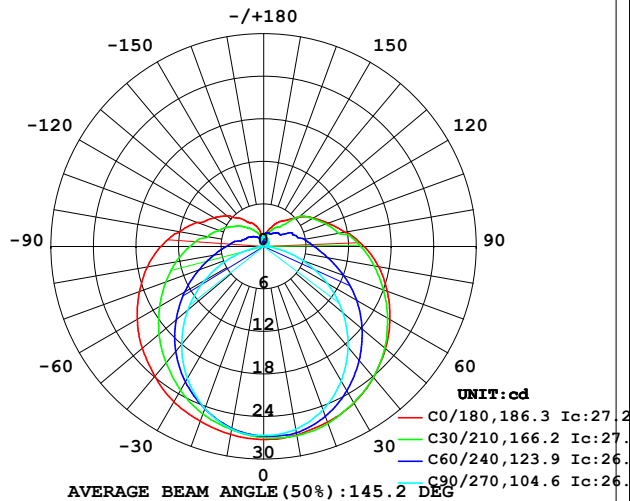


LUMINAIRE PHOTOMETRIC TEST REPORT

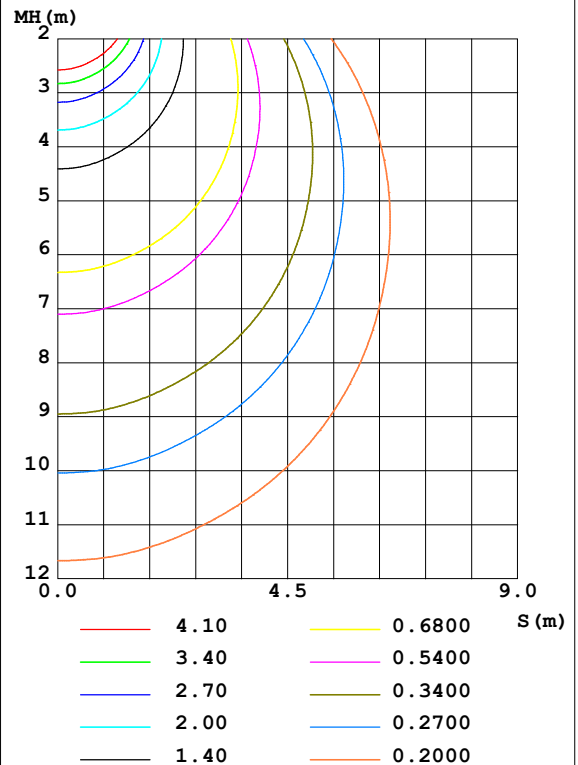
Test:U:24.00V I:0.3214A P:7.714W PF:1.000 Freq:50.00Hz Lamp Flux:133.287x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000)-G	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121702
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 17.28 lm/W			
MODEL	5050	I _{max} (cd)	27.22	S/MH (C0/180)	1.40
NOMINAL POWER (W)	4.5	LOR (%)	100.0	S/MH (C90/270)	1.21
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	133.29	η UP, DN (C0-180)	11.1, 38.8
NOMINAL FLUX (lm)	133.287	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	11.3, 38.7
LAMPS INSIDE	1	η up (%)	22.5	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	24	η down (%)	77.5	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)

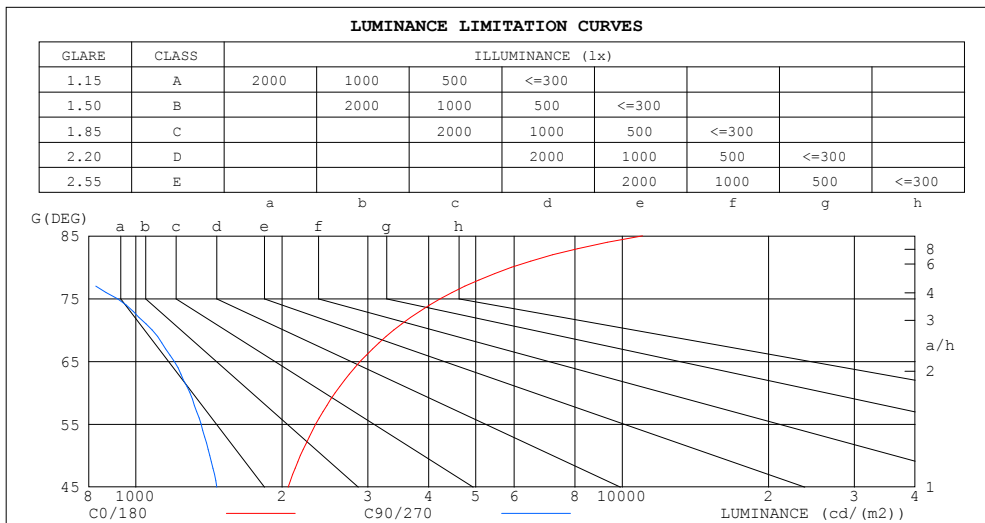


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LPC
Test Date: 2021-12-17

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:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.3214A P:7.714W PF:1.000 Freq:50.00Hz Lamp Flux:133.287x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000) -G	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121702
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:



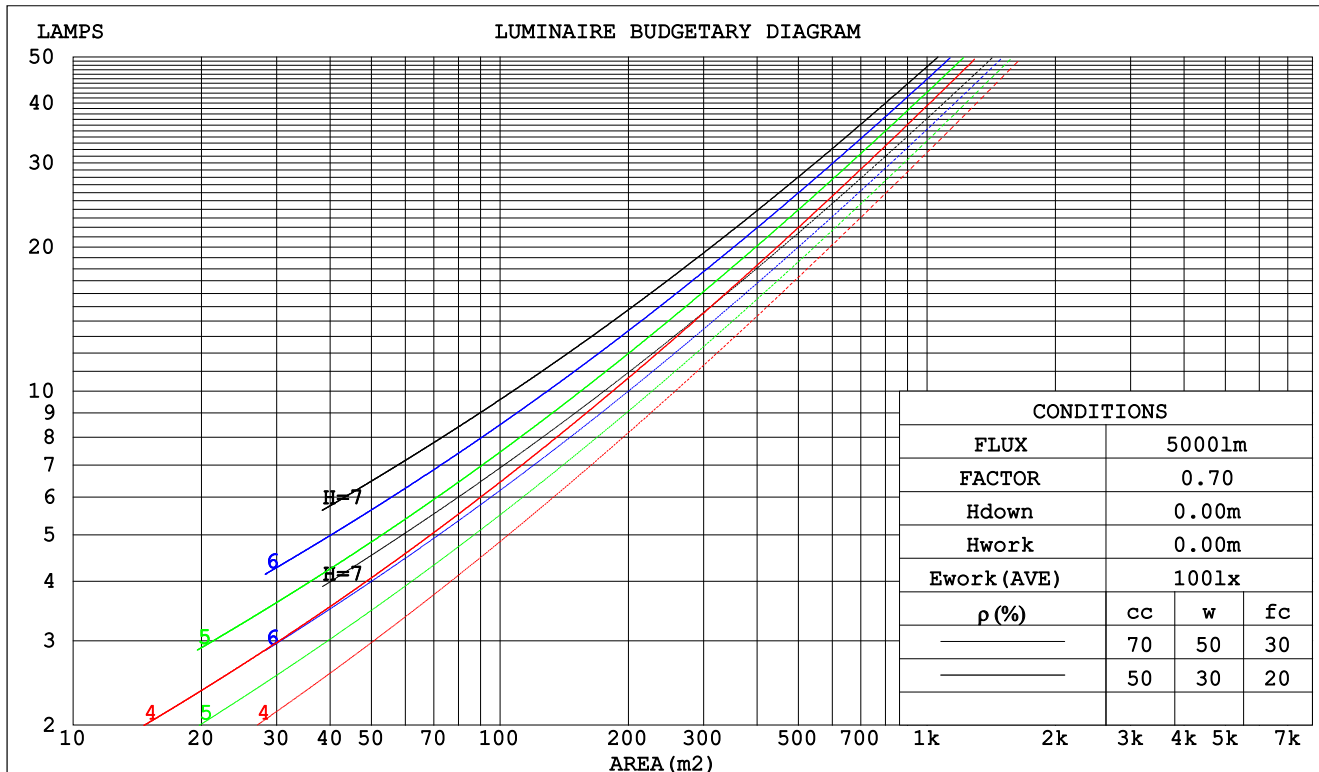
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LPC
Test Date:2021-12-17

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:0.3214A P:7.714W PF:1.000 Freq:50.00Hz Lamp Flux:133.287x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000) -G	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121702
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)															
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	.94	.89	.84	.90	.85	.81	.81	.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	.58	.52	.60	.54	.48	.55	.49	.44	.49	.45	.41	.38
4.0	.61	.52	.45	.59	.50	.43	.53	.46	.40	.48	.42	.37	.43	.39	.34	.31
5.0	.54	.45	.38	.52	.43	.37	.47	.40	.34	.43	.37	.32	.39	.34	.30	.27
6.0	.49	.39	.33	.47	.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	.27	.23	.20
8.0	.40	.31	.25	.38	.30	.24	.35	.28	.23	.32	.26	.22	.29	.24	.20	.18
9.0	.36	.28	.22	.35	.27	.22	.32	.25	.21	.29	.24	.19	.27	.22	.18	.16
10.0	.33	.26	.20	.32	.25	.20	.30	.23	.19	.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:

WEC AND CCEC

Test:U:24.00V I:0.3214A P:7.714W PF:1.000 Freq:50.00Hz Lamp Flux:133.287x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000) -G	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121702
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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.387	.220	.070	.373	.213	.068	.346	.199	.063	.322	.186	.060	.300	.174	.056		
2.0	.333	.183	.056	.320	.176	.054	.296	.165	.051	.274	.154	.048	.254	.144	.045		
3.0	.295	.157	.047	.284	.152	.046	.262	.142	.043	.242	.133	.041	.223	.124	.038		
4.0	.265	.138	.041	.255	.133	.039	.235	.125	.037	.217	.117	.035	.200	.109	.033		
5.0	.241	.123	.036	.232	.119	.035	.214	.111	.033	.197	.104	.031	.181	.097	.029		
6.0	.221	.111	.032	.212	.107	.031	.196	.100	.029	.180	.094	.028	.166	.087	.026		
7.0	.204	.101	.029	.196	.097	.028	.181	.091	.026	.167	.085	.025	.153	.080	.023		
8.0	.189	.092	.026	.181	.089	.025	.168	.084	.024	.155	.078	.023	.142	.073	.021		
9.0	.176	.085	.024	.169	.082	.023	.156	.077	.022	.144	.072	.021	.133	.068	.020		
10.0	.165	.079	.022	.158	.076	.021	.147	.072	.020	.135	.067	.019	.125	.063	.018		

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.362	.362	.362	.309	.309	.309	.211	.211	.211	.121	.121	.121	.039	.039	.039	
1.0	.358	.328	.301	.307	.282	.259	.210	.194	.179	.121	.112	.104	.039	.036	.034	
2.0	.352	.305	.267	.301	.263	.231	.206	.182	.161	.119	.106	.094	.038	.034	.031	
3.0	.344	.289	.245	.295	.249	.213	.202	.173	.149	.117	.101	.088	.038	.033	.029	
4.0	.336	.277	.231	.289	.239	.201	.198	.167	.142	.115	.098	.084	.037	.032	.028	
5.0	.329	.267	.222	.282	.231	.193	.194	.161	.136	.113	.095	.081	.036	.031	.027	
6.0	.321	.259	.215	.276	.225	.187	.191	.157	.132	.111	.092	.079	.036	.030	.026	
7.0	.314	.253	.210	.270	.219	.183	.187	.154	.129	.109	.090	.077	.035	.030	.025	
8.0	.308	.247	.206	.265	.214	.179	.183	.151	.127	.107	.089	.076	.034	.029	.025	
9.0	.301	.242	.203	.260	.210	.177	.180	.148	.126	.105	.087	.075	.034	.029	.025	
10.0	.296	.238	.200	.255	.207	.175	.177	.146	.124	.103	.086	.074	.033	.028	.025	

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:0.3214A P:7.714W PF:1.000 Freq:50.00Hz Lamp Flux:133.287x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000) -G	TYPE: 硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121702
MFR.: OLYMPIA	SUR.:1*0.016	Shielding Angle:

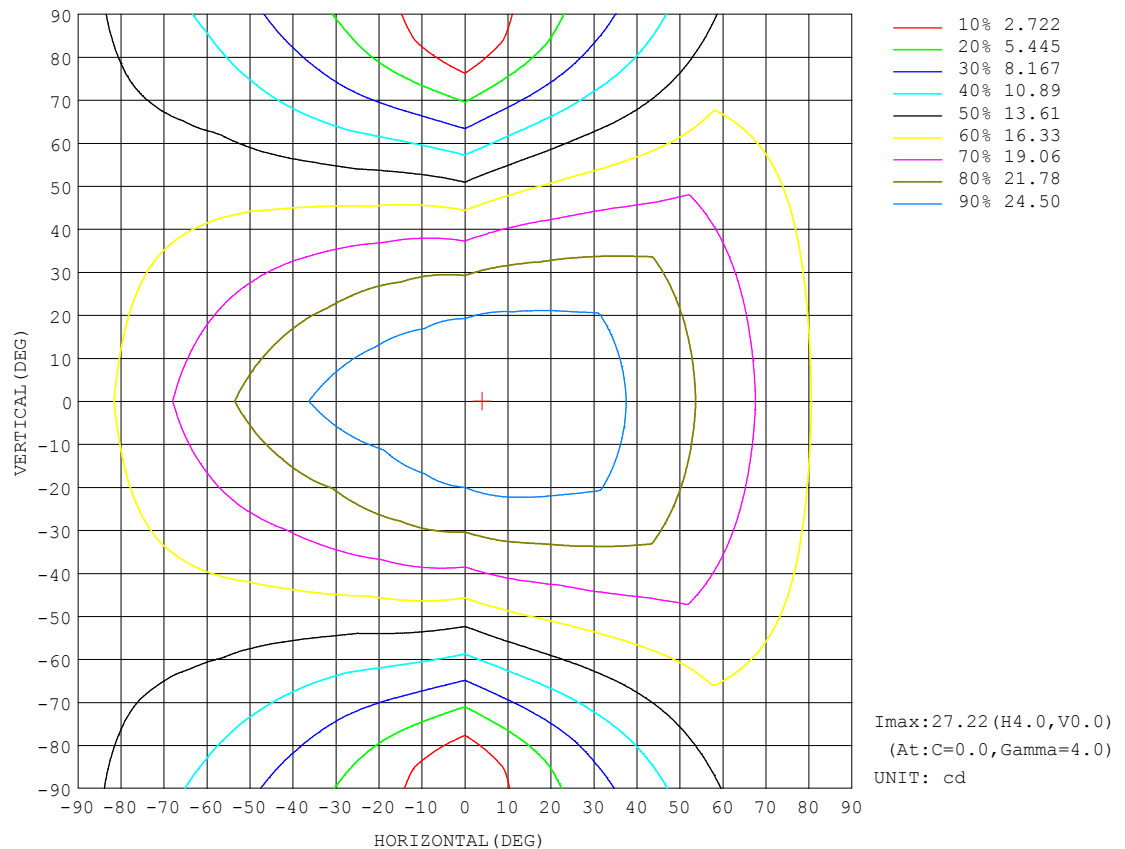
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	46	34	27	45	33	26	43	32	26	19
0.80	55	42	34	54	41	34	51	40	33	25
1.00	63	50	42	61	49	41	57	49	39	30
1.25	70	57	48	67	56	47	63	53	46	35
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	76	68	83	74	66	76	69	62	49
3.00	91	81	74	87	78	71	79	72	67	52
4.00	95	87	81	91	84	78	83	77	72	57
5.00	98	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

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:0.3214A P:7.714W PF:1.000 Freq:50.00Hz Lamp Flux:133.287x1 lm		
NAME: SF21-24V-5050-70-DMX4-RGBW(4000)-G	TYPE:硅胶	WEIGHT:
SPEC.:	DIM.: 28mm*11.5mm	SERIAL No.:2021121702
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:

```


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	27.22	26.97	26.75	26.66	26.69	26.64	27.22	26.97	26.75	26.66
3.0	27.22	27.07	26.81	26.63	26.57	26.46	27.18	26.80	26.65	26.66
6.0	27.18	27.09	26.80	26.51	26.36	26.24	27.11	26.58	26.43	26.53
9.0	27.04	27.09	26.74	26.29	26.08	25.98	26.98	26.34	26.15	26.26
12.0	26.87	27.03	26.51	25.92	25.69	25.71	26.81	26.04	25.76	25.85
15.0	26.67	26.90	26.19	25.48	25.24	25.41	26.61	25.73	25.28	25.35
18.0	26.49	26.73	25.79	24.92	24.73	25.06	26.37	25.40	24.73	24.76
21.0	26.31	26.47	25.31	24.29	24.16	24.64	26.13	24.99	24.15	24.07
24.0	26.07	26.13	24.77	23.57	23.54	24.16	25.90	24.53	23.50	23.28
27.0	25.80	25.77	24.16	22.75	22.87	23.63	25.64	24.02	22.81	22.45
30.0	25.48	25.42	23.48	21.91	22.14	23.06	25.32	23.46	22.09	21.53
33.0	25.12	25.06	22.77	20.95	21.36	22.44	24.96	22.85	21.31	20.54
36.0	24.72	24.67	22.03	19.93	20.52	21.85	24.55	22.22	20.48	19.51
39.0	24.27	24.24	21.23	18.89	19.64	21.27	24.07	21.62	19.61	18.39
42.0	23.77	23.77	20.42	17.78	18.72	20.66	23.57	21.01	18.71	17.24
45.0	23.27	23.25	19.57	16.61	17.76	20.01	23.11	20.39	17.75	16.07
48.0	22.78	22.70	18.70	15.44	16.79	19.36	22.67	19.73	16.80	14.83
51.0	22.26	22.10	17.86	14.19	15.83	18.66	22.20	19.05	15.81	13.57
54.0	21.72	21.47	16.95	12.91	14.85	17.96	21.70	18.35	14.83	12.29
57.0	21.15	20.81	16.07	11.63	13.88	17.27	21.16	17.64	13.87	10.98
60.0	20.56	20.17	15.13	10.34	12.89	16.61	20.58	16.95	12.89	9.638
63.0	19.96	19.53	14.20	9.002	11.92	15.92	20.02	16.26	11.92	8.337
66.0	19.38	18.89	13.25	7.656	10.97	15.26	19.45	15.60	10.96	7.005
69.0	18.76	18.22	12.31	6.359	10.04	14.61	18.85	14.92	10.03	5.668
72.0	18.15	17.54	11.41	5.022	9.195	13.95	18.26	14.28	9.159	4.397
75.0	17.53	16.89	10.55	3.796	8.391	13.32	17.67	13.62	8.345	3.185
78.0	16.90	16.25	9.708	2.600	7.657	12.69	17.07	12.97	7.611	2.064
81.0	16.25	15.61	8.948	1.561	7.008	12.01	16.47	12.33	6.938	1.133
84.0	15.58	14.98	8.255	0.7517	6.405	11.39	15.83	11.69	6.340	0.4091
87.0	14.87	14.35	7.661	0.3769	5.852	10.76	15.18	11.04	5.778	0.2516
90.0	14.17	13.71	7.138	0.3669	5.384	10.16	14.50	10.44	5.301	0.2436
93.0	13.46	13.11	6.706	0.3780	4.997	9.603	13.83	9.862	4.904	0.2470
96.0	12.76	12.49	6.304	0.3870	4.685	9.100	13.17	9.324	4.572	0.2504
99.0	12.10	11.22	5.957	0.4021	4.414	8.780	12.29	8.146	4.281	0.2539
102.0	11.23	10.47	5.595	0.4726	3.832	7.618	11.65	7.851	3.771	0.2713
105.0	10.62	10.06	4.971	0.4976	3.177	7.311	11.05	7.479	3.247	0.2914
108.0	10.03	9.633	4.880	0.5178	3.146	6.827	10.42	6.928	3.110	0.2935
111.0	9.476	9.196	4.624	0.5429	2.981	6.311	9.506	6.600	2.894	0.2966
114.0	8.978	8.744	4.478	0.5731	2.865	5.934	8.970	6.308	2.739	0.3115
117.0	8.510	8.321	4.313	0.6183	2.764	5.623	8.552	5.937	2.683	0.3618
120.0	8.083	7.945	3.662	0.6535	2.669	5.352	8.115	5.565	2.593	0.4370
123.0	7.661	7.583	3.148	0.7087	2.508	5.090	7.693	5.198	2.447	0.4823
126.0	7.199	7.246	2.870	0.7389	2.408	4.789	7.291	4.886	2.327	0.5326
129.0	6.656	6.837	2.845	0.7791	2.292	4.442	6.879	4.605	2.146	0.5929
132.0	6.058	5.933	2.845	0.8092	2.161	4.171	6.484	4.288	2.095	0.6531
135.0	5.515	4.852	2.729	0.8494	2.056	3.894	5.773	3.871	1.980	0.6934
138.0	5.042	4.129	2.614	0.8796	1.930	3.537	5.427	3.600	1.829	0.7588
141.0	4.720	3.577	2.473	0.8998	1.830	3.186	5.104	3.363	1.769	0.8289
144.0	4.479	3.407	2.332	0.9248	1.699	2.984	4.526	3.132	1.718	0.8543
147.0	4.198	3.241	2.187	0.9552	1.589	2.653	4.086	2.815	1.588	0.9145
150.0	3.876	2.964	2.071	1.046	1.373	2.437	3.795	2.534	1.411	0.9848
153.0	3.544	2.693	2.005	1.116	1.182	2.201	3.768	2.347	1.195	1.020
156.0	3.198	2.447	2.050	1.176	1.051	2.005	3.482	2.186	1.020	1.085
159.0	2.850	2.160	2.056	1.231	0.8451	1.743	3.145	1.951	0.9087	1.116
162.0	2.584	1.919	2.036	1.292	0.6437	1.391	2.838	1.599	0.7336	1.181
165.0	2.243	1.787	2.025	1.342	0.6404	1.115	2.436	1.312	0.7075	1.226
168.0	1.252	1.740	1.970	1.372	0.6283	0.7877	1.386	1.076	0.6814	1.266
171.0	1.111	1.708	1.915	1.397	0.6197	0.7295	1.211	0.6394	0.6553	1.307
174.0	0.9455	1.593	1.840	1.422	0.6111	0.6713	1.014	0.6363	0.6292	1.357
177.0	0.8046	1.513	1.769	1.427	0.6031	0.6131	0.8691	0.6332	0.6031	1.427
180.0	0.6332	0.6232	1.352	1.422	1.407	1.186	0.6332	0.6433	1.086	1.493
G/C	300.0	330.0								
0.0	26.69	26.64								
3.0	26.69	26.77								
6.0	26.67	26.85								
9.0	26.54	26.85								
12.0	26.29	26.83								
15.0	25.95	26.70								
18.0	25.52	26.50								
21.0	25.01	26.26								
24.0	24.44	25.99								
27.0	23.82	25.68								
30.0	23.19	25.33								

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:

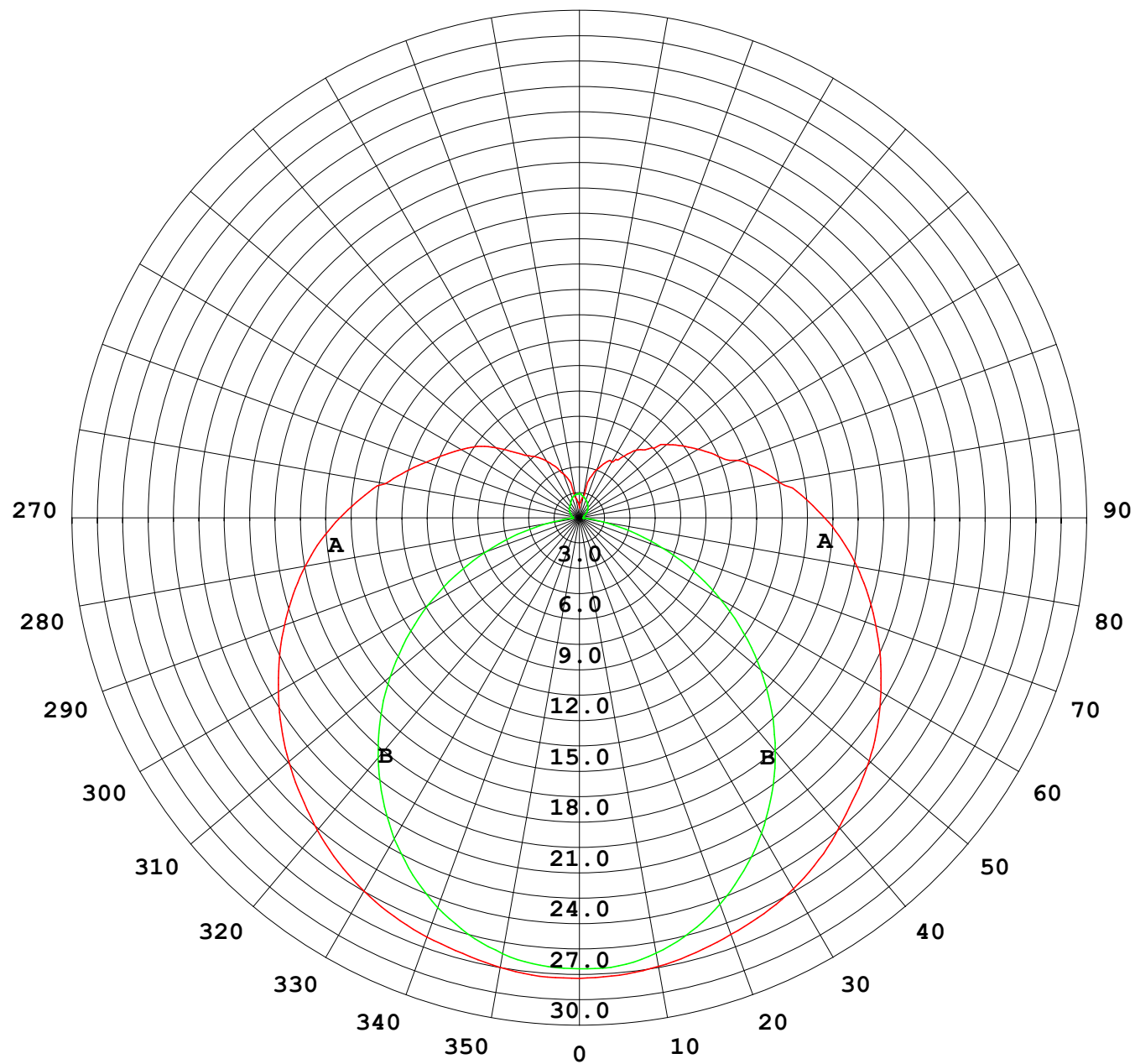
Photometric Data Table [cd]

33.0	22.51	24.96
36.0	21.82	24.60
39.0	21.09	24.19
42.0	20.32	23.74
45.0	19.50	23.25
48.0	18.65	22.73
51.0	17.79	22.17
54.0	16.91	21.57
57.0	16.00	20.92
60.0	15.07	20.26
63.0	14.14	19.65
66.0	13.19	19.01
69.0	12.24	18.36
72.0	11.33	17.70
75.0	10.47	17.05
78.0	9.631	16.42
81.0	8.853	15.79
84.0	8.154	15.16
87.0	7.537	14.53
90.0	7.014	13.92
93.0	6.572	13.31
96.0	6.165	12.72
99.0	5.814	11.42
102.0	5.490	10.73
105.0	4.854	10.32
108.0	4.719	9.852
111.0	4.499	9.384
114.0	4.345	8.927
117.0	4.164	8.490
120.0	3.844	8.093
123.0	3.728	7.731
126.0	3.497	7.399
129.0	3.326	6.998
132.0	3.170	6.344
135.0	2.964	5.544
138.0	2.723	4.870
141.0	2.532	4.209
144.0	2.367	4.001
147.0	2.231	3.675
150.0	2.075	3.328
153.0	1.995	2.986
156.0	1.995	2.679
159.0	1.995	2.428
162.0	1.995	2.102
165.0	1.990	1.920
168.0	1.914	1.879
171.0	1.819	1.856
174.0	1.759	1.815
177.0	1.734	1.694
180.0	1.447	1.206

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

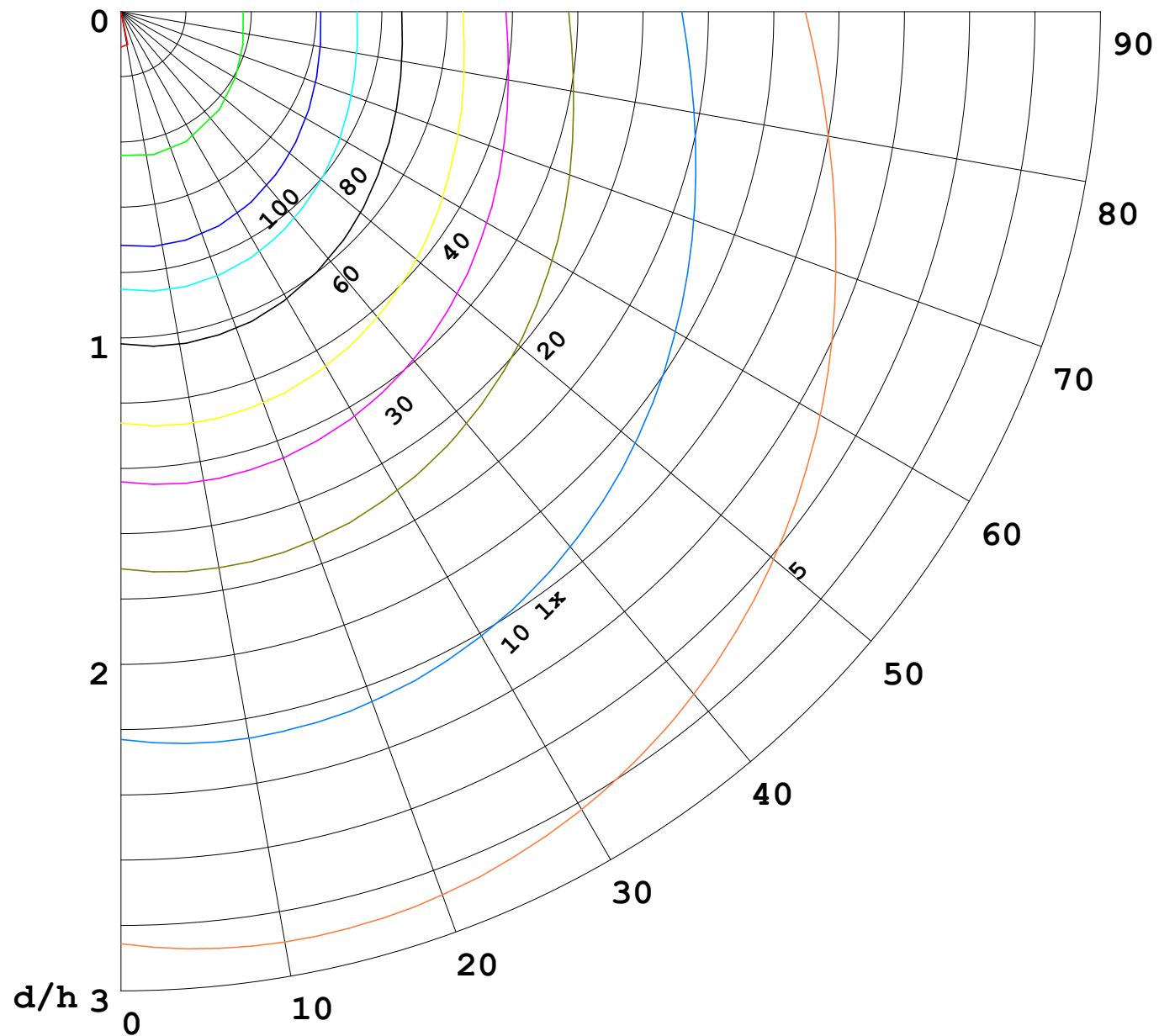
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 9.200m [K=1.0000]
 Remarks:

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

