

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: P639494

Luminaire Tested: RL56LS9FSD2W1EWH -1200LM -2700K

Issue Date: 1/25/2023

Test Information

Test Method: LM-79-2019
Report Number: P639494
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 -1200LM -2700K
Description: 5/6IN RETROFIT, SELECTABLE LUMEN AND CCT, MATTE WHITE BAFFLE
Light Source: (1) SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

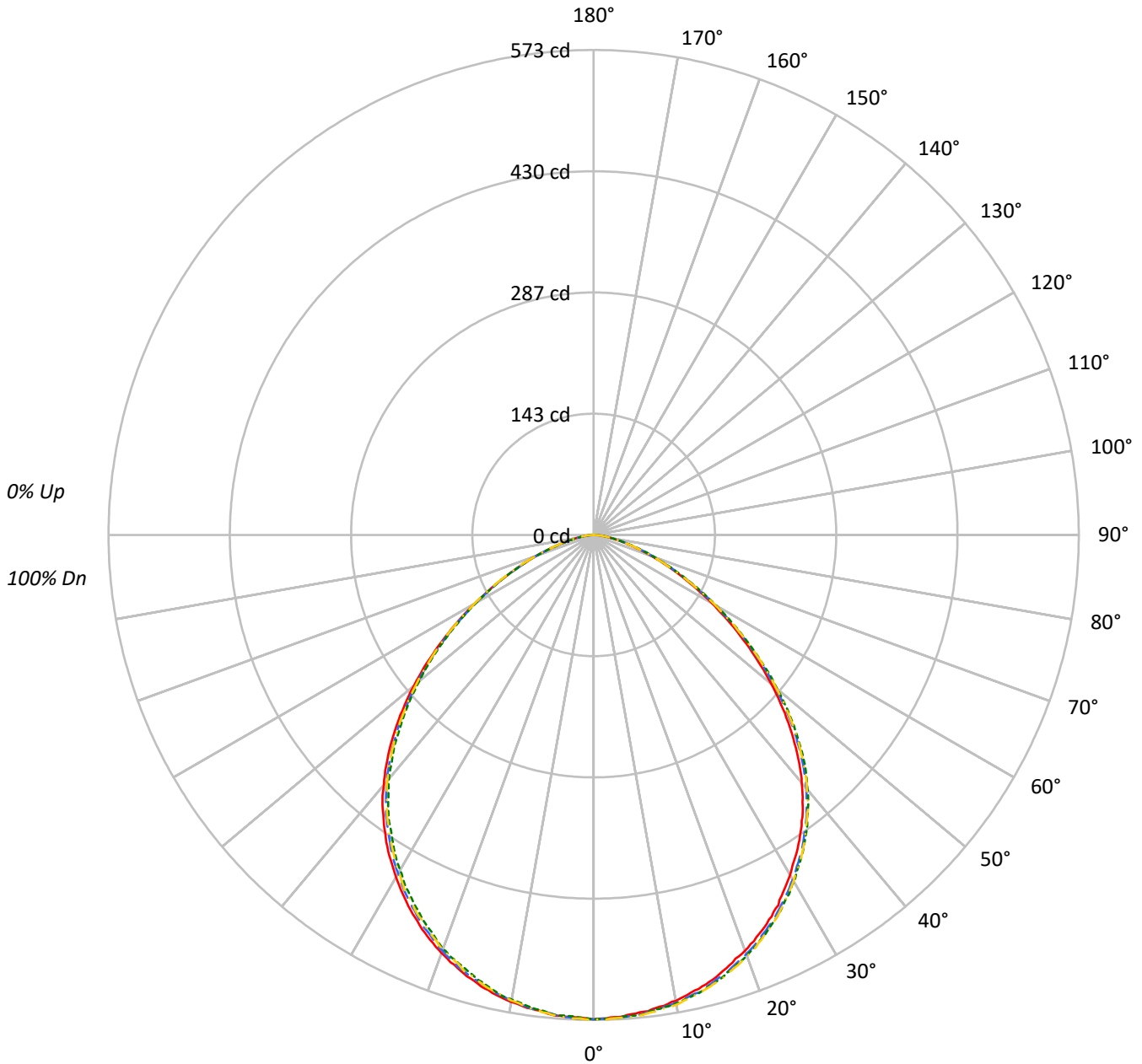
Lumens per Lamp: N/A
Luminaire Lumens: 1325.0 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.3
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 14.4
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: P639494
CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -2700K

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								
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°	31379	31379	31379	31379
5°	31240	31367	31317	31279
10°	31128	31284	31190	31034
15°	30874	31158	30959	30698
20°	30505	30879	30668	30342
25°	30092	30474	30177	29639
30°	29378	29960	29549	28954
35°	28536	29185	28737	28074
40°	27358	28138	27587	26915
45°	25638	26491	25925	25127
50°	23325	24170	23624	22950
55°	20606	21333	20855	20453
60°	17652	18354	17784	17553
65°	14619	15190	14593	14567
70°	11685	12246	11460	11396
75°	8811	9425	8451	8155
80°	6566	6945	5967	5714
85°	5787	6101	4843	4403

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°

Vertical Angle: 45°

Luminance: 26522 cd/sqm



TEST NUMBER: P639494
 CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.0	4.1
10°-20°	153.8	11.6
20°-30°	229.3	17.3
30°-40°	267.5	20.2
40°-50°	256.3	19.3
50°-60°	195.4	14.7
60°-70°	113.8	8.6
70°-80°	45.3	3.4
80°-90°	9.6	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°	437.1	33.0
0°-40°	704.7	53.2
0°-60°	1156.3	87.3
0°-90°	1325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1325.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	572	572	572	572	572	
5°	568	570	569	568	568	54
15°	544	549	546	541	544	153
25°	498	504	499	490	498	229
35°	426	436	429	420	426	266
45°	331	342	334	324	331	254
55°	216	223	218	214	216	193
65°	113	117	112	112	113	113
75°	42	44	40	38	42	46
85°	9	10	8	7	9	10
90°	0	1	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°	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4
0.5°	571.6	572.4	572.4	572.5	572.1	572.4	572.8	571.9	571.7	572.3	572.3
1°	571.5	572.2	571.9	572.1	572.1	572.3	573.3	572.7	571.2	572.2	571.8
1.5°	571.5	572.1	571.6	572.4	571.9	572.1	572.8	573.0	570.5	571.9	571.5
2°	570.4	571.8	571.3	572.4	571.8	571.1	571.7	572.8	570.5	572.1	571.9
2.5°	570.3	572.4	571.5	572.0	571.6	571.6	571.7	571.7	570.3	571.6	571.5
3°	570.4	571.8	571.4	572.6	571.0	571.9	571.6	571.6	570.2	571.1	570.4
3.5°	570.0	571.2	570.7	572.6	570.2	571.9	571.6	571.9	570.2	571.4	570.7
4°	568.5	570.5	570.6	571.9	570.2	572.1	571.4	570.3	569.6	572.1	569.2
4.5°	567.9	570.0	570.0	570.5	570.0	571.8	571.2	569.8	570.0	571.2	569.2
5°	567.7	570.1	569.4	570.4	570.0	571.0	570.6	569.8	569.1	569.4	567.9
5.5°	566.5	570.0	569.4	570.0	570.0	569.5	570.4	569.6	568.2	569.1	567.0
6°	566.5	569.0	568.9	569.2	569.5	569.2	569.6	568.7	566.8	568.9	566.8
6.5°	566.4	567.2	567.1	568.8	567.7	568.2	568.6	567.6	565.9	567.0	566.4
7°	564.8	566.8	566.8	567.9	566.2	567.7	568.0	567.0	565.3	566.8	565.5
7.5°	563.7	565.4	565.8	567.4	565.4	566.1	567.9	566.6	564.5	565.8	564.7
8°	562.9	564.6	564.8	566.0	565.4	565.2	566.4	565.4	564.4	564.3	563.1
8.5°	562.5	563.8	563.8	565.8	564.2	565.2	565.5	565.1	563.3	563.5	562.1
9°	561.0	563.5	563.3	564.1	564.0	564.3	564.7	564.0	561.9	562.5	561.2
9.5°	559.4	562.4	562.3	563.8	563.1	563.0	564.5	563.3	560.9	562.3	560.2
10°	559.2	560.8	561.5	562.6	562.0	562.1	563.6	561.7	560.3	560.6	559.5
10.5°	557.3	560.3	560.0	561.0	561.8	561.7	562.4	560.5	559.5	560.1	557.6
11°	556.0	558.6	559.1	560.7	559.5	559.5	560.2	559.5	558.0	557.5	555.9
11.5°	554.7	557.0	557.3	558.6	558.5	558.3	559.5	557.6	556.7	557.1	554.8
12°	552.9	556.0	556.0	557.3	557.4	558.3	558.7	556.5	555.3	555.3	553.6
12.5°	551.2	554.5	555.0	556.2	556.0	557.4	556.5	555.5	554.1	554.3	551.9
13°	550.8	553.0	554.9	554.4	555.3	555.7	555.4	553.6	552.2	553.6	550.5
13.5°	548.7	550.6	552.5	553.6	553.6	554.2	553.7	552.9	551.1	551.3	548.3
14°	547.3	549.3	550.4	551.5	552.2	552.6	552.4	551.1	549.6	548.8	546.8
14.5°	545.4	548.8	548.7	550.5	550.0	551.9	550.9	549.6	547.4	547.6	544.6
15°	544.0	546.9	547.0	549.1	549.0	549.3	549.1	547.6	545.5	545.4	543.7
15.5°	542.1	543.8	544.6	547.6	546.7	547.4	547.9	545.7	543.8	543.7	542.0
16°	539.7	542.1	543.0	545.2	545.3	545.8	546.2	544.5	542.5	541.3	540.0
16.5°	537.5	540.8	541.3	543.0	543.3	543.4	544.2	542.6	540.3	539.8	537.6
17°	535.6	538.0	540.0	541.6	540.5	542.2	541.5	540.0	538.4	537.7	536.4
17.5°	533.1	537.3	537.5	538.7	539.5	540.1	540.0	538.4	536.3	535.3	534.5
18°	531.3	534.7	535.4	536.4	537.4	537.5	537.8	537.8	533.7	534.0	531.8
18.5°	527.9	531.4	533.2	536.1	534.8	536.2	536.4	534.6	532.6	532.1	529.4
19°	526.6	529.7	531.0	533.3	533.3	534.2	534.3	532.3	529.9	529.1	527.6
19.5°	524.8	527.7	529.4	530.1	531.2	531.6	531.7	530.3	527.6	526.7	525.2
20°	522.9	526.5	527.1	528.4	529.3	529.3	529.4	527.5	525.7	525.4	522.5
20.5°	520.8	523.6	524.9	526.3	526.4	527.1	527.9	525.1	523.1	522.1	520.7
21°	517.7	521.8	522.5	523.7	524.6	524.8	526.0	523.2	521.1	520.0	517.4



TEST NUMBER: P639494

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	510.5	514.0	514.9	517.6	516.7	517.9	517.8	515.6	513.2	512.2	509.0
23°	508.1	511.2	512.0	514.1	515.1	515.9	514.8	513.1	510.4	508.8	506.9
23.5°	505.6	508.6	510.1	511.7	511.8	513.2	512.2	510.6	508.2	506.2	504.7
24°	503.1	505.6	506.8	508.3	509.4	510.6	509.6	508.0	505.2	503.9	501.6
24.5°	499.2	502.5	504.5	506.0	506.4	507.7	507.0	504.9	501.7	501.7	498.1
25°	497.5	499.8	502.5	503.2	503.8	504.4	504.1	502.1	498.9	498.1	494.9
25.5°	493.5	497.0	499.1	500.8	501.4	501.2	501.3	498.9	496.3	494.3	491.6
26°	490.9	493.9	495.7	497.6	498.5	498.4	498.3	495.6	493.2	491.6	489.3
26.5°	488.9	490.7	492.9	494.3	495.4	496.2	494.9	492.5	490.1	489.0	485.7
27°	483.9	488.2	489.5	491.6	491.9	492.8	491.7	490.3	486.6	485.5	482.5
27.5°	480.7	485.4	486.2	488.3	488.4	489.2	489.1	486.7	483.6	482.4	479.5
28°	477.3	481.3	482.9	485.3	485.4	485.9	485.1	483.3	480.3	479.4	476.2
28.5°	473.9	477.8	480.3	481.7	483.4	482.3	482.1	479.9	477.1	475.8	472.7
29°	470.5	474.4	476.9	478.1	479.8	479.3	478.8	476.7	473.4	472.4	469.3
29.5°	467.5	471.2	473.3	475.3	475.7	475.7	475.4	473.3	470.5	468.3	465.8
30°	464.1	468.5	470.0	471.9	473.3	472.5	472.4	469.8	466.8	464.7	461.6
30.5°	459.9	464.9	466.7	468.4	469.6	469.2	468.3	466.2	463.2	461.7	458.9
31°	455.8	460.5	463.1	464.9	465.1	465.7	464.9	462.8	459.7	458.2	455.1
31.5°	452.6	457.8	459.5	461.4	461.9	462.0	461.8	459.3	455.9	454.9	451.9
32°	449.2	454.2	456.1	457.6	458.5	459.4	458.5	455.6	452.5	451.7	447.9
32.5°	445.7	450.2	452.5	454.2	455.1	454.9	454.9	452.0	449.3	447.0	443.9
33°	442.2	446.3	449.1	450.3	451.4	451.4	450.8	448.1	445.5	443.3	440.3
33.5°	438.4	442.9	445.4	446.8	447.9	447.7	447.5	444.2	441.6	439.3	436.0
34°	434.7	439.0	441.8	443.5	443.7	443.6	443.6	440.8	438.0	435.5	431.8
34.5°	430.6	434.4	437.9	439.7	440.2	439.8	439.7	437.5	433.6	431.4	427.5
35°	426.4	431.2	433.5	436.2	436.1	436.4	435.1	433.4	429.4	427.5	423.7
35.5°	422.8	427.1	429.6	431.5	432.2	432.7	431.2	430.3	425.9	423.9	420.1
36°	417.9	422.9	425.8	427.3	428.6	429.1	426.8	425.3	421.8	419.8	415.7
36.5°	414.4	419.0	421.5	423.5	424.5	424.8	422.9	420.4	417.4	415.6	412.1
37°	410.2	414.1	417.7	419.6	419.0	420.4	418.7	416.9	413.1	411.3	407.5
37.5°	405.8	410.5	413.0	414.3	415.3	415.0	414.2	412.3	409.0	406.6	403.1
38°	400.6	405.6	408.7	410.1	410.9	411.4	411.6	407.5	405.2	402.1	398.3
38.5°	396.5	401.5	403.5	405.3	407.2	406.4	406.7	402.9	400.6	397.3	394.1
39°	392.1	396.6	399.6	401.0	402.7	403.1	401.4	399.1	396.3	393.7	389.4
39.5°	387.1	392.3	395.1	396.9	398.5	398.6	396.5	394.6	390.4	388.3	384.6
40°	382.3	388.6	390.7	392.5	393.2	393.2	391.5	389.9	385.5	384.3	380.2
40.5°	378.1	382.8	386.1	387.5	387.9	388.4	387.4	383.9	380.9	380.2	375.5
41°	372.9	377.5	380.7	382.9	383.9	384.1	382.6	380.3	375.7	374.4	370.7
41.5°	367.9	372.3	375.6	377.9	379.0	379.2	377.5	375.9	371.6	368.8	365.1
42°	362.7	367.6	371.0	372.7	374.1	373.0	372.4	369.8	366.3	364.1	360.2
42.5°	357.5	362.1	365.6	366.9	369.8	368.8	367.0	364.7	360.9	359.3	354.9
43°	352.5	356.9	359.9	361.9	364.1	363.2	362.1	359.3	355.8	353.8	349.9
43.5°	347.1	351.6	354.7	357.0	358.6	358.2	356.2	353.8	350.7	348.5	344.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	330.7	335.2	338.8	339.9	341.7	342.1	340.0	337.8	334.4	331.9	328.7
45.5°	325.2	329.7	332.4	334.7	336.6	336.4	335.2	332.2	328.6	326.3	323.4
46°	319.7	323.8	327.4	329.4	330.4	330.4	329.1	326.4	323.1	321.0	317.8
46.5°	313.7	317.9	321.7	323.7	325.4	324.6	323.3	320.8	317.4	315.1	311.9
47°	308.8	312.3	315.5	317.1	318.9	319.2	317.1	314.8	312.1	309.5	306.5
47.5°	302.4	306.9	309.9	311.0	313.2	313.1	311.5	309.4	305.5	304.2	300.3
48°	296.9	300.8	304.2	305.1	307.8	307.1	305.8	303.8	300.3	298.5	294.9
48.5°	291.4	295.0	297.9	299.7	301.4	301.2	300.4	297.4	294.6	292.8	289.0
49°	285.2	288.9	292.0	293.7	295.5	295.0	293.6	291.6	289.0	286.9	283.6
49.5°	279.7	283.0	286.3	288.2	289.6	289.5	288.0	285.9	283.1	281.0	277.7
50°	273.5	276.9	280.2	281.4	283.4	283.9	281.7	279.7	277.0	275.1	272.2
50.5°	268.1	271.7	274.1	276.0	277.2	277.5	275.8	273.6	271.0	269.3	266.4
51°	262.0	265.9	268.0	270.2	271.7	270.6	270.2	268.0	265.3	264.1	261.1
51.5°	256.3	260.0	262.5	263.9	266.1	265.3	264.3	262.1	259.7	257.3	254.9
52°	249.8	253.7	256.3	258.4	260.1	259.3	257.9	256.3	254.1	252.1	249.1
52.5°	244.3	247.3	250.2	252.0	253.5	253.2	252.2	250.5	247.9	246.3	243.5
53°	238.7	241.6	244.3	246.1	247.1	248.0	246.0	244.1	241.7	240.0	238.0
53.5°	232.8	235.8	238.7	240.4	241.4	241.3	240.1	238.4	235.9	234.5	232.4
54°	227.1	229.8	233.2	234.2	235.2	235.1	233.9	232.8	230.3	228.5	226.5
54.5°	221.8	224.3	226.9	228.6	229.3	229.4	228.3	227.0	224.4	222.9	220.8
55°	215.6	218.3	221.0	222.8	223.2	223.3	222.4	220.8	218.2	216.9	214.9
55.5°	209.9	212.6	215.2	216.9	217.6	217.7	216.3	214.8	212.6	211.0	209.6
56°	204.4	206.9	209.6	211.2	211.9	211.6	210.2	209.2	206.8	205.4	204.0
56.5°	198.9	201.4	203.9	205.5	206.3	205.9	204.5	203.2	201.5	200.2	198.4
57°	193.3	195.6	198.4	199.5	200.6	200.0	199.3	197.4	195.5	194.2	193.1
57.5°	187.6	190.2	193.1	194.0	194.6	194.4	193.2	191.7	189.8	188.6	187.3
58°	182.0	184.8	187.4	188.6	189.2	188.8	187.6	186.2	184.2	183.2	181.7
58.5°	176.8	178.8	181.5	182.9	184.1	183.5	181.8	180.3	178.4	177.6	176.3
59°	171.4	173.5	176.2	177.0	178.4	177.9	176.3	175.1	173.1	171.9	170.9
59.5°	166.2	168.0	170.6	171.9	172.3	171.8	171.2	169.3	167.4	166.7	165.8
60°	161.0	162.6	165.4	166.8	167.4	166.4	165.5	164.1	162.2	161.5	160.6
60.5°	155.8	157.5	160.2	161.2	162.2	161.5	160.2	158.6	157.0	156.2	155.3
61°	150.6	152.3	155.0	156.2	157.0	156.0	154.6	153.1	151.5	150.8	150.1
61.5°	145.8	147.2	149.7	150.9	151.6	150.7	149.4	147.9	146.4	145.5	144.7
62°	140.7	142.2	144.5	145.6	146.7	145.4	144.2	142.7	141.2	140.5	139.9
62.5°	135.6	137.4	139.4	140.6	141.5	140.4	139.1	138.1	136.2	135.4	135.0
63°	130.9	132.5	134.5	135.6	136.4	135.1	134.1	132.5	131.3	130.7	129.9
63.5°	126.1	127.8	129.7	131.0	131.2	130.5	129.0	127.7	126.6	126.0	125.5
64°	121.4	123.1	125.1	126.3	126.6	125.8	124.4	122.8	121.7	121.2	121.0
64.5°	117.0	118.4	120.5	121.5	122.0	121.0	119.6	118.2	116.9	116.6	116.0
65°	112.7	114.0	115.8	116.8	117.1	116.3	114.8	113.7	112.5	112.3	111.4
65.5°	108.1	109.4	111.5	112.4	112.7	111.8	110.5	109.1	107.9	107.4	107.3
66°	103.8	105.3	107.1	107.8	108.2	107.2	105.8	104.4	103.3	103.0	102.5



TEST NUMBER: P639494

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	91.8	93.0	94.8	95.7	95.1	94.4	93.1	91.9	90.7	90.3	90.1
68°	87.9	89.1	90.7	91.7	91.3	90.4	89.1	87.5	86.6	86.4	86.1
68.5°	84.1	85.4	86.7	87.7	87.2	86.4	84.9	83.5	82.4	82.4	81.9
69°	80.2	81.5	82.9	83.8	83.5	82.6	81.2	79.9	78.8	78.4	78.0
69.5°	76.4	77.8	79.2	80.0	80.1	78.9	77.5	76.1	75.0	74.7	74.4
70°	72.9	74.2	75.8	76.2	76.4	75.5	74.0	72.6	71.5	71.1	70.9
70.5°	69.5	70.7	72.0	72.7	72.9	71.9	70.7	69.2	68.1	67.7	67.4
71°	65.9	67.3	68.4	69.3	69.5	68.5	67.1	65.7	64.7	64.3	64.0
71.5°	62.4	63.9	65.0	65.7	66.0	65.0	63.6	62.5	61.1	60.6	60.5
72°	59.3	60.4	61.5	62.2	62.8	61.7	60.3	59.1	57.9	57.5	57.3
72.5°	55.8	56.9	58.3	58.8	59.4	58.6	57.1	55.7	54.9	54.3	54.0
73°	52.7	54.0	55.0	55.4	56.2	55.2	53.9	52.6	51.7	51.1	50.8
73.5°	49.8	51.0	51.9	52.4	53.2	52.2	50.8	49.6	48.5	48.1	47.7
74°	47.0	48.1	49.1	49.4	50.3	49.2	47.8	46.6	45.5	44.9	44.6
74.5°	44.2	45.3	46.1	46.5	47.3	46.1	44.9	43.8	42.7	42.2	41.9
75°	41.6	42.7	43.5	43.7	44.5	43.5	42.2	41.0	39.9	39.4	39.3
75.5°	38.9	39.9	40.9	41.0	41.7	40.9	39.4	38.5	37.3	36.8	36.6
76°	36.5	37.5	38.2	38.4	39.1	38.2	36.9	35.9	34.8	34.3	34.1
76.5°	34.1	35.1	35.8	35.9	36.6	35.7	34.4	33.3	32.3	31.8	31.5
77°	31.9	32.9	33.5	33.7	34.1	33.3	32.1	31.0	29.9	29.5	29.2
77.5°	29.7	30.6	31.3	31.4	31.9	31.0	29.8	28.9	27.9	27.3	27.1
78°	27.7	28.5	29.1	29.2	29.6	28.9	27.9	26.8	25.9	25.2	24.9
78.5°	25.7	26.7	27.3	27.3	27.6	26.7	25.8	24.8	23.8	23.5	23.2
79°	24.0	24.8	25.2	25.2	25.5	24.8	23.7	23.3	22.3	21.7	21.5
79.5°	22.5	23.3	23.7	23.7	23.6	23.2	22.4	21.4	20.5	20.0	19.7
80°	20.8	21.6	22.0	22.0	22.0	21.5	20.6	19.7	18.9	18.5	18.2
80.5°	19.3	20.0	20.5	20.4	20.4	19.8	19.0	18.4	17.6	17.1	16.7
81°	18.0	18.6	18.9	18.9	18.8	18.4	17.6	16.9	16.2	15.7	15.3
81.5°	16.6	17.2	17.6	17.6	17.3	16.9	16.1	15.5	14.9	14.5	14.2
82°	15.4	15.9	16.3	16.2	16.0	15.5	14.9	14.3	13.8	13.4	13.1
82.5°	14.3	14.8	15.1	15.0	14.7	14.3	13.9	13.2	12.8	12.4	12.0
83°	13.2	13.7	14.1	14.1	13.7	13.2	12.9	12.4	11.7	11.4	10.9
83.5°	12.2	12.7	13.1	13.1	12.6	12.3	11.8	11.2	10.7	10.2	9.8
84°	11.3	11.7	12.1	12.1	11.7	11.3	10.8	10.2	9.6	9.2	8.8
84.5°	10.2	10.7	11.1	11.1	10.7	10.4	9.8	9.3	8.6	8.2	7.9
85°	9.2	9.7	10.1	10.1	9.7	9.4	8.7	8.3	7.7	7.3	6.7
85.5°	8.1	8.7	9.1	9.1	8.7	8.4	7.9	7.3	6.6	6.3	5.8
86°	7.2	7.8	8.1	8.1	7.8	7.5	7.0	6.3	5.8	5.2	5.1
86.5°	6.2	6.8	7.2	7.3	6.9	6.5	6.1	5.4	5.1	4.3	3.8
87°	5.2	5.9	6.2	6.3	6.1	5.7	5.1	4.4	3.8	3.3	2.8
87.5°	4.3	5.0	5.3	5.4	5.1	5.0	4.1	3.6	2.9	2.4	2.1
88°	3.3	3.9	4.4	4.5	4.1	3.8	3.2	2.6	2.0	1.6	1.1
88.5°	2.6	3.1	3.4	3.5	3.2	2.8	2.4	1.8	1.2	0.6	0.5



TEST NUMBER: P639494

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.2	0.6	1.0	1.0	0.7	0.6	0.1	0.0	0.0	0.0	0.0



TEST NUMBER: P639494

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	572.4	572.4	572.4	572.4	572.4	572.4
0.5°	571.9	571.8	572.5	573.1	571.7	571.6
1°	571.5	571.1	571.4	572.4	571.9	571.5
1.5°	571.3	570.7	571.1	571.6	572.7	571.5
2°	571.2	570.1	571.1	571.6	572.7	570.4
2.5°	570.2	569.2	570.6	571.8	571.4	570.3
3°	570.2	569.2	570.0	571.2	570.7	570.4
3.5°	570.1	568.8	570.0	570.7	570.4	570.0
4°	569.9	569.2	569.4	570.0	570.1	568.5
4.5°	569.5	569.1	569.6	569.7	569.3	567.9
5°	569.8	568.4	567.6	569.0	568.3	567.7
5.5°	569.2	566.9	567.5	567.6	567.0	566.5
6°	566.4	565.5	566.0	567.4	567.0	566.5
6.5°	565.2	564.7	565.9	566.2	565.1	566.4
7°	564.6	564.5	565.0	565.2	564.8	564.8
7.5°	563.9	563.0	562.6	564.7	564.2	563.7
8°	563.7	562.3	561.9	563.4	563.4	562.9
8.5°	561.7	560.6	561.0	562.3	562.4	562.5
9°	560.8	559.5	559.1	560.5	561.1	561.0
9.5°	559.8	558.2	558.5	559.5	560.3	559.4
10°	558.6	557.5	558.3	558.9	559.0	559.2
10.5°	556.9	556.3	556.4	557.1	558.0	557.3
11°	556.8	556.0	555.9	555.9	555.3	556.0
11.5°	554.8	554.6	554.6	554.2	554.4	554.7
12°	554.2	552.3	551.3	552.6	553.3	552.9
12.5°	551.7	550.5	549.6	551.3	551.2	551.2
13°	549.2	548.6	548.8	550.1	549.9	550.8
13.5°	548.2	546.7	547.8	548.6	548.4	548.7
14°	547.2	544.5	545.8	546.6	546.8	547.3
14.5°	545.0	543.4	543.7	544.4	544.0	545.4
15°	543.1	540.9	542.5	541.9	543.6	544.0
15.5°	540.6	538.7	539.4	540.1	541.3	542.1
16°	538.5	536.6	537.6	537.6	538.9	539.7
16.5°	537.0	534.5	535.5	537.6	536.9	537.5
17°	534.8	532.6	533.6	534.8	535.8	535.6
17.5°	532.8	531.0	532.3	531.2	532.9	533.1
18°	531.2	528.3	529.5	529.6	530.0	531.3
18.5°	527.9	527.1	526.1	527.0	528.4	527.9
19°	526.0	525.0	523.9	526.2	526.2	526.6
19.5°	523.6	522.3	521.6	522.8	524.3	524.8
20°	521.2	520.1	519.1	520.7	521.8	522.9
20.5°	517.8	517.5	516.9	518.9	519.7	520.8
21°	515.7	514.5	514.6	515.4	516.3	517.7

TEST NUMBER: P639494

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	508.4	505.2	505.8	507.8	507.9	510.5
23°	505.1	502.7	502.7	505.2	506.3	508.1
23.5°	502.8	499.7	500.5	502.0	503.2	505.6
24°	499.5	497.1	497.5	498.4	500.0	503.1
24.5°	496.6	493.5	494.5	496.2	497.4	499.2
25°	493.4	490.0	491.3	493.7	494.9	497.5
25.5°	490.0	487.6	487.9	490.3	491.5	493.5
26°	487.3	484.4	485.3	486.9	489.1	490.9
26.5°	484.2	480.8	482.4	483.7	485.3	488.9
27°	480.7	477.9	478.6	480.7	482.1	483.9
27.5°	477.3	474.5	475.2	477.7	479.3	480.7
28°	474.3	472.1	472.1	475.5	475.6	477.3
28.5°	471.0	468.3	468.8	471.3	472.1	473.9
29°	467.1	464.7	465.3	467.8	468.8	470.5
29.5°	463.3	460.3	461.8	463.6	465.3	467.5
30°	459.9	457.4	457.8	460.5	462.1	464.1
30.5°	456.4	454.0	454.4	457.2	458.3	459.9
31°	453.0	450.7	450.7	453.8	454.6	455.8
31.5°	449.6	447.1	447.0	449.4	451.1	452.6
32°	445.0	443.3	443.0	445.6	447.7	449.2
32.5°	441.0	439.2	439.1	441.4	443.9	445.7
33°	437.2	434.4	435.6	438.0	440.3	442.2
33.5°	433.4	431.3	432.0	434.2	436.3	438.4
34°	429.8	426.8	427.8	430.0	432.6	434.7
34.5°	426.0	423.0	423.9	426.6	428.6	430.6
35°	422.4	419.5	420.0	422.5	424.9	426.4
35.5°	418.0	416.1	416.1	418.1	420.2	422.8
36°	413.2	411.8	412.4	414.5	416.6	417.9
36.5°	409.5	407.4	407.5	410.0	411.8	414.4
37°	405.9	403.4	402.8	406.0	408.2	410.2
37.5°	401.5	398.6	398.8	401.2	404.0	405.8
38°	396.6	393.9	394.9	396.9	399.5	400.6
38.5°	392.1	389.2	390.8	392.7	394.6	396.5
39°	387.6	384.9	385.7	388.1	390.0	392.1
39.5°	382.3	380.9	381.2	384.0	385.3	387.1
40°	377.9	376.1	376.1	379.2	380.9	382.3
40.5°	373.3	371.5	372.2	374.4	375.6	378.1
41°	367.9	366.2	367.2	369.7	371.0	372.9
41.5°	363.6	360.3	362.5	364.9	366.2	367.9
42°	358.8	355.5	357.9	359.4	361.1	362.7
42.5°	353.0	350.9	352.1	354.1	356.6	357.5
43°	348.0	345.9	346.4	349.2	351.1	352.5
43.5°	342.4	340.9	340.9	343.9	345.9	347.1



TEST NUMBER: P639494

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	327.0	324.1	325.3	327.9	329.7	330.7
45.5°	321.4	318.9	319.9	322.6	323.7	325.2
46°	315.8	313.5	314.5	317.8	319.1	319.7
46.5°	309.9	308.2	309.7	311.7	312.9	313.7
47°	304.7	302.7	303.6	306.1	307.6	308.8
47.5°	299.0	297.1	298.6	300.9	301.6	302.4
48°	293.6	291.7	292.5	295.6	296.4	296.9
48.5°	287.6	286.1	287.4	289.1	290.4	291.4
49°	281.5	280.3	282.0	284.1	284.8	285.2
49.5°	276.0	275.1	276.3	278.5	278.7	279.7
50°	271.0	269.1	271.5	272.9	272.8	273.5
50.5°	264.8	263.7	265.3	267.3	267.9	268.1
51°	259.1	258.2	260.1	261.6	262.2	262.0
51.5°	253.4	253.0	253.9	256.1	256.3	256.3
52°	248.0	247.1	248.5	250.4	250.0	249.8
52.5°	242.2	241.7	243.3	244.6	244.4	244.3
53°	236.9	235.9	238.1	239.4	239.0	238.7
53.5°	231.2	230.3	232.1	233.5	233.4	232.8
54°	225.6	225.0	226.3	228.4	227.3	227.1
54.5°	220.1	219.1	220.3	222.7	222.0	221.8
55°	214.6	214.0	215.3	216.8	216.1	215.6
55.5°	209.0	208.2	209.8	210.8	210.6	209.9
56°	203.7	202.8	203.9	205.6	204.9	204.4
56.5°	198.2	197.0	198.4	200.4	199.8	198.9
57°	192.9	191.9	193.5	194.8	194.2	193.3
57.5°	187.2	186.1	188.1	189.0	188.3	187.6
58°	181.6	180.9	182.5	183.6	183.0	182.0
58.5°	176.5	175.7	177.1	178.4	177.4	176.8
59°	171.2	170.7	171.6	173.2	172.1	171.4
59.5°	165.8	165.2	166.8	167.8	167.0	166.2
60°	160.7	160.1	161.3	162.8	161.6	161.0
60.5°	155.8	154.9	156.2	157.5	156.6	155.8
61°	150.8	150.0	151.3	152.3	151.6	150.6
61.5°	145.3	145.2	146.4	147.3	146.5	145.8
62°	140.3	139.9	141.5	142.0	141.1	140.7
62.5°	135.6	135.2	136.5	137.2	136.2	135.6
63°	130.6	130.6	131.6	132.6	131.6	130.9
63.5°	125.8	126.0	127.3	127.7	126.8	126.1
64°	121.0	121.4	122.2	123.1	122.1	121.4
64.5°	116.3	116.6	117.8	118.3	117.5	117.0
65°	112.1	112.3	113.1	113.7	112.9	112.7
65.5°	107.7	107.7	109.1	109.1	108.5	108.1
66°	103.0	103.1	104.4	105.1	104.2	103.8



TEST NUMBER: P639494

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	90.7	90.9	91.9	92.2	91.9	91.8
68°	86.6	86.9	87.9	88.2	87.9	87.9
68.5°	82.5	83.0	83.7	84.3	84.1	84.1
69°	78.5	78.9	79.8	80.4	80.2	80.2
69.5°	74.8	75.2	76.0	76.4	76.3	76.4
70°	71.3	71.1	72.2	72.9	72.7	72.9
70.5°	68.0	67.4	68.7	69.2	69.3	69.5
71°	64.4	63.9	64.8	65.7	65.8	65.9
71.5°	60.9	60.4	61.3	62.0	62.2	62.4
72°	57.5	57.0	57.9	58.6	58.9	59.3
72.5°	54.4	53.6	54.4	55.2	55.4	55.8
73°	51.0	50.1	50.9	51.8	52.2	52.7
73.5°	48.0	47.0	47.7	48.6	49.3	49.8
74°	45.0	44.0	44.7	45.7	46.2	47.0
74.5°	42.0	41.2	41.8	42.7	43.5	44.2
75°	39.4	38.5	39.2	40.0	40.8	41.6
75.5°	36.7	35.8	36.5	37.4	38.1	38.9
76°	34.1	33.3	34.0	34.8	35.7	36.5
76.5°	31.6	31.0	31.5	32.5	33.3	34.1
77°	29.2	28.8	29.2	30.2	31.0	31.9
77.5°	27.1	26.6	27.2	28.0	28.9	29.7
78°	24.9	24.5	25.0	26.0	26.9	27.7
78.5°	23.2	22.9	23.4	24.1	24.9	25.7
79°	21.3	21.2	21.7	22.5	23.4	24.0
79.5°	19.6	19.5	19.9	20.8	21.7	22.5
80°	18.0	18.1	18.5	19.2	20.0	20.8
80.5°	16.6	16.7	17.1	17.9	18.6	19.3
81°	15.2	15.5	15.9	16.5	17.3	18.0
81.5°	14.1	14.4	14.8	15.4	15.9	16.6
82°	13.0	13.3	13.7	14.2	14.9	15.4
82.5°	11.9	12.3	12.6	13.1	13.7	14.3
83°	10.9	11.1	11.5	12.1	12.7	13.2
83.5°	9.7	10.1	10.4	11.1	11.7	12.2
84°	8.6	9.1	9.4	10.0	10.6	11.3
84.5°	7.7	8.0	8.3	9.0	9.6	10.2
85°	6.6	7.0	7.5	7.9	8.5	9.2
85.5°	5.6	6.0	6.4	7.0	7.6	8.1
86°	4.7	5.1	5.5	5.9	6.6	7.2
86.5°	3.8	4.0	4.5	5.0	5.7	6.2
87°	2.7	3.1	3.5	4.0	4.7	5.2
87.5°	1.9	2.2	2.6	3.1	3.6	4.3
88°	0.9	1.3	1.6	2.2	2.8	3.3
88.5°	0.2	0.6	0.9	1.3	1.9	2.6



TEST NUMBER: P639494

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.1	0.2

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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°	516.0	518.7	520.3	522.2	522.6	523.3	522.9	520.1	518.1	517.4	515.0
22°	512.7	515.7	517.2	520.0	519.7	521.3	520.0	518.4	515.8	515.1	512.0



44°	341.3	346.1	349.5	351.9	353.0	353.1	351.1	348.8	345.1	343.1	339.5
44.5°	336.6	340.6	343.2	346.0	347.2	346.8	346.1	343.5	340.1	336.9	333.6



66.5°	99.7	101.1	102.6	103.6	103.5	102.6	101.5	100.1	98.9	98.6	98.3
67°	95.9	96.9	98.5	99.4	99.5	98.3	97.1	95.8	94.7	94.5	94.0



89°	1.6	2.2	2.6	2.7	2.4	2.1	1.6	0.8	0.3	0.0	0.0
89.5°	0.8	1.3	1.8	1.8	1.7	1.3	0.6	0.0	0.0	0.0	0.0

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21.5°	513.5	511.3	511.7	512.6	514.0	516.0
22°	510.1	507.7	509.3	510.5	511.0	512.7



44°	337.3	335.2	335.9	338.9	340.8	341.3
44.5°	332.5	329.4	330.5	334.0	335.1	336.6

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66.5°	98.8	99.0	100.1	100.6	100.0	99.7
67°	94.7	95.0	96.0	96.5	96.0	95.9

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89°	0.0	0.1	0.3	0.6	1.0	1.6
89.5°	0.0	0.0	0.0	0.1	0.4	0.8

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(END OF REPORT)