

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: P249725

Luminaire Tested: **LSR8B150D010 EC8B150840 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249725
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 EC8B150840 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17067.0 lumens
Efficiency: N/A
Efficacy: 107.7 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

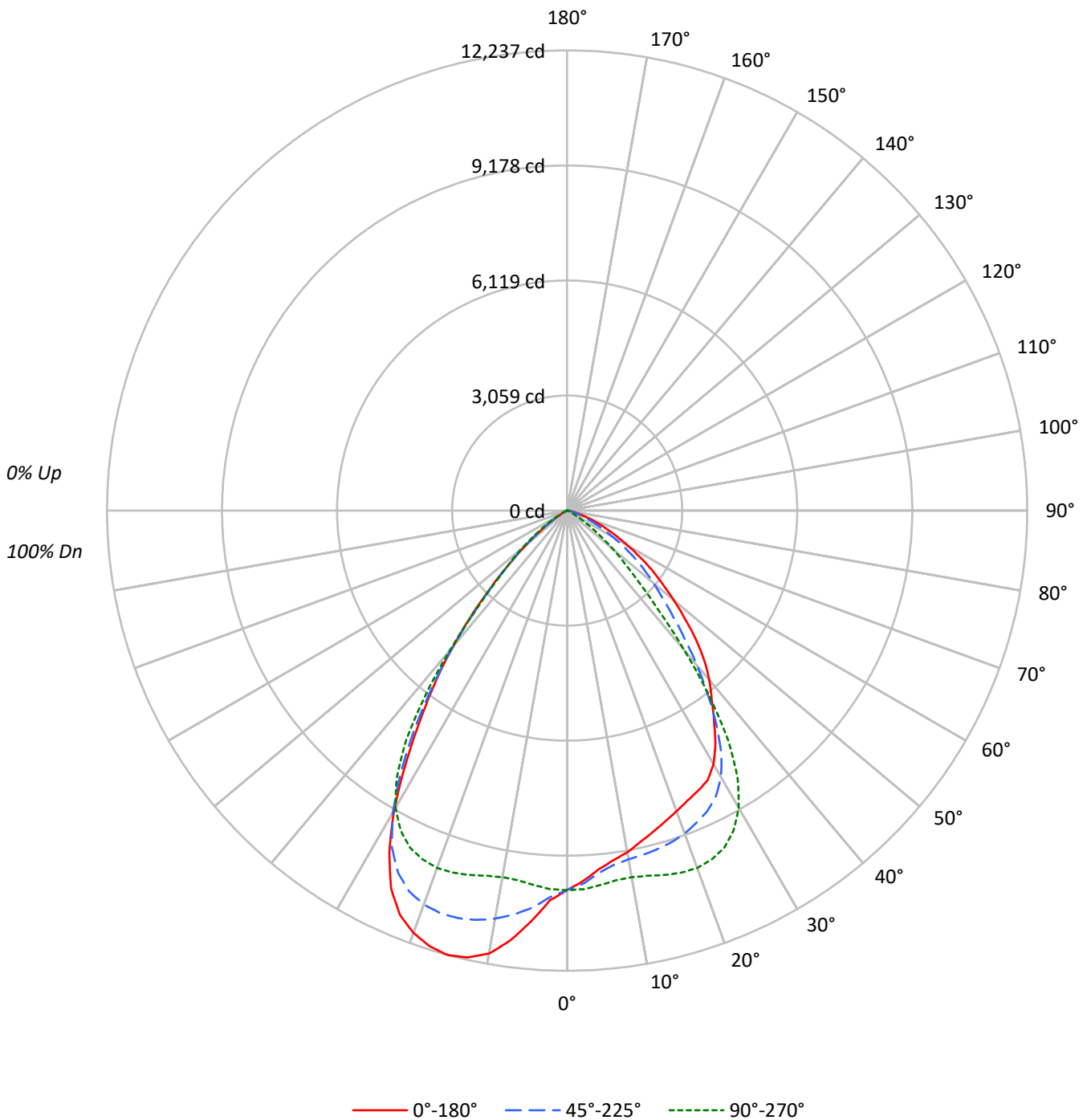
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249725

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBSW0LI

Luminous Intensity Polar Plot





TEST NUMBER: P249725

CATALOG NUMBER: LSR8B150D010 EC8B150840 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°	311194	311194	311194
5°	296472	309461	339245
10°	288825	309939	374467
15°	282276	320212	390668
20°	279170	331783	392133
25°	279824	336468	376899
30°	277227	324915	327770
35°	256169	281195	256519
40°	236717	194954	190212
45°	210789	117636	121539
50°	177360	75787	68779
55°	147559	41574	31440
60°	115174	18027	9886
65°	84990	8953	4816
70°	59099	5527	2119
75°	35957	1132	0
80°	25962	1687	0
85°	16700	1663	0



TEST NUMBER: P249725

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBSWOLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	970.2	5.7
10°-20°	2903.6	17.0
20°-30°	4446.5	26.1
30°-40°	4359.1	25.5
40°-50°	2625.0	15.4
50°-60°	1208.2	7.1
60°-70°	424.4	2.5
70°-80°	111.0	0.7
80°-90°	18.9	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°	8320.3	48.8
0°-40°	12679.4	74.3
0°-60°	16512.6	96.8
0°-90°	17067.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17067.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10092	10092	10092	10092	10092	
5°	9578	9667	9997	10596	10960	905
15°	8842	9318	10030	11219	12237	2498
25°	8224	8819	9889	10634	11077	3788
35°	6805	6899	7470	7041	6814	4262
45°	4834	3980	2698	2716	2787	3707
55°	2745	2174	773	608	585	2449
65°	1165	806	123	61	66	1187
75°	302	174	10	0	0	366
85°	47	24	5	0	0	65
90°	0	0	0	0	0	



TEST NUMBER: P249725

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBSW0LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8
2.5°	9855.9	9865.4	9865.4	9865.4	9884.3	9889.1	9884.3	9889.1	9898.4	9931.4	9945.6
5°	9577.8	9563.6	9573.1	9568.3	9591.9	9606.1	9596.6	9610.8	9643.8	9667.4	9690.9
7.5°	9379.8	9379.8	9379.8	9389.1	9403.3	9431.6	9426.9	9436.3	9469.3	9502.3	9535.3
10°	9224.1	9219.4	9219.4	9242.9	9261.8	9294.8	9304.3	9332.6	9374.9	9417.4	9455.1
12.5°	9021.3	9026.1	9049.6	9073.3	9115.6	9167.4	9195.8	9233.6	9299.6	9370.3	9412.8
15°	8842.1	8846.8	8865.8	8912.8	8964.8	9026.1	9087.3	9148.6	9228.8	9318.4	9393.9
17.5°	8667.6	8672.3	8686.4	8738.4	8804.4	8884.6	8955.3	9035.4	9139.3	9242.9	9337.3
20°	8507.3	8502.6	8526.1	8573.3	8658.3	8733.6	8804.4	8898.8	9011.9	9139.3	9247.6
22.5°	8351.6	8351.6	8375.3	8422.4	8498.0	8573.3	8648.8	8747.8	8860.9	8983.6	9110.9
25°	8224.3	8219.6	8252.6	8276.3	8332.8	8408.3	8488.4	8568.6	8681.8	8818.6	8941.1
27.5°	8087.6	8083.0	8087.6	8116.0	8167.8	8224.3	8285.6	8356.4	8450.8	8563.9	8681.8
30°	7785.8	7790.4	7790.4	7814.1	7842.5	7903.6	7936.6	8007.4	8092.3	8186.6	8290.5
32.5°	7337.8	7342.4	7342.4	7352.0	7375.4	7403.8	7432.1	7483.9	7549.9	7630.1	7724.4
35°	6805.0	6805.0	6800.1	6805.0	6819.1	6819.1	6842.6	6819.1	6852.1	6899.3	6970.0
37.5°	6314.5	6304.9	6295.6	6286.1	6271.9	6248.5	6215.5	6158.8	6144.6	6125.8	6130.4
40°	5880.6	5876.0	5847.6	5823.9	5776.8	5720.3	5640.1	5541.1	5461.0	5366.6	5286.5
42.5°	5399.6	5394.8	5371.3	5328.8	5277.0	5192.1	5064.8	4932.8	4772.5	4631.0	4484.8
45°	4833.6	4847.8	4814.8	4767.6	4706.3	4626.1	4484.8	4324.3	4164.0	3980.1	3796.1
47.5°	4244.1	4239.5	4216.0	4187.6	4135.8	4055.6	3961.3	3786.8	3617.0	3447.3	3258.6
50°	3697.1	3678.3	3668.8	3640.6	3607.6	3541.7	3442.5	3301.0	3150.1	2989.8	2815.3
52.5°	3178.5	3178.5	3154.8	3136.0	3107.6	3055.8	2971.0	2857.8	2730.5	2579.5	2395.7
55°	2744.7	2735.1	2711.7	2688.0	2659.6	2626.6	2551.3	2457.0	2320.1	2174.0	2013.7
57.5°	2282.5	2277.6	2268.3	2240.0	2225.8	2192.8	2108.0	2013.7	1895.8	1768.5	1636.3
60°	1867.5	1848.7	1829.6	1810.8	1787.3	1754.3	1697.6	1617.5	1518.5	1405.3	1273.3
62.5°	1495.0	1523.1	1466.7	1466.7	1419.5	1391.2	1339.3	1292.2	1188.3	1084.7	971.5
65°	1164.8	1164.8	1141.1	1122.3	1094.0	1061.0	1009.2	962.0	886.5	806.3	726.1
67.5°	891.3	886.5	863.0	844.2	820.5	801.7	764.0	707.3	650.8	584.8	518.7
70°	655.5	650.8	646.0	613.0	594.2	570.7	542.3	504.7	462.2	415.0	353.7
72.5°	471.5	471.5	457.5	443.3	424.5	405.5	377.3	353.7	316.0	283.0	240.5
75°	301.8	297.2	297.2	273.5	273.5	245.2	226.3	212.2	193.3	174.5	136.8
77.5°	217.0	212.2	207.5	198.0	188.7	179.2	165.0	146.2	132.0	113.2	99.0
80°	146.2	136.8	132.0	132.0	117.8	113.2	117.8	89.7	84.8	70.7	61.3
82.5°	89.7	89.7	84.8	84.8	80.2	75.5	61.3	61.3	56.7	51.8	42.5
85°	47.2	61.3	42.5	47.2	42.5	47.2	42.5	33.0	28.3	23.5	23.5
87.5°	28.3	18.8	18.8	28.3	23.5	18.8	18.8	18.8	14.2	9.5	9.5
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: P249725

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8
2.5°	9936.3	9969.3	9964.4	10006.9	10021.1	10054.1	10054.1	10077.6	10091.8	10124.8	10153.1
5°	9700.4	9752.3	9766.4	9818.3	9860.8	9912.6	9945.6	9997.4	10044.6	10115.4	10181.4
7.5°	9554.3	9596.6	9624.9	9686.3	9733.4	9789.9	9846.6	9917.3	9983.2	10068.3	10162.6
10°	9483.4	9540.1	9582.4	9643.8	9700.4	9761.8	9818.3	9898.4	9973.9	10082.4	10186.1
12.5°	9464.6	9530.6	9582.4	9667.4	9723.9	9789.9	9855.9	9945.6	10025.8	10138.9	10256.9
15°	9464.6	9554.3	9624.9	9719.3	9785.3	9870.1	9940.9	10030.4	10120.1	10237.9	10351.1
17.5°	9445.8	9554.3	9643.8	9752.3	9837.1	9922.1	10011.6	10096.6	10190.7	10304.1	10431.2
20°	9370.3	9507.1	9615.4	9742.8	9832.4	9926.8	10016.4	10110.6	10209.8	10327.6	10436.1
22.5°	9238.3	9398.6	9521.3	9657.9	9761.8	9855.9	9945.6	10039.9	10148.4	10261.6	10374.8
25°	9063.8	9214.6	9346.8	9488.1	9591.9	9695.6	9780.6	9889.1	9988.1	10096.6	10186.1
27.5°	8799.6	8959.9	9087.3	9233.6	9327.8	9426.9	9497.6	9587.3	9681.6	9771.1	9841.9
30°	8403.6	8549.8	8681.8	8813.8	8908.1	8978.9	9054.3	9125.1	9186.4	9247.6	9308.9
32.5°	7823.4	7955.6	8083.0	8205.4	8280.9	8342.3	8398.8	8441.3	8474.3	8507.3	8511.9
35°	7026.6	7134.9	7215.1	7323.6	7394.5	7450.9	7450.9	7469.8	7465.1	7450.9	7436.8
37.5°	6135.3	6177.6	6210.6	6253.1	6257.8	6257.8	6229.6	6205.9	6168.3	6158.8	6130.4
40°	5206.3	5149.6	5107.1	5050.6	5017.6	4946.8	4885.6	4843.1	4781.8	4772.5	4763.0
42.5°	4324.3	4192.3	4074.5	3975.5	3862.3	3763.1	3673.6	3607.6	3560.5	3555.6	3560.5
45°	3607.6	3456.6	3282.1	3145.5	3018.2	2895.5	2777.7	2697.5	2655.0	2645.5	2655.0
47.5°	3065.3	2890.8	2721.0	2565.3	2428.7	2291.8	2174.0	2065.5	2013.7	1999.5	1994.8
50°	2636.2	2457.0	2277.6	2117.3	1966.5	1829.6	1683.5	1579.8	1513.8	1490.2	1471.3
52.5°	2216.5	2056.2	1872.2	1707.2	1556.1	1395.8	1245.0	1127.0	1061.0	1032.8	1013.8
55°	1848.7	1688.3	1518.5	1358.2	1197.8	1037.5	886.5	773.3	702.7	669.7	646.0
57.5°	1476.0	1325.2	1179.0	1018.7	886.5	731.0	580.0	481.0	419.7	382.0	363.2
60°	1141.1	1023.3	896.0	764.0	636.7	509.3	386.7	292.3	245.2	217.0	193.3
62.5°	863.0	764.0	679.0	565.8	466.8	358.3	264.2	188.7	146.2	122.7	113.2
65°	622.5	547.0	471.5	400.8	330.2	250.0	179.2	122.7	84.8	70.7	66.0
67.5°	443.3	382.0	325.3	278.2	226.3	179.2	127.3	84.8	66.0	56.7	51.8
70°	311.2	264.2	226.3	184.0	150.8	117.8	99.0	61.3	37.7	42.5	33.0
72.5°	207.5	174.5	155.7	127.3	103.7	84.8	61.3	42.5	42.5	33.0	28.3
75°	113.2	103.7	80.2	61.3	51.8	47.2	18.8	9.5	4.7	14.2	4.7
77.5°	80.2	70.7	61.3	51.8	42.5	33.0	18.8	18.8	14.2	18.8	9.5
80°	51.8	42.5	37.7	37.7	23.5	14.2	9.5	9.5	14.2	4.7	4.7
82.5°	33.0	28.3	23.5	23.5	23.5	14.2	14.2	14.2	14.2	9.5	9.5
85°	18.8	14.2	9.5	9.5	4.7	9.5	0.0	4.7	4.7	0.0	0.0
87.5°	9.5	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



TEST NUMBER: P249725

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8	10091.8
2.5°	10171.9	10190.7	10214.4	10233.3	10275.8	10285.1	10304.1	10322.9	10337.1	10351.1	10355.9
5°	10237.9	10308.8	10374.8	10445.4	10535.1	10596.4	10667.1	10728.4	10789.8	10841.6	10879.2
7.5°	10256.9	10365.2	10464.4	10586.9	10718.9	10832.3	10950.1	11067.9	11190.6	11284.9	11365.1
10°	10294.6	10426.6	10553.9	10700.1	10869.9	11020.7	11166.9	11322.6	11478.3	11610.2	11728.3
12.5°	10360.6	10506.8	10643.6	10803.9	10978.4	11148.1	11308.4	11482.9	11648.1	11794.3	11926.2
15°	10469.1	10605.7	10737.9	10888.8	11063.3	11218.9	11379.3	11548.9	11714.1	11864.9	11987.6
17.5°	10539.7	10667.1	10799.1	10935.9	11082.1	11223.6	11374.4	11525.4	11676.2	11813.1	11926.2
20°	10539.7	10662.4	10761.4	10884.1	11020.7	11143.4	11266.1	11398.1	11530.1	11643.2	11751.7
22.5°	10454.9	10572.7	10648.3	10742.6	10860.4	10964.3	11030.3	11176.4	11275.4	11374.4	11454.6
25°	10256.9	10341.8	10403.1	10469.1	10563.4	10634.1	10690.8	10775.6	10874.6	10912.4	10968.9
27.5°	9898.4	9959.8	9992.8	10006.9	10054.1	10091.8	10101.3	10138.9	10181.4	10190.7	10214.4
30°	9332.6	9337.3	9323.1	9318.4	9294.8	9266.6	9261.8	9257.1	9238.3	9219.4	9224.1
32.5°	8478.9	8455.4	8398.8	8337.6	8276.3	8210.3	8172.4	8125.3	8096.9	8068.8	8035.8
35°	7375.4	7319.0	7238.8	7163.3	7092.6	7040.6	6955.8	6927.4	6899.3	6861.4	6852.1
37.5°	6078.6	6045.6	5970.1	5913.6	5876.0	5852.3	5809.8	5781.6	5781.6	5767.5	5758.0
40°	4739.3	4730.0	4701.6	4715.8	4697.0	4706.3	4701.6	4692.1	4715.8	4715.8	4725.3
42.5°	3555.6	3560.5	3574.7	3584.0	3612.3	3617.0	3640.6	3640.6	3654.8	3668.8	3678.3
45°	2645.5	2664.5	2664.5	2683.3	2711.7	2716.3	2725.6	2730.5	2739.8	2763.5	2772.8
47.5°	1985.3	1990.0	1990.0	1994.8	2004.1	2013.7	2009.0	2013.7	2027.8	2018.3	2027.8
50°	1466.7	1471.3	1457.2	1443.0	1457.2	1457.2	1452.5	1438.3	1452.5	1433.7	1443.0
52.5°	999.8	995.0	980.8	985.7	976.2	971.5	971.5	962.0	962.0	962.0	943.2
55°	632.0	632.0	622.5	622.5	617.8	608.3	603.7	598.8	594.2	589.5	589.5
57.5°	353.7	358.3	344.3	339.5	344.3	339.5	330.2	330.2	330.2	316.0	325.3
60°	193.3	188.7	184.0	179.2	174.5	179.2	179.2	169.8	169.8	169.8	174.5
62.5°	103.7	103.7	99.0	99.0	94.3	94.3	103.7	89.7	94.3	89.7	94.3
65°	56.7	70.7	51.8	51.8	66.0	61.3	56.7	56.7	61.3	51.8	56.7
67.5°	61.3	42.5	37.7	42.5	37.7	37.7	37.7	47.2	42.5	33.0	42.5
70°	28.3	33.0	33.0	23.5	37.7	18.8	33.0	18.8	28.3	23.5	28.3
72.5°	28.3	28.3	28.3	18.8	28.3	18.8	23.5	23.5	18.8	18.8	28.3
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°	9.5	9.5	4.7	4.7	4.7	4.7	9.5	9.5	9.5	0.0	4.7
80°	9.5	9.5	0.0	4.7	0.0	0.0	4.7	0.0	4.7	0.0	9.5
82.5°	4.7	9.5	4.7	4.7	9.5	9.5	9.5	4.7	4.7	4.7	4.7
85°	0.0	4.7	0.0	0.0	0.0	0.0	9.5	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: P249725

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	10091.8	10091.8	10091.8	10091.8
2.5°	10360.6	10365.2	10374.8	10370.1
5°	10907.6	10945.4	10964.3	10959.6
7.5°	11421.6	11487.8	11525.4	11525.4
10°	11817.7	11893.2	11949.7	11959.2
12.5°	12029.9	12114.9	12190.4	12171.4
15°	12091.2	12176.3	12251.6	12237.4
17.5°	12020.6	12105.4	12162.1	12152.6
20°	11827.3	11897.9	11954.6	11949.7
22.5°	11525.4	11586.8	11633.9	11629.1
25°	11016.1	11058.6	11096.3	11077.4
27.5°	10233.3	10247.4	10270.9	10242.8
30°	9191.1	9200.4	9209.9	9205.3
32.5°	8021.6	8016.8	8007.4	7997.9
35°	6838.0	6838.0	6842.6	6814.3
37.5°	5762.6	5758.0	5772.1	5758.0
40°	4734.6	4730.0	4748.8	4725.3
42.5°	3692.5	3706.6	3711.3	3711.3
45°	2777.7	2782.3	2787.0	2787.0
47.5°	2027.8	2032.5	2056.2	2027.8
50°	1433.7	1438.3	1443.0	1433.7
52.5°	947.8	952.7	947.8	933.6
55°	580.0	584.8	584.8	584.8
57.5°	311.2	316.0	316.0	311.2
60°	169.8	165.0	169.8	160.3
62.5°	89.7	99.0	94.3	84.8
65°	56.7	56.7	56.7	66.0
67.5°	47.2	37.7	42.5	33.0
70°	28.3	33.0	33.0	23.5
72.5°	23.5	23.5	23.5	28.3
75°	0.0	0.0	0.0	0.0
77.5°	9.5	9.5	9.5	4.7
80°	4.7	0.0	4.7	0.0
82.5°	4.7	4.7	9.5	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)