

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: P249446

Luminaire Tested: **LSR8B100D010 EC8B100850 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249446  
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 EC8B100850 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9887.0 lumens  
Efficiency: N/A  
Efficacy: 93.0 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

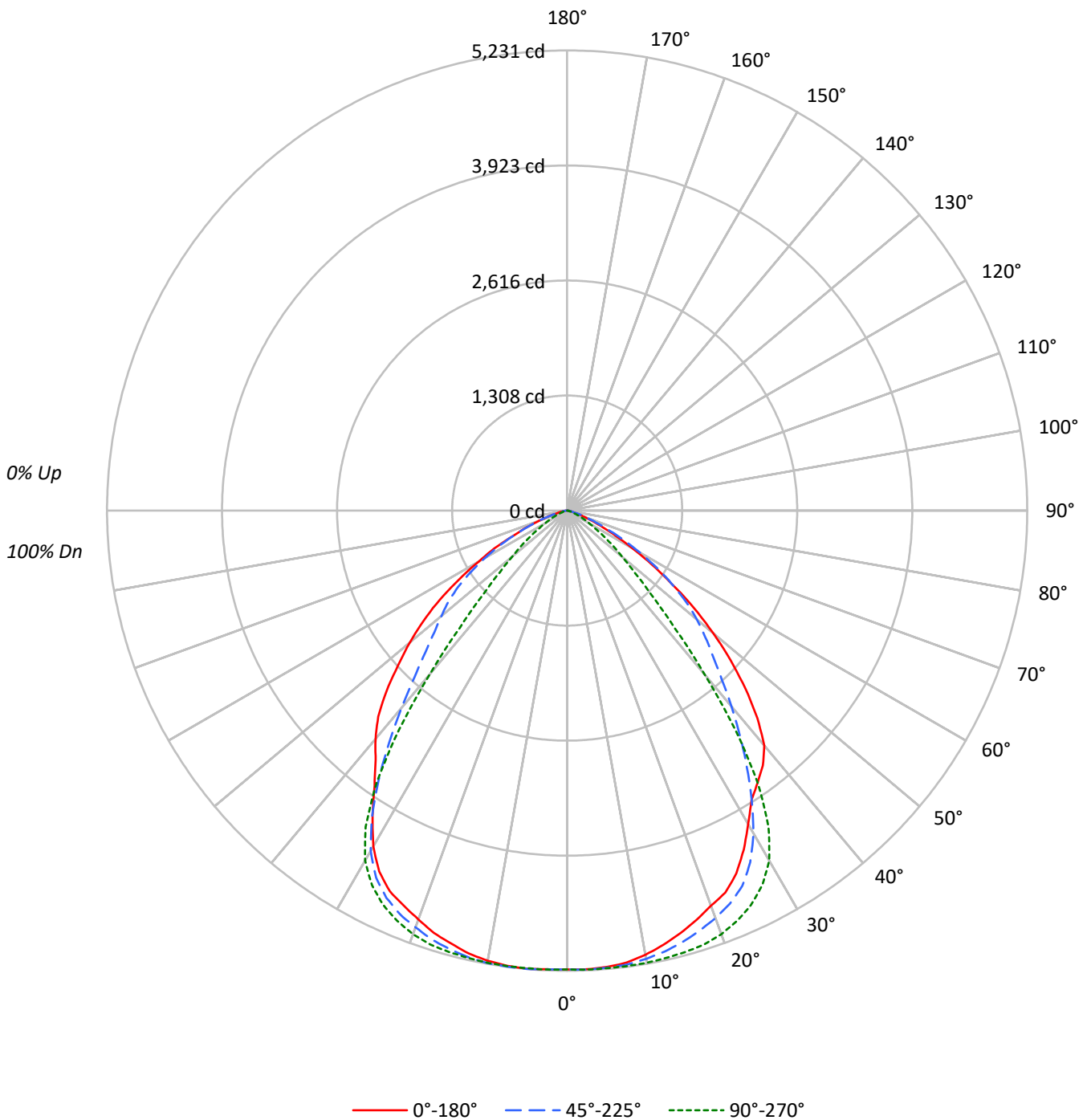
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	160861	160861	160861
5°	161212	161649	161822
10°	160537	163430	162729
15°	158755	165820	162692
20°	156851	168152	162272
25°	154813	168344	162438
30°	146465	163609	156933
35°	142092	142193	143673
40°	140329	97837	136384
45°	125040	58733	126750
50°	103971	39088	112031
55°	77976	26945	94986
60°	52841	17959	71670
65°	31871	11645	49237
70°	17671	6311	30294
75°	8006	2669	15679
80°	6961	2983	10939
85°	7925	3963	10897



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	497.9	5.0
10°-20°	1445.8	14.6
20°-30°	2194.5	22.2
30°-40°	2304.9	23.3
40°-50°	1728.0	17.5
50°-60°	1108.7	11.2
60°-70°	474.3	4.8
70°-80°	112.1	1.1
80°-90°	20.8	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°	4138.2	41.9
0°-40°	6443.0	65.2
0°-60°	9279.8	93.9
0°-90°	9887.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9887.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5217	5217	5217	5217	5217	
5°	5208	5217	5222	5231	5228	495
15°	4973	5077	5194	5161	5096	1403
25°	4550	4710	4948	4858	4774	2079
35°	3775	3564	3777	3732	3817	2369
45°	2867	2344	1347	2276	2906	2196
55°	1450	1450	501	1512	1767	1316
65°	437	515	160	664	675	466
75°	67	78	22	134	132	98
85°	22	14	11	22	31	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°	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6
2.5°	5219.4	5225.0	5222.2	5222.2	5219.4	5222.2	5222.2	5227.8	5227.8	5222.2	5219.4
5°	5208.1	5213.8	5213.8	5208.1	5208.1	5222.2	5213.8	5219.4	5219.4	5216.6	5216.6
7.5°	5183.0	5183.0	5194.2	5185.8	5185.8	5194.2	5191.4	5197.0	5202.6	5205.4	5205.4
10°	5127.0	5132.6	5135.4	5135.4	5138.2	5146.6	5152.2	5163.4	5169.0	5174.6	5177.4
12.5°	5057.0	5065.4	5068.2	5065.4	5073.8	5085.0	5099.0	5113.0	5121.4	5132.6	5141.0
15°	4972.9	4972.9	4978.6	4987.0	4992.6	5009.4	5023.4	5040.2	5062.6	5076.6	5090.6
17.5°	4880.6	4886.2	4894.6	4894.6	4905.8	4933.8	4942.2	4967.4	4992.6	5006.6	5034.6
20°	4779.8	4785.4	4793.8	4799.4	4813.4	4835.8	4852.6	4875.0	4903.0	4928.2	4956.2
22.5°	4701.4	4690.2	4695.7	4701.4	4715.4	4735.0	4754.6	4782.5	4810.6	4835.8	4863.8
25°	4550.1	4553.0	4561.4	4566.9	4583.8	4600.6	4623.0	4656.5	4681.8	4709.8	4740.5
27.5°	4345.8	4348.6	4362.6	4362.6	4376.5	4404.5	4418.5	4446.5	4480.2	4508.1	4544.6
30°	4113.4	4118.9	4118.9	4130.2	4138.5	4152.6	4166.5	4194.6	4211.3	4236.6	4287.0
32.5°	3900.6	3906.1	3903.3	3900.6	3892.1	3889.3	3886.5	3892.1	3897.8	3906.1	3925.7
35°	3774.6	3760.5	3749.4	3729.8	3707.4	3679.3	3654.1	3620.5	3589.7	3564.5	3536.5
37.5°	3654.1	3651.3	3634.5	3606.5	3561.7	3511.3	3452.5	3379.7	3306.9	3228.5	3152.9
40°	3486.1	3477.7	3463.7	3424.5	3374.1	3312.5	3234.1	3144.5	3026.9	2906.5	2783.3
42.5°	3200.5	3203.3	3186.5	3155.7	3108.1	3049.3	2968.1	2870.1	2744.1	2601.3	2441.7
45°	2867.3	2867.3	2861.7	2836.5	2802.9	2755.3	2693.7	2612.5	2489.3	2343.7	2172.8
47.5°	2520.1	2522.9	2514.5	2508.9	2494.9	2464.1	2419.3	2357.7	2270.9	2130.9	1960.0
50°	2167.3	2167.3	2181.3	2178.5	2178.5	2167.3	2147.7	2111.3	2035.7	1923.7	1764.1
52.5°	1814.5	1820.1	1828.5	1839.7	1853.6	1876.0	1853.6	1836.9	1789.2	1702.4	1565.3
55°	1450.4	1456.1	1470.0	1489.6	1506.5	1528.9	1534.4	1534.4	1509.2	1450.4	1346.8
57.5°	1139.7	1131.2	1142.5	1159.3	1181.7	1204.1	1220.8	1240.4	1237.6	1198.4	1114.4
60°	856.8	859.6	868.0	884.9	901.6	921.2	943.6	960.4	968.9	949.3	896.0
62.5°	624.4	624.4	635.6	652.4	660.8	688.8	702.8	711.2	719.6	716.8	683.2
65°	436.8	442.4	448.0	456.4	464.8	481.6	490.0	506.8	512.4	515.2	490.0
67.5°	308.0	299.6	305.2	310.8	319.2	330.4	347.2	347.2	355.6	355.6	338.8
70°	196.0	196.0	198.8	207.2	212.8	215.6	221.2	226.8	235.2	232.4	232.4
72.5°	131.6	128.8	131.6	134.4	137.2	145.6	145.6	148.4	154.0	156.8	145.6
75°	67.2	70.0	75.6	72.8	81.2	75.6	78.4	86.8	84.0	78.4	78.4
77.5°	56.0	56.0	56.0	53.2	58.8	58.8	56.0	61.6	58.8	58.8	56.0
80°	39.2	42.0	39.2	36.4	39.2	36.4	36.4	36.4	36.4	36.4	33.6
82.5°	30.8	25.2	28.0	25.2	28.0	28.0	25.2	22.4	22.4	25.2	22.4
85°	22.4	16.8	19.6	19.6	16.8	16.8	16.8	16.8	16.8	14.0	14.0
87.5°	14.0	8.4	8.4	8.4	11.2	11.2	11.2	8.4	11.2	11.2	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°	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6
2.5°	5225.0	5222.2	5227.8	5225.0	5225.0	5222.2	5225.0	5222.2	5227.8	5216.6	5219.4
5°	5225.0	5219.4	5222.2	5225.0	5227.8	5222.2	5222.2	5222.2	5227.8	5222.2	5225.0
7.5°	5213.8	5211.0	5219.4	5225.0	5222.2	5219.4	5225.0	5222.2	5227.8	5225.0	5230.6
10°	5191.4	5194.2	5199.8	5208.1	5211.0	5213.8	5219.4	5219.4	5227.8	5216.6	5222.2
12.5°	5157.8	5169.0	5183.0	5188.6	5199.8	5199.8	5205.4	5208.1	5213.8	5211.0	5219.4
15°	5115.8	5129.8	5146.6	5160.6	5174.6	5183.0	5191.4	5194.2	5202.6	5194.2	5197.0
17.5°	5065.4	5082.2	5107.4	5124.2	5146.6	5155.0	5166.2	5171.8	5180.2	5174.6	5177.4
20°	4995.3	5015.0	5043.0	5068.2	5082.2	5101.7	5115.8	5124.2	5129.8	5124.2	5127.0
22.5°	4897.4	4925.4	4961.8	4981.4	5009.4	5026.2	5029.0	5048.6	5062.6	5048.6	5054.2
25°	4782.5	4810.6	4838.6	4880.6	4905.8	4925.4	4945.0	4947.8	4961.8	4959.0	4956.2
27.5°	4592.1	4628.6	4676.1	4709.8	4743.4	4774.2	4796.6	4802.1	4816.2	4810.6	4813.4
30°	4331.7	4371.0	4415.8	4469.0	4516.6	4547.3	4575.4	4594.9	4608.9	4600.6	4597.8
32.5°	3962.2	4001.3	4049.0	4102.1	4158.2	4202.9	4236.6	4261.8	4278.6	4272.9	4259.0
35°	3539.4	3550.5	3581.4	3623.4	3670.9	3718.5	3749.4	3777.3	3796.9	3802.5	3802.5
37.5°	3105.3	3068.9	3046.5	3046.5	3074.5	3094.1	3122.1	3138.9	3169.7	3180.9	3189.3
40°	2685.3	2601.3	2522.9	2464.1	2424.9	2422.1	2422.1	2430.5	2458.5	2494.9	2528.5
42.5°	2310.1	2175.7	2055.3	1946.1	1867.7	1822.9	1803.3	1806.1	1828.5	1862.1	1918.0
45°	2010.5	1842.5	1691.3	1559.6	1453.2	1383.2	1349.7	1346.8	1363.6	1402.8	1464.5
47.5°	1778.1	1598.8	1428.0	1276.8	1162.1	1086.4	1047.2	1036.1	1047.2	1083.6	1156.4
50°	1584.9	1400.1	1223.7	1066.8	943.6	865.3	828.8	814.8	828.8	859.6	932.4
52.5°	1405.6	1215.2	1050.0	898.8	767.2	700.0	660.8	652.4	660.8	697.2	756.0
55°	1198.4	1036.1	873.6	722.4	607.6	540.4	509.6	501.2	509.6	543.2	604.8
57.5°	994.1	854.0	711.2	574.0	476.0	417.2	389.2	378.0	397.6	420.0	492.8
60°	803.6	691.6	571.2	450.8	369.6	316.4	294.0	291.2	296.8	324.8	375.2
62.5°	630.1	537.6	442.4	344.4	277.2	254.8	226.8	224.0	229.6	246.4	285.6
65°	453.6	394.8	322.0	252.0	198.8	168.0	156.8	159.6	165.2	176.4	212.8
67.5°	316.4	274.4	224.0	176.4	137.2	123.2	112.0	109.2	112.0	131.6	151.2
70°	212.8	187.6	151.2	134.4	95.2	75.6	78.4	70.0	81.2	81.2	98.0
72.5°	140.0	123.2	100.8	78.4	67.2	53.2	53.2	50.4	56.0	58.8	72.8
75°	72.8	56.0	56.0	39.2	28.0	14.0	25.2	22.4	19.6	22.4	28.0
77.5°	50.4	42.0	39.2	30.8	28.0	22.4	22.4	22.4	22.4	25.2	28.0
80°	30.8	30.8	22.4	19.6	16.8	14.0	16.8	16.8	16.8	16.8	19.6
82.5°	19.6	16.8	16.8	14.0	14.0	11.2	11.2	11.2	11.2	11.2	16.8
85°	16.8	11.2	11.2	8.4	11.2	19.6	8.4	11.2	11.2	11.2	8.4
87.5°	5.6	8.4	8.4	8.4	5.6	2.8	5.6	8.4	8.4	14.0	11.2
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°	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6	5216.6
2.5°	5225.0	5227.8	5227.8	5225.0	5225.0	5219.4	5230.6	5222.2	5225.0	5236.2	5227.8
5°	5230.6	5233.4	5233.4	5230.6	5230.6	5230.6	5233.4	5233.4	5230.6	5227.8	5233.4
7.5°	5241.8	5239.0	5239.0	5233.4	5233.4	5227.8	5233.4	5225.0	5230.6	5225.0	5233.4
10°	5227.8	5230.6	5227.8	5225.0	5225.0	5222.2	5222.2	5213.8	5216.6	5208.1	5213.8
12.5°	5219.4	5216.6	5216.6	5211.0	5205.4	5199.8	5197.0	5188.6	5188.6	5169.0	5177.4
15°	5197.0	5199.8	5191.4	5180.2	5174.6	5160.6	5155.0	5143.7	5132.6	5118.6	5121.4
17.5°	5177.4	5169.0	5157.8	5146.6	5124.2	5113.0	5101.7	5085.0	5079.3	5062.6	5057.0
20°	5118.6	5113.0	5099.0	5079.3	5065.4	5040.2	5029.0	5012.2	4998.2	4981.4	4972.9
22.5°	5043.0	5037.3	5020.6	5001.0	4978.6	4967.4	4956.2	4925.4	4911.3	4894.6	4891.8
25°	4947.8	4939.4	4922.6	4900.2	4888.9	4858.2	4846.9	4824.5	4819.0	4802.1	4799.4
27.5°	4802.1	4791.0	4771.4	4743.4	4723.8	4704.2	4693.0	4676.1	4670.6	4653.7	4651.0
30°	4583.8	4569.7	4530.5	4519.4	4485.7	4466.1	4466.1	4443.7	4446.5	4435.4	4435.4
32.5°	4239.4	4217.0	4186.1	4163.7	4141.3	4130.2	4130.2	4121.7	4127.3	4127.3	4133.0
35°	3782.9	3752.2	3735.3	3721.3	3721.3	3732.5	3766.1	3774.6	3791.3	3805.3	3816.6
37.5°	3197.7	3194.9	3214.5	3231.3	3273.3	3320.9	3379.7	3430.1	3477.7	3511.3	3544.9
40°	2564.9	2634.9	2690.9	2769.3	2833.7	2926.1	3032.5	3119.3	3200.5	3259.3	3320.9
42.5°	2002.0	2091.7	2209.3	2324.1	2438.9	2564.9	2704.9	2825.3	2931.7	3012.9	3077.3
45°	1559.6	1682.8	1825.7	1971.3	2119.7	2276.5	2422.1	2545.3	2657.3	2741.3	2805.7
47.5°	1257.2	1391.7	1554.0	1713.7	1881.7	2046.9	2209.3	2315.7	2408.1	2475.3	2534.1
50°	1038.8	1181.7	1352.5	1534.4	1702.4	1867.7	2007.7	2111.3	2186.9	2245.7	2282.1
52.5°	868.0	1019.2	1201.3	1383.2	1551.2	1702.4	1828.5	1906.9	1968.5	2010.5	2044.0
55°	716.8	862.5	1033.3	1204.1	1369.2	1512.0	1615.6	1674.5	1722.0	1747.2	1766.8
57.5°	585.2	719.6	876.4	1033.3	1176.0	1293.7	1374.9	1433.7	1456.1	1475.7	1472.8
60°	459.2	585.2	728.0	862.5	985.6	1080.8	1139.7	1173.2	1190.0	1198.4	1192.8
62.5°	361.2	476.0	585.2	702.8	792.4	873.6	929.7	929.7	938.0	940.8	949.3
65°	268.8	355.6	450.8	537.6	610.4	663.6	694.5	702.8	714.1	711.2	705.6
67.5°	198.8	263.2	333.2	397.6	448.0	481.6	504.0	523.6	520.8	515.2	512.4
70°	137.2	179.2	240.8	280.0	316.4	350.0	355.6	358.4	361.2	364.0	358.4
72.5°	95.2	126.0	159.6	193.2	215.6	229.6	243.6	246.4	246.4	246.4	243.6
75°	47.6	64.4	95.2	109.2	128.8	134.4	145.6	145.6	154.0	142.8	140.0
77.5°	42.0	50.4	67.2	78.4	86.8	95.2	98.0	106.4	103.6	98.0	100.8
80°	25.2	30.8	42.0	47.6	58.8	61.6	64.4	67.2	64.4	67.2	67.2
82.5°	19.6	22.4	28.0	28.0	36.4	36.4	39.2	39.2	42.0	42.0	42.0
85°	11.2	19.6	16.8	33.6	22.4	22.4	28.0	33.6	28.0	28.0	33.6
87.5°	11.2	11.2	8.4	11.2	11.2	11.2	14.0	16.8	16.8	19.6	16.8
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: P249446

CATALOG NUMBER: LSR8B100D010 EC8B100850 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5216.6	5216.6	5216.6	5216.6
2.5°	5225.0	5230.6	5222.2	5219.4
5°	5233.4	5233.4	5227.8	5227.8
7.5°	5233.4	5233.4	5225.0	5219.4
10°	5211.0	5211.0	5202.6	5197.0
12.5°	5169.0	5169.0	5166.2	5157.8
15°	5115.8	5115.8	5104.6	5096.2
17.5°	5043.0	5048.6	5034.6	5034.6
20°	4964.6	4961.8	4950.6	4945.0
22.5°	4883.4	4877.8	4875.0	4858.2
25°	4796.6	4791.0	4782.5	4774.2
27.5°	4648.2	4645.4	4636.9	4625.8
30°	4421.3	4418.5	4407.4	4407.4
32.5°	4127.3	4124.5	4113.4	4116.2
35°	3822.1	3833.3	3827.7	3816.6
37.5°	3567.3	3575.7	3581.4	3575.7
40°	3354.5	3379.7	3382.5	3388.1
42.5°	3127.7	3161.3	3172.5	3178.1
45°	2856.1	2886.9	2912.1	2906.5
47.5°	2578.9	2601.3	2623.7	2606.9
50°	2312.9	2326.9	2335.3	2335.3
52.5°	2060.9	2060.9	2058.1	2060.9
55°	1772.5	1772.5	1761.3	1766.8
57.5°	1470.0	1475.7	1467.2	1453.2
60°	1190.0	1176.0	1170.4	1162.1
62.5°	926.9	926.9	907.3	932.4
65°	694.5	686.0	677.6	674.8
67.5°	504.0	501.2	492.8	490.0
70°	355.6	344.4	341.6	336.0
72.5°	238.0	238.0	232.4	232.4
75°	145.6	131.6	128.8	131.6
77.5°	100.8	98.0	98.0	95.2
80°	67.2	64.4	70.0	61.6
82.5°	42.0	44.8	42.0	44.8
85°	28.0	33.6	30.8	30.8
87.5°	16.8	16.8	16.8	16.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)