

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: P249158

Luminaire Tested: **LSR8B100D010 EC8B100940 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249158  
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: LSR8B100D010 EC8B100940 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9824.0 lumens  
Efficiency: N/A  
Efficacy: 92.4 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

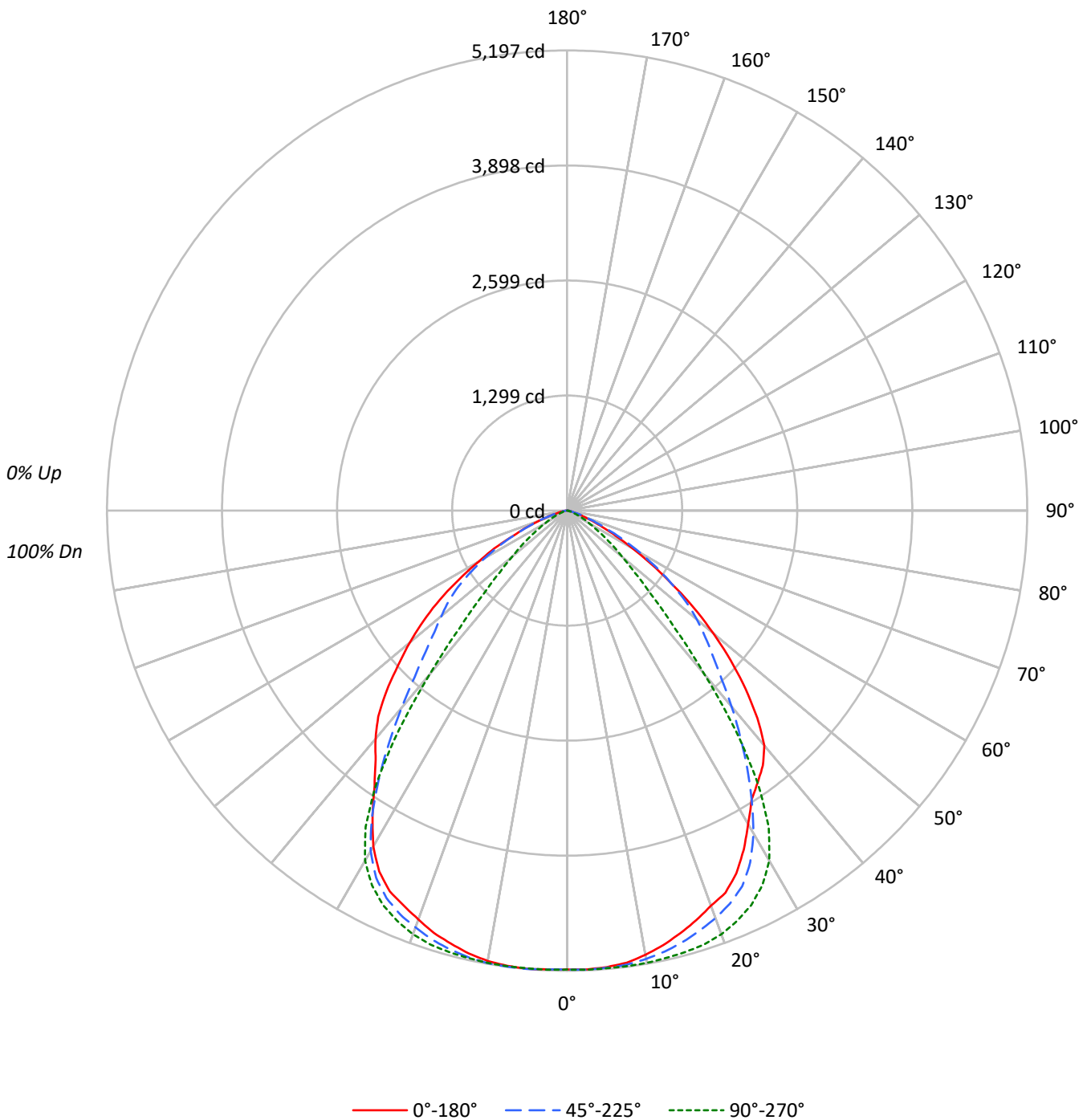
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	159834	159834	159834
5°	160187	160618	160791
10°	159513	162387	161692
15°	157747	164763	161654
20°	155850	167079	161238
25°	153826	167273	161404
30°	145532	162570	155932
35°	141185	141286	142754
40°	139436	97213	135519
45°	124242	58362	125943
50°	103309	38839	111316
55°	77481	26779	94384
60°	52508	17842	71213
65°	31674	11572	48923
70°	17563	6275	30104
75°	7959	2657	15584
80°	6908	2966	10868
85°	7890	3927	10826



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	494.7	5.0
10°-20°	1436.6	14.6
20°-30°	2180.5	22.2
30°-40°	2290.2	23.3
40°-50°	1717.0	17.5
50°-60°	1101.7	11.2
60°-70°	471.3	4.8
70°-80°	111.3	1.1
80°-90°	20.7	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°	4111.8	41.9
0°-40°	6402.0	65.2
0°-60°	9220.7	93.9
0°-90°	9824.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9824.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5183	5183	5183	5183	5183	
5°	5175	5183	5189	5197	5194	492
15°	4941	5044	5161	5128	5064	1394
25°	4521	4680	4916	4827	4744	2065
35°	3750	3542	3753	3709	3792	2354
45°	2849	2329	1338	2262	2888	2182
55°	1441	1441	498	1502	1756	1307
65°	434	512	159	659	670	463
75°	67	78	22	134	131	97
85°	22	14	11	22	31	23
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°	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3
2.5°	5186.1	5191.7	5188.9	5188.9	5186.1	5188.9	5188.9	5194.5	5194.5	5188.9	5186.1
5°	5175.0	5180.5	5180.5	5175.0	5175.0	5188.9	5180.5	5186.1	5186.1	5183.3	5183.3
7.5°	5150.0	5150.0	5161.1	5152.8	5152.8	5161.1	5158.3	5163.9	5169.4	5172.2	5172.2
10°	5094.3	5099.9	5102.7	5102.7	5105.5	5113.8	5119.3	5130.5	5136.0	5141.6	5144.4
12.5°	5024.8	5033.1	5035.9	5033.1	5041.5	5052.6	5066.5	5080.4	5088.8	5099.9	5108.2
15°	4941.3	4941.3	4946.8	4955.2	4960.8	4977.5	4991.4	5008.0	5030.3	5044.3	5058.1
17.5°	4849.5	4855.1	4863.4	4863.4	4874.5	4902.3	4910.7	4935.7	4960.8	4974.7	5002.5
20°	4749.3	4754.9	4763.2	4768.8	4782.7	4805.0	4821.6	4843.9	4871.7	4896.8	4924.6
22.5°	4671.4	4660.3	4665.8	4671.4	4685.3	4704.8	4724.3	4752.1	4779.9	4805.0	4832.8
25°	4521.1	4523.9	4532.3	4537.8	4554.6	4571.3	4593.5	4626.9	4651.9	4679.8	4710.3
27.5°	4318.1	4320.9	4334.8	4334.8	4348.6	4376.5	4390.4	4418.2	4451.6	4479.4	4515.6
30°	4087.2	4092.7	4092.7	4103.8	4112.1	4126.1	4140.0	4167.8	4184.5	4209.6	4259.7
32.5°	3875.7	3881.2	3878.4	3875.7	3867.3	3864.5	3861.8	3867.3	3872.9	3881.2	3900.7
35°	3750.5	3736.6	3725.5	3706.0	3683.7	3655.9	3630.8	3597.5	3566.8	3541.8	3514.0
37.5°	3630.8	3628.0	3611.4	3583.5	3539.0	3489.0	3430.5	3358.2	3285.8	3207.9	3132.8
40°	3463.9	3455.5	3441.6	3402.7	3352.6	3291.4	3213.5	3124.5	3007.6	2888.0	2765.6
42.5°	3180.1	3182.9	3166.2	3135.6	3088.3	3029.8	2949.2	2851.8	2726.6	2584.7	2426.1
45°	2849.0	2849.0	2843.5	2818.4	2785.0	2737.7	2676.5	2595.9	2473.5	2328.7	2159.0
47.5°	2504.0	2506.8	2498.4	2492.9	2479.0	2448.4	2403.9	2342.7	2256.4	2117.3	1947.6
50°	2153.5	2153.5	2167.4	2164.6	2164.6	2153.5	2134.0	2097.8	2022.7	1911.4	1752.9
52.5°	1802.9	1808.5	1816.8	1827.9	1841.8	1864.1	1841.8	1825.2	1777.8	1691.6	1555.3
55°	1441.2	1446.8	1460.7	1480.1	1496.9	1519.1	1524.7	1524.7	1499.6	1441.2	1338.3
57.5°	1132.4	1124.0	1135.2	1151.9	1174.1	1196.4	1213.1	1232.5	1229.7	1190.8	1107.3
60°	851.4	854.2	862.5	879.2	895.9	915.4	937.6	954.3	962.7	943.2	890.3
62.5°	620.5	620.5	631.6	648.2	656.6	684.4	698.3	706.7	715.0	712.2	678.9
65°	434.1	439.6	445.2	453.5	461.8	478.5	486.9	503.6	509.2	511.9	486.9
67.5°	306.1	297.7	303.3	308.8	317.2	328.3	345.0	345.0	353.3	353.3	336.6
70°	194.8	194.8	197.6	205.9	211.4	214.2	219.8	225.3	233.7	230.9	230.9
72.5°	130.8	128.0	130.8	133.6	136.4	144.7	144.7	147.5	153.0	155.8	144.7
75°	66.8	69.6	75.1	72.4	80.7	75.1	77.9	86.3	83.5	77.9	77.9
77.5°	55.6	55.6	55.6	52.9	58.4	58.4	55.6	61.2	58.4	58.4	55.6
80°	38.9	41.7	38.9	36.1	38.9	36.1	36.1	36.1	36.1	36.1	33.4
82.5°	30.6	25.1	27.8	25.1	27.8	27.8	25.1	22.3	22.3	25.1	22.3
85°	22.3	16.7	19.5	19.5	16.7	16.7	16.7	16.7	16.7	13.9	13.9
87.5°	13.9	8.4	8.4	8.4	11.1	11.1	11.1	8.4	11.1	11.1	5.6
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°	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3
2.5°	5191.7	5188.9	5194.5	5191.7	5191.7	5188.9	5191.7	5188.9	5194.5	5183.3	5186.1
5°	5191.7	5186.1	5188.9	5191.7	5194.5	5188.9	5188.9	5188.9	5194.5	5188.9	5191.7
7.5°	5180.5	5177.8	5186.1	5191.7	5188.9	5186.1	5191.7	5188.9	5194.5	5191.7	5197.2
10°	5158.3	5161.1	5166.7	5175.0	5177.8	5180.5	5186.1	5186.1	5194.5	5183.3	5188.9
12.5°	5124.9	5136.0	5150.0	5155.5	5166.7	5166.7	5172.2	5175.0	5180.5	5177.8	5186.1
15°	5083.2	5097.1	5113.8	5127.7	5141.6	5150.0	5158.3	5161.1	5169.4	5161.1	5163.9
17.5°	5033.1	5049.8	5074.8	5091.5	5113.8	5122.1	5133.2	5138.8	5147.2	5141.6	5144.4
20°	4963.5	4983.1	5010.8	5035.9	5049.8	5069.2	5083.2	5091.5	5097.1	5091.5	5094.3
22.5°	4866.2	4894.0	4930.2	4949.6	4977.5	4994.1	4996.9	5016.4	5030.3	5016.4	5022.0
25°	4752.1	4779.9	4807.8	4849.5	4874.5	4894.0	4913.5	4916.3	4930.2	4927.4	4924.6
27.5°	4562.9	4599.1	4646.3	4679.8	4713.1	4743.8	4766.0	4771.5	4785.5	4779.9	4782.7
30°	4304.1	4343.1	4387.6	4440.5	4487.8	4518.4	4546.2	4565.7	4579.6	4571.3	4568.5
32.5°	3936.9	3975.8	4023.2	4076.0	4131.7	4176.1	4209.6	4234.6	4251.3	4245.7	4231.8
35°	3516.8	3527.9	3558.5	3600.3	3647.5	3694.8	3725.5	3753.2	3772.7	3778.3	3778.3
37.5°	3085.5	3049.4	3027.1	3027.1	3054.9	3074.4	3102.2	3118.9	3149.5	3160.6	3169.0
40°	2668.2	2584.7	2506.8	2448.4	2409.5	2406.7	2406.7	2415.0	2442.8	2479.0	2512.4
42.5°	2295.4	2161.8	2042.2	1933.7	1855.8	1811.3	1791.8	1794.6	1816.8	1850.2	1905.8
45°	1997.7	1830.7	1680.5	1549.7	1444.0	1374.4	1341.1	1338.3	1354.9	1393.9	1455.2
47.5°	1766.7	1588.7	1418.9	1268.7	1154.7	1079.5	1040.6	1029.5	1040.6	1076.7	1149.1
50°	1574.8	1391.2	1215.9	1060.0	937.6	859.7	823.5	809.6	823.5	854.2	926.5
52.5°	1396.7	1207.5	1043.4	893.1	762.3	695.5	656.6	648.2	656.6	692.8	751.2
55°	1190.8	1029.5	868.1	717.8	603.8	537.0	506.4	498.1	506.4	539.8	601.0
57.5°	987.7	848.6	706.7	570.4	473.0	414.5	386.7	375.6	395.1	417.3	489.7
60°	798.5	687.2	567.6	447.9	367.3	314.4	292.1	289.3	294.9	322.8	372.8
62.5°	626.0	534.2	439.6	342.2	275.4	253.2	225.3	222.6	228.1	244.8	283.8
65°	450.7	392.3	320.0	250.4	197.6	166.9	155.8	158.6	164.1	175.3	211.4
67.5°	314.4	272.7	222.6	175.3	136.4	122.4	111.3	108.5	111.3	130.8	150.2
70°	211.4	186.4	150.2	133.6	94.6	75.1	77.9	69.6	80.7	80.7	97.4
72.5°	139.1	122.4	100.1	77.9	66.8	52.9	52.9	50.1	55.6	58.4	72.4
75°	72.4	55.6	55.6	38.9	27.8	13.9	25.1	22.3	19.5	22.3	27.8
77.5°	50.1	41.7	38.9	30.6	27.8	22.3	22.3	22.3	22.3	25.1	27.8
80°	30.6	30.6	22.3	19.5	16.7	13.9	16.7	16.7	16.7	16.7	19.5
82.5°	19.5	16.7	16.7	13.9	13.9	11.1	11.1	11.1	11.1	11.1	16.7
85°	16.7	11.1	11.1	8.4	11.1	19.5	8.4	11.1	11.1	11.1	8.4
87.5°	5.6	8.4	8.4	8.4	5.6	2.8	5.6	8.4	8.4	13.9	11.1
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°	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3	5183.3
2.5°	5191.7	5194.5	5194.5	5191.7	5191.7	5186.1	5197.2	5188.9	5191.7	5202.8	5194.5
5°	5197.2	5200.0	5200.0	5197.2	5197.2	5197.2	5200.0	5200.0	5197.2	5194.5	5200.0
7.5°	5208.4	5205.6	5205.6	5200.0	5200.0	5194.5	5200.0	5191.7	5197.2	5191.7	5200.0
10°	5194.5	5197.2	5194.5	5191.7	5191.7	5188.9	5188.9	5180.5	5183.3	5175.0	5180.5
12.5°	5186.1	5183.3	5183.3	5177.8	5172.2	5166.7	5163.9	5155.5	5155.5	5136.0	5144.4
15°	5163.9	5166.7	5158.3	5147.2	5141.6	5127.7	5122.1	5111.0	5099.9	5086.0	5088.8
17.5°	5144.4	5136.0	5124.9	5113.8	5091.5	5080.4	5069.2	5052.6	5047.0	5030.3	5024.8
20°	5086.0	5080.4	5066.5	5047.0	5033.1	5008.0	4996.9	4980.3	4966.3	4949.6	4941.3
22.5°	5010.8	5005.2	4988.6	4969.1	4946.8	4935.7	4924.6	4894.0	4880.1	4863.4	4860.6
25°	4916.3	4907.9	4891.2	4869.0	4857.8	4827.2	4816.1	4793.8	4788.3	4771.5	4768.8
27.5°	4771.5	4760.4	4741.0	4713.1	4693.7	4674.2	4663.1	4646.3	4640.8	4624.1	4621.4
30°	4554.6	4540.6	4501.7	4490.6	4457.2	4437.7	4437.7	4415.4	4418.2	4407.1	4407.1
32.5°	4212.3	4190.1	4159.5	4137.2	4114.9	4103.8	4103.8	4095.5	4101.0	4101.0	4106.6
35°	3758.8	3728.3	3711.5	3697.6	3697.6	3708.7	3742.1	3750.5	3767.2	3781.1	3792.2
37.5°	3177.3	3174.6	3194.0	3210.7	3252.5	3299.8	3358.2	3408.3	3455.5	3489.0	3522.3
40°	2548.5	2618.1	2673.7	2751.7	2815.6	2907.4	3013.2	3099.4	3180.1	3238.6	3299.8
42.5°	1989.3	2078.3	2195.2	2309.3	2423.3	2548.5	2687.7	2807.3	2913.0	2993.7	3057.7
45°	1549.7	1672.1	1814.1	1958.7	2106.2	2262.0	2406.7	2529.1	2640.4	2723.8	2787.8
47.5°	1249.2	1382.8	1544.1	1702.7	1869.7	2033.8	2195.2	2300.9	2392.7	2459.5	2518.0
50°	1032.2	1174.1	1343.8	1524.7	1691.6	1855.8	1994.9	2097.8	2173.0	2231.4	2267.5
52.5°	862.5	1012.7	1193.6	1374.4	1541.3	1691.6	1816.8	1894.7	1955.9	1997.7	2031.0
55°	712.2	857.0	1026.7	1196.4	1360.5	1502.4	1605.3	1663.8	1711.1	1736.1	1755.6
57.5°	581.5	715.0	870.8	1026.7	1168.5	1285.4	1366.1	1424.5	1446.8	1466.2	1463.5
60°	456.3	581.5	723.4	857.0	979.4	1073.9	1132.4	1165.8	1182.4	1190.8	1185.2
62.5°	358.9	473.0	581.5	698.3	787.4	868.1	923.7	923.7	932.0	934.8	943.2
65°	267.1	353.3	447.9	534.2	606.5	659.4	690.0	698.3	709.5	706.7	701.1
67.5°	197.6	261.6	331.1	395.1	445.2	478.5	500.8	520.3	517.5	511.9	509.2
70°	136.4	178.1	239.3	278.2	314.4	347.8	353.3	356.1	358.9	361.7	356.1
72.5°	94.6	125.2	158.6	192.0	214.2	228.1	242.1	244.8	244.8	244.8	242.1
75°	47.3	64.0	94.6	108.5	128.0	133.6	144.7	144.7	153.0	141.9	139.1
77.5°	41.7	50.1	66.8	77.9	86.3	94.6	97.4	105.7	102.9	97.4	100.1
80°	25.1	30.6	41.7	47.3	58.4	61.2	64.0	66.8	64.0	66.8	66.8
82.5°	19.5	22.3	27.8	27.8	36.1	36.1	38.9	38.9	41.7	41.7	41.7
85°	11.1	19.5	16.7	33.4	22.3	22.3	27.8	33.4	27.8	27.8	33.4
87.5°	11.1	11.1	8.4	11.1	11.1	11.1	13.9	16.7	16.7	19.5	16.7
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: P249158

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5183.3	5183.3	5183.3	5183.3
2.5°	5191.7	5197.2	5188.9	5186.1
5°	5200.0	5200.0	5194.5	5194.5
7.5°	5200.0	5200.0	5191.7	5186.1
10°	5177.8	5177.8	5169.4	5163.9
12.5°	5136.0	5136.0	5133.2	5124.9
15°	5083.2	5083.2	5072.0	5063.7
17.5°	5010.8	5016.4	5002.5	5002.5
20°	4932.9	4930.2	4919.1	4913.5
22.5°	4852.3	4846.7	4843.9	4827.2
25°	4766.0	4760.4	4752.1	4743.8
27.5°	4618.6	4615.8	4607.4	4596.3
30°	4393.2	4390.4	4379.3	4379.3
32.5°	4101.0	4098.3	4087.2	4089.9
35°	3797.8	3808.9	3803.3	3792.2
37.5°	3544.6	3553.0	3558.5	3553.0
40°	3333.1	3358.2	3361.0	3366.6
42.5°	3107.8	3141.2	3152.3	3157.8
45°	2837.9	2868.5	2893.6	2888.0
47.5°	2562.4	2584.7	2607.0	2590.3
50°	2298.2	2312.0	2320.4	2320.4
52.5°	2047.8	2047.8	2045.0	2047.8
55°	1761.2	1761.2	1750.1	1755.6
57.5°	1460.7	1466.2	1457.9	1444.0
60°	1182.4	1168.5	1163.0	1154.7
62.5°	920.9	920.9	901.5	926.5
65°	690.0	681.7	673.3	670.5
67.5°	500.8	498.1	489.7	486.9
70°	353.3	342.2	339.4	333.9
72.5°	236.5	236.5	230.9	230.9
75°	144.7	130.8	128.0	130.8
77.5°	100.1	97.4	97.4	94.6
80°	66.8	64.0	69.6	61.2
82.5°	41.7	44.5	41.7	44.5
85°	27.8	33.4	30.6	30.6
87.5°	16.7	16.7	16.7	16.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)