

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: P249313

Luminaire Tested: **LSR8B150D010 EC8B150830 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249313  
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 EC8B150830 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15478.0 lumens  
Efficiency: N/A  
Efficacy: 97.7 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

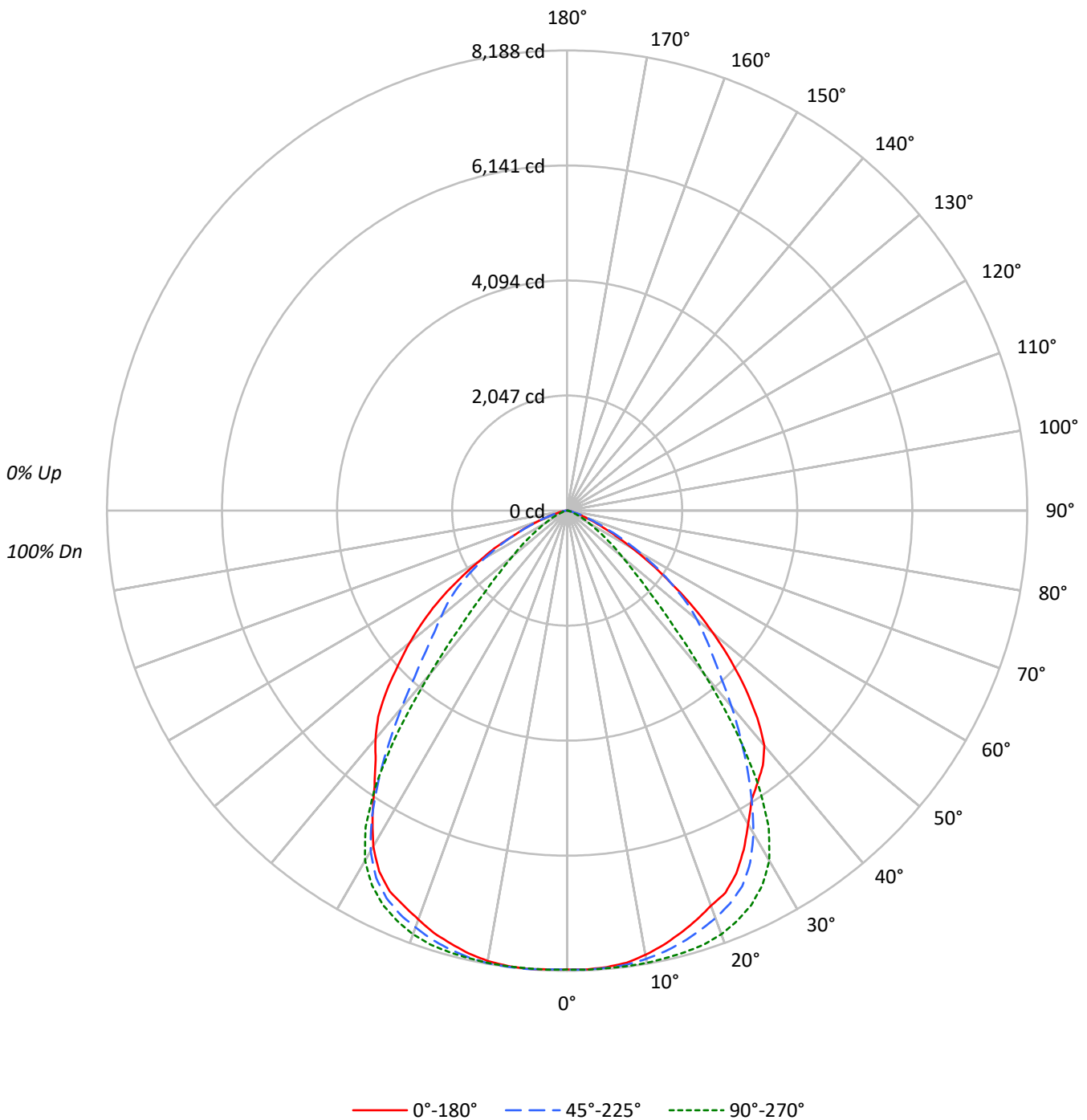
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249313

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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°	251825	251825	251825
5°	252378	253059	253331
10°	251316	255847	254748
15°	248532	259588	254690
20°	245547	263238	254033
25°	242361	263541	254293
30°	229286	256130	245676
35°	222440	222601	224917
40°	219686	153162	213511
45°	195748	91950	198426
50°	162767	61194	175384
55°	122071	42187	148704
60°	82728	28110	112195
65°	49901	18234	77080
70°	27670	9881	47424
75°	12534	4182	24543
80°	10903	4670	17119
85°	12419	6192	17089



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CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBDW0GPH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	779.4	5.0
10°-20°	2263.4	14.6
20°-30°	3435.4	22.2
30°-40°	3608.2	23.3
40°-50°	2705.2	17.5
50°-60°	1735.7	11.2
60°-70°	742.5	4.8
70°-80°	175.4	1.1
80°-90°	32.6	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°	6478.2	41.9
0°-40°	10086.5	65.2
0°-60°	14527.4	93.9
0°-90°	15478.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15478.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	8166	8166	8166	8166	8166	
5°	8153	8166	8175	8188	8184	774
15°	7785	7947	8131	8079	7978	2196
25°	7123	7373	7746	7605	7474	3254
35°	5909	5580	5913	5843	5975	3709
45°	4489	3669	2108	3564	4550	3438
55°	2271	2271	785	2367	2766	2060
65°	684	807	250	1039	1056	730
75°	105	123	35	210	206	153
85°	35	22	18	35	48	37
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°	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5
2.5°	8170.9	8179.7	8175.3	8175.3	8170.9	8175.3	8175.3	8184.1	8184.1	8175.3	8170.9
5°	8153.3	8162.1	8162.1	8153.3	8153.3	8175.3	8162.1	8170.9	8170.9	8166.5	8166.5
7.5°	8113.9	8113.9	8131.4	8118.3	8118.3	8131.4	8127.0	8135.8	8144.6	8149.0	8149.0
10°	8026.2	8035.0	8039.4	8039.4	8043.8	8056.9	8065.7	8083.3	8092.0	8100.7	8105.1
12.5°	7916.7	7929.8	7934.2	7929.8	7943.0	7960.5	7982.4	8004.3	8017.5	8035.0	8048.2
15°	7785.1	7785.1	7793.9	7807.1	7815.9	7842.1	7864.0	7890.3	7925.4	7947.4	7969.2
17.5°	7640.5	7649.3	7662.4	7662.4	7680.0	7723.7	7736.9	7776.4	7815.9	7837.8	7881.6
20°	7482.7	7491.4	7504.6	7513.4	7535.3	7570.4	7596.6	7631.7	7675.6	7715.0	7758.8
22.5°	7359.9	7342.4	7351.1	7359.9	7381.9	7412.6	7443.3	7487.0	7530.9	7570.4	7614.2
25°	7123.2	7127.6	7140.8	7149.5	7175.9	7202.1	7237.2	7289.8	7329.2	7373.1	7421.3
27.5°	6803.3	6807.6	6829.5	6829.5	6851.4	6895.3	6917.2	6961.0	7013.7	7057.5	7114.5
30°	6439.4	6448.1	6448.1	6465.7	6478.8	6500.8	6522.7	6566.5	6592.8	6632.3	6711.2
32.5°	6106.3	6115.0	6110.6	6106.3	6093.1	6088.7	6084.3	6093.1	6101.9	6115.0	6145.7
35°	5909.0	5887.1	5869.6	5838.9	5803.8	5760.0	5720.5	5667.9	5619.7	5580.2	5536.4
37.5°	5720.5	5716.1	5689.8	5645.9	5575.8	5497.0	5404.9	5290.9	5176.9	5054.2	4935.9
40°	5457.5	5444.3	5422.4	5361.1	5282.1	5185.7	5063.0	4922.7	4738.5	4550.1	4357.2
42.5°	5010.3	5014.7	4988.5	4940.2	4865.7	4773.6	4646.5	4493.1	4295.9	4072.3	3822.5
45°	4488.7	4488.7	4479.9	4440.5	4387.9	4313.4	4216.9	4089.8	3897.0	3669.0	3401.6
47.5°	3945.2	3949.6	3936.4	3927.7	3905.7	3857.5	3787.4	3691.0	3555.1	3335.8	3068.4
50°	3392.9	3392.9	3414.8	3410.4	3410.4	3392.9	3362.2	3305.1	3186.8	3011.5	2761.7
52.5°	2840.5	2849.3	2862.5	2880.0	2901.9	2936.9	2901.9	2875.6	2801.0	2665.1	2450.4
55°	2270.6	2279.4	2301.3	2332.0	2358.4	2393.5	2402.1	2402.1	2362.7	2270.6	2108.5
57.5°	1784.1	1770.9	1788.5	1814.8	1849.9	1884.9	1911.2	1941.9	1937.5	1876.2	1744.7
60°	1341.4	1345.8	1358.9	1385.2	1411.5	1442.2	1477.3	1503.5	1516.7	1486.1	1402.7
62.5°	977.5	977.5	995.0	1021.3	1034.5	1078.4	1100.3	1113.4	1126.5	1122.1	1069.6
65°	683.9	692.6	701.4	714.5	727.6	753.9	767.1	793.4	802.2	806.6	767.1
67.5°	482.2	469.0	477.8	486.5	499.7	517.3	543.6	543.6	556.7	556.7	530.4
70°	306.9	306.9	311.3	324.3	333.1	337.5	346.3	355.0	368.2	363.8	363.8
72.5°	206.0	201.6	206.0	210.4	214.8	227.9	227.9	232.3	241.1	245.5	227.9
75°	105.2	109.6	118.3	114.0	127.1	118.3	122.7	135.9	131.5	122.7	122.7
77.5°	87.6	87.6	87.6	83.3	92.0	92.0	87.6	96.4	92.0	92.0	87.6
80°	61.4	65.7	61.4	57.0	61.4	57.0	57.0	57.0	57.0	57.0	52.6
82.5°	48.3	39.5	43.9	39.5	43.9	43.9	39.5	35.1	35.1	39.5	35.1
85°	35.1	26.3	30.7	30.7	26.3	26.3	26.3	26.3	26.3	21.9	21.9
87.5°	21.9	13.2	13.2	13.2	17.5	17.5	17.5	13.2	17.5	17.5	8.8
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: P249313

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5
2.5°	8179.7	8175.3	8184.1	8179.7	8179.7	8175.3	8179.7	8175.3	8184.1	8166.5	8170.9
5°	8179.7	8170.9	8175.3	8179.7	8184.1	8175.3	8175.3	8175.3	8184.1	8175.3	8179.7
7.5°	8162.1	8157.7	8170.9	8179.7	8175.3	8170.9	8179.7	8175.3	8184.1	8179.7	8188.4
10°	8127.0	8131.4	8140.2	8153.3	8157.7	8162.1	8170.9	8170.9	8184.1	8166.5	8175.3
12.5°	8074.5	8092.0	8113.9	8122.6	8140.2	8140.2	8149.0	8153.3	8162.1	8157.7	8170.9
15°	8008.7	8030.6	8056.9	8078.9	8100.7	8113.9	8127.0	8131.4	8144.6	8131.4	8135.8
17.5°	7929.8	7956.1	7995.5	8021.8	8056.9	8070.1	8087.6	8096.4	8109.5	8100.7	8105.1
20°	7820.2	7850.9	7894.7	7934.2	7956.1	7986.7	8008.7	8021.8	8030.6	8021.8	8026.2
22.5°	7666.8	7710.7	7767.6	7798.3	7842.1	7868.4	7872.8	7903.5	7925.4	7903.5	7912.3
25°	7487.0	7530.9	7574.8	7640.5	7680.0	7710.7	7741.3	7745.7	7767.6	7763.2	7758.8
27.5°	7189.0	7246.0	7320.4	7373.1	7425.7	7473.9	7509.0	7517.7	7539.7	7530.9	7535.3
30°	6781.3	6842.7	6912.9	6996.1	7070.6	7118.8	7162.7	7193.3	7215.2	7202.1	7197.7
32.5°	6202.7	6264.1	6338.6	6421.8	6509.6	6579.6	6632.3	6671.8	6698.0	6689.2	6667.4
35°	5540.8	5558.3	5606.6	5672.3	5746.8	5821.3	5869.6	5913.3	5944.0	5952.8	5952.8
37.5°	4861.3	4804.4	4769.3	4769.3	4813.1	4843.8	4887.6	4913.9	4962.2	4979.7	4992.8
40°	4203.8	4072.3	3949.6	3857.5	3796.2	3791.8	3791.8	3804.9	3848.7	3905.7	3958.3
42.5°	3616.4	3406.0	3217.5	3046.5	2923.8	2853.7	2823.0	2827.4	2862.5	2915.1	3002.7
45°	3147.4	2884.4	2647.7	2441.6	2275.0	2165.4	2112.9	2108.5	2134.8	2196.1	2292.6
47.5°	2783.6	2503.0	2235.6	1998.9	1819.2	1700.8	1639.4	1621.9	1639.4	1696.4	1810.4
50°	2481.1	2191.8	1915.6	1670.1	1477.3	1354.6	1297.5	1275.6	1297.5	1345.8	1459.7
52.5°	2200.5	1902.4	1643.8	1407.1	1201.1	1095.9	1034.5	1021.3	1034.5	1091.5	1183.6
55°	1876.2	1621.9	1367.6	1130.9	951.3	846.0	797.8	784.7	797.8	850.4	946.9
57.5°	1556.2	1337.0	1113.4	898.6	745.2	653.1	609.3	591.7	622.4	657.5	771.5
60°	1258.0	1082.8	894.2	705.8	578.7	495.3	460.2	455.8	464.6	508.5	587.3
62.5°	986.3	841.7	692.6	539.2	434.0	398.9	355.0	350.7	359.4	385.7	447.2
65°	710.2	618.1	504.1	394.5	311.3	263.0	245.5	249.9	258.6	276.2	333.1
67.5°	495.3	429.6	350.7	276.2	214.8	192.9	175.4	171.0	175.4	206.0	236.7
70°	333.1	293.7	236.7	210.4	149.1	118.3	122.7	109.6	127.1	127.1	153.4
72.5°	219.1	192.9	157.8	122.7	105.2	83.3	83.3	78.9	87.6	92.0	114.0
75°	114.0	87.6	87.6	61.4	43.9	21.9	39.5	35.1	30.7	35.1	43.9
77.5°	78.9	65.7	61.4	48.3	43.9	35.1	35.1	35.1	35.1	39.5	43.9
80°	48.3	48.3	35.1	30.7	26.3	21.9	26.3	26.3	26.3	26.3	30.7
82.5°	30.7	26.3	26.3	21.9	21.9	17.5	17.5	17.5	17.5	17.5	26.3
85°	26.3	17.5	17.5	13.2	17.5	30.7	13.2	17.5	17.5	17.5	13.2
87.5°	8.8	13.2	13.2	13.2	8.8	4.4	8.8	13.2	13.2	21.9	17.5
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: P249313

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5	8166.5
2.5°	8179.7	8184.1	8184.1	8179.7	8179.7	8170.9	8188.4	8175.3	8179.7	8197.2	8184.1
5°	8188.4	8192.8	8192.8	8188.4	8188.4	8188.4	8192.8	8192.8	8188.4	8184.1	8192.8
7.5°	8206.0	8201.6	8201.6	8192.8	8192.8	8184.1	8192.8	8179.7	8188.4	8179.7	8192.8
10°	8184.1	8188.4	8184.1	8179.7	8179.7	8175.3	8175.3	8162.1	8166.5	8153.3	8162.1
12.5°	8170.9	8166.5	8166.5	8157.7	8149.0	8140.2	8135.8	8122.6	8122.6	8092.0	8105.1
15°	8135.8	8140.2	8127.0	8109.5	8100.7	8078.9	8070.1	8052.5	8035.0	8013.1	8017.5
17.5°	8105.1	8092.0	8074.5	8056.9	8021.8	8004.3	7986.7	7960.5	7951.7	7925.4	7916.7
20°	8013.1	8004.3	7982.4	7951.7	7929.8	7890.3	7872.8	7846.5	7824.6	7798.3	7785.1
22.5°	7894.7	7885.9	7859.6	7829.0	7793.9	7776.4	7758.8	7710.7	7688.7	7662.4	7658.0
25°	7745.7	7732.5	7706.3	7671.2	7653.6	7605.4	7587.8	7552.8	7544.1	7517.7	7513.4
27.5°	7517.7	7500.2	7469.5	7425.7	7395.0	7364.3	7346.8	7320.4	7311.8	7285.4	7281.1
30°	7175.9	7153.9	7092.5	7075.0	7022.4	6991.7	6991.7	6956.6	6961.0	6943.5	6943.5
32.5°	6636.7	6601.6	6553.3	6518.3	6483.2	6465.7	6465.7	6452.5	6461.3	6461.3	6470.1
35°	5922.1	5874.0	5847.6	5825.7	5825.7	5843.2	5895.9	5909.0	5935.3	5957.2	5974.8
37.5°	5005.9	5001.6	5032.3	5058.6	5124.3	5198.9	5290.9	5369.9	5444.3	5497.0	5549.5
40°	4015.3	4124.9	4212.5	4335.4	4436.1	4580.8	4747.3	4883.2	5010.3	5102.5	5198.9
42.5°	3134.2	3274.5	3458.6	3638.3	3818.1	4015.3	4234.5	4423.0	4589.6	4716.7	4817.5
45°	2441.6	2634.5	2858.1	3086.0	3318.3	3563.9	3791.8	3984.6	4160.0	4291.5	4392.3
47.5°	1968.2	2178.6	2432.8	2682.7	2945.7	3204.3	3458.6	3625.2	3769.8	3875.0	3967.1
50°	1626.2	1849.9	2117.3	2402.1	2665.1	2923.8	3143.0	3305.1	3423.6	3515.6	3572.5
52.5°	1358.9	1595.6	1880.5	2165.4	2428.4	2665.1	2862.5	2985.2	3081.6	3147.4	3199.9
55°	1122.1	1350.2	1617.6	1884.9	2143.5	2367.1	2529.2	2621.4	2695.8	2735.3	2766.0
57.5°	916.2	1126.5	1372.0	1617.6	1841.1	2025.2	2152.3	2244.4	2279.4	2310.1	2305.7
60°	718.9	916.2	1139.7	1350.2	1543.0	1692.0	1784.1	1836.7	1863.0	1876.2	1867.4
62.5°	565.5	745.2	916.2	1100.3	1240.5	1367.6	1455.4	1455.4	1468.5	1472.9	1486.1
65°	420.8	556.7	705.8	841.7	955.6	1038.9	1087.2	1100.3	1117.8	1113.4	1104.6
67.5°	311.3	412.1	521.6	622.4	701.4	753.9	789.0	819.8	815.4	806.6	802.2
70°	214.8	280.6	377.0	438.4	495.3	548.0	556.7	561.1	565.5	569.9	561.1
72.5°	149.1	197.2	249.9	302.5	337.5	359.4	381.4	385.7	385.7	385.7	381.4
75°	74.5	100.8	149.1	171.0	201.6	210.4	227.9	227.9	241.1	223.5	219.1
77.5°	65.7	78.9	105.2	122.7	135.9	149.1	153.4	166.6	162.2	153.4	157.8
80°	39.5	48.3	65.7	74.5	92.0	96.4	100.8	105.2	100.8	105.2	105.2
82.5°	30.7	35.1	43.9	43.9	57.0	57.0	61.4	61.4	65.7	65.7	65.7
85°	17.5	30.7	26.3	52.6	35.1	35.1	43.9	52.6	43.9	43.9	52.6
87.5°	17.5	17.5	13.2	17.5	17.5	17.5	21.9	26.3	26.3	30.7	26.3
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: P249313

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	8166.5	8166.5	8166.5	8166.5
2.5°	8179.7	8188.4	8175.3	8170.9
5°	8192.8	8192.8	8184.1	8184.1
7.5°	8192.8	8192.8	8179.7	8170.9
10°	8157.7	8157.7	8144.6	8135.8
12.5°	8092.0	8092.0	8087.6	8074.5
15°	8008.7	8008.7	7991.1	7978.0
17.5°	7894.7	7903.5	7881.6	7881.6
20°	7772.0	7767.6	7750.1	7741.3
22.5°	7644.9	7636.1	7631.7	7605.4
25°	7509.0	7500.2	7487.0	7473.9
27.5°	7276.7	7272.3	7259.1	7241.6
30°	6921.6	6917.2	6899.7	6899.7
32.5°	6461.3	6456.9	6439.4	6443.8
35°	5983.5	6001.1	5992.3	5974.8
37.5°	5584.6	5597.8	5606.6	5597.8
40°	5251.4	5290.9	5295.3	5304.1
42.5°	4896.4	4949.0	4966.6	4975.3
45°	4471.1	4519.4	4558.9	4550.1
47.5°	4037.2	4072.3	4107.3	4081.1
50°	3620.8	3642.7	3655.9	3655.9
52.5°	3226.3	3226.3	3221.9	3226.3
55°	2774.8	2774.8	2757.3	2766.0
57.5°	2301.3	2310.1	2296.9	2275.0
60°	1863.0	1841.1	1832.3	1819.2
62.5°	1451.0	1451.0	1420.3	1459.7
65°	1087.2	1074.0	1060.8	1056.4
67.5°	789.0	784.7	771.5	767.1
70°	556.7	539.2	534.8	526.0
72.5°	372.6	372.6	363.8	363.8
75°	227.9	206.0	201.6	206.0
77.5°	157.8	153.4	153.4	149.1
80°	105.2	100.8	109.6	96.4
82.5°	65.7	70.1	65.7	70.1
85°	43.9	52.6	48.3	48.3
87.5°	26.3	26.3	26.3	26.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)