

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: P249430

Luminaire Tested: **LSR8B150D010 EC8B150835 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249430
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 EC8B150835 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14571.0 lumens
Efficiency: N/A
Efficacy: 91.9 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

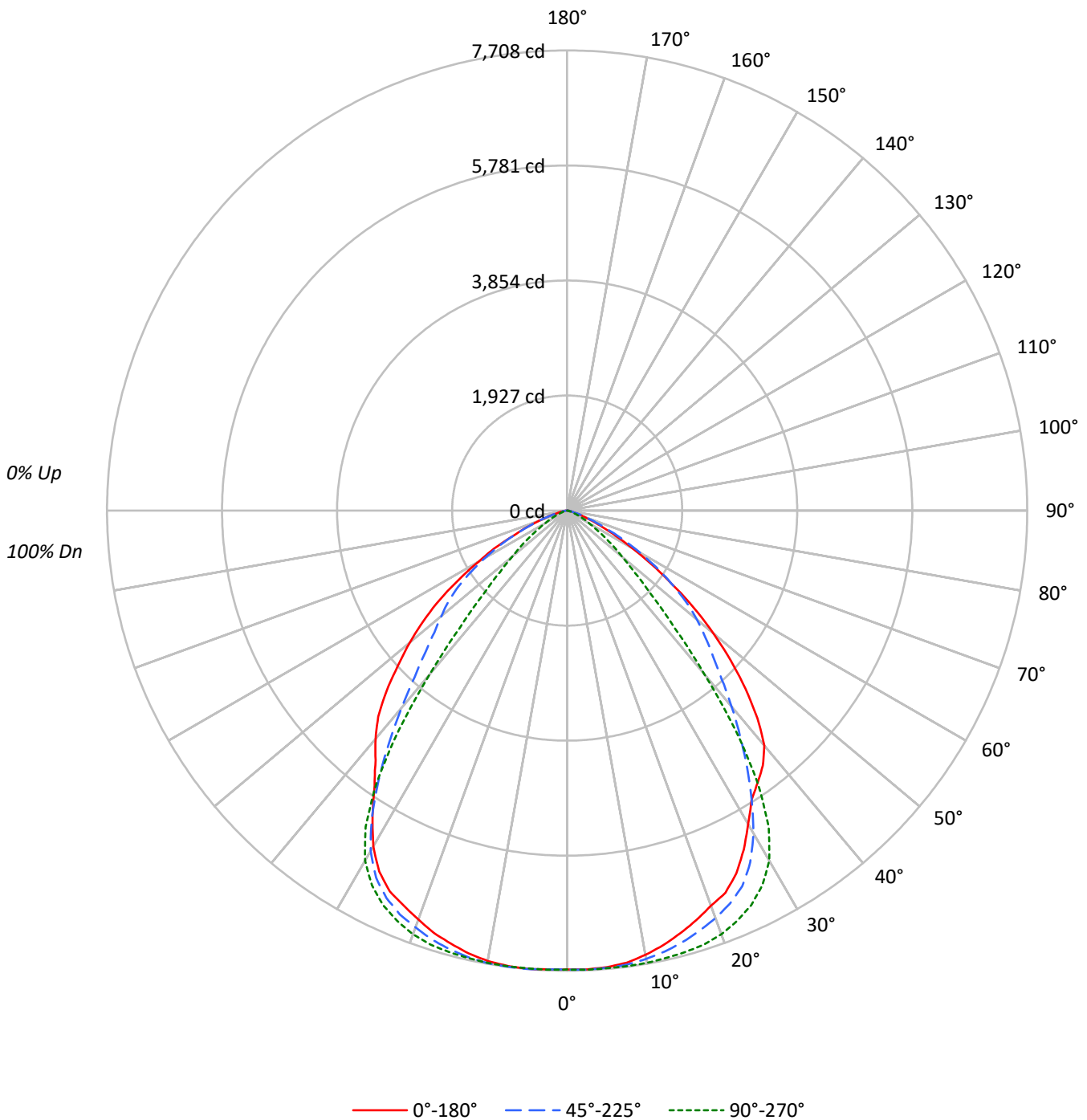
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249430

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0B

Luminous Intensity Polar Plot





TEST NUMBER: P249430

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0B

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°	237067	237067	237067
5°	237588	238229	238486
10°	236590	240855	239822
15°	233969	244376	239766
20°	231158	247811	239148
25°	228159	248097	239394
30°	215851	241122	231280
35°	209407	209558	211737
40°	206813	144186	201000
45°	184279	86560	186800
50°	153230	57611	165103
55°	114921	39714	139990
60°	77880	26464	105621
65°	46975	17169	72564
70°	26047	9304	44647
75°	11807	3932	23114
80°	10264	4386	16124
85°	11676	5838	16063



TEST NUMBER: P249430

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	733.7	5.0
10°-20°	2130.8	14.6
20°-30°	3234.1	22.2
30°-40°	3396.8	23.3
40°-50°	2546.7	17.5
50°-60°	1634.0	11.2
60°-70°	699.0	4.8
70°-80°	165.1	1.1
80°-90°	30.7	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°	6098.6	41.9
0°-40°	9495.4	65.2
0°-60°	13676.1	93.9
0°-90°	14571.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14571.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7688	7688	7688	7688	7688	
5°	7676	7688	7696	7708	7704	729
15°	7329	7482	7655	7606	7510	2067
25°	6706	6941	7292	7160	7036	3064
35°	5563	5253	5567	5501	5625	3491
45°	4226	3454	1985	3355	4284	3236
55°	2138	2138	739	2228	2604	1939
65°	644	759	235	978	994	687
75°	99	116	33	198	194	144
85°	33	21	16	33	45	35
90°	0	0	0	0	0	



TEST NUMBER: P249430

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0B

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9
2.5°	7692.1	7700.4	7696.2	7696.2	7692.1	7696.2	7696.2	7704.5	7704.5	7696.2	7692.1
5°	7675.5	7683.8	7683.8	7675.5	7675.5	7696.2	7683.8	7692.1	7692.1	7687.9	7687.9
7.5°	7638.5	7638.5	7654.9	7642.6	7642.6	7654.9	7650.8	7659.1	7667.3	7671.5	7671.5
10°	7555.9	7564.2	7568.3	7568.3	7572.4	7584.8	7593.0	7609.6	7617.8	7626.1	7630.2
12.5°	7452.8	7465.1	7469.2	7465.1	7477.5	7494.0	7514.7	7535.3	7547.7	7564.2	7576.6
15°	7328.9	7328.9	7337.2	7349.6	7357.9	7382.6	7403.2	7427.9	7461.0	7481.7	7502.3
17.5°	7192.8	7201.1	7213.4	7213.4	7229.9	7271.1	7283.6	7320.7	7357.9	7378.5	7419.8
20°	7044.2	7052.4	7064.8	7073.1	7093.7	7126.7	7151.5	7184.5	7225.8	7263.0	7304.2
22.5°	6928.6	6912.2	6920.4	6928.6	6949.3	6978.2	7007.1	7048.3	7089.6	7126.7	7168.0
25°	6705.8	6709.9	6722.3	6730.5	6755.4	6780.1	6813.1	6862.6	6899.8	6941.1	6986.4
27.5°	6404.6	6408.7	6429.3	6429.3	6449.9	6491.2	6511.8	6553.1	6602.7	6643.9	6697.6
30°	6062.1	6070.3	6070.3	6086.8	6099.1	6119.8	6140.4	6181.7	6206.5	6243.6	6317.9
32.5°	5748.5	5756.6	5752.5	5748.5	5736.0	5731.9	5727.8	5736.0	5744.3	5756.6	5785.5
35°	5562.8	5542.1	5525.6	5496.7	5463.7	5422.4	5385.3	5335.8	5290.4	5253.2	5212.0
37.5°	5385.3	5381.1	5356.4	5315.1	5249.1	5174.8	5088.2	4980.9	4873.5	4758.0	4646.7
40°	5137.7	5125.3	5104.7	5046.9	4972.6	4881.8	4766.3	4634.2	4460.9	4283.5	4101.9
42.5°	4716.7	4720.9	4696.1	4650.7	4580.6	4493.9	4374.2	4229.8	4044.1	3833.6	3598.5
45°	4225.7	4225.7	4217.4	4180.3	4130.8	4060.6	3969.8	3850.2	3668.6	3454.0	3202.2
47.5°	3714.0	3718.1	3705.7	3697.5	3676.8	3631.5	3565.4	3474.7	3346.7	3140.3	2888.6
50°	3194.1	3194.1	3214.7	3210.5	3210.5	3194.1	3165.2	3111.5	3000.1	2835.0	2599.8
52.5°	2674.1	2682.3	2694.8	2711.2	2731.8	2764.8	2731.8	2707.1	2636.9	2509.0	2306.8
55°	2137.6	2145.9	2166.5	2195.3	2220.2	2253.2	2261.4	2261.4	2224.2	2137.6	1984.9
57.5°	1679.6	1667.2	1683.7	1708.5	1741.5	1774.5	1799.2	1828.1	1824.0	1766.2	1642.4
60°	1262.8	1266.9	1279.2	1304.1	1328.8	1357.7	1390.7	1415.4	1427.9	1399.0	1320.5
62.5°	920.3	920.3	936.7	961.5	973.9	1015.2	1035.8	1048.2	1060.5	1056.4	1006.9
65°	643.8	652.0	660.3	672.7	685.0	709.7	722.2	746.9	755.2	759.3	722.2
67.5°	454.0	441.6	449.8	458.0	470.4	487.0	511.7	511.7	524.0	524.0	499.3
70°	288.9	288.9	293.0	305.3	313.6	317.8	326.0	334.2	346.6	342.5	342.5
72.5°	194.0	189.8	194.0	198.1	202.2	214.6	214.6	218.7	227.0	231.1	214.6
75°	99.1	103.2	111.4	107.3	119.7	111.4	115.5	127.9	123.8	115.5	115.5
77.5°	82.5	82.5	82.5	78.5	86.6	86.6	82.5	90.8	86.6	86.6	82.5
80°	57.8	61.9	57.8	53.6	57.8	53.6	53.6	53.6	53.6	53.6	49.5
82.5°	45.4	37.2	41.3	37.2	41.3	41.3	37.2	33.0	33.0	37.2	33.0
85°	33.0	24.7	28.9	28.9	24.7	24.7	24.7	24.7	24.7	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: P249430

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9
2.5°	7700.4	7696.2	7704.5	7700.4	7700.4	7696.2	7700.4	7696.2	7704.5	7687.9	7692.1
5°	7700.4	7692.1	7696.2	7700.4	7704.5	7696.2	7696.2	7696.2	7704.5	7696.2	7700.4
7.5°	7683.8	7679.7	7692.1	7700.4	7696.2	7692.1	7700.4	7696.2	7704.5	7700.4	7708.5
10°	7650.8	7654.9	7663.2	7675.5	7679.7	7683.8	7692.1	7692.1	7704.5	7687.9	7696.2
12.5°	7601.3	7617.8	7638.5	7646.7	7663.2	7663.2	7671.5	7675.5	7683.8	7679.7	7692.1
15°	7539.4	7560.0	7584.8	7605.5	7626.1	7638.5	7650.8	7654.9	7667.3	7654.9	7659.1
17.5°	7465.1	7489.8	7527.0	7551.7	7584.8	7597.2	7613.6	7621.9	7634.3	7626.1	7630.2
20°	7361.9	7390.9	7432.1	7469.2	7489.8	7518.7	7539.4	7551.7	7560.0	7551.7	7555.9
22.5°	7217.5	7258.8	7312.4	7341.3	7382.6	7407.3	7411.5	7440.4	7461.0	7440.4	7448.6
25°	7048.3	7089.6	7130.9	7192.8	7229.9	7258.8	7287.7	7291.8	7312.4	7308.3	7304.2
27.5°	6767.7	6821.4	6891.5	6941.1	6990.5	7036.0	7069.0	7077.2	7097.9	7089.6	7093.7
30°	6383.9	6441.7	6507.8	6586.1	6656.3	6701.6	6742.9	6771.8	6792.4	6780.1	6776.0
32.5°	5839.2	5897.0	5967.2	6045.5	6128.1	6194.1	6243.6	6280.8	6305.5	6297.3	6276.7
35°	5216.1	5232.6	5278.0	5339.9	5410.0	5480.2	5525.6	5566.8	5595.7	5604.0	5604.0
37.5°	4576.5	4522.9	4489.8	4489.8	4531.0	4559.9	4601.2	4626.0	4671.4	4687.9	4700.3
40°	3957.4	3833.6	3718.1	3631.5	3573.7	3569.6	3569.6	3581.9	3623.2	3676.8	3726.4
42.5°	3404.5	3206.4	3029.0	2868.0	2752.5	2686.5	2657.6	2661.7	2694.8	2744.2	2826.7
45°	2962.9	2715.4	2492.5	2298.5	2141.7	2038.5	1989.1	1984.9	2009.7	2067.4	2158.3
47.5°	2620.4	2356.3	2104.6	1881.7	1712.6	1601.1	1543.4	1526.9	1543.4	1597.0	1704.3
50°	2335.7	2063.4	1803.4	1572.2	1390.7	1275.2	1221.5	1200.9	1221.5	1266.9	1374.1
52.5°	2071.6	1791.0	1547.5	1324.7	1130.7	1031.6	973.9	961.5	973.9	1027.5	1114.2
55°	1766.2	1526.9	1287.5	1064.7	895.5	796.5	751.0	738.7	751.0	800.6	891.4
57.5°	1465.0	1258.6	1048.2	845.9	701.6	614.8	573.6	557.1	585.9	619.0	726.3
60°	1184.3	1019.3	841.8	664.4	544.7	466.3	433.3	429.1	437.4	478.7	552.9
62.5°	928.5	792.3	652.0	507.6	408.5	375.5	334.2	330.2	338.4	363.1	421.0
65°	668.5	581.9	474.6	371.4	293.0	247.6	231.1	235.3	243.4	260.0	313.6
67.5°	466.3	404.4	330.2	260.0	202.2	181.5	165.1	160.9	165.1	194.0	222.8
70°	313.6	276.5	222.8	198.1	140.3	111.4	115.5	103.2	119.7	119.7	144.4
72.5°	206.3	181.5	148.5	115.5	99.1	78.5	78.5	74.3	82.5	86.6	107.3
75°	107.3	82.5	82.5	57.8	41.3	20.6	37.2	33.0	28.9	33.0	41.3
77.5°	74.3	61.9	57.8	45.4	41.3	33.0	33.0	33.0	33.0	37.2	41.3
80°	45.4	45.4	33.0	28.9	24.7	20.6	24.7	24.7	24.7	24.7	28.9
82.5°	28.9	24.7	24.7	20.6	20.6	16.5	16.5	16.5	16.5	16.5	24.7
85°	24.7	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: P249430

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9	7687.9
2.5°	7700.4	7704.5	7704.5	7700.4	7700.4	7692.1	7708.5	7696.2	7700.4	7716.8	7704.5
5°	7708.5	7712.7	7712.7	7708.5	7708.5	7708.5	7712.7	7712.7	7708.5	7704.5	7712.7
7.5°	7725.1	7721.0	7721.0	7712.7	7712.7	7704.5	7712.7	7700.4	7708.5	7700.4	7712.7
10°	7704.5	7708.5	7704.5	7700.4	7700.4	7696.2	7696.2	7683.8	7687.9	7675.5	7683.8
12.5°	7692.1	7687.9	7687.9	7679.7	7671.5	7663.2	7659.1	7646.7	7646.7	7617.8	7630.2
15°	7659.1	7663.2	7650.8	7634.3	7626.1	7605.5	7597.2	7580.6	7564.2	7543.6	7547.7
17.5°	7630.2	7617.8	7601.3	7584.8	7551.7	7535.3	7518.7	7494.0	7485.7	7461.0	7452.8
20°	7543.6	7535.3	7514.7	7485.7	7465.1	7427.9	7411.5	7386.7	7366.0	7341.3	7328.9
22.5°	7432.1	7423.8	7399.1	7370.2	7337.2	7320.7	7304.2	7258.8	7238.1	7213.4	7209.2
25°	7291.8	7279.4	7254.7	7221.7	7205.1	7159.8	7143.2	7110.2	7102.0	7077.2	7073.1
27.5°	7077.2	7060.7	7031.8	6990.5	6961.7	6932.8	6916.3	6891.5	6883.3	6858.5	6854.4
30°	6755.4	6734.7	6676.9	6660.4	6610.9	6582.0	6582.0	6549.0	6553.1	6536.7	6536.7
32.5°	6247.8	6214.8	6169.3	6136.3	6103.3	6086.8	6086.8	6074.4	6082.7	6082.7	6091.0
35°	5575.1	5529.8	5504.9	5484.3	5484.3	5500.8	5550.4	5562.8	5587.5	5608.1	5624.7
37.5°	4712.6	4708.5	4737.4	4762.2	4824.1	4894.2	4980.9	5055.2	5125.3	5174.8	5224.3
40°	3780.0	3883.2	3965.7	4081.3	4176.1	4312.3	4469.1	4597.1	4716.7	4803.5	4894.2
42.5°	2950.5	3082.6	3256.0	3425.1	3594.3	3780.0	3986.4	4163.8	4320.6	4440.3	4535.2
45°	2298.5	2480.1	2690.6	2905.2	3123.9	3355.0	3569.6	3751.1	3916.2	4040.0	4134.9
47.5°	1852.8	2051.0	2290.3	2525.5	2773.1	3016.6	3256.0	3412.8	3548.9	3647.9	3734.7
50°	1530.9	1741.5	1993.2	2261.4	2509.0	2752.5	2958.8	3111.5	3222.9	3309.6	3363.2
52.5°	1279.2	1502.1	1770.4	2038.5	2286.1	2509.0	2694.8	2810.3	2901.0	2962.9	3012.4
55°	1056.4	1271.0	1522.8	1774.5	2017.9	2228.4	2381.0	2467.8	2537.8	2575.0	2603.9
57.5°	862.5	1060.5	1291.6	1522.8	1733.2	1906.6	2026.2	2112.8	2145.9	2174.7	2170.6
60°	676.8	862.5	1072.9	1271.0	1452.6	1592.8	1679.6	1729.1	1753.8	1766.2	1757.9
62.5°	532.3	701.6	862.5	1035.8	1167.8	1287.5	1370.1	1370.1	1382.4	1386.6	1399.0
65°	396.1	524.0	664.4	792.3	899.6	978.0	1023.5	1035.8	1052.3	1048.2	1039.9
67.5°	293.0	387.9	491.0	585.9	660.3	709.7	742.8	771.7	767.6	759.3	755.2
70°	202.2	264.1	354.9	412.7	466.3	515.9	524.0	528.2	532.3	536.5	528.2
72.5°	140.3	185.7	235.3	284.7	317.8	338.4	359.1	363.1	363.1	363.1	359.1
75°	70.2	94.9	140.3	160.9	189.8	198.1	214.6	214.6	227.0	210.4	206.3
77.5°	61.9	74.3	99.1	115.5	127.9	140.3	144.4	156.8	152.7	144.4	148.5
80°	37.2	45.4	61.9	70.2	86.6	90.8	94.9	99.1	94.9	99.1	99.1
82.5°	28.9	33.0	41.3	41.3	53.6	53.6	57.8	57.8	61.9	61.9	61.9
85°	16.5	28.9	24.7	49.5	33.0	33.0	41.3	49.5	41.3	41.3	49.5
87.5°	16.5	16.5	12.4	16.5	16.5	16.5	20.6	24.7	24.7	28.9	24.7
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: P249430

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7687.9	7687.9	7687.9	7687.9
2.5°	7700.4	7708.5	7696.2	7692.1
5°	7712.7	7712.7	7704.5	7704.5
7.5°	7712.7	7712.7	7700.4	7692.1
10°	7679.7	7679.7	7667.3	7659.1
12.5°	7617.8	7617.8	7613.6	7601.3
15°	7539.4	7539.4	7522.9	7510.5
17.5°	7432.1	7440.4	7419.8	7419.8
20°	7316.6	7312.4	7296.0	7287.7
22.5°	7196.9	7188.6	7184.5	7159.8
25°	7069.0	7060.7	7048.3	7036.0
27.5°	6850.3	6846.1	6833.7	6817.3
30°	6516.0	6511.8	6495.4	6495.4
32.5°	6082.7	6078.5	6062.1	6066.2
35°	5632.9	5649.4	5641.1	5624.7
37.5°	5257.3	5269.8	5278.0	5269.8
40°	4943.7	4980.9	4985.0	4993.3
42.5°	4609.5	4659.0	4675.5	4683.7
45°	4209.1	4254.6	4291.7	4283.5
47.5°	3800.6	3833.6	3866.6	3841.9
50°	3408.6	3429.2	3441.6	3441.6
52.5°	3037.3	3037.3	3033.1	3037.3
55°	2612.2	2612.2	2595.7	2603.9
57.5°	2166.5	2174.7	2162.3	2141.7
60°	1753.8	1733.2	1724.9	1712.6
62.5°	1366.0	1366.0	1337.1	1374.1
65°	1023.5	1011.0	998.6	994.5
67.5°	742.8	738.7	726.3	722.2
70°	524.0	507.6	503.4	495.2
72.5°	350.8	350.8	342.5	342.5
75°	214.6	194.0	189.8	194.0
77.5°	148.5	144.4	144.4	140.3
80°	99.1	94.9	103.2	90.8
82.5°	61.9	66.0	61.9	66.0
85°	41.3	49.5	45.4	45.4
87.5°	24.7	24.7	24.7	24.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)