

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: P639501

Luminaire Tested: RL56LS9FSD2W1EWH -900LM -3500K

Issue Date: 1/25/2023

Test Information

Test Method: LM-79-2019
Report Number: P639501
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2206549B001)
Test Lab:
Issue Date: 1/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: RL56LS9FSD2W1EWH -900LM -3500K
Description: 5/6IN RETROFIT, SELECTABLE LUMEN AND CCT, MATTE WHITE BAFFLE
Light Source: (1) SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

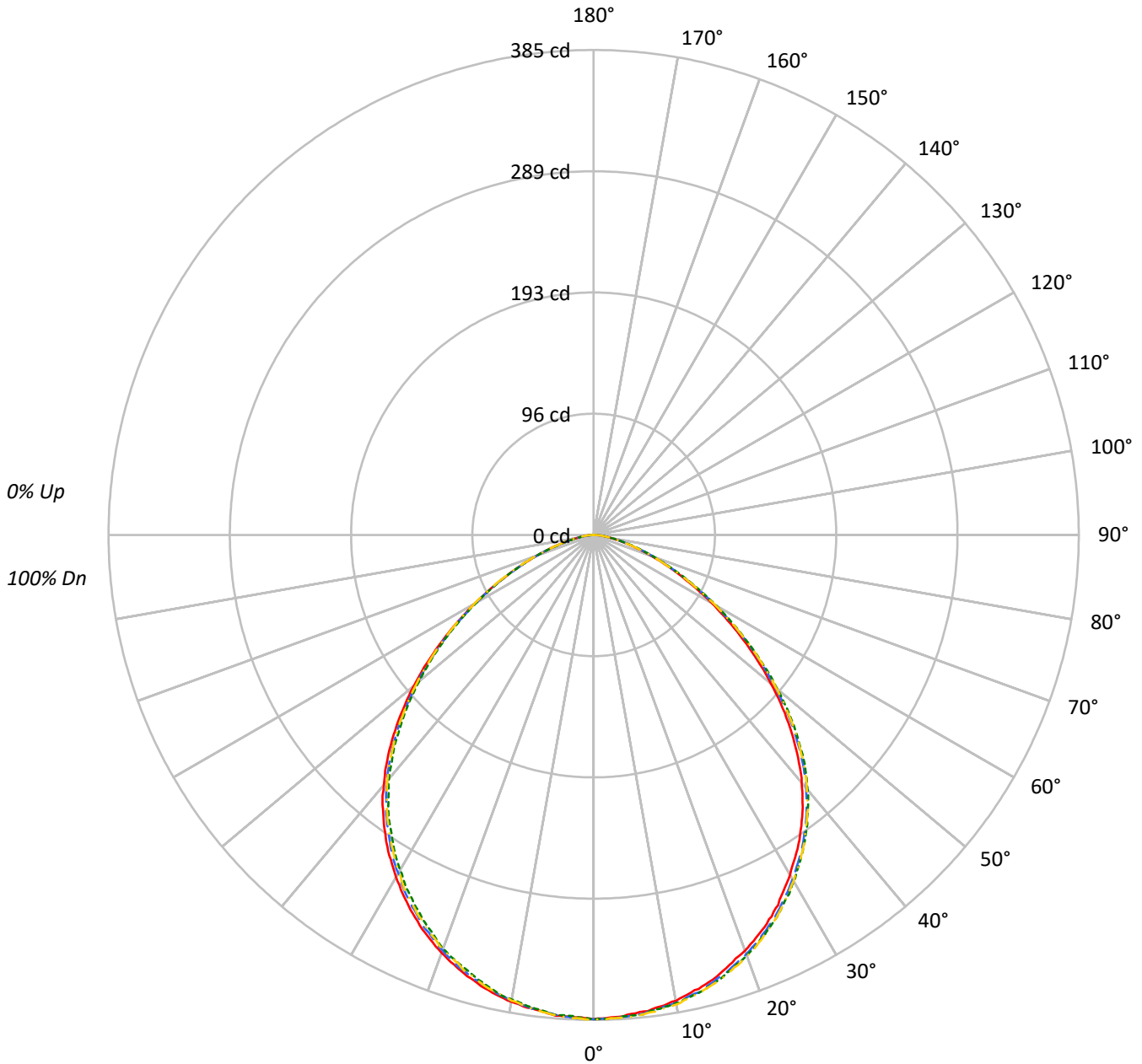
Lumens per Lamp: N/A
Luminaire Lumens: 890.0 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.3
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 8.7
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



TEST NUMBER: P639501
CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

Luminous Intensity Polar Plot





TEST NUMBER: P639501

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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	100	100		
	1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87	87	87	87	87	87		
	2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	74	74	74	74	74	74		
	3	93	84	76	70	91	82	75	70	79	73	69	76	72	67	74	70	66	64	64	64	64	64	64		
	4	86	75	67	61	84	73	66	60	71	65	59	69	63	59	67	62	58	56	56	56	56	56	56		
	5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49	49	49	49	49	49		
	6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43	43	43	43	43	43		
	7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	39	39	39	39	39	39		
	8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	35	35	35	35	35	35		
	9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31	31	31	31	31	31		
	10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	28	28	28	28	28	28		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	21078	21078	21078	21078
5°	20983	21065	21032	21010
10°	20908	21014	20953	20847
15°	20738	20931	20795	20619
20°	20494	20739	20599	20383
25°	20215	20469	20269	19906
30°	19731	20123	19851	19446
35°	19167	19602	19301	18859
40°	18377	18900	18528	18084
45°	17219	17793	17413	16878
50°	15667	16238	15872	15411
55°	13839	14327	14011	13744
60°	11863	12335	11951	11786
65°	9819	10196	9794	9781
70°	7854	8223	7710	7662
75°	5909	6333	5676	5465
80°	4420	4672	4009	3820
85°	3900	4088	3208	2956

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
 Vertical Angle: 45°
 Luminance: 17816 cd/sqm



TEST NUMBER: P639501
 CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.3	4.1
10°-20°	103.3	11.6
20°-30°	154.0	17.3
30°-40°	179.7	20.2
40°-50°	172.2	19.3
50°-60°	131.2	14.7
60°-70°	76.5	8.6
70°-80°	30.4	3.4
80°-90°	6.4	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°	293.6	33.0
0°-40°	473.3	53.2
0°-60°	776.7	87.3
0°-90°	890.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	890.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	384	384	384	384	384	
5°	381	383	382	382	381	36
15°	365	369	366	363	365	103
25°	334	338	335	329	334	154
35°	286	293	288	282	286	179
45°	222	230	225	218	222	171
55°	145	150	147	144	145	130
65°	76	79	76	75	76	76
75°	28	30	27	26	28	31
85°	6	6	5	5	6	7
90°	0	0	0	0	0	



TEST NUMBER: P639501

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5
0.5°	384.0	384.5	384.5	384.5	384.3	384.5	384.7	384.2	384.0	384.4	384.4
1°	383.9	384.4	384.2	384.3	384.3	384.4	385.1	384.7	383.7	384.4	384.1
1.5°	383.9	384.3	384.0	384.5	384.2	384.3	384.7	384.9	383.2	384.2	383.9
2°	383.2	384.1	383.8	384.5	384.1	383.6	384.0	384.7	383.2	384.3	384.2
2.5°	383.1	384.5	383.9	384.2	384.0	384.0	384.0	384.0	383.1	384.0	383.9
3°	383.2	384.1	383.8	384.6	383.6	384.2	384.0	384.0	383.0	383.6	383.2
3.5°	382.9	383.7	383.4	384.6	383.0	384.2	384.0	384.2	383.0	383.8	383.4
4°	381.8	383.2	383.3	384.2	383.0	384.3	383.8	383.1	382.6	384.3	382.3
4.5°	381.5	382.8	382.8	383.2	382.8	384.1	383.7	382.7	382.9	383.7	382.3
5°	381.3	383.0	382.4	383.2	382.8	383.6	383.3	382.7	382.2	382.4	381.5
5.5°	380.5	382.9	382.4	382.8	382.9	382.5	383.2	382.6	381.6	382.2	380.9
6°	380.5	382.2	382.1	382.3	382.5	382.3	382.6	382.0	380.7	382.1	380.7
6.5°	380.5	381.0	380.9	382.0	381.3	381.6	381.9	381.3	380.1	380.9	380.5
7°	379.4	380.7	380.7	381.5	380.3	381.3	381.5	380.9	379.7	380.7	379.9
7.5°	378.6	379.8	380.1	381.1	379.8	380.3	381.5	380.6	379.1	380.1	379.3
8°	378.1	379.2	379.4	380.2	379.8	379.7	380.5	379.8	379.1	379.0	378.2
8.5°	377.8	378.7	378.7	380.1	378.9	379.7	379.9	379.6	378.4	378.5	377.6
9°	376.8	378.5	378.4	378.9	378.8	379.0	379.3	378.8	377.4	377.8	377.0
9.5°	375.7	377.8	377.7	378.7	378.2	378.2	379.1	378.4	376.8	377.7	376.3
10°	375.6	376.7	377.2	377.9	377.5	377.6	378.6	377.3	376.4	376.6	375.8
10.5°	374.3	376.4	376.2	376.8	377.4	377.3	377.8	376.5	375.8	376.2	374.5
11°	373.5	375.2	375.5	376.6	375.8	375.8	376.3	375.8	374.8	374.5	373.4
11.5°	372.6	374.1	374.3	375.2	375.1	375.0	375.8	374.5	373.9	374.2	372.7
12°	371.4	373.5	373.5	374.3	374.4	375.0	375.3	373.8	373.0	373.0	371.8
12.5°	370.2	372.5	372.8	373.6	373.5	374.4	373.8	373.1	372.2	372.4	370.7
13°	370.0	371.4	372.7	372.4	373.0	373.3	373.1	371.8	370.9	371.8	369.8
13.5°	368.5	369.8	371.1	371.8	371.8	372.3	371.9	371.4	370.2	370.3	368.3
14°	367.6	369.0	369.7	370.4	370.9	371.2	371.0	370.2	369.2	368.6	367.3
14.5°	366.4	368.6	368.5	369.8	369.5	370.7	370.0	369.2	367.7	367.8	365.8
15°	365.4	367.3	367.4	368.9	368.8	369.0	368.9	367.8	366.4	366.4	365.2
15.5°	364.1	365.3	365.8	367.8	367.2	367.7	368.0	366.6	365.3	365.2	364.0
16°	362.5	364.1	364.7	366.2	366.3	366.6	366.9	365.8	364.4	363.6	362.7
16.5°	361.0	363.3	363.6	364.7	364.9	365.0	365.6	364.4	362.9	362.6	361.1
17°	359.8	361.3	362.7	363.8	363.1	364.2	363.7	362.7	361.6	361.1	360.3
17.5°	358.1	360.9	361.0	361.9	362.4	362.8	362.7	361.6	360.2	359.6	359.0
18°	356.9	359.2	359.6	360.3	361.0	361.0	361.2	361.2	358.5	358.7	357.2
18.5°	354.6	356.9	358.2	360.1	359.2	360.2	360.3	359.1	357.7	357.4	355.6
19°	353.7	355.8	356.7	358.2	358.2	358.8	358.9	357.5	355.9	355.4	354.4
19.5°	352.5	354.4	355.6	356.1	356.8	357.1	357.1	356.2	354.4	353.8	352.8
20°	351.3	353.6	354.0	355.0	355.5	355.5	355.6	354.3	353.1	352.9	350.9
20.5°	349.8	351.7	352.6	353.5	353.6	354.0	354.6	352.7	351.4	350.7	349.7
21°	347.8	350.5	350.9	351.8	352.4	352.5	353.3	351.5	350.0	349.3	347.5



TEST NUMBER: P639501

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	342.9	345.3	345.9	347.7	347.0	347.9	347.8	346.3	344.7	344.1	341.9
23°	341.3	343.4	343.9	345.3	346.0	346.5	345.8	344.7	342.8	341.8	340.5
23.5°	339.6	341.6	342.6	343.7	343.7	344.7	344.1	343.0	341.4	340.0	339.0
24°	337.9	339.6	340.4	341.4	342.2	343.0	342.3	341.2	339.3	338.5	336.9
24.5°	335.3	337.6	338.9	339.9	340.1	341.0	340.6	339.1	337.0	337.0	334.6
25°	334.2	335.7	337.6	338.0	338.4	338.8	338.6	337.3	335.1	334.6	332.4
25.5°	331.5	333.9	335.2	336.4	336.8	336.6	336.7	335.1	333.3	332.0	330.2
26°	329.7	331.8	332.9	334.3	334.8	334.8	334.7	332.9	331.3	330.2	328.7
26.5°	328.4	329.6	331.1	332.0	332.7	333.3	332.4	330.8	329.2	328.5	326.2
27°	325.0	327.9	328.8	330.2	330.4	331.0	330.3	329.3	326.9	326.1	324.1
27.5°	322.9	326.0	326.6	328.0	328.1	328.6	328.5	326.9	324.8	324.0	322.1
28°	320.6	323.3	324.4	326.0	326.0	326.3	325.8	324.6	322.6	322.0	319.9
28.5°	318.3	320.9	322.6	323.6	324.7	324.0	323.8	322.3	320.5	319.6	317.5
29°	316.1	318.6	320.3	321.1	322.3	321.9	321.6	320.2	318.0	317.3	315.2
29.5°	314.0	316.5	317.9	319.2	319.6	319.6	319.3	317.9	316.1	314.5	312.9
30°	311.7	314.7	315.7	317.0	317.9	317.4	317.3	315.5	313.6	312.1	310.1
30.5°	308.9	312.3	313.5	314.6	315.4	315.1	314.5	313.2	311.1	310.1	308.2
31°	306.2	309.3	311.1	312.3	312.4	312.8	312.3	310.9	308.7	307.8	305.7
31.5°	304.0	307.5	308.6	309.9	310.3	310.3	310.2	308.5	306.2	305.6	303.5
32°	301.8	305.1	306.4	307.4	308.0	308.5	308.0	306.0	303.9	303.4	300.8
32.5°	299.4	302.4	303.9	305.1	305.7	305.6	305.6	303.6	301.8	300.2	298.2
33°	297.0	299.8	301.6	302.5	303.2	303.2	302.8	301.0	299.3	297.7	295.8
33.5°	294.4	297.5	299.2	300.1	300.8	300.7	300.6	298.4	296.6	295.1	292.9
34°	292.0	294.9	296.7	297.9	298.0	297.9	297.9	296.1	294.2	292.5	290.0
34.5°	289.2	291.8	294.1	295.4	295.7	295.4	295.4	293.8	291.3	289.8	287.1
35°	286.4	289.6	291.2	293.0	292.9	293.1	292.3	291.1	288.4	287.1	284.6
35.5°	284.0	286.9	288.6	289.8	290.3	290.6	289.6	289.0	286.1	284.8	282.2
36°	280.7	284.0	286.0	287.0	287.9	288.2	286.7	285.7	283.3	282.0	279.2
36.5°	278.4	281.5	283.1	284.5	285.1	285.3	284.0	282.4	280.3	279.2	276.8
37°	275.5	278.2	280.5	281.9	281.5	282.4	281.3	280.0	277.5	276.3	273.7
37.5°	272.6	275.7	277.4	278.3	279.0	278.8	278.2	276.9	274.7	273.1	270.8
38°	269.1	272.4	274.5	275.5	276.0	276.3	276.4	273.7	272.2	270.1	267.5
38.5°	266.3	269.7	271.0	272.2	273.5	273.0	273.2	270.6	269.1	266.9	264.7
39°	263.4	266.4	268.4	269.3	270.5	270.8	269.6	268.1	266.2	264.5	261.6
39.5°	260.0	263.5	265.4	266.6	267.7	267.7	266.3	265.0	262.2	260.8	258.3
40°	256.8	261.0	262.4	263.7	264.1	264.1	263.0	261.9	258.9	258.1	255.4
40.5°	254.0	257.1	259.3	260.3	260.6	260.9	260.2	257.9	255.9	255.4	252.2
41°	250.5	253.6	255.7	257.2	257.9	258.0	257.0	255.4	252.4	251.5	249.0
41.5°	247.1	250.1	252.3	253.8	254.6	254.7	253.6	252.5	249.6	247.7	245.3
42°	243.6	246.9	249.2	250.3	251.3	250.5	250.1	248.4	246.1	244.5	242.0
42.5°	240.1	243.2	245.6	246.5	248.4	247.7	246.5	244.9	242.4	241.3	238.4
43°	236.8	239.7	241.8	243.1	244.5	244.0	243.2	241.3	239.0	237.6	235.1
43.5°	233.1	236.2	238.3	239.8	240.9	240.6	239.3	237.6	235.6	234.1	231.5



TEST NUMBER: P639501

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	222.1	225.2	227.5	228.3	229.5	229.8	228.4	226.9	224.6	222.9	220.8
45.5°	218.4	221.5	223.3	224.8	226.1	226.0	225.2	223.1	220.7	219.2	217.3
46°	214.8	217.5	219.9	221.3	221.9	221.9	221.1	219.2	217.1	215.6	213.5
46.5°	210.7	213.6	216.1	217.5	218.6	218.0	217.2	215.5	213.2	211.7	209.5
47°	207.4	209.7	211.9	213.0	214.2	214.4	213.0	211.5	209.6	207.9	205.9
47.5°	203.2	206.1	208.2	208.9	210.4	210.3	209.2	207.8	205.2	204.3	201.7
48°	199.5	202.0	204.3	204.9	206.8	206.2	205.4	204.1	201.7	200.5	198.1
48.5°	195.7	198.1	200.1	201.3	202.4	202.3	201.8	199.8	197.9	196.7	194.1
49°	191.5	194.1	196.2	197.3	198.5	198.1	197.2	195.9	194.1	192.7	190.5
49.5°	187.9	190.1	192.3	193.6	194.5	194.4	193.5	192.0	190.2	188.7	186.5
50°	183.7	186.0	188.2	189.0	190.4	190.7	189.2	187.9	186.1	184.8	182.8
50.5°	180.1	182.5	184.1	185.4	186.2	186.4	185.2	183.8	182.1	180.9	179.0
51°	176.0	178.6	180.0	181.5	182.5	181.8	181.5	180.0	178.2	177.4	175.4
51.5°	172.2	174.6	176.3	177.2	178.8	178.2	177.5	176.1	174.4	172.8	171.2
52°	167.8	170.4	172.2	173.6	174.7	174.1	173.2	172.2	170.7	169.3	167.3
52.5°	164.1	166.1	168.1	169.3	170.3	170.1	169.4	168.3	166.5	165.4	163.5
53°	160.3	162.3	164.1	165.3	166.0	166.6	165.2	163.9	162.3	161.2	159.8
53.5°	156.4	158.4	160.3	161.5	162.2	162.1	161.3	160.1	158.5	157.5	156.1
54°	152.5	154.4	156.6	157.3	158.0	157.9	157.1	156.4	154.7	153.5	152.1
54.5°	149.0	150.7	152.4	153.6	154.0	154.1	153.3	152.5	150.7	149.7	148.3
55°	144.8	146.7	148.4	149.6	149.9	150.0	149.4	148.3	146.6	145.7	144.4
55.5°	141.0	142.8	144.6	145.7	146.1	146.2	145.3	144.3	142.8	141.7	140.8
56°	137.3	138.9	140.8	141.8	142.3	142.1	141.2	140.5	138.9	138.0	137.0
56.5°	133.6	135.3	137.0	138.0	138.6	138.3	137.4	136.5	135.3	134.5	133.3
57°	129.9	131.4	133.3	134.0	134.7	134.3	133.9	132.6	131.3	130.4	129.7
57.5°	126.0	127.7	129.7	130.3	130.7	130.6	129.8	128.7	127.5	126.7	125.8
58°	122.3	124.1	125.9	126.7	127.1	126.8	126.0	125.0	123.7	123.1	122.1
58.5°	118.8	120.1	121.9	122.9	123.7	123.3	122.1	121.1	119.8	119.3	118.4
59°	115.2	116.5	118.4	118.9	119.8	119.5	118.4	117.6	116.3	115.5	114.8
59.5°	111.7	112.8	114.6	115.5	115.7	115.4	115.0	113.7	112.5	112.0	111.4
60°	108.2	109.2	111.1	112.1	112.5	111.8	111.1	110.2	109.0	108.5	107.9
60.5°	104.7	105.8	107.6	108.3	109.0	108.5	107.6	106.5	105.5	104.9	104.3
61°	101.2	102.3	104.1	104.9	105.5	104.8	103.8	102.8	101.8	101.3	100.9
61.5°	97.9	98.9	100.6	101.4	101.8	101.2	100.3	99.3	98.3	97.8	97.2
62°	94.5	95.5	97.1	97.8	98.5	97.7	96.8	95.8	94.9	94.4	94.0
62.5°	91.1	92.3	93.7	94.5	95.0	94.3	93.4	92.7	91.5	91.0	90.7
63°	87.9	89.0	90.4	91.1	91.6	90.8	90.1	89.0	88.2	87.8	87.3
63.5°	84.7	85.8	87.1	88.0	88.1	87.7	86.7	85.8	85.0	84.6	84.3
64°	81.5	82.7	84.0	84.8	85.0	84.5	83.6	82.5	81.7	81.4	81.3
64.5°	78.6	79.6	80.9	81.6	81.9	81.3	80.4	79.4	78.5	78.3	77.9
65°	75.7	76.6	77.8	78.4	78.6	78.1	77.1	76.4	75.5	75.4	74.8
65.5°	72.6	73.5	74.9	75.5	75.7	75.1	74.2	73.3	72.5	72.1	72.0
66°	69.7	70.7	71.9	72.4	72.7	72.0	71.1	70.1	69.4	69.2	68.9



TEST NUMBER: P639501

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	61.6	62.5	63.7	64.3	63.9	63.4	62.6	61.7	60.9	60.6	60.5
68°	59.1	59.9	60.9	61.6	61.3	60.7	59.9	58.8	58.1	58.0	57.8
68.5°	56.5	57.3	58.2	58.9	58.6	58.0	57.0	56.1	55.4	55.4	55.0
69°	53.9	54.8	55.7	56.3	56.1	55.5	54.5	53.7	52.9	52.7	52.4
69.5°	51.3	52.3	53.2	53.7	53.8	53.0	52.1	51.1	50.4	50.2	50.0
70°	49.0	49.8	50.9	51.2	51.3	50.7	49.7	48.8	48.1	47.8	47.7
70.5°	46.7	47.5	48.4	48.8	49.0	48.3	47.5	46.5	45.7	45.5	45.3
71°	44.3	45.2	45.9	46.5	46.7	46.0	45.1	44.2	43.4	43.2	43.0
71.5°	41.9	42.9	43.6	44.1	44.4	43.6	42.7	42.0	41.1	40.7	40.7
72°	39.8	40.5	41.3	41.8	42.2	41.5	40.5	39.7	38.9	38.6	38.5
72.5°	37.5	38.2	39.2	39.5	39.9	39.4	38.4	37.4	36.8	36.5	36.3
73°	35.4	36.3	36.9	37.2	37.8	37.1	36.2	35.3	34.7	34.3	34.1
73.5°	33.4	34.3	34.9	35.2	35.7	35.1	34.1	33.3	32.6	32.3	32.0
74°	31.6	32.3	33.0	33.2	33.8	33.0	32.1	31.3	30.6	30.2	29.9
74.5°	29.7	30.5	31.0	31.2	31.8	31.0	30.2	29.4	28.7	28.3	28.1
75°	27.9	28.7	29.2	29.3	29.9	29.2	28.3	27.6	26.8	26.4	26.4
75.5°	26.1	26.8	27.5	27.6	28.0	27.5	26.5	25.8	25.0	24.7	24.6
76°	24.5	25.2	25.6	25.8	26.2	25.6	24.8	24.1	23.4	23.1	22.9
76.5°	22.9	23.6	24.1	24.1	24.6	24.0	23.1	22.3	21.7	21.4	21.2
77°	21.4	22.1	22.5	22.6	22.9	22.3	21.6	20.8	20.1	19.8	19.6
77.5°	20.0	20.6	21.0	21.1	21.4	20.8	20.0	19.4	18.7	18.3	18.2
78°	18.6	19.1	19.6	19.6	19.9	19.4	18.7	18.0	17.4	16.9	16.7
78.5°	17.3	17.9	18.3	18.3	18.5	17.9	17.3	16.7	16.0	15.8	15.6
79°	16.1	16.7	16.9	16.9	17.1	16.7	16.0	15.6	15.0	14.6	14.4
79.5°	15.1	15.6	16.0	16.0	15.8	15.6	15.0	14.4	13.8	13.4	13.2
80°	14.0	14.5	14.8	14.8	14.8	14.4	13.8	13.2	12.7	12.5	12.2
80.5°	13.0	13.4	13.8	13.7	13.7	13.3	12.8	12.3	11.8	11.5	11.2
81°	12.1	12.5	12.7	12.7	12.7	12.3	11.8	11.3	10.9	10.5	10.3
81.5°	11.1	11.5	11.8	11.8	11.6	11.3	10.8	10.4	10.0	9.8	9.6
82°	10.3	10.7	10.9	10.9	10.7	10.4	10.0	9.6	9.3	9.0	8.8
82.5°	9.6	10.0	10.2	10.1	9.9	9.6	9.4	8.9	8.6	8.3	8.0
83°	8.9	9.2	9.5	9.5	9.2	8.9	8.6	8.3	7.8	7.6	7.3
83.5°	8.2	8.5	8.8	8.8	8.4	8.2	7.9	7.5	7.2	6.9	6.6
84°	7.6	7.8	8.1	8.1	7.8	7.6	7.3	6.9	6.5	6.2	5.9
84.5°	6.9	7.2	7.4	7.4	7.2	7.0	6.6	6.3	5.8	5.5	5.3
85°	6.2	6.5	6.8	6.8	6.5	6.3	5.9	5.6	5.1	4.9	4.5
85.5°	5.5	5.9	6.1	6.1	5.9	5.7	5.3	4.9	4.4	4.2	3.9
86°	4.8	5.2	5.5	5.5	5.2	5.0	4.7	4.2	3.9	3.5	3.4
86.5°	4.2	4.5	4.8	4.9	4.6	4.4	4.1	3.6	3.4	2.9	2.6
87°	3.5	4.0	4.2	4.2	4.1	3.8	3.4	3.0	2.6	2.2	1.9
87.5°	2.9	3.4	3.6	3.6	3.4	3.4	2.8	2.4	2.0	1.6	1.4
88°	2.2	2.6	3.0	3.0	2.8	2.6	2.2	1.7	1.3	1.1	0.7
88.5°	1.7	2.1	2.3	2.4	2.2	1.9	1.6	1.2	0.8	0.4	0.3



TEST NUMBER: P639501
CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.1	0.4	0.7	0.7	0.5	0.4	0.1	0.0	0.0	0.0	0.0



TEST NUMBER: P639501

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	384.5	384.5	384.5	384.5	384.5	384.5
0.5°	384.2	384.1	384.5	384.9	384.0	384.0
1°	383.9	383.6	383.8	384.5	384.2	383.9
1.5°	383.8	383.4	383.6	384.0	384.7	383.9
2°	383.7	383.0	383.6	384.0	384.7	383.2
2.5°	383.0	382.3	383.3	384.1	383.8	383.1
3°	383.0	382.3	382.8	383.7	383.4	383.2
3.5°	383.0	382.0	382.8	383.4	383.2	382.9
4°	382.8	382.3	382.4	382.8	383.0	381.8
4.5°	382.5	382.2	382.6	382.6	382.4	381.5
5°	382.7	381.8	381.3	382.2	381.7	381.3
5.5°	382.3	380.8	381.2	381.3	380.9	380.5
6°	380.5	379.9	380.2	381.1	380.9	380.5
6.5°	379.7	379.3	380.1	380.3	379.6	380.5
7°	379.2	379.1	379.5	379.7	379.4	379.4
7.5°	378.7	378.2	377.9	379.3	378.9	378.6
8°	378.6	377.7	377.4	378.4	378.4	378.1
8.5°	377.3	376.6	376.8	377.7	377.8	377.8
9°	376.7	375.8	375.5	376.5	376.9	376.8
9.5°	376.0	374.9	375.1	375.8	376.4	375.7
10°	375.2	374.5	375.0	375.4	375.5	375.6
10.5°	374.1	373.7	373.7	374.2	374.8	374.3
11°	374.0	373.5	373.4	373.4	373.0	373.5
11.5°	372.7	372.6	372.6	372.2	372.4	372.6
12°	372.2	371.0	370.3	371.2	371.6	371.4
12.5°	370.6	369.8	369.2	370.3	370.2	370.2
13°	368.9	368.5	368.6	369.5	369.4	370.0
13.5°	368.2	367.2	367.9	368.5	368.3	368.5
14°	367.5	365.8	366.6	367.1	367.3	367.6
14.5°	366.1	365.0	365.2	365.7	365.4	366.4
15°	364.8	363.3	364.4	364.0	365.1	365.4
15.5°	363.1	361.9	362.3	362.8	363.6	364.1
16°	361.7	360.4	361.1	361.1	362.0	362.5
16.5°	360.7	359.0	359.7	361.1	360.6	361.0
17°	359.2	357.7	358.4	359.2	359.9	359.8
17.5°	357.9	356.7	357.5	356.8	357.9	358.1
18°	356.8	354.9	355.7	355.7	356.0	356.9
18.5°	354.6	354.0	353.4	354.0	355.0	354.6
19°	353.3	352.6	351.9	353.4	353.4	353.7
19.5°	351.7	350.8	350.3	351.2	352.2	352.5
20°	350.1	349.4	348.7	349.7	350.5	351.3
20.5°	347.8	347.6	347.2	348.6	349.1	349.8
21°	346.4	345.6	345.7	346.2	346.8	347.8



TEST NUMBER: P639501

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	341.5	339.3	339.7	341.1	341.2	342.9
23°	339.3	337.7	337.7	339.3	340.1	341.3
23.5°	337.7	335.6	336.2	337.2	338.0	339.6
24°	335.5	333.9	334.2	334.8	335.8	337.9
24.5°	333.6	331.5	332.1	333.3	334.1	335.3
25°	331.4	329.1	330.0	331.6	332.4	334.2
25.5°	329.1	327.5	327.7	329.3	330.2	331.5
26°	327.3	325.4	326.0	327.1	328.5	329.7
26.5°	325.2	323.0	324.0	324.9	326.0	328.4
27°	322.9	321.0	321.5	322.9	323.8	325.0
27.5°	320.6	318.7	319.2	320.9	321.9	322.9
28°	318.6	317.1	317.1	319.4	319.5	320.6
28.5°	316.4	314.5	314.9	316.6	317.1	318.3
29°	313.8	312.1	312.6	314.2	314.9	316.1
29.5°	311.2	309.2	310.2	311.4	312.6	314.0
30°	308.9	307.2	307.5	309.3	310.4	311.7
30.5°	306.6	304.9	305.3	307.1	307.8	308.9
31°	304.3	302.7	302.7	304.8	305.4	306.2
31.5°	302.0	300.3	300.2	301.9	303.0	304.0
32°	298.9	297.7	297.5	299.3	300.7	301.8
32.5°	296.2	295.0	295.0	296.5	298.2	299.4
33°	293.7	291.8	292.6	294.2	295.8	297.0
33.5°	291.1	289.7	290.2	291.7	293.1	294.4
34°	288.7	286.7	287.3	288.8	290.6	292.0
34.5°	286.1	284.2	284.8	286.5	287.9	289.2
35°	283.7	281.8	282.1	283.8	285.4	286.4
35.5°	280.8	279.5	279.5	280.9	282.2	284.0
36°	277.6	276.6	277.0	278.4	279.8	280.7
36.5°	275.1	273.7	273.7	275.4	276.6	278.4
37°	272.6	271.0	270.6	272.7	274.2	275.5
37.5°	269.7	267.7	267.9	269.5	271.4	272.6
38°	266.4	264.6	265.2	266.6	268.3	269.1
38.5°	263.4	261.4	262.5	263.8	265.0	266.3
39°	260.4	258.5	259.0	260.7	261.9	263.4
39.5°	256.8	255.9	256.1	257.9	258.8	260.0
40°	253.8	252.7	252.7	254.7	255.8	256.8
40.5°	250.7	249.6	250.0	251.5	252.3	254.0
41°	247.1	246.0	246.7	248.3	249.2	250.5
41.5°	244.2	242.0	243.5	245.1	246.0	247.1
42°	241.0	238.8	240.4	241.4	242.6	243.6
42.5°	237.1	235.7	236.5	237.8	239.5	240.1
43°	233.7	232.4	232.7	234.5	235.8	236.8
43.5°	230.0	229.0	229.0	231.0	232.4	233.1



TEST NUMBER: P639501

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	219.6	217.7	218.5	220.2	221.5	222.1
45.5°	215.9	214.2	214.9	216.7	217.5	218.4
46°	212.1	210.6	211.3	213.5	214.4	214.8
46.5°	208.2	207.0	208.0	209.3	210.2	210.7
47°	204.7	203.3	203.9	205.6	206.6	207.4
47.5°	200.8	199.6	200.6	202.1	202.6	203.2
48°	197.2	196.0	196.5	198.5	199.1	199.5
48.5°	193.2	192.1	193.1	194.2	195.0	195.7
49°	189.1	188.3	189.4	190.8	191.3	191.5
49.5°	185.4	184.8	185.6	187.1	187.2	187.9
50°	182.1	180.7	182.4	183.3	183.2	183.7
50.5°	177.8	177.1	178.2	179.6	179.9	180.1
51°	174.0	173.4	174.7	175.7	176.1	176.0
51.5°	170.2	169.9	170.5	172.0	172.2	172.2
52°	166.6	166.0	166.9	168.2	168.0	167.8
52.5°	162.7	162.3	163.4	164.3	164.2	164.1
53°	159.1	158.5	159.9	160.8	160.6	160.3
53.5°	155.3	154.7	155.9	156.8	156.7	156.4
54°	151.5	151.1	152.0	153.4	152.7	152.5
54.5°	147.8	147.2	148.0	149.6	149.1	149.0
55°	144.2	143.8	144.6	145.6	145.1	144.8
55.5°	140.4	139.9	140.9	141.6	141.5	141.0
56°	136.8	136.2	137.0	138.1	137.6	137.3
56.5°	133.1	132.4	133.3	134.6	134.2	133.6
57°	129.6	128.9	130.0	130.8	130.4	129.9
57.5°	125.8	125.0	126.4	127.0	126.5	126.0
58°	122.0	121.5	122.6	123.3	122.9	122.3
58.5°	118.6	118.0	119.0	119.8	119.2	118.8
59°	115.0	114.6	115.3	116.3	115.6	115.2
59.5°	111.4	110.9	112.1	112.7	112.2	111.7
60°	108.0	107.5	108.4	109.4	108.6	108.2
60.5°	104.7	104.0	104.9	105.8	105.2	104.7
61°	101.3	100.8	101.6	102.3	101.8	101.2
61.5°	97.6	97.6	98.3	98.9	98.4	97.9
62°	94.3	94.0	95.0	95.4	94.8	94.5
62.5°	91.1	90.8	91.7	92.1	91.5	91.1
63°	87.7	87.7	88.4	89.1	88.4	87.9
63.5°	84.5	84.6	85.5	85.8	85.2	84.7
64°	81.3	81.5	82.1	82.7	82.0	81.5
64.5°	78.1	78.3	79.1	79.5	78.9	78.6
65°	75.3	75.4	76.0	76.4	75.8	75.7
65.5°	72.3	72.4	73.3	73.3	72.9	72.6
66°	69.2	69.3	70.1	70.6	70.0	69.7

TEST NUMBER: P639501

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	60.9	61.0	61.7	62.0	61.8	61.6
68°	58.1	58.4	59.1	59.3	59.1	59.1
68.5°	55.4	55.8	56.2	56.6	56.5	56.5
69°	52.7	53.0	53.6	54.0	53.9	53.9
69.5°	50.2	50.5	51.0	51.3	51.3	51.3
70°	47.9	47.8	48.5	49.0	48.8	49.0
70.5°	45.7	45.3	46.1	46.5	46.5	46.7
71°	43.2	42.9	43.5	44.1	44.2	44.3
71.5°	40.9	40.6	41.2	41.7	41.8	41.9
72°	38.6	38.3	38.9	39.4	39.5	39.8
72.5°	36.5	36.0	36.5	37.0	37.2	37.5
73°	34.3	33.7	34.2	34.8	35.1	35.4
73.5°	32.2	31.6	32.0	32.6	33.1	33.4
74°	30.3	29.5	30.1	30.7	31.0	31.6
74.5°	28.2	27.7	28.1	28.7	29.2	29.7
75°	26.4	25.8	26.3	26.9	27.4	27.9
75.5°	24.7	24.1	24.5	25.1	25.6	26.1
76°	22.9	22.3	22.8	23.4	24.0	24.5
76.5°	21.2	20.8	21.2	21.8	22.3	22.9
77°	19.6	19.3	19.6	20.3	20.8	21.4
77.5°	18.2	17.9	18.3	18.8	19.4	20.0
78°	16.7	16.5	16.8	17.5	18.1	18.6
78.5°	15.6	15.4	15.7	16.2	16.7	17.3
79°	14.3	14.2	14.6	15.1	15.7	16.1
79.5°	13.2	13.1	13.4	14.0	14.6	15.1
80°	12.1	12.1	12.5	12.9	13.4	14.0
80.5°	11.1	11.2	11.5	12.0	12.5	13.0
81°	10.2	10.4	10.7	11.1	11.6	12.1
81.5°	9.5	9.7	10.0	10.3	10.7	11.1
82°	8.7	9.0	9.2	9.6	10.0	10.3
82.5°	8.0	8.2	8.4	8.8	9.2	9.6
83°	7.3	7.4	7.7	8.1	8.5	8.9
83.5°	6.5	6.8	7.0	7.4	7.8	8.2
84°	5.8	6.1	6.3	6.7	7.1	7.6
84.5°	5.1	5.4	5.6	6.1	6.5	6.9
85°	4.4	4.7	5.0	5.3	5.7	6.2
85.5°	3.8	4.0	4.3	4.7	5.1	5.5
86°	3.2	3.4	3.7	4.0	4.4	4.8
86.5°	2.6	2.7	3.0	3.4	3.8	4.2
87°	1.8	2.1	2.4	2.7	3.2	3.5
87.5°	1.3	1.5	1.8	2.1	2.4	2.9
88°	0.6	0.9	1.1	1.5	1.9	2.2
88.5°	0.1	0.4	0.6	0.9	1.3	1.7



TEST NUMBER: P639501

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.1	0.1

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°

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

Scaled Data Report



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

Scaled Data Report





21.5°	346.6	348.4	349.5	350.7	351.0	351.5	351.3	349.4	348.0	347.5	345.9
22°	344.4	346.4	347.4	349.3	349.1	350.1	349.3	348.2	346.4	346.0	343.9



44°	229.3	232.5	234.8	236.4	237.1	237.2	235.8	234.3	231.8	230.4	228.1
44.5°	226.1	228.8	230.5	232.4	233.2	232.9	232.5	230.7	228.5	226.3	224.0



66.5°	67.0	67.9	68.9	69.6	69.5	68.9	68.2	67.2	66.4	66.2	66.0
67°	64.4	65.1	66.2	66.8	66.8	66.0	65.2	64.3	63.6	63.5	63.1



89°	1.1	1.5	1.7	1.8	1.6	1.4	1.1	0.5	0.2	0.0	0.0
89.5°	0.5	0.9	1.2	1.2	1.1	0.9	0.4	0.0	0.0	0.0	0.0

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

Scaled Data Report





21.5°	344.9	343.4	343.7	344.3	345.3	346.6
22°	342.6	341.0	342.1	342.9	343.2	344.4



44°	226.6	225.2	225.6	227.7	228.9	229.3
44.5°	223.3	221.3	222.0	224.4	225.1	226.1



66.5°	66.4	66.5	67.2	67.6	67.2	67.0
67°	63.6	63.8	64.5	64.8	64.5	64.4

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

Scaled Data Report



89°	0.0	0.1	0.2	0.4	0.7	1.1
89.5°	0.0	0.0	0.0	0.1	0.3	0.5

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

Scaled Data Report



(END OF REPORT)