

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: P639474

Luminaire Tested: RL4LS9FSD2W1EWH -900LM -2700K

Issue Date: 1/25/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P639474  
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 -2700K  
Description: 4IN RETROFIT, SELECTABLE LUMEN AND CCT, MATTE WHITE BAFFLE  
Light Source: (1) SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

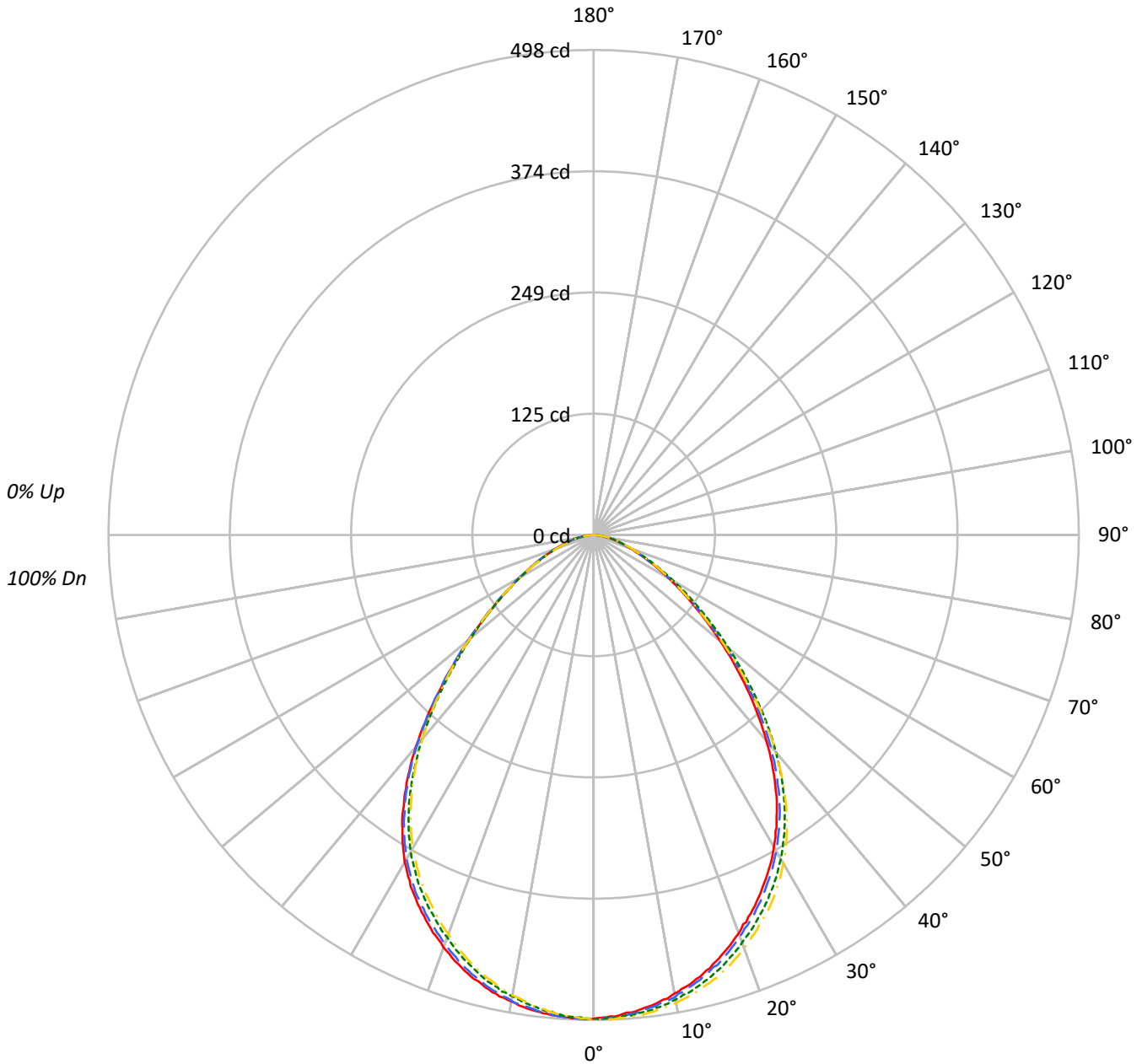
Lumens per Lamp: N/A  
Luminaire Lumens: 960.0 lumens  
Efficiency: N/A  
Efficacy: 88.1 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.2  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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

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

	0°	90°	180°	270°
0°	61413	61413	61413	61413
5°	60941	61275	61424	60978
10°	60014	60804	61055	60365
15°	58960	59984	60457	59383
20°	57266	58607	59291	57818
25°	55339	56975	57602	56130
30°	52832	54844	55358	53574
35°	49367	51540	51299	49654
40°	44513	46966	45756	44191
45°	38733	41145	38750	37894
50°	32725	34840	31956	31591
55°	26935	28852	26159	26116
60°	21975	23532	21604	21530
65°	17781	18921	17956	17781
70°	14346	14996	14960	14743
75°	12034	12177	12654	12511
80°	10178	10320	11174	11032
85°	6949	7232	8934	8792

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 41145 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.8	4.9
10°-20°	131.3	13.7
20°-30°	190.5	19.8
30°-40°	208.2	21.7
40°-50°	173.0	18.0
50°-60°	113.2	11.8
60°-70°	62.2	6.5
70°-80°	28.1	2.9
80°-90°	6.8	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°	368.6	38.4
0°-40°	576.8	60.1
0°-60°	862.9	89.9
0°-90°	960.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	960.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	497	497	497	497	497	
5°	491	494	495	492	491	46
15°	461	469	472	464	461	129
25°	406	418	422	412	406	186
35°	327	342	340	329	327	203
45°	222	235	222	217	222	171
55°	125	134	121	121	125	113
65°	61	65	61	61	61	61
75°	25	26	26	26	25	27
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°	496.9	496.9	496.9	496.9	496.9	496.9	496.9	496.9	496.9	496.9	496.9
0.5°	496.1	496.0	497.3	497.1	496.8	497.4	497.5	497.1	496.9	496.0	497.3
1°	495.9	495.2	497.1	497.4	496.8	497.8	497.9	497.3	497.5	496.0	497.3
1.5°	495.7	495.9	496.2	496.4	496.7	497.6	497.5	497.5	496.8	496.1	497.4
2°	494.8	494.8	496.5	496.1	496.4	496.6	497.7	497.1	496.7	496.1	496.8
2.5°	495.2	493.9	495.7	495.7	496.2	496.9	497.7	497.2	497.0	496.9	496.8
3°	494.1	493.7	495.2	495.4	496.6	497.3	496.8	497.4	496.1	495.6	496.2
3.5°	492.7	494.0	494.6	494.4	495.0	496.3	497.0	496.8	496.1	495.3	495.7
4°	491.7	492.8	494.3	494.2	494.4	496.1	496.7	496.5	495.7	495.2	495.8
4.5°	492.1	492.1	492.9	494.0	495.0	496.4	496.4	496.0	495.3	494.4	495.3
5°	491.2	490.9	493.4	493.9	493.9	494.7	495.8	496.3	495.1	494.7	494.7
5.5°	489.9	490.8	491.2	492.4	493.0	495.4	495.7	495.0	494.2	493.5	493.7
6°	488.7	488.6	490.7	491.5	492.5	493.7	495.0	494.8	493.9	493.3	493.6
6.5°	487.8	488.0	489.4	491.1	492.0	493.6	494.0	494.0	493.1	492.5	492.6
7°	487.0	486.9	488.7	490.4	491.4	492.7	493.7	493.4	492.4	492.0	491.3
7.5°	485.8	485.9	487.9	488.1	490.0	491.2	492.7	492.5	491.9	490.1	490.3
8°	484.2	484.2	486.2	487.1	489.4	490.9	491.0	492.2	491.2	489.6	489.3
8.5°	482.4	483.1	484.8	486.9	488.0	490.0	491.0	490.7	490.0	489.3	488.8
9°	482.3	482.0	484.4	485.4	487.4	488.7	489.9	490.2	489.2	487.3	487.7
9.5°	480.2	480.1	483.0	483.4	485.6	487.8	488.6	489.5	487.6	486.3	487.4
10°	478.2	479.4	482.0	483.0	484.5	486.5	488.1	488.0	486.5	486.6	485.6
10.5°	477.0	477.0	478.9	480.8	483.5	485.2	486.3	486.7	485.7	484.4	483.9
11°	474.9	475.3	478.6	479.4	481.1	484.4	485.3	486.1	484.2	483.7	482.9
11.5°	473.7	473.9	476.2	476.9	480.8	482.0	484.4	484.0	483.8	481.6	481.9
12°	472.3	472.8	474.4	476.8	479.3	481.4	482.4	482.9	481.7	480.7	479.8
12.5°	470.3	471.4	472.8	474.3	477.5	479.6	481.7	481.5	481.0	478.7	478.7
13°	468.1	468.6	471.1	472.9	475.9	478.3	479.8	480.2	478.9	477.7	477.1
13.5°	466.7	466.7	469.7	471.7	474.1	476.3	478.1	478.1	477.6	476.5	475.5
14°	464.5	464.9	466.7	469.9	472.0	474.5	476.4	477.0	475.2	473.4	473.2
14.5°	461.9	463.1	465.5	468.2	470.8	473.3	475.5	474.8	473.5	472.1	472.0
15°	460.8	460.8	463.0	465.9	468.8	471.5	473.2	473.8	472.5	470.8	469.7
15.5°	457.6	458.8	460.4	464.1	466.5	469.4	472.1	471.4	470.7	469.3	468.1
16°	455.6	455.8	459.7	460.3	464.7	467.7	470.0	469.9	468.5	467.4	465.5
16.5°	453.6	454.0	457.2	458.9	462.6	465.8	467.7	468.5	466.7	464.7	463.9
17°	450.7	451.8	454.1	456.3	460.5	463.1	465.5	465.7	464.3	461.9	461.2
17.5°	448.3	449.1	452.1	453.4	458.0	461.6	463.7	463.2	462.1	460.4	459.8
18°	445.9	447.3	449.6	451.9	455.5	458.7	461.2	461.8	460.3	457.8	456.4
18.5°	443.5	443.5	446.9	448.3	453.4	456.7	458.8	459.2	458.0	456.2	454.0
19°	440.6	441.6	444.4	446.6	450.9	454.4	456.5	456.5	455.1	453.1	451.9
19.5°	437.7	438.7	441.5	444.0	448.6	451.3	454.3	454.6	452.9	451.3	449.5
20°	435.4	436.3	438.9	441.2	445.6	449.1	451.5	451.7	450.8	448.9	446.9
20.5°	432.2	433.8	436.2	438.0	442.6	446.5	448.9	448.9	447.2	445.8	444.3
21°	428.2	429.7	432.7	435.5	440.5	443.8	446.4	446.5	445.0	442.4	441.1



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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°	421.0	422.1	424.9	427.7	432.5	435.8	438.6	439.2	437.2	435.5	433.4
23°	417.8	419.0	422.6	424.2	429.6	432.9	435.1	436.1	434.4	432.1	430.9
23.5°	415.1	416.2	418.9	422.1	426.7	430.6	433.3	433.0	431.5	430.0	427.8
24°	411.6	412.7	415.8	418.0	423.8	428.1	429.8	431.4	428.4	426.5	425.0
24.5°	408.7	409.7	413.2	415.8	421.2	424.8	426.7	427.4	425.7	424.0	421.4
25°	405.8	406.9	409.7	413.5	417.8	422.1	424.4	424.2	422.4	421.4	419.7
25.5°	402.0	403.4	406.8	409.1	415.4	419.0	421.4	421.0	419.6	417.5	415.6
26°	398.7	399.9	403.3	406.7	411.3	415.5	418.0	418.3	416.0	414.0	412.9
26.5°	395.6	397.4	399.6	403.5	408.5	413.6	414.9	414.6	412.9	411.4	409.9
27°	392.3	393.5	396.6	399.7	405.7	409.4	411.0	411.1	409.8	407.2	406.0
27.5°	388.7	390.1	393.1	396.6	401.9	405.9	407.9	407.9	406.8	404.5	402.7
28°	385.4	386.4	390.1	393.5	398.8	402.4	404.3	404.7	401.9	400.7	399.1
28.5°	381.9	382.9	386.2	389.3	395.3	398.9	401.2	400.8	399.1	397.2	395.1
29°	378.3	378.8	382.3	385.4	391.1	395.5	397.2	396.4	395.0	393.7	391.5
29.5°	374.1	375.6	378.6	382.0	387.7	391.6	393.1	393.0	391.3	388.7	387.8
30°	370.2	370.5	375.0	378.3	384.3	387.7	390.1	389.2	387.9	385.8	384.1
30.5°	366.0	367.6	371.0	374.4	380.4	384.1	385.1	385.3	383.3	381.6	379.7
31°	362.2	364.1	366.8	370.2	376.5	379.9	381.5	381.4	379.2	377.4	375.2
31.5°	357.3	359.9	362.5	366.1	372.2	376.0	377.3	376.6	374.6	373.1	371.5
32°	354.1	355.2	358.7	361.9	367.8	371.1	372.9	371.7	370.5	368.9	366.7
32.5°	349.4	351.6	354.5	357.9	364.2	367.7	368.7	367.0	365.5	363.8	362.2
33°	344.6	346.8	350.0	353.2	359.3	362.6	364.3	363.0	360.3	359.3	357.2
33.5°	340.8	342.3	346.0	349.6	355.5	358.5	359.2	357.8	356.2	354.6	353.3
34°	336.3	337.8	341.5	344.9	350.8	354.3	354.8	352.7	351.4	349.2	347.4
34.5°	331.8	333.2	336.8	339.9	346.4	349.6	349.9	347.8	346.1	345.1	341.9
35°	327.2	328.1	332.1	335.1	341.6	345.1	345.2	342.6	340.0	339.5	338.3
35.5°	322.0	323.7	328.1	331.0	337.2	339.8	340.0	337.7	335.2	334.3	332.6
36°	316.9	319.0	322.5	326.6	332.3	335.2	334.5	332.3	330.1	329.0	327.6
36.5°	312.5	313.7	317.2	321.3	327.4	329.8	329.5	327.0	324.1	323.2	321.6
37°	307.2	309.0	313.2	316.1	322.6	324.8	324.2	321.2	319.4	318.5	316.4
37.5°	302.2	304.4	307.9	310.6	317.5	319.8	318.8	315.7	313.1	312.5	311.3
38°	297.2	299.2	302.8	305.3	312.7	314.1	313.3	310.0	307.1	307.0	305.5
38.5°	291.7	294.1	298.0	300.7	306.9	309.2	307.8	304.0	301.9	301.3	300.1
39°	286.7	288.5	292.3	296.1	302.0	303.1	302.0	297.9	295.9	295.0	294.0
39.5°	281.4	284.1	286.9	290.7	296.1	298.1	296.3	292.1	289.3	289.5	288.1
40°	275.9	278.6	282.1	285.1	291.1	292.6	290.2	286.0	283.6	283.3	282.0
40.5°	270.7	272.6	276.6	279.6	285.6	286.7	284.9	280.1	277.1	277.5	276.4
41°	265.2	267.8	271.4	274.5	280.2	281.2	278.8	273.8	271.1	271.5	270.5
41.5°	259.8	261.7	265.9	268.7	274.4	275.7	273.0	267.4	265.1	265.3	264.1
42°	254.6	256.8	260.5	262.9	268.9	269.7	266.6	261.0	258.2	258.6	257.8
42.5°	248.9	251.3	254.7	258.1	263.5	264.2	260.8	255.4	252.7	253.2	252.4
43°	243.7	245.9	249.8	252.5	257.8	258.1	254.8	249.0	246.7	247.0	246.5
43.5°	238.1	240.5	243.8	246.9	252.1	252.7	248.9	242.7	239.9	241.0	240.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	221.6	224.4	227.1	230.5	235.4	235.0	230.7	224.2	221.7	222.8	222.8
45.5°	216.5	219.1	221.9	224.8	229.5	229.0	224.9	218.2	216.1	217.0	217.0
46°	210.9	213.3	216.9	219.5	224.1	223.7	218.4	212.4	209.8	211.4	211.5
46.5°	205.9	208.3	211.4	214.0	218.5	217.7	213.2	206.4	204.0	205.8	205.3
47°	200.4	203.1	206.0	208.7	212.8	212.3	206.9	200.5	198.6	199.9	200.1
47.5°	195.2	197.5	200.6	203.2	207.5	206.4	201.3	194.8	192.8	194.1	194.5
48°	190.2	192.5	195.4	197.8	202.0	200.9	195.8	189.4	187.2	188.6	188.9
48.5°	184.7	187.0	190.4	192.5	196.8	196.1	190.2	183.9	181.7	183.3	183.8
49°	179.9	182.2	185.0	187.8	191.8	190.0	184.7	178.5	176.4	177.9	178.8
49.5°	174.7	177.0	179.9	182.3	186.2	185.0	179.3	173.0	171.0	172.6	173.5
50°	170.2	172.2	174.7	177.1	181.2	179.7	174.1	168.2	166.2	167.5	168.2
50.5°	165.1	167.0	170.2	172.0	175.8	174.6	168.8	162.8	160.9	162.7	163.6
51°	160.4	162.4	165.0	167.0	171.1	169.6	164.0	157.9	156.0	157.8	158.5
51.5°	155.7	157.9	160.1	162.3	166.2	164.6	159.0	153.1	151.2	152.7	153.8
52°	151.1	152.9	155.3	157.5	161.3	159.6	154.1	148.6	146.8	148.2	149.2
52.5°	146.5	148.2	150.9	152.7	156.4	154.8	149.2	143.8	142.4	143.6	144.7
53°	141.7	143.8	146.4	147.9	151.8	150.2	144.6	139.4	137.8	139.0	140.1
53.5°	137.6	139.6	141.9	143.5	147.0	145.6	140.2	135.1	133.5	134.7	135.8
54°	133.2	135.2	137.0	138.9	142.7	140.8	135.5	131.0	129.4	130.5	131.5
54.5°	129.2	130.9	132.9	134.6	138.3	136.5	131.4	126.7	125.3	126.2	127.5
55°	125.0	126.9	128.8	130.8	133.9	132.6	127.3	123.0	121.4	122.3	123.5
55.5°	120.9	122.9	124.4	126.3	129.6	127.9	123.3	118.9	117.4	118.5	119.6
56°	117.2	118.8	120.6	122.3	125.4	123.8	119.3	115.3	113.8	114.6	115.8
56.5°	113.3	115.1	116.7	118.1	121.2	119.7	115.5	111.5	110.1	111.0	111.9
57°	109.6	111.3	112.7	114.3	117.3	115.8	111.7	108.0	106.4	107.3	108.3
57.5°	106.2	107.4	109.1	110.5	113.4	111.9	108.0	104.5	103.2	103.9	104.8
58°	102.4	103.9	105.5	106.8	109.5	108.3	104.6	101.0	99.6	100.4	101.4
58.5°	99.2	100.2	101.7	103.1	105.7	104.7	101.1	98.1	96.6	97.1	98.3
59°	95.7	96.8	98.1	99.4	102.2	100.9	97.6	94.7	93.4	93.9	94.9
59.5°	92.1	93.4	94.9	96.1	98.7	97.5	94.3	91.5	90.1	90.9	91.8
60°	88.9	90.1	91.6	92.5	95.2	94.2	91.1	88.4	87.4	87.8	88.5
60.5°	85.9	87.0	88.2	89.2	91.8	90.7	88.0	85.6	84.4	84.7	85.6
61°	82.6	83.7	84.8	86.2	88.5	87.6	85.0	82.6	81.6	81.8	82.9
61.5°	79.8	80.7	81.7	82.8	85.4	84.3	82.0	80.0	79.0	79.1	80.2
62°	76.9	77.6	78.9	79.9	82.1	81.4	79.2	77.2	76.3	76.4	77.4
62.5°	74.0	74.7	75.8	76.7	79.2	78.4	76.5	74.6	73.6	73.6	74.8
63°	71.1	72.0	72.9	73.8	76.2	75.5	73.6	71.9	70.9	71.0	72.1
63.5°	68.5	69.1	70.0	71.0	73.2	72.5	70.8	69.2	68.6	68.6	69.3
64°	65.8	66.4	67.3	68.3	70.3	69.6	68.3	66.9	66.2	66.2	66.8
64.5°	63.2	63.9	64.7	65.4	67.5	67.0	65.6	64.5	63.8	63.9	64.5
65°	60.8	61.3	62.2	62.7	64.7	64.3	63.2	62.1	61.4	61.5	62.1
65.5°	58.3	58.9	59.6	60.3	62.1	61.8	60.8	59.9	59.2	59.2	59.8
66°	55.9	56.4	57.1	57.7	59.5	59.2	58.5	57.6	57.0	57.0	57.5





TEST NUMBER: P639474

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -2700K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	49.3	49.6	50.2	50.7	52.3	52.1	51.8	51.2	50.8	50.9	51.2
68°	47.2	47.6	48.0	48.6	49.9	49.9	49.7	49.1	48.8	49.0	49.1
68.5°	45.2	45.5	46.0	46.3	47.8	47.8	47.7	47.3	46.9	47.0	47.2
69°	43.4	43.6	44.0	44.3	45.6	45.6	45.7	45.3	45.1	45.1	45.3
69.5°	41.5	41.7	42.0	42.3	43.6	43.7	43.8	43.5	43.2	43.3	43.5
70°	39.7	39.9	40.1	40.3	41.5	41.7	41.8	41.7	41.4	41.6	41.7
70.5°	38.0	38.1	38.4	38.6	39.7	39.9	40.2	40.0	39.8	39.9	40.1
71°	36.3	36.5	36.6	36.8	37.8	38.1	38.4	38.3	38.0	38.2	38.4
71.5°	34.7	34.8	34.9	35.0	36.1	36.3	36.7	36.7	36.5	36.6	36.8
72°	33.7	33.4	33.4	33.3	34.4	34.6	35.0	35.0	35.0	35.1	35.2
72.5°	32.2	32.0	32.0	31.8	32.8	33.1	33.4	33.5	33.4	33.5	33.6
73°	30.7	30.5	30.5	30.4	31.1	31.5	32.0	32.0	32.0	32.1	32.2
73.5°	29.2	29.1	29.1	29.0	29.6	29.9	30.4	30.5	30.5	30.7	30.7
74°	27.7	27.6	27.6	27.5	28.3	28.6	29.0	29.2	29.2	29.3	29.4
74.5°	26.3	26.3	26.2	26.1	26.9	27.2	27.6	27.8	27.8	27.9	28.1
75°	25.2	25.1	25.0	24.9	25.5	25.9	26.3	26.5	26.5	26.6	26.7
75.5°	24.0	23.9	23.8	23.8	24.4	24.7	25.1	25.3	25.3	25.4	25.5
76°	22.8	22.7	22.6	22.6	23.3	23.5	23.9	24.0	24.0	24.2	24.3
76.5°	21.7	21.6	21.6	21.6	22.2	22.3	22.7	22.8	22.9	23.0	23.2
77°	20.7	20.6	20.5	20.5	21.1	21.4	21.6	21.7	21.8	22.0	22.1
77.5°	19.7	19.5	19.4	19.4	20.0	20.3	20.7	20.8	20.9	21.1	21.2
78°	18.5	18.4	18.3	18.3	18.9	19.2	19.6	19.8	19.8	20.1	20.2
78.5°	17.5	17.4	17.3	17.2	17.8	18.1	18.5	18.6	18.8	19.0	19.1
79°	16.4	16.3	16.1	16.1	16.8	17.1	17.5	17.6	17.7	17.9	18.0
79.5°	15.3	15.2	15.1	15.0	15.7	16.0	16.4	16.6	16.7	17.0	17.0
80°	14.3	14.1	14.0	13.9	14.5	14.9	15.3	15.6	15.7	16.0	16.1
80.5°	13.3	13.2	13.1	13.0	13.6	13.8	14.2	14.5	14.7	14.9	15.1
81°	12.4	12.2	12.0	11.9	12.6	12.9	13.3	13.6	13.7	13.9	14.0
81.5°	11.3	11.1	11.0	10.8	11.5	11.9	12.3	12.6	12.7	13.0	13.1
82°	10.3	10.2	10.0	9.9	10.5	10.8	11.3	11.5	11.7	12.0	12.1
82.5°	9.5	9.3	9.1	9.0	9.7	9.9	10.3	10.5	10.7	11.0	11.1
83°	8.4	8.3	8.1	8.1	8.7	9.0	9.5	9.7	9.8	10.0	10.2
83.5°	7.5	7.4	7.2	7.1	7.8	8.1	8.6	8.8	9.0	9.3	9.4
84°	6.7	6.5	6.3	6.3	6.9	7.2	7.6	7.9	8.1	8.4	8.5
84.5°	5.9	5.7	5.5	5.4	5.9	6.3	6.7	7.0	7.2	7.5	7.6
85°	4.9	4.8	4.6	4.6	5.1	5.5	5.9	6.1	6.3	6.6	6.7
85.5°	4.2	4.0	3.8	3.8	4.3	4.6	5.0	5.3	5.5	5.7	5.9
86°	3.4	3.2	3.2	3.1	3.5	3.8	4.2	4.4	4.6	4.8	5.0
86.5°	2.7	2.5	2.5	2.3	2.7	3.0	3.4	3.7	3.9	4.0	4.1
87°	2.0	2.0	1.9	1.7	2.0	2.2	2.6	2.9	3.1	3.3	3.4
87.5°	1.4	1.3	1.2	1.0	1.4	1.6	1.9	2.1	2.3	2.5	2.6
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: P639474  
CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -2700K

**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: P639474

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	496.9	496.9	496.9	496.9	496.9	496.9
0.5°	496.4	496.9	497.2	497.1	496.6	496.1
1°	496.8	496.3	496.1	496.4	496.8	495.9
1.5°	498.0	495.7	496.6	496.7	496.5	495.7
2°	496.0	495.8	496.0	495.6	495.5	494.8
2.5°	497.1	495.3	495.3	495.4	495.6	495.2
3°	496.1	495.4	494.9	494.8	495.0	494.1
3.5°	495.0	495.1	494.5	494.6	493.8	492.7
4°	495.0	493.6	493.9	493.7	493.0	491.7
4.5°	494.7	493.6	493.1	493.0	492.0	492.1
5°	493.7	491.5	492.1	492.0	491.5	491.2
5.5°	492.7	491.6	490.8	491.1	490.4	489.9
6°	492.4	490.9	490.5	489.7	489.5	488.7
6.5°	491.6	489.8	489.6	489.0	489.1	487.8
7°	490.8	488.4	487.8	488.4	487.0	487.0
7.5°	489.4	487.6	487.2	486.6	486.4	485.8
8°	488.4	486.4	485.7	485.6	484.9	484.2
8.5°	487.9	485.6	484.5	483.6	483.2	482.4
9°	485.4	483.8	483.3	482.4	482.6	482.3
9.5°	484.1	482.8	481.7	481.0	480.5	480.2
10°	483.9	481.0	480.6	480.1	478.8	478.2
10.5°	483.1	480.1	478.9	478.0	476.6	477.0
11°	482.2	478.2	477.3	476.7	475.9	474.9
11.5°	479.4	478.4	475.9	475.3	474.2	473.7
12°	478.6	474.7	474.2	473.4	472.2	472.3
12.5°	475.8	473.9	472.1	471.3	470.4	470.3
13°	475.3	472.0	469.8	469.4	469.3	468.1
13.5°	473.9	471.0	468.5	467.9	466.6	466.7
14°	471.6	468.3	467.1	465.9	464.8	464.5
14.5°	469.3	466.5	464.7	464.2	463.2	461.9
15°	468.4	464.1	462.0	461.6	460.5	460.8
15.5°	465.5	461.7	460.5	458.7	457.9	457.6
16°	463.6	459.9	458.3	457.1	456.4	455.6
16.5°	461.3	457.4	455.8	454.9	453.8	453.6
17°	459.5	455.7	453.8	452.1	451.1	450.7
17.5°	456.9	453.1	451.7	449.7	448.9	448.3
18°	454.6	450.4	448.7	447.4	446.6	445.9
18.5°	452.7	448.3	446.4	444.7	443.4	443.5
19°	450.1	445.3	443.6	442.0	440.6	440.6
19.5°	446.6	442.8	440.9	439.2	438.3	437.7
20°	444.8	439.6	438.7	436.2	435.5	435.4
20.5°	441.6	437.6	435.4	433.7	432.9	432.2
21°	439.2	435.2	432.8	430.9	429.8	428.2

TEST NUMBER: P639474

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	431.9	426.1	424.0	422.7	421.0	421.0
23°	428.0	422.9	420.9	419.1	418.3	417.8
23.5°	425.0	420.7	418.0	415.7	415.1	415.1
24°	421.5	417.6	415.5	412.9	412.0	411.6
24.5°	419.6	414.3	412.4	409.7	408.8	408.7
25°	415.5	411.6	408.9	407.3	406.3	405.8
25.5°	412.2	407.9	406.0	403.2	402.5	402.0
26°	410.2	404.8	402.8	400.4	398.8	398.7
26.5°	405.9	401.9	399.4	396.7	396.0	395.6
27°	402.9	398.2	395.7	393.7	392.3	392.3
27.5°	399.9	394.2	391.7	389.9	388.9	388.7
28°	395.9	390.6	387.9	386.6	385.6	385.4
28.5°	392.6	387.0	384.5	382.5	381.5	381.9
29°	387.9	383.0	380.3	378.8	378.1	378.3
29.5°	384.5	379.8	377.0	374.5	374.0	374.1
30°	380.8	375.4	373.2	370.9	370.7	370.2
30.5°	376.7	371.5	368.8	366.8	366.3	366.0
31°	372.7	366.6	364.5	362.7	361.8	362.2
31.5°	368.8	362.7	360.6	358.6	357.7	357.3
32°	363.3	358.2	356.0	354.2	353.3	354.1
32.5°	358.7	353.3	351.3	349.6	349.4	349.4
33°	354.4	348.9	347.0	344.9	344.6	344.6
33.5°	349.1	344.1	342.1	340.7	340.3	340.8
34°	345.4	339.2	337.0	335.7	335.8	336.3
34.5°	339.6	334.6	332.1	331.1	330.6	331.8
35°	334.7	329.1	327.1	326.1	326.0	327.2
35.5°	329.7	324.0	322.0	320.7	321.3	322.0
36°	324.1	318.5	317.0	316.2	316.4	316.9
36.5°	319.4	313.5	311.7	311.2	311.3	312.5
37°	313.3	307.8	306.4	305.6	306.0	307.2
37.5°	308.3	302.6	301.0	300.8	301.1	302.2
38°	302.7	296.8	295.6	295.4	295.9	297.2
38.5°	297.0	291.0	290.3	289.8	290.5	291.7
39°	291.0	285.7	284.3	284.4	285.8	286.7
39.5°	285.5	279.9	279.3	279.4	280.1	281.4
40°	280.0	273.9	273.0	273.5	274.5	275.9
40.5°	273.6	268.4	267.9	268.3	269.8	270.7
41°	268.0	262.3	262.0	262.5	263.7	265.2
41.5°	262.1	256.8	256.4	257.0	258.1	259.8
42°	255.9	251.5	250.9	251.8	252.8	254.6
42.5°	249.9	245.1	245.1	246.2	247.5	248.9
43°	243.9	239.4	239.5	240.2	241.7	243.7
43.5°	238.0	233.7	233.8	234.7	236.5	238.1



TEST NUMBER: P639474

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	220.6	216.8	217.3	217.9	219.9	221.6
45.5°	214.6	211.1	211.6	213.0	214.6	216.5
46°	209.5	205.8	206.4	207.2	209.1	210.9
46.5°	204.0	200.1	201.3	202.1	203.8	205.9
47°	198.3	194.9	195.6	197.0	198.4	200.4
47.5°	192.9	189.6	190.2	191.4	193.5	195.2
48°	187.7	184.5	185.5	186.1	188.1	190.2
48.5°	182.5	179.2	180.1	181.3	182.9	184.7
49°	177.5	174.4	175.3	176.3	177.9	179.9
49.5°	172.4	169.4	170.1	171.1	173.0	174.7
50°	167.1	164.3	165.2	166.5	168.1	170.2
50.5°	162.4	159.7	160.4	161.3	163.0	165.1
51°	157.8	154.9	155.8	156.9	158.5	160.4
51.5°	153.1	150.7	151.3	152.2	153.9	155.7
52°	148.6	146.0	146.7	147.6	149.2	151.1
52.5°	143.8	141.5	142.4	143.2	144.4	146.5
53°	139.5	137.3	138.1	138.8	140.2	141.7
53.5°	135.4	133.2	133.7	134.7	135.7	137.6
54°	131.4	128.7	129.6	130.3	131.7	133.2
54.5°	127.4	125.0	125.6	126.2	127.4	129.2
55°	123.1	121.2	121.5	122.3	123.4	125.0
55.5°	119.5	117.4	117.8	118.3	119.6	120.9
56°	115.8	113.7	113.9	114.6	115.7	117.2
56.5°	111.8	110.0	110.4	110.8	111.7	113.3
57°	108.4	106.8	106.8	107.2	108.1	109.6
57.5°	105.2	103.1	103.3	103.7	104.4	106.2
58°	101.7	99.9	99.9	100.3	101.1	102.4
58.5°	98.5	96.5	96.5	96.8	97.5	99.2
59°	95.2	93.3	93.5	93.4	94.3	95.7
59.5°	92.0	90.3	90.2	90.3	91.0	92.1
60°	89.0	87.1	87.3	87.3	88.0	88.9
60.5°	86.1	84.3	84.0	84.2	84.9	85.9
61°	83.2	81.3	81.3	81.1	81.7	82.6
61.5°	80.4	78.6	78.4	78.3	78.8	79.8
62°	77.7	75.9	75.4	75.6	76.0	76.9
62.5°	75.0	72.9	72.8	72.7	73.3	74.0
63°	72.3	70.5	70.2	70.0	70.5	71.1
63.5°	69.5	68.0	67.7	67.5	67.8	68.5
64°	67.1	65.4	65.1	65.0	65.2	65.8
64.5°	64.7	63.1	62.8	62.5	62.8	63.2
65°	62.2	60.8	60.4	60.3	60.3	60.8
65.5°	60.0	58.5	58.0	57.8	57.9	58.3
66°	57.8	56.3	55.9	55.5	55.6	55.9



TEST NUMBER: P639474

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	51.4	49.9	49.5	49.2	49.0	49.3
68°	49.2	48.1	47.6	47.2	47.0	47.2
68.5°	47.3	46.0	45.6	45.2	45.1	45.2
69°	45.5	44.3	43.8	43.4	43.3	43.4
69.5°	43.7	42.5	41.9	41.5	41.3	41.5
70°	41.8	40.8	40.3	39.9	39.6	39.7
70.5°	40.2	39.0	38.6	38.1	37.9	38.0
71°	38.5	37.4	37.0	36.6	36.3	36.3
71.5°	36.8	35.8	35.4	35.0	34.8	34.7
72°	35.3	34.3	33.9	33.3	33.6	33.7
72.5°	33.7	33.0	32.5	32.0	32.1	32.2
73°	32.3	31.6	31.1	30.6	30.6	30.7
73.5°	30.8	30.2	29.7	29.3	29.2	29.2
74°	29.4	28.8	28.4	27.9	27.7	27.7
74.5°	28.2	27.4	27.0	26.6	26.4	26.3
75°	26.9	26.2	25.8	25.5	25.2	25.2
75.5°	25.6	25.0	24.7	24.3	24.0	24.0
76°	24.5	23.8	23.5	23.1	22.9	22.8
76.5°	23.3	22.7	22.4	22.1	21.9	21.7
77°	22.2	21.6	21.4	21.1	20.9	20.7
77.5°	21.3	20.7	20.4	20.1	19.9	19.7
78°	20.2	19.6	19.3	19.0	18.7	18.5
78.5°	19.2	18.6	18.3	17.9	17.6	17.5
79°	18.1	17.6	17.3	16.9	16.6	16.4
79.5°	17.2	16.5	16.2	15.9	15.6	15.3
80°	16.1	15.5	15.2	14.8	14.5	14.3
80.5°	15.1	14.5	14.2	13.8	13.6	13.3
81°	14.0	13.6	13.2	12.9	12.5	12.4
81.5°	13.2	12.6	12.3	11.9	11.5	11.3
82°	12.2	11.6	11.2	10.8	10.5	10.3
82.5°	11.2	10.6	10.3	9.9	9.7	9.5
83°	10.2	9.8	9.5	9.1	8.7	8.4
83.5°	9.4	8.9	8.5	8.1	7.7	7.5
84°	8.5	7.9	7.6	7.2	6.9	6.7
84.5°	7.6	7.0	6.7	6.4	6.0	5.9
85°	6.7	6.2	5.9	5.6	5.2	4.9
85.5°	5.9	5.4	5.0	4.7	4.3	4.2
86°	5.0	4.5	4.2	3.9	3.6	3.4
86.5°	4.2	3.8	3.5	3.2	2.9	2.7
87°	3.5	3.1	2.8	2.5	2.2	2.0
87.5°	2.7	2.4	2.1	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: P639474

CATALOG NUMBER: RL4LS9FSD2W1EWH -900LM -2700K

**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



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

Scaled Data Report





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

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21.5°	427.5	427.6	430.9	433.7	437.9	441.5	443.4	443.7	442.4	440.2	438.9
22°	423.3	424.8	427.9	430.6	435.4	438.3	441.1	441.0	440.4	438.5	435.9



44°	232.6	235.3	238.7	241.6	246.1	246.2	242.8	236.3	234.0	234.8	235.0
44.5°	227.5	229.4	233.3	236.2	240.7	241.0	236.7	230.3	227.5	229.2	228.4



66.5°	53.6	54.1	54.8	55.4	57.0	56.8	56.2	55.5	55.0	54.9	55.3
67°	51.5	51.9	52.4	52.9	54.6	54.4	53.9	53.2	52.9	53.0	53.2



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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Scaled Data Report





21.5°	436.5	432.0	430.1	428.0	427.2	427.5
22°	432.9	429.3	427.0	424.7	424.1	423.3



44°	232.3	228.2	228.1	229.3	230.9	232.6
44.5°	226.5	222.4	222.9	223.8	225.4	227.5



66.5°	55.5	54.1	53.6	53.3	53.3	53.6
67°	53.4	52.1	51.5	51.2	51.1	51.5



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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Scaled Data Report



(END OF REPORT)