

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: P248402

Luminaire Tested: **LSR8B100D010 EC8B100940 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248402
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 EC8B100940 8LBDWOLI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10181.0 lumens
Efficiency: N/A
Efficacy: 95.8 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

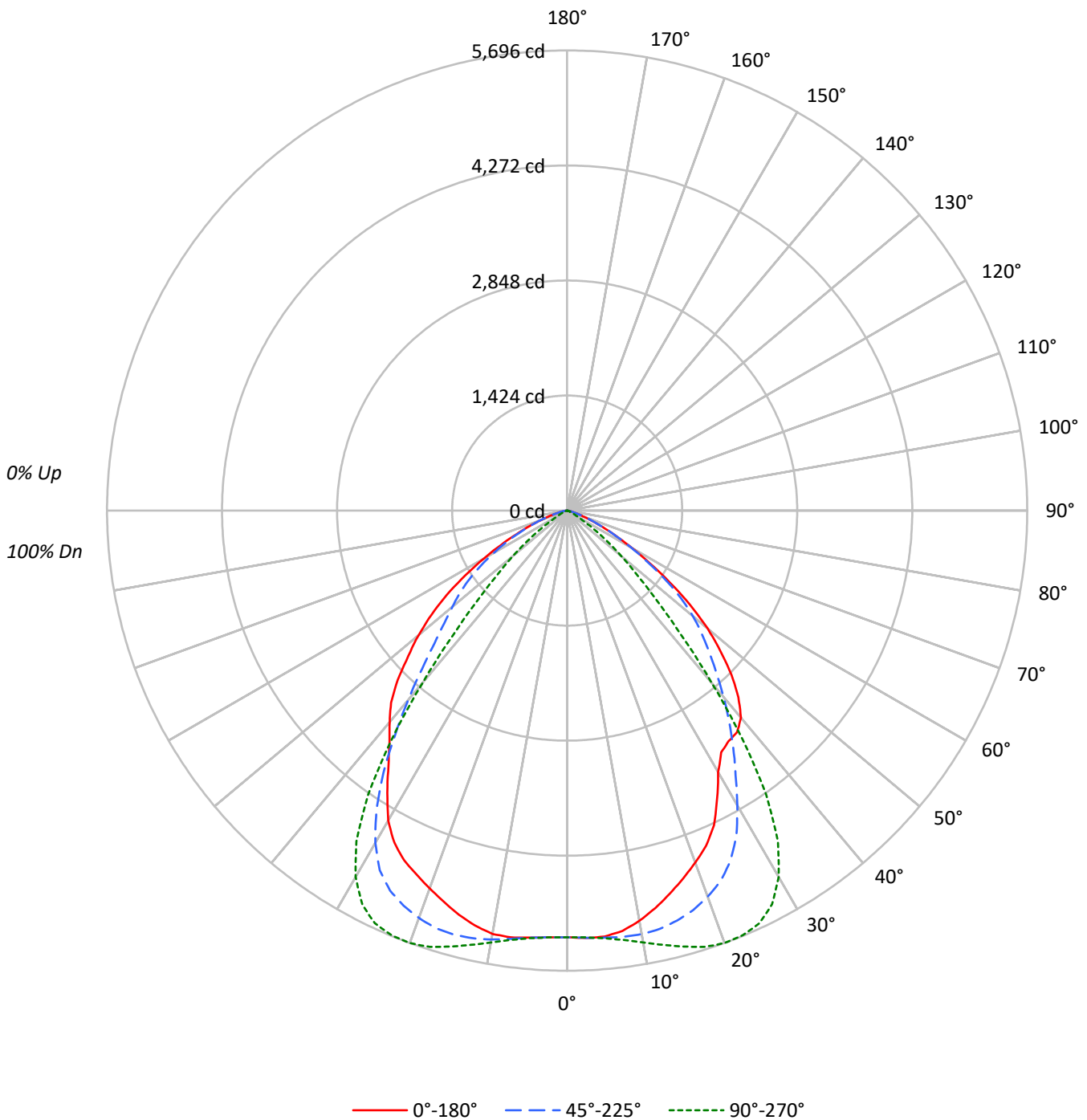
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	162862	162862	162862
5°	163834	164441	164267
10°	161426	169943	166605
15°	156706	178363	165297
20°	152158	186932	163289
25°	146317	191719	162533
30°	133158	186462	157713
35°	131175	161569	145103
40°	134742	112059	137560
45°	125433	67725	129345
50°	108797	41823	115255
55°	83492	21854	97814
60°	56881	8819	73822
65°	35388	4502	50930
70°	19213	2786	31087
75°	10020	1334	18372
80°	4475	1492	9944
85°	2972	991	8916



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	507.9	5.0
10°-20°	1504.7	14.8
20°-30°	2295.5	22.5
30°-40°	2395.4	23.5
40°-50°	1799.2	17.7
50°-60°	1107.0	10.9
60°-70°	450.5	4.4
70°-80°	106.1	1.0
80°-90°	14.6	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°	4308.1	42.3
0°-40°	6703.4	65.8
0°-60°	9609.7	94.4
0°-90°	10181.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10181.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5282	5282	5282	5282	5282	
5°	5293	5307	5312	5307	5307	501
15°	4909	5254	5587	5433	5178	1383
25°	4300	4783	5635	5189	4777	1955
35°	3485	3583	4292	3967	3855	2200
45°	2876	2489	1553	2318	2966	2194
55°	1553	1475	406	1475	1819	1396
65°	485	491	62	659	698	506
75°	84	84	11	149	154	101
85°	8	8	3	20	25	12
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°	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5
2.5°	5295.6	5287.2	5295.6	5295.6	5298.4	5292.8	5295.6	5298.4	5292.8	5292.8	5292.8
5°	5292.8	5287.2	5292.8	5290.0	5295.6	5295.6	5301.2	5301.2	5306.8	5306.8	5315.2
7.5°	5247.9	5236.7	5247.9	5256.4	5261.9	5273.2	5287.2	5298.4	5309.6	5320.8	5334.8
10°	5155.4	5155.4	5163.8	5180.6	5197.4	5217.1	5242.3	5270.4	5298.4	5323.6	5348.8
12.5°	5040.5	5032.1	5048.9	5071.3	5096.5	5127.4	5166.6	5208.7	5253.6	5304.0	5343.3
15°	4908.7	4900.3	4919.9	4942.3	4973.2	5018.1	5065.7	5121.8	5186.3	5253.6	5318.0
17.5°	4774.2	4771.3	4791.0	4821.8	4847.1	4894.7	4956.4	5023.6	5096.5	5186.3	5270.4
20°	4636.8	4634.0	4653.6	4678.9	4712.5	4757.3	4819.0	4897.5	4984.4	5085.4	5183.5
22.5°	4493.8	4496.6	4513.4	4541.5	4569.5	4617.1	4681.6	4760.2	4855.4	4964.8	5074.1
25°	4300.4	4286.4	4308.8	4336.9	4384.5	4423.7	4485.4	4569.5	4667.6	4782.6	4911.5
27.5°	4020.0	4017.2	4036.9	4062.1	4104.1	4151.8	4219.1	4306.0	4409.7	4535.9	4662.0
30°	3739.7	3745.3	3753.7	3779.0	3807.0	3854.6	3921.9	3994.9	4092.9	4213.5	4348.0
32.5°	3549.1	3549.1	3560.3	3577.1	3596.7	3622.0	3669.6	3722.9	3798.6	3882.7	3980.8
35°	3484.6	3473.4	3484.6	3487.4	3490.2	3495.8	3504.2	3521.1	3546.2	3582.7	3619.2
37.5°	3456.6	3448.2	3448.2	3437.0	3422.9	3406.1	3383.7	3358.4	3330.4	3294.0	3266.0
40°	3347.3	3341.6	3336.0	3324.8	3294.0	3260.3	3223.9	3165.0	3100.5	3010.8	2921.1
42.5°	3137.0	3131.4	3128.6	3106.1	3078.1	3038.9	2996.8	2935.1	2853.9	2738.9	2609.9
45°	2876.3	2865.0	2856.7	2837.1	2817.4	2783.8	2744.5	2688.4	2607.1	2489.4	2335.2
47.5°	2573.5	2567.9	2565.1	2556.7	2537.1	2517.4	2492.2	2447.4	2374.5	2262.3	2102.5
50°	2267.9	2256.7	2262.3	2259.6	2251.1	2237.1	2220.3	2189.5	2133.3	2032.4	1886.7
52.5°	1917.5	1917.5	1914.7	1923.1	1925.9	1923.1	1925.9	1892.3	1844.6	1768.9	1645.6
55°	1553.0	1553.0	1561.5	1572.7	1583.9	1586.7	1583.9	1569.9	1536.2	1474.6	1365.2
57.5°	1211.0	1205.5	1222.3	1239.1	1250.3	1261.5	1253.1	1241.9	1222.3	1171.8	1087.7
60°	922.3	922.3	933.5	944.7	955.9	967.2	964.4	961.6	944.7	911.1	843.8
62.5°	678.4	681.2	681.2	689.6	700.8	712.1	720.4	712.1	703.6	681.2	636.3
65°	485.0	482.1	485.0	493.4	501.8	513.0	518.6	515.8	507.4	490.6	457.0
67.5°	325.2	322.4	333.6	336.4	342.0	353.3	350.4	353.3	350.4	336.4	308.4
70°	213.1	207.4	213.1	210.2	218.7	221.5	227.0	229.9	227.0	218.7	210.2
72.5°	131.8	129.0	131.8	134.6	137.4	140.1	145.8	145.8	143.0	137.4	126.1
75°	84.1	75.7	78.5	72.9	78.5	78.5	84.1	86.9	84.1	84.1	78.5
77.5°	50.5	50.5	50.5	50.5	50.5	50.5	50.5	53.3	56.0	50.5	47.7
80°	25.2	25.2	28.1	28.1	28.1	30.9	28.1	28.1	28.1	30.9	22.4
82.5°	19.6	16.8	16.8	16.8	19.6	16.8	16.8	16.8	16.8	16.8	16.8
85°	8.4	11.2	8.4	5.6	8.4	8.4	11.2	8.4	8.4	8.4	11.2
87.5°	2.8	2.8	0.0	0.0	0.0	2.8	0.0	2.8	2.8	5.6	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°	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5
2.5°	5295.6	5290.0	5290.0	5287.2	5292.8	5287.2	5290.0	5287.2	5287.2	5292.8	5287.2
5°	5315.2	5318.0	5312.4	5309.6	5318.0	5318.0	5318.0	5312.4	5312.4	5315.2	5312.4
7.5°	5343.3	5348.8	5351.6	5354.5	5360.1	5362.9	5362.9	5360.1	5357.3	5365.7	5354.5
10°	5374.1	5382.5	5399.3	5407.8	5421.7	5421.7	5427.4	5427.4	5421.7	5427.4	5424.6
12.5°	5362.9	5413.3	5441.4	5461.0	5480.6	5497.4	5503.0	5505.8	5503.0	5514.3	5503.0
15°	5382.5	5424.6	5469.4	5503.0	5539.5	5559.1	5564.7	5587.1	5592.8	5595.6	5578.8
17.5°	5351.6	5427.4	5475.0	5525.5	5578.8	5615.2	5648.8	5662.9	5665.7	5671.2	5648.8
20°	5281.5	5365.7	5438.6	5511.5	5573.1	5629.2	5657.2	5696.5	5685.3	5707.7	5676.9
22.5°	5186.3	5281.5	5374.1	5469.4	5533.9	5601.2	5660.0	5688.0	5702.1	5702.1	5668.4
25°	5034.9	5147.0	5247.9	5346.0	5444.2	5525.5	5592.8	5634.8	5643.2	5640.4	5601.2
27.5°	4799.4	4919.9	5037.7	5149.8	5270.4	5365.7	5444.2	5494.6	5508.7	5508.7	5466.6
30°	4474.2	4603.1	4718.1	4852.6	4976.0	5082.6	5191.9	5236.7	5261.9	5261.9	5214.3
32.5°	4087.3	4196.7	4303.2	4435.0	4569.5	4690.1	4793.8	4855.4	4886.3	4883.5	4841.4
35°	3666.8	3720.1	3801.4	3899.5	4020.0	4132.2	4233.1	4292.0	4345.2	4342.4	4303.2
37.5°	3246.3	3232.3	3240.7	3277.2	3352.8	3431.4	3509.8	3565.9	3610.7	3630.4	3622.0
40°	2834.2	2761.3	2691.2	2666.0	2671.6	2699.7	2741.7	2783.8	2834.2	2859.5	2870.7
42.5°	2464.2	2340.8	2217.4	2125.0	2071.7	2054.9	2074.5	2088.5	2119.4	2155.8	2192.3
45°	2167.0	2001.6	1839.0	1696.1	1606.3	1553.0	1541.9	1553.0	1569.9	1606.3	1654.0
47.5°	1923.1	1729.7	1547.5	1387.7	1255.9	1185.9	1166.2	1160.6	1177.4	1211.0	1275.5
50°	1707.2	1513.8	1312.0	1126.9	989.6	911.1	883.1	871.8	891.5	916.7	975.5
52.5°	1471.8	1281.1	1073.7	894.3	751.3	670.0	639.2	622.4	633.5	667.2	726.1
55°	1216.7	1040.0	852.2	667.2	529.8	454.2	417.7	406.5	417.7	454.2	513.0
57.5°	961.6	813.0	656.0	482.1	358.8	283.2	246.7	235.5	266.3	280.3	342.0
60°	751.3	630.8	496.2	353.3	246.7	187.8	151.4	143.0	157.0	182.2	232.7
62.5°	563.5	487.8	381.2	252.3	182.2	120.5	100.9	92.5	100.9	120.5	159.8
65°	409.3	350.4	266.3	185.0	123.3	89.7	67.3	61.7	70.1	84.1	117.8
67.5°	280.3	235.5	185.0	129.0	84.1	56.0	47.7	47.7	50.5	61.7	86.9
70°	182.2	154.2	117.8	84.1	56.0	42.0	36.4	30.9	36.4	44.9	58.9
72.5°	115.0	98.1	75.7	58.9	42.0	30.9	25.2	22.4	28.1	33.6	44.9
75°	70.1	53.3	39.2	30.9	22.4	22.4	22.4	11.2	14.0	22.4	28.1
77.5°	42.0	36.4	30.9	25.2	19.6	11.2	11.2	11.2	14.0	16.8	25.2
80°	22.4	19.6	14.0	14.0	11.2	8.4	11.2	8.4	5.6	14.0	16.8
82.5°	14.0	11.2	11.2	11.2	14.0	5.6	8.4	5.6	8.4	11.2	8.4
85°	8.4	8.4	8.4	5.6	14.0	5.6	5.6	2.8	2.8	5.6	5.6
87.5°	0.0	2.8	2.8	0.0	2.8	0.0	2.8	2.8	2.8	2.8	2.8
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°	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5	5281.5
2.5°	5290.0	5287.2	5290.0	5287.2	5287.2	5287.2	5290.0	5290.0	5287.2	5287.2	5292.8
5°	5312.4	5312.4	5312.4	5309.6	5306.8	5306.8	5312.4	5312.4	5304.0	5312.4	5312.4
7.5°	5360.1	5351.6	5360.1	5348.8	5343.3	5346.0	5348.8	5343.3	5337.7	5340.5	5340.5
10°	5421.7	5413.3	5413.3	5404.9	5396.5	5390.9	5385.3	5371.3	5357.3	5354.5	5343.3
12.5°	5494.6	5480.6	5472.2	5455.4	5441.4	5421.7	5404.9	5382.5	5354.5	5334.8	5315.2
15°	5567.5	5545.1	5525.5	5497.4	5466.6	5432.9	5396.5	5360.1	5315.2	5276.0	5242.3
17.5°	5626.4	5595.6	5559.1	5514.3	5469.4	5418.9	5365.7	5312.4	5247.9	5197.4	5158.2
20°	5646.0	5601.2	5553.5	5494.6	5435.7	5365.7	5298.4	5228.3	5155.4	5102.2	5057.3
22.5°	5620.8	5567.5	5508.7	5447.0	5368.5	5292.8	5214.3	5133.0	5068.5	4995.6	4953.6
25°	5550.7	5486.2	5421.7	5348.8	5273.2	5189.1	5105.0	5020.9	4942.3	4903.1	4849.9
27.5°	5407.8	5337.7	5267.5	5191.9	5105.0	5020.9	4934.0	4852.6	4785.4	4732.1	4701.3
30°	5155.4	5074.1	4992.8	4911.5	4835.8	4748.9	4667.6	4600.3	4533.0	4491.0	4460.2
32.5°	4768.5	4695.7	4614.4	4535.9	4465.8	4392.9	4325.6	4266.8	4219.1	4191.0	4168.6
35°	4247.1	4174.2	4112.6	4056.5	3997.6	3966.8	3924.8	3891.1	3871.5	3860.3	3857.5
37.5°	3591.1	3549.1	3529.4	3518.3	3507.0	3498.6	3504.2	3518.3	3529.4	3549.1	3571.5
40°	2890.3	2926.7	2938.0	2977.2	3013.6	3061.3	3114.6	3176.3	3226.7	3291.1	3336.0
42.5°	2251.1	2318.4	2396.9	2481.0	2570.7	2657.6	2764.1	2862.2	2951.9	3033.2	3103.3
45°	1729.7	1833.4	1951.2	2071.7	2192.3	2318.4	2447.4	2567.9	2674.4	2761.3	2834.2
47.5°	1348.4	1463.4	1614.8	1763.3	1909.1	2057.7	2200.6	2326.8	2416.5	2500.6	2565.1
50°	1068.1	1199.8	1365.2	1536.2	1696.1	1853.0	2004.4	2122.2	2211.9	2279.2	2326.8
52.5°	827.0	984.0	1152.2	1331.6	1502.6	1673.6	1813.8	1923.1	1996.0	2054.9	2091.3
55°	616.7	770.9	950.4	1135.4	1309.2	1474.6	1606.3	1701.7	1766.2	1799.8	1819.4
57.5°	445.7	585.9	765.3	950.4	1107.3	1264.3	1370.9	1457.8	1494.2	1513.8	1522.2
60°	325.2	454.2	613.9	773.7	922.3	1048.5	1141.0	1199.8	1227.9	1239.1	1236.3
62.5°	238.3	350.4	487.8	622.4	742.9	846.6	919.5	958.7	972.8	978.4	970.0
65°	182.2	269.1	386.9	490.6	583.1	658.8	712.1	737.3	745.7	742.9	737.3
67.5°	134.6	201.9	288.8	367.3	434.5	493.4	521.5	543.9	549.4	541.1	532.6
70°	95.3	148.6	210.2	263.5	314.0	347.6	378.4	381.2	381.2	378.4	372.9
72.5°	67.3	103.7	143.0	179.4	210.2	235.5	246.7	255.1	252.3	249.5	243.9
75°	44.9	64.5	103.7	112.2	140.1	148.6	159.8	159.8	162.6	154.2	154.2
77.5°	28.1	44.9	61.7	72.9	84.1	95.3	100.9	100.9	103.7	100.9	100.9
80°	16.8	28.1	33.6	50.5	50.5	58.9	61.7	64.5	58.9	67.3	58.9
82.5°	11.2	16.8	25.2	25.2	30.9	36.4	36.4	39.2	39.2	36.4	36.4
85°	8.4	11.2	14.0	16.8	16.8	19.6	16.8	16.8	19.6	22.4	19.6
87.5°	2.8	5.6	2.8	5.6	5.6	11.2	8.4	8.4	8.4	11.2	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



TEST NUMBER: P248402

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5281.5	5281.5	5281.5	5281.5
2.5°	5287.2	5290.0	5287.2	5287.2
5°	5312.4	5309.6	5312.4	5306.8
7.5°	5332.0	5332.0	5329.2	5329.2
10°	5332.0	5320.8	5320.8	5320.8
12.5°	5290.0	5276.0	5267.5	5261.9
15°	5217.1	5191.9	5180.6	5177.8
17.5°	5121.8	5099.4	5085.4	5076.9
20°	5012.4	4990.0	4973.2	4976.0
22.5°	4917.1	4891.9	4880.7	4875.1
25°	4821.8	4791.0	4782.6	4777.0
27.5°	4667.6	4650.8	4642.4	4634.0
30°	4432.1	4423.7	4409.7	4429.3
32.5°	4160.2	4146.2	4135.0	4143.4
35°	3860.3	3851.8	3860.3	3854.6
37.5°	3585.6	3593.9	3605.2	3610.7
40°	3369.7	3400.5	3411.7	3417.3
42.5°	3153.8	3190.2	3212.7	3226.7
45°	2887.5	2923.9	2949.1	2966.0
47.5°	2612.8	2643.6	2668.8	2666.0
50°	2363.3	2380.1	2391.3	2402.5
52.5°	2110.9	2110.9	2113.7	2113.7
55°	1825.0	1819.4	1816.6	1819.4
57.5°	1511.0	1505.4	1502.6	1494.2
60°	1225.1	1208.3	1197.0	1197.0
62.5°	958.7	939.1	930.8	927.9
65°	720.4	717.6	700.8	698.0
67.5°	521.5	510.2	499.0	501.8
70°	367.3	350.4	350.4	344.8
72.5°	238.3	229.9	227.0	227.0
75°	148.6	148.6	143.0	154.2
77.5°	98.1	98.1	95.3	98.1
80°	58.9	58.9	58.9	56.0
82.5°	36.4	39.2	36.4	36.4
85°	19.6	22.4	16.8	25.2
87.5°	11.2	14.0	11.2	14.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)