

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: P249731

Luminaire Tested: **LSR8B120D010 EC8B120850 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249731
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: LSR8B120D010 EC8B120850 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13203.0 lumens
Efficiency: N/A
Efficacy: 111.6 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

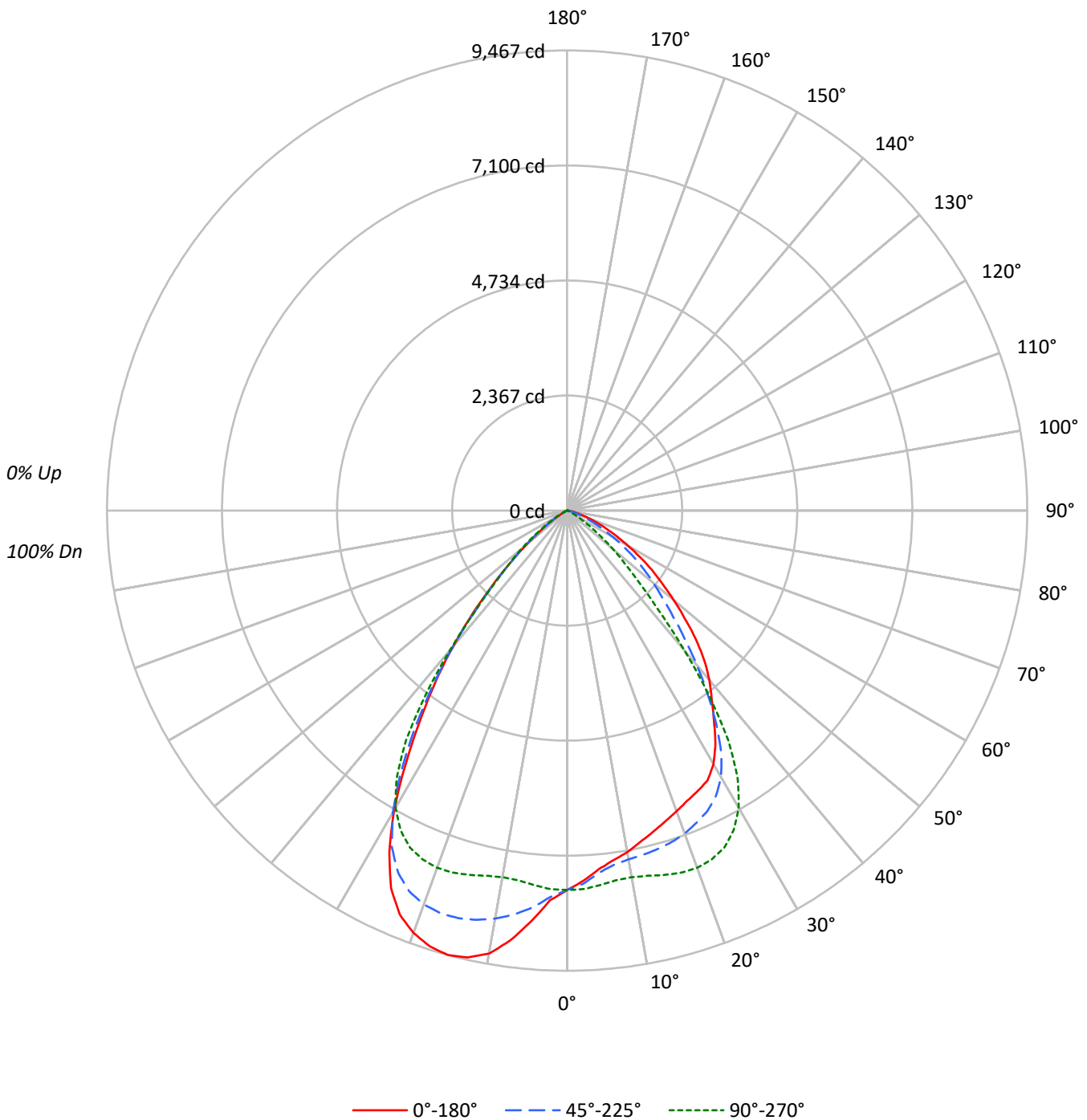
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249731

CATALOG NUMBER: LSR8B120D010 EC8B120850 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°	240739	240739	240739
5°	229348	239399	262438
10°	223433	239769	289689
15°	218367	247715	302219
20°	215964	256665	303355
25°	216472	260291	291570
30°	214463	251355	253562
35°	198170	217531	198441
40°	183123	150815	147148
45°	163068	91004	94021
50°	137207	58632	53207
55°	114152	32160	24322
60°	89098	13944	7647
65°	65749	6924	3729
70°	45720	4283	1641
75°	27820	882	0
80°	20084	1314	0
85°	12914	1274	0



TEST NUMBER: P249731

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBSWOLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	750.5	5.7
10°-20°	2246.2	17.0
20°-30°	3439.8	26.1
30°-40°	3372.2	25.5
40°-50°	2030.7	15.4
50°-60°	934.7	7.1
60°-70°	328.3	2.5
70°-80°	85.9	0.7
80°-90°	14.6	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°	6436.5	48.8
0°-40°	9808.7	74.3
0°-60°	12774.1	96.8
0°-90°	13203.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13203.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7807	7807	7807	7807	7807	
5°	7409	7479	7734	8197	8478	700
15°	6840	7209	7760	8679	9467	1933
25°	6362	6822	7650	8226	8570	2930
35°	5264	5337	5779	5447	5272	3297
45°	3739	3079	2087	2101	2156	2867
55°	2123	1682	598	471	452	1894
65°	901	624	95	48	51	918
75°	234	135	7	0	0	283
85°	36	18	4	0	0	50
90°	0	0	0	0	0	



TEST NUMBER: P249731

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBSWOLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0
2.5°	7624.5	7631.9	7631.9	7631.9	7646.4	7650.2	7646.4	7650.2	7657.4	7682.9	7693.9
5°	7409.3	7398.4	7405.7	7402.0	7420.3	7431.3	7423.9	7434.9	7460.4	7478.7	7496.9
7.5°	7256.2	7256.2	7256.2	7263.4	7274.3	7296.3	7292.7	7299.9	7325.4	7350.9	7376.5
10°	7135.7	7132.1	7132.1	7150.3	7164.9	7190.4	7197.8	7219.7	7252.4	7285.3	7314.4
12.5°	6978.8	6982.6	7000.8	7019.1	7051.8	7091.9	7113.8	7143.1	7194.2	7248.8	7281.7
15°	6840.2	6843.8	6858.6	6894.9	6935.1	6982.6	7029.9	7077.3	7139.4	7208.7	7267.1
17.5°	6705.2	6708.8	6719.8	6760.0	6811.1	6873.1	6927.8	6989.8	7070.1	7150.3	7223.3
20°	6581.2	6577.6	6595.8	6632.3	6698.0	6756.3	6811.1	6884.1	6971.6	7070.1	7153.9
22.5°	6460.8	6460.8	6479.1	6515.6	6574.0	6632.3	6690.7	6767.3	6854.8	6949.7	7048.2
25°	6362.3	6358.7	6384.2	6402.5	6446.2	6504.6	6566.6	6628.7	6716.2	6822.1	6916.8
27.5°	6256.6	6253.0	6256.6	6278.5	6318.6	6362.3	6409.7	6464.5	6537.5	6625.1	6716.2
30°	6023.1	6026.7	6026.7	6045.0	6066.9	6114.2	6139.7	6194.5	6260.2	6333.1	6413.5
32.5°	5676.5	5680.1	5680.1	5687.5	5705.6	5727.5	5749.5	5789.6	5840.6	5902.6	5975.6
35°	5264.3	5264.3	5260.6	5264.3	5275.3	5275.3	5293.4	5275.3	5300.8	5337.3	5391.9
37.5°	4884.9	4877.5	4870.3	4862.9	4852.0	4833.8	4808.3	4764.4	4753.5	4738.9	4742.5
40°	4549.2	4545.6	4523.7	4505.4	4468.9	4425.2	4363.2	4286.6	4224.6	4151.6	4089.6
42.5°	4177.1	4173.4	4155.2	4122.3	4082.2	4016.6	3918.1	3816.0	3692.0	3582.5	3469.4
45°	3739.3	3750.2	3724.7	3688.2	3640.8	3578.8	3469.4	3345.3	3221.2	3079.0	2936.7
47.5°	3283.2	3279.6	3261.5	3239.5	3199.5	3137.4	3064.5	2929.5	2798.1	2666.8	2520.9
50°	2860.1	2845.5	2838.2	2816.4	2790.9	2739.8	2663.1	2553.6	2436.9	2312.9	2177.9
52.5°	2458.9	2458.9	2440.5	2426.0	2404.1	2364.0	2298.3	2210.8	2112.3	1995.5	1853.3
55°	2123.3	2115.9	2097.7	2079.4	2057.5	2032.0	1973.7	1900.7	1794.9	1681.8	1557.8
57.5°	1765.7	1762.0	1754.8	1732.8	1721.9	1696.4	1630.7	1557.8	1466.6	1368.1	1265.8
60°	1444.7	1430.1	1415.4	1400.8	1382.7	1357.1	1313.3	1251.3	1174.7	1087.2	985.0
62.5°	1156.5	1178.3	1134.6	1134.6	1098.1	1076.2	1036.1	999.6	919.3	839.1	751.6
65°	901.1	901.1	882.8	868.2	846.3	820.8	780.7	744.2	685.8	623.8	561.7
67.5°	689.5	685.8	667.6	653.0	634.7	620.2	591.0	547.2	503.5	452.4	401.2
70°	507.1	503.5	499.7	474.2	459.6	441.5	419.5	390.4	357.5	321.0	273.6
72.5°	364.7	364.7	353.9	343.0	328.4	313.7	291.9	273.6	244.5	218.9	186.0
75°	233.5	229.9	229.9	211.6	211.6	189.7	175.1	164.1	149.6	135.0	105.9
77.5°	167.9	164.1	160.5	153.2	146.0	138.6	127.6	113.1	102.1	87.5	76.6
80°	113.1	105.9	102.1	102.1	91.1	87.5	91.1	69.4	65.6	54.7	47.5
82.5°	69.4	69.4	65.6	65.6	62.0	58.4	47.5	47.5	43.8	40.1	32.9
85°	36.5	47.5	32.9	36.5	32.9	36.5	32.9	25.5	21.9	18.2	18.2
87.5°	21.9	14.6	14.6	21.9	18.2	14.6	14.6	14.6	11.0	7.4	7.4
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: P249731

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0
2.5°	7686.7	7712.2	7708.5	7741.3	7752.3	7777.8	7777.8	7796.0	7807.0	7832.5	7854.4
5°	7504.2	7544.3	7555.3	7595.4	7628.3	7668.4	7693.9	7734.0	7770.5	7825.3	7876.3
7.5°	7391.2	7423.9	7445.8	7493.3	7529.8	7573.5	7617.3	7672.0	7723.0	7788.8	7861.8
10°	7336.4	7380.2	7412.9	7460.4	7504.2	7551.7	7595.4	7657.4	7715.8	7799.8	7879.9
12.5°	7321.8	7372.8	7412.9	7478.7	7522.4	7573.5	7624.5	7693.9	7755.9	7843.5	7934.7
15°	7321.8	7391.2	7445.8	7518.8	7569.9	7635.5	7690.3	7759.5	7828.9	7920.0	8007.6
17.5°	7307.2	7391.2	7460.4	7544.3	7610.0	7675.7	7744.9	7810.7	7883.5	7971.2	8069.6
20°	7248.8	7354.7	7438.5	7537.0	7606.3	7679.3	7748.7	7821.5	7898.3	7989.4	8073.3
22.5°	7146.7	7270.7	7365.6	7471.4	7551.7	7624.5	7693.9	7766.9	7850.8	7938.4	8025.9
25°	7011.7	7128.4	7230.6	7340.0	7420.3	7500.5	7566.3	7650.2	7726.8	7810.7	7879.9
27.5°	6807.3	6931.4	7029.9	7143.1	7215.9	7292.7	7347.3	7416.7	7489.7	7558.9	7613.7
30°	6501.0	6614.1	6716.2	6818.3	6891.3	6946.1	7004.4	7059.2	7106.6	7153.9	7201.4
32.5°	6052.2	6154.5	6253.0	6347.7	6406.1	6453.6	6497.3	6530.2	6555.7	6581.2	6584.8
35°	5435.8	5519.6	5581.6	5665.5	5720.3	5764.0	5764.0	5778.6	5775.0	5764.0	5753.1
37.5°	4746.3	4779.0	4804.5	4837.4	4841.0	4841.0	4819.2	4800.9	4771.8	4764.4	4742.5
40°	4027.6	3983.7	3950.9	3907.2	3881.6	3826.8	3779.5	3746.6	3699.2	3692.0	3684.6
42.5°	3345.3	3243.2	3152.0	3075.4	2987.9	2911.1	2841.9	2790.9	2754.4	2750.6	2754.4
45°	2790.9	2674.0	2539.1	2433.3	2334.8	2239.9	2148.8	2086.8	2053.9	2046.5	2053.9
47.5°	2371.3	2236.3	2104.9	1984.5	1878.8	1772.9	1681.8	1597.9	1557.8	1546.8	1543.2
50°	2039.3	1900.7	1762.0	1637.9	1521.3	1415.4	1302.3	1222.2	1171.1	1152.8	1138.2
52.5°	1714.7	1590.6	1448.3	1320.7	1203.8	1079.8	963.1	871.8	820.8	799.0	784.3
55°	1430.1	1306.1	1174.7	1050.7	926.6	802.6	685.8	598.2	543.6	518.1	499.7
57.5°	1141.8	1025.1	912.1	788.0	685.8	565.5	448.7	372.1	324.6	295.5	280.9
60°	882.8	791.6	693.1	591.0	492.5	394.0	299.1	226.1	189.7	167.9	149.6
62.5°	667.6	591.0	525.3	437.7	361.1	277.2	204.4	146.0	113.1	94.9	87.5
65°	481.6	423.2	364.7	310.1	255.4	193.4	138.6	94.9	65.6	54.7	51.1
67.5°	343.0	295.5	251.7	215.2	175.1	138.6	98.5	65.6	51.1	43.8	40.1
70°	240.7	204.4	175.1	142.4	116.7	91.1	76.6	47.5	29.1	32.9	25.5
72.5°	160.5	135.0	120.4	98.5	80.2	65.6	47.5	32.9	32.9	25.5	21.9
75°	87.5	80.2	62.0	47.5	40.1	36.5	14.6	7.4	3.6	11.0	3.6
77.5°	62.0	54.7	47.5	40.1	32.9	25.5	14.6	14.6	11.0	14.6	7.4
80°	40.1	32.9	29.1	29.1	18.2	11.0	7.4	7.4	11.0	3.6	3.6
82.5°	25.5	21.9	18.2	18.2	18.2	11.0	11.0	11.0	11.0	7.4	7.4
85°	14.6	11.0	7.4	7.4	3.6	7.4	0.0	3.6	3.6	0.0	0.0
87.5°	7.4	3.6	3.6	3.6	3.6	0.0	0.0	3.6	0.0	3.6	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: P249731

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0	7807.0
2.5°	7869.0	7883.5	7901.9	7916.4	7949.3	7956.5	7971.2	7985.8	7996.8	8007.6	8011.3
5°	7920.0	7974.8	8025.9	8080.6	8149.9	8197.4	8252.0	8299.5	8346.9	8387.0	8416.2
7.5°	7934.7	8018.5	8095.3	8190.0	8292.1	8379.8	8471.0	8562.1	8657.0	8730.0	8792.0
10°	7963.9	8066.0	8164.5	8277.6	8409.0	8525.6	8638.7	8759.1	8879.6	8981.7	9073.0
12.5°	8014.9	8128.0	8233.9	8357.9	8492.9	8624.1	8748.2	8883.2	9010.9	9124.0	9226.1
15°	8098.9	8204.6	8306.8	8423.5	8558.5	8678.9	8803.0	8934.2	9062.0	9178.7	9273.6
17.5°	8153.5	8252.0	8354.1	8460.0	8573.1	8682.5	8799.2	8916.0	9032.7	9138.6	9226.1
20°	8153.5	8248.4	8325.0	8419.9	8525.6	8620.5	8715.4	8817.5	8919.6	9007.2	9091.1
22.5°	8087.9	8179.1	8237.5	8310.4	8401.6	8481.9	8533.0	8646.1	8722.6	8799.2	8861.2
25°	7934.7	8000.4	8047.8	8098.9	8171.9	8226.5	8270.4	8336.0	8412.6	8441.8	8485.5
27.5°	7657.4	7704.9	7730.4	7741.3	7777.8	7807.0	7814.3	7843.5	7876.3	7883.5	7901.9
30°	7219.7	7223.3	7212.3	7208.7	7190.4	7168.6	7164.9	7161.3	7146.7	7132.1	7135.7
32.5°	6559.3	6541.1	6497.3	6450.0	6402.5	6351.5	6322.2	6285.7	6263.8	6242.0	6216.5
35°	5705.6	5661.9	5599.9	5541.5	5486.8	5446.6	5381.0	5359.1	5337.3	5308.0	5300.8
37.5°	4702.4	4676.9	4618.5	4574.8	4545.6	4527.3	4494.4	4472.7	4472.7	4461.7	4454.3
40°	3666.3	3659.1	3637.2	3648.1	3633.6	3640.8	3637.2	3629.8	3648.1	3648.1	3655.5
42.5°	2750.6	2754.4	2765.3	2772.6	2794.5	2798.1	2816.4	2816.4	2827.4	2838.2	2845.5
45°	2046.5	2061.2	2061.2	2075.8	2097.7	2101.3	2108.5	2112.3	2119.5	2137.8	2145.0
47.5°	1535.8	1539.4	1539.4	1543.2	1550.4	1557.8	1554.2	1557.8	1568.7	1561.4	1568.7
50°	1134.6	1138.2	1127.3	1116.3	1127.3	1127.3	1123.6	1112.7	1123.6	1109.1	1116.3
52.5°	773.5	769.7	758.8	762.5	755.2	751.6	751.6	744.2	744.2	744.2	729.6
55°	488.9	488.9	481.6	481.6	478.0	470.6	467.0	463.2	459.6	456.0	456.0
57.5°	273.6	277.2	266.4	262.6	266.4	262.6	255.4	255.4	255.4	244.5	251.7
60°	149.6	146.0	142.4	138.6	135.0	138.6	138.6	131.4	131.4	131.4	135.0
62.5°	80.2	80.2	76.6	76.6	73.0	73.0	80.2	69.4	73.0	69.4	73.0
65°	43.8	54.7	40.1	40.1	51.1	47.5	43.8	43.8	47.5	40.1	43.8
67.5°	47.5	32.9	29.1	32.9	29.1	29.1	29.1	36.5	32.9	25.5	32.9
70°	21.9	25.5	25.5	18.2	29.1	14.6	25.5	14.6	21.9	18.2	21.9
72.5°	21.9	21.9	21.9	14.6	21.9	14.6	18.2	18.2	14.6	14.6	21.9
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°	7.4	7.4	3.6	3.6	3.6	3.6	7.4	7.4	7.4	0.0	3.6
80°	7.4	7.4	0.0	3.6	0.0	0.0	3.6	0.0	3.6	0.0	7.4
82.5°	3.6	7.4	3.6	3.6	7.4	7.4	7.4	3.6	3.6	3.6	3.6
85°	0.0	3.6	0.0	0.0	0.0	0.0	7.4	0.0	0.0	0.0	3.6
87.5°	0.0	3.6	0.0	0.0	0.0	0.0	3.6	3.6	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: P249731

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7807.0	7807.0	7807.0	7807.0
2.5°	8014.9	8018.5	8025.9	8022.3
5°	8438.1	8467.4	8481.9	8478.3
7.5°	8835.7	8886.9	8916.0	8916.0
10°	9142.2	9200.6	9244.3	9251.7
12.5°	9306.3	9372.1	9430.5	9415.8
15°	9353.8	9419.5	9477.8	9466.8
17.5°	9299.1	9364.7	9408.6	9401.2
20°	9149.5	9204.2	9248.0	9244.3
22.5°	8916.0	8963.5	9000.0	8996.2
25°	8522.0	8554.9	8584.0	8569.5
27.5°	7916.4	7927.4	7945.6	7923.8
30°	7110.2	7117.4	7124.8	7121.2
32.5°	6205.5	6201.8	6194.5	6187.2
35°	5289.8	5289.8	5293.4	5271.5
37.5°	4457.9	4454.3	4465.3	4454.3
40°	3662.7	3659.1	3673.7	3655.5
42.5°	2856.5	2867.5	2871.1	2871.1
45°	2148.8	2152.4	2156.0	2156.0
47.5°	1568.7	1572.3	1590.6	1568.7
50°	1109.1	1112.7	1116.3	1109.1
52.5°	733.2	737.0	733.2	722.3
55°	448.7	452.4	452.4	452.4
57.5°	240.7	244.5	244.5	240.7
60°	131.4	127.6	131.4	124.0
62.5°	69.4	76.6	73.0	65.6
65°	43.8	43.8	43.8	51.1
67.5°	36.5	29.1	32.9	25.5
70°	21.9	25.5	25.5	18.2
72.5°	18.2	18.2	18.2	21.9
75°	0.0	0.0	0.0	0.0
77.5°	7.4	7.4	7.4	3.6
80°	3.6	0.0	3.6	0.0
82.5°	3.6	3.6	7.4	3.6
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)