

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: P249322

Luminaire Tested: **LSR8B150D010 EC8B150835 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249322
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 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16095.0 lumens
Efficiency: N/A
Efficacy: 101.5 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

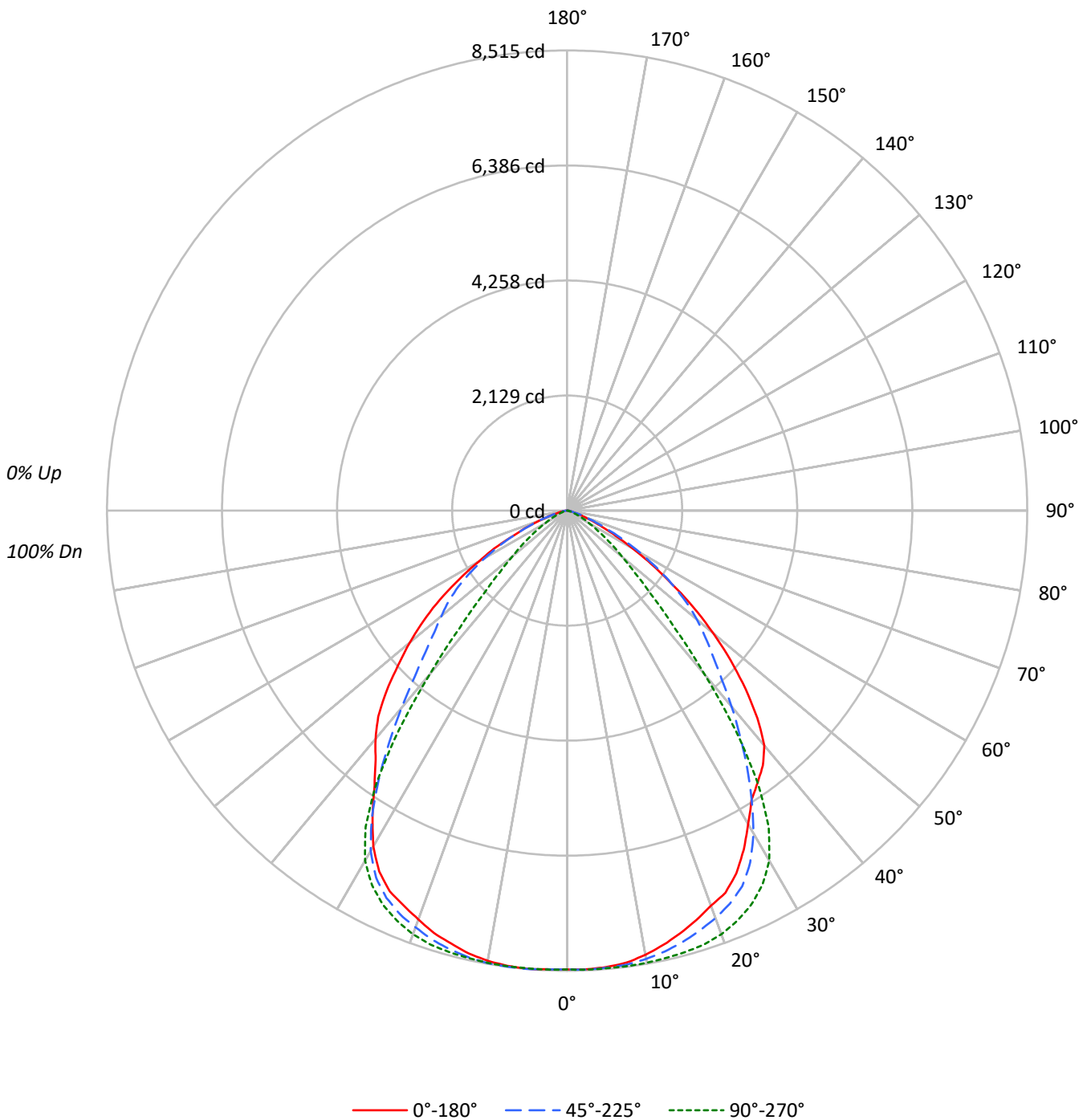
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	261862	261862	261862
5°	262438	263147	263429
10°	261336	266046	264903
15°	258438	269937	264846
20°	255336	273732	264160
25°	252023	274047	264432
30°	238426	266342	255467
35°	231308	231478	233883
40°	228441	159265	222021
45°	203554	95613	206337
50°	169253	63636	182373
55°	126942	43869	154629
60°	86021	29233	116666
65°	51885	18964	80152
70°	28770	10278	49317
75°	13034	4349	25532
80°	11330	4848	17811
85°	12914	6439	17761



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	810.4	5.0
10°-20°	2353.6	14.6
20°-30°	3572.4	22.2
30°-40°	3752.1	23.3
40°-50°	2813.1	17.5
50°-60°	1804.9	11.2
60°-70°	772.1	4.8
70°-80°	182.4	1.1
80°-90°	33.9	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°	6736.5	41.9
0°-40°	10488.6	65.2
0°-60°	15106.5	93.9
0°-90°	16095.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16095.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8492	8492	8492	8492	8492	
5°	8478	8492	8501	8515	8510	805
15°	8095	8264	8456	8401	8296	2283
25°	7407	7667	8054	7909	7772	3384
35°	6145	5803	6149	6076	6213	3856
45°	4668	3815	2192	3706	4732	3575
55°	2361	2361	816	2461	2876	2142
65°	711	839	260	1080	1098	759
75°	109	128	36	219	214	159
85°	36	23	18	36	50	38
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°	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0
2.5°	8496.6	8505.8	8501.2	8501.2	8496.6	8501.2	8501.2	8510.3	8510.3	8501.2	8496.6
5°	8478.3	8487.5	8487.5	8478.3	8478.3	8501.2	8487.5	8496.6	8496.6	8492.0	8492.0
7.5°	8437.4	8437.4	8455.6	8442.0	8442.0	8455.6	8451.0	8460.1	8469.3	8473.9	8473.9
10°	8346.2	8355.3	8359.9	8359.9	8364.4	8378.1	8387.2	8405.5	8414.5	8423.7	8428.2
12.5°	8232.3	8245.9	8250.5	8245.9	8259.6	8277.8	8300.6	8323.4	8337.1	8355.3	8369.0
15°	8095.4	8095.4	8104.6	8118.3	8127.4	8154.8	8177.5	8204.8	8241.3	8264.2	8286.9
17.5°	7945.1	7954.2	7967.8	7967.8	7986.1	8031.6	8045.3	8086.4	8127.4	8150.2	8195.8
20°	7781.0	7790.0	7803.8	7812.9	7835.7	7872.1	7899.5	7935.9	7981.5	8022.6	8068.1
22.5°	7653.3	7635.1	7644.2	7653.3	7676.2	7708.1	7740.0	7785.5	7831.1	7872.1	7917.8
25°	7407.2	7411.7	7425.4	7434.5	7461.9	7489.2	7525.7	7580.4	7621.4	7667.0	7717.1
27.5°	7074.4	7079.0	7101.8	7101.8	7124.5	7170.1	7192.9	7238.5	7293.3	7338.8	7398.1
30°	6696.1	6705.2	6705.2	6723.5	6737.1	6759.9	6782.7	6828.3	6855.6	6896.7	6978.8
32.5°	6349.7	6358.7	6354.2	6349.7	6336.0	6331.4	6326.8	6336.0	6345.1	6358.7	6390.6
35°	6144.6	6121.7	6103.5	6071.7	6035.2	5989.6	5948.5	5893.9	5843.7	5802.6	5757.1
37.5°	5948.5	5943.9	5916.6	5871.0	5798.1	5716.1	5620.4	5501.8	5383.3	5255.7	5132.7
40°	5675.0	5661.3	5638.6	5574.8	5492.7	5392.4	5264.8	5118.9	4927.4	4731.5	4530.9
42.5°	5210.1	5214.6	5187.3	5137.1	5059.7	4963.9	4831.7	4672.2	4467.1	4234.6	3974.8
45°	4667.7	4667.7	4658.5	4617.5	4562.8	4485.3	4385.0	4252.9	4052.3	3815.2	3537.2
47.5°	4102.4	4107.0	4093.3	4084.2	4061.4	4011.3	3938.4	3838.1	3696.8	3468.8	3190.7
50°	3528.1	3528.1	3550.9	3546.3	3546.3	3528.1	3496.2	3436.9	3313.9	3131.5	2871.8
52.5°	2953.7	2962.9	2976.6	2994.8	3017.5	3054.0	3017.5	2990.2	2912.7	2771.4	2548.1
55°	2361.2	2370.3	2393.1	2425.0	2452.4	2488.9	2497.9	2497.9	2456.9	2361.2	2192.5
57.5°	1855.2	1841.5	1859.8	1887.1	1923.6	1960.1	1987.4	2019.3	2014.7	1950.9	1814.2
60°	1394.8	1399.4	1413.0	1440.5	1467.8	1499.7	1536.1	1563.5	1577.2	1545.3	1458.6
62.5°	1016.5	1016.5	1034.7	1062.0	1075.7	1121.4	1144.1	1157.8	1171.4	1166.9	1112.2
65°	711.1	720.2	729.3	743.0	756.6	784.0	797.7	825.0	834.2	838.7	797.7
67.5°	501.5	487.7	496.9	505.9	519.6	537.9	565.2	565.2	578.9	578.9	551.5
70°	319.1	319.1	323.7	337.3	346.4	351.0	360.1	369.2	382.9	378.3	378.3
72.5°	214.3	209.7	214.3	218.8	223.4	237.0	237.0	241.6	250.7	255.3	237.0
75°	109.4	114.0	123.0	118.6	132.2	123.0	127.6	141.3	136.7	127.6	127.6
77.5°	91.1	91.1	91.1	86.7	95.7	95.7	91.1	100.3	95.7	95.7	91.1
80°	63.8	68.4	63.8	59.2	63.8	59.2	59.2	59.2	59.2	59.2	54.7
82.5°	50.2	41.0	45.6	41.0	45.6	45.6	41.0	36.5	36.5	41.0	36.5
85°	36.5	27.3	31.9	31.9	27.3	27.3	27.3	27.3	27.3	22.8	22.8
87.5°	22.8	13.7	13.7	13.7	18.2	18.2	18.2	13.7	18.2	18.2	9.1
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°	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0
2.5°	8505.8	8501.2	8510.3	8505.8	8505.8	8501.2	8505.8	8501.2	8510.3	8492.0	8496.6
5°	8505.8	8496.6	8501.2	8505.8	8510.3	8501.2	8501.2	8501.2	8510.3	8501.2	8505.8
7.5°	8487.5	8482.9	8496.6	8505.8	8501.2	8496.6	8505.8	8501.2	8510.3	8505.8	8514.8
10°	8451.0	8455.6	8464.7	8478.3	8482.9	8487.5	8496.6	8496.6	8510.3	8492.0	8501.2
12.5°	8396.3	8414.5	8437.4	8446.4	8464.7	8464.7	8473.9	8478.3	8487.5	8482.9	8496.6
15°	8328.0	8350.7	8378.1	8400.9	8423.7	8437.4	8451.0	8455.6	8469.3	8455.6	8460.1
17.5°	8245.9	8273.2	8314.3	8341.6	8378.1	8391.8	8410.0	8419.1	8432.8	8423.7	8428.2
20°	8131.9	8163.9	8209.4	8250.5	8273.2	8305.1	8328.0	8341.6	8350.7	8341.6	8346.2
22.5°	7972.4	8018.0	8077.2	8109.1	8154.8	8182.1	8186.7	8218.6	8241.3	8218.6	8227.7
25°	7785.5	7831.1	7876.7	7945.1	7986.1	8018.0	8049.9	8054.5	8077.2	8072.7	8068.1
27.5°	7475.5	7534.9	7612.3	7667.0	7721.7	7771.9	7808.3	7817.4	7840.2	7831.1	7835.7
30°	7051.6	7115.5	7188.4	7275.0	7352.5	7402.6	7448.2	7480.1	7502.9	7489.2	7484.7
32.5°	6450.0	6513.8	6591.3	6677.8	6769.1	6841.9	6896.7	6937.7	6965.0	6955.9	6933.1
35°	5761.7	5779.9	5830.1	5898.4	5975.8	6053.4	6103.5	6149.1	6181.0	6190.1	6190.1
37.5°	5055.1	4995.9	4959.4	4959.4	5004.9	5036.8	5082.5	5109.8	5160.0	5178.2	5191.9
40°	4371.3	4234.6	4107.0	4011.3	3947.5	3942.9	3942.9	3956.5	4002.2	4061.4	4116.1
42.5°	3760.6	3541.7	3345.8	3168.0	3040.4	2967.5	2935.6	2940.1	2976.6	3031.3	3122.4
45°	3272.8	2999.4	2753.2	2538.9	2365.7	2251.7	2197.1	2192.5	2219.8	2283.6	2384.0
47.5°	2894.5	2602.7	2324.7	2078.5	1891.7	1768.6	1704.8	1686.6	1704.8	1764.0	1882.6
50°	2580.0	2279.2	1992.0	1736.7	1536.1	1408.6	1349.2	1326.5	1349.2	1399.4	1517.9
52.5°	2288.2	1978.3	1709.4	1463.2	1249.0	1139.5	1075.7	1062.0	1075.7	1135.0	1230.8
55°	1950.9	1686.6	1422.2	1176.0	989.2	879.8	829.6	816.0	829.6	884.3	984.6
57.5°	1618.2	1390.3	1157.8	934.4	774.9	679.1	633.6	615.3	647.2	683.7	802.3
60°	1308.2	1125.9	929.9	733.9	601.7	515.1	478.6	474.0	483.2	528.8	610.8
62.5°	1025.7	875.2	720.2	560.7	451.3	414.8	369.2	364.7	373.7	401.1	465.0
65°	738.5	642.8	524.2	410.2	323.7	273.5	255.3	259.9	268.9	287.2	346.4
67.5°	515.1	446.7	364.7	287.2	223.4	200.5	182.4	177.8	182.4	214.3	246.2
70°	346.4	305.4	246.2	218.8	155.0	123.0	127.6	114.0	132.2	132.2	159.5
72.5°	227.9	200.5	164.1	127.6	109.4	86.7	86.7	82.1	91.1	95.7	118.6
75°	118.6	91.1	91.1	63.8	45.6	22.8	41.0	36.5	31.9	36.5	45.6
77.5°	82.1	68.4	63.8	50.2	45.6	36.5	36.5	36.5	36.5	41.0	45.6
80°	50.2	50.2	36.5	31.9	27.3	22.8	27.3	27.3	27.3	27.3	31.9
82.5°	31.9	27.3	27.3	22.8	22.8	18.2	18.2	18.2	18.2	18.2	27.3
85°	27.3	18.2	18.2	13.7	18.2	31.9	13.7	18.2	18.2	18.2	13.7
87.5°	9.1	13.7	13.7	13.7	9.1	4.6	9.1	13.7	13.7	22.8	18.2
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°	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0	8492.0
2.5°	8505.8	8510.3	8510.3	8505.8	8505.8	8496.6	8514.8	8501.2	8505.8	8523.9	8510.3
5°	8514.8	8519.4	8519.4	8514.8	8514.8	8514.8	8519.4	8519.4	8514.8	8510.3	8519.4
7.5°	8533.1	8528.5	8528.5	8519.4	8519.4	8510.3	8519.4	8505.8	8514.8	8505.8	8519.4
10°	8510.3	8514.8	8510.3	8505.8	8505.8	8501.2	8501.2	8487.5	8492.0	8478.3	8487.5
12.5°	8496.6	8492.0	8492.0	8482.9	8473.9	8464.7	8460.1	8446.4	8446.4	8414.5	8428.2
15°	8460.1	8464.7	8451.0	8432.8	8423.7	8400.9	8391.8	8373.5	8355.3	8332.5	8337.1
17.5°	8428.2	8414.5	8396.3	8378.1	8341.6	8323.4	8305.1	8277.8	8268.6	8241.3	8232.3
20°	8332.5	8323.4	8300.6	8268.6	8245.9	8204.8	8186.7	8159.3	8136.5	8109.1	8095.4
22.5°	8209.4	8200.3	8172.9	8141.0	8104.6	8086.4	8068.1	8018.0	7995.2	7967.8	7963.3
25°	8054.5	8040.8	8013.4	7977.0	7958.7	7908.6	7890.3	7853.8	7844.8	7817.4	7812.9
27.5°	7817.4	7799.2	7767.3	7721.7	7689.8	7657.9	7639.7	7612.3	7603.2	7575.8	7571.3
30°	7461.9	7439.1	7375.3	7357.1	7302.3	7270.4	7270.4	7233.9	7238.5	7220.3	7220.3
32.5°	6901.2	6864.8	6814.6	6778.1	6741.6	6723.5	6723.5	6709.7	6718.9	6718.9	6728.0
35°	6158.2	6108.1	6080.7	6057.9	6057.9	6076.1	6130.9	6144.6	6171.9	6194.7	6213.0
37.5°	5205.5	5201.0	5232.9	5260.2	5328.6	5406.1	5501.8	5583.9	5661.3	5716.1	5770.7
40°	4175.4	4289.3	4380.5	4508.2	4612.9	4763.4	4936.6	5077.9	5210.1	5305.9	5406.1
42.5°	3259.1	3405.0	3596.5	3783.3	3970.3	4175.4	4403.3	4599.3	4772.5	4904.7	5009.5
45°	2538.9	2739.5	2972.0	3209.0	3450.6	3705.9	3942.9	4143.5	4325.8	4462.6	4567.4
47.5°	2046.6	2265.5	2529.8	2789.7	3063.2	3332.1	3596.5	3769.7	3920.1	4029.5	4125.3
50°	1691.1	1923.6	2201.7	2497.9	2771.4	3040.4	3268.3	3436.9	3560.0	3655.7	3715.0
52.5°	1413.0	1659.2	1955.5	2251.7	2525.2	2771.4	2976.6	3104.2	3204.5	3272.8	3327.5
55°	1166.9	1404.0	1682.0	1960.1	2229.0	2461.4	2630.1	2725.9	2803.3	2844.3	2876.2
57.5°	952.7	1171.4	1426.7	1682.0	1914.5	2106.0	2238.1	2333.8	2370.3	2402.2	2397.6
60°	747.6	952.7	1185.2	1404.0	1604.5	1759.4	1855.2	1909.9	1937.2	1950.9	1941.8
62.5°	588.0	774.9	952.7	1144.1	1290.0	1422.2	1513.4	1513.4	1527.0	1531.6	1545.3
65°	437.5	578.9	733.9	875.2	993.7	1080.3	1130.5	1144.1	1162.4	1157.8	1148.7
67.5°	323.7	428.5	542.4	647.2	729.3	784.0	820.4	852.4	847.9	838.7	834.2
70°	223.4	291.8	392.0	455.8	515.1	569.8	578.9	583.4	588.0	592.6	583.4
72.5°	155.0	205.1	259.9	314.5	351.0	373.7	396.6	401.1	401.1	401.1	396.6
75°	77.5	104.8	155.0	177.8	209.7	218.8	237.0	237.0	250.7	232.4	227.9
77.5°	68.4	82.1	109.4	127.6	141.3	155.0	159.5	173.2	168.6	159.5	164.1
80°	41.0	50.2	68.4	77.5	95.7	100.3	104.8	109.4	104.8	109.4	109.4
82.5°	31.9	36.5	45.6	45.6	59.2	59.2	63.8	63.8	68.4	68.4	68.4
85°	18.2	31.9	27.3	54.7	36.5	36.5	45.6	54.7	45.6	45.6	54.7
87.5°	18.2	18.2	13.7	18.2	18.2	18.2	22.8	27.3	27.3	31.9	27.3
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: P249322

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8492.0	8492.0	8492.0	8492.0
2.5°	8505.8	8514.8	8501.2	8496.6
5°	8519.4	8519.4	8510.3	8510.3
7.5°	8519.4	8519.4	8505.8	8496.6
10°	8482.9	8482.9	8469.3	8460.1
12.5°	8414.5	8414.5	8410.0	8396.3
15°	8328.0	8328.0	8309.7	8296.1
17.5°	8209.4	8218.6	8195.8	8195.8
20°	8081.8	8077.2	8059.1	8049.9
22.5°	7949.6	7940.5	7935.9	7908.6
25°	7808.3	7799.2	7785.5	7771.9
27.5°	7566.8	7562.2	7548.5	7530.3
30°	7197.5	7192.9	7174.7	7174.7
32.5°	6718.9	6714.3	6696.1	6700.7
35°	6222.0	6240.3	6231.1	6213.0
37.5°	5807.2	5820.9	5830.1	5820.9
40°	5460.8	5501.8	5506.4	5515.5
42.5°	5091.6	5146.3	5164.6	5173.6
45°	4649.4	4699.6	4740.6	4731.5
47.5°	4198.1	4234.6	4271.1	4243.7
50°	3765.1	3787.9	3801.6	3801.6
52.5°	3354.9	3354.9	3350.3	3354.9
55°	2885.4	2885.4	2867.2	2876.2
57.5°	2393.1	2402.2	2388.5	2365.7
60°	1937.2	1914.5	1905.3	1891.7
62.5°	1508.8	1508.8	1476.9	1517.9
65°	1130.5	1116.8	1103.1	1098.5
67.5°	820.4	816.0	802.3	797.7
70°	578.9	560.7	556.1	547.0
72.5°	387.5	387.5	378.3	378.3
75°	237.0	214.3	209.7	214.3
77.5°	164.1	159.5	159.5	155.0
80°	109.4	104.8	114.0	100.3
82.5°	68.4	72.9	68.4	72.9
85°	45.6	54.7	50.2	50.2
87.5°	27.3	27.3	27.3	27.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)