

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: P639486

Luminaire Tested: RL4LS9FSD2W1EWHDM -900LM -3500K

Issue Date: 1/25/2023

Test Information

Test Method: LM-79-2019
Report Number: P639486
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2206549A001)
Test Lab:
Issue Date: 1/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: RL4LS9FSD2W1EWHDM -900LM -3500K
Description: 4IN DIRECT MOUNT, SELECTABLE LUMEN AND CCT, MATTE WHITE BAFFLE
Light Source: (1) SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 975.0 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.2
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

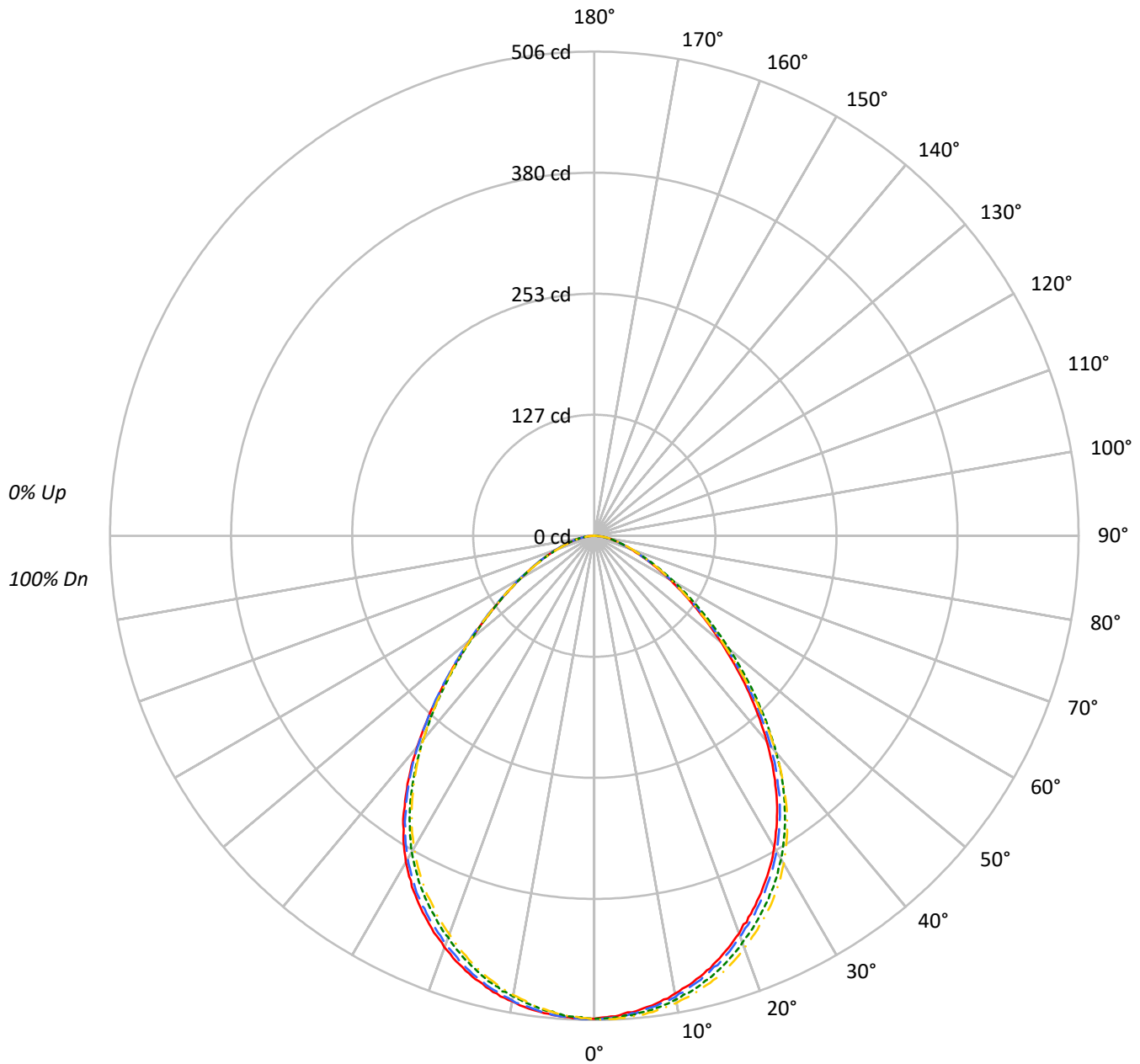
Input Watts (W): 11.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	103	100	108	105	101	99	101	98	96	97	95	93	93	91	90	88		
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77		
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67		
4	88	77	70	64	86	76	69	63	74	68	63	71	66	62	69	65	61	59		
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52		
6	76	64	56	50	74	63	55	50	61	55	50	60	54	49	58	53	49	47		
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42		
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38		
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35		
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	62377	62377	62377	62377
5°	61883	62231	62380	61921
10°	60955	61758	62009	61306
15°	59882	60931	61404	60304
20°	58160	59528	60212	58726
25°	56211	57875	58502	57002
30°	53646	55701	56229	54416
35°	50137	52340	52098	50424
40°	45207	47692	46465	44884
45°	39344	41791	39362	38488
50°	33225	35379	32456	32091
55°	27366	29305	26568	26525
60°	22321	23903	21925	21851
65°	18044	19214	18249	18044
70°	14563	15249	15213	14960
75°	12225	12368	12845	12702
80°	10391	10534	11317	11174
85°	7090	7232	9076	8934

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 41791 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.5	4.9
10°-20°	133.4	13.7
20°-30°	193.5	19.8
30°-40°	211.4	21.7
40°-50°	175.7	18.0
50°-60°	115.0	11.8
60°-70°	63.2	6.5
70°-80°	28.5	2.9
80°-90°	6.9	0.7
90°-100°	0.0	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°	374.3	38.4
0°-40°	585.8	60.1
0°-60°	876.4	89.9
0°-90°	975.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	975.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	505	505	505	505	505	
5°	499	502	503	499	499	47
15°	468	476	480	471	468	131
25°	412	424	429	418	412	189
35°	332	347	345	334	332	206
45°	225	239	225	220	225	174
55°	127	136	123	123	127	115
65°	62	66	62	62	62	62
75°	26	26	27	27	26	28
85°	5	5	6	6	5	6
90°	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°	504.7	504.7	504.7	504.7	504.7	504.7	504.7	504.7	504.7	504.7	504.7
0.5°	503.9	503.7	505.1	504.9	504.6	505.2	505.3	504.9	504.7	503.7	505.1
1°	503.6	502.9	504.9	505.2	504.6	505.6	505.7	505.1	505.3	503.8	505.1
1.5°	503.4	503.6	504.0	504.2	504.5	505.4	505.3	505.3	504.6	503.9	505.2
2°	502.5	502.5	504.3	503.9	504.2	504.4	505.5	504.9	504.5	503.9	504.6
2.5°	502.9	501.6	503.4	503.4	504.0	504.7	505.5	505.0	504.8	504.7	504.6
3°	501.8	501.4	502.9	503.1	504.4	505.1	504.6	505.2	503.9	503.3	504.0
3.5°	500.4	501.7	502.3	502.1	502.7	504.1	504.8	504.6	503.9	503.0	503.4
4°	499.3	500.5	502.0	501.9	502.1	503.9	504.5	504.3	503.4	502.9	503.5
4.5°	499.7	499.7	500.6	501.7	502.7	504.2	504.2	503.7	503.0	502.1	503.0
5°	498.8	498.6	501.1	501.6	501.6	502.4	503.5	504.1	502.8	502.4	502.4
5.5°	497.6	498.5	498.8	500.1	500.7	503.1	503.4	502.7	501.9	501.2	501.4
6°	496.4	496.3	498.4	499.1	500.2	501.4	502.7	502.5	501.6	501.0	501.3
6.5°	495.4	495.6	497.1	498.7	499.6	501.3	501.7	501.7	500.8	500.2	500.3
7°	494.6	494.5	496.4	498.1	499.0	500.4	501.4	501.1	500.1	499.6	498.9
7.5°	493.4	493.5	495.5	495.7	497.7	498.8	500.4	500.2	499.5	497.8	498.0
8°	491.8	491.7	493.8	494.7	497.1	498.6	498.6	499.9	498.8	497.3	497.0
8.5°	489.9	490.6	492.4	494.5	495.6	497.7	498.6	498.4	497.7	497.0	496.5
9°	489.8	489.5	492.0	493.0	495.0	496.4	497.6	497.9	496.9	494.9	495.3
9.5°	487.7	487.6	490.5	490.9	493.2	495.4	496.3	497.2	495.2	493.9	495.0
10°	485.7	486.9	489.5	490.5	492.1	494.1	495.7	495.6	494.1	494.2	493.2
10.5°	484.5	484.5	486.4	488.3	491.0	492.8	493.9	494.3	493.3	492.0	491.4
11°	482.3	482.7	486.1	486.9	488.6	492.0	492.9	493.7	491.8	491.2	490.4
11.5°	481.1	481.3	483.6	484.4	488.3	489.5	492.0	491.5	491.3	489.1	489.4
12°	479.6	480.2	481.8	484.3	486.8	488.9	489.9	490.4	489.2	488.3	487.3
12.5°	477.7	478.7	480.2	481.7	485.0	487.1	489.2	489.0	488.5	486.2	486.2
13°	475.4	476.0	478.4	480.3	483.3	485.8	487.3	487.7	486.4	485.2	484.6
13.5°	474.0	474.0	477.1	479.0	481.5	483.7	485.6	485.6	485.1	484.0	482.9
14°	471.7	472.2	474.0	477.3	479.3	481.9	483.9	484.5	482.6	480.8	480.6
14.5°	469.1	470.3	472.8	475.5	478.1	480.7	482.9	482.2	480.9	479.4	479.3
15°	468.0	468.0	470.2	473.2	476.2	478.8	480.6	481.2	479.9	478.1	477.1
15.5°	464.8	466.0	467.6	471.3	473.8	476.8	479.4	478.7	478.0	476.7	475.4
16°	462.7	462.9	466.9	467.5	472.0	475.0	477.4	477.3	475.8	474.7	472.8
16.5°	460.7	461.1	464.4	466.1	469.8	473.1	475.0	475.8	474.0	472.0	471.1
17°	457.7	458.8	461.2	463.4	467.7	470.3	472.8	473.0	471.5	469.1	468.4
17.5°	455.3	456.2	459.1	460.5	465.2	468.8	470.9	470.4	469.3	467.6	467.0
18°	452.9	454.3	456.7	458.9	462.6	465.9	468.4	469.0	467.5	465.0	463.5
18.5°	450.4	450.4	453.9	455.3	460.5	463.8	466.0	466.4	465.2	463.3	461.1
19°	447.4	448.5	451.3	453.6	457.9	461.5	463.6	463.6	462.2	460.2	458.9
19.5°	444.6	445.6	448.4	450.9	455.6	458.3	461.4	461.7	460.0	458.3	456.6
20°	442.2	443.1	445.8	448.1	452.6	456.2	458.5	458.7	457.8	455.9	453.9
20.5°	438.9	440.6	443.0	444.9	449.5	453.5	456.0	456.0	454.2	452.8	451.2
21°	434.9	436.5	439.4	442.3	447.3	450.7	453.4	453.5	451.9	449.3	447.9



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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°	427.5	428.7	431.5	434.4	439.2	442.6	445.5	446.1	444.0	442.3	440.2
23°	424.4	425.6	429.2	430.8	436.4	439.6	441.9	442.9	441.2	438.8	437.6
23.5°	421.6	422.7	425.5	428.7	433.4	437.3	440.0	439.7	438.2	436.8	434.5
24°	418.0	419.1	422.3	424.6	430.4	434.8	436.6	438.1	435.1	433.2	431.6
24.5°	415.1	416.2	419.6	422.3	427.7	431.4	433.4	434.1	432.4	430.6	427.9
25°	412.2	413.3	416.2	419.9	424.4	428.7	431.0	430.8	429.0	427.9	426.3
25.5°	408.3	409.7	413.2	415.5	421.9	425.6	427.9	427.5	426.2	424.0	422.1
26°	405.0	406.1	409.6	413.1	417.7	422.0	424.6	424.9	422.5	420.5	419.3
26.5°	401.8	403.6	405.9	409.8	414.9	420.0	421.4	421.1	419.3	417.8	416.4
27°	398.4	399.6	402.8	406.0	412.0	415.8	417.4	417.5	416.3	413.6	412.4
27.5°	394.8	396.2	399.2	402.8	408.2	412.3	414.3	414.3	413.2	410.8	409.0
28°	391.4	392.5	396.1	399.6	405.1	408.7	410.6	411.0	408.1	406.9	405.4
28.5°	387.8	388.9	392.2	395.4	401.5	405.2	407.4	407.0	405.4	403.4	401.3
29°	384.2	384.8	388.2	391.4	397.2	401.7	403.4	402.6	401.2	399.8	397.6
29.5°	379.9	381.5	384.6	387.9	393.8	397.7	399.2	399.1	397.4	394.8	393.9
30°	375.9	376.3	380.9	384.2	390.3	393.8	396.1	395.3	394.0	391.8	390.1
30.5°	371.7	373.4	376.8	380.3	386.3	390.1	391.1	391.3	389.3	387.5	385.6
31°	367.8	369.8	372.6	375.9	382.4	385.8	387.4	387.3	385.2	383.3	381.1
31.5°	362.9	365.5	368.1	371.8	378.0	381.9	383.2	382.5	380.5	378.9	377.3
32°	359.6	360.8	364.3	367.5	373.6	376.9	378.7	377.5	376.3	374.7	372.5
32.5°	354.8	357.1	360.0	363.5	369.9	373.5	374.5	372.8	371.2	369.5	367.8
33°	350.0	352.2	355.4	358.7	365.0	368.2	370.0	368.7	365.9	365.0	362.8
33.5°	346.1	347.6	351.4	355.0	361.1	364.1	364.9	363.4	361.8	360.1	358.8
34°	341.6	343.1	346.8	350.3	356.2	359.8	360.3	358.2	356.9	354.7	352.9
34.5°	337.0	338.4	342.1	345.2	351.8	355.0	355.3	353.3	351.5	350.5	347.2
35°	332.3	333.3	337.3	340.3	346.9	350.5	350.6	347.9	345.3	344.8	343.6
35.5°	327.0	328.8	333.3	336.1	342.5	345.1	345.3	343.0	340.5	339.5	337.8
36°	321.9	323.9	327.5	331.7	337.5	340.4	339.7	337.5	335.2	334.1	332.8
36.5°	317.4	318.6	322.2	326.3	332.6	334.9	334.6	332.1	329.2	328.2	326.6
37°	312.0	313.8	318.1	321.1	327.6	329.9	329.3	326.2	324.3	323.5	321.4
37.5°	306.9	309.2	312.8	315.4	322.5	324.8	323.8	320.7	318.0	317.4	316.1
38°	301.9	303.8	307.5	310.1	317.6	319.0	318.2	314.8	311.9	311.8	310.3
38.5°	296.2	298.7	302.7	305.4	311.7	314.0	312.6	308.8	306.6	306.0	304.8
39°	291.2	293.0	296.9	300.8	306.7	307.8	306.7	302.6	300.5	299.6	298.6
39.5°	285.8	288.5	291.4	295.2	300.8	302.8	301.0	296.7	293.8	294.0	292.6
40°	280.2	282.9	286.5	289.6	295.6	297.2	294.7	290.5	288.0	287.7	286.4
40.5°	274.9	276.9	281.0	283.9	290.1	291.2	289.4	284.4	281.5	281.9	280.8
41°	269.4	272.0	275.6	278.8	284.5	285.6	283.1	278.1	275.3	275.7	274.7
41.5°	263.8	265.8	270.1	272.9	278.7	280.0	277.3	271.6	269.3	269.5	268.2
42°	258.6	260.8	264.5	267.0	273.1	273.9	270.8	265.1	262.2	262.6	261.9
42.5°	252.7	255.2	258.7	262.1	267.6	268.3	264.9	259.4	256.6	257.2	256.3
43°	247.5	249.8	253.7	256.4	261.9	262.1	258.8	252.8	250.6	250.9	250.4
43.5°	241.8	244.2	247.6	250.8	256.0	256.6	252.7	246.5	243.6	244.7	243.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	225.1	227.9	230.7	234.1	239.1	238.7	234.3	227.7	225.2	226.3	226.3
45.5°	219.9	222.5	225.4	228.3	233.1	232.5	228.4	221.6	219.5	220.4	220.4
46°	214.2	216.6	220.3	222.9	227.6	227.2	221.8	215.7	213.0	214.7	214.8
46.5°	209.2	211.5	214.7	217.4	221.9	221.1	216.5	209.7	207.2	209.1	208.5
47°	203.5	206.3	209.3	211.9	216.1	215.6	210.2	203.6	201.7	203.0	203.2
47.5°	198.3	200.5	203.7	206.4	210.7	209.7	204.4	197.9	195.8	197.2	197.6
48°	193.2	195.5	198.5	200.8	205.2	204.0	198.9	192.3	190.2	191.5	191.8
48.5°	187.6	190.0	193.4	195.5	199.9	199.2	193.1	186.8	184.5	186.2	186.7
49°	182.7	185.0	187.9	190.7	194.8	192.9	187.6	181.3	179.2	180.6	181.6
49.5°	177.5	179.8	182.7	185.1	189.2	187.9	182.1	175.7	173.7	175.3	176.2
50°	172.8	174.9	177.5	179.9	184.0	182.5	176.8	170.8	168.8	170.1	170.8
50.5°	167.7	169.6	172.8	174.7	178.6	177.4	171.4	165.4	163.4	165.2	166.2
51°	162.9	164.9	167.6	169.6	173.8	172.2	166.6	160.3	158.5	160.2	160.9
51.5°	158.2	160.3	162.6	164.8	168.8	167.2	161.5	155.5	153.6	155.1	156.2
52°	153.5	155.3	157.8	159.9	163.8	162.1	156.5	150.9	149.1	150.5	151.5
52.5°	148.8	150.5	153.2	155.1	158.9	157.2	151.5	146.1	144.6	145.9	147.0
53°	143.9	146.1	148.7	150.2	154.2	152.5	146.9	141.6	139.9	141.1	142.3
53.5°	139.7	141.8	144.1	145.8	149.3	147.9	142.4	137.2	135.6	136.8	138.0
54°	135.3	137.3	139.1	141.0	144.9	143.0	137.7	133.0	131.4	132.5	133.6
54.5°	131.2	132.9	135.0	136.7	140.4	138.7	133.5	128.6	127.3	128.2	129.5
55°	127.0	128.8	130.8	132.8	136.0	134.7	129.2	124.9	123.3	124.2	125.4
55.5°	122.8	124.8	126.4	128.3	131.6	129.9	125.2	120.7	119.2	120.3	121.4
56°	119.0	120.6	122.5	124.2	127.4	125.8	121.1	117.1	115.6	116.4	117.7
56.5°	115.1	116.9	118.5	119.9	123.1	121.6	117.3	113.2	111.8	112.7	113.7
57°	111.3	113.0	114.5	116.1	119.1	117.7	113.4	109.7	108.0	108.9	110.0
57.5°	107.9	109.0	110.8	112.2	115.2	113.7	109.7	106.2	104.8	105.6	106.5
58°	104.0	105.6	107.2	108.4	111.2	110.0	106.3	102.6	101.1	102.0	103.0
58.5°	100.7	101.8	103.3	104.7	107.4	106.4	102.7	99.6	98.1	98.6	99.8
59°	97.2	98.3	99.6	100.9	103.8	102.5	99.1	96.2	94.9	95.4	96.4
59.5°	93.5	94.9	96.4	97.6	100.2	99.0	95.8	92.9	91.5	92.3	93.2
60°	90.3	91.5	93.0	94.0	96.7	95.7	92.5	89.8	88.7	89.1	89.9
60.5°	87.3	88.3	89.6	90.6	93.2	92.1	89.3	87.0	85.8	86.1	87.0
61°	83.9	85.0	86.2	87.5	89.9	88.9	86.4	83.9	82.9	83.1	84.2
61.5°	81.0	82.0	83.0	84.1	86.8	85.7	83.3	81.2	80.2	80.3	81.4
62°	78.1	78.8	80.1	81.1	83.4	82.7	80.4	78.4	77.4	77.5	78.6
62.5°	75.2	75.9	77.0	77.9	80.4	79.6	77.6	75.8	74.8	74.8	76.0
63°	72.2	73.1	74.1	75.0	77.3	76.7	74.8	73.0	72.0	72.1	73.2
63.5°	69.5	70.2	71.1	72.1	74.4	73.7	71.9	70.3	69.6	69.7	70.4
64°	66.8	67.4	68.3	69.3	71.4	70.7	69.3	67.9	67.2	67.2	67.8
64.5°	64.2	64.9	65.8	66.5	68.5	68.0	66.7	65.5	64.8	64.9	65.5
65°	61.7	62.3	63.2	63.7	65.7	65.3	64.2	63.1	62.4	62.5	63.1
65.5°	59.2	59.8	60.5	61.2	63.1	62.8	61.8	60.8	60.1	60.1	60.7
66°	56.7	57.2	58.0	58.6	60.4	60.1	59.4	58.5	57.9	57.9	58.4

TEST NUMBER: P639486

CATALOG NUMBER: RL4LS9FSD2W1EWHDM -900LM -3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	50.1	50.4	51.0	51.5	53.1	52.9	52.6	52.0	51.6	51.7	52.0
68°	47.9	48.3	48.7	49.3	50.7	50.7	50.5	49.9	49.5	49.7	49.9
68.5°	46.0	46.3	46.7	47.0	48.5	48.5	48.4	48.0	47.6	47.7	47.9
69°	44.1	44.3	44.7	45.0	46.3	46.3	46.4	46.1	45.9	45.9	46.1
69.5°	42.2	42.4	42.7	43.0	44.3	44.4	44.5	44.2	43.9	44.0	44.2
70°	40.3	40.5	40.7	40.9	42.2	42.4	42.5	42.4	42.1	42.3	42.4
70.5°	38.6	38.7	39.0	39.2	40.3	40.5	40.8	40.6	40.4	40.5	40.7
71°	36.8	37.0	37.1	37.3	38.4	38.7	39.0	38.9	38.6	38.8	39.0
71.5°	35.3	35.4	35.5	35.6	36.6	36.8	37.2	37.2	37.0	37.1	37.3
72°	34.3	34.0	34.0	33.8	35.0	35.2	35.6	35.6	35.6	35.7	35.8
72.5°	32.7	32.5	32.5	32.3	33.3	33.6	34.0	34.1	34.0	34.1	34.2
73°	31.2	31.0	31.0	30.9	31.6	32.0	32.5	32.5	32.5	32.6	32.7
73.5°	29.6	29.5	29.5	29.4	30.1	30.4	30.9	31.0	31.0	31.2	31.2
74°	28.1	28.0	28.0	27.9	28.7	29.0	29.4	29.6	29.6	29.7	29.8
74.5°	26.7	26.7	26.6	26.5	27.3	27.6	28.0	28.2	28.2	28.3	28.5
75°	25.6	25.5	25.4	25.3	25.9	26.3	26.7	26.9	26.9	27.0	27.1
75.5°	24.4	24.3	24.2	24.2	24.8	25.1	25.5	25.7	25.7	25.7	25.8
76°	23.2	23.1	23.0	23.0	23.7	23.9	24.3	24.4	24.4	24.6	24.7
76.5°	22.1	22.0	21.9	21.9	22.6	22.7	23.1	23.2	23.3	23.4	23.6
77°	21.0	20.9	20.8	20.8	21.4	21.7	22.0	22.1	22.2	22.4	22.5
77.5°	20.0	19.8	19.7	19.7	20.3	20.6	21.0	21.1	21.2	21.4	21.5
78°	18.8	18.7	18.6	18.6	19.2	19.5	19.9	20.1	20.1	20.4	20.5
78.5°	17.7	17.6	17.5	17.4	18.1	18.4	18.8	18.9	19.1	19.3	19.4
79°	16.6	16.5	16.3	16.3	17.0	17.3	17.7	17.8	18.0	18.2	18.3
79.5°	15.5	15.4	15.4	15.3	15.9	16.2	16.6	16.8	16.9	17.2	17.2
80°	14.6	14.4	14.3	14.2	14.8	15.2	15.5	15.8	15.9	16.2	16.3
80.5°	13.5	13.4	13.3	13.2	13.8	14.1	14.5	14.8	15.0	15.2	15.4
81°	12.6	12.4	12.2	12.1	12.8	13.1	13.5	13.8	13.9	14.2	14.3
81.5°	11.5	11.3	11.2	11.0	11.7	12.1	12.5	12.8	12.9	13.2	13.3
82°	10.5	10.4	10.2	10.1	10.7	11.0	11.5	11.7	11.9	12.2	12.3
82.5°	9.6	9.4	9.2	9.1	9.8	10.1	10.5	10.7	10.9	11.2	11.3
83°	8.5	8.4	8.2	8.2	8.8	9.1	9.6	9.8	10.0	10.2	10.4
83.5°	7.6	7.5	7.3	7.2	7.9	8.2	8.7	8.9	9.1	9.4	9.5
84°	6.8	6.6	6.4	6.4	7.0	7.3	7.7	8.0	8.2	8.5	8.6
84.5°	5.9	5.7	5.5	5.4	6.0	6.4	6.8	7.1	7.3	7.6	7.7
85°	5.0	4.9	4.7	4.7	5.1	5.5	5.9	6.2	6.4	6.7	6.8
85.5°	4.3	4.1	3.9	3.9	4.4	4.7	5.1	5.3	5.5	5.7	5.9
86°	3.5	3.3	3.3	3.2	3.6	3.9	4.3	4.5	4.7	4.9	5.1
86.5°	2.8	2.6	2.6	2.4	2.8	3.1	3.5	3.8	4.0	4.1	4.2
87°	2.1	2.0	1.9	1.7	2.0	2.3	2.7	3.0	3.2	3.4	3.5
87.5°	1.4	1.3	1.2	1.0	1.4	1.6	1.9	2.2	2.4	2.6	2.7
88°	0.7	0.6	0.5	0.5	0.8	1.0	1.4	1.6	1.7	1.9	2.0
88.5°	0.3	0.4	0.3	0.2	0.3	0.5	0.8	1.0	1.1	1.3	1.4



TEST NUMBER: P639486
CATALOG NUMBER: RL4LS9FSD2W1EWHDM -900LM -3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2

TEST NUMBER: P639486

CATALOG NUMBER: RL4LS9FSD2W1EWHDM -900LM -3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	504.7	504.7	504.7	504.7	504.7	504.7
0.5°	504.2	504.7	505.0	504.9	504.4	503.9
1°	504.6	504.1	503.9	504.2	504.6	503.6
1.5°	505.8	503.4	504.4	504.5	504.3	503.4
2°	503.7	503.5	503.8	503.3	503.2	502.5
2.5°	504.9	503.0	503.0	503.1	503.3	502.9
3°	503.9	503.1	502.6	502.5	502.7	501.8
3.5°	502.7	502.8	502.2	502.3	501.5	500.4
4°	502.7	501.3	501.6	501.4	500.7	499.3
4.5°	502.4	501.3	500.8	500.7	499.6	499.7
5°	501.4	499.1	499.7	499.6	499.1	498.8
5.5°	500.4	499.2	498.5	498.7	498.1	497.6
6°	500.1	498.6	498.2	497.4	497.2	496.4
6.5°	499.2	497.5	497.3	496.7	496.8	495.4
7°	498.5	496.1	495.4	496.1	494.6	494.6
7.5°	497.1	495.2	494.8	494.2	494.0	493.4
8°	496.1	494.0	493.3	493.2	492.5	491.8
8.5°	495.5	493.2	492.1	491.1	490.7	489.9
9°	493.0	491.3	490.8	489.9	490.1	489.8
9.5°	491.6	490.3	489.2	488.5	488.1	487.7
10°	491.4	488.5	488.2	487.6	486.3	485.7
10.5°	490.6	487.6	486.4	485.5	484.1	484.5
11°	489.7	485.7	484.8	484.2	483.3	482.3
11.5°	486.9	485.9	483.3	482.7	481.6	481.1
12°	486.1	482.1	481.6	480.8	479.5	479.6
12.5°	483.2	481.3	479.4	478.6	477.8	477.7
13°	482.7	479.3	477.2	476.8	476.7	475.4
13.5°	481.3	478.3	475.9	475.2	473.9	474.0
14°	478.9	475.6	474.4	473.2	472.1	471.7
14.5°	476.7	473.8	472.0	471.4	470.4	469.1
15°	475.7	471.3	469.2	468.8	467.7	468.0
15.5°	472.8	468.9	467.7	465.9	465.1	464.8
16°	470.8	467.1	465.5	464.3	463.5	462.7
16.5°	468.5	464.6	462.9	462.0	460.9	460.7
17°	466.7	462.8	460.9	459.1	458.1	457.7
17.5°	464.1	460.2	458.7	456.8	455.9	455.3
18°	461.7	457.5	455.7	454.4	453.6	452.9
18.5°	459.7	455.3	453.4	451.6	450.3	450.4
19°	457.2	452.3	450.5	448.9	447.4	447.4
19.5°	453.6	449.7	447.7	446.1	445.2	444.6
20°	451.7	446.5	445.6	443.0	442.3	442.2
20.5°	448.5	444.5	442.2	440.5	439.6	438.9
21°	446.1	442.0	439.5	437.6	436.6	434.9

TEST NUMBER: P639486

CATALOG NUMBER: RL4LS9FSD2W1EWHDM -900LM -3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	438.6	432.8	430.6	429.3	427.5	427.5
23°	434.7	429.5	427.4	425.7	424.9	424.4
23.5°	431.6	427.2	424.6	422.2	421.6	421.6
24°	428.1	424.1	422.0	419.3	418.4	418.0
24.5°	426.2	420.8	418.8	416.2	415.2	415.1
25°	422.0	418.0	415.3	413.7	412.7	412.2
25.5°	418.6	414.3	412.4	409.5	408.8	408.3
26°	416.6	411.1	409.1	406.6	405.1	405.0
26.5°	412.3	408.1	405.7	402.9	402.2	401.8
27°	409.2	404.5	401.9	399.8	398.4	398.4
27.5°	406.1	400.4	397.8	395.9	395.0	394.8
28°	402.1	396.7	394.0	392.7	391.6	391.4
28.5°	398.7	393.1	390.5	388.5	387.4	387.8
29°	394.0	389.0	386.2	384.8	384.0	384.2
29.5°	390.5	385.7	382.9	380.4	379.8	379.9
30°	386.7	381.3	379.0	376.7	376.5	375.9
30.5°	382.6	377.3	374.6	372.6	372.0	371.7
31°	378.5	372.4	370.2	368.3	367.4	367.8
31.5°	374.6	368.4	366.2	364.2	363.3	362.9
32°	369.0	363.8	361.6	359.7	358.8	359.6
32.5°	364.3	358.8	356.8	355.0	354.8	354.8
33°	359.9	354.4	352.4	350.3	350.0	350.0
33.5°	354.6	349.5	347.4	346.0	345.6	346.1
34°	350.8	344.5	342.3	341.0	341.1	341.6
34.5°	344.9	339.8	337.3	336.2	335.7	337.0
35°	339.9	334.2	332.2	331.2	331.1	332.3
35.5°	334.8	329.1	327.0	325.7	326.3	327.0
36°	329.2	323.5	322.0	321.2	321.4	321.9
36.5°	324.3	318.4	316.5	316.0	316.1	317.4
37°	318.2	312.7	311.2	310.4	310.8	312.0
37.5°	313.2	307.3	305.7	305.5	305.8	306.9
38°	307.4	301.5	300.2	300.0	300.5	301.9
38.5°	301.7	295.5	294.8	294.3	295.0	296.2
39°	295.5	290.2	288.7	288.9	290.3	291.2
39.5°	290.0	284.2	283.6	283.7	284.4	285.8
40°	284.3	278.2	277.3	277.8	278.8	280.2
40.5°	277.9	272.5	272.1	272.4	274.0	274.9
41°	272.2	266.4	266.1	266.6	267.8	269.4
41.5°	266.2	260.8	260.4	261.1	262.1	263.8
42°	259.9	255.4	254.8	255.7	256.7	258.6
42.5°	253.8	249.0	249.0	250.1	251.4	252.7
43°	247.7	243.1	243.2	243.9	245.5	247.5
43.5°	241.7	237.4	237.5	238.4	240.2	241.8

TEST NUMBER: P639486

CATALOG NUMBER: RL4LS9FSD2W1EWHDM -900LM -3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	224.0	220.2	220.7	221.3	223.3	225.1
45.5°	218.0	214.4	214.9	216.3	218.0	219.9
46°	212.7	209.1	209.7	210.5	212.3	214.2
46.5°	207.2	203.2	204.4	205.3	207.0	209.2
47°	201.4	198.0	198.7	200.1	201.5	203.5
47.5°	195.9	192.5	193.1	194.4	196.5	198.3
48°	190.6	187.4	188.4	189.0	191.0	193.2
48.5°	185.4	182.0	182.9	184.1	185.8	187.6
49°	180.2	177.1	178.1	179.1	180.6	182.7
49.5°	175.1	172.0	172.7	173.8	175.7	177.5
50°	169.7	166.9	167.8	169.1	170.7	172.8
50.5°	164.9	162.2	162.9	163.8	165.6	167.7
51°	160.2	157.4	158.3	159.3	160.9	162.9
51.5°	155.5	153.0	153.7	154.6	156.3	158.2
52°	150.9	148.3	149.0	149.9	151.5	153.5
52.5°	146.1	143.7	144.6	145.5	146.7	148.8
53°	141.7	139.4	140.2	140.9	142.4	143.9
53.5°	137.6	135.3	135.8	136.8	137.9	139.7
54°	133.4	130.7	131.6	132.3	133.8	135.3
54.5°	129.3	127.0	127.6	128.2	129.4	131.2
55°	125.0	123.1	123.4	124.2	125.3	127.0
55.5°	121.3	119.2	119.6	120.1	121.4	122.8
56°	117.7	115.5	115.7	116.4	117.6	119.0
56.5°	113.6	111.7	112.1	112.5	113.4	115.1
57°	110.1	108.4	108.4	108.8	109.8	111.3
57.5°	106.9	104.7	104.9	105.3	106.1	107.9
58°	103.3	101.4	101.4	101.9	102.7	104.0
58.5°	100.0	98.0	98.0	98.3	99.0	100.7
59°	96.7	94.8	95.0	94.9	95.8	97.2
59.5°	93.4	91.7	91.6	91.7	92.4	93.5
60°	90.4	88.4	88.6	88.6	89.3	90.3
60.5°	87.4	85.6	85.3	85.5	86.3	87.3
61°	84.5	82.6	82.6	82.4	83.0	83.9
61.5°	81.7	79.8	79.6	79.5	80.0	81.0
62°	78.9	77.1	76.6	76.8	77.1	78.1
62.5°	76.2	74.1	74.0	73.9	74.5	75.2
63°	73.4	71.6	71.3	71.1	71.6	72.2
63.5°	70.6	69.0	68.7	68.5	68.8	69.5
64°	68.1	66.5	66.2	66.1	66.3	66.8
64.5°	65.7	64.1	63.8	63.5	63.8	64.2
65°	63.2	61.7	61.3	61.2	61.2	61.7
65.5°	60.9	59.4	58.9	58.7	58.8	59.2
66°	58.7	57.1	56.7	56.4	56.5	56.7



TEST NUMBER: P639486

CATALOG NUMBER: RL4LS9FSD2W1EWHDM -900LM -3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	52.2	50.7	50.3	50.0	49.8	50.1
68°	50.0	48.8	48.3	47.9	47.7	47.9
68.5°	48.0	46.7	46.3	46.0	45.8	46.0
69°	46.3	45.0	44.5	44.1	44.0	44.1
69.5°	44.4	43.2	42.6	42.2	42.0	42.2
70°	42.5	41.4	40.9	40.5	40.2	40.3
70.5°	40.8	39.6	39.2	38.7	38.5	38.6
71°	39.1	38.0	37.5	37.1	36.8	36.8
71.5°	37.3	36.3	36.0	35.6	35.4	35.3
72°	35.9	34.9	34.5	33.8	34.2	34.3
72.5°	34.3	33.5	33.0	32.5	32.6	32.7
73°	32.8	32.1	31.6	31.1	31.1	31.2
73.5°	31.3	30.7	30.2	29.7	29.6	29.6
74°	29.9	29.2	28.8	28.3	28.1	28.1
74.5°	28.6	27.8	27.4	27.0	26.8	26.7
75°	27.3	26.6	26.2	25.8	25.6	25.6
75.5°	26.0	25.4	25.1	24.7	24.4	24.4
76°	24.9	24.2	23.9	23.5	23.3	23.2
76.5°	23.7	23.1	22.8	22.5	22.3	22.1
77°	22.6	22.0	21.7	21.4	21.2	21.0
77.5°	21.6	21.0	20.7	20.4	20.2	20.0
78°	20.5	19.9	19.6	19.3	19.0	18.8
78.5°	19.5	18.9	18.6	18.2	17.9	17.7
79°	18.4	17.8	17.5	17.1	16.8	16.6
79.5°	17.4	16.7	16.4	16.1	15.8	15.5
80°	16.3	15.7	15.4	15.1	14.8	14.6
80.5°	15.4	14.8	14.5	14.1	13.8	13.5
81°	14.3	13.8	13.4	13.1	12.7	12.6
81.5°	13.4	12.8	12.5	12.1	11.7	11.5
82°	12.4	11.8	11.4	11.0	10.7	10.5
82.5°	11.4	10.8	10.5	10.1	9.8	9.6
83°	10.4	9.9	9.6	9.2	8.8	8.5
83.5°	9.5	9.0	8.6	8.2	7.8	7.6
84°	8.6	8.0	7.7	7.3	7.0	6.8
84.5°	7.7	7.1	6.8	6.5	6.1	5.9
85°	6.8	6.3	5.9	5.6	5.2	5.0
85.5°	5.9	5.4	5.1	4.8	4.4	4.3
86°	5.1	4.6	4.3	4.0	3.7	3.5
86.5°	4.3	3.9	3.6	3.3	3.0	2.8
87°	3.6	3.2	2.9	2.6	2.3	2.1
87.5°	2.8	2.5	2.2	1.9	1.6	1.4
88°	2.0	1.8	1.5	1.2	0.8	0.7
88.5°	1.4	1.1	0.8	0.5	0.3	0.3



TEST NUMBER: P639486
CATALOG NUMBER: RL4LS9FSD2W1EWHDM -900LM -3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.3	0.3	0.2	0.2	0.2	0.2



Report Generated By 670245859 / DESKTOP-T8S5UU9





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







21.5°	434.2	434.3	437.6	440.5	444.8	448.4	450.3	450.6	449.3	447.1	445.8
22°	429.9	431.4	434.6	437.3	442.2	445.2	448.0	447.8	447.2	445.4	442.7



44°	236.2	239.0	242.4	245.4	250.0	250.1	246.6	240.0	237.7	238.5	238.7
44.5°	231.1	233.0	236.9	239.9	244.4	244.7	240.4	233.9	231.1	232.7	231.9



66.5°	54.5	55.0	55.7	56.3	57.9	57.6	57.0	56.4	55.9	55.8	56.2
67°	52.3	52.7	53.2	53.8	55.5	55.3	54.8	54.1	53.7	53.9	54.1



89°	0.3	0.3	0.2	0.2	0.2	0.2	0.4	0.4	0.5	0.7	0.8
89.5°	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3





21.5°	443.3	438.7	436.9	434.7	433.9	434.2
22°	439.6	436.0	433.7	431.3	430.7	429.9



44°	235.9	231.7	231.6	232.8	234.5	236.2
44.5°	230.1	225.9	226.4	227.3	228.9	231.1



66.5°	56.4	55.0	54.5	54.2	54.2	54.5
67°	54.3	52.9	52.3	52.0	51.9	52.3



89°	0.8	0.5	0.3	0.2	0.2	0.3
89.5°	0.4	0.3	0.2	0.2	0.2	0.2



(END OF REPORT)