

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: P249767

Luminaire Tested: **LSR8B150D010 EC8B150950 8LBSWOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249767  
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 EC8B150950 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 5000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

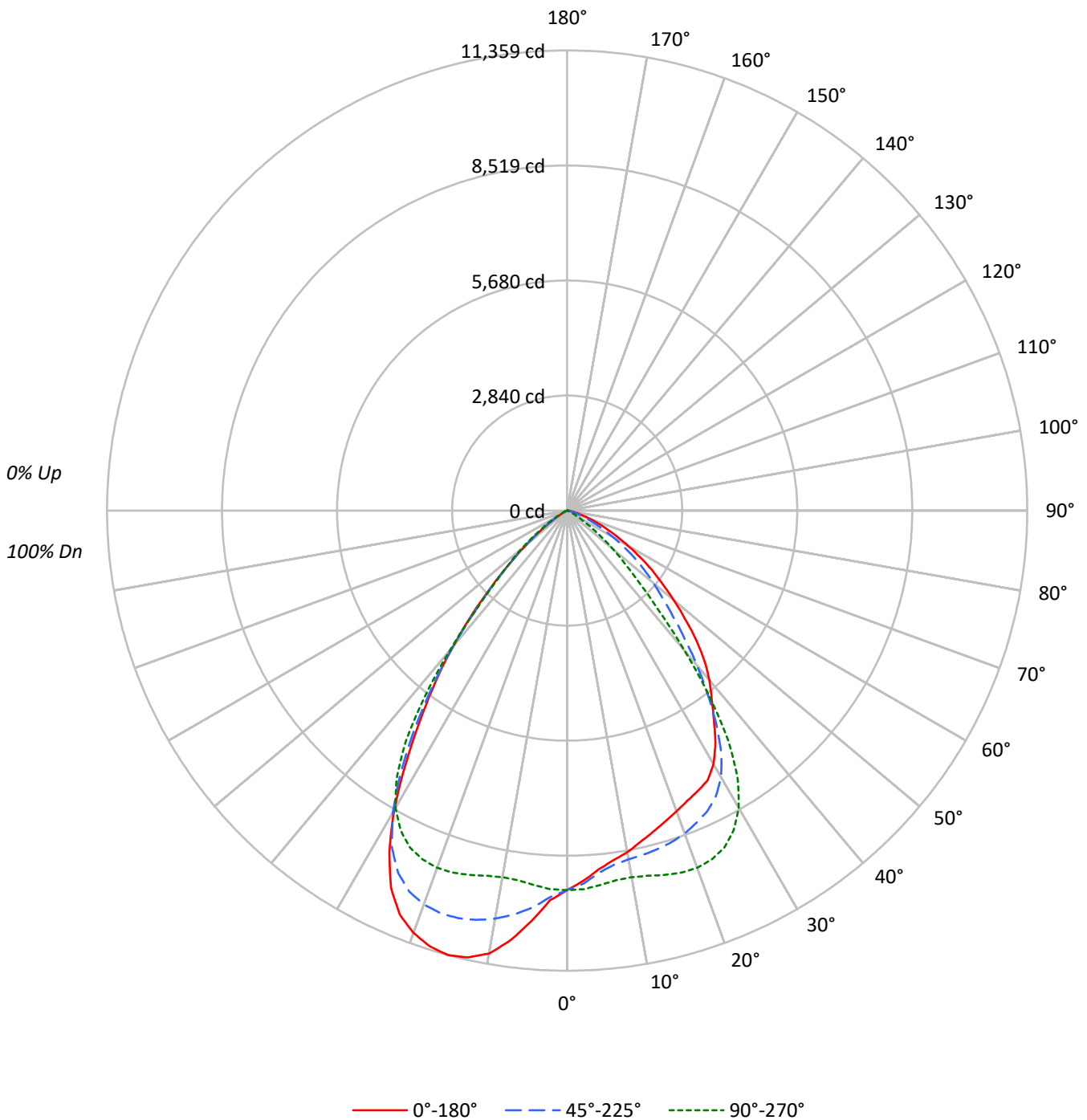
Lumens per Lamp: N/A  
Luminaire Lumens: 15842.0 lumens  
Efficiency: N/A  
Efficacy: 99.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



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### 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°	288856	288856	288856
5°	275191	287248	314896
10°	268093	287695	347592
15°	262017	297229	362626
20°	259133	307968	363988
25°	259740	312317	349846
30°	257326	301592	304245
35°	237780	261010	238107
40°	219726	180962	176558
45°	195661	109193	112812
50°	164633	70347	63842
55°	136968	38590	29187
60°	106910	16732	9177
65°	78890	8311	4473
70°	54853	5130	1965
75°	33384	1048	0
80°	24098	1563	0
85°	15497	1521	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	900.5	5.7
10°-20°	2695.2	17.0
20°-30°	4127.4	26.1
30°-40°	4046.2	25.5
40°-50°	2436.6	15.4
50°-60°	1121.5	7.1
60°-70°	394.0	2.5
70°-80°	103.0	0.7
80°-90°	17.5	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°	7723.1	48.8
0°-40°	11769.3	74.3
0°-60°	15327.4	96.8
0°-90°	15842.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15842.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	9367	9367	9367	9367	9367	
5°	8890	8974	9280	9836	10173	840
15°	8208	8650	9310	10414	11359	2319
25°	7634	8186	9179	9871	10282	3516
35°	6316	6404	6934	6535	6325	3956
45°	4487	3694	2504	2521	2587	3441
55°	2548	2018	718	565	543	2273
65°	1081	748	114	57	61	1101
75°	280	162	9	0	0	340
85°	44	22	4	0	0	60
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°	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4
2.5°	9148.5	9157.3	9157.3	9157.3	9174.8	9179.3	9174.8	9179.3	9188.0	9218.6	9231.7
5°	8890.3	8877.2	8886.0	8881.5	8903.5	8916.6	8907.8	8920.9	8951.6	8973.5	8995.3
7.5°	8706.5	8706.5	8706.5	8715.2	8728.3	8754.6	8750.3	8759.0	8789.6	8820.2	8850.9
10°	8562.0	8557.7	8557.7	8579.5	8597.0	8627.6	8636.4	8662.7	8702.0	8741.5	8776.4
12.5°	8373.8	8378.3	8400.1	8422.0	8461.3	8509.4	8535.7	8570.9	8632.1	8697.7	8737.2
15°	8207.5	8211.8	8229.4	8273.0	8321.3	8378.3	8435.0	8491.9	8566.4	8649.6	8719.7
17.5°	8045.5	8049.8	8063.0	8111.2	8172.5	8246.9	8312.5	8386.9	8483.3	8579.5	8667.1
20°	7896.7	7892.3	7914.1	7957.9	8036.8	8106.7	8172.5	8260.1	8365.1	8483.3	8583.8
22.5°	7752.2	7752.2	7774.1	7817.9	7888.0	7957.9	8028.0	8119.9	8224.9	8338.8	8457.0
25°	7634.0	7629.6	7660.3	7682.2	7734.7	7804.8	7879.2	7953.6	8058.6	8185.6	8299.3
27.5°	7507.1	7502.8	7507.1	7533.4	7581.5	7634.0	7690.9	7756.7	7844.2	7949.3	8058.6
30°	7226.9	7231.3	7231.3	7253.3	7279.6	7336.3	7366.9	7432.7	7511.4	7599.0	7695.4
32.5°	6811.1	6815.4	6815.4	6824.3	6846.1	6872.4	6898.7	6946.8	7008.0	7082.4	7170.0
35°	6316.5	6316.5	6312.0	6316.5	6329.7	6329.7	6351.5	6329.7	6360.3	6404.1	6469.7
37.5°	5861.2	5852.4	5843.8	5834.9	5821.8	5800.0	5769.3	5716.7	5703.6	5686.1	5690.4
40°	5458.5	5454.2	5427.9	5405.9	5362.1	5309.7	5235.3	5143.4	5069.0	4981.4	4907.0
42.5°	5012.1	5007.6	4985.8	4946.3	4898.2	4819.5	4701.3	4578.8	4429.9	4298.6	4162.9
45°	4486.7	4499.8	4469.2	4425.4	4368.5	4294.1	4162.9	4013.9	3865.1	3694.5	3523.7
47.5°	3939.5	3935.2	3913.4	3887.1	3839.0	3764.5	3677.0	3515.0	3357.4	3199.9	3024.8
50°	3431.8	3414.3	3405.5	3379.3	3348.7	3287.4	3195.4	3064.0	2924.0	2775.2	2613.2
52.5°	2950.3	2950.3	2928.4	2910.9	2884.6	2836.5	2757.7	2652.7	2534.5	2394.3	2223.7
55°	2547.7	2538.8	2517.0	2495.0	2468.7	2438.1	2368.2	2280.6	2153.6	2017.9	1869.1
57.5°	2118.7	2114.2	2105.5	2079.2	2066.1	2035.4	1956.7	1869.1	1759.8	1641.6	1518.9
60°	1733.5	1716.0	1698.3	1680.8	1659.0	1628.4	1575.8	1501.4	1409.5	1304.5	1181.9
62.5°	1387.7	1413.8	1361.4	1361.4	1317.6	1291.3	1243.2	1199.4	1103.0	1006.8	901.8
65°	1081.2	1081.2	1059.2	1041.8	1015.5	984.8	936.7	892.9	822.9	748.4	674.0
67.5°	827.4	822.9	801.1	783.6	761.6	744.1	709.2	656.6	604.1	542.9	481.4
70°	608.4	604.1	599.6	569.0	551.5	529.7	503.4	468.5	429.0	385.2	328.3
72.5°	437.6	437.6	424.7	411.5	394.0	376.4	350.3	328.3	293.3	262.7	223.2
75°	280.2	275.8	275.8	253.9	253.9	227.6	210.1	196.9	179.5	162.0	127.0
77.5°	201.4	196.9	192.6	183.8	175.1	166.3	153.1	135.7	122.5	105.0	91.9
80°	135.7	127.0	122.5	122.5	109.4	105.0	109.4	83.2	78.7	65.6	56.9
82.5°	83.2	83.2	78.7	78.7	74.4	70.1	56.9	56.9	52.6	48.1	39.5
85°	43.8	56.9	39.5	43.8	39.5	43.8	39.5	30.6	26.3	21.8	21.8
87.5°	26.3	17.5	17.5	26.3	21.8	17.5	17.5	17.5	13.2	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4
2.5°	9223.1	9253.7	9249.2	9288.7	9301.8	9332.5	9332.5	9354.3	9367.4	9398.0	9424.3
5°	9004.2	9052.3	9065.4	9113.5	9153.0	9201.1	9231.7	9279.8	9323.6	9389.4	9450.6
7.5°	8868.5	8907.8	8934.1	8991.0	9034.8	9087.2	9139.8	9205.4	9266.7	9345.6	9433.2
10°	8802.7	8855.4	8894.6	8951.6	9004.2	9061.1	9113.5	9188.0	9258.0	9358.8	9455.0
12.5°	8785.3	8846.5	8894.6	8973.5	9026.0	9087.2	9148.5	9231.7	9306.1	9411.2	9520.7
15°	8785.3	8868.5	8934.1	9021.7	9082.9	9161.6	9227.4	9310.5	9393.7	9503.1	9608.1
17.5°	8767.8	8868.5	8951.6	9052.3	9131.0	9209.9	9293.0	9371.9	9459.3	9564.5	9682.5
20°	8697.7	8824.7	8925.3	9043.5	9126.7	9214.3	9297.5	9384.9	9477.0	9586.3	9687.0
22.5°	8575.2	8724.0	8837.9	8964.7	9061.1	9148.5	9231.7	9319.3	9420.0	9525.1	9630.1
25°	8413.2	8553.2	8675.9	8807.1	8903.5	8999.7	9078.6	9179.3	9271.2	9371.9	9455.0
27.5°	8168.0	8316.8	8435.0	8570.9	8658.2	8750.3	8815.9	8899.1	8986.7	9069.8	9135.5
30°	7800.4	7936.1	8058.6	8181.1	8268.7	8334.5	8404.4	8470.1	8527.1	8583.8	8640.8
32.5°	7261.9	7384.6	7502.8	7616.5	7686.6	7743.5	7795.9	7835.4	7866.0	7896.7	7901.0
35°	6522.3	6622.8	6697.2	6798.0	6863.7	6916.1	6916.1	6933.6	6929.3	6916.1	6903.0
37.5°	5694.9	5734.2	5764.8	5804.3	5808.6	5808.6	5782.5	5760.5	5725.6	5716.7	5690.4
40°	4832.6	4780.0	4740.5	4688.1	4657.5	4591.7	4535.0	4495.5	4438.6	4429.9	4421.1
42.5°	4013.9	3891.4	3782.0	3690.1	3585.1	3493.0	3410.0	3348.7	3304.9	3300.4	3304.9
45°	3348.7	3208.5	3046.6	2919.7	2801.5	2687.7	2578.3	2503.9	2464.4	2455.6	2464.4
47.5°	2845.3	2683.3	2525.7	2381.2	2254.3	2127.3	2017.9	1917.2	1869.1	1856.0	1851.6
50°	2446.9	2280.6	2114.2	1965.3	1825.3	1698.3	1562.6	1466.4	1405.2	1383.2	1365.7
52.5°	2057.4	1908.6	1737.8	1584.6	1444.5	1295.6	1155.6	1046.1	984.8	958.7	941.0
55°	1716.0	1567.2	1409.5	1260.7	1111.9	963.0	822.9	717.8	652.2	621.6	599.6
57.5°	1370.0	1230.0	1094.4	945.6	822.9	678.5	538.4	446.5	389.5	354.6	337.1
60°	1059.2	949.9	831.7	709.2	591.0	472.8	358.9	271.3	227.6	201.4	179.5
62.5°	801.1	709.2	630.2	525.2	433.3	332.6	245.2	175.1	135.7	113.9	105.0
65°	577.8	507.7	437.6	372.1	306.5	232.1	166.3	113.9	78.7	65.6	61.3
67.5°	411.5	354.6	302.0	258.2	210.1	166.3	118.2	78.7	61.3	52.6	48.1
70°	288.8	245.2	210.1	170.8	140.0	109.4	91.9	56.9	35.0	39.5	30.6
72.5°	192.6	162.0	144.5	118.2	96.2	78.7	56.9	39.5	39.5	30.6	26.3
75°	105.0	96.2	74.4	56.9	48.1	43.8	17.5	8.8	4.3	13.2	4.3
77.5°	74.4	65.6	56.9	48.1	39.5	30.6	17.5	17.5	13.2	17.5	8.8
80°	48.1	39.5	35.0	35.0	21.8	13.2	8.8	8.8	13.2	4.3	4.3
82.5°	30.6	26.3	21.8	21.8	21.8	13.2	13.2	13.2	13.2	8.8	8.8
85°	17.5	13.2	8.8	8.8	4.3	8.8	0.0	4.3	4.3	0.0	0.0
87.5°	8.8	4.3	4.3	4.3	4.3	0.0	0.0	4.3	0.0	4.3	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



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4	9367.4
2.5°	9441.8	9459.3	9481.3	9498.8	9538.2	9546.9	9564.5	9582.0	9595.1	9608.1	9612.6
5°	9503.1	9568.8	9630.1	9695.7	9778.9	9835.9	9901.4	9958.4	10015.3	10063.4	10098.4
7.5°	9520.7	9621.3	9713.3	9827.0	9949.5	10054.8	10164.1	10273.5	10387.4	10474.9	10549.3
10°	9555.7	9678.2	9796.4	9932.1	10089.7	10229.7	10365.4	10509.9	10654.4	10776.9	10886.5
12.5°	9616.9	9752.6	9879.6	10028.5	10190.4	10347.9	10496.7	10658.7	10812.0	10947.7	11070.2
15°	9717.7	9844.5	9967.2	10107.2	10269.2	10413.7	10562.5	10720.0	10873.3	11013.3	11127.2
17.5°	9783.2	9901.4	10024.0	10151.0	10286.7	10418.0	10558.0	10698.2	10838.2	10965.2	11070.2
20°	9783.2	9897.1	9989.0	10102.9	10229.7	10343.6	10457.5	10580.0	10702.5	10807.5	10908.3
22.5°	9704.5	9813.9	9884.0	9971.5	10080.9	10177.3	10238.5	10374.2	10466.1	10558.0	10632.4
25°	9520.7	9599.5	9656.4	9717.7	9805.2	9870.8	9923.4	10002.2	10094.0	10129.2	10181.6
27.5°	9188.0	9244.9	9275.5	9288.7	9332.5	9367.4	9376.2	9411.2	9450.6	9459.3	9481.3
30°	8662.7	8667.1	8653.9	8649.6	8627.6	8601.5	8597.0	8592.7	8575.2	8557.7	8562.0
32.5°	7870.3	7848.5	7795.9	7739.2	7682.2	7621.0	7585.9	7542.1	7515.8	7489.6	7459.0
35°	6846.1	6793.6	6719.2	6649.1	6583.5	6535.3	6456.5	6430.2	6404.1	6369.0	6360.3
37.5°	5642.3	5611.7	5541.6	5489.2	5454.2	5432.2	5392.8	5366.7	5366.7	5353.5	5344.7
40°	4399.1	4390.5	4364.2	4377.3	4359.8	4368.5	4364.2	4355.3	4377.3	4377.3	4386.1
42.5°	3300.4	3304.9	3318.1	3326.7	3353.0	3357.4	3379.3	3379.3	3392.5	3405.5	3414.3
45°	2455.6	2473.2	2473.2	2490.7	2517.0	2521.4	2530.0	2534.5	2543.2	2565.1	2573.8
47.5°	1842.8	1847.1	1847.1	1851.6	1860.3	1869.1	1864.8	1869.1	1882.3	1873.4	1882.3
50°	1361.4	1365.7	1352.6	1339.4	1352.6	1352.6	1348.2	1335.1	1348.2	1330.8	1339.4
52.5°	928.1	923.6	910.4	914.9	906.1	901.8	901.8	892.9	892.9	892.9	875.5
55°	586.6	586.6	577.8	577.8	573.5	564.7	560.3	555.8	551.5	547.2	547.2
57.5°	328.3	332.6	319.6	315.1	319.6	315.1	306.5	306.5	306.5	293.3	302.0
60°	179.5	175.1	170.8	166.3	162.0	166.3	166.3	157.7	157.7	157.7	162.0
62.5°	96.2	96.2	91.9	91.9	87.6	87.6	96.2	83.2	87.6	83.2	87.6
65°	52.6	65.6	48.1	48.1	61.3	56.9	52.6	52.6	56.9	48.1	52.6
67.5°	56.9	39.5	35.0	39.5	35.0	35.0	35.0	43.8	39.5	30.6	39.5
70°	26.3	30.6	30.6	21.8	35.0	17.5	30.6	17.5	26.3	21.8	26.3
72.5°	26.3	26.3	26.3	17.5	26.3	17.5	21.8	21.8	17.5	17.5	26.3
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°	8.8	8.8	4.3	4.3	4.3	4.3	8.8	8.8	8.8	0.0	4.3
80°	8.8	8.8	0.0	4.3	0.0	0.0	4.3	0.0	4.3	0.0	8.8
82.5°	4.3	8.8	4.3	4.3	8.8	8.8	8.8	4.3	4.3	4.3	4.3
85°	0.0	4.3	0.0	0.0	0.0	0.0	8.8	0.0	0.0	0.0	4.3
87.5°	0.0	4.3	0.0	0.0	0.0	0.0	4.3	4.3	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: P249767

CATALOG NUMBER: LSR8B150D010 EC8B150950 8LBSWOLI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	9367.4	9367.4	9367.4	9367.4
2.5°	9616.9	9621.3	9630.1	9625.8
5°	10124.7	10159.8	10177.3	10173.0
7.5°	10601.8	10663.2	10698.2	10698.2
10°	10969.5	11039.6	11092.0	11100.9
12.5°	11166.4	11245.4	11315.4	11297.8
15°	11223.4	11302.3	11372.2	11359.0
17.5°	11157.8	11236.5	11289.1	11280.3
20°	10978.3	11043.9	11096.5	11092.0
22.5°	10698.2	10755.1	10798.9	10794.4
25°	10225.4	10264.9	10299.8	10282.3
27.5°	9498.8	9511.9	9533.7	9507.6
30°	8531.4	8540.1	8548.9	8544.6
32.5°	7445.9	7441.4	7432.7	7423.9
35°	6347.2	6347.2	6351.5	6325.2
37.5°	5349.0	5344.7	5357.8	5344.7
40°	4394.8	4390.5	4407.9	4386.1
42.5°	3427.4	3440.6	3444.9	3444.9
45°	2578.3	2582.6	2586.9	2586.9
47.5°	1882.3	1886.6	1908.6	1882.3
50°	1330.8	1335.1	1339.4	1330.8
52.5°	879.8	884.3	879.8	866.6
55°	538.4	542.9	542.9	542.9
57.5°	288.8	293.3	293.3	288.8
60°	157.7	153.1	157.7	148.8
62.5°	83.2	91.9	87.6	78.7
65°	52.6	52.6	52.6	61.3
67.5°	43.8	35.0	39.5	30.6
70°	26.3	30.6	30.6	21.8
72.5°	21.8	21.8	21.8	26.3
75°	0.0	0.0	0.0	0.0
77.5°	8.8	8.8	8.8	4.3
80°	4.3	0.0	4.3	0.0
82.5°	4.3	4.3	8.8	4.3
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)