

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: P249600

Luminaire Tested: **LSR8B120D010 EC8B120950 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249600  
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 EC8B120950 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 5000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11400.0 lumens  
Efficiency: N/A  
Efficacy: 96.4 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

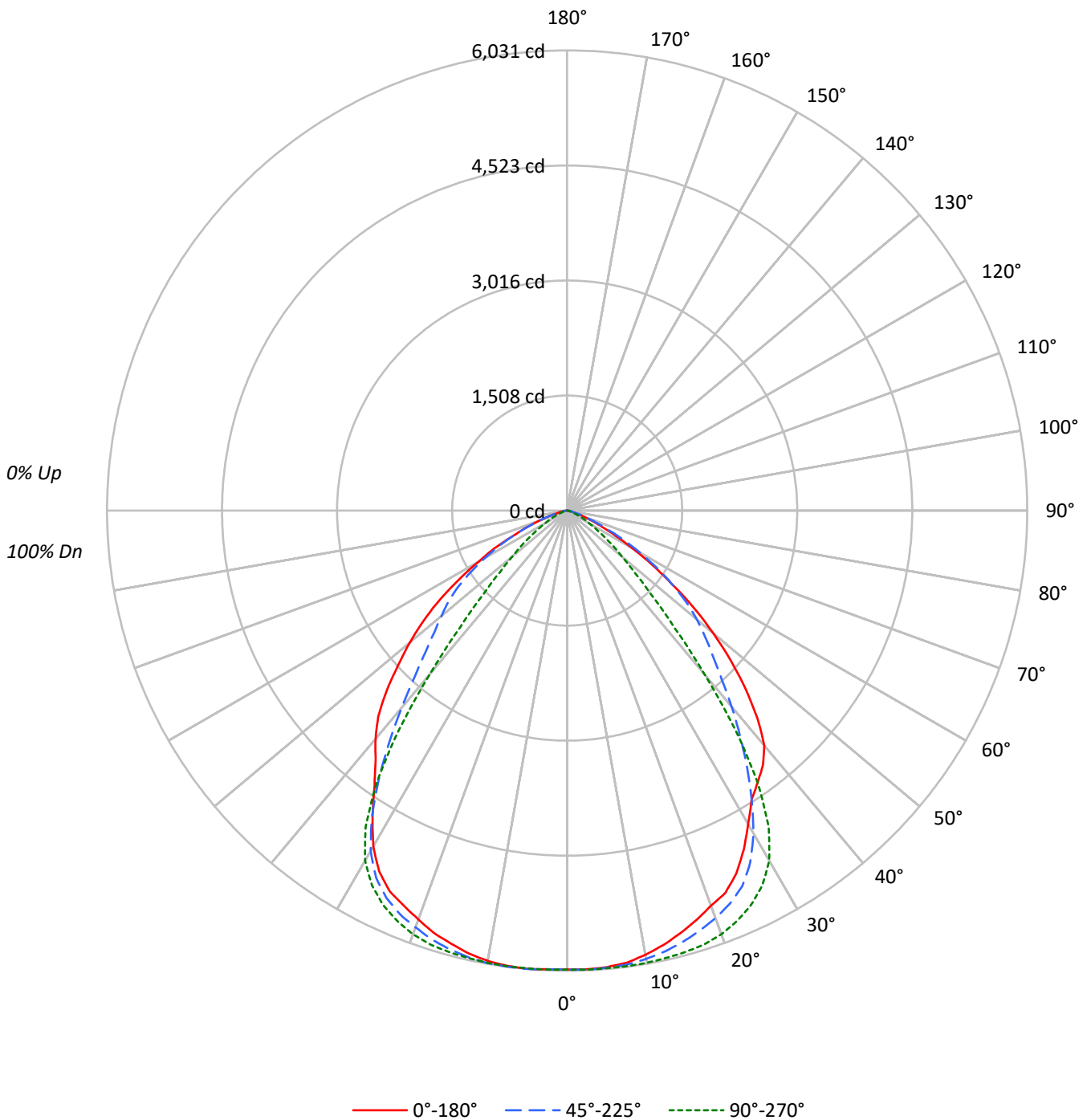
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	185477	185477	185477
5°	185882	186384	186585
10°	185101	188439	187631
15°	183050	191193	187589
20°	180852	193883	187103
25°	178504	194108	187296
30°	168875	188648	180946
35°	163835	163952	165657
40°	161805	112808	157256
45°	144176	67725	146147
50°	119884	45070	129176
55°	89911	31074	109523
60°	60933	20704	82635
65°	36752	13433	56774
70°	20376	7276	34928
75°	9234	3074	18086
80°	8027	3445	12608
85°	9128	4564	12560



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	574.0	5.0
10°-20°	1667.1	14.6
20°-30°	2530.3	22.2
30°-40°	2657.6	23.3
40°-50°	1992.5	17.5
50°-60°	1278.4	11.2
60°-70°	546.9	4.8
70°-80°	129.2	1.1
80°-90°	24.0	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°	4771.4	41.9
0°-40°	7429.0	65.2
0°-60°	10699.9	93.9
0°-90°	11400.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11400.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6015	6015	6015	6015	6015	
5°	6005	6015	6021	6031	6028	570
15°	5734	5854	5989	5950	5876	1617
25°	5246	5430	5705	5602	5505	2397
35°	4352	4110	4355	4304	4401	2732
45°	3306	2702	1553	2625	3351	2532
55°	1672	1672	578	1743	2037	1517
65°	504	594	184	765	778	538
75°	78	90	26	155	152	113
85°	26	16	13	26	36	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°	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9
2.5°	6018.1	6024.6	6021.3	6021.3	6018.1	6021.3	6021.3	6027.8	6027.8	6021.3	6018.1
5°	6005.1	6011.6	6011.6	6005.1	6005.1	6021.3	6011.6	6018.1	6018.1	6014.9	6014.9
7.5°	5976.2	5976.2	5989.0	5979.4	5979.4	5989.0	5985.8	5992.3	5998.7	6002.0	6002.0
10°	5911.5	5918.0	5921.3	5921.3	5924.5	5934.1	5940.6	5953.6	5960.0	5966.4	5969.7
12.5°	5830.9	5840.5	5843.8	5840.5	5850.2	5863.1	5879.3	5895.4	5905.1	5918.0	5927.7
15°	5733.9	5733.9	5740.4	5750.1	5756.6	5776.0	5792.1	5811.4	5837.3	5853.5	5869.6
17.5°	5627.5	5633.9	5643.6	5643.6	5656.5	5688.8	5698.5	5727.5	5756.6	5772.7	5805.0
20°	5511.2	5517.6	5527.4	5533.8	5550.0	5575.8	5595.1	5621.0	5653.3	5682.4	5714.6
22.5°	5420.8	5407.9	5414.3	5420.8	5437.0	5459.6	5482.2	5514.4	5546.7	5575.8	5608.1
25°	5246.4	5249.7	5259.4	5265.8	5285.2	5304.6	5330.4	5369.1	5398.2	5430.5	5466.0
27.5°	5010.8	5014.0	5030.1	5030.1	5046.3	5078.6	5094.7	5127.0	5165.8	5198.0	5240.0
30°	4742.8	4749.2	4749.2	4762.2	4771.8	4788.0	4804.1	4836.4	4855.8	4884.9	4943.0
32.5°	4497.5	4503.9	4500.6	4497.5	4487.7	4484.5	4481.3	4487.7	4494.2	4503.9	4526.5
35°	4352.2	4336.0	4323.1	4300.5	4274.7	4242.4	4213.3	4174.6	4139.0	4110.0	4077.7
37.5°	4213.3	4210.1	4190.7	4158.4	4106.7	4048.7	3980.9	3896.9	3812.9	3722.6	3635.4
40°	4019.6	4009.9	3993.8	3948.6	3890.4	3819.4	3729.0	3625.7	3490.1	3351.3	3209.2
42.5°	3690.3	3693.5	3674.1	3638.6	3583.8	3515.9	3422.3	3309.3	3164.0	2999.3	2815.3
45°	3306.1	3306.1	3299.6	3270.5	3231.8	3176.9	3105.9	3012.3	2870.2	2702.3	2505.4
47.5°	2905.7	2909.0	2899.2	2892.8	2876.7	2841.2	2789.5	2718.5	2618.4	2456.9	2260.0
50°	2499.0	2499.0	2515.1	2511.8	2511.8	2499.0	2476.4	2434.3	2347.2	2218.0	2034.1
52.5°	2092.1	2098.6	2108.3	2121.2	2137.3	2163.1	2137.3	2117.9	2063.0	1963.0	1804.8
55°	1672.4	1678.9	1695.0	1717.6	1737.0	1762.8	1769.3	1769.3	1740.2	1672.4	1553.0
57.5°	1314.1	1304.3	1317.3	1336.7	1362.5	1388.3	1407.7	1430.3	1427.0	1381.8	1285.0
60°	988.0	991.2	1000.8	1020.3	1039.6	1062.2	1088.0	1107.4	1117.1	1094.5	1033.1
62.5°	720.0	720.0	732.9	752.2	761.9	794.2	810.4	820.1	829.7	826.5	787.8
65°	503.7	510.1	516.6	526.3	535.9	555.3	565.0	584.4	590.8	594.1	565.0
67.5°	355.2	345.5	351.9	358.3	368.1	381.0	400.4	400.4	410.0	410.0	390.6
70°	226.0	226.0	229.3	238.9	245.4	248.6	255.1	261.5	271.2	268.0	268.0
72.5°	151.8	148.5	151.8	155.0	158.2	167.9	167.9	171.1	177.6	180.8	167.9
75°	77.5	80.7	87.1	84.0	93.6	87.1	90.4	100.1	96.9	90.4	90.4
77.5°	64.5	64.5	64.5	61.4	67.8	67.8	64.5	71.0	67.8	67.8	64.5
80°	45.2	48.4	45.2	41.9	45.2	41.9	41.9	41.9	41.9	41.9	38.7
82.5°	35.5	29.1	32.3	29.1	32.3	32.3	29.1	25.8	25.8	29.1	25.8
85°	25.8	19.4	22.6	22.6	19.4	19.4	19.4	19.4	19.4	16.1	16.1
87.5°	16.1	9.7	9.7	9.7	12.9	12.9	12.9	9.7	12.9	12.9	6.5
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°	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9
2.5°	6024.6	6021.3	6027.8	6024.6	6024.6	6021.3	6024.6	6021.3	6027.8	6014.9	6018.1
5°	6024.6	6018.1	6021.3	6024.6	6027.8	6021.3	6021.3	6021.3	6027.8	6021.3	6024.6
7.5°	6011.6	6008.4	6018.1	6024.6	6021.3	6018.1	6024.6	6021.3	6027.8	6024.6	6031.0
10°	5985.8	5989.0	5995.5	6005.1	6008.4	6011.6	6018.1	6018.1	6027.8	6014.9	6021.3
12.5°	5947.1	5960.0	5976.2	5982.6	5995.5	5995.5	6002.0	6005.1	6011.6	6008.4	6018.1
15°	5898.7	5914.8	5934.1	5950.3	5966.4	5976.2	5985.8	5989.0	5998.7	5989.0	5992.3
17.5°	5840.5	5859.9	5888.9	5908.3	5934.1	5943.8	5956.7	5963.2	5972.9	5966.4	5969.7
20°	5759.8	5782.4	5814.7	5843.8	5859.9	5882.5	5898.7	5908.3	5914.8	5908.3	5911.5
22.5°	5646.8	5679.1	5721.1	5743.7	5776.0	5795.3	5798.6	5821.2	5837.3	5821.2	5827.6
25°	5514.4	5546.7	5579.0	5627.5	5656.5	5679.1	5701.7	5705.0	5721.1	5717.8	5714.6
27.5°	5294.9	5336.9	5391.7	5430.5	5469.2	5504.8	5530.6	5537.0	5553.2	5546.7	5550.0
30°	4994.6	5039.9	5091.5	5152.8	5207.7	5243.2	5275.5	5298.1	5314.2	5304.6	5301.3
32.5°	4568.5	4613.7	4668.6	4729.9	4794.5	4846.1	4884.9	4913.9	4933.3	4926.8	4910.7
35°	4081.0	4093.9	4129.4	4177.8	4232.7	4287.6	4323.1	4355.3	4377.9	4384.4	4384.4
37.5°	3580.5	3538.6	3512.7	3512.7	3545.0	3567.6	3599.9	3619.2	3654.8	3667.7	3677.4
40°	3096.2	2999.3	2909.0	2841.2	2796.0	2792.8	2792.8	2802.4	2834.7	2876.7	2915.4
42.5°	2663.6	2508.6	2369.8	2243.9	2153.5	2101.8	2079.2	2082.5	2108.3	2147.0	2211.6
45°	2318.1	2124.4	1950.1	1798.3	1675.6	1594.9	1556.2	1553.0	1572.3	1617.5	1688.6
47.5°	2050.2	1843.5	1646.6	1472.2	1339.9	1252.7	1207.5	1194.6	1207.5	1249.4	1333.4
50°	1827.4	1614.3	1410.9	1230.1	1088.0	997.7	955.6	939.5	955.6	991.2	1075.1
52.5°	1620.7	1401.2	1210.7	1036.4	884.6	807.1	761.9	752.2	761.9	803.9	871.7
55°	1381.8	1194.6	1007.3	833.0	700.6	623.1	587.6	578.0	587.6	626.4	697.4
57.5°	1146.2	984.7	820.1	661.8	548.9	481.0	448.8	435.8	458.4	484.3	568.2
60°	926.6	797.5	658.6	519.8	426.2	364.8	339.0	335.7	342.2	374.5	432.6
62.5°	726.5	619.9	510.1	397.1	319.6	293.8	261.5	258.3	264.7	284.1	329.3
65°	523.0	455.3	371.3	290.6	229.3	193.7	180.8	184.1	190.5	203.4	245.4
67.5°	364.8	316.4	258.3	203.4	158.2	142.0	129.2	125.9	129.2	151.8	174.3
70°	245.4	216.3	174.3	155.0	109.8	87.1	90.4	80.7	93.6	93.6	113.0
72.5°	161.4	142.0	116.2	90.4	77.5	61.4	61.4	58.1	64.5	67.8	84.0
75°	84.0	64.5	64.5	45.2	32.3	16.1	29.1	25.8	22.6	25.8	32.3
77.5°	58.1	48.4	45.2	35.5	32.3	25.8	25.8	25.8	25.8	29.1	32.3
80°	35.5	35.5	25.8	22.6	19.4	16.1	19.4	19.4	19.4	19.4	22.6
82.5°	22.6	19.4	19.4	16.1	16.1	12.9	12.9	12.9	12.9	12.9	19.4
85°	19.4	12.9	12.9	9.7	12.9	22.6	9.7	12.9	12.9	12.9	9.7
87.5°	6.5	9.7	9.7	9.7	6.5	3.2	6.5	9.7	9.7	16.1	12.9
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°	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9	6014.9
2.5°	6024.6	6027.8	6027.8	6024.6	6024.6	6018.1	6031.0	6021.3	6024.6	6037.5	6027.8
5°	6031.0	6034.2	6034.2	6031.0	6031.0	6031.0	6034.2	6034.2	6031.0	6027.8	6034.2
7.5°	6043.9	6040.7	6040.7	6034.2	6034.2	6027.8	6034.2	6024.6	6031.0	6024.6	6034.2
10°	6027.8	6031.0	6027.8	6024.6	6024.6	6021.3	6021.3	6011.6	6014.9	6005.1	6011.6
12.5°	6018.1	6014.9	6014.9	6008.4	6002.0	5995.5	5992.3	5982.6	5982.6	5960.0	5969.7
15°	5992.3	5995.5	5985.8	5972.9	5966.4	5950.3	5943.8	5930.9	5918.0	5901.9	5905.1
17.5°	5969.7	5960.0	5947.1	5934.1	5908.3	5895.4	5882.5	5863.1	5856.6	5837.3	5830.9
20°	5901.9	5895.4	5879.3	5856.6	5840.5	5811.4	5798.6	5779.2	5763.0	5743.7	5733.9
22.5°	5814.7	5808.2	5788.9	5766.3	5740.4	5727.5	5714.6	5679.1	5662.9	5643.6	5640.3
25°	5705.0	5695.2	5675.9	5650.0	5637.1	5601.6	5588.7	5562.8	5556.4	5537.0	5533.8
27.5°	5537.0	5524.1	5501.5	5469.2	5446.6	5424.0	5411.2	5391.7	5385.3	5365.9	5362.7
30°	5285.2	5269.0	5223.9	5211.0	5172.2	5149.6	5149.6	5123.8	5127.0	5114.1	5114.1
32.5°	4888.1	4862.3	4826.7	4800.9	4775.1	4762.2	4762.2	4752.5	4758.9	4758.9	4765.4
35°	4361.8	4326.3	4306.9	4290.8	4290.8	4303.7	4342.5	4352.2	4371.5	4387.7	4400.6
37.5°	3687.0	3683.9	3706.4	3725.8	3774.2	3829.1	3896.9	3955.1	4009.9	4048.7	4087.4
40°	2957.4	3038.1	3102.7	3193.1	3267.3	3373.9	3496.6	3596.6	3690.3	3758.1	3829.1
42.5°	2308.4	2411.7	2547.4	2679.7	2812.1	2957.4	3118.9	3257.7	3380.3	3474.0	3548.2
45°	1798.3	1940.4	2105.1	2272.9	2444.1	2624.9	2792.8	2934.8	3064.0	3160.8	3235.1
47.5°	1449.6	1604.6	1791.8	1975.9	2169.6	2360.1	2547.4	2670.1	2776.6	2854.1	2921.9
50°	1197.8	1362.5	1559.4	1769.3	1963.0	2153.5	2314.9	2434.3	2521.6	2589.3	2631.3
52.5°	1000.8	1175.2	1385.1	1594.9	1788.6	1963.0	2108.3	2198.7	2269.7	2318.1	2356.8
55°	826.5	994.4	1191.4	1388.3	1578.8	1743.4	1862.9	1930.7	1985.5	2014.6	2037.2
57.5°	674.8	829.7	1010.5	1191.4	1356.0	1491.6	1585.3	1653.0	1678.9	1701.5	1698.2
60°	529.5	674.8	839.4	994.4	1136.5	1246.2	1314.1	1352.8	1372.1	1381.8	1375.4
62.5°	416.5	548.9	674.8	810.4	913.7	1007.3	1071.9	1071.9	1081.6	1084.8	1094.5
65°	309.9	410.0	519.8	619.9	703.8	765.2	800.7	810.4	823.3	820.1	813.6
67.5°	229.3	303.5	384.2	458.4	516.6	555.3	581.1	603.8	600.5	594.1	590.8
70°	158.2	206.7	277.7	322.9	364.8	403.6	410.0	413.2	416.5	419.7	413.2
72.5°	109.8	145.3	184.1	222.8	248.6	264.7	280.9	284.1	284.1	284.1	280.9
75°	54.9	74.3	109.8	125.9	148.5	155.0	167.9	167.9	177.6	164.6	161.4
77.5°	48.4	58.1	77.5	90.4	100.1	109.8	113.0	122.7	119.4	113.0	116.2
80°	29.1	35.5	48.4	54.9	67.8	71.0	74.3	77.5	74.3	77.5	77.5
82.5°	22.6	25.8	32.3	32.3	41.9	41.9	45.2	45.2	48.4	48.4	48.4
85°	12.9	22.6	19.4	38.7	25.8	25.8	32.3	38.7	32.3	32.3	38.7
87.5°	12.9	12.9	9.7	12.9	12.9	12.9	16.1	19.4	19.4	22.6	19.4
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: P249600

CATALOG NUMBER: LSR8B120D010 EC8B120950 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	6014.9	6014.9	6014.9	6014.9
2.5°	6024.6	6031.0	6021.3	6018.1
5°	6034.2	6034.2	6027.8	6027.8
7.5°	6034.2	6034.2	6024.6	6018.1
10°	6008.4	6008.4	5998.7	5992.3
12.5°	5960.0	5960.0	5956.7	5947.1
15°	5898.7	5898.7	5885.7	5876.1
17.5°	5814.7	5821.2	5805.0	5805.0
20°	5724.3	5721.1	5708.2	5701.7
22.5°	5630.7	5624.2	5621.0	5601.6
25°	5530.6	5524.1	5514.4	5504.8
27.5°	5359.5	5356.3	5346.5	5333.7
30°	5097.9	5094.7	5081.8	5081.8
32.5°	4758.9	4755.7	4742.8	4746.1
35°	4407.0	4420.0	4413.5	4400.6
37.5°	4113.2	4122.9	4129.4	4122.9
40°	3867.8	3896.9	3900.2	3906.6
42.5°	3606.4	3645.1	3658.0	3664.4
45°	3293.1	3328.7	3357.8	3351.3
47.5°	2973.5	2999.3	3025.2	3005.8
50°	2666.8	2682.9	2692.7	2692.7
52.5°	2376.3	2376.3	2373.0	2376.3
55°	2043.7	2043.7	2030.8	2037.2
57.5°	1695.0	1701.5	1691.8	1675.6
60°	1372.1	1356.0	1349.5	1339.9
62.5°	1068.7	1068.7	1046.1	1075.1
65°	800.7	791.0	781.3	778.1
67.5°	581.1	578.0	568.2	565.0
70°	410.0	397.1	393.9	387.4
72.5°	274.4	274.4	268.0	268.0
75°	167.9	151.8	148.5	151.8
77.5°	116.2	113.0	113.0	109.8
80°	77.5	74.3	80.7	71.0
82.5°	48.4	51.7	48.4	51.7
85°	32.3	38.7	35.5	35.5
87.5°	19.4	19.4	19.4	19.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)