

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: P249751

Luminaire Tested: **LSR8B100D010 EC8B100935 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249751
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B100D010 EC8B100935 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9805.0 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

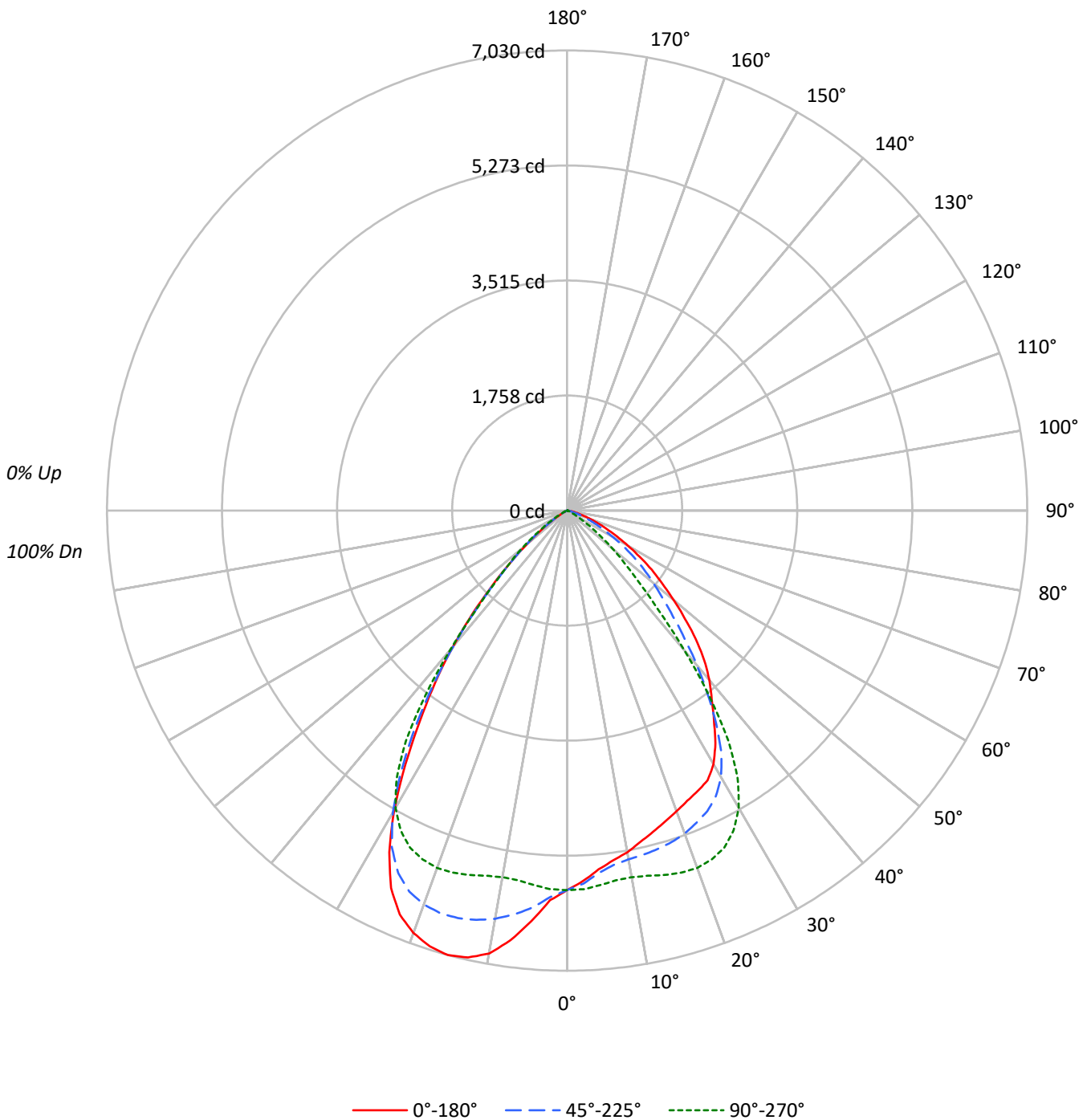
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249751

CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBSW0LI

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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60					60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42					42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	178780	178780	178780
5°	170322	177785	194896
10°	165932	178059	215132
15°	162168	183963	224439
20°	160382	190608	225280
25°	160757	193301	216529
30°	159265	186665	188303
35°	147170	161546	147369
40°	135994	112003	109277
45°	121098	67581	69823
50°	101894	43540	39510
55°	84771	23886	18064
60°	66169	10355	5680
65°	48828	5144	2765
70°	33954	3174	1217
75°	20659	655	0
80°	14917	977	0
85°	9588	955	0



TEST NUMBER: P249751

CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBSWOLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	557.4	5.7
10°-20°	1668.1	17.0
20°-30°	2554.5	26.1
30°-40°	2504.3	25.5
40°-50°	1508.1	15.4
50°-60°	694.1	7.1
60°-70°	243.8	2.5
70°-80°	63.8	0.7
80°-90°	10.9	0.1
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°	4780.0	48.8
0°-40°	7284.3	74.3
0°-60°	9486.5	96.8
0°-90°	9805.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9805.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5798	5798	5798	5798	5798	
5°	5502	5554	5744	6088	6296	520
15°	5080	5353	5762	6445	7030	1435
25°	4725	5066	5681	6109	6364	2176
35°	3910	3964	4291	4045	3915	2448
45°	2777	2287	1550	1560	1601	2129
55°	1577	1249	444	350	336	1407
65°	669	463	70	35	38	682
75°	173	100	6	0	0	210
85°	27	14	3	0	0	37
90°	0	0	0	0	0	



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CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBSWOLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7
2.5°	5662.2	5667.7	5667.7	5667.7	5678.5	5681.3	5678.5	5681.3	5686.6	5705.6	5713.7
5°	5502.4	5494.3	5499.8	5497.0	5510.6	5518.7	5513.2	5521.4	5540.3	5553.9	5567.4
7.5°	5388.7	5388.7	5388.7	5394.0	5402.2	5418.5	5415.8	5421.1	5440.1	5459.0	5478.0
10°	5299.3	5296.6	5296.6	5310.1	5320.9	5339.8	5345.3	5361.6	5385.9	5410.3	5432.0
12.5°	5182.7	5185.5	5199.0	5212.6	5236.9	5266.7	5283.0	5304.7	5342.6	5383.2	5407.6
15°	5079.8	5082.5	5093.4	5120.4	5150.3	5185.5	5220.6	5255.9	5301.9	5353.4	5396.8
17.5°	4979.5	4982.2	4990.4	5020.2	5058.2	5104.2	5144.8	5190.9	5250.5	5310.1	5364.3
20°	4887.4	4884.8	4898.2	4925.3	4974.2	5017.5	5058.2	5112.4	5177.4	5250.5	5312.7
22.5°	4798.0	4798.0	4811.6	4838.7	4882.1	4925.3	4968.7	5025.6	5090.6	5161.1	5234.2
25°	4724.8	4722.2	4741.1	4754.7	4787.2	4830.6	4876.6	4922.7	4987.7	5066.3	5136.7
27.5°	4646.3	4643.7	4646.3	4662.6	4692.4	4724.8	4760.1	4800.8	4855.0	4920.0	4987.7
30°	4472.9	4475.6	4475.6	4489.2	4505.5	4540.6	4559.6	4600.3	4649.0	4703.2	4762.9
32.5°	4215.6	4218.2	4218.2	4223.7	4237.2	4253.5	4269.8	4299.5	4337.4	4383.5	4437.7
35°	3909.5	3909.5	3906.7	3909.5	3917.6	3917.6	3931.1	3917.6	3936.6	3963.6	4004.2
37.5°	3627.7	3622.2	3616.8	3611.4	3603.2	3589.7	3570.8	3538.2	3530.1	3519.3	3521.9
40°	3378.4	3375.7	3359.5	3345.9	3318.8	3286.3	3240.3	3183.4	3137.3	3083.1	3037.1
42.5°	3102.1	3099.3	3085.8	3061.4	3031.6	2982.9	2909.7	2833.9	2741.8	2660.5	2576.5
45°	2776.9	2785.1	2766.1	2739.0	2703.8	2657.7	2576.5	2484.3	2392.2	2286.6	2180.9
47.5°	2438.3	2435.6	2422.1	2405.8	2376.0	2330.0	2275.8	2175.5	2077.9	1980.5	1872.1
50°	2124.0	2113.2	2107.7	2091.6	2072.6	2034.7	1977.7	1896.4	1809.8	1717.6	1617.4
52.5°	1826.0	1826.0	1812.4	1801.6	1785.3	1755.6	1706.8	1641.8	1568.7	1481.9	1376.3
55°	1576.8	1571.3	1557.8	1544.2	1528.0	1509.0	1465.7	1411.5	1332.9	1249.0	1156.8
57.5°	1311.3	1308.5	1303.2	1286.9	1278.7	1259.8	1211.0	1156.8	1089.2	1016.0	940.1
60°	1072.9	1062.1	1051.1	1040.3	1026.8	1007.9	975.3	929.2	872.4	807.4	731.5
62.5°	858.9	875.0	842.6	842.6	815.5	799.2	769.4	742.3	682.7	623.1	558.1
65°	669.2	669.2	655.6	644.8	628.5	609.5	579.8	552.7	509.3	463.2	417.2
67.5°	512.1	509.3	495.8	485.0	471.4	460.6	438.9	406.4	373.9	336.0	298.0
70°	376.6	373.9	371.1	352.2	341.3	327.9	311.6	289.9	265.5	238.4	203.2
72.5°	270.9	270.9	262.8	254.7	243.9	233.0	216.8	203.2	181.5	162.6	138.2
75°	173.4	170.7	170.7	157.1	157.1	140.8	130.0	121.9	111.1	100.3	78.6
77.5°	124.7	121.9	119.2	113.7	108.4	102.9	94.8	84.0	75.8	65.0	56.9
80°	84.0	78.6	75.8	75.8	67.7	65.0	67.7	51.5	48.7	40.6	35.2
82.5°	51.5	51.5	48.7	48.7	46.1	43.4	35.2	35.2	32.6	29.8	24.4
85°	27.1	35.2	24.4	27.1	24.4	27.1	24.4	19.0	16.3	13.5	13.5
87.5°	16.3	10.8	10.8	16.3	13.5	10.8	10.8	10.8	8.1	5.5	5.5
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: P249751

CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7
2.5°	5708.4	5727.4	5724.6	5749.0	5757.1	5776.1	5776.1	5789.6	5797.7	5816.7	5833.0
5°	5572.9	5602.7	5610.8	5640.6	5665.0	5694.8	5713.7	5743.5	5770.6	5811.3	5849.2
7.5°	5488.9	5513.2	5529.5	5564.8	5591.9	5624.3	5656.9	5697.5	5735.4	5784.2	5838.4
10°	5448.2	5480.8	5505.1	5540.3	5572.9	5608.1	5640.6	5686.6	5730.0	5792.4	5851.9
12.5°	5437.4	5475.3	5505.1	5553.9	5586.4	5624.3	5662.2	5713.7	5759.8	5824.8	5892.6
15°	5437.4	5488.9	5529.5	5583.7	5621.6	5670.4	5711.1	5762.5	5814.0	5881.7	5946.7
17.5°	5426.6	5488.9	5540.3	5602.7	5651.4	5700.3	5751.7	5800.5	5854.6	5919.7	5992.8
20°	5383.2	5461.8	5524.1	5597.2	5648.7	5702.9	5754.4	5808.5	5865.5	5933.2	5995.5
22.5°	5307.4	5399.5	5470.0	5548.5	5608.1	5662.2	5713.7	5767.9	5830.3	5895.3	5960.3
25°	5207.1	5293.8	5369.7	5450.9	5510.6	5570.1	5619.0	5681.3	5738.2	5800.5	5851.9
27.5°	5055.4	5147.5	5220.6	5304.7	5358.8	5415.8	5456.4	5507.9	5562.1	5613.5	5654.2
30°	4827.9	4911.9	4987.7	5063.5	5117.7	5158.4	5201.7	5242.4	5277.6	5312.7	5348.0
32.5°	4494.6	4570.5	4643.7	4714.0	4757.4	4792.6	4825.1	4849.5	4868.5	4887.4	4890.1
35°	4036.8	4099.0	4145.1	4207.4	4248.1	4280.6	4280.6	4291.4	4288.7	4280.6	4272.4
37.5°	3524.7	3549.0	3568.0	3592.4	3595.1	3595.1	3578.9	3565.3	3543.7	3538.2	3521.9
40°	2991.0	2958.5	2934.0	2901.6	2882.6	2841.9	2806.8	2782.4	2747.1	2741.8	2736.3
42.5°	2484.3	2408.5	2340.8	2283.9	2218.9	2161.9	2110.5	2072.6	2045.5	2042.7	2045.5
45°	2072.6	1985.8	1885.6	1807.1	1733.9	1663.5	1595.8	1549.7	1525.3	1519.8	1525.3
47.5°	1761.0	1660.8	1563.2	1473.8	1395.3	1316.6	1249.0	1186.6	1156.8	1148.7	1146.0
50°	1514.5	1411.5	1308.5	1216.4	1129.7	1051.1	967.2	907.6	869.7	856.1	845.3
52.5°	1273.4	1181.3	1075.6	980.8	894.0	801.9	715.2	647.4	609.5	593.4	582.4
55°	1062.1	969.9	872.4	780.3	688.2	596.0	509.3	444.3	403.7	384.7	371.1
57.5°	848.0	761.3	677.3	585.2	509.3	420.0	333.2	276.3	241.1	219.5	208.6
60°	655.6	587.9	514.7	438.9	365.8	292.6	222.1	167.9	140.8	124.7	111.1
62.5°	495.8	438.9	390.1	325.1	268.2	205.9	151.8	108.4	84.0	70.5	65.0
65°	357.6	314.2	270.9	230.3	189.7	143.6	102.9	70.5	48.7	40.6	37.9
67.5°	254.7	219.5	186.9	159.8	130.0	102.9	73.2	48.7	37.9	32.6	29.8
70°	178.8	151.8	130.0	105.7	86.6	67.7	56.9	35.2	21.6	24.4	19.0
72.5°	119.2	100.3	89.4	73.2	59.5	48.7	35.2	24.4	24.4	19.0	16.3
75°	65.0	59.5	46.1	35.2	29.8	27.1	10.8	5.5	2.7	8.1	2.7
77.5°	46.1	40.6	35.2	29.8	24.4	19.0	10.8	10.8	8.1	10.8	5.5
80°	29.8	24.4	21.6	21.6	13.5	8.1	5.5	5.5	8.1	2.7	2.7
82.5°	19.0	16.3	13.5	13.5	13.5	8.1	8.1	8.1	8.1	5.5	5.5
85°	10.8	8.1	5.5	5.5	2.7	5.5	0.0	2.7	2.7	0.0	0.0
87.5°	5.5	2.7	2.7	2.7	2.7	0.0	0.0	2.7	0.0	2.7	0.0
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: P249751

CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7	5797.7
2.5°	5843.8	5854.6	5868.2	5879.0	5903.4	5908.8	5919.7	5930.5	5938.7	5946.7	5949.5
5°	5881.7	5922.4	5960.3	6000.9	6052.4	6087.7	6128.2	6163.5	6198.7	6228.5	6250.1
7.5°	5892.6	5954.8	6011.8	6082.2	6158.0	6223.1	6290.8	6358.5	6429.0	6483.2	6529.2
10°	5914.2	5990.1	6063.2	6147.2	6244.8	6331.4	6415.4	6504.8	6594.3	6670.1	6737.9
12.5°	5952.2	6036.1	6114.8	6206.9	6307.1	6404.6	6496.7	6596.9	6691.8	6775.8	6851.6
15°	6014.5	6093.0	6168.9	6255.6	6355.8	6445.3	6537.4	6634.9	6729.8	6816.4	6886.9
17.5°	6055.1	6128.2	6204.1	6282.7	6366.7	6448.0	6534.6	6621.4	6708.0	6786.6	6851.6
20°	6055.1	6125.6	6182.4	6252.9	6331.4	6401.9	6472.4	6548.2	6624.0	6689.0	6751.4
22.5°	6006.4	6074.0	6117.4	6171.6	6239.3	6299.0	6336.9	6420.9	6477.7	6534.6	6580.7
25°	5892.6	5941.3	5976.6	6014.5	6068.7	6109.3	6141.8	6190.6	6247.5	6269.2	6301.6
27.5°	5686.6	5721.9	5740.8	5749.0	5776.1	5797.7	5803.2	5824.8	5849.2	5854.6	5868.2
30°	5361.6	5364.3	5356.1	5353.4	5339.8	5323.7	5320.9	5318.2	5307.4	5296.6	5299.3
32.5°	4871.1	4857.7	4825.1	4790.0	4754.7	4716.8	4695.1	4668.0	4651.7	4635.5	4616.6
35°	4237.2	4204.7	4158.7	4115.3	4074.7	4044.8	3996.1	3979.8	3963.6	3941.9	3936.6
37.5°	3492.2	3473.2	3429.8	3397.4	3375.7	3362.1	3337.7	3321.6	3321.6	3313.4	3307.9
40°	2722.7	2717.4	2701.1	2709.2	2698.4	2703.8	2701.1	2695.6	2709.2	2709.2	2714.7
42.5°	2042.7	2045.5	2053.6	2059.0	2075.3	2077.9	2091.6	2091.6	2099.7	2107.7	2113.2
45°	1519.8	1530.8	1530.8	1541.6	1557.8	1560.5	1565.9	1568.7	1574.0	1587.6	1593.0
47.5°	1140.6	1143.2	1143.2	1146.0	1151.4	1156.8	1154.2	1156.8	1165.0	1159.5	1165.0
50°	842.6	845.3	837.1	829.0	837.1	837.1	834.5	826.3	834.5	823.6	829.0
52.5°	574.4	571.6	563.5	566.3	560.8	558.1	558.1	552.7	552.7	552.7	541.8
55°	363.1	363.1	357.6	357.6	354.9	349.5	346.8	344.0	341.3	338.7	338.7
57.5°	203.2	205.9	197.8	195.0	197.8	195.0	189.7	189.7	189.7	181.5	186.9
60°	111.1	108.4	105.7	102.9	100.3	102.9	102.9	97.6	97.6	97.6	100.3
62.5°	59.5	59.5	56.9	56.9	54.2	54.2	59.5	51.5	54.2	51.5	54.2
65°	32.6	40.6	29.8	29.8	37.9	35.2	32.6	32.6	35.2	29.8	32.6
67.5°	35.2	24.4	21.6	24.4	21.6	21.6	21.6	27.1	24.4	19.0	24.4
70°	16.3	19.0	19.0	13.5	21.6	10.8	19.0	10.8	16.3	13.5	16.3
72.5°	16.3	16.3	16.3	10.8	16.3	10.8	13.5	13.5	10.8	10.8	16.3
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	5.5	5.5	2.7	2.7	2.7	2.7	5.5	5.5	5.5	0.0	2.7
80°	5.5	5.5	0.0	2.7	0.0	0.0	2.7	0.0	2.7	0.0	5.5
82.5°	2.7	5.5	2.7	2.7	5.5	5.5	5.5	2.7	2.7	2.7	2.7
85°	0.0	2.7	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	2.7
87.5°	0.0	2.7	0.0	0.0	0.0	0.0	2.7	2.7	0.0	0.0	0.0
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: P249751

CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5797.7	5797.7	5797.7	5797.7
2.5°	5952.2	5954.8	5960.3	5957.6
5°	6266.4	6288.2	6299.0	6296.3
7.5°	6561.7	6599.7	6621.4	6621.4
10°	6789.3	6832.7	6865.1	6870.6
12.5°	6911.2	6960.0	7003.4	6992.5
15°	6946.4	6995.3	7038.5	7030.4
17.5°	6905.8	6954.6	6987.1	6981.7
20°	6794.8	6835.4	6867.9	6865.1
22.5°	6621.4	6656.6	6683.7	6680.9
25°	6328.7	6353.2	6374.8	6364.0
27.5°	5879.0	5887.2	5900.6	5884.5
30°	5280.3	5285.6	5291.1	5288.4
32.5°	4608.4	4605.6	4600.3	4594.8
35°	3928.4	3928.4	3931.1	3914.8
37.5°	3310.6	3307.9	3316.1	3307.9
40°	2720.0	2717.4	2728.2	2714.7
42.5°	2121.3	2129.5	2132.1	2132.1
45°	1595.8	1598.4	1601.1	1601.1
47.5°	1165.0	1167.7	1181.3	1165.0
50°	823.6	826.3	829.0	823.6
52.5°	544.5	547.3	544.5	536.4
55°	333.2	336.0	336.0	336.0
57.5°	178.8	181.5	181.5	178.8
60°	97.6	94.8	97.6	92.1
62.5°	51.5	56.9	54.2	48.7
65°	32.6	32.6	32.6	37.9
67.5°	27.1	21.6	24.4	19.0
70°	16.3	19.0	19.0	13.5
72.5°	13.5	13.5	13.5	16.3
75°	0.0	0.0	0.0	0.0
77.5°	5.5	5.5	5.5	2.7
80°	2.7	0.0	2.7	0.0
82.5°	2.7	2.7	5.5	2.7
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)