

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: P639503

Luminaire Tested: RL56LS9FSD2W1EWH -900LM -5000K

Issue Date: 1/25/2023

Test Information

Test Method: LM-79-2019
Report Number: P639503
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 -5000K
Description: 5/6IN RETROFIT, SELECTABLE LUMEN AND CCT, MATTE WHITE BAFFLE
Light Source: (1) SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

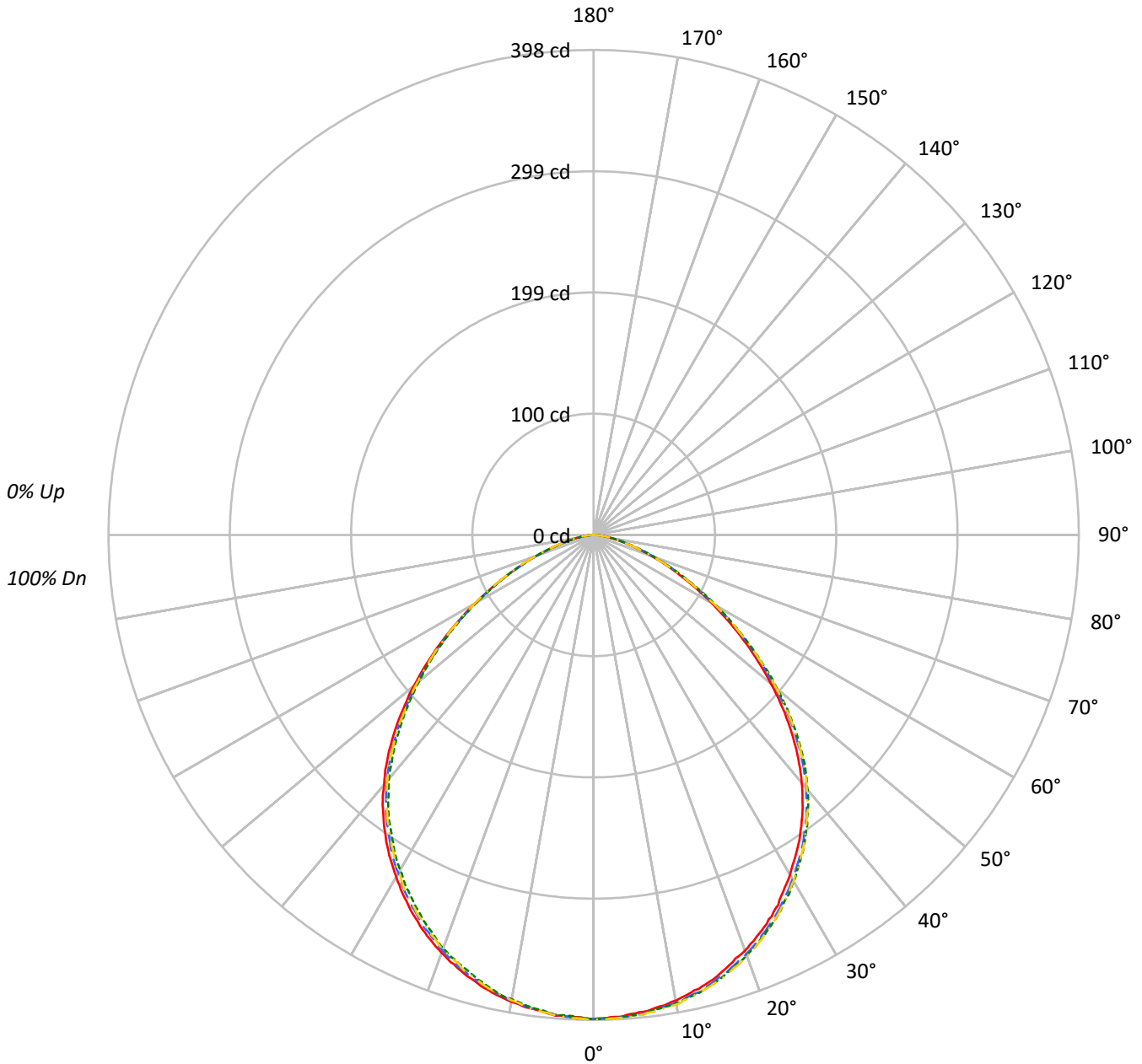
Lumens per Lamp: N/A
Luminaire Lumens: 920.0 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.3
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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																			
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87																			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	74																			
3	93	84	76	70	91	82	75	70	79	73	69	76	72	67	74	70	66	64																			
4	86	75	67	61	84	73	66	60	71	65	59	69	63	59	67	62	58	56																			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																			
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43																			
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	39																			
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	35																			
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31																			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	21786	21786	21786	21786
5°	21693	21775	21742	21715
10°	21609	21721	21660	21548
15°	21442	21635	21498	21317
20°	21183	21439	21294	21066
25°	20898	21158	20953	20578
30°	20396	20801	20516	20104
35°	19816	20264	19956	19495
40°	19000	19537	19150	18692
45°	17800	18397	18002	17451
50°	16196	16784	16409	15931
55°	14308	14805	14480	14203
60°	12258	12740	12346	12181
65°	10144	10546	10131	10105
70°	8110	8511	7966	7918
75°	6121	6545	5867	5655
80°	4546	4830	4167	3946
85°	4026	4214	3334	3019

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°

Vertical Angle: 45°

Luminance: 18413 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	4.1
10°-20°	106.8	11.6
20°-30°	159.2	17.3
30°-40°	185.8	20.2
40°-50°	178.0	19.3
50°-60°	135.6	14.7
60°-70°	79.0	8.6
70°-80°	31.4	3.4
80°-90°	6.6	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°	303.5	33.0
0°-40°	489.3	53.2
0°-60°	802.9	87.3
0°-90°	920.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	920.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	397	397	397	397	397	
5°	394	396	395	395	394	37
15°	378	381	379	376	378	106
25°	346	350	346	340	346	159
35°	296	303	298	291	296	185
45°	230	237	232	225	230	177
55°	150	155	152	149	150	134
65°	78	81	78	78	78	78
75°	29	31	28	27	29	32
85°	6	7	5	5	6	7
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°	397.4	397.4	397.4	397.4	397.4	397.4	397.4	397.4	397.4	397.4	397.4
0.5°	396.9	397.4	397.4	397.5	397.2	397.4	397.7	397.1	397.0	397.4	397.4
1°	396.8	397.3	397.1	397.2	397.2	397.4	398.1	397.6	396.6	397.3	397.0
1.5°	396.8	397.2	396.9	397.4	397.1	397.2	397.7	397.9	396.1	397.1	396.8
2°	396.1	397.0	396.7	397.4	397.0	396.6	397.0	397.7	396.1	397.2	397.1
2.5°	396.0	397.4	396.8	397.2	396.9	396.9	397.0	397.0	396.0	396.9	396.8
3°	396.1	397.0	396.8	397.6	396.5	397.1	396.9	396.9	395.9	396.6	396.1
3.5°	395.8	396.6	396.3	397.6	395.9	397.1	396.9	397.1	395.9	396.8	396.3
4°	394.7	396.1	396.2	397.1	395.9	397.2	396.8	396.0	395.5	397.2	395.2
4.5°	394.3	395.7	395.7	396.1	395.7	397.0	396.6	395.6	395.8	396.6	395.2
5°	394.2	395.9	395.3	396.1	395.7	396.5	396.2	395.6	395.1	395.3	394.3
5.5°	393.4	395.8	395.3	395.7	395.8	395.4	396.1	395.5	394.5	395.1	393.7
6°	393.4	395.1	395.0	395.2	395.4	395.2	395.5	394.9	393.6	395.0	393.6
6.5°	393.3	393.8	393.8	394.9	394.2	394.5	394.8	394.1	392.9	393.7	393.3
7°	392.2	393.6	393.6	394.3	393.2	394.2	394.4	393.7	392.5	393.6	392.7
7.5°	391.4	392.6	392.9	394.0	392.6	393.1	394.3	393.4	391.9	392.9	392.1
8°	390.8	392.0	392.2	393.0	392.6	392.5	393.3	392.6	391.9	391.8	391.0
8.5°	390.6	391.4	391.4	392.9	391.7	392.5	392.7	392.4	391.1	391.2	390.3
9°	389.5	391.2	391.1	391.7	391.6	391.8	392.1	391.6	390.2	390.6	389.7
9.5°	388.4	390.5	390.4	391.4	391.0	390.9	391.9	391.1	389.5	390.4	389.0
10°	388.2	389.4	389.9	390.6	390.2	390.3	391.3	390.0	389.1	389.3	388.5
10.5°	386.9	389.1	388.9	389.5	390.1	390.0	390.5	389.2	388.4	388.9	387.2
11°	386.1	387.8	388.2	389.3	388.5	388.4	389.0	388.4	387.4	387.1	386.0
11.5°	385.2	386.7	386.9	387.8	387.8	387.6	388.4	387.2	386.5	386.8	385.2
12°	383.9	386.1	386.1	386.9	387.0	387.6	387.9	386.4	385.6	385.6	384.4
12.5°	382.7	385.0	385.4	386.2	386.1	387.0	386.4	385.7	384.7	384.9	383.2
13°	382.5	384.0	385.3	385.0	385.6	385.9	385.7	384.4	383.4	384.4	382.2
13.5°	381.0	382.3	383.6	384.4	384.4	384.8	384.4	383.9	382.7	382.8	380.7
14°	380.0	381.4	382.2	382.9	383.4	383.7	383.5	382.7	381.6	381.0	379.7
14.5°	378.7	381.0	381.0	382.2	381.9	383.2	382.5	381.6	380.1	380.2	378.2
15°	377.8	379.7	379.8	381.3	381.2	381.4	381.3	380.2	378.8	378.7	377.5
15.5°	376.4	377.6	378.2	380.2	379.6	380.1	380.4	378.9	377.6	377.5	376.3
16°	374.8	376.4	377.0	378.6	378.6	379.0	379.3	378.1	376.7	375.8	375.0
16.5°	373.2	375.5	375.8	377.0	377.2	377.3	377.9	376.7	375.2	374.8	373.3
17°	371.9	373.5	375.0	376.0	375.3	376.5	376.0	375.0	373.8	373.3	372.4
17.5°	370.1	373.0	373.2	374.1	374.6	375.0	375.0	373.8	372.4	371.7	371.1
18°	368.9	371.3	371.8	372.4	373.1	373.2	373.4	373.4	370.6	370.8	369.2
18.5°	366.5	369.0	370.3	372.2	371.3	372.3	372.4	371.2	369.8	369.4	367.6
19°	365.6	367.8	368.7	370.3	370.3	370.9	371.0	369.6	367.9	367.4	366.3
19.5°	364.4	366.4	367.6	368.1	368.8	369.1	369.2	368.2	366.3	365.7	364.7
20°	363.1	365.6	366.0	366.9	367.5	367.5	367.6	366.2	365.0	364.8	362.8
20.5°	361.6	363.6	364.5	365.4	365.5	366.0	366.5	364.6	363.2	362.5	361.5
21°	359.5	362.3	362.8	363.6	364.3	364.4	365.2	363.3	361.8	361.1	359.2



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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°	354.4	356.9	357.5	359.4	358.7	359.6	359.6	358.0	356.4	355.7	353.4
23°	352.8	354.9	355.5	357.0	357.7	358.2	357.4	356.3	354.4	353.3	351.9
23.5°	351.0	353.2	354.2	355.3	355.3	356.4	355.7	354.5	352.9	351.5	350.4
24°	349.3	351.0	351.9	352.9	353.7	354.5	353.8	352.7	350.8	349.9	348.2
24.5°	346.6	348.9	350.3	351.3	351.6	352.5	352.1	350.6	348.3	348.3	345.9
25°	345.5	347.0	348.9	349.4	349.8	350.2	350.0	348.7	346.4	345.9	343.6
25.5°	342.7	345.1	346.5	347.7	348.1	348.0	348.0	346.4	344.6	343.2	341.4
26°	340.8	342.9	344.2	345.5	346.1	346.1	346.0	344.1	342.5	341.4	339.7
26.5°	339.5	340.7	342.3	343.2	344.0	344.5	343.6	342.0	340.3	339.5	337.2
27°	336.0	339.0	339.9	341.4	341.6	342.2	341.4	340.4	337.9	337.1	335.0
27.5°	333.7	337.0	337.6	339.0	339.1	339.7	339.6	338.0	335.8	335.0	332.9
28°	331.4	334.2	335.3	336.9	337.0	337.3	336.8	335.6	333.5	332.8	330.7
28.5°	329.0	331.8	333.5	334.5	335.6	334.9	334.8	333.2	331.3	330.4	328.2
29°	326.7	329.4	331.1	332.0	333.1	332.8	332.4	331.0	328.7	328.0	325.8
29.5°	324.6	327.2	328.6	330.0	330.3	330.3	330.1	328.6	326.7	325.1	323.4
30°	322.2	325.3	326.3	327.7	328.6	328.1	328.0	326.2	324.1	322.6	320.5
30.5°	319.4	322.8	324.1	325.2	326.0	325.8	325.1	323.7	321.6	320.6	318.6
31°	316.5	319.8	321.5	322.8	323.0	323.4	322.8	321.3	319.2	318.1	316.0
31.5°	314.2	317.9	319.0	320.4	320.7	320.8	320.7	318.9	316.6	315.9	313.8
32°	311.9	315.3	316.7	317.7	318.3	318.9	318.3	316.4	314.2	313.6	311.0
32.5°	309.5	312.6	314.2	315.3	316.0	315.9	315.9	313.8	312.0	310.4	308.3
33°	307.0	309.9	311.8	312.7	313.4	313.4	313.0	311.1	309.3	307.8	305.7
33.5°	304.4	307.5	309.3	310.2	311.0	310.8	310.7	308.5	306.6	305.0	302.7
34°	301.8	304.8	306.8	307.9	308.0	308.0	308.0	306.1	304.1	302.4	299.8
34.5°	299.0	301.6	304.0	305.3	305.7	305.4	305.3	303.8	301.1	299.5	296.8
35°	296.1	299.4	301.0	302.9	302.8	303.0	302.1	300.9	298.2	296.8	294.2
35.5°	293.5	296.5	298.3	299.6	300.1	300.4	299.4	298.8	295.7	294.4	291.7
36°	290.2	293.6	295.6	296.7	297.6	298.0	296.3	295.3	292.9	291.5	288.6
36.5°	287.7	290.9	292.6	294.1	294.8	295.0	293.6	291.9	289.8	288.6	286.1
37°	284.8	287.5	290.0	291.4	290.9	291.9	290.7	289.4	286.9	285.6	283.0
37.5°	281.7	285.0	286.8	287.7	288.4	288.2	287.6	286.2	284.0	282.3	279.9
38°	278.1	281.6	283.8	284.7	285.3	285.6	285.8	283.0	281.3	279.2	276.6
38.5°	275.3	278.7	280.2	281.4	282.8	282.2	282.4	279.8	278.1	275.9	273.6
39°	272.3	275.4	277.5	278.4	279.6	279.9	278.7	277.1	275.1	273.4	270.4
39.5°	268.8	272.4	274.3	275.6	276.7	276.8	275.3	274.0	271.0	269.6	267.0
40°	265.5	269.8	271.3	272.5	273.0	273.0	271.9	270.7	267.6	266.8	264.0
40.5°	262.5	265.8	268.1	269.1	269.3	269.7	269.0	266.6	264.5	264.0	260.7
41°	258.9	262.1	264.3	265.9	266.6	266.7	265.7	264.0	260.9	259.9	257.4
41.5°	255.4	258.5	260.8	262.4	263.1	263.3	262.1	261.0	258.0	256.1	253.5
42°	251.8	255.2	257.6	258.8	259.7	259.0	258.6	256.7	254.4	252.8	250.1
42.5°	248.2	251.4	253.9	254.8	256.7	256.1	254.8	253.2	250.6	249.4	246.5
43°	244.7	247.8	249.9	251.3	252.8	252.2	251.4	249.4	247.1	245.6	243.0
43.5°	241.0	244.1	246.3	247.9	249.0	248.7	247.3	245.6	243.5	242.0	239.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	229.6	232.8	235.2	236.0	237.3	237.5	236.1	234.5	232.2	230.4	228.3
45.5°	225.8	228.9	230.8	232.4	233.7	233.6	232.8	230.6	228.2	226.6	224.6
46°	222.0	224.9	227.3	228.7	229.4	229.4	228.5	226.6	224.4	222.9	220.7
46.5°	217.8	220.8	223.4	224.8	225.9	225.4	224.5	222.7	220.4	218.8	216.5
47°	214.4	216.8	219.1	220.2	221.4	221.6	220.2	218.6	216.7	214.9	212.8
47.5°	210.0	213.1	215.2	215.9	217.5	217.4	216.3	214.8	212.1	211.2	208.5
48°	206.2	208.8	211.2	211.8	213.7	213.2	212.3	211.0	208.5	207.3	204.8
48.5°	202.3	204.8	206.9	208.1	209.2	209.1	208.6	206.5	204.5	203.3	200.7
49°	198.0	200.6	202.8	203.9	205.2	204.8	203.9	202.5	200.7	199.2	196.9
49.5°	194.2	196.5	198.8	200.1	201.1	201.0	200.0	198.5	196.6	195.1	192.8
50°	189.9	192.3	194.5	195.4	196.8	197.1	195.6	194.2	192.4	191.0	189.0
50.5°	186.2	188.7	190.3	191.7	192.5	192.7	191.5	190.0	188.2	187.0	185.0
51°	181.9	184.7	186.1	187.6	188.7	187.9	187.6	186.1	184.2	183.4	181.3
51.5°	178.0	180.5	182.3	183.2	184.8	184.2	183.5	182.0	180.3	178.7	177.0
52°	173.5	176.1	178.0	179.4	180.6	180.0	179.1	178.0	176.4	175.0	172.9
52.5°	169.7	171.7	173.7	175.0	176.0	175.8	175.1	174.0	172.1	171.0	169.0
53°	165.7	167.8	169.6	170.9	171.6	172.2	170.8	169.5	167.8	166.7	165.2
53.5°	161.6	163.7	165.7	166.9	167.6	167.5	166.7	165.5	163.8	162.8	161.3
54°	157.7	159.6	161.9	162.6	163.3	163.3	162.4	161.6	159.9	158.7	157.3
54.5°	154.0	155.8	157.5	158.8	159.2	159.3	158.5	157.6	155.8	154.7	153.3
55°	149.7	151.6	153.4	154.7	154.9	155.1	154.4	153.3	151.5	150.6	149.2
55.5°	145.7	147.6	149.4	150.6	151.1	151.1	150.2	149.2	147.6	146.5	145.5
56°	141.9	143.6	145.5	146.6	147.1	146.9	145.9	145.3	143.6	142.6	141.7
56.5°	138.1	139.8	141.6	142.7	143.2	143.0	142.0	141.1	139.9	139.0	137.8
57°	134.2	135.8	137.8	138.5	139.3	138.9	138.4	137.1	135.7	134.8	134.1
57.5°	130.3	132.0	134.1	134.7	135.1	135.0	134.2	133.1	131.8	131.0	130.1
58°	126.4	128.3	130.1	131.0	131.4	131.1	130.3	129.3	127.9	127.2	126.2
58.5°	122.8	124.1	126.1	127.0	127.8	127.4	126.3	125.2	123.9	123.3	122.4
59°	119.0	120.5	122.4	122.9	123.9	123.5	122.4	121.6	120.2	119.4	118.7
59.5°	115.4	116.7	118.4	119.4	119.6	119.3	118.9	117.5	116.2	115.8	115.2
60°	111.8	112.9	114.8	115.8	116.2	115.6	114.9	113.9	112.6	112.2	111.5
60.5°	108.2	109.4	111.2	111.9	112.6	112.2	111.2	110.1	109.0	108.5	107.9
61°	104.6	105.7	107.7	108.5	109.0	108.3	107.3	106.3	105.2	104.7	104.2
61.5°	101.3	102.2	104.0	104.8	105.3	104.7	103.7	102.7	101.7	101.0	100.5
62°	97.7	98.7	100.4	101.1	101.9	101.0	100.1	99.1	98.0	97.6	97.2
62.5°	94.2	95.4	96.8	97.6	98.3	97.5	96.6	95.9	94.6	94.0	93.8
63°	90.9	92.0	93.4	94.2	94.7	93.8	93.1	92.0	91.2	90.8	90.2
63.5°	87.6	88.7	90.1	91.0	91.1	90.6	89.6	88.6	87.9	87.5	87.1
64°	84.3	85.4	86.9	87.7	87.9	87.4	86.4	85.2	84.5	84.1	84.0
64.5°	81.2	82.2	83.7	84.4	84.7	84.0	83.1	82.0	81.2	80.9	80.5
65°	78.2	79.2	80.4	81.1	81.3	80.7	79.7	79.0	78.1	77.9	77.3
65.5°	75.1	76.0	77.4	78.0	78.2	77.6	76.7	75.8	75.0	74.5	74.5
66°	72.1	73.1	74.3	74.9	75.2	74.4	73.5	72.5	71.7	71.5	71.2



TEST NUMBER: P639503

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	63.7	64.6	65.8	66.4	66.0	65.5	64.7	63.8	63.0	62.7	62.5
68°	61.1	61.9	63.0	63.6	63.4	62.8	61.9	60.8	60.1	60.0	59.8
68.5°	58.4	59.3	60.2	60.9	60.6	60.0	58.9	58.0	57.2	57.2	56.9
69°	55.7	56.6	57.6	58.2	58.0	57.4	56.3	55.5	54.7	54.4	54.2
69.5°	53.1	54.0	55.0	55.5	55.6	54.8	53.8	52.8	52.1	51.9	51.6
70°	50.6	51.5	52.6	52.9	53.1	52.4	51.4	50.4	49.7	49.4	49.3
70.5°	48.2	49.1	50.0	50.5	50.6	49.9	49.1	48.0	47.3	47.0	46.8
71°	45.8	46.7	47.5	48.1	48.2	47.6	46.6	45.7	44.9	44.6	44.4
71.5°	43.3	44.4	45.1	45.6	45.9	45.1	44.2	43.4	42.4	42.1	42.0
72°	41.2	41.9	42.7	43.2	43.6	42.9	41.8	41.0	40.2	39.9	39.8
72.5°	38.8	39.5	40.5	40.8	41.2	40.7	39.7	38.7	38.1	37.7	37.5
73°	36.6	37.5	38.2	38.5	39.0	38.4	37.4	36.5	35.9	35.5	35.3
73.5°	34.5	35.4	36.0	36.4	36.9	36.2	35.3	34.4	33.7	33.4	33.1
74°	32.6	33.4	34.1	34.3	35.0	34.1	33.2	32.4	31.6	31.2	30.9
74.5°	30.7	31.5	32.0	32.3	32.8	32.0	31.2	30.4	29.6	29.3	29.1
75°	28.9	29.6	30.2	30.3	30.9	30.2	29.3	28.5	27.7	27.3	27.3
75.5°	27.0	27.7	28.4	28.5	29.0	28.4	27.4	26.7	25.9	25.6	25.4
76°	25.3	26.0	26.5	26.6	27.1	26.5	25.6	24.9	24.2	23.8	23.6
76.5°	23.7	24.4	24.9	24.9	25.4	24.8	23.9	23.1	22.4	22.1	21.9
77°	22.1	22.8	23.2	23.4	23.7	23.1	22.3	21.5	20.8	20.5	20.3
77.5°	20.6	21.3	21.7	21.8	22.1	21.5	20.7	20.0	19.4	18.9	18.8
78°	19.2	19.8	20.2	20.3	20.6	20.0	19.4	18.6	18.0	17.5	17.3
78.5°	17.9	18.5	18.9	18.9	19.1	18.5	17.9	17.2	16.6	16.3	16.1
79°	16.7	17.2	17.5	17.5	17.7	17.2	16.5	16.1	15.5	15.1	14.9
79.5°	15.6	16.1	16.5	16.5	16.4	16.1	15.5	14.9	14.2	13.9	13.7
80°	14.4	15.0	15.3	15.3	15.3	14.9	14.3	13.7	13.2	12.9	12.6
80.5°	13.4	13.9	14.2	14.2	14.2	13.8	13.2	12.7	12.2	11.9	11.6
81°	12.5	12.9	13.2	13.2	13.1	12.7	12.2	11.7	11.2	10.9	10.6
81.5°	11.5	11.9	12.2	12.2	12.0	11.7	11.2	10.8	10.4	10.1	9.9
82°	10.7	11.0	11.3	11.2	11.1	10.8	10.4	9.9	9.6	9.3	9.1
82.5°	9.9	10.3	10.5	10.4	10.2	9.9	9.7	9.2	8.9	8.6	8.3
83°	9.2	9.5	9.8	9.8	9.5	9.2	8.9	8.6	8.1	7.9	7.6
83.5°	8.4	8.8	9.1	9.1	8.7	8.5	8.2	7.8	7.4	7.1	6.8
84°	7.8	8.1	8.4	8.4	8.1	7.8	7.5	7.1	6.7	6.4	6.1
84.5°	7.1	7.4	7.7	7.7	7.4	7.2	6.8	6.5	6.0	5.7	5.5
85°	6.4	6.7	7.0	7.0	6.7	6.5	6.1	5.8	5.3	5.0	4.6
85.5°	5.7	6.1	6.3	6.3	6.1	5.9	5.5	5.0	4.6	4.4	4.0
86°	5.0	5.4	5.7	5.7	5.4	5.2	4.8	4.4	4.0	3.6	3.5
86.5°	4.3	4.7	5.0	5.0	4.8	4.5	4.2	3.7	3.5	3.0	2.7
87°	3.6	4.1	4.3	4.4	4.2	4.0	3.5	3.1	2.7	2.3	2.0
87.5°	3.0	3.5	3.7	3.7	3.5	3.5	2.9	2.5	2.0	1.6	1.4
88°	2.3	2.7	3.1	3.1	2.9	2.7	2.2	1.8	1.4	1.1	0.7
88.5°	1.8	2.2	2.4	2.5	2.2	2.0	1.6	1.2	0.8	0.4	0.3



TEST NUMBER: P639503

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -5000K

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: P639503

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	397.4	397.4	397.4	397.4	397.4	397.4
0.5°	397.1	397.0	397.5	397.9	397.0	396.9
1°	396.8	396.6	396.8	397.4	397.1	396.8
1.5°	396.7	396.3	396.6	396.9	397.6	396.8
2°	396.6	395.9	396.6	396.9	397.6	396.1
2.5°	395.9	395.2	396.2	397.0	396.8	396.0
3°	395.9	395.2	395.7	396.6	396.3	396.1
3.5°	395.9	394.9	395.7	396.3	396.1	395.8
4°	395.7	395.2	395.3	395.7	395.9	394.7
4.5°	395.4	395.1	395.5	395.5	395.3	394.3
5°	395.6	394.6	394.1	395.1	394.6	394.2
5.5°	395.2	393.6	394.0	394.1	393.7	393.4
6°	393.3	392.7	393.0	394.0	393.7	393.4
6.5°	392.5	392.1	392.9	393.2	392.4	393.3
7°	392.0	391.9	392.3	392.5	392.2	392.2
7.5°	391.5	390.9	390.6	392.1	391.7	391.4
8°	391.4	390.4	390.2	391.2	391.2	390.8
8.5°	390.0	389.3	389.5	390.4	390.5	390.6
9°	389.4	388.5	388.2	389.2	389.6	389.5
9.5°	388.7	387.6	387.8	388.5	389.1	388.4
10°	387.8	387.1	387.6	388.0	388.1	388.2
10.5°	386.7	386.3	386.3	386.8	387.4	386.9
11°	386.6	386.1	386.0	386.0	385.6	386.1
11.5°	385.2	385.1	385.1	384.8	385.0	385.2
12°	384.8	383.5	382.8	383.7	384.2	383.9
12.5°	383.1	382.2	381.6	382.8	382.7	382.7
13°	381.4	380.9	381.0	382.0	381.8	382.5
13.5°	380.6	379.6	380.3	380.9	380.7	381.0
14°	379.9	378.1	379.0	379.5	379.7	380.0
14.5°	378.4	377.3	377.5	378.0	377.8	378.7
15°	377.1	375.6	376.7	376.3	377.4	377.8
15.5°	375.4	374.1	374.5	375.0	375.8	376.4
16°	373.9	372.6	373.3	373.3	374.2	374.8
16.5°	372.8	371.1	371.8	373.3	372.8	373.2
17°	371.3	369.8	370.5	371.3	372.0	371.9
17.5°	369.9	368.7	369.6	368.8	370.0	370.1
18°	368.8	366.8	367.7	367.7	368.0	368.9
18.5°	366.5	366.0	365.3	365.9	366.9	366.5
19°	365.2	364.5	363.8	365.4	365.4	365.6
19.5°	363.6	362.6	362.1	363.0	364.1	364.4
20°	361.9	361.1	360.4	361.5	362.3	363.1
20.5°	359.6	359.3	358.9	360.3	360.9	361.6
21°	358.1	357.2	357.3	357.9	358.5	359.5

TEST NUMBER: P639503

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	353.0	350.8	351.2	352.6	352.7	354.4
23°	350.7	349.1	349.1	350.8	351.5	352.8
23.5°	349.1	347.0	347.5	348.6	349.4	351.0
24°	346.8	345.2	345.5	346.1	347.2	349.3
24.5°	344.8	342.7	343.3	344.5	345.4	346.6
25°	342.6	340.2	341.2	342.8	343.6	345.5
25.5°	340.2	338.6	338.8	340.4	341.3	342.7
26°	338.4	336.3	336.9	338.1	339.6	340.8
26.5°	336.2	333.9	335.0	335.8	336.9	339.5
27°	333.8	331.8	332.3	333.7	334.8	336.0
27.5°	331.4	329.4	329.9	331.7	332.8	333.7
28°	329.3	327.8	327.8	330.2	330.3	331.4
28.5°	327.1	325.1	325.5	327.3	327.8	329.0
29°	324.3	322.6	323.1	324.8	325.5	326.7
29.5°	321.7	319.6	320.7	321.9	323.1	324.6
30°	319.4	317.6	317.9	319.8	320.9	322.2
30.5°	316.9	315.2	315.5	317.5	318.2	319.4
31°	314.5	313.0	313.0	315.1	315.7	316.5
31.5°	312.2	310.4	310.4	312.1	313.2	314.2
32°	309.0	307.8	307.6	309.4	310.8	311.9
32.5°	306.2	305.0	304.9	306.5	308.3	309.5
33°	303.6	301.6	302.5	304.1	305.7	307.0
33.5°	301.0	299.5	299.9	301.5	302.9	304.4
34°	298.4	296.3	297.0	298.6	300.3	301.8
34.5°	295.8	293.7	294.4	296.2	297.6	299.0
35°	293.3	291.3	291.6	293.3	295.0	296.1
35.5°	290.3	288.9	288.9	290.3	291.8	293.5
36°	286.9	285.9	286.3	287.8	289.2	290.2
36.5°	284.3	282.9	283.0	284.7	285.9	287.7
37°	281.8	280.1	279.7	281.9	283.4	284.8
37.5°	278.7	276.8	276.9	278.5	280.5	281.7
38°	275.3	273.5	274.2	275.6	277.4	278.1
38.5°	272.3	270.2	271.3	272.7	274.0	275.3
39°	269.1	267.2	267.8	269.5	270.8	272.3
39.5°	265.5	264.5	264.7	266.6	267.5	268.8
40°	262.4	261.2	261.2	263.3	264.4	265.5
40.5°	259.2	258.0	258.4	259.9	260.8	262.5
41°	255.4	254.3	255.0	256.7	257.6	258.9
41.5°	252.4	250.2	251.7	253.3	254.3	255.4
42°	249.1	246.9	248.5	249.5	250.7	251.8
42.5°	245.1	243.7	244.5	245.8	247.6	248.2
43°	241.6	240.2	240.5	242.4	243.8	244.7
43.5°	237.7	236.7	236.7	238.8	240.2	241.0



TEST NUMBER: P639503

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	227.0	225.1	225.9	227.6	228.9	229.6
45.5°	223.1	221.4	222.1	224.0	224.8	225.8
46°	219.3	217.7	218.4	220.7	221.6	222.0
46.5°	215.2	214.0	215.0	216.4	217.3	217.8
47°	211.6	210.2	210.8	212.5	213.6	214.4
47.5°	207.6	206.3	207.3	208.9	209.4	210.0
48°	203.9	202.6	203.1	205.2	205.8	206.2
48.5°	199.7	198.6	199.6	200.7	201.6	202.3
49°	195.5	194.6	195.8	197.3	197.7	198.0
49.5°	191.7	191.0	191.9	193.4	193.5	194.2
50°	188.2	186.8	188.5	189.5	189.4	189.9
50.5°	183.8	183.1	184.2	185.6	186.0	186.2
51°	179.9	179.3	180.6	181.7	182.1	181.9
51.5°	175.9	175.7	176.3	177.8	178.0	178.0
52°	172.2	171.6	172.5	173.9	173.6	173.5
52.5°	168.2	167.8	168.9	169.9	169.7	169.7
53°	164.5	163.8	165.3	166.3	166.0	165.7
53.5°	160.5	159.9	161.1	162.1	162.0	161.6
54°	156.6	156.2	157.1	158.6	157.8	157.7
54.5°	152.8	152.1	153.0	154.6	154.1	154.0
55°	149.0	148.6	149.5	150.5	150.0	149.7
55.5°	145.1	144.6	145.7	146.4	146.2	145.7
56°	141.5	140.8	141.6	142.7	142.3	141.9
56.5°	137.6	136.8	137.8	139.1	138.7	138.1
57°	134.0	133.3	134.4	135.3	134.8	134.2
57.5°	130.0	129.2	130.6	131.2	130.8	130.3
58°	126.1	125.6	126.7	127.5	127.1	126.4
58.5°	122.6	122.0	123.0	123.9	123.2	122.8
59°	118.9	118.5	119.2	120.3	119.5	119.0
59.5°	115.2	114.7	115.8	116.5	116.0	115.4
60°	111.6	111.1	112.0	113.0	112.2	111.8
60.5°	108.2	107.5	108.5	109.4	108.7	108.2
61°	104.7	104.2	105.1	105.7	105.3	104.6
61.5°	100.9	100.8	101.7	102.3	101.7	101.3
62°	97.4	97.2	98.3	98.6	98.0	97.7
62.5°	94.2	93.9	94.8	95.3	94.6	94.2
63°	90.7	90.7	91.4	92.1	91.4	90.9
63.5°	87.4	87.5	88.4	88.6	88.0	87.6
64°	84.0	84.3	84.8	85.4	84.8	84.3
64.5°	80.7	80.9	81.8	82.2	81.6	81.2
65°	77.8	77.9	78.6	79.0	78.4	78.2
65.5°	74.7	74.8	75.8	75.8	75.4	75.1
66°	71.5	71.6	72.5	73.0	72.4	72.1



TEST NUMBER: P639503

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	63.0	63.1	63.8	64.0	63.8	63.7
68°	60.1	60.4	61.1	61.3	61.1	61.1
68.5°	57.3	57.6	58.1	58.5	58.4	58.4
69°	54.5	54.8	55.4	55.8	55.7	55.7
69.5°	51.9	52.2	52.7	53.1	53.0	53.1
70°	49.5	49.4	50.1	50.6	50.5	50.6
70.5°	47.2	46.8	47.7	48.0	48.1	48.2
71°	44.7	44.4	45.0	45.6	45.7	45.8
71.5°	42.3	42.0	42.6	43.1	43.2	43.3
72°	39.9	39.6	40.2	40.7	40.9	41.2
72.5°	37.7	37.2	37.7	38.3	38.5	38.8
73°	35.4	34.8	35.4	36.0	36.2	36.6
73.5°	33.3	32.6	33.1	33.7	34.2	34.5
74°	31.3	30.5	31.1	31.8	32.1	32.6
74.5°	29.2	28.6	29.0	29.6	30.2	30.7
75°	27.3	26.7	27.2	27.8	28.3	28.9
75.5°	25.5	24.9	25.3	26.0	26.4	27.0
76°	23.6	23.1	23.6	24.2	24.8	25.3
76.5°	21.9	21.5	21.9	22.6	23.1	23.7
77°	20.3	20.0	20.3	21.0	21.5	22.1
77.5°	18.8	18.5	18.9	19.4	20.0	20.6
78°	17.3	17.0	17.4	18.1	18.7	19.2
78.5°	16.1	15.9	16.2	16.8	17.3	17.9
79°	14.8	14.7	15.1	15.6	16.2	16.7
79.5°	13.6	13.6	13.8	14.4	15.1	15.6
80°	12.5	12.5	12.9	13.4	13.9	14.4
80.5°	11.5	11.6	11.9	12.4	12.9	13.4
81°	10.6	10.8	11.0	11.4	12.0	12.5
81.5°	9.8	10.0	10.3	10.7	11.0	11.5
82°	9.0	9.3	9.5	9.9	10.4	10.7
82.5°	8.2	8.5	8.7	9.1	9.5	9.9
83°	7.6	7.7	8.0	8.4	8.8	9.2
83.5°	6.7	7.0	7.2	7.7	8.1	8.4
84°	6.0	6.3	6.5	6.9	7.4	7.8
84.5°	5.3	5.6	5.8	6.3	6.7	7.1
85°	4.6	4.8	5.2	5.5	5.9	6.4
85.5°	3.9	4.2	4.4	4.8	5.2	5.7
86°	3.3	3.5	3.8	4.1	4.6	5.0
86.5°	2.7	2.8	3.1	3.5	4.0	4.3
87°	1.9	2.2	2.5	2.8	3.3	3.6
87.5°	1.3	1.5	1.8	2.2	2.5	3.0
88°	0.6	0.9	1.1	1.5	2.0	2.3
88.5°	0.1	0.4	0.6	0.9	1.3	1.8



TEST NUMBER: P639503

CATALOG NUMBER: RL56LS9FSD2W1EWH -900LM -5000K

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

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

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21.5°	358.3	360.2	361.3	362.6	362.8	363.4	363.1	361.1	359.8	359.2	357.6
22°	356.0	358.1	359.1	361.1	360.9	361.9	361.1	360.0	358.1	357.7	355.5



44°	237.0	240.3	242.7	244.3	245.1	245.2	243.8	242.2	239.6	238.2	235.8
44.5°	233.7	236.5	238.3	240.3	241.1	240.8	240.3	238.5	236.2	233.9	231.6



66.5°	69.2	70.2	71.3	72.0	71.9	71.3	70.5	69.5	68.7	68.5	68.3
67°	66.6	67.3	68.4	69.0	69.1	68.3	67.4	66.5	65.8	65.6	65.3



89°	1.1	1.5	1.8	1.9	1.6	1.4	1.1	0.5	0.2	0.0	0.0
89.5°	0.5	0.9	1.2	1.2	1.2	0.9	0.4	0.0	0.0	0.0	0.0

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21.5°	356.6	355.0	355.3	355.9	356.9	358.3
22°	354.2	352.5	353.6	354.4	354.8	356.0



44°	234.2	232.8	233.2	235.3	236.6	237.0
44.5°	230.8	228.7	229.5	231.9	232.7	233.7

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66.5°	68.6	68.8	69.5	69.8	69.4	69.2
67°	65.8	66.0	66.6	67.0	66.6	66.6

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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

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(END OF REPORT)