

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: P248413

Luminaire Tested: **LSR8B150D010 EC8B150950 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248413
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 EC8B150950 8LBDWOLI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15736.0 lumens
Efficiency: N/A
Efficacy: 99.3 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

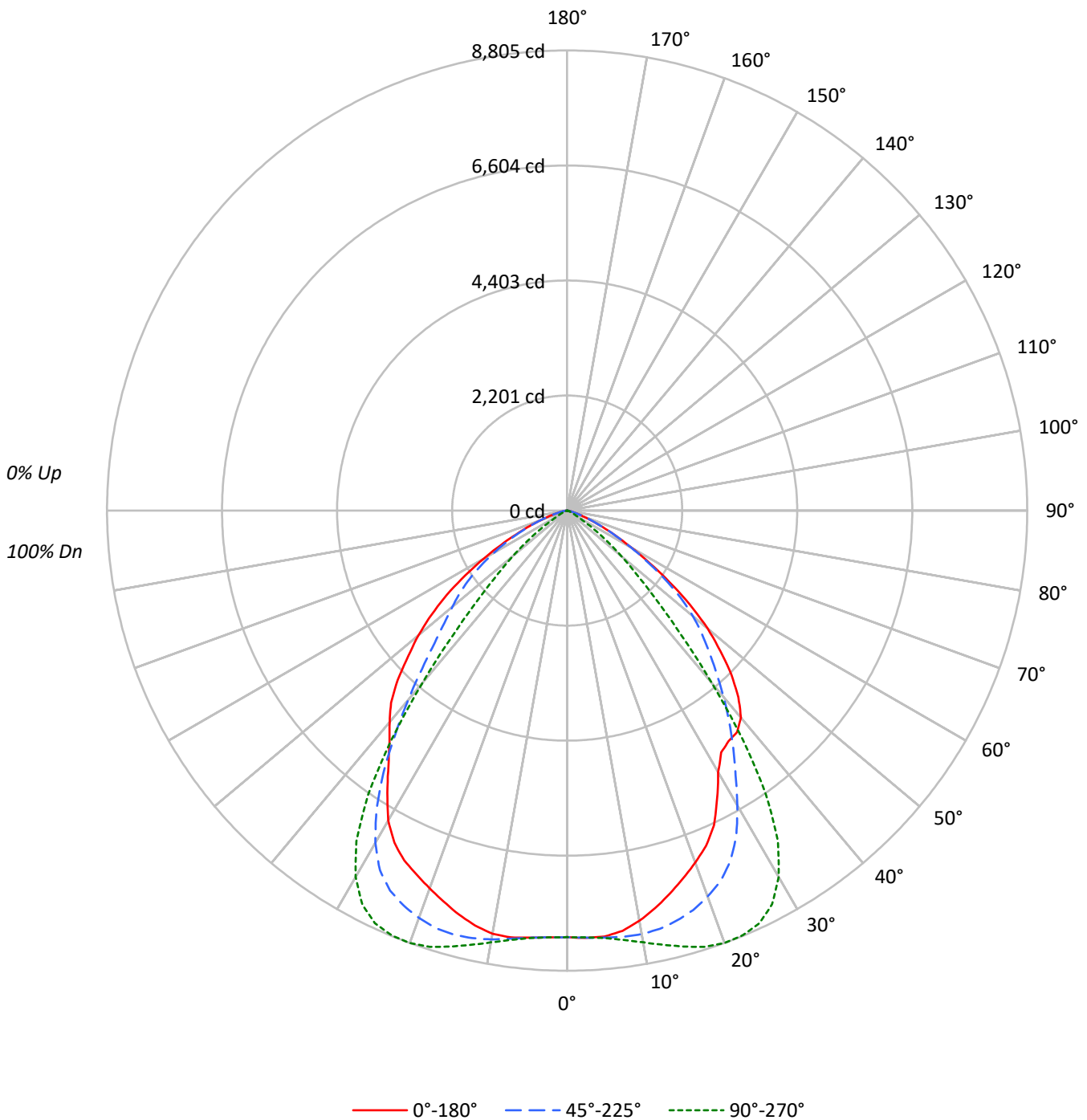
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	251726	251726	251726
5°	253226	254164	253895
10°	249504	262667	257510
15°	242211	275684	255489
20°	235181	288926	252386
25°	226151	296326	251214
30°	205810	288201	243767
35°	202748	249724	224277
40°	208258	173197	212617
45°	193873	104679	199917
50°	168164	64643	178142
55°	129049	33778	151183
60°	87920	13623	114107
65°	54695	6954	78722
70°	29689	4301	48055
75°	15489	2061	28392
80°	6926	2309	15378
85°	4599	1521	13798



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	785.1	5.0
10°-20°	2325.6	14.8
20°-30°	3548.0	22.5
30°-40°	3702.4	23.5
40°-50°	2781.0	17.7
50°-60°	1711.1	10.9
60°-70°	696.3	4.4
70°-80°	164.1	1.0
80°-90°	22.6	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°	6658.6	42.3
0°-40°	10361.0	65.8
0°-60°	14853.0	94.4
0°-90°	15736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15736.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8163	8163	8163	8163	8163	
5°	8181	8202	8211	8202	8202	774
15°	7587	8120	8636	8397	8003	2137
25°	6647	7392	8709	8020	7383	3022
35°	5386	5538	6634	6131	5958	3401
45°	4446	3848	2400	3583	4584	3392
55°	2400	2279	628	2279	2812	2158
65°	750	758	95	1018	1079	782
75°	130	130	17	230	238	157
85°	13	13	4	30	39	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°	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3
2.5°	8185.0	8172.0	8185.0	8185.0	8189.4	8180.7	8185.0	8189.4	8180.7	8180.7	8180.7
5°	8180.7	8172.0	8180.7	8176.3	8185.0	8185.0	8193.7	8193.7	8202.3	8202.3	8215.3
7.5°	8111.3	8094.0	8111.3	8124.4	8133.0	8150.3	8172.0	8189.4	8206.6	8224.0	8245.7
10°	7968.3	7968.3	7981.3	8007.3	8033.3	8063.6	8102.6	8146.0	8189.4	8228.3	8267.3
12.5°	7790.7	7777.7	7803.7	7838.3	7877.3	7925.1	7985.7	8050.7	8120.0	8198.0	8258.7
15°	7587.1	7574.0	7604.3	7639.0	7686.7	7756.1	7829.7	7916.4	8016.0	8120.0	8219.7
17.5°	7379.0	7374.7	7405.0	7452.7	7491.7	7565.3	7660.7	7764.6	7877.3	8016.0	8146.0
20°	7166.8	7162.4	7192.8	7231.8	7283.7	7353.1	7448.4	7569.7	7704.0	7860.1	8011.7
22.5°	6945.7	6950.1	6976.1	7019.4	7062.8	7136.4	7236.0	7357.4	7504.7	7673.7	7842.7
25°	6646.8	6625.1	6659.8	6703.2	6776.7	6837.4	6932.8	7062.8	7214.4	7392.1	7591.4
27.5°	6213.5	6209.1	6239.5	6278.4	6343.4	6417.1	6521.1	6655.5	6815.8	7010.7	7205.7
30°	5780.1	5788.8	5801.9	5840.9	5884.2	5957.8	6061.8	6174.5	6326.2	6512.4	6720.4
32.5°	5485.5	5485.5	5502.9	5528.9	5559.2	5598.2	5671.9	5754.2	5871.2	6001.2	6152.8
35°	5385.9	5368.6	5385.9	5390.2	5394.5	5403.2	5416.2	5442.3	5481.2	5537.6	5593.9
37.5°	5342.6	5329.6	5329.6	5312.3	5290.5	5264.6	5229.9	5190.9	5147.6	5091.2	5048.0
40°	5173.6	5164.9	5156.2	5138.9	5091.2	5039.3	4982.9	4891.9	4792.2	4653.6	4515.0
42.5°	4848.6	4840.0	4835.6	4800.9	4757.6	4696.9	4631.9	4536.6	4411.0	4233.3	4034.0
45°	4445.7	4428.3	4415.3	4385.0	4354.6	4302.6	4242.0	4155.3	4029.6	3847.7	3609.4
47.5°	3977.7	3969.0	3964.6	3951.7	3921.4	3891.0	3852.1	3782.7	3670.0	3496.7	3249.7
50°	3505.4	3488.1	3496.7	3492.4	3479.4	3457.8	3431.7	3384.1	3297.4	3141.4	2916.1
52.5°	2963.7	2963.7	2959.5	2972.4	2976.7	2972.4	2976.7	2924.8	2851.1	2734.1	2543.4
55°	2400.4	2400.4	2413.5	2430.8	2448.1	2452.5	2448.1	2426.5	2374.4	2279.1	2110.1
57.5°	1871.8	1863.2	1889.2	1915.2	1932.5	1949.8	1936.8	1919.5	1889.2	1811.2	1681.2
60°	1425.6	1425.6	1442.8	1460.2	1477.5	1494.9	1490.5	1486.2	1460.2	1408.2	1304.3
62.5°	1048.5	1052.9	1052.9	1065.9	1083.2	1100.6	1113.5	1100.6	1087.6	1052.9	983.6
65°	749.6	745.2	749.6	762.6	775.6	792.9	801.6	797.3	784.2	758.3	706.3
67.5°	502.6	498.3	515.6	519.9	528.6	546.0	541.7	546.0	541.7	519.9	476.7
70°	329.3	320.6	329.3	325.0	338.0	342.3	350.9	355.3	350.9	338.0	325.0
72.5°	203.7	199.3	203.7	208.0	212.4	216.6	225.3	225.3	220.9	212.4	195.0
75°	130.0	116.9	121.3	112.7	121.3	121.3	130.0	134.3	130.0	130.0	121.3
77.5°	78.0	78.0	78.0	78.0	78.0	78.0	78.0	82.4	86.6	78.0	73.7
80°	39.0	39.0	43.4	43.4	43.4	47.7	43.4	43.4	43.4	47.7	34.7
82.5°	30.3	26.0	26.0	26.0	30.3	26.0	26.0	26.0	26.0	26.0	26.0
85°	13.0	17.3	13.0	8.7	13.0	13.0	17.3	13.0	13.0	13.0	17.3
87.5°	4.3	4.3	0.0	0.0	0.0	4.3	0.0	4.3	4.3	8.7	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°	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3
2.5°	8185.0	8176.3	8176.3	8172.0	8180.7	8172.0	8176.3	8172.0	8172.0	8180.7	8172.0
5°	8215.3	8219.7	8211.0	8206.6	8219.7	8219.7	8219.7	8211.0	8211.0	8215.3	8211.0
7.5°	8258.7	8267.3	8271.6	8276.0	8284.7	8289.0	8289.0	8284.7	8280.3	8293.4	8276.0
10°	8306.3	8319.3	8345.3	8358.4	8380.0	8380.0	8388.7	8388.7	8380.0	8388.7	8384.3
12.5°	8289.0	8366.9	8410.3	8440.6	8471.0	8496.9	8505.6	8510.0	8505.6	8523.0	8505.6
15°	8319.3	8384.3	8453.7	8505.6	8561.9	8592.2	8600.9	8635.6	8644.3	8648.6	8622.7
17.5°	8271.6	8388.7	8462.3	8540.3	8622.7	8679.0	8730.9	8752.6	8757.0	8765.6	8730.9
20°	8163.3	8293.4	8406.0	8518.7	8614.0	8700.6	8744.0	8804.6	8787.3	8822.0	8774.3
22.5°	8016.0	8163.3	8306.3	8453.7	8553.3	8657.3	8748.3	8791.6	8813.3	8813.3	8761.2
25°	7782.0	7955.4	8111.3	8262.9	8414.7	8540.3	8644.3	8709.3	8722.3	8718.0	8657.3
27.5°	7418.1	7604.3	7786.4	7959.7	8146.0	8293.4	8414.7	8492.6	8514.3	8514.3	8449.3
30°	6915.4	7114.7	7292.4	7500.3	7691.1	7855.7	8024.7	8094.0	8133.0	8133.0	8059.4
32.5°	6317.5	6486.5	6651.1	6854.8	7062.8	7249.1	7409.4	7504.7	7552.4	7548.0	7483.1
35°	5667.6	5749.8	5875.6	6027.2	6213.5	6386.8	6542.8	6633.8	6716.1	6711.8	6651.1
37.5°	5017.5	4995.9	5008.9	5065.2	5182.2	5303.6	5424.9	5511.6	5580.8	5611.3	5598.2
40°	4380.7	4268.0	4159.6	4120.7	4129.3	4172.7	4237.6	4302.6	4380.7	4419.7	4437.0
42.5°	3808.7	3618.1	3427.3	3284.4	3202.0	3176.1	3206.4	3228.0	3275.7	3332.0	3388.4
45°	3349.4	3093.8	2842.4	2621.5	2482.8	2400.4	2383.1	2400.4	2426.5	2482.8	2556.5
47.5°	2972.4	2673.4	2391.8	2144.8	1941.1	1832.9	1802.6	1793.9	1819.8	1871.8	1971.5
50°	2638.8	2339.8	2027.9	1741.8	1529.6	1408.2	1364.9	1347.5	1377.8	1416.9	1507.8
52.5°	2274.8	1980.2	1659.5	1382.2	1161.2	1035.6	987.9	961.9	979.2	1031.3	1122.2
55°	1880.5	1607.5	1317.2	1031.3	818.9	702.0	645.6	628.3	645.6	702.0	792.9
57.5°	1486.2	1256.6	1013.9	745.2	554.6	437.7	381.3	364.0	411.7	433.3	528.6
60°	1161.2	975.0	767.0	546.0	381.3	290.3	234.0	220.9	242.7	281.6	359.6
62.5°	871.0	753.9	589.3	389.9	281.6	186.3	156.0	143.0	156.0	186.3	247.0
65°	632.6	541.7	411.7	285.9	190.6	138.7	104.0	95.3	108.4	130.0	182.0
67.5°	433.3	364.0	285.9	199.3	130.0	86.6	73.7	73.7	78.0	95.3	134.3
70°	281.6	238.3	182.0	130.0	86.6	65.0	56.3	47.7	56.3	69.3	91.0
72.5°	177.7	151.6	116.9	91.0	65.0	47.7	39.0	34.7	43.4	52.0	69.3
75°	108.4	82.4	60.6	47.7	34.7	34.7	34.7	17.3	21.6	34.7	43.4
77.5°	65.0	56.3	47.7	39.0	30.3	17.3	17.3	17.3	21.6	26.0	39.0
80°	34.7	30.3	21.6	21.6	17.3	13.0	17.3	13.0	8.7	21.6	26.0
82.5°	21.6	17.3	17.3	17.3	21.6	8.7	13.0	8.7	13.0	17.3	13.0
85°	13.0	13.0	13.0	8.7	21.6	8.7	8.7	4.3	4.3	8.7	8.7
87.5°	0.0	4.3	4.3	0.0	4.3	0.0	4.3	4.3	4.3	4.3	4.3
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°	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3	8163.3
2.5°	8176.3	8172.0	8176.3	8172.0	8172.0	8172.0	8176.3	8176.3	8172.0	8172.0	8180.7
5°	8211.0	8211.0	8211.0	8206.6	8202.3	8202.3	8211.0	8211.0	8198.0	8211.0	8211.0
7.5°	8284.7	8271.6	8284.7	8267.3	8258.7	8262.9	8267.3	8258.7	8250.0	8254.4	8254.4
10°	8380.0	8366.9	8366.9	8354.0	8341.0	8332.3	8323.7	8302.0	8280.3	8276.0	8258.7
12.5°	8492.6	8471.0	8458.0	8431.9	8410.3	8380.0	8354.0	8319.3	8276.0	8245.7	8215.3
15°	8605.3	8570.6	8540.3	8496.9	8449.3	8397.3	8341.0	8284.7	8215.3	8154.7	8102.6
17.5°	8696.2	8648.6	8592.2	8523.0	8453.7	8375.6	8293.4	8211.0	8111.3	8033.3	7972.7
20°	8726.6	8657.3	8583.7	8492.6	8401.6	8293.4	8189.4	8081.0	7968.3	7886.0	7816.7
22.5°	8687.7	8605.3	8514.3	8419.0	8297.6	8180.7	8059.4	7933.6	7834.0	7721.4	7656.4
25°	8579.3	8479.6	8380.0	8267.3	8150.3	8020.4	7890.4	7760.4	7639.0	7578.4	7496.1
27.5°	8358.4	8250.0	8141.7	8024.7	7890.4	7760.4	7626.1	7500.3	7396.4	7314.1	7266.4
30°	7968.3	7842.7	7717.0	7591.4	7474.4	7340.0	7214.4	7110.4	7006.4	6941.4	6893.8
32.5°	7370.4	7257.8	7132.1	7010.7	6902.5	6789.8	6685.8	6594.8	6521.1	6477.8	6443.1
35°	6564.5	6451.8	6356.5	6269.9	6178.8	6131.2	6066.2	6014.1	5983.8	5966.5	5962.2
37.5°	5550.5	5485.5	5455.2	5437.9	5420.5	5407.6	5416.2	5437.9	5455.2	5485.5	5520.2
40°	4467.3	4523.6	4541.0	4601.6	4657.9	4731.6	4814.0	4909.3	4987.2	5086.9	5156.2
42.5°	3479.4	3583.4	3704.7	3834.7	3973.3	4107.7	4272.3	4423.9	4562.6	4688.2	4796.6
45°	2673.4	2833.7	3015.8	3202.0	3388.4	3583.4	3782.7	3969.0	4133.6	4268.0	4380.7
47.5°	2084.2	2261.8	2495.8	2725.5	2950.8	3180.4	3401.4	3596.3	3735.0	3865.0	3964.6
50°	1650.8	1854.5	2110.1	2374.4	2621.5	2864.0	3098.0	3280.1	3418.7	3522.7	3596.3
52.5°	1278.2	1520.9	1780.8	2058.2	2322.5	2586.8	2803.4	2972.4	3085.1	3176.1	3232.4
55°	953.2	1191.6	1468.9	1754.9	2023.5	2279.1	2482.8	2630.2	2729.8	2781.8	2812.1
57.5°	688.9	905.6	1182.9	1468.9	1711.5	1954.2	2118.8	2253.2	2309.5	2339.8	2352.8
60°	502.6	702.0	948.9	1195.9	1425.6	1620.5	1763.5	1854.5	1897.9	1915.2	1910.8
62.5°	368.3	541.7	753.9	961.9	1148.2	1308.5	1421.2	1481.9	1503.6	1512.2	1499.2
65°	281.6	415.9	598.0	758.3	901.3	1018.2	1100.6	1139.6	1152.6	1148.2	1139.6
67.5°	208.0	312.0	446.3	567.6	671.6	762.6	806.0	840.6	849.2	836.3	823.3
70°	147.4	229.6	325.0	407.3	485.3	537.3	584.9	589.3	589.3	584.9	576.3
72.5°	104.0	160.3	220.9	277.3	325.0	364.0	381.3	394.3	389.9	385.6	377.0
75°	69.3	99.7	160.3	173.3	216.6	229.6	247.0	247.0	251.3	238.3	238.3
77.5°	43.4	69.3	95.3	112.7	130.0	147.4	156.0	156.0	160.3	156.0	156.0
80°	26.0	43.4	52.0	78.0	78.0	91.0	95.3	99.7	91.0	104.0	91.0
82.5°	17.3	26.0	39.0	39.0	47.7	56.3	56.3	60.6	60.6	56.3	56.3
85°	13.0	17.3	21.6	26.0	26.0	30.3	26.0	26.0	30.3	34.7	30.3
87.5°	4.3	8.7	4.3	8.7	8.7	17.3	13.0	13.0	13.0	17.3	17.3
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: P248413

CATALOG NUMBER: LSR8B150D010 EC8B150950 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8163.3	8163.3	8163.3	8163.3
2.5°	8172.0	8176.3	8172.0	8172.0
5°	8211.0	8206.6	8211.0	8202.3
7.5°	8241.3	8241.3	8237.0	8237.0
10°	8241.3	8224.0	8224.0	8224.0
12.5°	8176.3	8154.7	8141.7	8133.0
15°	8063.6	8024.7	8007.3	8003.0
17.5°	7916.4	7881.7	7860.1	7847.0
20°	7747.4	7712.7	7686.7	7691.1
22.5°	7600.0	7561.1	7543.7	7535.0
25°	7452.7	7405.0	7392.1	7383.4
27.5°	7214.4	7188.4	7175.4	7162.4
30°	6850.4	6837.4	6815.8	6846.1
32.5°	6430.2	6408.4	6391.1	6404.2
35°	5966.5	5953.5	5966.5	5957.8
37.5°	5541.9	5554.9	5572.2	5580.8
40°	5208.3	5255.9	5273.3	5281.9
42.5°	4874.6	4930.9	4965.6	4987.2
45°	4462.9	4519.2	4558.3	4584.3
47.5°	4038.3	4086.0	4125.0	4120.7
50°	3652.7	3678.7	3696.0	3713.4
52.5°	3262.7	3262.7	3267.0	3267.0
55°	2820.8	2812.1	2807.7	2812.1
57.5°	2335.4	2326.8	2322.5	2309.5
60°	1893.5	1867.6	1850.2	1850.2
62.5°	1481.9	1451.5	1438.6	1434.2
65°	1113.5	1109.2	1083.2	1078.9
67.5°	806.0	788.6	771.3	775.6
70°	567.6	541.7	541.7	533.0
72.5°	368.3	355.3	350.9	350.9
75°	229.6	229.6	220.9	238.3
77.5°	151.6	151.6	147.4	151.6
80°	91.0	91.0	91.0	86.6
82.5°	56.3	60.6	56.3	56.3
85°	30.3	34.7	26.0	39.0
87.5°	17.3	21.6	17.3	21.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)