

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: P249268

Luminaire Tested: **LSR8B150D010 EC8B150940 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249268
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 EC8B150940 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14590.0 lumens
Efficiency: N/A
Efficacy: 92.1 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

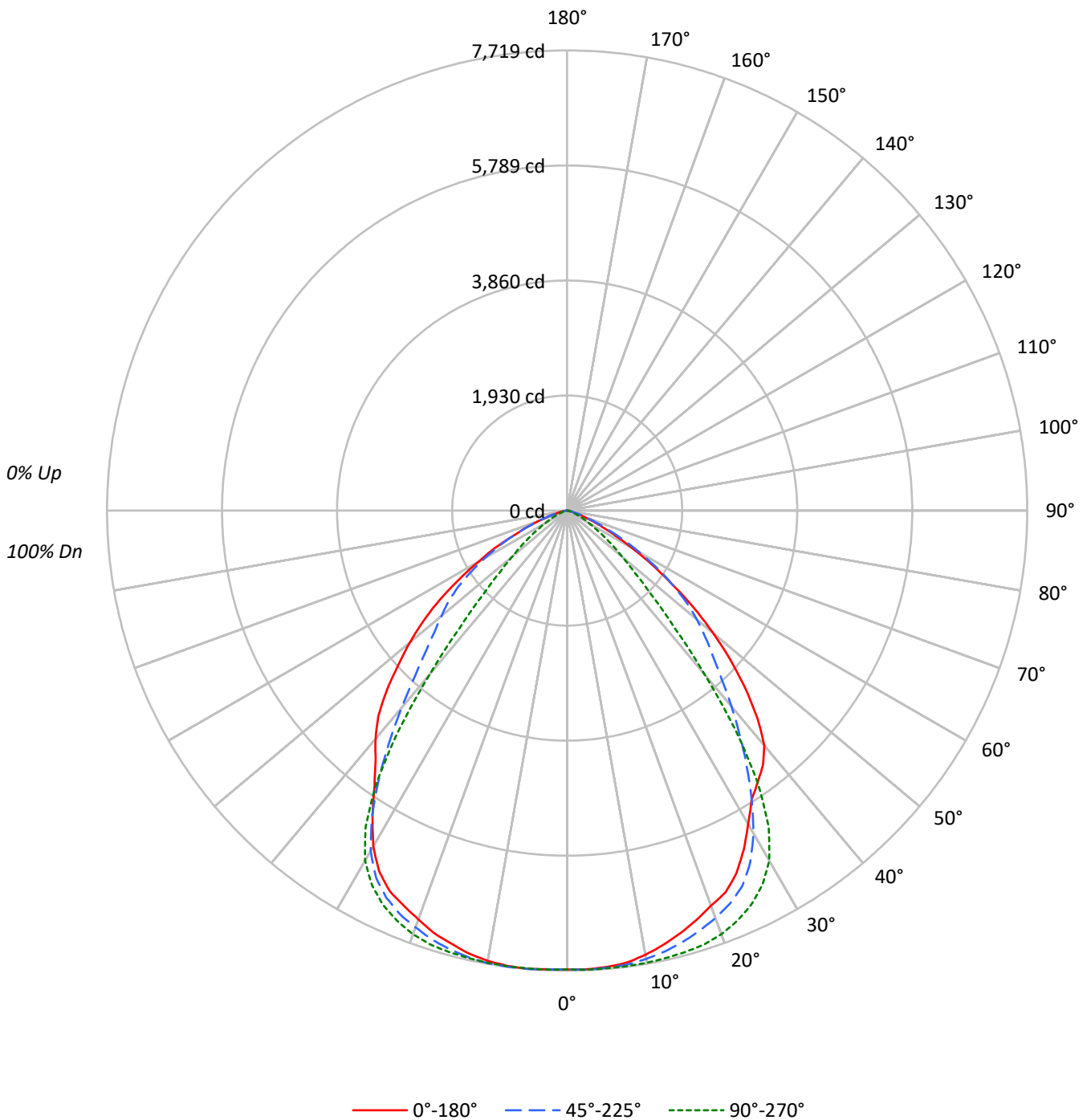
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249268

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBDW0WMH

Luminous Intensity Polar Plot





TEST NUMBER: P249268

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBDW0WMH

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°	237378	237378	237378
5°	237898	238542	238795
10°	236897	241168	240135
15°	234272	244695	240079
20°	231460	248136	239460
25°	228455	248420	239703
30°	216133	241438	231579
35°	209678	209832	212012
40°	207082	144375	201262
45°	184519	86673	187040
50°	153427	57682	165319
55°	115071	39767	140172
60°	77979	26501	105756
65°	47033	17191	72658
70°	26083	9313	44701
75°	11819	3944	23137
80°	10264	4404	16142
85°	11711	5838	16098



TEST NUMBER: P249268

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBDW0WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	734.7	5.0
10°-20°	2133.6	14.6
20°-30°	3238.3	22.2
30°-40°	3401.2	23.3
40°-50°	2550.0	17.5
50°-60°	1636.1	11.2
60°-70°	699.9	4.8
70°-80°	165.4	1.1
80°-90°	30.8	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°	6106.6	41.9
0°-40°	9507.8	65.2
0°-60°	13694.0	93.9
0°-90°	14590.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14590.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7698	7698	7698	7698	7698	
5°	7686	7698	7706	7719	7714	730
15°	7338	7491	7665	7615	7520	2070
25°	6714	6950	7301	7169	7045	3067
35°	5570	5260	5574	5508	5632	3496
45°	4231	3458	1988	3359	4289	3240
55°	2140	2140	740	2231	2607	1941
65°	645	760	236	979	996	688
75°	99	116	33	198	194	144
85°	33	21	16	33	46	35
90°	0	0	0	0	0	



TEST NUMBER: P249268

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBDW0WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0
2.5°	7702.1	7710.4	7706.3	7706.3	7702.1	7706.3	7706.3	7714.5	7714.5	7706.3	7702.1
5°	7685.5	7693.8	7693.8	7685.5	7685.5	7706.3	7693.8	7702.1	7702.1	7698.0	7698.0
7.5°	7648.4	7648.4	7664.9	7652.6	7652.6	7664.9	7660.8	7669.1	7677.3	7681.5	7681.5
10°	7565.7	7574.0	7578.2	7578.2	7582.3	7594.6	7602.9	7619.5	7627.7	7636.0	7640.1
12.5°	7462.5	7474.8	7479.0	7474.8	7487.3	7503.8	7524.5	7545.1	7557.5	7574.0	7586.5
15°	7338.4	7338.4	7346.7	7359.2	7367.5	7392.2	7412.9	7437.6	7470.7	7491.4	7512.0
17.5°	7202.2	7210.4	7222.8	7222.8	7239.4	7280.6	7293.0	7330.3	7367.5	7388.1	7429.4
20°	7053.4	7061.6	7074.1	7082.3	7103.0	7136.0	7160.8	7193.9	7235.2	7272.4	7313.7
22.5°	6937.7	6921.2	6929.4	6937.7	6958.4	6987.3	7016.2	7057.5	7098.8	7136.0	7177.4
25°	6714.5	6718.7	6731.1	6739.3	6764.2	6788.9	6822.0	6871.5	6908.8	6950.1	6995.5
27.5°	6412.9	6417.1	6437.7	6437.7	6458.3	6499.7	6520.3	6561.7	6611.3	6652.6	6706.3
30°	6070.0	6078.2	6078.2	6094.8	6107.1	6127.8	6148.4	6189.8	6214.6	6251.8	6326.2
32.5°	5756.0	5764.2	5760.0	5756.0	5743.5	5739.4	5735.2	5743.5	5751.8	5764.2	5793.1
35°	5570.0	5549.3	5532.8	5503.9	5470.8	5429.5	5392.3	5342.7	5297.3	5260.0	5218.8
37.5°	5392.3	5388.1	5363.4	5322.0	5255.9	5181.6	5094.8	4987.4	4879.9	4764.2	4652.7
40°	5144.4	5131.9	5111.3	5053.5	4979.1	4888.2	4772.5	4640.3	4466.7	4289.0	4107.3
42.5°	4722.9	4727.0	4702.3	4656.8	4586.6	4499.7	4379.9	4235.4	4049.4	3838.6	3603.1
45°	4231.2	4231.2	4222.9	4185.7	4136.2	4065.9	3975.0	3855.2	3673.4	3458.5	3206.4
47.5°	3718.8	3723.0	3710.5	3702.3	3681.6	3636.2	3570.1	3479.2	3351.1	3144.4	2892.4
50°	3198.2	3198.2	3218.9	3214.7	3214.7	3198.2	3169.3	3115.5	3004.0	2838.7	2603.2
52.5°	2677.5	2685.8	2698.3	2714.7	2735.4	2768.4	2735.4	2710.6	2640.3	2512.2	2309.8
55°	2140.4	2148.7	2169.3	2198.2	2223.1	2256.1	2264.3	2264.3	2227.1	2140.4	1987.5
57.5°	1681.8	1669.3	1685.9	1710.7	1743.7	1776.8	1801.6	1830.5	1826.3	1768.5	1644.6
60°	1264.4	1268.6	1280.9	1305.8	1330.5	1359.4	1392.5	1417.3	1429.7	1400.8	1322.2
62.5°	921.5	921.5	937.9	962.7	975.2	1016.5	1037.1	1049.6	1061.9	1057.8	1008.2
65°	644.6	652.8	661.1	673.6	685.9	710.7	723.1	747.9	756.2	760.3	723.1
67.5°	454.6	442.1	450.4	458.6	471.0	487.6	512.4	512.4	524.7	524.7	500.0
70°	289.3	289.3	293.4	305.7	314.0	318.2	326.5	334.7	347.1	342.9	342.9
72.5°	194.2	190.1	194.2	198.4	202.5	214.8	214.8	219.0	227.3	231.4	214.8
75°	99.2	103.3	111.5	107.5	119.8	111.5	115.7	128.1	124.0	115.7	115.7
77.5°	82.6	82.6	82.6	78.6	86.7	86.7	82.6	90.9	86.7	86.7	82.6
80°	57.8	62.0	57.8	53.7	57.8	53.7	53.7	53.7	53.7	53.7	49.5
82.5°	45.5	37.2	41.4	37.2	41.4	41.4	37.2	33.1	33.1	37.2	33.1
85°	33.1	24.8	28.9	28.9	24.8	24.8	24.8	24.8	24.8	20.6	20.6
87.5°	20.6	12.4	12.4	12.4	16.5	16.5	16.5	12.4	16.5	16.5	8.3
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: P249268

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0
2.5°	7710.4	7706.3	7714.5	7710.4	7710.4	7706.3	7710.4	7706.3	7714.5	7698.0	7702.1
5°	7710.4	7702.1	7706.3	7710.4	7714.5	7706.3	7706.3	7706.3	7714.5	7706.3	7710.4
7.5°	7693.8	7689.7	7702.1	7710.4	7706.3	7702.1	7710.4	7706.3	7714.5	7710.4	7718.6
10°	7660.8	7664.9	7673.2	7685.5	7689.7	7693.8	7702.1	7702.1	7714.5	7698.0	7706.3
12.5°	7611.2	7627.7	7648.4	7656.6	7673.2	7673.2	7681.5	7685.5	7693.8	7689.7	7702.1
15°	7549.2	7569.9	7594.6	7615.4	7636.0	7648.4	7660.8	7664.9	7677.3	7664.9	7669.1
17.5°	7474.8	7499.6	7536.8	7561.6	7594.6	7607.1	7623.6	7631.8	7644.3	7636.0	7640.1
20°	7371.5	7400.5	7441.8	7479.0	7499.6	7528.5	7549.2	7561.6	7569.9	7561.6	7565.7
22.5°	7226.9	7268.3	7322.0	7350.9	7392.2	7417.0	7421.1	7450.1	7470.7	7450.1	7458.4
25°	7057.5	7098.8	7140.2	7202.2	7239.4	7268.3	7297.2	7301.3	7322.0	7317.8	7313.7
27.5°	6776.5	6830.3	6900.5	6950.1	6999.6	7045.1	7078.2	7086.4	7107.1	7098.8	7103.0
30°	6392.2	6450.1	6516.3	6594.7	6665.0	6710.4	6751.7	6780.7	6801.3	6788.9	6784.8
32.5°	5846.9	5904.7	5975.0	6053.4	6136.1	6202.1	6251.8	6289.0	6313.8	6305.5	6284.8
35°	5222.9	5239.4	5284.9	5346.9	5417.1	5487.3	5532.8	5574.1	5603.0	5611.3	5611.3
37.5°	4582.4	4528.8	4495.7	4495.7	4536.9	4565.9	4607.2	4632.0	4677.5	4694.0	4706.4
40°	3962.6	3838.6	3723.0	3636.2	3578.4	3574.2	3574.2	3586.6	3627.9	3681.6	3731.2
42.5°	3408.9	3210.6	3032.9	2871.8	2756.1	2690.0	2661.1	2665.2	2698.3	2747.8	2830.4
45°	2966.8	2718.9	2495.8	2301.5	2144.5	2041.2	1991.7	1987.5	2012.3	2070.1	2161.1
47.5°	2623.9	2359.4	2107.3	1884.2	1714.8	1603.2	1545.4	1528.9	1545.4	1599.1	1706.5
50°	2338.7	2066.1	1805.7	1574.3	1392.5	1276.8	1223.1	1202.4	1223.1	1268.6	1375.9
52.5°	2074.3	1793.3	1549.5	1326.4	1132.2	1033.0	975.2	962.7	975.2	1028.8	1115.7
55°	1768.5	1528.9	1289.2	1066.0	896.7	797.5	752.0	739.7	752.0	801.7	892.5
57.5°	1466.9	1260.3	1049.6	847.1	702.5	615.6	574.4	557.8	586.7	619.8	727.2
60°	1185.9	1020.6	842.9	665.3	545.5	466.9	433.8	429.7	438.0	479.3	553.6
62.5°	929.8	793.4	652.8	508.3	409.1	376.0	334.7	330.6	338.8	363.6	421.5
65°	669.4	582.7	475.2	371.9	293.4	247.9	231.4	235.6	243.8	260.3	314.0
67.5°	466.9	404.9	330.6	260.3	202.5	181.8	165.3	161.2	165.3	194.2	223.1
70°	314.0	276.8	223.1	198.4	140.5	111.5	115.7	103.3	119.8	119.8	144.6
72.5°	206.6	181.8	148.7	115.7	99.2	78.6	78.6	74.4	82.6	86.7	107.5
75°	107.5	82.6	82.6	57.8	41.4	20.6	37.2	33.1	28.9	33.1	41.4
77.5°	74.4	62.0	57.8	45.5	41.4	33.1	33.1	33.1	33.1	37.2	41.4
80°	45.5	45.5	33.1	28.9	24.8	20.6	24.8	24.8	24.8	24.8	28.9
82.5°	28.9	24.8	24.8	20.6	20.6	16.5	16.5	16.5	16.5	16.5	24.8
85°	24.8	16.5	16.5	12.4	16.5	28.9	12.4	16.5	16.5	16.5	12.4
87.5°	8.3	12.4	12.4	12.4	8.3	4.1	8.3	12.4	12.4	20.6	16.5
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: P249268

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0	7698.0
2.5°	7710.4	7714.5	7714.5	7710.4	7710.4	7702.1	7718.6	7706.3	7710.4	7726.9	7714.5
5°	7718.6	7722.7	7722.7	7718.6	7718.6	7718.6	7722.7	7722.7	7718.6	7714.5	7722.7
7.5°	7735.2	7731.0	7731.0	7722.7	7722.7	7714.5	7722.7	7710.4	7718.6	7710.4	7722.7
10°	7714.5	7718.6	7714.5	7710.4	7710.4	7706.3	7706.3	7693.8	7698.0	7685.5	7693.8
12.5°	7702.1	7698.0	7698.0	7689.7	7681.5	7673.2	7669.1	7656.6	7656.6	7627.7	7640.1
15°	7669.1	7673.2	7660.8	7644.3	7636.0	7615.4	7607.1	7590.5	7574.0	7553.4	7557.5
17.5°	7640.1	7627.7	7611.2	7594.6	7561.6	7545.1	7528.5	7503.8	7495.5	7470.7	7462.5
20°	7553.4	7545.1	7524.5	7495.5	7474.8	7437.6	7421.1	7396.4	7375.7	7350.9	7338.4
22.5°	7441.8	7433.5	7408.7	7379.8	7346.7	7330.3	7313.7	7268.3	7247.6	7222.8	7218.6
25°	7301.3	7288.9	7264.1	7231.1	7214.5	7169.1	7152.5	7119.5	7111.3	7086.4	7082.3
27.5°	7086.4	7069.9	7041.0	6999.6	6970.7	6941.8	6925.3	6900.5	6892.3	6867.4	6863.4
30°	6764.2	6743.4	6685.6	6669.1	6619.5	6590.6	6590.6	6557.5	6561.7	6545.2	6545.2
32.5°	6255.9	6222.9	6177.4	6144.3	6111.2	6094.8	6094.8	6082.3	6090.6	6090.6	6098.9
35°	5582.4	5537.0	5512.1	5491.5	5491.5	5508.0	5557.6	5570.0	5594.8	5615.4	5632.0
37.5°	4718.7	4714.7	4743.6	4768.4	4830.4	4900.6	4987.4	5061.8	5131.9	5181.6	5231.1
40°	3784.9	3888.3	3970.9	4086.6	4181.6	4318.0	4475.0	4603.1	4722.9	4809.7	4900.6
42.5°	2954.4	3086.6	3260.2	3429.6	3599.0	3784.9	3991.6	4169.2	4326.2	4446.1	4541.1
45°	2301.5	2483.3	2694.1	2909.0	3128.0	3359.4	3574.2	3756.0	3921.3	4045.3	4140.3
47.5°	1855.3	2053.6	2293.2	2528.8	2776.7	3020.5	3260.2	3417.2	3553.5	3652.7	3739.5
50°	1532.9	1743.7	1995.8	2264.3	2512.2	2756.1	2962.7	3115.5	3227.1	3313.9	3367.6
52.5°	1280.9	1504.0	1772.7	2041.2	2289.1	2512.2	2698.3	2813.9	2904.8	2966.8	3016.3
55°	1057.8	1272.7	1524.8	1776.8	2020.6	2231.3	2384.1	2471.0	2541.2	2578.4	2607.3
57.5°	863.6	1061.9	1293.3	1524.8	1735.5	1909.0	2028.9	2115.6	2148.7	2177.6	2173.4
60°	677.7	863.6	1074.3	1272.7	1454.5	1594.9	1681.8	1731.3	1756.1	1768.5	1760.2
62.5°	533.0	702.5	863.6	1037.1	1169.4	1289.2	1371.9	1371.9	1384.2	1388.4	1400.8
65°	396.6	524.7	665.3	793.4	900.7	979.3	1024.8	1037.1	1053.7	1049.6	1041.3
67.5°	293.4	388.4	491.7	586.7	661.1	710.7	743.7	772.7	768.6	760.3	756.2
70°	202.5	264.5	355.4	413.2	466.9	516.5	524.7	528.9	533.0	537.2	528.9
72.5°	140.5	185.9	235.6	285.1	318.2	338.8	359.5	363.6	363.6	363.6	359.5
75°	70.3	95.0	140.5	161.2	190.1	198.4	214.8	214.8	227.3	210.7	206.6
77.5°	62.0	74.4	99.2	115.7	128.1	140.5	144.6	157.0	152.9	144.6	148.7
80°	37.2	45.5	62.0	70.3	86.7	90.9	95.0	99.2	95.0	99.2	99.2
82.5°	28.9	33.1	41.4	41.4	53.7	53.7	57.8	57.8	62.0	62.0	62.0
85°	16.5	28.9	24.8	49.5	33.1	33.1	41.4	49.5	41.4	41.4	49.5
87.5°	16.5	16.5	12.4	16.5	16.5	16.5	20.6	24.8	24.8	28.9	24.8
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: P249268

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7698.0	7698.0	7698.0	7698.0
2.5°	7710.4	7718.6	7706.3	7702.1
5°	7722.7	7722.7	7714.5	7714.5
7.5°	7722.7	7722.7	7710.4	7702.1
10°	7689.7	7689.7	7677.3	7669.1
12.5°	7627.7	7627.7	7623.6	7611.2
15°	7549.2	7549.2	7532.7	7520.3
17.5°	7441.8	7450.1	7429.4	7429.4
20°	7326.1	7322.0	7305.5	7297.2
22.5°	7206.3	7198.0	7193.9	7169.1
25°	7078.2	7069.9	7057.5	7045.1
27.5°	6859.2	6855.1	6842.6	6826.1
30°	6524.5	6520.3	6503.8	6503.8
32.5°	6090.6	6086.5	6070.0	6074.1
35°	5640.2	5656.8	5648.5	5632.0
37.5°	5264.2	5276.6	5284.9	5276.6
40°	4950.2	4987.4	4991.5	4999.8
42.5°	4615.5	4665.0	4681.6	4689.8
45°	4214.6	4260.1	4297.3	4289.0
47.5°	3805.6	3838.6	3871.7	3846.9
50°	3413.1	3433.7	3446.1	3446.1
52.5°	3041.2	3041.2	3037.1	3041.2
55°	2615.6	2615.6	2599.1	2607.3
57.5°	2169.3	2177.6	2165.1	2144.5
60°	1756.1	1735.5	1727.2	1714.8
62.5°	1367.7	1367.7	1338.8	1375.9
65°	1024.8	1012.4	999.9	995.8
67.5°	743.7	739.7	727.2	723.1
70°	524.7	508.3	504.1	495.8
72.5°	351.2	351.2	342.9	342.9
75°	214.8	194.2	190.1	194.2
77.5°	148.7	144.6	144.6	140.5
80°	99.2	95.0	103.3	90.9
82.5°	62.0	66.1	62.0	66.1
85°	41.4	49.5	45.5	45.5
87.5°	24.8	24.8	24.8	24.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)