

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: P249702

Luminaire Tested: **LSR8B100D010 EC8B100827 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249702
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 EC8B100827 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10787.0 lumens
Efficiency: N/A
Efficacy: 101.5 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

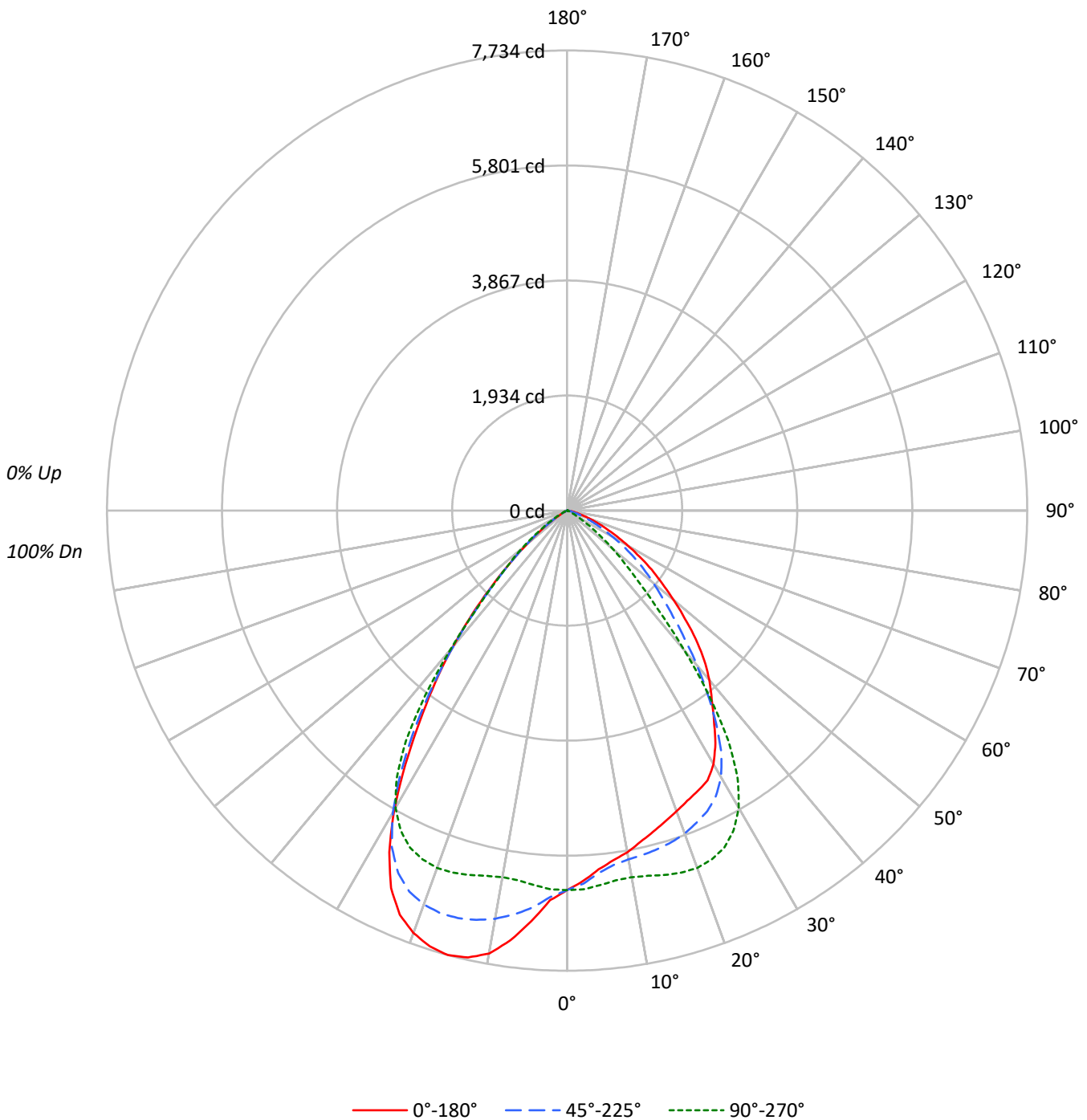
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249702

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBSW0LI

Luminous Intensity Polar Plot





TEST NUMBER: P249702

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBSW0LI

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°	196686	196686	196686
5°	187381	195593	214416
10°	182549	195894	236678
15°	178408	202386	246917
20°	176445	209700	247844
25°	176857	212661	238216
30°	175217	205358	207163
35°	161908	177726	162130
40°	149616	123217	120222
45°	133226	74349	76817
50°	112098	47901	43468
55°	93260	26279	19870
60°	72792	11397	6247
65°	53717	5655	3043
70°	37353	3498	1334
75°	22732	715	0
80°	16408	1065	0
85°	10543	1026	0



TEST NUMBER: P249702

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBSWOLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	613.2	5.7
10°-20°	1835.2	17.0
20°-30°	2810.4	26.1
30°-40°	2755.1	25.5
40°-50°	1659.1	15.4
50°-60°	763.6	7.1
60°-70°	268.3	2.5
70°-80°	70.2	0.7
80°-90°	11.9	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°	5258.7	48.8
0°-40°	8013.8	74.3
0°-60°	10436.6	96.8
0°-90°	10787.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10787.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6378	6378	6378	6378	6378	
5°	6054	6110	6319	6697	6927	572
15°	5588	5890	6340	7091	7734	1579
25°	5198	5574	6250	6721	7001	2394
35°	4301	4361	4721	4450	4307	2694
45°	3055	2516	1705	1717	1762	2343
55°	1735	1374	489	384	370	1548
65°	736	510	78	39	42	750
75°	191	110	6	0	0	231
85°	30	15	3	0	0	41
90°	0	0	0	0	0	



TEST NUMBER: P249702

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBSWOLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4
2.5°	6229.3	6235.3	6235.3	6235.3	6247.2	6250.3	6247.2	6250.3	6256.2	6277.0	6286.0
5°	6053.5	6044.6	6050.6	6047.5	6062.5	6071.4	6065.4	6074.4	6095.2	6110.2	6125.0
7.5°	5928.4	5928.4	5928.4	5934.3	5943.2	5961.1	5958.2	5964.1	5984.9	6005.8	6026.6
10°	5830.0	5827.0	5827.0	5841.9	5853.8	5874.6	5880.7	5898.6	5925.3	5952.2	5976.0
12.5°	5701.8	5704.9	5719.7	5734.7	5761.4	5794.2	5812.1	5836.0	5877.7	5922.4	5949.2
15°	5588.5	5591.5	5603.5	5633.2	5666.1	5704.9	5743.5	5782.3	5832.9	5889.6	5937.3
17.5°	5478.3	5481.2	5490.2	5523.0	5564.7	5615.4	5660.1	5710.7	5776.4	5841.9	5901.5
20°	5376.9	5374.0	5388.8	5418.6	5472.4	5520.0	5564.7	5624.4	5695.9	5776.4	5844.8
22.5°	5278.5	5278.5	5293.5	5323.3	5371.0	5418.6	5466.4	5528.9	5600.4	5678.0	5758.5
25°	5198.0	5195.1	5216.0	5230.9	5266.6	5314.4	5365.0	5415.7	5487.2	5573.7	5651.1
27.5°	5111.7	5108.7	5111.7	5129.6	5162.3	5198.0	5236.8	5281.6	5341.2	5412.7	5487.2
30°	4920.9	4923.9	4923.9	4938.8	4956.7	4995.4	5016.2	5061.0	5114.6	5174.2	5239.9
32.5°	4637.8	4640.7	4640.7	4646.7	4661.6	4679.5	4697.4	4730.1	4771.9	4822.5	4882.1
35°	4301.0	4301.0	4297.9	4301.0	4310.0	4310.0	4324.8	4310.0	4330.8	4360.6	4405.3
37.5°	3991.0	3985.0	3979.1	3973.1	3964.1	3949.3	3928.4	3892.6	3883.6	3871.7	3874.7
40°	3716.8	3713.8	3695.9	3681.0	3651.1	3615.4	3564.8	3502.2	3451.5	3391.9	3341.3
42.5°	3412.8	3409.7	3394.9	3368.0	3335.2	3281.6	3201.1	3117.7	3016.4	2927.0	2834.6
45°	3055.0	3064.0	3043.1	3013.3	2974.6	2923.9	2834.6	2733.1	2631.8	2515.6	2399.3
47.5°	2682.4	2679.5	2664.7	2646.7	2614.0	2563.3	2503.7	2393.4	2286.1	2178.8	2059.6
50°	2336.7	2324.8	2318.8	2301.0	2280.2	2238.5	2175.8	2086.3	1991.0	1889.7	1779.4
52.5°	2008.9	2008.9	1994.0	1982.1	1964.1	1931.4	1877.8	1806.3	1725.8	1630.3	1514.1
55°	1734.7	1728.7	1713.9	1698.9	1681.0	1660.1	1612.5	1552.9	1466.4	1374.0	1272.7
57.5°	1442.6	1439.6	1433.7	1415.8	1406.8	1385.9	1332.3	1272.7	1198.2	1117.8	1034.2
60°	1180.3	1168.4	1156.4	1144.5	1129.7	1108.8	1073.0	1022.3	959.7	888.2	804.8
62.5°	944.9	962.7	927.0	927.0	897.2	879.3	846.5	816.7	751.1	685.5	614.0
65°	736.2	736.2	721.2	709.3	691.4	670.6	637.8	608.0	560.3	509.6	459.0
67.5°	563.4	560.3	545.4	533.5	518.6	506.7	482.9	447.1	411.4	369.6	327.8
70°	414.3	411.4	408.3	387.4	375.5	360.7	342.8	319.0	292.1	262.3	223.5
72.5°	298.0	298.0	289.2	280.2	268.3	256.3	238.5	223.5	199.7	178.9	152.0
75°	190.8	187.8	187.8	172.9	172.9	154.9	143.0	134.1	122.2	110.3	86.5
77.5°	137.2	134.1	131.1	125.1	119.2	113.2	104.3	92.4	83.4	71.5	62.6
80°	92.4	86.5	83.4	83.4	74.5	71.5	74.5	56.7	53.6	44.7	38.8
82.5°	56.7	56.7	53.6	53.6	50.7	47.7	38.8	38.8	35.8	32.8	26.9
85°	29.8	38.8	26.9	29.8	26.9	29.8	26.9	20.9	17.9	14.8	14.8
87.5°	17.9	11.9	11.9	17.9	14.8	11.9	11.9	11.9	9.0	6.0	6.0
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: P249702

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4
2.5°	6280.1	6301.0	6297.9	6324.8	6333.7	6354.6	6354.6	6369.4	6378.4	6399.2	6417.1
5°	6131.0	6163.8	6172.8	6205.5	6232.4	6265.1	6286.0	6318.8	6348.6	6393.3	6435.1
7.5°	6038.7	6065.4	6083.3	6122.1	6151.9	6187.6	6223.4	6268.1	6309.8	6363.5	6423.2
10°	5993.9	6029.7	6056.5	6095.2	6131.0	6169.8	6205.5	6256.2	6303.9	6372.5	6438.0
12.5°	5982.0	6023.7	6056.5	6110.2	6145.9	6187.6	6229.3	6286.0	6336.7	6408.2	6482.8
15°	5982.0	6038.7	6083.3	6142.9	6184.7	6238.3	6283.1	6339.6	6396.3	6470.8	6542.3
17.5°	5970.1	6038.7	6095.2	6163.8	6217.4	6271.2	6327.7	6381.4	6440.9	6512.6	6592.9
20°	5922.4	6008.9	6077.3	6157.8	6214.5	6274.1	6330.8	6390.3	6453.0	6527.4	6596.0
22.5°	5838.9	5940.3	6017.8	6104.2	6169.8	6229.3	6286.0	6345.6	6414.2	6485.7	6557.2
25°	5728.7	5824.0	5907.5	5996.8	6062.5	6128.0	6181.7	6250.3	6312.9	6381.4	6438.0
27.5°	5561.7	5663.0	5743.5	5836.0	5895.5	5958.2	6002.8	6059.5	6119.1	6175.7	6220.5
30°	5311.4	5403.8	5487.2	5570.6	5630.3	5675.0	5722.6	5767.4	5806.2	5844.8	5883.6
32.5°	4944.7	5028.3	5108.7	5186.1	5233.9	5272.6	5308.3	5335.2	5356.1	5376.9	5379.9
35°	4441.1	4509.6	4560.2	4628.8	4673.6	4709.3	4709.3	4721.2	4718.2	4709.3	4700.3
37.5°	3877.7	3904.5	3925.3	3952.2	3955.2	3955.2	3937.4	3922.4	3898.6	3892.6	3874.7
40°	3290.6	3254.8	3227.9	3192.2	3171.3	3126.6	3087.9	3061.0	3022.3	3016.4	3010.4
42.5°	2733.1	2649.7	2575.2	2512.7	2441.1	2378.4	2321.9	2280.2	2250.4	2247.3	2250.4
45°	2280.2	2184.7	2074.4	1988.1	1907.6	1830.1	1755.6	1704.9	1678.0	1672.0	1678.0
47.5°	1937.4	1827.1	1719.8	1621.4	1535.0	1448.5	1374.0	1305.5	1272.7	1263.8	1260.8
50°	1666.1	1552.9	1439.6	1338.2	1242.9	1156.4	1064.0	998.5	956.8	941.8	929.9
52.5°	1400.9	1299.6	1183.3	1079.0	983.5	882.2	786.9	712.3	670.6	652.8	640.8
55°	1168.4	1067.1	959.7	858.4	757.1	655.7	560.3	488.8	444.1	423.3	408.3
57.5°	932.9	837.6	745.2	643.8	560.3	462.0	366.6	304.0	265.2	241.4	229.5
60°	721.2	646.8	566.3	482.9	402.4	321.9	244.4	184.8	154.9	137.2	122.2
62.5°	545.4	482.9	429.1	357.6	295.1	226.5	167.0	119.2	92.4	77.5	71.5
65°	393.4	345.7	298.0	253.3	208.7	158.0	113.2	77.5	53.6	44.7	41.7
67.5°	280.2	241.4	205.6	175.8	143.0	113.2	80.5	53.6	41.7	35.8	32.8
70°	196.7	167.0	143.0	116.3	95.3	74.5	62.6	38.8	23.8	26.9	20.9
72.5°	131.1	110.3	98.4	80.5	65.5	53.6	38.8	26.9	26.9	20.9	17.9
75°	71.5	65.5	50.7	38.8	32.8	29.8	11.9	6.0	2.9	9.0	2.9
77.5°	50.7	44.7	38.8	32.8	26.9	20.9	11.9	11.9	9.0	11.9	6.0
80°	32.8	26.9	23.8	23.8	14.8	9.0	6.0	6.0	9.0	2.9	2.9
82.5°	20.9	17.9	14.8	14.8	14.8	9.0	9.0	9.0	9.0	6.0	6.0
85°	11.9	9.0	6.0	6.0	2.9	6.0	0.0	2.9	2.9	0.0	0.0
87.5°	6.0	2.9	2.9	2.9	2.9	0.0	0.0	2.9	0.0	2.9	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: P249702

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4	6378.4
2.5°	6429.0	6440.9	6455.9	6467.8	6494.7	6500.6	6512.6	6524.5	6533.4	6542.3	6545.3
5°	6470.8	6515.5	6557.2	6601.9	6658.6	6697.3	6742.0	6780.8	6819.5	6852.3	6876.1
7.5°	6482.8	6551.2	6613.9	6691.3	6774.8	6846.4	6920.9	6995.3	7072.9	7132.5	7183.2
10°	6506.6	6590.0	6670.5	6762.9	6870.2	6965.5	7057.9	7156.3	7254.7	7338.1	7412.7
12.5°	6548.3	6640.7	6727.2	6828.5	6938.8	7046.0	7147.3	7257.6	7362.0	7454.4	7537.8
15°	6616.9	6703.2	6786.8	6882.1	6992.4	7090.8	7192.1	7299.4	7403.8	7499.1	7576.6
17.5°	6661.5	6742.0	6825.4	6911.9	7004.3	7093.7	7189.1	7284.5	7379.8	7466.3	7537.8
20°	6661.5	6739.1	6801.6	6879.2	6965.5	7043.1	7120.6	7204.0	7287.5	7359.0	7427.6
22.5°	6607.9	6682.4	6730.1	6789.7	6864.2	6929.8	6971.5	7063.9	7126.5	7189.1	7239.7
25°	6482.8	6536.4	6575.2	6616.9	6676.5	6721.2	6757.0	6810.6	6873.2	6897.1	6932.8
27.5°	6256.2	6295.0	6315.8	6324.8	6354.6	6378.4	6384.4	6408.2	6435.1	6440.9	6455.9
30°	5898.6	5901.5	5892.6	5889.6	5874.6	5856.9	5853.8	5850.8	5838.9	5827.0	5830.0
32.5°	5359.0	5344.2	5308.3	5269.7	5230.9	5189.2	5165.3	5135.5	5117.6	5099.8	5078.9
35°	4661.6	4625.9	4575.2	4527.5	4482.8	4449.9	4396.3	4378.4	4360.6	4336.7	4330.8
37.5°	3841.9	3821.1	3773.3	3737.6	3713.8	3698.9	3672.0	3654.2	3654.2	3645.3	3639.2
40°	2995.4	2989.5	2971.6	2980.6	2968.7	2974.6	2971.6	2965.6	2980.6	2980.6	2986.6
42.5°	2247.3	2250.4	2259.3	2265.2	2283.1	2286.1	2301.0	2301.0	2310.0	2318.8	2324.8
45°	1672.0	1684.1	1684.1	1696.0	1713.9	1716.8	1722.7	1725.8	1731.7	1746.6	1752.5
47.5°	1254.8	1257.7	1257.7	1260.8	1266.7	1272.7	1269.8	1272.7	1281.7	1275.7	1281.7
50°	927.0	929.9	921.0	912.0	921.0	921.0	918.0	909.1	918.0	906.1	912.0
52.5°	631.9	628.9	619.9	623.0	617.0	614.0	614.0	608.0	608.0	608.0	596.1
55°	399.5	399.5	393.4	393.4	390.5	384.5	381.5	378.5	375.5	372.6	372.6
57.5°	223.5	226.5	217.6	214.6	217.6	214.6	208.7	208.7	208.7	199.7	205.6
60°	122.2	119.2	116.3	113.2	110.3	113.2	113.2	107.3	107.3	107.3	110.3
62.5°	65.5	65.5	62.6	62.6	59.6	59.6	65.5	56.7	59.6	56.7	59.6
65°	35.8	44.7	32.8	32.8	41.7	38.8	35.8	35.8	38.8	32.8	35.8
67.5°	38.8	26.9	23.8	26.9	23.8	23.8	23.8	29.8	26.9	20.9	26.9
70°	17.9	20.9	20.9	14.8	23.8	11.9	20.9	11.9	17.9	14.8	17.9
72.5°	17.9	17.9	17.9	11.9	17.9	11.9	14.8	14.8	11.9	11.9	17.9
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°	6.0	6.0	2.9	2.9	2.9	2.9	6.0	6.0	6.0	0.0	2.9
80°	6.0	6.0	0.0	2.9	0.0	0.0	2.9	0.0	2.9	0.0	6.0
82.5°	2.9	6.0	2.9	2.9	6.0	6.0	6.0	2.9	2.9	2.9	2.9
85°	0.0	2.9	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	2.9
87.5°	0.0	2.9	0.0	0.0	0.0	0.0	2.9	2.9	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: P249702

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6378.4	6378.4	6378.4	6378.4
2.5°	6548.3	6551.2	6557.2	6554.3
5°	6894.0	6917.9	6929.8	6926.9
7.5°	7218.9	7260.7	7284.5	7284.5
10°	7469.3	7517.0	7552.7	7558.7
12.5°	7603.4	7657.1	7704.8	7692.8
15°	7642.1	7695.9	7743.5	7734.5
17.5°	7597.5	7651.1	7686.9	7680.9
20°	7475.3	7519.9	7555.8	7552.7
22.5°	7284.5	7323.3	7353.1	7350.0
25°	6962.6	6989.5	7013.3	7001.4
27.5°	6467.8	6476.8	6491.6	6473.8
30°	5809.1	5815.0	5821.0	5818.1
32.5°	5070.0	5066.9	5061.0	5055.0
35°	4321.9	4321.9	4324.8	4306.9
37.5°	3642.2	3639.2	3648.2	3639.2
40°	2992.5	2989.5	3001.4	2986.6
42.5°	2333.8	2342.7	2345.7	2345.7
45°	1755.6	1758.5	1761.5	1761.5
47.5°	1281.7	1284.6	1299.6	1281.7
50°	906.1	909.1	912.0	906.1
52.5°	599.1	602.1	599.1	590.1
55°	366.6	369.6	369.6	369.6
57.5°	196.7	199.7	199.7	196.7
60°	107.3	104.3	107.3	101.3
62.5°	56.7	62.6	59.6	53.6
65°	35.8	35.8	35.8	41.7
67.5°	29.8	23.8	26.9	20.9
70°	17.9	20.9	20.9	14.8
72.5°	14.8	14.8	14.8	17.9
75°	0.0	0.0	0.0	0.0
77.5°	6.0	6.0	6.0	2.9
80°	2.9	0.0	2.9	0.0
82.5°	2.9	2.9	6.0	2.9
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)