	.81	.82	.78	.74	.74	.71	.68	.67	.65	.63	.59
2.0	.81	.73	.66	.77	.70	.64	.70	.64	.59	.63	.59	.55	.57	.54	.50	.47
3.0	.70	.61	.54	.67	.59	.52	.61	.54	.48	.55	.50	.45	.50	.45	.41	.38
4.0	.62	.52	.45	.59	.50	.43	.53	.46	.40	.49	.43	.38	.44	.39	.35	.32
5.0	.55	.45	.38	.52	.43	.37	.48	.40	.35	.43	.37	.32	.39	.34	.30	.27
6.0	.49	.40	.33	.47	.38	.32	.43	.35	.30	.39	.33	.28	.35	.30	.26	.23
7.0	.44	.35	.29	.42	.34	.28	.39	.31	.26	.35	.29	.25	.32	.27	.23	.21
8.0	.40	.31	.25	.38	.30	.25	.35	.28	.23	.32	.26	.22	.30	.24	.20	.18
9.0	.37	.28	.23	.35	.27	.22	.32	.26	.21	.30	.24	.19	.27	.22	.18	.16
10.0	.34	.26	.20	.32	.25	.20	.30	.23	.19	.28	.22	.18	.25	.20	.17	.15



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:LPC
 Test Date:2021-12-16

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:0.3197A P:7.673W PF:1.000 Freq:50.00Hz Lamp Flux:22.3898x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(3000)-B	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121609
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	.387	.220	.070	.373	.213	.068	.348	.199	.064	.324	.187	.060	.302	.175	.056		
2.0	.334	.183	.056	.321	.177	.054	.298	.166	.051	.276	.155	.048	.256	.145	.046		
3.0	.296	.157	.047	.284	.152	.046	.263	.143	.043	.244	.133	.041	.225	.125	.039		
4.0	.266	.138	.041	.256	.134	.040	.236	.125	.037	.218	.117	.035	.202	.110	.033		
5.0	.241	.123	.036	.232	.119	.035	.215	.112	.033	.198	.105	.031	.183	.098	.029		
6.0	.221	.111	.032	.213	.107	.031	.197	.101	.029	.182	.094	.028	.168	.088	.026		
7.0	.204	.101	.029	.196	.098	.028	.181	.092	.026	.168	.086	.025	.155	.080	.024		
8.0	.189	.092	.026	.182	.090	.025	.168	.084	.024	.156	.079	.023	.144	.074	.022		
9.0	.176	.085	.024	.170	.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	.275	.253	.205	.189	.175	.118	.110	.102	.038	.035	.033		
2.0	.344	.298	.260	.295	.257	.224	.202	.178	.156	.117	.103	.092	.037	.033	.030		
3.0	.337	.282	.238	.289	.243	.206	.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	.214	.276	.225	.186	.190	.157	.132	.110	.092	.078	.036	.030	.026		
6.0	.314	.252	.207	.270	.218	.181	.186	.153	.128	.108	.090	.076	.035	.029	.025		
7.0	.307	.245	.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	.143	.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:2021-12-16

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:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.3197A P:7.673W PF:1.000 Freq:50.00Hz Lamp Flux:22.3898x1 lm										
NAME: SF21-24V-5050-70-DMX4-RGBW(3000)-B					TYPE:硅胶			WEIGHT:		
SPEC.:					DIM.: 28mm*11.5mm			SERIAL No.:2021121609		
MFR.: OLYMPIA					SUR.:1*0.016			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	22.2	23.6	22.8	24.1	24.8	19.6	20.9	20.1	21.4	22.1
3H	25.1	26.3	25.7	26.9	27.6	21.0	22.2	21.6	22.8	23.5
4H	26.7	27.8	27.3	28.4	29.1	21.5	22.7	22.1	23.3	24.0
6H	28.4	29.5	29.1	30.2	30.9	21.8	22.9	22.4	23.5	24.3
8H	29.4	30.5	30.1	31.1	31.9	21.9	22.9	22.5	23.6	24.3
12H	30.6	31.6	31.2	32.2	33.0	21.9	22.9	22.5	23.5	24.3
4H 2H	22.8	23.9	23.4	24.5	25.2	20.9	22.0	21.5	22.6	23.3
3H	25.9	26.9	26.5	27.5	28.3	22.6	23.6	23.3	24.3	25.0
4H	27.6	28.6	28.3	29.2	30.0	23.4	24.3	24.1	25.0	25.8
6H	29.6	30.5	30.3	31.2	32.0	24.0	24.8	24.7	25.5	26.3
8H	30.7	31.5	31.5	32.2	33.1	24.2	24.9	24.9	25.6	26.5
12H	32.0	32.7	32.7	33.5	34.3	24.2	25.0	25.0	25.7	26.5
8H 4H	28.0	28.8	28.7	29.5	30.3	24.7	25.5	25.4	26.2	27.0
6H	30.3	30.9	31.0	31.7	32.5	25.8	26.4	26.5	27.1	28.0
8H	31.6	32.2	32.4	33.0	33.8	26.2	26.8	26.9	27.5	28.4
12H	33.1	33.7	33.9	34.4	35.3	26.5	27.1	27.3	27.8	28.7
12H 4H	28.0	28.7	28.7	29.4	30.3	25.1	25.9	25.8	26.6	27.4
6H	30.4	31.0	31.1	31.7	32.6	26.5	27.1	27.2	27.8	28.7
8H	31.8	32.4	32.6	33.1	34.0	27.1	27.7	27.9	28.4	29.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.4				

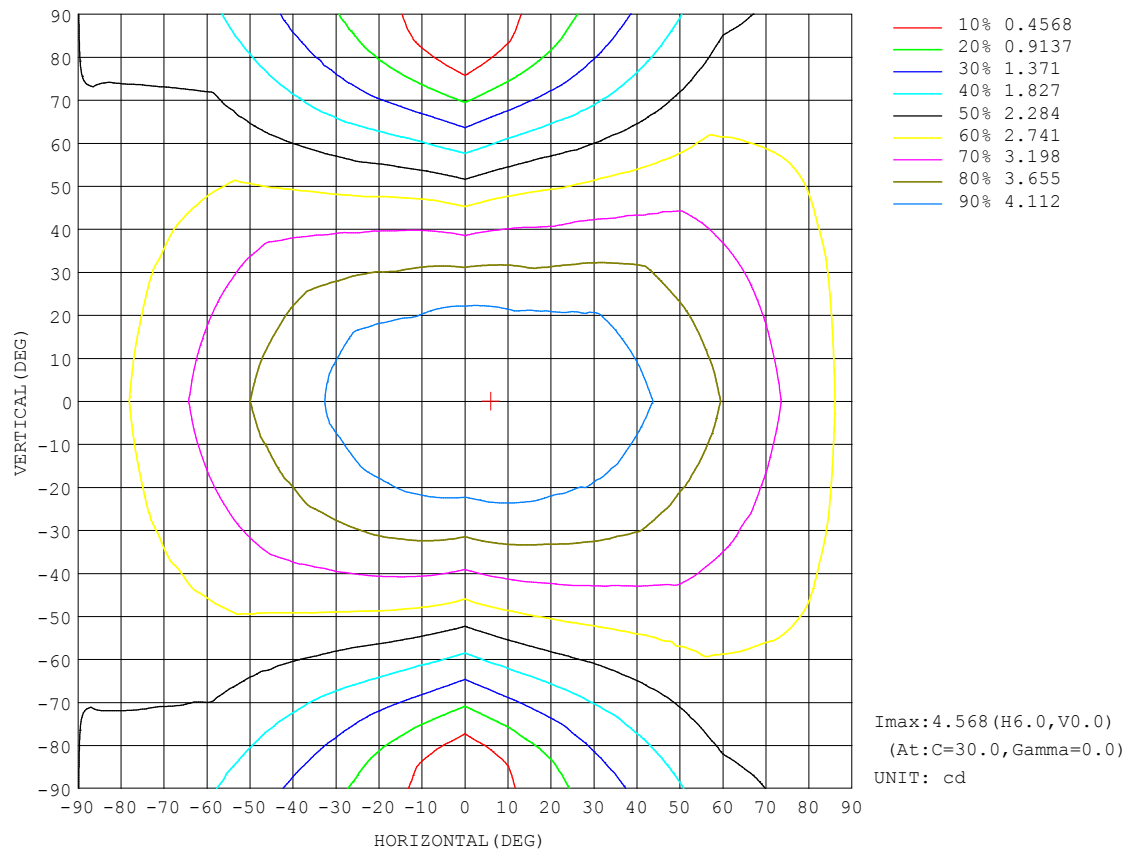
CIE Pub.117, 22.39 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -13.2)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LPC
Test Date:2021-12-16

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:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.3197A P:7.673W PF:1.000 Freq:50.00Hz Lamp Flux:22.3898x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(3000)-B	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121609
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LPC
Test Date:2021-12-16

```

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

```


LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.3197A P:7.673W PF:1.000 Freq:50.00Hz Lamp Flux:22.3898x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(3000)-B	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121609
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	4.56	4.57	4.55	4.55	4.56	4.57	4.56	4.57	4.55	4.55	4.56	4.57						
5	4.56	4.57	4.55	4.54	4.55	4.54	4.54	4.56	4.54	4.55	4.55	4.57						
10	4.56	4.55	4.54	4.47	4.52	4.47	4.47	4.52	4.46	4.52	4.51	4.56						
15	4.55	4.50	4.47	4.36	4.40	4.39	4.41	4.44	4.33	4.37	4.40	4.55						
20	4.52	4.43	4.34	4.21	4.26	4.30	4.34	4.34	4.18	4.19	4.25	4.46						
25	4.47	4.33	4.17	3.99	4.10	4.21	4.28	4.24	4.01	3.98	4.07	4.36						
30	4.40	4.22	3.98	3.74	3.90	4.07	4.16	4.12	3.81	3.72	3.85	4.26						
35	4.32	4.10	3.75	3.46	3.68	3.91	4.06	3.96	3.60	3.42	3.64	4.16						
40	4.20	3.97	3.52	3.14	3.44	3.74	3.91	3.78	3.37	3.10	3.40	4.02						
45	4.08	3.81	3.28	2.80	3.19	3.57	3.80	3.61	3.11	2.76	3.19	3.86						
50	3.94	3.62	3.02	2.45	2.91	3.40	3.65	3.44	2.83	2.40	2.94	3.68						
55	3.79	3.44	2.76	2.09	2.61	3.20	3.50	3.25	2.54	2.02	2.68	3.50						
60	3.64	3.25	2.48	1.72	2.34	3.01	3.34	3.06	2.26	1.63	2.40	3.32						
65	3.48	3.07	2.19	1.35	2.07	2.82	3.18	2.86	1.98	1.26	2.12	3.12						
70	3.31	2.87	1.93	0.98	1.80	2.63	3.02	2.67	1.72	0.87	1.86	2.93						
75	3.15	2.68	1.68	0.61	1.56	2.45	2.85	2.49	1.48	0.51	1.60	2.74						
80	2.97	2.51	1.47	0.28	1.35	2.27	2.67	2.31	1.25	0.20	1.40	2.56						
85	2.78	2.32	1.28	0.04	1.17	2.09	2.49	2.13	1.08	0.02	1.20	2.38						
90	2.59	2.14	1.12	0.03	1.01	1.89	2.29	1.95	0.93	0.00	1.05	2.19						
95	2.38	1.96	0.98	0.03	0.89	1.73	2.10	1.77	0.81	0.00	0.92	2.01						
100	2.13	1.59	0.86	0.04	0.80	1.45	1.88	1.51	0.72	0.00	0.83	1.67						
105	1.93	1.49	0.73	0.04	0.61	1.37	1.72	1.41	0.57	0.00	0.72	1.58						
110	1.75	1.38	0.68	0.04	0.57	1.20	1.56	1.26	0.52	0.00	0.65	1.45						
115	1.59	1.27	0.63	0.04	0.54	1.09	1.37	1.17	0.47	0.00	0.59	1.34						
120	1.46	1.17	0.53	0.04	0.51	1.00	1.25	1.06	0.45	0.00	0.52	1.24						
125	1.34	1.08	0.42	0.05	0.48	0.92	1.13	0.97	0.40	0.00	0.46	1.14						
130	1.21	0.92	0.38	0.05	0.44	0.83	1.01	0.87	0.36	0.00	0.40	1.01						
135	1.08	0.68	0.35	0.05	0.42	0.73	0.85	0.74	0.35	0.00	0.36	0.82						
140	0.94	0.53	0.31	0.05	0.37	0.62	0.75	0.66	0.30	0.00	0.29	0.63						
145	0.81	0.43	0.28	0.05	0.34	0.53	0.63	0.59	0.29	0.00	0.26	0.54						
150	0.70	0.35	0.24	0.05	0.32	0.46	0.50	0.49	0.28	0.00	0.21	0.45						
155	0.61	0.28	0.23	0.05	0.28	0.38	0.47	0.43	0.22	0.00	0.20	0.37						
160	0.50	0.21	0.23	0.05	0.22	0.31	0.37	0.37	0.16	0.00	0.20	0.29						
165	0.40	0.17	0.22	0.05	0.17	0.23	0.28	0.28	0.13	0.00	0.20	0.24						
170	0.18	0.16	0.22	0.05	0.12	0.14	0.12	0.22	0.07	0.01	0.19	0.23						
175	0.14	0.14	0.16	0.04	0.06	0.07	0.06	0.12	0.05	0.01	0.11	0.20						
180	0.06	0.06	0.05	0.04	0.05	0.06	0.06	0.06	0.05	0.04	0.04	0.06						

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LPC
Test Date:2021-12-16

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:

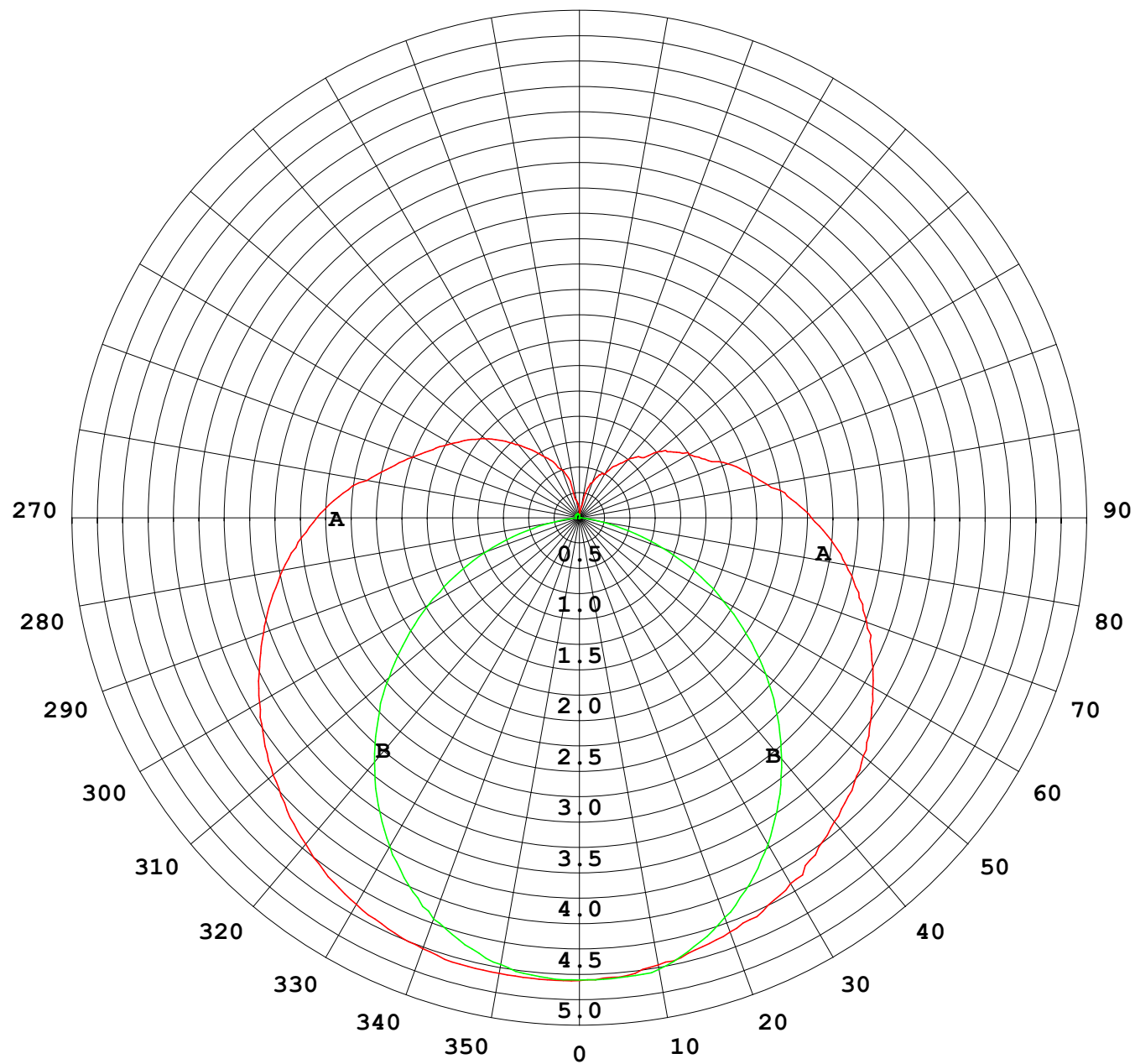
Photometric Data Table [cd]

33.0	3.729	4.202
36.0	3.583	4.131
39.0	3.452	4.041
42.0	3.326	3.951
45.0	3.186	3.855
48.0	3.050	3.749
51.0	2.889	3.639
54.0	2.733	3.528
57.0	2.568	3.413
60.0	2.402	3.317
63.0	2.236	3.192
66.0	2.075	3.076
69.0	1.904	2.965
72.0	1.753	2.850
75.0	1.603	2.744
78.0	1.477	2.634
81.0	1.351	2.523
84.0	1.241	2.413
87.0	1.140	2.302
90.0	1.045	2.192
93.0	0.9746	2.081
96.0	0.9043	1.975
99.0	0.8342	1.720
102.0	0.7836	1.639
105.0	0.7183	1.583
108.0	0.6809	1.503
111.0	0.6402	1.433
114.0	0.5979	1.357
117.0	0.5575	1.287
120.0	0.5176	1.236
123.0	0.4773	1.171
126.0	0.4570	1.106
129.0	0.4367	1.036
132.0	0.3668	0.9153
135.0	0.3566	0.8245
138.0	0.3015	0.7039
141.0	0.2914	0.6034
144.0	0.2762	0.5580
147.0	0.2211	0.5077
150.0	0.2136	0.4474
153.0	0.2060	0.3922
156.0	0.2037	0.3420
159.0	0.2014	0.3017
162.0	0.1991	0.2614
165.0	0.1968	0.2433
168.0	0.2009	0.2342
171.0	0.1608	0.2212
174.0	0.1304	0.2111
177.0	0.0502	0.1263
180.0	0.0402	0.0553

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: LPC
 Test Date: 2021-12-16

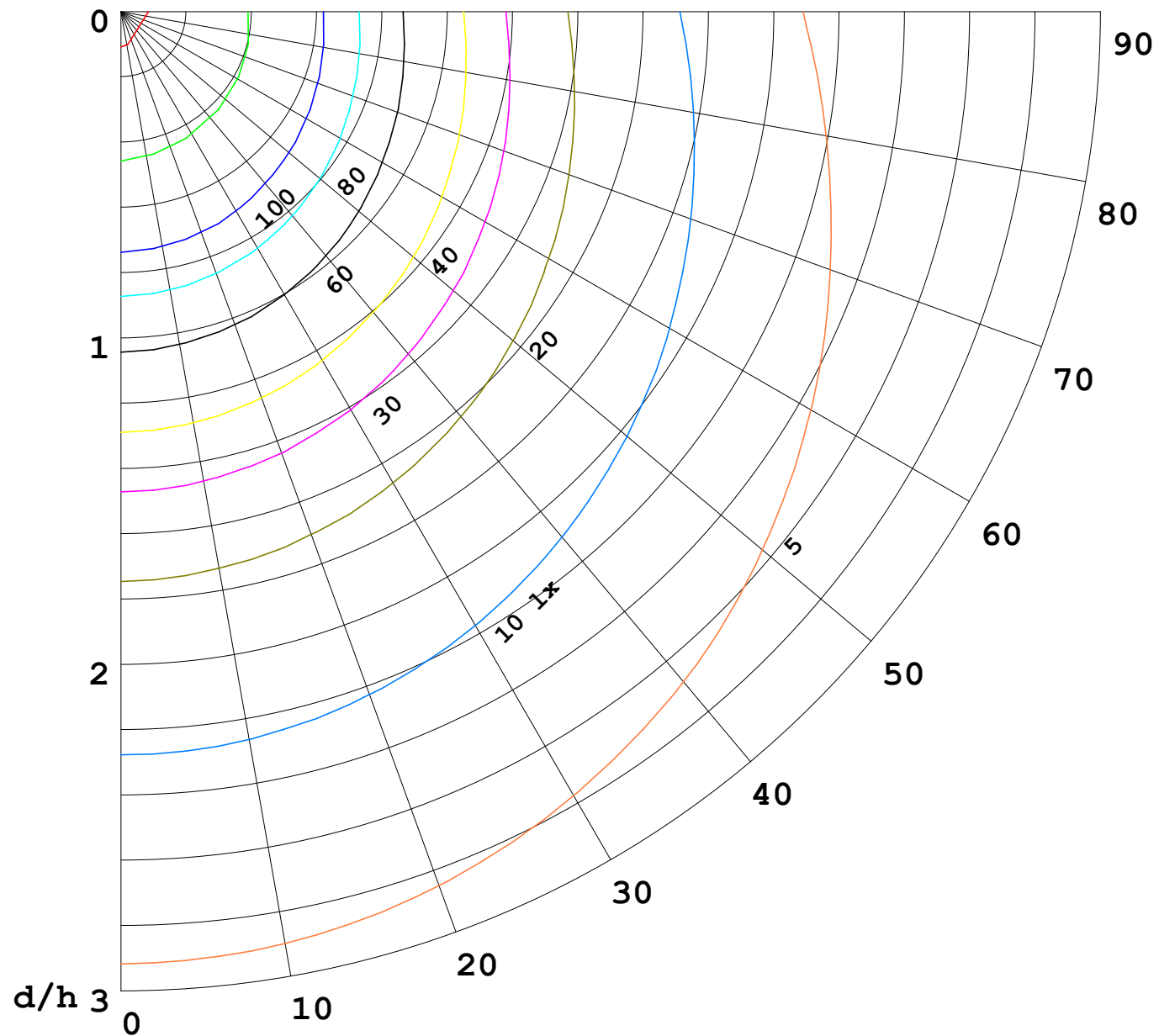
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 9.200m [K=1.0000]
 Remarks:

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

