

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: P249718

Luminaire Tested: **LSR8B150D010 EC8B150835 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249718
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 EC8B150835 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17179.0 lumens
Efficiency: N/A
Efficacy: 108.4 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

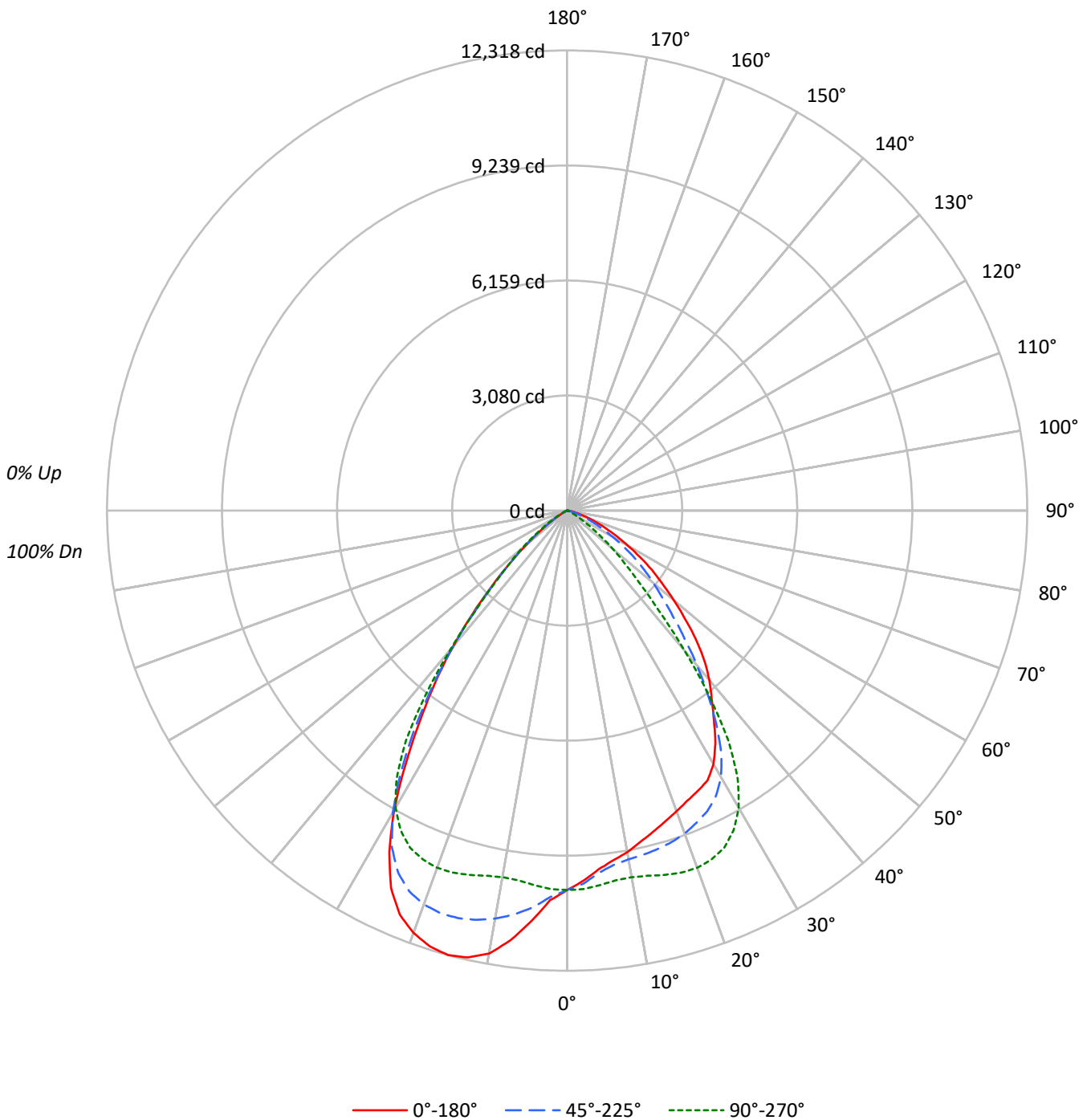
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	313235	313235	313235
5°	298416	311491	341470
10°	290720	311974	376925
15°	284128	322312	393232
20°	281001	333958	394709
25°	281658	338676	379372
30°	279046	327048	329921
35°	257848	283039	258201
40°	238271	196234	191460
45°	212172	118408	122337
50°	178526	76286	69230
55°	148527	41848	31649
60°	115926	18144	9954
65°	85551	9011	4845
70°	59487	5563	2128
75°	36195	1144	0
80°	26122	1705	0
85°	16806	1663	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	976.5	5.7
10°-20°	2922.6	17.0
20°-30°	4475.7	26.1
30°-40°	4387.7	25.5
40°-50°	2642.3	15.4
50°-60°	1216.2	7.1
60°-70°	427.2	2.5
70°-80°	111.8	0.7
80°-90°	19.0	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°	8374.9	48.8
0°-40°	12762.6	74.3
0°-60°	16621.0	96.8
0°-90°	17179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17179.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10158	10158	10158	10158	10158	
5°	9641	9731	10063	10666	11032	911
15°	8900	9380	10096	11292	12318	2515
25°	8278	8876	9954	10704	11150	3813
35°	6850	6945	7519	7087	6859	4290
45°	4865	4006	2715	2734	2805	3731
55°	2763	2188	778	612	589	2465
65°	1172	812	124	62	66	1194
75°	304	176	10	0	0	368
85°	48	24	5	0	0	65
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°	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0
2.5°	9920.6	9930.2	9930.2	9930.2	9949.1	9954.0	9949.1	9954.0	9963.4	9996.6	10010.9
5°	9640.6	9626.4	9635.9	9631.0	9654.9	9669.1	9659.6	9673.8	9707.0	9730.9	9754.5
7.5°	9441.3	9441.3	9441.3	9450.7	9465.0	9493.5	9488.8	9498.2	9531.4	9564.6	9597.8
10°	9284.6	9279.9	9279.9	9303.6	9322.5	9355.8	9365.3	9393.8	9436.4	9479.2	9517.1
12.5°	9080.5	9085.3	9109.0	9132.8	9175.4	9227.6	9256.1	9294.2	9360.6	9431.8	9474.5
15°	8900.1	8904.8	8924.0	8971.2	9023.6	9085.3	9146.9	9208.6	9289.3	9379.6	9455.6
17.5°	8724.5	8729.2	8743.4	8795.8	8862.2	8942.9	9014.0	9094.7	9199.3	9303.6	9398.5
20°	8563.1	8558.4	8582.0	8629.5	8715.1	8790.9	8862.2	8957.2	9071.1	9199.3	9308.3
22.5°	8406.4	8406.4	8430.2	8477.7	8553.7	8629.5	8705.5	8805.2	8919.1	9042.6	9170.7
25°	8278.2	8273.5	8306.8	8330.6	8387.4	8463.5	8544.1	8624.8	8738.7	8876.5	8999.8
27.5°	8140.7	8136.0	8140.7	8169.2	8221.4	8278.2	8340.0	8411.3	8506.2	8620.1	8738.7
30°	7836.9	7841.6	7841.6	7865.4	7893.9	7955.5	7988.7	8060.0	8145.4	8240.3	8344.9
32.5°	7385.9	7390.6	7390.6	7400.2	7423.8	7452.4	7480.9	7533.1	7599.5	7680.2	7775.1
35°	6849.6	6849.6	6844.7	6849.6	6863.9	6863.9	6887.5	6863.9	6897.1	6944.6	7015.7
37.5°	6355.9	6346.3	6336.9	6327.4	6313.1	6289.5	6256.2	6199.2	6184.9	6166.0	6170.7
40°	5919.2	5914.5	5886.0	5862.2	5814.7	5757.8	5677.1	5577.5	5496.8	5401.9	5321.2
42.5°	5435.1	5430.2	5406.5	5363.8	5311.6	5226.2	5098.0	4965.2	4803.8	4661.4	4514.2
45°	4865.3	4879.6	4846.4	4798.9	4737.2	4656.5	4514.2	4352.7	4191.3	4006.3	3821.0
47.5°	4272.0	4267.3	4243.6	4215.1	4163.0	4082.3	3987.3	3811.7	3640.7	3469.9	3280.0
50°	3721.4	3702.4	3692.9	3664.5	3631.3	3564.9	3465.1	3322.6	3170.8	3009.4	2833.8
52.5°	3199.3	3199.3	3175.5	3156.6	3128.0	3075.9	2990.5	2876.6	2748.4	2596.4	2411.4
55°	2762.7	2753.1	2729.5	2705.6	2677.1	2643.9	2568.1	2473.1	2335.4	2188.3	2026.9
57.5°	2297.5	2292.6	2283.2	2254.7	2240.4	2207.2	2121.8	2026.9	1908.3	1780.1	1647.0
60°	1879.7	1860.8	1841.6	1822.7	1799.1	1765.8	1708.8	1628.1	1528.5	1414.5	1281.7
62.5°	1504.8	1533.1	1476.3	1476.3	1428.8	1400.3	1348.1	1300.6	1196.1	1091.8	977.9
65°	1172.5	1172.5	1148.6	1129.7	1101.2	1067.9	1015.8	968.3	892.3	811.6	730.9
67.5°	897.2	892.3	868.7	849.7	825.9	806.9	769.0	712.0	655.1	588.7	522.1
70°	659.8	655.1	650.2	617.0	598.1	574.4	545.9	508.0	465.2	417.7	356.0
72.5°	474.6	474.6	460.5	446.2	427.3	408.1	379.8	356.0	318.1	284.9	242.1
75°	303.8	299.1	299.1	275.3	275.3	246.8	227.8	213.5	194.6	175.6	137.7
77.5°	218.4	213.5	208.9	199.3	189.9	180.3	166.1	147.1	132.9	113.9	99.6
80°	147.1	137.7	132.9	132.9	118.6	113.9	118.6	90.3	85.4	71.1	61.7
82.5°	90.3	90.3	85.4	85.4	80.7	76.0	61.7	61.7	57.1	52.2	42.8
85°	47.5	61.7	42.8	47.5	42.8	47.5	42.8	33.2	28.5	23.6	23.6
87.5°	28.5	19.0	19.0	28.5	23.6	19.0	19.0	19.0	14.3	9.6	9.6
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°	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0
2.5°	10001.5	10034.7	10029.8	10072.6	10086.9	10120.1	10120.1	10143.7	10158.0	10191.2	10219.7
5°	9764.1	9816.3	9830.5	9882.7	9925.5	9977.6	10010.9	10063.0	10110.5	10181.8	10248.2
7.5°	9617.0	9659.6	9688.1	9749.8	9797.3	9854.2	9911.2	9982.3	10048.8	10134.3	10229.3
10°	9545.7	9602.7	9645.3	9707.0	9764.1	9825.8	9882.7	9963.4	10039.4	10148.6	10252.9
12.5°	9526.7	9593.1	9645.3	9730.9	9787.7	9854.2	9920.6	10010.9	10091.6	10205.5	10324.2
15°	9526.7	9617.0	9688.1	9783.0	9849.5	9934.9	10006.2	10096.2	10186.5	10305.1	10419.0
17.5°	9507.8	9617.0	9707.0	9816.3	9901.6	9987.2	10077.3	10162.9	10257.6	10371.7	10499.7
20°	9431.8	9569.5	9678.5	9806.7	9897.0	9991.9	10082.2	10176.9	10276.8	10395.4	10504.6
22.5°	9298.9	9460.3	9583.8	9721.3	9825.8	9920.6	10010.9	10105.8	10215.0	10328.9	10442.8
25°	9123.2	9275.1	9408.1	9550.3	9654.9	9759.2	9844.8	9954.0	10053.6	10162.9	10252.9
27.5°	8857.3	9018.7	9146.9	9294.2	9389.0	9488.8	9559.9	9650.2	9745.1	9835.2	9906.5
30°	8458.8	8605.9	8738.7	8871.6	8966.6	9037.9	9113.7	9185.0	9246.7	9308.3	9370.0
32.5°	7874.8	8007.8	8136.0	8259.3	8335.3	8397.0	8453.9	8496.7	8529.9	8563.1	8567.8
35°	7072.7	7181.8	7262.5	7371.7	7443.0	7499.8	7499.8	7518.8	7514.1	7499.8	7485.6
37.5°	6175.6	6218.2	6251.4	6294.2	6298.8	6298.8	6270.5	6246.7	6208.8	6199.2	6170.7
40°	5240.5	5183.4	5140.6	5083.8	5050.6	4979.2	4917.7	4874.9	4813.2	4803.8	4794.2
42.5°	4352.7	4219.8	4101.2	4001.6	3887.7	3787.8	3697.8	3631.3	3583.8	3579.0	3583.8
45°	3631.3	3479.3	3303.7	3166.1	3038.0	2914.5	2795.9	2715.2	2672.4	2662.8	2672.4
47.5°	3085.4	2909.8	2738.8	2582.1	2444.6	2306.8	2188.3	2079.0	2026.9	2012.6	2007.9
50°	2653.4	2473.1	2292.6	2131.2	1979.4	1841.6	1694.5	1590.2	1523.8	1499.9	1481.0
52.5°	2231.0	2069.7	1884.4	1718.4	1566.4	1405.0	1253.2	1134.4	1067.9	1039.6	1020.5
55°	1860.8	1699.4	1528.5	1367.1	1205.7	1044.3	892.3	778.4	707.3	674.1	650.2
57.5°	1485.7	1333.9	1186.7	1025.4	892.3	735.8	583.8	484.2	422.4	384.5	365.6
60°	1148.6	1030.0	901.9	769.0	640.8	512.7	389.2	294.2	246.8	218.4	194.6
62.5°	868.7	769.0	683.4	569.5	469.9	360.7	265.9	189.9	147.1	123.5	113.9
65°	626.6	550.6	474.6	403.5	332.3	251.6	180.3	123.5	85.4	71.1	66.4
67.5°	446.2	384.5	327.5	280.0	227.8	180.3	128.2	85.4	66.4	57.1	52.2
70°	313.2	265.9	227.8	185.2	151.8	118.6	99.6	61.7	37.9	42.8	33.2
72.5°	208.9	175.6	156.7	128.2	104.3	85.4	61.7	42.8	42.8	33.2	28.5
75°	113.9	104.3	80.7	61.7	52.2	47.5	19.0	9.6	4.7	14.3	4.7
77.5°	80.7	71.1	61.7	52.2	42.8	33.2	19.0	19.0	14.3	19.0	9.6
80°	52.2	42.8	37.9	37.9	23.6	14.3	9.6	9.6	14.3	4.7	4.7
82.5°	33.2	28.5	23.6	23.6	23.6	14.3	14.3	14.3	14.3	9.6	9.6
85°	19.0	14.3	9.6	9.6	4.7	9.6	0.0	4.7	4.7	0.0	0.0
87.5°	9.6	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°	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0	10158.0
2.5°	10238.7	10257.6	10281.5	10300.4	10343.2	10352.6	10371.7	10390.7	10404.9	10419.0	10423.9
5°	10305.1	10376.4	10442.8	10514.0	10604.2	10666.0	10737.1	10798.8	10860.6	10912.7	10950.6
7.5°	10324.2	10433.3	10533.1	10656.4	10789.3	10903.4	11021.9	11140.5	11264.0	11359.0	11439.7
10°	10362.2	10495.0	10623.2	10770.3	10941.3	11093.1	11240.2	11396.9	11553.6	11686.4	11805.2
12.5°	10428.6	10575.7	10713.4	10874.8	11050.5	11221.2	11382.6	11558.3	11724.5	11871.7	12004.5
15°	10537.8	10675.3	10808.4	10960.2	11135.9	11292.5	11453.9	11624.7	11791.0	11942.8	12066.3
17.5°	10608.9	10737.1	10869.9	11007.7	11154.8	11297.2	11449.0	11601.1	11752.9	11890.6	12004.5
20°	10608.9	10732.4	10832.0	10955.5	11093.1	11216.5	11340.0	11472.9	11605.7	11719.6	11828.9
22.5°	10523.5	10642.1	10718.1	10813.1	10931.7	11036.2	11102.6	11249.8	11349.4	11449.0	11529.7
25°	10324.2	10409.6	10471.4	10537.8	10632.8	10703.9	10760.9	10846.3	10945.9	10984.0	11040.9
27.5°	9963.4	10025.1	10058.3	10072.6	10120.1	10158.0	10167.6	10205.5	10248.2	10257.6	10281.5
30°	9393.8	9398.5	9384.3	9379.6	9355.8	9327.4	9322.5	9317.8	9298.9	9279.9	9284.6
32.5°	8534.6	8510.9	8453.9	8392.3	8330.6	8264.2	8226.1	8178.6	8150.1	8121.7	8088.5
35°	7423.8	7367.0	7286.3	7210.3	7139.2	7086.8	7001.4	6972.9	6944.6	6906.5	6897.1
37.5°	6118.5	6085.3	6009.3	5952.4	5914.5	5890.7	5847.9	5819.6	5819.6	5805.3	5795.7
40°	4770.4	4761.0	4732.5	4746.7	4727.8	4737.2	4732.5	4722.9	4746.7	4746.7	4756.3
42.5°	3579.0	3583.8	3598.1	3607.5	3636.0	3640.7	3664.5	3664.5	3678.8	3692.9	3702.4
45°	2662.8	2682.0	2682.0	2700.9	2729.5	2734.1	2743.5	2748.4	2757.8	2781.6	2791.0
47.5°	1998.3	2003.0	2003.0	2007.9	2017.3	2026.9	2022.2	2026.9	2041.1	2031.6	2041.1
50°	1476.3	1481.0	1466.7	1452.5	1466.7	1466.7	1462.0	1447.8	1462.0	1443.1	1452.5
52.5°	1006.4	1001.5	987.3	992.1	982.6	977.9	977.9	968.3	968.3	968.3	949.3
55°	636.2	636.2	626.6	626.6	621.9	612.3	607.6	602.7	598.1	593.4	593.4
57.5°	356.0	360.7	346.6	341.7	346.6	341.7	332.3	332.3	332.3	318.1	327.5
60°	194.6	189.9	185.2	180.3	175.6	180.3	180.3	171.0	171.0	171.0	175.6
62.5°	104.3	104.3	99.6	99.6	95.0	95.0	104.3	90.3	95.0	90.3	95.0
65°	57.1	71.1	52.2	52.2	66.4	61.7	57.1	57.1	61.7	52.2	57.1
67.5°	61.7	42.8	37.9	42.8	37.9	37.9	37.9	47.5	42.8	33.2	42.8
70°	28.5	33.2	33.2	23.6	37.9	19.0	33.2	19.0	28.5	23.6	28.5
72.5°	28.5	28.5	28.5	19.0	28.5	19.0	23.6	23.6	19.0	19.0	28.5
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°	9.6	9.6	4.7	4.7	4.7	4.7	9.6	9.6	9.6	0.0	4.7
80°	9.6	9.6	0.0	4.7	0.0	0.0	4.7	0.0	4.7	0.0	9.6
82.5°	4.7	9.6	4.7	4.7	9.6	9.6	9.6	4.7	4.7	4.7	4.7
85°	0.0	4.7	0.0	0.0	0.0	0.0	9.6	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: P249718

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	10158.0	10158.0	10158.0	10158.0
2.5°	10428.6	10433.3	10442.8	10438.2
5°	10979.2	11017.3	11036.2	11031.5
7.5°	11496.5	11563.1	11601.1	11601.1
10°	11895.3	11971.3	12028.2	12037.7
12.5°	12108.8	12194.4	12270.4	12251.3
15°	12170.6	12256.2	12332.0	12317.7
17.5°	12099.5	12184.8	12241.9	12232.3
20°	11904.9	11976.0	12033.0	12028.2
22.5°	11601.1	11662.8	11710.3	11705.4
25°	11088.4	11131.2	11169.1	11150.1
27.5°	10300.4	10314.7	10338.3	10310.0
30°	9251.4	9260.8	9270.4	9265.7
32.5°	8074.3	8069.4	8060.0	8050.4
35°	6882.8	6882.8	6887.5	6859.0
37.5°	5800.4	5795.7	5810.0	5795.7
40°	4765.7	4761.0	4780.0	4756.3
42.5°	3716.7	3731.0	3735.7	3735.7
45°	2795.9	2800.6	2805.3	2805.3
47.5°	2041.1	2045.8	2069.7	2041.1
50°	1443.1	1447.8	1452.5	1443.1
52.5°	954.0	958.9	954.0	939.8
55°	583.8	588.7	588.7	588.7
57.5°	313.2	318.1	318.1	313.2
60°	171.0	166.1	171.0	161.4
62.5°	90.3	99.6	95.0	85.4
65°	57.1	57.1	57.1	66.4
67.5°	47.5	37.9	42.8	33.2
70°	28.5	33.2	33.2	23.6
72.5°	23.6	23.6	23.6	28.5
75°	0.0	0.0	0.0	0.0
77.5°	9.6	9.6	9.6	4.7
80°	4.7	0.0	4.7	0.0
82.5°	4.7	4.7	9.6	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)