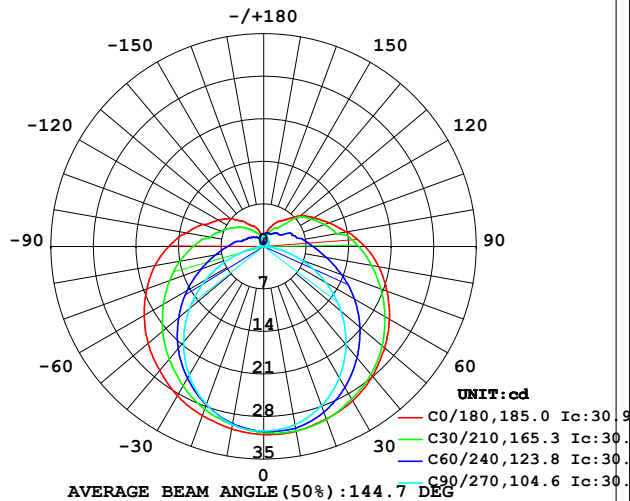


## LUMINAIRE PHOTOMETRIC TEST REPORT

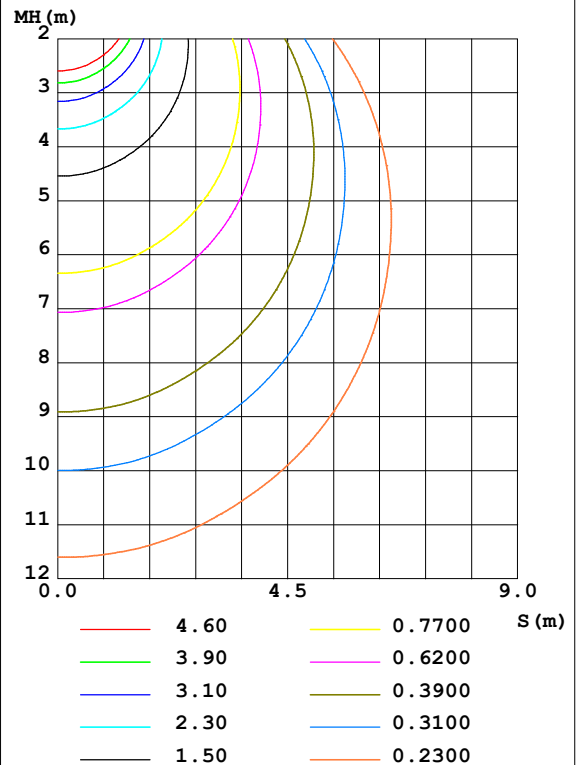
Test:U:24.00V I:0.3203A P:7.687W PF:1.000 Freq:50.00Hz Lamp Flux:151.093x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000)-W	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121704
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 19.66 lm/W			
MODEL	5050	I <sub>max</sub> (cd)	30.99	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)	151.09	η UP, DN (C0-180)	11.3, 39.1
NOMINAL FLUX (lm)	151.093	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	11.1, 38.6
LAMPS INSIDE	1	η up (%)	22.4	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	24	η down (%)	77.6	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: 2021-12-17

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:

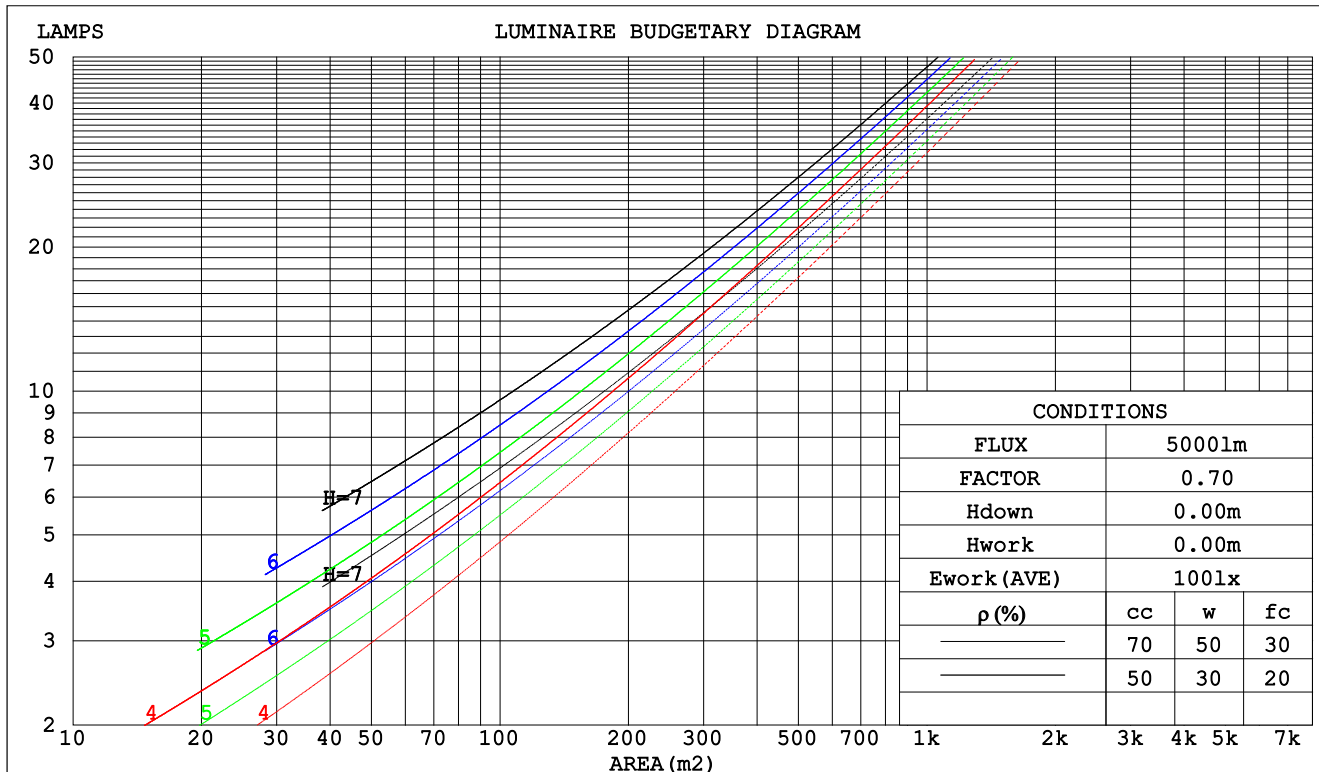




## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.3203A P:7.687W PF:1.000 Freq:50.00Hz Lamp Flux:151.093x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000)-W	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121704
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	Coefficients of Utilization(CU)															
	RCR:Room Cavity Ratio															
0.0	1.14	1.14	1.14	1.08	1.08	1.08	.99	.99	.99	.90	.90	.90	.81	.81	.81	.78
1.0	.95	.89	.84	.90	.85	.81	.82	.78	.74	.74	.71	.68	.67	.64	.62	.58
2.0	.81	.73	.66	.77	.70	.64	.70	.64	.59	.63	.58	.54	.57	.53	.50	.46
3.0	.70	.61	.54	.67	.59	.52	.60	.54	.48	.55	.49	.45	.49	.45	.41	.38
4.0	.61	.52	.45	.59	.50	.43	.53	.46	.40	.48	.42	.37	.44	.39	.35	.31
5.0	.55	.45	.38	.52	.43	.37	.47	.40	.34	.43	.37	.32	.39	.34	.30	.27
6.0	.49	.39	.33	.47	.38	.32	.43	.35	.30	.39	.32	.28	.35	.30	.26	.23
7.0	.44	.35	.29	.42	.34	.28	.38	.31	.26	.35	.29	.24	.32	.27	.23	.20
8.0	.40	.31	.25	.38	.30	.25	.35	.28	.23	.32	.26	.22	.29	.24	.20	.18
9.0	.36	.28	.23	.35	.27	.22	.32	.25	.21	.30	.24	.19	.27	.22	.18	.16
10.0	.34	.26	.20	.32	.25	.20	.30	.23	.19	.27	.22	.17	.25	.20	.16	.14



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

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:0.3203A P:7.687W PF:1.000 Freq:50.00Hz Lamp Flux:151.093x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000)-W	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121704
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

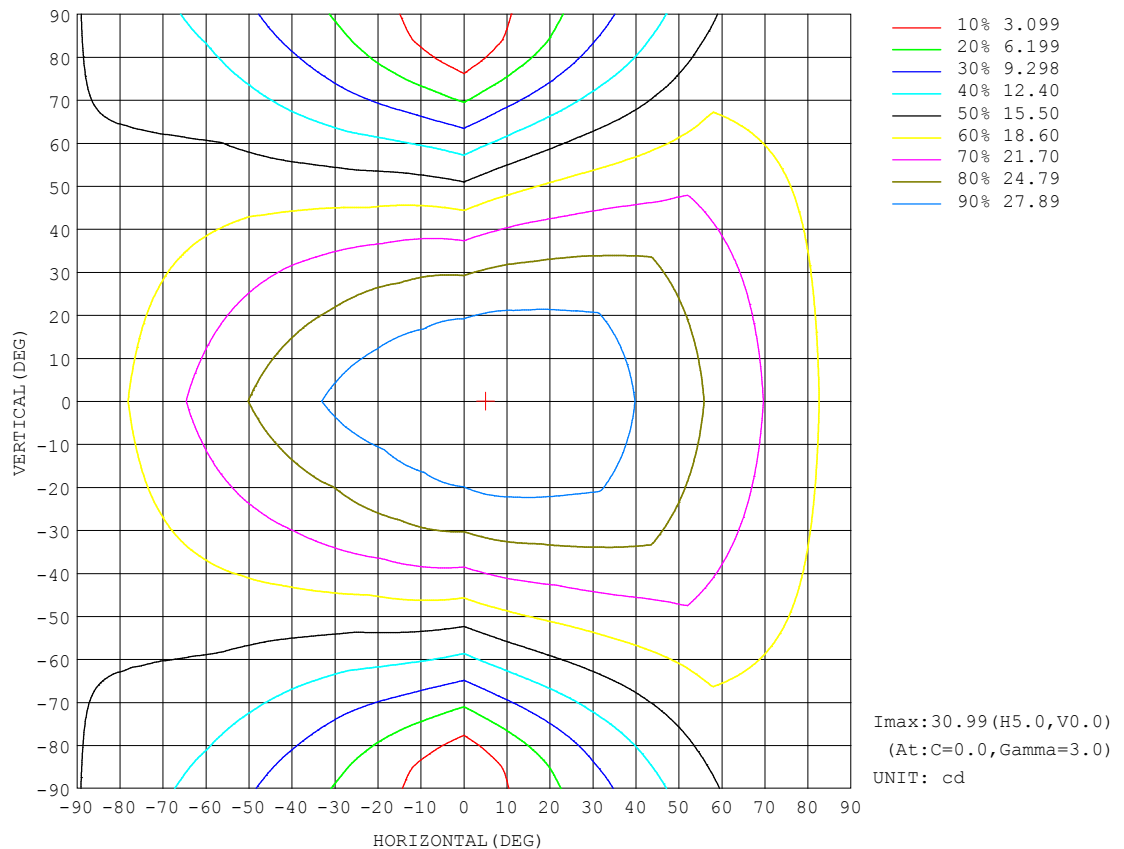
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	46	34	27	45	33	26	43	32	26	19
0.80	55	42	34	54	42	34	51	40	33	25
1.00	63	50	42	61	49	41	57	49	40	30
1.25	70	57	49	67	56	48	63	53	46	36
1.50	75	63	54	72	61	53	67	57	50	39
2.00	82	71	63	79	69	61	73	64	58	45
2.50	87	77	68	83	74	66	76	69	63	49
3.00	91	81	74	87	78	71	79	73	67	52
4.00	95	87	81	91	84	78	83	77	73	57
5.00	99	91	85	94	88	82	86	81	76	60
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

$\gamma$  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:0.3203A P:7.687W PF:1.000 Freq:50.00Hz Lamp Flux:151.093x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000)-W	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121704
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:2021-12-17

```

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:

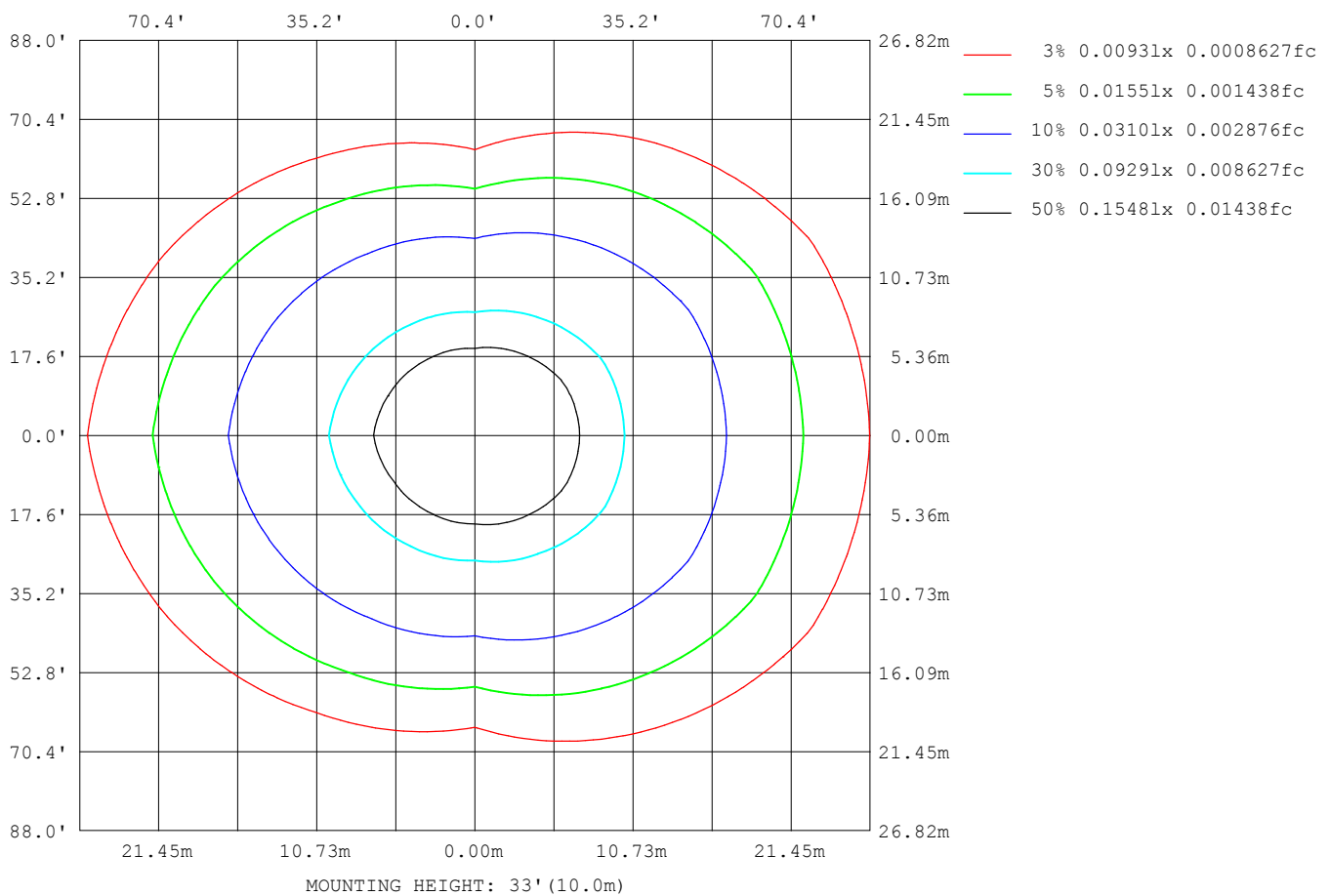
```





## ISOLUX DIAGRAM

Test:U:24.00V I:0.3203A P:7.687W PF:1.000 Freq:50.00Hz Lamp Flux:151.093x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000)-W	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121704
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:2021-12-17

```

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:0.3203A P:7.687W PF:1.000 Freq:50.00Hz Lamp Flux:151.093x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000)-W	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121704
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	31.0	30.6	30.4	30.4	30.4	30.3	31.0	30.6	30.4	30.4	30.4	30.3						
5	31.0	30.8	30.5	30.2	30.1	29.9	30.8	30.3	30.1	30.2	30.4	30.5						
10	30.9	30.8	30.4	29.8	29.6	29.5	30.5	29.8	29.6	29.7	30.1	30.6						
15	30.5	30.6	29.8	29.0	28.7	28.9	30.0	29.2	28.8	28.9	29.6	30.4						
20	30.2	30.3	29.0	27.9	27.7	28.2	29.6	28.5	27.7	27.6	28.7	30.0						
25	29.8	29.7	28.0	26.5	26.5	27.2	29.1	27.6	26.5	26.2	27.7	29.5						
30	29.3	29.0	26.8	24.9	25.1	26.2	28.4	26.5	25.1	24.5	26.5	28.9						
35	28.6	28.3	25.4	23.1	23.6	25.0	27.5	25.3	23.6	22.6	25.2	28.2						
40	27.9	27.5	23.9	21.1	21.9	23.9	26.6	24.2	21.9	20.5	23.8	27.4						
45	26.9	26.5	22.3	18.9	20.1	22.6	25.8	23.0	20.1	18.3	22.3	26.5						
50	26.0	25.5	20.7	16.6	18.3	21.4	24.8	21.7	18.3	16.0	20.6	25.5						
55	25.0	24.3	19.0	14.2	16.4	20.0	23.8	20.4	16.4	13.5	18.9	24.3						
60	23.9	23.0	17.2	11.8	14.6	18.7	22.7	19.0	14.6	11.0	17.2	23.1						
65	22.7	21.8	15.5	9.24	12.7	17.5	21.6	17.7	12.7	8.46	15.4	21.9						
70	21.6	20.5	13.7	6.72	11.0	16.2	20.5	16.5	11.0	5.92	13.6	20.6						
75	20.4	19.3	12.0	4.31	9.45	15.0	19.3	15.2	9.42	3.56	11.9	19.4						
80	19.2	18.0	10.5	2.13	8.12	13.7	18.2	14.0	8.07	1.58	10.4	18.1						
85	18.0	16.8	9.15	0.60	6.96	12.5	16.9	12.8	6.90	0.36	9.04	17.0						
90	16.7	15.6	8.11	0.45	6.03	11.4	15.6	11.6	5.95	0.28	7.97	15.8						
95	15.4	14.5	7.29	0.45	5.35	10.4	14.4	10.6	5.25	0.28	7.14	14.6						
100	13.8	12.2	6.65	0.49	4.85	8.72	12.9	8.94	4.69	0.28	6.48	12.4						
105	12.6	11.5	5.65	0.59	3.55	8.15	11.8	8.30	3.65	0.31	5.50	11.7						
110	11.4	10.7	5.24	0.63	3.39	7.17	10.7	7.38	3.32	0.33	5.30	10.8						
115	10.4	9.82	5.10	0.70	3.10	6.50	9.46	6.84	3.03	0.44	4.76	9.92						
120	9.51	9.06	4.24	0.80	2.97	5.97	8.67	6.14	2.88	0.55	4.18	9.13						
125	8.71	8.38	3.34	0.89	2.74	5.43	7.91	5.49	2.61	0.69	4.15	8.47						
130	7.85	7.57	3.21	0.97	2.51	4.82	7.16	4.97	2.37	0.82	3.79	7.59						
135	6.76	5.78	3.11	1.05	2.27	4.31	6.15	4.27	2.21	0.93	3.39	6.27						
140	5.81	4.32	2.88	1.12	2.06	3.73	5.50	3.73	1.97	1.03	2.97	5.19						
145	5.19	3.76	2.62	1.17	1.85	3.20	4.53	3.33	1.84	1.11	2.69	4.37						
150	4.71	3.41	2.37	1.31	1.52	2.65	3.90	2.79	1.53	1.23	2.38	3.81						
155	4.11	2.92	2.32	1.44	1.19	2.27	3.67	2.38	1.16	1.32	2.31	3.14						
160	3.44	2.44	2.34	1.57	0.83	1.81	3.11	2.04	0.83	1.43	2.32	2.65						
165	2.86	2.08	2.32	1.66	0.74	1.21	2.45	1.40	0.71	1.52	2.31	2.20						
170	1.46	1.97	2.24	1.74	0.72	0.79	1.31	0.89	0.71	1.63	2.13	2.17						
175	1.21	1.82	2.12	1.75	0.70	0.73	0.95	0.78	0.71	1.73	2.01	2.06						
180	0.73	0.86	1.74	1.76	1.75	1.58	0.72	0.99	1.56	1.82	1.80	1.58						

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	30.95	30.64	30.43	30.36	30.38	30.32	30.95	30.64	30.43	30.36
3.0	30.99	30.78	30.50	30.30	30.22	30.11	30.86	30.44	30.29	30.35
6.0	30.96	30.81	30.46	30.16	29.99	29.86	30.74	30.19	30.05	30.18
9.0	30.91	30.82	30.43	29.91	29.68	29.57	30.54	29.89	29.75	29.89
12.0	30.76	30.76	30.17	29.49	29.22	29.27	30.30	29.57	29.29	29.42
15.0	30.55	30.65	29.81	28.97	28.70	28.92	30.04	29.21	28.76	28.86
18.0	30.33	30.46	29.35	28.34	28.09	28.50	29.78	28.80	28.14	28.19
21.0	30.11	30.17	28.81	27.64	27.46	28.00	29.50	28.32	27.47	27.36
24.0	29.90	29.80	28.19	26.82	26.74	27.44	29.20	27.77	26.74	26.54
27.0	29.62	29.40	27.51	25.91	25.97	26.84	28.82	27.19	25.94	25.54
30.0	29.30	28.99	26.76	24.93	25.12	26.17	28.39	26.52	25.10	24.49
33.0	28.93	28.56	25.95	23.85	24.23	25.46	27.91	25.81	24.21	23.42
36.0	28.51	28.12	25.10	22.66	23.28	24.76	27.35	25.10	23.25	22.18
39.0	28.03	27.64	24.22	21.51	22.26	24.11	26.80	24.41	22.24	20.94
42.0	27.51	27.12	23.27	20.25	21.21	23.40	26.28	23.71	21.21	19.64
45.0	26.93	26.52	22.31	18.90	20.12	22.65	25.77	22.99	20.12	18.28
48.0	26.34	25.91	21.34	17.56	19.01	21.88	25.22	22.23	19.02	16.91
51.0	25.79	25.23	20.35	16.16	17.92	21.10	24.64	21.44	17.91	15.48
54.0	25.17	24.51	19.34	14.70	16.82	20.29	24.02	20.64	16.82	14.01
57.0	24.54	23.76	18.30	13.25	15.69	19.50	23.36	19.84	15.70	12.49
60.0	23.89	23.02	17.25	11.77	14.57	18.74	22.70	19.04	14.58	10.99
63.0	23.22	22.29	16.18	10.23	13.46	17.95	22.06	18.27	13.47	9.508
66.0	22.51	21.55	15.11	8.721	12.37	17.19	21.38	17.49	12.37	7.955
69.0	21.85	20.78	14.03	7.223	11.33	16.46	20.70	16.74	11.32	6.442
72.0	21.14	20.02	12.99	5.725	10.35	15.68	20.01	15.98	10.33	5.000
75.0	20.43	19.28	12.00	4.314	9.452	14.97	19.33	15.24	9.415	3.557
78.0	19.73	18.52	11.06	2.967	8.627	14.24	18.63	14.51	8.586	2.346
81.0	18.99	17.79	10.17	1.771	7.878	13.47	17.91	13.76	7.822	1.264
84.0	18.23	17.08	9.386	0.8519	7.175	12.74	17.18	13.01	7.119	0.4498
87.0	17.46	16.35	8.707	0.4705	6.571	12.02	16.41	12.28	6.496	0.3017
90.0	16.69	15.63	8.114	0.4505	6.033	11.37	15.63	11.60	5.949	0.2769
93.0	15.86	14.94	7.606	0.4322	5.600	10.75	14.87	10.95	5.502	0.2783
96.0	15.08	14.26	7.148	0.4424	5.243	10.17	14.14	10.35	5.135	0.2796
99.0	14.31	12.82	6.751	0.4626	4.942	8.854	13.18	9.056	4.789	0.2809
102.0	13.28	11.94	6.354	0.5581	4.285	8.518	12.45	8.715	4.228	0.2953
105.0	12.57	11.47	5.655	0.5931	3.554	8.151	11.81	8.304	3.649	0.3070
108.0	11.88	10.99	5.534	0.6132	3.503	7.611	11.14	7.683	3.492	0.3188
111.0	11.22	10.48	5.217	0.6434	3.323	7.045	10.17	7.293	3.246	0.3466
114.0	10.60	9.975	5.096	0.6936	3.187	6.618	9.578	6.956	3.070	0.4068
117.0	10.03	9.507	4.941	0.7490	3.081	6.266	9.150	6.565	3.010	0.4723
120.0	9.511	9.060	4.240	0.8043	2.966	5.970	8.668	6.143	2.879	0.5526
123.0	9.023	8.633	3.526	0.8546	2.785	5.648	8.210	5.730	2.723	0.6330
126.0	8.560	8.251	3.277	0.9097	2.699	5.316	7.758	5.388	2.588	0.7135
129.0	8.054	7.857	3.220	0.9550	2.533	4.944	7.306	5.072	2.382	0.7938
132.0	7.431	6.923	3.199	1.005	2.403	4.628	6.861	4.720	2.317	0.8592
135.0	6.762	5.781	3.111	1.050	2.272	4.306	6.149	4.274	2.205	0.9347
138.0	6.168	4.857	2.991	1.091	2.141	3.929	5.688	3.976	2.040	0.9949
141.0	5.641	4.120	2.830	1.121	2.016	3.647	5.340	3.679	1.965	1.040
144.0	5.283	3.829	2.674	1.151	1.870	3.266	4.692	3.423	1.889	1.090
147.0	5.022	3.678	2.513	1.181	1.725	2.964	4.331	3.042	1.738	1.161
150.0	4.705	3.407	2.373	1.307	1.523	2.648	3.905	2.795	1.527	1.231
153.0	4.344	3.105	2.307	1.392	1.293	2.432	3.839	2.559	1.301	1.271
156.0	3.982	2.834	2.342	1.473	1.131	2.206	3.557	2.362	1.115	1.332
159.0	3.509	2.532	2.348	1.543	0.9004	1.924	3.180	2.132	0.9138	1.407
162.0	3.243	2.240	2.336	1.598	0.7493	1.542	2.888	1.725	0.7086	1.487
165.0	2.856	2.084	2.322	1.664	0.7400	1.211	2.446	1.403	0.7096	1.518
168.0	1.574	2.015	2.272	1.724	0.7288	0.8185	1.432	1.102	0.7106	1.568
171.0	1.413	1.965	2.222	1.746	0.7237	0.7819	1.256	0.8681	0.7116	1.643
174.0	1.252	1.879	2.146	1.753	0.7137	0.7453	1.019	0.8034	0.7126	1.718
177.0	1.081	1.804	2.056	1.759	0.7036	0.7086	0.8637	0.7388	0.7137	1.764
180.0	0.7338	0.8644	1.744	1.759	1.754	1.583	0.7237	0.9901	1.563	1.819
G/C	300.0	330.0								
0.0	30.38	30.32								
3.0	30.39	30.48								
6.0	30.35	30.57								
9.0	30.21	30.59								
12.0	29.95	30.59								
15.0	29.58	30.42								
18.0	29.12	30.21								
21.0	28.52	29.93								
24.0	27.90	29.64								
27.0	27.21	29.28								
30.0	26.47	28.87								

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:

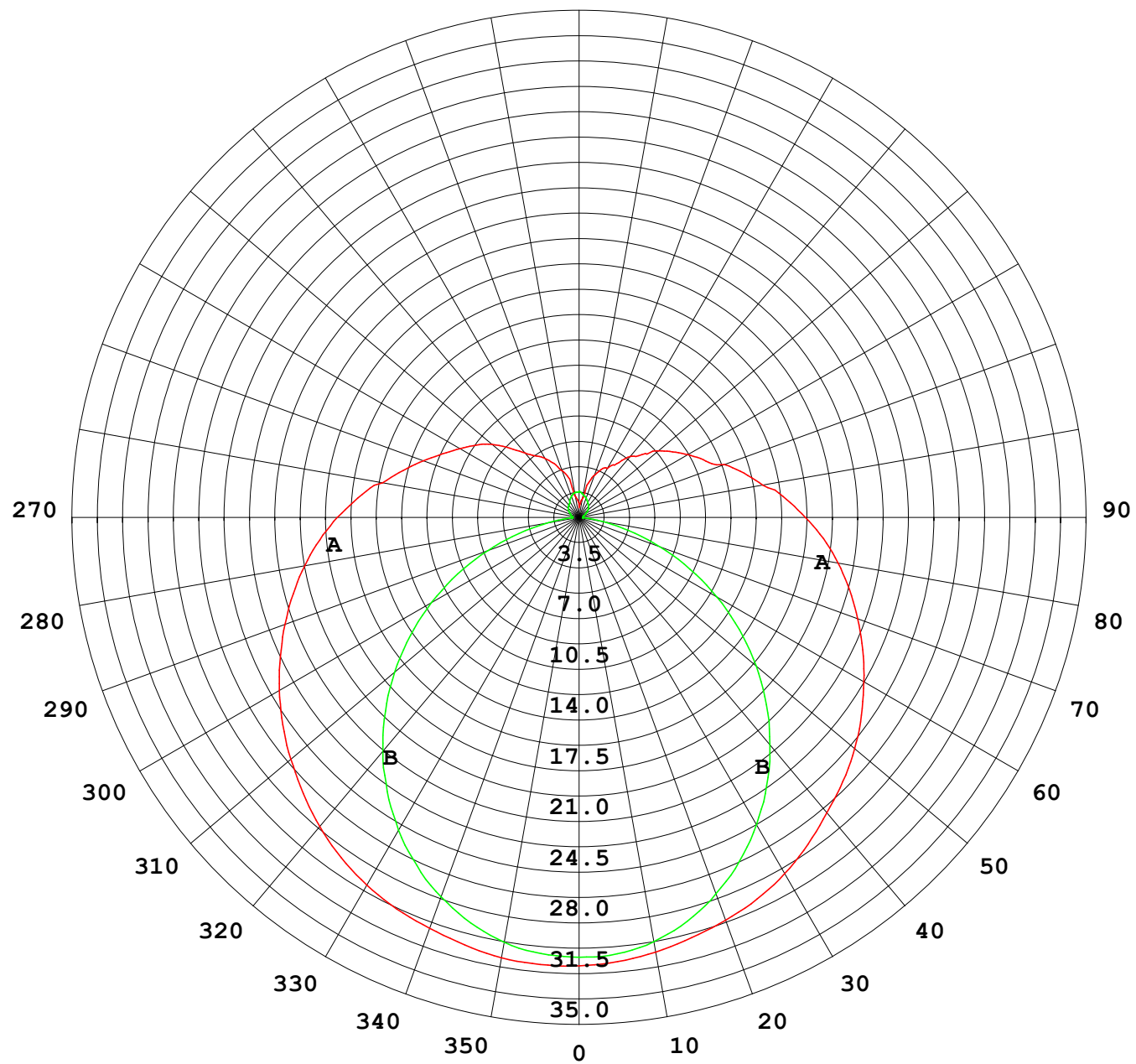
## Photometric Data Table [cd]

33.0	25.71	28.47
36.0	24.91	28.02
39.0	24.08	27.56
42.0	23.21	27.05
45.0	22.26	26.49
48.0	21.28	25.90
51.0	20.29	25.25
54.0	19.29	24.57
57.0	18.26	23.81
60.0	17.20	23.07
63.0	16.13	22.35
66.0	15.06	21.62
69.0	13.99	20.87
72.0	12.92	20.14
75.0	11.93	19.36
78.0	10.99	18.63
81.0	10.08	17.92
84.0	9.275	17.19
87.0	8.582	16.48
90.0	7.974	15.77
93.0	7.456	15.06
96.0	6.994	14.41
99.0	6.603	12.88
102.0	6.229	12.15
105.0	5.498	11.70
108.0	5.357	11.16
111.0	5.107	10.63
114.0	4.928	10.09
117.0	4.703	9.591
120.0	4.182	9.133
123.0	4.161	8.726
126.0	4.080	8.349
129.0	3.864	7.882
132.0	3.643	7.123
135.0	3.386	6.273
138.0	3.110	5.645
141.0	2.899	4.694
144.0	2.719	4.449
147.0	2.557	4.192
150.0	2.381	3.806
153.0	2.292	3.404
156.0	2.310	3.071
159.0	2.315	2.780
162.0	2.307	2.424
165.0	2.307	2.202
168.0	2.211	2.173
171.0	2.125	2.168
174.0	2.035	2.096
177.0	1.975	1.946
180.0	1.804	1.583

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:

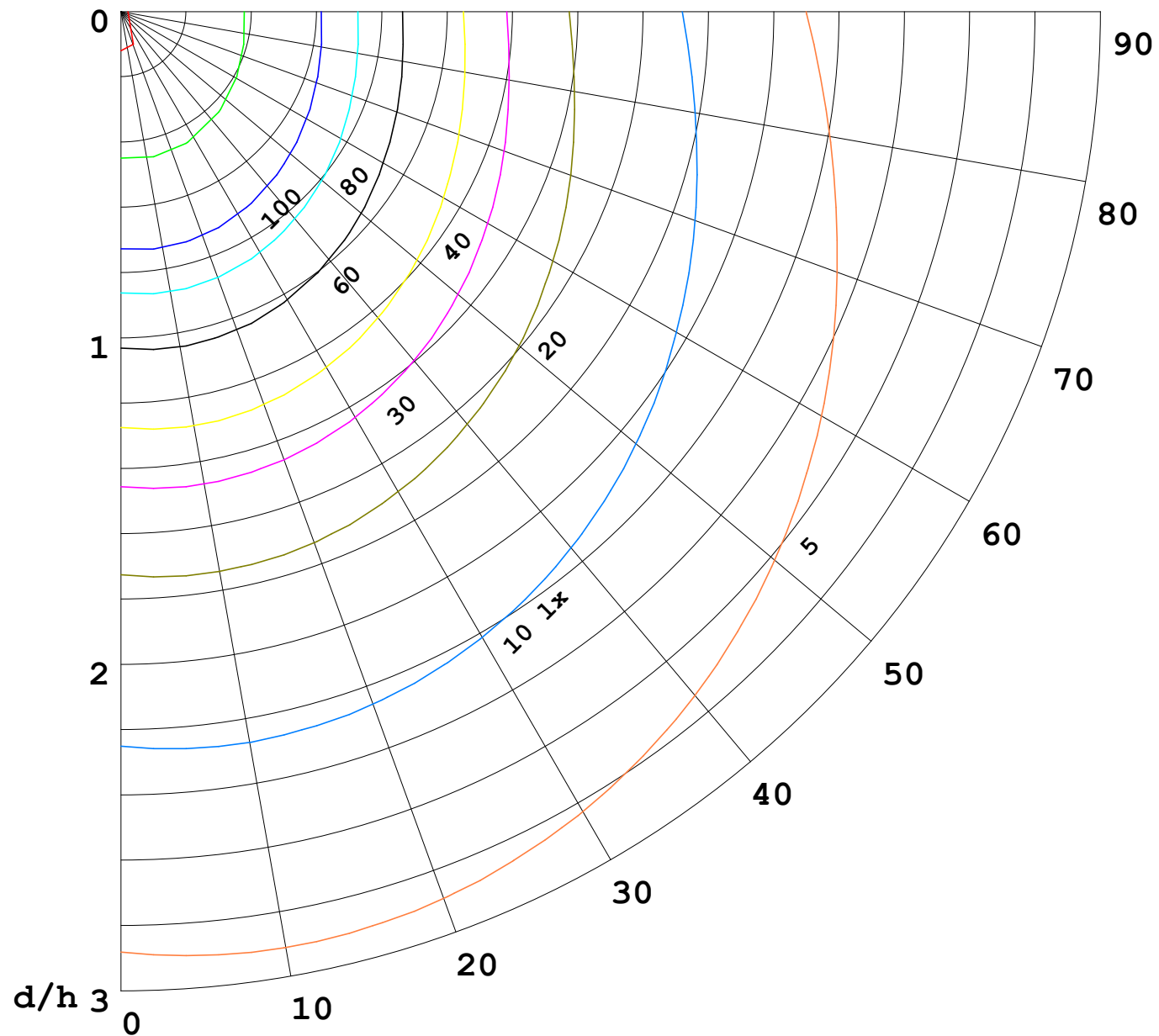
I (cd)





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

