

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: P250236

Luminaire Tested: **LSR8B150D010 EC8B150850 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250236  
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 EC8B150850 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16780.0 lumens  
Efficiency: N/A  
Efficacy: 105.9 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

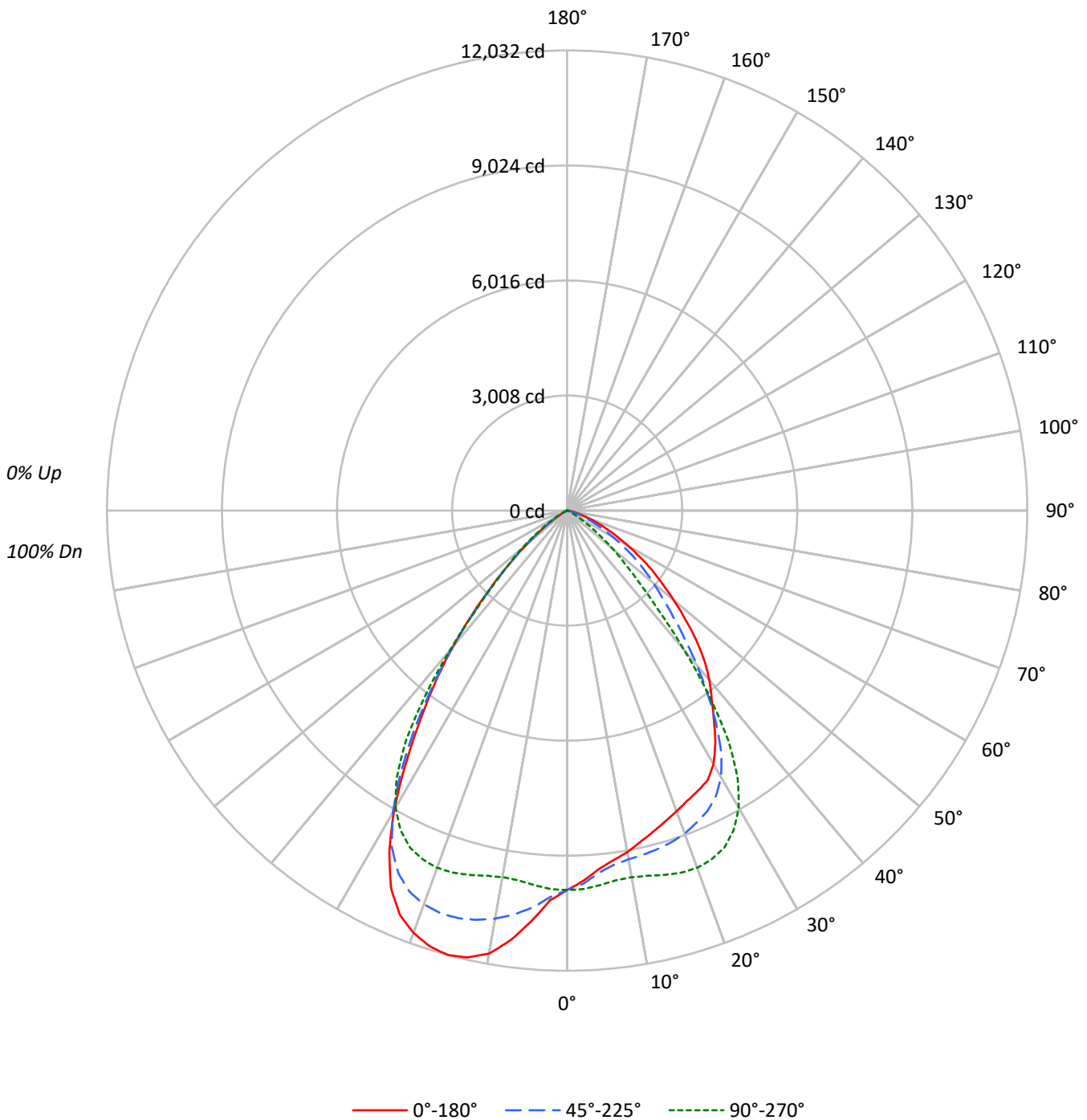
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P250236

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBSW0WH

### Luminous Intensity Polar Plot





TEST NUMBER: P250236

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBSW0WH

**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°	305958	305958	305958
5°	291486	304257	333540
10°	283969	304729	368170
15°	277529	314826	384098
20°	274474	326204	385541
25°	275119	330810	370560
30°	272566	319453	322259
35°	251858	276466	252205
40°	232736	191677	187012
45°	207244	115656	119493
50°	174381	74516	67622
55°	145075	40875	30913
60°	113237	17725	9720
65°	83559	8800	4735
70°	58108	5437	2083
75°	35361	1120	0
80°	25518	1669	0
85°	16417	1628	0



TEST NUMBER: P250236

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBSW0WH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	953.8	5.7
10°-20°	2854.7	17.0
20°-30°	4371.8	26.1
30°-40°	4285.8	25.5
40°-50°	2580.9	15.4
50°-60°	1187.9	7.1
60°-70°	417.3	2.5
70°-80°	109.2	0.7
80°-90°	18.6	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°	8180.4	48.8
0°-40°	12466.1	74.3
0°-60°	16235.0	96.8
0°-90°	16780.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16780.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	9922	9922	9922	9922	9922	
5°	9417	9505	9829	10418	10775	889
15°	8693	9162	9862	11030	12032	2456
25°	8086	8670	9723	10455	10891	3724
35°	6690	6783	7344	6922	6700	4190
45°	4752	3913	2652	2671	2740	3644
55°	2698	2137	760	598	575	2408
65°	1145	793	121	60	65	1167
75°	297	172	9	0	0	360
85°	46	23	5	0	0	64
90°	0	0	0	0	0	



TEST NUMBER: P250236

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBSW0WH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0
2.5°	9690.2	9699.5	9699.5	9699.5	9718.0	9722.8	9718.0	9722.8	9732.0	9764.4	9778.3
5°	9416.7	9402.8	9412.1	9407.3	9430.6	9444.6	9435.2	9449.1	9481.6	9504.9	9528.0
7.5°	9222.0	9222.0	9222.0	9231.2	9245.1	9273.0	9268.4	9277.6	9310.0	9342.5	9374.9
10°	9069.0	9064.4	9064.4	9087.5	9106.0	9138.5	9147.8	9175.7	9217.3	9259.1	9296.1
12.5°	8869.6	8874.3	8897.4	8920.7	8962.3	9013.3	9041.1	9078.3	9143.2	9212.7	9254.5
15°	8693.4	8698.0	8716.7	8762.9	8814.0	8874.3	8934.4	8994.7	9073.6	9161.7	9236.0
17.5°	8521.8	8526.4	8540.4	8591.5	8656.4	8735.2	8804.7	8883.5	8985.6	9087.5	9180.2
20°	8364.2	8359.6	8382.7	8429.1	8512.7	8586.7	8656.4	8749.1	8860.4	8985.6	9092.1
22.5°	8211.2	8211.2	8234.4	8280.8	8355.0	8429.1	8503.3	8600.7	8711.9	8832.5	8957.7
25°	8086.0	8081.4	8113.8	8137.1	8192.6	8266.9	8345.7	8424.5	8535.8	8670.3	8790.7
27.5°	7951.6	7947.0	7951.6	7979.5	8030.4	8086.0	8146.3	8215.9	8308.7	8419.9	8535.8
30°	7654.9	7659.4	7659.4	7682.7	7710.6	7770.7	7803.1	7872.8	7956.2	8048.9	8151.0
32.5°	7214.4	7219.0	7219.0	7228.3	7251.4	7279.3	7307.1	7358.1	7423.0	7501.8	7594.5
35°	6690.5	6690.5	6685.8	6690.5	6704.5	6704.5	6727.6	6704.5	6736.9	6783.3	6852.7
37.5°	6208.3	6198.9	6189.8	6180.4	6166.5	6143.4	6110.9	6055.2	6041.3	6022.8	6027.4
40°	5781.7	5777.2	5749.3	5726.0	5679.6	5624.1	5545.3	5448.0	5369.1	5276.4	5197.6
42.5°	5308.8	5304.1	5281.0	5239.2	5188.2	5104.8	4979.6	4849.9	4692.2	4553.1	4409.4
45°	4752.3	4766.3	4733.8	4687.5	4627.1	4548.3	4409.4	4251.6	4093.9	3913.2	3732.3
47.5°	4172.8	4168.2	4145.1	4117.2	4066.3	3987.4	3894.7	3723.1	3556.1	3389.3	3203.9
50°	3635.0	3616.4	3607.1	3579.4	3547.0	3482.1	3384.6	3245.5	3097.2	2939.5	2768.0
52.5°	3125.0	3125.0	3101.7	3083.2	3055.4	3004.4	2921.0	2809.8	2684.6	2536.1	2355.4
55°	2698.5	2689.2	2666.1	2642.8	2614.9	2582.5	2508.4	2415.7	2281.1	2137.4	1979.8
57.5°	2244.1	2239.3	2230.2	2202.3	2188.4	2155.9	2072.5	1979.8	1864.0	1738.8	1608.8
60°	1836.1	1817.6	1798.9	1780.4	1757.3	1724.8	1669.1	1590.3	1493.0	1381.7	1251.9
62.5°	1469.9	1497.5	1442.0	1442.0	1395.6	1367.8	1316.8	1270.4	1168.3	1066.4	955.2
65°	1145.2	1145.2	1122.0	1103.4	1075.6	1043.1	992.2	945.8	871.6	792.8	713.9
67.5°	876.3	871.6	848.5	830.0	806.7	788.2	751.2	695.4	639.9	575.0	509.9
70°	644.5	639.9	635.1	602.7	584.2	561.1	533.2	496.2	454.4	408.0	347.7
72.5°	463.6	463.6	449.8	435.9	417.4	398.7	371.0	347.7	310.7	278.2	236.5
75°	296.8	292.2	292.2	268.9	268.9	241.0	222.5	208.6	190.1	171.6	134.5
77.5°	213.4	208.6	204.0	194.7	185.5	176.1	162.2	143.7	129.8	111.3	97.3
80°	143.7	134.5	129.8	129.8	115.8	111.3	115.8	88.2	83.4	69.5	60.3
82.5°	88.2	88.2	83.4	83.4	78.8	74.2	60.3	60.3	55.7	51.0	41.8
85°	46.4	60.3	41.8	46.4	41.8	46.4	41.8	32.4	27.9	23.1	23.1
87.5°	27.9	18.5	18.5	27.9	23.1	18.5	18.5	18.5	13.9	9.4	9.4
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: P250236

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0
2.5°	9769.2	9801.6	9796.9	9838.7	9852.6	9885.0	9885.0	9908.1	9922.0	9954.5	9982.4
5°	9537.3	9588.3	9602.2	9653.2	9694.9	9745.9	9778.3	9829.3	9875.7	9945.3	10010.2
7.5°	9393.6	9435.2	9463.1	9523.4	9569.8	9625.3	9681.0	9750.5	9815.4	9899.0	9991.7
10°	9324.0	9379.7	9421.3	9481.6	9537.3	9597.6	9653.2	9732.0	9806.2	9912.9	10014.8
12.5°	9305.4	9370.3	9421.3	9504.9	9560.4	9625.3	9690.2	9778.3	9857.2	9968.4	10084.5
15°	9305.4	9393.6	9463.1	9555.8	9620.7	9704.1	9773.8	9861.7	9949.9	10065.8	10177.0
17.5°	9286.9	9393.6	9481.6	9588.3	9671.7	9755.3	9843.2	9926.8	10019.4	10130.8	10255.8
20°	9212.7	9347.2	9453.7	9578.9	9667.1	9759.8	9848.0	9940.6	10038.1	10153.9	10260.6
22.5°	9082.9	9240.6	9361.2	9495.5	9597.6	9690.2	9778.3	9871.1	9977.8	10089.0	10200.3
25°	8911.4	9059.6	9189.6	9328.5	9430.6	9532.5	9616.1	9722.8	9820.1	9926.8	10014.8
27.5°	8651.6	8809.3	8934.4	9078.3	9170.9	9268.4	9337.9	9426.1	9518.8	9606.8	9676.4
30°	8262.3	8406.0	8535.8	8665.5	8758.3	8828.0	8902.0	8971.7	9032.0	9092.1	9152.4
32.5°	7691.9	7821.8	7947.0	8067.5	8141.7	8202.0	8257.5	8299.3	8331.8	8364.2	8368.8
35°	6908.5	7015.0	7093.8	7200.5	7270.1	7325.6	7325.6	7344.2	7339.6	7325.6	7311.7
37.5°	6032.1	6073.7	6106.2	6148.0	6152.5	6152.5	6124.9	6101.6	6064.6	6055.2	6027.4
40°	5118.8	5063.0	5021.2	4965.7	4933.3	4863.6	4803.5	4761.7	4701.4	4692.2	4682.9
42.5°	4251.6	4121.8	4006.0	3908.6	3797.4	3699.8	3611.9	3547.0	3500.6	3495.8	3500.6
45°	3547.0	3398.5	3226.9	3092.6	2967.4	2846.8	2730.9	2652.1	2610.3	2601.0	2610.3
47.5°	3013.8	2842.2	2675.2	2522.2	2387.8	2253.3	2137.4	2030.7	1979.8	1965.9	1961.3
50°	2591.8	2415.7	2239.3	2081.7	1933.4	1798.9	1655.2	1553.3	1488.4	1465.1	1446.6
52.5°	2179.2	2021.6	1840.7	1678.5	1530.0	1372.3	1224.1	1108.0	1043.1	1015.5	996.8
55°	1817.6	1659.9	1493.0	1335.3	1177.7	1020.0	871.6	760.3	690.8	658.4	635.1
57.5°	1451.2	1302.9	1159.2	1001.5	871.6	718.7	570.2	472.9	412.6	375.6	357.1
60°	1122.0	1006.1	880.9	751.2	626.0	500.8	380.2	287.4	241.0	213.4	190.1
62.5°	848.5	751.2	667.6	556.3	459.0	352.3	259.7	185.5	143.7	120.6	111.3
65°	612.0	537.8	463.6	394.1	324.6	245.8	176.1	120.6	83.4	69.5	64.9
67.5°	435.9	375.6	319.9	273.5	222.5	176.1	125.2	83.4	64.9	55.7	51.0
70°	305.9	259.7	222.5	180.9	148.3	115.8	97.3	60.3	37.0	41.8	32.4
72.5°	204.0	171.6	153.1	125.2	101.9	83.4	60.3	41.8	41.8	32.4	27.9
75°	111.3	101.9	78.8	60.3	51.0	46.4	18.5	9.4	4.6	13.9	4.6
77.5°	78.8	69.5	60.3	51.0	41.8	32.4	18.5	18.5	13.9	18.5	9.4
80°	51.0	41.8	37.0	37.0	23.1	13.9	9.4	9.4	13.9	4.6	4.6
82.5°	32.4	27.9	23.1	23.1	23.1	13.9	13.9	13.9	13.9	9.4	9.4
85°	18.5	13.9	9.4	9.4	4.6	9.4	0.0	4.6	4.6	0.0	0.0
87.5°	9.4	4.6	4.6	4.6	4.6	0.0	0.0	4.6	0.0	4.6	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: P250236

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0	9922.0
2.5°	10000.9	10019.4	10042.7	10061.2	10103.0	10112.1	10130.8	10149.3	10163.3	10177.0	10181.8
5°	10065.8	10135.4	10200.3	10269.8	10357.9	10418.2	10487.7	10548.0	10608.3	10659.3	10696.3
7.5°	10084.5	10190.9	10288.5	10408.9	10538.7	10650.1	10766.0	10881.8	11002.4	11095.2	11174.0
10°	10121.5	10251.3	10376.4	10520.1	10687.1	10835.4	10979.1	11132.2	11285.2	11415.0	11531.0
12.5°	10186.4	10330.1	10464.6	10622.2	10793.8	10960.6	11118.2	11289.8	11452.2	11595.9	11725.7
15°	10293.0	10427.4	10557.4	10705.6	10877.2	11030.3	11187.9	11354.7	11517.1	11665.4	11786.0
17.5°	10362.5	10487.7	10617.5	10752.0	10895.7	11034.8	11183.1	11331.6	11479.9	11614.4	11725.7
20°	10362.5	10483.1	10580.5	10701.1	10835.4	10956.0	11076.6	11206.4	11336.2	11447.4	11554.1
22.5°	10279.1	10395.0	10469.2	10561.9	10677.8	10779.9	10844.8	10988.5	11085.8	11183.1	11261.9
25°	10084.5	10167.9	10228.2	10293.0	10385.8	10455.3	10511.0	10594.4	10691.7	10728.9	10784.5
27.5°	9732.0	9792.3	9824.7	9838.7	9885.0	9922.0	9931.4	9968.4	10010.2	10019.4	10042.7
30°	9175.7	9180.2	9166.3	9161.7	9138.5	9110.8	9106.0	9101.4	9082.9	9064.4	9069.0
32.5°	8336.3	8313.3	8257.5	8197.4	8137.1	8072.2	8035.0	7988.6	7960.8	7933.1	7900.7
35°	7251.4	7195.9	7117.1	7042.8	6973.4	6922.2	6838.8	6810.9	6783.3	6746.1	6736.9
37.5°	5976.4	5944.0	5869.7	5814.2	5777.2	5753.9	5712.1	5684.4	5684.4	5670.5	5661.1
40°	4659.6	4650.4	4622.6	4636.5	4618.0	4627.1	4622.6	4613.2	4636.5	4636.5	4645.8
42.5°	3495.8	3500.6	3514.5	3523.7	3551.6	3556.1	3579.4	3579.4	3593.4	3607.1	3616.4
45°	2601.0	2619.7	2619.7	2638.2	2666.1	2670.6	2679.8	2684.6	2693.7	2717.0	2726.2
47.5°	1951.9	1956.5	1956.5	1961.3	1970.4	1979.8	1975.2	1979.8	1993.7	1984.4	1993.7
50°	1442.0	1446.6	1432.6	1418.7	1432.6	1432.6	1428.1	1414.1	1428.1	1409.6	1418.7
52.5°	983.0	978.3	964.3	969.1	959.7	955.2	955.2	945.8	945.8	945.8	927.3
55°	621.4	621.4	612.0	612.0	607.4	598.1	593.5	588.7	584.2	579.6	579.6
57.5°	347.7	352.3	338.6	333.8	338.6	333.8	324.6	324.6	324.6	310.7	319.9
60°	190.1	185.5	180.9	176.1	171.6	176.1	176.1	167.0	167.0	167.0	171.6
62.5°	101.9	101.9	97.3	97.3	92.7	92.7	101.9	88.2	92.7	88.2	92.7
65°	55.7	69.5	51.0	51.0	64.9	60.3	55.7	55.7	60.3	51.0	55.7
67.5°	60.3	41.8	37.0	41.8	37.0	37.0	37.0	46.4	41.8	32.4	41.8
70°	27.9	32.4	32.4	23.1	37.0	18.5	32.4	18.5	27.9	23.1	27.9
72.5°	27.9	27.9	27.9	18.5	27.9	18.5	23.1	23.1	18.5	18.5	27.9
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°	9.4	9.4	4.6	4.6	4.6	4.6	9.4	9.4	9.4	0.0	4.6
80°	9.4	9.4	0.0	4.6	0.0	0.0	4.6	0.0	4.6	0.0	9.4
82.5°	4.6	9.4	4.6	4.6	9.4	9.4	9.4	4.6	4.6	4.6	4.6
85°	0.0	4.6	0.0	0.0	0.0	0.0	9.4	0.0	0.0	0.0	4.6
87.5°	0.0	4.6	0.0	0.0	0.0	0.0	4.6	4.6	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: P250236

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	9922.0	9922.0	9922.0	9922.0
2.5°	10186.4	10190.9	10200.3	10195.7
5°	10724.2	10761.4	10779.9	10775.3
7.5°	11229.5	11294.6	11331.6	11331.6
10°	11619.0	11693.3	11748.8	11758.1
12.5°	11827.6	11911.2	11985.4	11966.7
15°	11887.9	11971.5	12045.5	12031.6
17.5°	11818.4	11901.8	11957.6	11948.2
20°	11628.4	11697.8	11753.6	11748.8
22.5°	11331.6	11391.9	11438.3	11433.5
25°	10830.8	10872.6	10909.7	10891.1
27.5°	10061.2	10075.1	10098.2	10070.5
30°	9036.5	9045.7	9055.1	9050.5
32.5°	7886.7	7882.0	7872.8	7863.4
35°	6723.0	6723.0	6727.6	6699.7
37.5°	5665.7	5661.1	5675.1	5661.1
40°	4655.0	4650.4	4668.9	4645.8
42.5°	3630.4	3644.3	3648.9	3648.9
45°	2730.9	2735.5	2740.1	2740.1
47.5°	1993.7	1998.3	2021.6	1993.7
50°	1409.6	1414.1	1418.7	1409.6
52.5°	931.9	936.7	931.9	917.9
55°	570.2	575.0	575.0	575.0
57.5°	305.9	310.7	310.7	305.9
60°	167.0	162.2	167.0	157.6
62.5°	88.2	97.3	92.7	83.4
65°	55.7	55.7	55.7	64.9
67.5°	46.4	37.0	41.8	32.4
70°	27.9	32.4	32.4	23.1
72.5°	23.1	23.1	23.1	27.9
75°	0.0	0.0	0.0	0.0
77.5°	9.4	9.4	9.4	4.6
80°	4.6	0.0	4.6	0.0
82.5°	4.6	4.6	9.4	4.6
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)