

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: P249619

Luminaire Tested: **LSR8B150D010 EC8B150930 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249619  
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 EC8B150930 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13444.2 lumens  
Efficiency: N/A  
Efficacy: 84.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

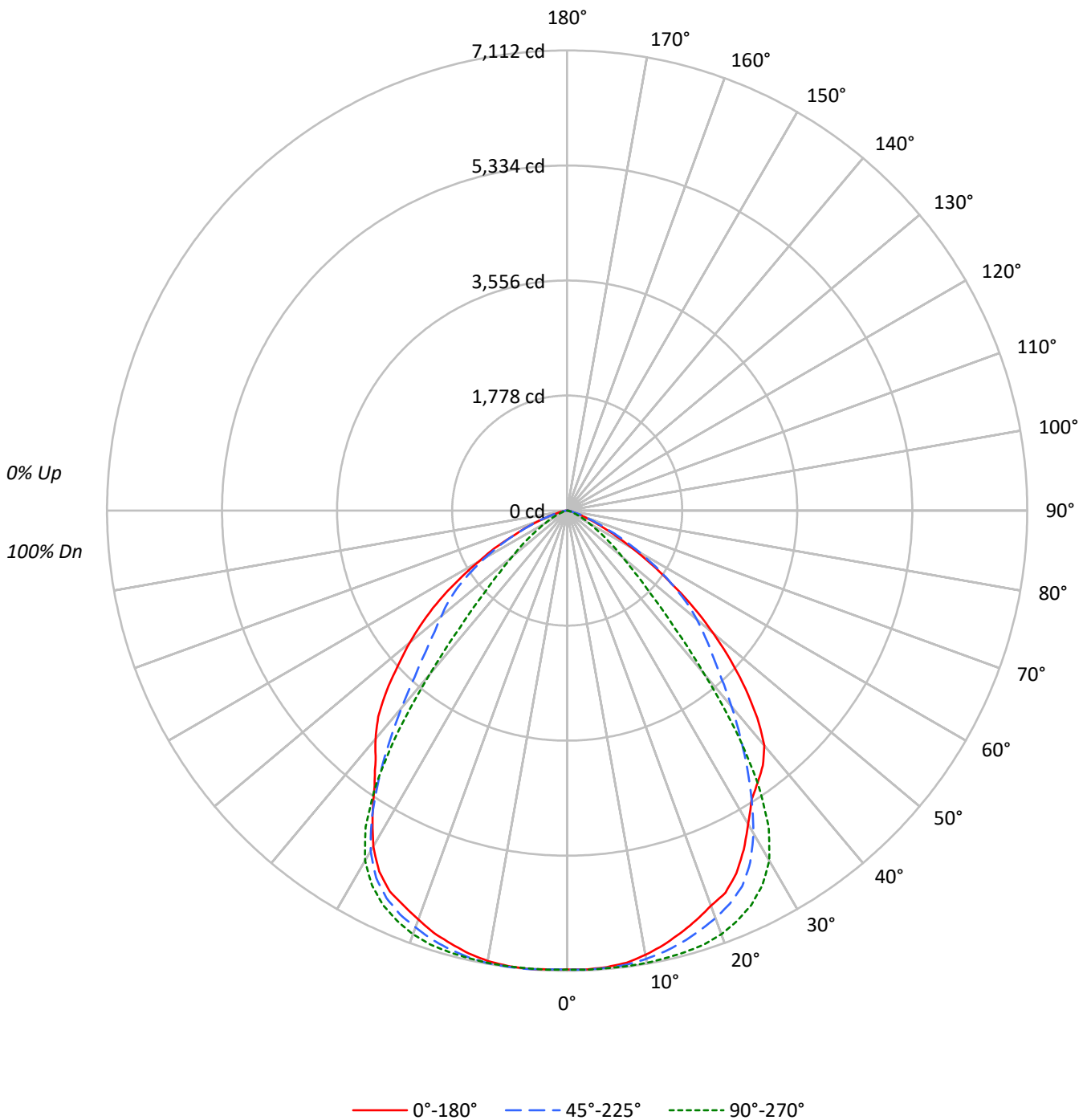
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	677.0	5.0
10°-20°	1966.0	14.6
20°-30°	2984.0	22.2
30°-40°	3134.1	23.3
40°-50°	2349.7	17.5
50°-60°	1507.7	11.2
60°-70°	644.9	4.8
70°-80°	152.4	1.1
80°-90°	28.3	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°	5627.0	41.9
0°-40°	8761.1	65.2
0°-60°	12618.5	93.9
0°-90°	13444.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13444.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7093	7093	7093	7093	7093	
5°	7082	7093	7101	7112	7109	673
15°	6762	6903	7063	7017	6930	1907
25°	6187	6404	6728	6606	6492	2827
35°	5133	4847	5136	5075	5190	3221
45°	3899	3187	1831	3096	3952	2986
55°	1972	1972	682	2056	2402	1789
65°	594	701	217	902	918	634
75°	91	107	30	183	179	133
85°	30	19	15	30	42	32
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°	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4
2.5°	7097.2	7104.9	7101.1	7101.1	7097.2	7101.1	7101.1	7108.7	7108.7	7101.1	7097.2
5°	7081.9	7089.5	7089.5	7081.9	7081.9	7101.1	7089.5	7097.2	7097.2	7093.4	7093.4
7.5°	7047.7	7047.7	7063.0	7051.5	7051.5	7063.0	7059.2	7066.8	7074.4	7078.2	7078.2
10°	6971.5	6979.2	6983.0	6983.0	6986.9	6998.2	7005.8	7021.0	7028.7	7036.3	7040.1
12.5°	6876.4	6887.8	6891.6	6887.8	6899.2	6914.4	6933.5	6952.6	6964.0	6979.2	6990.7
15°	6762.1	6762.1	6769.7	6781.2	6788.9	6811.6	6830.7	6853.5	6883.9	6903.1	6922.1
17.5°	6636.5	6644.2	6655.5	6655.5	6670.8	6708.8	6720.3	6754.6	6788.9	6807.8	6845.9
20°	6499.4	6507.1	6518.5	6526.1	6545.2	6575.6	6598.4	6628.9	6667.0	6701.2	6739.3
22.5°	6392.8	6377.6	6385.2	6392.8	6411.9	6438.6	6465.1	6503.3	6541.3	6575.6	6613.7
25°	6187.2	6191.1	6202.5	6210.0	6233.0	6255.7	6286.2	6331.9	6366.2	6404.3	6446.1
27.5°	5909.2	5913.1	5932.1	5932.1	5951.2	5989.2	6008.2	6046.3	6092.1	6130.1	6179.6
30°	5593.2	5600.9	5600.9	5616.1	5627.4	5646.6	5665.5	5703.6	5726.5	5760.8	5829.3
32.5°	5303.9	5311.4	5307.6	5303.9	5292.5	5288.7	5284.8	5292.5	5300.1	5311.4	5338.1
35°	5132.6	5113.4	5098.3	5071.6	5041.1	5003.1	4968.8	4923.1	4881.2	4847.0	4809.0
37.5°	4968.8	4965.0	4942.2	4904.0	4843.2	4774.7	4694.7	4595.7	4496.7	4390.1	4287.3
40°	4740.4	4728.9	4709.9	4656.6	4588.0	4504.3	4397.7	4275.8	4115.9	3952.2	3784.7
42.5°	4351.9	4355.8	4333.0	4291.1	4226.4	4146.4	4035.9	3902.8	3731.4	3537.2	3320.2
45°	3899.0	3899.0	3891.2	3857.0	3811.3	3746.6	3662.9	3552.4	3385.0	3186.9	2954.6
47.5°	3426.8	3430.6	3419.2	3411.5	3392.5	3350.7	3289.7	3205.9	3087.9	2897.4	2665.2
50°	2947.0	2947.0	2966.1	2962.2	2962.2	2947.0	2920.4	2870.9	2768.1	2615.7	2398.8
52.5°	2467.2	2474.9	2486.4	2501.5	2520.6	2551.1	2520.6	2497.7	2433.0	2315.0	2128.4
55°	1972.3	1979.9	1999.0	2025.5	2048.5	2078.9	2086.5	2086.5	2052.2	1972.3	1831.4
57.5°	1549.7	1538.2	1553.5	1576.4	1606.8	1637.2	1660.1	1686.8	1683.0	1629.6	1515.4
60°	1165.1	1169.0	1180.3	1203.2	1226.0	1252.7	1283.1	1306.0	1317.4	1290.8	1218.4
62.5°	849.0	849.0	864.3	887.2	898.6	936.7	955.7	967.1	978.5	974.7	929.1
65°	594.0	601.5	609.2	620.7	632.0	654.9	666.3	689.1	696.8	700.6	666.3
67.5°	418.9	407.4	415.0	422.6	434.1	449.3	472.2	472.2	483.5	483.5	460.7
70°	266.6	266.6	270.4	281.7	289.3	293.1	300.9	308.4	319.8	316.0	316.0
72.5°	178.9	175.1	178.9	182.8	186.6	198.0	198.0	201.8	209.4	213.2	198.0
75°	91.4	95.2	102.8	99.0	110.4	102.8	106.6	118.0	114.2	106.6	106.6
77.5°	76.1	76.1	76.1	72.4	79.9	79.9	76.1	83.7	79.9	79.9	76.1
80°	53.2	57.1	53.2	49.4	53.2	49.4	49.4	49.4	49.4	49.4	45.6
82.5°	41.9	34.3	38.1	34.3	38.1	38.1	34.3	30.5	30.5	34.3	30.5
85°	30.5	22.9	26.7	26.7	22.9	22.9	22.9	22.9	22.9	19.1	19.1
87.5°	19.1	11.4	11.4	11.4	15.1	15.1	15.1	11.4	15.1	15.1	7.6
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°	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4
2.5°	7104.9	7101.1	7108.7	7104.9	7104.9	7101.1	7104.9	7101.1	7108.7	7093.4	7097.2
5°	7104.9	7097.2	7101.1	7104.9	7108.7	7101.1	7101.1	7101.1	7108.7	7101.1	7104.9
7.5°	7089.5	7085.7	7097.2	7104.9	7101.1	7097.2	7104.9	7101.1	7108.7	7104.9	7112.4
10°	7059.2	7063.0	7070.6	7081.9	7085.7	7089.5	7097.2	7097.2	7108.7	7093.4	7101.1
12.5°	7013.4	7028.7	7047.7	7055.3	7070.6	7070.6	7078.2	7081.9	7089.5	7085.7	7097.2
15°	6956.4	6975.3	6998.2	7017.2	7036.3	7047.7	7059.2	7063.0	7074.4	7063.0	7066.8
17.5°	6887.8	6910.6	6944.9	6967.7	6998.2	7009.6	7024.9	7032.5	7043.9	7036.3	7040.1
20°	6792.6	6819.3	6857.3	6891.6	6910.6	6937.3	6956.4	6967.7	6975.3	6967.7	6971.5
22.5°	6659.3	6697.4	6747.0	6773.5	6811.6	6834.5	6838.3	6865.0	6883.9	6865.0	6872.6
25°	6503.3	6541.3	6579.4	6636.5	6670.8	6697.4	6724.1	6727.9	6747.0	6743.2	6739.3
27.5°	6244.3	6293.9	6358.5	6404.3	6449.9	6491.8	6522.3	6529.8	6549.0	6541.3	6545.2
30°	5890.2	5943.5	6004.5	6076.8	6141.5	6183.3	6221.4	6248.1	6267.2	6255.7	6251.9
32.5°	5387.6	5441.0	5505.7	5578.0	5654.2	5715.1	5760.8	5795.1	5817.9	5810.3	5791.2
35°	4812.8	4827.9	4869.8	4927.0	4991.6	5056.4	5098.3	5136.3	5163.0	5170.6	5170.6
37.5°	4222.6	4173.0	4142.7	4142.7	4180.7	4207.2	4245.3	4268.2	4310.1	4325.3	4336.8
40°	3651.3	3537.2	3430.6	3350.7	3297.3	3293.5	3293.5	3304.9	3343.0	3392.5	3438.2
42.5°	3141.2	2958.4	2794.8	2646.2	2539.6	2478.8	2452.1	2455.9	2486.4	2532.0	2608.1
45°	2733.8	2505.3	2299.7	2120.8	1976.1	1880.9	1835.2	1831.4	1854.2	1907.5	1991.3
47.5°	2417.8	2174.1	1941.8	1736.2	1580.2	1477.3	1424.0	1408.9	1424.0	1473.4	1572.5
50°	2155.0	1903.8	1663.9	1450.7	1283.1	1176.6	1127.1	1108.0	1127.1	1169.0	1267.9
52.5°	1911.3	1652.5	1427.8	1222.2	1043.2	951.8	898.6	887.2	898.6	948.0	1028.1
55°	1629.6	1408.9	1187.9	982.3	826.3	734.9	693.0	681.6	693.0	738.7	822.5
57.5°	1351.7	1161.2	967.1	780.6	647.3	567.2	529.2	514.0	540.7	571.1	670.1
60°	1092.8	940.5	776.7	613.0	502.7	430.2	399.7	395.9	403.6	441.7	510.2
62.5°	856.8	731.0	601.5	468.4	377.0	346.5	308.4	304.7	312.2	335.1	388.4
65°	616.9	536.8	437.9	342.7	270.4	228.5	213.2	217.0	224.6	239.9	289.3
67.5°	430.2	373.1	304.7	239.9	186.6	167.5	152.3	148.5	152.3	178.9	205.6
70°	289.3	255.0	205.6	182.8	129.5	102.8	106.6	95.2	110.4	110.4	133.2
72.5°	190.3	167.5	137.1	106.6	91.4	72.4	72.4	68.6	76.1	79.9	99.0
75°	99.0	76.1	76.1	53.2	38.1	19.1	34.3	30.5	26.7	30.5	38.1
77.5°	68.6	57.1	53.2	41.9	38.1	30.5	30.5	30.5	30.5	34.3	38.1
80°	41.9	41.9	30.5	26.7	22.9	19.1	22.9	22.9	22.9	22.9	26.7
82.5°	26.7	22.9	22.9	19.1	19.1	15.1	15.1	15.1	15.1	15.1	22.9
85°	22.9	15.1	15.1	11.4	15.1	26.7	11.4	15.1	15.1	15.1	11.4
87.5°	7.6	11.4	11.4	11.4	7.6	3.8	7.6	11.4	11.4	19.1	15.1
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°	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4	7093.4
2.5°	7104.9	7108.7	7108.7	7104.9	7104.9	7097.2	7112.4	7101.1	7104.9	7120.0	7108.7
5°	7112.4	7116.2	7116.2	7112.4	7112.4	7112.4	7116.2	7116.2	7112.4	7108.7	7116.2
7.5°	7127.7	7123.8	7123.8	7116.2	7116.2	7108.7	7116.2	7104.9	7112.4	7104.9	7116.2
10°	7108.7	7112.4	7108.7	7104.9	7104.9	7101.1	7101.1	7089.5	7093.4	7081.9	7089.5
12.5°	7097.2	7093.4	7093.4	7085.7	7078.2	7070.6	7066.8	7055.3	7055.3	7028.7	7040.1
15°	7066.8	7070.6	7059.2	7043.9	7036.3	7017.2	7009.6	6994.4	6979.2	6960.2	6964.0
17.5°	7040.1	7028.7	7013.4	6998.2	6967.7	6952.6	6937.3	6914.4	6906.8	6883.9	6876.4
20°	6960.2	6952.6	6933.5	6906.8	6887.8	6853.5	6838.3	6815.5	6796.4	6773.5	6762.1
22.5°	6857.3	6849.6	6826.9	6800.2	6769.7	6754.6	6739.3	6697.4	6678.4	6655.5	6651.7
25°	6727.9	6716.5	6693.6	6663.2	6647.9	6606.1	6590.8	6560.3	6552.8	6529.8	6526.1
27.5°	6529.8	6514.7	6488.0	6449.9	6423.2	6396.7	6381.4	6358.5	6351.0	6328.0	6324.3
30°	6233.0	6213.8	6160.6	6145.3	6099.6	6073.0	6073.0	6042.5	6046.3	6031.1	6031.1
32.5°	5764.6	5734.1	5692.2	5661.7	5631.3	5616.1	5616.1	5604.7	5612.3	5612.3	5619.9
35°	5143.9	5102.1	5079.3	5060.2	5060.2	5075.3	5121.2	5132.6	5155.4	5174.4	5189.7
37.5°	4348.1	4344.4	4371.0	4393.9	4451.0	4515.7	4595.7	4664.3	4728.9	4774.7	4820.3
40°	3487.7	3582.9	3659.1	3765.7	3853.2	3978.9	4123.5	4241.5	4351.9	4432.0	4515.7
42.5°	2722.3	2844.2	3004.2	3160.2	3316.4	3487.7	3678.1	3841.8	3986.5	4096.9	4184.5
45°	2120.8	2288.3	2482.6	2680.5	2882.3	3095.5	3293.5	3461.1	3613.3	3727.5	3815.1
47.5°	1709.5	1892.4	2113.2	2330.2	2558.7	2783.2	3004.2	3148.9	3274.4	3365.8	3445.8
50°	1412.6	1606.8	1839.0	2086.5	2315.0	2539.6	2730.0	2870.9	2973.7	3053.6	3103.2
52.5°	1180.3	1385.9	1633.4	1880.9	2109.3	2315.0	2486.4	2593.0	2676.7	2733.8	2779.4
55°	974.7	1172.8	1404.9	1637.2	1861.9	2056.0	2196.9	2277.0	2341.5	2375.8	2402.5
57.5°	795.8	978.5	1191.7	1404.9	1599.1	1759.1	1869.5	1949.4	1979.9	2006.6	2002.8
60°	624.5	795.8	990.0	1172.8	1340.3	1469.6	1549.7	1595.3	1618.2	1629.6	1622.0
62.5°	491.1	647.3	795.8	955.7	1077.5	1187.9	1264.2	1264.2	1275.5	1279.3	1290.8
65°	365.4	483.5	613.0	731.0	830.0	902.4	944.3	955.7	970.9	967.1	959.5
67.5°	270.4	357.9	453.1	540.7	609.2	654.9	685.3	712.1	708.2	700.6	696.8
70°	186.6	243.7	327.4	380.8	430.2	476.0	483.5	487.3	491.1	495.0	487.3
72.5°	129.5	171.3	217.0	262.8	293.1	312.2	331.3	335.1	335.1	335.1	331.3
75°	64.8	87.6	129.5	148.5	175.1	182.8	198.0	198.0	209.4	194.2	190.3
77.5°	57.1	68.6	91.4	106.6	118.0	129.5	133.2	144.7	140.9	133.2	137.1
80°	34.3	41.9	57.1	64.8	79.9	83.7	87.6	91.4	87.6	91.4	91.4
82.5°	26.7	30.5	38.1	38.1	49.4	49.4	53.2	53.2	57.1	57.1	57.1
85°	15.1	26.7	22.9	45.6	30.5	30.5	38.1	45.6	38.1	38.1	45.6
87.5°	15.1	15.1	11.4	15.1	15.1	15.1	19.1	22.9	22.9	26.7	22.9
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: P249619

CATALOG NUMBER: LSR8B150D010 EC8B150930 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	7093.4	7093.4	7093.4	7093.4
2.5°	7104.9	7112.4	7101.1	7097.2
5°	7116.2	7116.2	7108.7	7108.7
7.5°	7116.2	7116.2	7104.9	7097.2
10°	7085.7	7085.7	7074.4	7066.8
12.5°	7028.7	7028.7	7024.9	7013.4
15°	6956.4	6956.4	6941.1	6929.7
17.5°	6857.3	6865.0	6845.9	6845.9
20°	6750.8	6747.0	6731.7	6724.1
22.5°	6640.4	6632.7	6628.9	6606.1
25°	6522.3	6514.7	6503.3	6491.8
27.5°	6320.5	6316.7	6305.3	6290.0
30°	6012.0	6008.2	5993.1	5993.1
32.5°	5612.3	5608.5	5593.2	5597.0
35°	5197.3	5212.5	5204.9	5189.7
37.5°	4850.8	4862.2	4869.8	4862.2
40°	4561.3	4595.7	4599.5	4607.1
42.5°	4253.1	4298.7	4313.9	4321.5
45°	3883.6	3925.5	3959.8	3952.2
47.5°	3506.7	3537.2	3567.6	3544.8
50°	3145.1	3164.0	3175.5	3175.5
52.5°	2802.4	2802.4	2798.6	2802.4
55°	2410.2	2410.2	2395.0	2402.5
57.5°	1999.0	2006.6	1995.2	1976.1
60°	1618.2	1599.1	1591.5	1580.2
62.5°	1260.3	1260.3	1233.7	1267.9
65°	944.3	932.9	921.3	917.5
67.5°	685.3	681.6	670.1	666.3
70°	483.5	468.4	464.5	456.9
72.5°	323.6	323.6	316.0	316.0
75°	198.0	178.9	175.1	178.9
77.5°	137.1	133.2	133.2	129.5
80°	91.4	87.6	95.2	83.7
82.5°	57.1	61.0	57.1	61.0
85°	38.1	45.6	41.9	41.9
87.5°	22.9	22.9	22.9	22.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)