

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
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: P1214535

Luminaire Tested: HFL2001S/HFL2002S-927

Issue Date: 12/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1214535
Test Lab: THIRD PARTY NVLAP LAB
Issue Date: 12/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: HFL2001S/HFL2002S-927
Description: HALO FLEX LINEAR 200LM/FT 90 CRI COLOR SELECTABLE FIXTURE (ONE FOOT)
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

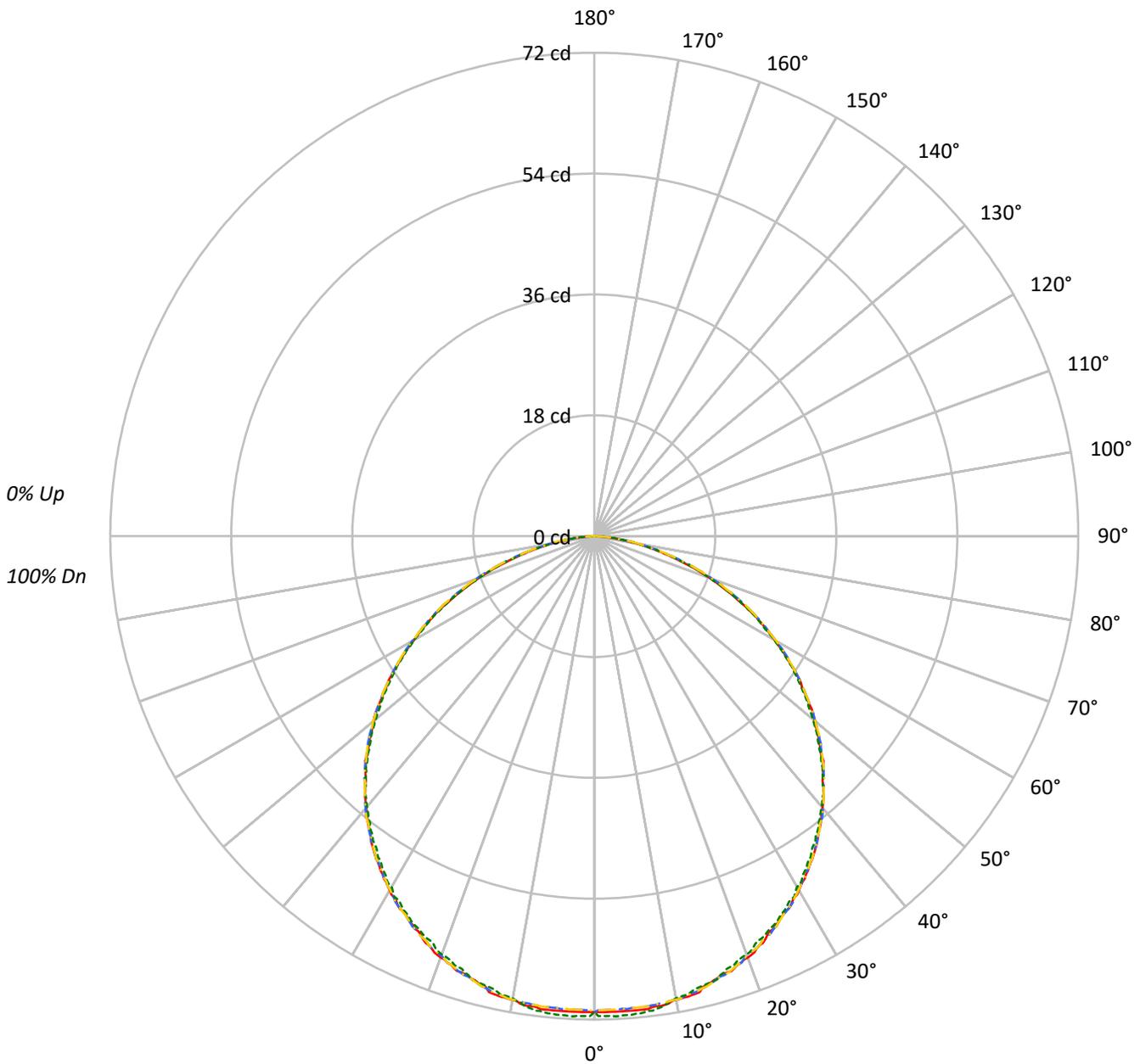
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 202.1 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
Luminous Opening: Rectangular (W 0.03' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 2.2
Input Voltage (V): 24
Input Current (A_{in}): 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: 28.75 FT

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Luminous Intensity Polar Plot



0% Up
100% Dn

— 0°-180° - - 45°-225° - · - · 90°-270° - · - · 135°-315°



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	53	53	53	50
5	76	63	54	47	74	62	54	47	60	52	47	58	51	46	56	50	46	46	46	46	44
6	70	57	48	41	68	56	47	41	54	46	41	52	46	40	51	45	40	40	40	40	38
7	65	51	43	37	63	51	42	36	49	42	36	48	41	36	46	40	36	36	36	36	34
8	61	47	38	33	59	46	38	32	45	38	32	44	37	32	42	36	32	32	32	32	30
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	25439	25439	25439	25439
5°	25536	25716	25536	25716
10°	25540	25467	25540	25467
15°	25445	25482	25445	25482
20°	25506	25315	25506	25315
25°	25297	25218	25297	25218
30°	25231	24982	25231	24982
35°	25054	24791	25054	24791
40°	24730	24637	24730	24637
45°	24407	24254	24407	24254
50°	23891	23667	23891	23667
55°	23333	23020	23333	23020
60°	22245	22174	22245	22174
65°	21140	21140	21140	21140
70°	19303	19407	19303	19407
75°	16497	16774	16497	16774
80°	13430	14050	13430	14050
85°	9057	9468	9057	9468

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45.5°
 Luminance: 24469 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.7	3.3
10°-20°	19.3	9.6
20°-30°	29.4	14.6
30°-40°	35.6	17.6
40°-50°	37.0	18.3
50°-60°	33.1	16.4
60°-70°	24.6	12.2
70°-80°	13.1	6.5
80°-90°	3.0	1.5
90°-100°	0.1	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	55.5	27.5
0°-40°	91.2	45.1
0°-60°	161.3	79.8
0°-90°	202.0	100.0
90°-120°	0.1	0.0
90°-150°	0.1	0.0
90°-180°	0.0	0.0
0°-180°	202.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	71	71	71	71	71	
5°	71	71	71	71	71	7
15°	68	69	68	69	68	19
25°	64	64	64	64	64	30
35°	57	57	57	57	57	36
45°	48	48	48	48	48	37
55°	37	37	37	37	37	33
65°	25	25	25	25	25	24
75°	12	12	12	12	12	13
85°	2	2	2	2	2	3
90°	0	0	0	0	0	0
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
0.5°	70.9	71.1	70.6	70.6	71.5	70.6	70.6	71.1	70.9	71.1	70.6
1°	70.9	71.0	70.6	70.6	71.5	70.6	70.6	71.0	70.9	71.0	70.6
1.5°	70.9	71.0	70.6	70.6	71.5	70.6	70.6	71.0	70.9	71.0	70.6
2°	70.9	70.9	70.6	70.6	71.5	70.6	70.6	70.9	70.9	70.9	70.6
2.5°	70.9	70.8	70.6	70.6	71.6	70.6	70.6	70.8	70.9	70.8	70.6
3°	70.9	70.8	70.6	70.5	71.6	70.5	70.6	70.8	70.9	70.8	70.6
3.5°	70.9	70.8	70.5	70.5	71.5	70.5	70.5	70.8	70.9	70.8	70.5
4°	70.9	70.7	70.6	70.5	71.5	70.5	70.6	70.7	70.9	70.7	70.6
4.5°	70.9	70.6	70.5	70.5	71.5	70.5	70.5	70.6	70.9	70.6	70.5
5°	70.9	70.5	70.5	70.4	71.4	70.4	70.5	70.5	70.9	70.5	70.5
5.5°	70.9	70.4	70.5	70.4	71.4	70.4	70.5	70.4	70.9	70.4	70.5
6°	70.9	70.4	70.5	70.4	71.3	70.4	70.5	70.4	70.9	70.4	70.5
6.5°	70.9	70.4	70.5	70.4	71.2	70.4	70.5	70.4	70.9	70.4	70.5
7°	70.7	70.3	70.4	70.3	71.2	70.3	70.4	70.3	70.7	70.3	70.4
7.5°	70.6	70.2	70.4	70.3	71.0	70.3	70.4	70.2	70.6	70.2	70.4
8°	70.7	70.0	70.3	70.3	70.9	70.3	70.3	70.0	70.7	70.0	70.3
8.5°	70.6	69.9	70.3	70.3	70.7	70.3	70.3	69.9	70.6	69.9	70.3
9°	70.5	69.7	70.2	70.3	70.3	70.3	70.2	69.7	70.5	69.7	70.2
9.5°	70.2	69.5	70.1	70.2	70.2	70.2	70.1	69.5	70.2	69.5	70.1
10°	70.1	69.4	70.1	70.1	69.9	70.1	70.1	69.4	70.1	69.4	70.1
10.5°	70.1	69.3	70.1	69.9	69.8	69.9	70.1	69.3	70.1	69.3	70.1
11°	70.0	69.3	69.9	69.7	69.7	69.7	69.9	69.3	70.0	69.3	69.9
11.5°	70.0	69.2	69.8	69.5	69.7	69.5	69.8	69.2	70.0	69.2	69.8
12°	69.9	69.2	69.6	69.5	69.4	69.5	69.6	69.2	69.9	69.2	69.6
12.5°	69.8	69.1	69.6	69.4	69.1	69.4	69.6	69.1	69.8	69.1	69.6
13°	69.7	69.1	69.4	69.3	69.0	69.3	69.4	69.1	69.7	69.1	69.4
13.5°	69.1	69.0	69.2	69.3	68.9	69.3	69.2	69.0	69.1	69.0	69.2
14°	68.9	68.7	69.1	69.2	68.8	69.2	69.1	68.7	68.9	68.7	69.1
14.5°	68.8	68.6	68.9	68.9	68.7	68.9	68.9	68.6	68.8	68.6	68.9
15°	68.5	68.3	68.7	68.8	68.6	68.8	68.7	68.3	68.5	68.3	68.7
15.5°	68.4	68.1	68.4	68.6	68.5	68.6	68.4	68.1	68.4	68.1	68.4
16°	68.1	67.9	68.2	68.3	68.0	68.3	68.2	67.9	68.1	67.9	68.2
16.5°	68.0	67.8	68.2	68.1	67.8	68.1	68.2	67.8	68.0	67.8	68.2
17°	67.9	67.6	68.0	67.9	67.4	67.9	68.0	67.6	67.9	67.6	68.0
17.5°	67.9	67.4	67.8	67.7	67.3	67.7	67.8	67.4	67.9	67.4	67.8
18°	67.6	67.1	67.5	67.5	67.2	67.5	67.5	67.1	67.6	67.1	67.5
18.5°	67.3	66.9	67.3	67.3	66.8	67.3	67.3	66.9	67.3	66.9	67.3
19°	67.2	66.7	67.2	67.0	66.6	67.0	67.2	66.7	67.2	66.7	67.2
19.5°	66.9	66.5	66.8	66.8	66.4	66.8	66.8	66.5	66.9	66.5	66.8
20°	66.8	66.2	66.5	66.6	66.3	66.6	66.5	66.2	66.8	66.2	66.5
20.5°	66.6	66.1	66.3	66.4	66.1	66.4	66.3	66.1	66.6	66.1	66.3
21°	66.4	65.8	66.1	66.2	65.8	66.2	66.1	65.8	66.4	65.8	66.1
21.5°	66.0	65.7	66.0	65.8	65.3	65.8	66.0	65.7	66.0	65.7	66.0
22°	65.7	65.4	65.7	65.5	65.0	65.5	65.7	65.4	65.7	65.4	65.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	65.6	65.1	65.3	65.3	64.9	65.3	65.3	65.1	65.6	65.1	65.3
23°	65.2	64.9	65.1	65.1	64.7	65.1	65.1	64.9	65.2	64.9	65.1
23.5°	64.7	64.6	64.9	64.7	64.4	64.7	64.9	64.6	64.7	64.6	64.9
24°	64.4	64.3	64.7	64.6	64.1	64.6	64.7	64.3	64.4	64.3	64.7
24.5°	64.3	63.9	64.3	64.3	63.9	64.3	64.3	63.9	64.3	63.9	64.3
25°	63.9	63.7	64.1	63.9	63.7	63.9	64.1	63.7	63.9	63.7	64.1
25.5°	63.7	63.4	63.7	63.7	63.4	63.7	63.7	63.4	63.7	63.4	63.7
26°	63.3	63.2	63.4	63.3	63.0	63.3	63.4	63.2	63.3	63.2	63.4
26.5°	63.0	62.9	63.0	63.1	62.7	63.1	63.0	62.9	63.0	62.9	63.0
27°	62.7	62.6	62.8	62.7	62.5	62.7	62.8	62.6	62.7	62.6	62.8
27.5°	62.6	62.3	62.5	62.4	62.1	62.4	62.5	62.3	62.6	62.3	62.5
28°	62.3	62.0	62.3	62.2	61.7	62.2	62.3	62.0	62.3	62.0	62.3
28.5°	61.8	61.6	62.0	61.9	61.5	61.9	62.0	61.6	61.8	61.6	62.0
29°	61.5	61.3	61.5	61.6	61.4	61.6	61.5	61.3	61.5	61.3	61.5
29.5°	61.3	60.8	61.2	61.2	60.8	61.2	61.2	60.8	61.3	60.8	61.2
30°	60.9	60.5	60.8	60.8	60.3	60.8	60.8	60.5	60.9	60.5	60.8
30.5°	60.5	60.2	60.5	60.4	60.2	60.4	60.5	60.2	60.5	60.2	60.5
31°	60.1	59.9	60.0	60.0	59.9	60.0	60.0	59.9	60.1	59.9	60.0
31.5°	59.9	59.5	59.8	59.7	59.3	59.7	59.8	59.5	59.9	59.5	59.8
32°	59.4	59.1	59.4	59.4	59.0	59.4	59.4	59.1	59.4	59.1	59.4
32.5°	59.1	58.6	59.0	59.1	58.7	59.1	59.0	58.6	59.1	58.6	59.0
33°	58.7	58.3	58.7	58.7	58.2	58.7	58.7	58.3	58.7	58.3	58.7
33.5°	58.3	57.9	58.2	58.2	57.8	58.2	58.2	57.9	58.3	57.9	58.2
34°	58.0	57.6	58.0	57.9	57.6	57.9	58.0	57.6	58.0	57.6	58.0
34.5°	57.6	57.2	57.5	57.5	57.0	57.5	57.5	57.2	57.6	57.2	57.5
35°	57.2	56.8	57.1	57.1	56.6	57.1	57.1	56.8	57.2	56.8	57.1
35.5°	56.8	56.5	56.7	56.6	56.3	56.6	56.7	56.5	56.8	56.5	56.7
36°	56.4	56.1	56.4	56.3	56.0	56.3	56.4	56.1	56.4	56.1	56.4
36.5°	55.9	55.7	55.8	55.8	55.4	55.8	55.8	55.7	55.9	55.7	55.8
37°	55.4	55.2	55.5	55.3	55.1	55.3	55.5	55.2	55.4	55.2	55.5
37.5°	55.0	54.7	55.1	54.9	54.8	54.9	55.1	54.7	55.0	54.7	55.1
38°	54.6	54.3	54.5	54.5	54.2	54.5	54.5	54.3	54.6	54.3	54.5
38.5°	54.2	53.8	54.2	54.1	53.9	54.1	54.2	53.8	54.2	53.8	54.2
39°	53.7	53.4	53.9	53.6	53.4	53.6	53.9	53.4	53.7	53.4	53.9
39.5°	53.2	53.0	53.4	53.2	53.0	53.2	53.4	53.0	53.2	53.0	53.4
40°	52.8	52.6	52.9	52.7	52.6	52.7	52.9	52.6	52.8	52.6	52.9
40.5°	52.4	52.2	52.5	52.3	52.2	52.3	52.5	52.2	52.4	52.2	52.5
41°	51.9	51.8	52.0	51.8	51.7	51.8	52.0	51.8	51.9	51.8	52.0
41.5°	51.5	51.2	51.5	51.3	51.4	51.3	51.5	51.2	51.5	51.2	51.5
42°	50.9	50.7	51.0	51.0	51.1	51.0	51.0	50.7	50.9	50.7	51.0
42.5°	50.5	50.2	50.5	50.4	50.3	50.4	50.5	50.2	50.5	50.2	50.5
43°	49.8	49.8	50.0	50.0	49.9	50.0	50.0	49.8	49.8	49.8	50.0
43.5°	49.4	49.3	49.7	49.6	49.4	49.6	49.7	49.3	49.4	49.3	49.7
44°	49.0	48.9	49.1	49.0	48.8	49.0	49.1	48.9	49.0	48.9	49.1
44.5°	48.5	48.4	48.7	48.6	48.5	48.6	48.7	48.4	48.5	48.4	48.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	48.1	48.0	48.2	48.0	47.8	48.0	48.2	48.0	48.1	48.0	48.2
45.5°	47.8	47.5	47.6	47.5	47.3	47.5	47.6	47.5	47.8	47.5	47.6
46°	46.9	47.0	47.2	47.2	46.9	47.2	47.2	47.0	46.9	47.0	47.2
46.5°	46.5	46.3	46.6	46.6	46.2	46.6	46.6	46.3	46.5	46.3	46.6
47°	45.9	45.8	46.1	46.0	45.7	46.0	46.1	45.8	45.9	45.8	46.1
47.5°	45.4	45.3	45.7	45.6	45.1	45.6	45.7	45.3	45.4	45.3	45.7
48°	44.9	44.8	45.1	45.0	44.7	45.0	45.1	44.8	44.9	44.8	45.1
48.5°	44.3	44.2	44.6	44.5	44.2	44.5	44.6	44.2	44.3	44.2	44.6
49°	43.8	43.8	44.0	44.0	43.6	44.0	44.0	43.8	43.8	43.8	44.0
49.5°	43.2	43.2	43.4	43.5	43.0	43.5	43.4	43.2	43.2	43.2	43.4
50°	42.8	42.7	43.0	42.9	42.4	42.9	43.0	42.7	42.8	42.7	43.0
50.5°	42.4	42.1	42.3	42.3	41.9	42.3	42.3	42.1	42.4	42.1	42.3
51°	41.8	41.5	41.9	41.8	41.3	41.8	41.9	41.5	41.8	41.5	41.9
51.5°	41.3	40.9	41.2	41.2	40.7	41.2	41.2	40.9	41.3	40.9	41.2
52°	40.6	40.4	40.7	40.7	40.3	40.7	40.7	40.4	40.6	40.4	40.7
52.5°	40.0	39.9	40.1	40.1	39.7	40.1	40.1	39.9	40.0	39.9	40.1
53°	39.4	39.3	39.5	39.6	39.2	39.6	39.5	39.3	39.4	39.3	39.5
53.5°	38.8	38.7	39.0	39.0	38.5	39.0	39.0	38.7	38.8	38.7	39.0
54°	38.2	38.1	38.4	38.4	38.0	38.4	38.4	38.1	38.2	38.1	38.4
54.5°	37.8	37.5	37.9	37.8	37.4	37.8	37.9	37.5	37.8	37.5	37.9
55°	37.3	36.9	37.2	37.2	36.8	37.2	37.2	36.9	37.3	36.9	37.2
55.5°	36.6	36.3	36.7	36.7	36.3	36.7	36.7	36.3	36.6	36.3	36.7
56°	36.1	35.7	36.1	36.0	35.6	36.0	36.1	35.7	36.1	35.7	36.1
56.5°	35.4	35.2	35.5	35.5	35.3	35.5	35.5	35.2	35.4	35.2	35.5
57°	34.7	34.6	34.9	34.7	34.5	34.7	34.9	34.6	34.7	34.6	34.9
57.5°	34.1	34.0	34.3	34.2	34.0	34.2	34.3	34.0	34.1	34.0	34.3
58°	33.5	33.5	33.8	33.6	33.3	33.6	33.8	33.5	33.5	33.5	33.8
58.5°	33.0	32.8	33.1	33.0	32.8	33.0	33.1	32.8	33.0	32.8	33.1
59°	32.3	32.2	32.6	32.4	32.1	32.4	32.6	32.2	32.3	32.2	32.6
59.5°	31.6	31.5	31.9	31.8	31.5	31.8	31.9	31.5	31.6	31.5	31.9
60°	31.0	30.9	31.3	31.2	30.9	31.2	31.3	30.9	31.0	30.9	31.3
60.5°	30.4	30.3	30.6	30.6	30.3	30.6	30.6	30.3	30.4	30.3	30.6
61°	29.8	29.6	30.0	30.0	29.6	30.0	30.0	29.6	29.8	29.6	30.0
61.5°	29.2	29.0	29.4	29.3	28.9	29.3	29.4	29.0	29.2	29.0	29.4
62°	28.6	28.5	28.9	28.8	28.4	28.8	28.9	28.5	28.6	28.5	28.9
62.5°	28.0	27.8	28.2	28.2	27.8	28.2	28.2	27.8	28.0	27.8	28.2
63°	27.3	27.3	27.7	27.5	27.2	27.5	27.7	27.3	27.3	27.3	27.7
63.5°	26.9	26.7	27.0	27.0	26.7	27.0	27.0	26.7	26.9	26.7	27.0
64°	26.2	26.1	26.5	26.4	26.1	26.4	26.5	26.1	26.2	26.1	26.5
64.5°	25.5	25.5	25.9	25.8	25.3	25.8	25.9	25.5	25.5	25.5	25.9
65°	24.9	24.8	25.2	25.2	24.9	25.2	25.2	24.8	24.9	24.8	25.2
65.5°	24.1	24.2	24.7	24.5	24.1	24.5	24.7	24.2	24.1	24.2	24.7
66°	23.4	23.5	23.9	23.9	23.6	23.9	23.9	23.5	23.4	23.5	23.9
66.5°	22.8	22.9	23.3	23.2	22.8	23.2	23.3	22.9	22.8	22.9	23.3
67°	22.2	22.2	22.6	22.6	22.2	22.6	22.6	22.2	22.2	22.2	22.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	21.5	21.6	22.1	22.0	21.5	22.0	22.1	21.6	21.5	21.6	22.1
68°	20.8	20.9	21.3	21.3	21.0	21.3	21.3	20.9	20.8	20.9	21.3
68.5°	20.2	20.2	20.7	20.7	20.2	20.7	20.7	20.2	20.2	20.2	20.7
69°	19.6	19.6	20.1	20.1	19.8	20.1	20.1	19.6	19.6	19.6	20.1
69.5°	18.9	19.0	19.5	19.4	18.9	19.4	19.5	19.0	18.9	19.0	19.5
70°	18.4	18.4	18.7	18.7	18.5	18.7	18.7	18.4	18.4	18.4	18.7
70.5°	17.7	17.7	18.2	18.0	17.6	18.0	18.2	17.7	17.7	17.7	18.2
71°	17.1	17.1	17.5	17.4	17.1	17.4	17.5	17.1	17.1	17.1	17.5
71.5°	16.4	16.5	17.0	16.8	16.5	16.8	17.0	16.5	16.4	16.5	17.0
72°	15.8	15.9	16.2	16.1	15.8	16.1	16.2	15.9	15.8	15.9	16.2
72.5°	15.1	15.2	15.7	15.6	15.1	15.6	15.7	15.2	15.1	15.2	15.7
73°	14.4	14.5	15.0	14.9	14.8	14.9	15.0	14.5	14.4	14.5	15.0
73.5°	13.8	14.0	14.4	14.3	14.0	14.3	14.4	14.0	13.8	14.0	14.4
74°	13.2	13.3	13.7	13.7	13.4	13.7	13.7	13.3	13.2	13.3	13.7
74.5°	12.6	12.7	13.1	13.1	12.7	13.1	13.1	12.7	12.6	12.7	13.1
75°	11.9	12.1	12.4	12.4	12.1	12.4	12.4	12.1	11.9	12.1	12.4
75.5°	11.4	11.5	11.9	11.9	11.5	11.9	11.9	11.5	11.4	11.5	11.9
76°	10.7	10.9	11.2	11.3	11.0	11.3	11.2	10.9	10.7	10.9	11.2
76.5°	10.2	10.3	10.7	10.7	10.5	10.7	10.7	10.3	10.2	10.3	10.7
77°	9.6	9.7	10.0	10.2	9.9	10.2	10.0	9.7	9.6	9.7	10.0
77.5°	9.1	9.2	9.5	9.7	9.5	9.7	9.5	9.2	9.1	9.2	9.5
78°	8.6	8.6	8.9	9.2	8.8	9.2	8.9	8.6	8.6	8.6	8.9
78.5°	8.0	8.2	8.4	8.5	8.2	8.5	8.4	8.2	8.0	8.2	8.4
79°	7.5	7.6	7.9	8.0	7.7	8.0	7.9	7.6	7.5	7.6	7.9
79.5°	6.9	7.1	7.3	7.4	7.2	7.4	7.3	7.1	6.9	7.1	7.3
80°	6.5	6.7	6.9	6.9	6.8	6.9	6.9	6.7	6.5	6.7	6.9
80.5°	6.1	6.2	6.4	6.4	6.2	6.4	6.4	6.2	6.1	6.2	6.4
81°	5.5	5.7	5.9	5.8	5.7	5.8	5.9	5.7	5.5	5.7	5.9
81.5°	4.9	5.1	5.5	5.5	5.3	5.5	5.5	5.1	4.9	5.1	5.5
82°	4.6	4.8	4.9	5.0	4.8	5.0	4.9	4.8	4.6	4.8	4.9
82.5°	4.1	4.3	4.5	4.5	4.5	4.5	4.5	4.3	4.1	4.3	4.5
83°	3.6	3.9	4.1	4.2	4.1	4.2	4.1	3.9	3.6	3.9	4.1
83.5°	3.2	3.4	3.7	3.7	3.4	3.7	3.7	3.4	3.2	3.4	3.7
84°	2.8	3.1	3.2	3.2	3.1	3.2	3.2	3.1	2.8	3.1	3.2
84.5°	2.4	2.7	2.9	2.9	2.9	2.9	2.9	2.7	2.4	2.7	2.9
85°	2.2	2.3	2.6	2.5	2.3	2.5	2.6	2.3	2.2	2.3	2.6
85.5°	1.7	2.0	2.1	2.1	2.0	2.1	2.1	2.0	1.7	2.0	2.1
86°	1.4	1.6	1.8	1.8	1.6	1.8	1.8	1.6	1.4	1.6	1.8
86.5°	1.2	1.3	1.6	1.5	1.4	1.5	1.6	1.3	1.2	1.3	1.6
87°	1.0	1.1	1.3	1.2	1.1	1.2	1.3	1.1	1.0	1.1	1.3
87.5°	0.5	0.8	1.0	0.9	0.9	0.9	1.0	0.8	0.5	0.8	1.0
88°	0.4	0.7	0.8	0.8	0.7	0.8	0.8	0.7	0.4	0.7	0.8
88.5°	0.3	0.4	0.6	0.6	0.6	0.6	0.6	0.4	0.3	0.4	0.6
89°	0.2	0.3	0.4	0.5	0.5	0.5	0.4	0.3	0.2	0.3	0.4
89.5°	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.2
90.5°	0.0	0.1	0.2	0.2	0.3	0.2	0.2	0.1	0.0	0.1	0.2
91°	0.0	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.0	0.1	0.1
91.5°	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1
92°	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1
92.5°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
93°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
93.5°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
94°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
94.5°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
95°	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
95.5°	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
96.5°	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
98.5°	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
99.5°	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
101.5°	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1214535
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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1214535
 CATALOG NUMBER: HFL2001S/HFL2002S-927

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1214535
CATALOG NUMBER: HFL2001S/HFL2002S-927

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: P1214535
 CATALOG NUMBER: HFL2001S/HFL2002S-927

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	70.9	70.9	70.9	70.9	70.9	70.9
0.5°	70.6	71.5	70.6	70.6	71.1	70.9
1°	70.6	71.5	70.6	70.6	71.0	70.9
1.5°	70.6	71.5	70.6	70.6	71.0	70.9
2°	70.6	71.5	70.6	70.6	70.9	70.9
2.5°	70.6	71.6	70.6	70.6	70.8	70.9
3°	70.5	71.6	70.5	70.6	70.8	70.9
3.5°	70.5	71.5	70.5	70.5	70.8	70.9
4°	70.5	71.5	70.5	70.6	70.7	70.9
4.5°	70.5	71.5	70.5	70.5	70.6	70.9
5°	70.4	71.4	70.4	70.5	70.5	70.9
5.5°	70.4	71.4	70.4	70.5	70.4	70.9
6°	70.4	71.3	70.4	70.5	70.4	70.9
6.5°	70.4	71.2	70.4	70.5	70.4	70.9
7°	70.3	71.2	70.3	70.4	70.3	70.7
7.5°	70.3	71.0	70.3	70.4	70.2	70.6
8°	70.3	70.9	70.3	70.3	70.0	70.7
8.5°	70.3	70.7	70.3	70.3	69.9	70.6
9°	70.3	70.3	70.3	70.2	69.7	70.5
9.5°	70.2	70.2	70.2	70.1	69.5	70.2
10°	70.1	69.9	70.1	70.1	69.4	70.1
10.5°	69.9	69.8	69.9	70.1	69.3	70.1
11°	69.7	69.7	69.7	69.9	69.3	70.0
11.5°	69.5	69.7	69.5	69.8	69.2	70.0
12°	69.5	69.4	69.5	69.6	69.2	69.9
12.5°	69.4	69.1	69.4	69.6	69.1	69.8
13°	69.3	69.0	69.3	69.4	69.1	69.7
13.5°	69.3	68.9	69.3	69.2	69.0	69.1
14°	69.2	68.8	69.2	69.1	68.7	68.9
14.5°	68.9	68.7	68.9	68.9	68.6	68.8
15°	68.8	68.6	68.8	68.7	68.3	68.5
15.5°	68.6	68.5	68.6	68.4	68.1	68.4
16°	68.3	68.0	68.3	68.2	67.9	68.1
16.5°	68.1	67.8	68.1	68.2	67.8	68.0
17°	67.9	67.4	67.9	68.0	67.6	67.9
17.5°	67.7	67.3	67.7	67.8	67.4	67.9
18°	67.5	67.2	67.5	67.5	67.1	67.6
18.5°	67.3	66.8	67.3	67.3	66.9	67.3
19°	67.0	66.6	67.0	67.2	66.7	67.2
19.5°	66.8	66.4	66.8	66.8	66.5	66.9
20°	66.6	66.3	66.6	66.5	66.2	66.8
20.5°	66.4	66.1	66.4	66.3	66.1	66.6
21°	66.2	65.8	66.2	66.1	65.8	66.4
21.5°	65.8	65.3	65.8	66.0	65.7	66.0
22°	65.5	65.0	65.5	65.7	65.4	65.7



TEST NUMBER: P1214535
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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	65.3	64.9	65.3	65.3	65.1	65.6
23°	65.1	64.7	65.1	65.1	64.9	65.2
23.5°	64.7	64.4	64.7	64.9	64.6	64.7
24°	64.6	64.1	64.6	64.7	64.3	64.4
24.5°	64.3	63.9	64.3	64.3	63.9	64.3
25°	63.9	63.7	63.9	64.1	63.7	63.9
25.5°	63.7	63.4	63.7	63.7	63.4	63.7
26°	63.3	63.0	63.3	63.4	63.2	63.3
26.5°	63.1	62.7	63.1	63.0	62.9	63.0
27°	62.7	62.5	62.7	62.8	62.6	62.7
27.5°	62.4	62.1	62.4	62.5	62.3	62.6
28°	62.2	61.7	62.2	62.3	62.0	62.3
28.5°	61.9	61.5	61.9	62.0	61.6	61.8
29°	61.6	61.4	61.6	61.5	61.3	61.5
29.5°	61.2	60.8	61.2	61.2	60.8	61.3
30°	60.8	60.3	60.8	60.8	60.5	60.9
30.5°	60.4	60.2	60.4	60.5	60.2	60.5
31°	60.0	59.9	60.0	60.0	59.9	60.1
31.5°	59.7	59.3	59.7	59.8	59.5	59.9
32°	59.4	59.0	59.4	59.4	59.1	59.4
32.5°	59.1	58.7	59.1	59.0	58.6	59.1
33°	58.7	58.2	58.7	58.7	58.3	58.7
33.5°	58.2	57.8	58.2	58.2	57.9	58.3
34°	57.9	57.6	57.9	58.0	57.6	58.0
34.5°	57.5	57.0	57.5	57.5	57.2	57.6
35°	57.1	56.6	57.1	57.1	56.8	57.2
35.5°	56.6	56.3	56.6	56.7	56.5	56.8
36°	56.3	56.0	56.3	56.4	56.1	56.4
36.5°	55.8	55.4	55.8	55.8	55.7	55.9
37°	55.3	55.1	55.3	55.5	55.2	55.4
37.5°	54.9	54.8	54.9	55.1	54.7	55.0
38°	54.5	54.2	54.5	54.5	54.3	54.6
38.5°	54.1	53.9	54.1	54.2	53.8	54.2
39°	53.6	53.4	53.6	53.9	53.4	53.7
39.5°	53.2	53.0	53.2	53.4	53.0	53.2
40°	52.7	52.6	52.7	52.9	52.6	52.8
40.5°	52.3	52.2	52.3	52.5	52.2	52.4
41°	51.8	51.7	51.8	52.0	51.8	51.9
41.5°	51.3	51.4	51.3	51.5	51.2	51.5
42°	51.0	51.1	51.0	51.0	50.7	50.9
42.5°	50.4	50.3	50.4	50.5	50.2	50.5
43°	50.0	49.9	50.0	50.0	49.8	49.8
43.5°	49.6	49.4	49.6	49.7	49.3	49.4
44°	49.0	48.8	49.0	49.1	48.9	49.0
44.5°	48.6	48.5	48.6	48.7	48.4	48.5



TEST NUMBER: P1214535

CATALOG NUMBER: HFL2001S/HFL2002S-927

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	48.0	47.8	48.0	48.2	48.0	48.1
45.5°	47.5	47.3	47.5	47.6	47.5	47.8
46°	47.2	46.9	47.2	47.2	47.0	46.9
46.5°	46.6	46.2	46.6	46.6	46.3	46.5
47°	46.0	45.7	46.0	46.1	45.8	45.9
47.5°	45.6	45.1	45.6	45.7	45.3	45.4
48°	45.0	44.7	45.0	45.1	44.8	44.9
48.5°	44.5	44.2	44.5	44.6	44.2	44.3
49°	44.0	43.6	44.0	44.0	43.8	43.8
49.5°	43.5	43.0	43.5	43.4	43.2	43.2
50°	42.9	42.4	42.9	43.0	42.7	42.8
50.5°	42.3	41.9	42.3	42.3	42.1	42.4
51°	41.8	41.3	41.8	41.9	41.5	41.8
51.5°	41.2	40.7	41.2	41.2	40.9	41.3
52°	40.7	40.3	40.7	40.7	40.4	40.6
52.5°	40.1	39.7	40.1	40.1	39.9	40.0
53°	39.6	39.2	39.6	39.5	39.3	39.4
53.5°	39.0	38.5	39.0	39.0	38.7	38.8
54°	38.4	38.0	38.4	38.4	38.1	38.2
54.5°	37.8	37.4	37.8	37.9	37.5	37.8
55°	37.2	36.8	37.2	37.2	36.9	37.3
55.5°	36.7	36.3	36.7	36.7	36.3	36.6
56°	36.0	35.6	36.0	36.1	35.7	36.1
56.5°	35.5	35.3	35.5	35.5	35.2	35.4
57°	34.7	34.5	34.7	34.9	34.6	34.7
57.5°	34.2	34.0	34.2	34.3	34.0	34.1
58°	33.6	33.3	33.6	33.8	33.5	33.5
58.5°	33.0	32.8	33.0	33.1	32.8	33.0
59°	32.4	32.1	32.4	32.6	32.2	32.3
59.5°	31.8	31.5	31.8	31.9	31.5	31.6
60°	31.2	30.9	31.2	31.3	30.9	31.0
60.5°	30.6	30.3	30.6	30.6	30.3	30.4
61°	30.0	29.6	30.0	30.0	29.6	29.8
61.5°	29.3	28.9	29.3	29.4	29.0	29.2
62°	28.8	28.4	28.8	28.9	28.5	28.6
62.5°	28.2	27.8	28.2	28.2	27.8	28.0
63°	27.5	27.2	27.5	27.7	27.3	27.3
63.5°	27.0	26.7	27.0	27.0	26.7	26.9
64°	26.4	26.1	26.4	26.5	26.1	26.2
64.5°	25.8	25.3	25.8	25.9	25.5	25.5
65°	25.2	24.9	25.2	25.2	24.8	24.9
65.5°	24.5	24.1	24.5	24.7	24.2	24.1
66°	23.9	23.6	23.9	23.9	23.5	23.4
66.5°	23.2	22.8	23.2	23.3	22.9	22.8
67°	22.6	22.2	22.6	22.6	22.2	22.2



TEST NUMBER: P1214535
 CATALOG NUMBER: HFL2001S/HFL2002S-927

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	22.0	21.5	22.0	22.1	21.6	21.5
68°	21.3	21.0	21.3	21.3	20.9	20.8
68.5°	20.7	20.2	20.7	20.7	20.2	20.2
69°	20.1	19.8	20.1	20.1	19.6	19.6
69.5°	19.4	18.9	19.4	19.5	19.0	18.9
70°	18.7	18.5	18.7	18.7	18.4	18.4
70.5°	18.0	17.6	18.0	18.2	17.7	17.7
71°	17.4	17.1	17.4	17.5	17.1	17.1
71.5°	16.8	16.5	16.8	17.0	16.5	16.4
72°	16.1	15.8	16.1	16.2	15.9	15.8
72.5°	15.6	15.1	15.6	15.7	15.2	15.1
73°	14.9	14.8	14.9	15.0	14.5	14.4
73.5°	14.3	14.0	14.3	14.4	14.0	13.8
74°	13.7	13.4	13.7	13.7	13.3	13.2
74.5°	13.1	12.7	13.1	13.1	12.7	12.6
75°	12.4	12.1	12.4	12.4	12.1	11.9
75.5°	11.9	11.5	11.9	11.9	11.5	11.4
76°	11.3	11.0	11.3	11.2	10.9	10.7
76.5°	10.7	10.5	10.7	10.7	10.3	10.2
77°	10.2	9.9	10.2	10.0	9.7	9.6
77.5°	9.7	9.5	9.7	9.5	9.2	9.1
78°	9.2	8.8	9.2	8.9	8.6	8.6
78.5°	8.5	8.2	8.5	8.4	8.2	8.0
79°	8.0	7.7	8.0	7.9	7.6	7.5
79.5°	7.4	7.2	7.4	7.3	7.1	6.9
80°	6.9	6.8	6.9	6.9	6.7	6.5
80.5°	6.4	6.2	6.4	6.4	6.2	6.1
81°	5.8	5.7	5.8	5.9	5.7	5.5
81.5°	5.5	5.3	5.5	5.5	5.1	4.9
82°	5.0	4.8	5.0	4.9	4.8	4.6
82.5°	4.5	4.5	4.5	4.5	4.3	4.1
83°	4.2	4.1	4.2	4.1	3.9	3.6
83.5°	3.7	3.4	3.7	3.7	3.4	3.2
84°	3.2	3.1	3.2	3.2	3.1	2.8
84.5°	2.9	2.9	2.9	2.9	2.7	2.4
85°	2.5	2.3	2.5	2.6	2.3	2.2
85.5°	2.1	2.0	2.1	2.1	2.0	1.7
86°	1.8	1.6	1.8	1.8	1.6	1.4
86.5°	1.5	1.4	1.5	1.6	1.3	1.2
87°	1.2	1.1	1.2	1.3	1.1	1.0
87.5°	0.9	0.9	0.9	1.0	0.8	0.5
88°	0.8	0.7	0.8	0.8	0.7	0.4
88.5°	0.6	0.6	0.6	0.6	0.4	0.3
89°	0.5	0.5	0.5	0.4	0.3	0.2
89.5°	0.3	0.4	0.3	0.3	0.2	0.2



TEST NUMBER: P1214535
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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.2	0.3	0.2	0.2	0.2	0.1
90.5°	0.2	0.3	0.2	0.2	0.1	0.0
91°	0.2	0.2	0.2	0.1	0.1	0.0
91.5°	0.1	0.2	0.1	0.1	0.1	0.0
92°	0.1	0.2	0.1	0.1	0.1	0.0
92.5°	0.1	0.1	0.1	0.1	0.1	0.0
93°	0.1	0.1	0.1	0.1	0.1	0.0
93.5°	0.1	0.1	0.1	0.1	0.0	0.0
94°	0.1	0.1	0.1	0.1	0.1	0.0
94.5°	0.1	0.1	0.1	0.1	0.0	0.0
95°	0.1	0.1	0.1	0.0	0.0	0.0
95.5°	0.1	0.1	0.1	0.0	0.0	0.0
96°	0.1	0.1	0.1	0.0	0.0	0.0
96.5°	0.1	0.1	0.1	0.0	0.0	0.0
97°	0.1	0.1	0.1	0.0	0.0	0.0
97.5°	0.1	0.0	0.1	0.0	0.0	0.0
98°	0.1	0.0	0.1	0.0	0.0	0.0
98.5°	0.1	0.0	0.1	0.0	0.0	0.0
99°	0.1	0.0	0.1	0.0	0.0	0.0
99.5°	0.1	0.0	0.1	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0
100.5°	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.1	0.0	0.1	0.0	0.0	0.0
101.5°	0.1	0.0	0.1	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0
103.5°	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0
104.5°	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0
105.5°	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0
106.5°	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0
108.5°	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0
109.5°	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0
110.5°	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0
111.5°	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1214535
CATALOG NUMBER: HFL2001S/HFL2002S-927

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0
113.5°	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0
114.5°	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0
115.5°	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0
116.5°	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0
118.5°	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0
119.5°	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0
120.5°	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0
121.5°	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0
123.5°	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0
124.5°	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0
125.5°	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0
126.5°	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0
128.5°	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0
129.5°	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0
130.5°	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0
131.5°	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0
133.5°	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0
134.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1214535
CATALOG NUMBER: HFL2001S/HFL2002S-927

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	0.0	0.0	0.0	0.0	0.0	0.0
135.5°	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0
136.5°	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0
138.5°	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0
139.5°	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0
140.5°	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0
141.5°	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0
143.5°	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0
144.5°	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0
145.5°	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0
146.5°	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0
148.5°	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0
149.5°	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0
150.5°	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0
151.5°	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0
153.5°	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0
154.5°	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0
155.5°	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0
156.5°	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1214535
CATALOG NUMBER: HFL2001S/HFL2002S-927

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
157.5°	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0
158.5°	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0
159.5°	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0
160.5°	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0
161.5°	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0
163.5°	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0
164.5°	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0
165.5°	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0
166.5°	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0
168.5°	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0
169.5°	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0
170.5°	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0
171.5°	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0
173.5°	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0
174.5°	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0
175.5°	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0
176.5°	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0
178.5°	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0
179.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1214535
CATALOG NUMBER: HFL2001S/HFL2002S-927

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: P1214535
 CATALOG NUMBER: HFL2001S/HFL2002S-927

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	23.1	24.7	23.5	25.0	25.4	23.1	24.7	23.5	25.1	25.4
	3H	24.8	26.2	25.1	26.6	26.9	24.8	26.3	25.2	26.6	27.0
	4H	25.3	26.7	25.7	27.1	27.4	25.4	26.8	25.8	27.1	27.5
	6H	25.7	27.0	26.1	27.3	27.7	25.8	27.1	26.2	27.4	27.8
	8H	25.8	27.0	26.2	27.4	27.8	25.9	27.1	26.3	27.5	27.9
	12H	25.8	27.0	26.2	27.4	27.8	25.9	27.1	26.4	27.5	27.9
4H	2H	23.7	25.1	24.1	25.5	25.8	23.7	25.1	24.1	25.5	25.9
	3H	25.6	26.8	26.0	27.2	27.6	25.7	26.8	26.1	27.2	27.6
	4H	26.3	27.3	26.7	27.7	28.2	26.3	27.4	26.8	27.8	28.3
	6H	26.7	27.7	27.2	28.1	28.6	26.8	27.8	27.3	28.2	28.7
	8H	26.9	27.7	27.3	28.2	28.6	27.0	27.8	27.4	28.3	28.7
	12H	26.9	27.7	27.4	28.2	28.6	27.1	27.8	27.5	28.3	28.8
8H	4H	26.6	27.4	27.0	27.9	28.3	26.6	27.5	27.1	27.9	28.4
	6H	27.1	27.8	27.6	28.3	28.8	27.2	27.9	27.7	28.4	28.9
	8H	27.3	27.9	27.8	28.4	28.9	27.4	28.0	27.9	28.5	29.0
	12H	27.4	28.0	27.9	28.4	29.0	27.5	28.1	28.0	28.6	29.1
12H	4H	26.6	27.3	27.1	27.8	28.3	26.6	27.4	27.1	27.9	28.4
	6H	27.2	27.8	27.7	28.3	28.8	27.3	27.9	27.8	28.4	28.9
	8H	27.4	27.9	27.9	28.4	29.0	27.5	28.0	28.0	28.5	29.1

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

Report Prepared for

Cooper Lighting Solutions

Halo Track & Surface

Report Number: SP1-2509-560-1

Test Date: 10/10/2025

Luminaire Tested: HFLESD4-HFL4001S-HFLP60A-927

Data in this report applies to families of products including HFLESD4-HFL4001S-HFLP60A*

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

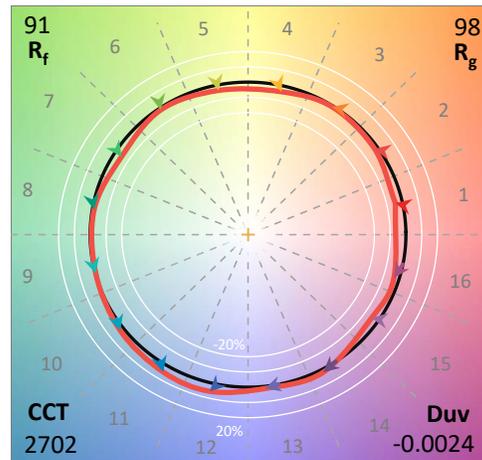
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2509-560-1
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/20/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Halo Track & Surface
 Catalog Number: **HFLESD4-HFL4001S-HFLP60A-927**
 Description: HALO FLEX LINEAR 4 SURFACE MOUNT DEEP 400LM/FT 60W UNV

Spectral Parameters

CCT (K): 2702
 CIE u': 0.2631
 CIE v': 0.5238
 Duv: -0.0024
 CIE x: 0.4555
 CIE y: 0.4031
 CIE z: 0.1414
 Peak Wavelength (nm): 621
 Dominant Wavelength (nm): 585
 Purity: 57.7
 Rf: 91.1
 Rg: 97.7

CRI (Ra):	93.3		
R1:	96.6	R9:	65.7
R2:	98.5	R10:	97.9
R3:	95.1	R11:	96.8
R4:	94.2	R12:	84.4
R5:	96.8	R13:	98.5
R6:	93.9	R14:	98.3
R7:	89.3	R15:	92.3
R8:	82.3		



Test Conditions

Stabilization Time: 50M
 Operation Time: 1H 50M
 Sphere Temperature (°C): 25.3

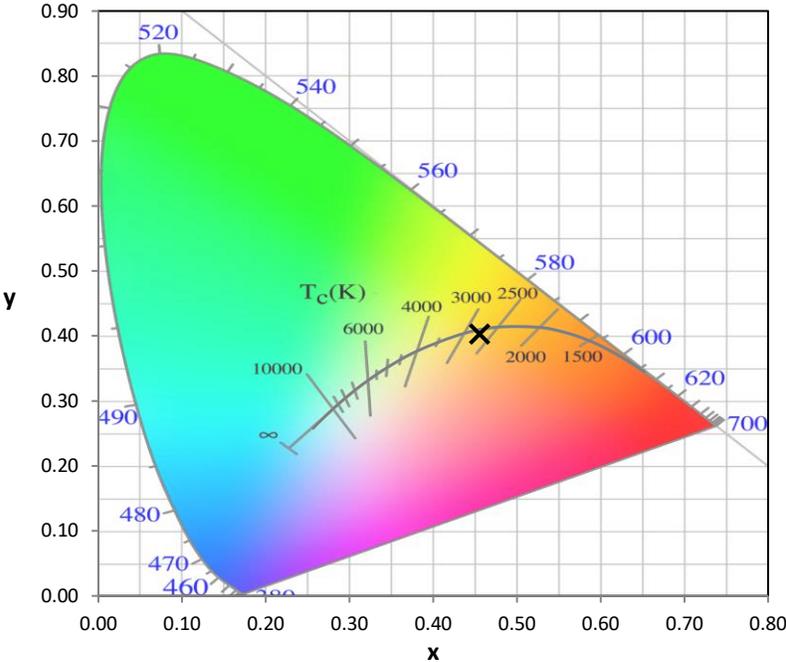
REPORT NUMBER: SP1-2509-560-1

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

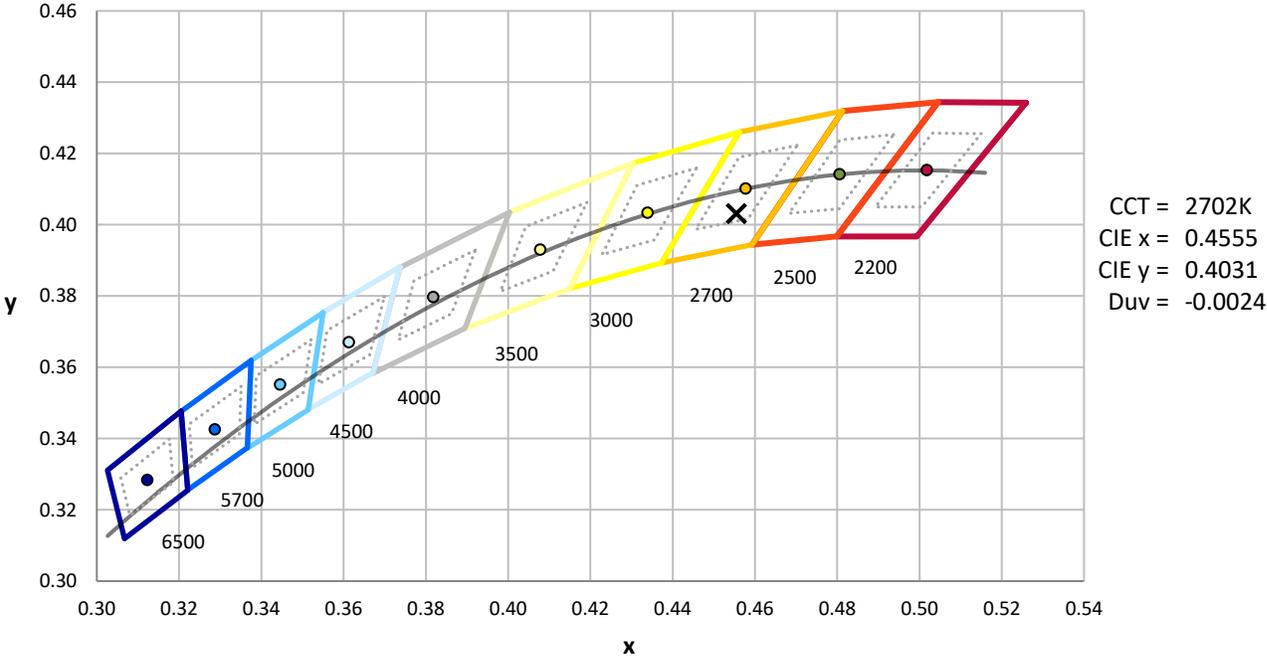
Sample Number	Condition	Description
P2509-560-LM.4	Good	EX LINEAR 4' SURFACE MOUNT DEEP, 400LM/FT 6

REPORT NUMBER: SP1-2509-560-1

CIE 1931 Chromaticity Diagram



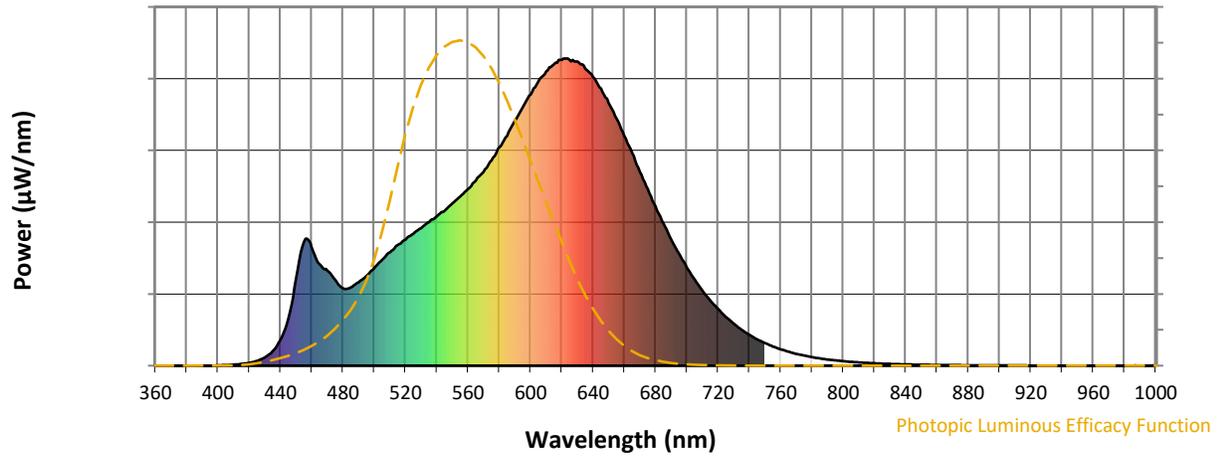
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2509-560-1

Photopic Flux vs. Wavelength

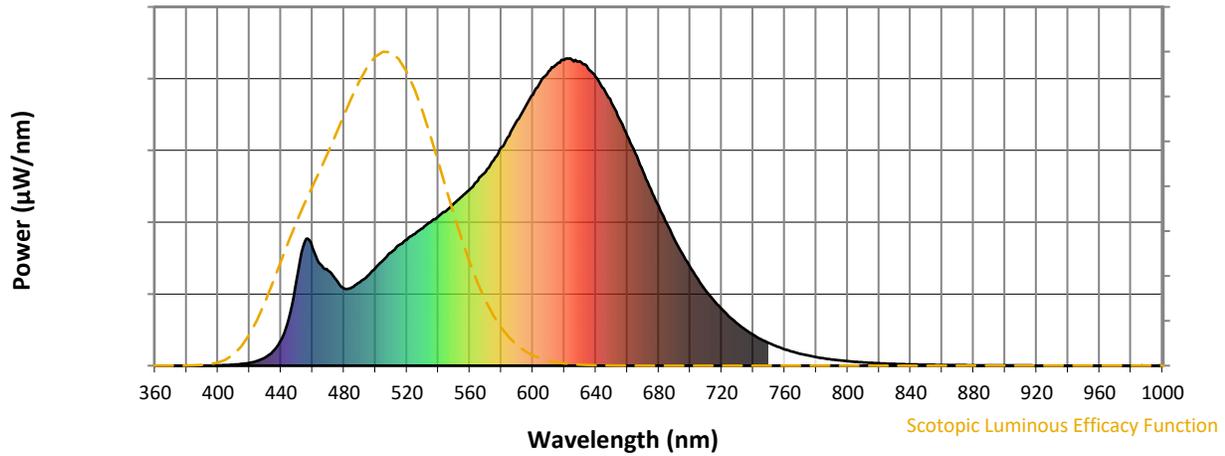


Photopic Lumens: NR

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	271	NR	620	995	NR	750	73	NR	880	1	NR
365	0	NR	495	292	NR	625	995	NR	755	63	NR	885	1	NR
370	0	NR	500	318	NR	630	991	NR	760	53	NR	890	1	NR
375	0	NR	505	344	NR	635	967	NR	765	46	NR	895	1	NR
380	0	NR	510	369	NR	640	939	NR	770	39	NR	900	1	NR
385	0	NR	515	393	NR	645	902	NR	775	33	NR	905	1	NR
390	0	NR	520	411	NR	650	855	NR	780	28	NR	910	1	NR
395	0	NR	525	429	NR	655	804	NR	785	24	NR	915	1	NR
400	1	NR	530	448	NR	660	748	NR	790	20	NR	920	1	NR
405	2	NR	535	467	NR	665	692	NR	795	17	NR	925	1	NR
410	3	NR	540	486	NR	670	631	NR	800	15	NR	930	0	NR
415	6	NR	545	505	NR	675	575	NR	805	12	NR	935	1	NR
420	10	NR	550	528	NR	680	519	NR	810	11	NR	940	0	NR
425	16	NR	555	551	NR	685	463	NR	815	9	NR	945	0	NR
430	27	NR	560	575	NR	690	412	NR	820	8	NR	950	0	NR
435	47	NR	565	603	NR	695	364	NR	825	7	NR	955	0	NR
440	84	NR	570	631	NR	700	320	NR	830	6	NR	960	0	NR
445	153	NR	575	668	NR	705	280	NR	835	5	NR	965	0	NR
450	283	NR	580	710	NR	710	244	NR	840	4	NR	970	0	NR
455	403	NR	585	748	NR	715	213	NR	845	4	NR	975	0	NR
460	386	NR	590	799	NR	720	184	NR	850	3	NR	980	0	NR
465	331	NR	595	841	NR	725	159	NR	855	3	NR	985	0	NR
470	308	NR	600	883	NR	730	137	NR	860	2	NR	990	1	NR
475	279	NR	605	925	NR	735	117	NR	865	2	NR	995	1	NR
480	251	NR	610	958	NR	740	100	NR	870	2	NR	1000	0	NR
485	255	NR	615	981	NR	745	86	NR	875	2	NR			

REPORT NUMBER: SP1-2509-560-1

Scotopic Flux vs. Wavelength



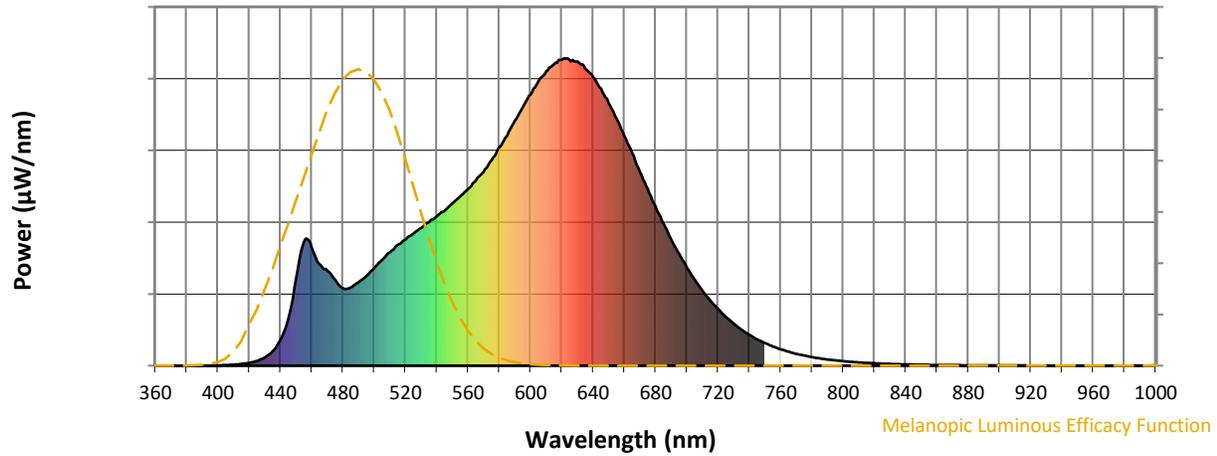
Scotopic Lumens: NR

S/P: 1.36

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	271	NR	620	995	NR	750	73	NR	880	1	NR
365	0	NR	495	292	NR	625	995	NR	755	63	NR	885	1	NR
370	0	NR	500	318	NR	630	991	NR	760	53	NR	890	1	NR
375	0	NR	505	344	NR	635	967	NR	765	46	NR	895	1	NR
380	0	NR	510	369	NR	640	939	NR	770	39	NR	900	1	NR
385	0	NR	515	393	NR	645	902	NR	775	33	NR	905	1	NR
390	0	NR	520	411	NR	650	855	NR	780	28	NR	910	1	NR
395	0	NR	525	429	NR	655	804	NR	785	24	NR	915	1	NR
400	1	NR	530	448	NR	660	748	NR	790	20	NR	920	1	NR
405	2	NR	535	467	NR	665	692	NR	795	17	NR	925	1	NR
410	3	NR	540	486	NR	670	631	NR	800	15	NR	930	0	NR
415	6	NR	545	505	NR	675	575	NR	805	12	NR	935	1	NR
420	10	NR	550	528	NR	680	519	NR	810	11	NR	940	0	NR
425	16	NR	555	551	NR	685	463	NR	815	9	NR	945	0	NR
430	27	NR	560	575	NR	690	412	NR	820	8	NR	950	0	NR
435	47	NR	565	603	NR	695	364	NR	825	7	NR	955	0	NR
440	84	NR	570	631	NR	700	320	NR	830	6	NR	960	0	NR
445	153	NR	575	668	NR	705	280	NR	835	5	NR	965	0	NR
450	283	NR	580	710	NR	710	244	NR	840	4	NR	970	0	NR
455	403	NR	585	748	NR	715	213	NR	845	4	NR	975	0	NR
460	386	NR	590	799	NR	720	184	NR	850	3	NR	980	0	NR
465	331	NR	595	841	NR	725	159	NR	855	3	NR	985	0	NR
470	308	NR	600	883	NR	730	137	NR	860	2	NR	990	1	NR
475	279	NR	605	925	NR	735	117	NR	865	2	NR	995	1	NR
480	251	NR	610	958	NR	740	100	NR	870	2	NR	1000	0	NR
485	255	NR	615	981	NR	745	86	NR	875	2	NR			

REPORT NUMBER: SP1-2509-560-1

Melanopic Flux vs. Wavelength



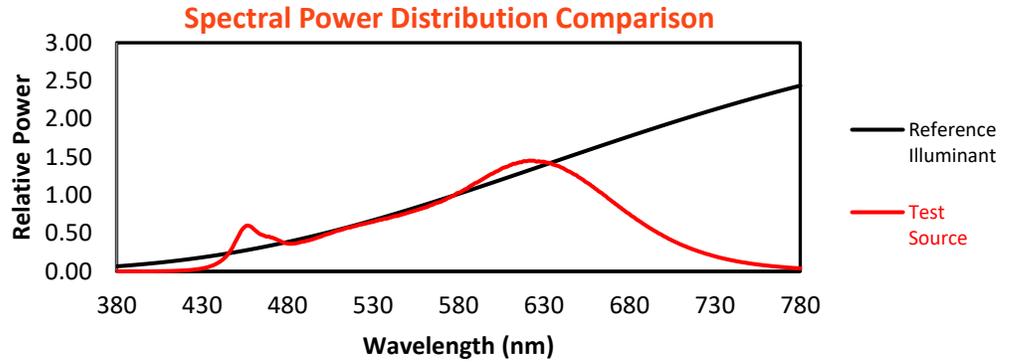
Melanopic Lumens: NR

M/P: 2.67

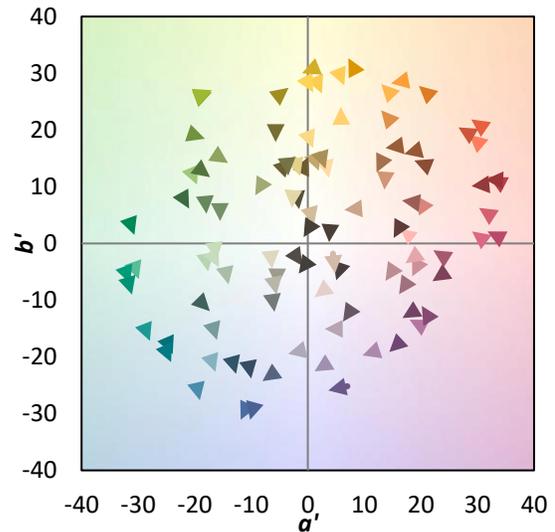
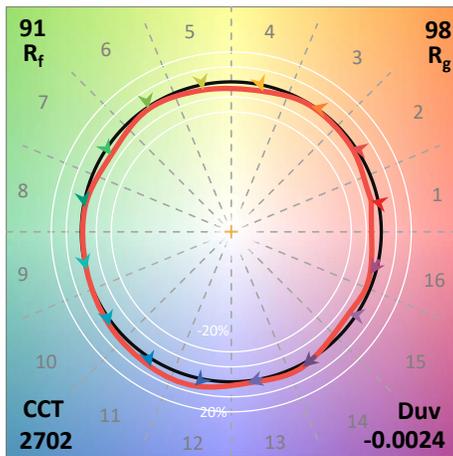
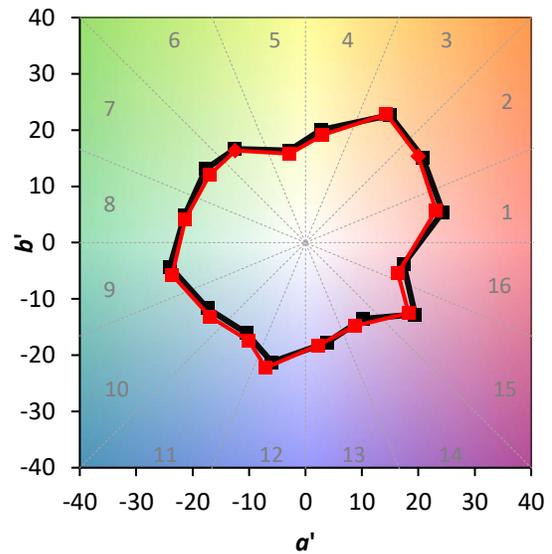
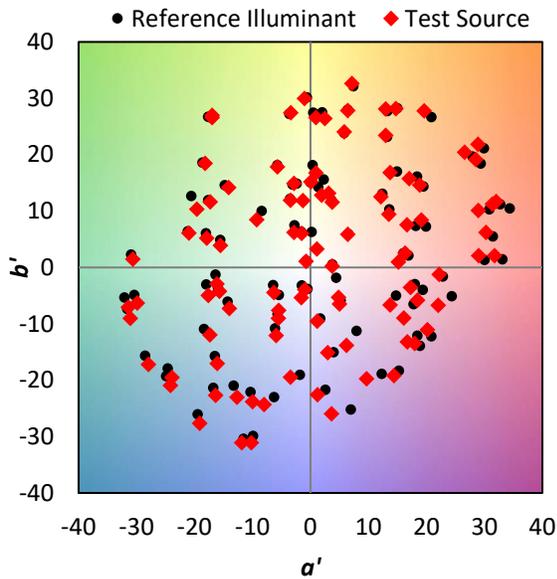
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	271	NR	620	995	NR	750	73	NR	880	1	NR
365	0	NR	495	292	NR	625	995	NR	755	63	NR	885	1	NR
370	0	NR	500	318	NR	630	991	NR	760	53	NR	890	1	NR
375	0	NR	505	344	NR	635	967	NR	765	46	NR	895	1	NR
380	0	NR	510	369	NR	640	939	NR	770	39	NR	900	1	NR
385	0	NR	515	393	NR	645	902	NR	775	33	NR	905	1	NR
390	0	NR	520	411	NR	650	855	NR	780	28	NR	910	1	NR
395	0	NR	525	429	NR	655	804	NR	785	24	NR	915	1	NR
400	1	NR	530	448	NR	660	748	NR	790	20	NR	920	1	NR
405	2	NR	535	467	NR	665	692	NR	795	17	NR	925	1	NR
410	3	NR	540	486	NR	670	631	NR	800	15	NR	930	0	NR
415	6	NR	545	505	NR	675	575	NR	805	12	NR	935	1	NR
420	10	NR	550	528	NR	680	519	NR	810	11	NR	940	0	NR
425	16	NR	555	551	NR	685	463	NR	815	9	NR	945	0	NR
430	27	NR	560	575	NR	690	412	NR	820	8	NR	950	0	NR
435	47	NR	565	603	NR	695	364	NR	825	7	NR	955	0	NR
440	84	NR	570	631	NR	700	320	NR	830	6	NR	960	0	NR
445	153	NR	575	668	NR	705	280	NR	835	5	NR	965	0	NR
450	283	NR	580	710	NR	710	244	NR	840	4	NR	970	0	NR
455	403	NR	585	748	NR	715	213	NR	845	4	NR	975	0	NR
460	386	NR	590	799	NR	720	184	NR	850	3	NR	980	0	NR
465	331	NR	595	841	NR	725	159	NR	855	3	NR	985	0	NR
470	308	NR	600	883	NR	730	137	NR	860	2	NR	990	1	NR
475	279	NR	605	925	NR	735	117	NR	865	2	NR	995	1	NR
480	251	NR	610	958	NR	740	100	NR	870	2	NR	1000	0	NR
485	255	NR	615	981	NR	745	86	NR	875	2	NR			

Summary

$R_f = 91.1$
 $R_g = 97.7$
 $CIE R_a = 93.3$
 $R_9 = 65.7$

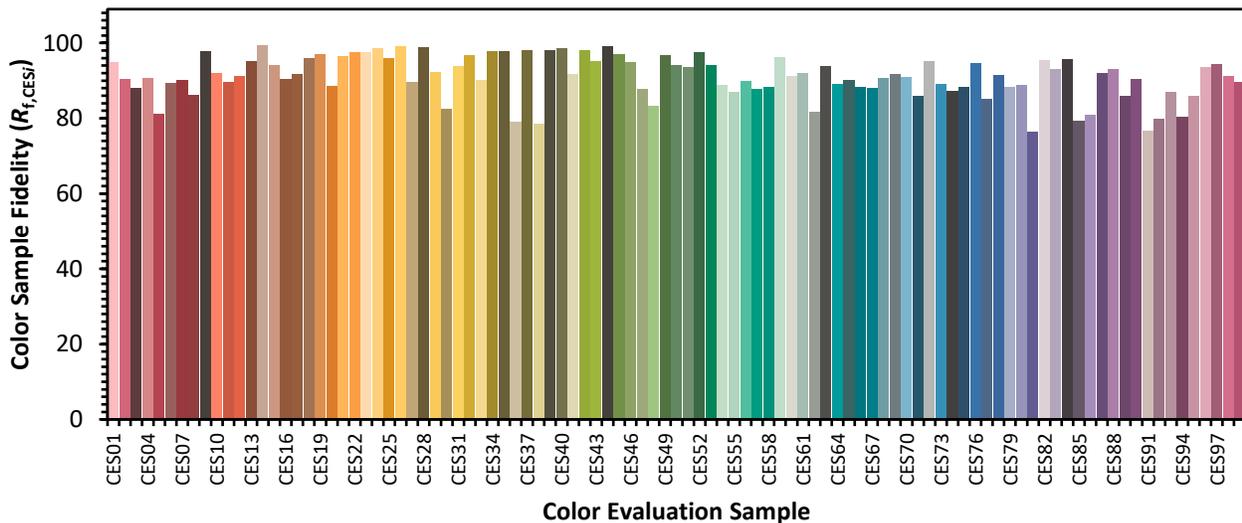


Color Vector Graphics

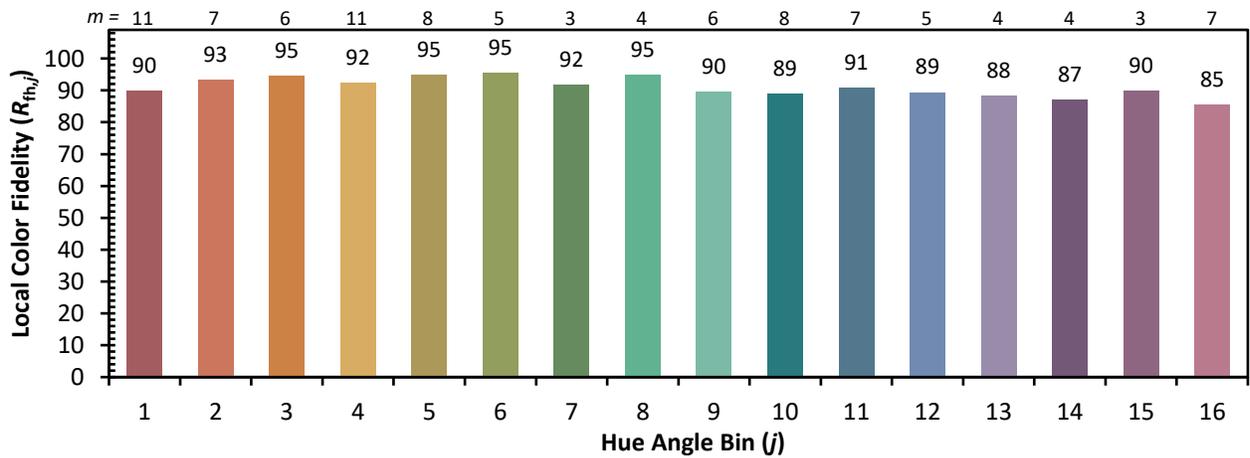
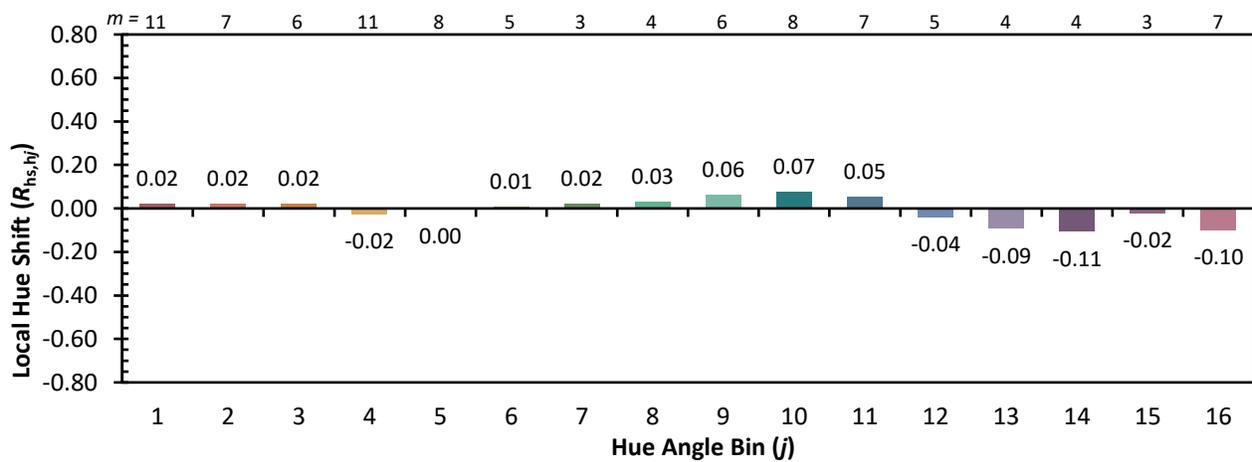
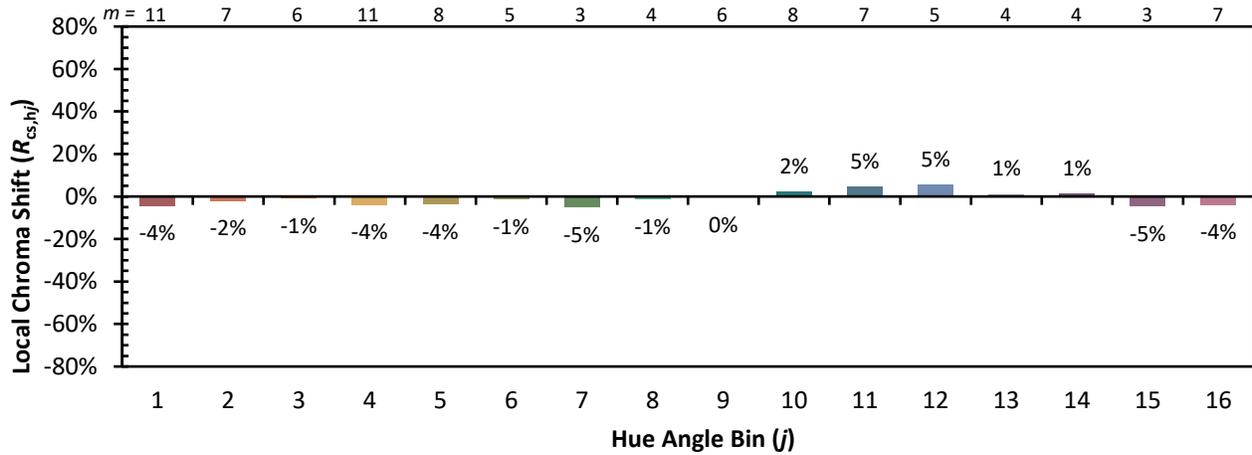


Individual Sample Fidelity Index ($R_{f,i}$)

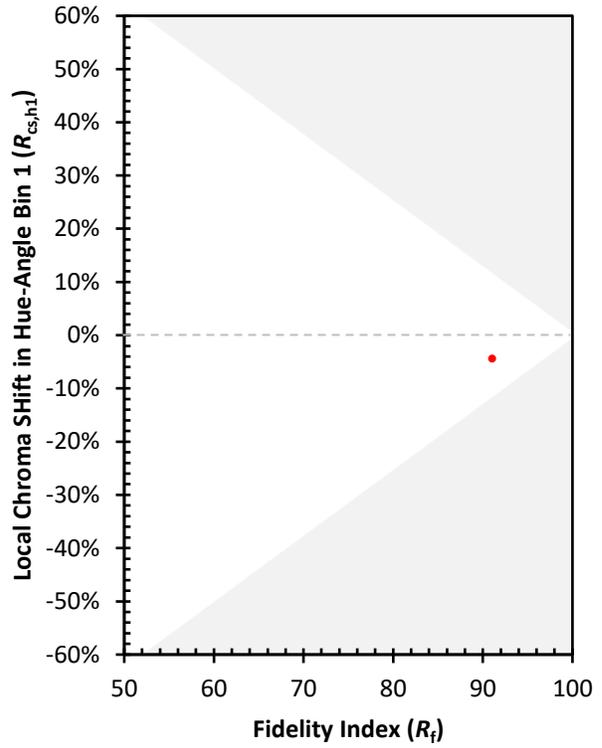
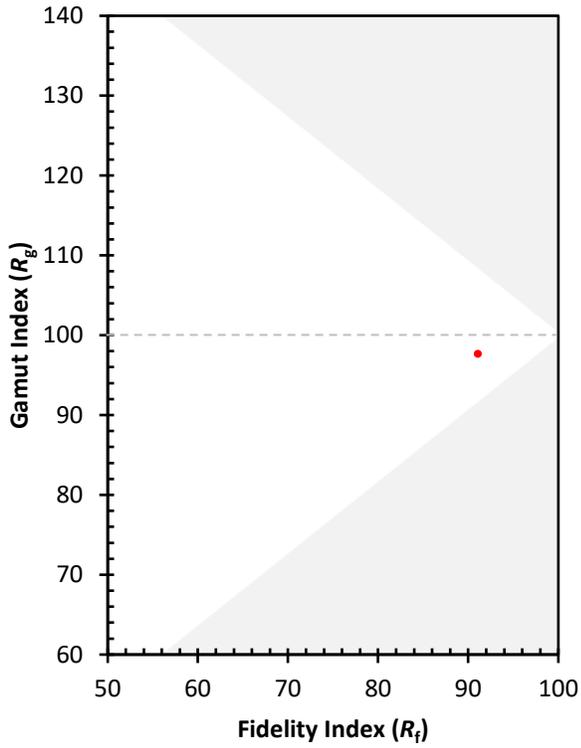
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CES02 = 64	CES27 = 90	CES52 = 98	CES77 = 85
CES03 = 32	CES28 = 99	CES53 = 94	CES78 = 91
CES04 = 71	CES29 = 92	CES54 = 89	CES79 = 88
CES05 = 51	CES30 = 82	CES55 = 87	CES80 = 89
CES06 = 52	CES31 = 94	CES56 = 90	CES81 = 76
CES07 = 44	CES32 = 97	CES57 = 88	CES82 = 95
CES08 = 43	CES33 = 90	CES58 = 88	CES83 = 93
CES09 = 29	CES34 = 98	CES59 = 96	CES84 = 96
CES10 = 77	CES35 = 98	CES60 = 91	CES85 = 79
CES11 = 60	CES36 = 79	CES61 = 92	CES86 = 81
CES12 = 66	CES37 = 98	CES62 = 82	CES87 = 92
CES13 = 44	CES38 = 79	CES63 = 94	CES88 = 93
CES14 = 74	CES39 = 98	CES64 = 89	CES89 = 86
CES15 = 72	CES40 = 99	CES65 = 90	CES90 = 91
CES16 = 48	CES41 = 92	CES66 = 88	CES91 = 77
CES17 = 50	CES42 = 98	CES67 = 88	CES92 = 80
CES18 = 57	CES43 = 95	CES68 = 91	CES93 = 87
CES19 = 72	CES44 = 99	CES69 = 92	CES94 = 80
CES20 = 68	CES45 = 97	CES70 = 91	CES95 = 86
CES21 = 87	CES46 = 95	CES71 = 86	CES96 = 93
CES22 = 79	CES47 = 88	CES72 = 95	CES97 = 94
CES23 = 92	CES48 = 83	CES73 = 89	CES98 = 91
CES24 = 91	CES49 = 97	CES74 = 87	CES99 = 90
CES25 = 72	CES50 = 94	CES75 = 88	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)