

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: P248420

Luminaire Tested: **LSR8B100D010 EC8B100927 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248420
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: LSR8B100D010 EC8B100927 8LBDWOLI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8953.9 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

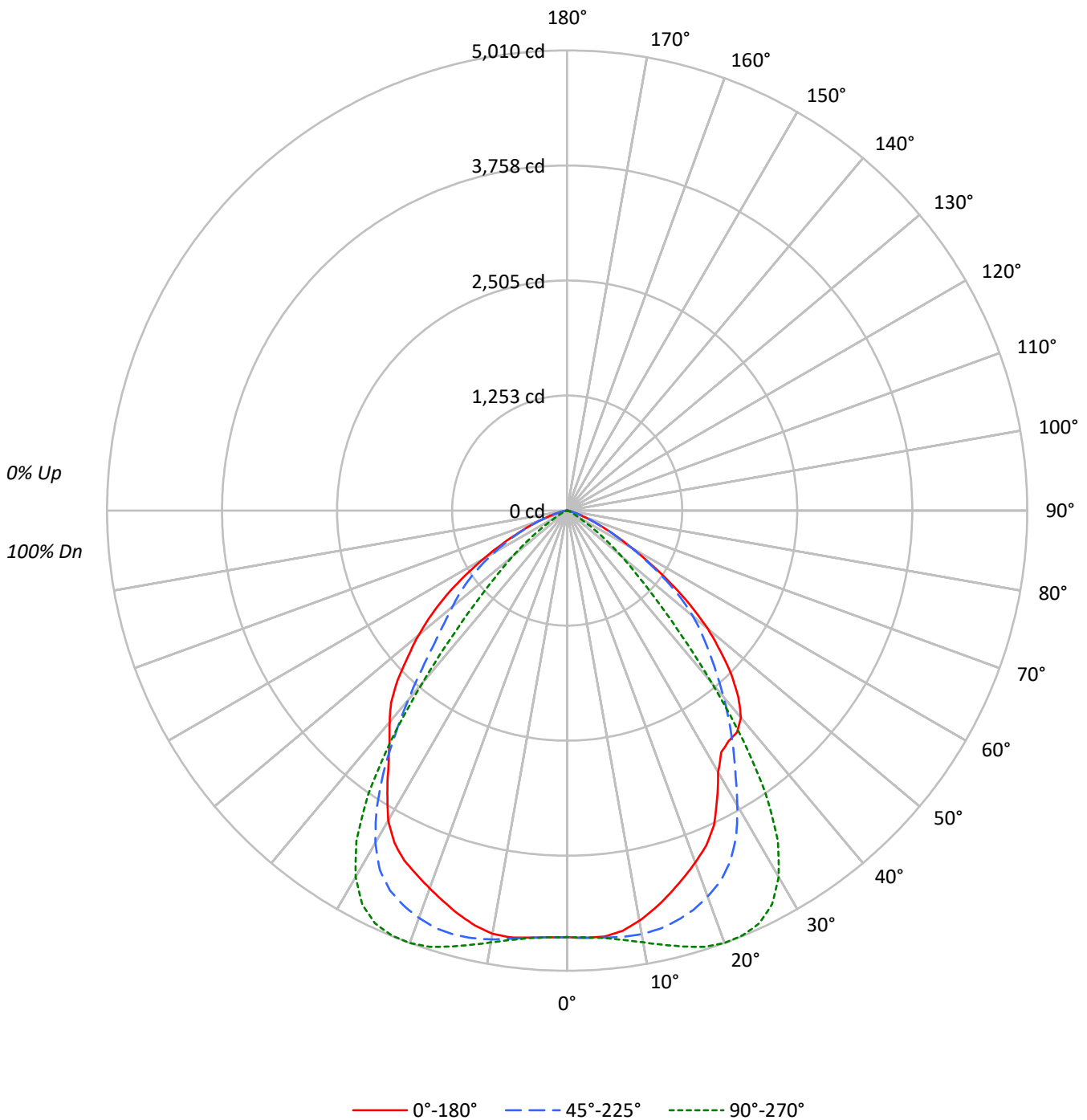
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	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°	446.7	5.0
10°-20°	1323.3	14.8
20°-30°	2018.8	22.5
30°-40°	2106.7	23.5
40°-50°	1582.4	17.7
50°-60°	973.6	10.9
60°-70°	396.2	4.4
70°-80°	93.3	1.0
80°-90°	12.8	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°	3788.8	42.3
0°-40°	5895.5	65.8
0°-60°	8451.4	94.4
0°-90°	8953.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8953.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4645	4645	4645	4645	4645	
5°	4655	4667	4672	4667	4667	440
15°	4317	4620	4914	4778	4554	1216
25°	3782	4206	4956	4564	4201	1719
35°	3065	3151	3775	3489	3390	1935
45°	2530	2189	1366	2039	2608	1930
55°	1366	1297	358	1297	1600	1228
65°	426	431	54	579	614	445
75°	74	74	10	131	136	89
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°	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9
2.5°	4657.3	4649.8	4657.3	4657.3	4659.8	4654.8	4657.3	4659.8	4654.8	4654.8	4654.8
5°	4654.8	4649.8	4654.8	4652.3	4657.3	4657.3	4662.2	4662.2	4667.2	4667.2	4674.6
7.5°	4615.4	4605.5	4615.4	4622.8	4627.7	4637.6	4649.8	4659.8	4669.7	4679.6	4691.8
10°	4534.0	4534.0	4541.4	4556.2	4571.0	4588.2	4610.5	4635.1	4659.8	4681.9	4704.2
12.5°	4433.0	4425.5	4440.4	4460.1	4482.2	4509.4	4543.9	4580.9	4620.4	4664.7	4699.2
15°	4317.1	4309.7	4326.9	4346.7	4373.8	4413.3	4455.1	4504.5	4561.2	4620.4	4677.1
17.5°	4198.7	4196.2	4213.5	4240.7	4262.8	4304.7	4359.0	4418.1	4482.2	4561.2	4635.1
20°	4077.9	4075.4	4092.8	4114.9	4144.5	4184.0	4238.2	4307.2	4383.7	4472.4	4558.7
22.5°	3952.1	3954.6	3969.4	3994.1	4018.7	4060.7	4117.4	4186.5	4270.2	4366.3	4462.5
25°	3782.0	3769.8	3789.4	3814.1	3856.0	3890.5	3944.8	4018.7	4105.0	4206.2	4319.6
27.5°	3535.5	3533.1	3550.3	3572.4	3609.4	3651.4	3710.6	3787.0	3878.2	3989.1	4100.1
30°	3288.9	3293.9	3301.3	3323.5	3348.1	3390.1	3449.2	3513.4	3599.7	3705.6	3824.0
32.5°	3121.3	3121.3	3131.2	3146.0	3163.2	3185.4	3227.3	3274.2	3340.8	3414.7	3501.0
35°	3064.6	3054.7	3064.6	3067.1	3069.6	3074.5	3081.8	3096.7	3118.8	3150.9	3183.0
37.5°	3040.0	3032.5	3032.5	3022.8	3010.4	2995.5	2975.8	2953.7	2929.0	2897.0	2872.4
40°	2943.8	2938.8	2933.9	2924.1	2897.0	2867.4	2835.3	2783.5	2726.8	2647.9	2569.0
42.5°	2759.0	2754.0	2751.5	2731.7	2707.1	2672.5	2635.6	2581.3	2509.9	2408.7	2295.3
45°	2529.6	2519.7	2512.4	2495.1	2477.8	2448.2	2413.7	2364.4	2292.9	2189.4	2053.8
47.5°	2263.3	2258.3	2256.0	2248.5	2231.3	2214.0	2191.8	2152.4	2088.2	1989.7	1849.2
50°	1994.6	1984.7	1989.7	1987.2	1979.8	1967.5	1952.7	1925.6	1876.2	1787.5	1659.3
52.5°	1686.4	1686.4	1683.9	1691.3	1693.8	1691.3	1693.8	1664.2	1622.2	1555.6	1447.2
55°	1365.9	1365.9	1373.3	1383.2	1393.0	1395.4	1393.0	1380.7	1351.1	1296.8	1200.7
57.5°	1065.0	1060.2	1074.9	1089.8	1099.6	1109.5	1102.0	1092.3	1074.9	1030.6	956.6
60°	811.1	811.1	821.0	830.9	840.7	850.6	848.1	845.7	830.9	801.2	742.2
62.5°	596.6	599.1	599.1	606.5	616.4	626.3	633.6	626.3	618.9	599.1	559.7
65°	426.5	424.0	426.5	433.9	441.3	451.2	456.1	453.6	446.3	431.4	401.8
67.5°	286.0	283.5	293.4	295.9	300.8	310.7	308.2	310.7	308.2	295.9	271.2
70°	187.4	182.5	187.4	185.0	192.4	194.7	199.7	202.2	199.7	192.4	185.0
72.5°	115.9	113.4	115.9	118.4	120.8	123.3	128.2	128.2	125.8	120.8	110.9
75°	73.9	66.5	69.0	64.1	69.0	69.0	73.9	76.4	73.9	73.9	69.0
77.5°	44.4	44.4	44.4	44.4	44.4	44.4	44.4	46.9	49.3	44.4	42.0
80°	22.2	22.2	24.6	24.6	24.6	27.1	24.6	24.6	24.6	27.1	19.7
82.5°	17.2	14.7	14.7	14.7	17.2	14.7	14.7	14.7	14.7	14.7	14.7
85°	7.4	9.8	7.4	5.0	7.4	7.4	9.8	7.4	7.4	7.4	9.8
87.5°	2.5	2.5	0.0	0.0	0.0	2.5	0.0	2.5	2.5	5.0	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°	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9
2.5°	4657.3	4652.3	4652.3	4649.8	4654.8	4649.8	4652.3	4649.8	4649.8	4654.8	4649.8
5°	4674.6	4677.1	4672.1	4669.7	4677.1	4677.1	4677.1	4672.1	4672.1	4674.6	4672.1
7.5°	4699.2	4704.2	4706.7	4709.0	4714.0	4716.4	4716.4	4714.0	4711.5	4718.9	4709.0
10°	4726.3	4733.8	4748.5	4755.9	4768.3	4768.3	4773.3	4773.3	4768.3	4773.3	4770.8
12.5°	4716.4	4760.9	4785.5	4802.7	4820.1	4834.8	4839.8	4842.2	4839.8	4849.7	4839.8
15°	4733.8	4770.8	4810.2	4839.8	4871.8	4889.0	4894.0	4913.7	4918.6	4921.1	4906.3
17.5°	4706.7	4773.3	4815.1	4859.4	4906.3	4938.4	4967.9	4980.3	4982.7	4987.7	4967.9
20°	4644.9	4718.9	4783.0	4847.2	4901.4	4950.7	4975.3	5009.8	5000.1	5019.8	4992.6
22.5°	4561.2	4644.9	4726.3	4810.2	4866.9	4926.0	4977.8	5002.4	5014.8	5014.8	4985.2
25°	4428.0	4526.7	4615.4	4701.7	4788.0	4859.4	4918.6	4955.6	4963.0	4960.6	4926.0
27.5°	4220.9	4326.9	4430.5	4529.1	4635.1	4718.9	4788.0	4832.3	4844.7	4844.7	4807.7
30°	3934.9	4048.3	4149.4	4267.7	4376.2	4470.0	4566.2	4605.5	4627.7	4627.7	4585.8
32.5°	3594.7	3690.8	3784.5	3900.4	4018.7	4124.8	4215.9	4270.2	4297.4	4294.9	4257.9
35°	3224.9	3271.7	3343.3	3429.4	3535.5	3634.1	3722.8	3774.7	3821.5	3819.0	3784.5
37.5°	2855.0	2842.6	2850.1	2882.1	2948.7	3017.8	3086.8	3136.2	3175.5	3192.9	3185.4
40°	2492.7	2428.5	2366.9	2344.7	2349.6	2374.3	2411.2	2448.2	2492.7	2514.8	2524.6
42.5°	2167.2	2058.8	1950.2	1868.8	1821.9	1807.2	1824.4	1836.8	1863.9	1896.0	1928.0
45°	1905.9	1760.4	1617.3	1491.6	1412.8	1365.9	1356.0	1365.9	1380.7	1412.8	1454.6
47.5°	1691.3	1521.2	1360.9	1220.4	1104.5	1042.9	1025.7	1020.7	1035.4	1065.0	1121.7
50°	1501.4	1331.3	1153.9	991.1	870.3	801.2	776.6	766.8	784.0	806.2	857.9
52.5°	1294.3	1126.7	944.3	786.5	660.7	589.3	562.2	547.3	557.2	586.8	638.6
55°	1070.0	914.6	749.5	586.8	466.0	399.4	367.3	357.5	367.3	399.4	451.2
57.5°	845.7	714.9	576.9	424.0	315.6	249.1	216.9	207.1	234.2	246.6	300.8
60°	660.7	554.7	436.4	310.7	216.9	165.2	133.1	125.8	138.0	160.2	204.6
62.5°	495.6	429.0	335.2	221.8	160.2	106.0	88.8	81.3	88.8	106.0	140.5
65°	360.0	308.2	234.2	162.7	108.4	78.9	59.2	54.2	61.6	73.9	103.6
67.5°	246.6	207.1	162.7	113.4	73.9	49.3	42.0	42.0	44.4	54.2	76.4
70°	160.2	135.6	103.6	73.9	49.3	37.0	32.1	27.1	32.1	39.5	51.8
72.5°	101.1	86.3	66.5	51.8	37.0	27.1	22.2	19.7	24.6	29.6	39.5
75°	61.6	46.9	34.5	27.1	19.7	19.7	19.7	9.8	12.3	19.7	24.6
77.5°	37.0	32.1	27.1	22.2	17.2	9.8	9.8	9.8	12.3	14.7	22.2
80°	19.7	17.2	12.3	12.3	9.8	7.4	9.8	7.4	5.0	12.3	14.7
82.5°	12.3	9.8	9.8	9.8	12.3	5.0	7.4	5.0	7.4	9.8	7.4
85°	7.4	7.4	7.4	5.0	12.3	5.0	5.0	2.5	2.5	5.0	5.0
87.5°	0.0	2.5	2.5	0.0	2.5	0.0	2.5	2.5	2.5	2.5	2.5
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°	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9	4644.9
2.5°	4652.3	4649.8	4652.3	4649.8	4649.8	4649.8	4652.3	4652.3	4649.8	4649.8	4654.8
5°	4672.1	4672.1	4672.1	4669.7	4667.2	4667.2	4672.1	4672.1	4664.7	4672.1	4672.1
7.5°	4714.0	4706.7	4714.0	4704.2	4699.2	4701.7	4704.2	4699.2	4694.3	4696.8	4696.8
10°	4768.3	4760.9	4760.9	4753.5	4746.0	4741.1	4736.2	4723.9	4711.5	4709.0	4699.2
12.5°	4832.3	4820.1	4812.6	4797.8	4785.5	4768.3	4753.5	4733.8	4709.0	4691.8	4674.6
15°	4896.4	4876.8	4859.4	4834.8	4807.7	4778.1	4746.0	4714.0	4674.6	4640.1	4610.5
17.5°	4948.2	4921.1	4889.0	4849.7	4810.2	4765.8	4718.9	4672.1	4615.4	4571.0	4536.4
20°	4965.5	4926.0	4884.2	4832.3	4780.6	4718.9	4659.8	4598.1	4534.0	4487.2	4447.8
22.5°	4943.4	4896.4	4844.7	4790.5	4721.4	4654.8	4585.8	4514.3	4457.6	4393.5	4356.6
25°	4881.7	4825.0	4768.3	4704.2	4637.6	4563.7	4489.7	4415.7	4346.7	4312.1	4265.3
27.5°	4755.9	4694.3	4632.6	4566.2	4489.7	4415.7	4339.2	4267.7	4208.6	4161.7	4134.6
30°	4534.0	4462.5	4391.0	4319.6	4253.0	4176.6	4105.0	4045.8	3986.7	3949.6	3922.6
32.5°	4193.8	4129.7	4058.2	3989.1	3927.6	3863.5	3804.3	3752.4	3710.6	3685.8	3666.2
35°	3735.2	3671.1	3616.9	3567.6	3515.7	3488.6	3451.7	3422.0	3404.8	3395.0	3392.6
37.5°	3158.3	3121.3	3104.0	3094.2	3084.3	3077.0	3081.8	3094.2	3104.0	3121.3	3141.0
40°	2541.9	2574.0	2583.8	2618.3	2650.4	2692.4	2739.2	2793.4	2837.7	2894.5	2933.9
42.5°	1979.8	2039.0	2108.0	2181.9	2260.8	2337.3	2431.0	2517.2	2596.2	2667.6	2729.2
45°	1521.2	1612.4	1716.0	1821.9	1928.0	2039.0	2152.4	2258.3	2352.0	2428.5	2492.7
47.5°	1185.9	1287.0	1420.1	1550.8	1679.0	1809.7	1935.3	2046.4	2125.2	2199.2	2256.0
50°	939.4	1055.2	1200.7	1351.1	1491.6	1629.7	1762.8	1866.4	1945.2	2004.4	2046.4
52.5°	727.3	865.4	1013.3	1171.1	1321.5	1472.0	1595.1	1691.3	1755.4	1807.2	1839.3
55°	542.4	678.0	835.9	998.6	1151.4	1296.8	1412.8	1496.6	1553.3	1582.9	1600.1
57.5°	392.0	515.4	673.1	835.9	973.8	1112.0	1205.7	1282.0	1314.1	1331.3	1338.8
60°	286.0	399.4	539.9	680.5	811.1	922.0	1003.5	1055.2	1079.9	1089.8	1087.3
62.5°	209.6	308.2	429.0	547.3	653.3	744.5	808.6	843.2	855.6	860.4	853.1
65°	160.2	236.7	340.2	431.4	512.9	579.4	626.3	648.4	655.8	653.3	648.4
67.5°	118.4	177.5	254.0	323.0	382.2	433.9	458.6	478.4	483.2	475.9	468.4
70°	83.8	130.6	185.0	231.8	276.1	305.8	332.8	335.2	335.2	332.8	327.9
72.5°	59.2	91.2	125.8	157.8	185.0	207.1	216.9	224.3	221.8	219.4	214.5
75°	39.5	56.7	91.2	98.7	123.3	130.6	140.5	140.5	143.0	135.6	135.6
77.5°	24.6	39.5	54.2	64.1	73.9	83.8	88.8	88.8	91.2	88.8	88.8
80°	14.7	24.6	29.6	44.4	44.4	51.8	54.2	56.7	51.8	59.2	51.8
82.5°	9.8	14.7	22.2	22.2	27.1	32.1	32.1	34.5	34.5	32.1	32.1
85°	7.4	9.8	12.3	14.7	14.7	17.2	14.7	14.7	17.2	19.7	17.2
87.5°	2.5	5.0	2.5	5.0	5.0	9.8	7.4	7.4	7.4	9.8	9.8
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: P248420

CATALOG NUMBER: LSR8B100D010 EC8B100927 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4644.9	4644.9	4644.9	4644.9
2.5°	4649.8	4652.3	4649.8	4649.8
5°	4672.1	4669.7	4672.1	4667.2
7.5°	4689.3	4689.3	4686.9	4686.9
10°	4689.3	4679.6	4679.6	4679.6
12.5°	4652.3	4640.1	4632.6	4627.7
15°	4588.2	4566.2	4556.2	4553.8
17.5°	4504.5	4484.7	4472.4	4465.0
20°	4408.3	4388.5	4373.8	4376.2
22.5°	4324.4	4302.3	4292.4	4287.5
25°	4240.7	4213.5	4206.2	4201.2
27.5°	4105.0	4090.3	4082.8	4075.4
30°	3897.9	3890.5	3878.2	3895.4
32.5°	3658.8	3646.5	3636.6	3644.0
35°	3395.0	3387.6	3395.0	3390.1
37.5°	3153.4	3160.7	3170.6	3175.5
40°	2963.6	2990.6	3000.5	3005.4
42.5°	2773.7	2805.8	2825.4	2837.7
45°	2539.5	2571.5	2593.7	2608.5
47.5°	2297.8	2324.9	2347.1	2344.7
50°	2078.4	2093.2	2103.1	2113.0
52.5°	1856.5	1856.5	1859.0	1859.0
55°	1605.0	1600.1	1597.6	1600.1
57.5°	1328.9	1324.0	1321.5	1314.1
60°	1077.4	1062.7	1052.8	1052.8
62.5°	843.2	826.0	818.6	816.1
65°	633.6	631.1	616.4	613.9
67.5°	458.6	448.8	438.9	441.3
70°	323.0	308.2	308.2	303.3
72.5°	209.6	202.2	199.7	199.7
75°	130.6	130.6	125.8	135.6
77.5°	86.3	86.3	83.8	86.3
80°	51.8	51.8	51.8	49.3
82.5°	32.1	34.5	32.1	32.1
85°	17.2	19.7	14.7	22.2
87.5°	9.8	12.3	9.8	12.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)