

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: P249732

Luminaire Tested: **LSR8B150D010 EC8B150850 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249732
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: LSR8B150D010 EC8B150850 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: 17401.0 lumens
Efficiency: N/A
Efficacy: 109.8 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

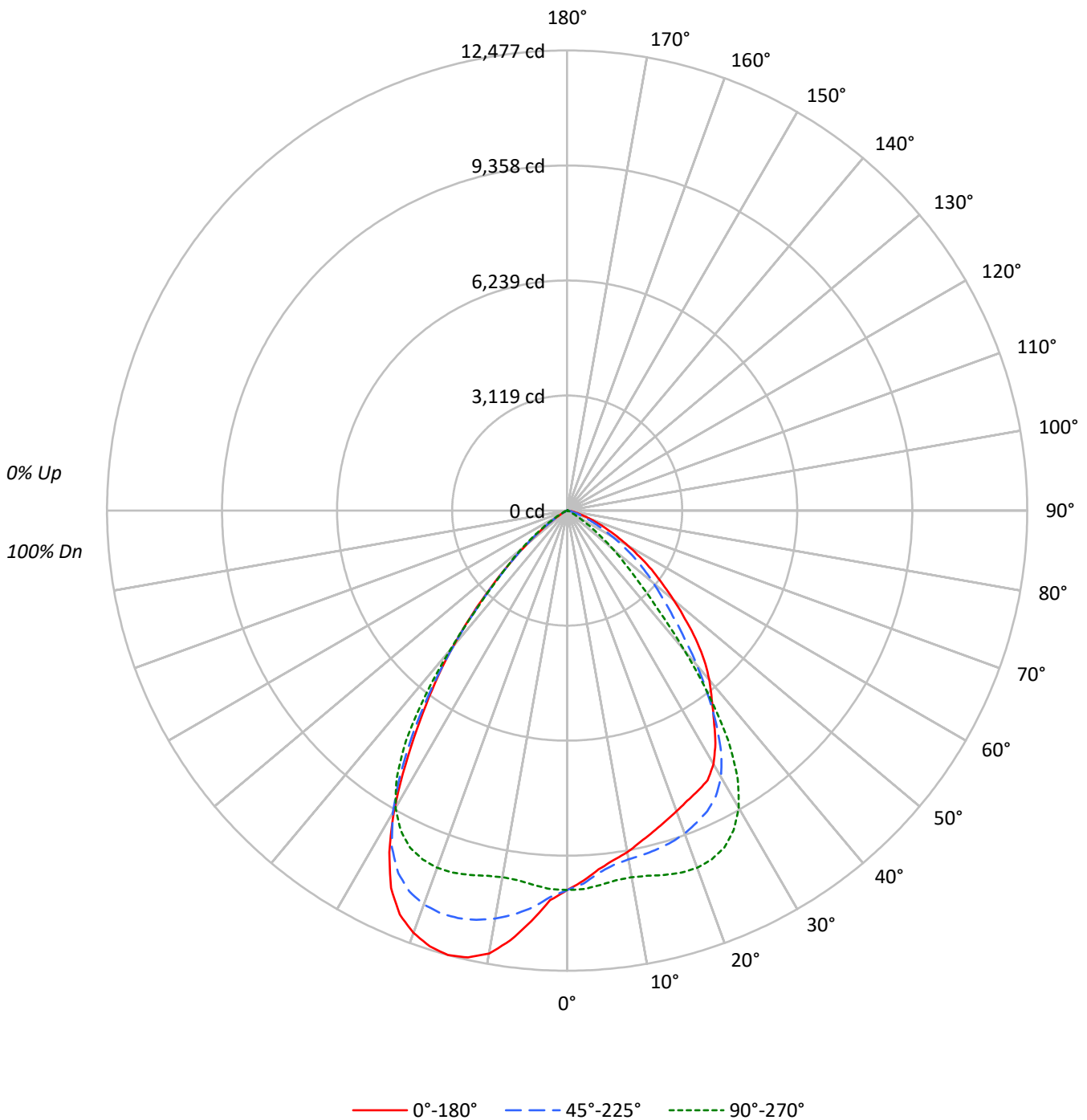
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	317281	317281	317281
5°	302273	315518	345884
10°	294477	316004	381797
15°	287799	326478	398314
20°	284634	338273	399809
25°	285299	343051	384275
30°	282650	331274	334183
35°	261179	286698	261537
40°	241351	198770	193935
45°	214915	119938	123915
50°	180833	77270	70122
55°	150446	42391	32058
60°	117425	18378	10083
65°	86653	9128	4911
70°	60253	5635	2155
75°	36660	1156	0
80°	26459	1723	0
85°	17018	1663	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	989.1	5.7
10°-20°	2960.4	17.0
20°-30°	4533.6	26.1
30°-40°	4444.4	25.5
40°-50°	2676.4	15.4
50°-60°	1231.9	7.1
60°-70°	432.7	2.5
70°-80°	113.2	0.7
80°-90°	19.3	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°	8483.1	48.8
0°-40°	12927.5	74.3
0°-60°	16835.8	96.8
0°-90°	17401.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17401.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10289	10289	10289	10289	10289	
5°	9765	9857	10193	10804	11174	922
15°	9015	9501	10227	11438	12477	2547
25°	8385	8991	10083	10842	11294	3862
35°	6938	7034	7616	7178	6948	4345
45°	4928	4058	2750	2770	2842	3779
55°	2798	2216	788	620	596	2497
65°	1188	822	125	62	67	1210
75°	308	178	10	0	0	373
85°	48	24	5	0	0	66
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°	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2
2.5°	10048.8	10058.5	10058.5	10058.5	10077.7	10082.6	10077.7	10082.6	10092.1	10125.8	10140.2
5°	9765.2	9750.8	9760.4	9755.5	9779.6	9794.1	9784.4	9798.8	9832.5	9856.6	9880.6
7.5°	9563.3	9563.3	9563.3	9572.8	9587.3	9616.2	9611.4	9620.9	9654.6	9688.2	9721.9
10°	9404.6	9399.9	9399.9	9423.8	9443.0	9476.7	9486.3	9515.2	9558.4	9601.7	9640.1
12.5°	9197.8	9202.8	9226.7	9250.8	9294.0	9346.8	9375.7	9414.3	9481.6	9553.6	9597.0
15°	9015.1	9019.9	9039.3	9087.2	9140.2	9202.8	9265.1	9327.6	9409.4	9500.8	9577.8
17.5°	8837.2	8842.0	8856.4	8909.5	8976.7	9058.5	9130.5	9212.3	9318.1	9423.8	9520.0
20°	8673.8	8669.0	8693.0	8741.0	8827.7	8904.5	8976.7	9072.9	9188.3	9318.1	9428.6
22.5°	8515.0	8515.0	8539.2	8587.3	8664.3	8741.0	8818.0	8919.0	9034.3	9159.4	9289.2
25°	8385.2	8380.5	8414.1	8438.2	8495.8	8572.8	8654.6	8736.3	8851.7	8991.2	9116.1
27.5°	8245.9	8241.1	8245.9	8274.8	8327.6	8385.2	8447.7	8520.0	8616.2	8731.5	8851.7
30°	7938.1	7942.9	7942.9	7967.0	7995.9	8058.3	8091.9	8164.2	8250.6	8346.8	8452.7
32.5°	7481.4	7486.1	7486.1	7495.8	7519.8	7548.7	7577.6	7630.4	7697.7	7779.4	7875.6
35°	6938.1	6938.1	6933.2	6938.1	6952.6	6952.6	6976.5	6952.6	6986.2	7034.3	7106.4
37.5°	6438.0	6428.3	6418.8	6409.1	6394.7	6370.7	6337.1	6279.3	6264.9	6245.7	6250.4
40°	5995.7	5991.0	5962.1	5937.9	5889.8	5832.2	5750.5	5649.6	5567.8	5471.7	5389.9
42.5°	5505.3	5500.4	5476.4	5433.1	5380.2	5293.7	5163.9	5029.3	4865.9	4721.6	4572.6
45°	4928.2	4942.7	4909.0	4860.9	4798.4	4716.7	4572.6	4408.9	4245.4	4058.0	3870.4
47.5°	4327.2	4322.4	4298.5	4269.6	4216.7	4135.0	4038.8	3860.9	3687.8	3514.8	3322.4
50°	3769.5	3750.3	3740.6	3711.9	3678.3	3611.0	3509.8	3365.6	3211.8	3048.3	2870.4
52.5°	3240.7	3240.7	3216.5	3197.3	3168.4	3115.6	3029.1	2913.7	2783.9	2630.0	2442.5
55°	2798.4	2788.7	2764.7	2740.6	2711.7	2678.0	2601.3	2505.1	2365.6	2216.5	2053.1
57.5°	2327.2	2322.2	2312.7	2283.8	2269.4	2235.7	2149.2	2053.1	1932.9	1803.1	1668.3
60°	1904.0	1884.8	1865.4	1846.3	1822.3	1788.7	1730.9	1649.1	1548.2	1432.8	1298.3
62.5°	1524.3	1553.0	1495.4	1495.4	1447.3	1418.4	1365.5	1317.4	1211.6	1105.9	990.5
65°	1187.6	1187.6	1163.5	1144.3	1115.4	1081.7	1028.9	980.8	903.8	822.1	740.4
67.5°	908.8	903.8	879.9	860.7	836.5	817.3	779.0	721.2	663.6	596.3	528.8
70°	668.3	663.6	658.6	625.0	605.8	581.8	552.9	514.6	471.2	423.1	360.6
72.5°	480.7	480.7	466.5	452.0	432.8	413.4	384.7	360.6	322.2	288.5	245.2
75°	307.7	303.0	303.0	278.8	278.8	250.0	230.8	216.3	197.1	177.9	139.5
77.5°	221.3	216.3	211.6	201.9	192.4	182.7	168.2	149.0	134.6	115.4	100.9
80°	149.0	139.5	134.6	134.6	120.1	115.4	120.1	91.4	86.5	72.0	62.5
82.5°	91.4	91.4	86.5	86.5	81.7	77.0	62.5	62.5	57.8	52.8	43.3
85°	48.1	62.5	43.3	48.1	43.3	48.1	43.3	33.6	28.9	23.9	23.9
87.5°	28.9	19.2	19.2	28.9	23.9	19.2	19.2	19.2	14.4	9.7	9.7
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°	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2
2.5°	10130.7	10164.4	10159.4	10202.8	10217.2	10250.9	10250.9	10274.8	10289.2	10322.9	10351.8
5°	9890.3	9943.1	9957.6	10010.4	10053.7	10106.6	10140.2	10193.1	10241.2	10313.4	10380.7
7.5°	9741.3	9784.4	9813.3	9875.8	9923.9	9981.5	10039.3	10111.3	10178.6	10265.3	10361.5
10°	9669.0	9726.8	9769.9	9832.5	9890.3	9952.8	10010.4	10092.1	10169.1	10279.7	10385.4
12.5°	9649.8	9717.1	9769.9	9856.6	9914.2	9981.5	10048.8	10140.2	10222.0	10337.3	10457.7
15°	9649.8	9741.3	9813.3	9909.5	9976.8	10063.2	10135.5	10226.7	10318.1	10438.3	10553.6
17.5°	9630.6	9741.3	9832.5	9943.1	10029.6	10116.3	10207.5	10294.2	10390.2	10505.8	10635.4
20°	9553.6	9693.2	9803.6	9933.4	10024.8	10121.0	10212.5	10308.4	10409.6	10529.7	10640.3
22.5°	9419.1	9582.5	9707.6	9846.9	9952.8	10048.8	10140.2	10236.4	10347.0	10462.4	10577.8
25°	9241.1	9394.9	9529.7	9673.8	9779.6	9885.3	9972.0	10082.6	10183.6	10294.2	10385.4
27.5°	8971.8	9135.3	9265.1	9414.3	9510.3	9611.4	9683.5	9774.9	9871.1	9962.3	10034.5
30°	8568.1	8717.1	8851.7	8986.2	9082.4	9154.7	9231.4	9303.7	9366.2	9428.6	9491.1
32.5°	7976.5	8111.3	8241.1	8366.0	8443.0	8505.5	8563.1	8606.5	8640.1	8673.8	8678.5
35°	7164.1	7274.6	7356.3	7466.9	7539.2	7596.8	7596.8	7616.0	7611.2	7596.8	7582.3
37.5°	6255.4	6298.5	6332.1	6375.5	6380.2	6380.2	6351.5	6327.4	6289.0	6279.3	6250.4
40°	5308.2	5250.4	5207.1	5149.5	5115.8	5043.6	4981.3	4937.9	4875.4	4865.9	4856.2
42.5°	4408.9	4274.3	4154.2	4053.3	3937.9	3836.8	3745.5	3678.3	3630.2	3625.2	3630.2
45°	3678.3	3524.3	3346.4	3207.0	3077.2	2952.1	2832.0	2750.3	2706.9	2697.2	2706.9
47.5°	3125.3	2947.4	2774.2	2615.5	2476.2	2336.7	2216.5	2105.9	2053.1	2038.6	2033.9
50°	2687.7	2505.1	2322.2	2158.7	2005.0	1865.4	1716.4	1610.7	1543.5	1519.3	1500.1
52.5°	2259.9	2096.4	1908.8	1740.6	1586.6	1423.1	1269.4	1149.0	1081.7	1053.0	1033.7
55°	1884.8	1721.4	1548.2	1384.7	1221.3	1057.8	903.8	788.5	716.4	682.8	658.6
57.5°	1504.9	1351.1	1202.1	1038.6	903.8	745.3	591.3	490.4	427.9	389.5	370.3
60°	1163.5	1043.4	913.5	779.0	649.1	519.3	394.2	298.0	250.0	221.3	197.1
62.5°	879.9	779.0	692.3	576.9	476.0	365.3	269.3	192.4	149.0	125.1	115.4
65°	634.7	557.7	480.7	408.7	336.6	254.9	182.7	125.1	86.5	72.0	67.3
67.5°	452.0	389.5	331.7	283.6	230.8	182.7	129.8	86.5	67.3	57.8	52.8
70°	317.2	269.3	230.8	187.6	153.8	120.1	100.9	62.5	38.4	43.3	33.6
72.5°	211.6	177.9	158.7	129.8	105.7	86.5	62.5	43.3	43.3	33.6	28.9
75°	115.4	105.7	81.7	62.5	52.8	48.1	19.2	9.7	4.7	14.4	4.7
77.5°	81.7	72.0	62.5	52.8	43.3	33.6	19.2	19.2	14.4	19.2	9.7
80°	52.8	43.3	38.4	38.4	23.9	14.4	9.7	9.7	14.4	4.7	4.7
82.5°	33.6	28.9	23.9	23.9	23.9	14.4	14.4	14.4	14.4	9.7	9.7
85°	19.2	14.4	9.7	9.7	4.7	9.7	0.0	4.7	4.7	0.0	0.0
87.5°	9.7	4.7	4.7	4.7	4.7	0.0	0.0	4.7	0.0	4.7	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2	10289.2
2.5°	10371.0	10390.2	10414.3	10433.5	10476.9	10486.4	10505.8	10525.0	10539.4	10553.6	10558.6
5°	10438.3	10510.5	10577.8	10649.8	10741.3	10803.8	10875.8	10938.4	11000.9	11053.8	11092.1
7.5°	10457.7	10568.1	10669.2	10794.1	10928.7	11044.3	11164.4	11284.5	11409.6	11505.8	11587.5
10°	10496.1	10630.6	10760.5	10909.5	11082.6	11236.4	11385.4	11544.2	11702.9	11837.5	11957.8
12.5°	10563.3	10712.4	10851.9	11015.4	11193.3	11366.2	11529.7	11707.6	11876.0	12025.1	12159.6
15°	10674.0	10813.3	10948.1	11101.8	11279.8	11438.5	11601.9	11774.9	11943.3	12097.1	12222.2
17.5°	10746.0	10875.8	11010.4	11149.9	11299.0	11443.2	11597.0	11751.0	11904.7	12044.3	12159.6
20°	10746.0	10871.1	10972.0	11097.1	11236.4	11361.5	11486.6	11621.1	11755.7	11871.1	11981.7
22.5°	10659.5	10779.7	10856.6	10952.8	11072.9	11178.8	11246.1	11395.1	11496.1	11597.0	11678.7
25°	10457.7	10544.1	10606.7	10674.0	10770.2	10842.2	10900.0	10986.5	11087.4	11126.0	11183.6
27.5°	10092.1	10154.7	10188.3	10202.8	10250.9	10289.2	10298.9	10337.3	10380.7	10390.2	10414.3
30°	9515.2	9520.0	9505.5	9500.8	9476.7	9448.0	9443.0	9438.3	9419.1	9399.9	9404.6
32.5°	8644.9	8620.9	8563.1	8500.8	8438.2	8371.0	8332.4	8284.3	8255.4	8226.7	8193.0
35°	7519.8	7462.2	7380.4	7303.5	7231.4	7178.4	7091.9	7063.0	7034.3	6995.7	6986.2
37.5°	6197.6	6163.9	6086.9	6029.4	5991.0	5966.8	5923.5	5894.8	5894.8	5880.3	5870.6
40°	4832.0	4822.5	4793.6	4808.1	4788.9	4798.4	4793.6	4783.9	4808.1	4808.1	4817.8
42.5°	3625.2	3630.2	3644.6	3654.1	3683.0	3687.8	3711.9	3711.9	3726.3	3740.6	3750.3
45°	2697.2	2716.6	2716.6	2735.8	2764.7	2769.5	2779.0	2783.9	2793.4	2817.6	2827.1
47.5°	2024.2	2028.9	2028.9	2033.9	2043.4	2053.1	2048.3	2053.1	2067.5	2057.8	2067.5
50°	1495.4	1500.1	1485.7	1471.2	1485.7	1485.7	1480.9	1466.5	1480.9	1461.7	1471.2
52.5°	1019.4	1014.5	1000.0	1005.0	995.3	990.5	990.5	980.8	980.8	980.8	961.6
55°	644.4	644.4	634.7	634.7	629.9	620.2	615.5	610.5	605.8	601.0	601.0
57.5°	360.6	365.3	351.1	346.1	351.1	346.1	336.6	336.6	336.6	322.2	331.7
60°	197.1	192.4	187.6	182.7	177.9	182.7	182.7	173.2	173.2	173.2	177.9
62.5°	105.7	105.7	100.9	100.9	96.2	96.2	105.7	91.4	96.2	91.4	96.2
65°	57.8	72.0	52.8	52.8	67.3	62.5	57.8	57.8	62.5	52.8	57.8
67.5°	62.5	43.3	38.4	43.3	38.4	38.4	38.4	48.1	43.3	33.6	43.3
70°	28.9	33.6	33.6	23.9	38.4	19.2	33.6	19.2	28.9	23.9	28.9
72.5°	28.9	28.9	28.9	19.2	28.9	19.2	23.9	23.9	19.2	19.2	28.9
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°	9.7	9.7	4.7	4.7	4.7	4.7	9.7	9.7	9.7	0.0	4.7
80°	9.7	9.7	0.0	4.7	0.0	0.0	4.7	0.0	4.7	0.0	9.7
82.5°	4.7	9.7	4.7	4.7	9.7	9.7	9.7	4.7	4.7	4.7	4.7
85°	0.0	4.7	0.0	0.0	0.0	0.0	9.7	0.0	0.0	0.0	4.7
87.5°	0.0	4.7	0.0	0.0	0.0	0.0	4.7	4.7	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: P249732

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	10289.2	10289.2	10289.2	10289.2
2.5°	10563.3	10568.1	10577.8	10573.0
5°	11121.0	11159.6	11178.8	11174.1
7.5°	11645.1	11712.6	11751.0	11751.0
10°	12049.0	12126.0	12183.6	12193.3
12.5°	12265.3	12352.0	12429.0	12409.6
15°	12327.9	12414.5	12491.3	12476.9
17.5°	12255.8	12342.3	12400.1	12390.4
20°	12058.7	12130.7	12188.5	12183.6
22.5°	11751.0	11813.5	11861.6	11856.7
25°	11231.7	11275.0	11313.4	11294.2
27.5°	10433.5	10448.0	10471.9	10443.2
30°	9371.0	9380.5	9390.2	9385.4
32.5°	8178.6	8173.7	8164.2	8154.5
35°	6971.8	6971.8	6976.5	6947.6
37.5°	5875.4	5870.6	5885.1	5870.6
40°	4827.3	4822.5	4841.7	4817.8
42.5°	3764.7	3779.2	3783.9	3783.9
45°	2832.0	2836.8	2841.5	2841.5
47.5°	2067.5	2072.3	2096.4	2067.5
50°	1461.7	1466.5	1471.2	1461.7
52.5°	966.4	971.3	966.4	951.9
55°	591.3	596.3	596.3	596.3
57.5°	317.2	322.2	322.2	317.2
60°	173.2	168.2	173.2	163.5
62.5°	91.4	100.9	96.2	86.5
65°	57.8	57.8	57.8	67.3
67.5°	48.1	38.4	43.3	33.6
70°	28.9	33.6	33.6	23.9
72.5°	23.9	23.9	23.9	28.9
75°	0.0	0.0	0.0	0.0
77.5°	9.7	9.7	9.7	4.7
80°	4.7	0.0	4.7	0.0
82.5°	4.7	4.7	9.7	4.7
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)