

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: P249403

Luminaire Tested: **LSR8B150D010 EC8B150930 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249403  
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 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13291.7 lumens  
Efficiency: N/A  
Efficacy: 83.9 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

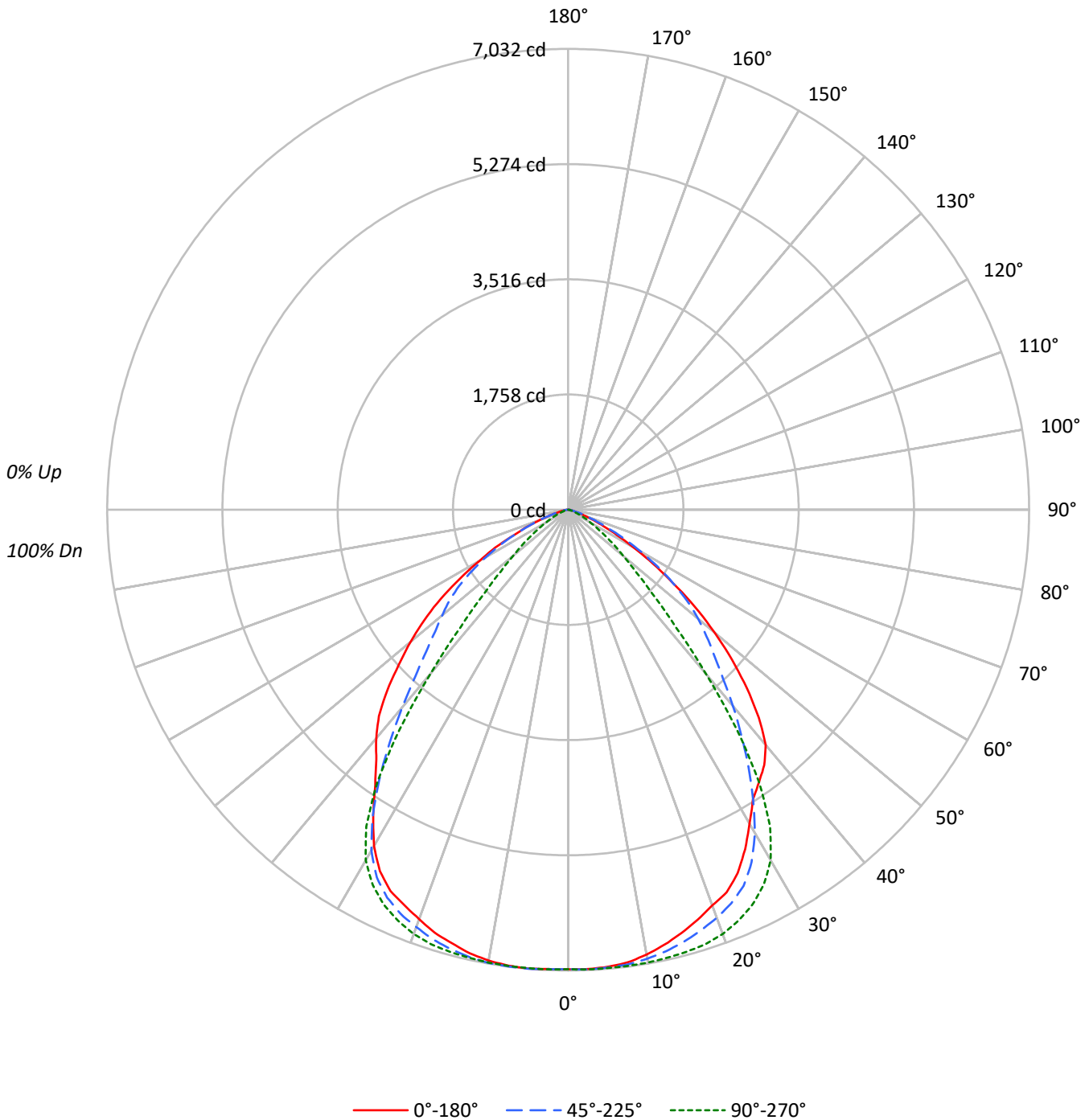
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	669.3	5.0
10°-20°	1943.7	14.6
20°-30°	2950.2	22.2
30°-40°	3098.6	23.3
40°-50°	2323.1	17.5
50°-60°	1490.5	11.2
60°-70°	637.6	4.8
70°-80°	150.6	1.1
80°-90°	28.0	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°	5563.2	41.9
0°-40°	8661.7	65.2
0°-60°	12475.4	93.9
0°-90°	13291.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13291.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7013	7013	7013	7013	7013	
5°	7002	7013	7020	7032	7028	665
15°	6685	6825	6983	6938	6851	1886
25°	6117	6332	6652	6531	6418	2795
35°	5074	4792	5078	5018	5131	3185
45°	3855	3151	1811	3060	3907	2952
55°	1950	1950	674	2033	2375	1769
65°	587	693	215	892	907	627
75°	90	105	30	181	177	132
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°	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0
2.5°	7016.8	7024.3	7020.5	7020.5	7016.8	7020.5	7020.5	7028.1	7028.1	7020.5	7016.8
5°	7001.7	7009.2	7009.2	7001.7	7001.7	7020.5	7009.2	7016.8	7016.8	7013.0	7013.0
7.5°	6967.8	6967.8	6982.8	6971.6	6971.6	6982.8	6979.1	6986.6	6994.1	6998.0	6998.0
10°	6892.5	6900.1	6903.8	6903.8	6907.6	6918.8	6926.4	6941.5	6949.0	6956.5	6960.3
12.5°	6798.4	6809.6	6813.4	6809.6	6821.1	6836.0	6854.9	6873.7	6885.1	6900.1	6911.4
15°	6685.4	6685.4	6692.9	6704.3	6711.9	6734.4	6753.2	6775.8	6805.9	6824.8	6843.6
17.5°	6561.2	6568.8	6580.0	6580.0	6595.2	6632.7	6644.1	6677.9	6711.9	6730.6	6768.4
20°	6425.8	6433.2	6444.5	6452.1	6470.9	6501.0	6523.5	6553.7	6591.4	6625.3	6662.9
22.5°	6320.3	6305.3	6312.8	6320.3	6339.1	6365.5	6391.8	6429.5	6467.2	6501.0	6538.7
25°	6117.1	6120.8	6132.1	6139.6	6162.2	6184.8	6214.9	6260.1	6294.0	6331.6	6373.0
27.5°	5842.3	5846.0	5864.8	5864.8	5883.7	5921.3	5940.1	5977.7	6023.0	6060.6	6109.6
30°	5529.9	5537.3	5537.3	5552.4	5563.6	5582.6	5601.3	5639.0	5661.6	5695.5	5763.3
32.5°	5243.8	5251.2	5247.4	5243.8	5232.4	5228.7	5224.9	5232.4	5240.0	5251.2	5277.6
35°	5074.4	5055.5	5040.5	5014.1	4984.0	4946.3	4912.4	4867.3	4825.9	4791.9	4754.4
37.5°	4912.4	4908.6	4886.1	4848.4	4788.2	4720.5	4641.5	4543.5	4445.7	4340.3	4238.7
40°	4686.6	4675.2	4656.5	4603.8	4536.0	4453.2	4347.8	4227.4	4069.2	3907.4	3741.8
42.5°	4302.6	4306.4	4283.8	4242.4	4178.4	4099.4	3990.2	3858.5	3689.1	3497.1	3282.5
45°	3854.7	3854.7	3847.2	3813.2	3768.1	3704.1	3621.3	3512.1	3346.5	3150.7	2921.1
47.5°	3387.9	3391.7	3380.4	3372.9	3354.0	3312.7	3252.4	3169.6	3052.9	2864.6	2635.0
50°	2913.6	2913.6	2932.4	2928.6	2928.6	2913.6	2887.2	2838.3	2736.7	2586.1	2371.6
52.5°	2439.3	2446.8	2458.1	2473.2	2492.0	2522.1	2492.0	2469.5	2405.3	2288.6	2104.2
55°	1949.9	1957.5	1976.2	2002.6	2025.2	2055.4	2062.9	2062.9	2028.9	1949.9	1810.6
57.5°	1532.1	1520.7	1535.9	1558.4	1588.6	1618.7	1641.3	1667.6	1663.8	1611.1	1498.2
60°	1151.9	1155.6	1167.0	1189.6	1212.1	1238.5	1268.6	1291.2	1302.5	1276.1	1204.6
62.5°	839.5	839.5	854.4	877.1	888.4	926.1	944.9	956.2	967.4	963.6	918.5
65°	587.3	594.7	602.3	613.6	624.8	647.4	658.7	681.3	688.9	692.7	658.7
67.5°	414.1	402.8	410.3	417.8	429.1	444.3	466.8	466.8	478.0	478.0	455.5
70°	263.5	263.5	267.2	278.6	286.1	289.9	297.4	304.9	316.2	312.4	312.4
72.5°	176.9	173.2	176.9	180.7	184.5	195.7	195.7	199.5	207.0	210.9	195.7
75°	90.4	94.2	101.6	97.9	109.2	101.6	105.4	116.7	112.9	105.4	105.4
77.5°	75.2	75.2	75.2	71.5	79.0	79.0	75.2	82.8	79.0	79.0	75.2
80°	52.7	56.5	52.7	48.9	52.7	48.9	48.9	48.9	48.9	48.9	45.2
82.5°	41.5	33.9	37.7	33.9	37.7	37.7	33.9	30.2	30.2	33.9	30.2
85°	30.2	22.5	26.3	26.3	22.5	22.5	22.5	22.5	22.5	18.8	18.8
87.5°	18.8	11.3	11.3	11.3	15.0	15.0	15.0	11.3	15.0	15.0	7.5
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°	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0
2.5°	7024.3	7020.5	7028.1	7024.3	7024.3	7020.5	7024.3	7020.5	7028.1	7013.0	7016.8
5°	7024.3	7016.8	7020.5	7024.3	7028.1	7020.5	7020.5	7020.5	7028.1	7020.5	7024.3
7.5°	7009.2	7005.5	7016.8	7024.3	7020.5	7016.8	7024.3	7020.5	7028.1	7024.3	7031.7
10°	6979.1	6982.8	6990.4	7001.7	7005.5	7009.2	7016.8	7016.8	7028.1	7013.0	7020.5
12.5°	6933.9	6949.0	6967.8	6975.3	6990.4	6990.4	6998.0	7001.7	7009.2	7005.5	7016.8
15°	6877.4	6896.3	6918.8	6937.8	6956.5	6967.8	6979.1	6982.8	6994.1	6982.8	6986.6
17.5°	6809.6	6832.3	6866.1	6888.7	6918.8	6930.1	6945.2	6952.8	6964.1	6956.5	6960.3
20°	6715.6	6742.0	6779.6	6813.4	6832.3	6858.6	6877.4	6888.7	6896.3	6888.7	6892.5
22.5°	6583.9	6621.5	6670.4	6696.7	6734.4	6756.9	6760.8	6787.1	6805.9	6787.1	6794.7
25°	6429.5	6467.2	6504.8	6561.2	6595.2	6621.5	6647.9	6651.7	6670.4	6666.6	6662.9
27.5°	6173.5	6222.4	6286.5	6331.6	6376.8	6418.2	6448.3	6455.8	6474.7	6467.2	6470.9
30°	5823.4	5876.2	5936.4	6007.9	6071.9	6113.3	6150.9	6177.3	6196.1	6184.8	6181.1
32.5°	5326.5	5379.2	5443.2	5514.8	5590.1	5650.3	5695.5	5729.3	5752.0	5744.3	5725.6
35°	4758.2	4773.2	4814.6	4871.1	4935.0	4999.0	5040.5	5078.0	5104.4	5112.0	5112.0
37.5°	4174.7	4125.7	4095.7	4095.7	4133.2	4159.6	4197.2	4219.8	4261.3	4276.3	4287.6
40°	3610.0	3497.1	3391.7	3312.7	3260.0	3256.2	3256.2	3267.4	3305.0	3354.0	3399.2
42.5°	3105.6	2924.9	2763.0	2616.2	2510.8	2450.6	2424.3	2428.1	2458.1	2503.3	2578.5
45°	2702.8	2477.0	2273.7	2096.7	1953.7	1859.5	1814.5	1810.6	1833.2	1885.9	1968.8
47.5°	2390.4	2149.4	1919.8	1716.5	1562.2	1460.6	1407.9	1392.8	1407.9	1456.7	1554.7
50°	2130.6	1882.2	1645.1	1434.2	1268.6	1163.3	1114.3	1095.4	1114.3	1155.6	1253.5
52.5°	1889.7	1633.7	1411.7	1208.3	1031.4	941.1	888.4	877.1	888.4	937.3	1016.4
55°	1611.1	1392.8	1174.5	971.2	816.9	726.5	685.0	673.8	685.0	730.3	813.2
57.5°	1336.3	1148.1	956.2	771.7	640.0	560.8	523.3	508.1	534.5	564.6	662.5
60°	1080.3	929.9	767.9	606.0	496.9	425.3	395.3	391.5	399.0	436.6	504.3
62.5°	847.0	722.8	594.7	463.0	372.6	342.6	304.9	301.2	308.6	331.3	383.9
65°	609.8	530.8	432.9	338.8	267.2	225.9	210.9	214.6	222.1	237.2	286.1
67.5°	425.3	368.9	301.2	237.2	184.5	165.6	150.6	146.9	150.6	176.9	203.2
70°	286.1	252.2	203.2	180.7	128.0	101.6	105.4	94.2	109.2	109.2	131.7
72.5°	188.2	165.6	135.5	105.4	90.4	71.5	71.5	67.8	75.2	79.0	97.9
75°	97.9	75.2	75.2	52.7	37.7	18.8	33.9	30.2	26.3	30.2	37.7
77.5°	67.8	56.5	52.7	41.5	37.7	30.2	30.2	30.2	30.2	33.9	37.7
80°	41.5	41.5	30.2	26.3	22.5	18.8	22.5	22.5	22.5	22.5	26.3
82.5°	26.3	22.5	22.5	18.8	18.8	15.0	15.0	15.0	15.0	15.0	22.5
85°	22.5	15.0	15.0	11.3	15.0	26.3	11.3	15.0	15.0	15.0	11.3
87.5°	7.5	11.3	11.3	11.3	7.5	3.8	7.5	11.3	11.3	18.8	15.0
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°	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0	7013.0
2.5°	7024.3	7028.1	7028.1	7024.3	7024.3	7016.8	7031.7	7020.5	7024.3	7039.3	7028.1
5°	7031.7	7035.5	7035.5	7031.7	7031.7	7031.7	7035.5	7035.5	7031.7	7028.1	7035.5
7.5°	7046.8	7043.1	7043.1	7035.5	7035.5	7028.1	7035.5	7024.3	7031.7	7024.3	7035.5
10°	7028.1	7031.7	7028.1	7024.3	7024.3	7020.5	7020.5	7009.2	7013.0	7001.7	7009.2
12.5°	7016.8	7013.0	7013.0	7005.5	6998.0	6990.4	6986.6	6975.3	6975.3	6949.0	6960.3
15°	6986.6	6990.4	6979.1	6964.1	6956.5	6937.8	6930.1	6915.0	6900.1	6881.3	6885.1
17.5°	6960.3	6949.0	6933.9	6918.8	6888.7	6873.7	6858.6	6836.0	6828.5	6805.9	6798.4
20°	6881.3	6873.7	6854.9	6828.5	6809.6	6775.8	6760.8	6738.2	6719.3	6696.7	6685.4
22.5°	6779.6	6772.0	6749.4	6723.1	6692.9	6677.9	6662.9	6621.5	6602.6	6580.0	6576.2
25°	6651.7	6640.2	6617.7	6587.6	6572.5	6531.2	6516.0	6485.9	6478.5	6455.8	6452.1
27.5°	6455.8	6440.8	6414.5	6376.8	6350.5	6324.1	6309.1	6286.5	6278.9	6256.3	6252.6
30°	6162.2	6143.4	6090.7	6075.7	6030.4	6004.1	6004.1	5974.0	5977.7	5962.7	5962.7
32.5°	5699.3	5669.1	5627.6	5597.6	5567.4	5552.4	5552.4	5541.1	5548.6	5548.6	5556.2
35°	5085.6	5044.3	5021.6	5002.8	5002.8	5017.8	5063.0	5074.4	5097.0	5115.7	5130.8
37.5°	4298.8	4295.1	4321.5	4344.1	4400.5	4464.5	4543.5	4611.3	4675.2	4720.5	4765.6
40°	3448.1	3542.2	3617.5	3723.0	3809.5	3933.7	4076.7	4193.4	4302.6	4381.8	4464.5
42.5°	2691.5	2811.9	2970.1	3124.3	3278.7	3448.1	3636.4	3798.3	3941.3	4050.4	4137.1
45°	2096.7	2262.3	2454.4	2650.2	2849.6	3060.4	3256.2	3421.7	3572.4	3685.3	3771.9
47.5°	1690.1	1870.8	2089.2	2303.8	2529.6	2751.7	2970.1	3113.1	3237.3	3327.7	3406.7
50°	1396.5	1588.6	1818.1	2062.9	2288.6	2510.8	2699.0	2838.3	2939.9	3019.0	3068.0
52.5°	1167.0	1370.2	1614.9	1859.5	2085.4	2288.6	2458.1	2563.5	2646.3	2702.8	2747.9
55°	963.6	1159.5	1389.0	1618.7	1840.8	2032.7	2171.9	2251.1	2315.0	2348.9	2375.3
57.5°	786.8	967.4	1178.3	1389.0	1581.1	1739.1	1848.3	1927.3	1957.5	1983.8	1980.0
60°	617.4	786.8	978.7	1159.5	1325.0	1453.0	1532.1	1577.2	1599.8	1611.1	1603.6
62.5°	485.6	640.0	786.8	944.9	1065.3	1174.5	1249.8	1249.8	1261.0	1264.8	1276.1
65°	361.3	478.0	606.0	722.8	820.6	892.2	933.6	944.9	959.9	956.2	948.6
67.5°	267.2	353.9	448.0	534.5	602.3	647.4	677.5	704.0	700.2	692.7	688.9
70°	184.5	240.9	323.7	376.4	425.3	470.6	478.0	481.8	485.6	489.3	481.8
72.5°	128.0	169.4	214.6	259.7	289.9	308.6	327.6	331.3	331.3	331.3	327.6
75°	64.0	86.5	128.0	146.9	173.2	180.7	195.7	195.7	207.0	191.9	188.2
77.5°	56.5	67.8	90.4	105.4	116.7	128.0	131.7	143.0	139.2	131.7	135.5
80°	33.9	41.5	56.5	64.0	79.0	82.8	86.5	90.4	86.5	90.4	90.4
82.5°	26.3	30.2	37.7	37.7	48.9	48.9	52.7	52.7	56.5	56.5	56.5
85°	15.0	26.3	22.5	45.2	30.2	30.2	37.7	45.2	37.7	37.7	45.2
87.5°	15.0	15.0	11.3	15.0	15.0	15.0	18.8	22.5	22.5	26.3	22.5
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: P249403

CATALOG NUMBER: LSR8B150D010 EC8B150930 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	7013.0	7013.0	7013.0	7013.0
2.5°	7024.3	7031.7	7020.5	7016.8
5°	7035.5	7035.5	7028.1	7028.1
7.5°	7035.5	7035.5	7024.3	7016.8
10°	7005.5	7005.5	6994.1	6986.6
12.5°	6949.0	6949.0	6945.2	6933.9
15°	6877.4	6877.4	6862.3	6851.1
17.5°	6779.6	6787.1	6768.4	6768.4
20°	6674.2	6670.4	6655.4	6647.9
22.5°	6565.0	6557.5	6553.7	6531.2
25°	6448.3	6440.8	6429.5	6418.2
27.5°	6248.8	6245.1	6233.8	6218.7
30°	5943.9	5940.1	5925.0	5925.0
32.5°	5548.6	5544.9	5529.9	5533.6
35°	5138.3	5153.3	5145.8	5130.8
37.5°	4795.8	4807.1	4814.6	4807.1
40°	4509.7	4543.5	4547.3	4554.8
42.5°	4204.8	4249.9	4265.1	4272.5
45°	3839.5	3881.0	3915.0	3907.4
47.5°	3466.9	3497.1	3527.1	3504.6
50°	3109.3	3128.2	3139.5	3139.5
52.5°	2770.6	2770.6	2766.9	2770.6
55°	2382.8	2382.8	2367.8	2375.3
57.5°	1976.2	1983.8	1972.5	1953.7
60°	1599.8	1581.1	1573.4	1562.2
62.5°	1246.0	1246.0	1219.6	1253.5
65°	933.6	922.2	910.9	907.1
67.5°	677.5	673.8	662.5	658.7
70°	478.0	463.0	459.3	451.7
72.5°	319.9	319.9	312.4	312.4
75°	195.7	176.9	173.2	176.9
77.5°	135.5	131.7	131.7	128.0
80°	90.4	86.5	94.2	82.8
82.5°	56.5	60.2	56.5	60.2
85°	37.7	45.2	41.5	41.5
87.5°	22.5	22.5	22.5	22.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)