

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 EC8B1509730 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 EC8B1509730 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: 11857.0 lumens
Efficiency: N/A
Efficacy: 74.8 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

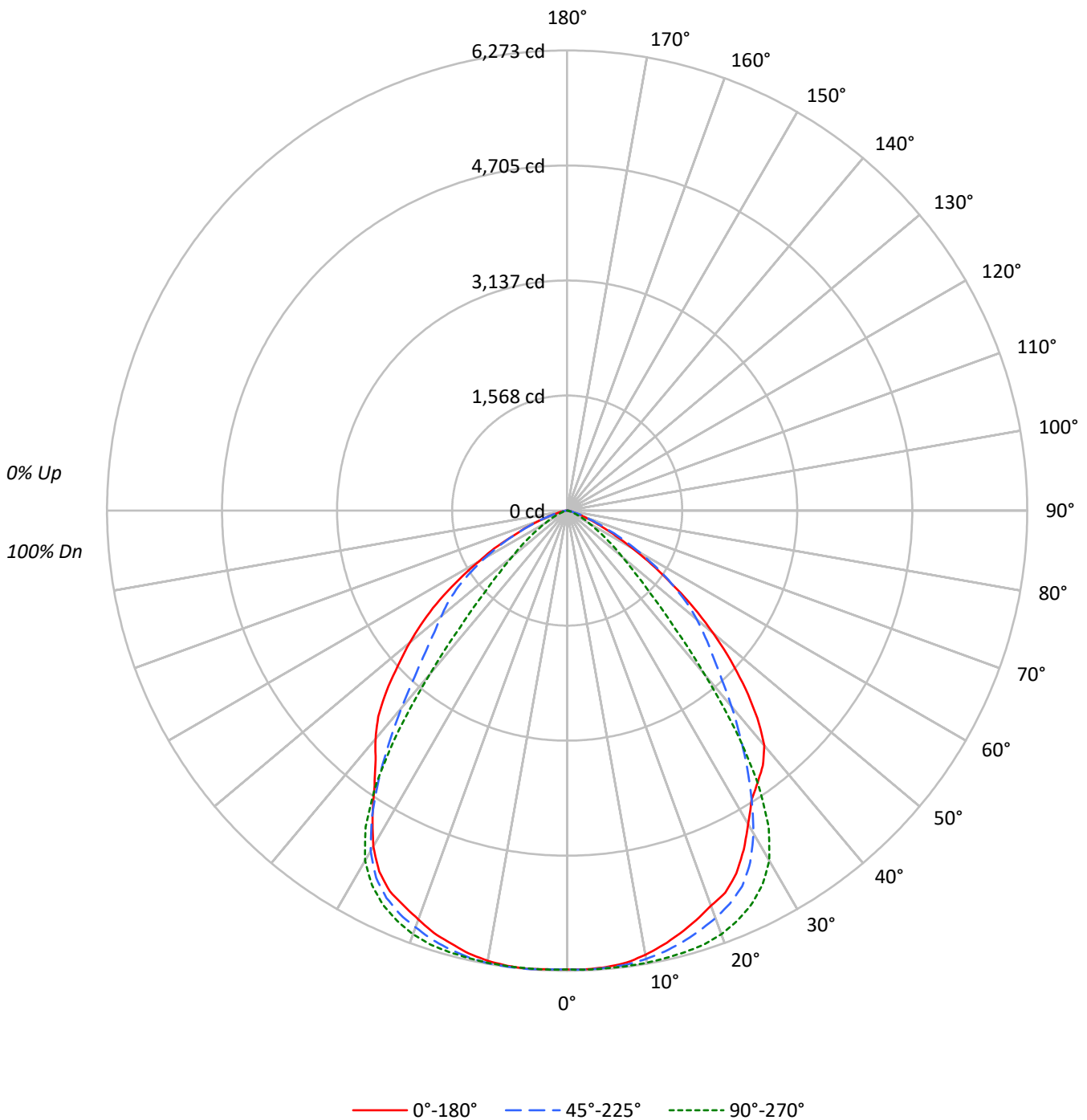
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	597.0	5.0
10°-20°	1733.9	14.6
20°-30°	2631.7	22.2
30°-40°	2764.1	23.3
40°-50°	2072.3	17.5
50°-60°	1329.7	11.2
60°-70°	568.8	4.8
70°-80°	134.4	1.1
80°-90°	25.0	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°	4962.7	41.9
0°-40°	7726.8	65.2
0°-60°	11128.8	93.9
0°-90°	11857.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11857.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6256	6256	6256	6256	6256	
5°	6246	6256	6263	6273	6270	593
15°	5964	6088	6229	6189	6112	1682
25°	5457	5648	5934	5826	5725	2493
35°	4527	4275	4530	4476	4577	2841
45°	3439	2811	1615	2730	3486	2633
55°	1739	1739	601	1813	2119	1578
65°	524	618	191	796	809	559
75°	81	94	27	161	158	117
85°	27	17	13	27	37	28
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°	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0
2.5°	6259.4	6266.1	6262.7	6262.7	6259.4	6262.7	6262.7	6269.5	6269.5	6262.7	6259.4
5°	6245.9	6252.6	6252.6	6245.9	6245.9	6262.7	6252.6	6259.4	6259.4	6256.0	6256.0
7.5°	6215.7	6215.7	6229.1	6219.1	6219.1	6229.1	6225.8	6232.5	6239.2	6242.6	6242.6
10°	6148.5	6155.3	6158.6	6158.6	6162.0	6172.0	6178.8	6192.2	6198.9	6205.6	6209.0
12.5°	6064.6	6074.6	6078.0	6074.6	6084.8	6098.1	6115.0	6131.8	6141.9	6155.3	6165.4
15°	5963.8	5963.8	5970.5	5980.6	5987.4	6007.5	6024.3	6044.4	6071.3	6088.1	6104.9
17.5°	5853.0	5859.8	5869.8	5869.8	5883.3	5916.8	5926.9	5957.1	5987.4	6004.1	6037.8
20°	5732.2	5738.8	5748.9	5755.7	5772.4	5799.3	5819.4	5846.3	5879.9	5910.2	5943.7
22.5°	5638.1	5624.7	5631.4	5638.1	5654.9	5678.4	5701.9	5735.5	5769.1	5799.3	5832.9
25°	5456.8	5460.1	5470.2	5476.9	5497.1	5517.2	5544.1	5584.4	5614.6	5648.2	5685.1
27.5°	5211.7	5215.0	5231.8	5231.8	5248.6	5282.2	5298.9	5332.5	5372.9	5406.4	5450.1
30°	4933.0	4939.6	4939.6	4953.1	4963.1	4980.0	4996.7	5030.3	5050.5	5080.7	5141.2
32.5°	4677.8	4684.4	4681.0	4677.8	4667.6	4664.3	4660.9	4667.6	4674.4	4684.4	4707.9
35°	4526.7	4509.8	4496.4	4472.9	4446.0	4412.4	4382.2	4341.9	4305.0	4274.7	4241.2
37.5°	4382.2	4378.8	4358.7	4325.1	4271.4	4211.0	4140.5	4053.1	3965.8	3871.8	3781.2
40°	4180.7	4170.6	4153.9	4106.9	4046.4	3972.5	3878.5	3771.1	3630.0	3485.6	3337.9
42.5°	3838.2	3841.6	3821.4	3784.5	3727.4	3656.9	3559.5	3442.0	3290.9	3119.6	2928.2
45°	3438.6	3438.6	3431.9	3401.6	3361.4	3304.3	3230.4	3133.0	2985.3	2810.6	2605.8
47.5°	3022.2	3025.6	3015.5	3008.8	2992.0	2955.1	2901.3	2827.5	2723.4	2555.4	2350.6
50°	2599.1	2599.1	2615.9	2612.5	2612.5	2599.1	2575.6	2531.9	2441.3	2307.0	2115.6
52.5°	2176.0	2182.7	2192.8	2206.2	2223.0	2249.9	2223.0	2202.9	2145.7	2041.6	1877.1
55°	1739.4	1746.2	1762.9	1786.4	1806.6	1833.5	1840.2	1840.2	1809.9	1739.4	1615.2
57.5°	1366.7	1356.6	1370.1	1390.2	1417.1	1444.0	1464.1	1487.6	1484.2	1437.2	1336.5
60°	1027.6	1030.9	1041.0	1061.2	1081.3	1104.8	1131.7	1151.8	1161.9	1138.4	1074.6
62.5°	748.9	748.9	762.2	782.4	792.5	826.1	842.9	853.0	863.0	859.6	819.4
65°	523.9	530.5	537.3	547.4	557.4	577.5	587.6	607.8	614.5	617.9	587.6
67.5°	369.4	359.3	366.0	372.7	382.8	396.3	416.4	416.4	426.4	426.4	406.3
70°	235.1	235.1	238.4	248.5	255.2	258.6	265.3	272.0	282.1	278.7	278.7
72.5°	157.8	154.5	157.8	161.2	164.6	174.6	174.6	178.0	184.7	188.1	174.6
75°	80.6	84.0	90.6	87.3	97.4	90.6	94.0	104.1	100.7	94.0	94.0
77.5°	67.1	67.1	67.1	63.8	70.5	70.5	67.1	73.9	70.5	70.5	67.1
80°	47.0	50.4	47.0	43.6	47.0	43.6	43.6	43.6	43.6	43.6	40.3
82.5°	37.0	30.2	33.6	30.2	33.6	33.6	30.2	26.9	26.9	30.2	26.9
85°	26.9	20.1	23.5	23.5	20.1	20.1	20.1	20.1	20.1	16.8	16.8
87.5°	16.8	10.1	10.1	10.1	13.4	13.4	13.4	10.1	13.4	13.4	6.7
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°	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0
2.5°	6266.1	6262.7	6269.5	6266.1	6266.1	6262.7	6266.1	6262.7	6269.5	6256.0	6259.4
5°	6266.1	6259.4	6262.7	6266.1	6269.5	6262.7	6262.7	6262.7	6269.5	6262.7	6266.1
7.5°	6252.6	6249.3	6259.4	6266.1	6262.7	6259.4	6266.1	6262.7	6269.5	6266.1	6272.7
10°	6225.8	6229.1	6235.9	6245.9	6249.3	6252.6	6259.4	6259.4	6269.5	6256.0	6262.7
12.5°	6185.5	6198.9	6215.7	6222.4	6235.9	6235.9	6242.6	6245.9	6252.6	6249.3	6259.4
15°	6135.1	6151.9	6172.0	6188.9	6205.6	6215.7	6225.8	6229.1	6239.2	6229.1	6232.5
17.5°	6074.6	6094.8	6125.0	6145.1	6172.0	6182.1	6195.5	6202.3	6212.4	6205.6	6209.0
20°	5990.7	6014.3	6047.8	6078.0	6094.8	6118.3	6135.1	6145.1	6151.9	6145.1	6148.5
22.5°	5873.2	5906.8	5950.4	5973.9	6007.5	6027.6	6031.0	6054.5	6071.3	6054.5	6061.3
25°	5735.5	5769.1	5802.7	5853.0	5883.3	5906.8	5930.3	5933.7	5950.4	5947.0	5943.7
27.5°	5507.1	5550.8	5607.9	5648.2	5688.5	5725.4	5752.3	5759.0	5775.8	5769.1	5772.4
30°	5194.8	5241.9	5295.6	5359.4	5416.5	5453.4	5487.0	5510.5	5527.3	5517.2	5513.9
32.5°	4751.6	4798.6	4855.7	4919.5	4986.7	5040.4	5080.7	5110.9	5131.1	5124.3	5107.6
35°	4244.6	4258.0	4294.9	4345.3	4402.3	4459.4	4496.4	4529.9	4553.4	4560.2	4560.2
37.5°	3724.1	3680.4	3653.6	3653.6	3687.1	3710.6	3744.2	3764.3	3801.3	3814.7	3824.8
40°	3220.3	3119.6	3025.6	2955.1	2908.1	2904.7	2904.7	2914.7	2948.3	2992.0	3032.3
42.5°	2770.4	2609.2	2464.8	2333.8	2239.8	2186.1	2162.6	2166.0	2192.8	2233.1	2300.2
45°	2411.1	2209.6	2028.3	1870.4	1742.8	1658.8	1618.6	1615.2	1635.3	1682.3	1756.3
47.5°	2132.4	1917.4	1712.6	1531.2	1393.6	1302.9	1255.9	1242.5	1255.9	1299.5	1386.9
50°	1900.6	1679.0	1467.5	1279.4	1131.7	1037.7	994.0	977.2	994.0	1030.9	1118.2
52.5°	1685.7	1457.4	1259.3	1077.9	920.1	839.5	792.5	782.4	792.5	836.1	906.7
55°	1437.2	1242.5	1047.7	866.4	728.7	648.1	611.1	601.1	611.1	651.5	725.4
57.5°	1192.1	1024.2	853.0	688.4	570.9	500.3	466.8	453.3	476.8	503.7	591.0
60°	963.7	829.5	685.0	540.6	443.3	379.4	352.6	349.2	355.9	389.5	449.9
62.5°	755.6	644.8	530.5	413.0	332.4	305.6	272.0	268.7	275.3	295.5	342.5
65°	544.0	473.5	386.2	302.2	238.4	201.5	188.1	191.4	198.1	211.6	255.2
67.5°	379.4	329.1	268.7	211.6	164.6	147.7	134.3	131.0	134.3	157.8	181.3
70°	255.2	225.0	181.3	161.2	114.2	90.6	94.0	84.0	97.4	97.4	117.5
72.5°	167.9	147.7	120.9	94.0	80.6	63.8	63.8	60.5	67.1	70.5	87.3
75°	87.3	67.1	67.1	47.0	33.6	16.8	30.2	26.9	23.5	26.9	33.6
77.5°	60.5	50.4	47.0	37.0	33.6	26.9	26.9	26.9	26.9	30.2	33.6
80°	37.0	37.0	26.9	23.5	20.1	16.8	20.1	20.1	20.1	20.1	23.5
82.5°	23.5	20.1	20.1	16.8	16.8	13.4	13.4	13.4	13.4	13.4	20.1
85°	20.1	13.4	13.4	10.1	13.4	23.5	10.1	13.4	13.4	13.4	10.1
87.5°	6.7	10.1	10.1	10.1	6.7	3.4	6.7	10.1	10.1	16.8	13.4
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°	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0	6256.0
2.5°	6266.1	6269.5	6269.5	6266.1	6266.1	6259.4	6272.7	6262.7	6266.1	6279.5	6269.5
5°	6272.7	6276.1	6276.1	6272.7	6272.7	6272.7	6276.1	6276.1	6272.7	6269.5	6276.1
7.5°	6286.2	6282.9	6282.9	6276.1	6276.1	6269.5	6276.1	6266.1	6272.7	6266.1	6276.1
10°	6269.5	6272.7	6269.5	6266.1	6266.1	6262.7	6262.7	6252.6	6256.0	6245.9	6252.6
12.5°	6259.4	6256.0	6256.0	6249.3	6242.6	6235.9	6232.5	6222.4	6222.4	6198.9	6209.0
15°	6232.5	6235.9	6225.8	6212.4	6205.6	6188.9	6182.1	6168.6	6155.3	6138.5	6141.9
17.5°	6209.0	6198.9	6185.5	6172.0	6145.1	6131.8	6118.3	6098.1	6091.4	6071.3	6064.6
20°	6138.5	6131.8	6115.0	6091.4	6074.6	6044.4	6031.0	6010.9	5994.0	5973.9	5963.8
22.5°	6047.8	6041.0	6020.9	5997.4	5970.5	5957.1	5943.7	5906.8	5889.9	5869.8	5866.4
25°	5933.7	5923.5	5903.4	5876.5	5863.1	5826.2	5812.7	5785.8	5779.2	5759.0	5755.7
27.5°	5759.0	5745.6	5722.1	5688.5	5665.0	5641.5	5628.1	5607.9	5601.2	5581.0	5577.7
30°	5497.1	5480.3	5433.3	5419.9	5379.5	5356.0	5356.0	5329.2	5332.5	5319.1	5319.1
32.5°	5084.1	5057.2	5020.2	4993.4	4966.5	4953.1	4953.1	4943.0	4949.7	4949.7	4956.5
35°	4536.7	4499.8	4479.6	4462.8	4462.8	4476.2	4516.5	4526.7	4546.8	4563.5	4577.0
37.5°	3834.8	3831.5	3855.0	3875.2	3925.5	3982.6	4053.1	4113.6	4170.6	4211.0	4251.2
40°	3075.9	3159.9	3227.0	3321.1	3398.3	3509.1	3636.7	3740.8	3838.2	3908.8	3982.6
42.5°	2401.0	2508.4	2649.5	2787.1	2924.8	3075.9	3243.9	3388.3	3515.9	3613.2	3690.5
45°	1870.4	2018.1	2189.5	2364.1	2542.0	2730.1	2904.7	3052.4	3186.8	3287.5	3364.8
47.5°	1507.7	1668.9	1863.7	2055.1	2256.6	2454.7	2649.5	2777.1	2887.9	2968.5	3039.0
50°	1245.8	1417.1	1621.9	1840.2	2041.6	2239.8	2407.7	2531.9	2622.6	2693.1	2736.8
52.5°	1041.0	1222.3	1440.6	1658.8	1860.3	2041.6	2192.8	2286.8	2360.7	2411.1	2451.3
55°	859.6	1034.3	1239.1	1444.0	1642.1	1813.3	1937.5	2008.1	2065.1	2095.4	2118.9
57.5°	701.9	863.0	1051.1	1239.1	1410.4	1551.4	1648.8	1719.3	1746.2	1769.7	1766.3
60°	550.8	701.9	873.1	1034.3	1182.0	1296.2	1366.7	1407.0	1427.1	1437.2	1430.5
62.5°	433.2	570.9	701.9	842.9	950.3	1047.7	1114.9	1114.9	1124.9	1128.3	1138.4
65°	322.3	426.4	540.6	644.8	732.0	795.9	832.8	842.9	856.3	853.0	846.2
67.5°	238.4	315.7	399.6	476.8	537.3	577.5	604.4	628.0	624.6	617.9	614.5
70°	164.6	214.9	288.8	335.8	379.4	419.8	426.4	429.8	433.2	436.5	429.8
72.5°	114.2	151.1	191.4	231.7	258.6	275.3	292.2	295.5	295.5	295.5	292.2
75°	57.1	77.2	114.2	131.0	154.5	161.2	174.6	174.6	184.7	171.2	167.9
77.5°	50.4	60.5	80.6	94.0	104.1	114.2	117.5	127.6	124.2	117.5	120.9
80°	30.2	37.0	50.4	57.1	70.5	73.9	77.2	80.6	77.2	80.6	80.6
82.5°	23.5	26.9	33.6	33.6	43.6	43.6	47.0	47.0	50.4	50.4	50.4
85°	13.4	23.5	20.1	40.3	26.9	26.9	33.6	40.3	33.6	33.6	40.3
87.5°	13.4	13.4	10.1	13.4	13.4	13.4	16.8	20.1	20.1	23.5	20.1
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 EC8B1509730 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6256.0	6256.0	6256.0	6256.0
2.5°	6266.1	6272.7	6262.7	6259.4
5°	6276.1	6276.1	6269.5	6269.5
7.5°	6276.1	6276.1	6266.1	6259.4
10°	6249.3	6249.3	6239.2	6232.5
12.5°	6198.9	6198.9	6195.5	6185.5
15°	6135.1	6135.1	6121.6	6111.6
17.5°	6047.8	6054.5	6037.8	6037.8
20°	5953.8	5950.4	5937.0	5930.3
22.5°	5856.4	5849.7	5846.3	5826.2
25°	5752.3	5745.6	5735.5	5725.4
27.5°	5574.3	5571.0	5560.9	5547.5
30°	5302.3	5298.9	5285.5	5285.5
32.5°	4949.7	4946.4	4933.0	4936.3
35°	4583.7	4597.1	4590.4	4577.0
37.5°	4278.1	4288.2	4294.9	4288.2
40°	4022.9	4053.1	4056.5	4063.2
42.5°	3750.9	3791.2	3804.7	3811.3
45°	3425.1	3462.1	3492.4	3485.6
47.5°	3092.7	3119.6	3146.4	3126.3
50°	2773.7	2790.5	2800.6	2800.6
52.5°	2471.5	2471.5	2468.2	2471.5
55°	2125.6	2125.6	2112.2	2118.9
57.5°	1762.9	1769.7	1759.6	1742.8
60°	1427.1	1410.4	1403.6	1393.6
62.5°	1111.5	1111.5	1088.0	1118.2
65°	832.8	822.7	812.6	809.2
67.5°	604.4	601.1	591.0	587.6
70°	426.4	413.0	409.7	402.9
72.5°	285.4	285.4	278.7	278.7
75°	174.6	157.8	154.5	157.8
77.5°	120.9	117.5	117.5	114.2
80°	80.6	77.2	84.0	73.9
82.5°	50.4	53.7	50.4	53.7
85°	33.6	40.3	37.0	37.0
87.5°	20.1	20.1	20.1	20.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)