

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: P249124

Luminaire Tested: **LSR8B150D010 EC8B150850 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249124
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B150D010 EC8B150850 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16678.0 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

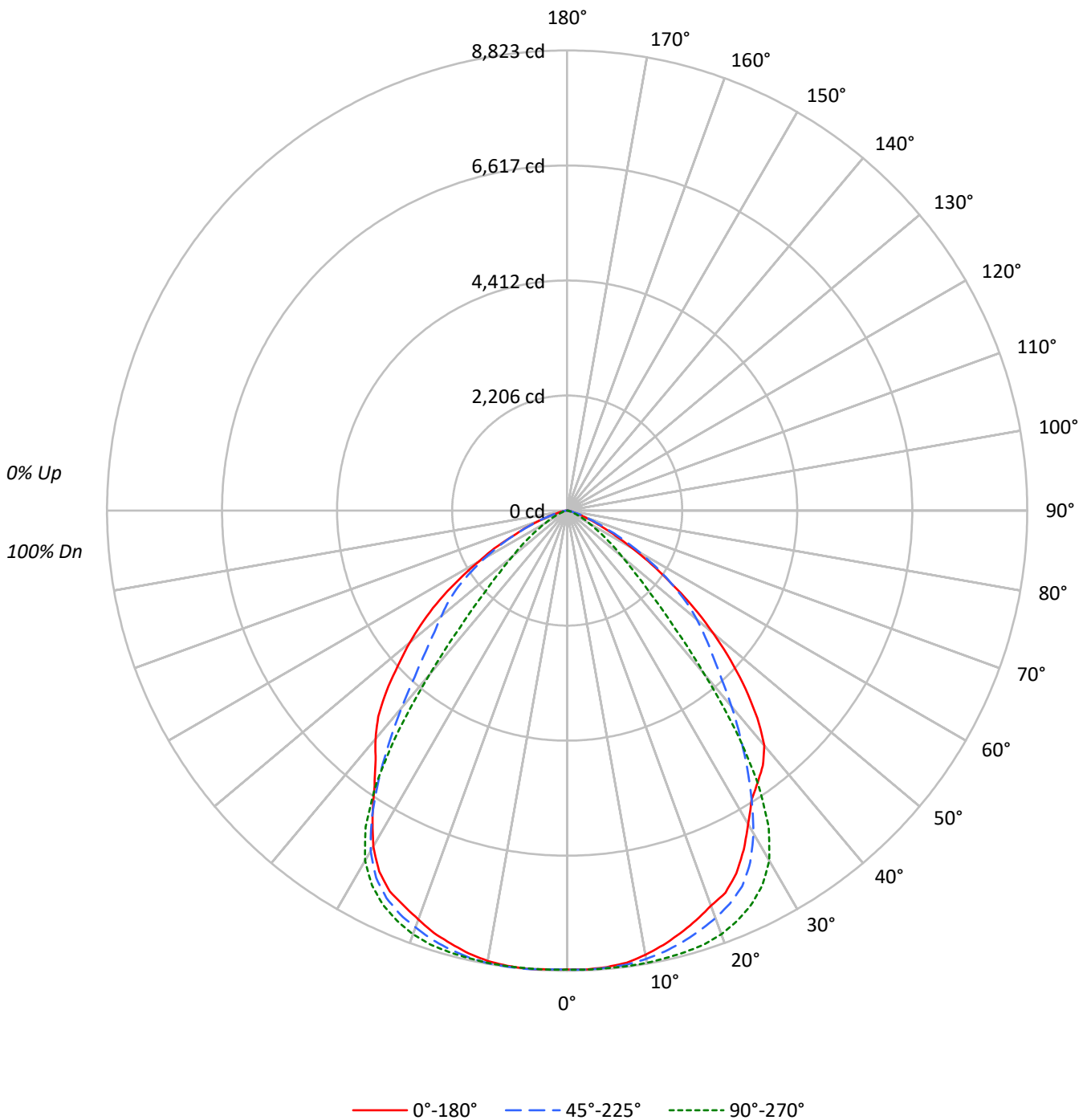
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249124

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0H

Luminous Intensity Polar Plot





TEST NUMBER: P249124

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0H

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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	271347	271347	271347
5°	271944	272678	272972
10°	270802	275683	274500
15°	267802	279713	274439
20°	264587	283646	273729
25°	261152	283972	274010
30°	247064	275988	264722
35°	239688	239861	242353
40°	236717	165037	230063
45°	210924	99076	213811
50°	175384	65939	188979
55°	131538	45455	160231
60°	89142	30294	120891
65°	53768	19649	83056
70°	29816	10648	51102
75°	13511	4504	26450
80°	11738	5025	18450
85°	13374	6652	18398



TEST NUMBER: P249124

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	839.8	5.0
10°-20°	2438.9	14.6
20°-30°	3701.8	22.2
30°-40°	3888.0	23.3
40°-50°	2914.9	17.5
50°-60°	1870.3	11.2
60°-70°	800.1	4.8
70°-80°	189.0	1.1
80°-90°	35.2	0.2
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°	6980.5	41.9
0°-40°	10868.5	65.2
0°-60°	15653.7	93.9
0°-90°	16678.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16678.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8800	8800	8800	8800	8800	
5°	8785	8800	8809	8823	8819	835
15°	8389	8564	8762	8705	8597	2366
25°	7676	7945	8346	8195	8053	3506
35°	6367	6013	6372	6296	6438	3996
45°	4837	3953	2272	3840	4903	3704
55°	2447	2447	846	2551	2980	2219
65°	737	869	269	1119	1138	787
75°	113	132	38	227	222	165
85°	38	24	19	38	52	40
90°	0	0	0	0	0	



TEST NUMBER: P249124

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6
2.5°	8804.4	8813.9	8809.1	8809.1	8804.4	8809.1	8809.1	8818.6	8818.6	8809.1	8804.4
5°	8785.4	8794.9	8794.9	8785.4	8785.4	8809.1	8794.9	8804.4	8804.4	8799.6	8799.6
7.5°	8743.0	8743.0	8761.8	8747.7	8747.7	8761.8	8757.1	8766.6	8776.1	8780.8	8780.8
10°	8648.5	8657.9	8662.7	8662.7	8667.4	8681.5	8691.0	8710.0	8719.3	8728.8	8733.5
12.5°	8530.5	8544.6	8549.3	8544.6	8558.8	8577.6	8601.3	8624.9	8639.1	8657.9	8672.2
15°	8388.7	8388.7	8398.1	8412.4	8421.8	8450.1	8473.7	8502.0	8539.8	8563.5	8587.1
17.5°	8232.9	8242.3	8256.4	8256.4	8275.4	8322.6	8336.8	8379.3	8421.8	8445.4	8492.7
20°	8062.9	8072.2	8086.4	8095.9	8119.5	8157.3	8185.6	8223.4	8270.7	8313.2	8360.3
22.5°	7930.5	7911.7	7921.1	7930.5	7954.2	7987.3	8020.3	8067.5	8114.8	8157.3	8204.6
25°	7675.5	7680.2	7694.4	7703.8	7732.2	7760.5	7798.3	7854.9	7897.5	7944.7	7996.6
27.5°	7330.7	7335.4	7359.0	7359.0	7382.6	7429.9	7453.4	7500.7	7557.5	7604.6	7666.1
30°	6938.7	6948.0	6948.0	6967.0	6981.1	7004.8	7028.4	7075.6	7103.9	7146.5	7231.5
32.5°	6579.7	6589.1	6584.3	6579.7	6565.5	6560.8	6556.0	6565.5	6575.0	6589.1	6622.1
35°	6367.2	6343.5	6324.6	6291.6	6253.8	6206.5	6164.0	6107.4	6055.4	6012.8	5965.7
37.5°	6164.0	6159.3	6130.9	6083.7	6008.1	5923.1	5824.0	5701.1	5578.3	5446.0	5318.6
40°	5880.6	5866.4	5842.8	5776.7	5691.6	5587.7	5455.5	5304.4	5105.9	4902.9	4695.1
42.5°	5398.8	5403.5	5375.2	5323.2	5243.0	5143.7	5006.8	4841.5	4628.9	4388.0	4118.8
45°	4836.7	4836.7	4827.3	4784.7	4728.1	4647.8	4543.9	4406.9	4199.1	3953.4	3665.3
47.5°	4251.0	4255.8	4241.5	4232.2	4208.5	4156.6	4081.0	3977.1	3830.7	3594.4	3306.3
50°	3655.9	3655.9	3679.5	3674.8	3674.8	3655.9	3622.9	3561.4	3433.9	3245.0	2975.8
52.5°	3060.7	3070.2	3084.4	3103.3	3126.8	3164.6	3126.8	3098.5	3018.2	2871.8	2640.4
55°	2446.7	2456.2	2479.7	2512.8	2541.2	2579.0	2588.4	2588.4	2545.9	2446.7	2271.9
57.5°	1922.4	1908.2	1927.2	1955.5	1993.3	2031.1	2059.4	2092.5	2087.7	2021.6	1879.9
60°	1445.4	1450.1	1464.2	1492.6	1520.9	1554.0	1591.8	1620.1	1634.3	1601.3	1511.5
62.5°	1053.3	1053.3	1072.2	1100.5	1114.7	1162.0	1185.6	1199.8	1213.9	1209.1	1152.5
65°	736.9	746.3	755.7	769.9	784.1	812.4	826.6	854.9	864.4	869.1	826.6
67.5°	519.6	505.4	514.9	524.2	538.5	557.4	585.7	585.7	599.8	599.8	571.5
70°	330.7	330.7	335.4	349.5	359.0	363.7	373.2	382.5	396.8	392.0	392.0
72.5°	222.0	217.3	222.0	226.8	231.5	245.6	245.6	250.3	259.8	264.5	245.6
75°	113.4	118.1	127.5	122.9	137.0	127.5	132.2	146.4	141.7	132.2	132.2
77.5°	94.4	94.4	94.4	89.8	99.2	99.2	94.4	103.9	99.2	99.2	94.4
80°	66.1	70.8	66.1	61.4	66.1	61.4	61.4	61.4	61.4	61.4	56.6
82.5°	52.0	42.5	47.3	42.5	47.3	47.3	42.5	37.8	37.8	42.5	37.8
85°	37.8	28.3	33.1	33.1	28.3	28.3	28.3	28.3	28.3	23.6	23.6
87.5°	23.6	14.2	14.2	14.2	18.8	18.8	18.8	14.2	18.8	18.8	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: P249124

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6
2.5°	8813.9	8809.1	8818.6	8813.9	8813.9	8809.1	8813.9	8809.1	8818.6	8799.6	8804.4
5°	8813.9	8804.4	8809.1	8813.9	8818.6	8809.1	8809.1	8809.1	8818.6	8809.1	8813.9
7.5°	8794.9	8790.2	8804.4	8813.9	8809.1	8804.4	8813.9	8809.1	8818.6	8813.9	8823.2
10°	8757.1	8761.8	8771.3	8785.4	8790.2	8794.9	8804.4	8804.4	8818.6	8799.6	8809.1
12.5°	8700.5	8719.3	8743.0	8752.4	8771.3	8771.3	8780.8	8785.4	8794.9	8790.2	8804.4
15°	8629.6	8653.2	8681.5	8705.2	8728.8	8743.0	8757.1	8761.8	8776.1	8761.8	8766.6
17.5°	8544.6	8572.9	8615.4	8643.7	8681.5	8695.7	8714.6	8724.1	8738.3	8728.8	8733.5
20°	8426.5	8459.6	8506.8	8549.3	8572.9	8605.9	8629.6	8643.7	8653.2	8643.7	8648.5
22.5°	8261.2	8308.5	8369.8	8402.9	8450.1	8478.5	8483.2	8516.3	8539.8	8516.3	8525.7
25°	8067.5	8114.8	8162.0	8232.9	8275.4	8308.5	8341.5	8346.2	8369.8	8365.1	8360.3
27.5°	7746.3	7807.8	7888.0	7944.7	8001.4	8053.4	8091.2	8100.5	8124.2	8114.8	8119.5
30°	7307.0	7373.2	7448.8	7538.5	7618.8	7670.7	7718.0	7751.0	7774.6	7760.5	7755.8
32.5°	6683.6	6749.7	6830.0	6919.7	7014.3	7089.7	7146.5	7189.0	7217.3	7207.8	7184.3
35°	5970.4	5989.2	6041.2	6112.1	6192.3	6272.6	6324.6	6371.8	6404.8	6414.3	6414.3
37.5°	5238.2	5176.9	5139.1	5139.1	5186.2	5219.3	5266.6	5294.9	5346.9	5365.7	5379.9
40°	4529.7	4388.0	4255.8	4156.6	4090.5	4085.7	4085.7	4099.9	4147.1	4208.5	4265.2
42.5°	3896.8	3670.0	3467.0	3282.7	3150.5	3074.9	3041.9	3046.6	3084.4	3141.1	3235.5
45°	3391.4	3108.0	2852.9	2630.9	2451.4	2333.3	2276.7	2271.9	2300.3	2366.4	2470.4
47.5°	2999.4	2697.0	2408.9	2153.8	1960.2	1832.6	1766.5	1747.7	1766.5	1827.9	1950.8
50°	2673.4	2361.7	2064.1	1799.6	1591.8	1459.6	1398.1	1374.5	1398.1	1450.1	1572.8
52.5°	2371.1	2049.9	1771.3	1516.2	1294.2	1180.8	1114.7	1100.5	1114.7	1176.1	1275.4
55°	2021.6	1747.7	1473.7	1218.6	1025.0	911.6	859.6	845.5	859.6	916.4	1020.3
57.5°	1676.9	1440.6	1199.8	968.3	803.0	703.7	656.6	637.6	670.7	708.5	831.3
60°	1355.6	1166.7	963.5	760.5	623.5	533.7	495.9	491.2	500.7	547.9	632.9
62.5°	1062.8	906.9	746.3	581.0	467.6	429.8	382.5	377.9	387.3	415.6	481.8
65°	765.2	666.0	543.2	425.1	335.4	283.4	264.5	269.3	278.6	297.6	359.0
67.5°	533.7	462.9	377.9	297.6	231.5	207.8	189.0	184.2	189.0	222.0	255.1
70°	359.0	316.4	255.1	226.8	160.6	127.5	132.2	118.1	137.0	137.0	165.3
72.5°	236.1	207.8	170.0	132.2	113.4	89.8	89.8	85.1	94.4	99.2	122.9
75°	122.9	94.4	94.4	66.1	47.3	23.6	42.5	37.8	33.1	37.8	47.3
77.5°	85.1	70.8	66.1	52.0	47.3	37.8	37.8	37.8	37.8	42.5	47.3
80°	52.0	52.0	37.8	33.1	28.3	23.6	28.3	28.3	28.3	28.3	33.1
82.5°	33.1	28.3	28.3	23.6	23.6	18.8	18.8	18.8	18.8	18.8	28.3
85°	28.3	18.8	18.8	14.2	18.8	33.1	14.2	18.8	18.8	18.8	14.2
87.5°	9.5	14.2	14.2	14.2	9.5	4.7	9.5	14.2	14.2	23.6	18.8
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: P249124

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6	8799.6
2.5°	8813.9	8818.6	8818.6	8813.9	8813.9	8804.4	8823.2	8809.1	8813.9	8832.7	8818.6
5°	8823.2	8828.0	8828.0	8823.2	8823.2	8823.2	8828.0	8828.0	8823.2	8818.6	8828.0
7.5°	8842.2	8837.4	8837.4	8828.0	8828.0	8818.6	8828.0	8813.9	8823.2	8813.9	8828.0
10°	8818.6	8823.2	8818.6	8813.9	8813.9	8809.1	8809.1	8794.9	8799.6	8785.4	8794.9
12.5°	8804.4	8799.6	8799.6	8790.2	8780.8	8771.3	8766.6	8752.4	8752.4	8719.3	8733.5
15°	8766.6	8771.3	8757.1	8738.3	8728.8	8705.2	8695.7	8676.8	8657.9	8634.4	8639.1
17.5°	8733.5	8719.3	8700.5	8681.5	8643.7	8624.9	8605.9	8577.6	8568.1	8539.8	8530.5
20°	8634.4	8624.9	8601.3	8568.1	8544.6	8502.0	8483.2	8454.9	8431.2	8402.9	8388.7
22.5°	8506.8	8497.3	8469.0	8435.9	8398.1	8379.3	8360.3	8308.5	8284.8	8256.4	8251.7
25°	8346.2	8332.0	8303.7	8265.9	8247.0	8195.1	8176.1	8138.3	8129.0	8100.5	8095.9
27.5°	8100.5	8081.7	8048.6	8001.4	7968.3	7935.3	7916.4	7888.0	7878.6	7850.2	7845.6
30°	7732.2	7708.5	7642.4	7623.6	7566.8	7533.8	7533.8	7496.0	7500.7	7481.9	7481.9
32.5°	7151.2	7113.4	7061.4	7023.6	6985.8	6967.0	6967.0	6952.8	6962.3	6962.3	6971.7
35°	6381.3	6329.4	6300.9	6277.4	6277.4	6296.2	6353.0	6367.2	6395.5	6419.1	6438.0
37.5°	5394.0	5389.4	5422.5	5450.8	5521.6	5602.0	5701.1	5786.2	5866.4	5923.1	5979.8
40°	4326.6	4444.7	4539.1	4671.5	4780.0	4935.9	5115.4	5261.8	5398.8	5498.1	5602.0
42.5°	3377.2	3528.3	3726.8	3920.4	4114.1	4326.6	4562.8	4765.9	4945.4	5082.3	5191.0
45°	2630.9	2838.7	3079.7	3325.3	3575.6	3840.2	4085.7	4293.6	4482.5	4624.2	4732.8
47.5°	2120.8	2347.5	2621.4	2890.7	3174.1	3452.8	3726.8	3906.3	4062.1	4175.4	4274.7
50°	1752.3	1993.3	2281.4	2588.4	2871.8	3150.5	3386.6	3561.4	3689.0	3788.1	3849.5
52.5°	1464.2	1719.3	2026.3	2333.3	2616.7	2871.8	3084.4	3216.6	3320.5	3391.4	3448.0
55°	1209.1	1454.8	1743.0	2031.1	2309.7	2550.6	2725.3	2824.6	2904.8	2947.4	2980.4
57.5°	987.2	1213.9	1478.4	1743.0	1983.8	2182.3	2319.2	2418.4	2456.2	2489.2	2484.5
60°	774.7	987.2	1228.1	1454.8	1662.6	1823.2	1922.4	1979.1	2007.4	2021.6	2012.1
62.5°	609.3	803.0	987.2	1185.6	1336.7	1473.7	1568.2	1568.2	1582.3	1587.1	1601.3
65°	453.4	599.8	760.5	906.9	1029.6	1119.4	1171.4	1185.6	1204.5	1199.8	1190.3
67.5°	335.4	444.0	562.0	670.7	755.7	812.4	850.2	883.3	878.6	869.1	864.4
70°	231.5	302.3	406.2	472.3	533.7	590.5	599.8	604.6	609.3	614.0	604.6
72.5°	160.6	212.5	269.3	325.9	363.7	387.3	411.0	415.6	415.6	415.6	411.0
75°	80.3	108.6	160.6	184.2	217.3	226.8	245.6	245.6	259.8	240.9	236.1
77.5°	70.8	85.1	113.4	132.2	146.4	160.6	165.3	179.5	174.7	165.3	170.0
80°	42.5	52.0	70.8	80.3	99.2	103.9	108.6	113.4	108.6	113.4	113.4
82.5°	33.1	37.8	47.3	47.3	61.4	61.4	66.1	66.1	70.8	70.8	70.8
85°	18.8	33.1	28.3	56.6	37.8	37.8	47.3	56.6	47.3	47.3	56.6
87.5°	18.8	18.8	14.2	18.8	18.8	18.8	23.6	28.3	28.3	33.1	28.3
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: P249124

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8799.6	8799.6	8799.6	8799.6
2.5°	8813.9	8823.2	8809.1	8804.4
5°	8828.0	8828.0	8818.6	8818.6
7.5°	8828.0	8828.0	8813.9	8804.4
10°	8790.2	8790.2	8776.1	8766.6
12.5°	8719.3	8719.3	8714.6	8700.5
15°	8629.6	8629.6	8610.7	8596.6
17.5°	8506.8	8516.3	8492.7	8492.7
20°	8374.6	8369.8	8351.0	8341.5
22.5°	8237.6	8228.1	8223.4	8195.1
25°	8091.2	8081.7	8067.5	8053.4
27.5°	7840.8	7836.1	7821.9	7803.0
30°	7458.2	7453.4	7434.6	7434.6
32.5°	6962.3	6957.5	6938.7	6943.4
35°	6447.4	6466.3	6456.9	6438.0
37.5°	6017.6	6031.8	6041.2	6031.8
40°	5658.6	5701.1	5705.9	5715.3
42.5°	5276.0	5332.7	5351.6	5361.0
45°	4817.8	4869.8	4912.3	4902.9
47.5°	4350.2	4388.0	4425.8	4397.5
50°	3901.5	3925.1	3939.3	3939.3
52.5°	3476.4	3476.4	3471.7	3476.4
55°	2989.9	2989.9	2971.0	2980.4
57.5°	2479.7	2489.2	2475.0	2451.4
60°	2007.4	1983.8	1974.3	1960.2
62.5°	1563.5	1563.5	1530.4	1572.8
65°	1171.4	1157.2	1143.0	1138.3
67.5°	850.2	845.5	831.3	826.6
70°	599.8	581.0	576.2	566.8
72.5°	401.5	401.5	392.0	392.0
75°	245.6	222.0	217.3	222.0
77.5°	170.0	165.3	165.3	160.6
80°	113.4	108.6	118.1	103.9
82.5°	70.8	75.6	70.8	75.6
85°	47.3	56.6	52.0	52.0
87.5°	28.3	28.3	28.3	28.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)