

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: P248404

Luminaire Tested: **LSR8B150D010 EC8B150940 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248404  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B150D010 EC8B150940 8LBDWOLI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15199.0 lumens  
Efficiency: N/A  
Efficacy: 95.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

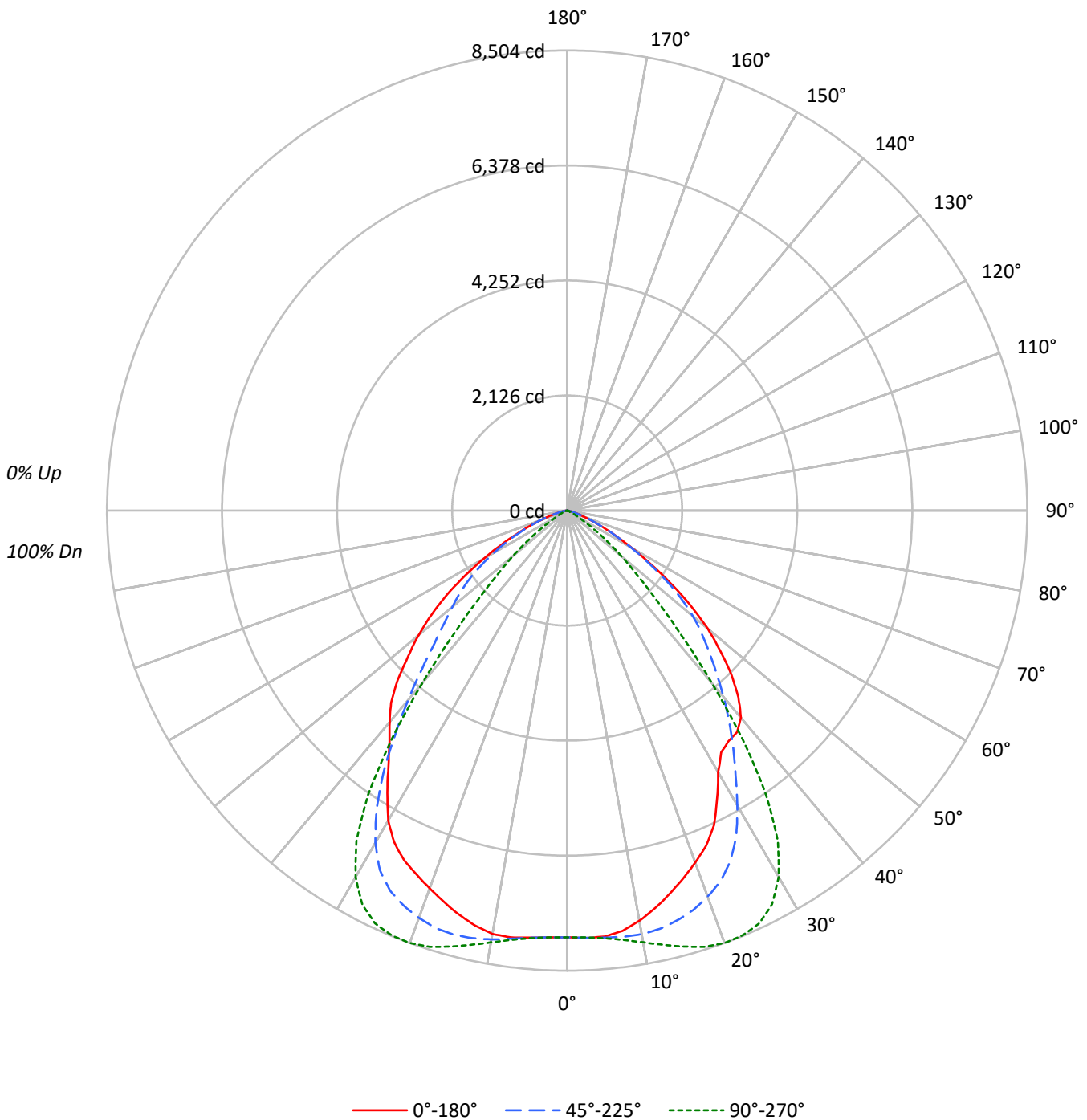
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	243135	243135	243135
5°	244584	245491	245231
10°	240990	253702	248724
15°	233943	266276	246770
20°	227154	279065	243772
25°	218431	286214	242640
30°	198789	278366	235449
35°	195829	241201	216623
40°	201149	167287	205360
45°	187258	101108	193097
50°	162421	62437	172064
55°	124646	32622	146022
60°	84917	13161	110209
65°	52827	6720	76037
70°	28680	4156	46414
75°	14952	1990	27427
80°	6695	2237	14863
85°	4458	1486	13339



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	758.3	5.0
10°-20°	2246.3	14.8
20°-30°	3426.9	22.5
30°-40°	3576.0	23.5
40°-50°	2686.1	17.7
50°-60°	1652.7	10.9
60°-70°	672.6	4.4
70°-80°	158.5	1.0
80°-90°	21.8	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°	6431.4	42.3
0°-40°	10007.4	65.8
0°-60°	14346.1	94.4
0°-90°	15199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15199.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7885	7885	7885	7885	7885	
5°	7902	7922	7931	7922	7922	748
15°	7328	7843	8341	8111	7730	2064
25°	6420	7140	8412	7747	7131	2919
35°	5202	5349	6407	5922	5754	3285
45°	4294	3716	2318	3461	4428	3276
55°	2318	2201	607	2201	2716	2084
65°	724	732	92	984	1042	755
75°	126	126	17	222	230	151
85°	13	13	4	29	38	18
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°	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7
2.5°	7905.7	7893.1	7905.7	7905.7	7909.9	7901.5	7905.7	7909.9	7901.5	7901.5	7901.5
5°	7901.5	7893.1	7901.5	7897.3	7905.7	7905.7	7914.1	7914.1	7922.4	7922.4	7935.0
7.5°	7834.5	7817.8	7834.5	7847.1	7855.4	7872.2	7893.1	7909.9	7926.6	7943.4	7964.3
10°	7696.4	7696.4	7709.0	7734.1	7759.2	7788.4	7826.1	7868.0	7909.9	7947.5	7985.2
12.5°	7524.9	7512.3	7537.4	7570.8	7608.5	7654.6	7713.2	7776.0	7842.9	7918.2	7976.9
15°	7328.1	7315.6	7344.8	7378.3	7424.4	7491.4	7562.5	7646.2	7742.5	7842.9	7939.2
17.5°	7127.2	7123.0	7152.3	7198.4	7236.1	7307.2	7399.3	7499.7	7608.5	7742.5	7868.0
20°	6922.2	6918.0	6947.3	6985.0	7035.2	7102.1	7194.2	7311.4	7441.1	7591.8	7738.3
22.5°	6708.7	6712.9	6738.0	6779.9	6821.8	6892.8	6989.1	7106.3	7248.6	7411.8	7575.0
25°	6419.9	6399.0	6432.5	6474.4	6545.5	6604.1	6696.2	6821.8	6968.2	7139.8	7332.3
27.5°	6001.4	5997.2	6026.6	6064.2	6127.0	6198.1	6298.6	6428.3	6583.2	6771.5	6959.8
30°	5582.9	5591.3	5603.9	5641.6	5683.4	5754.5	5855.0	5963.8	6110.3	6290.2	6491.1
32.5°	5298.3	5298.3	5315.1	5340.2	5369.5	5407.2	5478.3	5557.8	5670.9	5796.4	5942.8
35°	5202.1	5185.4	5202.1	5206.3	5210.5	5218.9	5231.3	5256.5	5294.1	5348.6	5403.0
37.5°	5160.3	5147.7	5147.7	5131.0	5110.0	5084.9	5051.4	5013.7	4972.0	4917.5	4875.7
40°	4997.0	4988.7	4980.3	4963.6	4917.5	4867.3	4812.8	4725.0	4628.7	4494.8	4360.9
42.5°	4683.2	4674.8	4670.6	4637.1	4595.2	4536.6	4473.9	4381.8	4260.5	4088.8	3896.3
45°	4294.0	4277.2	4264.7	4235.4	4206.0	4155.8	4097.2	4013.5	3892.1	3716.4	3486.2
47.5°	3841.9	3833.5	3829.4	3816.9	3787.6	3758.2	3720.6	3653.6	3544.8	3377.3	3138.8
50°	3385.7	3369.0	3377.3	3373.2	3360.7	3339.8	3314.6	3268.6	3184.8	3034.2	2816.6
52.5°	2862.6	2862.6	2858.5	2871.0	2875.2	2871.0	2875.2	2825.0	2753.8	2640.8	2456.6
55°	2318.5	2318.5	2331.1	2347.9	2364.6	2368.8	2364.6	2343.7	2293.4	2201.4	2038.1
57.5°	1807.9	1799.6	1824.7	1849.8	1866.6	1883.3	1870.7	1854.0	1824.7	1749.3	1623.8
60°	1376.9	1376.9	1393.6	1410.4	1427.1	1443.9	1439.7	1435.5	1410.4	1360.1	1259.8
62.5°	1012.8	1017.0	1017.0	1029.6	1046.3	1063.0	1075.5	1063.0	1050.4	1017.0	950.0
65°	724.0	719.8	724.0	736.6	749.2	765.9	774.3	770.1	757.5	732.4	682.2
67.5°	485.5	481.3	498.0	502.2	510.6	527.4	523.2	527.4	523.2	502.2	460.4
70°	318.1	309.7	318.1	313.9	326.5	330.7	339.0	343.2	339.0	326.5	313.9
72.5°	196.7	192.5	196.7	200.9	205.1	209.2	217.6	217.6	213.4	205.1	188.3
75°	125.5	113.0	117.2	108.9	117.2	117.2	125.5	129.7	125.5	125.5	117.2
77.5°	75.4	75.4	75.4	75.4	75.4	75.4	75.4	79.6	83.7	75.4	71.2
80°	37.7	37.7	41.9	41.9	41.9	46.1	41.9	41.9	41.9	46.1	33.5
82.5°	29.3	25.1	25.1	25.1	29.3	25.1	25.1	25.1	25.1	25.1	25.1
85°	12.6	16.7	12.6	8.4	12.6	12.6	16.7	12.6	12.6	12.6	16.7
87.5°	4.2	4.2	0.0	0.0	0.0	4.2	0.0	4.2	4.2	8.4	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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7
2.5°	7905.7	7897.3	7897.3	7893.1	7901.5	7893.1	7897.3	7893.1	7893.1	7901.5	7893.1
5°	7935.0	7939.2	7930.8	7926.6	7939.2	7939.2	7939.2	7930.8	7930.8	7935.0	7930.8
7.5°	7976.9	7985.2	7989.4	7993.6	8002.0	8006.2	8006.2	8002.0	7997.8	8010.3	7993.6
10°	8022.8	8035.4	8060.5	8073.1	8094.0	8094.0	8102.4	8102.4	8094.0	8102.4	8098.2
12.5°	8006.2	8081.4	8123.3	8152.6	8181.9	8207.0	8215.4	8219.6	8215.4	8232.2	8215.4
15°	8035.4	8098.2	8165.2	8215.4	8269.7	8299.0	8307.4	8340.9	8349.3	8353.5	8328.4
17.5°	7989.4	8102.4	8173.5	8248.8	8328.4	8382.8	8433.0	8454.0	8458.2	8466.5	8433.0
20°	7884.7	8010.3	8119.1	8228.0	8320.0	8403.7	8445.6	8504.1	8487.4	8520.9	8474.9
22.5°	7742.5	7884.7	8022.8	8165.2	8261.4	8361.9	8449.8	8491.5	8512.5	8512.5	8462.3
25°	7516.5	7683.9	7834.5	7981.0	8127.5	8248.8	8349.3	8412.1	8424.7	8420.5	8361.9
27.5°	7164.9	7344.8	7520.7	7688.1	7868.0	8010.3	8127.5	8202.8	8223.8	8223.8	8161.0
30°	6679.4	6871.9	7043.6	7244.4	7428.6	7587.6	7750.9	7817.8	7855.4	7855.4	7784.3
32.5°	6101.9	6265.1	6424.1	6620.8	6821.8	7001.7	7156.5	7248.6	7294.7	7290.5	7227.7
35°	5474.1	5553.6	5675.1	5821.5	6001.4	6168.8	6319.5	6407.4	6486.9	6482.7	6424.1
37.5°	4846.3	4825.4	4838.0	4892.4	5005.3	5122.6	5239.7	5323.5	5390.4	5419.8	5407.2
40°	4231.2	4122.3	4017.7	3980.1	3988.4	4030.3	4093.0	4155.8	4231.2	4268.9	4285.6
42.5°	3678.7	3494.6	3310.4	3172.3	3092.8	3067.7	3097.0	3117.9	3163.9	3218.3	3272.8
45°	3235.1	2988.2	2745.4	2532.0	2398.1	2318.5	2301.8	2318.5	2343.7	2398.1	2469.2
47.5°	2871.0	2582.2	2310.2	2071.6	1874.9	1770.3	1741.0	1732.7	1757.7	1807.9	1904.2
50°	2548.7	2259.9	1958.7	1682.4	1477.4	1360.1	1318.3	1301.5	1330.8	1368.5	1456.4
52.5°	2197.2	1912.6	1602.9	1335.0	1121.6	1000.3	954.2	929.1	945.8	996.1	1083.9
55°	1816.3	1552.6	1272.3	996.1	791.0	678.0	623.5	606.8	623.5	678.0	765.9
57.5°	1435.5	1213.7	979.3	719.8	535.7	422.7	368.2	351.5	397.6	418.5	510.6
60°	1121.6	941.7	740.8	527.4	368.2	280.4	226.0	213.4	234.4	272.0	347.4
62.5°	841.2	728.2	569.2	376.6	272.0	179.9	150.6	138.1	150.6	179.9	238.6
65°	611.0	523.2	397.6	276.2	184.1	133.9	100.5	92.1	104.7	125.5	175.8
67.5°	418.5	351.5	276.2	192.5	125.5	83.7	71.2	71.2	75.4	92.1	129.7
70°	272.0	230.2	175.8	125.5	83.7	62.8	54.4	46.1	54.4	67.0	87.9
72.5°	171.6	146.4	113.0	87.9	62.8	46.1	37.7	33.5	41.9	50.2	67.0
75°	104.7	79.6	58.6	46.1	33.5	33.5	33.5	16.7	20.9	33.5	41.9
77.5°	62.8	54.4	46.1	37.7	29.3	16.7	16.7	16.7	20.9	25.1	37.7
80°	33.5	29.3	20.9	20.9	16.7	12.6	16.7	12.6	8.4	20.9	25.1
82.5°	20.9	16.7	16.7	16.7	20.9	8.4	12.6	8.4	12.6	16.7	12.6
85°	12.6	12.6	12.6	8.4	20.9	8.4	8.4	4.2	4.2	8.4	8.4
87.5°	0.0	4.2	4.2	0.0	4.2	0.0	4.2	4.2	4.2	4.2	4.2
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°	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7	7884.7
2.5°	7897.3	7893.1	7897.3	7893.1	7893.1	7893.1	7897.3	7897.3	7893.1	7893.1	7901.5
5°	7930.8	7930.8	7930.8	7926.6	7922.4	7922.4	7930.8	7930.8	7918.2	7930.8	7930.8
7.5°	8002.0	7989.4	8002.0	7985.2	7976.9	7981.0	7985.2	7976.9	7968.5	7972.7	7972.7
10°	8094.0	8081.4	8081.4	8068.9	8056.3	8047.9	8039.6	8018.6	7997.8	7993.6	7976.9
12.5°	8202.8	8181.9	8169.4	8144.2	8123.3	8094.0	8068.9	8035.4	7993.6	7964.3	7935.0
15°	8311.6	8278.1	8248.8	8207.0	8161.0	8110.7	8056.3	8002.0	7935.0	7876.4	7826.1
17.5°	8399.5	8353.5	8299.0	8232.2	8165.2	8089.8	8010.3	7930.8	7834.5	7759.2	7700.6
20°	8428.8	8361.9	8290.7	8202.8	8114.9	8010.3	7909.9	7805.2	7696.4	7616.9	7549.9
22.5°	8391.2	8311.6	8223.8	8131.7	8014.4	7901.5	7784.3	7662.9	7566.6	7457.9	7395.1
25°	8286.5	8190.3	8094.0	7985.2	7872.2	7746.7	7621.1	7495.6	7378.3	7319.7	7240.3
27.5°	8073.1	7968.5	7863.8	7750.9	7621.1	7495.6	7365.8	7244.4	7144.0	7064.5	7018.5
30°	7696.4	7575.0	7453.7	7332.3	7219.3	7089.5	6968.2	6867.7	6767.3	6704.5	6658.5
32.5°	7118.8	7010.1	6888.7	6771.5	6666.9	6558.1	6457.6	6369.8	6298.6	6256.7	6223.2
35°	6340.5	6231.6	6139.6	6055.9	5967.9	5921.9	5859.2	5808.9	5779.6	5762.9	5758.7
37.5°	5361.1	5298.3	5269.0	5252.3	5235.5	5223.1	5231.3	5252.3	5269.0	5298.3	5331.8
40°	4314.8	4369.2	4386.0	4444.6	4499.0	4570.1	4649.7	4741.8	4817.0	4913.3	4980.3
42.5°	3360.7	3461.1	3578.3	3703.8	3837.7	3967.5	4126.5	4273.0	4406.9	4528.3	4632.9
45°	2582.2	2737.0	2912.8	3092.8	3272.8	3461.1	3653.6	3833.5	3992.6	4122.3	4231.2
47.5°	2013.0	2184.7	2410.7	2632.5	2850.1	3071.9	3285.3	3473.6	3607.5	3733.1	3829.4
50°	1594.5	1791.2	2038.1	2293.4	2532.0	2766.3	2992.3	3168.1	3302.1	3402.5	3473.6
52.5°	1234.6	1469.0	1720.1	1987.9	2243.2	2498.5	2707.7	2871.0	2979.8	3067.7	3122.1
55°	920.7	1150.9	1418.8	1695.0	1954.5	2201.4	2398.1	2540.4	2636.7	2686.8	2716.1
57.5°	665.4	874.7	1142.5	1418.8	1653.1	1887.5	2046.5	2176.3	2230.6	2259.9	2272.5
60°	485.5	678.0	916.5	1155.1	1376.9	1565.2	1703.4	1791.2	1833.1	1849.8	1845.6
62.5°	355.7	523.2	728.2	929.1	1109.0	1263.9	1372.7	1431.3	1452.3	1460.6	1448.1
65°	272.0	401.7	577.6	732.4	870.5	983.5	1063.0	1100.7	1113.2	1109.0	1100.7
67.5°	200.9	301.4	431.1	548.3	648.7	736.6	778.5	811.9	820.2	807.8	795.2
70°	142.3	221.8	313.9	393.4	468.7	519.0	565.0	569.2	569.2	565.0	556.7
72.5°	100.5	154.8	213.4	267.9	313.9	351.5	368.2	380.8	376.6	372.4	364.1
75°	67.0	96.3	154.8	167.4	209.2	221.8	238.6	238.6	242.7	230.2	230.2
77.5°	41.9	67.0	92.1	108.9	125.5	142.3	150.6	150.6	154.8	150.6	150.6
80°	25.1	41.9	50.2	75.4	75.4	87.9	92.1	96.3	87.9	100.5	87.9
82.5°	16.7	25.1	37.7	37.7	46.1	54.4	54.4	58.6	58.6	54.4	54.4
85°	12.6	16.7	20.9	25.1	25.1	29.3	25.1	25.1	29.3	33.5	29.3
87.5°	4.2	8.4	4.2	8.4	8.4	16.7	12.6	12.6	12.6	16.7	16.7
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: P248404

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBDWOLI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	7884.7	7884.7	7884.7	7884.7
2.5°	7893.1	7897.3	7893.1	7893.1
5°	7930.8	7926.6	7930.8	7922.4
7.5°	7960.1	7960.1	7955.9	7955.9
10°	7960.1	7943.4	7943.4	7943.4
12.5°	7897.3	7876.4	7863.8	7855.4
15°	7788.4	7750.9	7734.1	7729.9
17.5°	7646.2	7612.7	7591.8	7579.2
20°	7483.0	7449.5	7424.4	7428.6
22.5°	7340.6	7303.1	7286.3	7277.9
25°	7198.4	7152.3	7139.8	7131.4
27.5°	6968.2	6943.1	6930.5	6918.0
30°	6616.7	6604.1	6583.2	6612.5
32.5°	6210.7	6189.7	6173.0	6185.6
35°	5762.9	5750.3	5762.9	5754.5
37.5°	5352.8	5365.3	5382.1	5390.4
40°	5030.5	5076.5	5093.3	5101.6
42.5°	4708.3	4762.6	4796.1	4817.0
45°	4310.6	4365.0	4402.7	4427.9
47.5°	3900.5	3946.6	3984.2	3980.1
50°	3528.1	3553.2	3569.9	3586.7
52.5°	3151.3	3151.3	3155.5	3155.5
55°	2724.5	2716.1	2711.9	2716.1
57.5°	2255.7	2247.4	2243.2	2230.6
60°	1828.9	1803.8	1787.0	1787.0
62.5°	1431.3	1402.0	1389.5	1385.3
65°	1075.5	1071.3	1046.3	1042.1
67.5°	778.5	761.7	745.0	749.2
70°	548.3	523.2	523.2	514.8
72.5°	355.7	343.2	339.0	339.0
75°	221.8	221.8	213.4	230.2
77.5°	146.4	146.4	142.3	146.4
80°	87.9	87.9	87.9	83.7
82.5°	54.4	58.6	54.4	54.4
85°	29.3	33.5	25.1	37.7
87.5°	16.7	20.9	16.7	20.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)