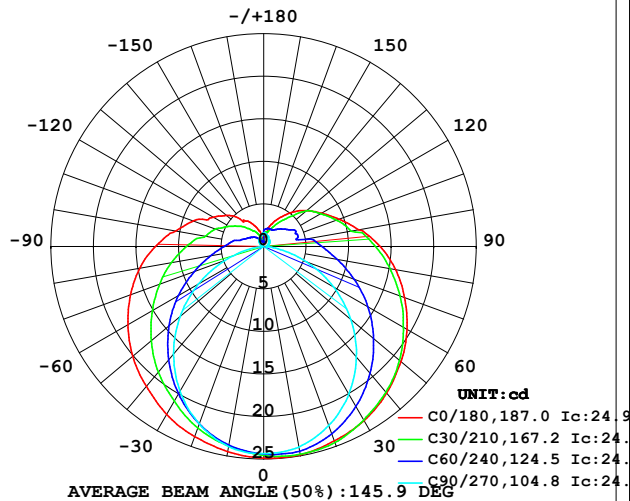


## LUMINAIRE PHOTOMETRIC TEST REPORT

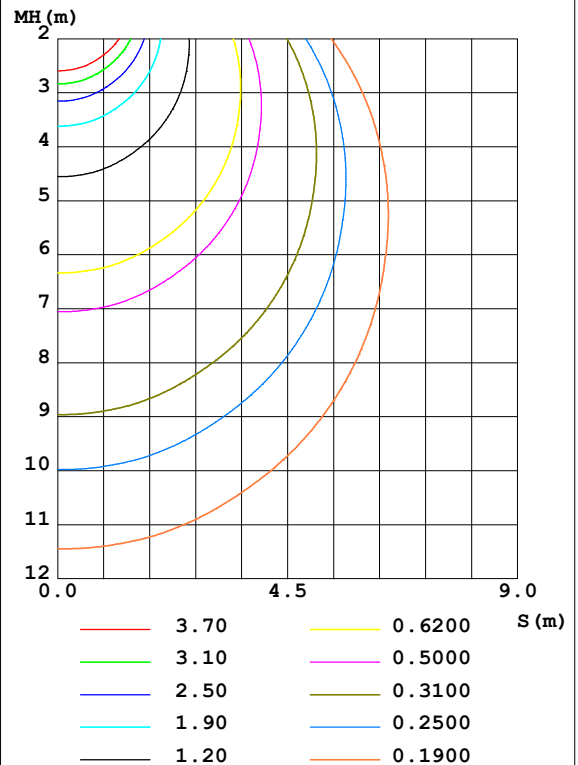
Test:U:24.00V I:0.3206A P:7.694W PF:1.000 Freq:50.00Hz Lamp Flux:122.868x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(2700)-W	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121605
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 15.97 lm/W			
MODEL	5050	I <sub>max</sub> (cd)	24.92	S/MH (C0/180)	1.37
NOMINAL POWER(W)	4.5	LOR(%)	100.0	S/MH (C90/270)	1.21
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	122.87	η UP,DN(C0-180)	11.5,38.9
NOMINAL FLUX(lm)	122.868	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	11.2,38.4
LAMPS INSIDE	1	η up (%)	22.7	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	η down (%)	77.3	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:

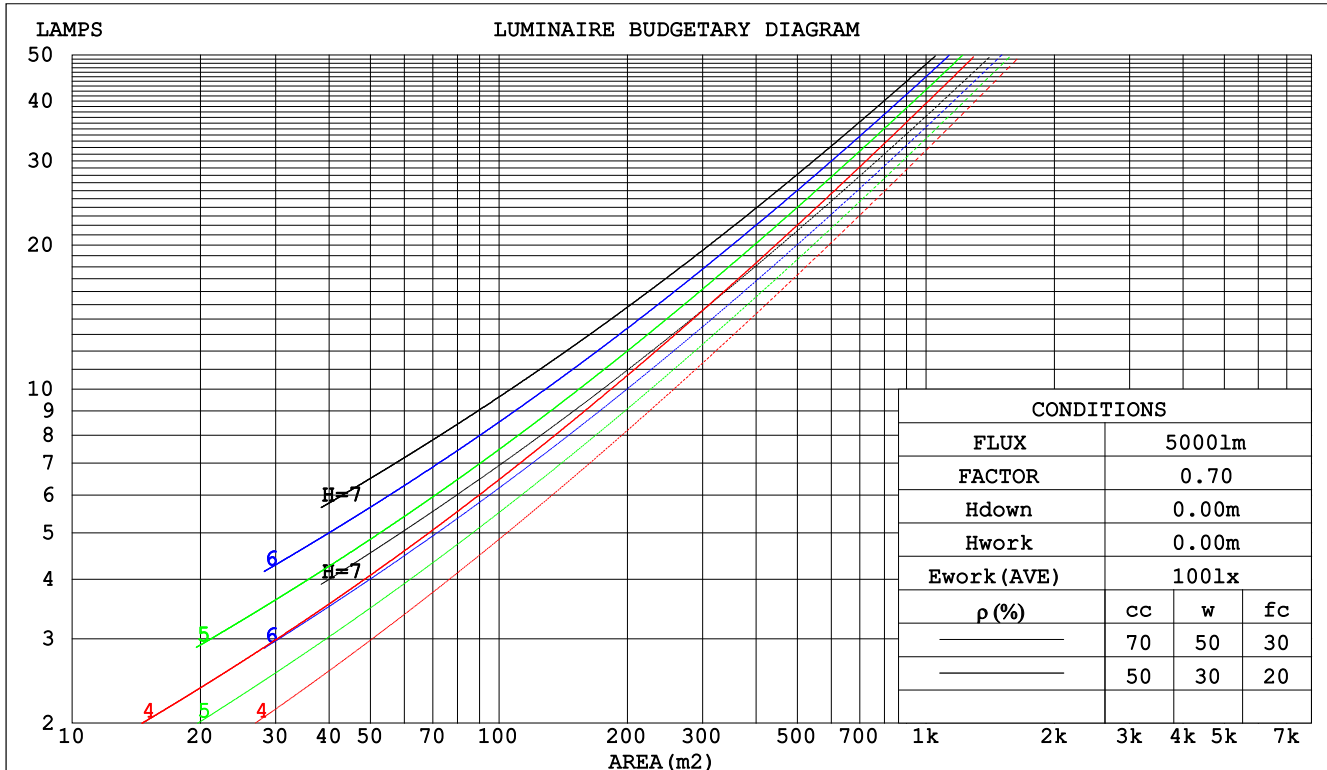




## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.3206A P:7.694W PF:1.000 Freq:50.00Hz Lamp Flux:122.868x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(2700)-W	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121605
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	1.08	1.08	1.08	.99	.99	.99	.89	.89	.89	.81	.81	.81	.77
1.0	.94	.89	.84	.90	.85	.81	.81	.77	.74	.74	.70	.68	.66	.64	.62	.58
2.0	.81	.73	.66	.77	.70	.64	.69	.64	.59	.63	.58	.54	.56	.53	.49	.46
3.0	.70	.61	.54	.67	.58	.52	.60	.54	.48	.54	.49	.44	.49	.45	.41	.37
4.0	.61	.52	.45	.58	.50	.43	.53	.46	.40	.48	.42	.37	.43	.38	.34	.31
5.0	.54	.45	.38	.52	.43	.37	.47	.40	.34	.43	.37	.32	.39	.34	.29	.27
6.0	.49	.39	.33	.46	.38	.32	.42	.35	.30	.39	.32	.28	.35	.30	.26	.23
7.0	.44	.35	.29	.42	.34	.28	.38	.31	.26	.35	.29	.24	.32	.26	.22	.20
8.0	.40	.31	.25	.38	.30	.24	.35	.28	.23	.32	.26	.21	.29	.24	.20	.18
9.0	.36	.28	.22	.35	.27	.22	.32	.25	.20	.29	.23	.19	.27	.22	.18	.16
10.0	.33	.25	.20	.32	.25	.20	.30	.23	.18	.27	.21	.17	.25	.20	.16	.14



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:





### UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.3206A P:7.694W PF:1.000 Freq:50.00Hz Lamp Flux:122.868x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(2700)-W	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121605
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

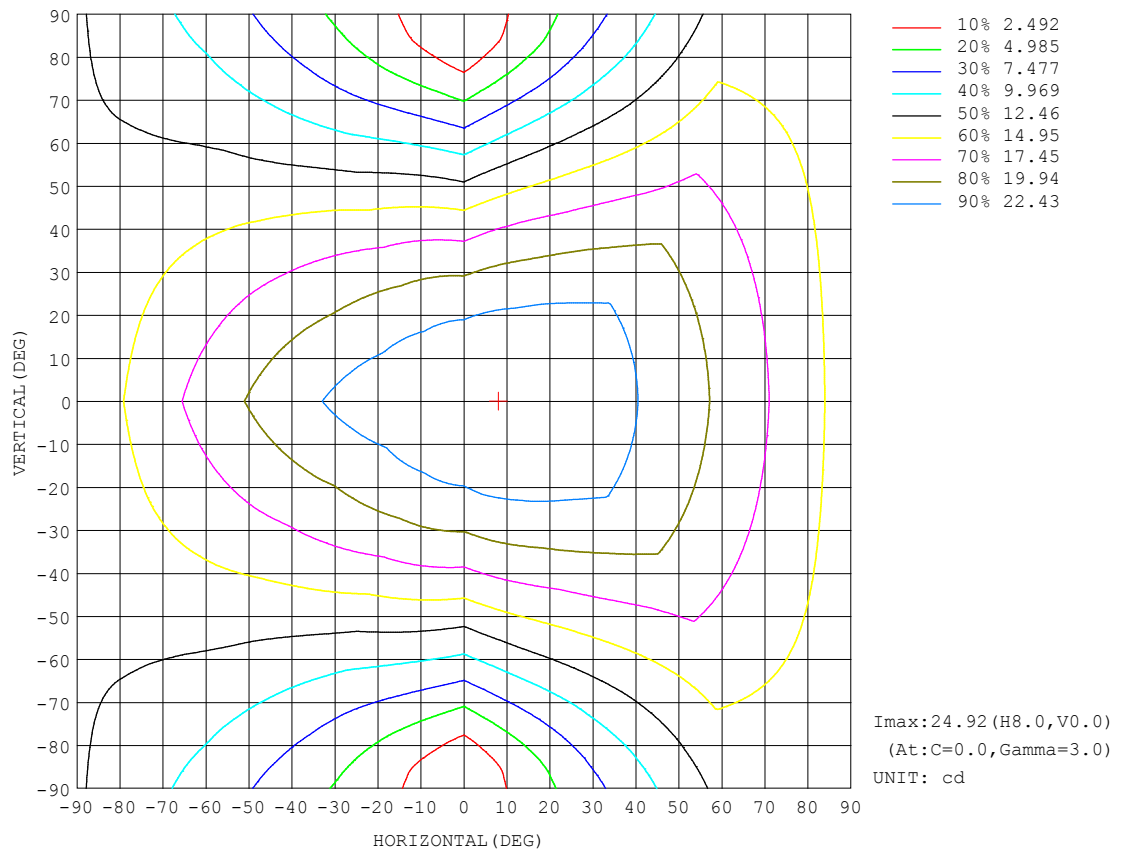
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	46	34	27	45	33	26	43	32	26	19
0.80	55	42	34	54	41	34	50	40	33	25
1.00	63	50	41	61	49	41	57	49	39	30
1.25	70	57	48	67	55	47	62	53	45	35
1.50	75	62	54	72	61	53	67	57	50	39
2.00	82	71	62	79	69	61	73	64	58	45
2.50	87	76	68	83	74	66	76	68	62	49
3.00	91	81	73	87	78	71	79	72	67	52
4.00	95	87	80	91	84	78	83	77	72	56
5.00	98	91	85	94	88	82	86	81	76	59
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:2021-12-16

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:0.3206A P:7.694W PF:1.000 Freq:50.00Hz Lamp Flux:122.868x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(2700)-W	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121605
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:

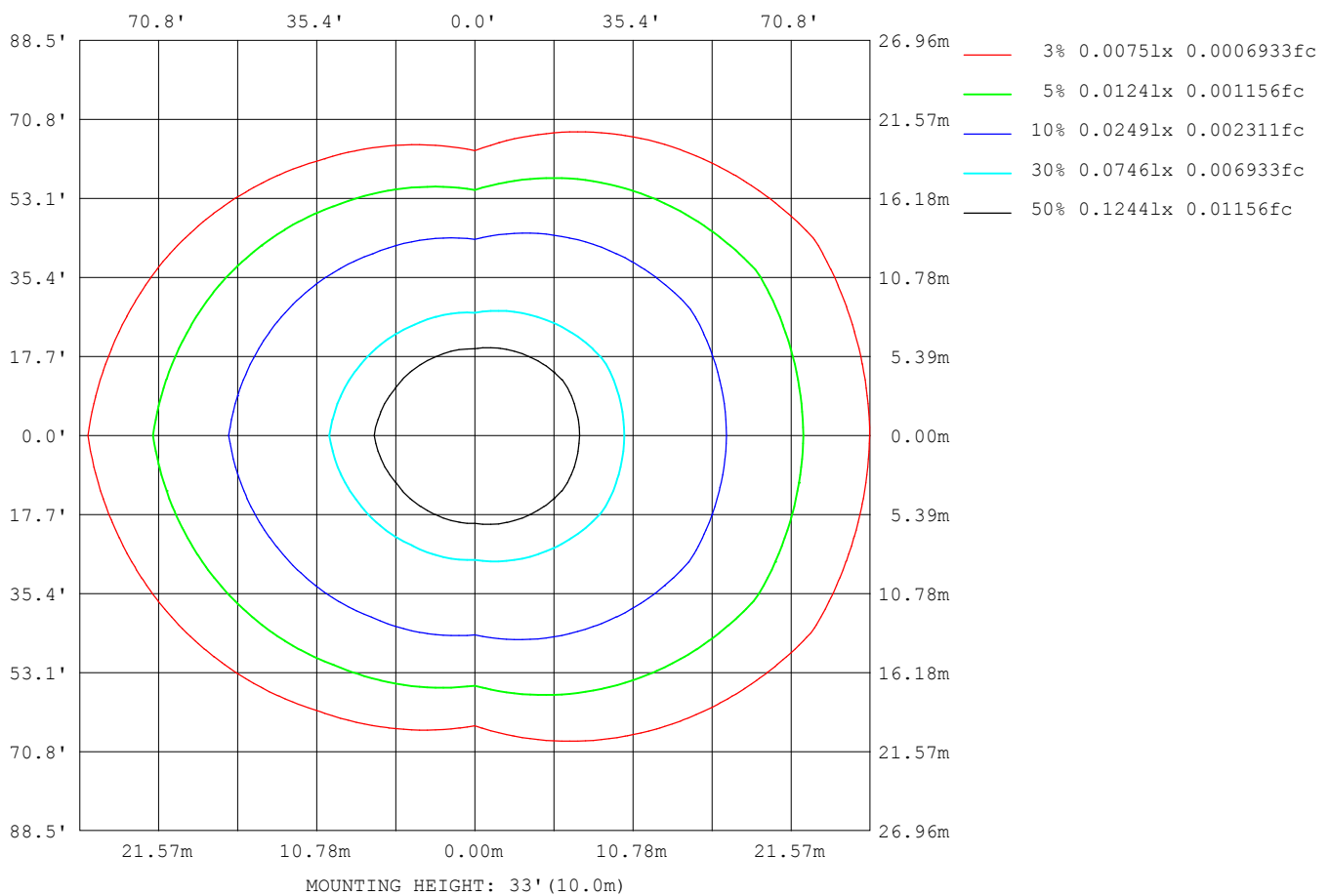
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## ISOLUX DIAGRAM

Test:U:24.00V I:0.3206A P:7.694W PF:1.000 Freq:50.00Hz Lamp Flux:122.868x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(2700)-W	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121605
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:0.3206A P:7.694W PF:1.000 Freq:50.00Hz Lamp Flux:122.868x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(2700)-W	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121605
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	24.9	24.6	24.4	24.3	24.4	24.4	24.9	24.6	24.4	24.3	24.4	24.4						
5	24.9	24.8	24.5	24.2	24.2	24.1	24.7	24.2	24.1	24.3	24.4	24.6						
10	24.9	24.8	24.4	23.9	23.8	23.7	24.5	23.8	23.7	23.9	24.3	24.7						
15	24.6	24.7	24.0	23.3	23.1	23.2	24.1	23.3	23.0	23.1	23.9	24.7						
20	24.3	24.5	23.4	22.4	22.3	22.6	23.8	22.7	22.2	22.2	23.2	24.4						
25	24.0	24.1	22.6	21.3	21.3	21.8	23.4	21.9	21.2	21.0	22.4	24.1						
30	23.6	23.5	21.7	20.0	20.1	20.9	22.8	21.0	20.0	19.7	21.4	23.6						
35	23.1	23.0	20.6	18.6	18.9	20.0	22.1	20.2	18.8	18.1	20.4	23.0						
40	22.5	22.3	19.5	17.0	17.5	19.1	21.5	19.3	17.4	16.5	19.3	22.4						
45	21.8	21.6	18.2	15.2	16.1	18.1	20.8	18.3	16.0	14.7	18.1	21.8						
50	21.1	20.8	16.9	13.4	14.6	17.1	20.1	17.2	14.5	12.8	16.8	21.0						
55	20.3	19.9	15.5	11.5	13.2	16.0	19.3	16.2	13.1	10.9	15.5	20.1						
60	19.5	19.0	14.2	9.47	11.7	14.9	18.4	15.1	11.6	8.86	14.1	19.2						
65	18.5	18.1	12.7	7.43	10.2	13.9	17.5	14.1	10.1	6.86	12.7	18.2						
70	17.6	17.1	11.3	5.38	8.80	12.9	16.7	13.0	8.71	4.87	11.3	17.3						
75	16.7	16.1	9.99	3.42	7.57	11.9	15.7	12.0	7.45	3.00	9.93	16.3						
80	15.7	15.1	8.77	1.70	6.51	10.9	14.8	11.0	6.35	1.39	8.71	15.4						
85	14.7	14.1	7.70	0.50	5.57	9.90	13.8	10.0	5.40	0.32	7.61	14.4						
90	13.7	13.2	6.85	0.36	4.83	8.98	12.7	9.09	4.66	0.24	6.74	13.4						
95	12.6	12.2	6.22	0.36	4.28	8.17	11.7	8.26	4.13	0.25	6.10	12.5						
100	11.3	10.4	4.97	0.39	3.88	6.88	10.5	6.96	3.69	0.27	5.56	10.7						
105	10.4	9.84	4.17	0.45	2.94	6.47	9.60	6.52	2.86	0.28	4.71	10.1						
110	9.43	9.11	4.22	0.51	2.72	5.97	8.81	6.03	2.55	0.29	4.41	9.35						
115	8.59	8.40	4.23	0.60	2.43	5.12	7.39	5.30	2.25	0.37	3.97	8.46						
120	7.85	7.73	3.95	0.69	2.23	4.61	6.88	4.74	2.08	0.47	3.78	7.81						
125	7.20	7.15	3.48	0.77	2.07	4.17	6.24	4.20	1.87	0.57	3.38	7.22						
130	6.58	6.50	3.21	0.85	1.89	3.72	5.70	3.71	1.70	0.67	3.20	6.60						
135	5.96	5.40	2.93	0.92	1.66	3.24	5.09	3.27	1.56	0.75	2.91	5.57						
140	5.28	4.44	2.67	0.98	1.50	2.78	3.78	2.76	1.40	0.84	2.56	4.46						
145	4.58	3.69	2.46	1.02	1.24	2.35	3.66	2.21	1.18	0.91	2.31	3.79						
150	3.96	3.04	2.25	1.15	0.99	2.00	3.33	2.07	0.95	1.04	2.06	3.23						
155	3.40	2.49	2.20	1.26	0.84	1.59	2.81	1.67	0.78	1.16	2.05	2.74						
160	2.84	2.07	2.21	1.36	0.81	1.17	2.30	1.30	0.75	1.24	2.09	2.29						
165	2.36	1.81	2.20	1.47	0.59	0.89	1.92	0.83	0.56	1.35	2.11	1.90						
170	1.24	1.74	2.13	1.54	0.58	0.73	0.97	0.59	0.57	1.47	2.06	1.91						
175	1.00	1.64	2.03	1.59	0.57	0.60	0.75	0.58	0.57	1.55	1.99	1.90						
180	0.58	0.56	1.42	1.60	1.55	1.31	0.57	0.64	1.23	1.65	1.59	1.31						

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]

G/C	0.0	30.0	60.0	90.0	120.0	150.0	180.0	210.0	240.0	270.0
0.0	24.88	24.56	24.39	24.35	24.42	24.40	24.88	24.56	24.39	24.35
3.0	24.92	24.71	24.47	24.31	24.28	24.23	24.81	24.36	24.26	24.35
6.0	24.90	24.77	24.49	24.21	24.09	24.01	24.69	24.14	24.07	24.22
9.0	24.88	24.81	24.47	24.02	23.85	23.79	24.55	23.90	23.81	23.98
12.0	24.77	24.79	24.32	23.68	23.51	23.53	24.34	23.64	23.46	23.62
15.0	24.62	24.72	24.03	23.27	23.08	23.21	24.13	23.33	23.04	23.14
18.0	24.44	24.64	23.69	22.76	22.61	22.85	23.91	22.97	22.54	22.61
21.0	24.25	24.45	23.28	22.19	22.08	22.42	23.70	22.55	22.00	21.96
24.0	24.08	24.19	22.80	21.55	21.48	21.94	23.45	22.08	21.38	21.28
27.0	23.87	23.88	22.28	20.82	20.83	21.39	23.15	21.56	20.72	20.48
30.0	23.62	23.54	21.70	20.04	20.12	20.86	22.81	21.00	20.01	19.67
33.0	23.33	23.18	21.07	19.19	19.39	20.37	22.42	20.49	19.28	18.79
36.0	23.00	22.84	20.41	18.24	18.60	19.86	22.00	19.99	18.48	17.83
39.0	22.63	22.48	19.70	17.29	17.77	19.32	21.58	19.45	17.66	16.83
42.0	22.21	22.09	18.97	16.30	16.92	18.74	21.22	18.88	16.81	15.79
45.0	21.77	21.65	18.20	15.23	16.07	18.12	20.84	18.30	15.95	14.72
48.0	21.35	21.18	17.40	14.12	15.23	17.50	20.41	17.68	15.11	13.60
51.0	20.93	20.68	16.60	13.00	14.37	16.85	19.95	17.03	14.26	12.44
54.0	20.46	20.13	15.79	11.83	13.47	16.22	19.46	16.40	13.38	11.29
57.0	19.96	19.55	14.97	10.66	12.57	15.58	18.95	15.75	12.49	10.08
60.0	19.45	18.97	14.15	9.475	11.68	14.95	18.43	15.09	11.60	8.858
63.0	18.91	18.42	13.30	8.233	10.77	14.33	17.90	14.49	10.69	7.673
66.0	18.36	17.86	12.45	7.018	9.894	13.71	17.37	13.86	9.812	6.476
69.0	17.81	17.27	11.60	5.786	9.064	13.10	16.84	13.23	8.973	5.280
72.0	17.26	16.67	10.77	4.580	8.291	12.49	16.29	12.64	8.184	4.135
75.0	16.71	16.07	9.994	3.420	7.566	11.89	15.74	12.03	7.446	2.999
78.0	16.14	15.47	9.250	2.344	6.898	11.27	15.17	11.43	6.742	1.963
81.0	15.55	14.88	8.536	1.430	6.309	10.66	14.60	10.81	6.139	1.113
84.0	14.94	14.32	7.873	0.6868	5.737	10.08	14.00	10.21	5.571	0.4142
87.0	14.33	13.73	7.325	0.3568	5.244	9.507	13.36	9.626	5.075	0.2665
90.0	13.69	13.16	6.852	0.3598	4.826	8.985	12.73	9.088	4.657	0.2424
93.0	13.03	12.60	6.454	0.3568	4.474	8.477	12.11	8.575	4.316	0.2425
96.0	12.40	12.06	6.103	0.3620	4.197	8.020	11.52	8.103	4.060	0.2552
99.0	11.78	10.91	5.632	0.3770	3.956	7.565	10.79	7.080	3.773	0.2679
102.0	10.93	10.20	3.933	0.4373	3.700	6.734	10.14	6.775	3.556	0.2748
105.0	10.36	9.839	4.171	0.4524	2.937	6.472	9.602	6.519	2.859	0.2788
108.0	9.792	9.422	4.217	0.4826	2.780	6.186	9.130	6.228	2.723	0.2876
111.0	9.259	8.955	4.157	0.5278	2.679	5.842	8.653	5.926	2.477	0.2965
114.0	8.751	8.547	4.150	0.5832	2.488	5.256	7.890	5.404	2.306	0.3567
117.0	8.284	8.130	4.152	0.6385	2.363	4.889	7.231	5.107	2.186	0.4168
120.0	7.852	7.734	3.951	0.6887	2.232	4.613	6.884	4.740	2.080	0.4672
123.0	7.455	7.387	3.634	0.7439	2.136	4.362	6.547	4.403	1.909	0.5277
126.0	7.073	7.055	3.423	0.7942	2.041	4.090	6.105	4.102	1.864	0.5829
129.0	6.706	6.722	3.267	0.8344	1.890	3.809	5.808	3.785	1.729	0.6381
132.0	6.329	6.095	3.082	0.8796	1.805	3.553	5.462	3.549	1.658	0.6884
135.0	5.957	5.400	2.931	0.9198	1.664	3.241	5.095	3.273	1.558	0.7487
138.0	5.555	4.788	2.780	0.9550	1.558	2.889	4.575	2.851	1.457	0.7940
141.0	5.138	4.245	2.634	0.9851	1.438	2.698	3.741	2.680	1.362	0.8493
144.0	4.716	3.829	2.508	1.015	1.282	2.402	3.718	2.373	1.236	0.8994
147.0	4.313	3.436	2.373	1.046	1.131	2.216	3.568	2.196	1.080	0.9446
150.0	3.961	3.040	2.247	1.146	0.9857	2.005	3.331	2.071	0.9544	1.035
153.0	3.615	2.673	2.191	1.211	0.8147	1.768	3.029	1.845	0.7690	1.100
156.0	3.298	2.406	2.203	1.277	0.8890	1.522	2.713	1.604	0.8450	1.161
159.0	2.886	2.140	2.207	1.337	0.9997	1.246	2.446	1.393	0.9327	1.231
162.0	2.680	1.934	2.204	1.402	0.6045	0.9840	2.044	1.132	0.5678	1.286
165.0	2.363	1.814	2.198	1.468	0.5859	0.8903	1.924	0.8304	0.5636	1.352
168.0	1.318	1.769	2.191	1.518	0.5825	0.8479	1.060	0.8442	0.5647	1.427
171.0	1.192	1.739	2.111	1.558	0.5788	0.6769	0.9343	0.5830	0.5658	1.487
174.0	1.051	1.658	2.056	1.583	0.5744	0.6199	0.7985	0.5810	0.5668	1.533
177.0	0.9102	1.598	1.985	1.598	0.5629	0.5629	0.6676	0.5780	0.5679	1.588
180.0	0.5780	0.5629	1.422	1.598	1.553	1.307	0.5679	0.6383	1.231	1.653
G/C	300.0	330.0								
0.0	24.42	24.40								
3.0	24.43	24.56								
6.0	24.42	24.66								
9.0	24.33	24.70								
12.0	24.14	24.68								
15.0	23.85	24.65								
18.0	23.49	24.55								
21.0	23.05	24.38								
24.0	22.53	24.16								
27.0	22.01	23.91								
30.0	21.44	23.62								

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:

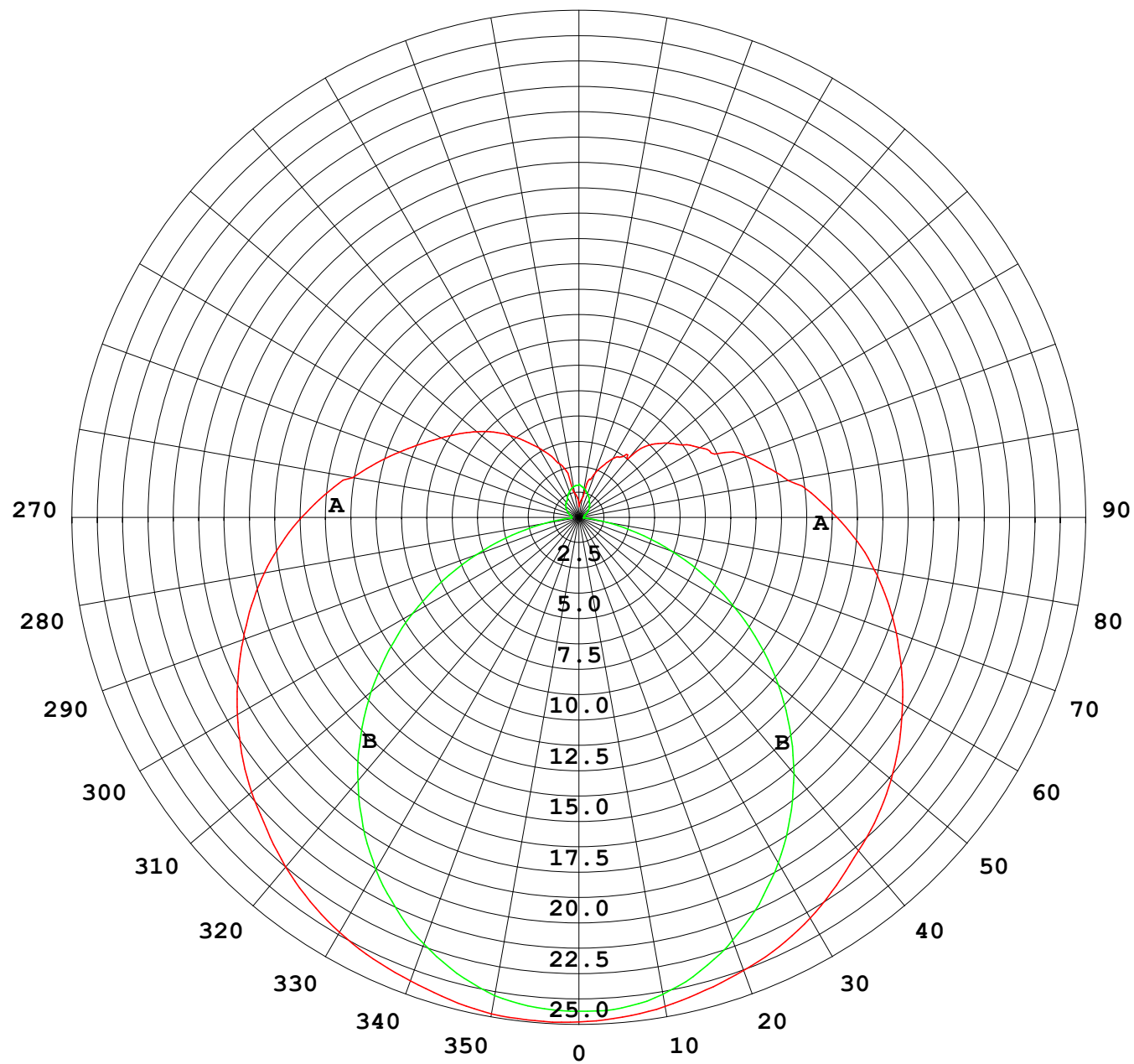
## Photometric Data Table [cd]

33.0	20.84	23.27
36.0	20.21	22.91
39.0	19.56	22.56
42.0	18.87	22.18
45.0	18.13	21.78
48.0	17.33	21.33
51.0	16.54	20.84
54.0	15.74	20.32
57.0	14.92	19.76
60.0	14.09	19.16
63.0	13.25	18.60
66.0	12.40	18.07
69.0	11.56	17.50
72.0	10.72	16.93
75.0	9.933	16.33
78.0	9.195	15.74
81.0	8.476	15.15
84.0	7.813	14.58
87.0	7.240	14.00
90.0	6.743	13.44
93.0	6.341	12.89
96.0	5.984	12.33
99.0	5.658	11.23
102.0	5.345	10.45
105.0	4.713	10.07
108.0	4.478	9.641
111.0	4.356	9.208
114.0	4.293	8.590
117.0	3.995	8.198
120.0	3.777	7.811
123.0	3.523	7.449
126.0	3.321	7.107
129.0	3.246	6.741
132.0	3.090	6.138
135.0	2.909	5.570
138.0	2.688	4.722
141.0	2.502	4.463
144.0	2.362	3.835
147.0	2.211	3.584
150.0	2.065	3.227
153.0	2.015	2.986
156.0	2.061	2.634
159.0	2.087	2.383
162.0	2.096	2.112
165.0	2.106	1.900
168.0	2.076	1.915
171.0	2.045	1.907
174.0	1.995	1.903
177.0	1.965	1.890
180.0	1.593	1.312

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:

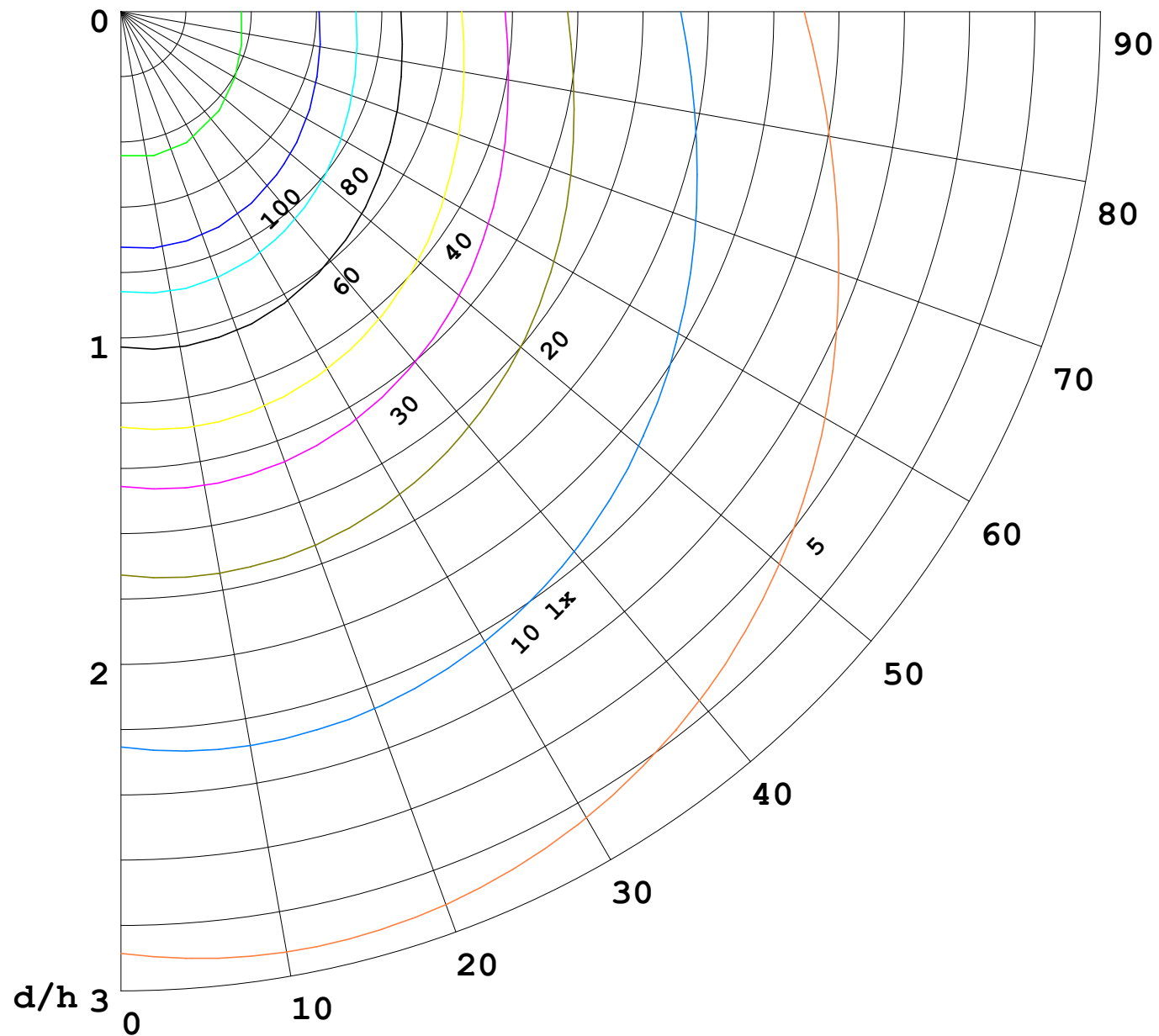
I (cd)





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

