

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: P249123

Luminaire Tested: **LSR8B120D010 EC8B120850 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249123
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: LSR8B120D010 EC8B120850 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12665.0 lumens
Efficiency: N/A
Efficacy: 107.1 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

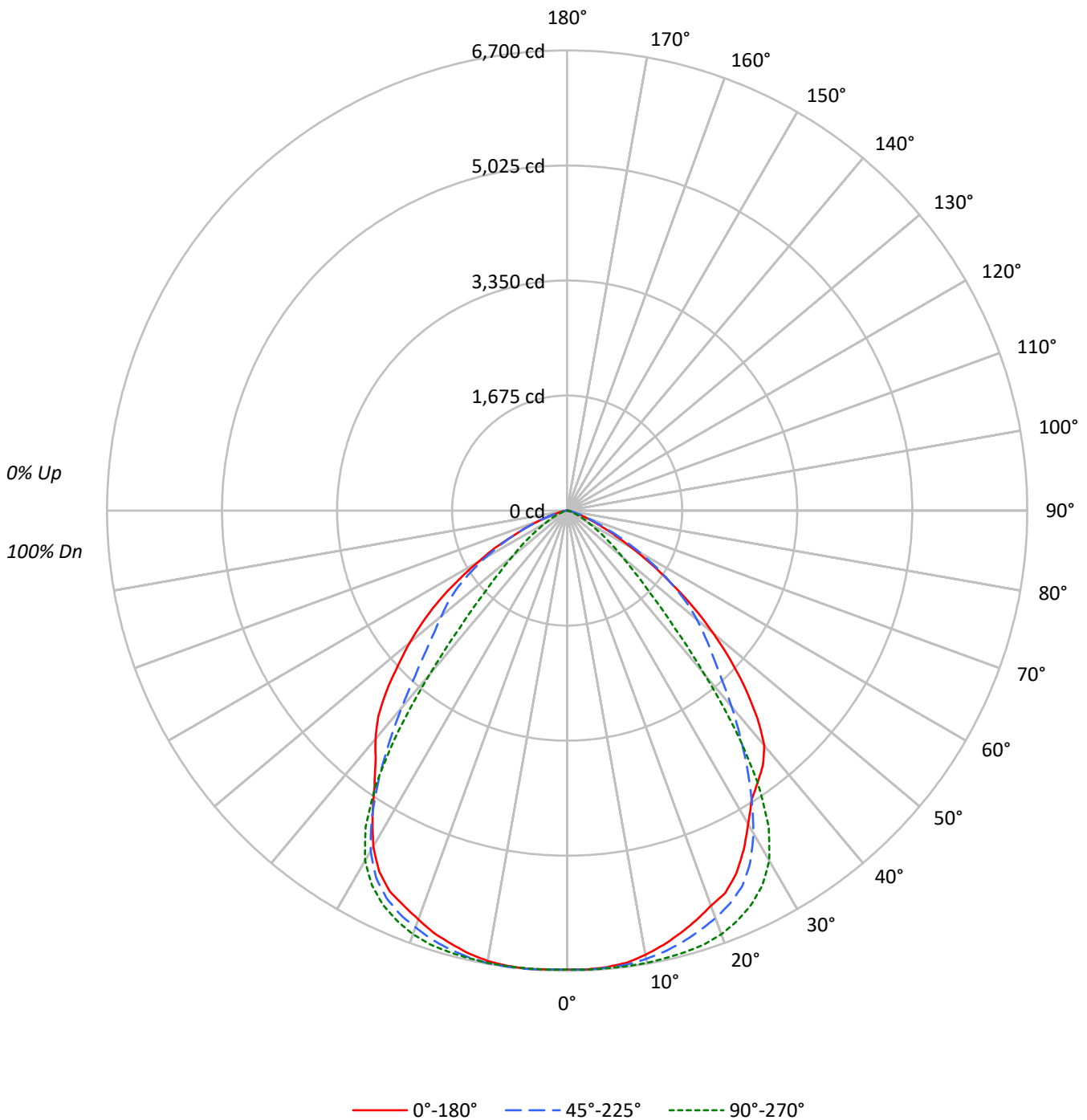
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	206058	206058	206058
5°	206510	207067	207290
10°	205642	209349	208450
15°	203363	212410	208404
20°	200922	215396	207865
25°	198313	215645	208078
30°	187615	209581	201025
35°	182013	182145	184039
40°	179758	125327	174706
45°	160172	75239	162361
50°	133187	50074	143511
55°	99889	34520	121678
60°	67692	23004	91806
65°	40831	14921	63071
70°	22639	8087	38805
75°	10258	3419	20087
80°	8914	3818	14011
85°	10154	5059	13975



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	637.7	5.0
10°-20°	1852.1	14.6
20°-30°	2811.1	22.2
30°-40°	2952.5	23.3
40°-50°	2213.6	17.5
50°-60°	1420.3	11.2
60°-70°	607.6	4.8
70°-80°	143.5	1.1
80°-90°	26.7	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°	5300.9	41.9
0°-40°	8253.3	65.2
0°-60°	11887.2	93.9
0°-90°	12665.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12665.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6682	6682	6682	6682	6682	
5°	6672	6682	6690	6700	6697	634
15°	6370	6503	6654	6611	6528	1797
25°	5829	6033	6338	6223	6116	2663
35°	4835	4566	4839	4781	4889	3035
45°	3673	3002	1725	2916	3723	2813
55°	1858	1858	642	1937	2263	1685
65°	560	660	204	850	864	597
75°	86	100	29	172	169	125
85°	29	18	14	29	40	30
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°	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3
2.5°	6685.9	6693.1	6689.5	6689.5	6685.9	6689.5	6689.5	6696.7	6696.7	6689.5	6685.9
5°	6671.5	6678.7	6678.7	6671.5	6671.5	6689.5	6678.7	6685.9	6685.9	6682.3	6682.3
7.5°	6639.3	6639.3	6653.6	6642.9	6642.9	6653.6	6650.0	6657.2	6664.4	6668.0	6668.0
10°	6567.5	6574.7	6578.3	6578.3	6581.9	6592.6	6599.8	6614.2	6621.3	6628.5	6632.1
12.5°	6477.9	6488.6	6492.2	6488.6	6499.4	6513.7	6531.7	6549.6	6560.4	6574.7	6585.5
15°	6370.2	6370.2	6377.4	6388.2	6395.4	6416.9	6434.8	6456.3	6485.0	6503.0	6520.9
17.5°	6251.9	6259.1	6269.8	6269.8	6284.2	6320.0	6330.8	6363.1	6395.4	6413.3	6449.2
20°	6122.8	6129.9	6140.7	6147.9	6165.8	6194.5	6216.0	6244.7	6280.6	6312.9	6348.7
22.5°	6022.3	6008.0	6015.1	6022.3	6040.3	6065.4	6090.5	6126.3	6162.2	6194.5	6230.4
25°	5828.6	5832.2	5843.0	5850.1	5871.7	5893.2	5921.9	5964.9	5997.2	6033.1	6072.5
27.5°	5566.8	5570.4	5588.3	5588.3	5606.2	5642.1	5660.0	5695.9	5739.0	5774.8	5821.5
30°	5269.1	5276.2	5276.2	5290.6	5301.3	5319.3	5337.2	5373.1	5394.6	5426.9	5491.5
32.5°	4996.5	5003.6	5000.0	4996.5	4985.7	4982.1	4978.5	4985.7	4992.9	5003.6	5028.7
35°	4835.1	4817.1	4802.8	4777.7	4749.0	4713.1	4680.8	4637.8	4598.3	4566.0	4530.2
37.5°	4680.8	4677.2	4655.7	4619.8	4562.4	4497.9	4422.6	4329.3	4236.0	4135.6	4038.8
40°	4465.6	4454.8	4436.9	4386.7	4322.1	4243.2	4142.8	4028.0	3877.4	3723.1	3565.3
42.5°	4099.7	4103.3	4081.8	4042.3	3981.4	3906.0	3802.0	3676.5	3515.1	3332.2	3127.8
45°	3672.9	3672.9	3665.7	3633.5	3590.4	3529.5	3450.6	3346.5	3188.7	3002.2	2783.4
47.5°	3228.2	3231.8	3221.0	3213.8	3195.9	3156.5	3099.1	3020.2	2909.0	2729.6	2510.8
50°	2776.3	2776.3	2794.2	2790.6	2790.6	2776.3	2751.2	2704.5	2607.7	2464.2	2259.8
52.5°	2324.3	2331.5	2342.3	2356.6	2374.5	2403.2	2374.5	2353.0	2292.0	2180.8	2005.1
55°	1858.0	1865.2	1883.1	1908.2	1929.8	1958.5	1965.6	1965.6	1933.3	1858.0	1725.3
57.5°	1459.9	1449.1	1463.5	1485.0	1513.7	1542.4	1563.9	1589.0	1585.4	1535.2	1427.6
60°	1097.6	1101.2	1111.9	1133.5	1155.0	1180.1	1208.8	1230.3	1241.1	1216.0	1147.8
62.5°	799.9	799.9	814.2	835.7	846.5	882.4	900.3	911.1	921.8	918.2	875.2
65°	559.6	566.7	573.9	584.7	595.4	616.9	627.7	649.2	656.4	660.0	627.7
67.5°	394.6	383.8	391.0	398.1	408.9	423.3	444.8	444.8	455.5	455.5	434.0
70°	251.1	251.1	254.7	265.4	272.6	276.2	283.4	290.5	301.3	297.7	297.7
72.5°	168.6	165.0	168.6	172.2	175.8	186.5	186.5	190.1	197.3	200.9	186.5
75°	86.1	89.7	96.8	93.3	104.0	96.8	100.4	111.2	107.6	100.4	100.4
77.5°	71.7	71.7	71.7	68.2	75.3	75.3	71.7	78.9	75.3	75.3	71.7
80°	50.2	53.8	50.2	46.6	50.2	46.6	46.6	46.6	46.6	46.6	43.0
82.5°	39.5	32.3	35.9	32.3	35.9	35.9	32.3	28.7	28.7	32.3	28.7
85°	28.7	21.5	25.1	25.1	21.5	21.5	21.5	21.5	21.5	17.9	17.9
87.5°	17.9	10.8	10.8	10.8	14.3	14.3	14.3	10.8	14.3	14.3	7.2
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3
2.5°	6693.1	6689.5	6696.7	6693.1	6693.1	6689.5	6693.1	6689.5	6696.7	6682.3	6685.9
5°	6693.1	6685.9	6689.5	6693.1	6696.7	6689.5	6689.5	6689.5	6696.7	6689.5	6693.1
7.5°	6678.7	6675.1	6685.9	6693.1	6689.5	6685.9	6693.1	6689.5	6696.7	6693.1	6700.2
10°	6650.0	6653.6	6660.8	6671.5	6675.1	6678.7	6685.9	6685.9	6696.7	6682.3	6689.5
12.5°	6607.0	6621.3	6639.3	6646.4	6660.8	6660.8	6668.0	6671.5	6678.7	6675.1	6685.9
15°	6553.2	6571.1	6592.6	6610.6	6628.5	6639.3	6650.0	6653.6	6664.4	6653.6	6657.2
17.5°	6488.6	6510.1	6542.4	6563.9	6592.6	6603.4	6617.7	6624.9	6635.7	6628.5	6632.1
20°	6398.9	6424.1	6459.9	6492.2	6510.1	6535.2	6553.2	6563.9	6571.1	6563.9	6567.5
22.5°	6273.4	6309.3	6355.9	6381.0	6416.9	6438.4	6442.0	6467.1	6485.0	6467.1	6474.3
25°	6126.3	6162.2	6198.1	6251.9	6284.2	6309.3	6334.4	6338.0	6355.9	6352.3	6348.7
27.5°	5882.4	5929.1	5990.0	6033.1	6076.1	6115.6	6144.3	6151.4	6169.4	6162.2	6165.8
30°	5548.8	5599.1	5656.5	5724.6	5785.6	5825.0	5860.9	5886.0	5903.9	5893.2	5889.6
32.5°	5075.4	5125.6	5186.6	5254.7	5326.5	5383.8	5426.9	5459.2	5480.7	5473.5	5455.6
35°	4533.8	4548.1	4587.6	4641.4	4702.3	4763.3	4802.8	4838.6	4863.7	4870.9	4870.9
37.5°	3977.8	3931.2	3902.5	3902.5	3938.3	3963.4	3999.3	4020.8	4060.3	4074.6	4085.4
40°	3439.8	3332.2	3231.8	3156.5	3106.2	3102.7	3102.7	3113.4	3149.3	3195.9	3238.9
42.5°	2959.2	2787.0	2632.8	2492.9	2392.5	2335.1	2310.0	2313.6	2342.3	2385.3	2457.0
45°	2575.4	2360.2	2166.5	1997.9	1861.6	1771.9	1728.9	1725.3	1746.8	1797.0	1876.0
47.5°	2277.7	2048.1	1829.3	1635.6	1488.6	1391.7	1341.5	1327.2	1341.5	1388.1	1481.4
50°	2030.2	1793.5	1567.5	1366.6	1208.8	1108.4	1061.7	1043.8	1061.7	1101.2	1194.4
52.5°	1800.6	1556.7	1345.1	1151.4	982.8	896.7	846.5	835.7	846.5	893.1	968.5
55°	1535.2	1327.2	1119.1	925.4	778.4	692.3	652.8	642.1	652.8	695.9	774.8
57.5°	1273.4	1094.0	911.1	735.3	609.8	534.4	498.6	484.2	509.3	538.0	631.3
60°	1029.4	886.0	731.7	577.5	473.5	405.3	376.6	373.0	380.2	416.1	480.6
62.5°	807.1	688.7	566.7	441.2	355.1	326.4	290.5	287.0	294.1	315.6	365.9
65°	581.1	505.8	412.5	322.8	254.7	215.2	200.9	204.5	211.6	226.0	272.6
67.5°	405.3	351.5	287.0	226.0	175.8	157.8	143.5	139.9	143.5	168.6	193.7
70°	272.6	240.3	193.7	172.2	122.0	96.8	100.4	89.7	104.0	104.0	125.5
72.5°	179.3	157.8	129.1	100.4	86.1	68.2	68.2	64.6	71.7	75.3	93.3
75°	93.3	71.7	71.7	50.2	35.9	17.9	32.3	28.7	25.1	28.7	35.9
77.5°	64.6	53.8	50.2	39.5	35.9	28.7	28.7	28.7	28.7	32.3	35.9
80°	39.5	39.5	28.7	25.1	21.5	17.9	21.5	21.5	21.5	21.5	25.1
82.5°	25.1	21.5	21.5	17.9	17.9	14.3	14.3	14.3	14.3	14.3	21.5
85°	21.5	14.3	14.3	10.8	14.3	25.1	10.8	14.3	14.3	14.3	10.8
87.5°	7.2	10.8	10.8	10.8	7.2	3.6	7.2	10.8	10.8	17.9	14.3
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°	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3	6682.3
2.5°	6693.1	6696.7	6696.7	6693.1	6693.1	6685.9	6700.2	6689.5	6693.1	6707.4	6696.7
5°	6700.2	6703.8	6703.8	6700.2	6700.2	6700.2	6703.8	6703.8	6700.2	6696.7	6703.8
7.5°	6714.6	6711.0	6711.0	6703.8	6703.8	6696.7	6703.8	6693.1	6700.2	6693.1	6703.8
10°	6696.7	6700.2	6696.7	6693.1	6693.1	6689.5	6689.5	6678.7	6682.3	6671.5	6678.7
12.5°	6685.9	6682.3	6682.3	6675.1	6668.0	6660.8	6657.2	6646.4	6646.4	6621.3	6632.1
15°	6657.2	6660.8	6650.0	6635.7	6628.5	6610.6	6603.4	6589.0	6574.7	6556.8	6560.4
17.5°	6632.1	6621.3	6607.0	6592.6	6563.9	6549.6	6535.2	6513.7	6506.5	6485.0	6477.9
20°	6556.8	6549.6	6531.7	6506.5	6488.6	6456.3	6442.0	6420.5	6402.5	6381.0	6370.2
22.5°	6459.9	6452.7	6431.2	6406.1	6377.4	6363.1	6348.7	6309.3	6291.3	6269.8	6266.2
25°	6338.0	6327.2	6305.7	6277.0	6262.6	6223.2	6208.8	6180.1	6173.0	6151.4	6147.9
27.5°	6151.4	6137.1	6112.0	6076.1	6051.0	6025.9	6011.6	5990.0	5982.9	5961.3	5957.8
30°	5871.7	5853.7	5803.5	5789.2	5746.1	5721.0	5721.0	5692.3	5695.9	5681.6	5681.6
32.5°	5430.5	5401.8	5362.3	5333.6	5304.9	5290.6	5290.6	5279.8	5287.0	5287.0	5294.2
35°	4845.8	4806.4	4784.8	4766.9	4766.9	4781.2	4824.3	4835.1	4856.6	4874.5	4888.9
37.5°	4096.1	4092.6	4117.7	4139.2	4193.0	4254.0	4329.3	4393.9	4454.8	4497.9	4540.9
40°	3285.6	3375.2	3447.0	3547.4	3629.9	3748.2	3884.5	3995.7	4099.7	4175.1	4254.0
42.5°	2564.6	2679.4	2830.1	2977.1	3124.2	3285.6	3464.9	3619.1	3755.4	3859.4	3941.9
45°	1997.9	2155.7	2338.7	2525.2	2715.3	2916.1	3102.7	3260.5	3403.9	3511.5	3594.0
47.5°	1610.5	1782.7	1990.7	2195.2	2410.4	2622.0	2830.1	2966.4	3084.7	3170.8	3246.1
50°	1330.7	1513.7	1732.5	1965.6	2180.8	2392.5	2571.8	2704.5	2801.4	2876.7	2923.3
52.5°	1111.9	1305.6	1538.8	1771.9	1987.1	2180.8	2342.3	2442.7	2521.6	2575.4	2618.4
55°	918.2	1104.8	1323.6	1542.4	1754.0	1936.9	2069.6	2145.0	2205.9	2238.2	2263.3
57.5°	749.7	921.8	1122.7	1323.6	1506.5	1657.2	1761.2	1836.5	1865.2	1890.3	1886.7
60°	588.3	749.7	932.6	1104.8	1262.6	1384.5	1459.9	1502.9	1524.4	1535.2	1528.0
62.5°	462.7	609.8	749.7	900.3	1015.1	1119.1	1190.9	1190.9	1201.6	1205.2	1216.0
65°	344.3	455.5	577.5	688.7	781.9	850.1	889.6	900.3	914.7	911.1	903.9
67.5°	254.7	337.2	426.8	509.3	573.9	616.9	645.6	670.8	667.2	660.0	656.4
70°	175.8	229.6	308.5	358.7	405.3	448.4	455.5	459.1	462.7	466.3	459.1
72.5°	122.0	161.4	204.5	247.5	276.2	294.1	312.1	315.6	315.6	315.6	312.1
75°	61.0	82.5	122.0	139.9	165.0	172.2	186.5	186.5	197.3	182.9	179.3
77.5°	53.8	64.6	86.1	100.4	111.2	122.0	125.5	136.3	132.7	125.5	129.1
80°	32.3	39.5	53.8	61.0	75.3	78.9	82.5	86.1	82.5	86.1	86.1
82.5°	25.1	28.7	35.9	35.9	46.6	46.6	50.2	50.2	53.8	53.8	53.8
85°	14.3	25.1	21.5	43.0	28.7	28.7	35.9	43.0	35.9	35.9	43.0
87.5°	14.3	14.3	10.8	14.3	14.3	14.3	17.9	21.5	21.5	25.1	21.5
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: P249123

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6682.3	6682.3	6682.3	6682.3
2.5°	6693.1	6700.2	6689.5	6685.9
5°	6703.8	6703.8	6696.7	6696.7
7.5°	6703.8	6703.8	6693.1	6685.9
10°	6675.1	6675.1	6664.4	6657.2
12.5°	6621.3	6621.3	6617.7	6607.0
15°	6553.2	6553.2	6538.8	6528.1
17.5°	6459.9	6467.1	6449.2	6449.2
20°	6359.5	6355.9	6341.6	6334.4
22.5°	6255.5	6248.3	6244.7	6223.2
25°	6144.3	6137.1	6126.3	6115.6
27.5°	5954.2	5950.6	5939.8	5925.5
30°	5663.6	5660.0	5645.7	5645.7
32.5°	5287.0	5283.4	5269.1	5272.7
35°	4896.0	4910.4	4903.2	4888.9
37.5°	4569.6	4580.4	4587.6	4580.4
40°	4297.0	4329.3	4332.9	4340.1
42.5°	4006.5	4049.5	4063.9	4071.0
45°	3658.6	3698.0	3730.3	3723.1
47.5°	3303.5	3332.2	3360.9	3339.4
50°	2962.8	2980.7	2991.5	2991.5
52.5°	2640.0	2640.0	2636.4	2640.0
55°	2270.5	2270.5	2256.2	2263.3
57.5°	1883.1	1890.3	1879.5	1861.6
60°	1524.4	1506.5	1499.3	1488.6
62.5°	1187.3	1187.3	1162.2	1194.4
65°	889.6	878.8	868.0	864.4
67.5°	645.6	642.1	631.3	627.7
70°	455.5	441.2	437.6	430.4
72.5°	304.9	304.9	297.7	297.7
75°	186.5	168.6	165.0	168.6
77.5°	129.1	125.5	125.5	122.0
80°	86.1	82.5	89.7	78.9
82.5°	53.8	57.4	53.8	57.4
85°	35.9	43.0	39.5	39.5
87.5°	21.5	21.5	21.5	21.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)