

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: P249394

Luminaire Tested: **LSR8B150D010 EC8B1509727 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249394
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 EC8B1509727 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11207.0 lumens
Efficiency: N/A
Efficacy: 70.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

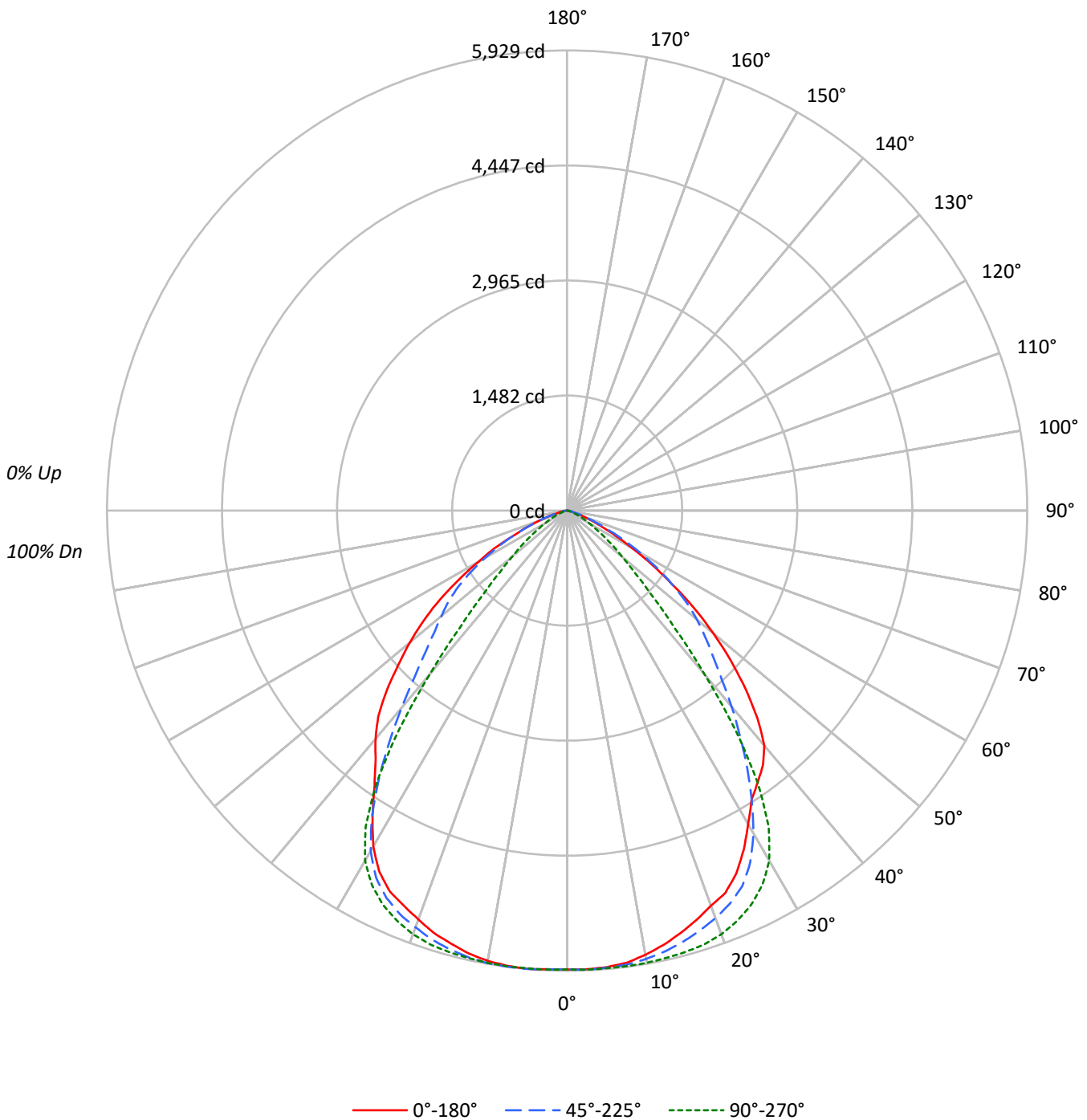
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	564.3	5.0
10°-20°	1638.9	14.6
20°-30°	2487.5	22.2
30°-40°	2612.6	23.3
40°-50°	1958.7	17.5
50°-60°	1256.8	11.2
60°-70°	537.6	4.8
70°-80°	127.0	1.1
80°-90°	23.6	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°	4690.6	41.9
0°-40°	7303.2	65.2
0°-60°	10518.7	93.9
0°-90°	11207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11207.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5913	5913	5913	5913	5913	
5°	5904	5913	5919	5929	5926	561
15°	5637	5754	5888	5850	5777	1590
25°	5158	5339	5608	5507	5412	2356
35°	4278	4040	4282	4231	4326	2685
45°	3250	2657	1527	2580	3294	2489
55°	1644	1644	568	1714	2003	1491
65°	495	584	181	752	765	529
75°	76	89	25	152	149	111
85°	25	16	13	25	35	27
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°	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0
2.5°	5916.2	5922.6	5919.4	5919.4	5916.2	5919.4	5919.4	5925.8	5925.8	5919.4	5916.2
5°	5903.5	5909.9	5909.9	5903.5	5903.5	5919.4	5909.9	5916.2	5916.2	5913.0	5913.0
7.5°	5875.0	5875.0	5887.6	5878.2	5878.2	5887.6	5884.5	5890.8	5897.2	5900.4	5900.4
10°	5811.5	5817.8	5821.0	5821.0	5824.2	5833.7	5840.0	5852.8	5859.1	5865.4	5868.6
12.5°	5732.2	5741.6	5744.8	5741.6	5751.2	5763.8	5779.8	5795.6	5805.2	5817.8	5827.4
15°	5636.9	5636.9	5643.2	5652.8	5659.2	5678.2	5694.0	5713.1	5738.5	5754.4	5770.2
17.5°	5532.2	5538.6	5548.0	5548.0	5560.8	5592.4	5602.0	5630.6	5659.2	5675.0	5706.8
20°	5417.9	5424.2	5433.8	5440.2	5456.0	5481.4	5500.4	5525.8	5557.6	5586.2	5617.8
22.5°	5329.0	5316.4	5322.7	5329.0	5344.9	5367.2	5389.4	5421.1	5452.8	5481.4	5513.2
25°	5157.6	5160.8	5170.4	5176.7	5195.8	5214.8	5240.2	5278.2	5306.8	5338.6	5373.4
27.5°	4926.0	4929.1	4945.0	4945.0	4960.8	4992.6	5008.4	5040.2	5078.3	5110.0	5151.3
30°	4662.5	4668.8	4668.8	4681.6	4691.0	4707.0	4722.8	4754.6	4773.6	4802.2	4859.3
32.5°	4421.3	4427.6	4424.4	4421.3	4411.8	4408.6	4405.4	4411.8	4418.1	4427.6	4449.8
35°	4278.5	4262.6	4249.9	4227.7	4202.3	4170.6	4142.0	4103.9	4069.0	4040.4	4008.7
37.5°	4142.0	4138.8	4119.8	4088.0	4037.2	3980.1	3913.5	3830.9	3748.4	3659.5	3573.9
40°	3951.5	3942.0	3926.2	3881.7	3824.6	3754.8	3665.9	3564.3	3431.0	3294.5	3154.9
42.5°	3627.8	3631.0	3611.9	3577.0	3523.1	3456.4	3364.4	3253.3	3110.5	2948.6	2767.7
45°	3250.1	3250.1	3243.7	3215.2	3177.1	3123.1	3053.3	2961.3	2821.7	2656.6	2462.9
47.5°	2856.5	2859.7	2850.2	2843.9	2828.0	2793.1	2742.3	2672.5	2574.1	2415.3	2221.7
50°	2456.7	2456.7	2472.5	2469.3	2469.3	2456.7	2434.4	2393.1	2307.5	2180.5	1999.6
52.5°	2056.7	2063.1	2072.6	2085.3	2101.1	2126.5	2101.1	2082.1	2028.1	1929.7	1774.2
55°	1644.1	1650.5	1666.3	1688.5	1707.6	1733.0	1739.3	1739.3	1710.7	1644.1	1526.7
57.5°	1291.8	1282.3	1295.0	1314.0	1339.4	1364.8	1383.8	1406.1	1402.9	1358.4	1263.2
60°	971.2	974.4	983.9	1003.0	1022.0	1044.2	1069.6	1088.7	1098.2	1076.0	1015.7
62.5°	707.8	707.8	720.5	739.5	749.0	780.8	796.6	806.2	815.7	812.5	774.4
65°	495.2	501.5	507.8	517.4	526.9	545.9	555.4	574.5	580.8	584.0	555.4
67.5°	349.2	339.6	346.0	352.3	361.8	374.6	393.6	393.6	403.1	403.1	384.0
70°	222.2	222.2	225.4	234.8	241.2	244.4	250.8	257.1	266.6	263.4	263.4
72.5°	149.2	146.0	149.2	152.4	155.6	165.0	165.0	168.2	174.6	177.8	165.0
75°	76.2	79.4	85.7	82.6	92.0	85.7	88.8	98.4	95.2	88.8	88.8
77.5°	63.5	63.5	63.5	60.3	66.6	66.6	63.5	69.8	66.6	66.6	63.5
80°	44.4	47.6	44.4	41.2	44.4	41.2	41.2	41.2	41.2	41.2	38.1
82.5°	34.9	28.6	31.8	28.6	31.8	31.8	28.6	25.4	25.4	28.6	25.4
85°	25.4	19.0	22.2	22.2	19.0	19.0	19.0	19.0	19.0	15.8	15.8
87.5°	15.8	9.6	9.6	9.6	12.7	12.7	12.7	9.6	12.7	12.7	6.4
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°	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0
2.5°	5922.6	5919.4	5925.8	5922.6	5922.6	5919.4	5922.6	5919.4	5925.8	5913.0	5916.2
5°	5922.6	5916.2	5919.4	5922.6	5925.8	5919.4	5919.4	5919.4	5925.8	5919.4	5922.6
7.5°	5909.9	5906.7	5916.2	5922.6	5919.4	5916.2	5922.6	5919.4	5925.8	5922.6	5928.9
10°	5884.5	5887.6	5894.0	5903.5	5906.7	5909.9	5916.2	5916.2	5925.8	5913.0	5919.4
12.5°	5846.4	5859.1	5875.0	5881.3	5894.0	5894.0	5900.4	5903.5	5909.9	5906.7	5916.2
15°	5798.8	5814.6	5833.7	5849.6	5865.4	5875.0	5884.5	5887.6	5897.2	5887.6	5890.8
17.5°	5741.6	5760.7	5789.2	5808.3	5833.7	5843.2	5855.9	5862.2	5871.8	5865.4	5868.6
20°	5662.3	5684.6	5716.2	5744.8	5760.7	5782.9	5798.8	5808.3	5814.6	5808.3	5811.5
22.5°	5551.2	5583.0	5624.2	5646.4	5678.2	5697.2	5700.4	5722.6	5738.5	5722.6	5729.0
25°	5421.1	5452.8	5484.6	5532.2	5560.8	5583.0	5605.2	5608.4	5624.2	5621.0	5617.8
27.5°	5205.2	5246.5	5300.4	5338.6	5376.6	5411.6	5437.0	5443.3	5459.2	5452.8	5456.0
30°	4910.0	4954.5	5005.3	5065.6	5119.6	5154.4	5186.2	5208.4	5224.3	5214.8	5211.6
32.5°	4491.1	4535.6	4589.5	4649.8	4713.3	4764.0	4802.2	4830.7	4849.8	4843.4	4827.6
35°	4011.9	4024.6	4059.5	4107.1	4161.0	4215.0	4249.9	4281.6	4303.8	4310.2	4310.2
37.5°	3519.9	3478.7	3453.3	3453.3	3485.0	3507.2	3538.9	3558.0	3592.9	3605.6	3615.1
40°	3043.8	2948.6	2859.7	2793.1	2748.7	2745.5	2745.5	2754.9	2786.7	2828.0	2866.1
42.5°	2618.5	2466.1	2329.7	2205.9	2117.0	2066.2	2044.0	2047.2	2072.6	2110.7	2174.1
45°	2278.9	2088.5	1917.1	1767.9	1647.3	1567.9	1529.8	1526.7	1545.7	1590.1	1660.0
47.5°	2015.5	1812.3	1618.7	1447.3	1317.2	1231.5	1187.0	1174.4	1187.0	1228.3	1310.8
50°	1796.5	1587.0	1387.0	1209.3	1069.6	980.8	939.5	923.6	939.5	974.4	1056.9
52.5°	1593.3	1377.5	1190.2	1018.8	869.6	793.5	749.0	739.5	749.0	790.3	857.0
55°	1358.4	1174.4	990.3	818.9	688.8	612.6	577.6	568.2	577.6	615.8	685.6
57.5°	1126.8	968.0	806.2	650.6	539.6	472.9	441.2	428.5	450.7	476.1	558.6
60°	910.9	784.0	647.5	511.0	419.0	358.6	333.2	330.1	336.4	368.2	425.3
62.5°	714.2	609.4	501.5	390.4	314.2	288.8	257.1	253.9	260.2	279.3	323.8
65°	514.2	447.6	365.0	285.6	225.4	190.4	177.8	180.9	187.2	200.0	241.2
67.5°	358.6	311.0	253.9	200.0	155.6	139.6	127.0	123.8	127.0	149.2	171.4
70°	241.2	212.6	171.4	152.4	107.9	85.7	88.8	79.4	92.0	92.0	111.1
72.5°	158.7	139.6	114.2	88.8	76.2	60.3	60.3	57.2	63.5	66.6	82.6
75°	82.6	63.5	63.5	44.4	31.8	15.8	28.6	25.4	22.2	25.4	31.8
77.5°	57.2	47.6	44.4	34.9	31.8	25.4	25.4	25.4	25.4	28.6	31.8
80°	34.9	34.9	25.4	22.2	19.0	15.8	19.0	19.0	19.0	19.0	22.2
82.5°	22.2	19.0	19.0	15.8	15.8	12.7	12.7	12.7	12.7	12.7	19.0
85°	19.0	12.7	12.7	9.6	12.7	22.2	9.6	12.7	12.7	12.7	9.6
87.5°	6.4	9.6	9.6	9.6	6.4	3.2	6.4	9.6	9.6	15.8	12.7
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°	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0	5913.0
2.5°	5922.6	5925.8	5925.8	5922.6	5922.6	5916.2	5928.9	5919.4	5922.6	5935.2	5925.8
5°	5928.9	5932.1	5932.1	5928.9	5928.9	5928.9	5932.1	5932.1	5928.9	5925.8	5932.1
7.5°	5941.6	5938.4	5938.4	5932.1	5932.1	5925.8	5932.1	5922.6	5928.9	5922.6	5932.1
10°	5925.8	5928.9	5925.8	5922.6	5922.6	5919.4	5919.4	5909.9	5913.0	5903.5	5909.9
12.5°	5916.2	5913.0	5913.0	5906.7	5900.4	5894.0	5890.8	5881.3	5881.3	5859.1	5868.6
15°	5890.8	5894.0	5884.5	5871.8	5865.4	5849.6	5843.2	5830.5	5817.8	5802.0	5805.2
17.5°	5868.6	5859.1	5846.4	5833.7	5808.3	5795.6	5782.9	5763.8	5757.5	5738.5	5732.2
20°	5802.0	5795.6	5779.8	5757.5	5741.6	5713.1	5700.4	5681.4	5665.5	5646.4	5636.9
22.5°	5716.2	5709.9	5690.8	5668.6	5643.2	5630.6	5617.8	5583.0	5567.1	5548.0	5544.8
25°	5608.4	5598.8	5579.8	5554.4	5541.7	5506.8	5494.1	5468.7	5462.4	5443.3	5440.2
27.5°	5443.3	5430.6	5408.4	5376.6	5354.4	5332.2	5319.5	5300.4	5294.2	5275.0	5271.9
30°	5195.8	5179.8	5135.4	5122.8	5084.6	5062.4	5062.4	5037.0	5040.2	5027.5	5027.5
32.5°	4805.4	4780.0	4745.0	4719.6	4694.2	4681.6	4681.6	4672.0	4678.4	4678.4	4684.7
35°	4288.0	4253.1	4234.0	4218.2	4218.2	4230.8	4268.9	4278.5	4297.5	4313.4	4326.1
37.5°	3624.6	3621.5	3643.7	3662.7	3710.3	3764.3	3830.9	3888.1	3942.0	3980.1	4018.2
40°	2907.3	2986.7	3050.1	3139.1	3212.0	3316.7	3437.4	3535.8	3627.8	3694.5	3764.3
42.5°	2269.3	2370.9	2504.3	2634.3	2764.5	2907.3	3066.1	3202.5	3323.1	3415.1	3488.1
45°	1767.9	1907.5	2069.4	2234.5	2402.7	2580.4	2745.5	2885.1	3012.1	3107.3	3180.3
47.5°	1425.1	1577.5	1761.5	1942.5	2132.9	2320.1	2504.3	2624.9	2729.6	2805.7	2872.4
50°	1177.5	1339.4	1533.0	1739.3	1929.7	2117.0	2275.7	2393.1	2478.9	2545.5	2586.7
52.5°	983.9	1155.3	1361.6	1567.9	1758.3	1929.7	2072.6	2161.5	2231.3	2278.9	2316.9
55°	812.5	977.6	1171.2	1364.8	1552.1	1713.9	1831.3	1898.0	1951.9	1980.5	2002.7
57.5°	663.4	815.7	993.4	1171.2	1333.1	1466.4	1558.4	1625.1	1650.5	1672.7	1669.5
60°	520.6	663.4	825.2	977.6	1117.2	1225.1	1291.8	1329.9	1348.9	1358.4	1352.1
62.5°	409.4	539.6	663.4	796.6	898.2	990.3	1053.8	1053.8	1063.3	1066.4	1076.0
65°	304.7	403.1	511.0	609.4	691.9	752.2	787.2	796.6	809.4	806.2	799.8
67.5°	225.4	298.4	377.7	450.7	507.8	545.9	571.3	593.6	590.4	584.0	580.8
70°	155.6	203.2	273.0	317.4	358.6	396.8	403.1	406.2	409.4	412.6	406.2
72.5°	107.9	142.8	180.9	219.0	244.4	260.2	276.2	279.3	279.3	279.3	276.2
75°	54.0	73.0	107.9	123.8	146.0	152.4	165.0	165.0	174.6	161.8	158.7
77.5°	47.6	57.2	76.2	88.8	98.4	107.9	111.1	120.6	117.4	111.1	114.2
80°	28.6	34.9	47.6	54.0	66.6	69.8	73.0	76.2	73.0	76.2	76.2
82.5°	22.2	25.4	31.8	31.8	41.2	41.2	44.4	44.4	47.6	47.6	47.6
85°	12.7	22.2	19.0	38.1	25.4	25.4	31.8	38.1	31.8	31.8	38.1
87.5°	12.7	12.7	9.6	12.7	12.7	12.7	15.8	19.0	19.0	22.2	19.0
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: P249394

CATALOG NUMBER: LSR8B150D010 EC8B1509727 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5913.0	5913.0	5913.0	5913.0
2.5°	5922.6	5928.9	5919.4	5916.2
5°	5932.1	5932.1	5925.8	5925.8
7.5°	5932.1	5932.1	5922.6	5916.2
10°	5906.7	5906.7	5897.2	5890.8
12.5°	5859.1	5859.1	5855.9	5846.4
15°	5798.8	5798.8	5786.1	5776.6
17.5°	5716.2	5722.6	5706.8	5706.8
20°	5627.4	5624.2	5611.6	5605.2
22.5°	5535.4	5529.0	5525.8	5506.8
25°	5437.0	5430.6	5421.1	5411.6
27.5°	5268.8	5265.6	5256.0	5243.4
30°	5011.6	5008.4	4995.8	4995.8
32.5°	4678.4	4675.2	4662.5	4665.7
35°	4332.4	4345.1	4338.8	4326.1
37.5°	4043.6	4053.1	4059.5	4053.1
40°	3802.4	3830.9	3834.1	3840.5
42.5°	3545.3	3583.4	3596.1	3602.4
45°	3237.4	3272.3	3300.9	3294.5
47.5°	2923.2	2948.6	2974.0	2954.9
50°	2621.7	2637.5	2647.1	2647.1
52.5°	2336.0	2336.0	2332.9	2336.0
55°	2009.1	2009.1	1996.4	2002.7
57.5°	1666.3	1672.7	1663.1	1647.3
60°	1348.9	1333.1	1326.7	1317.2
62.5°	1050.6	1050.6	1028.4	1056.9
65°	787.2	777.6	768.1	764.9
67.5°	571.3	568.2	558.6	555.4
70°	403.1	390.4	387.2	380.9
72.5°	269.8	269.8	263.4	263.4
75°	165.0	149.2	146.0	149.2
77.5°	114.2	111.1	111.1	107.9
80°	76.2	73.0	79.4	69.8
82.5°	47.6	50.8	47.6	50.8
85°	31.8	38.1	34.9	34.9
87.5°	19.0	19.0	19.0	19.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)