

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P249711

Luminaire Tested: **LSR8B150D010 EC8B150830 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249711
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B150D010 EC8B150830 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16520.0 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

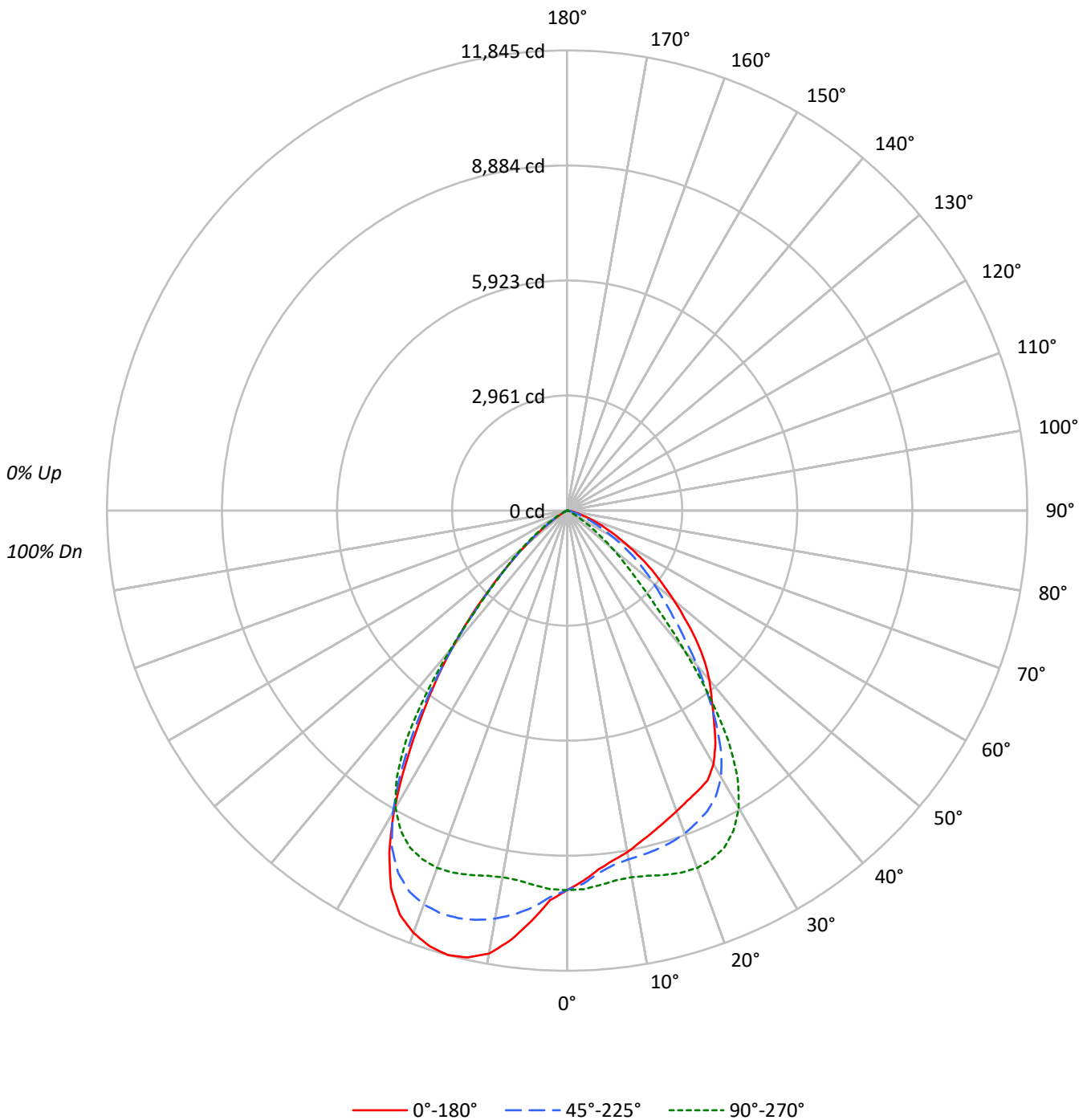
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249711

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBSW0LI

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	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			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60					60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42					42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	301218	301218	301218
5°	286969	299543	328370
10°	279569	300007	362465
15°	273229	309948	378147
20°	270221	321147	379565
25°	270856	325686	364820
30°	268339	314500	317263
35°	247959	272183	248297
40°	229134	188706	184118
45°	204034	113863	117640
50°	171675	73360	66572
55°	142828	40240	30434
60°	111479	17453	9572
65°	82268	8661	4662
70°	57206	5355	2047
75°	34813	1096	0
80°	25127	1634	0
85°	16169	1592	0



TEST NUMBER: P249711

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBSWOLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	939.1	5.7
10°-20°	2810.5	17.0
20°-30°	4304.0	26.1
30°-40°	4219.4	25.5
40°-50°	2540.9	15.4
50°-60°	1169.5	7.1
60°-70°	410.8	2.5
70°-80°	107.5	0.7
80°-90°	18.3	0.1
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°	8053.6	48.8
0°-40°	12273.0	74.3
0°-60°	15983.4	96.8
0°-90°	16520.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16520.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9768	9768	9768	9768	9768	
5°	9271	9358	9677	10257	10608	876
15°	8559	9020	9709	10859	11845	2418
25°	7961	8536	9572	10293	10722	3667
35°	6587	6678	7230	6815	6596	4125
45°	4679	3853	2611	2629	2698	3588
55°	2657	2104	748	589	566	2370
65°	1128	780	119	59	64	1149
75°	292	169	9	0	0	354
85°	46	23	4	0	0	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3
2.5°	9540.0	9549.2	9549.2	9549.2	9567.5	9572.2	9567.5	9572.2	9581.2	9613.1	9626.8
5°	9270.8	9257.1	9266.3	9261.6	9284.5	9298.2	9289.0	9302.7	9334.7	9357.6	9380.3
7.5°	9079.2	9079.2	9079.2	9088.2	9101.9	9129.3	9124.8	9133.8	9165.8	9197.7	9229.6
10°	8928.5	8924.0	8924.0	8946.7	8964.9	8996.9	9006.1	9033.5	9074.5	9115.6	9152.0
12.5°	8732.1	8736.8	8759.6	8782.5	8823.4	8873.6	8901.0	8937.7	9001.6	9069.9	9111.1
15°	8558.7	8563.2	8581.6	8627.1	8677.5	8736.8	8796.0	8855.4	8933.0	9019.8	9092.9
17.5°	8389.8	8394.3	8408.0	8458.4	8522.3	8599.9	8668.2	8745.8	8846.4	8946.7	9038.0
20°	8234.6	8230.1	8252.8	8298.5	8380.8	8453.7	8522.3	8613.6	8723.1	8846.4	8951.2
22.5°	8083.9	8083.9	8106.8	8152.5	8225.6	8298.5	8371.6	8467.4	8576.9	8695.7	8818.9
25°	7960.7	7956.2	7988.1	8011.0	8065.7	8138.8	8216.4	8294.0	8403.5	8536.0	8654.5
27.5°	7828.4	7823.9	7828.4	7855.8	7906.0	7960.7	8020.0	8088.6	8179.9	8289.5	8403.5
30°	7536.2	7540.8	7540.8	7563.7	7591.1	7650.3	7682.2	7750.8	7832.9	7924.2	8024.7
32.5°	7102.6	7107.1	7107.1	7116.3	7139.1	7166.5	7193.9	7244.1	7308.0	7385.6	7476.9
35°	6586.9	6586.9	6582.2	6586.9	6600.6	6600.6	6623.3	6600.6	6632.5	6678.2	6746.6
37.5°	6112.1	6102.9	6093.9	6084.6	6070.9	6048.2	6016.3	5961.4	5947.7	5929.5	5934.0
40°	5692.2	5687.6	5660.2	5637.3	5591.6	5537.0	5459.4	5363.5	5285.9	5194.6	5117.0
42.5°	5226.6	5221.9	5199.1	5158.0	5107.8	5025.7	4902.5	4774.7	4619.5	4482.6	4341.1
45°	4678.7	4692.4	4660.5	4614.8	4555.5	4477.9	4341.1	4185.7	4030.5	3852.6	3674.5
47.5°	4108.1	4103.6	4080.9	4053.4	4003.3	3925.7	3834.4	3665.4	3501.0	3336.8	3154.2
50°	3578.6	3560.4	3551.2	3524.0	3492.0	3428.1	3332.1	3195.2	3049.2	2894.0	2725.1
52.5°	3076.6	3076.6	3053.7	3035.5	3008.0	2957.9	2875.8	2766.2	2643.0	2496.8	2318.9
55°	2656.7	2647.5	2624.7	2601.8	2574.4	2542.5	2469.6	2378.2	2245.8	2104.3	1949.1
57.5°	2209.3	2204.6	2195.6	2168.2	2154.5	2122.5	2040.4	1949.1	1835.1	1711.8	1583.9
60°	1807.6	1789.4	1771.0	1752.8	1730.0	1698.1	1643.2	1565.6	1469.8	1360.3	1232.5
62.5°	1447.1	1474.3	1419.7	1419.7	1374.0	1346.6	1296.4	1250.7	1150.2	1049.9	940.4
65°	1127.5	1127.5	1104.6	1086.3	1058.9	1027.0	976.8	931.2	858.1	780.5	702.9
67.5°	862.8	858.1	835.3	817.1	794.2	776.0	739.5	684.7	630.0	566.1	502.0
70°	634.5	630.0	625.3	593.3	575.1	552.4	524.9	488.5	447.4	401.7	342.3
72.5°	456.4	456.4	442.8	429.1	410.9	392.5	365.2	342.3	305.9	273.9	232.8
75°	292.2	287.7	287.7	264.7	264.7	237.3	219.1	205.4	187.1	168.9	132.5
77.5°	210.1	205.4	200.8	191.6	182.6	173.4	159.7	141.5	127.8	109.5	95.8
80°	141.5	132.5	127.8	127.8	114.0	109.5	114.0	86.8	82.1	68.4	59.4
82.5°	86.8	86.8	82.1	82.1	77.6	73.1	59.4	59.4	54.9	50.2	41.1
85°	45.7	59.4	41.1	45.7	41.1	45.7	41.1	31.9	27.4	22.7	22.7
87.5°	27.4	18.2	18.2	27.4	22.7	18.2	18.2	18.2	13.7	9.2	9.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P249711

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3
2.5°	9617.8	9649.8	9645.1	9686.2	9699.9	9731.9	9731.9	9754.6	9768.3	9800.3	9827.7
5°	9389.5	9439.7	9453.4	9503.6	9544.7	9594.9	9626.8	9677.0	9722.7	9791.2	9855.1
7.5°	9248.1	9289.0	9316.4	9375.8	9421.5	9476.2	9531.0	9599.4	9663.3	9745.6	9836.9
10°	9179.5	9234.3	9275.3	9334.7	9389.5	9448.9	9503.6	9581.2	9654.3	9759.3	9859.6
12.5°	9161.3	9225.1	9275.3	9357.6	9412.3	9476.2	9540.0	9626.8	9704.4	9814.0	9928.2
15°	9161.3	9248.1	9316.4	9407.8	9471.6	9553.7	9622.3	9708.9	9795.7	9909.8	10019.3
17.5°	9143.0	9248.1	9334.7	9439.7	9521.8	9604.1	9690.7	9773.0	9864.1	9973.9	10096.9
20°	9069.9	9202.4	9307.2	9430.5	9517.3	9608.6	9695.4	9786.5	9882.5	9996.6	10101.6
22.5°	8942.2	9097.4	9216.1	9348.4	9448.9	9540.0	9626.8	9718.1	9823.2	9932.7	10042.2
25°	8773.3	8919.3	9047.2	9184.0	9284.5	9384.8	9467.1	9572.2	9668.0	9773.0	9859.6
27.5°	8517.6	8672.8	8796.0	8937.7	9028.8	9124.8	9193.2	9280.0	9371.3	9457.9	9526.5
30°	8134.3	8275.8	8403.5	8531.3	8622.6	8691.2	8764.1	8832.6	8892.0	8951.2	9010.6
32.5°	7572.7	7700.6	7823.9	7942.4	8015.5	8074.9	8129.6	8170.7	8202.7	8234.6	8239.1
35°	6801.4	6906.3	6983.9	7088.9	7157.5	7212.1	7212.1	7230.4	7225.9	7212.1	7198.4
37.5°	5938.7	5979.6	6011.6	6052.7	6057.2	6057.2	6030.0	6007.0	5970.6	5961.4	5934.0
40°	5039.4	4984.6	4943.4	4888.8	4856.8	4788.2	4729.1	4687.9	4628.5	4619.5	4610.3
42.5°	4185.7	4057.9	3943.9	3848.1	3738.5	3642.5	3555.9	3492.0	3446.4	3441.7	3446.4
45°	3492.0	3345.8	3176.9	3044.7	2921.4	2802.7	2688.6	2611.0	2569.9	2560.7	2569.9
47.5°	2967.1	2798.2	2633.8	2483.1	2350.8	2218.4	2104.3	1999.3	1949.1	1935.4	1930.9
50°	2551.7	2378.2	2204.6	2049.4	1903.5	1771.0	1629.5	1529.2	1465.3	1442.4	1424.2
52.5°	2145.5	1990.3	1812.1	1652.4	1506.3	1351.1	1205.1	1090.9	1027.0	999.7	981.3
55°	1789.4	1634.2	1469.8	1314.6	1159.4	1004.2	858.1	748.5	680.1	648.2	625.3
57.5°	1428.7	1282.7	1141.2	986.0	858.1	707.6	561.4	465.6	406.2	369.8	351.5
60°	1104.6	990.5	867.3	739.5	616.3	493.0	374.3	283.0	237.3	210.1	187.1
62.5°	835.3	739.5	657.2	547.7	451.9	346.8	255.7	182.6	141.5	118.7	109.5
65°	602.5	529.5	456.4	388.0	319.6	242.0	173.4	118.7	82.1	68.4	63.9
67.5°	429.1	369.8	314.9	269.2	219.1	173.4	123.3	82.1	63.9	54.9	50.2
70°	301.2	255.7	219.1	178.1	146.0	114.0	95.8	59.4	36.4	41.1	31.9
72.5°	200.8	168.9	150.7	123.3	100.3	82.1	59.4	41.1	41.1	31.9	27.4
75°	109.5	100.3	77.6	59.4	50.2	45.7	18.2	9.2	4.5	13.7	4.5
77.5°	77.6	68.4	59.4	50.2	41.1	31.9	18.2	18.2	13.7	18.2	9.2
80°	50.2	41.1	36.4	36.4	22.7	13.7	9.2	9.2	13.7	4.5	4.5
82.5°	31.9	27.4	22.7	22.7	22.7	13.7	13.7	13.7	13.7	9.2	9.2
85°	18.2	13.7	9.2	9.2	4.5	9.2	0.0	4.5	4.5	0.0	0.0
87.5°	9.2	4.5	4.5	4.5	4.5	0.0	0.0	4.5	0.0	4.5	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P249711

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3	9768.3
2.5°	9845.9	9864.1	9887.1	9905.3	9946.4	9955.4	9973.9	9992.1	10005.8	10019.3	10024.0
5°	9909.8	9978.4	10042.2	10110.6	10197.4	10256.8	10325.2	10384.6	10443.9	10494.1	10530.6
7.5°	9928.2	10033.0	10129.0	10247.6	10375.4	10485.1	10599.1	10713.2	10831.9	10923.2	11000.8
10°	9964.7	10092.4	10215.7	10357.1	10521.5	10667.5	10809.0	10959.7	11110.4	11238.1	11352.4
12.5°	10028.5	10170.0	10302.5	10457.7	10626.6	10790.8	10946.0	11114.9	11274.8	11416.2	11544.0
15°	10133.6	10265.8	10393.8	10539.8	10708.7	10859.4	11014.5	11178.8	11338.7	11484.6	11603.4
17.5°	10201.9	10325.2	10453.0	10585.4	10726.9	10863.9	11009.9	11156.0	11302.0	11434.5	11544.0
20°	10201.9	10320.7	10416.5	10535.3	10667.5	10786.3	10905.0	11032.8	11160.5	11270.1	11375.1
22.5°	10119.8	10233.9	10307.0	10398.3	10512.3	10612.9	10676.7	10818.2	10914.0	11009.9	11087.4
25°	9928.2	10010.3	10069.7	10133.6	10224.9	10293.3	10348.1	10430.2	10526.0	10562.7	10617.4
27.5°	9581.2	9640.5	9672.5	9686.2	9731.9	9768.3	9777.5	9814.0	9855.1	9864.1	9887.1
30°	9033.5	9038.0	9024.3	9019.8	8996.9	8969.6	8964.9	8960.4	8942.2	8924.0	8928.5
32.5°	8207.2	8184.4	8129.6	8070.4	8011.0	7947.1	7910.5	7864.9	7837.4	7810.2	7778.2
35°	7139.1	7084.4	7006.8	6933.7	6865.3	6815.0	6732.8	6705.4	6678.2	6641.5	6632.5
37.5°	5883.8	5851.9	5778.8	5724.1	5687.6	5664.7	5623.6	5596.3	5596.3	5582.6	5573.4
40°	4587.4	4578.4	4550.9	4564.7	4546.4	4555.5	4550.9	4541.7	4564.7	4564.7	4573.9
42.5°	3441.7	3446.4	3460.1	3469.1	3496.5	3501.0	3524.0	3524.0	3537.7	3551.2	3560.4
45°	2560.7	2579.1	2579.1	2597.3	2624.7	2629.3	2638.3	2643.0	2652.0	2674.9	2683.9
47.5°	1921.7	1926.2	1926.2	1930.9	1939.9	1949.1	1944.6	1949.1	1962.8	1953.6	1962.8
50°	1419.7	1424.2	1410.5	1396.7	1410.5	1410.5	1405.9	1392.2	1405.9	1387.7	1396.7
52.5°	967.8	963.1	949.4	954.1	944.9	940.4	940.4	931.2	931.2	931.2	912.9
55°	611.8	611.8	602.5	602.5	598.0	588.8	584.3	579.6	575.1	570.6	570.6
57.5°	342.3	346.8	333.3	328.6	333.3	328.6	319.6	319.6	319.6	305.9	314.9
60°	187.1	182.6	178.1	173.4	168.9	173.4	173.4	164.4	164.4	164.4	168.9
62.5°	100.3	100.3	95.8	95.8	91.3	91.3	100.3	86.8	91.3	86.8	91.3
65°	54.9	68.4	50.2	50.2	63.9	59.4	54.9	54.9	59.4	50.2	54.9
67.5°	59.4	41.1	36.4	41.1	36.4	36.4	36.4	45.7	41.1	31.9	41.1
70°	27.4	31.9	31.9	22.7	36.4	18.2	31.9	18.2	27.4	22.7	27.4
72.5°	27.4	27.4	27.4	18.2	27.4	18.2	22.7	22.7	18.2	18.2	27.4
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	9.2	9.2	4.5	4.5	4.5	4.5	9.2	9.2	9.2	0.0	4.5
80°	9.2	9.2	0.0	4.5	0.0	0.0	4.5	0.0	4.5	0.0	9.2
82.5°	4.5	9.2	4.5	4.5	9.2	9.2	9.2	4.5	4.5	4.5	4.5
85°	0.0	4.5	0.0	0.0	0.0	0.0	9.2	0.0	0.0	0.0	4.5
87.5°	0.0	4.5	0.0	0.0	0.0	0.0	4.5	4.5	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P249711

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9768.3	9768.3	9768.3	9768.3
2.5°	10028.5	10033.0	10042.2	10037.7
5°	10558.0	10594.6	10612.9	10608.3
7.5°	11055.5	11119.6	11156.0	11156.0
10°	11439.0	11512.1	11566.7	11575.9
12.5°	11644.3	11726.6	11799.7	11781.3
15°	11703.7	11786.0	11858.9	11845.2
17.5°	11635.3	11717.4	11772.3	11763.1
20°	11448.2	11516.6	11571.4	11566.7
22.5°	11156.0	11215.4	11261.1	11256.4
25°	10663.0	10704.2	10740.6	10722.4
27.5°	9905.3	9919.0	9941.7	9914.5
30°	8896.5	8905.5	8914.8	8910.2
32.5°	7764.5	7759.8	7750.8	7741.6
35°	6618.8	6618.8	6623.3	6595.9
37.5°	5577.9	5573.4	5587.1	5573.4
40°	4582.9	4578.4	4596.6	4573.9
42.5°	3574.1	3587.8	3592.4	3592.4
45°	2688.6	2693.1	2697.6	2697.6
47.5°	1962.8	1967.3	1990.3	1962.8
50°	1387.7	1392.2	1396.7	1387.7
52.5°	917.4	922.1	917.4	903.7
55°	561.4	566.1	566.1	566.1
57.5°	301.2	305.9	305.9	301.2
60°	164.4	159.7	164.4	155.2
62.5°	86.8	95.8	91.3	82.1
65°	54.9	54.9	54.9	63.9
67.5°	45.7	36.4	41.1	31.9
70°	27.4	31.9	31.9	22.7
72.5°	22.7	22.7	22.7	27.4
75°	0.0	0.0	0.0	0.0
77.5°	9.2	9.2	9.2	4.5
80°	4.5	0.0	4.5	0.0
82.5°	4.5	4.5	9.2	4.5
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)