

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: P249760

Luminaire Tested: **LSR8B150D010 EC8B150940 8LBSWOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249760  
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 EC8B150940 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15301.0 lumens  
Efficiency: N/A  
Efficacy: 96.5 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

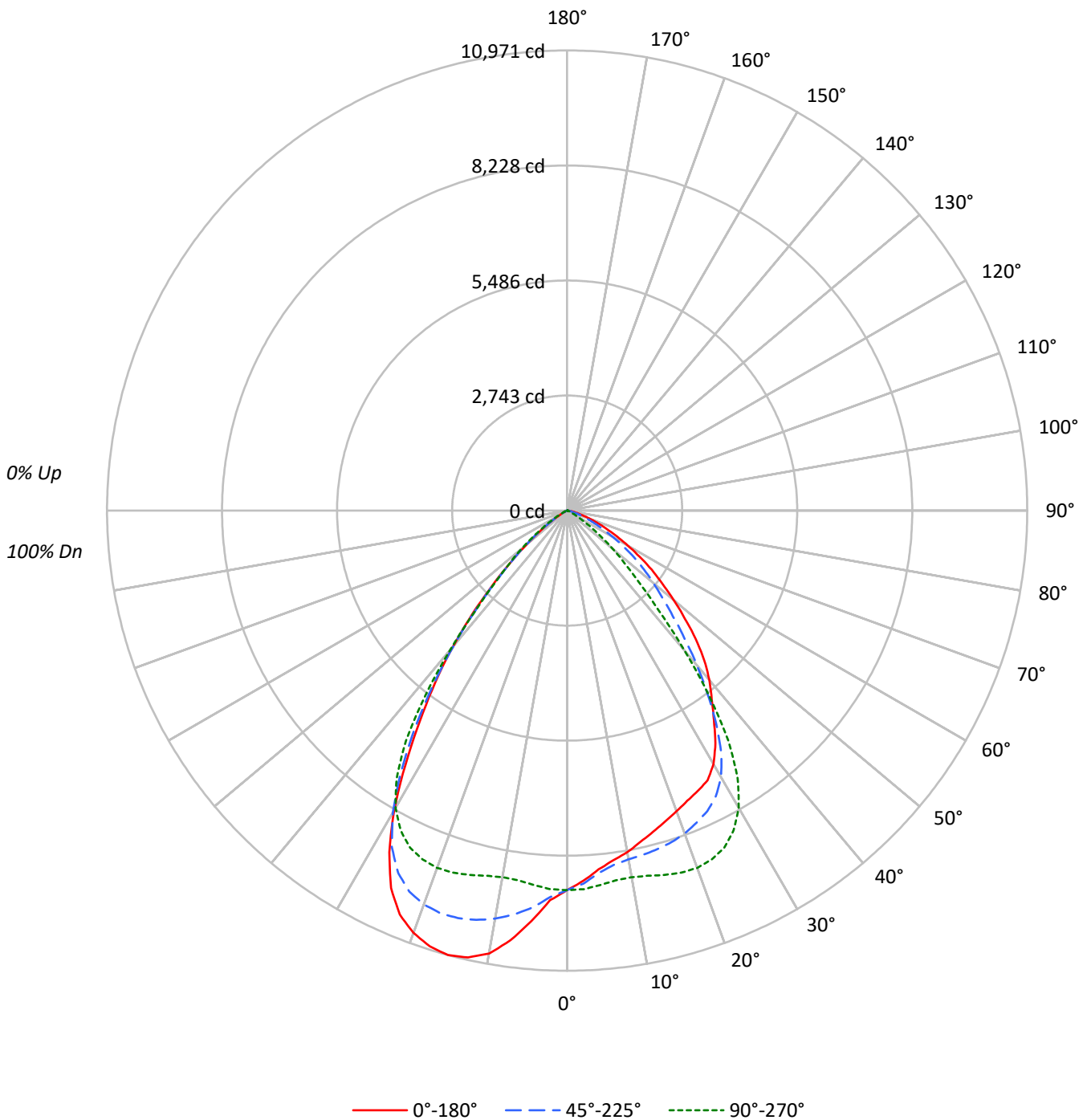
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	278992	278992	278992
5°	265794	277439	304143
10°	258938	277869	335721
15°	253069	287077	350243
20°	250282	297451	351557
25°	250870	301651	337900
30°	248538	291295	293855
35°	229660	252096	229976
40°	212223	174783	170532
45°	188980	105464	108962
50°	159011	67949	61659
55°	132291	37273	28187
60°	103258	16164	8862
65°	76197	8026	4320
70°	52987	4959	1902
75°	32240	1013	0
80°	23263	1509	0
85°	14966	1486	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	869.8	5.7
10°-20°	2603.1	17.0
20°-30°	3986.4	26.1
30°-40°	3908.0	25.5
40°-50°	2353.4	15.4
50°-60°	1083.2	7.1
60°-70°	380.5	2.5
70°-80°	99.5	0.7
80°-90°	17.0	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°	7459.3	48.8
0°-40°	11367.4	74.3
0°-60°	14804.0	96.8
0°-90°	15301.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15301.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	9048	9048	9048	9048	9048	
5°	8587	8667	8963	9500	9826	811
15°	7927	8354	8992	10058	10971	2240
25°	7373	7906	8866	9534	9931	3396
35°	6101	6185	6697	6312	6109	3821
45°	4334	3568	2418	2435	2499	3323
55°	2461	1949	693	545	524	2196
65°	1044	723	110	55	59	1064
75°	271	156	8	0	0	328
85°	42	21	4	0	0	58
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°	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5
2.5°	8836.1	8844.6	8844.6	8844.6	8861.5	8865.8	8861.5	8865.8	8874.2	8903.8	8916.5
5°	8586.7	8574.0	8582.5	8578.2	8599.4	8612.1	8603.6	8616.3	8645.9	8667.1	8688.2
7.5°	8409.2	8409.2	8409.2	8417.6	8430.3	8455.7	8451.5	8459.8	8489.4	8519.0	8548.6
10°	8269.6	8265.5	8265.5	8286.5	8303.4	8333.0	8341.5	8366.9	8404.9	8443.0	8476.7
12.5°	8087.8	8092.1	8113.2	8134.4	8172.4	8218.8	8244.2	8278.2	8337.3	8400.7	8438.8
15°	7927.2	7931.3	7948.4	7990.5	8037.1	8092.1	8147.0	8201.9	8273.8	8354.2	8421.9
17.5°	7770.7	7774.9	7787.6	7834.2	7893.4	7965.3	8028.6	8100.5	8193.6	8286.5	8371.1
20°	7627.0	7622.8	7643.9	7686.1	7762.4	7829.9	7893.4	7978.0	8079.4	8193.6	8290.7
22.5°	7487.4	7487.4	7508.6	7550.9	7618.6	7686.1	7753.8	7842.6	7944.0	8054.0	8168.2
25°	7373.3	7369.1	7398.7	7419.9	7470.5	7538.2	7610.1	7682.0	7783.4	7906.1	8015.9
27.5°	7250.7	7246.6	7250.7	7276.2	7322.6	7373.3	7428.3	7491.8	7576.3	7677.8	7783.4
30°	6980.1	6984.3	6984.3	7005.6	7031.0	7085.8	7115.4	7178.9	7254.9	7339.5	7432.6
32.5°	6578.5	6582.7	6582.7	6591.2	6612.3	6637.7	6663.1	6709.5	6768.7	6840.6	6925.2
35°	6100.8	6100.8	6096.5	6100.8	6113.5	6113.5	6134.6	6113.5	6143.1	6185.4	6248.7
37.5°	5661.1	5652.5	5644.2	5635.7	5623.0	5601.9	5572.3	5521.5	5508.8	5491.9	5496.1
40°	5272.1	5268.0	5242.5	5221.3	5179.0	5128.4	5056.5	4967.8	4895.9	4811.3	4739.5
42.5°	4840.9	4836.6	4815.5	4777.4	4730.9	4654.9	4540.7	4422.4	4278.6	4151.8	4020.7
45°	4333.5	4346.2	4316.6	4274.3	4219.3	4147.4	4020.7	3876.8	3733.1	3568.3	3403.3
47.5°	3805.0	3800.8	3779.7	3754.3	3707.9	3636.0	3551.4	3395.0	3242.7	3090.6	2921.5
50°	3314.6	3297.7	3289.2	3263.9	3234.3	3175.2	3086.3	2959.4	2824.2	2680.4	2524.0
52.5°	2849.6	2849.6	2828.4	2811.5	2786.1	2739.6	2663.6	2562.1	2448.0	2312.6	2147.8
55°	2460.7	2452.1	2431.1	2409.8	2384.4	2354.8	2287.3	2202.8	2080.1	1949.0	1805.3
57.5°	2046.3	2042.0	2033.6	2008.2	1995.5	1965.9	1889.9	1805.3	1699.7	1585.5	1467.0
60°	1674.3	1657.4	1640.3	1623.4	1602.4	1572.8	1522.0	1450.1	1361.4	1259.9	1141.6
62.5°	1340.3	1365.5	1314.9	1314.9	1272.6	1247.2	1200.7	1158.5	1065.4	972.4	871.0
65°	1044.3	1044.3	1023.1	1006.2	980.8	951.2	904.7	862.4	794.8	722.9	651.0
67.5°	799.1	794.8	773.7	756.8	735.6	718.7	684.9	634.1	583.5	524.3	465.0
70°	587.7	583.5	579.1	549.6	532.7	511.6	486.2	452.5	414.3	372.1	317.1
72.5°	422.7	422.7	410.2	397.5	380.6	363.5	338.3	317.1	283.3	253.7	215.6
75°	270.6	266.4	266.4	245.2	245.2	219.8	202.9	190.2	173.3	156.4	122.7
77.5°	194.6	190.2	186.0	177.5	169.1	160.6	147.9	131.0	118.3	101.5	88.8
80°	131.0	122.7	118.3	118.3	105.6	101.5	105.6	80.4	76.0	63.3	55.0
82.5°	80.4	80.4	76.0	76.0	71.9	67.7	55.0	55.0	50.8	46.5	38.1
85°	42.3	55.0	38.1	42.3	38.1	42.3	38.1	29.6	25.4	21.1	21.1
87.5°	25.4	16.9	16.9	25.4	21.1	16.9	16.9	16.9	12.7	8.5	8.5
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°	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5
2.5°	8908.1	8937.7	8933.4	8971.5	8984.2	9013.8	9013.8	9034.8	9047.5	9077.1	9102.5
5°	8696.7	8743.2	8755.9	8802.3	8840.4	8886.9	8916.5	8962.9	9005.2	9068.7	9127.9
7.5°	8565.7	8603.6	8629.0	8684.0	8726.3	8776.9	8827.7	8891.1	8950.2	9026.5	9111.0
10°	8502.1	8552.9	8590.9	8645.9	8696.7	8751.7	8802.3	8874.2	8941.9	9039.2	9132.1
12.5°	8485.3	8544.4	8590.9	8667.1	8717.7	8776.9	8836.1	8916.5	8988.3	9089.8	9195.6
15°	8485.3	8565.7	8629.0	8713.6	8772.7	8848.8	8912.3	8992.5	9072.9	9178.6	9280.0
17.5°	8468.4	8565.7	8645.9	8743.2	8819.2	8895.4	8975.6	9051.9	9136.3	9237.9	9351.9
20°	8400.7	8523.4	8620.5	8734.6	8815.0	8899.6	8980.0	9064.4	9153.3	9258.9	9356.2
22.5°	8282.3	8426.1	8536.1	8658.6	8751.7	8836.1	8916.5	9001.1	9098.3	9199.8	9301.2
25°	8125.9	8261.1	8379.6	8506.3	8599.4	8692.3	8768.6	8865.8	8954.6	9051.9	9132.1
27.5°	7889.1	8032.8	8147.0	8278.2	8362.6	8451.5	8514.8	8595.2	8679.8	8760.0	8823.5
30°	7534.1	7665.1	7783.4	7901.8	7986.3	8049.9	8117.4	8180.9	8235.9	8290.7	8345.7
32.5°	7013.9	7132.4	7246.6	7356.4	7424.1	7479.1	7529.7	7567.8	7597.4	7627.0	7631.2
35°	6299.6	6396.7	6468.5	6565.8	6629.3	6680.0	6680.0	6696.8	6692.7	6680.0	6667.3
37.5°	5500.4	5538.4	5568.0	5606.1	5610.3	5610.3	5585.0	5563.8	5530.0	5521.5	5496.1
40°	4667.6	4616.8	4578.7	4528.0	4498.4	4434.9	4380.1	4342.0	4287.0	4278.6	4270.1
42.5°	3876.8	3758.5	3652.9	3564.1	3462.7	3373.7	3293.5	3234.3	3192.1	3187.7	3192.1
45°	3234.3	3099.0	2942.5	2820.0	2705.8	2595.9	2490.2	2418.4	2380.3	2371.7	2380.3
47.5°	2748.1	2591.7	2439.4	2299.9	2177.3	2054.7	1949.0	1851.8	1805.3	1792.6	1788.4
50°	2363.4	2202.8	2042.0	1898.2	1763.0	1640.3	1509.3	1416.4	1357.2	1336.0	1319.1
52.5°	1987.1	1843.4	1678.4	1530.5	1395.1	1251.4	1116.2	1010.4	951.2	926.0	908.9
55°	1657.4	1513.6	1361.4	1217.6	1073.9	930.1	794.8	693.3	630.0	600.4	579.1
57.5°	1323.3	1188.0	1057.0	913.3	794.8	655.4	520.0	431.2	376.2	342.5	325.6
60°	1023.1	917.4	803.3	684.9	570.8	456.6	346.6	262.1	219.8	194.6	173.3
62.5°	773.7	684.9	608.7	507.3	418.5	321.2	236.8	169.1	131.0	110.0	101.5
65°	558.1	490.4	422.7	359.4	296.0	224.1	160.6	110.0	76.0	63.3	59.2
67.5°	397.5	342.5	291.7	249.4	202.9	160.6	114.2	76.0	59.2	50.8	46.5
70°	279.0	236.8	202.9	165.0	135.2	105.6	88.8	55.0	33.8	38.1	29.6
72.5°	186.0	156.4	139.6	114.2	92.9	76.0	55.0	38.1	38.1	29.6	25.4
75°	101.5	92.9	71.9	55.0	46.5	42.3	16.9	8.5	4.2	12.7	4.2
77.5°	71.9	63.3	55.0	46.5	38.1	29.6	16.9	16.9	12.7	16.9	8.5
80°	46.5	38.1	33.8	33.8	21.1	12.7	8.5	8.5	12.7	4.2	4.2
82.5°	29.6	25.4	21.1	21.1	21.1	12.7	12.7	12.7	12.7	8.5	8.5
85°	16.9	12.7	8.5	8.5	4.2	8.5	0.0	4.2	4.2	0.0	0.0
87.5°	8.5	4.2	4.2	4.2	4.2	0.0	0.0	4.2	0.0	4.2	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°	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5	9047.5
2.5°	9119.4	9136.3	9157.5	9174.4	9212.5	9220.8	9237.9	9254.8	9267.5	9280.0	9284.4
5°	9178.6	9242.1	9301.2	9364.6	9445.0	9500.0	9563.3	9618.3	9673.3	9719.8	9753.5
7.5°	9195.6	9292.7	9381.6	9491.4	9609.8	9711.4	9817.0	9922.7	10032.6	10117.2	10189.1
10°	9229.4	9347.7	9461.9	9592.9	9745.2	9880.4	10011.4	10151.0	10290.5	10408.9	10514.7
12.5°	9288.5	9419.6	9542.3	9686.0	9842.4	9994.5	10138.3	10294.7	10442.8	10573.8	10692.2
15°	9385.8	9508.3	9626.8	9762.0	9918.5	10058.1	10201.8	10353.9	10502.0	10637.2	10747.2
17.5°	9449.2	9563.3	9681.6	9804.3	9935.4	10062.2	10197.4	10332.8	10468.0	10590.7	10692.2
20°	9449.2	9559.1	9647.9	9757.9	9880.4	9990.4	10100.3	10218.7	10337.0	10438.5	10535.7
22.5°	9373.1	9478.7	9546.4	9631.0	9736.6	9829.7	9888.9	10019.9	10108.7	10197.4	10269.3
25°	9195.6	9271.7	9326.6	9385.8	9470.4	9533.7	9584.5	9660.6	9749.3	9783.3	9833.9
27.5°	8874.2	8929.2	8958.8	8971.5	9013.8	9047.5	9056.0	9089.8	9127.9	9136.3	9157.5
30°	8366.9	8371.1	8358.4	8354.2	8333.0	8307.8	8303.4	8299.2	8282.3	8265.5	8269.6
32.5°	7601.6	7580.5	7529.7	7474.9	7419.9	7360.7	7326.8	7284.5	7259.1	7233.9	7204.3
35°	6612.3	6561.6	6489.8	6422.1	6358.7	6312.1	6236.0	6210.6	6185.4	6151.5	6143.1
37.5°	5449.6	5420.1	5352.4	5301.7	5268.0	5246.7	5208.6	5183.4	5183.4	5170.7	5162.2
40°	4248.9	4240.5	4215.1	4227.8	4211.0	4219.3	4215.1	4206.6	4227.8	4227.8	4236.4
42.5°	3187.7	3192.1	3204.8	3213.1	3238.5	3242.7	3263.9	3263.9	3276.6	3289.2	3297.7
45°	2371.7	2388.8	2388.8	2405.7	2431.1	2435.2	2443.6	2448.0	2456.3	2477.5	2485.9
47.5°	1779.9	1784.1	1784.1	1788.4	1796.8	1805.3	1801.1	1805.3	1818.0	1809.5	1818.0
50°	1314.9	1319.1	1306.4	1293.7	1306.4	1306.4	1302.2	1289.5	1302.2	1285.3	1293.7
52.5°	896.4	892.0	879.3	883.7	875.2	871.0	871.0	862.4	862.4	862.4	845.6
55°	566.6	566.6	558.1	558.1	553.9	545.4	541.2	536.9	532.7	528.5	528.5
57.5°	317.1	321.2	308.7	304.4	308.7	304.4	296.0	296.0	296.0	283.3	291.7
60°	173.3	169.1	165.0	160.6	156.4	160.6	160.6	152.3	152.3	152.3	156.4
62.5°	92.9	92.9	88.8	88.8	84.6	84.6	92.9	80.4	84.6	80.4	84.6
65°	50.8	63.3	46.5	46.5	59.2	55.0	50.8	50.8	55.0	46.5	50.8
67.5°	55.0	38.1	33.8	38.1	33.8	33.8	33.8	42.3	38.1	29.6	38.1
70°	25.4	29.6	29.6	21.1	33.8	16.9	29.6	16.9	25.4	21.1	25.4
72.5°	25.4	25.4	25.4	16.9	25.4	16.9	21.1	21.1	16.9	16.9	25.4
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°	8.5	8.5	4.2	4.2	4.2	4.2	8.5	8.5	8.5	0.0	4.2
80°	8.5	8.5	0.0	4.2	0.0	0.0	4.2	0.0	4.2	0.0	8.5
82.5°	4.2	8.5	4.2	4.2	8.5	8.5	8.5	4.2	4.2	4.2	4.2
85°	0.0	4.2	0.0	0.0	0.0	0.0	8.5	0.0	0.0	0.0	4.2
87.5°	0.0	4.2	0.0	0.0	0.0	0.0	4.2	4.2	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: P249760

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBSWOLI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	9047.5	9047.5	9047.5	9047.5
2.5°	9288.5	9292.7	9301.2	9297.1
5°	9778.9	9812.9	9829.7	9825.6
7.5°	10239.7	10299.1	10332.8	10332.8
10°	10594.9	10662.6	10713.2	10721.8
12.5°	10785.1	10861.3	10929.0	10912.0
15°	10840.1	10916.3	10983.8	10971.1
17.5°	10776.8	10852.8	10903.6	10895.1
20°	10603.4	10666.8	10717.6	10713.2
22.5°	10332.8	10387.8	10430.1	10425.8
25°	9876.2	9914.3	9948.1	9931.2
27.5°	9174.4	9187.1	9208.1	9182.9
30°	8240.1	8248.4	8256.9	8252.8
32.5°	7191.6	7187.2	7178.9	7170.4
35°	6130.4	6130.4	6134.6	6109.2
37.5°	5166.3	5162.2	5174.9	5162.2
40°	4244.7	4240.5	4257.4	4236.4
42.5°	3310.4	3323.1	3327.3	3327.3
45°	2490.2	2494.4	2498.6	2498.6
47.5°	1818.0	1822.2	1843.4	1818.0
50°	1285.3	1289.5	1293.7	1285.3
52.5°	849.7	854.1	849.7	837.0
55°	520.0	524.3	524.3	524.3
57.5°	279.0	283.3	283.3	279.0
60°	152.3	147.9	152.3	143.7
62.5°	80.4	88.8	84.6	76.0
65°	50.8	50.8	50.8	59.2
67.5°	42.3	33.8	38.1	29.6
70°	25.4	29.6	29.6	21.1
72.5°	21.1	21.1	21.1	25.4
75°	0.0	0.0	0.0	0.0
77.5°	8.5	8.5	8.5	4.2
80°	4.2	0.0	4.2	0.0
82.5°	4.2	4.2	8.5	4.2
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)