

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P1046672

Luminaire Tested: FMNL809FS5-920

Issue Date: 07/08/2025

Tested By:

Approved By:



NVLAP Lab Code: 200050-0

Cooper Lighting Solutions laboratories have been accredited by National Voluntary Laboratory Accreditation Program (NVLAP) that it adheres to the requirements of ISO/IEC 17025:2005 and appropriate IESNA test methods. This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government. Results contained in this report are valid for luminaire sample tested, as supplied by requestor. Information related to the luminaire tested has been supplied by requestor and can affect the validity of the test results. Report shall not be reproduced except in full without approval of Cooper Lighting Solutions Lighting Laboratory. Test performed at address noted above.

Test Information

Test Method: LM-79-2019
Report Number: P1046672
Test Lab: Cooper lighting solutions
Issue Date: 07/08/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: FMNL809FS5-920
Description: HALO 8 inch 90 CRI COLOR SELECTABLE flush mount White Trim FIXTURE with night light
Light Source: 2000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

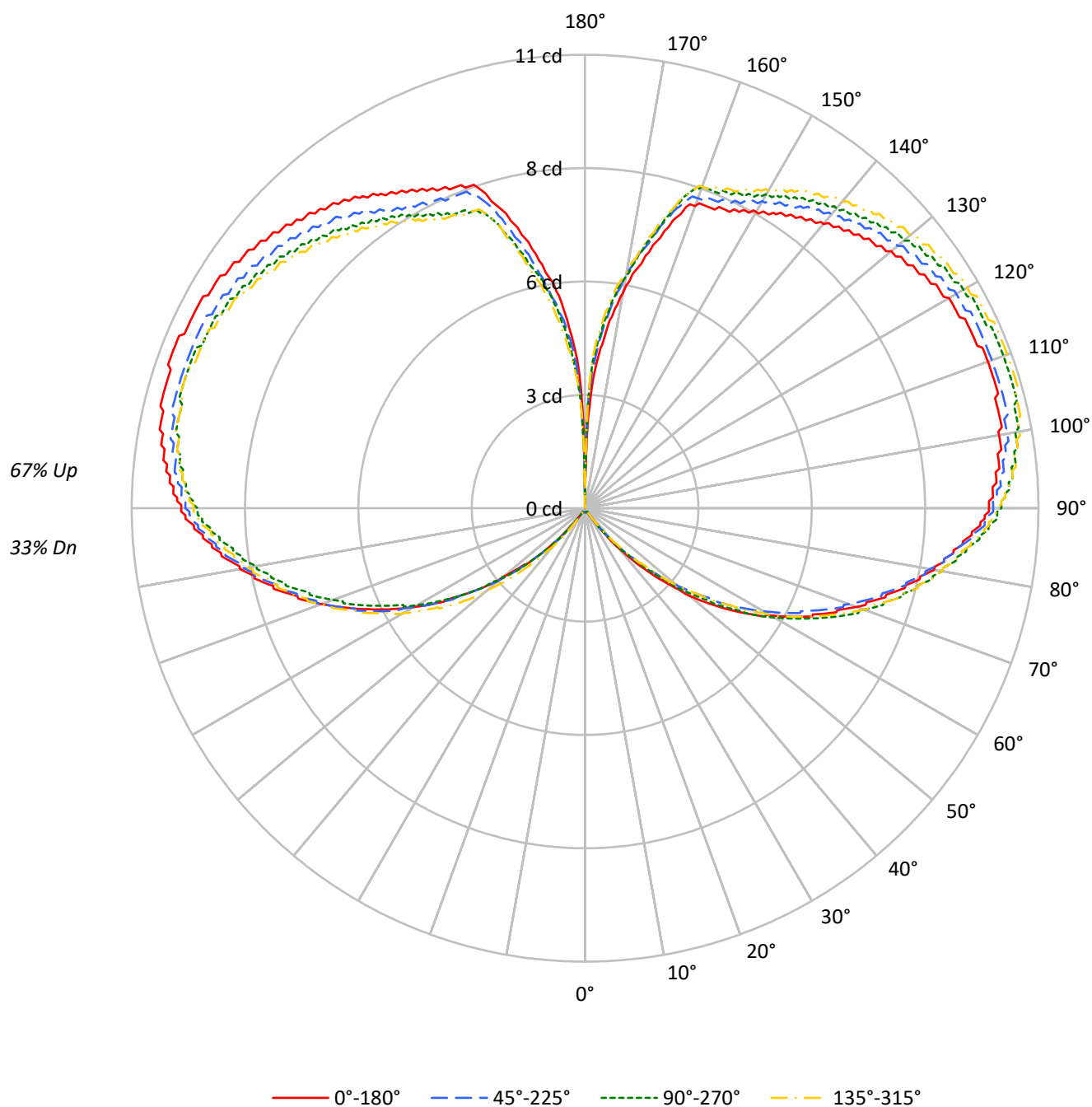
Lumens per Lamp: N/A
Luminaire Lumens: 90.3 lumens
Efficiency: N/A
Efficacy: 13.5 lumens/watt
Spacing Criteria (0/90/45): 10.88 / 10.85 / 9.86
Luminous Opening: Circular (Dia: 0.7' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 6.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	P3	10/30/2015	4/30/2016
Power Meter	IN0214	1/12/2016	1/12/2017
AC Power Source	IN0062	1/12/2016	1/12/2017
DC Power Supply	--	--	--
Room Thermometer	IN0145	1/13/2016	1/13/2017

TEST NUMBER: P1046672
CATALOG NUMBER: FMNL809FS5-920

Luminous Intensity Polar Plot



TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40
1	88	82	76	70	79	73	68	63	56	52	49	41	38	35	27	25	23
2	78	68	60	53	69	61	54	48	46	41	36	33	29	26	21	18	15
3	70	59	49	42	62	52	44	38	39	33	28	28	23	20	17	14	11
4	64	51	41	34	56	45	37	30	34	28	23	24	19	15	14	11	8
5	58	45	35	28	51	39	31	25	30	24	19	21	16	13	12	9	7
6	53	40	30	24	47	35	27	21	26	20	16	18	14	10	11	8	5
7	49	35	27	20	43	31	24	18	24	18	13	17	12	9	10	7	4
8	45	32	23	18	40	28	21	16	21	16	12	15	11	8	9	6	4
9	42	29	21	15	37	26	18	14	19	14	10	14	10	7	8	5	3
10	39	26	19	13	34	23	16	12	18	12	9	13	9	6	8	5	3

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	3	3	3	3
5°	3	3	3	3
10°	3	3	3	3
15°	3	3	3	3
20°	3	3	3	3
25°	3	3	3	3
30°	3	3	3	3
35°	14	14	7	10
40°	44	40	29	33
45°	87	79	67	67
50°	144	135	113	113
55°	210	205	180	180
60°	291	296	269	263
65°	404	417	384	371
70°	572	589	556	532
75°	843	865	832	800
80°	1385	1417	1369	1305
85°	2952	3049	2952	2856

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°

Vertical Angle: 89.5°

Luminance: 32372 cd/sqm

TEST NUMBER: P1046672
CATALOG NUMBER: FMNL809FS5-920

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.1
30°-40°	0.3	0.3
40°-50°	1.5	1.7
50°-60°	3.6	4.0
60°-70°	5.9	6.6
70°-80°	8.2	9.0
80°-90°	10.0	11.1
90°-100°	11.0	12.2
100°-110°	11.0	12.2
110°-120°	10.3	11.5
120°-130°	9.1	10.0
130°-140°	7.4	8.2
140°-150°	5.6	6.2
150°-160°	3.8	4.2
160°-170°	2.0	2.2
170°-180°	0.4	0.5
0°-30°	0.1	0.1
0°-40°	0.4	0.4
0°-60°	5.4	6.0
0°-90°	29.6	32.8
90°-120°	32.4	35.9
90°-150°	54.5	60.3
90°-180°	61.0	67.6
0°-180°	90.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	2	2	2	2	2	2
55°	4	4	4	4	4	4
65°	6	6	6	6	6	6
75°	8	8	8	7	8	8
85°	9	10	9	9	9	7
90°	10	10	10	9	10	5
95°	10	10	10	10	10	8
105°	10	11	11	10	10	11
115°	10	11	11	10	10	10
125°	10	10	10	10	10	9
135°	9	10	10	9	9	7
145°	9	9	9	9	9	5
155°	8	8	8	8	8	4
165°	7	7	7	7	7	2
175°	4	4	4	4	4	0
180°	0	0	0	0	0	

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
3°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
3.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
4°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
4.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
6°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
6.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
7°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
7.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
8°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
8.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
9°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
9.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
10°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
10.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
11°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
11.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
12°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
12.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
13°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
13.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
14°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
14.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
16°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
16.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
17°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
17.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
18°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
18.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
19°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
19.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
21°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
21.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
22°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
23°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
23.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
24°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
24.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
26°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
26.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
27°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
27.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
28°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
28.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
29°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
29.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
30°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
30.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
31°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
31.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
32°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
32.5°	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
33°	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
33.5°	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
34°	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.2	0.2
34.5°	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
35°	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.3
35.5°	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
36°	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.4	0.4
36.5°	0.7	0.6	0.6	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.4
37°	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.5	0.5
37.5°	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.5
38°	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.5	0.6	0.6
38.5°	1.0	0.9	0.8	0.8	0.9	0.8	0.8	0.7	0.6	0.7	0.7
39°	1.1	0.9	0.9	0.9	0.9	0.9	0.8	0.7	0.7	0.7	0.7
39.5°	1.2	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.8	0.8
40°	1.2	1.1	1.1	1.1	1.1	1.1	1.0	0.9	0.8	0.9	0.9
40.5°	1.3	1.2	1.1	1.2	1.2	1.1	1.1	1.0	0.9	1.0	1.0
41°	1.4	1.3	1.2	1.2	1.3	1.2	1.1	1.0	1.0	1.0	1.0
41.5°	1.5	1.3	1.3	1.3	1.4	1.3	1.2	1.1	1.1	1.1	1.1
42°	1.6	1.4	1.4	1.4	1.5	1.4	1.3	1.2	1.1	1.2	1.2
42.5°	1.7	1.5	1.5	1.5	1.5	1.5	1.4	1.3	1.2	1.3	1.3
43°	1.8	1.6	1.6	1.6	1.6	1.6	1.5	1.4	1.3	1.4	1.4
43.5°	1.9	1.7	1.6	1.7	1.7	1.7	1.6	1.5	1.4	1.5	1.5
44°	2.0	1.8	1.7	1.8	1.8	1.8	1.7	1.6	1.5	1.6	1.5
44.5°	2.1	1.9	1.8	1.9	1.9	1.9	1.8	1.6	1.6	1.7	1.6

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	2.2	2.0	1.9	2.0	2.0	2.0	1.9	1.7	1.7	1.7	1.7
45.5°	2.3	2.1	2.0	2.1	2.1	2.1	1.9	1.8	1.8	1.8	1.8
46°	2.4	2.2	2.1	2.1	2.2	2.2	2.0	1.9	1.9	1.9	1.9
46.5°	2.5	2.3	2.2	2.2	2.3	2.3	2.1	2.0	2.0	2.0	2.0
47°	2.6	2.4	2.3	2.3	2.4	2.4	2.2	2.1	2.0	2.1	2.1
47.5°	2.7	2.5	2.4	2.4	2.5	2.5	2.3	2.2	2.1	2.2	2.2
48°	2.8	2.6	2.5	2.5	2.6	2.6	2.4	2.3	2.2	2.3	2.3
48.5°	2.9	2.7	2.6	2.6	2.7	2.7	2.6	2.4	2.3	2.4	2.4
49°	3.0	2.8	2.7	2.8	2.9	2.8	2.7	2.5	2.4	2.5	2.5
49.5°	3.2	2.9	2.8	2.9	3.0	2.9	2.8	2.6	2.5	2.6	2.6
50°	3.3	3.0	2.9	3.0	3.1	3.0	2.9	2.7	2.6	2.7	2.7
50.5°	3.4	3.1	3.0	3.1	3.2	3.1	3.0	2.8	2.8	2.8	2.8
51°	3.5	3.2	3.1	3.2	3.3	3.2	3.1	2.9	2.9	2.9	2.9
51.5°	3.6	3.3	3.2	3.3	3.4	3.3	3.2	3.1	3.0	3.0	3.0
52°	3.7	3.4	3.3	3.4	3.5	3.4	3.3	3.2	3.1	3.1	3.1
52.5°	3.8	3.5	3.4	3.5	3.6	3.5	3.4	3.3	3.2	3.2	3.2
53°	3.9	3.6	3.5	3.6	3.7	3.6	3.5	3.4	3.3	3.4	3.3
53.5°	4.0	3.7	3.6	3.7	3.9	3.8	3.7	3.5	3.4	3.5	3.4
54°	4.1	3.9	3.7	3.8	4.0	3.9	3.8	3.6	3.5	3.6	3.5
54.5°	4.2	4.0	3.9	3.9	4.1	4.0	3.9	3.7	3.6	3.7	3.6
55°	4.3	4.1	4.0	4.0	4.2	4.1	4.0	3.8	3.7	3.8	3.7
55.5°	4.4	4.2	4.1	4.1	4.3	4.2	4.1	3.9	3.8	3.9	3.9
56°	4.5	4.3	4.2	4.2	4.4	4.3	4.2	4.1	3.9	4.0	4.0
56.5°	4.6	4.4	4.3	4.3	4.5	4.4	4.3	4.2	4.1	4.1	4.1
57°	4.7	4.5	4.4	4.5	4.7	4.6	4.5	4.3	4.2	4.2	4.2
57.5°	4.8	4.6	4.5	4.6	4.8	4.7	4.6	4.4	4.3	4.3	4.3
58°	4.9	4.7	4.6	4.7	4.9	4.8	4.7	4.5	4.4	4.4	4.4
58.5°	5.0	4.8	4.7	4.8	5.0	4.9	4.8	4.6	4.5	4.6	4.5
59°	5.1	4.9	4.8	4.9	5.1	5.0	4.9	4.7	4.6	4.7	4.6
59.5°	5.1	5.0	4.9	5.0	5.2	5.1	5.0	4.8	4.7	4.8	4.7
60°	5.2	5.1	5.0	5.1	5.3	5.2	5.1	5.0	4.8	4.9	4.8
60.5°	5.3	5.1	5.1	5.2	5.4	5.3	5.2	5.1	4.9	5.0	4.9
61°	5.4	5.2	5.2	5.3	5.5	5.4	5.3	5.2	5.0	5.1	5.0
61.5°	5.5	5.3	5.3	5.4	5.6	5.5	5.4	5.3	5.1	5.2	5.2
62°	5.6	5.4	5.4	5.5	5.7	5.6	5.5	5.4	5.2	5.3	5.3
62.5°	5.7	5.5	5.5	5.6	5.8	5.7	5.6	5.5	5.3	5.4	5.4
63°	5.8	5.6	5.6	5.7	5.9	5.8	5.7	5.6	5.4	5.5	5.5
63.5°	5.9	5.7	5.7	5.8	6.0	5.9	5.8	5.7	5.5	5.6	5.6
64°	6.0	5.8	5.8	5.9	6.1	6.0	5.9	5.8	5.6	5.7	5.7
64.5°	6.1	5.9	5.8	5.9	6.2	6.1	6.0	5.9	5.7	5.8	5.8
65°	6.1	6.0	5.9	6.0	6.3	6.2	6.1	6.0	5.8	5.9	5.9
65.5°	6.2	6.1	6.0	6.1	6.4	6.3	6.2	6.1	5.9	6.0	6.0
66°	6.3	6.1	6.1	6.2	6.5	6.4	6.3	6.2	6.0	6.1	6.1
66.5°	6.4	6.2	6.2	6.3	6.6	6.5	6.4	6.3	6.1	6.2	6.1
67°	6.5	6.3	6.3	6.4	6.7	6.6	6.5	6.4	6.2	6.3	6.2

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	6.6	6.4	6.4	6.5	6.8	6.9	6.7	6.5	6.3	6.4	6.3
68°	6.6	6.5	6.5	6.6	6.9	6.9	6.8	6.6	6.4	6.5	6.4
68.5°	6.7	6.6	6.6	6.7	7.0	7.0	6.9	6.7	6.5	6.6	6.5
69°	6.8	6.7	6.7	6.8	7.1	7.1	7.0	6.8	6.6	6.6	6.6
69.5°	6.9	6.7	6.7	6.9	7.1	7.2	7.1	6.9	6.7	6.7	6.7
70°	7.0	6.8	6.8	7.0	7.2	7.3	7.2	7.0	6.8	6.8	6.8
70.5°	7.1	6.9	6.9	7.0	7.3	7.4	7.3	7.0	6.9	6.9	6.9
71°	7.2	7.0	7.0	7.1	7.4	7.5	7.4	7.1	7.0	7.0	6.9
71.5°	7.2	7.1	7.1	7.2	7.5	7.6	7.4	7.2	7.1	7.1	7.0
72°	7.3	7.2	7.2	7.3	7.6	7.6	7.5	7.3	7.2	7.2	7.1
72.5°	7.4	7.3	7.3	7.4	7.6	7.7	7.6	7.4	7.3	7.3	7.2
73°	7.5	7.4	7.4	7.5	7.7	7.8	7.7	7.5	7.3	7.4	7.3
73.5°	7.6	7.5	7.5	7.6	7.8	7.9	7.8	7.6	7.4	7.4	7.3
74°	7.6	7.5	7.5	7.6	7.9	8.0	7.9	7.7	7.5	7.5	7.4
74.5°	7.7	7.6	7.6	7.7	8.0	8.0	7.9	7.7	7.6	7.6	7.5
75°	7.8	7.7	7.7	7.8	8.0	8.1	8.0	7.8	7.7	7.7	7.6
75.5°	7.9	7.8	7.8	7.9	8.1	8.2	8.1	7.9	7.8	7.8	7.7
76°	8.0	7.9	7.9	8.0	8.2	8.3	8.2	8.0	7.8	7.8	7.7
76.5°	8.0	7.9	8.0	8.0	8.3	8.3	8.3	8.1	7.9	7.9	7.8
77°	8.1	8.0	8.0	8.1	8.3	8.4	8.3	8.1	8.0	8.0	7.9
77.5°	8.2	8.1	8.1	8.2	8.4	8.5	8.4	8.2	8.1	8.1	8.0
78°	8.3	8.2	8.2	8.3	8.5	8.6	8.5	8.3	8.2	8.2	8.1
78.5°	8.3	8.3	8.3	8.3	8.6	8.6	8.6	8.4	8.2	8.2	8.2
79°	8.4	8.4	8.4	8.4	8.6	8.7	8.6	8.4	8.3	8.3	8.2
79.5°	8.5	8.4	8.4	8.5	8.7	8.8	8.7	8.5	8.4	8.4	8.3
80°	8.6	8.5	8.5	8.6	8.8	8.8	8.8	8.6	8.5	8.5	8.4
80.5°	8.6	8.6	8.6	8.7	8.8	8.9	8.8	8.7	8.5	8.5	8.5
81°	8.7	8.7	8.7	8.7	8.9	9.0	8.9	8.7	8.6	8.6	8.5
81.5°	8.8	8.7	8.8	8.8	9.0	9.1	9.0	8.8	8.7	8.7	8.6
82°	8.8	8.8	8.8	8.9	9.1	9.1	9.1	8.9	8.8	8.8	8.7
82.5°	8.9	8.9	8.9	9.0	9.1	9.2	9.1	9.0	8.9	8.8	8.8
83°	9.0	9.0	9.0	9.0	9.2	9.3	9.2	9.0	8.9	8.9	8.8
83.5°	9.0	9.0	9.1	9.1	9.3	9.3	9.2	9.1	9.0	9.0	8.9
84°	9.1	9.1	9.1	9.2	9.3	9.4	9.3	9.2	9.1	9.1	9.0
84.5°	9.2	9.2	9.2	9.3	9.4	9.5	9.4	9.2	9.1	9.1	9.0
85°	9.2	9.3	9.3	9.3	9.5	9.5	9.4	9.3	9.2	9.2	9.1
85.5°	9.3	9.3	9.4	9.4	9.6	9.6	9.5	9.4	9.3	9.3	9.2
86°	9.4	9.4	9.4	9.5	9.6	9.7	9.6	9.5	9.3	9.3	9.2
86.5°	9.4	9.5	9.5	9.6	9.7	9.7	9.7	9.5	9.4	9.4	9.3
87°	9.5	9.5	9.6	9.6	9.8	9.8	9.7	9.6	9.5	9.5	9.4
87.5°	9.6	9.6	9.7	9.7	9.8	9.9	9.8	9.6	9.5	9.5	9.4
88°	9.6	9.7	9.7	9.8	9.9	9.9	9.8	9.7	9.6	9.6	9.5
88.5°	9.7	9.7	9.8	9.8	10.0	10.0	9.9	9.8	9.7	9.6	9.5
89°	9.7	9.8	9.8	9.9	10.0	10.0	9.9	9.8	9.7	9.7	9.6
89.5°	9.8	9.8	9.9	9.9	10.0	10.1	10.0	9.9	9.8	9.7	9.6

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	9.8	9.9	9.9	9.9	10.1	10.1	10.0	9.9	9.8	9.7	9.7
90.5°	9.8	9.9	9.9	9.9	10.1	10.1	10.1	10.0	9.8	9.8	9.7
91°	9.8	9.9	9.9	10.0	10.1	10.2	10.1	10.0	9.9	9.8	9.7
91.5°	9.9	9.9	10.0	10.0	10.2	10.2	10.2	10.0	9.9	9.9	9.8
92°	9.9	10.0	10.0	10.0	10.2	10.3	10.2	10.1	10.0	9.9	9.8
92.5°	9.9	10.0	10.0	10.1	10.3	10.3	10.2	10.1	10.0	9.9	9.8
93°	9.9	10.0	10.1	10.1	10.3	10.3	10.3	10.2	10.0	10.0	9.8
93.5°	10.0	10.0	10.1	10.1	10.3	10.4	10.3	10.2	10.1	10.0	9.9
94°	10.0	10.1	10.1	10.2	10.4	10.4	10.4	10.2	10.1	10.0	9.9
94.5°	10.0	10.1	10.1	10.2	10.4	10.4	10.4	10.3	10.1	10.0	9.9
95°	10.0	10.1	10.2	10.2	10.4	10.5	10.4	10.3	10.2	10.1	10.0
95.5°	10.1	10.1	10.2	10.3	10.4	10.5	10.5	10.3	10.2	10.1	10.0
96°	10.1	10.2	10.2	10.3	10.5	10.5	10.5	10.4	10.2	10.1	10.0
96.5°	10.1	10.2	10.2	10.3	10.5	10.6	10.5	10.4	10.3	10.2	10.0
97°	10.1	10.2	10.3	10.3	10.5	10.6	10.5	10.4	10.3	10.2	10.0
97.5°	10.1	10.2	10.3	10.4	10.5	10.6	10.6	10.4	10.3	10.2	10.1
98°	10.2	10.2	10.3	10.4	10.6	10.6	10.6	10.5	10.3	10.2	10.1
98.5°	10.2	10.3	10.3	10.4	10.6	10.6	10.6	10.5	10.4	10.2	10.1
99°	10.2	10.3	10.4	10.4	10.6	10.7	10.6	10.5	10.4	10.3	10.1
99.5°	10.2	10.3	10.4	10.4	10.6	10.7	10.7	10.5	10.4	10.3	10.2
100°	10.2	10.3	10.4	10.5	10.6	10.7	10.7	10.6	10.4	10.3	10.2
100.5°	10.2	10.3	10.4	10.5	10.7	10.7	10.7	10.6	10.5	10.3	10.2
101°	10.3	10.4	10.4	10.5	10.7	10.7	10.7	10.6	10.5	10.3	10.2
101.5°	10.3	10.4	10.4	10.5	10.7	10.8	10.7	10.6	10.5	10.4	10.2
102°	10.3	10.4	10.4	10.5	10.7	10.8	10.8	10.6	10.5	10.4	10.2
102.5°	10.3	10.4	10.5	10.5	10.7	10.8	10.8	10.7	10.5	10.4	10.2
103°	10.3	10.4	10.5	10.5	10.7	10.8	10.8	10.7	10.5	10.4	10.3
103.5°	10.3	10.4	10.5	10.6	10.7	10.8	10.8	10.7	10.6	10.4	10.3
104°	10.3	10.4	10.5	10.6	10.8	10.8	10.8	10.7	10.6	10.4	10.3
104.5°	10.3	10.4	10.5	10.6	10.8	10.8	10.8	10.7	10.6	10.4	10.3
105°	10.3	10.4	10.5	10.6	10.8	10.8	10.8	10.7	10.6	10.4	10.3
105.5°	10.4	10.4	10.5	10.6	10.8	10.8	10.9	10.7	10.6	10.5	10.3
106°	10.4	10.5	10.5	10.6	10.8	10.8	10.9	10.7	10.6	10.5	10.3
106.5°	10.4	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.6	10.5	10.3
107°	10.4	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.6	10.5	10.3
107.5°	10.4	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.6	10.5	10.3
108°	10.4	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.6	10.5	10.3
108.5°	10.4	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.6	10.5	10.3
109°	10.4	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.7	10.5	10.3
109.5°	10.4	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.7	10.5	10.3
110°	10.4	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.7	10.5	10.3
110.5°	10.4	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.7	10.5	10.3
111°	10.4	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.7	10.5	10.3
111.5°	10.4	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.7	10.5	10.3
112°	10.4	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.7	10.5	10.3

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	10.3	10.5	10.5	10.6	10.8	10.9	10.9	10.8	10.7	10.5	10.3
113°	10.3	10.4	10.5	10.6	10.8	10.9	10.9	10.8	10.7	10.5	10.3
113.5°	10.3	10.4	10.5	10.6	10.8	10.8	10.9	10.8	10.6	10.5	10.3
114°	10.3	10.4	10.5	10.6	10.8	10.8	10.9	10.8	10.6	10.5	10.3
114.5°	10.3	10.4	10.5	10.6	10.7	10.8	10.9	10.8	10.6	10.5	10.3
115°	10.3	10.4	10.5	10.6	10.7	10.8	10.8	10.8	10.6	10.5	10.3
115.5°	10.3	10.4	10.5	10.6	10.7	10.8	10.8	10.8	10.6	10.4	10.3
116°	10.3	10.4	10.5	10.6	10.7	10.8	10.8	10.8	10.6	10.4	10.3
116.5°	10.3	10.4	10.5	10.6	10.7	10.8	10.8	10.8	10.6	10.4	10.3
117°	10.2	10.4	10.5	10.5	10.7	10.8	10.8	10.7	10.6	10.4	10.3
117.5°	10.2	10.4	10.4	10.5	10.7	10.8	10.8	10.7	10.6	10.4	10.2
118°	10.2	10.3	10.4	10.5	10.7	10.8	10.8	10.7	10.6	10.4	10.2
118.5°	10.2	10.3	10.4	10.5	10.7	10.7	10.8	10.7	10.6	10.4	10.2
119°	10.2	10.3	10.4	10.5	10.6	10.7	10.7	10.7	10.6	10.4	10.2
119.5°	10.2	10.3	10.4	10.5	10.6	10.7	10.7	10.7	10.5	10.3	10.2
120°	10.2	10.3	10.4	10.5	10.6	10.7	10.7	10.7	10.5	10.3	10.2
120.5°	10.1	10.3	10.4	10.4	10.6	10.7	10.7	10.7	10.5	10.3	10.2
121°	10.1	10.2	10.3	10.4	10.6	10.7	10.7	10.6	10.5	10.3	10.1
121.5°	10.1	10.2	10.3	10.4	10.5	10.7	10.7	10.6	10.5	10.3	10.1
122°	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.6	10.5	10.3	10.1
122.5°	10.1	10.2	10.3	10.4	10.5	10.6	10.6	10.6	10.5	10.2	10.1
123°	10.0	10.2	10.3	10.4	10.5	10.6	10.6	10.6	10.4	10.2	10.1
123.5°	10.0	10.1	10.2	10.3	10.5	10.6	10.6	10.6	10.4	10.2	10.1
124°	10.0	10.1	10.2	10.3	10.5	10.6	10.6	10.5	10.4	10.2	10.0
124.5°	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.5	10.4	10.2	10.0
125°	9.9	10.1	10.2	10.3	10.4	10.5	10.6	10.5	10.4	10.2	10.0
125.5°	9.9	10.0	10.2	10.3	10.4	10.5	10.5	10.5	10.3	10.1	10.0
126°	9.9	10.0	10.1	10.2	10.4	10.5	10.5	10.5	10.3	10.1	10.0
126.5°	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.4	10.3	10.1	9.9
127°	9.8	10.0	10.1	10.2	10.3	10.4	10.5	10.4	10.3	10.1	9.9
127.5°	9.8	10.0	10.1	10.2	10.3	10.4	10.5	10.4	10.3	10.0	9.9
128°	9.8	9.9	10.0	10.1	10.3	10.4	10.4	10.4	10.2	10.0	9.9
128.5°	9.8	9.9	10.0	10.1	10.2	10.4	10.4	10.3	10.2	10.0	9.8
129°	9.7	9.9	10.0	10.1	10.2	10.3	10.4	10.3	10.2	10.0	9.8
129.5°	9.7	9.8	10.0	10.1	10.2	10.3	10.4	10.3	10.2	9.9	9.8
130°	9.7	9.8	9.9	10.0	10.1	10.3	10.3	10.3	10.1	9.9	9.8
130.5°	9.6	9.8	9.9	10.0	10.1	10.2	10.3	10.2	10.1	9.9	9.8
131°	9.6	9.8	9.9	10.0	10.1	10.2	10.3	10.2	10.1	9.9	9.7
131.5°	9.6	9.7	9.8	10.0	10.1	10.2	10.3	10.2	10.1	9.8	9.7
132°	9.5	9.7	9.8	9.9	10.0	10.2	10.2	10.2	10.0	9.8	9.7
132.5°	9.5	9.7	9.8	9.9	10.0	10.1	10.2	10.1	10.0	9.8	9.7
133°	9.5	9.6	9.8	9.9	10.0	10.1	10.2	10.1	10.0	9.8	9.6
133.5°	9.5	9.6	9.7	9.8	9.9	10.1	10.1	10.1	10.0	9.7	9.6
134°	9.4	9.6	9.7	9.8	9.9	10.0	10.1	10.1	9.9	9.7	9.6
134.5°	9.4	9.5	9.7	9.8	9.9	10.0	10.1	10.0	9.9	9.7	9.5

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	9.4	9.5	9.6	9.7	9.8	10.0	10.1	10.0	9.9	9.7	9.5
135.5°	9.3	9.5	9.6	9.7	9.8	10.0	10.0	10.0	9.8	9.6	9.5
136°	9.3	9.4	9.6	9.7	9.8	9.9	10.0	10.0	9.8	9.6	9.5
136.5°	9.3	9.4	9.5	9.6	9.7	9.9	10.0	9.9	9.8	9.6	9.4
137°	9.2	9.4	9.5	9.6	9.7	9.9	9.9	9.9	9.8	9.6	9.4
137.5°	9.2	9.3	9.5	9.6	9.7	9.8	9.9	9.9	9.7	9.5	9.4
138°	9.2	9.3	9.4	9.5	9.6	9.8	9.9	9.8	9.7	9.5	9.3
138.5°	9.1	9.3	9.4	9.5	9.6	9.8	9.8	9.8	9.7	9.5	9.3
139°	9.1	9.2	9.4	9.5	9.6	9.7	9.8	9.8	9.6	9.4	9.3
139.5°	9.1	9.2	9.3	9.4	9.5	9.7	9.8	9.7	9.6	9.4	9.3
140°	9.0	9.2	9.3	9.4	9.5	9.6	9.7	9.7	9.6	9.4	9.2
140.5°	9.0	9.1	9.3	9.4	9.5	9.6	9.7	9.7	9.6	9.3	9.2
141°	8.9	9.1	9.2	9.3	9.4	9.6	9.7	9.7	9.5	9.3	9.1
141.5°	8.9	9.1	9.2	9.3	9.4	9.5	9.6	9.6	9.5	9.3	9.1
142°	8.9	9.0	9.2	9.3	9.4	9.5	9.6	9.6	9.5	9.2	9.1
142.5°	8.8	9.0	9.1	9.2	9.3	9.5	9.5	9.5	9.4	9.2	9.0
143°	8.8	9.0	9.1	9.2	9.3	9.4	9.5	9.5	9.4	9.1	9.0
143.5°	8.8	8.9	9.1	9.2	9.3	9.4	9.5	9.5	9.4	9.1	8.9
144°	8.7	8.9	9.0	9.1	9.2	9.3	9.4	9.4	9.3	9.0	8.9
144.5°	8.7	8.9	9.0	9.1	9.2	9.3	9.4	9.4	9.3	9.0	8.8
145°	8.7	8.8	8.9	9.1	9.2	9.3	9.4	9.3	9.2	9.0	8.8
145.5°	8.6	8.8	8.9	9.0	9.1	9.2	9.3	9.3	9.2	8.9	8.8
146°	8.6	8.7	8.9	9.0	9.1	9.2	9.3	9.3	9.2	8.9	8.7
146.5°	8.6	8.7	8.8	9.0	9.0	9.1	9.2	9.2	9.1	8.8	8.7
147°	8.5	8.7	8.8	8.9	9.0	9.1	9.2	9.2	9.1	8.8	8.6
147.5°	8.5	8.6	8.8	8.9	9.0	9.1	9.1	9.1	9.0	8.8	8.6
148°	8.4	8.6	8.7	8.9	8.9	9.0	9.1	9.1	9.0	8.7	8.6
148.5°	8.4	8.6	8.7	8.8	8.9	9.0	9.0	9.0	9.0	8.7	8.5
149°	8.4	8.5	8.7	8.8	8.8	8.9	9.0	9.0	8.9	8.7	8.5
149.5°	8.3	8.5	8.6	8.7	8.8	8.9	8.9	9.0	8.9	8.6	8.5
150°	8.3	8.4	8.6	8.7	8.8	8.8	8.9	8.9	8.9	8.6	8.5
150.5°	8.3	8.4	8.5	8.7	8.7	8.8	8.9	8.9	8.8	8.6	8.4
151°	8.2	8.4	8.5	8.6	8.7	8.8	8.8	8.8	8.8	8.6	8.4
151.5°	8.2	8.3	8.5	8.6	8.6	8.7	8.8	8.8	8.8	8.6	8.4
152°	8.2	8.3	8.4	8.6	8.6	8.7	8.7	8.8	8.7	8.5	8.4
152.5°	8.1	8.3	8.4	8.5	8.6	8.6	8.7	8.7	8.7	8.5	8.3
153°	8.1	8.2	8.3	8.5	8.5	8.6	8.7	8.7	8.7	8.5	8.3
153.5°	8.1	8.2	8.3	8.4	8.5	8.6	8.6	8.7	8.6	8.5	8.3
154°	8.0	8.2	8.3	8.4	8.5	8.5	8.6	8.6	8.6	8.5	8.3
154.5°	8.0	8.1	8.2	8.4	8.5	8.5	8.5	8.6	8.6	8.5	8.3
155°	8.0	8.1	8.2	8.3	8.4	8.5	8.5	8.6	8.5	8.4	8.3
155.5°	8.0	8.1	8.2	8.3	8.4	8.4	8.5	8.5	8.5	8.4	8.2
156°	8.0	8.0	8.2	8.3	8.4	8.4	8.5	8.5	8.5	8.4	8.2
156.5°	7.9	8.0	8.1	8.2	8.4	8.4	8.4	8.5	8.5	8.4	8.2
157°	7.9	8.0	8.1	8.2	8.3	8.4	8.4	8.5	8.4	8.4	8.2

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
157.5°	7.9	8.0	8.1	8.2	8.3	8.3	8.4	8.4	8.4	8.4	8.2
158°	7.9	8.0	8.1	8.2	8.3	8.3	8.4	8.4	8.4	8.4	8.2
158.5°	7.9	8.0	8.1	8.2	8.3	8.3	8.3	8.4	8.4	8.3	8.2
159°	7.9	8.0	8.0	8.1	8.3	8.3	8.3	8.4	8.4	8.3	8.2
159.5°	7.9	7.9	8.0	8.1	8.3	8.3	8.3	8.3	8.3	8.3	8.2
160°	7.8	7.9	8.0	8.1	8.3	8.3	8.3	8.3	8.3	8.3	8.1
160.5°	7.8	7.9	8.0	8.0	8.2	8.3	8.3	8.3	8.3	8.2	8.1
161°	7.8	7.9	8.0	8.0	8.2	8.2	8.2	8.2	8.3	8.2	8.0
161.5°	7.7	7.8	7.9	7.9	8.1	8.1	8.1	8.2	8.2	8.1	7.9
162°	7.5	7.7	7.8	7.8	8.0	8.0	8.0	8.1	8.1	8.0	7.8
162.5°	7.4	7.6	7.7	7.7	7.9	7.9	7.9	7.9	8.0	7.8	7.7
163°	7.3	7.5	7.6	7.6	7.7	7.8	7.8	7.8	7.8	7.7	7.6
163.5°	7.1	7.4	7.5	7.5	7.6	7.6	7.6	7.7	7.7	7.6	7.4
164°	7.0	7.2	7.3	7.3	7.4	7.5	7.5	7.6	7.6	7.4	7.3
164.5°	6.8	7.1	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.3	7.1
165°	6.7	6.9	7.1	7.1	7.1	7.2	7.2	7.3	7.4	7.1	7.0
165.5°	6.6	6.8	6.9	6.9	7.0	7.0	7.1	7.2	7.2	7.0	6.8
166°	6.4	6.7	6.8	6.8	6.8	6.9	6.9	7.1	7.1	6.8	6.7
166.5°	6.3	6.5	6.6	6.7	6.7	6.7	6.8	6.9	7.0	6.7	6.6
167°	6.1	6.4	6.5	6.6	6.6	6.6	6.7	6.8	6.8	6.6	6.4
167.5°	6.0	6.2	6.4	6.5	6.4	6.4	6.5	6.7	6.7	6.4	6.3
168°	5.9	6.1	6.3	6.4	6.3	6.3	6.4	6.5	6.6	6.3	6.1
168.5°	5.8	6.0	6.2	6.2	6.1	6.1	6.2	6.4	6.4	6.1	6.0
169°	5.6	5.9	6.0	6.1	6.0	6.0	6.1	6.3	6.3	6.0	5.8
169.5°	5.5	5.8	5.9	5.9	5.8	5.9	6.0	6.1	6.1	5.8	5.7
170°	5.3	5.6	5.7	5.8	5.7	5.7	5.8	6.0	6.0	5.7	5.5
170.5°	5.2	5.5	5.6	5.6	5.6	5.6	5.7	5.8	5.8	5.5	5.4
171°	5.0	5.3	5.4	5.5	5.5	5.5	5.6	5.7	5.7	5.4	5.2
171.5°	4.9	5.2	5.3	5.3	5.4	5.4	5.5	5.6	5.6	5.3	5.1
172°	4.7	5.0	5.1	5.2	5.2	5.2	5.4	5.5	5.5	5.2	5.0
172.5°	4.6	4.9	5.0	5.0	5.1	5.1	5.2	5.4	5.3	5.0	4.8
173°	4.4	4.7	4.8	4.9	4.9	4.9	5.1	5.2	5.2	4.9	4.7
173.5°	4.2	4.6	4.6	4.7	4.7	4.8	4.9	5.0	5.0	4.7	4.6
174°	4.0	4.4	4.5	4.5	4.6	4.6	4.8	4.8	4.8	4.5	4.4
174.5°	3.9	4.2	4.3	4.4	4.4	4.4	4.6	4.6	4.6	4.3	4.2
175°	3.7	4.0	4.1	4.2	4.2	4.3	4.4	4.5	4.4	4.1	4.1
175.5°	3.5	3.9	3.9	4.0	4.1	4.1	4.2	4.3	4.2	3.9	3.9
176°	3.3	3.6	3.7	3.8	3.9	3.9	4.1	4.1	4.0	3.8	3.7
176.5°	3.1	3.4	3.5	3.6	3.7	3.8	3.9	3.9	3.8	3.6	3.5
177°	2.8	3.1	3.3	3.4	3.6	3.6	3.7	3.7	3.6	3.2	3.2
177.5°	2.5	2.9	3.0	3.2	3.2	3.3	3.4	3.3	3.3	2.9	2.8
178°	2.2	2.7	2.8	2.9	2.9	2.9	3.0	2.9	2.9	2.4	2.3
178.5°	1.8	2.3	2.4	2.5	2.4	2.5	2.5	2.4	2.4	1.8	1.8
179°	1.2	1.8	1.9	2.1	1.8	1.9	1.9	1.8	1.8	0.9	1.0
179.5°	0.6	1.1	1.2	1.5	0.9	1.1	1.0	0.9	0.9	0.0	0.0

TEST NUMBER: P1046672
CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	0.1	0.1	0.1	0.1	0.1	0.1
0.5°	0.1	0.1	0.1	0.1	0.1	0.1
1°	0.1	0.1	0.1	0.1	0.1	0.1
1.5°	0.1	0.1	0.1	0.1	0.1	0.1
2°	0.1	0.1	0.1	0.1	0.1	0.1
2.5°	0.1	0.1	0.1	0.1	0.1	0.1
3°	0.1	0.1	0.1	0.1	0.1	0.1
3.5°	0.1	0.1	0.1	0.1	0.1	0.1
4°	0.1	0.1	0.1	0.1	0.1	0.1
4.5°	0.1	0.1	0.1	0.1	0.1	0.1
5°	0.1	0.1	0.1	0.1	0.1	0.1
5.5°	0.1	0.1	0.1	0.1	0.1	0.1
6°	0.1	0.1	0.1	0.1	0.1	0.1
6.5°	0.1	0.1	0.1	0.1	0.1	0.1
7°	0.1	0.1	0.1	0.1	0.1	0.1
7.5°	0.1	0.1	0.1	0.1	0.1	0.1
8°	0.1	0.1	0.1	0.1	0.1	0.1
8.5°	0.1	0.1	0.1	0.1	0.1	0.1
9°	0.1	0.1	0.1	0.1	0.1	0.1
9.5°	0.1	0.1	0.1	0.1	0.1	0.1
10°	0.1	0.1	0.1	0.1	0.1	0.1
10.5°	0.1	0.1	0.1	0.1	0.1	0.1
11°	0.1	0.1	0.1	0.1	0.1	0.1
11.5°	0.1	0.1	0.1	0.1	0.1	0.1
12°	0.1	0.1	0.1	0.1	0.1	0.1
12.5°	0.1	0.1	0.1	0.1	0.1	0.1
13°	0.1	0.1	0.1	0.1	0.1	0.1
13.5°	0.1	0.1	0.1	0.1	0.1	0.1
14°	0.1	0.1	0.1	0.1	0.1	0.1
14.5°	0.1	0.1	0.1	0.1	0.1	0.1
15°	0.1	0.1	0.1	0.1	0.1	0.1
15.5°	0.1	0.1	0.1	0.1	0.1	0.1
16°	0.1	0.1	0.1	0.1	0.1	0.1
16.5°	0.1	0.1	0.1	0.1	0.1	0.1
17°	0.1	0.1	0.1	0.1	0.1	0.1
17.5°	0.1	0.1	0.1	0.1	0.1	0.1
18°	0.1	0.1	0.1	0.1	0.1	0.1
18.5°	0.1	0.1	0.1	0.1	0.1	0.1
19°	0.1	0.1	0.1	0.1	0.1	0.1
19.5°	0.1	0.1	0.1	0.1	0.1	0.1
20°	0.1	0.1	0.1	0.1	0.1	0.1
20.5°	0.1	0.1	0.1	0.1	0.1	0.1
21°	0.1	0.1	0.1	0.1	0.1	0.1
21.5°	0.1	0.1	0.1	0.1	0.1	0.1
22°	0.1	0.1	0.1	0.1	0.1	0.1

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	0.1	0.1	0.1	0.1	0.1	0.1
23°	0.1	0.1	0.1	0.1	0.1	0.1
23.5°	0.1	0.1	0.1	0.1	0.1	0.1
24°	0.1	0.1	0.1	0.1	0.1	0.1
24.5°	0.1	0.1	0.1	0.1	0.1	0.1
25°	0.1	0.1	0.1	0.1	0.1	0.1
25.5°	0.1	0.1	0.1	0.1	0.1	0.1
26°	0.1	0.1	0.1	0.1	0.1	0.1
26.5°	0.1	0.1	0.1	0.1	0.1	0.1
27°	0.1	0.1	0.1	0.1	0.1	0.1
27.5°	0.1	0.1	0.1	0.1	0.1	0.1
28°	0.1	0.1	0.1	0.1	0.1	0.1
28.5°	0.1	0.1	0.1	0.1	0.1	0.1
29°	0.1	0.1	0.1	0.1	0.1	0.1
29.5°	0.1	0.1	0.1	0.1	0.1	0.1
30°	0.1	0.1	0.1	0.1	0.1	0.1
30.5°	0.1	0.1	0.1	0.1	0.1	0.1
31°	0.1	0.1	0.1	0.1	0.1	0.1
31.5°	0.1	0.1	0.1	0.1	0.1	0.1
32°	0.1	0.1	0.1	0.1	0.1	0.1
32.5°	0.1	0.1	0.1	0.2	0.2	0.2
33°	0.1	0.1	0.2	0.2	0.2	0.2
33.5°	0.1	0.1	0.2	0.3	0.3	0.3
34°	0.2	0.2	0.2	0.3	0.3	0.3
34.5°	0.2	0.2	0.3	0.4	0.4	0.4
35°	0.3	0.3	0.3	0.4	0.4	0.4
35.5°	0.3	0.3	0.4	0.5	0.5	0.5
36°	0.4	0.4	0.4	0.5	0.6	0.6
36.5°	0.4	0.4	0.5	0.6	0.7	0.7
37°	0.5	0.5	0.6	0.7	0.7	0.7
37.5°	0.5	0.5	0.6	0.8	0.8	0.8
38°	0.6	0.6	0.7	0.8	0.9	0.9
38.5°	0.7	0.7	0.8	0.9	1.0	1.0
39°	0.7	0.7	0.9	1.0	1.1	1.1
39.5°	0.8	0.8	0.9	1.1	1.2	1.2
40°	0.9	0.9	1.0	1.2	1.2	1.2
40.5°	0.9	1.0	1.1	1.3	1.3	1.3
41°	1.0	1.0	1.2	1.3	1.4	1.4
41.5°	1.1	1.1	1.3	1.4	1.5	1.5
42°	1.2	1.2	1.3	1.5	1.6	1.6
42.5°	1.3	1.3	1.4	1.6	1.7	1.7
43°	1.3	1.4	1.5	1.7	1.8	1.8
43.5°	1.4	1.4	1.6	1.8	1.9	1.9
44°	1.5	1.5	1.7	1.9	2.0	2.0
44.5°	1.6	1.6	1.8	2.0	2.1	2.1

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	1.7	1.7	1.9	2.1	2.2	2.2
45.5°	1.8	1.8	2.0	2.2	2.3	2.3
46°	1.9	1.9	2.1	2.3	2.4	2.4
46.5°	2.0	2.0	2.2	2.4	2.5	2.5
47°	2.1	2.1	2.3	2.5	2.7	2.6
47.5°	2.1	2.2	2.4	2.6	2.8	2.7
48°	2.2	2.3	2.5	2.7	2.9	2.8
48.5°	2.3	2.4	2.6	2.8	3.0	2.9
49°	2.4	2.5	2.7	2.9	3.1	3.0
49.5°	2.5	2.6	2.8	3.0	3.2	3.2
50°	2.6	2.6	2.9	3.1	3.3	3.3
50.5°	2.7	2.8	3.0	3.3	3.4	3.4
51°	2.8	2.8	3.1	3.4	3.5	3.5
51.5°	2.9	2.9	3.2	3.5	3.6	3.6
52°	3.0	3.1	3.3	3.6	3.7	3.7
52.5°	3.1	3.2	3.4	3.7	3.8	3.8
53°	3.3	3.3	3.5	3.8	3.9	3.9
53.5°	3.4	3.4	3.6	3.9	4.0	4.0
54°	3.5	3.5	3.7	4.0	4.1	4.1
54.5°	3.6	3.6	3.8	4.1	4.2	4.2
55°	3.7	3.7	3.9	4.2	4.3	4.3
55.5°	3.8	3.8	4.0	4.3	4.4	4.4
56°	3.9	3.9	4.1	4.3	4.5	4.5
56.5°	4.0	4.0	4.2	4.4	4.6	4.6
57°	4.1	4.1	4.3	4.5	4.7	4.7
57.5°	4.2	4.2	4.4	4.6	4.8	4.8
58°	4.3	4.3	4.5	4.7	4.9	4.9
58.5°	4.4	4.4	4.6	4.8	5.0	5.0
59°	4.5	4.5	4.6	4.9	5.1	5.1
59.5°	4.7	4.6	4.7	5.0	5.2	5.1
60°	4.8	4.7	4.8	5.1	5.3	5.2
60.5°	4.9	4.8	4.9	5.2	5.4	5.3
61°	5.0	4.9	5.0	5.3	5.4	5.4
61.5°	5.1	5.0	5.1	5.3	5.5	5.5
62°	5.2	5.0	5.2	5.4	5.6	5.6
62.5°	5.3	5.1	5.3	5.5	5.7	5.7
63°	5.4	5.2	5.4	5.6	5.8	5.8
63.5°	5.5	5.3	5.5	5.7	5.9	5.9
64°	5.6	5.4	5.5	5.8	6.0	6.0
64.5°	5.7	5.5	5.6	5.9	6.1	6.1
65°	5.8	5.6	5.7	6.0	6.1	6.1
65.5°	5.9	5.7	5.8	6.0	6.2	6.2
66°	6.0	5.8	5.9	6.1	6.3	6.3
66.5°	6.1	5.9	6.0	6.2	6.4	6.4
67°	6.1	6.0	6.1	6.3	6.5	6.5

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	6.2	6.1	6.2	6.4	6.6	6.6
68°	6.3	6.2	6.2	6.5	6.6	6.6
68.5°	6.4	6.3	6.3	6.6	6.7	6.7
69°	6.5	6.3	6.4	6.6	6.8	6.8
69.5°	6.6	6.4	6.5	6.7	6.9	6.9
70°	6.7	6.5	6.6	6.8	7.0	7.0
70.5°	6.8	6.6	6.7	6.9	7.1	7.1
71°	6.9	6.7	6.7	7.0	7.1	7.2
71.5°	6.9	6.8	6.8	7.1	7.2	7.2
72°	7.0	6.9	6.9	7.1	7.3	7.3
72.5°	7.1	7.0	7.0	7.2	7.4	7.4
73°	7.2	7.0	7.1	7.3	7.5	7.5
73.5°	7.3	7.1	7.2	7.4	7.5	7.6
74°	7.3	7.2	7.3	7.4	7.6	7.6
74.5°	7.4	7.3	7.3	7.5	7.7	7.7
75°	7.5	7.4	7.4	7.6	7.7	7.8
75.5°	7.6	7.5	7.5	7.7	7.8	7.9
76°	7.7	7.5	7.6	7.7	7.9	8.0
76.5°	7.7	7.6	7.6	7.8	8.0	8.0
77°	7.8	7.7	7.7	7.9	8.0	8.1
77.5°	7.9	7.8	7.8	7.9	8.1	8.2
78°	8.0	7.8	7.9	8.0	8.2	8.3
78.5°	8.1	7.9	7.9	8.1	8.2	8.3
79°	8.1	8.0	8.0	8.2	8.3	8.4
79.5°	8.2	8.1	8.1	8.2	8.4	8.5
80°	8.3	8.1	8.1	8.3	8.5	8.6
80.5°	8.4	8.2	8.2	8.4	8.5	8.6
81°	8.4	8.3	8.3	8.4	8.6	8.7
81.5°	8.5	8.4	8.3	8.5	8.7	8.8
82°	8.6	8.4	8.4	8.6	8.7	8.8
82.5°	8.7	8.5	8.5	8.6	8.8	8.9
83°	8.7	8.6	8.5	8.7	8.9	9.0
83.5°	8.8	8.6	8.6	8.8	8.9	9.0
84°	8.9	8.7	8.7	8.8	9.0	9.1
84.5°	8.9	8.8	8.8	8.9	9.0	9.2
85°	9.0	8.9	8.8	9.0	9.1	9.2
85.5°	9.1	8.9	8.9	9.0	9.2	9.3
86°	9.1	9.0	9.0	9.1	9.2	9.4
86.5°	9.2	9.1	9.0	9.1	9.3	9.4
87°	9.3	9.1	9.1	9.2	9.4	9.5
87.5°	9.3	9.2	9.2	9.3	9.4	9.6
88°	9.4	9.3	9.2	9.3	9.5	9.6
88.5°	9.4	9.3	9.3	9.4	9.5	9.7
89°	9.5	9.4	9.3	9.4	9.6	9.7
89.5°	9.5	9.4	9.4	9.5	9.6	9.8

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	9.6	9.4	9.4	9.5	9.7	9.8
90.5°	9.6	9.5	9.4	9.5	9.7	9.8
91°	9.6	9.5	9.5	9.6	9.7	9.8
91.5°	9.7	9.6	9.5	9.6	9.7	9.9
92°	9.7	9.6	9.6	9.6	9.8	9.9
92.5°	9.7	9.7	9.6	9.7	9.8	9.9
93°	9.8	9.7	9.6	9.7	9.8	9.9
93.5°	9.8	9.7	9.7	9.7	9.8	10.0
94°	9.8	9.8	9.7	9.8	9.9	10.0
94.5°	9.9	9.8	9.7	9.8	9.9	10.0
95°	9.9	9.8	9.8	9.8	9.9	10.0
95.5°	9.9	9.8	9.8	9.9	9.9	10.1
96°	9.9	9.9	9.8	9.9	10.0	10.1
96.5°	10.0	9.9	9.9	9.9	10.0	10.1
97°	10.0	9.9	9.9	9.9	10.0	10.1
97.5°	10.0	9.9	9.9	9.9	10.0	10.1
98°	10.0	10.0	9.9	10.0	10.1	10.2
98.5°	10.0	10.0	9.9	10.0	10.1	10.2
99°	10.0	10.0	10.0	10.0	10.1	10.2
99.5°	10.1	10.0	10.0	10.0	10.1	10.2
100°	10.1	10.0	10.0	10.0	10.1	10.2
100.5°	10.1	10.1	10.0	10.1	10.1	10.2
101°	10.1	10.1	10.0	10.1	10.2	10.3
101.5°	10.1	10.1	10.0	10.1	10.2	10.3
102°	10.1	10.1	10.1	10.1	10.2	10.3
102.5°	10.1	10.1	10.1	10.1	10.2	10.3
103°	10.2	10.1	10.1	10.1	10.2	10.3
103.5°	10.2	10.1	10.1	10.1	10.2	10.3
104°	10.2	10.1	10.1	10.1	10.2	10.3
104.5°	10.2	10.1	10.1	10.1	10.2	10.3
105°	10.2	10.2	10.1	10.1	10.2	10.3
105.5°	10.2	10.2	10.1	10.2	10.2	10.4
106°	10.2	10.2	10.1	10.2	10.2	10.4
106.5°	10.2	10.2	10.1	10.2	10.2	10.4
107°	10.2	10.2	10.1	10.2	10.3	10.4
107.5°	10.2	10.2	10.1	10.2	10.3	10.4
108°	10.2	10.2	10.1	10.2	10.3	10.4
108.5°	10.2	10.2	10.1	10.2	10.3	10.4
109°	10.2	10.2	10.1	10.2	10.3	10.4
109.5°	10.2	10.2	10.1	10.2	10.3	10.4
110°	10.2	10.2	10.1	10.2	10.2	10.4
110.5°	10.2	10.2	10.1	10.1	10.2	10.4
111°	10.2	10.2	10.1	10.1	10.2	10.4
111.5°	10.2	10.2	10.1	10.1	10.2	10.4
112°	10.2	10.2	10.1	10.1	10.2	10.4

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	10.2	10.2	10.1	10.1	10.2	10.3
113°	10.2	10.1	10.1	10.1	10.2	10.3
113.5°	10.2	10.1	10.1	10.1	10.2	10.3
114°	10.2	10.1	10.1	10.1	10.2	10.3
114.5°	10.2	10.1	10.1	10.1	10.2	10.3
115°	10.2	10.1	10.1	10.1	10.2	10.3
115.5°	10.2	10.1	10.1	10.1	10.2	10.3
116°	10.2	10.1	10.0	10.0	10.1	10.3
116.5°	10.2	10.1	10.0	10.0	10.1	10.3
117°	10.2	10.1	10.0	10.0	10.1	10.2
117.5°	10.1	10.1	10.0	10.0	10.1	10.2
118°	10.1	10.0	10.0	10.0	10.1	10.2
118.5°	10.1	10.0	10.0	10.0	10.1	10.2
119°	10.1	10.0	10.0	9.9	10.0	10.2
119.5°	10.1	10.0	9.9	9.9	10.0	10.2
120°	10.1	10.0	9.9	9.9	10.0	10.2
120.5°	10.1	10.0	9.9	9.9	10.0	10.1
121°	10.0	9.9	9.9	9.9	10.0	10.1
121.5°	10.0	9.9	9.9	9.8	9.9	10.1
122°	10.0	9.9	9.8	9.8	9.9	10.1
122.5°	10.0	9.9	9.8	9.8	9.9	10.1
123°	10.0	9.9	9.8	9.8	9.9	10.0
123.5°	10.0	9.8	9.8	9.7	9.9	10.0
124°	9.9	9.8	9.8	9.7	9.8	10.0
124.5°	9.9	9.8	9.7	9.7	9.8	10.0
125°	9.9	9.8	9.7	9.7	9.8	9.9
125.5°	9.9	9.8	9.7	9.6	9.8	9.9
126°	9.9	9.7	9.7	9.6	9.7	9.9
126.5°	9.8	9.7	9.6	9.6	9.7	9.9
127°	9.8	9.7	9.6	9.6	9.7	9.8
127.5°	9.8	9.7	9.6	9.5	9.7	9.8
128°	9.8	9.6	9.6	9.5	9.6	9.8
128.5°	9.7	9.6	9.5	9.5	9.6	9.8
129°	9.7	9.6	9.5	9.5	9.6	9.7
129.5°	9.7	9.6	9.5	9.4	9.5	9.7
130°	9.7	9.5	9.4	9.4	9.5	9.7
130.5°	9.6	9.5	9.4	9.4	9.5	9.6
131°	9.6	9.5	9.4	9.3	9.5	9.6
131.5°	9.6	9.4	9.3	9.3	9.4	9.6
132°	9.6	9.4	9.3	9.3	9.4	9.5
132.5°	9.5	9.4	9.3	9.2	9.4	9.5
133°	9.5	9.4	9.3	9.2	9.3	9.5
133.5°	9.5	9.3	9.2	9.2	9.3	9.5
134°	9.4	9.3	9.2	9.2	9.3	9.4
134.5°	9.4	9.3	9.2	9.1	9.2	9.4

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	9.4	9.2	9.1	9.1	9.2	9.4
135.5°	9.4	9.2	9.1	9.1	9.2	9.3
136°	9.3	9.2	9.1	9.0	9.1	9.3
136.5°	9.3	9.1	9.0	9.0	9.1	9.3
137°	9.3	9.1	9.0	9.0	9.1	9.2
137.5°	9.2	9.1	9.0	8.9	9.0	9.2
138°	9.2	9.1	8.9	8.9	9.0	9.2
138.5°	9.2	9.0	8.9	8.9	9.0	9.1
139°	9.1	9.0	8.9	8.8	8.9	9.1
139.5°	9.1	8.9	8.8	8.8	8.9	9.1
140°	9.0	8.9	8.8	8.8	8.9	9.0
140.5°	9.0	8.9	8.8	8.7	8.8	9.0
141°	9.0	8.8	8.7	8.7	8.8	8.9
141.5°	8.9	8.8	8.7	8.7	8.8	8.9
142°	8.9	8.8	8.6	8.6	8.7	8.9
142.5°	8.8	8.7	8.6	8.6	8.7	8.8
143°	8.8	8.7	8.6	8.6	8.7	8.8
143.5°	8.7	8.7	8.5	8.5	8.6	8.8
144°	8.7	8.6	8.5	8.5	8.6	8.7
144.5°	8.7	8.6	8.5	8.5	8.6	8.7
145°	8.6	8.6	8.4	8.4	8.5	8.7
145.5°	8.6	8.5	8.4	8.4	8.5	8.6
146°	8.6	8.5	8.4	8.4	8.5	8.6
146.5°	8.5	8.5	8.3	8.3	8.4	8.6
147°	8.5	8.4	8.3	8.3	8.4	8.5
147.5°	8.5	8.4	8.3	8.3	8.4	8.5
148°	8.4	8.4	8.2	8.2	8.3	8.4
148.5°	8.4	8.3	8.2	8.2	8.3	8.4
149°	8.4	8.3	8.1	8.2	8.2	8.4
149.5°	8.4	8.2	8.1	8.1	8.2	8.3
150°	8.3	8.2	8.1	8.1	8.2	8.3
150.5°	8.3	8.2	8.0	8.0	8.1	8.3
151°	8.3	8.1	8.0	8.0	8.1	8.2
151.5°	8.2	8.1	8.0	8.0	8.1	8.2
152°	8.2	8.1	7.9	7.9	8.1	8.2
152.5°	8.2	8.0	7.9	7.9	8.0	8.1
153°	8.2	8.0	7.9	7.9	8.0	8.1
153.5°	8.1	8.0	7.8	7.9	8.0	8.1
154°	8.1	7.9	7.8	7.8	7.9	8.0
154.5°	8.1	7.9	7.8	7.8	7.9	8.0
155°	8.1	7.9	7.8	7.8	7.9	8.0
155.5°	8.1	7.8	7.7	7.8	7.9	8.0
156°	8.0	7.8	7.7	7.8	7.9	8.0
156.5°	8.0	7.8	7.7	7.7	7.9	7.9
157°	8.0	7.8	7.7	7.7	7.8	7.9

TEST NUMBER: P1046672

CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
157.5°	8.0	7.8	7.7	7.7	7.8	7.9
158°	8.0	7.8	7.7	7.7	7.8	7.9
158.5°	8.0	7.7	7.7	7.7	7.8	7.9
159°	8.0	7.7	7.7	7.7	7.8	7.9
159.5°	8.0	7.7	7.7	7.7	7.8	7.9
160°	8.0	7.7	7.7	7.7	7.8	7.8
160.5°	7.9	7.6	7.6	7.7	7.8	7.8
161°	7.9	7.6	7.6	7.6	7.7	7.8
161.5°	7.8	7.5	7.5	7.5	7.6	7.7
162°	7.7	7.4	7.4	7.4	7.5	7.5
162.5°	7.6	7.3	7.2	7.3	7.4	7.4
163°	7.4	7.2	7.1	7.2	7.2	7.3
163.5°	7.3	7.0	7.0	7.0	7.1	7.1
164°	7.2	6.9	6.8	6.8	6.9	7.0
164.5°	7.0	6.8	6.7	6.7	6.8	6.8
165°	6.9	6.7	6.5	6.6	6.6	6.7
165.5°	6.7	6.5	6.4	6.4	6.5	6.6
166°	6.6	6.4	6.3	6.3	6.3	6.4
166.5°	6.5	6.3	6.1	6.1	6.2	6.3
167°	6.3	6.1	6.0	6.0	6.0	6.1
167.5°	6.2	6.0	5.9	5.8	5.9	6.0
168°	6.0	5.9	5.8	5.7	5.7	5.9
168.5°	5.9	5.8	5.7	5.6	5.6	5.8
169°	5.7	5.7	5.6	5.5	5.5	5.6
169.5°	5.6	5.6	5.4	5.3	5.4	5.5
170°	5.4	5.4	5.3	5.2	5.2	5.3
170.5°	5.3	5.3	5.1	5.0	5.1	5.2
171°	5.1	5.2	5.0	4.9	4.9	5.0
171.5°	4.9	5.0	4.8	4.7	4.8	4.9
172°	4.8	4.9	4.7	4.6	4.6	4.7
172.5°	4.6	4.7	4.6	4.4	4.4	4.6
173°	4.5	4.5	4.4	4.3	4.3	4.4
173.5°	4.4	4.4	4.2	4.1	4.1	4.2
174°	4.3	4.2	4.1	3.9	3.9	4.0
174.5°	4.1	4.0	3.9	3.8	3.8	3.9
175°	3.9	3.8	3.8	3.6	3.6	3.7
175.5°	3.7	3.6	3.6	3.5	3.4	3.5
176°	3.6	3.4	3.4	3.3	3.2	3.3
176.5°	3.4	3.2	3.2	3.1	3.1	3.1
177°	3.1	2.9	3.0	2.9	2.8	2.8
177.5°	2.7	2.7	2.7	2.6	2.6	2.5
178°	2.3	2.3	2.3	2.3	2.2	2.2
178.5°	1.7	1.8	1.8	1.8	1.9	1.8
179°	1.0	1.2	1.2	1.3	1.3	1.2
179.5°	0.1	0.3	0.3	0.3	0.3	0.6

TEST NUMBER: P1046672
CATALOG NUMBER: FMNL809FS5-920

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1046672
CATALOG NUMBER: FMNL809FS5-920

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference 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	1.5	2.3	2.5	3.4	4.9	1.4	2.3	2.5	3.4	4.9
	3H	6.7	7.5	7.8	8.6	10.1	6.9	7.7	8.0	8.8	10.3
	4H	9.4	10.1	10.4	11.2	12.7	9.6	10.4	10.6	11.4	12.9
	6H	12.2	12.9	13.3	14.0	15.5	12.4	13.1	13.5	14.2	15.7
	8H	13.7	14.4	14.8	15.5	17.0	13.9	14.6	14.9	15.7	17.2
	12H	15.3	16.0	16.4	17.1	18.6	15.5	16.2	16.6	17.3	18.8
4H	2H	3.0	3.8	4.1	4.9	6.4	3.1	3.9	4.2	4.9	6.4
	3H	8.2	8.9	9.3	10.0	11.5	8.4	9.1	9.5	10.2	11.7
	4H	11.0	11.6	12.0	12.7	14.2	11.2	11.8	12.3	12.9	14.5
	6H	13.9	14.5	15.0	15.6	17.1	14.1	14.7	15.2	15.8	17.3
	8H	15.5	16.0	16.5	17.1	18.7	15.6	16.2	16.7	17.3	18.8
	12H	17.2	17.7	18.3	18.8	20.4	17.4	17.9	18.5	19.0	20.6
8H	4H	12.0	12.5	13.1	13.6	15.2	12.2	12.7	13.3	13.8	15.4
	6H	15.1	15.6	16.2	16.7	18.3	15.3	15.8	16.4	16.9	18.5
	8H	16.8	17.3	18.0	18.4	20.0	17.0	17.5	18.1	18.6	20.1
	12H	18.8	19.2	19.9	20.3	21.9	19.0	19.3	20.1	20.5	22.1
12H	4H	12.3	12.8	13.4	13.9	15.5	12.5	13.0	13.6	14.1	15.7
	6H	15.5	15.9	16.6	17.1	18.7	15.7	16.1	16.8	17.3	18.9
	8H	17.4	17.8	18.5	18.9	20.5	17.6	17.9	18.7	19.1	20.7

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Halo Home

Report Number: SP1-2506-468-6

Test Date: 07/08/2025

Luminaire Tested: FMNL809FS5-NIGHT LIGHT

Data in this report applies to families of products including FMNL809FS5-NIGHT LIGHT

The results of this test have not been influenced by sources from within Eaton or from external interests.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

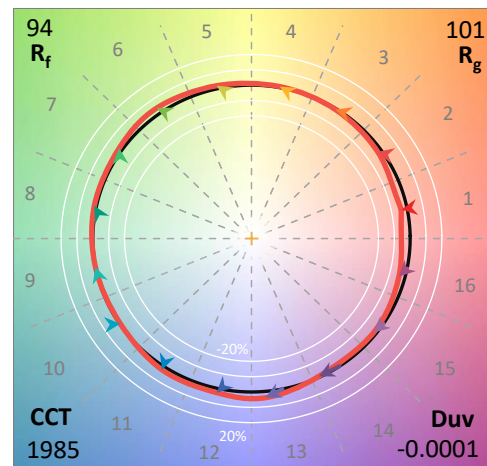
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-468-6
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 07/10/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Halo Home
 Catalog Number: **FMNL809FS5-NIGHT LIGHT**
 Description: HALO FLUSH MOUNT NIGHT LIGHT 8 INCH

Spectral Parameters

CCT (K): 1985
 CIE u' : 0.3063
 CIE v' : 0.5383
 Duv: -0.0001
 CIE x: 0.5276
 CIE y: 0.4121
 CIE z: 0.0604
 Peak Wavelength (nm): 636
 Dominant Wavelength (nm): 589
 Purity: 82.05337
 R_f: 93.7
 R_g: 100.8

CRI (Ra): 95.2
 R1: 97.1
 R2: 99.6
 R3: 99.3
 R4: 98.1
 R5: 98.1
 R6: 95.0
 R7: 91.0
 R8: 83.1
 R9: 66.7
 R10: 98.2
 R11: 95.9
 R12: 93.3
 R13: 98.4
 R14: 98.3
 R15: 91.1



Test Conditions

Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.0

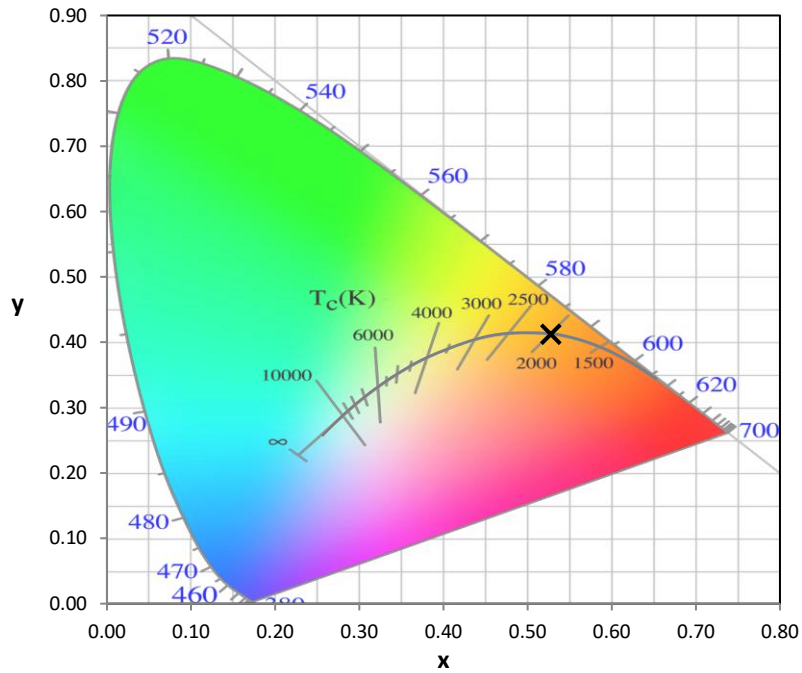
REPORT NUMBER: SP1-2506-468-6

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	10/22/2024	10/22/2025
Sphere Thermometer	ONSET IN0085	10/22/2024	10/22/2025
Room Thermometer	ONSET IN0046	10/22/2024	10/22/2025

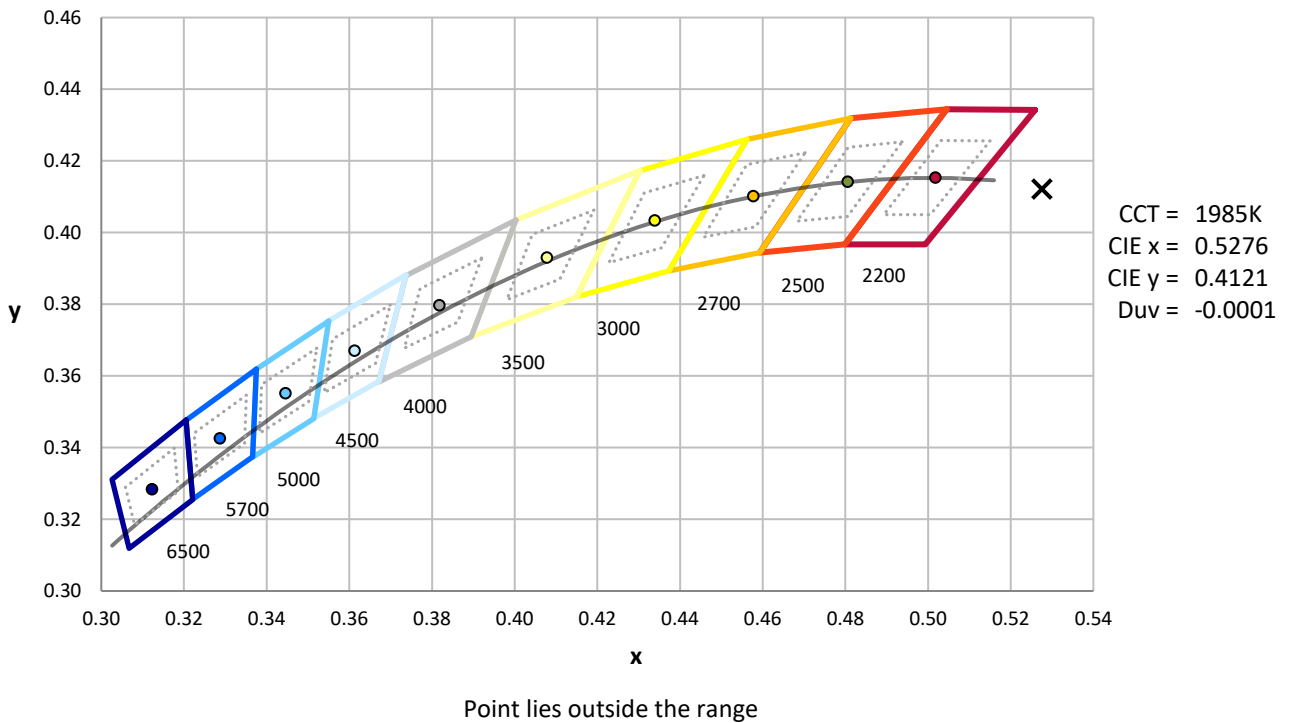
Sample Number	Condition	Description
P2506-468-LM.1	Good	HALO FLUSH MOUNT NIGHT LIGHT 8 INCH

REPORT NUMBER: SP1-2506-468-6

CIE 1931 Chromaticity Diagram

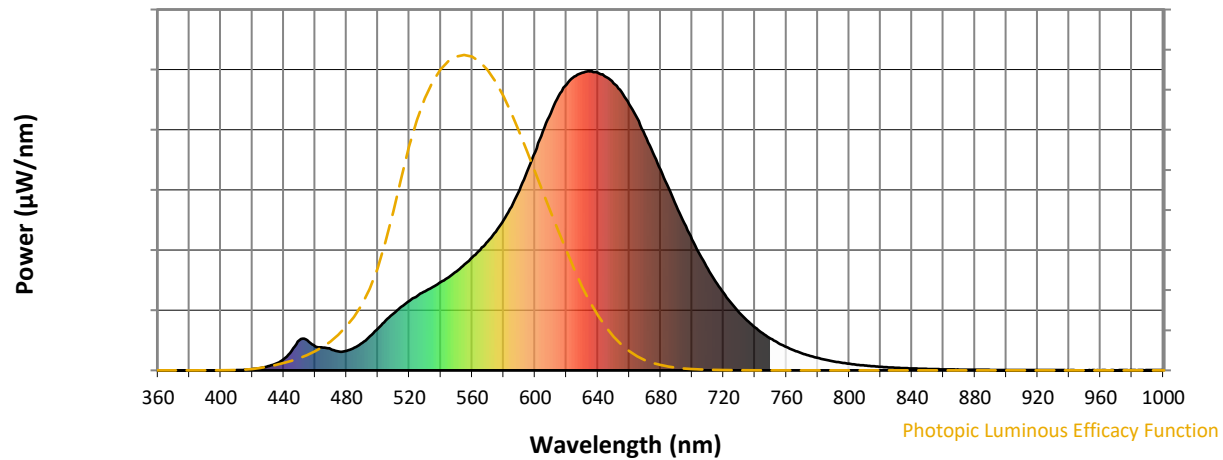


CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



REPORT NUMBER: SP1-2506-468-6

Photopic Flux vs. Wavelength

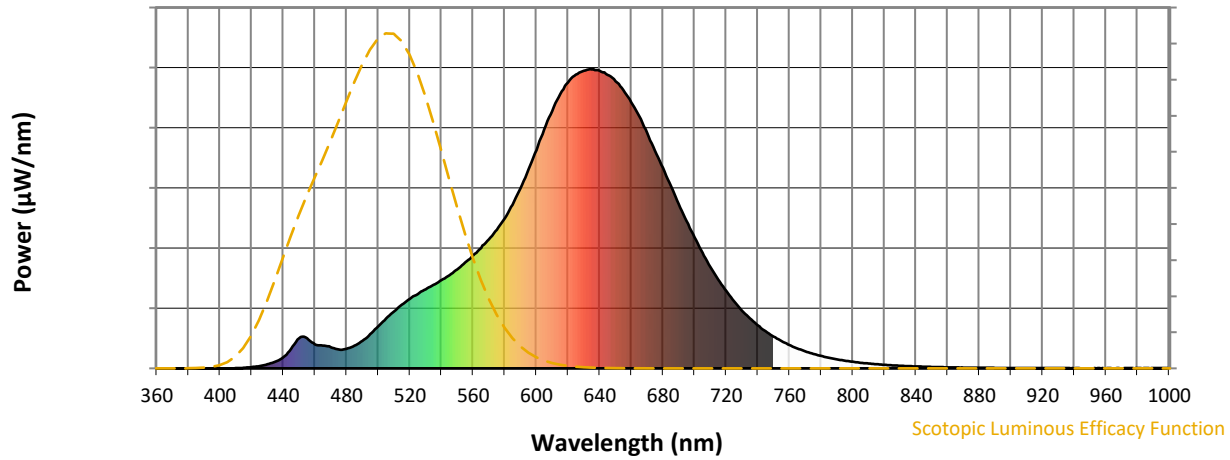


Photopic Lumens: NR

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	92	NR	620	954	NR	750	106	NR	880	2	NR
365	0	NR	495	114	NR	625	981	NR	755	91	NR	885	2	NR
370	0	NR	500	140	NR	630	994	NR	760	78	NR	890	2	NR
375	0	NR	505	166	NR	635	999	NR	765	67	NR	895	1	NR
380	0	NR	510	190	NR	640	994	NR	770	57	NR	900	1	NR
385	0	NR	515	213	NR	645	980	NR	775	49	NR	905	1	NR
390	0	NR	520	232	NR	650	959	NR	780	42	NR	910	1	NR
395	0	NR	525	248	NR	655	930	NR	785	35	NR	915	1	NR
400	0	NR	530	264	NR	660	888	NR	790	30	NR	920	1	NR
405	0	NR	535	279	NR	665	842	NR	795	26	NR	925	1	NR
410	1	NR	540	295	NR	670	785	NR	800	22	NR	930	1	NR
415	2	NR	545	311	NR	675	727	NR	805	19	NR	935	1	NR
420	4	NR	550	330	NR	680	670	NR	810	16	NR	940	1	NR
425	8	NR	555	354	NR	685	609	NR	815	14	NR	945	1	NR
430	14	NR	560	377	NR	690	550	NR	820	12	NR	950	0	NR
435	22	NR	565	402	NR	695	492	NR	825	10	NR	955	1	NR
440	37	NR	570	430	NR	700	437	NR	830	9	NR	960	1	NR
445	65	NR	575	463	NR	705	386	NR	835	8	NR	965	1	NR
450	101	NR	580	502	NR	710	339	NR	840	6	NR	970	1	NR
455	100	NR	585	546	NR	715	296	NR	845	6	NR	975	1	NR
460	81	NR	590	602	NR	720	259	NR	850	5	NR	980	1	NR
465	76	NR	595	664	NR	725	224	NR	855	4	NR	985	1	NR
470	71	NR	600	729	NR	730	193	NR	860	4	NR	990	1	NR
475	63	NR	605	799	NR	735	167	NR	865	3	NR	995	1	NR
480	65	NR	610	859	NR	740	144	NR	870	3	NR	1000	0	NR
485	76	NR	615	916	NR	745	124	NR	875	2	NR			

REPORT NUMBER: SP1-2506-468-6

Scotopic Flux vs. Wavelength



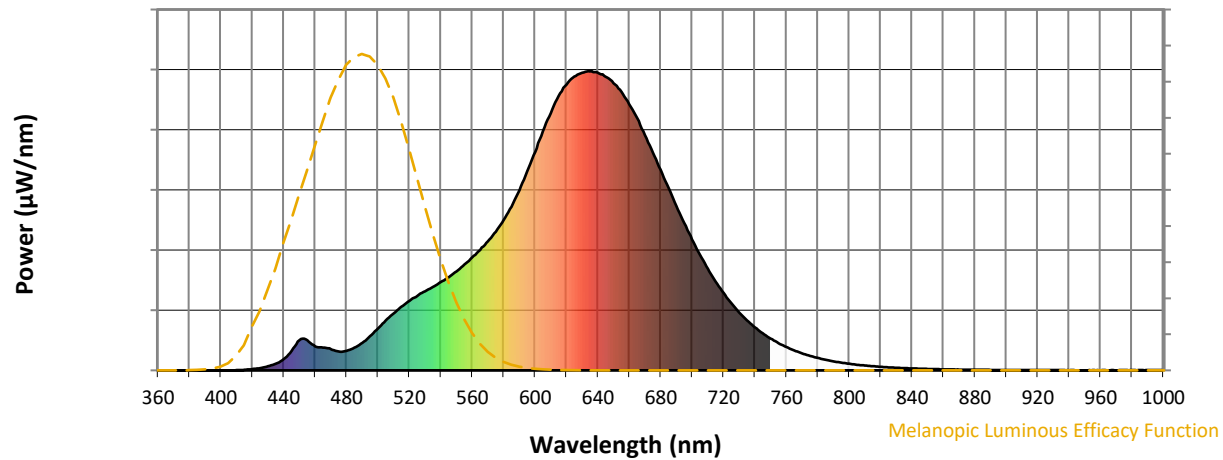
Scotopic Lumens: NR

S/P: 0.92

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	92	NR	620	954	NR	750	106	NR	880	2	NR
365	0	NR	495	114	NR	625	981	NR	755	91	NR	885	2	NR
370	0	NR	500	140	NR	630	994	NR	760	78	NR	890	2	NR
375	0	NR	505	166	NR	635	999	NR	765	67	NR	895	1	NR
380	0	NR	510	190	NR	640	994	NR	770	57	NR	900	1	NR
385	0	NR	515	213	NR	645	980	NR	775	49	NR	905	1	NR
390	0	NR	520	232	NR	650	959	NR	780	42	NR	910	1	NR
395	0	NR	525	248	NR	655	930	NR	785	35	NR	915	1	NR
400	0	NR	530	264	NR	660	888	NR	790	30	NR	920	1	NR
405	0	NR	535	279	NR	665	842	NR	795	26	NR	925	1	NR
410	1	NR	540	295	NR	670	785	NR	800	22	NR	930	1	NR
415	2	NR	545	311	NR	675	727	NR	805	19	NR	935	1	NR
420	4	NR	550	330	NR	680	670	NR	810	16	NR	940	1	NR
425	8	NR	555	354	NR	685	609	NR	815	14	NR	945	1	NR
430	14	NR	560	377	NR	690	550	NR	820	12	NR	950	0	NR
435	22	NR	565	402	NR	695	492	NR	825	10	NR	955	1	NR
440	37	NR	570	430	NR	700	437	NR	830	9	NR	960	1	NR
445	65	NR	575	463	NR	705	386	NR	835	8	NR	965	1	NR
450	101	NR	580	502	NR	710	339	NR	840	6	NR	970	1	NR
455	100	NR	585	546	NR	715	296	NR	845	6	NR	975	1	NR
460	81	NR	590	602	NR	720	259	NR	850	5	NR	980	1	NR
465	76	NR	595	664	NR	725	224	NR	855	4	NR	985	1	NR
470	71	NR	600	729	NR	730	193	NR	860	4	NR	990	1	NR
475	63	NR	605	799	NR	735	167	NR	865	3	NR	995	1	NR
480	65	NR	610	859	NR	740	144	NR	870	3	NR	1000	0	NR
485	76	NR	615	916	NR	745	124	NR	875	2	NR			

REPORT NUMBER: SP1-2506-468-6

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 1.58

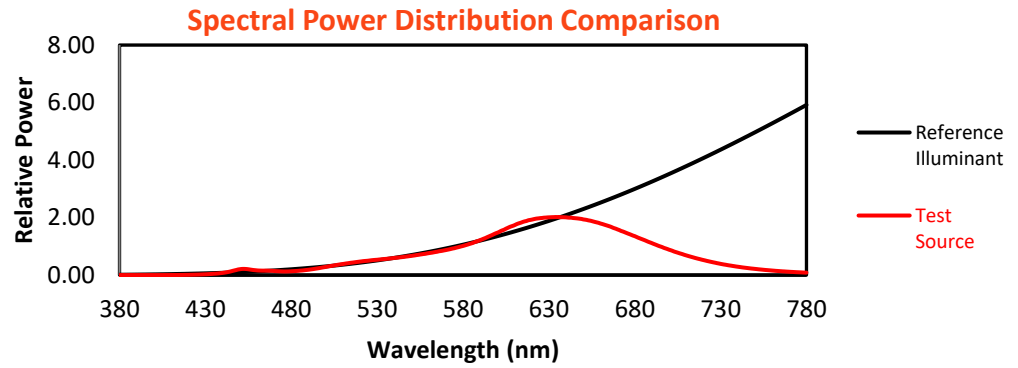
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	92	NR	620	954	NR	750	106	NR	880	2	NR
365	0	NR	495	114	NR	625	981	NR	755	91	NR	885	2	NR
370	0	NR	500	140	NR	630	994	NR	760	78	NR	890	2	NR
375	0	NR	505	166	NR	635	999	NR	765	67	NR	895	1	NR
380	0	NR	510	190	NR	640	994	NR	770	57	NR	900	1	NR
385	0	NR	515	213	NR	645	980	NR	775	49	NR	905	1	NR
390	0	NR	520	232	NR	650	959	NR	780	42	NR	910	1	NR
395	0	NR	525	248	NR	655	930	NR	785	35	NR	915	1	NR
400	0	NR	530	264	NR	660	888	NR	790	30	NR	920	1	NR
405	0	NR	535	279	NR	665	842	NR	795	26	NR	925	1	NR
410	1	NR	540	295	NR	670	785	NR	800	22	NR	930	1	NR
415	2	NR	545	311	NR	675	727	NR	805	19	NR	935	1	NR
420	4	NR	550	330	NR	680	670	NR	810	16	NR	940	1	NR
425	8	NR	555	354	NR	685	609	NR	815	14	NR	945	1	NR
430	14	NR	560	377	NR	690	550	NR	820	12	NR	950	0	NR
435	22	NR	565	402	NR	695	492	NR	825	10	NR	955	1	NR
440	37	NR	570	430	NR	700	437	NR	830	9	NR	960	1	NR
445	65	NR	575	463	NR	705	386	NR	835	8	NR	965	1	NR
450	101	NR	580	502	NR	710	339	NR	840	6	NR	970	1	NR
455	100	NR	585	546	NR	715	296	NR	845	6	NR	975	1	NR
460	81	NR	590	602	NR	720	259	NR	850	5	NR	980	1	NR
465	76	NR	595	664	NR	725	224	NR	855	4	NR	985	1	NR
470	71	NR	600	729	NR	730	193	NR	860	4	NR	990	1	NR
475	63	NR	605	799	NR	735	167	NR	865	3	NR	995	1	NR
480	65	NR	610	859	NR	740	144	NR	870	3	NR	1000	0	NR
485	76	NR	615	916	NR	745	124	NR	875	2	NR			

REPORT NUMBER: SP1-2506-468-6

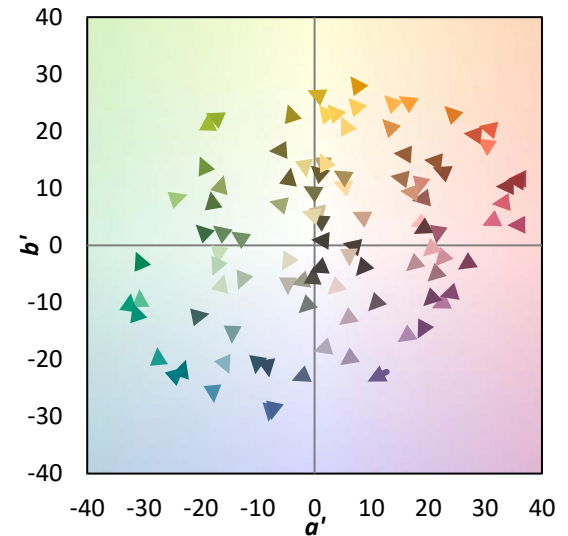
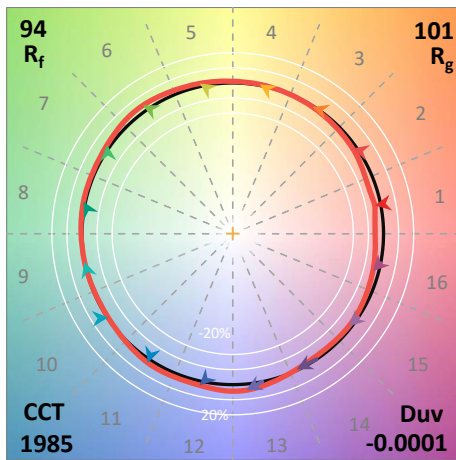
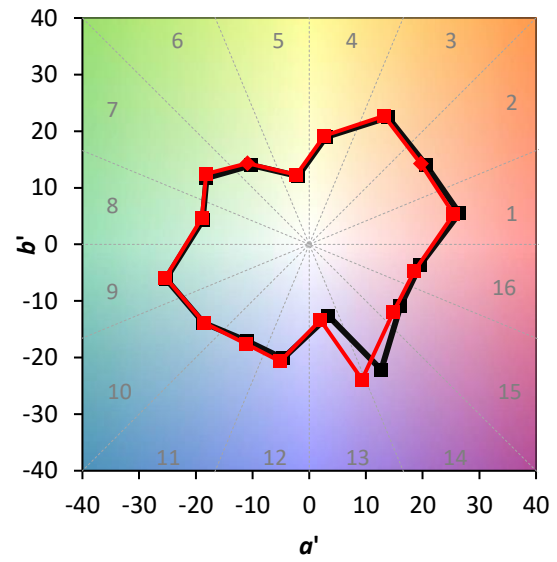
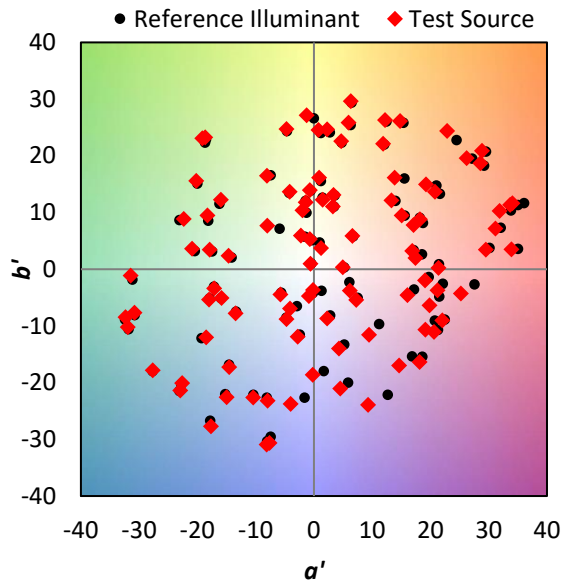
TM-30-18

Summary

$R_f = 93.7$
 $R_g = 100.8$
 $CIE R_a = 95.2$
 $R_9 = 66.7$

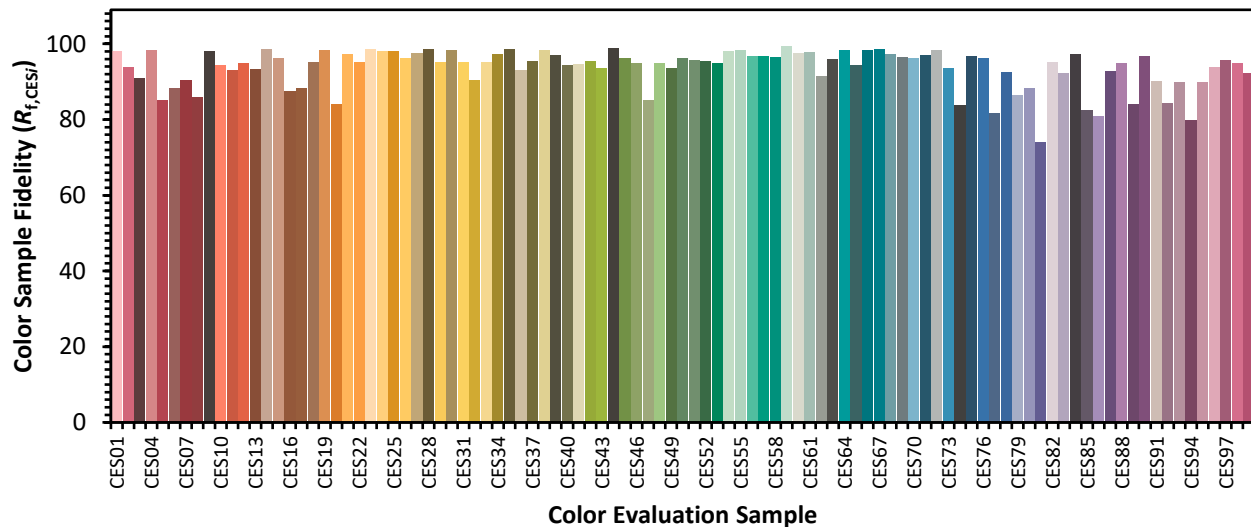


Color Vector Graphics

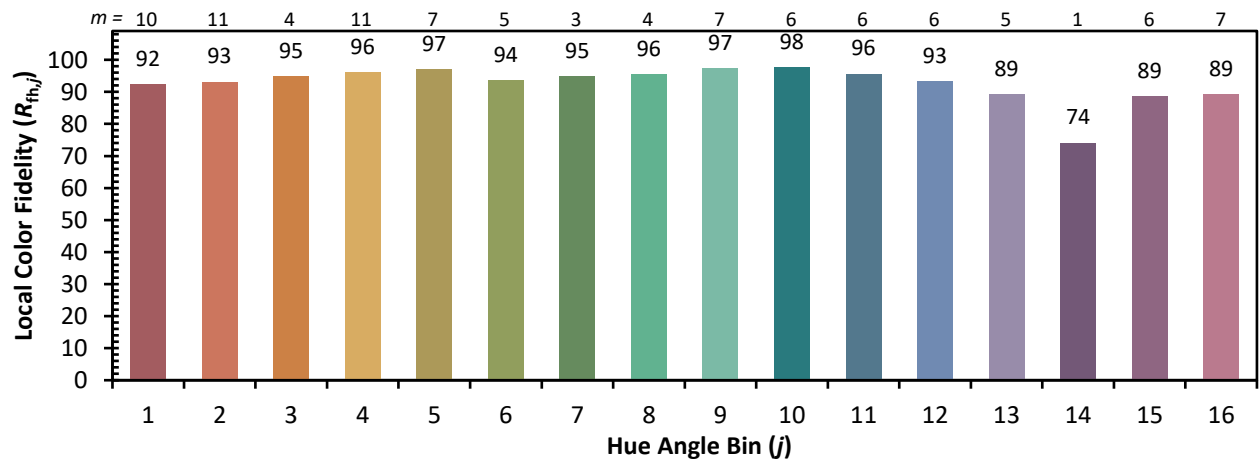
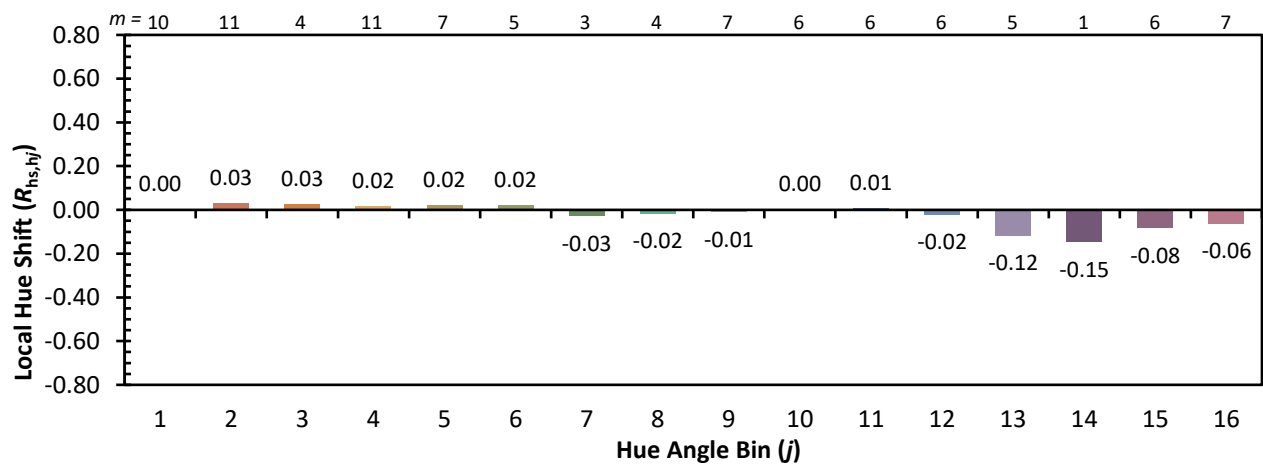
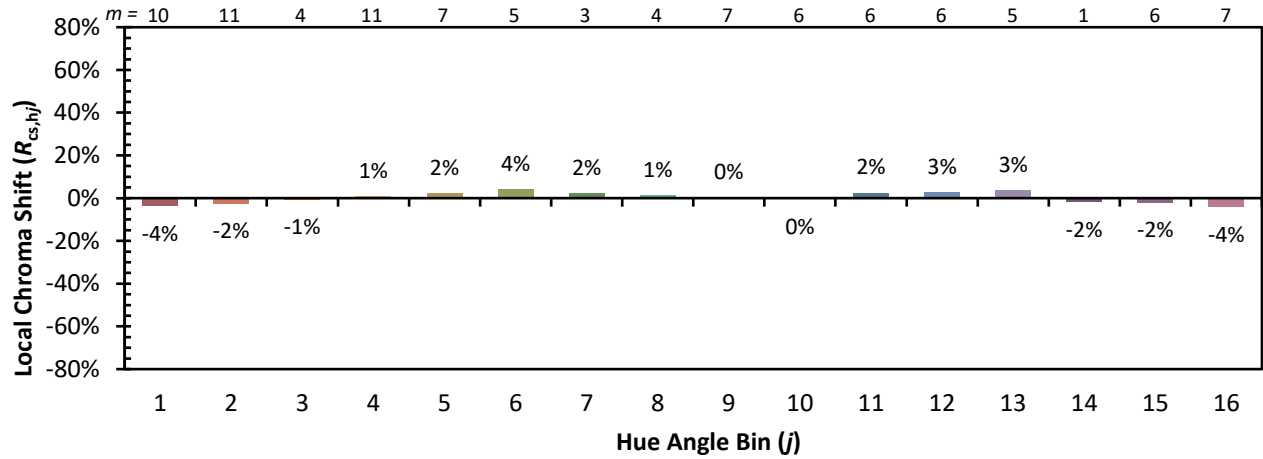


Individual Sample Fidelity Index ($R_{f,i}$)

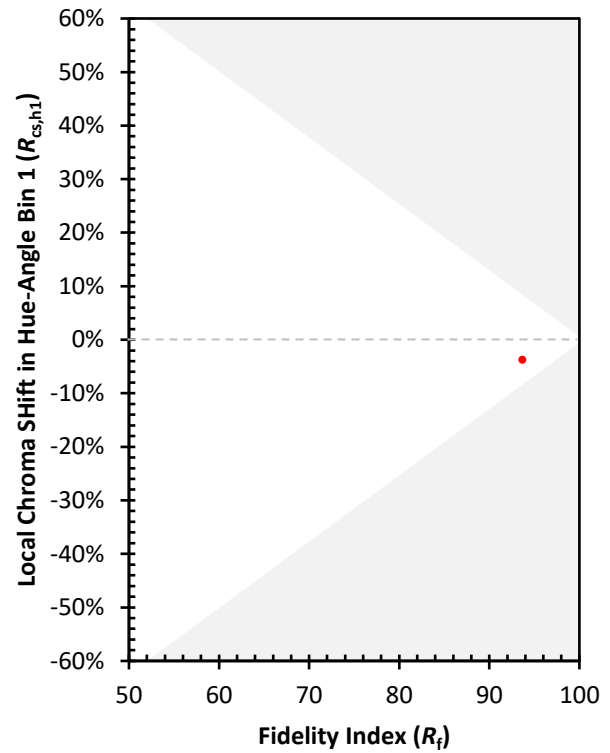
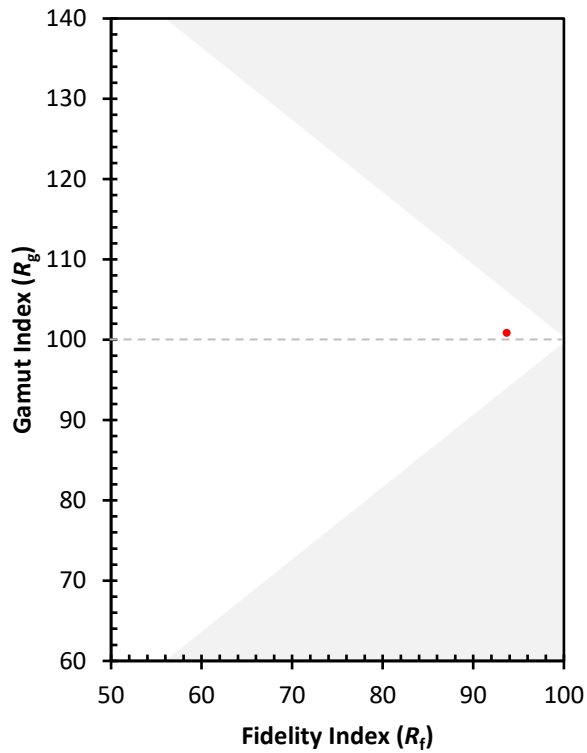
CES01 = 87	CES26 = 96	CES51 = 96	CES76 = 96
CES02 = 66	CES27 = 97	CES52 = 95	CES77 = 82
CES03 = 33	CES28 = 99	CES53 = 95	CES78 = 93
CES04 = 72	CES29 = 95	CES54 = 98	CES79 = 86
CES05 = 54	CES30 = 98	CES55 = 98	CES80 = 88
CES06 = 53	CES31 = 95	CES56 = 97	CES81 = 74
CES07 = 47	CES32 = 90	CES57 = 97	CES82 = 95
CES08 = 46	CES33 = 95	CES58 = 97	CES83 = 92
CES09 = 29	CES34 = 97	CES59 = 99	CES84 = 97
CES10 = 79	CES35 = 99	CES60 = 98	CES85 = 83
CES11 = 62	CES36 = 93	CES61 = 98	CES86 = 81
CES12 = 69	CES37 = 95	CES62 = 91	CES87 = 93
CES13 = 46	CES38 = 98	CES63 = 96	CES88 = 95
CES14 = 75	CES39 = 97	CES64 = 98	CES89 = 84
CES15 = 73	CES40 = 94	CES65 = 94	CES90 = 97
CES16 = 50	CES41 = 95	CES66 = 98	CES91 = 90
CES17 = 52	CES42 = 95	CES67 = 99	CES92 = 84
CES18 = 58	CES43 = 94	CES68 = 97	CES93 = 90
CES19 = 74	CES44 = 99	CES69 = 96	CES94 = 80
CES20 = 70	CES45 = 96	CES70 = 96	CES95 = 90
CES21 = 88	CES46 = 95	CES71 = 97	CES96 = 94
CES22 = 81	CES47 = 85	CES72 = 98	CES97 = 96
CES23 = 92	CES48 = 95	CES73 = 94	CES98 = 95
CES24 = 91	CES49 = 94	CES74 = 84	CES99 = 92
CES25 = 73	CES50 = 96	CES75 = 97	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)