

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: P249724

Luminaire Tested: **LSR8B120D010 EC8B120840 8LBSWOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249724  
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: LSR8B120D010 EC8B120840 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12949.0 lumens  
Efficiency: N/A  
Efficacy: 109.5 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

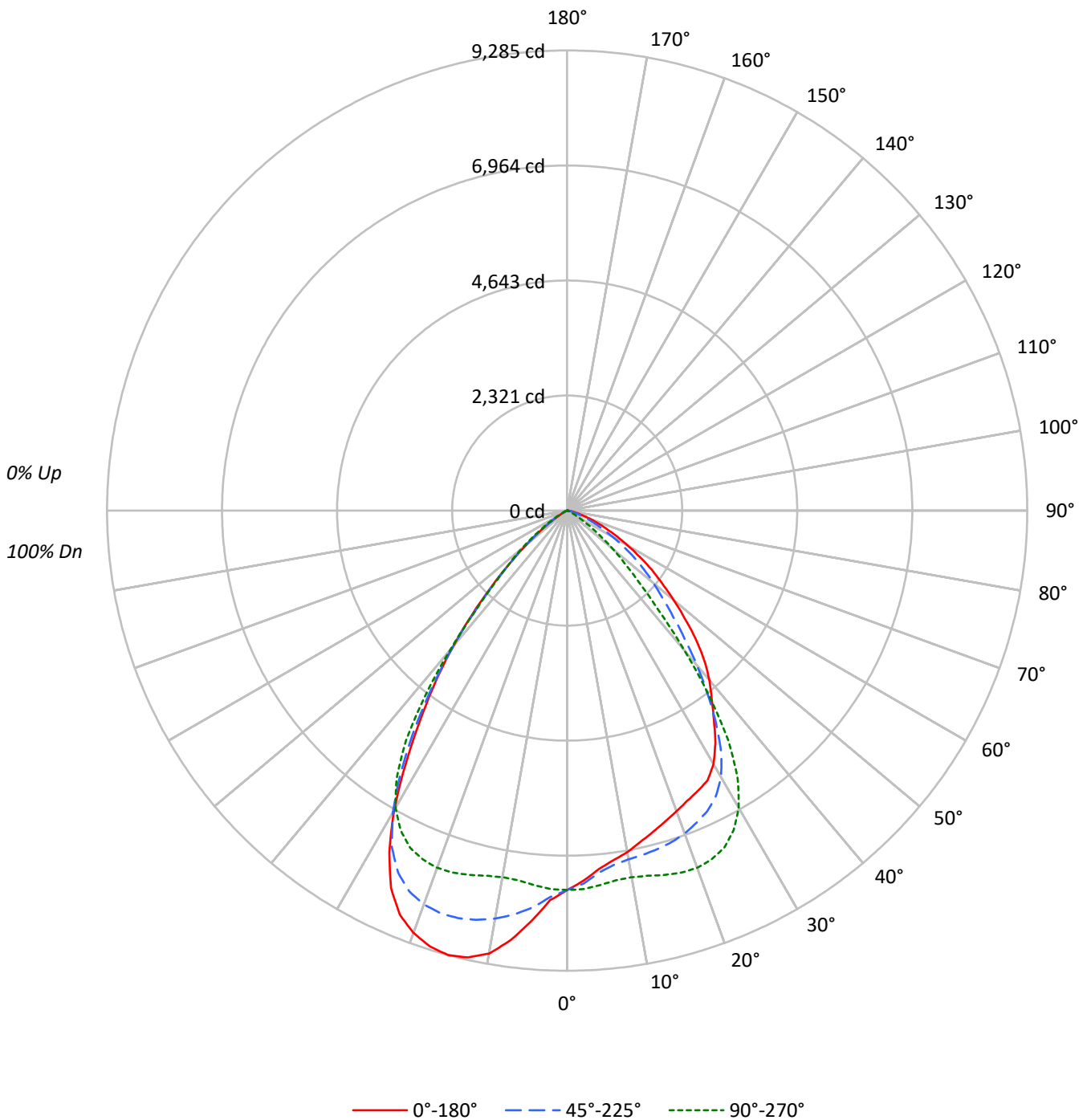
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249724

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBSW0LI

### Luminous Intensity Polar Plot





TEST NUMBER: P249724

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBSW0LI

**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°	236107	236107	236107
5°	224937	234793	257390
10°	219137	235156	284116
15°	214166	242949	296406
20°	211810	251730	297520
25°	212307	255283	285959
30°	210336	246519	248684
35°	194357	213345	194624
40°	179601	147917	144318
45°	159928	89250	92212
50°	134568	57500	52180
55°	111953	31542	23854
60°	87384	13679	7499
65°	64486	6793	3656
70°	44836	4192	1605
75°	27284	858	0
80°	19694	1279	0
85°	12666	1238	0



TEST NUMBER: P249724

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBSWOLI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	736.1	5.7
10°-20°	2203.0	17.0
20°-30°	3373.7	26.1
30°-40°	3307.3	25.5
40°-50°	1991.7	15.4
50°-60°	916.7	7.1
60°-70°	322.0	2.5
70°-80°	84.2	0.7
80°-90°	14.3	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°	6312.7	48.8
0°-40°	9620.0	74.3
0°-60°	12528.4	96.8
0°-90°	12949.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12949.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7657	7657	7657	7657	7657	
5°	7267	7335	7585	8040	8315	686
15°	6709	7070	7610	8512	9285	1895
25°	6240	6691	7503	8068	8405	2874
35°	5163	5235	5667	5342	5170	3234
45°	3667	3020	2047	2061	2114	2812
55°	2082	1649	587	462	444	1858
65°	884	612	93	46	50	900
75°	229	132	7	0	0	278
85°	36	18	4	0	0	49
90°	0	0	0	0	0	



TEST NUMBER: P249724

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBSWOLI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8
2.5°	7477.8	7485.1	7485.1	7485.1	7499.3	7503.0	7499.3	7503.0	7510.1	7535.1	7545.9
5°	7266.8	7256.0	7263.3	7259.6	7277.5	7288.3	7281.1	7291.8	7316.9	7334.8	7352.7
7.5°	7116.6	7116.6	7116.6	7123.6	7134.4	7155.9	7152.4	7159.4	7184.5	7209.5	7234.5
10°	6998.5	6994.9	6994.9	7012.8	7027.0	7052.1	7059.3	7080.8	7112.9	7145.2	7173.7
12.5°	6844.6	6848.3	6866.1	6884.0	6916.1	6955.5	6977.0	7005.7	7055.8	7109.4	7141.6
15°	6708.6	6712.2	6726.6	6762.2	6801.7	6848.3	6894.6	6941.2	7002.0	7070.0	7127.3
17.5°	6576.2	6579.8	6590.5	6630.0	6680.1	6740.9	6794.5	6855.3	6934.1	7012.8	7084.3
20°	6454.6	6451.1	6468.9	6504.7	6569.2	6626.3	6680.1	6751.6	6837.5	6934.1	7016.3
22.5°	6336.5	6336.5	6354.5	6390.2	6447.5	6504.7	6562.0	6637.1	6722.9	6816.0	6912.6
25°	6239.9	6236.3	6261.4	6279.3	6322.2	6379.5	6440.3	6501.1	6587.0	6690.8	6783.7
27.5°	6136.2	6132.7	6136.2	6157.7	6197.0	6239.9	6286.4	6340.2	6411.7	6497.6	6587.0
30°	5907.2	5910.7	5910.7	5928.7	5950.2	5996.6	6021.6	6075.4	6139.7	6211.3	6290.1
32.5°	5567.3	5570.8	5570.8	5578.0	5595.9	5617.4	5638.9	5678.2	5728.3	5789.1	5860.7
35°	5163.0	5163.0	5159.3	5163.0	5173.8	5173.8	5191.6	5173.8	5198.8	5234.6	5288.2
37.5°	4790.9	4783.7	4776.6	4769.4	4758.6	4740.8	4715.8	4672.8	4662.0	4647.7	4651.3
40°	4461.7	4458.2	4436.7	4418.7	4382.9	4340.1	4279.3	4204.1	4143.3	4071.8	4010.9
42.5°	4096.8	4093.1	4075.3	4043.0	4003.7	3939.4	3842.7	3742.6	3621.0	3513.6	3402.7
45°	3667.3	3678.1	3653.1	3617.3	3570.7	3509.9	3402.7	3280.9	3159.3	3019.8	2880.2
47.5°	3220.1	3216.5	3198.7	3177.2	3137.9	3077.1	3005.5	2873.1	2744.2	2615.5	2472.4
50°	2805.1	2790.8	2783.6	2762.2	2737.2	2687.1	2611.9	2504.5	2390.1	2268.4	2136.0
52.5°	2411.6	2411.6	2393.6	2379.3	2357.8	2318.5	2254.1	2168.3	2071.7	1957.1	1817.6
55°	2082.4	2075.2	2057.4	2039.4	2017.9	1992.9	1935.7	1864.2	1760.3	1649.4	1527.8
57.5°	1731.8	1728.1	1721.0	1699.5	1688.8	1663.7	1599.4	1527.8	1438.4	1341.8	1241.5
60°	1416.9	1402.6	1388.2	1373.9	1356.1	1331.0	1288.0	1227.2	1152.1	1066.2	966.1
62.5°	1134.3	1155.6	1112.8	1112.8	1077.0	1055.5	1016.2	980.4	901.6	823.0	737.1
65°	883.8	883.8	865.8	851.5	830.0	805.0	765.7	729.9	672.6	611.8	550.9
67.5°	676.3	672.6	654.8	640.5	622.5	608.2	579.7	536.7	493.8	443.7	393.5
70°	497.3	493.8	490.1	465.1	450.8	433.0	411.5	382.9	350.7	314.9	268.3
72.5°	357.7	357.7	347.1	336.4	322.1	307.6	286.3	268.3	239.8	214.7	182.5
75°	229.0	225.5	225.5	207.5	207.5	186.0	171.7	161.0	146.7	132.4	103.8
77.5°	164.6	161.0	157.4	150.2	143.1	135.9	125.2	110.9	100.1	85.9	75.1
80°	110.9	103.8	100.1	100.1	89.4	85.9	89.4	68.0	64.4	53.6	46.5
82.5°	68.0	68.0	64.4	64.4	60.8	57.3	46.5	46.5	43.0	39.3	32.3
85°	35.8	46.5	32.3	35.8	32.3	35.8	32.3	25.0	21.5	17.8	17.8
87.5°	21.5	14.3	14.3	21.5	17.8	14.3	14.3	14.3	10.8	7.2	7.2
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: P249724

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBSWOLI

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8
2.5°	7538.8	7563.8	7560.2	7592.4	7603.2	7628.2	7628.2	7646.0	7656.8	7681.8	7703.3
5°	7359.9	7399.2	7409.9	7449.3	7481.5	7520.8	7545.9	7585.2	7621.0	7674.7	7724.8
7.5°	7249.0	7281.1	7302.6	7349.1	7384.9	7427.8	7470.8	7524.4	7574.4	7639.0	7710.5
10°	7195.2	7238.2	7270.3	7316.9	7359.9	7406.4	7449.3	7510.1	7567.4	7649.7	7728.3
12.5°	7180.9	7231.0	7270.3	7334.8	7377.7	7427.8	7477.8	7545.9	7606.7	7692.6	7782.1
15°	7180.9	7249.0	7302.6	7374.2	7424.2	7488.6	7542.3	7610.2	7678.3	7767.7	7853.5
17.5°	7166.7	7249.0	7316.9	7399.2	7463.6	7528.1	7595.9	7660.5	7731.9	7817.9	7914.3
20°	7109.4	7213.2	7295.4	7392.0	7460.0	7531.6	7599.6	7671.1	7746.3	7835.7	7918.0
22.5°	7009.2	7130.9	7223.9	7327.6	7406.4	7477.8	7545.9	7617.4	7699.8	7785.6	7871.5
25°	6876.8	6991.3	7091.5	7198.8	7277.5	7356.2	7420.7	7503.0	7578.1	7660.5	7728.3
27.5°	6676.4	6798.0	6894.6	7005.7	7077.1	7152.4	7206.0	7274.0	7345.6	7413.5	7467.2
30°	6376.0	6486.8	6587.0	6687.1	6758.7	6812.5	6869.6	6923.4	6969.9	7016.3	7062.8
32.5°	5935.8	6036.1	6132.7	6225.6	6282.9	6329.4	6372.3	6404.5	6429.6	6454.6	6458.1
35°	5331.2	5413.4	5474.2	5556.5	5610.3	5653.1	5653.1	5667.4	5663.9	5653.1	5642.4
37.5°	4654.9	4687.0	4712.1	4744.3	4747.9	4747.9	4726.5	4708.6	4680.0	4672.8	4651.3
40°	3950.1	3907.1	3874.8	3832.0	3807.0	3753.2	3706.8	3674.6	3628.0	3621.0	3613.7
42.5°	3280.9	3180.8	3091.4	3016.3	2930.4	2855.1	2787.3	2737.2	2701.4	2697.7	2701.4
45°	2737.2	2622.6	2490.2	2386.5	2289.9	2196.8	2107.4	2046.6	2014.4	2007.2	2014.4
47.5°	2325.7	2193.3	2064.4	1946.3	1842.7	1738.8	1649.4	1567.1	1527.8	1517.0	1513.5
50°	2000.1	1864.2	1728.1	1606.4	1492.0	1388.2	1277.3	1198.6	1148.6	1130.6	1116.3
52.5°	1681.7	1560.0	1420.4	1295.2	1180.7	1059.0	944.6	855.1	805.0	783.6	769.2
55°	1402.6	1281.0	1152.1	1030.5	908.8	787.2	672.6	586.7	533.1	508.1	490.1
57.5°	1119.8	1005.4	894.5	772.9	672.6	554.6	440.0	364.9	318.4	289.8	275.5
60°	865.8	776.4	679.8	579.7	483.0	386.4	293.4	221.8	186.0	164.6	146.7
62.5°	654.8	579.7	515.2	429.3	354.2	271.9	200.4	143.1	110.9	93.1	85.9
65°	472.3	415.0	357.7	304.1	250.5	189.7	135.9	93.1	64.4	53.6	50.1
67.5°	336.4	289.8	246.8	211.0	171.7	135.9	96.6	64.4	50.1	43.0	39.3
70°	236.1	200.4	171.7	139.6	114.4	89.4	75.1	46.5	28.6	32.3	25.0
72.5°	157.4	132.4	118.1	96.6	78.6	64.4	46.5	32.3	32.3	25.0	21.5
75°	85.9	78.6	60.8	46.5	39.3	35.8	14.3	7.2	3.5	10.8	3.5
77.5°	60.8	53.6	46.5	39.3	32.3	25.0	14.3	14.3	10.8	14.3	7.2
80°	39.3	32.3	28.6	28.6	17.8	10.8	7.2	7.2	10.8	3.5	3.5
82.5°	25.0	21.5	17.8	17.8	17.8	10.8	10.8	10.8	10.8	7.2	7.2
85°	14.3	10.8	7.2	7.2	3.5	7.2	0.0	3.5	3.5	0.0	0.0
87.5°	7.2	3.5	3.5	3.5	3.5	0.0	0.0	3.5	0.0	3.5	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



TEST NUMBER: P249724

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBSWOLI

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8	7656.8
2.5°	7717.6	7731.9	7749.8	7764.1	7796.4	7803.5	7817.9	7832.2	7842.9	7853.5	7857.2
5°	7767.7	7821.4	7871.5	7925.1	7993.1	8039.7	8093.3	8139.8	8186.4	8225.7	8254.2
7.5°	7782.1	7864.3	7939.5	8032.5	8132.6	8218.6	8308.0	8397.4	8490.5	8562.0	8622.9
10°	7810.7	7910.8	8007.4	8118.3	8247.2	8361.6	8472.5	8590.6	8708.7	8808.9	8898.4
12.5°	7860.7	7971.6	8075.5	8197.1	8329.5	8458.2	8579.9	8712.3	8837.6	8948.5	9048.6
15°	7943.1	8046.7	8147.0	8261.5	8393.9	8512.0	8633.6	8762.3	8887.7	9002.1	9095.2
17.5°	7996.7	8093.3	8193.4	8297.3	8408.1	8515.5	8629.9	8744.5	8858.9	8962.8	9048.6
20°	7996.7	8089.7	8164.9	8257.9	8361.6	8454.7	8547.8	8647.9	8748.0	8833.9	8916.2
22.5°	7932.3	8021.7	8079.0	8150.6	8240.0	8318.8	8368.8	8479.7	8554.8	8629.9	8690.8
25°	7782.1	7846.5	7893.0	7943.1	8014.6	8068.2	8111.2	8175.6	8250.7	8279.4	8322.3
27.5°	7510.1	7556.6	7581.7	7592.4	7628.2	7656.8	7664.0	7692.6	7724.8	7731.9	7749.8
30°	7080.8	7084.3	7073.6	7070.0	7052.1	7030.7	7027.0	7023.5	7009.2	6994.9	6998.5
32.5°	6433.1	6415.3	6372.3	6325.9	6279.3	6229.3	6200.6	6164.8	6143.3	6121.9	6096.9
35°	5595.9	5553.0	5492.2	5434.9	5381.3	5341.8	5277.5	5256.0	5234.6	5205.9	5198.8
37.5°	4611.9	4586.9	4529.6	4486.8	4458.2	4440.2	4408.0	4386.6	4386.6	4375.9	4368.6
40°	3595.8	3588.7	3567.2	3578.0	3563.7	3570.7	3567.2	3560.0	3578.0	3578.0	3585.2
42.5°	2697.7	2701.4	2712.1	2719.2	2740.7	2744.2	2762.2	2762.2	2773.0	2783.6	2790.8
45°	2007.2	2021.6	2021.6	2035.9	2057.4	2060.9	2068.0	2071.7	2078.7	2096.7	2103.8
47.5°	1506.3	1509.8	1509.8	1513.5	1520.6	1527.8	1524.3	1527.8	1538.5	1531.3	1538.5
50°	1112.8	1116.3	1105.6	1094.8	1105.6	1105.6	1102.0	1091.3	1102.0	1087.7	1094.8
52.5°	758.6	754.9	744.2	747.8	740.6	737.1	737.1	729.9	729.9	729.9	715.6
55°	479.5	479.5	472.3	472.3	468.8	461.5	458.0	454.3	450.8	447.3	447.3
57.5°	268.3	271.9	261.3	257.6	261.3	257.6	250.5	250.5	250.5	239.8	246.8
60°	146.7	143.1	139.6	135.9	132.4	135.9	135.9	128.9	128.9	128.9	132.4
62.5°	78.6	78.6	75.1	75.1	71.6	71.6	78.6	68.0	71.6	68.0	71.6
65°	43.0	53.6	39.3	39.3	50.1	46.5	43.0	43.0	46.5	39.3	43.0
67.5°	46.5	32.3	28.6	32.3	28.6	28.6	28.6	35.8	32.3	25.0	32.3
70°	21.5	25.0	25.0	17.8	28.6	14.3	25.0	14.3	21.5	17.8	21.5
72.5°	21.5	21.5	21.5	14.3	21.5	14.3	17.8	17.8	14.3	14.3	21.5
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°	7.2	7.2	3.5	3.5	3.5	3.5	7.2	7.2	7.2	0.0	3.5
80°	7.2	7.2	0.0	3.5	0.0	0.0	3.5	0.0	3.5	0.0	7.2
82.5°	3.5	7.2	3.5	3.5	7.2	7.2	7.2	3.5	3.5	3.5	3.5
85°	0.0	3.5	0.0	0.0	0.0	0.0	7.2	0.0	0.0	0.0	3.5
87.5°	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	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: P249724

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBSWOLI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	7656.8	7656.8	7656.8	7656.8
2.5°	7860.7	7864.3	7871.5	7868.0
5°	8275.8	8304.5	8318.8	8315.2
7.5°	8665.7	8715.9	8744.5	8744.5
10°	8966.3	9023.6	9066.5	9073.7
12.5°	9127.3	9191.8	9249.1	9234.6
15°	9173.8	9238.3	9295.5	9284.7
17.5°	9120.2	9184.6	9227.6	9220.3
20°	8973.5	9027.1	9070.1	9066.5
22.5°	8744.5	8791.1	8826.8	8823.2
25°	8358.1	8390.3	8418.9	8404.6
27.5°	7764.1	7774.9	7792.7	7771.3
30°	6973.4	6980.5	6987.7	6984.2
32.5°	6086.1	6082.4	6075.4	6068.2
35°	5188.1	5188.1	5191.6	5170.1
37.5°	4372.2	4368.6	4379.4	4368.6
40°	3592.2	3588.7	3603.0	3585.2
42.5°	2801.5	2812.3	2815.8	2815.8
45°	2107.4	2111.0	2114.5	2114.5
47.5°	1538.5	1542.1	1560.0	1538.5
50°	1087.7	1091.3	1094.8	1087.7
52.5°	719.1	722.8	719.1	708.4
55°	440.0	443.7	443.7	443.7
57.5°	236.1	239.8	239.8	236.1
60°	128.9	125.2	128.9	121.6
62.5°	68.0	75.1	71.6	64.4
65°	43.0	43.0	43.0	50.1
67.5°	35.8	28.6	32.3	25.0
70°	21.5	25.0	25.0	17.8
72.5°	17.8	17.8	17.8	21.5
75°	0.0	0.0	0.0	0.0
77.5°	7.2	7.2	7.2	3.5
80°	3.5	0.0	3.5	0.0
82.5°	3.5	3.5	7.2	3.5
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)