

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: P249610

Luminaire Tested: **LSR8B150D010 EC8B1509727 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249610  
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 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11336.0 lumens  
Efficiency: N/A  
Efficacy: 71.5 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

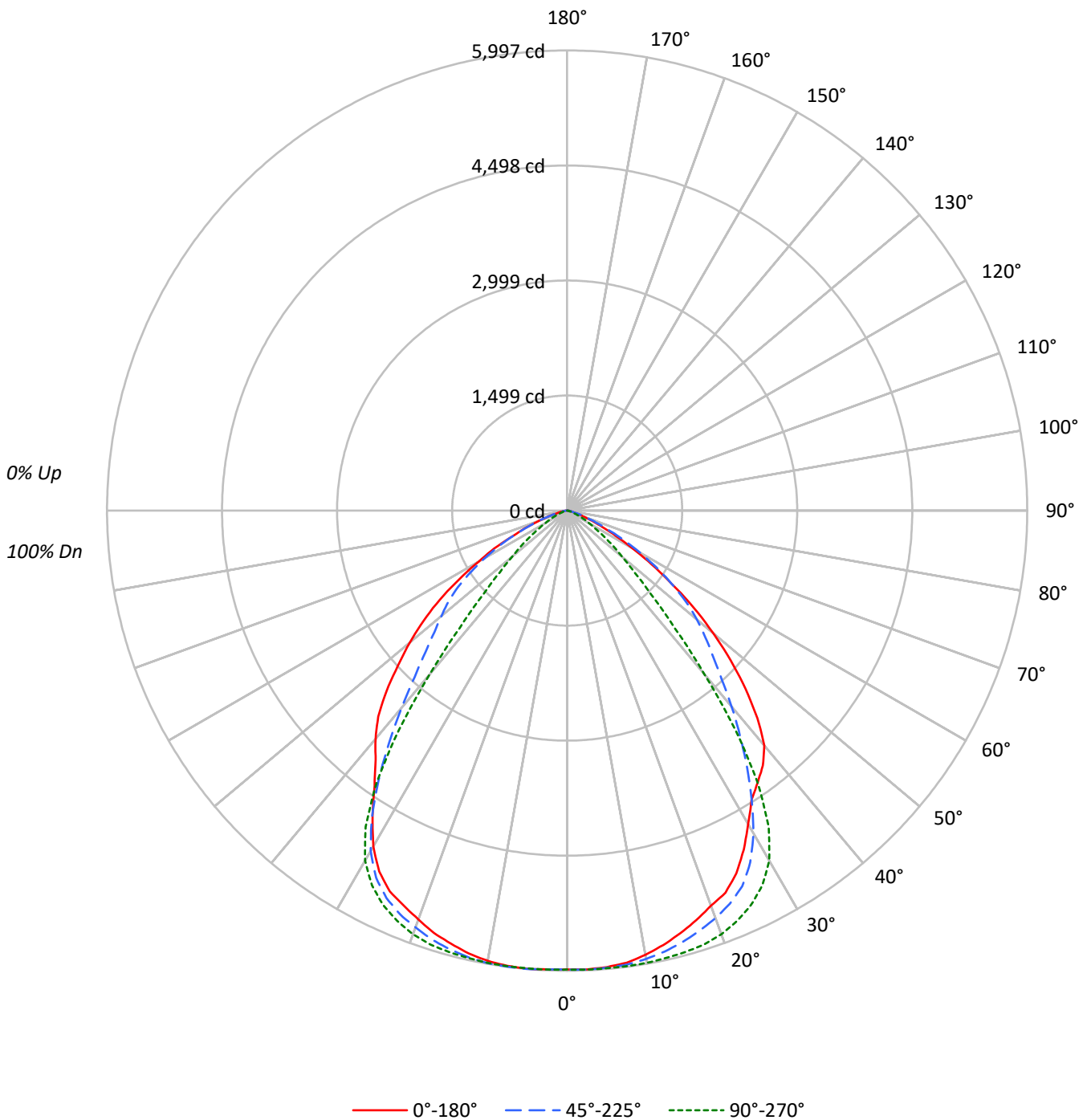
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90	90	90	90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79	79	79	79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70	70	70	70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62	62	62	62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55	55	55	55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50	50	50	50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45	45	45	45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41	41	41	41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37	37	37	37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34	34	34	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°	570.8	5.0
10°-20°	1657.7	14.6
20°-30°	2516.1	22.2
30°-40°	2642.7	23.3
40°-50°	1981.3	17.5
50°-60°	1271.2	11.2
60°-70°	543.8	4.8
70°-80°	128.5	1.1
80°-90°	23.9	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°	4744.6	41.9
0°-40°	7387.3	65.2
0°-60°	10639.8	93.9
0°-90°	11336.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11336.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5981	5981	5981	5981	5981	
5°	5971	5981	5988	5997	5994	567
15°	5702	5821	5955	5917	5843	1608
25°	5217	5400	5673	5570	5474	2383
35°	4328	4087	4331	4280	4376	2716
45°	3288	2687	1544	2610	3332	2518
55°	1663	1663	575	1734	2026	1508
65°	501	591	183	761	774	535
75°	77	90	26	154	151	112
85°	26	16	13	26	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°	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1
2.5°	5984.3	5990.8	5987.5	5987.5	5984.3	5987.5	5987.5	5994.0	5994.0	5987.5	5984.3
5°	5971.4	5977.9	5977.9	5971.4	5971.4	5987.5	5977.9	5984.3	5984.3	5981.1	5981.1
7.5°	5942.6	5942.6	5955.4	5945.8	5945.8	5955.4	5952.2	5958.6	5965.1	5968.3	5968.3
10°	5878.3	5884.8	5888.0	5888.0	5891.2	5900.8	5907.3	5920.1	5926.5	5932.9	5936.2
12.5°	5798.1	5807.7	5810.9	5807.7	5817.4	5830.2	5846.3	5862.3	5872.0	5884.8	5894.4
15°	5701.8	5701.8	5708.2	5717.9	5724.3	5743.5	5759.6	5778.8	5804.5	5820.6	5836.6
17.5°	5595.9	5602.3	5611.9	5611.9	5624.8	5656.8	5666.5	5695.4	5724.3	5740.3	5772.5
20°	5480.3	5486.7	5496.3	5502.8	5518.8	5544.5	5563.7	5589.4	5621.5	5650.5	5682.5
22.5°	5390.4	5377.6	5383.9	5390.4	5406.5	5428.9	5451.4	5483.5	5515.6	5544.5	5576.6
25°	5217.0	5220.2	5229.9	5236.2	5255.6	5274.8	5300.5	5339.0	5367.9	5400.0	5435.3
27.5°	4982.7	4985.9	5001.9	5001.9	5017.9	5050.1	5066.1	5098.2	5136.8	5168.8	5210.6
30°	4716.2	4722.6	4722.6	4735.4	4745.0	4761.1	4777.2	4809.3	4828.5	4857.4	4915.3
32.5°	4472.2	4478.6	4475.4	4472.2	4462.6	4459.3	4456.1	4462.6	4469.0	4478.6	4501.0
35°	4327.7	4311.6	4298.8	4276.4	4250.7	4218.6	4189.7	4151.2	4115.8	4086.9	4054.8
37.5°	4189.7	4186.4	4167.2	4135.1	4083.7	4025.9	3958.5	3875.0	3791.5	3701.7	3615.0
40°	3997.0	3987.4	3971.3	3926.4	3868.6	3798.0	3708.1	3605.4	3470.5	3332.5	3191.2
42.5°	3669.5	3672.8	3653.5	3618.2	3563.6	3496.2	3403.1	3290.7	3146.3	2982.5	2799.5
45°	3287.5	3287.5	3281.1	3252.2	3213.7	3159.1	3088.5	2995.4	2854.1	2687.1	2491.3
47.5°	2889.4	2892.6	2883.0	2876.6	2860.5	2825.2	2773.9	2703.2	2603.7	2443.1	2247.3
50°	2484.9	2484.9	2501.0	2497.7	2497.7	2484.9	2462.5	2420.7	2334.0	2205.6	2022.6
52.5°	2080.4	2086.8	2096.5	2109.3	2125.3	2151.0	2125.3	2106.1	2051.5	1951.9	1794.7
55°	1663.0	1669.4	1685.5	1707.9	1727.3	1753.0	1759.3	1759.3	1730.4	1663.0	1544.2
57.5°	1306.7	1297.0	1309.9	1329.1	1354.8	1380.5	1399.8	1422.2	1419.0	1374.1	1277.8
60°	982.4	985.6	995.2	1014.5	1033.8	1056.2	1081.9	1101.2	1110.8	1088.4	1027.3
62.5°	715.9	715.9	728.8	748.0	757.7	789.8	805.8	815.5	825.1	821.8	783.4
65°	500.9	507.2	513.7	523.3	532.9	552.2	561.8	581.1	587.5	590.7	561.8
67.5°	353.2	343.5	350.0	356.3	366.0	378.9	398.1	398.1	407.7	407.7	388.5
70°	224.7	224.7	228.0	237.6	244.0	247.2	253.7	260.0	269.7	266.5	266.5
72.5°	150.9	147.7	150.9	154.1	157.3	166.9	166.9	170.2	176.6	179.8	166.9
75°	77.1	80.3	86.6	83.5	93.1	86.6	89.9	99.5	96.3	89.9	89.9
77.5°	64.2	64.2	64.2	61.0	67.4	67.4	64.2	70.6	67.4	67.4	64.2
80°	44.9	48.2	44.9	41.7	44.9	41.7	41.7	41.7	41.7	41.7	38.5
82.5°	35.3	28.9	32.1	28.9	32.1	32.1	28.9	25.7	25.7	28.9	25.7
85°	25.7	19.2	22.5	22.5	19.2	19.2	19.2	19.2	19.2	16.0	16.0
87.5°	16.0	9.7	9.7	9.7	12.8	12.8	12.8	9.7	12.8	12.8	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°	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1
2.5°	5990.8	5987.5	5994.0	5990.8	5990.8	5987.5	5990.8	5987.5	5994.0	5981.1	5984.3
5°	5990.8	5984.3	5987.5	5990.8	5994.0	5987.5	5987.5	5987.5	5994.0	5987.5	5990.8
7.5°	5977.9	5974.7	5984.3	5990.8	5987.5	5984.3	5990.8	5987.5	5994.0	5990.8	5997.1
10°	5952.2	5955.4	5961.8	5971.4	5974.7	5977.9	5984.3	5984.3	5994.0	5981.1	5987.5
12.5°	5913.7	5926.5	5942.6	5949.0	5961.8	5961.8	5968.3	5971.4	5977.9	5974.7	5984.3
15°	5865.5	5881.6	5900.8	5916.9	5932.9	5942.6	5952.2	5955.4	5965.1	5955.4	5958.6
17.5°	5807.7	5827.0	5855.9	5875.1	5900.8	5910.5	5923.3	5929.7	5939.4	5932.9	5936.2
20°	5727.4	5750.0	5782.0	5810.9	5827.0	5849.4	5865.5	5875.1	5881.6	5875.1	5878.3
22.5°	5615.1	5647.2	5689.0	5711.4	5743.5	5762.8	5766.0	5788.5	5804.5	5788.5	5794.9
25°	5483.5	5515.6	5547.7	5595.9	5624.8	5647.2	5669.7	5672.9	5689.0	5685.7	5682.5
27.5°	5265.1	5306.9	5361.5	5400.0	5438.5	5473.9	5499.6	5505.9	5522.0	5515.6	5518.8
30°	4966.6	5011.6	5062.9	5123.9	5178.5	5213.8	5245.9	5268.4	5284.4	5274.8	5271.6
32.5°	4542.8	4587.8	4642.4	4703.3	4767.6	4818.9	4857.4	4886.4	4905.6	4899.2	4883.1
35°	4058.1	4070.9	4106.2	4154.4	4208.9	4263.5	4298.8	4330.9	4353.4	4359.8	4359.8
37.5°	3560.4	3518.7	3493.0	3493.0	3525.1	3547.5	3579.7	3598.9	3634.3	3647.1	3656.7
40°	3078.8	2982.5	2892.6	2825.2	2780.3	2777.1	2777.1	2786.7	2818.8	2860.5	2899.1
42.5°	2648.6	2494.5	2356.5	2231.3	2141.4	2090.0	2067.6	2070.8	2096.5	2135.0	2199.1
45°	2305.1	2112.5	1939.1	1788.2	1666.2	1585.9	1547.5	1544.2	1563.5	1608.4	1679.1
47.5°	2038.7	1833.2	1637.3	1464.0	1332.4	1245.6	1200.7	1187.9	1200.7	1242.4	1325.9
50°	1817.1	1605.3	1403.0	1223.2	1081.9	992.1	950.3	934.3	950.3	985.6	1069.1
52.5°	1611.6	1393.3	1203.9	1030.6	879.7	802.6	757.7	748.0	757.7	799.4	866.9
55°	1374.1	1187.9	1001.7	828.3	696.7	619.6	584.3	574.7	584.3	622.9	693.5
57.5°	1139.8	979.2	815.5	658.1	545.8	478.3	446.3	433.4	455.9	481.5	565.0
60°	921.4	793.0	654.9	516.9	423.8	362.8	337.1	333.9	340.3	372.4	430.2
62.5°	722.4	616.4	507.2	394.9	317.8	292.1	260.0	256.9	263.2	282.5	327.5
65°	520.1	452.7	369.2	288.9	228.0	192.6	179.8	183.0	189.4	202.3	244.0
67.5°	362.8	314.6	256.9	202.3	157.3	141.2	128.4	125.2	128.4	150.9	173.4
70°	244.0	215.1	173.4	154.1	109.2	86.6	89.9	80.3	93.1	93.1	112.3
72.5°	160.5	141.2	115.6	89.9	77.1	61.0	61.0	57.8	64.2	67.4	83.5
75°	83.5	64.2	64.2	44.9	32.1	16.0	28.9	25.7	22.5	25.7	32.1
77.5°	57.8	48.2	44.9	35.3	32.1	25.7	25.7	25.7	25.7	28.9	32.1
80°	35.3	35.3	25.7	22.5	19.2	16.0	19.2	19.2	19.2	19.2	22.5
82.5°	22.5	19.2	19.2	16.0	16.0	12.8	12.8	12.8	12.8	12.8	19.2
85°	19.2	12.8	12.8	9.7	12.8	22.5	9.7	12.8	12.8	12.8	9.7
87.5°	6.4	9.7	9.7	9.7	6.4	3.2	6.4	9.7	9.7	16.0	12.8
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1	5981.1
2.5°	5990.8	5994.0	5994.0	5990.8	5990.8	5984.3	5997.1	5987.5	5990.8	6003.6	5994.0
5°	5997.1	6000.3	6000.3	5997.1	5997.1	5997.1	6000.3	6000.3	5997.1	5994.0	6000.3
7.5°	6010.0	6006.8	6006.8	6000.3	6000.3	5994.0	6000.3	5990.8	5997.1	5990.8	6000.3
10°	5994.0	5997.1	5994.0	5990.8	5990.8	5987.5	5987.5	5977.9	5981.1	5971.4	5977.9
12.5°	5984.3	5981.1	5981.1	5974.7	5968.3	5961.8	5958.6	5949.0	5949.0	5926.5	5936.2
15°	5958.6	5961.8	5952.2	5939.4	5932.9	5916.9	5910.5	5897.6	5884.8	5868.8	5872.0
17.5°	5936.2	5926.5	5913.7	5900.8	5875.1	5862.3	5849.4	5830.2	5823.8	5804.5	5798.1
20°	5868.8	5862.3	5846.3	5823.8	5807.7	5778.8	5766.0	5746.8	5730.7	5711.4	5701.8
22.5°	5782.0	5775.6	5756.4	5733.9	5708.2	5695.4	5682.5	5647.2	5631.1	5611.9	5608.7
25°	5672.9	5663.3	5644.0	5618.3	5605.4	5570.2	5557.3	5531.6	5525.2	5505.9	5502.8
27.5°	5505.9	5493.1	5470.6	5438.5	5416.1	5393.6	5380.8	5361.5	5355.1	5335.8	5332.6
30°	5255.6	5239.5	5194.5	5181.7	5143.2	5120.7	5120.7	5095.0	5098.2	5085.4	5085.4
32.5°	4860.7	4835.0	4799.6	4773.9	4748.3	4735.4	4735.4	4725.8	4732.2	4732.2	4738.7
35°	4337.3	4302.1	4282.7	4266.7	4266.7	4279.5	4318.1	4327.7	4347.0	4363.0	4375.9
37.5°	3666.3	3663.2	3685.6	3704.9	3753.0	3807.6	3875.0	3932.9	3987.4	4025.9	4064.4
40°	2940.8	3021.1	3085.2	3175.2	3249.0	3354.9	3476.9	3576.5	3669.5	3737.0	3807.6
42.5°	2295.5	2398.2	2533.1	2664.7	2796.3	2940.8	3101.3	3239.4	3361.4	3454.5	3528.3
45°	1788.2	1929.5	2093.3	2260.2	2430.3	2610.1	2777.1	2918.3	3046.8	3143.1	3216.9
47.5°	1441.5	1595.6	1781.8	1964.8	2157.4	2346.8	2533.1	2655.1	2761.0	2838.0	2905.5
50°	1191.1	1354.8	1550.7	1759.3	1951.9	2141.4	2301.9	2420.7	2507.4	2574.8	2616.5
52.5°	995.2	1168.6	1377.3	1585.9	1778.6	1951.9	2096.5	2186.3	2257.0	2305.1	2343.6
55°	821.8	988.8	1184.7	1380.5	1569.9	1733.6	1852.4	1919.9	1974.4	2003.3	2025.8
57.5°	671.0	825.1	1004.9	1184.7	1348.4	1483.3	1576.4	1643.8	1669.4	1691.9	1688.7
60°	526.6	671.0	834.7	988.8	1130.1	1239.2	1306.7	1345.2	1364.4	1374.1	1367.6
62.5°	414.1	545.8	671.0	805.8	908.6	1001.7	1065.9	1065.9	1075.5	1078.7	1088.4
65°	308.2	407.7	516.9	616.4	699.8	760.9	796.2	805.8	818.7	815.5	809.0
67.5°	228.0	301.8	382.0	455.9	513.7	552.2	577.9	600.4	597.2	590.7	587.5
70°	157.3	205.5	276.1	321.1	362.8	401.3	407.7	410.9	414.1	417.4	410.9
72.5°	109.2	144.5	183.0	221.5	247.2	263.2	279.3	282.5	282.5	282.5	279.3
75°	54.6	73.8	109.2	125.2	147.7	154.1	166.9	166.9	176.6	163.7	160.5
77.5°	48.2	57.8	77.1	89.9	99.5	109.2	112.3	122.0	118.8	112.3	115.6
80°	28.9	35.3	48.2	54.6	67.4	70.6	73.8	77.1	73.8	77.1	77.1
82.5°	22.5	25.7	32.1	32.1	41.7	41.7	44.9	44.9	48.2	48.2	48.2
85°	12.8	22.5	19.2	38.5	25.7	25.7	32.1	38.5	32.1	32.1	38.5
87.5°	12.8	12.8	9.7	12.8	12.8	12.8	16.0	19.2	19.2	22.5	19.2
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: P249610

CATALOG NUMBER: LSR8B150D010 EC8B1509727 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5981.1	5981.1	5981.1	5981.1
2.5°	5990.8	5997.1	5987.5	5984.3
5°	6000.3	6000.3	5994.0	5994.0
7.5°	6000.3	6000.3	5990.8	5984.3
10°	5974.7	5974.7	5965.1	5958.6
12.5°	5926.5	5926.5	5923.3	5913.7
15°	5865.5	5865.5	5852.7	5843.1
17.5°	5782.0	5788.5	5772.5	5772.5
20°	5692.2	5689.0	5676.1	5669.7
22.5°	5599.1	5592.6	5589.4	5570.2
25°	5499.6	5493.1	5483.5	5473.9
27.5°	5329.4	5326.2	5316.5	5303.7
30°	5069.3	5066.1	5053.3	5053.3
32.5°	4732.2	4729.0	4716.2	4719.4
35°	4382.3	4395.1	4388.7	4375.9
37.5°	4090.1	4099.8	4106.2	4099.8
40°	3846.1	3875.0	3878.3	3884.7
42.5°	3586.1	3624.6	3637.5	3643.9
45°	3274.6	3310.0	3338.9	3332.5
47.5°	2956.8	2982.5	3008.2	2988.9
50°	2651.9	2667.9	2677.5	2677.5
52.5°	2362.9	2362.9	2359.7	2362.9
55°	2032.2	2032.2	2019.4	2025.8
57.5°	1685.5	1691.9	1682.3	1666.2
60°	1364.4	1348.4	1342.0	1332.4
62.5°	1062.7	1062.7	1040.2	1069.1
65°	796.2	786.6	776.9	773.7
67.5°	577.9	574.7	565.0	561.8
70°	407.7	394.9	391.7	385.2
72.5°	272.9	272.9	266.5	266.5
75°	166.9	150.9	147.7	150.9
77.5°	115.6	112.3	112.3	109.2
80°	77.1	73.8	80.3	70.6
82.5°	48.2	51.4	48.2	51.4
85°	32.1	38.5	35.3	35.3
87.5°	19.2	19.2	19.2	19.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)