

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: P248411

Luminaire Tested: **LSR8B100D010 EC8B100950 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248411
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 EC8B100950 8LBDWOLI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10541.0 lumens
Efficiency: N/A
Efficacy: 99.2 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

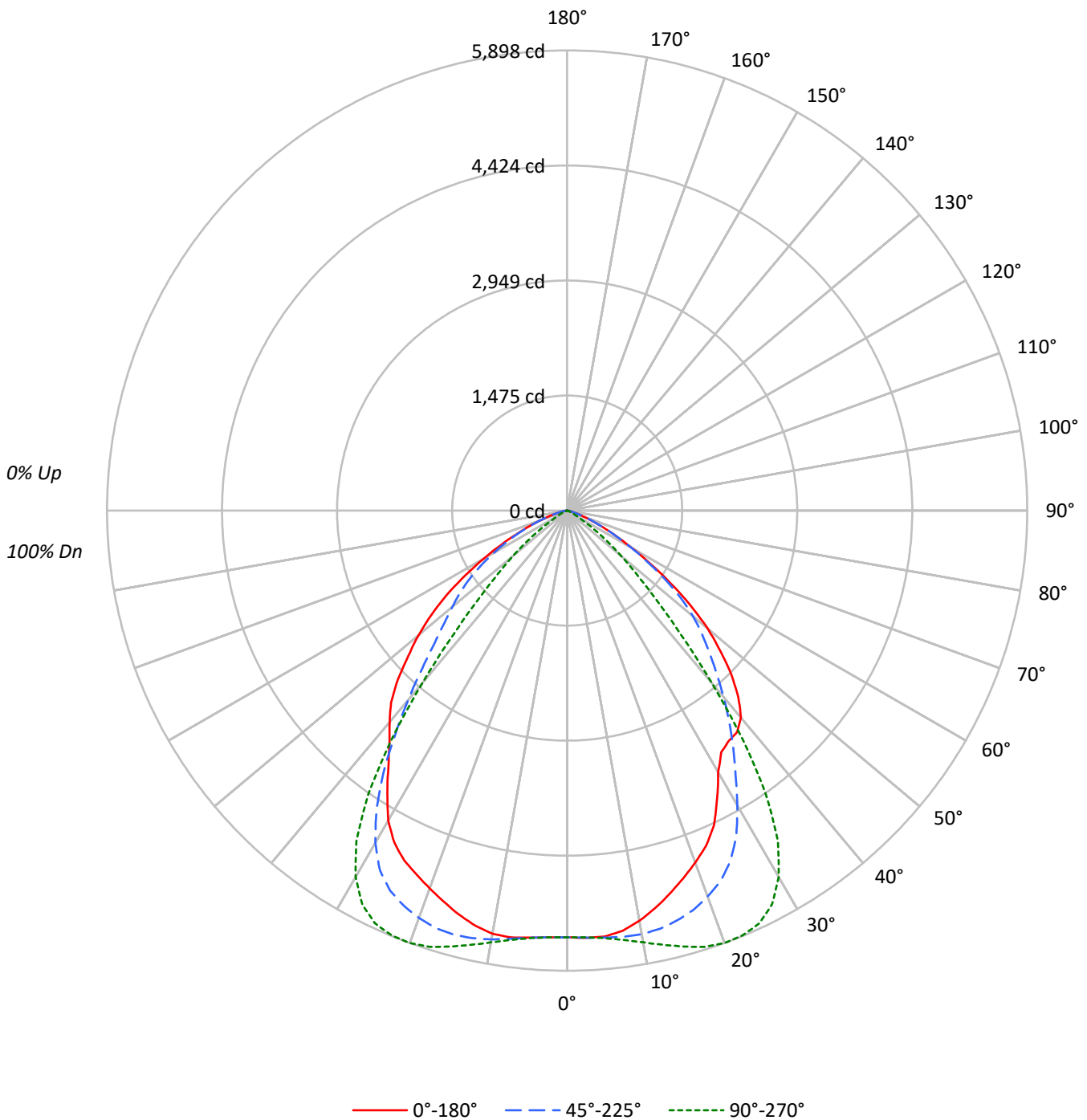
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	168622	168622	168622
5°	169625	170257	170074
10°	167134	175952	172498
15°	162248	184671	171142
20°	157540	193541	169065
25°	151489	198497	168280
30°	137866	193056	163292
35°	135813	167283	150234
40°	139504	116020	142422
45°	129868	70123	133919
50°	112645	43305	119332
55°	86448	22628	101270
60°	58891	9128	76437
65°	36636	4655	52732
70°	19889	2885	32187
75°	10377	1382	19027
80°	4635	1545	10300
85°	3078	1026	9234



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	525.9	5.0
10°-20°	1557.9	14.8
20°-30°	2376.7	22.5
30°-40°	2480.1	23.5
40°-50°	1862.9	17.7
50°-60°	1146.2	10.9
60°-70°	466.5	4.4
70°-80°	109.9	1.0
80°-90°	15.1	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°	4460.4	42.3
0°-40°	6940.5	65.8
0°-60°	9949.5	94.4
0°-90°	10541.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10541.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5468	5468	5468	5468	5468	
5°	5480	5494	5500	5494	5494	518
15°	5082	5439	5785	5625	5361	1432
25°	4452	4952	5834	5373	4946	2024
35°	3608	3709	4444	4107	3991	2278
45°	2978	2577	1608	2400	3071	2272
55°	1608	1527	421	1527	1884	1445
65°	502	508	64	682	723	524
75°	87	87	12	154	160	105
85°	9	9	3	20	26	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°	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3
2.5°	5482.9	5474.1	5482.9	5482.9	5485.8	5479.9	5482.9	5485.8	5479.9	5479.9	5479.9
5°	5479.9	5474.1	5479.9	5477.0	5482.9	5482.9	5488.7	5488.7	5494.4	5494.4	5503.2
7.5°	5433.5	5421.9	5433.5	5442.2	5448.0	5459.6	5474.1	5485.8	5497.3	5509.0	5523.5
10°	5337.7	5337.7	5346.4	5363.8	5381.2	5401.5	5427.7	5456.7	5485.8	5511.8	5538.0
12.5°	5218.7	5210.0	5227.4	5250.6	5276.8	5308.7	5349.3	5392.9	5439.3	5491.5	5532.2
15°	5082.3	5073.6	5093.9	5117.1	5149.1	5195.5	5244.9	5302.9	5369.7	5439.3	5506.1
17.5°	4943.0	4940.1	4960.4	4992.3	5018.5	5067.7	5131.7	5201.3	5276.8	5369.7	5456.7
20°	4800.8	4797.9	4818.2	4844.3	4879.1	4925.6	4989.4	5070.7	5160.6	5265.2	5366.7
22.5°	4652.7	4655.6	4673.0	4702.1	4731.1	4780.4	4847.2	4928.5	5027.1	5140.3	5253.5
25°	4452.4	4437.9	4461.2	4490.2	4539.5	4580.1	4644.0	4731.1	4832.7	4951.7	5085.2
27.5°	4162.2	4159.3	4179.6	4205.7	4249.2	4298.6	4368.3	4458.3	4565.6	4696.2	4826.9
30°	3871.9	3877.7	3886.5	3912.6	3941.6	3990.9	4060.6	4136.1	4237.7	4362.5	4501.8
32.5°	3674.6	3674.6	3686.2	3703.6	3723.9	3750.0	3799.4	3854.5	3932.9	4020.0	4121.6
35°	3607.8	3596.2	3607.8	3610.7	3613.6	3619.4	3628.1	3645.6	3671.6	3709.4	3747.1
37.5°	3578.8	3570.1	3570.1	3558.5	3544.0	3526.6	3503.3	3477.2	3448.2	3410.4	3381.5
40°	3465.6	3459.8	3454.0	3442.4	3410.4	3375.6	3337.9	3276.9	3210.2	3117.3	3024.4
42.5°	3247.9	3242.1	3239.2	3216.0	3186.9	3146.3	3102.8	3038.9	2954.8	2835.7	2702.2
45°	2978.0	2966.3	2957.7	2937.4	2917.0	2882.2	2841.6	2783.5	2699.3	2577.4	2417.8
47.5°	2664.5	2658.7	2655.8	2647.1	2626.8	2606.4	2580.4	2533.9	2458.4	2342.3	2176.9
50°	2348.1	2336.5	2342.3	2339.5	2330.7	2316.2	2298.8	2266.9	2208.8	2104.3	1953.4
52.5°	1985.3	1985.3	1982.4	1991.1	1994.0	1991.1	1994.0	1959.2	1909.9	1831.5	1703.8
55°	1608.0	1608.0	1616.7	1628.3	1639.9	1642.8	1639.9	1625.4	1590.6	1526.7	1413.5
57.5°	1253.9	1248.1	1265.5	1282.9	1294.5	1306.1	1297.4	1285.8	1265.5	1213.2	1126.2
60°	954.9	954.9	966.5	978.2	989.7	1001.4	998.5	995.6	978.2	943.3	873.7
62.5°	702.4	705.3	705.3	714.0	725.6	737.3	745.9	737.3	728.5	705.3	658.9
65°	502.1	499.2	502.1	510.8	519.6	531.2	537.0	534.1	525.3	507.9	473.1
67.5°	336.7	333.8	345.4	348.3	354.1	365.7	362.8	365.7	362.8	348.3	319.3
70°	220.6	214.8	220.6	217.7	226.4	229.3	235.1	238.0	235.1	226.4	217.7
72.5°	136.4	133.5	136.4	139.3	142.3	145.1	150.9	150.9	148.0	142.3	130.6
75°	87.1	78.3	81.2	75.5	81.2	81.2	87.1	90.0	87.1	87.1	81.2
77.5°	52.3	52.3	52.3	52.3	52.3	52.3	52.3	55.2	58.0	52.3	49.4
80°	26.1	26.1	29.0	29.0	29.0	32.0	29.0	29.0	29.0	32.0	23.2
82.5°	20.3	17.4	17.4	17.4	20.3	17.4	17.4	17.4	17.4	17.4	17.4
85°	8.7	11.6	8.7	5.8	8.7	8.7	11.6	8.7	8.7	8.7	11.6
87.5°	2.9	2.9	0.0	0.0	0.0	2.9	0.0	2.9	2.9	5.8	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°	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3
2.5°	5482.9	5477.0	5477.0	5474.1	5479.9	5474.1	5477.0	5474.1	5474.1	5479.9	5474.1
5°	5503.2	5506.1	5500.3	5497.3	5506.1	5506.1	5506.1	5500.3	5500.3	5503.2	5500.3
7.5°	5532.2	5538.0	5540.9	5543.8	5549.6	5552.5	5552.5	5549.6	5546.7	5555.4	5543.8
10°	5564.1	5572.8	5590.2	5599.0	5613.5	5613.5	5619.3	5619.3	5613.5	5619.3	5616.4
12.5°	5552.5	5604.7	5633.8	5654.1	5674.4	5691.8	5697.6	5700.5	5697.6	5709.3	5697.6
15°	5572.8	5616.4	5662.8	5697.6	5735.3	5755.6	5761.5	5784.7	5790.5	5793.4	5776.0
17.5°	5540.9	5619.3	5668.6	5720.8	5776.0	5813.7	5848.5	5863.1	5866.0	5871.8	5848.5
20°	5468.3	5555.4	5630.9	5706.4	5770.2	5828.2	5857.3	5897.9	5886.3	5909.5	5877.6
22.5°	5369.7	5468.3	5564.1	5662.8	5729.6	5799.2	5860.2	5889.2	5903.7	5903.7	5868.9
25°	5212.9	5329.0	5433.5	5535.1	5636.7	5720.8	5790.5	5834.0	5842.8	5839.9	5799.2
27.5°	4969.1	5093.9	5215.8	5331.9	5456.7	5555.4	5636.7	5688.9	5703.4	5703.4	5659.9
30°	4632.4	4765.9	4884.9	5024.2	5152.0	5262.3	5375.5	5421.9	5448.0	5448.0	5398.7
32.5°	4231.8	4345.1	4455.3	4591.8	4731.1	4855.9	4963.3	5027.1	5059.1	5056.2	5012.6
35°	3796.5	3851.6	3935.8	4037.4	4162.2	4278.3	4382.8	4443.8	4498.9	4496.0	4455.3
37.5°	3361.1	3346.6	3355.3	3393.0	3471.4	3552.7	3633.9	3692.0	3738.4	3758.8	3750.0
40°	2934.5	2859.0	2786.4	2760.3	2766.1	2795.1	2838.7	2882.2	2934.5	2960.6	2972.2
42.5°	2551.3	2423.6	2295.9	2200.1	2144.9	2127.5	2147.8	2162.3	2194.3	2232.0	2269.8
45°	2243.7	2072.4	1904.0	1756.0	1663.1	1608.0	1596.4	1608.0	1625.4	1663.1	1712.5
47.5°	1991.1	1790.8	1602.2	1436.7	1300.3	1227.8	1207.5	1201.7	1219.1	1253.9	1320.6
50°	1767.6	1567.3	1358.4	1166.8	1024.6	943.3	914.3	902.7	923.0	949.1	1010.0
52.5°	1523.8	1326.4	1111.7	925.9	777.9	693.7	661.8	644.4	655.9	690.8	751.7
55°	1259.7	1076.8	882.3	690.8	548.6	470.2	432.4	420.9	432.4	470.2	531.2
57.5°	995.6	841.7	679.2	499.2	371.5	293.2	255.4	243.8	275.8	290.3	354.1
60°	777.9	653.1	513.8	365.7	255.4	194.5	156.7	148.0	162.6	188.6	240.9
62.5°	583.4	505.0	394.7	261.2	188.6	124.8	104.5	95.8	104.5	124.8	165.5
65°	423.8	362.8	275.8	191.5	127.7	92.9	69.7	63.8	72.6	87.1	121.9
67.5°	290.3	243.8	191.5	133.5	87.1	58.0	49.4	49.4	52.3	63.8	90.0
70°	188.6	159.7	121.9	87.1	58.0	43.5	37.7	32.0	37.7	46.4	60.9
72.5°	119.0	101.6	78.3	60.9	43.5	32.0	26.1	23.2	29.0	34.8	46.4
75°	72.6	55.2	40.6	32.0	23.2	23.2	23.2	11.6	14.5	23.2	29.0
77.5°	43.5	37.7	32.0	26.1	20.3	11.6	11.6	11.6	14.5	17.4	26.1
80°	23.2	20.3	14.5	14.5	11.6	8.7	11.6	8.7	5.8	14.5	17.4
82.5°	14.5	11.6	11.6	11.6	14.5	5.8	8.7	5.8	8.7	11.6	8.7
85°	8.7	8.7	8.7	5.8	14.5	5.8	5.8	2.9	2.9	5.8	5.8
87.5°	0.0	2.9	2.9	0.0	2.9	0.0	2.9	2.9	2.9	2.9	2.9
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°	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3
2.5°	5477.0	5474.1	5477.0	5474.1	5474.1	5474.1	5477.0	5477.0	5474.1	5474.1	5479.9
5°	5500.3	5500.3	5500.3	5497.3	5494.4	5494.4	5500.3	5500.3	5491.5	5500.3	5500.3
7.5°	5549.6	5540.9	5549.6	5538.0	5532.2	5535.1	5538.0	5532.2	5526.4	5529.3	5529.3
10°	5613.5	5604.7	5604.7	5596.1	5587.3	5581.5	5575.7	5561.2	5546.7	5543.8	5532.2
12.5°	5688.9	5674.4	5665.7	5648.3	5633.8	5613.5	5596.1	5572.8	5543.8	5523.5	5503.2
15°	5764.4	5741.2	5720.8	5691.8	5659.9	5625.0	5587.3	5549.6	5503.2	5462.5	5427.7
17.5°	5825.3	5793.4	5755.6	5709.3	5662.8	5610.6	5555.4	5500.3	5433.5	5381.2	5340.6
20°	5845.6	5799.2	5749.9	5688.9	5628.0	5555.4	5485.8	5413.2	5337.7	5282.6	5236.1
22.5°	5819.6	5764.4	5703.4	5639.6	5558.3	5479.9	5398.7	5314.5	5247.7	5172.3	5128.8
25°	5747.0	5680.2	5613.5	5538.0	5459.6	5372.6	5285.5	5198.4	5117.1	5076.5	5021.4
27.5°	5599.0	5526.4	5453.8	5375.5	5285.5	5198.4	5108.4	5024.2	4954.6	4899.4	4867.5
30°	5337.7	5253.5	5169.4	5085.2	5006.8	4916.8	4832.7	4763.0	4693.3	4649.8	4617.9
32.5°	4937.1	4861.7	4777.6	4696.2	4623.7	4548.2	4478.6	4417.6	4368.3	4339.2	4316.0
35°	4397.3	4321.8	4258.0	4200.0	4139.0	4107.1	4063.5	4028.7	4008.3	3996.8	3993.9
37.5°	3718.1	3674.6	3654.2	3642.7	3631.0	3622.4	3628.1	3642.7	3654.2	3674.6	3697.8
40°	2992.5	3030.2	3041.8	3082.5	3120.2	3169.5	3224.7	3288.6	3340.8	3407.5	3454.0
42.5°	2330.7	2400.4	2481.6	2568.7	2661.6	2751.6	2861.9	2963.4	3056.3	3140.5	3213.1
45°	1790.8	1898.2	2020.2	2144.9	2269.8	2400.4	2533.9	2658.7	2769.0	2859.0	2934.5
47.5°	1396.1	1515.1	1671.9	1825.7	1976.6	2130.4	2278.5	2409.1	2502.0	2589.0	2655.8
50°	1105.8	1242.3	1413.5	1590.6	1756.0	1918.5	2075.3	2197.2	2290.1	2359.8	2409.1
52.5°	856.2	1018.8	1192.9	1378.7	1555.8	1732.8	1877.9	1991.1	2066.6	2127.5	2165.2
55°	638.5	798.2	984.0	1175.5	1355.5	1526.7	1663.1	1761.9	1828.6	1863.4	1883.7
57.5°	461.5	606.6	792.4	984.0	1146.5	1309.0	1419.3	1509.3	1547.0	1567.3	1576.1
60°	336.7	470.2	635.6	801.1	954.9	1085.5	1181.3	1242.3	1271.3	1282.9	1280.0
62.5°	246.7	362.8	505.0	644.4	769.1	876.5	952.0	992.6	1007.2	1013.0	1004.3
65°	188.6	278.6	400.6	507.9	603.7	682.1	737.3	763.4	772.1	769.1	763.4
67.5°	139.3	209.0	299.0	380.2	449.9	510.8	539.9	563.1	568.9	560.2	551.5
70°	98.7	153.8	217.7	272.9	325.1	359.9	391.8	394.7	394.7	391.8	386.1
72.5°	69.7	107.4	148.0	185.8	217.7	243.8	255.4	264.1	261.2	258.3	252.5
75°	46.4	66.8	107.4	116.1	145.1	153.8	165.5	165.5	168.3	159.7	159.7
77.5°	29.0	46.4	63.8	75.5	87.1	98.7	104.5	104.5	107.4	104.5	104.5
80°	17.4	29.0	34.8	52.3	52.3	60.9	63.8	66.8	60.9	69.7	60.9
82.5°	11.6	17.4	26.1	26.1	32.0	37.7	37.7	40.6	40.6	37.7	37.7
85°	8.7	11.6	14.5	17.4	17.4	20.3	17.4	17.4	20.3	23.2	20.3
87.5°	2.9	5.8	2.9	5.8	5.8	11.6	8.7	8.7	8.7	11.6	11.6
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: P248411

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5468.3	5468.3	5468.3	5468.3
2.5°	5474.1	5477.0	5474.1	5474.1
5°	5500.3	5497.3	5500.3	5494.4
7.5°	5520.6	5520.6	5517.7	5517.7
10°	5520.6	5509.0	5509.0	5509.0
12.5°	5477.0	5462.5	5453.8	5448.0
15°	5401.5	5375.5	5363.8	5360.9
17.5°	5302.9	5279.7	5265.2	5256.4
20°	5189.7	5166.5	5149.1	5152.0
22.5°	5091.0	5064.9	5053.3	5047.4
25°	4992.3	4960.4	4951.7	4945.9
27.5°	4832.7	4815.3	4806.5	4797.9
30°	4588.9	4580.1	4565.6	4586.0
32.5°	4307.3	4292.8	4281.2	4289.9
35°	3996.8	3988.0	3996.8	3990.9
37.5°	3712.3	3721.0	3732.6	3738.4
40°	3488.8	3520.7	3532.4	3538.1
42.5°	3265.3	3303.1	3326.3	3340.8
45°	2989.6	3027.3	3053.4	3070.9
47.5°	2705.1	2737.1	2763.2	2760.3
50°	2446.8	2464.2	2475.8	2487.5
52.5°	2185.6	2185.6	2188.5	2188.5
55°	1889.5	1883.7	1880.8	1883.7
57.5°	1564.4	1558.7	1555.8	1547.0
60°	1268.4	1251.0	1239.4	1239.4
62.5°	992.6	972.3	963.7	960.8
65°	745.9	743.0	725.6	722.7
67.5°	539.9	528.2	516.7	519.6
70°	380.2	362.8	362.8	357.0
72.5°	246.7	238.0	235.1	235.1
75°	153.8	153.8	148.0	159.7
77.5°	101.6	101.6	98.7	101.6
80°	60.9	60.9	60.9	58.0
82.5°	37.7	40.6	37.7	37.7
85°	20.3	23.2	17.4	26.1
87.5°	11.6	14.5	11.6	14.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)