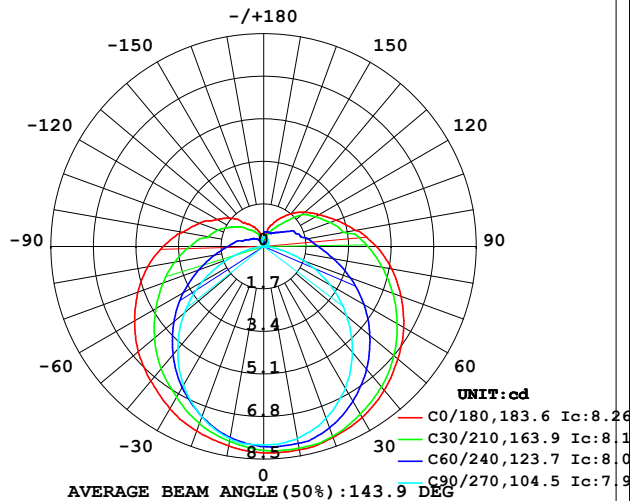


LUMINAIRE PHOTOMETRIC TEST REPORT

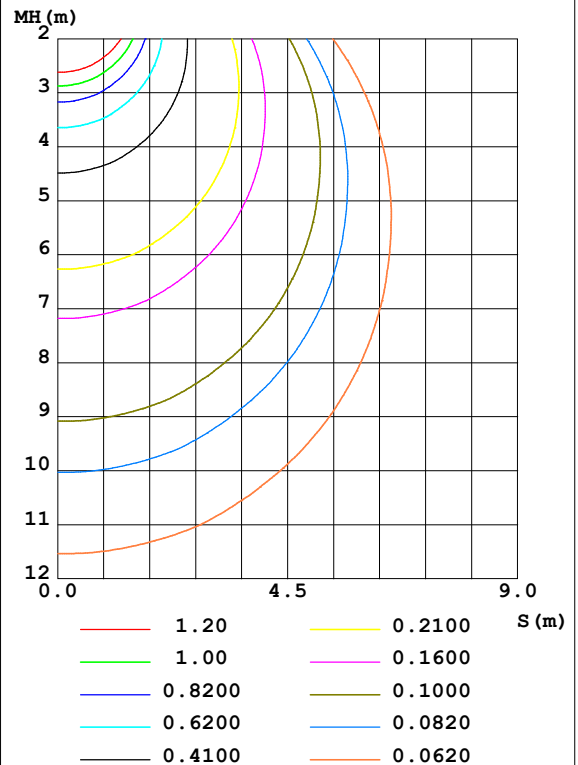
Test:U:24.00V I:0.3207A P:7.697W PF:1.000 Freq:50.00Hz Lamp Flux:39.4366x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(2700)-R	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121602
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 5.12 lm/W			
MODEL	5050	I _{max} (cd)	8.262	S/MH (C0/180)	1.36
NOMINAL POWER(W)	4.5	LOR(%)	100.0	S/MH (C90/270)	1.21
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	39.437	η UP,DN(C0-180)	11.2,39.5
NOMINAL FLUX(lm)	39.4366	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	10.7,38.6
LAMPS INSIDE	1	η up (%)	21.9	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	η down (%)	78.1	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



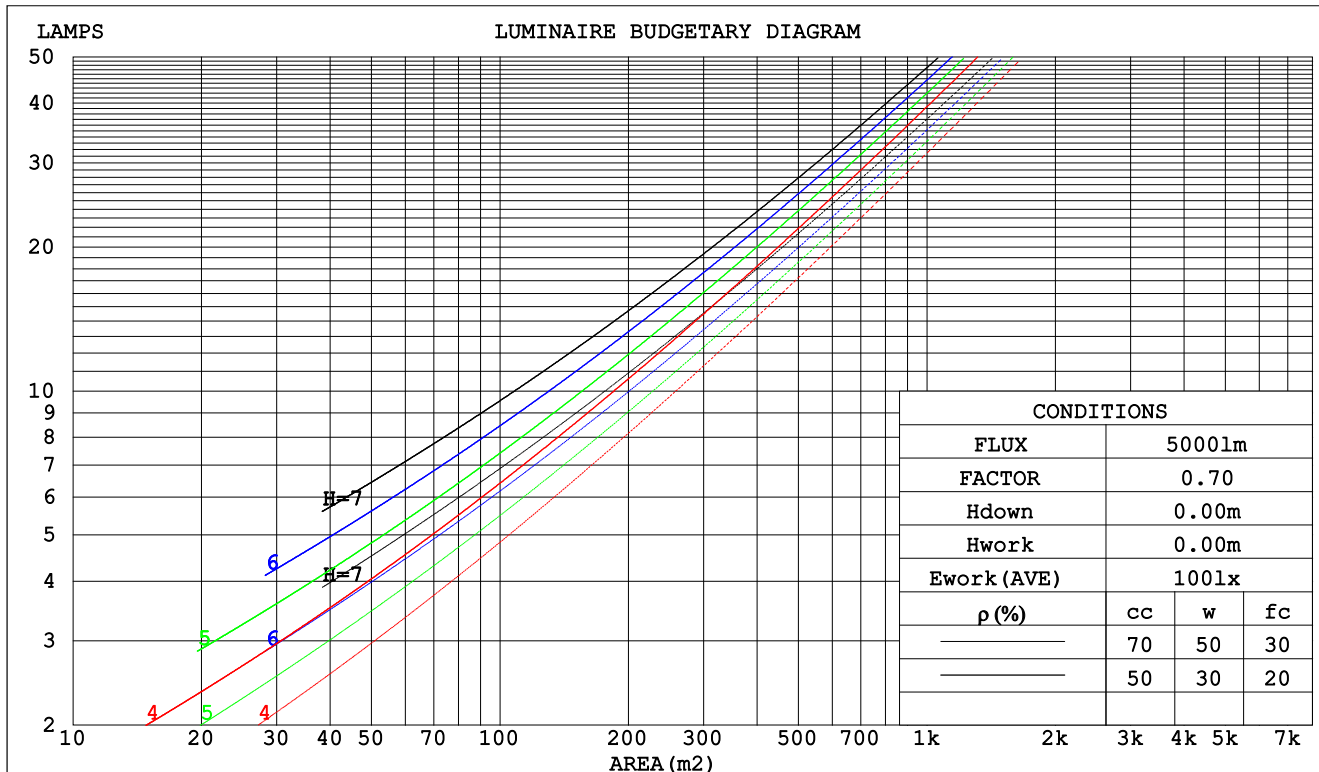
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LPC
Test Date: 2021-12-16

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:0.3207A P:7.697W PF:1.000 Freq:50.00Hz Lamp Flux:39.4366x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(2700)-R	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121602
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	.62	.59
2.0	.81	.73	.66	.77	.70	.64	.70	.64	.59	.63	.59	.54	.57	.53	.50	.47
3.0	.70	.61	.54	.67	.59	.52	.61	.54	.48	.55	.49	.45	.50	.45	.41	.38
4.0	.62	.52	.45	.59	.50	.43	.53	.46	.40	.48	.42	.38	.44	.39	.35	.32
5.0	.55	.45	.38	.52	.43	.37	.47	.40	.34	.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	.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	.37	.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	.18	.25	.20	.16	.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:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.3207A P:7.697W PF:1.000 Freq:50.00Hz Lamp Flux:39.4366x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(2700)-R	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121602
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

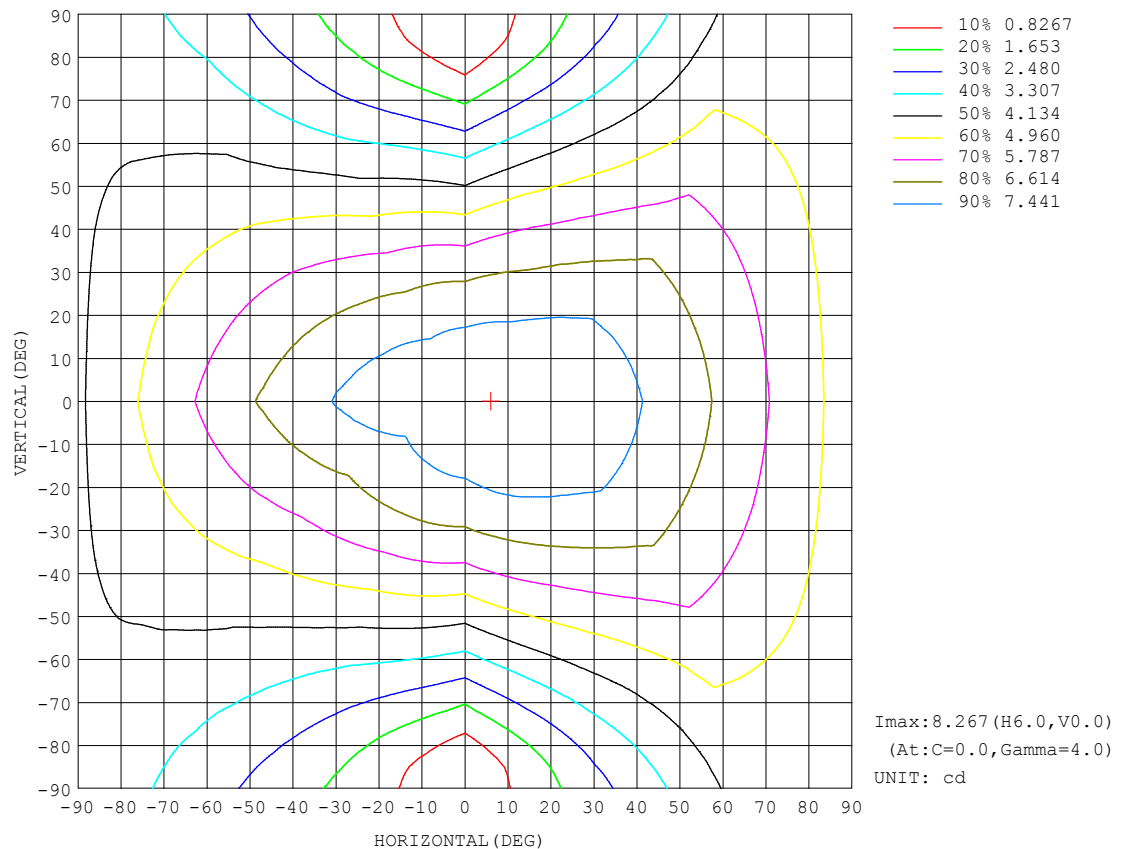
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	47	34	27	45	34	27	43	33	26	19
0.80	56	43	34	54	42	34	51	40	33	25
1.00	63	50	42	61	49	41	57	49	40	31
1.25	70	57	49	68	56	48	63	53	46	36
1.50	75	63	54	72	61	53	67	58	51	40
2.00	83	71	63	79	69	61	73	65	58	46
2.50	87	77	69	83	74	67	77	69	63	49
3.00	91	81	74	87	78	71	80	73	67	53
4.00	96	87	81	91	84	78	84	78	73	57
5.00	99	92	86	94	88	82	86	81	77	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:2021-12-16

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:0.3207A P:7.697W PF:1.000 Freq:50.00Hz Lamp Flux:39.4366x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(2700)-R	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121602
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

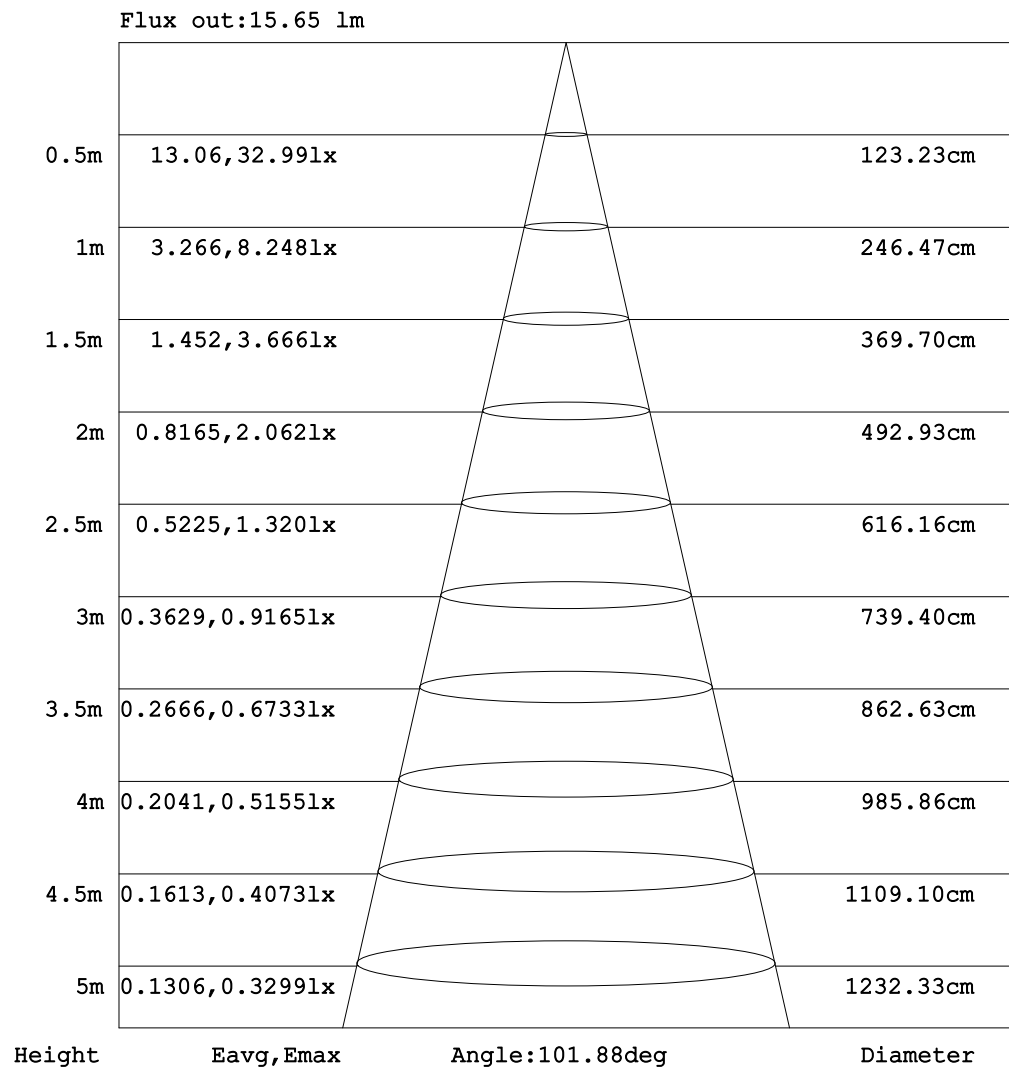
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Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

```


AAI Figure

Test:U:24.00V I:0.3207A P:7.697W PF:1.000 Freq:50.00Hz Lamp Flux:39.4366x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(2700)-R	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121602
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.3207A P:7.697W PF:1.000 Freq:50.00Hz Lamp Flux:39.4366x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(2700)-R	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121602
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	8.25	8.15	8.00	7.93	7.92	7.88	8.25	8.15	8.00	7.93	7.92	7.88						
5	8.26	8.18	8.01	7.91	7.88	7.76	8.20	8.04	7.91	7.93	7.92	7.94						
10	8.25	8.19	7.99	7.80	7.74	7.64	8.10	7.91	7.74	7.80	7.86	7.98						
15	8.22	8.17	7.91	7.58	7.53	7.48	7.98	7.74	7.52	7.56	7.71	7.97						
20	8.12	8.07	7.71	7.30	7.26	7.26	7.84	7.52	7.23	7.24	7.50	7.90						
25	8.01	7.92	7.45	6.94	6.94	7.01	7.69	7.27	6.88	6.85	7.21	7.79						
30	7.89	7.74	7.14	6.54	6.58	6.71	7.50	6.97	6.51	6.41	6.90	7.63						
35	7.71	7.53	6.79	6.06	6.16	6.44	7.25	6.67	6.10	5.91	6.58	7.43						
40	7.50	7.33	6.40	5.52	5.71	6.14	7.03	6.38	5.64	5.35	6.22	7.23						
45	7.25	7.07	5.98	4.93	5.23	5.81	6.79	6.05	5.16	4.76	5.82	7.00						
50	7.00	6.78	5.54	4.33	4.76	5.45	6.54	5.70	4.69	4.15	5.39	6.75						
55	6.74	6.49	5.09	3.71	4.27	5.11	6.26	5.34	4.20	3.50	4.94	6.47						
60	6.46	6.15	4.62	3.06	3.79	4.76	5.96	4.98	3.72	2.84	4.49	6.14						
65	6.15	5.83	4.16	2.39	3.29	4.42	5.65	4.62	3.22	2.19	4.03	5.84						
70	5.84	5.49	3.69	1.72	2.84	4.08	5.35	4.28	2.76	1.54	3.57	5.51						
75	5.52	5.16	3.24	1.09	2.43	3.75	5.03	3.95	2.36	0.93	3.12	5.19						
80	5.19	4.81	2.83	0.51	2.08	3.41	4.71	3.61	1.99	0.40	2.71	4.86						
85	4.86	4.49	2.47	0.11	1.77	3.09	4.37	3.28	1.68	0.06	2.36	4.55						
90	4.51	4.17	2.19	0.09	1.53	2.79	4.01	2.96	1.44	0.03	2.08	4.23						
95	4.15	3.85	1.97	0.09	1.36	2.53	3.67	2.69	1.26	0.03	1.85	3.94						
100	3.73	3.24	1.79	0.10	1.23	2.13	3.29	2.26	1.13	0.03	1.68	3.36						
105	3.40	3.08	1.53	0.12	0.92	1.99	3.00	2.10	0.86	0.03	1.43	3.15						
110	3.09	2.82	1.47	0.13	0.85	1.82	2.73	1.95	0.77	0.05	1.32	2.91						
115	2.80	2.59	1.37	0.16	0.75	1.56	2.44	1.73	0.65	0.05	1.19	2.68						
120	2.55	2.38	1.25	0.17	0.68	1.41	2.17	1.55	0.59	0.05	1.07	2.41						
125	2.34	2.20	1.05	0.19	0.63	1.27	1.96	1.38	0.54	0.07	1.03	2.23						
130	2.13	1.98	0.89	0.21	0.55	1.12	1.76	1.21	0.51	0.13	0.93	2.04						
135	1.93	1.58	0.79	0.22	0.52	0.94	1.55	1.03	0.44	0.13	0.85	1.73						
140	1.70	1.25	0.73	0.24	0.45	0.83	1.24	0.86	0.38	0.16	0.74	1.35						
145	1.49	1.01	0.67	0.26	0.37	0.67	1.08	0.78	0.31	0.20	0.68	1.16						
150	1.29	0.83	0.60	0.30	0.29	0.57	0.96	0.66	0.23	0.21	0.60	1.00						
155	1.10	0.68	0.60	0.32	0.24	0.45	0.83	0.55	0.22	0.22	0.61	0.85						
160	0.91	0.55	0.61	0.34	0.23	0.30	0.68	0.43	0.20	0.26	0.61	0.69						
165	0.76	0.46	0.60	0.36	0.16	0.25	0.45	0.29	0.19	0.29	0.60	0.57						
170	0.37	0.46	0.60	0.36	0.15	0.20	0.26	0.17	0.17	0.31	0.60	0.56						
175	0.30	0.44	0.58	0.37	0.15	0.16	0.17	0.16	0.15	0.37	0.54	0.55						
180	0.16	0.15	0.35	0.37	0.36	0.35	0.15	0.16	0.23	0.37	0.38	0.36						

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	8.247	8.152	7.996	7.926	7.921	7.875	8.247	8.152	7.996	7.926
3.0	8.262	8.182	8.016	7.916	7.916	7.810	8.227	8.092	7.940	7.926
6.0	8.258	8.184	8.004	7.885	7.856	7.744	8.177	8.016	7.875	7.921
9.0	8.252	8.186	7.992	7.825	7.770	7.674	8.116	7.931	7.784	7.845
12.0	8.246	8.177	7.980	7.709	7.665	7.579	8.046	7.845	7.664	7.720
15.0	8.222	8.167	7.911	7.583	7.534	7.478	7.980	7.740	7.518	7.559
18.0	8.157	8.111	7.800	7.432	7.378	7.357	7.910	7.624	7.347	7.378
21.0	8.092	8.046	7.665	7.232	7.203	7.217	7.825	7.474	7.171	7.167
24.0	8.036	7.955	7.509	7.025	7.012	7.066	7.724	7.328	6.955	6.931
27.0	7.966	7.845	7.328	6.779	6.801	6.885	7.614	7.142	6.734	6.690
30.0	7.886	7.739	7.137	6.543	6.580	6.709	7.503	6.966	6.513	6.409
33.0	7.785	7.614	6.926	6.251	6.333	6.553	7.357	6.775	6.266	6.117
36.0	7.670	7.498	6.715	5.945	6.072	6.382	7.201	6.614	6.005	5.796
39.0	7.549	7.367	6.484	5.638	5.801	6.201	7.056	6.439	5.733	5.459
42.0	7.408	7.227	6.238	5.296	5.514	6.015	6.940	6.248	5.447	5.112
45.0	7.253	7.071	5.982	4.934	5.233	5.814	6.789	6.052	5.160	4.760
48.0	7.097	6.905	5.715	4.587	4.951	5.603	6.653	5.845	4.874	4.393
51.0	6.951	6.729	5.449	4.205	4.670	5.387	6.488	5.625	4.602	4.022
54.0	6.790	6.548	5.183	3.839	4.373	5.181	6.322	5.408	4.301	3.635
57.0	6.640	6.357	4.906	3.457	4.082	4.965	6.136	5.192	4.014	3.243
60.0	6.464	6.151	4.625	3.064	3.785	4.764	5.960	4.976	3.723	2.841
63.0	6.278	5.965	4.343	2.652	3.484	4.548	5.774	4.765	3.416	2.449
66.0	6.092	5.769	4.062	2.255	3.197	4.352	5.593	4.559	3.125	2.047
69.0	5.906	5.563	3.780	1.848	2.921	4.136	5.412	4.348	2.849	1.660
72.0	5.715	5.352	3.504	1.476	2.670	3.950	5.221	4.152	2.592	1.298
75.0	5.524	5.161	3.243	1.090	2.433	3.754	5.030	3.951	2.356	0.9258
78.0	5.328	4.945	2.991	0.7278	2.207	3.553	4.844	3.745	2.130	0.5889
81.0	5.132	4.744	2.755	0.4165	2.016	3.342	4.638	3.544	1.924	0.3123
84.0	4.921	4.553	2.534	0.1803	1.825	3.165	4.447	3.343	1.733	0.0911
87.0	4.715	4.352	2.343	0.0854	1.659	2.965	4.221	3.152	1.568	0.0353
90.0	4.509	4.166	2.187	0.0854	1.528	2.794	4.015	2.961	1.442	0.0251
93.0	4.288	3.980	2.046	0.0854	1.418	2.628	3.809	2.790	1.332	0.0251
96.0	4.082	3.809	1.935	0.0854	1.322	2.482	3.608	2.634	1.241	0.0251
99.0	3.876	3.411	1.825	0.0905	1.242	2.136	3.371	2.298	1.156	0.0251
102.0	3.594	3.176	1.719	0.1056	1.161	2.075	3.161	2.196	1.080	0.0301
105.0	3.398	3.080	1.533	0.1156	0.9152	1.990	3.005	2.101	0.8642	0.0302
108.0	3.217	2.924	1.513	0.1257	0.8645	1.889	2.849	2.006	0.8139	0.0402
111.0	3.026	2.769	1.433	0.1347	0.8295	1.783	2.688	1.910	0.7585	0.0452
114.0	2.855	2.633	1.376	0.1459	0.7692	1.593	2.537	1.784	0.6732	0.0452
117.0	2.694	2.522	1.352	0.1608	0.7338	1.487	2.291	1.654	0.6330	0.0452
120.0	2.549	2.377	1.247	0.1692	0.6837	1.407	2.166	1.553	0.5885	0.0452
123.0	2.423	2.266	1.126	0.1818	0.6535	1.317	2.040	1.438	0.5611	0.0552
126.0	2.297	2.156	1.006	0.1960	0.6133	1.236	1.924	1.342	0.5426	0.0903
129.0	2.177	2.050	0.9201	0.2061	0.5682	1.156	1.804	1.242	0.5226	0.1256
132.0	2.046	1.824	0.8445	0.2181	0.5428	1.080	1.683	1.161	0.4772	0.1278
135.0	1.930	1.577	0.7943	0.2241	0.5176	0.9447	1.553	1.031	0.4422	0.1299
138.0	1.800	1.377	0.7590	0.2312	0.4875	0.8692	1.351	0.9248	0.3969	0.1548
141.0	1.664	1.186	0.7189	0.2463	0.4374	0.7939	1.246	0.8445	0.3768	0.1674
144.0	1.538	1.085	0.6786	0.2513	0.3872	0.7133	1.120	0.8043	0.3464	0.1958
147.0	1.403	0.9495	0.6433	0.2615	0.3420	0.6281	1.055	0.7340	0.2865	0.2010
150.0	1.287	0.8340	0.6032	0.3015	0.2866	0.5725	0.9596	0.6636	0.2311	0.2086
153.0	1.176	0.7484	0.5988	0.3067	0.2314	0.5073	0.8695	0.6034	0.2209	0.2161
156.0	1.066	0.6583	0.5944	0.3257	0.2462	0.4319	0.7788	0.5329	0.2133	0.2261
159.0	0.9252	0.5877	0.5981	0.3378	0.2611	0.3314	0.7282	0.4626	0.2057	0.2562
162.0	0.8648	0.5122	0.6064	0.3549	0.1713	0.2611	0.6279	0.3622	0.1957	0.2764
165.0	0.7644	0.4609	0.6039	0.3613	0.1636	0.2514	0.4521	0.2867	0.1857	0.2884
168.0	0.3977	0.4587	0.6014	0.3627	0.1576	0.2106	0.2814	0.2262	0.1757	0.2915
171.0	0.3520	0.4528	0.5990	0.3641	0.1530	0.1890	0.2310	0.1646	0.1657	0.3166
174.0	0.3118	0.4449	0.5832	0.3655	0.1494	0.1674	0.1956	0.1602	0.1557	0.3618
177.0	0.2716	0.4371	0.5780	0.3669	0.1458	0.1457	0.1508	0.1558	0.1457	0.3719
180.0	0.1558	0.1508	0.3518	0.3669	0.3619	0.3468	0.1508	0.1558	0.2262	0.3719
G/C	300.0	330.0								
0.0	7.921	7.875								
3.0	7.921	7.915								
6.0	7.916	7.956								
9.0	7.875	7.976								
12.0	7.830	7.974								
15.0	7.714	7.972								
18.0	7.593	7.936								
21.0	7.442	7.880								
24.0	7.272	7.805								
27.0	7.095	7.725								
30.0	6.900	7.629								

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:

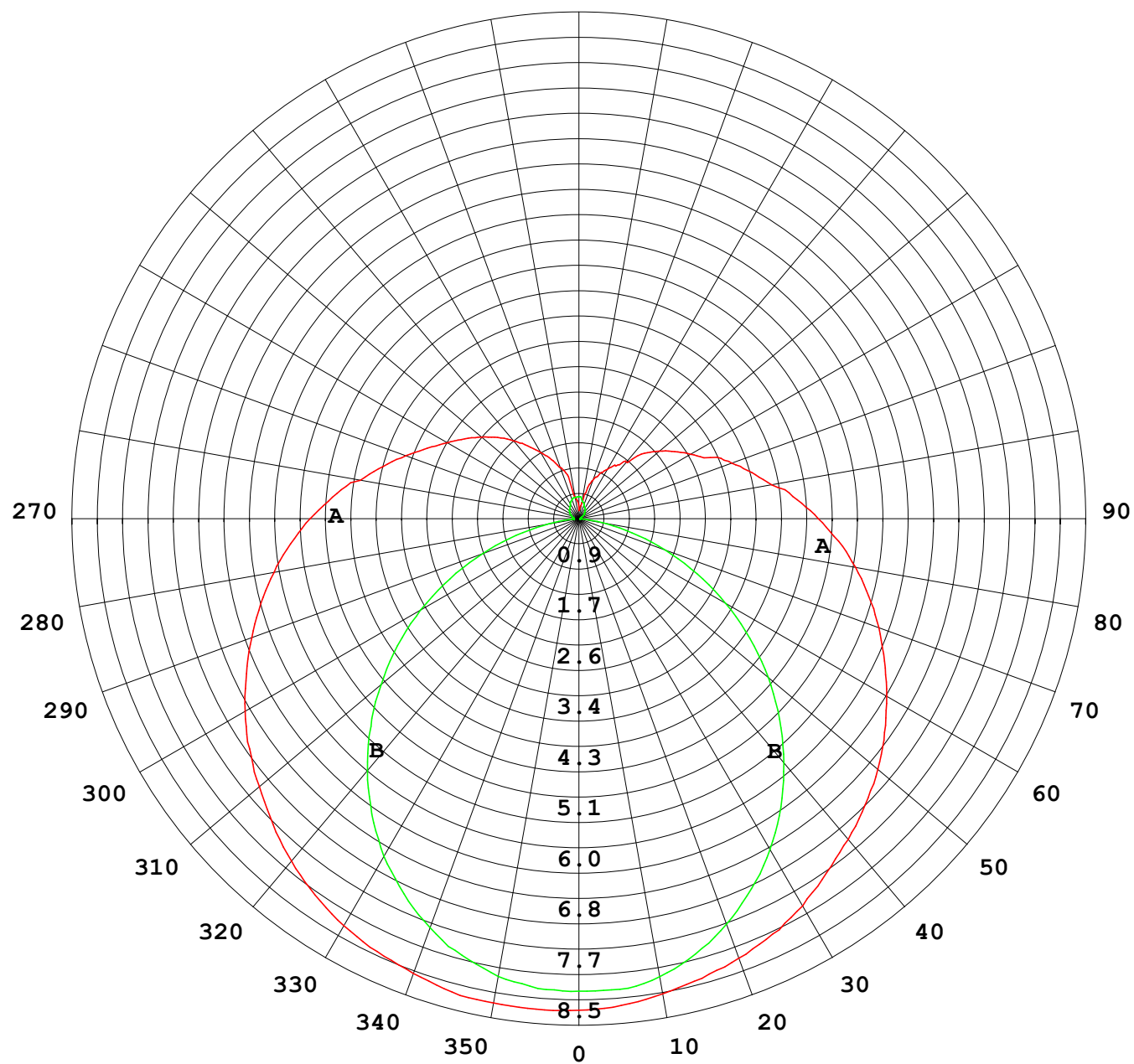
Photometric Data Table [cd]

33.0	6.704	7.509
36.0	6.513	7.388
39.0	6.296	7.268
42.0	6.065	7.147
45.0	5.824	7.001
48.0	5.563	6.850
51.0	5.296	6.705
54.0	5.030	6.529
57.0	4.768	6.338
60.0	4.487	6.137
63.0	4.210	5.956
66.0	3.939	5.770
69.0	3.658	5.584
72.0	3.381	5.393
75.0	3.120	5.187
78.0	2.874	4.991
81.0	2.638	4.800
84.0	2.436	4.609
87.0	2.231	4.423
90.0	2.075	4.227
93.0	1.934	4.056
96.0	1.819	3.880
99.0	1.723	3.505
102.0	1.618	3.272
105.0	1.427	3.147
108.0	1.357	3.011
111.0	1.261	2.870
114.0	1.217	2.724
117.0	1.130	2.584
120.0	1.070	2.408
123.0	1.025	2.297
126.0	1.005	2.191
129.0	0.9447	2.091
132.0	0.9195	1.910
135.0	0.8492	1.734
138.0	0.7687	1.404
141.0	0.7135	1.352
144.0	0.6785	1.181
147.0	0.6330	1.091
150.0	0.6021	1.000
153.0	0.5991	0.8899
156.0	0.6078	0.8195
159.0	0.6067	0.7290
162.0	0.6056	0.6335
165.0	0.6045	0.5680
168.0	0.6034	0.5602
171.0	0.5928	0.5561
174.0	0.5428	0.5520
177.0	0.5277	0.5479
180.0	0.3769	0.3619

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

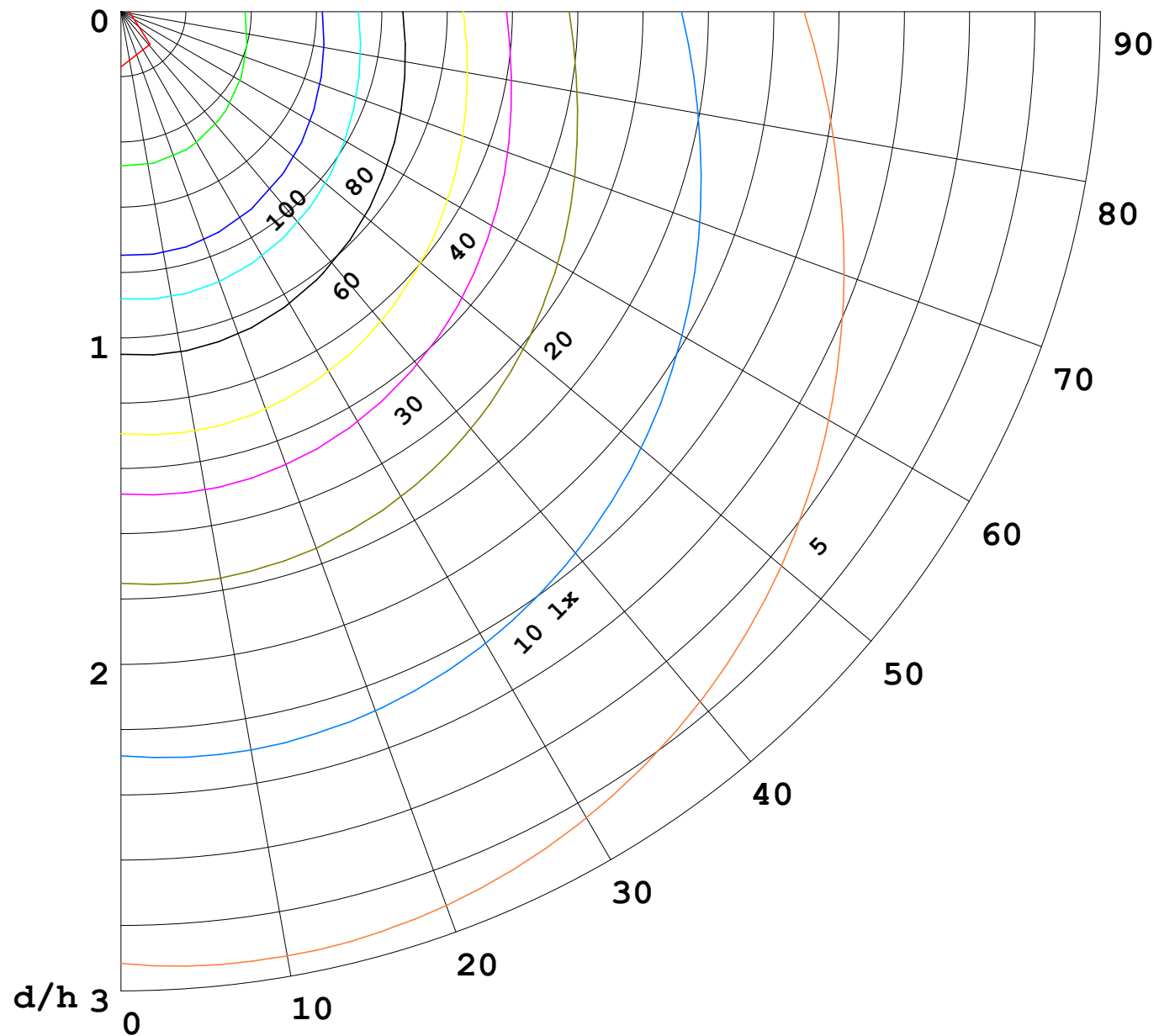
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:9.200m [K=1.0000]
 Remarks:

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

