

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: P248521

Luminaire Tested: **LSR8B150D010 EC8B150950 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248521  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B150D010 EC8B150950 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15302.0 lumens  
Efficiency: N/A  
Efficacy: 96.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

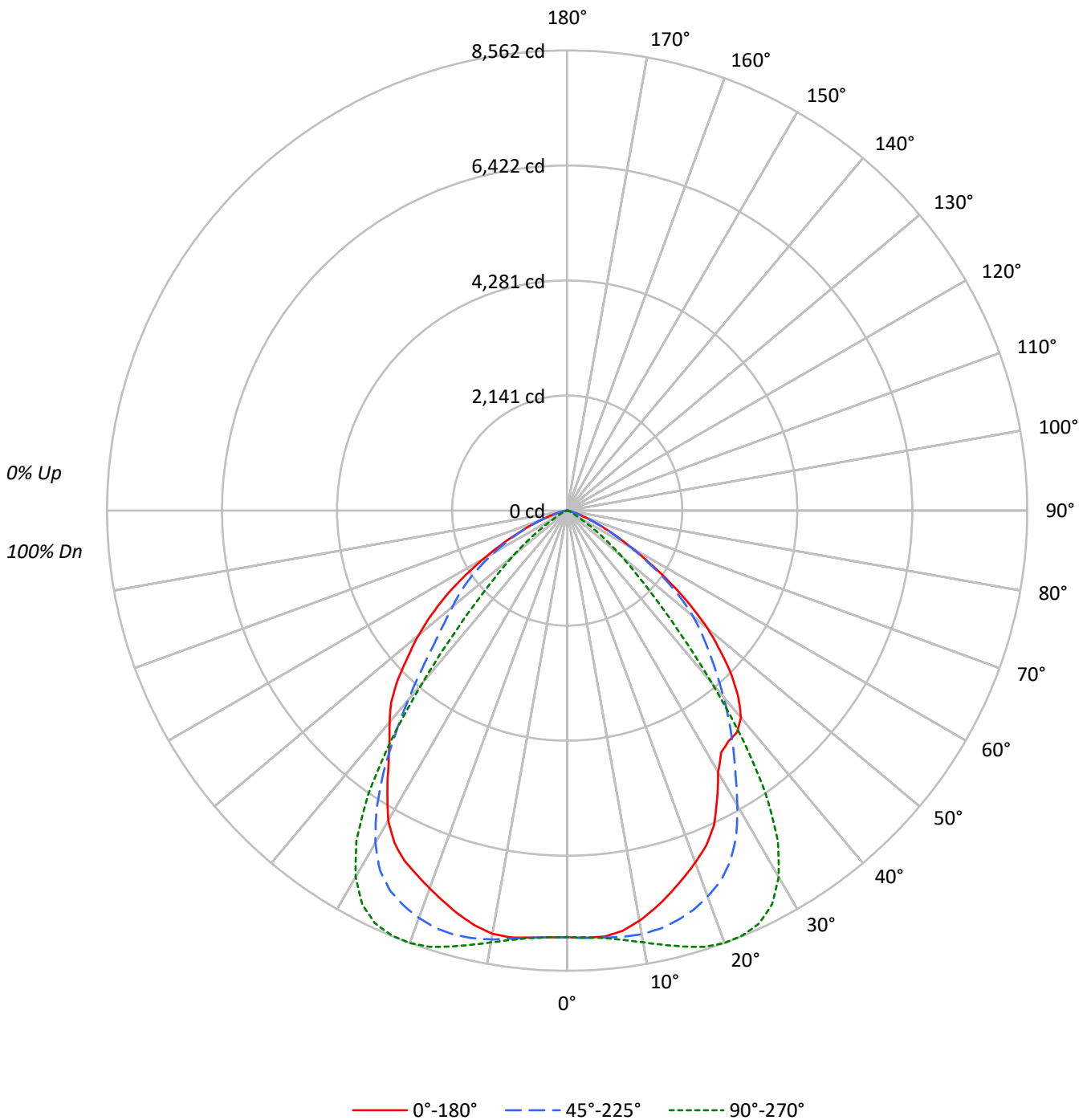
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	244782	244782	244782
5°	246240	247153	246893
10°	242621	255421	250408
15°	235530	268079	248443
20°	228693	280958	245422
25°	219911	288154	244286
30°	200135	280253	237045
35°	197154	242839	218092
40°	202514	168423	206752
45°	188522	101792	194405
50°	163525	62864	173230
55°	125490	32848	147011
60°	85491	13253	110955
65°	53184	6764	76548
70°	28869	4183	46730
75°	15060	2002	27617
80°	6730	2255	14952
85°	4493	1486	13409



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	763.4	5.0
10°-20°	2261.5	14.8
20°-30°	3450.1	22.5
30°-40°	3600.2	23.5
40°-50°	2704.3	17.7
50°-60°	1663.9	10.9
60°-70°	677.1	4.4
70°-80°	159.5	1.0
80°-90°	22.0	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°	6475.0	42.3
0°-40°	10075.2	65.8
0°-60°	14443.4	94.4
0°-90°	15302.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15302.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7938	7938	7938	7938	7938	
5°	7955	7976	7984	7976	7976	753
15°	7378	7896	8397	8166	7782	2078
25°	6463	7188	8469	7799	7180	2938
35°	5237	5385	6451	5962	5794	3307
45°	4323	3742	2334	3485	4458	3298
55°	2334	2216	611	2216	2734	2098
65°	729	737	93	990	1049	760
75°	126	126	17	223	232	152
85°	13	13	4	30	38	18
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°	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1
2.5°	7959.3	7946.6	7959.3	7959.3	7963.5	7955.0	7959.3	7963.5	7955.0	7955.0	7955.0
5°	7955.0	7946.6	7955.0	7950.8	7959.3	7959.3	7967.7	7967.7	7976.1	7976.1	7988.8
7.5°	7887.6	7870.8	7887.6	7900.3	7908.7	7925.6	7946.6	7963.5	7980.3	7997.2	8018.2
10°	7748.5	7748.5	7761.2	7786.5	7811.7	7841.2	7879.2	7921.3	7963.5	8001.3	8039.3
12.5°	7575.9	7563.2	7588.4	7622.1	7660.1	7706.5	7765.4	7828.6	7896.1	7971.9	8030.9
15°	7377.8	7365.1	7394.6	7428.3	7474.7	7542.1	7613.8	7698.0	7794.9	7896.1	7993.0
17.5°	7175.5	7171.3	7200.8	7247.2	7285.1	7356.7	7449.5	7550.5	7660.1	7794.9	7921.3
20°	6969.1	6964.9	6994.4	7032.3	7082.8	7150.3	7243.0	7360.9	7491.5	7643.3	7790.7
22.5°	6754.2	6758.4	6783.7	6825.8	6868.0	6939.5	7036.5	7154.5	7297.7	7462.0	7626.4
25°	6463.4	6442.4	6476.1	6518.3	6589.8	6648.8	6741.6	6868.0	7015.4	7188.2	7382.0
27.5°	6042.1	6037.9	6067.4	6105.3	6168.5	6240.1	6341.3	6471.9	6627.8	6817.4	7007.0
30°	5620.7	5629.2	5641.9	5679.8	5721.9	5793.5	5894.7	6004.2	6151.7	6332.8	6535.1
32.5°	5334.2	5334.2	5351.1	5376.4	5405.9	5443.8	5515.5	5595.5	5709.3	5835.7	5983.1
35°	5237.3	5220.5	5237.3	5241.5	5245.8	5254.2	5266.8	5292.2	5330.0	5384.8	5439.6
37.5°	5195.2	5182.6	5182.6	5165.8	5144.6	5119.4	5085.7	5047.7	5005.7	4950.8	4908.7
40°	5030.9	5022.5	5014.0	4997.2	4950.8	4900.3	4845.4	4757.0	4660.1	4525.2	4390.5
42.5°	4714.9	4706.5	4702.2	4668.5	4626.4	4567.4	4504.2	4411.5	4289.3	4116.5	3922.7
45°	4323.0	4306.1	4293.6	4264.1	4234.5	4184.0	4125.0	4040.7	3918.5	3741.6	3509.8
47.5°	3868.0	3859.5	3855.3	3842.7	3813.2	3783.7	3745.8	3678.4	3568.8	3400.2	3160.1
50°	3408.7	3391.9	3400.2	3396.1	3383.4	3362.4	3337.0	3290.7	3206.4	3054.8	2835.7
52.5°	2882.0	2882.0	2877.8	2890.4	2894.6	2890.4	2894.6	2844.1	2772.5	2658.7	2473.3
55°	2334.2	2334.2	2346.9	2363.8	2380.6	2384.8	2380.6	2359.6	2309.0	2216.3	2051.9
57.5°	1820.2	1811.8	1837.1	1862.3	1879.2	1896.1	1883.4	1866.6	1837.1	1761.2	1634.8
60°	1386.2	1386.2	1403.0	1420.0	1436.8	1453.7	1449.4	1445.2	1420.0	1369.3	1268.3
62.5°	1019.6	1023.9	1023.9	1036.5	1053.3	1070.2	1082.8	1070.2	1057.6	1023.9	956.4
65°	728.9	724.7	728.9	741.6	754.3	771.1	779.5	775.3	762.6	737.3	686.8
67.5°	488.8	484.6	501.4	505.6	514.0	530.9	526.7	530.9	526.7	505.6	463.5
70°	320.2	311.8	320.2	316.0	328.7	332.9	341.3	345.5	341.3	328.7	316.0
72.5°	198.0	193.8	198.0	202.3	206.5	210.6	219.1	219.1	214.9	206.5	189.6
75°	126.4	113.7	117.9	109.6	117.9	117.9	126.4	130.6	126.4	126.4	117.9
77.5°	75.9	75.9	75.9	75.9	75.9	75.9	75.9	80.1	84.2	75.9	71.7
80°	37.9	37.9	42.2	42.2	42.2	46.4	42.2	42.2	42.2	46.4	33.7
82.5°	29.5	25.3	25.3	25.3	29.5	25.3	25.3	25.3	25.3	25.3	25.3
85°	12.7	16.8	12.7	8.5	12.7	12.7	16.8	12.7	12.7	12.7	16.8
87.5°	4.2	4.2	0.0	0.0	0.0	4.2	0.0	4.2	4.2	8.5	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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1
2.5°	7959.3	7950.8	7950.8	7946.6	7955.0	7946.6	7950.8	7946.6	7946.6	7955.0	7946.6
5°	7988.8	7993.0	7984.5	7980.3	7993.0	7993.0	7993.0	7984.5	7984.5	7988.8	7984.5
7.5°	8030.9	8039.3	8043.5	8047.7	8056.2	8060.4	8060.4	8056.2	8052.0	8064.6	8047.7
10°	8077.2	8089.9	8115.2	8127.8	8148.9	8148.9	8157.3	8157.3	8148.9	8157.3	8153.1
12.5°	8060.4	8136.2	8178.4	8207.8	8237.3	8262.6	8271.0	8275.3	8271.0	8287.9	8271.0
15°	8089.9	8153.1	8220.5	8271.0	8325.8	8355.3	8363.7	8397.4	8405.9	8410.1	8384.9
17.5°	8043.5	8157.3	8228.9	8304.7	8384.9	8439.6	8490.1	8511.2	8515.5	8523.8	8490.1
20°	7938.1	8064.6	8174.1	8283.7	8376.4	8460.6	8502.8	8561.8	8545.0	8578.7	8532.3
22.5°	7794.9	7938.1	8077.2	8220.5	8317.4	8418.6	8507.0	8549.1	8570.2	8570.2	8519.6
25°	7567.4	7736.0	7887.6	8035.0	8182.6	8304.7	8405.9	8469.1	8481.8	8477.5	8418.6
27.5°	7213.5	7394.6	7571.6	7740.2	7921.3	8064.6	8182.6	8258.4	8279.5	8279.5	8216.3
30°	6724.7	6918.5	7091.3	7293.5	7478.9	7639.1	7803.4	7870.8	7908.7	7908.7	7837.1
32.5°	6143.2	6307.6	6467.7	6665.7	6868.0	7049.1	7205.0	7297.7	7344.1	7339.9	7276.7
35°	5511.2	5591.2	5713.5	5860.9	6042.1	6210.6	6362.3	6450.9	6530.9	6526.6	6467.7
37.5°	4879.2	4858.1	4870.8	4925.5	5039.3	5157.3	5275.3	5359.6	5426.9	5456.5	5443.8
40°	4259.9	4150.3	4044.9	4007.1	4015.4	4057.6	4120.8	4184.0	4259.9	4297.8	4314.6
42.5°	3703.6	3518.3	3332.8	3193.8	3113.7	3088.5	3118.0	3139.0	3185.4	3240.1	3295.0
45°	3257.0	3008.5	2764.0	2549.2	2414.3	2334.2	2317.4	2334.2	2359.6	2414.3	2486.0
47.5°	2890.4	2599.7	2325.9	2085.6	1887.6	1782.3	1752.8	1744.4	1769.7	1820.2	1917.1
50°	2566.0	2275.2	1971.9	1693.8	1487.4	1369.3	1327.3	1310.4	1339.8	1377.8	1466.2
52.5°	2212.0	1925.5	1613.8	1344.1	1129.2	1007.0	960.7	935.4	952.2	1002.8	1091.3
55°	1828.6	1563.2	1280.9	1002.8	796.3	682.6	627.8	611.0	627.8	682.6	771.1
57.5°	1445.2	1221.9	985.9	724.7	539.3	425.6	370.7	353.9	400.3	421.4	514.0
60°	1129.2	948.1	745.8	530.9	370.7	282.3	227.5	214.9	236.0	273.8	349.7
62.5°	846.9	733.1	573.0	379.2	273.8	181.1	151.7	139.1	151.7	181.1	240.2
65°	615.2	526.7	400.3	278.1	185.4	134.8	101.1	92.7	105.4	126.4	177.0
67.5°	421.4	353.9	278.1	193.8	126.4	84.2	71.7	71.7	75.9	92.7	130.6
70°	273.8	231.8	177.0	126.4	84.2	63.2	54.7	46.4	54.7	67.4	88.5
72.5°	172.8	147.4	113.7	88.5	63.2	46.4	37.9	33.7	42.2	50.5	67.4
75°	105.4	80.1	59.0	46.4	33.7	33.7	33.7	16.8	21.0	33.7	42.2
77.5°	63.2	54.7	46.4	37.9	29.5	16.8	16.8	16.8	21.0	25.3	37.9
80°	33.7	29.5	21.0	21.0	16.8	12.7	16.8	12.7	8.5	21.0	25.3
82.5°	21.0	16.8	16.8	16.8	21.0	8.5	12.7	8.5	12.7	16.8	12.7
85°	12.7	12.7	12.7	8.5	21.0	8.5	8.5	4.2	4.2	8.5	8.5
87.5°	0.0	4.2	4.2	0.0	4.2	0.0	4.2	4.2	4.2	4.2	4.2
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°	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1	7938.1
2.5°	7950.8	7946.6	7950.8	7946.6	7946.6	7946.6	7950.8	7950.8	7946.6	7946.6	7955.0
5°	7984.5	7984.5	7984.5	7980.3	7976.1	7976.1	7984.5	7984.5	7971.9	7984.5	7984.5
7.5°	8056.2	8043.5	8056.2	8039.3	8030.9	8035.0	8039.3	8030.9	8022.5	8026.7	8026.7
10°	8148.9	8136.2	8136.2	8123.6	8110.9	8102.5	8094.1	8073.0	8052.0	8047.7	8030.9
12.5°	8258.4	8237.3	8224.7	8199.4	8178.4	8148.9	8123.6	8089.9	8047.7	8018.2	7988.8
15°	8367.9	8334.2	8304.7	8262.6	8216.3	8165.7	8110.9	8056.2	7988.8	7929.8	7879.2
17.5°	8456.4	8410.1	8355.3	8287.9	8220.5	8144.6	8064.6	7984.5	7887.6	7811.7	7752.8
20°	8485.9	8418.6	8346.9	8258.4	8169.9	8064.6	7963.5	7858.1	7748.5	7668.5	7601.1
22.5°	8448.1	8367.9	8279.5	8186.8	8068.8	7955.0	7837.1	7714.8	7617.9	7508.4	7445.2
25°	8342.7	8245.8	8148.9	8039.3	7925.6	7799.2	7672.8	7546.4	7428.3	7369.4	7289.3
27.5°	8127.8	8022.5	7917.1	7803.4	7672.8	7546.4	7415.7	7293.5	7192.4	7112.3	7066.0
30°	7748.5	7626.4	7504.2	7382.0	7268.2	7137.6	7015.4	6914.3	6813.1	6749.9	6703.7
32.5°	7167.1	7057.6	6935.4	6817.4	6712.1	6602.5	6501.4	6412.9	6341.3	6299.1	6265.4
35°	6383.4	6273.8	6181.2	6096.9	6008.4	5962.1	5898.9	5848.3	5818.8	5802.0	5797.7
37.5°	5397.4	5334.2	5304.7	5287.9	5271.0	5258.4	5266.8	5287.9	5304.7	5334.2	5367.9
40°	4344.1	4398.8	4415.7	4474.7	4529.5	4601.1	4681.2	4773.9	4849.7	4946.6	5014.0
42.5°	3383.4	3484.6	3602.5	3728.9	3863.8	3994.4	4154.5	4301.9	4436.8	4558.9	4664.3
45°	2599.7	2755.6	2932.6	3113.7	3295.0	3484.6	3678.4	3859.5	4019.6	4150.3	4259.9
47.5°	2026.7	2199.5	2427.0	2650.3	2869.4	3092.7	3307.5	3497.1	3632.0	3758.4	3855.3
50°	1605.3	1803.4	2051.9	2309.0	2549.2	2785.1	3012.6	3189.6	3324.5	3425.6	3497.1
52.5°	1242.9	1478.9	1731.7	2001.4	2258.4	2515.5	2726.1	2890.4	3000.0	3088.5	3143.2
55°	926.9	1158.7	1428.4	1706.5	1967.7	2216.3	2414.3	2557.6	2654.5	2705.1	2734.5
57.5°	669.9	880.7	1150.3	1428.4	1664.3	1900.3	2060.4	2191.0	2245.8	2275.2	2287.9
60°	488.8	682.6	922.7	1162.9	1386.2	1575.8	1714.9	1803.4	1845.5	1862.3	1858.1
62.5°	358.2	526.7	733.1	935.4	1116.5	1272.4	1382.0	1441.0	1462.1	1470.5	1457.9
65°	273.8	404.5	581.5	737.3	876.4	990.1	1070.2	1108.2	1120.8	1116.5	1108.2
67.5°	202.3	303.4	434.0	552.0	653.1	741.6	783.7	817.5	825.8	813.2	800.5
70°	143.3	223.3	316.0	396.1	471.9	522.5	568.8	573.0	573.0	568.8	560.4
72.5°	101.1	155.9	214.9	269.7	316.0	353.9	370.7	383.4	379.2	375.0	366.6
75°	67.4	96.9	155.9	168.6	210.6	223.3	240.2	240.2	244.3	231.8	231.8
77.5°	42.2	67.4	92.7	109.6	126.4	143.3	151.7	151.7	155.9	151.7	151.7
80°	25.3	42.2	50.5	75.9	75.9	88.5	92.7	96.9	88.5	101.1	88.5
82.5°	16.8	25.3	37.9	37.9	46.4	54.7	54.7	59.0	59.0	54.7	54.7
85°	12.7	16.8	21.0	25.3	25.3	29.5	25.3	25.3	29.5	33.7	29.5
87.5°	4.2	8.5	4.2	8.5	8.5	16.8	12.7	12.7	12.7	16.8	16.8
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: P248521

CATALOG NUMBER: LSR8B150D010 EC8B150950 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	7938.1	7938.1	7938.1	7938.1
2.5°	7946.6	7950.8	7946.6	7946.6
5°	7984.5	7980.3	7984.5	7976.1
7.5°	8014.0	8014.0	8009.8	8009.8
10°	8014.0	7997.2	7997.2	7997.2
12.5°	7950.8	7929.8	7917.1	7908.7
15°	7841.2	7803.4	7786.5	7782.3
17.5°	7698.0	7664.3	7643.3	7630.6
20°	7533.7	7500.0	7474.7	7478.9
22.5°	7390.4	7352.5	7335.6	7327.2
25°	7247.2	7200.8	7188.2	7179.8
27.5°	7015.4	6990.2	6977.5	6964.9
30°	6661.5	6648.8	6627.8	6657.3
32.5°	6252.8	6231.7	6214.9	6227.6
35°	5802.0	5789.3	5802.0	5793.5
37.5°	5389.1	5401.6	5418.6	5426.9
40°	5064.6	5110.9	5127.8	5136.2
42.5°	4740.2	4794.9	4828.6	4849.7
45°	4339.9	4394.6	4432.5	4457.9
47.5°	3927.0	3973.3	4011.2	4007.1
50°	3552.0	3577.2	3594.1	3611.0
52.5°	3172.7	3172.7	3176.9	3176.9
55°	2743.0	2734.5	2730.3	2734.5
57.5°	2271.0	2262.7	2258.4	2245.8
60°	1841.3	1816.0	1799.1	1799.1
62.5°	1441.0	1411.5	1398.9	1394.7
65°	1082.8	1078.6	1053.3	1049.1
67.5°	783.7	766.8	750.0	754.3
70°	552.0	526.7	526.7	518.3
72.5°	358.2	345.5	341.3	341.3
75°	223.3	223.3	214.9	231.8
77.5°	147.4	147.4	143.3	147.4
80°	88.5	88.5	88.5	84.2
82.5°	54.7	59.0	54.7	54.7
85°	29.5	33.7	25.3	37.9
87.5°	16.8	21.0	16.8	21.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)