

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: P249537

Luminaire Tested: **LSR8B120D010 EC8B120835 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249537
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: LSR8B120D010 EC8B120835 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12363.0 lumens
Efficiency: N/A
Efficacy: 104.5 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

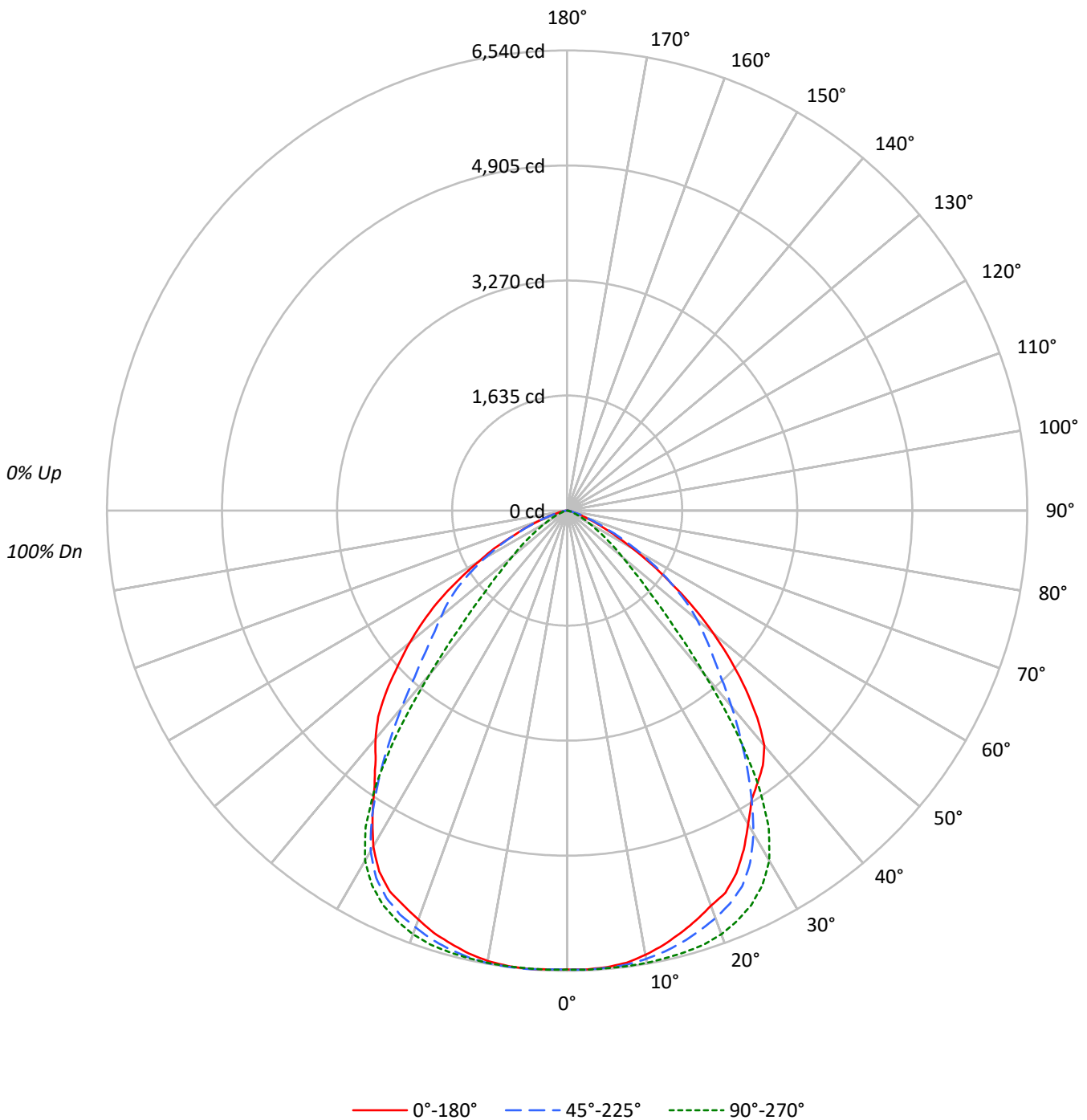
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249537

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBDW0MW

Luminous Intensity Polar Plot





TEST NUMBER: P249537

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBDW0MW

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°	201145	201145	201145
5°	201586	202130	202347
10°	200738	204358	203481
15°	198514	207344	203433
20°	196131	210261	202910
25°	193584	210504	203117
30°	183143	204585	196232
35°	177673	177805	179649
40°	175475	122336	170540
45°	156356	73442	158493
50°	130011	48879	140085
55°	97507	33698	118775
60°	66076	22455	89616
65°	39853	14564	61568
70°	22098	7898	37876
75°	10008	3336	19611
80°	8701	3729	13674
85°	9907	4953	13657



TEST NUMBER: P249537

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBDW0MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	622.5	5.0
10°-20°	1807.9	14.6
20°-30°	2744.0	22.2
30°-40°	2882.1	23.3
40°-50°	2160.8	17.5
50°-60°	1386.4	11.2
60°-70°	593.1	4.8
70°-80°	140.1	1.1
80°-90°	26.1	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°	5174.5	41.9
0°-40°	8056.5	65.2
0°-60°	11603.7	93.9
0°-90°	12363.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12363.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6523	6523	6523	6523	6523	
5°	6512	6523	6530	6540	6537	619
15°	6218	6348	6495	6453	6372	1754
25°	5690	5889	6187	6075	5970	2599
35°	4720	4457	4723	4667	4772	2962
45°	3585	2931	1684	2847	3634	2746
55°	1814	1814	627	1891	2209	1645
65°	546	644	200	830	844	583
75°	84	98	28	168	165	122
85°	28	18	14	28	39	30
90°	0	0	0	0	0	



TEST NUMBER: P249537

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBDW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0
2.5°	6526.5	6533.5	6530.0	6530.0	6526.5	6530.0	6530.0	6537.0	6537.0	6530.0	6526.5
5°	6512.4	6519.5	6519.5	6512.4	6512.4	6530.0	6519.5	6526.5	6526.5	6523.0	6523.0
7.5°	6481.0	6481.0	6494.9	6484.5	6484.5	6494.9	6491.4	6498.5	6505.5	6509.0	6509.0
10°	6410.9	6417.9	6421.4	6421.4	6425.0	6435.4	6442.4	6456.5	6463.4	6470.4	6474.0
12.5°	6323.4	6333.9	6337.4	6333.9	6344.4	6358.4	6375.9	6393.4	6404.0	6417.9	6428.5
15°	6218.3	6218.3	6225.3	6235.9	6242.9	6263.9	6281.4	6302.4	6330.4	6347.9	6365.4
17.5°	6102.8	6109.9	6120.3	6120.3	6134.4	6169.3	6179.8	6211.4	6242.9	6260.4	6295.4
20°	5976.8	5983.7	5994.3	6001.3	6018.8	6046.8	6067.8	6095.8	6130.8	6162.4	6197.3
22.5°	5878.7	5864.7	5871.7	5878.7	5896.3	5920.8	5945.3	5980.2	6015.3	6046.8	6081.8
25°	5689.6	5693.1	5703.7	5710.6	5731.7	5752.7	5780.7	5822.7	5854.2	5889.2	5927.7
27.5°	5434.1	5437.6	5455.1	5455.1	5472.5	5507.6	5525.1	5560.1	5602.2	5637.1	5682.7
30°	5143.5	5150.4	5150.4	5164.5	5174.9	5192.5	5210.0	5245.0	5266.0	5297.5	5360.6
32.5°	4877.4	4884.3	4880.8	4877.4	4866.8	4863.3	4859.8	4866.8	4873.9	4884.3	4908.8
35°	4719.8	4702.3	4688.3	4663.8	4635.8	4600.7	4569.2	4527.2	4488.7	4457.2	4422.2
37.5°	4569.2	4565.7	4544.7	4509.7	4453.6	4390.7	4317.2	4226.1	4135.0	4037.0	3942.5
40°	4359.2	4348.6	4331.1	4282.1	4219.1	4142.1	4044.0	3932.0	3784.9	3634.4	3480.3
42.5°	4002.0	4005.5	3984.5	3946.0	3886.5	3812.9	3711.4	3588.9	3431.3	3252.7	3053.2
45°	3585.4	3585.4	3578.3	3546.8	3504.8	3445.3	3368.3	3266.7	3112.7	2930.6	2717.0
47.5°	3151.2	3154.7	3144.2	3137.2	3119.7	3081.2	3025.2	2948.1	2839.6	2664.5	2450.9
50°	2710.1	2710.1	2727.5	2724.0	2724.0	2710.1	2685.6	2640.0	2545.5	2405.4	2205.9
52.5°	2268.8	2275.9	2286.4	2300.4	2317.9	2345.9	2317.9	2296.9	2237.3	2128.8	1957.3
55°	1813.7	1820.7	1838.2	1862.7	1883.7	1911.8	1918.7	1918.7	1887.2	1813.7	1684.1
57.5°	1425.1	1414.5	1428.6	1449.6	1477.6	1505.6	1526.6	1551.1	1547.6	1498.6	1393.5
60°	1071.4	1074.9	1085.4	1106.4	1127.4	1151.9	1180.0	1200.9	1211.5	1187.0	1120.4
62.5°	780.8	780.8	794.8	815.8	826.3	861.3	878.8	889.4	899.8	896.3	854.3
65°	546.2	553.2	560.2	570.7	581.2	602.2	612.7	633.7	640.7	644.3	612.7
67.5°	385.2	374.6	381.7	388.6	399.1	413.2	434.2	434.2	444.6	444.6	423.6
70°	245.1	245.1	248.6	259.1	266.1	269.6	276.6	283.6	294.1	290.6	290.6
72.5°	164.6	161.1	164.6	168.1	171.6	182.1	182.1	185.6	192.6	196.1	182.1
75°	84.0	87.6	94.5	91.1	101.5	94.5	98.0	108.5	105.0	98.0	98.0
77.5°	70.0	70.0	70.0	66.6	73.5	73.5	70.0	77.0	73.5	73.5	70.0
80°	49.0	52.5	49.0	45.5	49.0	45.5	45.5	45.5	45.5	45.5	42.0
82.5°	38.6	31.5	35.0	31.5	35.0	35.0	31.5	28.0	28.0	31.5	28.0
85°	28.0	21.0	24.5	24.5	21.0	21.0	21.0	21.0	21.0	17.5	17.5
87.5°	17.5	10.5	10.5	10.5	14.0	14.0	14.0	10.5	14.0	14.0	7.0
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: P249537

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0
2.5°	6533.5	6530.0	6537.0	6533.5	6533.5	6530.0	6533.5	6530.0	6537.0	6523.0	6526.5
5°	6533.5	6526.5	6530.0	6533.5	6537.0	6530.0	6530.0	6530.0	6537.0	6530.0	6533.5
7.5°	6519.5	6515.9	6526.5	6533.5	6530.0	6526.5	6533.5	6530.0	6537.0	6533.5	6540.4
10°	6491.4	6494.9	6502.0	6512.4	6515.9	6519.5	6526.5	6526.5	6537.0	6523.0	6530.0
12.5°	6449.5	6463.4	6481.0	6487.9	6502.0	6502.0	6509.0	6512.4	6519.5	6515.9	6526.5
15°	6396.9	6414.4	6435.4	6453.0	6470.4	6481.0	6491.4	6494.9	6505.5	6494.9	6498.5
17.5°	6333.9	6354.9	6386.4	6407.4	6435.4	6445.9	6459.9	6466.9	6477.5	6470.4	6474.0
20°	6246.3	6270.9	6305.9	6337.4	6354.9	6379.4	6396.9	6407.4	6414.4	6407.4	6410.9
22.5°	6123.8	6158.9	6204.3	6228.9	6263.9	6284.9	6288.4	6312.9	6330.4	6312.9	6319.9
25°	5980.2	6015.3	6050.3	6102.8	6134.4	6158.9	6183.4	6186.9	6204.3	6200.8	6197.3
27.5°	5742.2	5787.7	5847.2	5889.2	5931.2	5969.8	5997.8	6004.7	6022.3	6015.3	6018.8
30°	5416.5	5465.6	5521.6	5588.1	5647.7	5686.1	5721.2	5745.7	5763.1	5752.7	5749.2
32.5°	4954.4	5003.4	5062.9	5129.4	5199.5	5255.5	5297.5	5329.0	5350.0	5343.0	5325.5
35°	4425.7	4439.7	4478.2	4530.7	4590.2	4649.7	4688.3	4723.3	4747.8	4754.8	4754.8
37.5°	3883.0	3837.5	3809.5	3809.5	3844.4	3868.9	3904.0	3925.0	3963.5	3977.5	3988.0
40°	3357.7	3252.7	3154.7	3081.2	3032.2	3028.7	3028.7	3039.1	3074.2	3119.7	3161.7
42.5°	2888.6	2720.5	2570.0	2433.4	2335.4	2279.4	2254.9	2258.4	2286.4	2328.4	2398.4
45°	2514.0	2303.9	2114.8	1950.2	1817.2	1729.6	1687.6	1684.1	1705.1	1754.1	1831.2
47.5°	2223.4	1999.2	1785.7	1596.6	1453.1	1358.5	1309.5	1295.5	1309.5	1355.0	1446.1
50°	1981.8	1750.7	1530.1	1334.0	1180.0	1081.9	1036.4	1018.9	1036.4	1074.9	1165.9
52.5°	1757.6	1519.6	1313.0	1123.9	959.4	875.3	826.3	815.8	826.3	871.8	945.4
55°	1498.6	1295.5	1092.4	903.3	759.8	675.8	637.2	626.8	637.2	679.3	756.3
57.5°	1243.0	1067.9	889.4	717.8	595.2	521.7	486.7	472.7	497.2	525.2	616.2
60°	1004.8	864.9	714.2	563.7	462.2	395.6	367.6	364.1	371.1	406.2	469.1
62.5°	787.8	672.3	553.2	430.7	346.6	318.6	283.6	280.1	287.1	308.1	357.2
65°	567.2	493.7	402.7	315.1	248.6	210.1	196.1	199.6	206.6	220.6	266.1
67.5°	395.6	343.1	280.1	220.6	171.6	154.0	140.1	136.6	140.1	164.6	189.1
70°	266.1	234.6	189.1	168.1	119.1	94.5	98.0	87.6	101.5	101.5	122.5
72.5°	175.0	154.0	126.0	98.0	84.0	66.6	66.6	63.1	70.0	73.5	91.1
75°	91.1	70.0	70.0	49.0	35.0	17.5	31.5	28.0	24.5	28.0	35.0
77.5°	63.1	52.5	49.0	38.6	35.0	28.0	28.0	28.0	28.0	31.5	35.0
80°	38.6	38.6	28.0	24.5	21.0	17.5	21.0	21.0	21.0	21.0	24.5
82.5°	24.5	21.0	21.0	17.5	17.5	14.0	14.0	14.0	14.0	14.0	21.0
85°	21.0	14.0	14.0	10.5	14.0	24.5	10.5	14.0	14.0	14.0	10.5
87.5°	7.0	10.5	10.5	10.5	7.0	3.5	7.0	10.5	10.5	17.5	14.0
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: P249537

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0	6523.0
2.5°	6533.5	6537.0	6537.0	6533.5	6533.5	6526.5	6540.4	6530.0	6533.5	6547.5	6537.0
5°	6540.4	6544.0	6544.0	6540.4	6540.4	6540.4	6544.0	6544.0	6540.4	6537.0	6544.0
7.5°	6554.5	6551.0	6551.0	6544.0	6544.0	6537.0	6544.0	6533.5	6540.4	6533.5	6544.0
10°	6537.0	6540.4	6537.0	6533.5	6533.5	6530.0	6530.0	6519.5	6523.0	6512.4	6519.5
12.5°	6526.5	6523.0	6523.0	6515.9	6509.0	6502.0	6498.5	6487.9	6487.9	6463.4	6474.0
15°	6498.5	6502.0	6491.4	6477.5	6470.4	6453.0	6445.9	6431.9	6417.9	6400.4	6404.0
17.5°	6474.0	6463.4	6449.5	6435.4	6407.4	6393.4	6379.4	6358.4	6351.4	6330.4	6323.4
20°	6400.4	6393.4	6375.9	6351.4	6333.9	6302.4	6288.4	6267.4	6249.8	6228.9	6218.3
22.5°	6305.9	6298.8	6277.9	6253.4	6225.3	6211.4	6197.3	6158.9	6141.3	6120.3	6116.8
25°	6186.9	6176.3	6155.3	6127.3	6113.3	6074.8	6060.8	6032.7	6025.8	6004.7	6001.3
27.5°	6004.7	5990.8	5966.3	5931.2	5906.7	5882.2	5868.3	5847.2	5840.2	5819.2	5815.7
30°	5731.7	5714.1	5665.1	5651.2	5609.1	5584.6	5584.6	5556.6	5560.1	5546.1	5546.1
32.5°	5301.0	5273.0	5234.5	5206.4	5178.4	5164.5	5164.5	5153.9	5161.0	5161.0	5168.0
35°	4730.3	4691.8	4670.7	4653.3	4653.3	4667.2	4709.3	4719.8	4740.8	4758.3	4772.3
37.5°	3998.5	3995.0	4019.5	4040.5	4093.1	4152.6	4226.1	4289.2	4348.6	4390.7	4432.7
40°	3207.2	3294.8	3364.8	3462.9	3543.3	3658.9	3791.9	3900.5	4002.0	4075.6	4152.6
42.5°	2503.4	2615.5	2762.6	2906.1	3049.7	3207.2	3382.3	3532.8	3665.9	3767.4	3847.9
45°	1950.2	2104.3	2282.9	2464.9	2650.5	2846.6	3028.7	3182.7	3322.8	3427.8	3508.3
47.5°	1572.1	1740.2	1943.2	2142.8	2352.9	2559.4	2762.6	2895.6	3011.1	3095.2	3168.7
50°	1299.0	1477.6	1691.2	1918.7	2128.8	2335.4	2510.4	2640.0	2734.6	2808.1	2853.6
52.5°	1085.4	1274.5	1502.1	1729.6	1939.7	2128.8	2286.4	2384.4	2461.4	2514.0	2555.9
55°	896.3	1078.4	1292.0	1505.6	1712.1	1890.7	2020.2	2093.8	2153.3	2184.8	2209.3
57.5°	731.8	899.8	1095.9	1292.0	1470.6	1617.7	1719.2	1792.7	1820.7	1845.2	1841.7
60°	574.3	731.8	910.3	1078.4	1232.5	1351.5	1425.1	1467.0	1488.0	1498.6	1491.5
62.5°	451.7	595.2	731.8	878.8	990.9	1092.4	1162.5	1162.5	1172.9	1176.4	1187.0
65°	336.1	444.6	563.7	672.3	763.3	829.8	868.4	878.8	892.9	889.4	882.3
67.5°	248.6	329.1	416.6	497.2	560.2	602.2	630.2	654.8	651.3	644.3	640.7
70°	171.6	224.1	301.1	350.1	395.6	437.7	444.6	448.1	451.7	455.2	448.1
72.5°	119.1	157.6	199.6	241.6	269.6	287.1	304.6	308.1	308.1	308.1	304.6
75°	59.5	80.5	119.1	136.6	161.1	168.1	182.1	182.1	192.6	178.5	175.0
77.5°	52.5	63.1	84.0	98.0	108.5	119.1	122.5	133.0	129.5	122.5	126.0
80°	31.5	38.6	52.5	59.5	73.5	77.0	80.5	84.0	80.5	84.0	84.0
82.5°	24.5	28.0	35.0	35.0	45.5	45.5	49.0	49.0	52.5	52.5	52.5
85°	14.0	24.5	21.0	42.0	28.0	28.0	35.0	42.0	35.0	35.0	42.0
87.5°	14.0	14.0	10.5	14.0	14.0	14.0	17.5	21.0	21.0	24.5	21.0
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: P249537

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6523.0	6523.0	6523.0	6523.0
2.5°	6533.5	6540.4	6530.0	6526.5
5°	6544.0	6544.0	6537.0	6537.0
7.5°	6544.0	6544.0	6533.5	6526.5
10°	6515.9	6515.9	6505.5	6498.5
12.5°	6463.4	6463.4	6459.9	6449.5
15°	6396.9	6396.9	6382.9	6372.4
17.5°	6305.9	6312.9	6295.4	6295.4
20°	6207.9	6204.3	6190.4	6183.4
22.5°	6106.3	6099.3	6095.8	6074.8
25°	5997.8	5990.8	5980.2	5969.8
27.5°	5812.2	5808.7	5798.2	5784.2
30°	5528.6	5525.1	5511.1	5511.1
32.5°	5161.0	5157.4	5143.5	5147.0
35°	4779.3	4793.3	4786.3	4772.3
37.5°	4460.7	4471.2	4478.2	4471.2
40°	4194.6	4226.1	4229.6	4236.6
42.5°	3911.0	3953.0	3967.0	3974.0
45°	3571.3	3609.9	3641.4	3634.4
47.5°	3224.7	3252.7	3280.7	3259.7
50°	2892.1	2909.6	2920.1	2920.1
52.5°	2577.0	2577.0	2573.5	2577.0
55°	2216.3	2216.3	2202.4	2209.3
57.5°	1838.2	1845.2	1834.7	1817.2
60°	1488.0	1470.6	1463.5	1453.1
62.5°	1159.0	1159.0	1134.5	1165.9
65°	868.4	857.8	847.3	843.8
67.5°	630.2	626.8	616.2	612.7
70°	444.6	430.7	427.2	420.1
72.5°	297.6	297.6	290.6	290.6
75°	182.1	164.6	161.1	164.6
77.5°	126.0	122.5	122.5	119.1
80°	84.0	80.5	87.6	77.0
82.5°	52.5	56.0	52.5	56.0
85°	35.0	42.0	38.6	38.6
87.5°	21.0	21.0	21.0	21.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)