

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: P248472

Luminaire Tested: **LSR8B80D010 EC8B80850 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248472  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B80D010 EC8B80850 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8664.0 lumens  
Efficiency: N/A  
Efficacy: 116.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

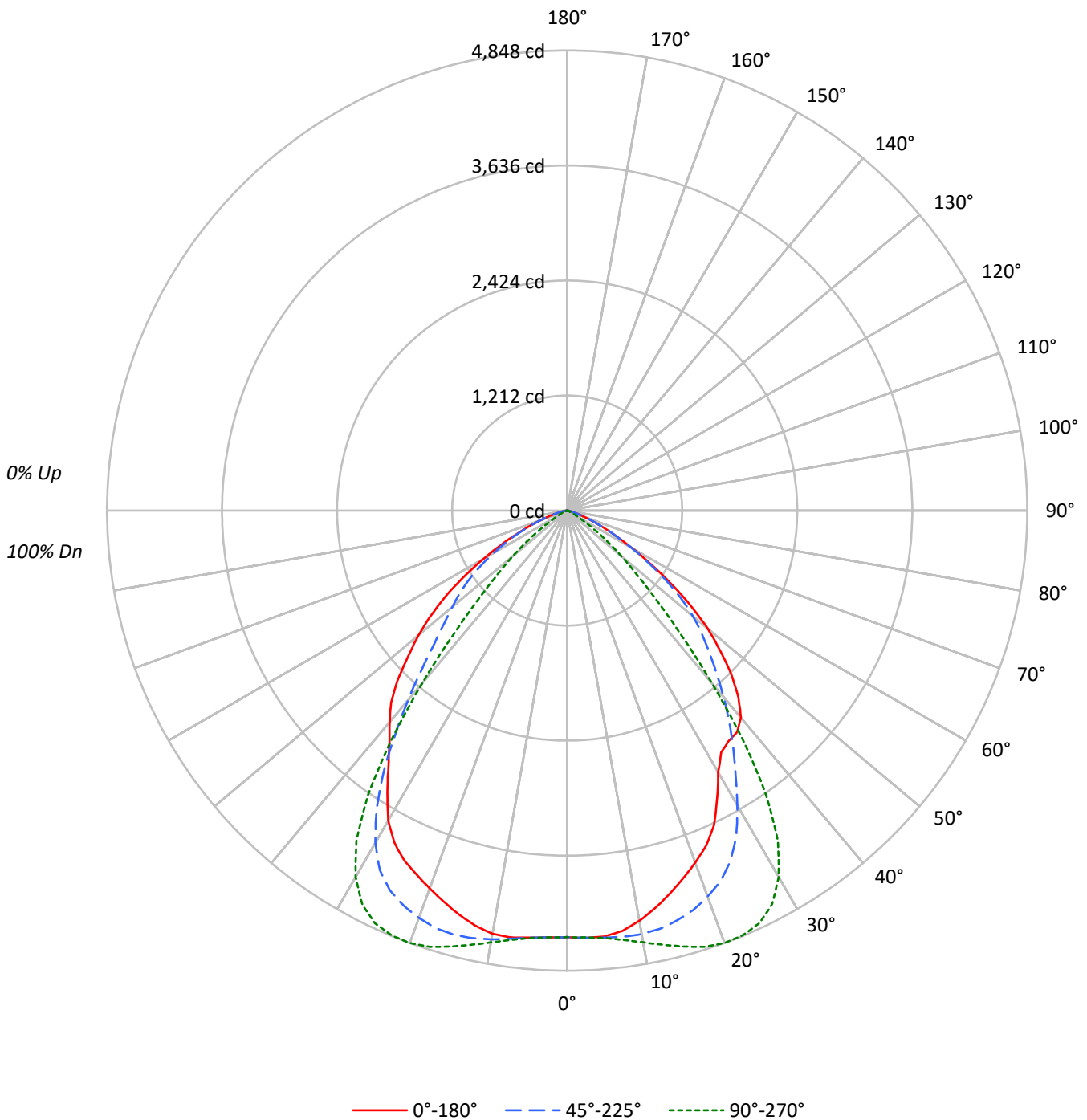
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	138597	138597	138597
5°	139420	139937	139792
10°	137372	144621	141781
15°	133357	151786	140667
20°	129486	159079	138960
25°	124515	163152	138315
30°	113318	158681	134212
35°	111630	137495	123484
40°	114663	95362	117063
45°	106742	57634	110074
50°	92587	35591	98080
55°	71051	18596	83239
60°	48407	7506	62826
65°	30113	3831	43341
70°	16346	2371	26453
75°	8531	1132	15631
80°	3818	1279	8471
85°	2547	849	7607



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	432.2	5.0
10°-20°	1280.5	14.8
20°-30°	1953.5	22.5
30°-40°	2038.5	23.5
40°-50°	1531.2	17.7
50°-60°	942.1	10.9
60°-70°	383.4	4.4
70°-80°	90.3	1.0
80°-90°	12.4	0.1
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°	3666.1	42.3
0°-40°	5704.6	65.8
0°-60°	8177.8	94.4
0°-90°	8664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8664.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4495	4495	4495	4495	4495	
5°	4504	4516	4521	4516	4516	426
15°	4177	4471	4755	4623	4406	1177
25°	3660	4070	4795	4416	4065	1664
35°	2965	3049	3652	3376	3280	1872
45°	2448	2118	1322	1973	2524	1868
55°	1322	1255	346	1255	1548	1188
65°	413	418	52	561	594	430
75°	72	72	10	126	131	86
85°	7	7	2	17	22	10
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°	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6
2.5°	4506.5	4499.4	4506.5	4506.5	4508.9	4504.1	4506.5	4508.9	4504.1	4504.1	4504.1
5°	4504.1	4499.4	4504.1	4501.8	4506.5	4506.5	4511.3	4511.3	4516.1	4516.1	4523.2
7.5°	4466.0	4456.5	4466.0	4473.2	4477.9	4487.5	4499.4	4508.9	4518.5	4528.0	4539.9
10°	4387.2	4387.2	4394.4	4408.7	4423.0	4439.7	4461.2	4485.1	4508.9	4530.4	4551.8
12.5°	4289.5	4282.3	4296.6	4315.7	4337.1	4363.4	4396.8	4432.6	4470.8	4513.7	4547.1
15°	4177.3	4170.1	4186.8	4205.9	4232.2	4270.4	4310.9	4358.6	4413.5	4470.8	4525.6
17.5°	4062.8	4060.4	4077.1	4103.4	4124.8	4165.4	4217.9	4275.1	4337.1	4413.5	4485.1
20°	3945.9	3943.5	3960.2	3981.7	4010.3	4048.5	4101.0	4167.7	4241.7	4327.6	4411.1
22.5°	3824.2	3826.6	3840.9	3864.8	3888.7	3929.2	3984.0	4050.9	4132.0	4225.0	4318.1
25°	3659.6	3647.7	3666.8	3690.7	3731.2	3764.6	3817.1	3888.7	3972.1	4070.0	4179.7
27.5°	3421.0	3418.6	3435.4	3456.8	3492.6	3533.2	3590.4	3664.4	3752.7	3860.0	3967.3
30°	3182.5	3187.2	3194.4	3215.9	3239.7	3280.3	3337.6	3399.6	3483.1	3585.6	3700.2
32.5°	3020.2	3020.2	3029.8	3044.1	3060.8	3082.3	3122.9	3168.2	3232.6	3304.2	3387.6
35°	2965.4	2955.9	2965.4	2967.8	2970.2	2974.9	2982.1	2996.4	3017.8	3048.9	3079.9
37.5°	2941.6	2934.4	2934.4	2924.9	2912.9	2898.6	2879.5	2858.0	2834.2	2803.1	2779.3
40°	2848.5	2843.7	2838.9	2829.4	2803.1	2774.5	2743.5	2693.4	2638.5	2562.2	2485.9
42.5°	2669.6	2664.8	2662.4	2643.3	2619.4	2586.1	2550.3	2497.8	2428.6	2330.8	2221.1
45°	2447.7	2438.1	2431.0	2414.3	2397.6	2369.0	2335.6	2287.8	2218.7	2118.5	1987.3
47.5°	2190.1	2185.3	2182.9	2175.8	2159.1	2142.3	2120.9	2082.7	2020.7	1925.2	1789.3
50°	1930.0	1920.5	1925.2	1922.9	1915.7	1903.8	1889.4	1863.2	1815.5	1729.6	1605.6
52.5°	1631.8	1631.8	1629.4	1636.6	1639.0	1636.6	1639.0	1610.3	1569.8	1505.3	1400.4
55°	1321.6	1321.6	1328.8	1338.4	1347.9	1350.3	1347.9	1336.0	1307.3	1254.9	1161.8
57.5°	1030.6	1025.9	1040.2	1054.5	1064.0	1073.5	1066.4	1056.9	1040.2	997.2	925.6
60°	784.9	784.9	794.4	804.0	813.5	823.1	820.7	818.3	804.0	775.3	718.1
62.5°	577.3	579.7	579.7	586.9	596.4	606.0	613.1	606.0	598.8	579.7	541.5
65°	412.7	410.3	412.7	419.9	427.1	436.6	441.4	439.0	431.8	417.5	388.9
67.5°	276.7	274.4	283.9	286.3	291.0	300.6	298.2	300.6	298.2	286.3	262.4
70°	181.3	176.5	181.3	178.9	186.1	188.5	193.2	195.6	193.2	186.1	178.9
72.5°	112.1	109.7	112.1	114.5	116.9	119.3	124.0	124.0	121.7	116.9	107.3
75°	71.6	64.4	66.8	62.0	66.8	66.8	71.6	74.0	71.6	71.6	66.8
77.5°	43.0	43.0	43.0	43.0	43.0	43.0	43.0	45.4	47.7	43.0	40.6
80°	21.5	21.5	23.9	23.9	23.9	26.3	23.9	23.9	23.9	26.3	19.1
82.5°	16.7	14.3	14.3	14.3	16.7	14.3	14.3	14.3	14.3	14.3	14.3
85°	7.2	9.5	7.2	4.8	7.2	7.2	9.5	7.2	7.2	7.2	9.5
87.5°	2.4	2.4	0.0	0.0	0.0	2.4	0.0	2.4	2.4	4.8	0.0
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°	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6
2.5°	4506.5	4501.8	4501.8	4499.4	4504.1	4499.4	4501.8	4499.4	4499.4	4504.1	4499.4
5°	4523.2	4525.6	4520.8	4518.5	4525.6	4525.6	4525.6	4520.8	4520.8	4523.2	4520.8
7.5°	4547.1	4551.8	4554.2	4556.6	4561.4	4563.8	4563.8	4561.4	4559.0	4566.2	4556.6
10°	4573.3	4580.5	4594.8	4602.0	4613.9	4613.9	4618.7	4618.7	4613.9	4618.7	4616.3
12.5°	4563.8	4606.7	4630.6	4647.3	4664.0	4678.3	4683.1	4685.5	4683.1	4692.6	4683.1
15°	4580.5	4616.3	4654.5	4683.1	4714.1	4730.8	4735.5	4754.6	4759.4	4761.8	4747.5
17.5°	4554.2	4618.7	4659.2	4702.2	4747.5	4778.5	4807.1	4819.1	4821.5	4826.2	4807.1
20°	4494.6	4566.2	4628.2	4690.2	4742.7	4790.4	4814.3	4847.7	4838.2	4857.2	4831.0
22.5°	4413.5	4494.6	4573.3	4654.5	4709.3	4766.6	4816.7	4840.5	4852.5	4852.5	4823.8
25°	4284.7	4380.1	4466.0	4549.4	4633.0	4702.2	4759.4	4795.2	4802.4	4800.0	4766.6
27.5°	4084.3	4186.8	4287.1	4382.5	4485.1	4566.2	4633.0	4675.9	4687.9	4687.9	4652.1
30°	3807.5	3917.3	4015.1	4129.6	4234.6	4325.2	4418.3	4456.5	4477.9	4477.9	4437.4
32.5°	3478.3	3571.3	3662.0	3774.1	3888.7	3991.2	4079.5	4132.0	4158.2	4155.8	4120.1
35°	3120.5	3165.8	3235.0	3318.5	3421.0	3516.5	3602.3	3652.5	3697.8	3695.4	3662.0
37.5°	2762.6	2750.7	2757.9	2788.8	2853.2	2920.1	2986.9	3034.6	3072.7	3089.5	3082.3
40°	2411.9	2349.9	2290.2	2268.8	2273.5	2297.4	2333.2	2369.0	2411.9	2433.4	2442.9
42.5°	2097.0	1992.0	1887.0	1808.3	1763.0	1748.7	1765.4	1777.3	1803.6	1834.6	1865.6
45°	1844.1	1703.4	1565.0	1443.3	1367.0	1321.6	1312.1	1321.6	1336.0	1367.0	1407.6
47.5°	1636.6	1471.9	1316.9	1180.9	1068.8	1009.2	992.5	987.7	1002.0	1030.6	1085.5
50°	1452.9	1288.2	1116.5	959.0	842.2	775.3	751.5	741.9	758.6	780.1	830.2
52.5°	1252.5	1090.2	913.7	761.0	639.4	570.2	543.9	529.6	539.1	567.8	617.9
55°	1035.4	885.1	725.2	567.8	450.9	386.5	355.4	345.9	355.4	386.5	436.6
57.5°	818.3	691.8	558.2	410.3	305.4	241.0	209.9	200.4	226.7	238.6	291.0
60°	639.4	536.8	422.3	300.6	209.9	159.8	128.8	121.7	133.6	155.0	198.0
62.5°	479.5	415.1	324.4	214.7	155.0	102.6	85.9	78.7	85.9	102.6	136.0
65°	348.3	298.2	226.7	157.4	105.0	76.4	57.3	52.5	59.7	71.6	100.2
67.5°	238.6	200.4	157.4	109.7	71.6	47.7	40.6	40.6	43.0	52.5	74.0
70°	155.0	131.2	100.2	71.6	47.7	35.8	31.0	26.3	31.0	38.2	50.1
72.5°	97.8	83.5	64.4	50.1	35.8	26.3	21.5	19.1	23.9	28.6	38.2
75°	59.7	45.4	33.4	26.3	19.1	19.1	19.1	9.5	11.9	19.1	23.9
77.5°	35.8	31.0	26.3	21.5	16.7	9.5	9.5	9.5	11.9	14.3	21.5
80°	19.1	16.7	11.9	11.9	9.5	7.2	9.5	7.2	4.8	11.9	14.3
82.5°	11.9	9.5	9.5	9.5	11.9	4.8	7.2	4.8	7.2	9.5	7.2
85°	7.2	7.2	7.2	4.8	11.9	4.8	4.8	2.4	2.4	4.8	4.8
87.5°	0.0	2.4	2.4	0.0	2.4	0.0	2.4	2.4	2.4	2.4	2.4
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6	4494.6
2.5°	4501.8	4499.4	4501.8	4499.4	4499.4	4499.4	4501.8	4501.8	4499.4	4499.4	4504.1
5°	4520.8	4520.8	4520.8	4518.5	4516.1	4516.1	4520.8	4520.8	4513.7	4520.8	4520.8
7.5°	4561.4	4554.2	4561.4	4551.8	4547.1	4549.4	4551.8	4547.1	4542.3	4544.7	4544.7
10°	4613.9	4606.7	4606.7	4599.6	4592.4	4587.6	4582.9	4570.9	4559.0	4556.6	4547.1
12.5°	4675.9	4664.0	4656.9	4642.5	4630.6	4613.9	4599.6	4580.5	4556.6	4539.9	4523.2
15°	4737.9	4718.8	4702.2	4678.3	4652.1	4623.4	4592.4	4561.4	4523.2	4489.8	4461.2
17.5°	4788.0	4761.8	4730.8	4692.6	4654.5	4611.5	4566.2	4520.8	4466.0	4423.0	4389.6
20°	4804.7	4766.6	4726.0	4675.9	4625.8	4566.2	4508.9	4449.3	4387.2	4341.9	4303.8
22.5°	4783.3	4737.9	4687.9	4635.4	4568.5	4504.1	4437.4	4368.1	4313.3	4251.3	4215.5
25°	4723.6	4668.8	4613.9	4551.8	4487.5	4415.9	4344.3	4272.8	4205.9	4172.5	4127.2
27.5°	4602.0	4542.3	4482.7	4418.3	4344.3	4272.8	4198.8	4129.6	4072.4	4027.0	4000.8
30°	4387.2	4318.1	4248.9	4179.7	4115.3	4041.3	3972.1	3914.9	3857.6	3821.8	3795.6
32.5°	4058.0	3996.0	3926.8	3860.0	3800.4	3738.3	3681.1	3631.0	3590.4	3566.6	3547.5
35°	3614.3	3552.3	3499.8	3452.1	3401.9	3375.7	3340.0	3311.3	3294.6	3285.1	3282.7
37.5°	3056.0	3020.2	3003.5	2994.0	2984.5	2977.3	2982.1	2994.0	3003.5	3020.2	3039.3
40°	2459.6	2490.6	2500.2	2533.6	2564.6	2605.1	2650.5	2703.0	2745.9	2800.8	2838.9
42.5°	1915.7	1973.0	2039.7	2111.3	2187.7	2261.6	2352.3	2435.7	2512.1	2581.3	2640.9
45°	1471.9	1560.2	1660.4	1763.0	1865.6	1973.0	2082.7	2185.3	2275.9	2349.9	2411.9
47.5°	1147.5	1245.3	1374.2	1500.6	1624.6	1751.1	1872.7	1980.1	2056.4	2128.0	2182.9
50°	908.9	1021.1	1161.8	1307.3	1443.3	1576.9	1705.7	1806.0	1882.3	1939.6	1980.1
52.5°	703.8	837.4	980.5	1133.2	1278.7	1424.3	1543.5	1636.6	1698.6	1748.7	1779.7
55°	524.8	656.1	808.8	966.2	1114.1	1254.9	1367.0	1448.1	1503.0	1531.6	1548.3
57.5°	379.3	498.6	651.3	808.8	942.3	1075.9	1166.6	1240.6	1271.5	1288.2	1295.4
60°	276.7	386.5	522.4	658.5	784.9	892.2	971.0	1021.1	1044.9	1054.5	1052.1
62.5°	202.8	298.2	415.1	529.6	632.2	720.4	782.5	815.9	827.9	832.6	825.5
65°	155.0	229.0	329.2	417.5	496.2	560.6	606.0	627.5	634.6	632.2	627.5
67.5°	114.5	171.8	245.8	312.5	369.8	419.9	443.8	462.8	467.6	460.4	453.3
70°	81.1	126.4	178.9	224.3	267.2	295.8	322.0	324.4	324.4	322.0	317.3
72.5°	57.3	88.3	121.7	152.7	178.9	200.4	209.9	217.1	214.7	212.3	207.6
75°	38.2	54.9	88.3	95.4	119.3	126.4	136.0	136.0	138.3	131.2	131.2
77.5°	23.9	38.2	52.5	62.0	71.6	81.1	85.9	85.9	88.3	85.9	85.9
80°	14.3	23.9	28.6	43.0	43.0	50.1	52.5	54.9	50.1	57.3	50.1
82.5°	9.5	14.3	21.5	21.5	26.3	31.0	31.0	33.4	33.4	31.0	31.0
85°	7.2	9.5	11.9	14.3	14.3	16.7	14.3	14.3	16.7	19.1	16.7
87.5°	2.4	4.8	2.4	4.8	4.8	9.5	7.2	7.2	7.2	9.5	9.5
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: P248472

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4494.6	4494.6	4494.6	4494.6
2.5°	4499.4	4501.8	4499.4	4499.4
5°	4520.8	4518.5	4520.8	4516.1
7.5°	4537.5	4537.5	4535.1	4535.1
10°	4537.5	4528.0	4528.0	4528.0
12.5°	4501.8	4489.8	4482.7	4477.9
15°	4439.7	4418.3	4408.7	4406.3
17.5°	4358.6	4339.5	4327.6	4320.4
20°	4265.6	4246.5	4232.2	4234.6
22.5°	4184.4	4163.0	4153.4	4148.7
25°	4103.4	4077.1	4070.0	4065.2
27.5°	3972.1	3957.8	3950.7	3943.5
30°	3771.7	3764.6	3752.7	3769.3
32.5°	3540.3	3528.4	3518.9	3526.0
35°	3285.1	3277.9	3285.1	3280.3
37.5°	3051.3	3058.4	3068.0	3072.7
40°	2867.6	2893.8	2903.4	2908.1
42.5°	2683.9	2714.9	2734.0	2745.9
45°	2457.2	2488.2	2509.7	2524.1
47.5°	2223.4	2249.7	2271.1	2268.8
50°	2011.1	2025.4	2035.0	2044.5
52.5°	1796.4	1796.4	1798.8	1798.8
55°	1553.1	1548.3	1545.9	1548.3
57.5°	1285.9	1281.1	1278.7	1271.5
60°	1042.5	1028.2	1018.7	1018.7
62.5°	815.9	799.2	792.1	789.7
65°	613.1	610.7	596.4	594.0
67.5°	443.8	434.2	424.7	427.1
70°	312.5	298.2	298.2	293.4
72.5°	202.8	195.6	193.2	193.2
75°	126.4	126.4	121.7	131.2
77.5°	83.5	83.5	81.1	83.5
80°	50.1	50.1	50.1	47.7
82.5°	31.0	33.4	31.0	31.0
85°	16.7	19.1	14.3	21.5
87.5°	9.5	11.9	9.5	11.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)