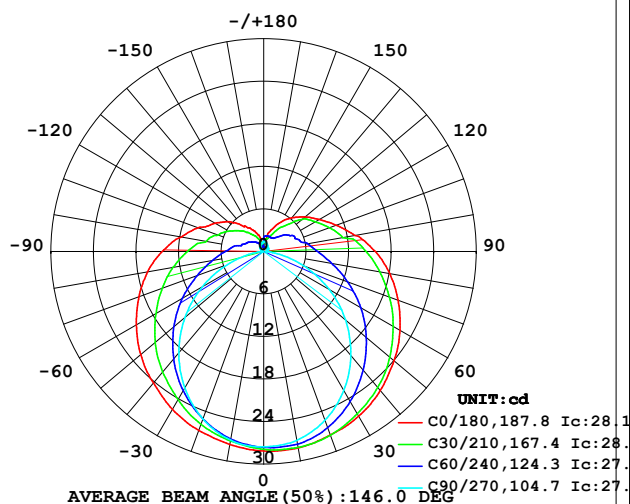


## LUMINAIRE PHOTOMETRIC TEST REPORT

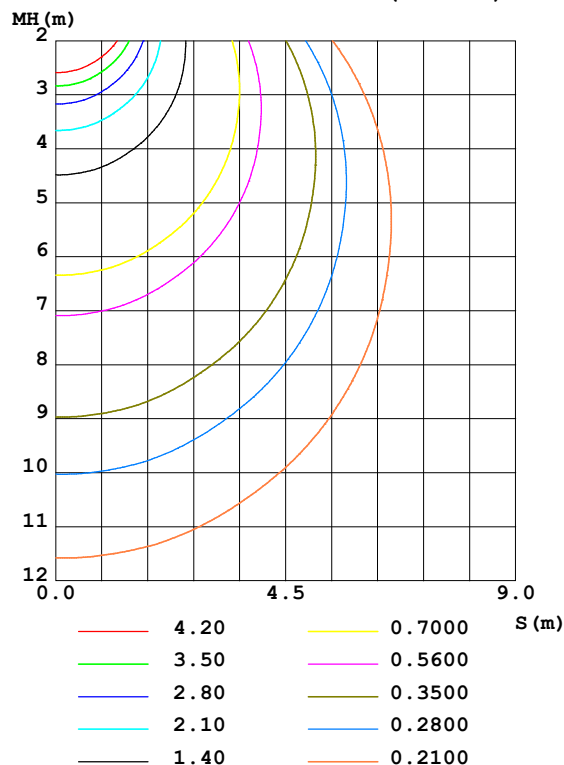
Test:U:24.00V I:0.3210A P:7.704W PF:1.000 Freq:50.00Hz Lamp Flux:139.133x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(5000)-W	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121709
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 18.06 lm/W			
MODEL	5050	I <sub>max</sub> (cd)	28.19	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)	139.13	η UP, DN (C0-180)	11.5, 38.8
NOMINAL FLUX (lm)	139.133	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	11.2, 38.4
LAMPS INSIDE	1	η up (%)	22.8	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	24	η down (%)	77.2	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:

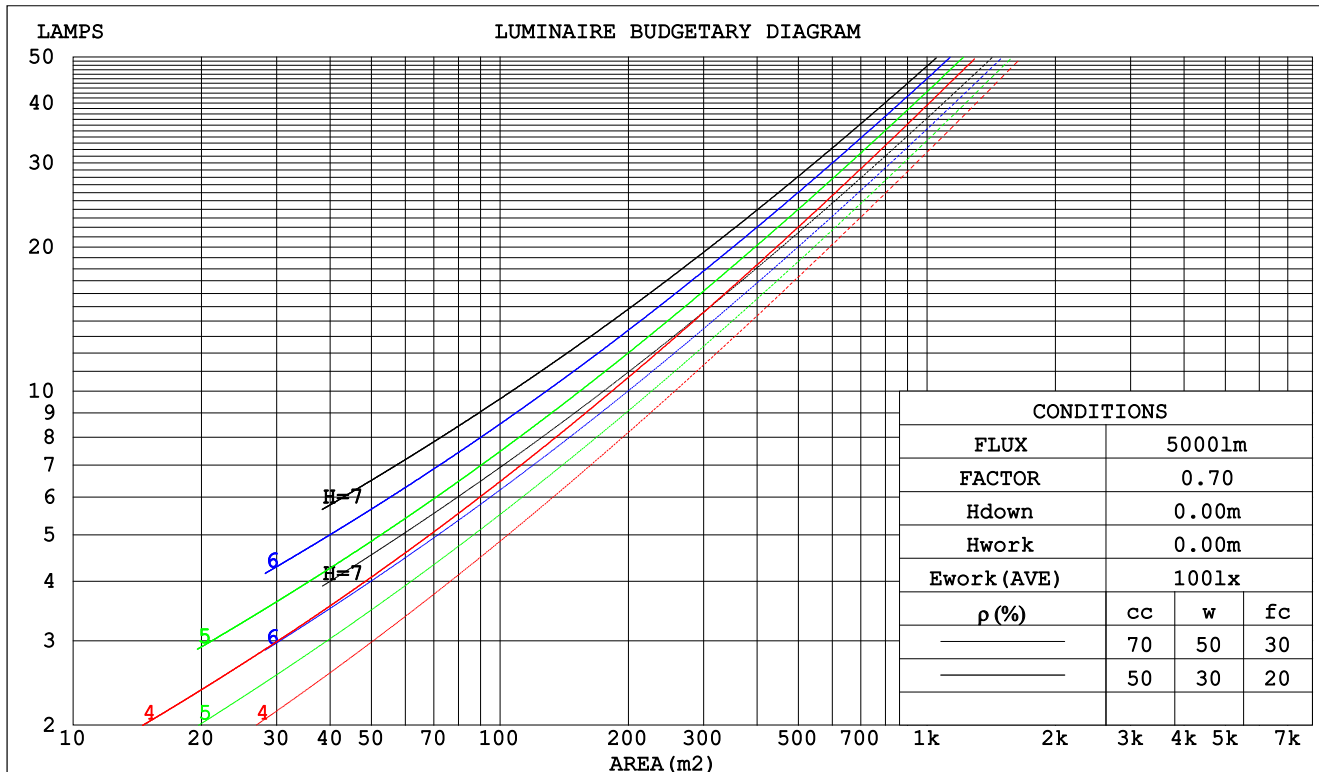




## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.3210A P:7.704W PF:1.000 Freq:50.00Hz Lamp Flux:139.133x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(5000)-W	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121709
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	.98	.98	.98	.89	.89	.89	.81	.81	.81	.77
1.0	.94	.89	.84	.90	.85	.81	.81	.77	.74	.73	.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	.53	.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	.33	.29	.27
6.0	.49	.39	.33	.46	.38	.32	.42	.35	.30	.38	.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:2021-12-17

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:0.3210A P:7.704W PF:1.000 Freq:50.00Hz Lamp Flux:139.133x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(5000)-W	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121709
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

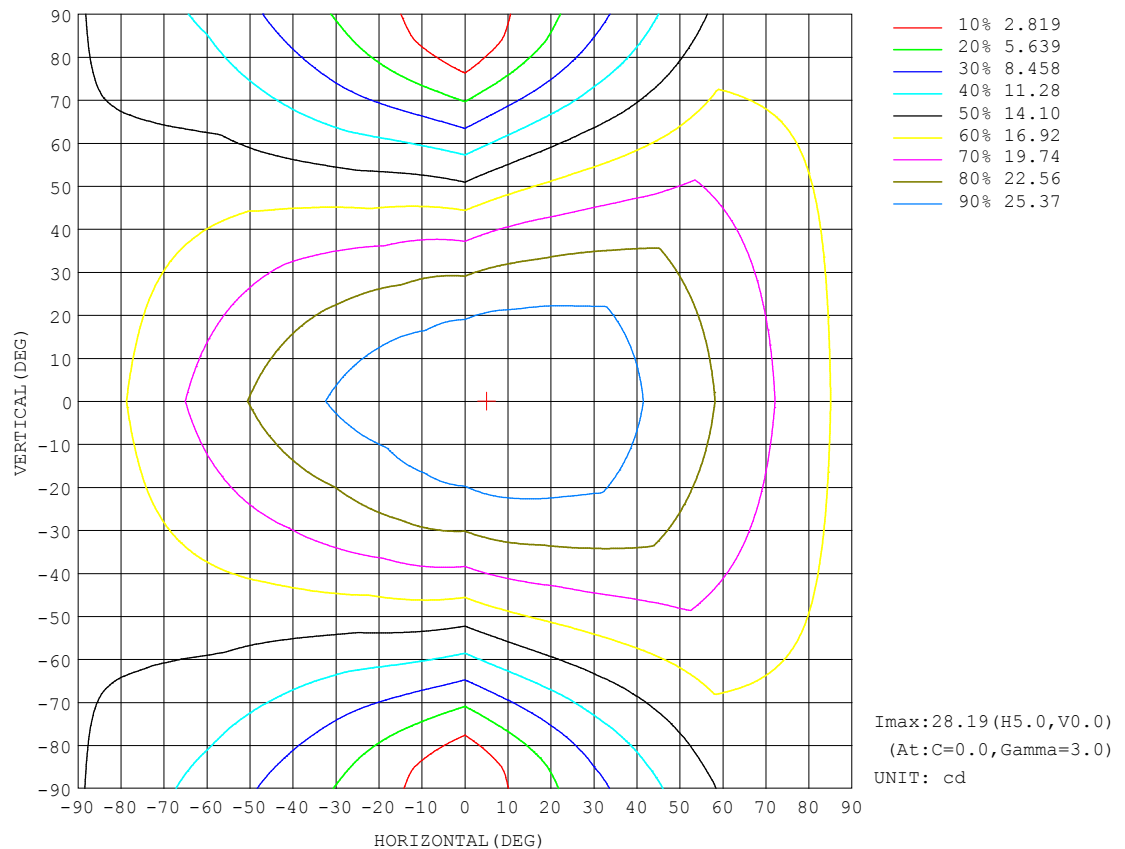
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	46	34	27	45	33	26	43	32	26	19
0.80	55	42	34	54	41	34	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	72	64	57	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	87	82	86	80	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:2021-12-17

$\gamma$  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:0.3210A P:7.704W PF:1.000 Freq:50.00Hz Lamp Flux:139.133x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(5000)-W	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121709
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:

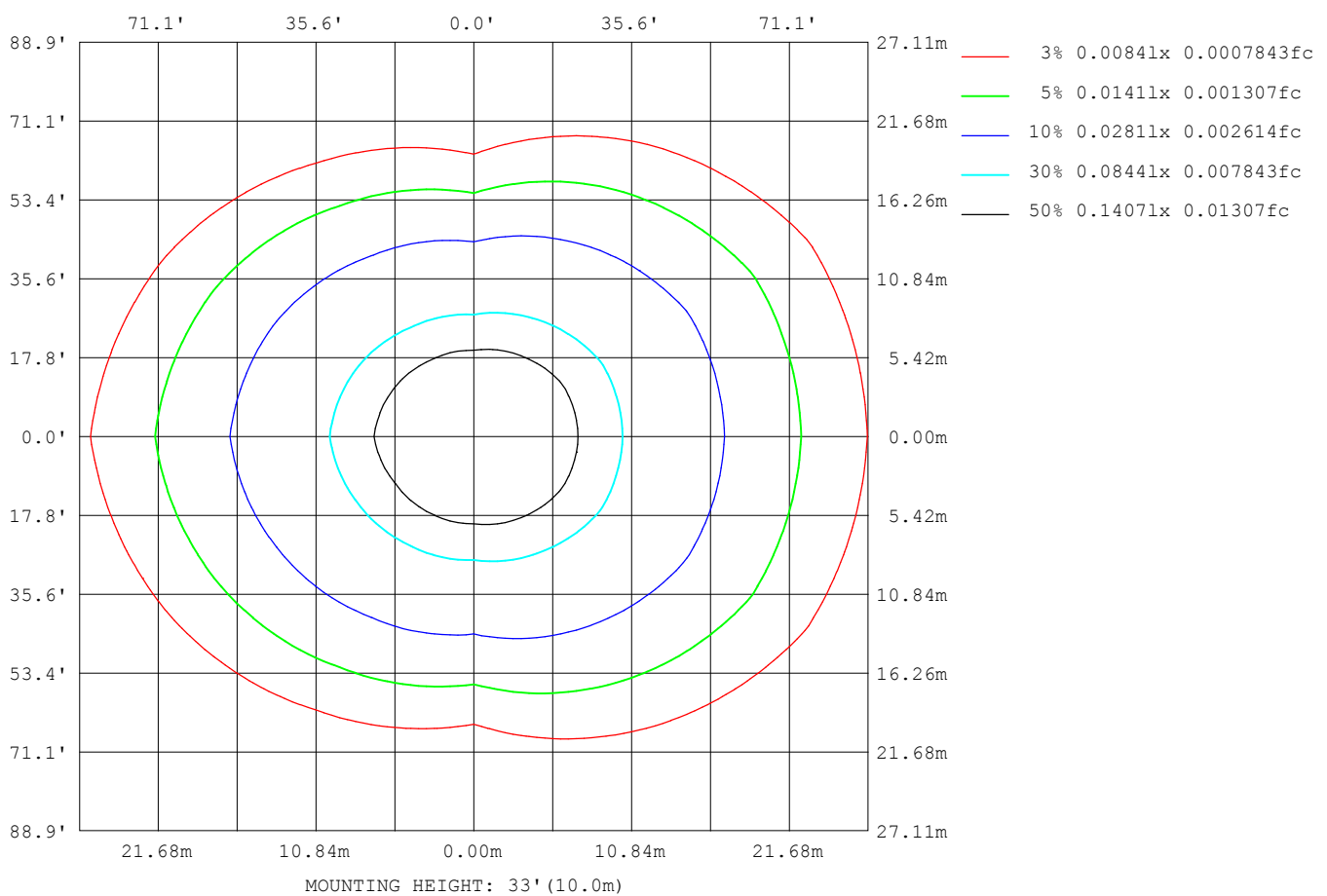
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## ISOLUX DIAGRAM

Test:U:24.00V I:0.3210A P:7.704W PF:1.000 Freq:50.00Hz Lamp Flux:139.133x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(5000)-W	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121709
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:0.3210A P:7.704W PF:1.000 Freq:50.00Hz Lamp Flux:139.133x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(5000)-W	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121709
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	28.1	27.9	27.6	27.5	27.6	27.6	28.1	27.9	27.6	27.5	27.6	27.6						
5	28.2	28.0	27.7	27.4	27.3	27.2	27.9	27.6	27.3	27.5	27.6	27.8						
10	28.1	28.1	27.6	27.0	26.8	26.8	27.6	27.1	26.9	27.0	27.4	27.9						
15	27.9	27.9	27.2	26.3	26.1	26.2	27.2	26.6	26.1	26.2	27.0	27.8						
20	27.5	27.6	26.4	25.3	25.2	25.5	26.8	25.9	25.1	25.1	26.2	27.5						
25	27.2	27.0	25.5	24.1	24.1	24.7	26.4	25.1	24.0	23.8	25.2	27.1						
30	26.8	26.4	24.4	22.6	22.9	23.7	25.7	24.2	22.7	22.3	24.2	26.5						
35	26.3	25.8	23.2	21.0	21.5	22.7	25.0	23.1	21.3	20.5	23.0	25.9						
40	25.6	25.0	21.8	19.2	19.9	21.7	24.2	22.2	19.8	18.7	21.8	25.2						
45	24.8	24.2	20.4	17.2	18.3	20.6	23.5	21.1	18.1	16.6	20.4	24.5						
50	24.0	23.2	18.9	15.1	16.7	19.4	22.7	20.0	16.6	14.5	18.9	23.6						
55	23.1	22.2	17.4	12.9	15.0	18.2	21.7	18.8	14.9	12.3	17.4	22.6						
60	22.2	21.1	15.8	10.6	13.3	17.1	20.8	17.6	13.2	9.99	15.8	21.5						
65	21.2	20.0	14.2	8.36	11.6	15.9	19.7	16.4	11.6	7.73	14.2	20.4						
70	20.2	18.9	12.6	6.07	10.0	14.7	18.7	15.2	9.98	5.46	12.6	19.4						
75	19.1	17.7	11.1	3.91	8.65	13.6	17.7	14.1	8.58	3.33	11.1	18.2						
80	18.1	16.6	9.74	1.95	7.44	12.5	16.6	13.0	7.35	1.53	9.73	17.1						
85	16.9	15.6	8.56	0.55	6.39	11.4	15.5	11.8	6.29	0.33	8.51	16.1						
90	15.8	14.5	7.64	0.40	5.53	10.3	14.3	10.8	5.43	0.25	7.53	15.0						
95	14.5	13.4	6.92	0.40	4.92	9.40	13.2	9.80	4.79	0.27	6.79	14.0						
100	13.1	11.3	6.32	0.43	4.46	7.94	11.8	8.25	4.30	0.28	6.20	11.9						
105	11.9	10.6	5.40	0.51	3.34	7.45	10.8	7.78	3.28	0.30	5.27	11.2						
110	10.9	9.85	5.11	0.54	3.15	6.56	9.86	6.85	3.07	0.31	5.09	10.4						
115	9.92	9.10	4.86	0.59	2.87	5.93	8.63	6.34	2.75	0.32	4.46	9.46						
120	9.07	8.41	4.54	0.64	2.67	5.40	7.94	5.75	2.60	0.43	4.22	8.65						
125	8.31	7.81	4.08	0.68	2.46	4.92	7.24	5.12	2.29	0.53	3.93	7.98						
130	7.60	7.08	3.61	0.73	2.19	4.38	6.56	4.61	2.12	0.64	3.52	7.26						
135	6.89	5.86	2.99	0.76	1.95	3.86	5.79	4.09	1.89	0.76	3.29	6.23						
140	6.21	4.83	2.56	0.79	1.78	3.37	4.81	3.53	1.71	0.86	2.88	5.00						
145	5.52	4.14	2.32	0.81	1.55	2.84	4.26	2.99	1.52	0.96	2.60	4.25						
150	4.79	3.30	2.25	0.95	1.21	2.37	3.80	2.59	1.27	1.08	2.37	3.68						
155	4.03	2.59	2.25	1.05	0.91	1.95	3.22	2.16	0.95	1.14	2.26	3.11						
160	3.27	2.08	2.27	1.17	0.88	1.49	2.60	1.81	0.75	1.19	2.29	2.58						
165	2.71	1.87	2.25	1.27	0.67	0.95	2.08	1.26	0.69	1.24	2.25	2.16						
170	1.41	1.81	2.24	1.34	0.66	0.85	1.08	0.71	0.67	1.30	2.12	2.20						
175	1.18	1.72	2.18	1.37	0.65	0.72	0.85	0.69	0.66	1.39	2.06	2.15						
180	0.66	0.66	1.29	1.36	1.35	1.24	0.66	0.66	1.02	1.44	1.41	1.26						

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	28.14	27.91	27.63	27.55	27.61	27.56	28.14	27.91	27.63	27.55
3.0	28.19	28.03	27.70	27.51	27.47	27.35	28.04	27.71	27.49	27.55
6.0	28.17	28.05	27.66	27.37	27.26	27.12	27.90	27.48	27.27	27.41
9.0	28.15	28.06	27.62	27.16	26.96	26.87	27.71	27.22	26.98	27.15
12.0	28.05	28.02	27.45	26.79	26.57	26.58	27.47	26.92	26.57	26.73
15.0	27.89	27.91	27.16	26.32	26.11	26.24	27.24	26.60	26.08	26.22
18.0	27.68	27.74	26.75	25.74	25.59	25.84	27.00	26.24	25.52	25.59
21.0	27.49	27.47	26.28	25.09	24.99	25.38	26.75	25.79	24.91	24.88
24.0	27.32	27.17	25.72	24.35	24.34	24.84	26.47	25.30	24.23	24.09
27.0	27.09	26.80	25.11	23.52	23.63	24.27	26.12	24.76	23.49	23.21
30.0	26.82	26.42	24.43	22.62	22.86	23.67	25.73	24.17	22.70	22.26
33.0	26.51	26.04	23.69	21.66	22.03	23.09	25.28	23.54	21.88	21.24
36.0	26.15	25.63	22.91	20.61	21.15	22.52	24.80	22.95	21.00	20.17
39.0	25.75	25.19	22.11	19.52	20.22	21.94	24.35	22.38	20.08	19.04
42.0	25.29	24.73	21.26	18.37	19.26	21.29	23.94	21.77	19.14	17.85
45.0	24.79	24.20	20.39	17.16	18.27	20.61	23.49	21.13	18.15	16.64
48.0	24.31	23.63	19.50	15.94	17.31	19.92	23.01	20.44	17.18	15.37
51.0	23.84	23.02	18.60	14.66	16.34	19.20	22.48	19.73	16.23	14.06
54.0	23.34	22.37	17.68	13.34	15.34	18.48	21.93	19.01	15.25	12.73
57.0	22.78	21.72	16.77	12.00	14.32	17.75	21.34	18.29	14.26	11.38
60.0	22.20	21.10	15.82	10.64	13.29	17.05	20.75	17.55	13.24	9.990
63.0	21.61	20.47	14.86	9.258	12.28	16.36	20.15	16.86	12.23	8.649
66.0	21.00	19.80	13.87	7.902	11.29	15.66	19.54	16.16	11.24	7.281
69.0	20.38	19.12	12.92	6.524	10.34	14.97	18.94	15.46	10.29	5.919
72.0	19.76	18.41	12.01	5.177	9.457	14.30	18.33	14.78	9.395	4.598
75.0	19.14	17.73	11.13	3.907	8.647	13.63	17.70	14.11	8.576	3.326
78.0	18.49	17.07	10.29	2.681	7.893	12.93	17.06	13.44	7.817	2.169
81.0	17.83	16.43	9.501	1.606	7.209	12.24	16.42	12.74	7.124	1.209
84.0	17.15	15.77	8.773	0.7868	6.581	11.59	15.74	12.06	6.496	0.4495
87.0	16.46	15.12	8.149	0.4229	6.018	10.93	15.02	11.40	5.924	0.2616
90.0	15.75	14.46	7.636	0.3960	5.535	10.32	14.31	10.77	5.426	0.2522
93.0	15.00	13.83	7.168	0.3921	5.143	9.753	13.62	10.17	5.014	0.2609
96.0	14.30	13.21	6.771	0.4021	4.821	9.231	12.95	9.616	4.693	0.2696
99.0	13.58	11.92	6.434	0.4173	4.549	8.055	12.15	8.393	4.416	0.2784
102.0	12.61	11.08	6.083	0.4777	4.049	7.759	11.42	8.077	3.952	0.2978
105.0	11.95	10.65	5.404	0.5077	3.344	7.447	10.83	7.781	3.277	0.3022
108.0	11.32	10.20	5.298	0.5327	3.197	7.089	10.26	7.354	3.235	0.3065
111.0	10.69	9.704	5.012	0.5529	3.082	6.422	9.660	6.760	2.990	0.3108
114.0	10.10	9.246	4.854	0.5780	2.930	6.060	8.783	6.479	2.804	0.3151
117.0	9.566	8.824	4.785	0.6082	2.744	5.688	8.361	6.138	2.689	0.3617
120.0	9.068	8.407	4.545	0.6384	2.669	5.397	7.944	5.746	2.598	0.4318
123.0	8.606	8.055	4.287	0.6735	2.554	5.100	7.517	5.358	2.472	0.4922
126.0	8.168	7.694	3.996	0.6937	2.408	4.814	7.100	5.006	2.246	0.5527
129.0	7.741	7.340	3.735	0.7188	2.252	4.492	6.688	4.710	2.161	0.6229
132.0	7.314	6.637	3.359	0.7438	2.001	4.156	6.248	4.363	1.960	0.6934
135.0	6.887	5.857	2.987	0.7640	1.950	3.864	5.787	4.087	1.889	0.7637
138.0	6.480	5.220	2.725	0.7791	1.865	3.572	5.229	3.700	1.804	0.8340
141.0	6.073	4.672	2.489	0.7941	1.734	3.275	4.542	3.448	1.673	0.8793
144.0	5.656	4.286	2.352	0.8142	1.589	2.914	4.416	3.051	1.563	0.9447
147.0	5.248	3.823	2.287	0.8246	1.453	2.647	3.985	2.810	1.427	1.0000
150.0	4.791	3.300	2.252	0.9451	1.207	2.366	3.803	2.594	1.270	1.080
153.0	4.329	2.803	2.221	1.005	1.041	2.085	3.417	2.373	1.060	1.106
156.0	3.886	2.462	2.256	1.071	0.9046	1.874	3.170	2.071	0.8694	1.156
159.0	3.349	2.140	2.278	1.141	1.025	1.562	2.792	1.850	0.9079	1.171
162.0	3.082	1.954	2.264	1.201	0.7796	1.261	2.447	1.604	0.7046	1.211
165.0	2.710	1.872	2.251	1.267	0.6735	0.9502	2.083	1.262	0.6933	1.241
168.0	1.501	1.837	2.247	1.317	0.6684	0.9038	1.105	0.9560	0.6821	1.277
171.0	1.372	1.819	2.243	1.352	0.6624	0.8270	1.055	0.7084	0.6708	1.317
174.0	1.227	1.754	2.196	1.365	0.6534	0.7502	0.9188	0.6909	0.6596	1.357
177.0	1.066	1.663	2.116	1.377	0.6483	0.6734	0.7131	0.6734	0.6483	1.407
180.0	0.6634	0.6634	1.292	1.362	1.347	1.241	0.6584	0.6634	1.020	1.442
G/C	300.0	330.0								
0.0	27.61	27.56								
3.0	27.64	27.73								
6.0	27.62	27.84								
9.0	27.52	27.88								
12.0	27.28	27.85								
15.0	26.96	27.80								
18.0	26.53	27.64								
21.0	26.03	27.43								
24.0	25.44	27.18								
27.0	24.82	26.89								
30.0	24.19	26.54								

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:

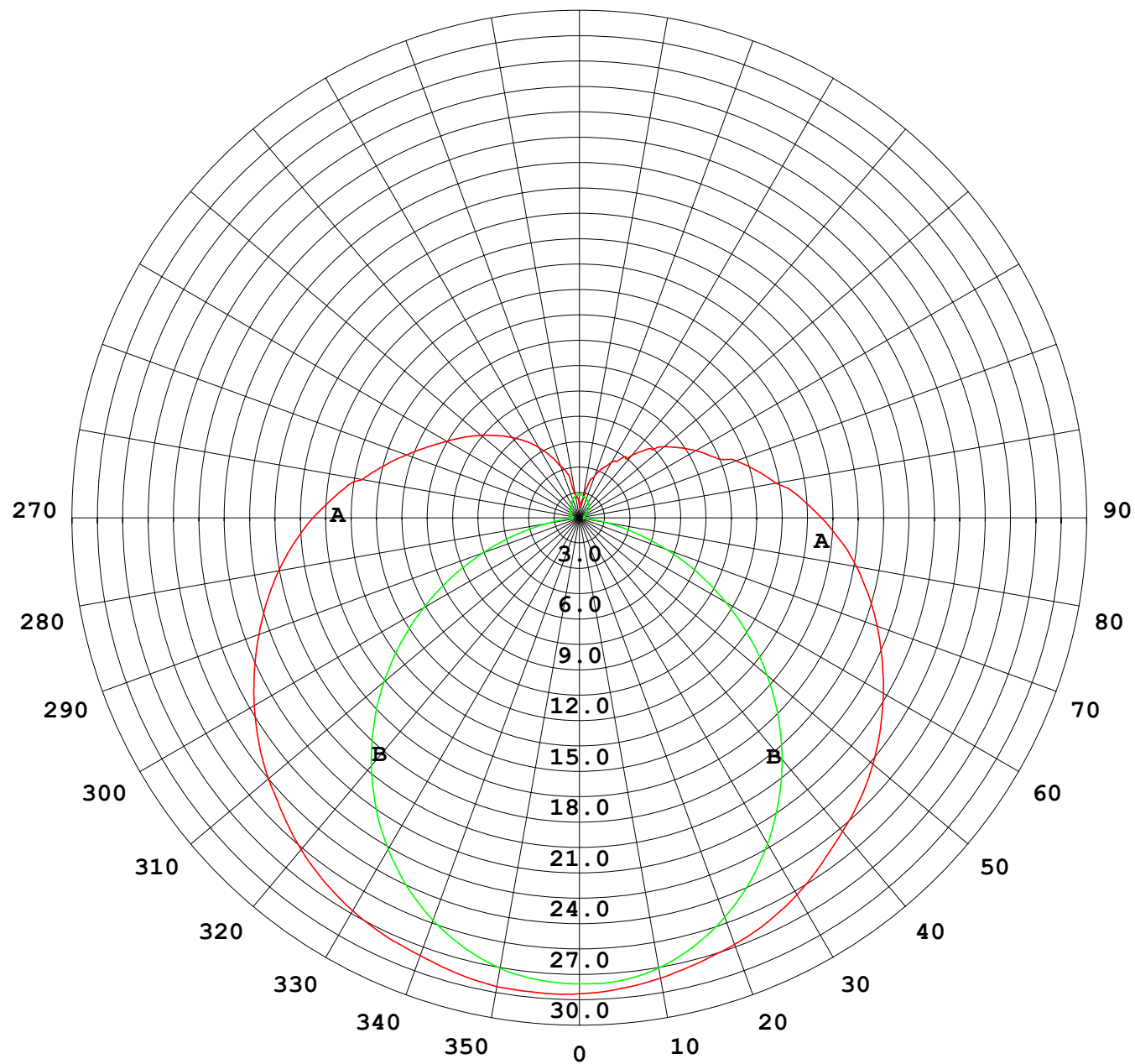
## Photometric Data Table [cd]

33.0	23.50	26.15
36.0	22.78	25.76
39.0	22.04	25.36
42.0	21.26	24.93
45.0	20.41	24.46
48.0	19.52	23.93
51.0	18.61	23.38
54.0	17.70	22.78
57.0	16.79	22.16
60.0	15.84	21.48
63.0	14.88	20.86
66.0	13.92	20.23
69.0	12.96	19.58
72.0	12.00	18.91
75.0	11.12	18.24
78.0	10.27	17.57
81.0	9.456	16.93
84.0	8.727	16.29
87.0	8.089	15.63
90.0	7.532	14.99
93.0	7.065	14.37
96.0	6.663	13.76
99.0	6.301	12.49
102.0	5.968	11.62
105.0	5.266	11.24
108.0	5.131	10.71
111.0	4.965	10.18
114.0	4.910	9.636
117.0	4.457	9.128
120.0	4.221	8.651
123.0	4.080	8.233
126.0	3.849	7.816
129.0	3.583	7.354
132.0	3.392	6.847
135.0	3.286	6.234
138.0	3.035	5.119
141.0	2.824	4.916
144.0	2.643	4.339
147.0	2.522	4.047
150.0	2.366	3.680
153.0	2.237	3.374
156.0	2.267	2.976
159.0	2.282	2.690
162.0	2.273	2.408
165.0	2.253	2.162
168.0	2.166	2.206
171.0	2.121	2.193
174.0	2.080	2.166
177.0	2.040	2.081
180.0	1.407	1.261

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:

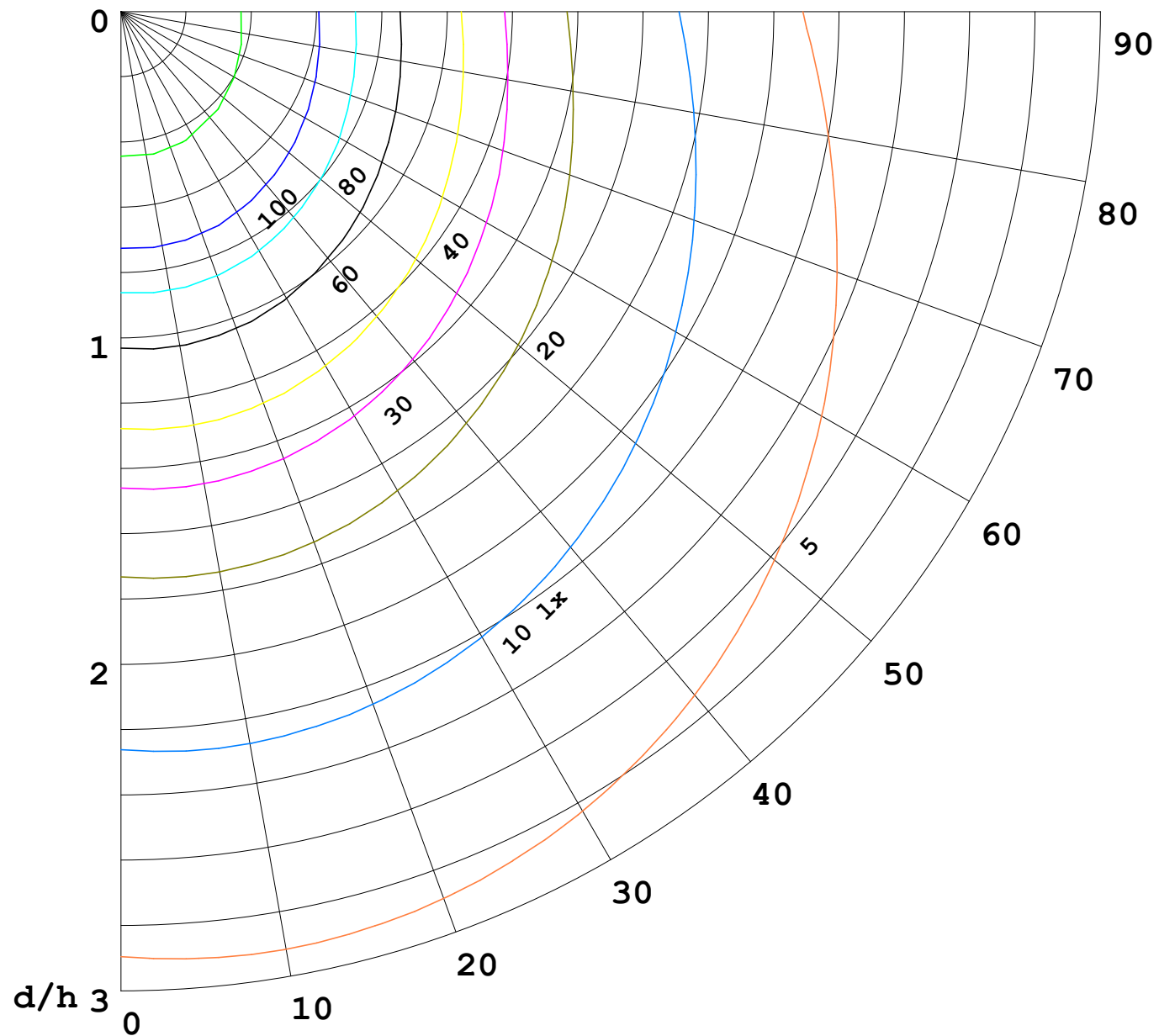
I (cd)





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

