

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: P248357

Luminaire Tested: **LSR8B100D010 EC8B100840 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248357
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 EC8B100840 8LBDWOLI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11356.0 lumens
Efficiency: N/A
Efficacy: 106.8 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

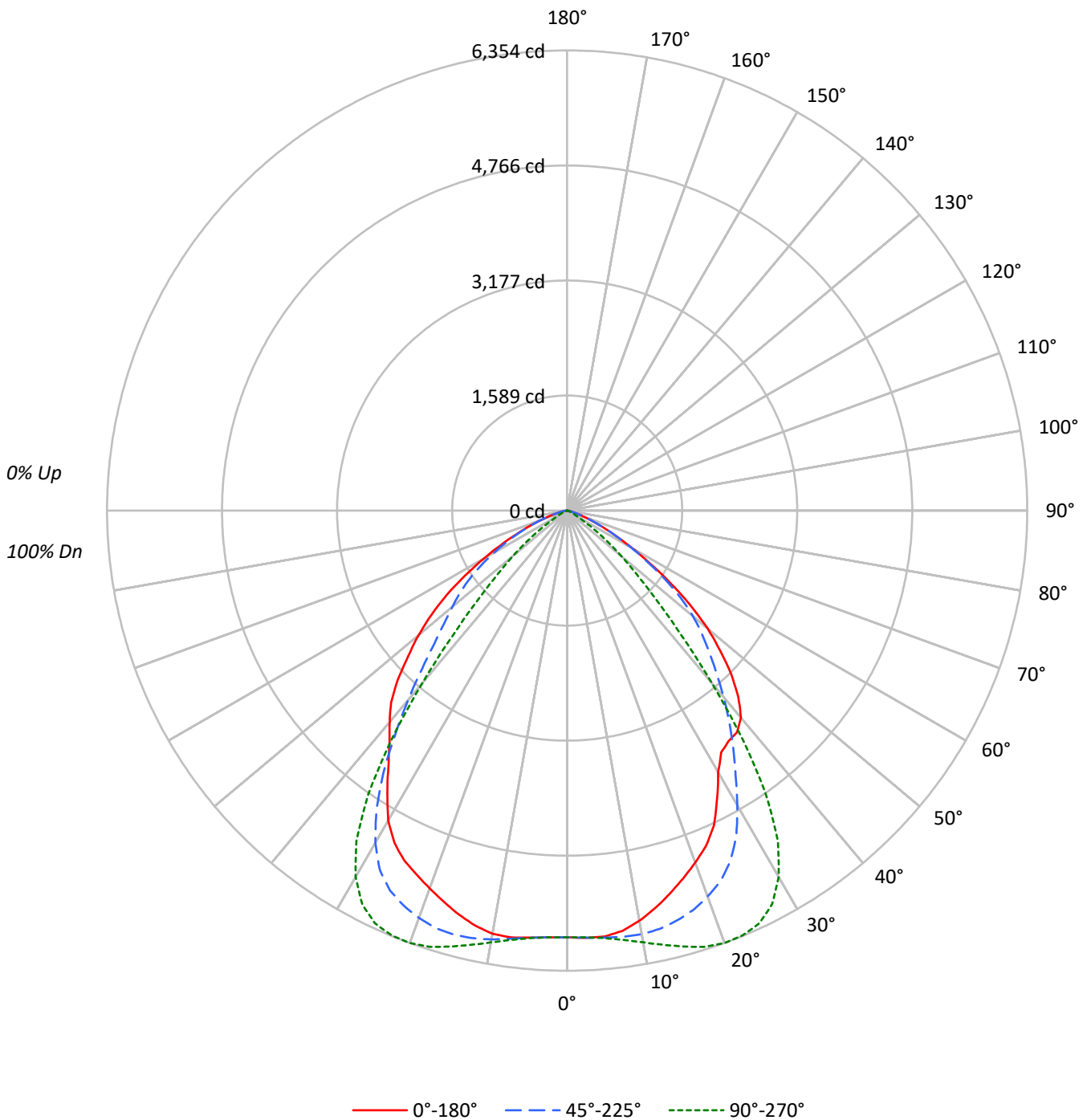
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	181660	181660	181660
5°	182741	183419	183224
10°	180057	189557	185834
15°	174794	198948	184374
20°	169721	208505	182135
25°	163203	213845	181291
30°	148526	207982	175915
35°	146312	180214	161851
40°	150292	124989	153436
45°	139907	75544	144272
50°	121357	46654	128557
55°	93131	24375	109104
60°	63449	9831	82345
65°	39467	5020	56810
70°	21422	3101	34675
75°	11176	1489	20492
80°	5008	1669	11099
85°	3326	1097	9977



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	566.5	5.0
10°-20°	1678.3	14.8
20°-30°	2560.4	22.5
30°-40°	2671.8	23.5
40°-50°	2006.9	17.7
50°-60°	1234.8	10.9
60°-70°	502.5	4.4
70°-80°	118.4	1.0
80°-90°	16.3	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°	4805.3	42.3
0°-40°	7477.1	65.8
0°-60°	10718.8	94.4
0°-90°	11356.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11356.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5891	5891	5891	5891	5891	
5°	5904	5919	5926	5919	5919	559
15°	5475	5860	6232	6060	5775	1542
25°	4797	5335	6285	5788	5328	2181
35°	3887	3996	4787	4425	4300	2454
45°	3208	2777	1732	2586	3308	2448
55°	1732	1645	453	1645	2029	1557
65°	541	547	69	735	779	564
75°	94	94	12	166	172	113
85°	9	9	3	22	28	13
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°	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1
2.5°	5906.8	5897.4	5906.8	5906.8	5909.9	5903.6	5906.8	5909.9	5903.6	5903.6	5903.6
5°	5903.6	5897.4	5903.6	5900.5	5906.8	5906.8	5913.0	5913.0	5919.2	5919.2	5928.7
7.5°	5853.6	5841.1	5853.6	5863.0	5869.2	5881.8	5897.4	5909.9	5922.4	5934.9	5950.5
10°	5750.4	5750.4	5759.8	5778.5	5797.3	5819.2	5847.3	5878.6	5909.9	5938.0	5966.1
12.5°	5622.2	5612.8	5631.6	5656.6	5684.7	5719.2	5762.9	5809.8	5859.9	5916.1	5959.9
15°	5475.3	5465.8	5487.7	5512.7	5547.2	5597.2	5650.4	5712.9	5784.8	5859.9	5931.8
17.5°	5325.1	5322.0	5343.9	5378.3	5406.5	5459.6	5528.4	5603.4	5684.7	5784.8	5878.6
20°	5172.0	5168.8	5190.7	5218.9	5256.4	5306.4	5375.2	5462.7	5559.6	5672.3	5781.7
22.5°	5012.4	5015.6	5034.3	5065.6	5096.9	5150.0	5221.9	5309.5	5415.8	5537.8	5659.7
25°	4796.7	4781.1	4806.1	4837.4	4890.5	4934.3	5003.1	5096.9	5206.3	5334.6	5478.4
27.5°	4484.0	4480.8	4502.8	4530.9	4577.8	4631.0	4706.0	4803.0	4918.6	5059.3	5200.0
30°	4171.3	4177.6	4187.0	4215.1	4246.3	4299.5	4374.6	4455.9	4565.3	4699.7	4849.9
32.5°	3958.7	3958.7	3971.2	3990.0	4011.8	4040.0	4093.2	4152.5	4237.0	4330.8	4440.2
35°	3886.7	3874.3	3886.7	3889.9	3893.0	3899.3	3908.6	3927.4	3955.5	3996.2	4036.9
37.5°	3855.5	3846.1	3846.1	3833.6	3818.0	3799.2	3774.2	3746.0	3714.8	3674.1	3642.9
40°	3733.6	3727.3	3721.0	3708.5	3674.1	3636.6	3595.9	3530.3	3458.4	3358.3	3258.3
42.5°	3499.1	3492.8	3489.7	3464.6	3433.3	3389.6	3342.7	3273.9	3183.2	3055.0	2911.2
45°	3208.2	3195.7	3186.4	3164.5	3142.5	3105.0	3061.3	2998.7	2908.0	2776.7	2604.7
47.5°	2870.5	2864.3	2861.1	2851.8	2829.9	2807.9	2779.9	2729.8	2648.5	2523.4	2345.2
50°	2529.7	2517.2	2523.4	2520.3	2510.9	2495.3	2476.5	2442.1	2379.6	2267.0	2104.4
52.5°	2138.8	2138.8	2135.7	2145.1	2148.2	2145.1	2148.2	2110.7	2057.5	1973.1	1835.5
55°	1732.3	1732.3	1741.7	1754.2	1766.7	1769.8	1766.7	1751.1	1713.5	1644.8	1522.8
57.5°	1350.8	1344.6	1363.3	1382.1	1394.6	1407.1	1397.7	1385.2	1363.3	1307.0	1213.2
60°	1028.8	1028.8	1041.2	1053.8	1066.3	1078.8	1075.7	1072.5	1053.8	1016.2	941.2
62.5°	756.7	759.8	759.8	769.2	781.7	794.3	803.6	794.3	784.8	759.8	709.8
65°	540.9	537.8	540.9	550.3	559.8	572.2	578.5	575.4	566.0	547.2	509.7
67.5°	362.7	359.6	372.1	375.2	381.5	394.0	390.9	394.0	390.9	375.2	344.0
70°	237.6	231.4	237.6	234.5	243.9	247.1	253.3	256.4	253.3	243.9	234.5
72.5°	147.0	143.8	147.0	150.1	153.2	156.3	162.6	162.6	159.4	153.2	140.7
75°	93.8	84.4	87.5	81.3	87.5	87.5	93.8	96.9	93.8	93.8	87.5
77.5°	56.3	56.3	56.3	56.3	56.3	56.3	56.3	59.4	62.5	56.3	53.2
80°	28.2	28.2	31.3	31.3	31.3	34.4	31.3	31.3	31.3	34.4	25.0
82.5°	21.9	18.7	18.7	18.7	21.9	18.7	18.7	18.7	18.7	18.7	18.7
85°	9.4	12.5	9.4	6.3	9.4	9.4	12.5	9.4	9.4	9.4	12.5
87.5°	3.1	3.1	0.0	0.0	0.0	3.1	0.0	3.1	3.1	6.3	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°	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1
2.5°	5906.8	5900.5	5900.5	5897.4	5903.6	5897.4	5900.5	5897.4	5897.4	5903.6	5897.4
5°	5928.7	5931.8	5925.5	5922.4	5931.8	5931.8	5931.8	5925.5	5925.5	5928.7	5925.5
7.5°	5959.9	5966.1	5969.3	5972.4	5978.7	5981.8	5981.8	5978.7	5975.6	5985.0	5972.4
10°	5994.3	6003.7	6022.5	6031.9	6047.5	6047.5	6053.8	6053.8	6047.5	6053.8	6050.6
12.5°	5981.8	6038.1	6069.4	6091.2	6113.1	6131.9	6138.1	6141.3	6138.1	6150.7	6138.1
15°	6003.7	6050.6	6100.7	6138.1	6178.8	6200.7	6206.9	6231.9	6238.2	6241.4	6222.6
17.5°	5969.3	6053.8	6106.9	6163.2	6222.6	6263.2	6300.7	6316.4	6319.5	6325.7	6300.7
20°	5891.1	5985.0	6066.2	6147.6	6216.3	6278.8	6310.1	6353.9	6341.4	6366.5	6332.0
22.5°	5784.8	5891.1	5994.3	6100.7	6172.6	6247.6	6313.3	6344.5	6360.2	6360.2	6322.6
25°	5616.0	5741.1	5853.6	5963.0	6072.5	6163.2	6238.2	6285.1	6294.5	6291.4	6247.6
27.5°	5353.3	5487.7	5619.1	5744.2	5878.6	5985.0	6072.5	6128.7	6144.4	6144.4	6097.5
30°	4990.6	5134.4	5262.6	5412.7	5550.3	5669.1	5791.1	5841.1	5869.2	5869.2	5816.1
32.5°	4559.0	4681.0	4799.8	4946.8	5096.9	5231.3	5347.0	5415.8	5450.2	5447.1	5400.2
35°	4090.0	4149.4	4240.1	4349.6	4484.0	4609.1	4721.6	4787.3	4846.7	4843.6	4799.8
37.5°	3620.9	3605.3	3614.7	3655.4	3739.8	3827.4	3914.9	3977.5	4027.4	4049.4	4040.0
40°	3161.3	3080.0	3001.8	2973.7	2979.9	3011.2	3058.1	3105.0	3161.3	3189.5	3202.0
42.5°	2748.6	2611.0	2473.4	2370.2	2310.8	2292.0	2313.9	2329.5	2364.0	2404.6	2445.3
45°	2417.1	2232.7	2051.3	1891.8	1791.7	1732.3	1719.8	1732.3	1751.1	1791.7	1844.9
47.5°	2145.1	1929.3	1726.1	1547.8	1400.8	1322.7	1300.8	1294.6	1313.3	1350.8	1422.7
50°	1904.3	1688.5	1463.4	1257.0	1103.8	1016.2	985.0	972.5	994.3	1022.5	1088.1
52.5°	1641.6	1429.0	1197.6	997.5	838.0	747.4	712.9	694.2	706.7	744.2	809.9
55°	1357.1	1160.1	950.6	744.2	591.0	506.6	465.9	453.4	465.9	506.6	572.2
57.5°	1072.5	906.8	731.7	537.8	400.2	315.8	275.1	262.7	297.1	312.7	381.5
60°	838.0	703.6	553.5	394.0	275.1	209.5	168.9	159.4	175.1	203.2	259.5
62.5°	628.5	544.1	425.2	281.4	203.2	134.4	112.5	103.2	112.5	134.4	178.3
65°	456.5	390.9	297.1	206.4	137.6	100.1	75.1	68.8	78.2	93.8	131.4
67.5°	312.7	262.7	206.4	143.8	93.8	62.5	53.2	53.2	56.3	68.8	96.9
70°	203.2	172.0	131.4	93.8	62.5	46.9	40.6	34.4	40.6	50.0	65.6
72.5°	128.2	109.4	84.4	65.6	46.9	34.4	28.2	25.0	31.3	37.5	50.0
75°	78.2	59.4	43.8	34.4	25.0	25.0	25.0	12.5	15.6	25.0	31.3
77.5°	46.9	40.6	34.4	28.2	21.9	12.5	12.5	12.5	15.6	18.7	28.2
80°	25.0	21.9	15.6	15.6	12.5	9.4	12.5	9.4	6.3	15.6	18.7
82.5°	15.6	12.5	12.5	12.5	15.6	6.3	9.4	6.3	9.4	12.5	9.4
85°	9.4	9.4	9.4	6.3	15.6	6.3	6.3	3.1	3.1	6.3	6.3
87.5°	0.0	3.1	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1	3.1
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°	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1	5891.1
2.5°	5900.5	5897.4	5900.5	5897.4	5897.4	5897.4	5900.5	5900.5	5897.4	5897.4	5903.6
5°	5925.5	5925.5	5925.5	5922.4	5919.2	5919.2	5925.5	5925.5	5916.1	5925.5	5925.5
7.5°	5978.7	5969.3	5978.7	5966.1	5959.9	5963.0	5966.1	5959.9	5953.7	5956.8	5956.8
10°	6047.5	6038.1	6038.1	6028.7	6019.3	6013.1	6006.9	5991.2	5975.6	5972.4	5959.9
12.5°	6128.7	6113.1	6103.8	6085.0	6069.4	6047.5	6028.7	6003.7	5972.4	5950.5	5928.7
15°	6210.1	6185.0	6163.2	6131.9	6097.5	6060.0	6019.3	5978.7	5928.7	5884.9	5847.3
17.5°	6275.7	6241.4	6200.7	6150.7	6100.7	6044.3	5985.0	5925.5	5853.6	5797.3	5753.5
20°	6297.6	6247.6	6194.5	6128.7	6063.1	5985.0	5909.9	5831.7	5750.4	5691.0	5641.0
22.5°	6269.5	6210.1	6144.4	6075.6	5988.0	5903.6	5816.1	5725.4	5653.5	5572.2	5525.3
25°	6191.3	6119.4	6047.5	5966.1	5881.8	5788.0	5694.2	5600.3	5512.7	5469.0	5409.6
27.5°	6031.9	5953.7	5875.5	5791.1	5694.2	5600.3	5503.4	5412.7	5337.7	5278.2	5243.9
30°	5750.4	5659.7	5569.1	5478.4	5393.9	5297.0	5206.3	5131.3	5056.2	5009.3	4975.0
32.5°	5318.9	5237.6	5146.9	5059.3	4981.2	4899.9	4824.8	4759.2	4706.0	4674.7	4649.7
35°	4737.3	4656.0	4587.2	4524.7	4459.0	4424.6	4377.7	4340.1	4318.3	4305.8	4302.7
37.5°	4005.6	3958.7	3936.8	3924.3	3911.8	3902.4	3908.6	3924.3	3936.8	3958.7	3983.7
40°	3223.9	3264.5	3277.0	3320.8	3361.4	3414.6	3474.0	3542.8	3599.1	3671.0	3721.0
42.5°	2510.9	2586.0	2673.5	2767.3	2867.4	2964.3	3083.1	3192.6	3292.6	3383.3	3461.5
45°	1929.3	2045.0	2176.3	2310.8	2445.3	2586.0	2729.8	2864.3	2983.1	3080.0	3161.3
47.5°	1504.0	1632.3	1801.1	1966.9	2129.4	2295.2	2454.6	2595.3	2695.4	2789.2	2861.1
50°	1191.3	1338.3	1522.8	1713.5	1891.8	2066.9	2235.7	2367.1	2467.2	2542.2	2595.3
52.5°	922.4	1097.5	1285.2	1485.3	1676.0	1866.8	2023.1	2145.1	2226.4	2292.0	2332.7
55°	687.9	859.9	1060.1	1266.4	1460.3	1644.8	1791.7	1898.1	1970.0	2007.5	2029.4
57.5°	497.2	653.6	853.6	1060.1	1235.1	1410.2	1529.1	1626.0	1666.6	1688.5	1697.9
60°	362.7	506.6	684.8	863.0	1028.8	1169.5	1272.7	1338.3	1369.6	1382.1	1379.0
62.5°	265.8	390.9	544.1	694.2	828.6	944.3	1025.6	1069.4	1085.1	1091.3	1081.9
65°	203.2	300.2	431.5	547.2	650.4	734.8	794.3	822.4	831.7	828.6	822.4
67.5°	150.1	225.2	322.1	409.6	484.7	550.3	581.6	606.7	612.9	603.5	594.1
70°	106.3	165.7	234.5	294.0	350.2	387.8	422.1	425.2	425.2	422.1	415.9
72.5°	75.1	115.7	159.4	200.2	234.5	262.7	275.1	284.5	281.4	278.3	272.1
75°	50.0	71.9	115.7	125.1	156.3	165.7	178.3	178.3	181.3	172.0	172.0
77.5°	31.3	50.0	68.8	81.3	93.8	106.3	112.5	112.5	115.7	112.5	112.5
80°	18.7	31.3	37.5	56.3	56.3	65.6	68.8	71.9	65.6	75.1	65.6
82.5°	12.5	18.7	28.2	28.2	34.4	40.6	40.6	43.8	43.8	40.6	40.6
85°	9.4	12.5	15.6	18.7	18.7	21.9	18.7	18.7	21.9	25.0	21.9
87.5°	3.1	6.3	3.1	6.3	6.3	12.5	9.4	9.4	9.4	12.5	12.5
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: P248357

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5891.1	5891.1	5891.1	5891.1
2.5°	5897.4	5900.5	5897.4	5897.4
5°	5925.5	5922.4	5925.5	5919.2
7.5°	5947.4	5947.4	5944.3	5944.3
10°	5947.4	5934.9	5934.9	5934.9
12.5°	5900.5	5884.9	5875.5	5869.2
15°	5819.2	5791.1	5778.5	5775.4
17.5°	5712.9	5687.9	5672.3	5662.9
20°	5590.9	5565.9	5547.2	5550.3
22.5°	5484.6	5456.5	5444.0	5437.7
25°	5378.3	5343.9	5334.6	5328.3
27.5°	5206.3	5187.6	5178.2	5168.8
30°	4943.7	4934.3	4918.6	4940.5
32.5°	4640.4	4624.7	4612.2	4621.6
35°	4305.8	4296.4	4305.8	4299.5
37.5°	3999.4	4008.7	4021.2	4027.4
40°	3758.6	3792.9	3805.5	3811.7
42.5°	3517.8	3558.4	3583.5	3599.1
45°	3220.7	3261.3	3289.5	3308.3
47.5°	2914.3	2948.7	2976.8	2973.7
50°	2636.0	2654.8	2667.2	2679.8
52.5°	2354.5	2354.5	2357.7	2357.7
55°	2035.6	2029.4	2026.2	2029.4
57.5°	1685.4	1679.2	1676.0	1666.6
60°	1366.5	1347.7	1335.2	1335.2
62.5°	1069.4	1047.5	1038.2	1035.0
65°	803.6	800.5	781.7	778.6
67.5°	581.6	569.1	556.6	559.8
70°	409.6	390.9	390.9	384.6
72.5°	265.8	256.4	253.3	253.3
75°	165.7	165.7	159.4	172.0
77.5°	109.4	109.4	106.3	109.4
80°	65.6	65.6	65.6	62.5
82.5°	40.6	43.8	40.6	40.6
85°	21.9	25.0	18.7	28.2
87.5°	12.5	15.6	12.5	15.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)