

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: P249618

Luminaire Tested: **LSR8B120D010 EC8B120930 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249618  
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 EC8B120930 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10208.9 lumens  
Efficiency: N/A  
Efficacy: 86.3 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

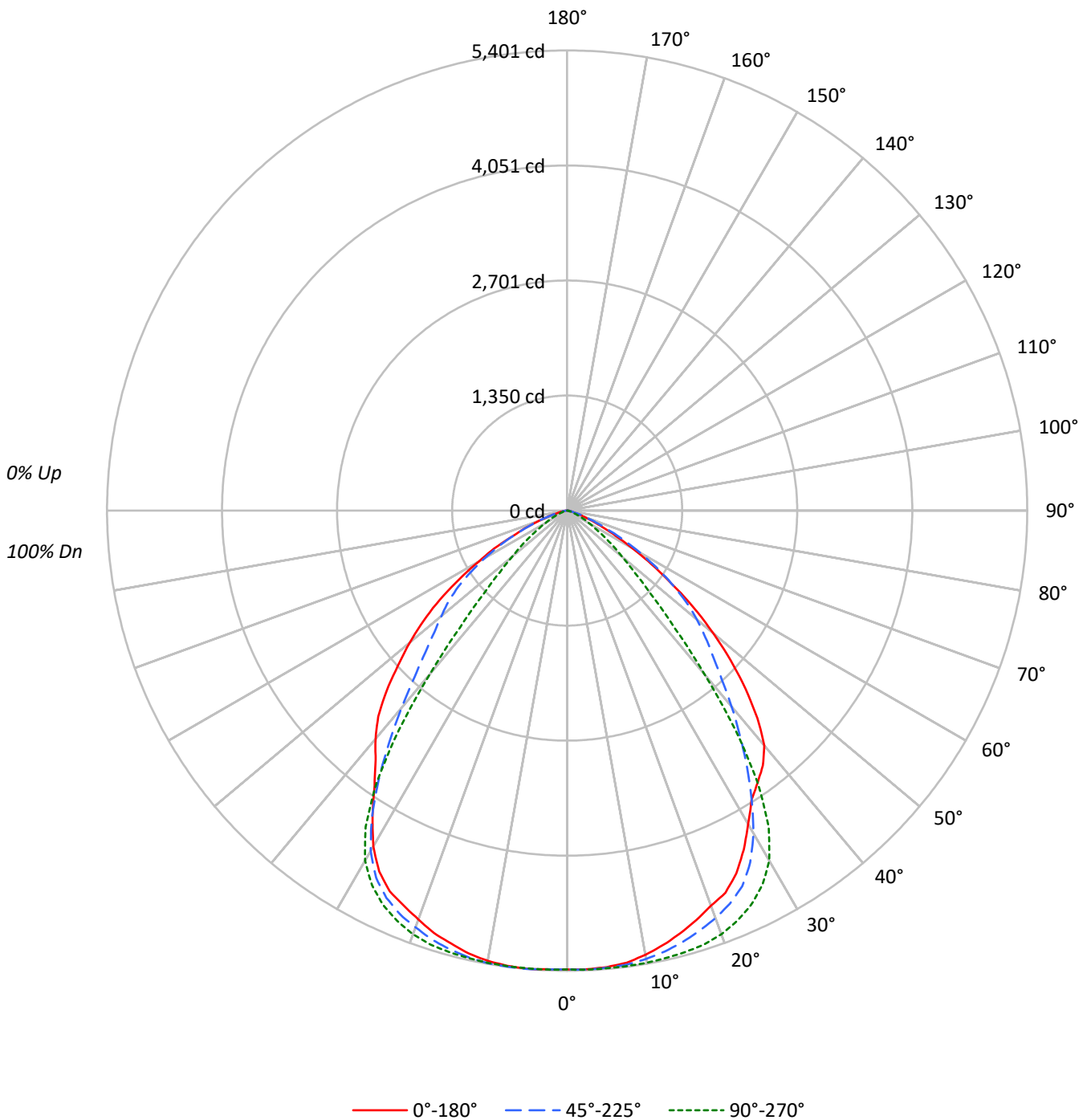
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	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°	514.1	5.0
10°-20°	1492.9	14.6
20°-30°	2265.9	22.2
30°-40°	2379.9	23.3
40°-50°	1784.3	17.5
50°-60°	1144.8	11.2
60°-70°	489.7	4.8
70°-80°	115.7	1.1
80°-90°	21.5	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°	4272.9	41.9
0°-40°	6652.8	65.2
0°-60°	9582.0	93.9
0°-90°	10208.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10208.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5386	5386	5386	5386	5386	
5°	5378	5386	5392	5401	5398	511
15°	5135	5242	5363	5329	5262	1448
25°	4698	4863	5109	5016	4930	2146
35°	3898	3681	3900	3854	3941	2446
45°	2961	2420	1391	2351	3001	2267
55°	1498	1498	518	1561	1824	1358
65°	451	532	165	685	697	482
75°	69	81	23	139	136	101
85°	23	14	12	23	32	24
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°	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4
2.5°	5389.3	5395.1	5392.2	5392.2	5389.3	5392.2	5392.2	5398.1	5398.1	5392.2	5389.3
5°	5377.8	5383.5	5383.5	5377.8	5377.8	5392.2	5383.5	5389.3	5389.3	5386.4	5386.4
7.5°	5351.8	5351.8	5363.3	5354.7	5354.7	5363.3	5360.4	5366.2	5372.1	5374.9	5374.9
10°	5293.9	5299.8	5302.6	5302.6	5305.5	5314.1	5319.9	5331.6	5337.3	5343.0	5345.9
12.5°	5221.7	5230.4	5233.2	5230.4	5239.0	5250.5	5265.0	5279.5	5288.2	5299.8	5308.4
15°	5134.9	5134.9	5140.7	5149.4	5155.1	5172.5	5187.0	5204.2	5227.4	5241.9	5256.4
17.5°	5039.5	5045.3	5053.9	5053.9	5065.6	5094.4	5103.1	5129.1	5155.1	5169.6	5198.5
20°	4935.4	4941.1	4949.9	4955.7	4970.1	4993.3	5010.5	5033.7	5062.7	5088.7	5117.6
22.5°	4854.5	4842.9	4848.7	4854.5	4869.0	4889.1	4909.4	4938.2	4967.3	4993.3	5022.2
25°	4698.3	4701.2	4709.9	4715.6	4733.1	4750.3	4773.6	4808.2	4834.2	4863.1	4895.0
27.5°	4487.3	4490.2	4504.6	4504.6	4519.1	4548.0	4562.4	4591.4	4626.0	4655.0	4692.6
30°	4247.4	4253.1	4253.1	4264.6	4273.3	4287.8	4302.2	4331.1	4348.5	4374.5	4426.6
32.5°	4027.5	4033.4	4030.4	4027.5	4018.9	4016.0	4013.1	4018.9	4024.7	4033.4	4053.5
35°	3897.5	3882.9	3871.5	3851.2	3828.1	3799.2	3773.1	3738.4	3706.6	3680.6	3651.7
37.5°	3773.1	3770.3	3752.9	3724.0	3677.7	3625.7	3565.0	3489.8	3414.6	3333.6	3255.6
40°	3599.6	3590.9	3576.6	3536.1	3484.0	3420.4	3339.5	3246.9	3125.5	3001.1	2873.9
42.5°	3304.7	3307.6	3290.2	3258.4	3209.3	3148.6	3064.7	2963.6	2833.4	2685.9	2521.2
45°	2960.7	2960.7	2954.8	2928.8	2894.2	2845.0	2781.4	2697.6	2570.3	2420.0	2243.6
47.5°	2602.2	2605.1	2596.3	2590.6	2576.1	2544.3	2498.0	2434.5	2344.8	2200.2	2023.9
50°	2237.9	2237.9	2252.3	2249.4	2249.4	2237.9	2217.7	2180.0	2102.0	1986.3	1821.5
52.5°	1873.5	1879.4	1888.0	1899.5	1914.0	1937.1	1914.0	1896.6	1847.5	1757.8	1616.3
55°	1497.7	1503.5	1517.9	1538.1	1555.5	1578.7	1584.4	1584.4	1558.4	1497.7	1390.7
57.5°	1176.7	1168.1	1179.6	1197.0	1220.1	1243.3	1260.6	1280.9	1277.9	1237.5	1150.7
60°	884.7	887.6	896.2	913.6	931.0	951.3	974.4	991.7	1000.4	980.2	925.2
62.5°	644.8	644.8	656.3	673.6	682.4	711.3	725.7	734.4	743.0	740.1	705.4
65°	451.1	456.8	462.6	471.3	479.9	497.3	506.0	523.3	529.1	532.0	506.0
67.5°	318.0	309.4	315.1	320.9	329.6	341.2	358.5	358.5	367.1	367.1	349.9
70°	202.5	202.5	205.3	213.9	219.7	222.6	228.5	234.2	242.9	240.0	240.0
72.5°	135.9	133.0	135.9	138.8	141.7	150.3	150.3	153.2	159.1	162.0	150.3
75°	69.4	72.3	78.0	75.2	83.9	78.0	80.9	89.7	86.8	80.9	80.9
77.5°	57.8	57.8	57.8	54.9	60.6	60.6	57.8	63.6	60.6	60.6	57.8
80°	40.5	43.4	40.5	37.6	40.5	37.6	37.6	37.6	37.6	37.6	34.6
82.5°	31.8	26.0	28.9	26.0	28.9	28.9	26.0	23.1	23.1	26.0	23.1
85°	23.1	17.4	20.2	20.2	17.4	17.4	17.4	17.4	17.4	14.5	14.5
87.5°	14.5	8.7	8.7	8.7	11.5	11.5	11.5	8.7	11.5	11.5	5.8
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°	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4
2.5°	5395.1	5392.2	5398.1	5395.1	5395.1	5392.2	5395.1	5392.2	5398.1	5386.4	5389.3
5°	5395.1	5389.3	5392.2	5395.1	5398.1	5392.2	5392.2	5392.2	5398.1	5392.2	5395.1
7.5°	5383.5	5380.7	5389.3	5395.1	5392.2	5389.3	5395.1	5392.2	5398.1	5395.1	5400.9
10°	5360.4	5363.3	5369.1	5377.8	5380.7	5383.5	5389.3	5389.3	5398.1	5386.4	5392.2
12.5°	5325.8	5337.3	5351.8	5357.5	5369.1	5369.1	5374.9	5377.8	5383.5	5380.7	5389.3
15°	5282.4	5296.8	5314.1	5328.7	5343.0	5351.8	5360.4	5363.3	5372.1	5363.3	5366.2
17.5°	5230.4	5247.6	5273.6	5291.0	5314.1	5322.8	5334.4	5340.2	5348.9	5343.0	5345.9
20°	5158.1	5178.3	5207.2	5233.2	5247.6	5267.9	5282.4	5291.0	5296.8	5291.0	5293.9
22.5°	5056.8	5085.8	5123.3	5143.6	5172.5	5189.9	5192.7	5213.0	5227.4	5213.0	5218.8
25°	4938.2	4967.3	4996.2	5039.5	5065.6	5085.8	5106.0	5109.0	5123.3	5120.4	5117.6
27.5°	4741.7	4779.3	4828.4	4863.1	4897.8	4929.6	4952.8	4958.5	4973.0	4967.3	4970.1
30°	4472.8	4513.3	4559.6	4614.5	4663.7	4695.4	4724.3	4744.5	4759.0	4750.3	4747.4
32.5°	4091.2	4131.7	4180.8	4235.7	4293.5	4339.7	4374.5	4400.5	4417.9	4412.0	4397.7
35°	3654.6	3666.1	3698.0	3741.3	3790.4	3839.6	3871.5	3900.3	3920.6	3926.3	3926.3
37.5°	3206.4	3168.8	3145.8	3145.8	3174.6	3194.8	3223.8	3241.1	3273.0	3284.4	3293.2
40°	2772.7	2685.9	2605.1	2544.3	2503.9	2501.0	2501.0	2509.6	2538.5	2576.1	2610.8
42.5°	2385.3	2246.5	2122.2	2009.4	1928.5	1882.3	1862.0	1864.9	1888.0	1922.7	1980.5
45°	2076.0	1902.4	1746.3	1610.4	1500.6	1428.3	1393.6	1390.7	1408.1	1448.6	1512.1
47.5°	1836.0	1650.9	1474.6	1318.4	1199.9	1121.8	1081.3	1069.8	1081.3	1118.9	1194.1
50°	1636.4	1445.6	1263.5	1101.6	974.4	893.4	855.8	841.4	855.8	887.6	962.7
52.5°	1451.4	1254.8	1084.2	928.1	792.2	722.8	682.4	673.6	682.4	719.9	780.7
55°	1237.5	1069.8	902.1	745.9	627.4	558.0	526.2	517.6	526.2	560.9	624.5
57.5°	1026.4	881.8	734.4	592.7	491.6	430.8	401.9	390.3	410.5	433.7	508.8
60°	829.8	714.2	589.8	465.6	381.7	326.7	303.6	300.7	306.5	335.4	387.4
62.5°	650.5	555.1	456.8	355.6	286.2	263.1	234.2	231.4	237.1	254.4	294.9
65°	468.4	407.7	332.5	260.2	205.3	173.4	162.0	164.8	170.6	182.2	219.7
67.5°	326.7	283.4	231.4	182.2	141.7	127.2	115.7	112.8	115.7	135.9	156.2
70°	219.7	193.7	156.2	138.8	98.3	78.0	80.9	72.3	83.9	83.9	101.1
72.5°	144.5	127.2	104.0	80.9	69.4	54.9	54.9	52.0	57.8	60.6	75.2
75°	75.2	57.8	57.8	40.5	28.9	14.5	26.0	23.1	20.2	23.1	28.9
77.5°	52.0	43.4	40.5	31.8	28.9	23.1	23.1	23.1	23.1	26.0	28.9
80°	31.8	31.8	23.1	20.2	17.4	14.5	17.4	17.4	17.4	17.4	20.2
82.5°	20.2	17.4	17.4	14.5	14.5	11.5	11.5	11.5	11.5	11.5	17.4
85°	17.4	11.5	11.5	8.7	11.5	20.2	8.7	11.5	11.5	11.5	8.7
87.5°	5.8	8.7	8.7	8.7	5.8	2.9	5.8	8.7	8.7	14.5	11.5
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4	5386.4
2.5°	5395.1	5398.1	5398.1	5395.1	5395.1	5389.3	5400.9	5392.2	5395.1	5406.7	5398.1
5°	5400.9	5403.8	5403.8	5400.9	5400.9	5400.9	5403.8	5403.8	5400.9	5398.1	5403.8
7.5°	5412.5	5409.6	5409.6	5403.8	5403.8	5398.1	5403.8	5395.1	5400.9	5395.1	5403.8
10°	5398.1	5400.9	5398.1	5395.1	5395.1	5392.2	5392.2	5383.5	5386.4	5377.8	5383.5
12.5°	5389.3	5386.4	5386.4	5380.7	5374.9	5369.1	5366.2	5357.5	5357.5	5337.3	5345.9
15°	5366.2	5369.1	5360.4	5348.9	5343.0	5328.7	5322.8	5311.2	5299.8	5285.3	5288.2
17.5°	5345.9	5337.3	5325.8	5314.1	5291.0	5279.5	5267.9	5250.5	5244.7	5227.4	5221.7
20°	5285.3	5279.5	5265.0	5244.7	5230.4	5204.2	5192.7	5175.4	5160.9	5143.6	5134.9
22.5°	5207.2	5201.3	5184.1	5163.8	5140.7	5129.1	5117.6	5085.8	5071.3	5053.9	5051.0
25°	5109.0	5100.2	5082.8	5059.7	5048.1	5016.4	5004.8	4981.6	4975.9	4958.5	4955.7
27.5°	4958.5	4947.0	4926.8	4897.8	4877.6	4857.3	4845.9	4828.4	4822.7	4805.3	4802.5
30°	4733.1	4718.5	4678.0	4666.5	4631.9	4611.6	4611.6	4588.5	4591.4	4579.8	4579.8
32.5°	4377.4	4354.3	4322.5	4299.3	4276.2	4264.6	4264.6	4256.0	4261.7	4261.7	4267.5
35°	3906.1	3874.3	3856.9	3842.5	3842.5	3854.0	3888.7	3897.5	3914.8	3929.2	3940.9
37.5°	3301.8	3299.0	3319.2	3336.5	3379.9	3429.0	3489.8	3541.8	3590.9	3625.7	3660.3
40°	2648.4	2720.7	2778.5	2859.6	2925.9	3021.3	3131.3	3220.9	3304.7	3365.5	3429.0
42.5°	2067.2	2159.7	2281.2	2399.7	2518.3	2648.4	2793.0	2917.3	3027.1	3111.0	3177.5
45°	1610.4	1737.7	1885.2	2035.5	2188.8	2350.6	2501.0	2628.2	2743.9	2830.5	2897.1
47.5°	1298.1	1437.0	1604.6	1769.5	1942.9	2113.5	2281.2	2391.1	2486.5	2555.9	2616.6
50°	1072.7	1220.1	1396.5	1584.4	1757.8	1928.5	2073.1	2180.0	2258.1	2318.8	2356.3
52.5°	896.2	1052.4	1240.4	1428.3	1601.7	1757.8	1888.0	1968.9	2032.6	2076.0	2110.6
55°	740.1	890.5	1066.9	1243.3	1413.8	1561.2	1668.3	1729.0	1778.1	1804.1	1824.3
57.5°	604.3	743.0	905.0	1066.9	1214.4	1335.8	1419.6	1480.3	1503.5	1523.7	1520.7
60°	474.2	604.3	751.7	890.5	1017.8	1116.0	1176.7	1211.5	1228.7	1237.5	1231.6
62.5°	373.0	491.6	604.3	725.7	818.2	902.1	959.9	959.9	968.5	971.5	980.2
65°	277.6	367.1	465.6	555.1	630.2	685.3	717.1	725.7	737.3	734.4	728.6
67.5°	205.3	271.8	344.0	410.5	462.6	497.3	520.4	540.7	537.9	532.0	529.1
70°	141.7	185.1	248.6	289.1	326.7	361.4	367.1	370.0	373.0	375.9	370.0
72.5°	98.3	130.1	164.8	199.5	222.6	237.1	251.6	254.4	254.4	254.4	251.6
75°	49.2	66.5	98.3	112.8	133.0	138.8	150.3	150.3	159.1	147.4	144.5
77.5°	43.4	52.0	69.4	80.9	89.7	98.3	101.1	109.9	106.9	101.1	104.0
80°	26.0	31.8	43.4	49.2	60.6	63.6	66.5	69.4	66.5	69.4	69.4
82.5°	20.2	23.1	28.9	28.9	37.6	37.6	40.5	40.5	43.4	43.4	43.4
85°	11.5	20.2	17.4	34.6	23.1	23.1	28.9	34.6	28.9	28.9	34.6
87.5°	11.5	11.5	8.7	11.5	11.5	11.5	14.5	17.4	17.4	20.2	17.4
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: P249618

CATALOG NUMBER: LSR8B120D010 EC8B120930 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5386.4	5386.4	5386.4	5386.4
2.5°	5395.1	5400.9	5392.2	5389.3
5°	5403.8	5403.8	5398.1	5398.1
7.5°	5403.8	5403.8	5395.1	5389.3
10°	5380.7	5380.7	5372.1	5366.2
12.5°	5337.3	5337.3	5334.4	5325.8
15°	5282.4	5282.4	5270.8	5262.1
17.5°	5207.2	5213.0	5198.5	5198.5
20°	5126.2	5123.3	5111.8	5106.0
22.5°	5042.4	5036.7	5033.7	5016.4
25°	4952.8	4947.0	4938.2	4929.6
27.5°	4799.6	4796.6	4787.9	4776.4
30°	4565.3	4562.4	4550.9	4550.9
32.5°	4261.7	4258.8	4247.4	4250.2
35°	3946.6	3958.1	3952.4	3940.9
37.5°	3683.5	3692.1	3698.0	3692.1
40°	3463.8	3489.8	3492.7	3498.4
42.5°	3229.6	3264.2	3275.8	3281.6
45°	2949.0	2980.9	3007.0	3001.1
47.5°	2662.8	2685.9	2709.1	2691.7
50°	2388.2	2402.6	2411.4	2411.4
52.5°	2128.0	2128.0	2125.1	2128.0
55°	1830.1	1830.1	1818.6	1824.3
57.5°	1517.9	1523.7	1515.0	1500.6
60°	1228.7	1214.4	1208.6	1199.9
62.5°	957.0	957.0	936.8	962.7
65°	717.1	708.4	699.6	696.8
67.5°	520.4	517.6	508.8	506.0
70°	367.1	355.6	352.8	346.9
72.5°	245.7	245.7	240.0	240.0
75°	150.3	135.9	133.0	135.9
77.5°	104.0	101.1	101.1	98.3
80°	69.4	66.5	72.3	63.6
82.5°	43.4	46.3	43.4	46.3
85°	28.9	34.6	31.8	31.8
87.5°	17.4	17.4	17.4	17.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)