

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: P249781

Luminaire Tested: **LSR8B150D010 EC8B150930 8LBSWOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249781  
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 EC8B150930 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14186.3 lumens  
Efficiency: N/A  
Efficacy: 89.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

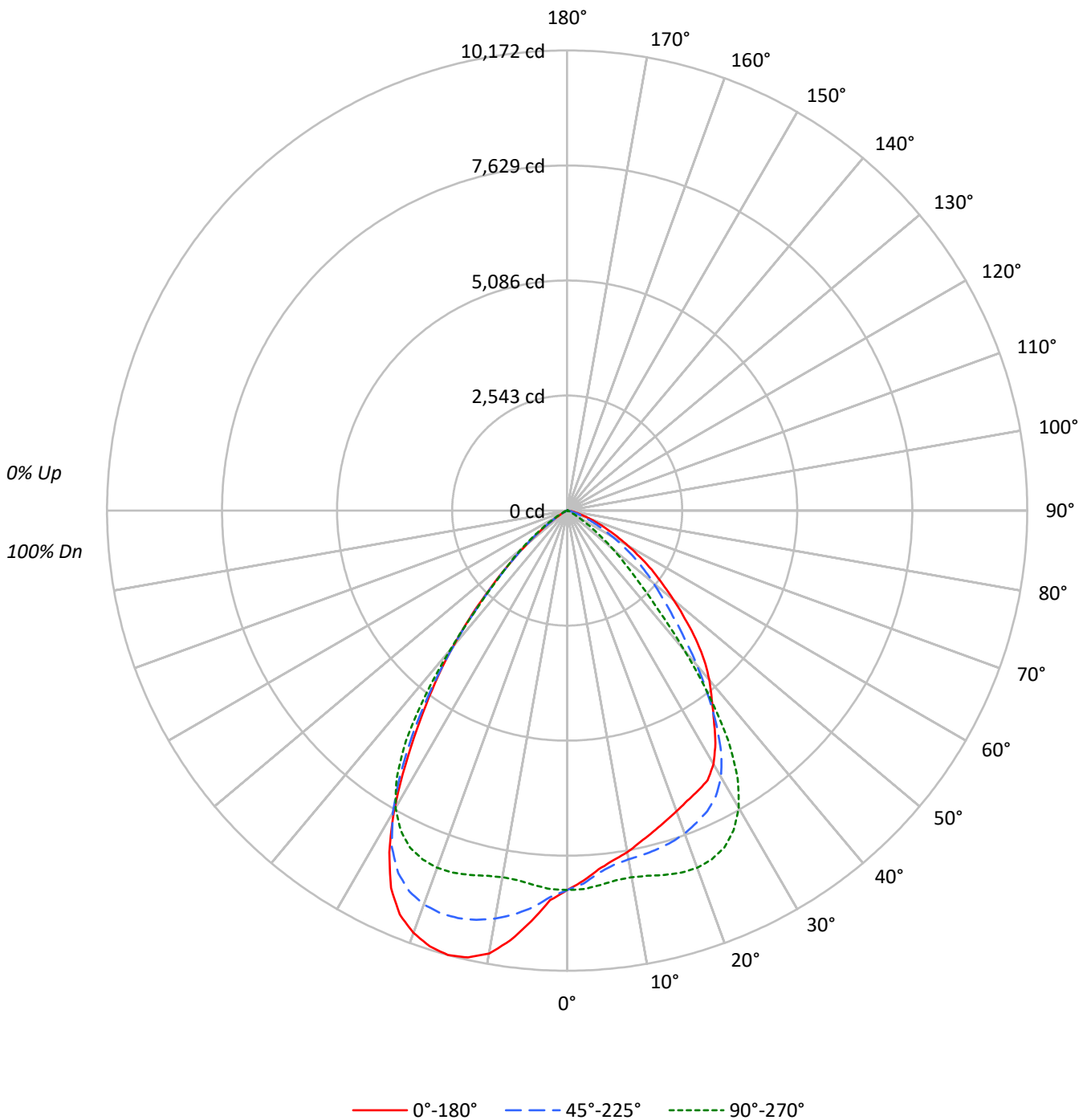
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0			
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91	91	91	91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82	82	82	82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73	73	73	73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66	66	66	66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60	60	60	60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54	54	54	54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49	49	49	49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45	45	45	45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42	42	42	42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38	38	38	38			

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

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	806.4	5.7
10°-20°	2413.5	17.0
20°-30°	3696.0	26.1
30°-40°	3623.3	25.5
40°-50°	2182.0	15.4
50°-60°	1004.3	7.1
60°-70°	352.8	2.5
70°-80°	92.3	0.7
80°-90°	15.7	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°	6915.9	48.8
0°-40°	10539.2	74.3
0°-60°	13725.5	96.8
0°-90°	14186.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14186.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	8388	8388	8388	8388	8388	
5°	7961	8036	8310	8808	9110	752
15°	7350	7746	8337	9325	10172	2076
25°	6836	7330	8220	8839	9208	3149
35°	5656	5735	6209	5852	5664	3543
45°	4018	3308	2242	2258	2316	3081
55°	2281	1807	643	506	486	2036
65°	968	670	102	51	55	986
75°	251	145	8	0	0	304
85°	39	20	4	0	0	54
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°	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3
2.5°	8192.4	8200.2	8200.2	8200.2	8215.9	8220.0	8215.9	8220.0	8227.7	8255.0	8266.9
5°	7961.1	7949.3	7957.3	7953.3	7972.9	7984.7	7976.8	7988.6	8015.9	8035.7	8055.2
7.5°	7796.6	7796.6	7796.6	7804.3	7816.1	7839.6	7835.8	7843.5	7871.0	7898.3	7925.8
10°	7667.2	7663.3	7663.3	7682.8	7698.5	7725.9	7733.8	7757.3	7792.5	7827.8	7859.1
12.5°	7498.6	7502.6	7522.1	7541.8	7577.0	7620.0	7643.7	7675.0	7730.0	7788.7	7824.0
15°	7349.6	7353.5	7369.3	7408.4	7451.6	7502.6	7553.4	7604.4	7671.0	7745.5	7808.3
17.5°	7204.6	7208.5	7220.2	7263.5	7318.3	7384.9	7443.7	7510.4	7596.7	7682.8	7761.2
20°	7071.3	7067.5	7087.0	7126.2	7196.8	7259.5	7318.3	7396.8	7490.9	7596.7	7686.7
22.5°	6941.9	6941.9	6961.6	7000.9	7063.5	7126.2	7189.0	7271.3	7365.3	7467.2	7573.1
25°	6836.1	6832.2	6859.6	6879.4	6926.3	6989.0	7055.7	7122.3	7216.3	7330.1	7431.9
27.5°	6722.5	6718.6	6722.5	6746.1	6789.1	6836.1	6887.1	6945.9	7024.4	7118.5	7216.3
30°	6471.6	6475.5	6475.5	6495.2	6518.7	6569.5	6597.0	6655.8	6726.3	6804.8	6891.1
32.5°	6099.2	6103.1	6103.1	6111.0	6130.5	6154.1	6177.6	6220.8	6275.6	6342.2	6420.6
35°	5656.3	5656.3	5652.3	5656.3	5668.1	5668.1	5687.6	5668.1	5695.6	5734.8	5793.4
37.5°	5248.6	5240.7	5232.9	5225.1	5213.3	5193.8	5166.4	5119.3	5107.5	5091.8	5095.7
40°	4888.0	4884.2	4860.7	4840.9	4801.7	4754.7	4688.1	4605.9	4539.3	4460.8	4394.2
42.5°	4488.3	4484.2	4464.7	4429.3	4386.2	4315.7	4209.9	4100.2	3966.9	3849.3	3727.8
45°	4017.8	4029.5	4002.1	3962.8	3912.0	3845.3	3727.8	3594.4	3461.1	3308.3	3155.4
47.5°	3527.8	3523.9	3504.4	3480.8	3437.8	3371.1	3292.7	3147.7	3006.4	2865.5	2708.7
50°	3073.1	3057.4	3049.6	3026.1	2998.7	2943.9	2861.5	2743.8	2618.4	2485.1	2340.1
52.5°	2642.0	2642.0	2622.4	2606.7	2583.1	2540.0	2469.6	2375.4	2269.6	2144.1	1991.3
55°	2281.3	2273.5	2254.0	2234.3	2210.7	2183.3	2120.7	2042.2	1928.6	1807.1	1673.8
57.5°	1897.2	1893.1	1885.4	1861.9	1850.1	1822.6	1752.2	1673.8	1575.8	1470.0	1360.1
60°	1552.2	1536.7	1520.9	1505.2	1485.7	1458.2	1411.1	1344.4	1262.1	1168.1	1058.4
62.5°	1242.6	1266.1	1219.1	1219.1	1179.9	1156.3	1113.3	1074.0	987.7	901.6	807.6
65°	968.2	968.2	948.5	932.9	909.4	881.9	838.8	799.6	736.8	670.2	603.5
67.5°	740.9	736.8	717.3	701.6	682.0	666.3	635.0	588.0	541.0	486.2	431.1
70°	544.8	541.0	537.0	509.5	493.9	474.3	450.8	419.5	384.2	344.9	293.9
72.5°	391.9	391.9	380.2	368.5	352.9	337.1	313.7	293.9	262.7	235.2	199.9
75°	250.9	247.1	247.1	227.3	227.3	203.8	188.1	176.3	160.8	145.1	113.8
77.5°	180.4	176.3	172.5	164.6	156.8	148.9	137.1	121.5	109.7	94.1	82.3
80°	121.5	113.8	109.7	109.7	98.0	94.1	98.0	74.5	70.5	58.7	51.0
82.5°	74.5	74.5	70.5	70.5	66.6	62.8	51.0	51.0	47.1	43.0	35.3
85°	39.2	51.0	35.3	39.2	35.3	39.2	35.3	27.5	23.5	19.5	19.5
87.5°	23.5	15.7	15.7	23.5	19.5	15.7	15.7	15.7	11.8	8.0	8.0
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°	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3
2.5°	8259.1	8286.5	8282.5	8317.8	8329.6	8357.1	8357.1	8376.6	8388.3	8415.8	8439.3
5°	8063.1	8106.2	8117.9	8161.0	8196.4	8239.5	8266.9	8310.0	8349.2	8408.1	8462.9
7.5°	7941.6	7976.8	8000.4	8051.4	8090.5	8137.5	8184.5	8243.3	8298.2	8368.8	8447.3
10°	7882.8	7929.8	7965.0	8015.9	8063.1	8114.1	8161.0	8227.7	8290.5	8380.6	8466.8
12.5°	7867.1	7921.9	7965.0	8035.7	8082.6	8137.5	8192.4	8266.9	8333.5	8427.6	8525.7
15°	7867.1	7941.6	8000.4	8078.7	8133.6	8204.2	8263.0	8337.3	8411.9	8509.8	8603.9
17.5°	7851.4	7941.6	8015.9	8106.2	8176.7	8247.3	8321.7	8392.4	8470.6	8564.9	8670.6
20°	7788.7	7902.4	7992.4	8098.2	8172.8	8251.2	8325.8	8404.0	8486.4	8584.4	8674.6
22.5°	7679.0	7812.2	7914.1	8027.8	8114.1	8192.4	8266.9	8345.3	8435.5	8529.6	8623.6
25°	7533.9	7659.2	7769.1	7886.6	7972.9	8059.1	8129.7	8220.0	8302.2	8392.4	8466.8
27.5°	7314.3	7447.6	7553.4	7675.0	7753.3	7835.8	7894.5	7969.1	8047.4	8121.9	8180.7
30°	6985.2	7106.7	7216.3	7326.1	7404.5	7463.4	7525.9	7584.9	7635.9	7686.7	7737.7
32.5°	6502.9	6612.8	6718.6	6820.4	6883.2	6934.2	6981.1	7016.5	7043.9	7071.3	7075.2
35°	5840.6	5930.7	5997.2	6087.5	6146.3	6193.3	6193.3	6209.0	6205.1	6193.3	6181.5
37.5°	5099.8	5134.9	5162.3	5197.6	5201.6	5201.6	5178.1	5158.4	5127.1	5119.3	5095.7
40°	4327.5	4280.4	4245.1	4198.1	4170.7	4111.8	4061.0	4025.6	3974.7	3966.9	3959.0
42.5°	3594.4	3484.6	3386.8	3304.5	3210.4	3127.9	3053.6	2998.7	2959.6	2955.5	2959.6
45°	2998.7	2873.2	2728.2	2614.5	2508.7	2406.8	2308.8	2242.2	2206.8	2199.0	2206.8
47.5°	2547.9	2402.9	2261.7	2132.3	2018.7	1905.0	1807.1	1716.8	1673.8	1662.0	1658.1
50°	2191.2	2042.2	1893.1	1760.0	1634.5	1520.9	1399.3	1313.1	1258.3	1238.6	1223.0
52.5°	1842.4	1709.1	1556.2	1419.0	1293.5	1160.2	1034.9	936.7	881.9	858.5	842.7
55°	1536.7	1403.4	1262.1	1129.0	995.7	862.4	736.8	642.8	584.0	556.6	537.0
57.5°	1226.8	1101.5	980.0	846.7	736.8	607.6	482.1	399.9	348.9	317.5	301.9
60°	948.5	850.6	744.8	635.0	529.2	423.4	321.4	243.0	203.8	180.4	160.8
62.5°	717.3	635.0	564.4	470.3	388.0	297.8	219.6	156.8	121.5	102.0	94.1
65°	517.5	454.7	391.9	333.2	274.4	207.8	148.9	102.0	70.5	58.7	54.8
67.5°	368.5	317.5	270.4	231.2	188.1	148.9	105.8	70.5	54.8	47.1	43.0
70°	258.6	219.6	188.1	152.9	125.3	98.0	82.3	51.0	31.3	35.3	27.5
72.5°	172.5	145.1	129.4	105.8	86.2	70.5	51.0	35.3	35.3	27.5	23.5
75°	94.1	86.2	66.6	51.0	43.0	39.2	15.7	8.0	3.9	11.8	3.9
77.5°	66.6	58.7	51.0	43.0	35.3	27.5	15.7	15.7	11.8	15.7	8.0
80°	43.0	35.3	31.3	31.3	19.5	11.8	8.0	8.0	11.8	3.9	3.9
82.5°	27.5	23.5	19.5	19.5	19.5	11.8	11.8	11.8	11.8	8.0	8.0
85°	15.7	11.8	8.0	8.0	3.9	8.0	0.0	3.9	3.9	0.0	0.0
87.5°	8.0	3.9	3.9	3.9	3.9	0.0	0.0	3.9	0.0	3.9	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°	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3	8388.3
2.5°	8455.0	8470.6	8490.3	8506.0	8541.3	8549.1	8564.9	8580.5	8592.4	8603.9	8607.9
5°	8509.8	8568.7	8623.6	8682.4	8756.9	8807.8	8866.5	8917.6	8968.6	9011.6	9042.9
7.5°	8525.7	8615.7	8698.2	8800.0	8909.7	9003.9	9101.8	9199.7	9301.7	9380.1	9446.8
10°	8556.9	8666.7	8772.5	8894.0	9035.1	9160.6	9282.0	9411.5	9540.8	9650.6	9748.7
12.5°	8611.9	8733.3	8847.0	8980.3	9125.4	9266.4	9399.7	9544.8	9682.0	9803.5	9913.2
15°	8702.0	8815.5	8925.5	9050.8	9195.9	9325.3	9458.5	9599.6	9736.9	9862.2	9964.2
17.5°	8760.7	8866.5	8976.3	9090.1	9211.5	9329.2	9454.5	9580.1	9705.4	9819.2	9913.2
20°	8760.7	8862.7	8945.0	9046.9	9160.6	9262.5	9364.5	9474.2	9583.9	9677.9	9768.2
22.5°	8690.2	8788.2	8851.0	8929.3	9027.3	9113.6	9168.4	9290.0	9372.2	9454.5	9521.1
25°	8525.7	8596.2	8647.2	8702.0	8780.5	8839.2	8886.3	8956.8	9039.1	9070.6	9117.4
27.5°	8227.7	8278.7	8306.0	8317.8	8357.1	8388.3	8396.3	8427.6	8462.9	8470.6	8490.3
30°	7757.3	7761.2	7749.5	7745.5	7725.9	7702.5	7698.5	7694.5	7679.0	7663.3	7667.2
32.5°	7047.7	7028.2	6981.1	6930.4	6879.4	6824.4	6793.0	6753.8	6730.3	6706.8	6679.4
35°	6130.5	6083.6	6017.0	5954.2	5895.5	5852.2	5781.7	5758.1	5734.8	5703.3	5695.6
37.5°	5052.6	5025.2	4962.4	4915.5	4884.2	4864.5	4829.2	4805.7	4805.7	4794.0	4786.1
40°	3939.3	3931.6	3908.0	3919.8	3904.2	3912.0	3908.0	3900.2	3919.8	3919.8	3927.8
42.5°	2955.5	2959.6	2971.3	2979.1	3002.6	3006.4	3026.1	3026.1	3037.9	3049.6	3057.4
45°	2199.0	2214.8	2214.8	2230.5	2254.0	2257.8	2265.5	2269.6	2277.3	2297.0	2304.8
47.5°	1650.2	1654.0	1654.0	1658.1	1665.9	1673.8	1669.8	1673.8	1685.5	1677.7	1685.5
50°	1219.1	1223.0	1211.2	1199.5	1211.2	1211.2	1207.3	1195.5	1207.3	1191.6	1199.5
52.5°	831.1	827.1	815.3	819.3	811.4	807.6	807.6	799.6	799.6	799.6	783.9
55°	525.3	525.3	517.5	517.5	513.5	505.7	501.8	497.7	493.9	490.0	490.0
57.5°	293.9	297.8	286.2	282.2	286.2	282.2	274.4	274.4	274.4	262.7	270.4
60°	160.8	156.8	152.9	148.9	145.1	148.9	148.9	141.1	141.1	141.1	145.1
62.5°	86.2	86.2	82.3	82.3	78.4	78.4	86.2	74.5	78.4	74.5	78.4
65°	47.1	58.7	43.0	43.0	54.8	51.0	47.1	47.1	51.0	43.0	47.1
67.5°	51.0	35.3	31.3	35.3	31.3	31.3	31.3	39.2	35.3	27.5	35.3
70°	23.5	27.5	27.5	19.5	31.3	15.7	27.5	15.7	23.5	19.5	23.5
72.5°	23.5	23.5	23.5	15.7	23.5	15.7	19.5	19.5	15.7	15.7	23.5
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°	8.0	8.0	3.9	3.9	3.9	3.9	8.0	8.0	8.0	0.0	3.9
80°	8.0	8.0	0.0	3.9	0.0	0.0	3.9	0.0	3.9	0.0	8.0
82.5°	3.9	8.0	3.9	3.9	8.0	8.0	8.0	3.9	3.9	3.9	3.9
85°	0.0	3.9	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	3.9
87.5°	0.0	3.9	0.0	0.0	0.0	0.0	3.9	3.9	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: P249781

CATALOG NUMBER: LSR8B150D010 EC8B150930 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	8388.3	8388.3	8388.3	8388.3
2.5°	8611.9	8615.7	8623.6	8619.7
5°	9066.5	9097.9	9113.6	9109.7
7.5°	9493.7	9548.8	9580.1	9580.1
10°	9823.0	9885.8	9932.7	9940.7
12.5°	9999.3	10070.1	10132.8	10117.0
15°	10050.3	10121.1	10183.6	10171.8
17.5°	9991.6	10062.1	10109.3	10101.3
20°	9830.9	9889.7	9936.8	9932.7
22.5°	9580.1	9631.1	9670.2	9666.2
25°	9156.7	9192.0	9223.4	9207.7
27.5°	8506.0	8517.8	8537.3	8513.9
30°	7639.7	7647.5	7655.4	7651.5
32.5°	6667.6	6663.6	6655.8	6648.0
35°	5683.8	5683.8	5687.6	5664.1
37.5°	4789.9	4786.1	4797.9	4786.1
40°	3935.5	3931.6	3947.3	3927.8
42.5°	3069.2	3081.0	3084.9	3084.9
45°	2308.8	2312.7	2316.5	2316.5
47.5°	1685.5	1689.5	1709.1	1685.5
50°	1191.6	1195.5	1199.5	1191.6
52.5°	787.8	791.9	787.8	776.1
55°	482.1	486.2	486.2	486.2
57.5°	258.6	262.7	262.7	258.6
60°	141.1	137.1	141.1	133.3
62.5°	74.5	82.3	78.4	70.5
65°	47.1	47.1	47.1	54.8
67.5°	39.2	31.3	35.3	27.5
70°	23.5	27.5	27.5	19.5
72.5°	19.5	19.5	19.5	23.5
75°	0.0	0.0	0.0	0.0
77.5°	8.0	8.0	8.0	3.9
80°	3.9	0.0	3.9	0.0
82.5°	3.9	3.9	8.0	3.9
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)