

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: P639477

Luminaire Tested: RL4LS9FSD2W1EWH -900LM -4000K

Issue Date: 1/25/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P639477  
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: RL4LS9FSD2W1EWH -900LM -4000K  
Description: 4IN RETROFIT, SELECTABLE LUMEN AND CCT, MATTE WHITE BAFFLE  
Light Source: (1) SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

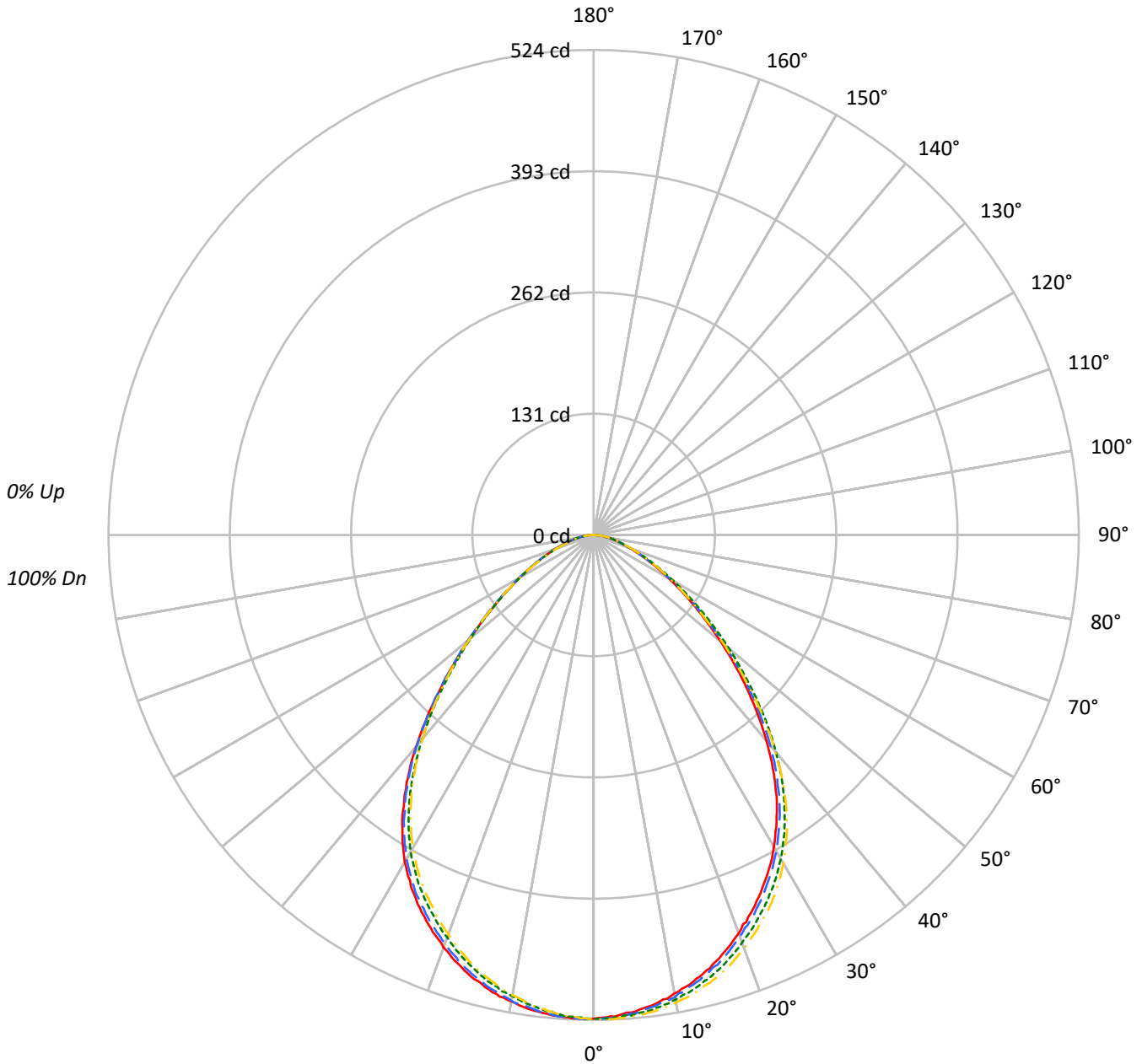
Lumens per Lamp: N/A  
Luminaire Lumens: 1010.0 lumens  
Efficiency: N/A  
Efficacy: 92.7 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.2  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 10.9  
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			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	100			100
1	111	107	103	100	108	105	101	99	101	98	96	97	95	93	93	91	90	88			88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77			77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67			67
4	88	77	70	64	86	76	69	63	74	68	63	71	66	62	69	65	61	59			59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52			52
6	76	64	56	50	74	63	55	50	61	55	50	60	54	49	58	53	49	47			47
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42			42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38			38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35			35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32			32

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	64614	64614	64614	64614
5°	64117	64464	64625	64154
10°	63139	63979	64230	63515
15°	62031	63119	63618	62466
20°	60251	61659	62382	60830
25°	58230	59948	60602	59048
30°	55572	57699	58241	56371
35°	51932	54226	53969	52234
40°	46820	49402	48127	46498
45°	40760	43295	40778	39869
50°	34417	36648	33610	33244
55°	28335	30361	27516	27473
60°	23137	24743	22716	22642
65°	18687	19886	18892	18687
70°	15105	15791	15755	15502
75°	12654	12845	13323	13180
80°	10747	10890	11744	11601
85°	7232	7516	9501	9359

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 43295 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.2	4.9
10°-20°	138.2	13.7
20°-30°	200.4	19.8
30°-40°	219.0	21.7
40°-50°	182.0	18.0
50°-60°	119.1	11.8
60°-70°	65.5	6.5
70°-80°	29.5	2.9
80°-90°	7.1	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°	387.8	38.4
0°-40°	606.8	60.1
0°-60°	907.9	89.9
0°-90°	1010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1010.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	523	523	523	523	523	
5°	517	520	521	517	517	49
15°	485	493	497	488	485	136
25°	427	440	444	433	427	196
35°	344	359	358	346	344	214
45°	233	248	233	228	233	180
55°	132	141	128	128	132	119
65°	64	68	65	64	64	64
75°	26	27	28	28	26	29
85°	5	5	7	7	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°	522.8	522.8	522.8	522.8	522.8	522.8	522.8	522.8	522.8	522.8	522.8
0.5°	522.0	521.8	523.2	523.0	522.7	523.3	523.4	523.0	522.8	521.8	523.2
1°	521.7	521.0	523.0	523.3	522.7	523.7	523.8	523.2	523.4	521.9	523.2
1.5°	521.5	521.7	522.1	522.3	522.6	523.5	523.4	523.4	522.7	522.0	523.3
2°	520.6	520.6	522.4	522.0	522.3	522.5	523.6	523.0	522.6	522.0	522.7
2.5°	521.0	519.6	521.5	521.5	522.1	522.8	523.6	523.1	522.9	522.8	522.7
3°	519.8	519.4	521.0	521.2	522.5	523.2	522.7	523.3	522.0	521.4	522.1
3.5°	518.4	519.7	520.3	520.1	520.8	522.2	522.9	522.7	522.0	521.1	521.5
4°	517.3	518.5	520.0	519.9	520.1	522.0	522.6	522.4	521.5	521.0	521.6
4.5°	517.7	517.7	518.6	519.7	520.8	522.3	522.3	521.8	521.1	520.1	521.1
5°	516.8	516.4	519.1	519.6	519.6	520.4	521.6	522.2	520.9	520.4	520.4
5.5°	515.4	516.3	516.8	518.1	518.7	521.2	521.5	520.8	519.9	519.2	519.4
6°	514.2	514.1	516.2	517.1	518.2	519.4	520.8	520.6	519.6	519.0	519.3
6.5°	513.2	513.4	514.9	516.7	517.6	519.3	519.7	519.7	518.8	518.2	518.3
7°	512.3	512.2	514.2	515.9	517.0	518.4	519.4	519.1	518.1	517.6	516.9
7.5°	511.1	511.2	513.3	513.5	515.5	516.8	518.4	518.2	517.5	515.6	515.8
8°	509.5	509.4	511.5	512.4	514.9	516.4	516.5	517.9	516.8	515.1	514.8
8.5°	507.5	508.2	510.1	512.2	513.4	515.5	516.5	516.2	515.5	514.8	514.3
9°	507.4	507.1	509.7	510.7	512.8	514.2	515.4	515.7	514.7	512.7	513.1
9.5°	505.2	505.1	508.1	508.5	510.9	513.2	514.1	515.0	513.0	511.6	512.8
10°	503.1	504.3	507.1	508.1	509.8	511.8	513.5	513.4	511.8	511.9	510.9
10.5°	501.9	501.9	503.8	505.9	508.7	510.5	511.6	512.0	511.0	509.7	509.1
11°	499.6	500.0	503.5	504.3	506.2	509.7	510.6	511.4	509.5	508.9	508.0
11.5°	498.4	498.6	501.0	501.8	505.9	507.1	509.7	509.2	509.0	506.7	507.0
12°	496.9	497.5	499.1	501.7	504.2	506.5	507.5	508.0	506.8	505.8	504.8
12.5°	494.8	495.9	497.5	499.0	502.4	504.5	506.8	506.6	506.1	503.6	503.6
13°	492.4	493.1	495.6	497.6	500.6	503.2	504.8	505.2	503.8	502.6	502.0
13.5°	491.0	491.0	494.2	496.2	498.8	501.1	503.0	503.0	502.5	501.4	500.2
14°	488.6	489.2	491.0	494.4	496.5	499.2	501.3	501.9	499.9	498.1	497.9
14.5°	486.0	487.2	489.8	492.5	495.3	498.0	500.2	499.5	498.2	496.6	496.5
15°	484.8	484.8	487.1	490.2	493.3	496.0	497.9	498.5	497.2	495.3	494.2
15.5°	481.5	482.7	484.3	488.2	490.8	493.9	496.6	495.9	495.2	493.8	492.4
16°	479.3	479.5	483.6	484.2	489.0	492.0	494.5	494.4	492.9	491.7	489.8
16.5°	477.3	477.7	481.1	482.8	486.7	490.1	492.0	492.9	491.0	489.0	488.0
17°	474.2	475.3	477.8	480.0	484.4	487.2	489.8	490.0	488.4	486.0	485.3
17.5°	471.6	472.5	475.6	477.1	481.9	485.7	487.8	487.3	486.2	484.3	483.7
18°	469.2	470.6	473.1	475.4	479.2	482.6	485.3	485.9	484.2	481.7	480.1
18.5°	466.6	466.6	470.2	471.6	477.1	480.4	482.7	483.1	481.9	479.9	477.7
19°	463.5	464.6	467.5	469.9	474.4	478.1	480.2	480.2	478.8	476.7	475.4
19.5°	460.5	461.6	464.5	467.1	471.9	474.8	478.0	478.3	476.5	474.8	472.9
20°	458.1	459.0	461.8	464.2	468.8	472.5	475.0	475.2	474.3	472.2	470.2
20.5°	454.7	456.4	458.9	460.8	465.7	469.8	472.3	472.3	470.5	469.0	467.4
21°	450.5	452.1	455.2	458.2	463.4	466.9	469.7	469.8	468.1	465.5	464.0



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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°	442.9	444.1	447.0	450.0	455.0	458.5	461.5	462.1	459.9	458.2	456.0
23°	439.6	440.8	444.6	446.3	452.0	455.4	457.8	458.8	457.0	454.6	453.4
23.5°	436.7	437.9	440.7	444.1	448.9	453.0	455.8	455.5	454.0	452.4	450.1
24°	433.0	434.2	437.5	439.8	445.9	450.4	452.2	453.9	450.7	448.7	447.1
24.5°	430.0	431.1	434.7	437.5	443.1	446.9	448.9	449.7	447.9	446.1	443.3
25°	427.0	428.1	431.1	435.0	439.6	444.1	446.5	446.3	444.4	443.3	441.6
25.5°	423.0	424.4	428.0	430.4	437.0	440.8	443.3	442.9	441.5	439.2	437.2
26°	419.5	420.7	424.3	427.9	432.7	437.1	439.8	440.1	437.7	435.6	434.4
26.5°	416.2	418.1	420.4	424.5	429.8	435.1	436.5	436.2	434.4	432.8	431.3
27°	412.7	414.0	417.2	420.5	426.8	430.7	432.4	432.5	431.2	428.4	427.2
27.5°	408.9	410.5	413.5	417.2	422.9	427.1	429.1	429.1	428.0	425.6	423.7
28°	405.4	406.6	410.4	414.0	419.6	423.4	425.3	425.8	422.8	421.5	419.9
28.5°	401.7	402.9	406.3	409.5	415.9	419.7	422.1	421.7	419.9	417.9	415.7
29°	398.0	398.6	402.2	405.4	411.5	416.1	417.9	417.0	415.6	414.2	411.9
29.5°	393.5	395.2	398.4	401.9	407.9	412.0	413.5	413.4	411.7	408.9	408.0
30°	389.4	389.8	394.6	398.0	404.3	407.9	410.4	409.4	408.1	405.9	404.1
30.5°	385.0	386.8	390.4	394.0	400.2	404.1	405.1	405.3	403.3	401.4	399.5
31°	381.0	383.1	386.0	389.4	396.1	399.7	401.3	401.2	399.0	397.0	394.8
31.5°	375.9	378.7	381.3	385.1	391.6	395.6	396.9	396.2	394.2	392.5	390.9
32°	372.5	373.7	377.3	380.7	387.0	390.5	392.3	391.1	389.8	388.1	385.8
32.5°	367.6	369.9	372.9	376.5	383.2	386.9	387.9	386.2	384.5	382.8	381.0
33°	362.6	364.8	368.2	371.6	378.1	381.4	383.3	381.9	379.1	378.1	375.8
33.5°	358.6	360.1	364.0	367.8	374.0	377.1	377.9	376.4	374.8	373.0	371.7
34°	353.8	355.4	359.3	362.9	369.0	372.7	373.2	371.1	369.7	367.4	365.5
34.5°	349.1	350.6	354.4	357.6	364.4	367.8	368.1	365.9	364.1	363.1	359.7
35°	344.2	345.2	349.4	352.5	359.4	363.1	363.2	360.4	357.7	357.2	355.9
35.5°	338.8	340.6	345.2	348.2	354.8	357.5	357.7	355.3	352.7	351.7	349.9
36°	333.4	335.6	339.3	343.6	349.6	352.6	351.9	349.6	347.3	346.1	344.7
36.5°	328.8	330.0	333.7	338.0	344.5	347.0	346.7	344.0	341.0	340.0	338.3
37°	323.2	325.1	329.5	332.6	339.4	341.7	341.1	337.9	336.0	335.1	332.9
37.5°	317.9	320.3	324.0	326.8	334.0	336.5	335.4	332.2	329.4	328.8	327.5
38°	312.7	314.8	318.5	321.2	329.0	330.4	329.6	326.1	323.1	323.0	321.4
38.5°	306.9	309.4	313.5	316.4	322.9	325.3	323.8	319.9	317.6	317.0	315.8
39°	301.6	303.6	307.6	311.6	317.7	318.9	317.7	313.4	311.3	310.3	309.3
39.5°	296.1	298.8	301.8	305.8	311.6	313.6	311.8	307.4	304.4	304.6	303.1
40°	290.2	293.1	296.8	300.0	306.2	307.9	305.3	300.9	298.3	298.0	296.7
40.5°	284.8	286.8	291.1	294.1	300.5	301.6	299.8	294.6	291.6	292.0	290.8
41°	279.0	281.7	285.5	288.8	294.7	295.9	293.3	288.1	285.2	285.6	284.6
41.5°	273.3	275.4	279.8	282.7	288.7	290.0	287.3	281.3	278.9	279.2	277.8
42°	267.9	270.1	274.0	276.6	282.9	283.8	280.5	274.6	271.7	272.1	271.3
42.5°	261.8	264.4	268.0	271.6	277.2	277.9	274.4	268.7	265.8	266.4	265.5
43°	256.4	258.7	262.8	265.6	271.3	271.6	268.1	261.9	259.6	259.9	259.4
43.5°	250.5	253.0	256.5	259.8	265.2	265.8	261.8	255.4	252.4	253.5	252.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	233.2	236.1	238.9	242.5	247.7	247.2	242.7	235.9	233.3	234.4	234.4
45.5°	227.8	230.5	233.5	236.5	241.5	240.9	236.6	229.6	227.3	228.3	228.3
46°	221.9	224.4	228.2	230.9	235.8	235.3	229.8	223.4	220.7	222.4	222.5
46.5°	216.7	219.1	222.4	225.2	229.9	229.1	224.3	217.2	214.6	216.6	216.0
47°	210.8	213.7	216.8	219.5	223.9	223.3	217.7	210.9	209.0	210.3	210.5
47.5°	205.4	207.7	211.0	213.8	218.3	217.2	211.7	205.0	202.8	204.3	204.7
48°	200.2	202.5	205.6	208.1	212.6	211.3	206.0	199.2	197.0	198.4	198.7
48.5°	194.3	196.8	200.4	202.5	207.0	206.3	200.1	193.5	191.1	192.9	193.4
49°	189.3	191.6	194.6	197.6	201.8	199.8	194.3	187.8	185.6	187.1	188.2
49.5°	183.8	186.2	189.3	191.7	196.0	194.6	188.7	182.0	179.9	181.6	182.5
50°	179.0	181.2	183.8	186.3	190.6	189.1	183.1	177.0	174.8	176.3	177.0
50.5°	173.7	175.7	179.0	181.0	185.0	183.7	177.6	171.3	169.3	171.1	172.1
51°	168.8	170.8	173.6	175.7	180.0	178.4	172.6	166.1	164.1	166.0	166.7
51.5°	163.8	166.1	168.5	170.7	174.8	173.2	167.3	161.1	159.1	160.7	161.8
52°	159.0	160.9	163.4	165.7	169.7	167.9	162.1	156.3	154.4	155.9	157.0
52.5°	154.1	155.9	158.7	160.7	164.6	162.8	157.0	151.3	149.8	151.1	152.2
53°	149.1	151.3	154.0	155.6	159.7	158.0	152.1	146.7	145.0	146.2	147.4
53.5°	144.8	146.9	149.3	151.0	154.7	153.2	147.5	142.1	140.4	141.7	142.9
54°	140.1	142.2	144.1	146.1	150.1	148.1	142.6	137.8	136.1	137.3	138.4
54.5°	135.9	137.7	139.8	141.6	145.5	143.6	138.3	133.3	131.8	132.8	134.2
55°	131.5	133.5	135.5	137.6	140.9	139.5	133.9	129.4	127.7	128.7	129.9
55.5°	127.2	129.3	130.9	132.9	136.3	134.6	129.7	125.1	123.5	124.6	125.8
56°	123.3	125.0	126.9	128.7	131.9	130.3	125.5	121.3	119.7	120.5	121.9
56.5°	119.2	121.1	122.8	124.2	127.5	126.0	121.5	117.3	115.8	116.7	117.8
57°	115.3	117.1	118.6	120.2	123.4	121.9	117.5	113.7	111.9	112.9	114.0
57.5°	111.7	113.0	114.8	116.2	119.3	117.8	113.7	110.0	108.5	109.4	110.3
58°	107.7	109.4	111.0	112.3	115.2	114.0	110.1	106.3	104.7	105.7	106.7
58.5°	104.3	105.5	107.0	108.4	111.2	110.2	106.4	103.2	101.7	102.2	103.4
59°	100.6	101.9	103.2	104.5	107.5	106.2	102.7	99.6	98.3	98.8	99.8
59.5°	96.8	98.3	99.8	101.1	103.8	102.6	99.2	96.2	94.8	95.6	96.5
60°	93.6	94.8	96.3	97.4	100.1	99.1	95.8	93.1	91.9	92.3	93.2
60.5°	90.4	91.5	92.8	93.9	96.5	95.4	92.5	90.1	88.8	89.2	90.1
61°	86.9	88.0	89.3	90.7	93.2	92.1	89.5	86.9	85.9	86.1	87.2
61.5°	83.9	84.9	86.0	87.1	89.9	88.7	86.3	84.1	83.1	83.2	84.3
62°	80.9	81.7	83.0	84.0	86.4	85.7	83.3	81.3	80.2	80.3	81.5
62.5°	77.9	78.6	79.7	80.7	83.3	82.5	80.4	78.5	77.5	77.5	78.7
63°	74.8	75.7	76.7	77.7	80.1	79.4	77.5	75.6	74.6	74.7	75.8
63.5°	72.0	72.7	73.7	74.7	77.0	76.3	74.5	72.8	72.1	72.2	72.9
64°	69.2	69.9	70.8	71.8	74.0	73.3	71.8	70.4	69.7	69.7	70.3
64.5°	66.5	67.2	68.1	68.8	71.0	70.5	69.0	67.8	67.1	67.2	67.8
65°	63.9	64.5	65.5	66.0	68.0	67.6	66.5	65.4	64.6	64.7	65.4
65.5°	61.3	62.0	62.7	63.4	65.4	65.0	64.0	63.0	62.3	62.3	62.9
66°	58.8	59.3	60.1	60.7	62.6	62.3	61.6	60.6	60.0	60.0	60.5





TEST NUMBER: P639477

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	51.9	52.2	52.8	53.3	55.0	54.8	54.5	53.9	53.5	53.6	53.9
68°	49.7	50.1	50.5	51.1	52.5	52.5	52.3	51.7	51.3	51.5	51.7
68.5°	47.6	47.9	48.4	48.7	50.3	50.3	50.2	49.8	49.3	49.4	49.7
69°	45.7	45.9	46.3	46.6	48.0	48.0	48.1	47.7	47.5	47.5	47.7
69.5°	43.7	43.9	44.2	44.5	45.9	46.0	46.1	45.8	45.4	45.6	45.8
70°	41.8	42.0	42.2	42.4	43.7	43.9	44.0	43.9	43.6	43.8	43.9
70.5°	40.0	40.1	40.4	40.6	41.8	42.0	42.3	42.1	41.9	42.0	42.2
71°	38.2	38.4	38.5	38.7	39.8	40.1	40.4	40.3	40.0	40.2	40.4
71.5°	36.5	36.6	36.7	36.8	38.0	38.2	38.6	38.6	38.4	38.5	38.7
72°	35.5	35.2	35.2	35.0	36.2	36.4	36.8	36.8	36.8	36.9	37.0
72.5°	33.9	33.7	33.7	33.4	34.5	34.8	35.2	35.3	35.2	35.3	35.4
73°	32.3	32.1	32.1	32.0	32.7	33.1	33.7	33.7	33.7	33.8	33.9
73.5°	30.7	30.6	30.6	30.5	31.2	31.5	32.0	32.1	32.1	32.3	32.3
74°	29.1	29.0	29.0	28.9	29.8	30.1	30.5	30.7	30.7	30.8	30.9
74.5°	27.7	27.7	27.6	27.5	28.3	28.6	29.0	29.2	29.2	29.3	29.5
75°	26.5	26.4	26.3	26.2	26.9	27.3	27.7	27.9	27.9	28.0	28.1
75.5°	25.2	25.1	25.0	25.0	25.6	26.0	26.4	26.6	26.6	26.7	26.8
76°	24.0	23.9	23.8	23.8	24.5	24.7	25.1	25.2	25.2	25.4	25.5
76.5°	22.9	22.8	22.7	22.7	23.4	23.5	23.9	24.0	24.1	24.2	24.4
77°	21.7	21.6	21.5	21.5	22.2	22.5	22.8	22.9	23.0	23.2	23.3
77.5°	20.7	20.5	20.4	20.4	21.0	21.3	21.7	21.9	22.0	22.2	22.3
78°	19.5	19.4	19.3	19.3	19.9	20.2	20.6	20.8	20.8	21.1	21.2
78.5°	18.4	18.3	18.2	18.1	18.8	19.1	19.5	19.6	19.8	20.0	20.1
79°	17.2	17.1	16.9	16.9	17.6	18.0	18.4	18.5	18.7	18.9	19.0
79.5°	16.1	16.0	15.9	15.8	16.5	16.8	17.2	17.4	17.5	17.9	17.9
80°	15.1	14.9	14.8	14.7	15.3	15.7	16.1	16.4	16.5	16.8	16.9
80.5°	14.0	13.8	13.7	13.6	14.3	14.6	15.0	15.3	15.5	15.7	15.9
81°	13.0	12.8	12.6	12.5	13.2	13.5	14.0	14.3	14.4	14.7	14.8
81.5°	11.9	11.7	11.6	11.4	12.1	12.5	12.9	13.2	13.3	13.6	13.7
82°	10.9	10.8	10.6	10.5	11.1	11.4	11.9	12.1	12.3	12.6	12.7
82.5°	10.0	9.7	9.5	9.4	10.2	10.5	10.9	11.1	11.3	11.6	11.7
83°	8.8	8.7	8.5	8.5	9.1	9.4	10.0	10.2	10.4	10.6	10.8
83.5°	7.9	7.8	7.6	7.5	8.2	8.5	9.0	9.2	9.4	9.7	9.8
84°	7.1	6.9	6.7	6.7	7.3	7.6	8.0	8.3	8.5	8.8	8.9
84.5°	6.2	6.0	5.7	5.6	6.3	6.7	7.1	7.4	7.6	7.9	8.0
85°	5.1	5.0	4.8	4.8	5.3	5.7	6.2	6.5	6.7	7.0	7.1
85.5°	4.4	4.2	4.0	4.0	4.5	4.8	5.2	5.5	5.7	6.0	6.2
86°	3.6	3.4	3.4	3.3	3.7	4.0	4.4	4.6	4.8	5.0	5.2
86.5°	2.9	2.7	2.7	2.5	2.9	3.2	3.6	3.9	4.1	4.2	4.3
87°	2.2	2.1	1.9	1.7	2.1	2.4	2.8	3.1	3.3	3.5	3.6
87.5°	1.4	1.3	1.2	1.0	1.4	1.6	1.9	2.3	2.5	2.7	2.8
88°	0.7	0.6	0.5	0.5	0.8	1.0	1.4	1.6	1.7	1.9	2.1
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: P639477

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -4000K

**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: P639477

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	522.8	522.8	522.8	522.8	522.8	522.8
0.5°	522.3	522.8	523.1	523.0	522.5	522.0
1°	522.7	522.2	522.0	522.3	522.7	521.7
1.5°	523.9	521.5	522.5	522.6	522.4	521.5
2°	521.8	521.6	521.9	521.4	521.3	520.6
2.5°	523.0	521.1	521.1	521.2	521.4	521.0
3°	522.0	521.2	520.7	520.6	520.8	519.8
3.5°	520.8	520.9	520.2	520.3	519.5	518.4
4°	520.8	519.3	519.6	519.4	518.7	517.3
4.5°	520.4	519.3	518.8	518.7	517.6	517.7
5°	519.4	517.1	517.7	517.6	517.1	516.8
5.5°	518.4	517.2	516.3	516.7	515.9	515.4
6°	518.1	516.4	516.0	515.2	515.0	514.2
6.5°	517.2	515.3	515.1	514.5	514.6	513.2
7°	516.3	513.9	513.2	513.9	512.3	512.3
7.5°	514.9	513.0	512.5	511.9	511.7	511.1
8°	513.9	511.7	511.0	510.9	510.2	509.5
8.5°	513.3	510.9	509.8	508.8	508.3	507.5
9°	510.7	509.0	508.4	507.5	507.7	507.4
9.5°	509.3	507.9	506.8	506.1	505.6	505.2
10°	509.1	506.1	505.7	505.1	503.7	503.1
10.5°	508.2	505.1	503.8	502.9	501.5	501.9
11°	507.3	503.1	502.2	501.6	500.6	499.6
11.5°	504.3	503.3	500.6	500.0	498.9	498.4
12°	503.5	499.4	498.9	498.1	496.7	496.9
12.5°	500.5	498.6	496.6	495.8	494.9	494.8
13°	500.0	496.5	494.3	493.9	493.8	492.4
13.5°	498.6	495.5	493.0	492.2	490.9	491.0
14°	496.1	492.6	491.4	490.2	489.1	488.6
14.5°	493.8	490.8	489.0	488.3	487.3	486.0
15°	492.7	488.2	486.1	485.7	484.4	484.8
15.5°	489.8	485.8	484.4	482.6	481.8	481.5
16°	487.7	483.8	482.2	481.0	480.1	479.3
16.5°	485.4	481.3	479.5	478.6	477.5	477.3
17°	483.4	479.4	477.5	475.6	474.6	474.2
17.5°	480.7	476.7	475.2	473.2	472.2	471.6
18°	478.3	473.9	472.0	470.7	469.9	469.2
18.5°	476.2	471.6	469.7	467.8	466.5	466.6
19°	473.6	468.5	466.7	465.0	463.5	463.5
19.5°	469.9	465.9	463.8	462.1	461.2	460.5
20°	467.9	462.5	461.6	458.9	458.2	458.1
20.5°	464.6	460.4	458.1	456.3	455.4	454.7
21°	462.1	457.9	455.3	453.4	452.2	450.5



TEST NUMBER: P639477

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	454.4	448.3	446.1	444.7	442.9	442.9
23°	450.3	444.9	442.8	440.9	440.1	439.6
23.5°	447.1	442.6	439.8	437.3	436.7	436.7
24°	443.5	439.3	437.1	434.4	433.5	433.0
24.5°	441.5	435.9	433.9	431.1	430.1	430.0
25°	437.1	433.0	430.2	428.5	427.5	427.0
25.5°	433.7	429.1	427.2	424.2	423.5	423.0
26°	431.6	425.9	423.8	421.2	419.6	419.5
26.5°	427.1	422.8	420.2	417.3	416.6	416.2
27°	423.9	419.0	416.3	414.2	412.7	412.7
27.5°	420.7	414.8	412.1	410.2	409.1	408.9
28°	416.5	411.0	408.1	406.8	405.6	405.4
28.5°	413.0	407.2	404.5	402.5	401.3	401.7
29°	408.1	403.0	400.1	398.6	397.7	398.0
29.5°	404.5	399.6	396.6	394.1	393.4	393.5
30°	400.6	395.0	392.6	390.3	390.1	389.4
30.5°	396.3	390.9	388.0	386.0	385.3	385.0
31°	392.1	385.7	383.5	381.5	380.6	381.0
31.5°	388.0	381.6	379.4	377.2	376.3	375.9
32°	382.3	376.8	374.6	372.6	371.7	372.5
32.5°	377.3	371.7	369.6	367.8	367.6	367.6
33°	372.8	367.1	365.0	362.9	362.6	362.6
33.5°	367.3	362.0	359.9	358.5	358.0	358.6
34°	363.4	356.9	354.6	353.2	353.3	353.8
34.5°	357.3	352.0	349.4	348.3	347.8	349.1
35°	352.1	346.2	344.1	343.1	343.0	344.2
35.5°	346.9	340.9	338.8	337.4	338.0	338.8
36°	341.0	335.1	333.5	332.7	332.9	333.4
36.5°	336.0	329.8	327.9	327.4	327.5	328.8
37°	329.6	323.9	322.3	321.5	321.9	323.2
37.5°	324.4	318.3	316.7	316.5	316.8	317.9
38°	318.4	312.3	311.0	310.8	311.3	312.7
38.5°	312.5	306.1	305.4	304.9	305.6	306.9
39°	306.1	300.6	299.1	299.3	300.7	301.6
39.5°	300.4	294.4	293.8	293.9	294.6	296.1
40°	294.5	288.2	287.3	287.8	288.8	290.2
40.5°	287.9	282.3	281.8	282.2	283.9	284.8
41°	281.9	276.0	275.7	276.2	277.4	279.0
41.5°	275.8	270.1	269.7	270.4	271.6	273.3
42°	269.2	264.6	264.0	264.9	265.9	267.9
42.5°	262.9	257.9	257.9	259.0	260.4	261.8
43°	256.6	251.9	252.0	252.7	254.3	256.4
43.5°	250.4	245.9	246.0	246.9	248.8	250.5



TEST NUMBER: P639477

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	232.1	228.1	228.6	229.3	231.3	233.2
45.5°	225.8	222.1	222.6	224.1	225.8	227.8
46°	220.4	216.6	217.2	218.0	220.0	221.9
46.5°	214.6	210.5	211.7	212.7	214.4	216.7
47°	208.7	205.1	205.8	207.2	208.8	210.8
47.5°	202.9	199.4	200.1	201.4	203.5	205.4
48°	197.5	194.1	195.1	195.7	197.9	200.2
48.5°	192.1	188.6	189.5	190.7	192.5	194.3
49°	186.7	183.4	184.5	185.5	187.1	189.3
49.5°	181.4	178.2	178.9	180.0	182.0	183.8
50°	175.8	172.9	173.8	175.1	176.9	179.0
50.5°	170.8	168.0	168.8	169.7	171.5	173.7
51°	166.0	163.0	163.9	165.1	166.7	168.8
51.5°	161.1	158.5	159.2	160.1	161.9	163.8
52°	156.3	153.6	154.3	155.3	157.0	159.0
52.5°	151.3	148.9	149.8	150.7	151.9	154.1
53°	146.8	144.4	145.3	146.0	147.5	149.1
53.5°	142.5	140.1	140.7	141.7	142.8	144.8
54°	138.2	135.4	136.3	137.1	138.6	140.1
54.5°	134.0	131.5	132.1	132.8	134.1	135.9
55°	129.5	127.5	127.8	128.7	129.8	131.5
55.5°	125.7	123.5	123.9	124.4	125.8	127.2
56°	121.9	119.6	119.8	120.5	121.8	123.3
56.5°	117.7	115.7	116.1	116.5	117.5	119.2
57°	114.1	112.3	112.3	112.7	113.8	115.3
57.5°	110.7	108.4	108.6	109.1	109.9	111.7
58°	107.0	105.1	105.1	105.6	106.4	107.7
58.5°	103.6	101.6	101.6	101.9	102.6	104.3
59°	100.1	98.2	98.4	98.3	99.2	100.6
59.5°	96.7	95.0	94.9	95.0	95.7	96.8
60°	93.7	91.6	91.8	91.8	92.5	93.6
60.5°	90.6	88.6	88.3	88.5	89.4	90.4
61°	87.5	85.6	85.6	85.4	86.0	86.9
61.5°	84.6	82.7	82.5	82.4	82.9	83.9
62°	81.8	79.8	79.3	79.5	79.9	80.9
62.5°	78.9	76.7	76.6	76.5	77.1	77.9
63°	76.0	74.2	73.9	73.7	74.2	74.8
63.5°	73.1	71.5	71.2	71.0	71.3	72.0
64°	70.6	68.8	68.5	68.4	68.6	69.2
64.5°	68.0	66.4	66.1	65.8	66.1	66.5
65°	65.5	63.9	63.5	63.4	63.4	63.9
65.5°	63.1	61.6	61.0	60.8	60.9	61.3
66°	60.8	59.2	58.8	58.4	58.5	58.8



TEST NUMBER: P639477

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	54.1	52.5	52.1	51.8	51.6	51.9
68°	51.8	50.6	50.1	49.7	49.4	49.7
68.5°	49.8	48.4	48.0	47.6	47.4	47.6
69°	47.9	46.6	46.1	45.7	45.6	45.7
69.5°	46.0	44.7	44.1	43.7	43.5	43.7
70°	44.0	42.9	42.4	42.0	41.7	41.8
70.5°	42.3	41.0	40.6	40.1	39.9	40.0
71°	40.5	39.4	38.9	38.5	38.2	38.2
71.5°	38.7	37.7	37.2	36.8	36.6	36.5
72°	37.1	36.1	35.7	35.0	35.4	35.5
72.5°	35.5	34.7	34.2	33.7	33.8	33.9
73°	34.0	33.2	32.7	32.2	32.2	32.3
73.5°	32.4	31.8	31.3	30.8	30.7	30.7
74°	31.0	30.3	29.9	29.3	29.1	29.1
74.5°	29.6	28.8	28.4	28.0	27.8	27.7
75°	28.3	27.6	27.2	26.8	26.5	26.5
75.5°	27.0	26.3	26.0	25.5	25.2	25.2
76°	25.8	25.0	24.7	24.3	24.1	24.0
76.5°	24.5	23.9	23.6	23.3	23.1	22.9
77°	23.4	22.8	22.5	22.2	22.0	21.7
77.5°	22.4	21.7	21.4	21.1	20.9	20.7
78°	21.2	20.6	20.3	20.0	19.7	19.5
78.5°	20.2	19.6	19.3	18.9	18.6	18.4
79°	19.1	18.5	18.2	17.7	17.4	17.2
79.5°	18.1	17.3	17.0	16.7	16.4	16.1
80°	16.9	16.3	16.0	15.6	15.3	15.1
80.5°	15.9	15.3	15.0	14.6	14.3	14.0
81°	14.8	14.3	13.8	13.5	13.1	13.0
81.5°	13.8	13.2	12.9	12.5	12.1	11.9
82°	12.8	12.2	11.8	11.4	11.1	10.9
82.5°	11.8	11.2	10.9	10.5	10.2	10.0
83°	10.8	10.3	10.0	9.5	9.1	8.8
83.5°	9.8	9.3	8.9	8.5	8.1	7.9
84°	8.9	8.3	8.0	7.6	7.3	7.1
84.5°	8.0	7.4	7.1	6.8	6.4	6.2
85°	7.1	6.6	6.2	5.8	5.4	5.1
85.5°	6.2	5.6	5.2	4.9	4.5	4.4
86°	5.2	4.7	4.4	4.1	3.8	3.6
86.5°	4.4	4.0	3.7	3.4	3.1	2.9
87°	3.7	3.3	3.0	2.7	2.4	2.2
87.5°	2.9	2.6	2.3	1.9	1.6	1.4
88°	2.1	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: P639477

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -4000K

**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

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9



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Scaled Data Report





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

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21.5°	449.8	449.9	453.4	456.3	460.7	464.5	466.5	466.8	465.5	463.1	461.8
22°	445.4	446.9	450.2	453.0	458.1	461.2	464.1	463.9	463.3	461.4	458.6



44°	244.7	247.6	251.1	254.2	258.9	259.0	255.5	248.6	246.2	247.0	247.2
44.5°	239.3	241.4	245.4	248.5	253.2	253.5	249.0	242.3	239.3	241.1	240.3



66.5°	56.4	56.9	57.7	58.3	60.0	59.7	59.1	58.4	57.9	57.8	58.2
67°	54.2	54.6	55.1	55.7	57.5	57.2	56.7	56.0	55.6	55.8	56.0



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



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21.5°	459.2	454.5	452.5	450.3	449.5	449.8
22°	455.4	451.6	449.2	446.8	446.2	445.4



44°	244.4	240.1	240.0	241.2	242.9	244.7
44.5°	238.3	234.0	234.5	235.4	237.1	239.3



66.5°	58.4	56.9	56.4	56.1	56.1	56.4
67°	56.2	54.8	54.2	53.9	53.8	54.2



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

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(END OF REPORT)