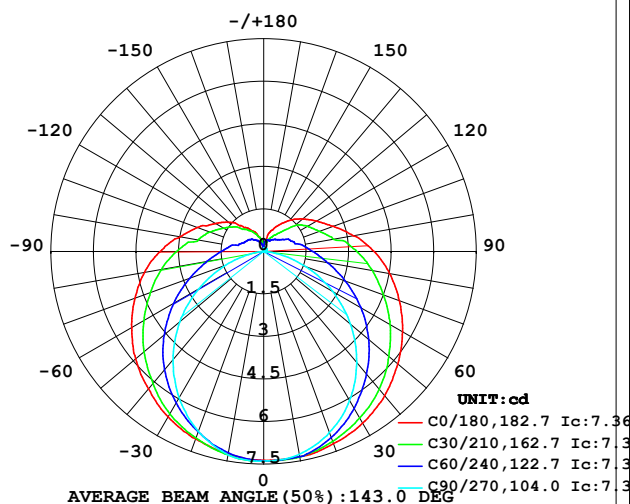


## LUMINAIRE PHOTOMETRIC TEST REPORT

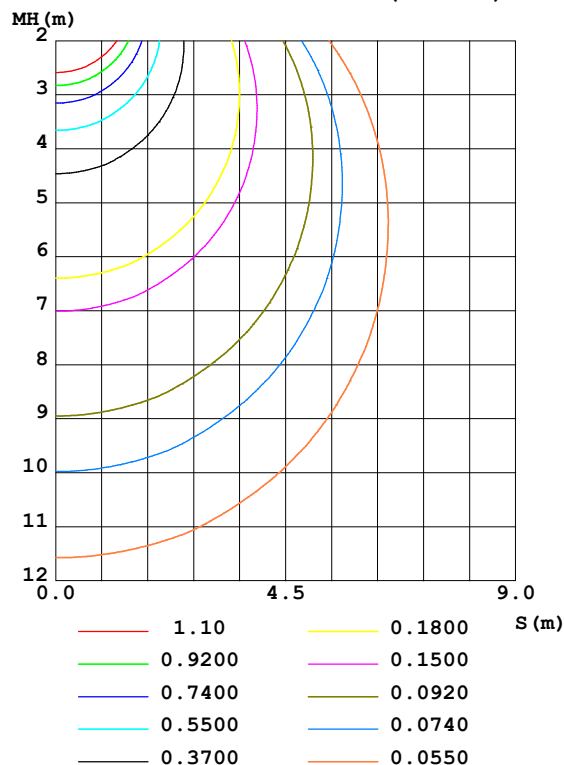
Test:U:24.00V I:0.3188A P:7.651W PF:1.000 Freq:50.00Hz Lamp Flux:35.7202x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(3000)-R	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121607
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 4.67 lm/W
MODEL	5050	I <sub>max</sub> (cd)	7.433	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)	35.720	η UP, DN (C0-180)	10.9, 39.7	
NOMINAL FLUX (lm)	35.7202	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	10.5, 39.0	
LAMPS INSIDE	1	η up (%)	21.4	CIBSE SHR NOM	1.50	
TEST VOLTAGE (V)	24	η down (%)	78.6	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: 2021-12-16

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:

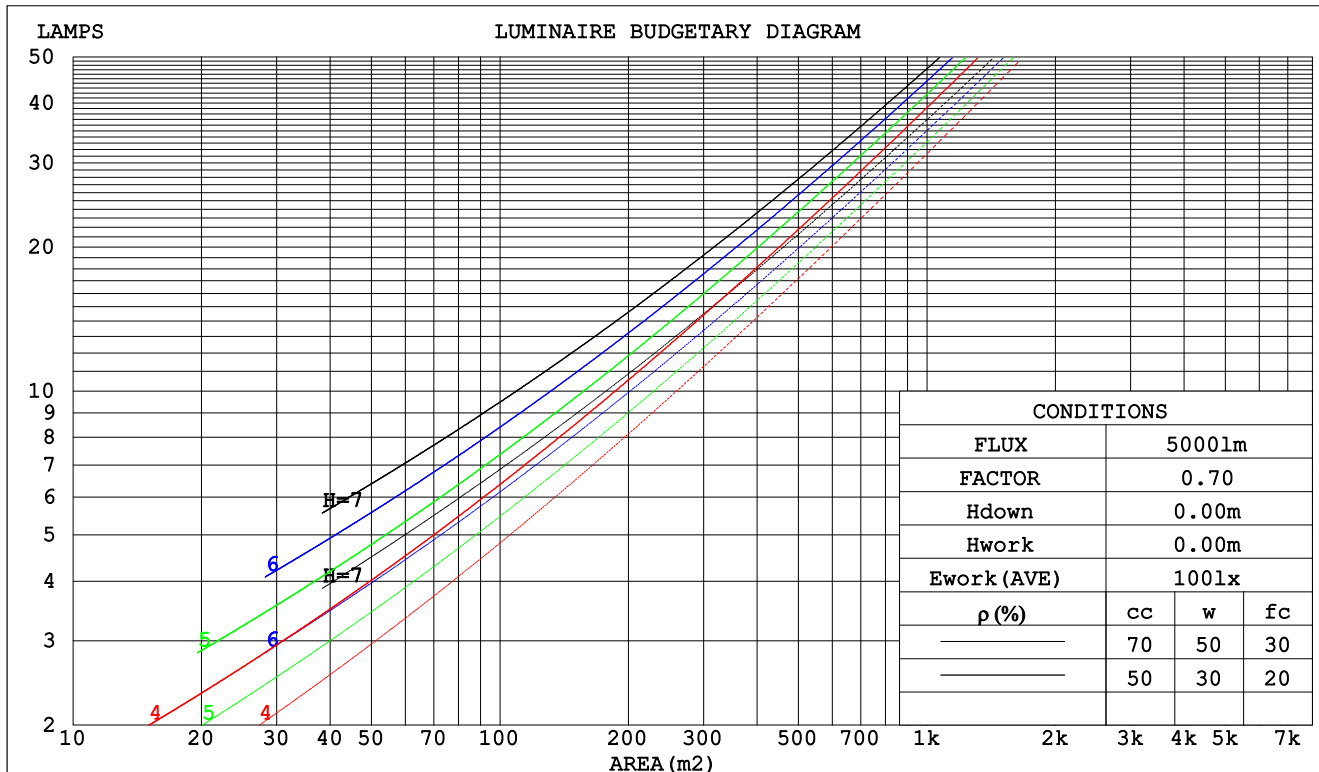




## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.3188A P:7.651W PF:1.000 Freq:50.00Hz Lamp Flux:35.7202x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(3000)-R	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121607
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	.79
1.0	.95	.89	.85	.90	.86	.81	.82	.78	.75	.75	.71	.69	.68	.65	.63	.59
2.0	.81	.73	.67	.77	.70	.64	.70	.64	.59	.64	.59	.55	.58	.54	.51	.47
3.0	.70	.61	.54	.67	.59	.52	.61	.54	.49	.55	.50	.45	.50	.46	.42	.38
4.0	.62	.52	.45	.59	.50	.44	.54	.46	.41	.49	.43	.38	.44	.39	.35	.32
5.0	.55	.45	.38	.52	.44	.37	.48	.40	.35	.43	.37	.32	.40	.34	.30	.27
6.0	.49	.40	.33	.47	.38	.32	.43	.36	.30	.39	.33	.28	.36	.30	.26	.24
7.0	.44	.35	.29	.42	.34	.28	.39	.32	.26	.36	.29	.25	.32	.27	.23	.21
8.0	.40	.31	.25	.39	.30	.25	.35	.28	.23	.33	.26	.22	.30	.24	.21	.18
9.0	.37	.28	.23	.35	.27	.22	.32	.26	.21	.30	.24	.20	.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:



UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.3188A P:7.651W PF:1.000 Freq:50.00Hz Lamp Flux:35.7202x1 lm											
NAME: SF21-24V-5050-70-DMX4-RGBW(3000)-R						TYPE:硅胶			WEIGHT:		
SPEC.:						DIM.: 28mm*11.5mm			SERIAL No.:2021121607		
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	2H	22.1	23.5	22.7	24.0	24.6	19.6	20.9	20.2	21.5	22.1
	3H	24.9	26.1	25.5	26.7	27.4	21.0	22.3	21.6	22.8	23.5
	4H	26.5	27.6	27.1	28.2	28.9	21.6	22.7	22.2	23.3	24.0
	6H	28.2	29.3	28.8	29.9	30.6	21.9	23.0	22.5	23.6	24.3
	8H	29.2	30.2	29.8	30.9	31.6	21.9	23.0	22.6	23.6	24.4
	12H	30.3	31.3	30.9	31.9	32.7	21.9	23.0	22.6	23.6	24.3
4H	2H	22.7	23.8	23.3	24.4	25.1	20.9	22.1	21.5	22.7	23.3
	3H	25.7	26.7	26.3	27.4	28.1	22.6	23.7	23.3	24.3	25.0
	4H	27.5	28.4	28.1	29.1	29.8	23.4	24.3	24.1	25.0	25.8
	6H	29.4	30.2	30.1	30.9	31.7	24.0	24.8	24.7	25.5	26.3
	8H	30.5	31.3	31.2	32.0	32.8	24.2	25.0	24.9	25.7	26.5
	12H	31.7	32.5	32.5	33.2	34.0	24.3	25.0	25.0	25.7	26.5
8H	4H	27.8	28.6	28.5	29.3	30.1	24.7	25.4	25.4	26.1	27.0
	6H	30.1	30.7	30.8	31.5	32.3	25.7	26.4	26.4	27.1	28.0
	8H	31.4	32.0	32.1	32.7	33.6	26.1	26.7	26.9	27.5	28.4
	12H	32.9	33.4	33.6	34.2	35.1	26.5	27.0	27.2	27.8	28.7
12H	4H	27.8	28.5	28.5	29.3	30.1	25.1	25.8	25.8	26.5	27.4
	6H	30.2	30.8	30.9	31.5	32.4	26.4	27.0	27.1	27.7	28.6
	8H	31.6	32.1	32.4	32.9	33.8	27.0	27.6	27.8	28.3	29.2
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, 35.72 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -11.6)

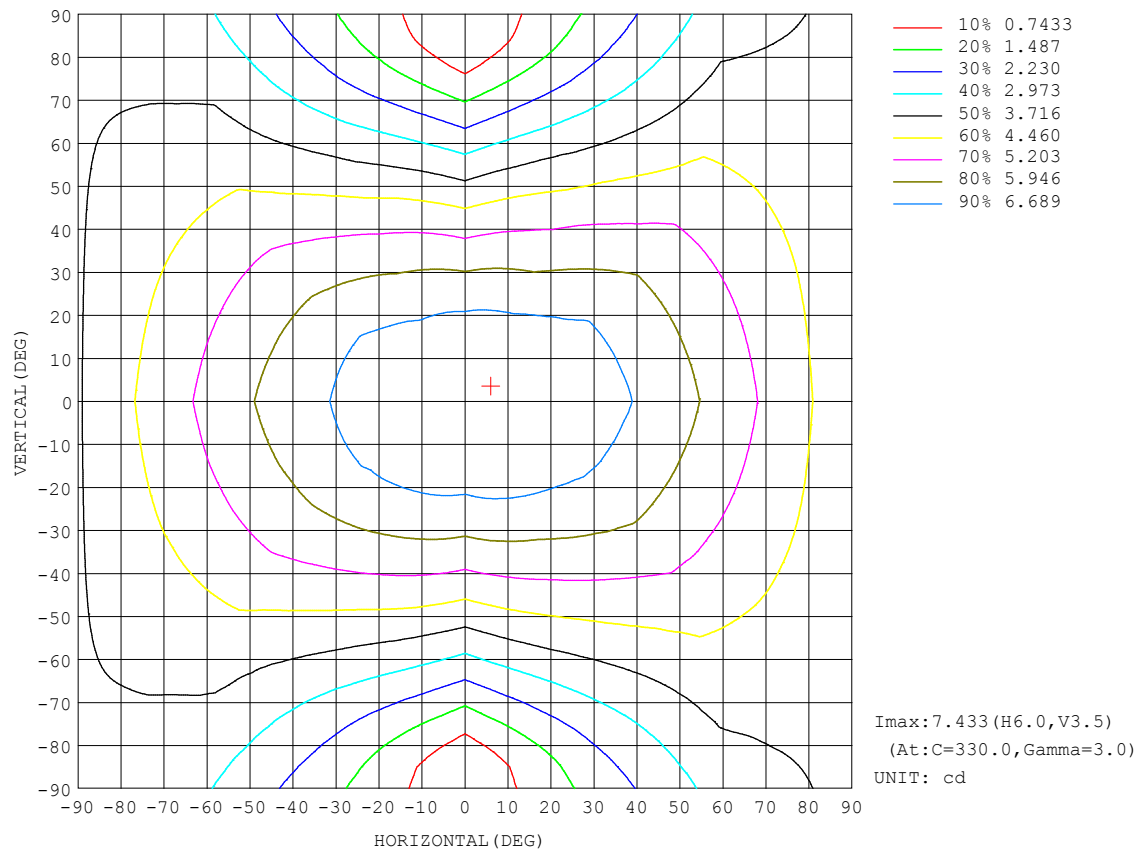
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LPC  
Test Date:2021-12-16

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:0.3188A P:7.651W PF:1.000 Freq:50.00Hz Lamp Flux:35.7202x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(3000)-R	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121607
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:

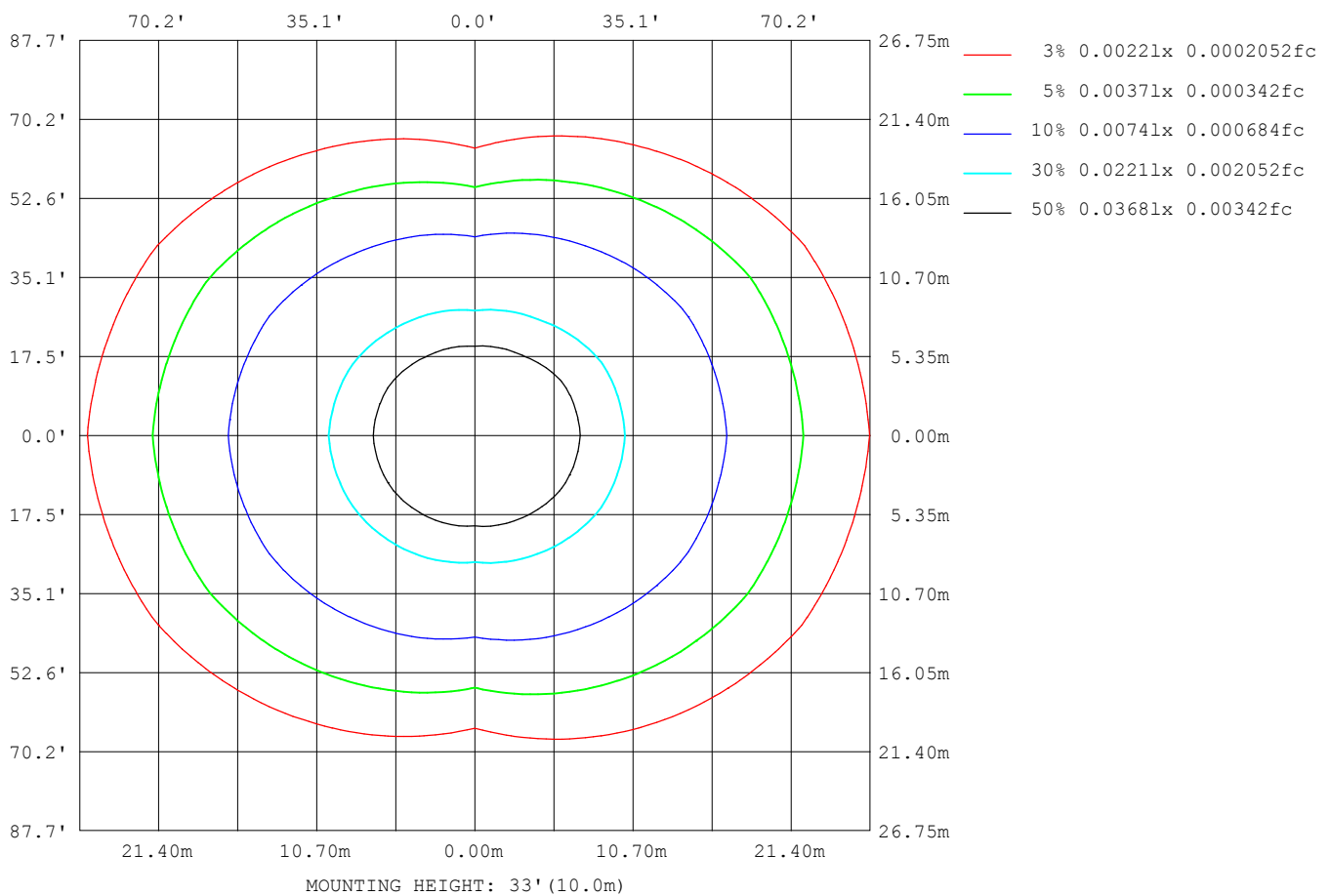
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## ISOLUX DIAGRAM

Test:U:24.00V I:0.3188A P:7.651W PF:1.000 Freq:50.00Hz Lamp Flux:35.7202x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(3000)-R	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121607
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:0.3188A P:7.651W PF:1.000 Freq:50.00Hz Lamp Flux:35.7202x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(3000)-R	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121607
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	7.36	7.39	7.38	7.39	7.40	7.42	7.36	7.39	7.38	7.39	7.40	7.42						
5	7.36	7.38	7.37	7.36	7.40	7.36	7.34	7.38	7.33	7.37	7.39	7.43						
10	7.35	7.35	7.35	7.26	7.30	7.27	7.26	7.28	7.21	7.28	7.30	7.42						
15	7.31	7.27	7.20	7.06	7.12	7.13	7.15	7.16	7.04	7.05	7.11	7.33						
20	7.21	7.13	6.98	6.79	6.89	6.98	7.03	7.00	6.76	6.75	6.87	7.17						
25	7.12	6.96	6.71	6.47	6.62	6.81	6.91	6.82	6.49	6.39	6.57	7.00						
30	6.99	6.78	6.38	6.07	6.30	6.61	6.74	6.62	6.17	5.96	6.22	6.83						
35	6.82	6.58	6.02	5.61	5.96	6.35	6.55	6.37	5.82	5.48	5.85	6.64						
40	6.63	6.34	5.64	5.11	5.57	6.07	6.32	6.07	5.45	4.98	5.50	6.40						
45	6.41	6.07	5.25	4.56	5.15	5.78	6.13	5.80	5.03	4.43	5.13	6.13						
50	6.17	5.76	4.84	3.99	4.69	5.49	5.90	5.51	4.58	3.86	4.73	5.84						
55	5.93	5.46	4.40	3.41	4.22	5.18	5.65	5.19	4.12	3.26	4.30	5.52						
60	5.65	5.14	3.96	2.81	3.78	4.86	5.38	4.88	3.66	2.65	3.88	5.22						
65	5.38	4.82	3.50	2.20	3.33	4.54	5.11	4.56	3.22	2.03	3.41	4.90						
70	5.09	4.50	3.07	1.58	2.89	4.22	4.83	4.25	2.78	1.43	2.98	4.58						
75	4.81	4.19	2.66	0.99	2.49	3.92	4.55	3.96	2.38	0.86	2.57	4.27						
80	4.51	3.89	2.29	0.48	2.15	3.64	4.27	3.66	2.04	0.37	2.21	3.98						
85	4.20	3.59	1.98	0.09	1.86	3.34	3.97	3.37	1.74	0.06	1.90	3.68						
90	3.90	3.29	1.73	0.08	1.61	3.03	3.65	3.07	1.51	0.03	1.65	3.38						
95	3.57	3.01	1.54	0.08	1.42	2.76	3.35	2.79	1.32	0.03	1.46	3.09						
100	3.21	2.50	1.37	0.10	1.30	2.31	2.99	2.35	1.18	0.03	1.30	2.57						
105	2.91	2.30	1.14	0.09	0.98	2.16	2.73	2.20	0.92	0.03	1.08	2.40						
110	2.61	2.09	1.07	0.09	0.93	2.00	2.49	2.03	0.85	0.03	1.03	2.20						
115	2.36	1.92	1.00	0.09	0.86	1.73	2.17	1.82	0.76	0.03	0.92	2.01						
120	2.15	1.79	0.85	0.09	0.82	1.57	1.97	1.65	0.73	0.03	0.79	1.85						
125	1.97	1.63	0.73	0.10	0.77	1.46	1.80	1.50	0.69	0.05	0.72	1.71						
130	1.79	1.42	0.65	0.11	0.72	1.32	1.60	1.36	0.66	0.05	0.66	1.55						
135	1.61	1.09	0.60	0.12	0.68	1.16	1.43	1.16	0.61	0.05	0.55	1.29						
140	1.43	0.86	0.55	0.12	0.62	1.02	1.15	1.02	0.54	0.05	0.48	1.02						
145	1.25	0.71	0.50	0.13	0.57	0.87	1.01	0.90	0.49	0.05	0.45	0.81						
150	1.09	0.60	0.44	0.13	0.52	0.79	0.83	0.81	0.45	0.06	0.41	0.69						
155	0.93	0.51	0.44	0.13	0.47	0.68	0.78	0.69	0.38	0.07	0.39	0.57						
160	0.79	0.43	0.43	0.13	0.39	0.54	0.61	0.57	0.33	0.07	0.37	0.46						
165	0.64	0.35	0.42	0.12	0.32	0.44	0.51	0.51	0.28	0.08	0.37	0.40						
170	0.32	0.32	0.38	0.13	0.25	0.30	0.22	0.38	0.20	0.08	0.35	0.38						
175	0.26	0.28	0.28	0.13	0.14	0.19	0.16	0.24	0.12	0.11	0.25	0.34						
180	0.13	0.13	0.12	0.13	0.13	0.14	0.13	0.14	0.12	0.12	0.13	0.14						

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:

Photometric Data Table [cd]

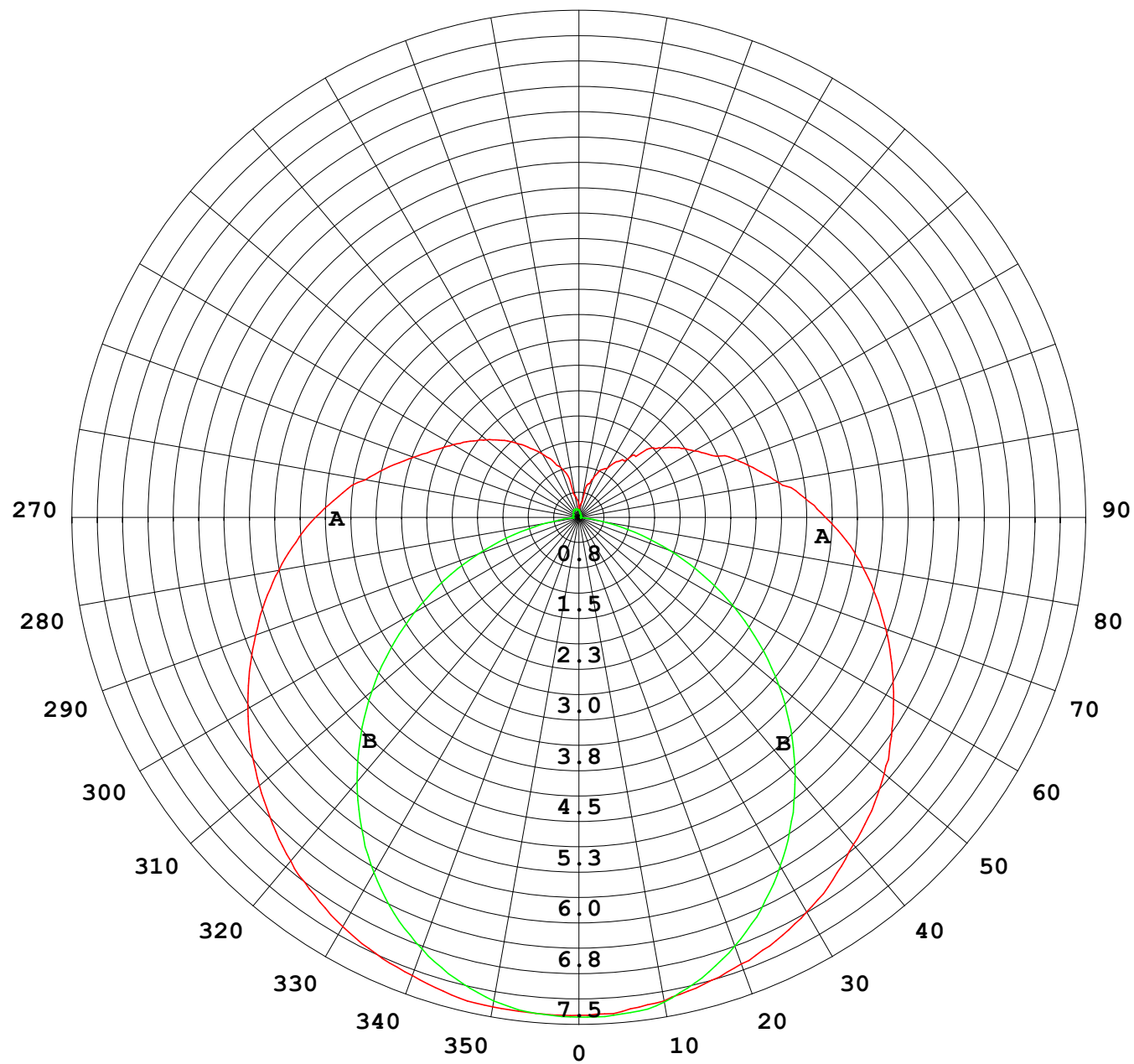
G/C	0.0	30.0	60.0	90.0	120.0	150.0	180.0	210.0	240.0	270.0
0.0	7.363	7.388	7.378	7.393	7.403	7.418	7.363	7.388	7.378	7.393
3.0	7.368	7.388	7.383	7.378	7.403	7.383	7.353	7.388	7.353	7.393
6.0	7.360	7.378	7.368	7.353	7.393	7.347	7.307	7.363	7.312	7.363
9.0	7.353	7.368	7.353	7.287	7.328	7.282	7.272	7.303	7.242	7.313
12.0	7.345	7.312	7.303	7.187	7.232	7.207	7.212	7.237	7.136	7.187
15.0	7.313	7.267	7.202	7.061	7.122	7.131	7.146	7.162	7.040	7.051
18.0	7.252	7.181	7.077	6.910	6.986	7.041	7.076	7.061	6.869	6.871
21.0	7.197	7.101	6.931	6.734	6.831	6.945	7.021	6.966	6.709	6.680
24.0	7.142	6.991	6.760	6.538	6.680	6.865	6.940	6.855	6.548	6.469
27.0	7.076	6.890	6.585	6.312	6.494	6.719	6.845	6.745	6.367	6.218
30.0	6.991	6.784	6.384	6.065	6.303	6.609	6.739	6.619	6.171	5.956
33.0	6.891	6.664	6.157	5.809	6.092	6.458	6.639	6.474	5.965	5.685
36.0	6.790	6.538	5.941	5.512	5.876	6.302	6.498	6.313	5.749	5.398
39.0	6.685	6.397	5.720	5.211	5.650	6.121	6.357	6.137	5.517	5.082
42.0	6.549	6.232	5.489	4.894	5.404	5.945	6.247	5.956	5.281	4.760
45.0	6.413	6.066	5.253	4.563	5.147	5.784	6.131	5.795	5.030	4.434
48.0	6.268	5.895	5.007	4.226	4.876	5.613	5.990	5.624	4.763	4.097
51.0	6.127	5.699	4.750	3.884	4.595	5.437	5.845	5.448	4.487	3.745
54.0	5.976	5.518	4.494	3.522	4.313	5.246	5.694	5.258	4.216	3.388
57.0	5.820	5.337	4.223	3.170	4.047	5.050	5.538	5.077	3.934	3.016
60.0	5.655	5.141	3.961	2.808	3.780	4.859	5.377	4.875	3.663	2.649
63.0	5.489	4.955	3.690	2.441	3.514	4.658	5.216	4.690	3.401	2.278
66.0	5.318	4.764	3.418	2.075	3.243	4.472	5.050	4.504	3.135	1.911
69.0	5.147	4.558	3.162	1.708	2.986	4.286	4.889	4.313	2.869	1.554
72.0	4.981	4.372	2.906	1.351	2.730	4.096	4.719	4.137	2.612	1.197
75.0	4.810	4.191	2.660	0.9943	2.494	3.925	4.553	3.961	2.376	0.8554
78.0	4.629	4.010	2.428	0.6727	2.277	3.744	4.382	3.780	2.160	0.5436
81.0	4.453	3.829	2.222	0.3812	2.081	3.578	4.216	3.609	1.964	0.2871
84.0	4.268	3.653	2.031	0.1602	1.910	3.407	4.040	3.433	1.789	0.0810
87.0	4.087	3.477	1.875	0.0804	1.755	3.211	3.844	3.247	1.628	0.0352
90.0	3.901	3.291	1.734	0.0804	1.609	3.030	3.648	3.071	1.507	0.0302
93.0	3.700	3.115	1.609	0.0804	1.493	2.864	3.487	2.900	1.397	0.0302
96.0	3.514	2.950	1.508	0.0804	1.397	2.703	3.291	2.740	1.286	0.0302
99.0	3.318	2.593	1.403	0.0905	1.322	2.517	3.050	2.573	1.206	0.0302
102.0	3.087	2.447	1.277	0.0905	1.202	2.246	2.889	2.292	1.129	0.0302
105.0	2.905	2.301	1.141	0.0905	0.9753	2.156	2.728	2.196	0.9197	0.0302
108.0	2.720	2.181	1.131	0.0905	0.9499	2.065	2.583	2.101	0.8892	0.0302
111.0	2.549	2.050	1.036	0.0905	0.9249	1.899	2.437	1.971	0.8340	0.0302
114.0	2.403	1.955	1.005	0.0905	0.8746	1.759	2.226	1.860	0.7738	0.0302
117.0	2.267	1.869	0.9801	0.0905	0.8545	1.648	2.095	1.754	0.7637	0.0302
120.0	2.151	1.794	0.8498	0.0905	0.8193	1.573	1.970	1.649	0.7270	0.0302
123.0	2.041	1.688	0.7793	0.1006	0.7941	1.518	1.874	1.558	0.7077	0.0451
126.0	1.930	1.598	0.7089	0.1066	0.7740	1.437	1.759	1.473	0.6885	0.0452
129.0	1.820	1.482	0.6686	0.1104	0.7340	1.347	1.638	1.382	0.6634	0.0452
132.0	1.719	1.296	0.6384	0.1139	0.7137	1.261	1.523	1.307	0.6282	0.0452
135.0	1.614	1.090	0.6031	0.1164	0.6837	1.161	1.426	1.161	0.6131	0.0502
138.0	1.508	0.9395	0.5781	0.1189	0.6435	1.065	1.236	1.066	0.5826	0.0503
141.0	1.398	0.8340	0.5479	0.1230	0.6232	1.005	1.076	1.005	0.5276	0.0503
144.0	1.287	0.7486	0.5178	0.1306	0.5732	0.9144	1.035	0.9350	0.5124	0.0503
147.0	1.186	0.6933	0.4876	0.1352	0.5529	0.8443	0.9645	0.8696	0.4723	0.0503
150.0	1.086	0.5980	0.4424	0.1335	0.5178	0.7938	0.8342	0.8144	0.4523	0.0553
153.0	0.9904	0.5376	0.4381	0.1318	0.4977	0.7244	0.8026	0.7341	0.4418	0.0603
156.0	0.8850	0.4774	0.4338	0.1334	0.4575	0.6381	0.7635	0.6736	0.3709	0.0653
159.0	0.8093	0.4372	0.4294	0.1351	0.4173	0.5627	0.6628	0.5782	0.3383	0.0704
162.0	0.7341	0.3668	0.4251	0.1289	0.3621	0.5123	0.5376	0.5481	0.3064	0.0704
165.0	0.6387	0.3467	0.4222	0.1248	0.3169	0.4371	0.5074	0.5078	0.2812	0.0753
168.0	0.3420	0.3316	0.3921	0.1250	0.2715	0.3567	0.2411	0.4375	0.2160	0.0754
171.0	0.3117	0.3015	0.3720	0.1252	0.2214	0.2813	0.2109	0.3420	0.1906	0.0904
174.0	0.2715	0.2814	0.3220	0.1254	0.1511	0.2109	0.1856	0.2617	0.1256	0.1005
177.0	0.2264	0.2005	0.1667	0.1256	0.1358	0.1407	0.1356	0.1863	0.1206	0.1106
180.0	0.1256	0.1256	0.1206	0.1256	0.1307	0.1357	0.1307	0.1357	0.1206	0.1206
G/C	300.0	330.0								
0.0	7.403	7.418								
3.0	7.398	7.433								
6.0	7.373	7.427								
9.0	7.317	7.422								
12.0	7.232	7.393								
15.0	7.111	7.333								
18.0	6.975	7.242								
21.0	6.804	7.132								
24.0	6.638	7.026								
27.0	6.432	6.931								
30.0	6.216	6.825								

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:



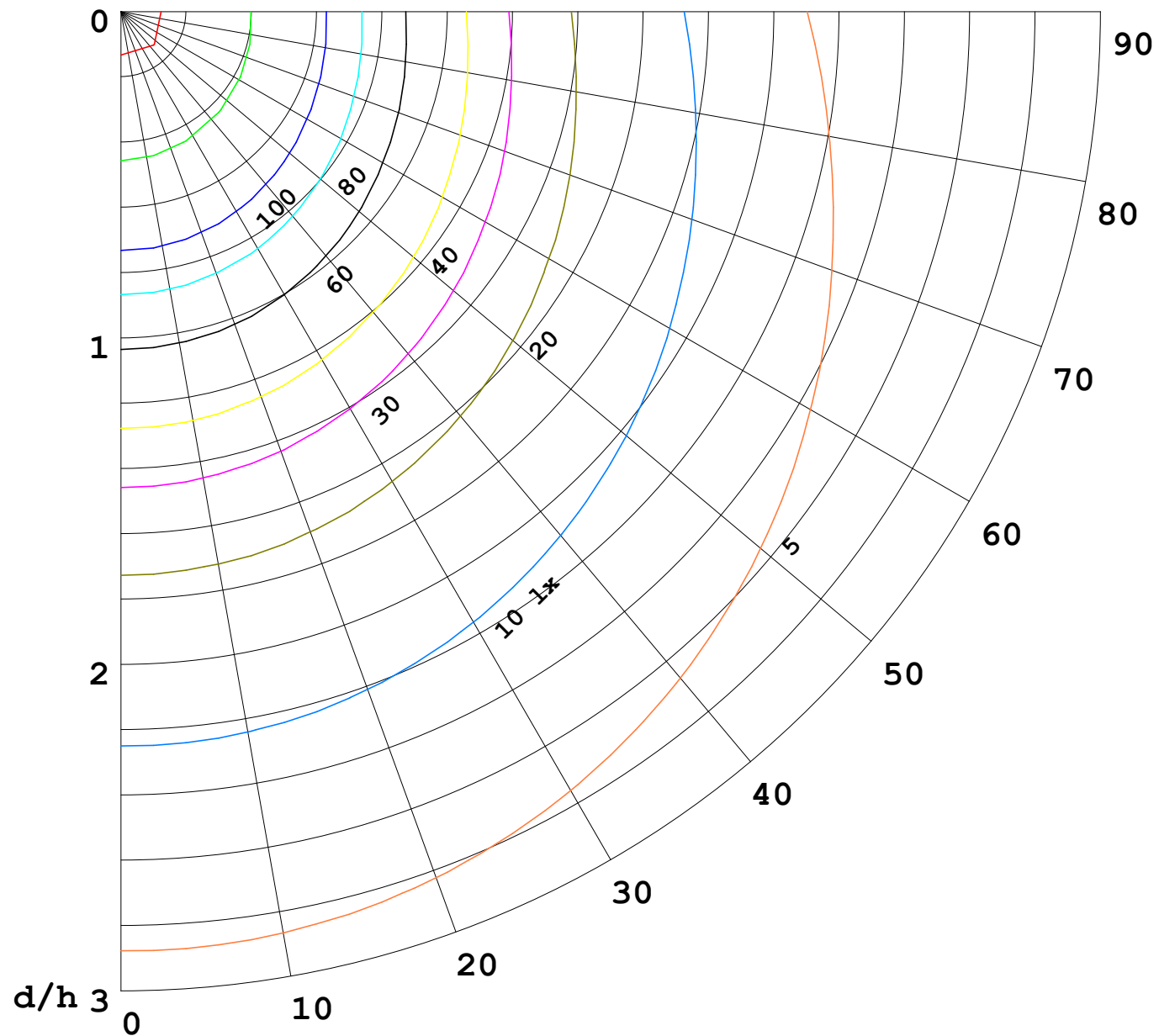
I (cd)





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

