

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: P249555

Luminaire Tested: **LSR8B120D010 EC8B120850 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249555  
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 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12522.0 lumens  
Efficiency: N/A  
Efficacy: 105.8 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

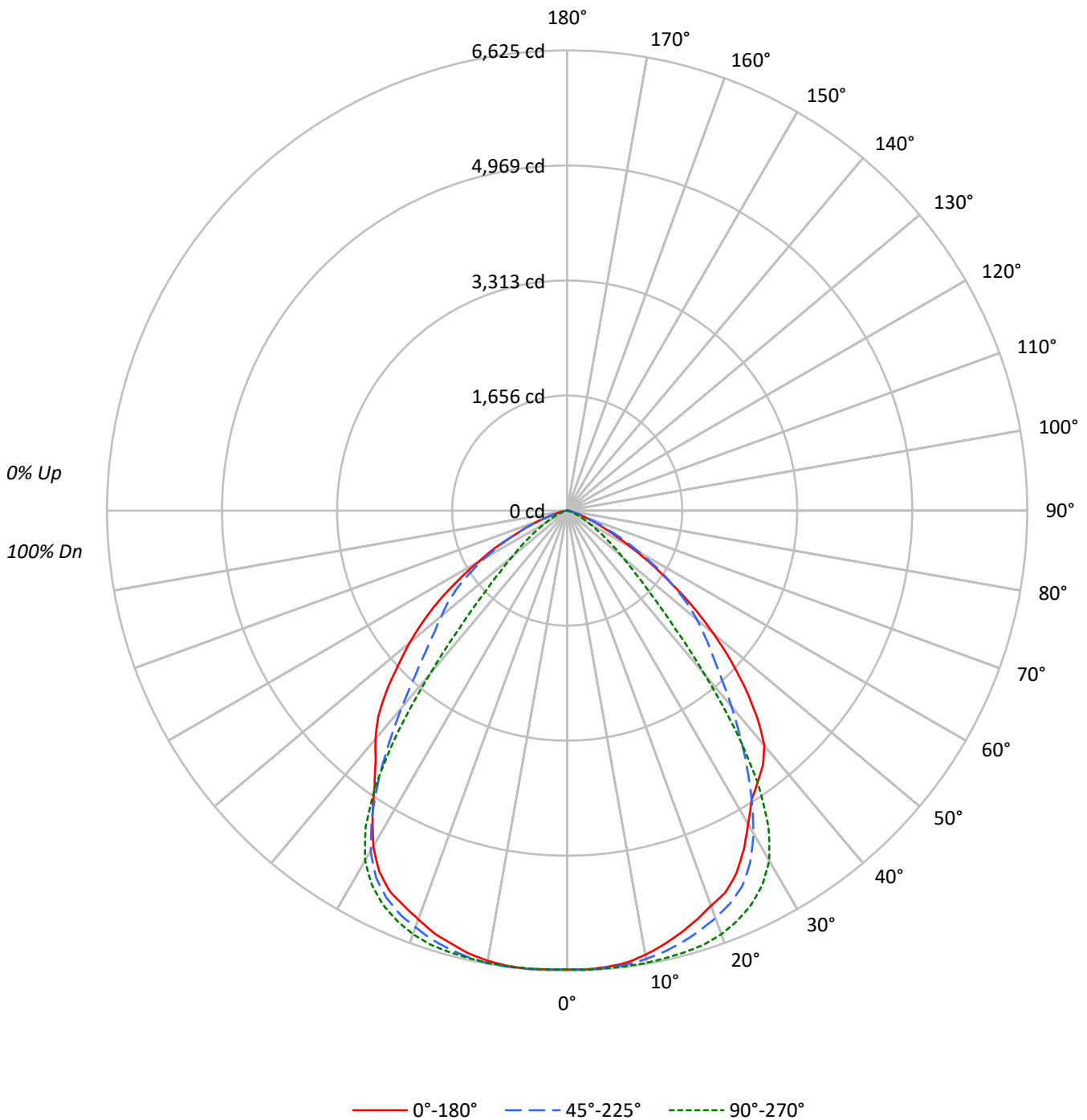
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	203732	203732	203732
5°	204179	204730	204950
10°	203321	206985	206096
15°	201068	210013	206051
20°	198654	212965	205519
25°	196074	213209	205730
30°	185497	207217	198757
35°	179958	180090	181961
40°	177729	123910	172734
45°	158367	74388	160530
50°	131681	49508	141889
55°	98760	34128	120302
60°	66927	22745	90770
65°	40371	14754	62356
70°	22387	7997	38363
75°	10139	3384	19861
80°	8808	3782	13851
85°	10048	4989	13798



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	630.5	5.0
10°-20°	1831.1	14.6
20°-30°	2779.3	22.2
30°-40°	2919.1	23.3
40°-50°	2188.6	17.5
50°-60°	1404.2	11.2
60°-70°	600.7	4.8
70°-80°	141.9	1.1
80°-90°	26.4	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°	5241.0	41.9
0°-40°	8160.2	65.2
0°-60°	11753.0	93.9
0°-90°	12522.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12522.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6607	6607	6607	6607	6607	
5°	6596	6607	6614	6625	6621	627
15°	6298	6430	6578	6536	6454	1776
25°	5763	5965	6266	6153	6047	2633
35°	4780	4514	4784	4727	4834	3000
45°	3632	2968	1706	2883	3681	2781
55°	1837	1837	635	1915	2238	1666
65°	553	652	202	840	855	591
75°	85	99	28	170	167	124
85°	28	18	14	28	39	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°	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9
2.5°	6610.4	6617.5	6614.0	6614.0	6610.4	6614.0	6614.0	6621.1	6621.1	6614.0	6610.4
5°	6596.2	6603.3	6603.3	6596.2	6596.2	6614.0	6603.3	6610.4	6610.4	6606.9	6606.9
7.5°	6564.3	6564.3	6578.5	6567.9	6567.9	6578.5	6574.9	6582.0	6589.2	6592.7	6592.7
10°	6493.4	6500.5	6504.0	6504.0	6507.6	6518.2	6525.3	6539.5	6546.5	6553.7	6557.2
12.5°	6404.8	6415.3	6418.9	6415.3	6426.0	6440.2	6457.9	6475.7	6486.3	6500.5	6511.1
15°	6298.3	6298.3	6305.4	6316.1	6323.2	6344.4	6362.2	6383.4	6411.8	6429.6	6447.3
17.5°	6181.3	6188.4	6199.0	6199.0	6213.2	6248.7	6259.3	6291.3	6323.2	6340.9	6376.4
20°	6053.7	6060.7	6071.4	6078.5	6096.2	6124.6	6145.8	6174.2	6209.7	6241.6	6277.0
22.5°	5954.3	5940.2	5947.2	5954.3	5972.1	5996.9	6021.7	6057.1	6092.6	6124.6	6160.1
25°	5762.8	5766.4	5777.0	5784.1	5805.4	5826.7	5855.0	5897.6	5929.5	5965.0	6004.0
27.5°	5504.0	5507.5	5525.2	5525.2	5542.9	5578.4	5596.1	5631.6	5674.2	5709.6	5755.8
30°	5209.6	5216.7	5216.7	5230.9	5241.5	5259.3	5277.0	5312.5	5333.7	5365.6	5429.5
32.5°	4940.1	4947.1	4943.6	4940.1	4929.4	4925.9	4922.3	4929.4	4936.5	4947.1	4972.0
35°	4780.5	4762.7	4748.6	4723.8	4695.4	4659.9	4628.0	4585.5	4546.4	4514.5	4479.1
37.5°	4628.0	4624.4	4603.2	4567.7	4510.9	4447.1	4372.7	4280.5	4188.2	4088.9	3993.2
40°	4415.2	4404.5	4386.8	4337.2	4273.3	4195.3	4096.1	3982.6	3833.6	3681.1	3525.1
42.5°	4053.5	4057.0	4035.8	3996.7	3936.5	3861.9	3759.1	3635.0	3475.5	3294.5	3092.4
45°	3631.5	3631.5	3624.4	3592.4	3549.9	3489.6	3411.6	3308.8	3152.7	2968.3	2751.9
47.5°	3191.7	3195.3	3184.6	3177.6	3159.8	3120.8	3064.1	2986.1	2876.1	2698.7	2482.4
50°	2744.9	2744.9	2762.6	2759.1	2759.1	2744.9	2720.1	2673.9	2578.2	2436.3	2234.2
52.5°	2298.0	2305.1	2315.8	2330.0	2347.7	2376.0	2347.7	2326.4	2266.1	2156.2	1982.4
55°	1837.0	1844.1	1861.8	1886.6	1908.0	1936.4	1943.4	1943.4	1911.5	1837.0	1705.8
57.5°	1443.4	1432.7	1446.9	1468.2	1496.6	1525.0	1546.2	1571.0	1567.5	1517.8	1411.5
60°	1085.2	1088.7	1099.3	1120.7	1141.9	1166.8	1195.1	1216.4	1227.1	1202.2	1134.8
62.5°	790.9	790.9	805.0	826.3	836.9	872.4	890.1	900.8	911.4	907.8	865.3
65°	553.3	560.3	567.4	578.1	588.7	609.9	620.6	641.9	649.0	652.5	620.6
67.5°	390.1	379.5	386.6	393.6	404.3	418.5	439.8	439.8	450.4	450.4	429.1
70°	248.3	248.3	251.8	262.4	269.5	273.1	280.2	287.2	297.9	294.3	294.3
72.5°	166.7	163.1	166.7	170.2	173.8	184.4	184.4	188.0	195.1	198.6	184.4
75°	85.1	88.7	95.7	92.2	102.8	95.7	99.3	109.9	106.4	99.3	99.3
77.5°	70.9	70.9	70.9	67.4	74.5	74.5	70.9	78.0	74.5	74.5	70.9
80°	49.6	53.2	49.6	46.1	49.6	46.1	46.1	46.1	46.1	46.1	42.5
82.5°	39.0	31.9	35.5	31.9	35.5	35.5	31.9	28.4	28.4	31.9	28.4
85°	28.4	21.3	24.8	24.8	21.3	21.3	21.3	21.3	21.3	17.7	17.7
87.5°	17.7	10.7	10.7	10.7	14.1	14.1	14.1	10.7	14.1	14.1	7.1
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°	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9
2.5°	6617.5	6614.0	6621.1	6617.5	6617.5	6614.0	6617.5	6614.0	6621.1	6606.9	6610.4
5°	6617.5	6610.4	6614.0	6617.5	6621.1	6614.0	6614.0	6614.0	6621.1	6614.0	6617.5
7.5°	6603.3	6599.7	6610.4	6617.5	6614.0	6610.4	6617.5	6614.0	6621.1	6617.5	6624.6
10°	6574.9	6578.5	6585.6	6596.2	6599.7	6603.3	6610.4	6610.4	6621.1	6606.9	6614.0
12.5°	6532.4	6546.5	6564.3	6571.4	6585.6	6585.6	6592.7	6596.2	6603.3	6599.7	6610.4
15°	6479.2	6496.9	6518.2	6536.0	6553.7	6564.3	6574.9	6578.5	6589.2	6578.5	6582.0
17.5°	6415.3	6436.6	6468.5	6489.8	6518.2	6528.8	6543.0	6550.1	6560.8	6553.7	6557.2
20°	6326.7	6351.6	6387.0	6418.9	6436.6	6461.4	6479.2	6489.8	6496.9	6489.8	6493.4
22.5°	6202.6	6238.1	6284.1	6309.0	6344.4	6365.7	6369.3	6394.1	6411.8	6394.1	6401.2
25°	6057.1	6092.6	6128.1	6181.3	6213.2	6238.1	6262.9	6266.4	6284.1	6280.6	6277.0
27.5°	5816.0	5862.2	5922.4	5965.0	6007.5	6046.6	6074.9	6082.0	6099.7	6092.6	6096.2
30°	5486.2	5535.9	5592.6	5660.0	5720.3	5759.3	5794.7	5819.6	5837.3	5826.7	5823.1
32.5°	5018.1	5067.8	5128.1	5195.4	5266.4	5323.0	5365.6	5397.6	5418.8	5411.7	5394.0
35°	4482.6	4496.8	4535.8	4589.0	4649.2	4709.5	4748.6	4784.0	4808.8	4815.9	4815.9
37.5°	3932.9	3886.8	3858.5	3858.5	3893.9	3918.7	3954.2	3975.4	4014.5	4028.6	4039.3
40°	3400.9	3294.5	3195.3	3120.8	3071.2	3067.6	3067.6	3078.2	3113.7	3159.8	3202.4
42.5°	2925.7	2755.5	2603.0	2464.7	2365.4	2308.7	2283.9	2287.4	2315.8	2358.3	2429.2
45°	2546.3	2333.5	2142.0	1975.3	1840.6	1751.9	1709.4	1705.8	1727.1	1776.7	1854.8
47.5°	2251.9	2024.9	1808.6	1617.1	1471.8	1376.0	1326.3	1312.2	1326.3	1372.4	1464.7
50°	2007.2	1773.2	1549.8	1351.2	1195.1	1095.9	1049.7	1032.0	1049.7	1088.7	1180.9
52.5°	1780.2	1539.1	1329.9	1138.4	971.7	886.6	836.9	826.3	836.9	883.0	957.5
55°	1517.8	1312.2	1106.5	914.9	769.6	684.5	645.4	634.8	645.4	688.0	766.0
57.5°	1259.0	1081.6	900.8	727.0	602.9	528.4	493.0	478.7	503.5	531.9	624.2
60°	1017.8	876.0	723.4	571.0	468.1	400.7	372.3	368.8	375.9	411.4	475.2
62.5°	798.0	680.9	560.3	436.2	351.1	322.7	287.2	283.7	290.8	312.0	361.8
65°	574.5	500.1	407.8	319.2	251.8	212.8	198.6	202.2	209.2	223.4	269.5
67.5°	400.7	347.5	283.7	223.4	173.8	156.0	141.9	138.3	141.9	166.7	191.5
70°	269.5	237.6	191.5	170.2	120.6	95.7	99.3	88.7	102.8	102.8	124.1
72.5°	177.3	156.0	127.6	99.3	85.1	67.4	67.4	63.9	70.9	74.5	92.2
75°	92.2	70.9	70.9	49.6	35.5	17.7	31.9	28.4	24.8	28.4	35.5
77.5°	63.9	53.2	49.6	39.0	35.5	28.4	28.4	28.4	28.4	31.9	35.5
80°	39.0	39.0	28.4	24.8	21.3	17.7	21.3	21.3	21.3	21.3	24.8
82.5°	24.8	21.3	21.3	17.7	17.7	14.1	14.1	14.1	14.1	14.1	21.3
85°	21.3	14.1	14.1	10.7	14.1	24.8	10.7	14.1	14.1	14.1	10.7
87.5°	7.1	10.7	10.7	10.7	7.1	3.6	7.1	10.7	10.7	17.7	14.1
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9	6606.9
2.5°	6617.5	6621.1	6621.1	6617.5	6617.5	6610.4	6624.6	6614.0	6617.5	6631.7	6621.1
5°	6624.6	6628.1	6628.1	6624.6	6624.6	6624.6	6628.1	6628.1	6624.6	6621.1	6628.1
7.5°	6638.8	6635.2	6635.2	6628.1	6628.1	6621.1	6628.1	6617.5	6624.6	6617.5	6628.1
10°	6621.1	6624.6	6621.1	6617.5	6617.5	6614.0	6614.0	6603.3	6606.9	6596.2	6603.3
12.5°	6610.4	6606.9	6606.9	6599.7	6592.7	6585.6	6582.0	6571.4	6571.4	6546.5	6557.2
15°	6582.0	6585.6	6574.9	6560.8	6553.7	6536.0	6528.8	6514.6	6500.5	6482.8	6486.3
17.5°	6557.2	6546.5	6532.4	6518.2	6489.8	6475.7	6461.4	6440.2	6433.0	6411.8	6404.8
20°	6482.8	6475.7	6457.9	6433.0	6415.3	6383.4	6369.3	6348.0	6330.2	6309.0	6298.3
22.5°	6387.0	6379.9	6358.6	6333.8	6305.4	6291.3	6277.0	6238.1	6220.3	6199.0	6195.5
25°	6266.4	6255.8	6234.5	6206.1	6191.9	6152.9	6138.7	6110.3	6103.3	6082.0	6078.5
27.5°	6082.0	6067.8	6043.0	6007.5	5982.7	5957.9	5943.7	5922.4	5915.4	5894.0	5890.5
30°	5805.4	5787.6	5738.0	5723.8	5681.2	5656.4	5656.4	5628.0	5631.6	5617.5	5617.5
32.5°	5369.2	5340.8	5301.8	5273.4	5245.0	5230.9	5230.9	5220.2	5227.3	5227.3	5234.4
35°	4791.1	4752.2	4730.8	4713.1	4713.1	4727.3	4769.9	4780.5	4801.8	4819.5	4833.7
37.5°	4049.9	4046.4	4071.2	4092.5	4145.7	4206.0	4280.5	4344.3	4404.5	4447.1	4489.7
40°	3248.5	3337.1	3408.0	3507.4	3588.9	3705.9	3840.7	3950.6	4053.5	4128.0	4206.0
42.5°	2535.6	2649.1	2798.1	2943.4	3088.9	3248.5	3425.8	3578.3	3713.0	3815.9	3897.4
45°	1975.3	2131.3	2312.3	2496.6	2684.6	2883.2	3067.6	3223.6	3365.5	3471.9	3553.5
47.5°	1592.3	1762.5	1968.2	2170.4	2383.1	2592.4	2798.1	2932.9	3049.8	3135.0	3209.5
50°	1315.7	1496.6	1712.9	1943.4	2156.2	2365.4	2542.7	2673.9	2769.7	2844.2	2890.3
52.5°	1099.3	1290.8	1521.4	1751.9	1964.6	2156.2	2315.8	2415.1	2493.1	2546.3	2588.8
55°	907.8	1092.3	1308.6	1525.0	1734.2	1915.0	2046.2	2120.7	2181.0	2212.9	2237.7
57.5°	741.2	911.4	1110.0	1308.6	1489.5	1638.5	1741.3	1815.7	1844.1	1868.9	1865.4
60°	581.6	741.2	922.1	1092.3	1248.3	1368.9	1443.4	1485.9	1507.2	1517.8	1510.7
62.5°	457.5	602.9	741.2	890.1	1003.6	1106.5	1177.4	1177.4	1188.0	1191.6	1202.2
65°	340.4	450.4	571.0	680.9	773.1	840.5	879.5	890.1	904.4	900.8	893.7
67.5°	251.8	333.4	422.0	503.5	567.4	609.9	638.3	663.2	659.7	652.5	649.0
70°	173.8	227.0	305.0	354.6	400.7	443.3	450.4	453.9	457.5	461.0	453.9
72.5°	120.6	159.6	202.2	244.7	273.1	290.8	308.6	312.0	312.0	312.0	308.6
75°	60.3	81.6	120.6	138.3	163.1	170.2	184.4	184.4	195.1	180.8	177.3
77.5°	53.2	63.9	85.1	99.3	109.9	120.6	124.1	134.8	131.2	124.1	127.6
80°	31.9	39.0	53.2	60.3	74.5	78.0	81.6	85.1	81.6	85.1	85.1
82.5°	24.8	28.4	35.5	35.5	46.1	46.1	49.6	49.6	53.2	53.2	53.2
85°	14.1	24.8	21.3	42.5	28.4	28.4	35.5	42.5	35.5	35.5	42.5
87.5°	14.1	14.1	10.7	14.1	14.1	14.1	17.7	21.3	21.3	24.8	21.3
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: P249555

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	6606.9	6606.9	6606.9	6606.9
2.5°	6617.5	6624.6	6614.0	6610.4
5°	6628.1	6628.1	6621.1	6621.1
7.5°	6628.1	6628.1	6617.5	6610.4
10°	6599.7	6599.7	6589.2	6582.0
12.5°	6546.5	6546.5	6543.0	6532.4
15°	6479.2	6479.2	6465.0	6454.4
17.5°	6387.0	6394.1	6376.4	6376.4
20°	6287.7	6284.1	6270.0	6262.9
22.5°	6184.9	6177.8	6174.2	6152.9
25°	6074.9	6067.8	6057.1	6046.6
27.5°	5887.0	5883.4	5872.7	5858.6
30°	5599.7	5596.1	5582.0	5582.0
32.5°	5227.3	5223.8	5209.6	5213.2
35°	4840.8	4855.0	4847.9	4833.7
37.5°	4518.0	4528.7	4535.8	4528.7
40°	4248.5	4280.5	4284.0	4291.1
42.5°	3961.3	4003.8	4018.0	4025.1
45°	3617.2	3656.3	3688.2	3681.1
47.5°	3266.2	3294.5	3322.9	3301.6
50°	2929.3	2947.0	2957.7	2957.7
52.5°	2610.1	2610.1	2606.6	2610.1
55°	2244.8	2244.8	2230.7	2237.7
57.5°	1861.8	1868.9	1858.3	1840.6
60°	1507.2	1489.5	1482.4	1471.8
62.5°	1173.9	1173.9	1149.1	1180.9
65°	879.5	868.9	858.2	854.6
67.5°	638.3	634.8	624.2	620.6
70°	450.4	436.2	432.7	425.5
72.5°	301.5	301.5	294.3	294.3
75°	184.4	166.7	163.1	166.7
77.5°	127.6	124.1	124.1	120.6
80°	85.1	81.6	88.7	78.0
82.5°	53.2	56.7	53.2	56.7
85°	35.5	42.5	39.0	39.0
87.5°	21.3	21.3	21.3	21.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)