

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: P639498

Luminaire Tested: RL56LS9FSD2W1EWH -1200LM -5000K

Issue Date: 1/25/2023

Test Information

Test Method: LM-79-2019
Report Number: P639498
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 -5000K
Description: 5/6IN RETROFIT, SELECTABLE LUMEN AND CCT, MATTE WHITE BAFFLE
Light Source: (1) SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

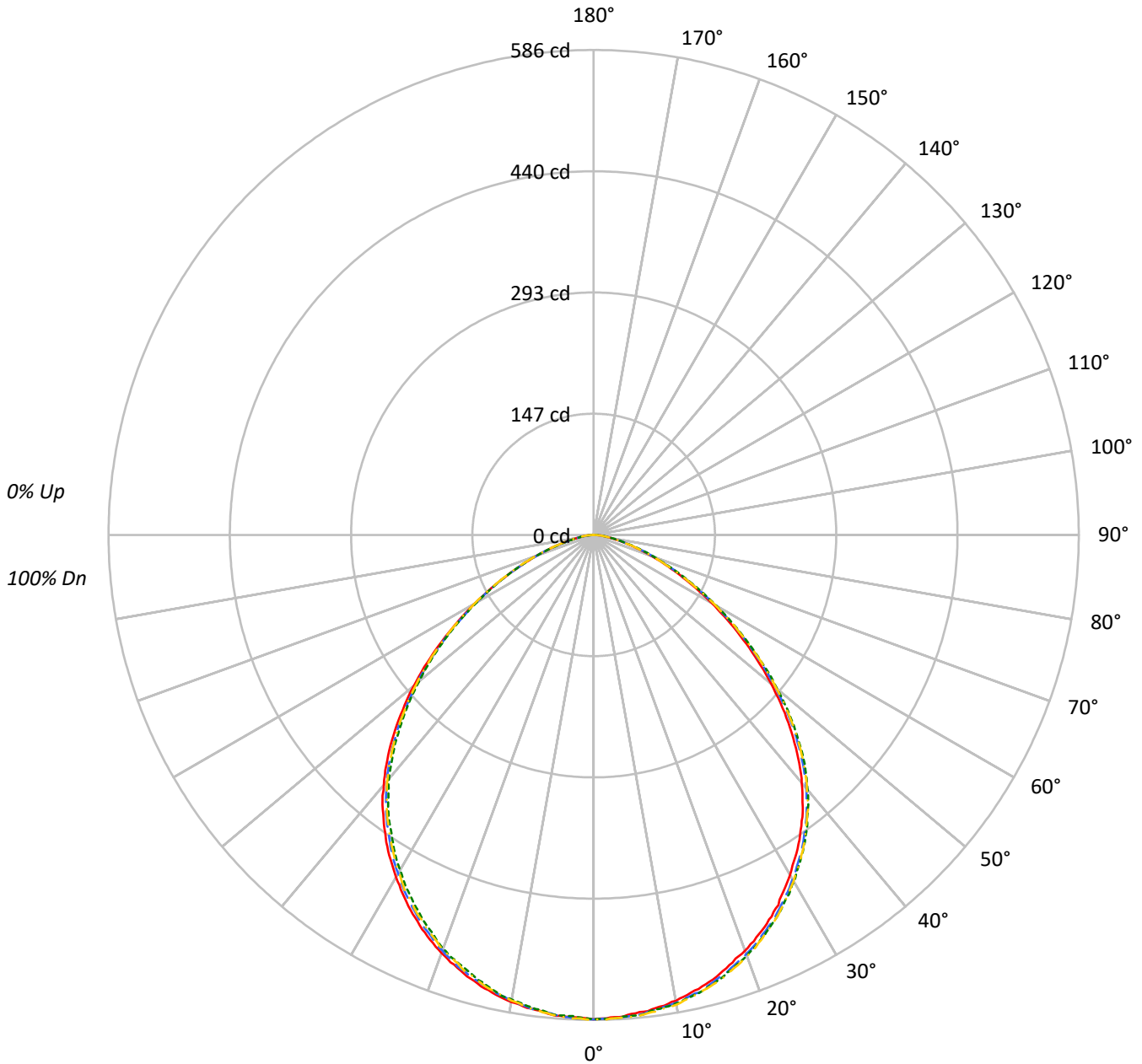
Lumens per Lamp: N/A
Luminaire Lumens: 1355.0 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.3
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 14.3
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					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°	32092	32092	32092	32092
5°	31945	32077	32027	31983
10°	31830	31991	31897	31735
15°	31578	31867	31663	31396
20°	31199	31579	31363	31030
25°	30776	31163	30861	30310
30°	30043	30638	30220	29606
35°	29178	29848	29386	28710
40°	27981	28775	28210	27530
45°	26220	27088	26514	25700
50°	23854	24716	24161	23470
55°	21075	21810	21333	20922
60°	18058	18770	18189	17948
65°	14943	15527	14917	14891
70°	11957	12534	11733	11669
75°	9023	9637	8642	8324
80°	6724	7103	6125	5840
85°	5913	6227	4906	4466

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
 Vertical Angle: 45°
 Luminance: 27119 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	4.1
10°-20°	157.3	11.6
20°-30°	234.5	17.3
30°-40°	273.6	20.2
40°-50°	262.1	19.3
50°-60°	199.8	14.7
60°-70°	116.4	8.6
70°-80°	46.3	3.4
80°-90°	9.8	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°	447.0	33.0
0°-40°	720.6	53.2
0°-60°	1182.5	87.3
0°-90°	1355.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1355.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	585	585	585	585	585	
5°	580	583	582	581	580	55
15°	556	562	558	553	556	157
25°	509	515	510	501	509	234
35°	436	446	439	429	436	272
45°	338	349	342	332	338	260
55°	220	228	223	219	220	197
65°	115	120	115	115	115	115
75°	43	46	41	39	43	47
85°	9	10	8	7	9	11
90°	0	1	0	0	0	



TEST NUMBER: P639498

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4
0.5°	584.6	585.4	585.4	585.5	585.1	585.4	585.8	584.9	584.7	585.3	585.3
1°	584.5	585.2	584.9	585.1	585.1	585.3	586.3	585.7	584.2	585.2	584.8
1.5°	584.5	585.1	584.6	585.4	584.9	585.1	585.8	586.0	583.5	584.9	584.5
2°	583.4	584.8	584.3	585.4	584.8	584.1	584.7	585.8	583.5	585.1	584.9
2.5°	583.3	585.4	584.5	585.0	584.6	584.6	584.7	584.7	583.3	584.6	584.5
3°	583.4	584.8	584.4	585.6	584.0	584.9	584.6	584.6	583.2	584.1	583.4
3.5°	583.0	584.2	583.7	585.6	583.2	584.9	584.6	584.9	583.2	584.4	583.7
4°	581.4	583.5	583.6	584.9	583.2	585.1	584.4	583.3	582.5	585.1	582.1
4.5°	580.7	582.9	582.9	583.5	582.9	584.8	584.2	582.7	583.0	584.2	582.1
5°	580.5	583.1	582.3	583.4	582.9	584.0	583.6	582.7	582.0	582.3	580.7
5.5°	579.3	583.0	582.3	582.9	583.0	582.4	583.4	582.5	581.0	582.0	579.8
6°	579.3	581.9	581.8	582.1	582.4	582.1	582.5	581.6	579.6	581.8	579.6
6.5°	579.2	580.0	579.9	581.7	580.5	581.0	581.5	580.4	578.7	579.8	579.2
7°	577.6	579.6	579.6	580.7	579.0	580.5	580.8	579.8	578.1	579.6	578.3
7.5°	576.4	578.2	578.6	580.2	578.2	578.9	580.7	579.4	577.2	578.6	577.5
8°	575.6	577.3	577.6	578.8	578.2	578.0	579.2	578.2	577.1	577.0	575.8
8.5°	575.2	576.5	576.5	578.6	576.9	578.0	578.3	577.9	576.0	576.2	574.8
9°	573.7	576.2	576.0	576.8	576.7	577.0	577.4	576.7	574.6	575.2	573.9
9.5°	572.0	575.1	575.0	576.5	575.8	575.7	577.2	576.0	573.6	575.0	572.9
10°	571.8	573.5	574.2	575.3	574.7	574.8	576.3	574.4	573.0	573.3	572.2
10.5°	569.9	573.0	572.7	573.7	574.5	574.4	575.1	573.2	572.1	572.8	570.2
11°	568.6	571.2	571.7	573.4	572.2	572.1	572.9	572.1	570.6	570.1	568.5
11.5°	567.3	569.6	569.9	571.2	571.1	570.9	572.1	570.2	569.3	569.7	567.4
12°	565.4	568.6	568.6	569.9	570.0	570.9	571.3	569.1	567.9	567.9	566.1
12.5°	563.7	567.1	567.6	568.8	568.6	570.0	569.1	568.1	566.6	566.9	564.4
13°	563.3	565.5	567.5	567.0	567.9	568.3	568.0	566.1	564.7	566.1	563.0
13.5°	561.1	563.1	565.0	566.1	566.1	566.8	566.2	565.4	563.6	563.8	560.7
14°	559.7	561.8	562.9	564.0	564.7	565.1	564.9	563.6	562.1	561.2	559.2
14.5°	557.8	561.2	561.1	563.0	562.5	564.4	563.4	562.1	559.8	560.0	557.0
15°	556.4	559.3	559.4	561.6	561.5	561.8	561.6	560.0	557.9	557.8	556.0
15.5°	554.4	556.2	557.0	560.0	559.1	559.8	560.3	558.1	556.2	556.1	554.3
16°	551.9	554.4	555.3	557.6	557.7	558.2	558.6	556.9	554.8	553.6	552.2
16.5°	549.6	553.1	553.6	555.3	555.6	555.7	556.6	554.9	552.5	552.0	549.7
17°	547.7	550.1	552.2	553.9	552.7	554.5	553.8	552.2	550.5	549.8	548.5
17.5°	545.1	549.4	549.6	550.9	551.7	552.3	552.2	550.5	548.4	547.4	546.6
18°	543.3	546.8	547.5	548.5	549.5	549.6	549.9	549.9	545.8	546.1	543.8
18.5°	539.8	543.4	545.3	548.2	546.9	548.3	548.5	546.7	544.6	544.1	541.4
19°	538.5	541.7	543.0	545.4	545.4	546.3	546.4	544.3	541.9	541.1	539.5
19.5°	536.7	539.6	541.4	542.1	543.2	543.6	543.7	542.3	539.5	538.6	537.1
20°	534.8	538.4	539.0	540.4	541.3	541.3	541.4	539.4	537.6	537.3	534.3
20.5°	532.6	535.5	536.8	538.2	538.3	539.0	539.8	537.0	535.0	533.9	532.5
21°	529.5	533.6	534.3	535.6	536.5	536.7	537.9	535.1	532.9	531.8	529.1



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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°	522.0	525.7	526.6	529.4	528.4	529.7	529.6	527.3	524.9	523.8	520.5
23°	519.6	522.7	523.5	525.8	526.8	527.6	526.5	524.8	521.9	520.3	518.3
23.5°	517.0	520.1	521.6	523.2	523.3	524.9	523.8	522.1	519.7	517.6	516.1
24°	514.5	517.0	518.2	519.8	520.9	522.1	521.1	519.5	516.6	515.3	512.9
24.5°	510.5	513.9	515.9	517.4	517.8	519.2	518.5	516.3	513.0	513.0	509.4
25°	508.8	511.1	513.9	514.6	515.2	515.8	515.5	513.5	510.2	509.4	506.1
25.5°	504.7	508.3	510.4	512.1	512.7	512.5	512.6	510.2	507.5	505.5	502.8
26°	502.0	505.1	506.9	508.9	509.8	509.7	509.6	506.8	504.4	502.8	500.4
26.5°	500.0	501.8	504.1	505.5	506.6	507.4	506.1	503.7	501.2	500.1	496.7
27°	494.8	499.3	500.6	502.8	503.1	504.0	502.9	501.4	497.7	496.5	493.4
27.5°	491.5	496.4	497.3	499.4	499.5	500.3	500.2	497.8	494.5	493.3	490.3
28°	488.1	492.2	493.8	496.3	496.4	496.9	496.0	494.2	491.1	490.2	487.0
28.5°	484.6	488.6	491.1	492.6	494.3	493.2	493.0	490.7	487.9	486.6	483.4
29°	481.2	485.1	487.7	488.9	490.6	490.1	489.6	487.5	484.1	483.1	479.9
29.5°	478.1	481.9	484.0	486.0	486.5	486.5	486.1	484.0	481.2	478.9	476.4
30°	474.6	479.1	480.6	482.6	484.0	483.2	483.1	480.4	477.4	475.2	472.1
30.5°	470.4	475.5	477.3	479.0	480.2	479.8	478.9	476.8	473.7	472.2	469.3
31°	466.1	471.0	473.6	475.5	475.7	476.3	475.5	473.3	470.1	468.6	465.4
31.5°	462.8	468.2	469.9	471.9	472.4	472.5	472.3	469.7	466.2	465.2	462.1
32°	459.4	464.4	466.4	468.0	468.9	469.8	468.9	465.9	462.7	461.9	458.0
32.5°	455.8	460.4	462.7	464.4	465.4	465.2	465.2	462.2	459.5	457.1	454.0
33°	452.2	456.4	459.2	460.5	461.6	461.6	461.0	458.2	455.6	453.3	450.3
33.5°	448.3	452.9	455.5	456.9	458.0	457.8	457.6	454.3	451.6	449.3	445.9
34°	444.6	449.0	451.8	453.5	453.7	453.6	453.6	450.8	447.9	445.4	441.6
34.5°	440.4	444.3	447.8	449.7	450.2	449.8	449.7	447.4	443.5	441.2	437.1
35°	436.0	441.0	443.4	446.1	446.0	446.3	445.0	443.2	439.1	437.1	433.3
35.5°	432.3	436.7	439.3	441.3	442.0	442.5	441.0	440.1	435.5	433.5	429.6
36°	427.4	432.4	435.4	436.9	438.3	438.8	436.4	434.9	431.3	429.3	425.1
36.5°	423.8	428.5	431.0	433.1	434.1	434.4	432.4	429.9	426.8	425.0	421.4
37°	419.5	423.5	427.1	429.1	428.5	429.9	428.2	426.3	422.5	420.6	416.8
37.5°	415.0	419.8	422.4	423.7	424.7	424.4	423.6	421.6	418.3	415.8	412.3
38°	409.6	414.8	418.0	419.4	420.2	420.7	420.9	416.8	414.4	411.3	407.3
38.5°	405.4	410.5	412.7	414.5	416.5	415.6	415.9	412.1	409.6	406.3	403.0
39°	401.0	405.6	408.6	410.0	411.9	412.3	410.4	408.1	405.2	402.6	398.2
39.5°	395.9	401.2	404.0	405.9	407.5	407.6	405.4	403.5	399.2	397.1	393.3
40°	391.0	397.4	399.5	401.4	402.1	402.1	400.4	398.7	394.2	393.0	388.8
40.5°	386.7	391.5	394.8	396.3	396.7	397.2	396.2	392.6	389.6	388.8	384.0
41°	381.3	386.1	389.3	391.6	392.6	392.8	391.3	388.9	384.3	382.9	379.1
41.5°	376.2	380.7	384.2	386.5	387.6	387.8	386.1	384.5	380.0	377.1	373.4
42°	370.9	375.9	379.4	381.1	382.5	381.4	380.8	378.1	374.6	372.3	368.4
42.5°	365.6	370.3	373.9	375.2	378.1	377.1	375.3	372.9	369.1	367.4	363.0
43°	360.5	365.0	368.1	370.1	372.3	371.4	370.3	367.4	363.9	361.8	357.9
43.5°	355.0	359.6	362.8	365.1	366.7	366.3	364.3	361.8	358.7	356.4	352.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	338.2	342.8	346.4	347.6	349.4	349.8	347.7	345.4	342.0	339.4	336.2
45.5°	332.6	337.2	339.9	342.3	344.2	344.0	342.8	339.7	336.1	333.7	330.8
46°	327.0	331.2	334.8	336.9	337.9	337.9	336.6	333.8	330.5	328.3	325.0
46.5°	320.8	325.1	329.0	331.1	332.8	332.0	330.7	328.1	324.5	322.2	318.9
47°	315.8	319.3	322.6	324.2	326.2	326.5	324.2	321.9	319.1	316.5	313.4
47.5°	309.3	313.8	316.9	318.0	320.3	320.2	318.5	316.4	312.4	311.1	307.1
48°	303.7	307.6	311.1	312.0	314.8	314.0	312.7	310.7	307.1	305.3	301.6
48.5°	298.0	301.7	304.7	306.5	308.2	308.0	307.2	304.2	301.3	299.5	295.5
49°	291.6	295.4	298.7	300.4	302.2	301.7	300.3	298.3	295.5	293.4	290.0
49.5°	286.0	289.4	292.8	294.7	296.1	296.0	294.5	292.3	289.5	287.3	284.0
50°	279.7	283.2	286.5	287.8	289.8	290.3	288.1	286.0	283.3	281.3	278.4
50.5°	274.2	277.9	280.3	282.3	283.5	283.8	282.0	279.8	277.2	275.4	272.5
51°	267.9	272.0	274.1	276.3	277.9	276.8	276.3	274.1	271.4	270.1	267.0
51.5°	262.1	265.8	268.4	269.9	272.2	271.3	270.3	268.0	265.5	263.1	260.7
52°	255.5	259.4	262.1	264.2	266.0	265.1	263.7	262.1	259.8	257.8	254.7
52.5°	249.9	252.9	255.9	257.7	259.2	258.9	257.9	256.2	253.5	251.9	249.0
53°	244.1	247.1	249.8	251.7	252.7	253.6	251.6	249.6	247.2	245.5	243.4
53.5°	238.0	241.2	244.1	245.9	246.9	246.8	245.6	243.8	241.3	239.8	237.6
54°	232.2	235.0	238.4	239.5	240.5	240.4	239.2	238.0	235.5	233.7	231.6
54.5°	226.8	229.4	232.0	233.8	234.5	234.6	233.4	232.1	229.5	227.9	225.8
55°	220.5	223.3	226.0	227.8	228.2	228.4	227.4	225.8	223.2	221.8	219.8
55.5°	214.7	217.4	220.1	221.8	222.5	222.6	221.2	219.7	217.4	215.8	214.4
56°	209.0	211.5	214.4	216.0	216.7	216.4	215.0	214.0	211.4	210.0	208.6
56.5°	203.4	205.9	208.5	210.1	210.9	210.5	209.1	207.8	206.0	204.7	202.9
57°	197.7	200.0	202.9	204.0	205.1	204.5	203.8	201.9	199.9	198.6	197.5
57.5°	191.9	194.5	197.5	198.4	199.0	198.8	197.6	196.0	194.1	192.9	191.6
58°	186.2	189.0	191.7	192.9	193.5	193.1	191.9	190.4	188.4	187.4	185.9
58.5°	180.8	182.8	185.7	187.1	188.3	187.7	186.0	184.4	182.4	181.6	180.3
59°	175.3	177.4	180.2	181.0	182.4	181.9	180.3	179.0	177.0	175.8	174.8
59.5°	170.0	171.8	174.4	175.8	176.2	175.7	175.1	173.1	171.2	170.5	169.6
60°	164.7	166.3	169.1	170.6	171.2	170.2	169.2	167.8	165.9	165.2	164.3
60.5°	159.4	161.1	163.8	164.9	165.9	165.2	163.8	162.2	160.6	159.8	158.9
61°	154.0	155.7	158.6	159.8	160.6	159.6	158.1	156.6	154.9	154.2	153.5
61.5°	149.1	150.5	153.1	154.3	155.0	154.1	152.7	151.2	149.7	148.8	148.0
62°	143.9	145.4	147.8	148.9	150.0	148.7	147.4	145.9	144.4	143.7	143.1
62.5°	138.7	140.5	142.6	143.8	144.7	143.6	142.2	141.2	139.3	138.5	138.1
63°	133.9	135.5	137.6	138.7	139.5	138.2	137.2	135.5	134.3	133.7	132.9
63.5°	129.0	130.7	132.7	134.0	134.2	133.5	132.0	130.6	129.5	128.9	128.4
64°	124.1	125.8	128.0	129.2	129.5	128.7	127.2	125.5	124.4	123.9	123.7
64.5°	119.6	121.1	123.2	124.2	124.7	123.7	122.3	120.8	119.5	119.2	118.6
65°	115.2	116.6	118.4	119.4	119.7	118.9	117.4	116.3	115.0	114.8	113.9
65.5°	110.6	111.9	114.0	114.9	115.2	114.3	113.0	111.6	110.4	109.8	109.7
66°	106.2	107.7	109.5	110.3	110.7	109.6	108.2	106.8	105.7	105.4	104.9



TEST NUMBER: P639498

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	93.8	95.1	96.9	97.8	97.2	96.5	95.2	93.9	92.7	92.3	92.1
68°	89.9	91.1	92.7	93.7	93.3	92.4	91.1	89.5	88.5	88.3	88.0
68.5°	86.0	87.3	88.6	89.7	89.2	88.3	86.8	85.4	84.3	84.3	83.8
69°	82.0	83.4	84.8	85.7	85.4	84.5	83.0	81.7	80.6	80.2	79.8
69.5°	78.2	79.6	81.0	81.8	81.9	80.7	79.3	77.8	76.7	76.4	76.1
70°	74.6	75.9	77.5	78.0	78.2	77.2	75.7	74.3	73.2	72.8	72.6
70.5°	71.1	72.3	73.7	74.4	74.6	73.6	72.3	70.7	69.6	69.2	68.9
71°	67.4	68.8	69.9	70.8	71.1	70.0	68.6	67.2	66.1	65.7	65.4
71.5°	63.8	65.3	66.4	67.1	67.5	66.4	65.0	63.9	62.5	62.0	61.9
72°	60.6	61.7	62.9	63.6	64.2	63.1	61.6	60.4	59.2	58.8	58.6
72.5°	57.1	58.2	59.6	60.1	60.7	59.9	58.4	57.0	56.1	55.5	55.2
73°	53.9	55.2	56.2	56.7	57.5	56.5	55.1	53.8	52.9	52.3	52.0
73.5°	50.9	52.2	53.1	53.6	54.4	53.4	52.0	50.7	49.6	49.2	48.8
74°	48.1	49.2	50.2	50.5	51.5	50.3	48.9	47.7	46.6	46.0	45.6
74.5°	45.2	46.4	47.2	47.6	48.4	47.2	46.0	44.8	43.7	43.2	42.9
75°	42.6	43.7	44.5	44.7	45.5	44.5	43.2	41.9	40.8	40.2	40.1
75.5°	39.7	40.8	41.8	41.9	42.7	41.8	40.3	39.3	38.1	37.6	37.4
76°	37.3	38.3	39.0	39.2	39.9	39.0	37.7	36.7	35.6	35.1	34.8
76.5°	34.9	35.9	36.6	36.7	37.4	36.5	35.2	34.0	33.0	32.5	32.2
77°	32.6	33.6	34.2	34.4	34.9	34.0	32.8	31.7	30.6	30.2	29.9
77.5°	30.4	31.3	32.0	32.1	32.6	31.7	30.5	29.5	28.5	27.9	27.7
78°	28.3	29.1	29.8	29.9	30.3	29.5	28.5	27.4	26.5	25.8	25.5
78.5°	26.3	27.3	27.9	27.9	28.2	27.3	26.4	25.4	24.4	24.0	23.7
79°	24.6	25.4	25.8	25.8	26.1	25.4	24.3	23.8	22.8	22.2	22.0
79.5°	23.0	23.8	24.3	24.3	24.1	23.7	22.9	21.9	21.0	20.5	20.2
80°	21.3	22.1	22.5	22.5	22.5	22.0	21.1	20.2	19.4	19.0	18.6
80.5°	19.8	20.5	21.0	20.9	20.9	20.3	19.5	18.8	18.0	17.5	17.1
81°	18.4	19.1	19.4	19.4	19.3	18.8	18.0	17.3	16.6	16.1	15.7
81.5°	17.0	17.6	18.0	18.0	17.7	17.3	16.5	15.9	15.3	14.9	14.6
82°	15.8	16.3	16.7	16.6	16.4	15.9	15.3	14.7	14.1	13.7	13.4
82.5°	14.7	15.2	15.5	15.4	15.1	14.7	14.3	13.5	13.0	12.6	12.2
83°	13.5	14.0	14.5	14.5	14.0	13.5	13.1	12.6	11.9	11.6	11.1
83.5°	12.4	12.9	13.3	13.3	12.8	12.5	12.0	11.4	10.9	10.4	10.0
84°	11.5	11.9	12.3	12.3	11.9	11.5	11.0	10.4	9.8	9.4	9.0
84.5°	10.4	10.9	11.3	11.3	10.9	10.6	10.0	9.5	8.8	8.4	8.0
85°	9.4	9.9	10.3	10.3	9.9	9.6	8.9	8.5	7.8	7.4	6.8
85.5°	8.3	8.9	9.3	9.3	8.9	8.6	8.1	7.4	6.7	6.4	5.9
86°	7.3	7.9	8.3	8.3	7.9	7.6	7.1	6.4	5.9	5.3	5.2
86.5°	6.3	6.9	7.3	7.4	7.0	6.6	6.2	5.5	5.2	4.4	3.9
87°	5.3	6.0	6.3	6.4	6.2	5.8	5.2	4.5	3.9	3.4	2.9
87.5°	4.4	5.1	5.4	5.5	5.2	5.1	4.2	3.7	3.0	2.4	2.1
88°	3.4	4.0	4.5	4.6	4.2	3.9	3.3	2.6	2.0	1.6	1.1
88.5°	2.6	3.2	3.5	3.6	3.3	2.9	2.4	1.8	1.2	0.6	0.5



TEST NUMBER: P639498

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -5000K

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: P639498

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	585.4	585.4	585.4	585.4	585.4	585.4
0.5°	584.9	584.8	585.5	586.1	584.7	584.6
1°	584.5	584.1	584.4	585.4	584.9	584.5
1.5°	584.3	583.7	584.1	584.6	585.7	584.5
2°	584.2	583.1	584.1	584.6	585.7	583.4
2.5°	583.2	582.1	583.6	584.8	584.4	583.3
3°	583.2	582.1	582.9	584.2	583.7	583.4
3.5°	583.1	581.7	582.9	583.7	583.4	583.0
4°	582.8	582.1	582.3	582.9	583.1	581.4
4.5°	582.4	582.0	582.5	582.6	582.2	580.7
5°	582.7	581.2	580.4	581.9	581.1	580.5
5.5°	582.1	579.7	580.3	580.4	579.8	579.3
6°	579.2	578.3	578.8	580.2	579.8	579.3
6.5°	578.0	577.4	578.7	579.0	577.9	579.2
7°	577.3	577.2	577.8	578.0	577.6	577.6
7.5°	576.6	575.7	575.3	577.5	576.9	576.4
8°	576.4	575.0	574.6	576.1	576.1	575.6
8.5°	574.4	573.3	573.7	575.0	575.1	575.2
9°	573.5	572.2	571.7	573.2	573.8	573.7
9.5°	572.5	570.8	571.1	572.2	573.0	572.0
10°	571.2	570.1	570.9	571.5	571.6	571.8
10.5°	569.5	568.9	569.0	569.7	570.6	569.9
11°	569.4	568.6	568.5	568.5	567.9	568.6
11.5°	567.4	567.2	567.2	566.7	567.0	567.3
12°	566.7	564.8	563.8	565.1	565.8	565.4
12.5°	564.2	563.0	562.1	563.8	563.7	563.7
13°	561.7	561.0	561.2	562.6	562.4	563.3
13.5°	560.6	559.1	560.2	561.0	560.8	561.1
14°	559.6	556.9	558.2	559.0	559.2	559.7
14.5°	557.4	555.7	556.1	556.8	556.4	557.8
15°	555.4	553.2	554.8	554.2	555.9	556.4
15.5°	552.8	550.9	551.6	552.3	553.6	554.4
16°	550.7	548.7	549.7	549.7	551.1	551.9
16.5°	549.1	546.6	547.6	549.7	549.0	549.6
17°	546.9	544.6	545.7	546.9	547.9	547.7
17.5°	544.8	543.0	544.3	543.2	544.9	545.1
18°	543.2	540.3	541.5	541.6	542.0	543.3
18.5°	539.8	539.0	538.0	538.9	540.4	539.8
19°	537.9	536.9	535.8	538.1	538.1	538.5
19.5°	535.5	534.1	533.4	534.7	536.2	536.7
20°	533.0	531.9	530.9	532.5	533.6	534.8
20.5°	529.6	529.2	528.6	530.7	531.5	532.6
21°	527.4	526.2	526.3	527.1	528.0	529.5



TEST NUMBER: P639498

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	519.9	516.6	517.2	519.3	519.4	522.0
23°	516.5	514.1	514.1	516.6	517.7	519.6
23.5°	514.2	511.0	511.8	513.4	514.6	517.0
24°	510.8	508.4	508.8	509.7	511.3	514.5
24.5°	507.9	504.7	505.7	507.4	508.7	510.5
25°	504.6	501.1	502.5	504.9	506.1	508.8
25.5°	501.1	498.7	499.0	501.4	502.7	504.7
26°	498.4	495.3	496.3	498.0	500.2	502.0
26.5°	495.1	491.7	493.3	494.6	496.3	500.0
27°	491.6	488.7	489.4	491.5	493.0	494.8
27.5°	488.1	485.2	485.9	488.5	490.1	491.5
28°	485.0	482.8	482.8	486.3	486.4	488.1
28.5°	481.7	478.9	479.4	482.0	482.8	484.6
29°	477.7	475.2	475.9	478.4	479.4	481.2
29.5°	473.8	470.8	472.3	474.1	475.9	478.1
30°	470.4	467.7	468.2	471.0	472.6	474.6
30.5°	466.7	464.2	464.7	467.5	468.7	470.4
31°	463.2	460.9	460.9	464.0	464.9	466.1
31.5°	459.8	457.2	457.1	459.6	461.3	462.8
32°	455.1	453.3	453.0	455.7	457.8	459.4
32.5°	451.0	449.2	449.1	451.4	454.0	455.8
33°	447.1	444.3	445.5	447.9	450.3	452.2
33.5°	443.3	441.1	441.8	444.1	446.2	448.3
34°	439.6	436.4	437.4	439.8	442.4	444.6
34.5°	435.6	432.6	433.5	436.2	438.3	440.4
35°	431.9	429.0	429.5	432.0	434.5	436.0
35.5°	427.5	425.5	425.5	427.6	429.7	432.3
36°	422.6	421.1	421.7	423.9	426.0	427.4
36.5°	418.8	416.7	416.8	419.3	421.1	423.8
37°	415.1	412.6	412.0	415.2	417.5	419.5
37.5°	410.5	407.6	407.8	410.2	413.2	415.0
38°	405.5	402.8	403.8	405.9	408.5	409.6
38.5°	401.0	398.0	399.6	401.6	403.5	405.4
39°	396.4	393.6	394.4	396.9	398.8	401.0
39.5°	391.0	389.6	389.9	392.7	394.0	395.9
40°	386.5	384.7	384.7	387.8	389.5	391.0
40.5°	381.7	379.9	380.6	382.9	384.2	386.7
41°	376.2	374.5	375.5	378.0	379.4	381.3
41.5°	371.8	368.5	370.7	373.1	374.5	376.2
42°	366.9	363.6	366.0	367.5	369.3	370.9
42.5°	361.0	358.9	360.1	362.1	364.7	365.6
43°	355.9	353.7	354.2	357.1	359.1	360.5
43.5°	350.1	348.6	348.6	351.6	353.7	355.0



TEST NUMBER: P639498

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	334.4	331.5	332.7	335.3	337.2	338.2
45.5°	328.7	326.2	327.2	329.9	331.1	332.6
46°	322.9	320.6	321.6	325.0	326.4	327.0
46.5°	316.9	315.2	316.7	318.7	320.0	320.8
47°	311.6	309.6	310.5	313.0	314.6	315.8
47.5°	305.8	303.9	305.4	307.7	308.4	309.3
48°	300.3	298.4	299.2	302.3	303.1	303.7
48.5°	294.1	292.5	293.9	295.6	296.9	298.0
49°	287.9	286.6	288.4	290.5	291.2	291.6
49.5°	282.3	281.3	282.6	284.8	285.0	286.0
50°	277.2	275.2	277.7	279.1	279.0	279.7
50.5°	270.8	269.7	271.4	273.4	274.0	274.2
51°	264.9	264.0	266.0	267.5	268.1	267.9
51.5°	259.1	258.7	259.6	261.9	262.1	262.1
52°	253.6	252.7	254.1	256.1	255.7	255.5
52.5°	247.7	247.2	248.8	250.2	250.0	249.9
53°	242.3	241.3	243.5	244.9	244.5	244.1
53.5°	236.4	235.5	237.3	238.7	238.6	238.0
54°	230.7	230.1	231.4	233.5	232.4	232.2
54.5°	225.1	224.1	225.3	227.7	227.0	226.8
55°	219.5	218.9	220.2	221.7	221.0	220.5
55.5°	213.8	213.0	214.6	215.6	215.4	214.7
56°	208.3	207.4	208.5	210.2	209.5	209.0
56.5°	202.7	201.5	202.9	204.9	204.3	203.4
57°	197.3	196.3	197.9	199.2	198.6	197.7
57.5°	191.5	190.3	192.4	193.3	192.6	191.9
58°	185.8	185.0	186.7	187.8	187.2	186.2
58.5°	180.5	179.6	181.1	182.4	181.4	180.8
59°	175.1	174.5	175.5	177.1	176.0	175.3
59.5°	169.6	168.9	170.6	171.6	170.8	170.0
60°	164.4	163.7	165.0	166.5	165.3	164.7
60.5°	159.4	158.4	159.8	161.1	160.2	159.4
61°	154.2	153.4	154.7	155.7	155.0	154.0
61.5°	148.6	148.5	149.7	150.6	149.8	149.1
62°	143.5	143.1	144.7	145.2	144.3	143.9
62.5°	138.7	138.3	139.6	140.3	139.3	138.7
63°	133.6	133.6	134.6	135.6	134.6	133.9
63.5°	128.7	128.9	130.2	130.6	129.7	129.0
64°	123.7	124.1	124.9	125.8	124.8	124.1
64.5°	118.9	119.2	120.4	121.0	120.1	119.6
65°	114.6	114.8	115.7	116.3	115.4	115.2
65.5°	110.1	110.2	111.6	111.6	111.0	110.6
66°	105.4	105.5	106.8	107.5	106.6	106.2



TEST NUMBER: P639498

CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	92.7	92.9	93.9	94.3	94.0	93.8
68°	88.5	88.9	89.9	90.2	89.9	89.9
68.5°	84.4	84.9	85.6	86.2	86.0	86.0
69°	80.3	80.7	81.6	82.2	82.0	82.0
69.5°	76.5	76.9	77.7	78.2	78.1	78.2
70°	73.0	72.8	73.9	74.6	74.4	74.6
70.5°	69.5	68.9	70.2	70.7	70.8	71.1
71°	65.8	65.3	66.2	67.1	67.3	67.4
71.5°	62.3	61.8	62.7	63.4	63.6	63.8
72°	58.8	58.3	59.2	59.9	60.2	60.6
72.5°	55.6	54.8	55.6	56.4	56.7	57.1
73°	52.2	51.3	52.1	53.0	53.4	53.9
73.5°	49.1	48.1	48.8	49.7	50.4	50.9
74°	46.1	45.0	45.8	46.8	47.3	48.1
74.5°	43.0	42.1	42.8	43.7	44.5	45.2
75°	40.2	39.3	40.0	40.9	41.7	42.6
75.5°	37.5	36.6	37.3	38.2	38.9	39.7
76°	34.8	34.0	34.7	35.6	36.5	37.3
76.5°	32.3	31.7	32.2	33.2	34.0	34.9
77°	29.9	29.4	29.9	30.9	31.7	32.6
77.5°	27.7	27.2	27.8	28.6	29.5	30.4
78°	25.5	25.1	25.6	26.6	27.5	28.3
78.5°	23.7	23.4	23.9	24.7	25.5	26.3
79°	21.8	21.7	22.2	23.0	23.9	24.6
79.5°	20.1	20.0	20.4	21.3	22.2	23.0
80°	18.4	18.5	19.0	19.7	20.5	21.3
80.5°	17.0	17.1	17.5	18.3	19.1	19.8
81°	15.6	15.9	16.3	16.9	17.7	18.4
81.5°	14.5	14.8	15.2	15.8	16.3	17.0
82°	13.2	13.6	14.0	14.6	15.3	15.8
82.5°	12.1	12.5	12.8	13.4	14.0	14.7
83°	11.1	11.3	11.7	12.3	12.9	13.5
83.5°	9.9	10.3	10.6	11.3	11.9	12.4
84°	8.8	9.3	9.6	10.2	10.8	11.5
84.5°	7.8	8.2	8.5	9.2	9.8	10.4
85°	6.7	7.1	7.6	8.1	8.7	9.4
85.5°	5.7	6.1	6.5	7.1	7.7	8.3
86°	4.8	5.2	5.6	6.0	6.7	7.3
86.5°	3.9	4.1	4.6	5.1	5.8	6.3
87°	2.8	3.2	3.6	4.1	4.8	5.3
87.5°	1.9	2.2	2.7	3.2	3.7	4.4
88°	0.9	1.3	1.6	2.2	2.9	3.4
88.5°	0.2	0.6	0.9	1.3	1.9	2.6



TEST NUMBER: P639498
CATALOG NUMBER: RL56LS9FSD2W1EWH -1200LM -5000K

CANDELA DISTRIBUTION (continued):

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

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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°	527.7	530.5	532.1	534.0	534.4	535.2	534.8	531.9	529.9	529.1	526.7
22°	524.3	527.4	528.9	531.8	531.5	533.1	531.8	530.2	527.5	526.8	523.5



44°	349.0	353.9	357.5	359.9	361.0	361.1	359.1	356.7	352.9	350.8	347.2
44.5°	344.2	348.3	350.9	353.8	355.1	354.7	353.9	351.2	347.8	344.5	341.1



66.5°	102.0	103.4	105.0	106.0	105.9	105.0	103.8	102.4	101.2	100.9	100.6
67°	98.0	99.0	100.8	101.7	101.8	100.6	99.3	97.9	96.8	96.6	96.1



89°	1.6	2.2	2.6	2.8	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°	525.2	522.8	523.2	524.2	525.7	527.7
22°	521.6	519.2	520.8	522.0	522.5	524.3



44°	344.9	342.8	343.5	346.6	348.5	349.0
44.5°	340.0	336.9	338.0	341.6	342.7	344.2

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66.5°	101.1	101.3	102.4	102.9	102.3	102.0
67°	96.8	97.1	98.1	98.6	98.1	98.0

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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)