

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: P249439

Luminaire Tested: **LSR8B150D010 EC8B150840 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249439  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B150D010 EC8B150840 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14476.0 lumens  
Efficiency: N/A  
Efficacy: 91.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

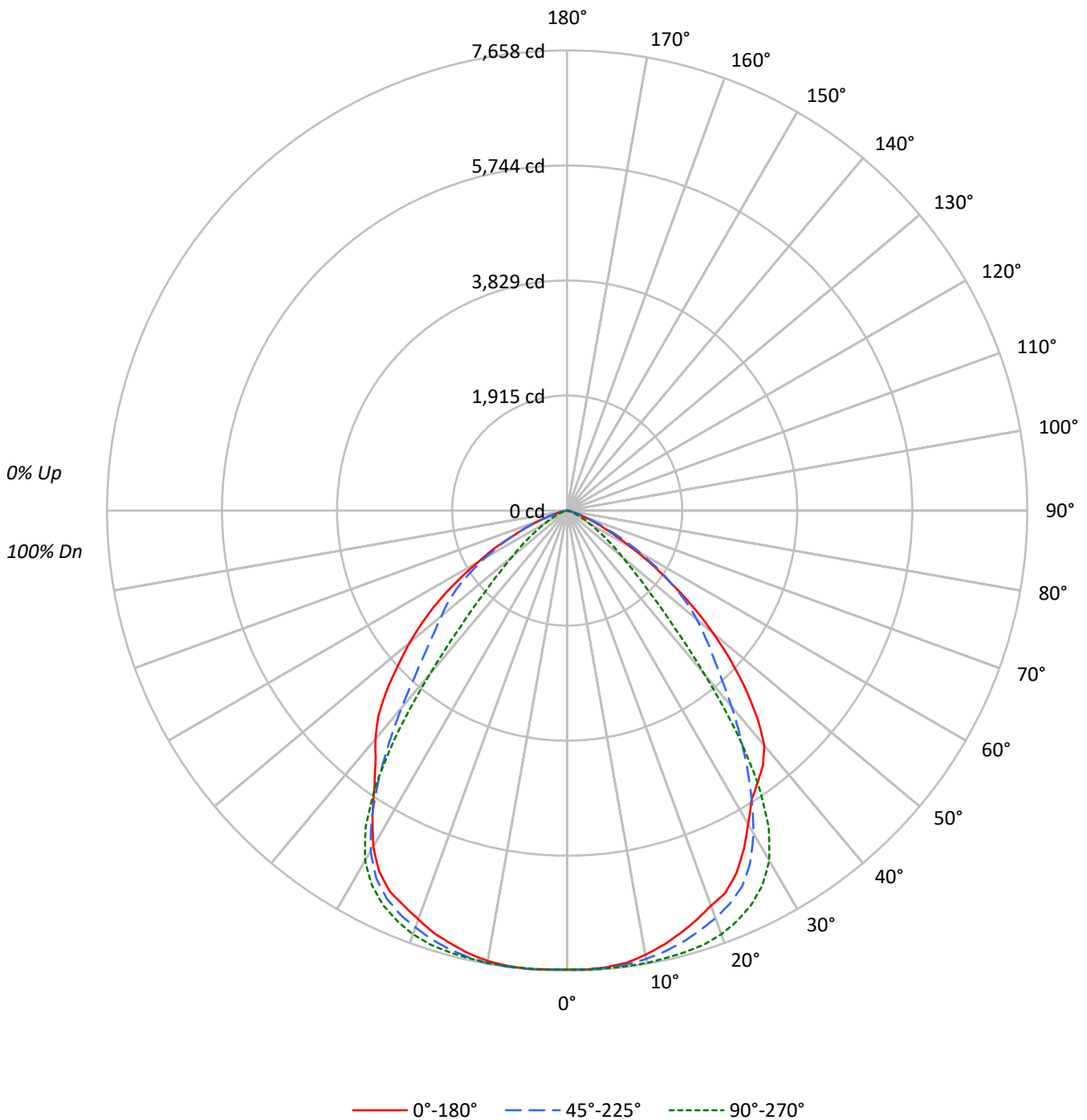
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

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

	0°	90°	180°
0°	235522	235522	235522
5°	236041	236675	236932
10°	235047	239283	238256
15°	232443	242783	238205
20°	229651	246197	237589
25°	226672	246481	237832
30°	214445	239551	229770
35°	208041	208191	210356
40°	205464	143244	199688
45°	183076	85997	185579
50°	152227	57232	164029
55°	114173	39456	139076
60°	77368	26291	104930
65°	46668	17052	72089
70°	25876	9241	44349
75°	11724	3908	22959
80°	10193	4368	16018
85°	11605	5802	15957



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	728.9	5.0
10°-20°	2116.9	14.6
20°-30°	3213.0	22.2
30°-40°	3374.7	23.3
40°-50°	2530.1	17.5
50°-60°	1623.4	11.2
60°-70°	694.5	4.8
70°-80°	164.1	1.1
80°-90°	30.5	0.2
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°	6058.9	41.9
0°-40°	9433.5	65.2
0°-60°	13587.0	93.9
0°-90°	14476.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14476.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7638	7638	7638	7638	7638	
5°	7626	7638	7646	7658	7654	724
15°	7281	7433	7605	7556	7462	2054
25°	6662	6896	7244	7113	6990	3044
35°	5526	5219	5530	5465	5588	3469
45°	4198	3431	1972	3333	4256	3215
55°	2124	2124	734	2214	2587	1926
65°	640	754	234	972	988	683
75°	98	115	33	197	193	143
85°	33	20	16	33	45	35
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°	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8
2.5°	7641.9	7650.2	7646.0	7646.0	7641.9	7646.0	7646.0	7654.3	7654.3	7646.0	7641.9
5°	7625.5	7633.7	7633.7	7625.5	7625.5	7646.0	7633.7	7641.9	7641.9	7637.8	7637.8
7.5°	7588.7	7588.7	7605.0	7592.8	7592.8	7605.0	7600.9	7609.1	7617.4	7621.5	7621.5
10°	7506.6	7514.8	7518.9	7518.9	7523.1	7535.3	7543.5	7560.0	7568.1	7576.3	7580.4
12.5°	7404.2	7416.4	7420.5	7416.4	7428.8	7445.1	7465.7	7486.1	7498.5	7514.8	7527.2
15°	7281.1	7281.1	7289.3	7301.7	7309.9	7334.5	7354.9	7379.5	7412.3	7432.9	7453.3
17.5°	7145.9	7154.1	7166.3	7166.3	7182.8	7223.7	7236.1	7273.0	7309.9	7330.4	7371.4
20°	6998.3	7006.4	7018.8	7027.0	7047.5	7080.3	7104.9	7137.7	7178.7	7215.6	7256.5
22.5°	6883.5	6867.1	6875.2	6883.5	6904.0	6932.7	6961.4	7002.3	7043.4	7080.3	7121.3
25°	6662.1	6666.2	6678.5	6686.6	6711.3	6735.9	6768.7	6817.9	6854.8	6895.8	6940.8
27.5°	6362.8	6366.9	6387.4	6387.4	6407.9	6448.9	6469.4	6510.4	6559.6	6600.6	6653.9
30°	6022.6	6030.7	6030.7	6047.1	6059.4	6079.9	6100.4	6141.4	6166.0	6202.9	6276.8
32.5°	5711.0	5719.1	5715.0	5711.0	5698.6	5694.5	5690.4	5698.6	5706.9	5719.1	5747.8
35°	5526.5	5505.9	5489.6	5460.9	5428.1	5387.1	5350.2	5301.0	5255.9	5218.9	5178.0
37.5°	5350.2	5346.0	5321.5	5280.4	5214.8	5141.1	5055.0	4948.4	4841.8	4727.0	4616.4
40°	5104.2	5091.8	5071.4	5014.0	4940.2	4850.0	4735.2	4604.0	4431.8	4255.5	4075.2
42.5°	4686.0	4690.1	4665.5	4620.4	4550.8	4464.6	4345.7	4202.3	4017.8	3808.6	3575.0
45°	4198.1	4198.1	4189.9	4153.0	4103.9	4034.1	3944.0	3825.1	3644.7	3431.4	3181.4
47.5°	3689.8	3693.9	3681.5	3673.4	3652.8	3607.8	3542.2	3452.0	3324.9	3119.9	2869.8
50°	3173.2	3173.2	3193.7	3189.6	3189.6	3173.2	3144.5	3091.2	2980.5	2816.5	2582.9
52.5°	2656.6	2664.8	2677.2	2693.5	2714.0	2746.8	2714.0	2689.4	2619.7	2492.6	2291.8
55°	2123.7	2131.9	2152.3	2181.0	2205.7	2238.5	2246.6	2246.6	2209.7	2123.7	1972.0
57.5°	1668.6	1656.3	1672.7	1697.3	1730.1	1762.9	1787.5	1816.2	1812.1	1754.7	1631.7
60°	1254.5	1258.6	1270.9	1295.6	1320.1	1348.8	1381.6	1406.2	1418.5	1389.9	1311.9
62.5°	914.3	914.3	930.6	955.2	967.5	1008.6	1029.0	1041.4	1053.6	1049.5	1000.3
65°	639.6	647.7	656.0	668.3	680.5	705.1	717.4	742.0	750.3	754.4	717.4
67.5°	451.0	438.7	446.9	455.0	467.4	483.8	508.4	508.4	520.6	520.6	496.1
70°	287.0	287.0	291.1	303.4	311.6	315.7	323.9	332.0	344.4	340.3	340.3
72.5°	192.7	188.6	192.7	196.8	200.9	213.2	213.2	217.3	225.5	229.6	213.2
75°	98.4	102.5	110.6	106.6	118.9	110.6	114.8	127.1	123.0	114.8	114.8
77.5°	82.0	82.0	82.0	77.9	86.1	86.1	82.0	90.2	86.1	86.1	82.0
80°	57.4	61.5	57.4	53.3	57.4	53.3	53.3	53.3	53.3	53.3	49.2
82.5°	45.1	36.9	41.0	36.9	41.0	41.0	36.9	32.8	32.8	36.9	32.8
85°	32.8	24.6	28.7	28.7	24.6	24.6	24.6	24.6	24.6	20.5	20.5
87.5°	20.5	12.3	12.3	12.3	16.4	16.4	16.4	12.3	16.4	16.4	8.2
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8
2.5°	7650.2	7646.0	7654.3	7650.2	7650.2	7646.0	7650.2	7646.0	7654.3	7637.8	7641.9
5°	7650.2	7641.9	7646.0	7650.2	7654.3	7646.0	7646.0	7646.0	7654.3	7646.0	7650.2
7.5°	7633.7	7629.6	7641.9	7650.2	7646.0	7641.9	7650.2	7646.0	7654.3	7650.2	7658.3
10°	7600.9	7605.0	7613.2	7625.5	7629.6	7633.7	7641.9	7641.9	7654.3	7637.8	7646.0
12.5°	7551.8	7568.1	7588.7	7596.8	7613.2	7613.2	7621.5	7625.5	7633.7	7629.6	7641.9
15°	7490.3	7510.7	7535.3	7555.9	7576.3	7588.7	7600.9	7605.0	7617.4	7605.0	7609.1
17.5°	7416.4	7441.0	7477.9	7502.5	7535.3	7547.6	7564.0	7572.2	7584.6	7576.3	7580.4
20°	7313.9	7342.7	7383.6	7420.5	7441.0	7469.7	7490.3	7502.5	7510.7	7502.5	7506.6
22.5°	7170.5	7211.5	7264.8	7293.4	7334.5	7359.0	7363.2	7391.9	7412.3	7391.9	7400.1
25°	7002.3	7043.4	7084.4	7145.9	7182.8	7211.5	7240.2	7244.3	7264.8	7260.6	7256.5
27.5°	6723.6	6776.9	6846.5	6895.8	6945.0	6990.1	7022.9	7031.0	7051.6	7043.4	7047.5
30°	6342.3	6399.7	6465.3	6543.2	6612.9	6658.0	6699.0	6727.7	6748.1	6735.9	6731.8
32.5°	5801.2	5858.5	5928.3	6006.1	6088.2	6153.7	6202.9	6239.8	6264.4	6256.2	6235.7
35°	5182.1	5198.5	5243.6	5305.1	5374.7	5444.5	5489.6	5530.5	5559.2	5567.4	5567.4
37.5°	4546.6	4493.4	4460.6	4460.6	4501.5	4530.2	4571.2	4595.8	4640.9	4657.3	4669.6
40°	3931.6	3808.6	3693.9	3607.8	3550.4	3546.3	3546.3	3558.5	3599.6	3652.8	3702.1
42.5°	3382.3	3185.5	3009.2	2849.3	2734.6	2669.0	2640.3	2644.4	2677.2	2726.3	2808.3
45°	2943.6	2697.6	2476.3	2283.6	2127.8	2025.2	1976.1	1972.0	1996.6	2053.9	2144.2
47.5°	2603.4	2340.9	2090.8	1869.5	1701.4	1590.7	1533.3	1516.9	1533.3	1586.6	1693.2
50°	2320.5	2049.9	1791.6	1562.0	1381.6	1266.9	1213.5	1193.0	1213.5	1258.6	1365.2
52.5°	2058.0	1779.3	1537.4	1316.0	1123.3	1024.9	967.5	955.2	967.5	1020.8	1107.0
55°	1754.7	1516.9	1279.1	1057.7	889.7	791.3	746.1	733.9	746.1	795.4	885.6
57.5°	1455.5	1250.4	1041.4	840.4	697.0	610.8	569.9	553.4	582.1	614.9	721.6
60°	1176.6	1012.7	836.3	660.1	541.2	463.3	430.4	426.3	434.6	475.6	549.3
62.5°	922.5	787.2	647.7	504.3	405.9	373.1	332.0	328.0	336.2	360.7	418.2
65°	664.2	578.1	471.5	369.0	291.1	246.0	229.6	233.7	241.9	258.3	311.6
67.5°	463.3	401.8	328.0	258.3	200.9	180.4	164.0	159.9	164.0	192.7	221.4
70°	311.6	274.7	221.4	196.8	139.4	110.6	114.8	102.5	118.9	118.9	143.5
72.5°	204.9	180.4	147.6	114.8	98.4	77.9	77.9	73.8	82.0	86.1	106.6
75°	106.6	82.0	82.0	57.4	41.0	20.5	36.9	32.8	28.7	32.8	41.0
77.5°	73.8	61.5	57.4	45.1	41.0	32.8	32.8	32.8	32.8	36.9	41.0
80°	45.1	45.1	32.8	28.7	24.6	20.5	24.6	24.6	24.6	24.6	28.7
82.5°	28.7	24.6	24.6	20.5	20.5	16.4	16.4	16.4	16.4	16.4	24.6
85°	24.6	16.4	16.4	12.3	16.4	28.7	12.3	16.4	16.4	16.4	12.3
87.5°	8.2	12.3	12.3	12.3	8.2	4.1	8.2	12.3	12.3	20.5	16.4
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°	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8	7637.8
2.5°	7650.2	7654.3	7654.3	7650.2	7650.2	7641.9	7658.3	7646.0	7650.2	7666.5	7654.3
5°	7658.3	7662.4	7662.4	7658.3	7658.3	7658.3	7662.4	7662.4	7658.3	7654.3	7662.4
7.5°	7674.7	7670.6	7670.6	7662.4	7662.4	7654.3	7662.4	7650.2	7658.3	7650.2	7662.4
10°	7654.3	7658.3	7654.3	7650.2	7650.2	7646.0	7646.0	7633.7	7637.8	7625.5	7633.7
12.5°	7641.9	7637.8	7637.8	7629.6	7621.5	7613.2	7609.1	7596.8	7596.8	7568.1	7580.4
15°	7609.1	7613.2	7600.9	7584.6	7576.3	7555.9	7547.6	7531.2	7514.8	7494.4	7498.5
17.5°	7580.4	7568.1	7551.8	7535.3	7502.5	7486.1	7469.7	7445.1	7436.9	7412.3	7404.2
20°	7494.4	7486.1	7465.7	7436.9	7416.4	7379.5	7363.2	7338.6	7318.0	7293.4	7281.1
22.5°	7383.6	7375.4	7350.8	7322.1	7289.3	7273.0	7256.5	7211.5	7190.9	7166.3	7162.2
25°	7244.3	7232.0	7207.4	7174.6	7158.1	7113.1	7096.6	7063.8	7055.7	7031.0	7027.0
27.5°	7031.0	7014.7	6986.0	6945.0	6916.3	6887.6	6871.2	6846.5	6838.4	6813.7	6809.7
30°	6711.3	6690.8	6633.4	6617.0	6567.8	6539.1	6539.1	6506.3	6510.4	6494.0	6494.0
32.5°	6207.0	6174.2	6129.1	6096.3	6063.5	6047.1	6047.1	6034.8	6043.0	6043.0	6051.3
35°	5538.7	5493.7	5469.0	5448.6	5448.6	5464.9	5514.2	5526.5	5551.1	5571.6	5588.0
37.5°	4681.9	4677.8	4706.5	4731.1	4792.6	4862.3	4948.4	5022.2	5091.8	5141.1	5190.3
40°	3755.4	3857.9	3939.8	4054.7	4148.9	4284.2	4440.0	4567.1	4686.0	4772.1	4862.3
42.5°	2931.3	3062.5	3234.7	3402.8	3570.9	3755.4	3960.4	4136.7	4292.4	4411.3	4505.6
45°	2283.6	2463.9	2673.1	2886.2	3103.5	3333.1	3546.3	3726.7	3890.7	4013.7	4108.0
47.5°	1840.8	2037.6	2275.3	2509.1	2755.0	2996.9	3234.7	3390.5	3525.7	3624.2	3710.3
50°	1521.0	1730.1	1980.2	2246.6	2492.6	2734.6	2939.5	3091.2	3201.9	3288.0	3341.3
52.5°	1270.9	1492.3	1758.8	2025.2	2271.2	2492.6	2677.2	2791.9	2882.1	2943.6	2992.8
55°	1049.5	1262.8	1512.8	1762.9	2004.8	2213.8	2365.5	2451.7	2521.3	2558.2	2586.9
57.5°	856.9	1053.6	1283.2	1512.8	1721.9	1894.1	2013.0	2099.1	2131.9	2160.6	2156.5
60°	672.4	856.9	1065.9	1262.8	1443.1	1582.5	1668.6	1717.8	1742.4	1754.7	1746.5
62.5°	528.9	697.0	856.9	1029.0	1160.2	1279.1	1361.2	1361.2	1373.4	1377.5	1389.9
65°	393.5	520.6	660.1	787.2	893.7	971.6	1016.8	1029.0	1045.5	1041.4	1033.1
67.5°	291.1	385.4	487.8	582.1	656.0	705.1	737.9	766.7	762.6	754.4	750.3
70°	200.9	262.4	352.6	410.0	463.3	512.5	520.6	524.7	528.9	533.0	524.7
72.5°	139.4	184.5	233.7	282.9	315.7	336.2	356.7	360.7	360.7	360.7	356.7
75°	69.7	94.3	139.4	159.9	188.6	196.8	213.2	213.2	225.5	209.1	204.9
77.5°	61.5	73.8	98.4	114.8	127.1	139.4	143.5	155.8	151.7	143.5	147.6
80°	36.9	45.1	61.5	69.7	86.1	90.2	94.3	98.4	94.3	98.4	98.4
82.5°	28.7	32.8	41.0	41.0	53.3	53.3	57.4	57.4	61.5	61.5	61.5
85°	16.4	28.7	24.6	49.2	32.8	32.8	41.0	49.2	41.0	41.0	49.2
87.5°	16.4	16.4	12.3	16.4	16.4	16.4	20.5	24.6	24.6	28.7	24.6
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: P249439

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	7637.8	7637.8	7637.8	7637.8
2.5°	7650.2	7658.3	7646.0	7641.9
5°	7662.4	7662.4	7654.3	7654.3
7.5°	7662.4	7662.4	7650.2	7641.9
10°	7629.6	7629.6	7617.4	7609.1
12.5°	7568.1	7568.1	7564.0	7551.8
15°	7490.3	7490.3	7473.8	7461.6
17.5°	7383.6	7391.9	7371.4	7371.4
20°	7268.9	7264.8	7248.4	7240.2
22.5°	7150.0	7141.8	7137.7	7113.1
25°	7022.9	7014.7	7002.3	6990.1
27.5°	6805.6	6801.5	6789.2	6772.8
30°	6473.5	6469.4	6453.0	6453.0
32.5°	6043.0	6038.9	6022.6	6026.7
35°	5596.1	5612.6	5604.4	5588.0
37.5°	5223.1	5235.4	5243.6	5235.4
40°	4911.5	4948.4	4952.5	4960.7
42.5°	4579.4	4628.6	4645.0	4653.2
45°	4181.7	4226.8	4263.8	4255.5
47.5°	3775.8	3808.6	3841.4	3816.9
50°	3386.4	3406.9	3419.2	3419.2
52.5°	3017.4	3017.4	3013.3	3017.4
55°	2595.1	2595.1	2578.8	2586.9
57.5°	2152.3	2160.6	2148.2	2127.8
60°	1742.4	1721.9	1713.7	1701.4
62.5°	1357.0	1357.0	1328.4	1365.2
65°	1016.8	1004.4	992.1	988.0
67.5°	737.9	733.9	721.6	717.4
70°	520.6	504.3	500.2	491.9
72.5°	348.5	348.5	340.3	340.3
75°	213.2	192.7	188.6	192.7
77.5°	147.6	143.5	143.5	139.4
80°	98.4	94.3	102.5	90.2
82.5°	61.5	65.6	61.5	65.6
85°	41.0	49.2	45.1	45.1
87.5°	24.6	24.6	24.6	24.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)