

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: P249599

Luminaire Tested: **LSR8B100D010 EC8B100950 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249599
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B100D010 EC8B100950 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10057.0 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

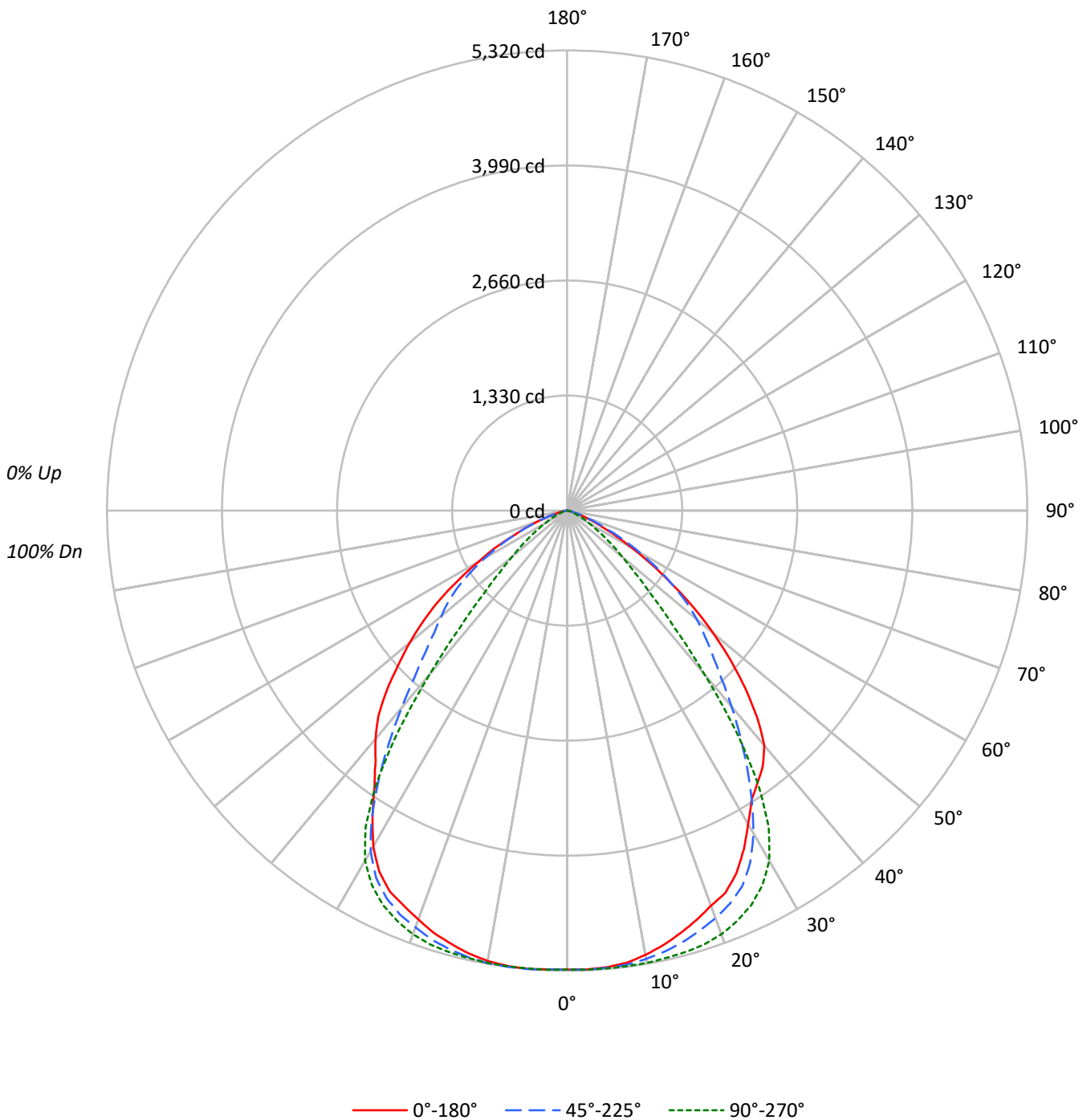
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249599

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0MW

Luminous Intensity Polar Plot





TEST NUMBER: P249599

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0MW

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	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	163627	163627	163627
5°	163986	164428	164605
10°	163295	166239	165525
15°	161485	168671	165488
20°	159548	171043	165061
25°	157477	171240	165231
30°	148982	166426	159628
35°	144535	144640	146142
40°	142745	99520	138731
45°	127190	59745	128930
50°	105761	39760	113955
55°	79320	27413	96620
60°	53754	18267	72897
65°	32426	11850	50083
70°	17978	6419	30816
75°	8149	2716	15953
80°	7085	3037	11134
85°	8067	4033	11110



TEST NUMBER: P249599

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	506.4	5.0
10°-20°	1470.7	14.6
20°-30°	2232.2	22.2
30°-40°	2344.5	23.3
40°-50°	1757.7	17.5
50°-60°	1127.8	11.2
60°-70°	482.5	4.8
70°-80°	114.0	1.1
80°-90°	21.2	0.2
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°	4209.3	41.9
0°-40°	6553.8	65.2
0°-60°	9439.4	93.9
0°-90°	10057.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10057.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5306	5306	5306	5306	5306	
5°	5298	5306	5312	5320	5318	503
15°	5058	5164	5284	5249	5184	1427
25°	4628	4791	5033	4942	4856	2114
35°	3840	3626	3842	3797	3882	2410
45°	2917	2384	1370	2316	2956	2234
55°	1475	1475	510	1538	1797	1338
65°	444	524	162	675	686	474
75°	68	80	23	137	134	100
85°	23	14	11	23	31	24
90°	0	0	0	0	0	



TEST NUMBER: P249599

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3
2.5°	5309.1	5314.8	5312.0	5312.0	5309.1	5312.0	5312.0	5317.7	5317.7	5312.0	5309.1
5°	5297.7	5303.4	5303.4	5297.7	5297.7	5312.0	5303.4	5309.1	5309.1	5306.3	5306.3
7.5°	5272.1	5272.1	5283.5	5275.0	5275.0	5283.5	5280.6	5286.3	5292.1	5294.9	5294.9
10°	5215.1	5220.8	5223.7	5223.7	5226.5	5235.0	5240.8	5252.2	5257.8	5263.5	5266.4
12.5°	5144.0	5152.5	5155.3	5152.5	5161.0	5172.4	5186.7	5200.9	5209.5	5220.8	5229.4
15°	5058.4	5058.4	5064.2	5072.7	5078.4	5095.5	5109.7	5126.8	5149.6	5163.9	5178.1
17.5°	4964.5	4970.2	4978.7	4978.7	4990.1	5018.6	5027.2	5052.8	5078.4	5092.7	5121.2
20°	4862.0	4867.6	4876.2	4881.9	4896.1	4918.9	4936.0	4958.8	4987.3	5012.9	5041.4
22.5°	4782.2	4770.8	4776.5	4782.2	4796.5	4816.4	4836.3	4864.8	4893.3	4918.9	4947.4
25°	4628.4	4631.2	4639.8	4645.5	4662.6	4679.7	4702.5	4736.6	4762.3	4790.8	4822.1
27.5°	4420.5	4423.3	4437.6	4437.6	4451.8	4480.3	4494.5	4523.0	4557.2	4585.7	4622.7
30°	4184.1	4189.7	4189.7	4201.2	4209.7	4224.0	4238.2	4266.7	4283.8	4309.4	4360.7
32.5°	3967.6	3973.3	3970.4	3967.6	3959.1	3956.2	3953.3	3959.1	3964.8	3973.3	3993.2
35°	3839.5	3825.2	3813.8	3793.9	3771.1	3742.6	3716.9	3682.8	3651.4	3625.8	3597.4
37.5°	3716.9	3714.1	3697.0	3668.5	3622.9	3571.7	3511.9	3437.8	3363.8	3284.0	3207.1
40°	3546.1	3537.5	3523.3	3483.4	3432.1	3369.5	3289.7	3198.6	3078.9	2956.5	2831.2
42.5°	3255.5	3258.4	3241.3	3209.9	3161.6	3101.7	3019.1	2919.5	2791.3	2646.0	2483.7
45°	2916.6	2916.6	2910.9	2885.2	2851.1	2802.7	2740.0	2657.4	2532.1	2384.0	2210.2
47.5°	2563.4	2566.3	2557.7	2552.0	2537.8	2506.5	2460.9	2398.2	2309.9	2167.5	1993.7
50°	2204.6	2204.6	2218.8	2215.9	2215.9	2204.6	2184.6	2147.6	2070.7	1956.7	1794.4
52.5°	1845.7	1851.4	1859.9	1871.3	1885.5	1908.3	1885.5	1868.4	1820.0	1731.7	1592.2
55°	1475.4	1481.1	1495.3	1515.2	1532.4	1555.2	1560.8	1560.8	1535.2	1475.4	1370.0
57.5°	1159.3	1150.7	1162.1	1179.2	1202.0	1224.8	1241.8	1261.8	1258.9	1219.1	1133.6
60°	871.6	874.4	882.9	900.1	917.1	937.1	959.9	976.9	985.5	965.6	911.4
62.5°	635.2	635.2	646.5	663.6	672.2	700.7	714.9	723.5	732.0	729.1	695.0
65°	444.4	450.0	455.7	464.3	472.8	489.9	498.4	515.5	521.2	524.1	498.4
67.5°	313.3	304.8	310.5	316.1	324.7	336.1	353.2	353.2	361.7	361.7	344.6
70°	199.4	199.4	202.2	210.7	216.5	219.3	225.0	230.7	239.3	236.4	236.4
72.5°	133.9	131.0	133.9	136.7	139.6	148.1	148.1	151.0	156.7	159.5	148.1
75°	68.4	71.2	76.9	74.1	82.6	76.9	79.7	88.3	85.4	79.7	79.7
77.5°	56.9	56.9	56.9	54.1	59.8	59.8	56.9	62.7	59.8	59.8	56.9
80°	39.9	42.7	39.9	37.0	39.9	37.0	37.0	37.0	37.0	37.0	34.2
82.5°	31.4	25.6	28.5	25.6	28.5	28.5	25.6	22.8	22.8	25.6	22.8
85°	22.8	17.1	19.9	19.9	17.1	17.1	17.1	17.1	17.1	14.2	14.2
87.5°	14.2	8.6	8.6	8.6	11.4	11.4	11.4	8.6	11.4	11.4	5.7
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: P249599

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3
2.5°	5314.8	5312.0	5317.7	5314.8	5314.8	5312.0	5314.8	5312.0	5317.7	5306.3	5309.1
5°	5314.8	5309.1	5312.0	5314.8	5317.7	5312.0	5312.0	5312.0	5317.7	5312.0	5314.8
7.5°	5303.4	5300.6	5309.1	5314.8	5312.0	5309.1	5314.8	5312.0	5317.7	5314.8	5320.5
10°	5280.6	5283.5	5289.2	5297.7	5300.6	5303.4	5309.1	5309.1	5317.7	5306.3	5312.0
12.5°	5246.5	5257.8	5272.1	5277.8	5289.2	5289.2	5294.9	5297.7	5303.4	5300.6	5309.1
15°	5203.8	5218.0	5235.0	5249.3	5263.5	5272.1	5280.6	5283.5	5292.1	5283.5	5286.3
17.5°	5152.5	5169.5	5195.2	5212.3	5235.0	5243.6	5255.0	5260.7	5269.3	5263.5	5266.4
20°	5081.2	5101.2	5129.7	5155.3	5169.5	5189.5	5203.8	5212.3	5218.0	5212.3	5215.1
22.5°	4981.6	5010.1	5047.1	5067.0	5095.5	5112.6	5115.5	5135.4	5149.6	5135.4	5141.1
25°	4864.8	4893.3	4921.8	4964.5	4990.1	5010.1	5030.0	5032.9	5047.1	5044.2	5041.4
27.5°	4671.1	4708.2	4756.5	4790.8	4824.9	4856.3	4879.1	4884.7	4899.0	4893.3	4896.1
30°	4406.2	4446.1	4491.7	4545.8	4594.2	4625.5	4654.0	4674.0	4688.2	4679.7	4676.8
32.5°	4030.3	4070.1	4118.6	4172.7	4229.7	4275.2	4309.4	4335.0	4352.1	4346.4	4332.2
35°	3600.2	3611.6	3642.9	3685.7	3734.0	3782.5	3813.8	3842.3	3862.2	3867.9	3867.9
37.5°	3158.7	3121.7	3098.9	3098.9	3127.4	3147.3	3175.8	3192.9	3224.2	3235.6	3244.2
40°	2731.4	2646.0	2566.3	2506.5	2466.6	2463.7	2463.7	2472.3	2500.8	2537.8	2572.0
42.5°	2349.8	2213.1	2090.6	1979.5	1899.8	1854.2	1834.3	1837.1	1859.9	1894.1	1951.0
45°	2045.0	1874.2	1720.3	1586.5	1478.2	1407.0	1372.9	1370.0	1387.1	1426.9	1489.7
47.5°	1808.6	1626.3	1452.6	1298.8	1182.0	1105.1	1065.2	1053.9	1065.2	1102.2	1176.3
50°	1612.1	1424.2	1244.7	1085.2	959.9	880.1	843.1	828.8	843.1	874.4	948.4
52.5°	1429.8	1236.1	1068.1	914.3	780.4	712.0	672.2	663.6	672.2	709.2	769.0
55°	1219.1	1053.9	888.6	734.8	618.1	549.7	518.4	509.9	518.4	552.6	615.2
57.5°	1011.2	868.7	723.5	583.9	484.2	424.4	395.9	384.5	404.4	427.2	501.3
60°	817.4	703.5	581.0	458.6	376.0	321.8	299.0	296.2	301.9	330.4	381.6
62.5°	640.9	546.9	450.0	350.3	282.0	259.2	230.7	227.9	233.5	250.6	290.5
65°	461.4	401.6	327.6	256.3	202.2	170.9	159.5	162.4	168.0	179.5	216.5
67.5°	321.8	279.1	227.9	179.5	139.6	125.3	113.9	111.1	113.9	133.9	153.8
70°	216.5	190.8	153.8	136.7	96.9	76.9	79.7	71.2	82.6	82.6	99.7
72.5°	142.4	125.3	102.5	79.7	68.4	54.1	54.1	51.3	56.9	59.8	74.1
75°	74.1	56.9	56.9	39.9	28.5	14.2	25.6	22.8	19.9	22.8	28.5
77.5°	51.3	42.7	39.9	31.4	28.5	22.8	22.8	22.8	22.8	25.6	28.5
80°	31.4	31.4	22.8	19.9	17.1	14.2	17.1	17.1	17.1	17.1	19.9
82.5°	19.9	17.1	17.1	14.2	14.2	11.4	11.4	11.4	11.4	11.4	17.1
85°	17.1	11.4	11.4	8.6	11.4	19.9	8.6	11.4	11.4	11.4	8.6
87.5°	5.7	8.6	8.6	8.6	5.7	2.9	5.7	8.6	8.6	14.2	11.4
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: P249599

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3	5306.3
2.5°	5314.8	5317.7	5317.7	5314.8	5314.8	5309.1	5320.5	5312.0	5314.8	5326.2	5317.7
5°	5320.5	5323.3	5323.3	5320.5	5320.5	5320.5	5323.3	5323.3	5320.5	5317.7	5323.3
7.5°	5331.9	5329.1	5329.1	5323.3	5323.3	5317.7	5323.3	5314.8	5320.5	5314.8	5323.3
10°	5317.7	5320.5	5317.7	5314.8	5314.8	5312.0	5312.0	5303.4	5306.3	5297.7	5303.4
12.5°	5309.1	5306.3	5306.3	5300.6	5294.9	5289.2	5286.3	5277.8	5277.8	5257.8	5266.4
15°	5286.3	5289.2	5280.6	5269.3	5263.5	5249.3	5243.6	5232.2	5220.8	5206.6	5209.5
17.5°	5266.4	5257.8	5246.5	5235.0	5212.3	5200.9	5189.5	5172.4	5166.7	5149.6	5144.0
20°	5206.6	5200.9	5186.7	5166.7	5152.5	5126.8	5115.5	5098.4	5084.1	5067.0	5058.4
22.5°	5129.7	5124.0	5106.9	5087.0	5064.2	5052.8	5041.4	5010.1	4995.8	4978.7	4975.9
25°	5032.9	5024.3	5007.2	4984.4	4973.0	4941.7	4930.3	4907.5	4901.8	4884.7	4881.9
27.5°	4884.7	4873.3	4853.4	4824.9	4805.0	4785.0	4773.7	4756.5	4750.9	4733.8	4731.0
30°	4662.6	4648.3	4608.4	4597.1	4562.9	4542.9	4542.9	4520.1	4523.0	4511.6	4511.6
32.5°	4312.3	4289.5	4258.1	4235.3	4212.5	4201.2	4201.2	4192.6	4198.3	4198.3	4204.0
35°	3848.0	3816.7	3799.5	3785.3	3785.3	3796.7	3830.9	3839.5	3856.5	3870.8	3882.2
37.5°	3252.7	3249.9	3269.8	3286.9	3329.6	3378.0	3437.8	3489.1	3537.5	3571.7	3605.9
40°	2609.0	2680.2	2737.1	2816.9	2882.4	2976.4	3084.6	3172.9	3255.5	3315.4	3378.0
42.5°	2036.5	2127.6	2247.3	2364.0	2480.8	2609.0	2751.4	2873.9	2982.1	3064.7	3130.2
45°	1586.5	1711.8	1857.1	2005.2	2156.1	2315.7	2463.7	2589.1	2703.0	2788.4	2854.0
47.5°	1278.8	1415.6	1580.8	1743.1	1914.0	2082.0	2247.3	2355.5	2449.5	2517.8	2577.7
50°	1056.7	1202.0	1375.7	1560.8	1731.7	1899.8	2042.2	2147.6	2224.5	2284.3	2321.3
52.5°	882.9	1036.7	1221.9	1407.0	1577.9	1731.7	1859.9	1939.7	2002.3	2045.0	2079.2
55°	729.1	877.3	1051.0	1224.8	1392.8	1538.0	1643.4	1703.3	1751.6	1777.3	1797.2
57.5°	595.3	732.0	891.5	1051.0	1196.3	1315.9	1398.5	1458.3	1481.1	1501.0	1498.2
60°	467.1	595.3	740.5	877.3	1002.6	1099.4	1159.3	1193.4	1210.5	1219.1	1213.3
62.5°	367.4	484.2	595.3	714.9	806.1	888.6	945.6	945.6	954.2	957.0	965.6
65°	273.4	361.7	458.6	546.9	620.9	675.0	706.4	714.9	726.3	723.5	717.8
67.5°	202.2	267.8	338.9	404.4	455.7	489.9	512.7	532.7	529.8	524.1	521.2
70°	139.6	182.3	245.0	284.8	321.8	356.1	361.7	364.6	367.4	370.3	364.6
72.5°	96.9	128.2	162.4	196.5	219.3	233.5	247.8	250.6	250.6	250.6	247.8
75°	48.4	65.5	96.9	111.1	131.0	136.7	148.1	148.1	156.7	145.2	142.4
77.5°	42.7	51.3	68.4	79.7	88.3	96.9	99.7	108.2	105.4	99.7	102.5
80°	25.6	31.4	42.7	48.4	59.8	62.7	65.5	68.4	65.5	68.4	68.4
82.5°	19.9	22.8	28.5	28.5	37.0	37.0	39.9	39.9	42.7	42.7	42.7
85°	11.4	19.9	17.1	34.2	22.8	22.8	28.5	34.2	28.5	28.5	34.2
87.5°	11.4	11.4	8.6	11.4	11.4	11.4	14.2	17.1	17.1	19.9	17.1
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: P249599

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5306.3	5306.3	5306.3	5306.3
2.5°	5314.8	5320.5	5312.0	5309.1
5°	5323.3	5323.3	5317.7	5317.7
7.5°	5323.3	5323.3	5314.8	5309.1
10°	5300.6	5300.6	5292.1	5286.3
12.5°	5257.8	5257.8	5255.0	5246.5
15°	5203.8	5203.8	5192.3	5183.8
17.5°	5129.7	5135.4	5121.2	5121.2
20°	5049.9	5047.1	5035.7	5030.0
22.5°	4967.4	4961.6	4958.8	4941.7
25°	4879.1	4873.3	4864.8	4856.3
27.5°	4728.1	4725.2	4716.7	4705.3
30°	4497.4	4494.5	4483.1	4483.1
32.5°	4198.3	4195.5	4184.1	4186.9
35°	3887.8	3899.3	3893.5	3882.2
37.5°	3628.6	3637.2	3642.9	3637.2
40°	3412.2	3437.8	3440.7	3446.4
42.5°	3181.5	3215.7	3227.1	3232.7
45°	2905.2	2936.5	2962.2	2956.5
47.5°	2623.2	2646.0	2668.8	2651.7
50°	2352.7	2366.9	2375.4	2375.4
52.5°	2096.3	2096.3	2093.5	2096.3
55°	1802.9	1802.9	1791.6	1797.2
57.5°	1495.3	1501.0	1492.5	1478.2
60°	1210.5	1196.3	1190.5	1182.0
62.5°	942.8	942.8	922.9	948.4
65°	706.4	697.8	689.3	686.4
67.5°	512.7	509.9	501.3	498.4
70°	361.7	350.3	347.5	341.8
72.5°	242.1	242.1	236.4	236.4
75°	148.1	133.9	131.0	133.9
77.5°	102.5	99.7	99.7	96.9
80°	68.4	65.5	71.2	62.7
82.5°	42.7	45.6	42.7	45.6
85°	28.5	34.2	31.4	31.4
87.5°	17.1	17.1	17.1	17.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)