

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: P249304

Luminaire Tested: **LSR8B150D010 EC8B150827 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249304
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 EC8B150827 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15100.0 lumens
Efficiency: N/A
Efficacy: 95.3 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

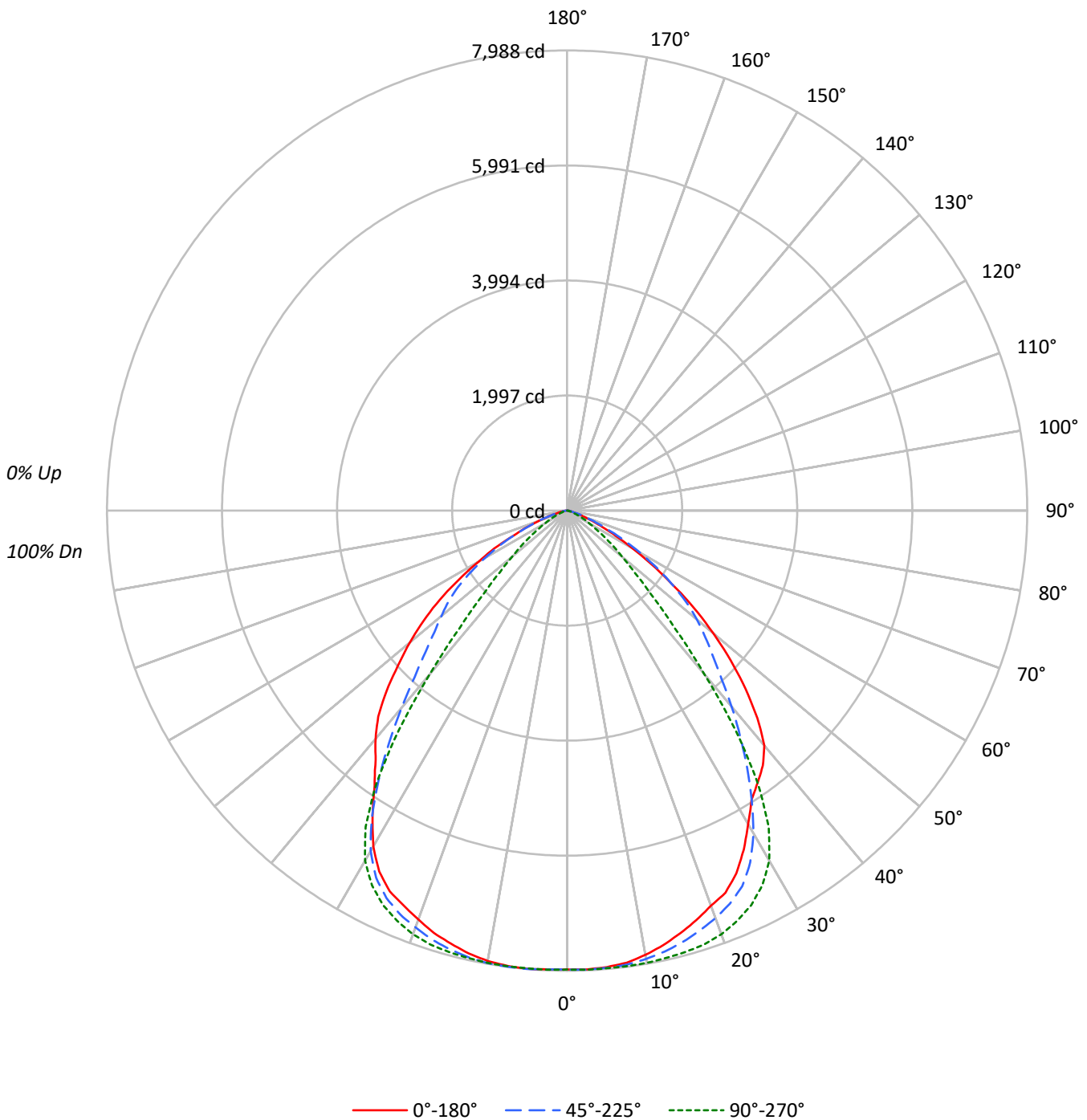
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	245676	245676	245676
5°	246215	246878	247144
10°	245179	249597	248527
15°	242464	253248	248472
20°	239552	256809	247831
25°	236440	257107	248083
30°	223688	249877	239676
35°	217007	217166	219424
40°	214320	149419	208298
45°	190969	89704	193581
50°	158790	59702	171100
55°	119092	41154	145070
60°	80705	27426	109457
65°	48682	17789	75198
70°	26994	9638	46261
75°	12224	4075	23948
80°	10637	4546	16710
85°	12100	6050	16664



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	760.3	5.0
10°-20°	2208.1	14.6
20°-30°	3351.5	22.2
30°-40°	3520.1	23.3
40°-50°	2639.2	17.5
50°-60°	1693.3	11.2
60°-70°	724.4	4.8
70°-80°	171.1	1.1
80°-90°	31.8	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°	6320.0	41.9
0°-40°	9840.1	65.2
0°-60°	14172.6	93.9
0°-90°	15100.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15100.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7967	7967	7967	7967	7967	
5°	7954	7967	7976	7988	7984	756
15°	7595	7753	7933	7882	7783	2142
25°	6949	7193	7557	7420	7291	3175
35°	5765	5444	5769	5700	5829	3618
45°	4379	3579	2057	3477	4439	3354
55°	2215	2215	766	2309	2698	2009
65°	667	787	244	1014	1031	712
75°	103	120	34	205	201	149
85°	34	21	17	34	47	36
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°	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1
2.5°	7971.3	7979.9	7975.6	7975.6	7971.3	7975.6	7975.6	7984.2	7984.2	7975.6	7971.3
5°	7954.2	7962.8	7962.8	7954.2	7954.2	7975.6	7962.8	7971.3	7971.3	7967.1	7967.1
7.5°	7915.8	7915.8	7932.8	7920.1	7920.1	7932.8	7928.6	7937.1	7945.7	7950.0	7950.0
10°	7830.2	7838.8	7843.1	7843.1	7847.3	7860.1	7868.7	7885.9	7894.3	7902.9	7907.2
12.5°	7723.4	7736.1	7740.4	7736.1	7749.0	7766.0	7787.5	7808.8	7821.7	7838.8	7851.6
15°	7595.0	7595.0	7603.5	7616.4	7625.0	7650.6	7672.0	7697.6	7731.8	7753.3	7774.6
17.5°	7453.9	7462.5	7475.3	7475.3	7492.4	7535.1	7548.0	7586.5	7625.0	7646.3	7689.1
20°	7300.0	7308.5	7321.3	7329.9	7351.3	7385.5	7411.1	7445.3	7488.1	7526.6	7569.3
22.5°	7180.2	7163.1	7171.6	7180.2	7201.6	7231.6	7261.5	7304.2	7347.0	7385.5	7428.3
25°	6949.2	6953.5	6966.4	6974.9	7000.6	7026.3	7060.5	7111.7	7150.3	7193.0	7240.0
27.5°	6637.1	6641.4	6662.7	6662.7	6684.1	6726.9	6748.2	6791.0	6842.4	6885.1	6940.8
30°	6282.2	6290.6	6290.6	6307.8	6320.6	6342.0	6363.4	6406.2	6431.8	6470.3	6547.3
32.5°	5957.2	5965.6	5961.4	5957.2	5944.3	5940.0	5935.7	5944.3	5952.9	5965.6	5995.6
35°	5764.7	5743.3	5726.2	5696.3	5662.1	5619.3	5580.8	5529.5	5482.4	5443.9	5401.2
37.5°	5580.8	5576.5	5550.9	5508.1	5439.6	5362.7	5272.9	5161.7	5050.5	4930.8	4815.3
40°	5324.2	5311.3	5290.0	5230.1	5153.1	5059.1	4939.3	4802.5	4622.8	4439.0	4250.8
42.5°	4888.0	4892.3	4866.6	4819.5	4746.9	4657.0	4533.0	4383.4	4191.0	3972.8	3729.1
45°	4379.1	4379.1	4370.5	4332.0	4280.8	4208.0	4114.0	3990.0	3801.8	3579.4	3318.5
47.5°	3848.8	3853.1	3840.2	3831.7	3810.3	3763.3	3694.9	3600.8	3468.2	3254.4	2993.5
50°	3310.0	3310.0	3331.4	3327.1	3327.1	3310.0	3280.1	3224.4	3109.0	2937.9	2694.2
52.5°	2771.1	2779.7	2792.6	2809.6	2831.0	2865.2	2831.0	2805.4	2732.6	2600.1	2390.6
55°	2215.2	2223.8	2245.1	2275.0	2300.8	2335.0	2343.5	2343.5	2305.0	2215.2	2057.0
57.5°	1740.6	1727.7	1744.8	1770.5	1804.7	1838.9	1864.5	1894.5	1890.2	1830.3	1702.0
60°	1308.6	1312.9	1325.7	1351.4	1377.0	1407.0	1441.2	1466.8	1479.7	1449.8	1368.5
62.5°	953.7	953.7	970.7	996.4	1009.2	1052.0	1073.4	1086.2	1099.0	1094.7	1043.5
65°	667.2	675.7	684.2	697.1	709.9	735.5	748.4	774.0	782.6	786.9	748.4
67.5°	470.5	457.6	466.2	474.6	487.5	504.7	530.3	530.3	543.1	543.1	517.4
70°	299.4	299.4	303.7	316.4	325.0	329.3	337.9	346.4	359.2	354.9	354.9
72.5°	201.0	196.7	201.0	205.3	209.6	222.4	222.4	226.6	235.2	239.5	222.4
75°	102.6	106.9	115.4	111.2	124.0	115.4	119.7	132.6	128.3	119.7	119.7
77.5°	85.5	85.5	85.5	81.3	89.8	89.8	85.5	94.1	89.8	89.8	85.5
80°	59.9	64.1	59.9	55.6	59.9	55.6	55.6	55.6	55.6	55.6	51.3
82.5°	47.1	38.5	42.8	38.5	42.8	42.8	38.5	34.2	34.2	38.5	34.2
85°	34.2	25.6	29.9	29.9	25.6	25.6	25.6	25.6	25.6	21.3	21.3
87.5°	21.3	12.9	12.9	12.9	17.1	17.1	17.1	12.9	17.1	17.1	8.6
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°	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1
2.5°	7979.9	7975.6	7984.2	7979.9	7979.9	7975.6	7979.9	7975.6	7984.2	7967.1	7971.3
5°	7979.9	7971.3	7975.6	7979.9	7984.2	7975.6	7975.6	7975.6	7984.2	7975.6	7979.9
7.5°	7962.8	7958.5	7971.3	7979.9	7975.6	7971.3	7979.9	7975.6	7984.2	7979.9	7988.4
10°	7928.6	7932.8	7941.4	7954.2	7958.5	7962.8	7971.3	7971.3	7984.2	7967.1	7975.6
12.5°	7877.3	7894.3	7915.8	7924.3	7941.4	7941.4	7950.0	7954.2	7962.8	7958.5	7971.3
15°	7813.1	7834.5	7860.1	7881.6	7902.9	7915.8	7928.6	7932.8	7945.7	7932.8	7937.1
17.5°	7736.1	7761.8	7800.3	7825.9	7860.1	7873.0	7890.0	7898.6	7911.5	7902.9	7907.2
20°	7629.2	7659.2	7701.9	7740.4	7761.8	7791.7	7813.1	7825.9	7834.5	7825.9	7830.2
22.5°	7479.5	7522.3	7577.9	7607.8	7650.6	7676.3	7680.6	7710.5	7731.8	7710.5	7719.1
25°	7304.2	7347.0	7389.8	7453.9	7492.4	7522.3	7552.3	7556.6	7577.9	7573.6	7569.3
27.5°	7013.4	7069.0	7141.7	7193.0	7244.3	7291.4	7325.6	7334.1	7355.5	7347.0	7351.3
30°	6615.7	6675.6	6744.0	6825.2	6898.0	6945.0	6987.7	7017.7	7039.0	7026.3	7022.0
32.5°	6051.2	6111.1	6183.8	6265.0	6350.6	6418.9	6470.3	6508.8	6534.5	6525.9	6504.5
35°	5405.5	5422.6	5469.7	5533.8	5606.4	5679.1	5726.2	5768.9	5798.8	5807.4	5807.4
37.5°	4742.6	4687.1	4652.8	4652.8	4695.5	4725.5	4768.3	4793.9	4841.0	4858.0	4870.9
40°	4101.1	3972.8	3853.1	3763.3	3703.5	3699.2	3699.2	3711.9	3754.7	3810.3	3861.7
42.5°	3528.1	3322.8	3138.9	2972.1	2852.4	2784.0	2754.1	2758.4	2792.6	2843.9	2929.4
45°	3070.5	2813.9	2583.0	2382.0	2219.5	2112.5	2061.3	2057.0	2082.6	2142.5	2236.6
47.5°	2715.6	2441.8	2181.0	1950.0	1774.8	1659.3	1599.4	1582.3	1599.4	1655.0	1766.2
50°	2420.5	2138.3	1868.8	1629.3	1441.2	1321.5	1265.8	1244.5	1265.8	1312.9	1424.0
52.5°	2146.8	1856.0	1603.7	1372.7	1171.7	1069.1	1009.2	996.4	1009.2	1064.8	1154.7
55°	1830.3	1582.3	1334.2	1103.3	928.0	825.4	778.3	765.5	778.3	829.7	923.7
57.5°	1518.2	1304.3	1086.2	876.7	727.0	637.1	594.4	577.3	607.2	641.4	752.7
60°	1227.3	1056.3	872.4	688.5	564.5	483.2	449.0	444.7	453.3	496.1	573.0
62.5°	962.3	821.1	675.7	526.0	423.4	389.2	346.4	342.2	350.6	376.3	436.2
65°	692.8	603.0	491.8	384.9	303.7	256.6	239.5	243.8	252.3	269.4	325.0
67.5°	483.2	419.1	342.2	269.4	209.6	188.1	171.1	166.8	171.1	201.0	230.9
70°	325.0	286.5	230.9	205.3	145.4	115.4	119.7	106.9	124.0	124.0	149.6
72.5°	213.8	188.1	153.9	119.7	102.6	81.3	81.3	77.0	85.5	89.8	111.2
75°	111.2	85.5	85.5	59.9	42.8	21.3	38.5	34.2	29.9	34.2	42.8
77.5°	77.0	64.1	59.9	47.1	42.8	34.2	34.2	34.2	34.2	38.5	42.8
80°	47.1	47.1	34.2	29.9	25.6	21.3	25.6	25.6	25.6	25.6	29.9
82.5°	29.9	25.6	25.6	21.3	21.3	17.1	17.1	17.1	17.1	17.1	25.6
85°	25.6	17.1	17.1	12.9	17.1	29.9	12.9	17.1	17.1	17.1	12.9
87.5°	8.6	12.9	12.9	12.9	8.6	4.3	8.6	12.9	12.9	21.3	17.1
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°	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1	7967.1
2.5°	7979.9	7984.2	7984.2	7979.9	7979.9	7971.3	7988.4	7975.6	7979.9	7997.0	7984.2
5°	7988.4	7992.7	7992.7	7988.4	7988.4	7988.4	7992.7	7992.7	7988.4	7984.2	7992.7
7.5°	8005.6	8001.3	8001.3	7992.7	7992.7	7984.2	7992.7	7979.9	7988.4	7979.9	7992.7
10°	7984.2	7988.4	7984.2	7979.9	7979.9	7975.6	7975.6	7962.8	7967.1	7954.2	7962.8
12.5°	7971.3	7967.1	7967.1	7958.5	7950.0	7941.4	7937.1	7924.3	7924.3	7894.3	7907.2
15°	7937.1	7941.4	7928.6	7911.5	7902.9	7881.6	7873.0	7855.8	7838.8	7817.4	7821.7
17.5°	7907.2	7894.3	7877.3	7860.1	7825.9	7808.8	7791.7	7766.0	7757.5	7731.8	7723.4
20°	7817.4	7808.8	7787.5	7757.5	7736.1	7697.6	7680.6	7654.9	7633.5	7607.8	7595.0
22.5°	7701.9	7693.3	7667.7	7637.8	7603.5	7586.5	7569.3	7522.3	7500.9	7475.3	7471.0
25°	7556.6	7543.7	7518.1	7483.8	7466.7	7419.7	7402.5	7368.3	7359.8	7334.1	7329.9
27.5°	7334.1	7317.0	7287.1	7244.3	7214.4	7184.5	7167.4	7141.7	7133.2	7107.5	7103.3
30°	7000.6	6979.2	6919.3	6902.3	6850.9	6821.0	6821.0	6786.7	6791.0	6774.0	6774.0
32.5°	6474.6	6440.4	6393.3	6359.1	6324.9	6307.8	6307.8	6294.9	6303.5	6303.5	6312.1
35°	5777.5	5730.5	5704.8	5683.4	5683.4	5700.5	5751.9	5764.7	5790.4	5811.7	5828.9
37.5°	4883.7	4879.5	4909.4	4935.1	4999.2	5071.9	5161.7	5238.7	5311.3	5362.7	5414.0
40°	3917.2	4024.2	4109.7	4229.5	4327.7	4468.9	4631.4	4764.0	4888.0	4977.9	5071.9
42.5°	3057.6	3194.5	3374.2	3549.4	3724.8	3917.2	4131.1	4315.0	4477.5	4601.5	4699.8
45°	2382.0	2570.1	2788.3	3010.7	3237.3	3476.8	3699.2	3887.3	4058.4	4186.7	4285.0
47.5°	1920.1	2125.4	2373.4	2617.2	2873.8	3126.1	3374.2	3536.7	3677.7	3780.4	3870.3
50°	1586.5	1804.7	2065.6	2343.5	2600.1	2852.4	3066.2	3224.4	3339.9	3429.7	3485.3
52.5°	1325.7	1556.6	1834.6	2112.5	2369.1	2600.1	2792.6	2912.3	3006.4	3070.5	3121.8
55°	1094.7	1317.2	1578.0	1838.9	2091.2	2309.3	2467.5	2557.4	2630.0	2668.5	2698.4
57.5°	893.8	1099.0	1338.5	1578.0	1796.1	1975.8	2099.8	2189.6	2223.8	2253.7	2249.4
60°	701.4	893.8	1111.9	1317.2	1505.3	1650.7	1740.6	1791.8	1817.5	1830.3	1821.8
62.5°	551.7	727.0	893.8	1073.4	1210.2	1334.2	1419.8	1419.8	1432.6	1436.9	1449.8
65°	410.5	543.1	688.5	821.1	932.2	1013.5	1060.6	1073.4	1090.5	1086.2	1077.7
67.5°	303.7	402.0	508.9	607.2	684.2	735.5	769.7	799.7	795.5	786.9	782.6
70°	209.6	273.7	367.8	427.7	483.2	534.6	543.1	547.4	551.7	555.9	547.4
72.5°	145.4	192.4	243.8	295.1	329.3	350.6	372.1	376.3	376.3	376.3	372.1
75°	72.7	98.4	145.4	166.8	196.7	205.3	222.4	222.4	235.2	218.1	213.8
77.5°	64.1	77.0	102.6	119.7	132.6	145.4	149.6	162.5	158.2	149.6	153.9
80°	38.5	47.1	64.1	72.7	89.8	94.1	98.4	102.6	98.4	102.6	102.6
82.5°	29.9	34.2	42.8	42.8	55.6	55.6	59.9	59.9	64.1	64.1	64.1
85°	17.1	29.9	25.6	51.3	34.2	34.2	42.8	51.3	42.8	42.8	51.3
87.5°	17.1	17.1	12.9	17.1	17.1	17.1	21.3	25.6	25.6	29.9	25.6
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: P249304

CATALOG NUMBER: LSR8B150D010 EC8B150827 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7967.1	7967.1	7967.1	7967.1
2.5°	7979.9	7988.4	7975.6	7971.3
5°	7992.7	7992.7	7984.2	7984.2
7.5°	7992.7	7992.7	7979.9	7971.3
10°	7958.5	7958.5	7945.7	7937.1
12.5°	7894.3	7894.3	7890.0	7877.3
15°	7813.1	7813.1	7796.0	7783.2
17.5°	7701.9	7710.5	7689.1	7689.1
20°	7582.2	7577.9	7560.8	7552.3
22.5°	7458.2	7449.6	7445.3	7419.7
25°	7325.6	7317.0	7304.2	7291.4
27.5°	7099.0	7094.7	7081.8	7064.8
30°	6752.5	6748.2	6731.2	6731.2
32.5°	6303.5	6299.2	6282.2	6286.5
35°	5837.4	5854.5	5845.9	5828.9
37.5°	5448.2	5461.1	5469.7	5461.1
40°	5123.2	5161.7	5166.0	5174.6
42.5°	4776.8	4828.1	4845.3	4853.8
45°	4362.0	4409.0	4447.5	4439.0
47.5°	3938.6	3972.8	4007.0	3981.4
50°	3532.4	3553.7	3566.6	3566.6
52.5°	3147.5	3147.5	3143.2	3147.5
55°	2707.0	2707.0	2689.9	2698.4
57.5°	2245.1	2253.7	2240.8	2219.5
60°	1817.5	1796.1	1787.5	1774.8
62.5°	1415.5	1415.5	1385.6	1424.0
65°	1060.6	1047.7	1034.9	1030.6
67.5°	769.7	765.5	752.7	748.4
70°	543.1	526.0	521.7	513.1
72.5°	363.5	363.5	354.9	354.9
75°	222.4	201.0	196.7	201.0
77.5°	153.9	149.6	149.6	145.4
80°	102.6	98.4	106.9	94.1
82.5°	64.1	68.4	64.1	68.4
85°	42.8	51.3	47.1	47.1
87.5°	25.6	25.6	25.6	25.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)