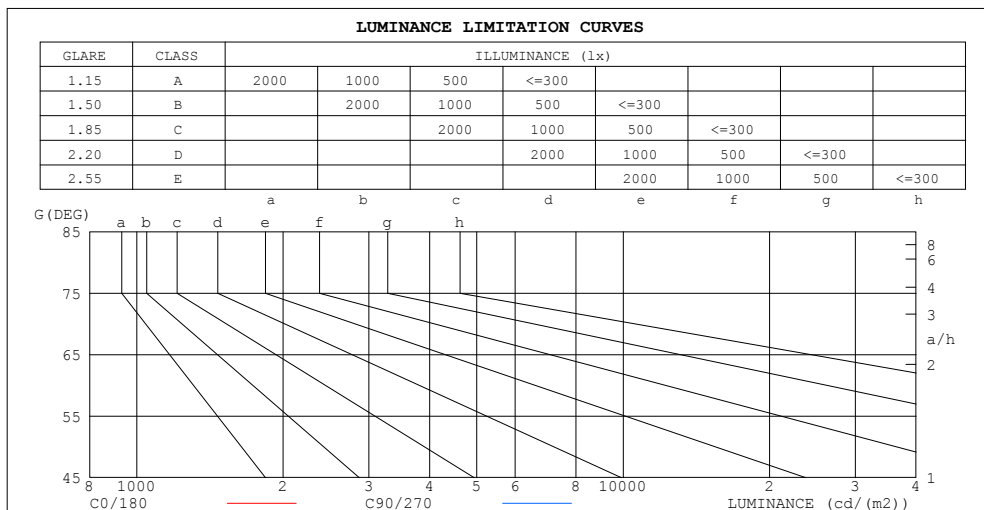




ZONAL FLUX DIAGRAM  
AND LUMINANCE LIMITATION CURVES

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	8.102	8.084	8.066	8.069	8.036	8.059	8.097	8.076	0- 10	0.7776	0.7776	3.28,3.28
20	7.640	7.644	7.659	7.634	7.568	7.604	7.655	7.621	10- 20	2.225	3.003	12.7,12.7
30	6.896	6.923	6.950	6.913	6.814	6.868	6.931	6.893	20- 30	3.361	6.364	26.8,26.8
40	5.932	5.971	6.015	5.973	5.869	5.923	5.997	5.943	30- 40	4.037	10.40	43.8,43.8
50	4.766	4.825	4.889	4.835	4.728	4.792	4.866	4.789	40- 50	4.165	14.57	61.4,61.4
60	3.484	3.551	3.658	3.593	3.486	3.548	3.615	3.510	50- 60	3.749	18.32	77.2,77.2
70	2.122	2.189	2.336	2.259	2.180	2.236	2.278	2.153	60- 70	2.857	21.17	89.2,89.2
80	0.8506	0.8822	0.9940	0.9651	0.9084	0.9472	0.9810	0.8567	70- 80	1.642	22.81	96.2,96.2
90	0.0858	0.0830	0.1489	0.1156	0.0450	0.0906	0.1497	0.0730	80- 90	0.4611	23.28	98.1,98.1
100	0.0352	0.0829	0.1166	0.0843	0	0.0377	0.1347	0.0528	90-100	0.0778	23.35	98.4,98.4
110	0.0352	0.0854	0.1162	0.0951	0.0101	0.0377	0.1156	0.0528	100-110	0.0710	23.42	98.7,98.7
120	0.0352	0.0854	0.1157	0.0982	0.0302	0.0377	0.1045	0.0553	110-120	0.0687	23.49	99,99
130	0.0352	0.0854	0.1055	0.0980	0.0552	0.0452	0.1005	0.0553	120-130	0.0633	23.56	99.3,99.3
140	0.0352	0.0854	0.1055	0.1005	0.0603	0.0477	0.1005	0.0653	130-140	0.0567	23.61	99.5,99.5
150	0.0402	0.0854	0.1055	0.1005	0.0603	0.0477	0.1005	0.0653	140-150	0.0471	23.66	99.7,99.7
160	0.0552	0.0861	0.1055	0.1050	0.0603	0.0503	0.1005	0.0653	150-160	0.0354	23.70	99.9,99.9
170	0.0653	0.0872	0.1026	0.1064	0.0603	0.0553	0.1005	0.0779	160-170	0.0226	23.72	100,100
180	0.0704	0.0880	0.1005	0.1055	0.0603	0.0578	0.1005	0.0804	170-180	0.0078	23.73	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	252	286
80	297	347
75	343	387
70	376	414
65	402	430
60	422	443
55	437	452
50	449	461
45	460	469

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:HXJ  
Test Date:2022-05-12

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
Humidity:65.0%  
Test Distance:9.200m [K=1.0000]  
Remarks:



## WEC AND CCEC

Test:U:24.00V I:0.1913A P:4.591W PF:1.000 Lamp Flux:23.7257x1 lm					
NAME: SF15-24V-5050-56-SPI4-RGBW- (5000K) -B			TYPE:PVC		WEIGHT:
DIM.: 21mm*11.5mm			SPEC.:		SERIAL No.:20220512
MFR.: OLYMPIA			SUR.:1*0.0165		PROTECTION 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	.310	.176	.056	.302	.172	.055	.288	.165	.053	.275	.158	.051	.262	.152	.049		
2.0	.291	.160	.049	.284	.157	.048	.272	.151	.047	.260	.146	.046	.249	.141	.044		
3.0	.269	.143	.043	.263	.141	.042	.252	.137	.041	.242	.132	.041	.232	.128	.040		
4.0	.248	.129	.038	.243	.127	.038	.233	.124	.037	.224	.120	.036	.215	.117	.036		
5.0	.230	.117	.034	.225	.115	.034	.216	.112	.033	.208	.110	.033	.200	.107	.032		
6.0	.213	.107	.031	.209	.105	.030	.201	.103	.030	.193	.100	.030	.186	.098	.029		
7.0	.198	.098	.028	.194	.097	.028	.187	.095	.027	.180	.093	.027	.174	.090	.027		
8.0	.185	.090	.025	.182	.089	.025	.175	.088	.025	.169	.086	.025	.163	.084	.024		
9.0	.173	.084	.023	.170	.083	.023	.165	.081	.023	.159	.080	.023	.154	.078	.023		
10.0	.163	.078	.022	.160	.077	.022	.155	.076	.021	.150	.074	.021	.145	.073	.021		

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	.205	.205	.205	.175	.175	.175	.120	.120	.120	.069	.069	.069	.022	.022	.022	
1.0	.195	.171	.149	.167	.147	.128	.114	.101	.089	.066	.058	.052	.021	.019	.017	
2.0	.187	.147	.113	.160	.126	.097	.110	.087	.068	.063	.051	.040	.020	.016	.013	
3.0	.179	.129	.089	.154	.111	.077	.105	.077	.054	.061	.045	.032	.020	.015	.010	
4.0	.171	.116	.073	.147	.100	.064	.101	.070	.045	.059	.041	.027	.019	.013	.009	
5.0	.164	.105	.062	.141	.091	.054	.097	.064	.038	.056	.037	.023	.018	.012	.007	
6.0	.157	.097	.054	.135	.084	.047	.093	.059	.033	.054	.035	.020	.017	.011	.007	
7.0	.150	.090	.048	.129	.078	.042	.089	.055	.030	.052	.032	.018	.017	.011	.006	
8.0	.144	.084	.044	.124	.073	.038	.086	.051	.027	.050	.030	.016	.016	.010	.005	
9.0	.138	.080	.040	.119	.069	.035	.082	.049	.025	.048	.029	.015	.015	.009	.005	
10.0	.132	.075	.038	.114	.065	.033	.079	.046	.023	.046	.027	.014	.015	.009	.005	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:HXJ  
 Test Date:2022-05-12

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
 Humidity:65.0%  
 Test Distance:9.200m [K=1.0000]  
 Remarks:

### Uncorrected UGR Table

Test:U:24.00V I:0.1913A P:4.591W PF:1.000 Lamp Flux:23.7257x1 lm											
NAME: SF15-24V-5050-56-SPI4-RGBW- (5000K) -B						TYPE:PVC			WEIGHT:		
DIM.: 21mm*11.5mm						SPEC.:			SERIAL No.:20220512		
MFR.: OLYMPIA						SUR.:1*0.0165			PROTECTION 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	9.8	11.3	10.1	11.6	11.8	10.1	11.5	10.3	11.8	12.0	
	3H	11.3	12.7	11.6	12.9	13.2	11.6	13.0	11.9	13.3	13.5
	4H	11.8	13.2	12.2	13.4	13.7	12.2	13.6	12.6	13.8	14.1
	6H	12.2	13.5	12.6	13.8	14.1	12.7	13.9	13.1	14.2	14.6
	8H	12.3	13.5	12.7	13.8	14.2	12.8	14.0	13.2	14.3	14.7
	12H	12.4	13.5	12.8	13.9	14.2	12.9	14.0	13.3	14.4	14.7
4H	2H	10.5	11.8	10.8	12.1	12.4	10.6	11.9	11.0	12.2	12.5
	3H	12.1	13.2	12.5	13.6	13.9	12.4	13.5	12.7	13.8	14.2
	4H	12.7	13.8	13.1	14.1	14.5	13.1	14.2	13.5	14.5	14.9
	6H	13.2	14.2	13.7	14.5	15.0	13.7	14.6	14.1	15.0	15.4
	8H	13.4	14.3	13.8	14.7	15.1	13.9	14.7	14.3	15.1	15.6
	12H	13.5	14.3	13.9	14.7	15.1	14.0	14.8	14.5	15.2	15.7
8H	4H	13.0	13.9	13.4	14.3	14.7	13.3	14.2	13.8	14.6	15.0
	6H	13.6	14.3	14.1	14.8	15.2	14.1	14.8	14.5	15.2	15.7
	8H	13.8	14.5	14.3	14.9	15.4	14.3	15.0	14.8	15.4	15.9
	12H	14.0	14.6	14.5	15.0	15.6	14.5	15.1	15.0	15.5	16.1
12H	4H	13.0	13.8	13.5	14.2	14.7	13.3	14.1	13.8	14.5	15.0
	6H	13.7	14.3	14.2	14.8	15.3	14.1	14.7	14.6	15.2	15.7
	8H	13.9	14.5	14.4	15.0	15.5	14.4	14.9	14.9	15.4	15.9
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.2					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					

CIE Pub.117 Corrected 23.73 lm Total Lamp Luminous Flux.(8log(F/F0) = -13.0)

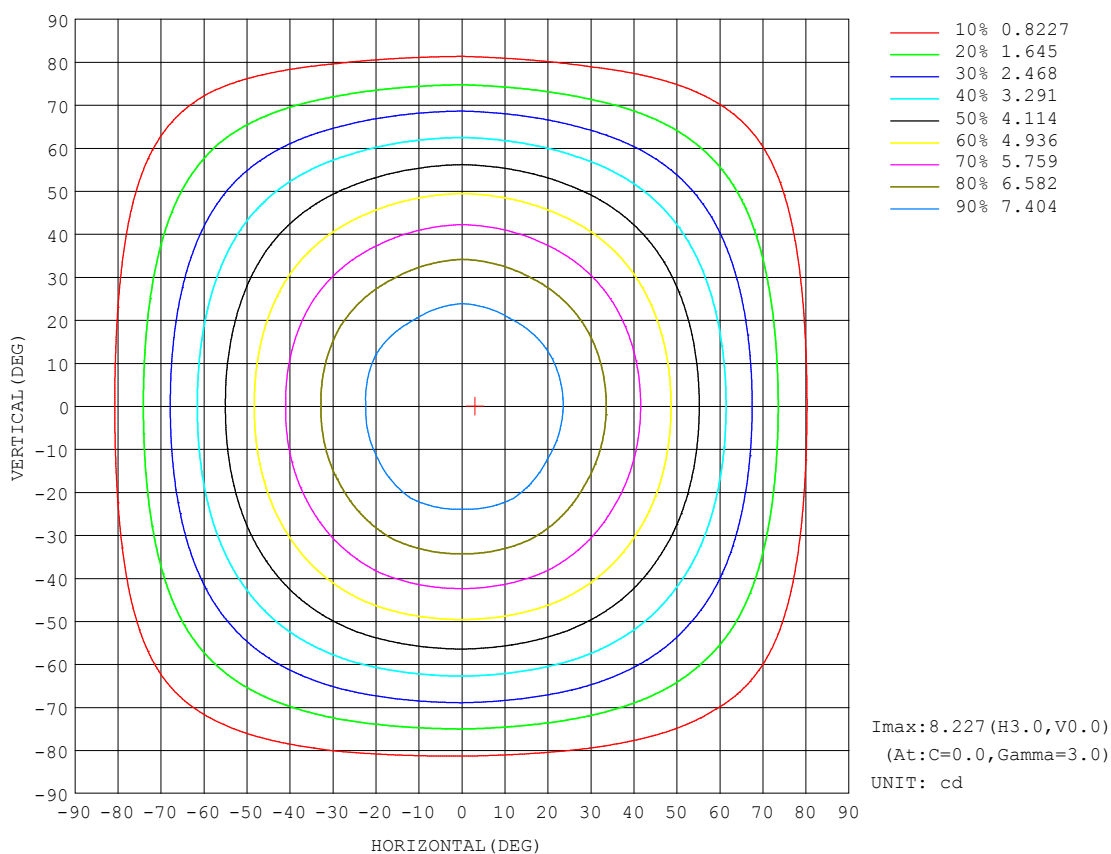
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:HXJ  
Test Date:2022-05-12

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
Humidity:65.0%  
Test Distance:9.200m [K=1.0000]  
Remarks:



## ISOCANDELA DIAGRAM

Test:U:24.00V I:0.1913A P:4.591W PF:1.000 Lamp Flux:23.7257x1 lm		
NAME: SF15-24V-5050-56-SPI4-RGBW- (5000K) -B	TYPE:PVC	WEIGHT:
DIM.: 21mm*11.5mm	SPEC.:	SERIAL No.:20220512
MFR.: OLYMPIA	SUR.:1*0.0165	PROTECTION ANGLE:



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:HXJ  
Test Date:2022-05-12

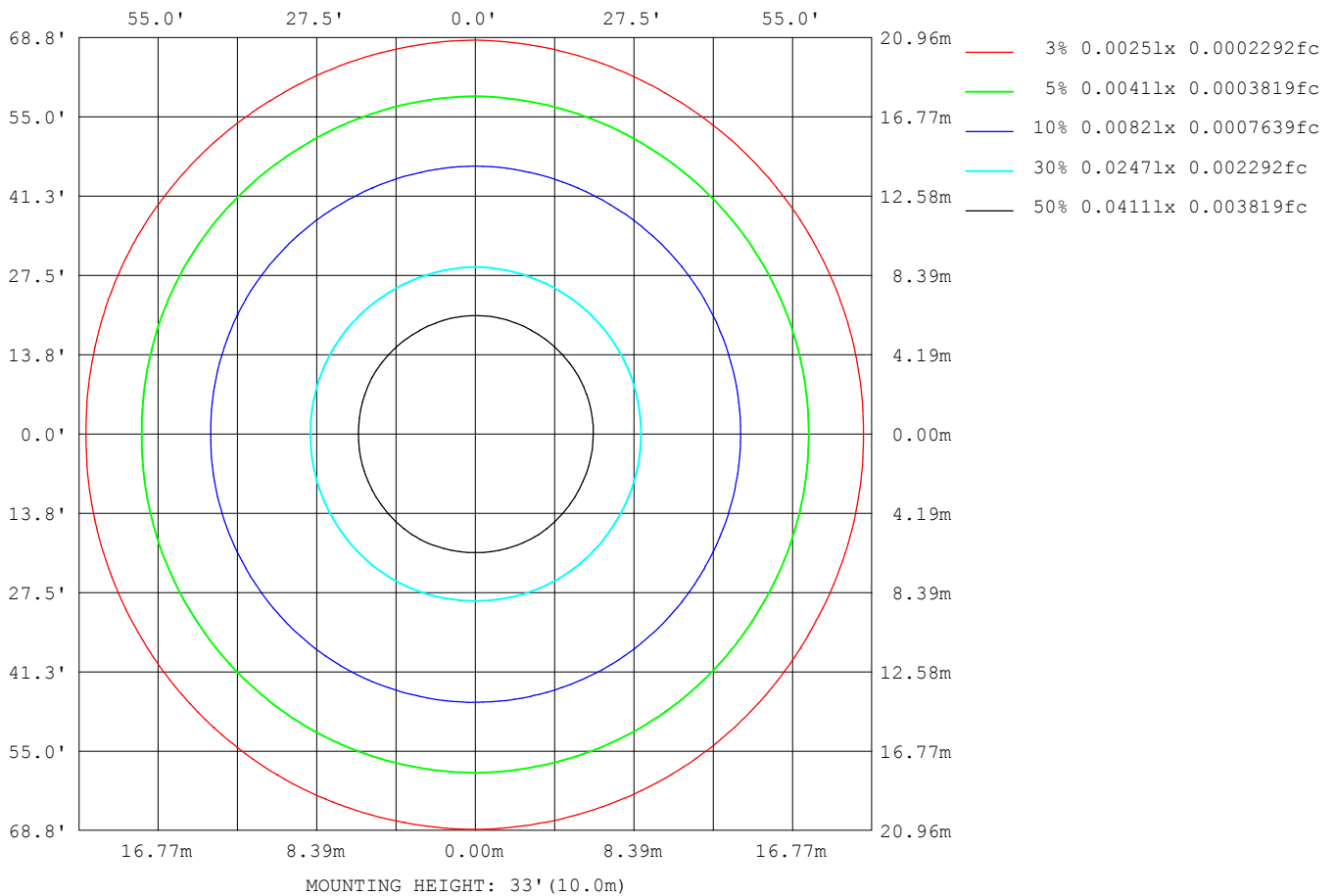
$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
Humidity:65.0%  
Test Distance:9.200m [K=1.0000]  
Remarks:





## ISOLUX DIAGRAM

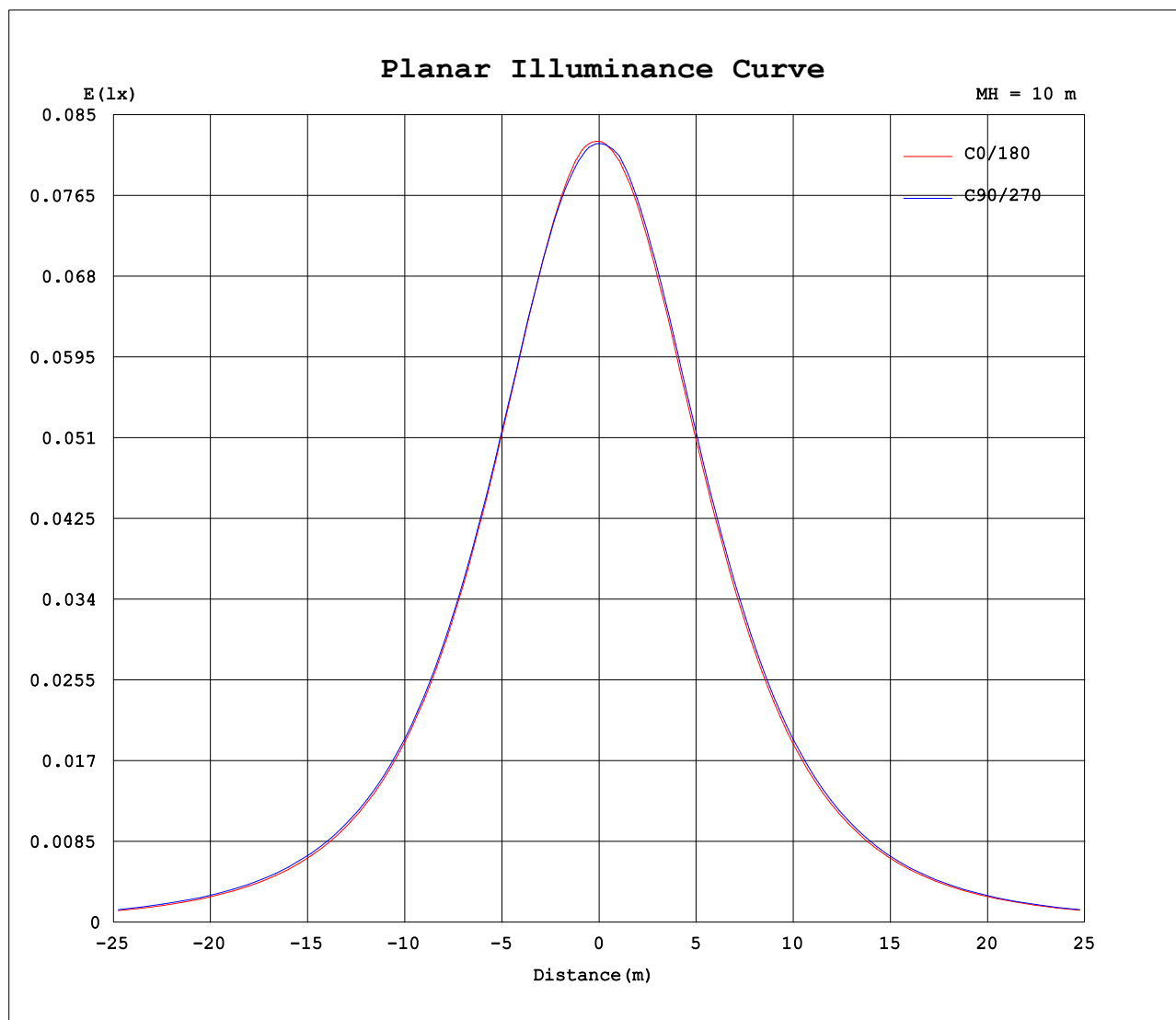
Test:U:24.00V I:0.1913A P:4.591W PF:1.000 Lamp Flux:23.7257x1 lm		
NAME: SF15-24V-5050-56-SPI4-RGBW- (5000K) -B	TYPE:PVC	WEIGHT:
DIM.: 21mm*11.5mm	SPEC.:	SERIAL No.:20220512
MFR.: OLYMPIA	SUR.:1*0.0165	PROTECTION ANGLE:



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:HXJ  
Test Date:2022-05-12

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
Humidity:65.0%  
Test Distance:9.200m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: HXJ  
Test Date: 2022-05-12

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
Humidity: 65.0%  
Test Distance: 9.200m [K=1.0000]  
Remarks:





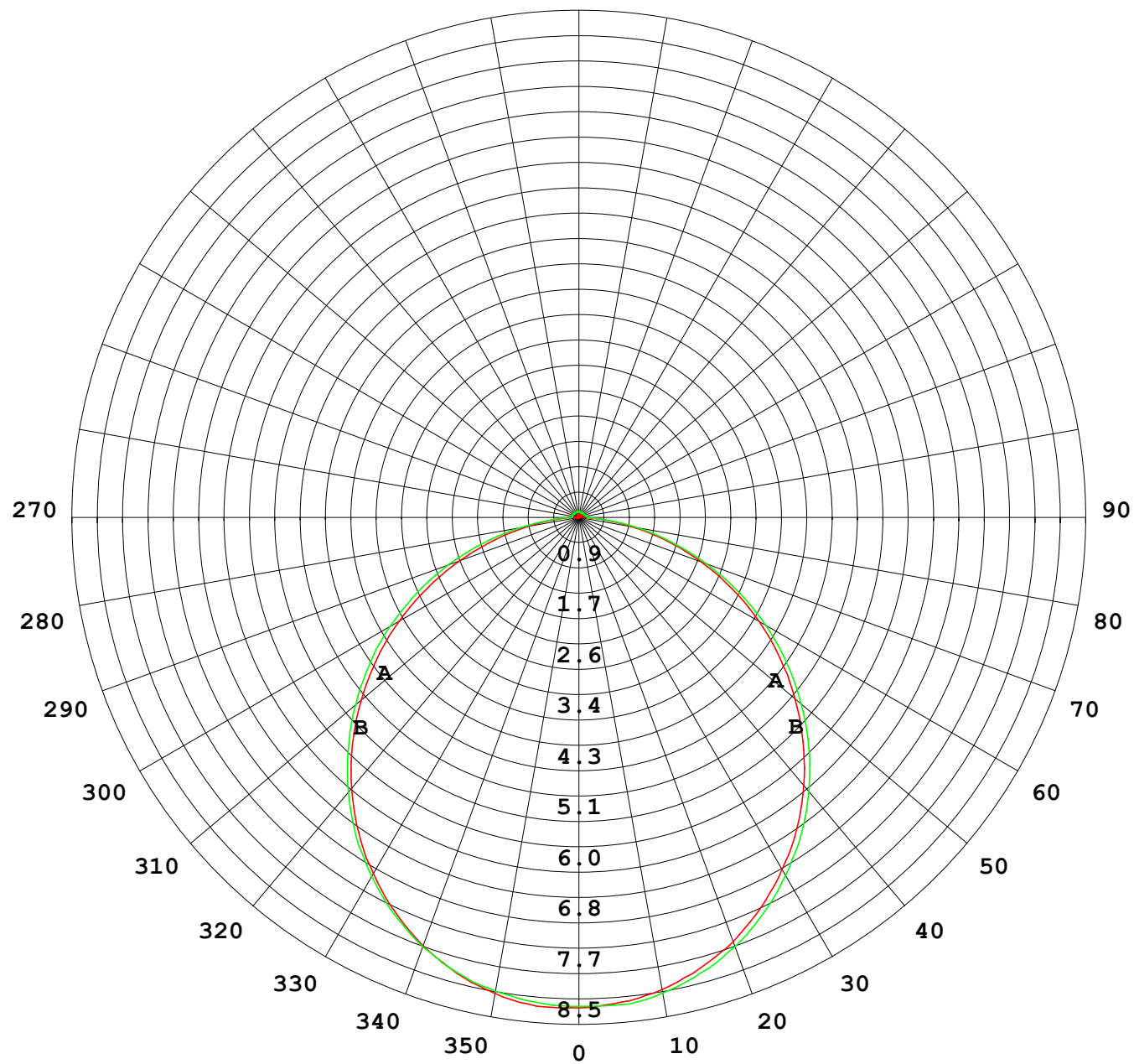
## Photometric Data Table [cd]

33.0	6.628	6.645
36.0	6.341	6.358
39.0	6.045	6.047
42.0	5.723	5.725
45.0	5.386	5.389
48.0	5.034	5.027
51.0	4.672	4.660
54.0	4.296	4.283
57.0	3.924	3.901
60.0	3.527	3.494
63.0	3.124	3.097
66.0	2.717	2.685
69.0	2.305	2.263
72.0	1.893	1.876
75.0	1.506	1.469
78.0	1.119	1.087
81.0	0.7526	0.7396
84.0	0.4310	0.4332
87.0	0.1803	0.2066
90.0	0.0804	0.0656
93.0	0.0804	0.0302
96.0	0.0804	0.0201
99.0	0.0904	0.0201
102.0	0.0854	0.0201
105.0	0.0854	0.0201
108.0	0.0854	0.0201
111.0	0.0854	0.0201
114.0	0.0854	0.0201
117.0	0.0954	0.0201
120.0	0.0905	0.0201
123.0	0.0905	0.0201
126.0	0.0905	0.0201
129.0	0.0905	0.0201
132.0	0.0905	0.0201
135.0	0.0905	0.0251
138.0	0.0905	0.0352
141.0	0.0905	0.0402
144.0	0.0905	0.0402
147.0	0.0905	0.0402
150.0	0.0905	0.0402
153.0	0.0905	0.0402
156.0	0.0905	0.0402
159.0	0.0905	0.0402
162.0	0.0905	0.0402
165.0	0.0905	0.0503
168.0	0.0905	0.0553
171.0	0.0905	0.0603
174.0	0.0905	0.0603
177.0	0.0955	0.0603
180.0	0.1005	0.0603

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:HXJ  
Test Date:2022-05-12

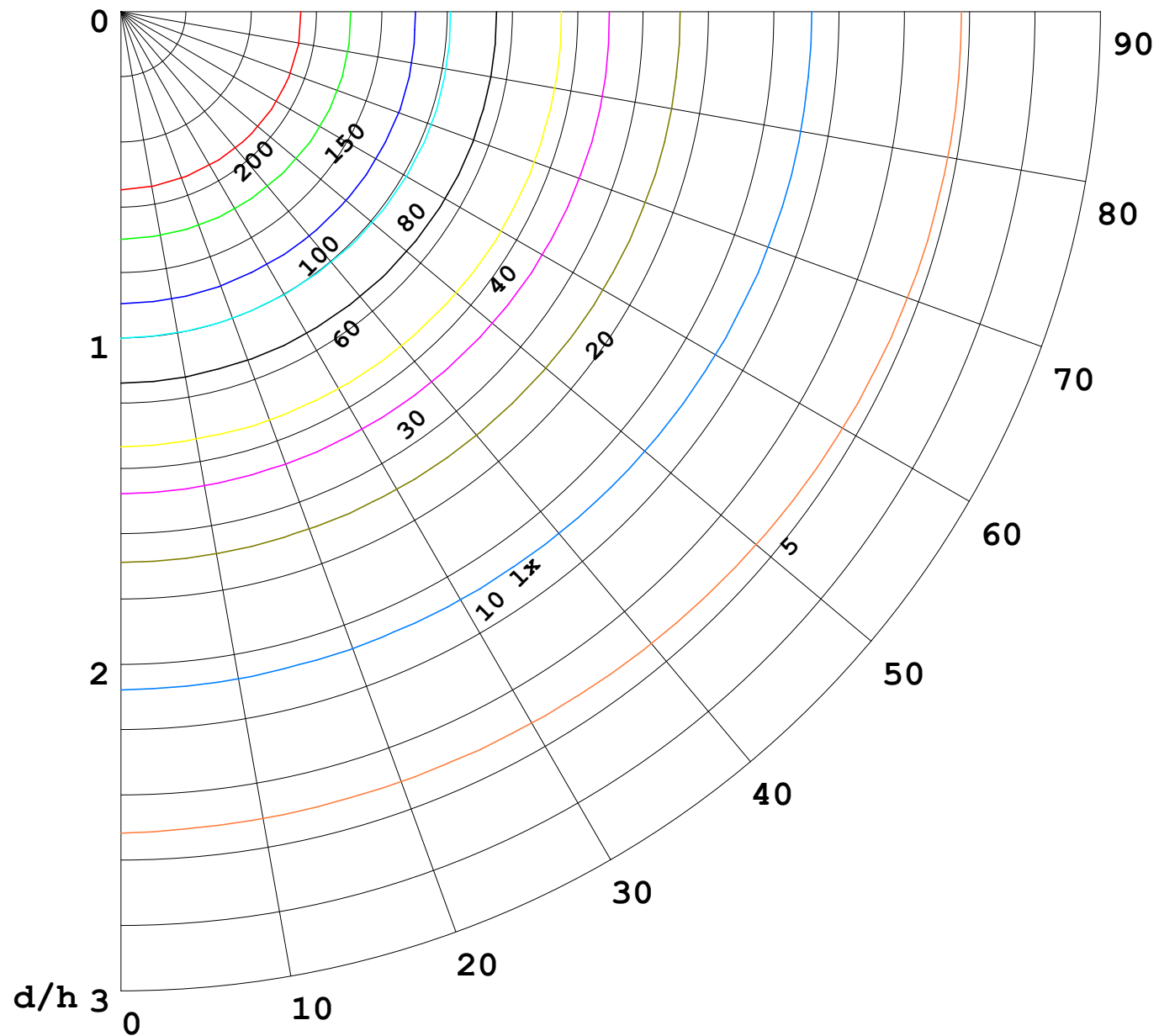
γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
Humidity:65.0%  
Test Distance:9.200m [K=1.0000]  
Remarks:

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

