

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: P249709

Luminaire Tested: **LSR8B100D010 EC8B100830 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249709
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 EC8B100830 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11057.0 lumens
Efficiency: N/A
Efficacy: 104.0 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

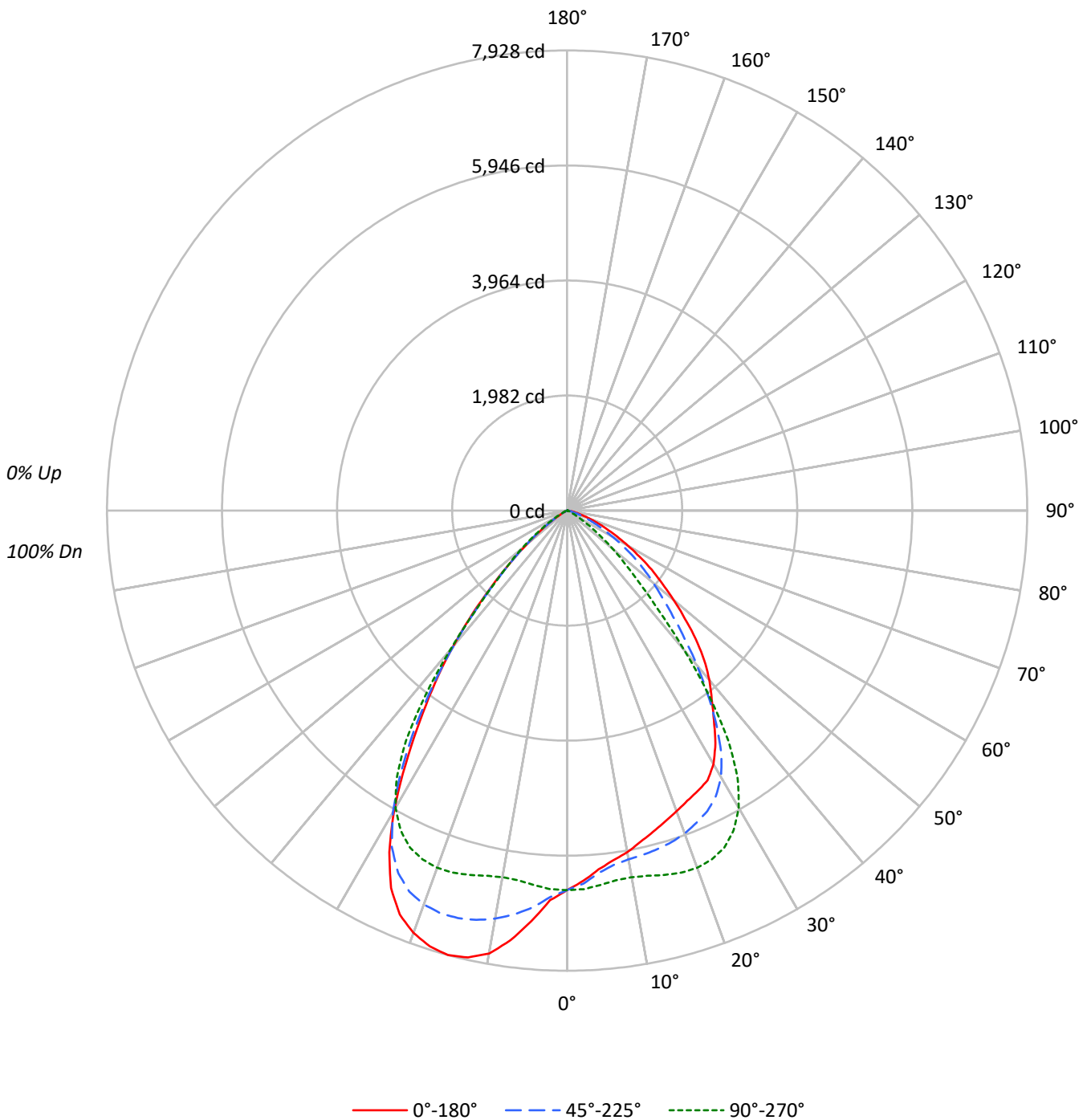
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	201608	201608	201608
5°	192070	200487	219783
10°	187117	200798	242602
15°	182874	207452	253097
20°	180862	214947	254046
25°	181287	217982	244177
30°	179604	210500	212348
35°	165962	182175	166188
40°	153359	126305	123229
45°	136562	76211	78741
50°	114904	49100	44557
55°	95593	26934	20370
60°	74618	11681	6408
65°	55059	5801	3123
70°	38291	3579	1370
75°	23292	739	0
80°	16817	1101	0
85°	10826	1061	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	628.5	5.7
10°-20°	1881.1	17.0
20°-30°	2880.7	26.1
30°-40°	2824.1	25.5
40°-50°	1700.7	15.4
50°-60°	782.8	7.1
60°-70°	275.0	2.5
70°-80°	71.9	0.7
80°-90°	12.2	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°	5390.4	48.8
0°-40°	8214.4	74.3
0°-60°	10697.8	96.8
0°-90°	11057.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11057.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6538	6538	6538	6538	6538	
5°	6205	6263	6477	6865	7100	586
15°	5728	6037	6498	7268	7928	1618
25°	5328	5713	6407	6889	7177	2454
35°	4409	4470	4839	4561	4415	2761
45°	3132	2579	1748	1760	1806	2401
55°	1778	1408	501	394	379	1587
65°	755	522	80	40	43	769
75°	196	113	6	0	0	237
85°	31	15	3	0	0	42
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°	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0
2.5°	6385.2	6391.4	6391.4	6391.4	6403.6	6406.7	6403.6	6406.7	6412.8	6434.2	6443.3
5°	6205.0	6195.9	6202.0	6198.9	6214.2	6223.4	6217.2	6226.4	6247.8	6263.1	6278.3
7.5°	6076.8	6076.8	6076.8	6082.8	6092.0	6110.3	6107.3	6113.4	6134.7	6156.1	6177.5
10°	5975.9	5972.9	5972.9	5988.1	6000.3	6021.7	6027.8	6046.2	6073.6	6101.2	6125.6
12.5°	5844.5	5847.6	5862.9	5878.2	5905.6	5939.2	5957.6	5982.1	6024.8	6070.6	6098.1
15°	5728.4	5731.4	5743.8	5774.2	5807.9	5847.6	5887.3	5927.0	5978.9	6037.0	6085.9
17.5°	5615.4	5618.4	5627.6	5661.3	5704.0	5756.0	5801.7	5853.7	5921.0	5988.1	6049.2
20°	5511.5	5508.5	5523.7	5554.3	5609.3	5658.1	5704.0	5765.1	5838.5	5921.0	5991.1
22.5°	5410.7	5410.7	5426.0	5456.6	5505.5	5554.3	5603.2	5667.3	5740.6	5820.1	5902.6
25°	5328.2	5325.1	5346.5	5361.9	5398.5	5447.4	5499.3	5551.2	5624.6	5713.2	5792.6
27.5°	5239.6	5236.6	5239.6	5258.0	5291.6	5328.2	5367.9	5413.8	5474.9	5548.2	5624.6
30°	5044.1	5047.1	5047.1	5062.4	5080.8	5120.4	5141.8	5187.7	5242.6	5303.8	5371.0
32.5°	4753.8	4756.9	4756.9	4763.0	4778.2	4796.6	4815.0	4848.5	4891.3	4943.2	5004.3
35°	4408.7	4408.7	4405.5	4408.7	4417.8	4417.8	4433.0	4417.8	4439.2	4469.8	4515.5
37.5°	4090.9	4084.7	4078.7	4072.5	4063.3	4048.1	4026.7	3990.0	3980.8	3968.6	3971.7
40°	3809.8	3806.8	3788.4	3773.1	3742.5	3705.9	3654.0	3589.9	3537.9	3476.8	3424.9
42.5°	3498.2	3495.1	3479.8	3452.3	3418.7	3363.8	3281.3	3195.8	3091.9	3000.2	2905.5
45°	3131.5	3140.7	3119.3	3088.7	3049.0	2997.1	2905.5	2801.5	2697.7	2578.6	2459.4
47.5°	2749.6	2746.6	2731.4	2713.0	2679.4	2627.5	2566.4	2453.3	2343.3	2233.4	2111.1
50°	2395.2	2383.0	2376.9	2358.6	2337.2	2294.5	2230.2	2138.6	2040.8	1937.0	1823.9
52.5°	2059.2	2059.2	2043.9	2031.7	2013.3	1979.7	1924.8	1851.5	1769.0	1671.1	1552.0
55°	1778.1	1772.0	1756.8	1741.4	1723.1	1701.7	1652.9	1591.8	1503.1	1408.4	1304.6
57.5°	1478.7	1475.6	1469.6	1451.2	1442.0	1420.6	1365.7	1304.6	1228.2	1145.7	1060.1
60°	1209.9	1197.7	1185.3	1173.2	1157.9	1136.6	1099.8	1047.9	983.8	910.5	824.9
62.5°	968.6	986.8	950.2	950.2	919.6	901.3	867.7	837.1	769.9	702.7	629.4
65°	754.6	754.6	739.3	727.1	708.7	687.4	653.8	623.2	574.3	522.4	470.4
67.5°	577.5	574.3	559.1	546.9	531.6	519.4	495.0	458.2	421.7	378.9	336.0
70°	424.7	421.7	418.5	397.1	384.9	369.7	351.4	327.0	299.4	268.9	229.1
72.5°	305.5	305.5	296.4	287.2	275.0	262.7	244.5	229.1	204.7	183.3	155.8
75°	195.5	192.5	192.5	177.2	177.2	158.8	146.6	137.4	125.3	113.1	88.7
77.5°	140.6	137.4	134.4	128.3	122.2	116.1	106.9	94.7	85.5	73.3	64.1
80°	94.7	88.7	85.5	85.5	76.3	73.3	76.3	58.1	55.0	45.8	39.7
82.5°	58.1	58.1	55.0	55.0	51.9	48.9	39.7	39.7	36.7	33.6	27.5
85°	30.6	39.7	27.5	30.6	27.5	30.6	27.5	21.4	18.4	15.2	15.2
87.5°	18.4	12.2	12.2	18.4	15.2	12.2	12.2	12.2	9.2	6.2	6.2
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°	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0
2.5°	6437.3	6458.7	6455.5	6483.1	6492.3	6513.6	6513.6	6528.8	6538.0	6559.4	6577.8
5°	6284.5	6318.1	6327.3	6360.8	6388.4	6422.0	6443.3	6476.9	6507.5	6553.4	6596.1
7.5°	6189.8	6217.2	6235.6	6275.3	6305.9	6342.5	6379.2	6425.0	6467.7	6522.8	6583.9
10°	6143.9	6180.6	6208.1	6247.8	6284.5	6324.2	6360.8	6412.8	6461.7	6532.0	6599.1
12.5°	6131.7	6174.5	6208.1	6263.1	6299.7	6342.5	6385.2	6443.3	6495.3	6568.6	6645.0
15°	6131.7	6189.8	6235.6	6296.7	6339.5	6394.4	6440.3	6498.3	6556.4	6632.7	6706.0
17.5°	6119.5	6189.8	6247.8	6318.1	6373.0	6428.1	6486.1	6541.2	6602.2	6675.6	6758.0
20°	6070.6	6159.3	6229.4	6311.9	6370.0	6431.1	6489.2	6550.2	6614.5	6690.8	6761.1
22.5°	5985.1	6089.0	6168.4	6257.0	6324.2	6385.2	6443.3	6504.5	6574.7	6648.1	6721.4
25°	5872.0	5969.7	6055.4	6146.9	6214.2	6281.4	6336.4	6406.7	6470.9	6541.2	6599.1
27.5°	5700.9	5804.8	5887.3	5982.1	6043.1	6107.3	6153.1	6211.2	6272.3	6330.3	6376.2
30°	5444.4	5539.0	5624.6	5710.1	5771.2	5817.1	5865.9	5911.8	5951.5	5991.1	6030.9
32.5°	5068.5	5154.1	5236.6	5316.0	5364.9	5404.6	5441.2	5468.7	5490.1	5511.5	5514.5
35°	4552.3	4622.4	4674.4	4744.7	4790.6	4827.2	4827.2	4839.4	4836.3	4827.2	4818.0
37.5°	3974.8	4002.2	4023.6	4051.1	4054.2	4054.2	4035.9	4020.6	3996.2	3990.0	3971.7
40°	3372.9	3336.2	3308.7	3272.1	3250.7	3204.8	3165.2	3137.7	3097.9	3091.9	3085.7
42.5°	2801.5	2716.0	2639.7	2575.5	2502.2	2438.0	2380.0	2337.2	2306.7	2303.5	2306.7
45°	2337.2	2239.4	2126.4	2037.8	1955.3	1875.9	1799.5	1747.6	1720.1	1713.9	1720.1
47.5°	1985.9	1872.8	1762.8	1662.0	1573.4	1484.8	1408.4	1338.1	1304.6	1295.4	1292.4
50°	1707.9	1591.8	1475.6	1371.7	1274.0	1185.3	1090.7	1023.5	980.7	965.4	953.2
52.5°	1436.0	1332.1	1212.9	1106.0	1008.2	904.3	806.6	730.1	687.4	669.1	656.8
55°	1197.7	1093.8	983.8	879.9	776.0	672.2	574.3	501.0	455.2	433.8	418.5
57.5°	956.2	858.5	763.8	660.0	574.3	473.6	375.8	311.6	271.9	247.5	235.3
60°	739.3	663.0	580.5	495.0	412.5	330.0	250.5	189.4	158.8	140.6	125.3
62.5°	559.1	495.0	439.9	366.6	302.4	232.1	171.1	122.2	94.7	79.5	73.3
65°	403.3	354.4	305.5	259.7	213.9	162.0	116.1	79.5	55.0	45.8	42.8
67.5°	287.2	247.5	210.8	180.2	146.6	116.1	82.5	55.0	42.8	36.7	33.6
70°	201.6	171.1	146.6	119.2	97.7	76.3	64.1	39.7	24.4	27.5	21.4
72.5°	134.4	113.1	100.9	82.5	67.2	55.0	39.7	27.5	27.5	21.4	18.4
75°	73.3	67.2	51.9	39.7	33.6	30.6	12.2	6.2	3.0	9.2	3.0
77.5°	51.9	45.8	39.7	33.6	27.5	21.4	12.2	12.2	9.2	12.2	6.2
80°	33.6	27.5	24.4	24.4	15.2	9.2	6.2	6.2	9.2	3.0	3.0
82.5°	21.4	18.4	15.2	15.2	15.2	9.2	9.2	9.2	9.2	6.2	6.2
85°	12.2	9.2	6.2	6.2	3.0	6.2	0.0	3.0	3.0	0.0	0.0
87.5°	6.2	3.0	3.0	3.0	3.0	0.0	0.0	3.0	0.0	3.0	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0
2.5°	6590.0	6602.2	6617.5	6629.7	6657.2	6663.3	6675.6	6687.8	6697.0	6706.0	6709.2
5°	6632.7	6678.6	6721.4	6767.1	6825.2	6865.0	6910.8	6950.5	6990.2	7023.8	7048.2
7.5°	6645.0	6715.2	6779.5	6858.8	6944.3	7017.8	7094.1	7170.4	7249.9	7311.0	7363.0
10°	6669.4	6755.0	6837.4	6932.1	7042.2	7139.9	7234.6	7335.4	7436.3	7521.8	7598.3
12.5°	6712.2	6806.9	6895.5	6999.4	7112.5	7222.4	7326.2	7439.3	7546.3	7641.0	7726.5
15°	6782.5	6871.0	6956.7	7054.4	7167.4	7268.3	7372.1	7482.1	7589.1	7686.8	7766.3
17.5°	6828.3	6910.8	6996.3	7084.9	7179.6	7271.3	7369.0	7466.8	7564.5	7653.2	7726.5
20°	6828.3	6907.7	6971.9	7051.4	7139.9	7219.4	7298.8	7384.3	7469.9	7543.2	7613.5
22.5°	6773.3	6849.6	6898.6	6959.7	7036.0	7103.3	7146.0	7240.7	7304.9	7369.0	7420.9
25°	6645.0	6700.0	6739.7	6782.5	6843.6	6889.4	6926.1	6981.1	7045.2	7069.7	7106.3
27.5°	6412.8	6452.5	6473.9	6483.1	6513.6	6538.0	6544.2	6568.6	6596.1	6602.2	6617.5
30°	6046.2	6049.2	6040.0	6037.0	6021.7	6003.5	6000.3	5997.3	5985.1	5972.9	5975.9
32.5°	5493.1	5477.9	5441.2	5401.6	5361.9	5319.1	5294.6	5264.0	5245.7	5227.4	5206.1
35°	4778.2	4741.6	4689.7	4640.8	4595.0	4561.3	4506.4	4488.0	4469.8	4445.2	4439.2
37.5°	3938.1	3916.7	3867.8	3831.2	3806.8	3791.5	3763.9	3745.7	3745.7	3736.5	3730.3
40°	3070.4	3064.4	3046.0	3055.2	3043.0	3049.0	3046.0	3039.8	3055.2	3055.2	3061.3
42.5°	2303.5	2306.7	2315.9	2321.9	2340.3	2343.3	2358.6	2358.6	2367.8	2376.9	2383.0
45°	1713.9	1726.2	1726.2	1738.4	1756.8	1759.8	1765.8	1769.0	1775.0	1790.3	1796.4
47.5°	1286.2	1289.2	1289.2	1292.4	1298.4	1304.6	1301.5	1304.6	1313.7	1307.6	1313.7
50°	950.2	953.2	944.0	934.8	944.0	944.0	941.0	931.8	941.0	928.8	934.8
52.5°	647.8	644.6	635.4	638.6	632.4	629.4	629.4	623.2	623.2	623.2	611.0
55°	409.5	409.5	403.3	403.3	400.3	394.1	391.1	387.9	384.9	381.9	381.9
57.5°	229.1	232.1	223.1	219.9	223.1	219.9	213.9	213.9	213.9	204.7	210.8
60°	125.3	122.2	119.2	116.1	113.1	116.1	116.1	110.0	110.0	110.0	113.1
62.5°	67.2	67.2	64.1	64.1	61.1	61.1	67.2	58.1	61.1	58.1	61.1
65°	36.7	45.8	33.6	33.6	42.8	39.7	36.7	36.7	39.7	33.6	36.7
67.5°	39.7	27.5	24.4	27.5	24.4	24.4	24.4	30.6	27.5	21.4	27.5
70°	18.4	21.4	21.4	15.2	24.4	12.2	21.4	12.2	18.4	15.2	18.4
72.5°	18.4	18.4	18.4	12.2	18.4	12.2	15.2	15.2	12.2	12.2	18.4
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°	6.2	6.2	3.0	3.0	3.0	3.0	6.2	6.2	6.2	0.0	3.0
80°	6.2	6.2	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	6.2
82.5°	3.0	6.2	3.0	3.0	6.2	6.2	6.2	3.0	3.0	3.0	3.0
85°	0.0	3.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0	3.0
87.5°	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	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: P249709

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6538.0	6538.0	6538.0	6538.0
2.5°	6712.2	6715.2	6721.4	6718.4
5°	7066.6	7091.1	7103.3	7100.3
7.5°	7399.6	7442.4	7466.8	7466.8
10°	7656.2	7705.1	7741.7	7747.9
12.5°	7793.7	7848.8	7897.7	7885.3
15°	7833.4	7888.5	7937.3	7928.1
17.5°	7787.6	7842.6	7879.3	7873.1
20°	7662.4	7708.2	7744.9	7741.7
22.5°	7466.8	7506.6	7537.1	7534.0
25°	7136.9	7164.4	7188.8	7176.6
27.5°	6629.7	6638.9	6654.1	6635.9
30°	5954.5	5960.6	5966.7	5963.7
32.5°	5196.9	5193.7	5187.7	5181.5
35°	4430.0	4430.0	4433.0	4414.7
37.5°	3733.4	3730.3	3739.5	3730.3
40°	3067.4	3064.4	3076.5	3061.3
42.5°	2392.2	2401.4	2404.4	2404.4
45°	1799.5	1802.5	1805.6	1805.6
47.5°	1313.7	1316.8	1332.1	1313.7
50°	928.8	931.8	934.8	928.8
52.5°	614.1	617.2	614.1	604.9
55°	375.8	378.9	378.9	378.9
57.5°	201.6	204.7	204.7	201.6
60°	110.0	106.9	110.0	103.9
62.5°	58.1	64.1	61.1	55.0
65°	36.7	36.7	36.7	42.8
67.5°	30.6	24.4	27.5	21.4
70°	18.4	21.4	21.4	15.2
72.5°	15.2	15.2	15.2	18.4
75°	0.0	0.0	0.0	0.0
77.5°	6.2	6.2	6.2	3.0
80°	3.0	0.0	3.0	0.0
82.5°	3.0	3.0	6.2	3.0
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)