

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: P249275

Luminaire Tested: **LSR8B100D010 EC8B100950 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249275
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 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10118.0 lumens
Efficiency: N/A
Efficacy: 95.2 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

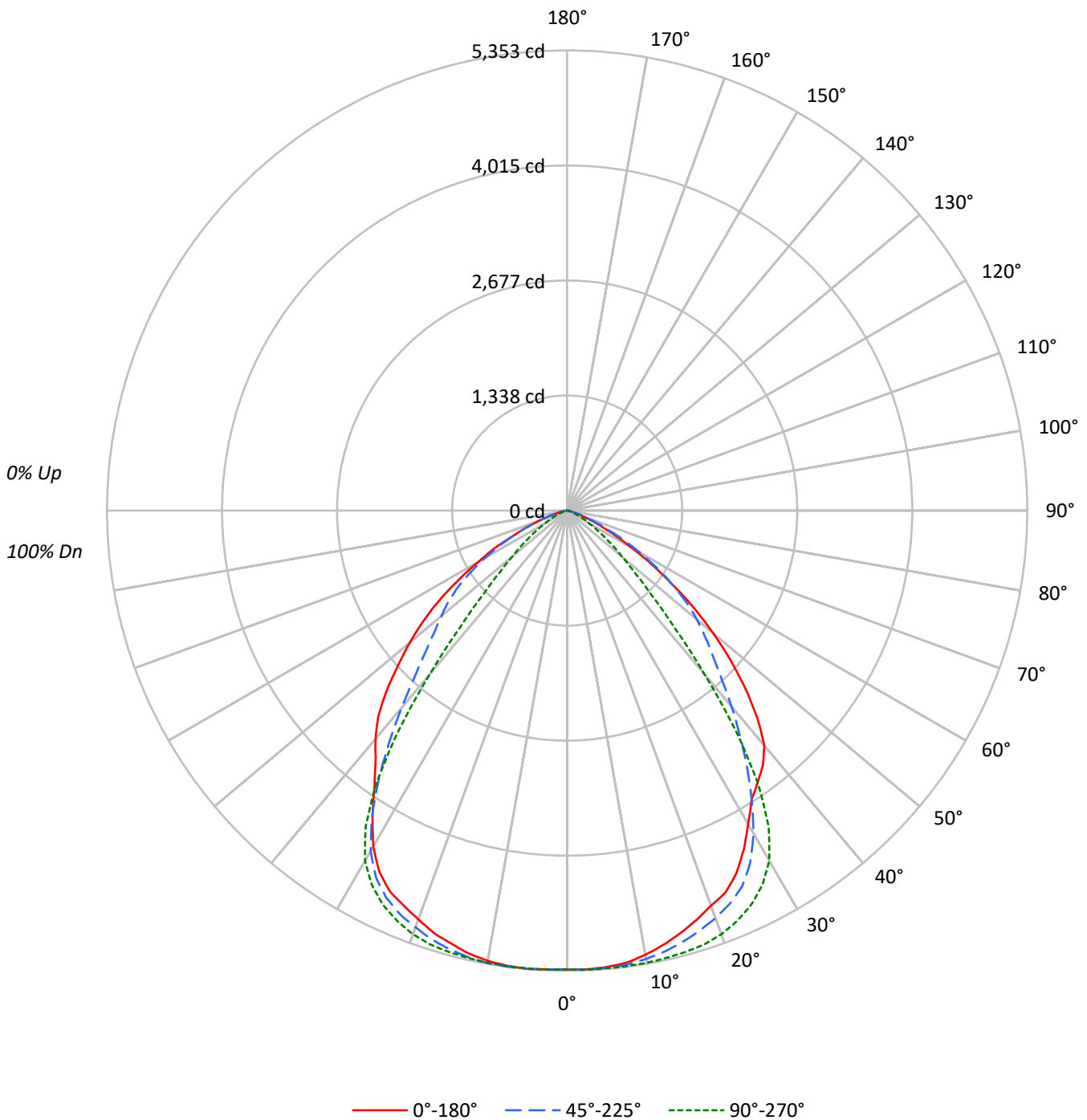
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	164620	164620	164620
5°	164979	165425	165604
10°	164285	167247	166530
15°	162465	169693	166494
20°	160516	172080	166062
25°	158433	172278	166232
30°	149886	167433	160597
35°	145412	145517	147027
40°	143610	100120	139573
45°	127962	60106	129711
50°	106399	40005	114650
55°	79798	27580	97206
60°	54081	18378	73341
65°	32615	11922	50390
70°	18086	6464	30997
75°	8197	2728	16048
80°	7121	3054	11187
85°	8102	4033	11180



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	509.5	5.0
10°-20°	1479.6	14.6
20°-30°	2245.8	22.2
30°-40°	2358.7	23.3
40°-50°	1768.4	17.5
50°-60°	1134.7	11.2
60°-70°	485.4	4.8
70°-80°	114.7	1.1
80°-90°	21.3	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°	4234.8	41.9
0°-40°	6593.6	65.2
0°-60°	9496.6	93.9
0°-90°	10118.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10118.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5338	5338	5338	5338	5338	
5°	5330	5338	5344	5353	5350	506
15°	5089	5195	5316	5281	5215	1435
25°	4656	4820	5063	4972	4886	2127
35°	3863	3648	3866	3820	3906	2424
45°	2934	2398	1378	2330	2974	2247
55°	1484	1484	513	1547	1808	1346
65°	447	527	163	679	691	477
75°	69	80	23	138	135	100
85°	23	14	11	23	32	24
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°	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5
2.5°	5341.3	5347.1	5344.2	5344.2	5341.3	5344.2	5344.2	5350.0	5350.0	5344.2	5341.3
5°	5329.8	5335.6	5335.6	5329.8	5329.8	5344.2	5335.6	5341.3	5341.3	5338.5	5338.5
7.5°	5304.1	5304.1	5315.5	5307.0	5307.0	5315.5	5312.7	5318.4	5324.2	5327.0	5327.0
10°	5246.7	5252.5	5255.4	5255.4	5258.2	5266.8	5272.5	5284.0	5289.7	5295.5	5298.3
12.5°	5175.2	5183.7	5186.6	5183.7	5192.3	5203.8	5218.1	5232.4	5241.1	5252.5	5261.1
15°	5089.1	5089.1	5094.9	5103.5	5109.2	5126.4	5140.7	5157.9	5180.8	5195.2	5209.5
17.5°	4994.6	5000.4	5008.9	5008.9	5020.4	5049.0	5057.6	5083.4	5109.2	5123.6	5152.2
20°	4891.5	4897.2	4905.8	4911.5	4925.8	4948.8	4965.9	4988.9	5017.5	5043.3	5072.0
22.5°	4811.2	4799.8	4805.4	4811.2	4825.6	4845.6	4865.7	4894.3	4923.0	4948.8	4977.4
25°	4656.5	4659.3	4667.9	4673.6	4690.9	4708.1	4731.0	4765.3	4791.1	4819.8	4851.3
27.5°	4447.3	4450.2	4464.5	4464.5	4478.8	4507.5	4521.8	4550.4	4584.9	4613.5	4650.8
30°	4209.5	4215.2	4215.2	4226.6	4235.2	4249.6	4263.9	4292.6	4309.7	4335.5	4387.1
32.5°	3991.7	3997.4	3994.5	3991.7	3983.1	3980.2	3977.3	3983.1	3988.8	3997.4	4017.4
35°	3862.8	3848.4	3837.0	3816.9	3794.0	3765.3	3739.5	3705.1	3673.6	3647.8	3619.2
37.5°	3739.5	3736.6	3719.4	3690.8	3644.9	3593.4	3533.2	3458.7	3384.2	3303.9	3226.6
40°	3567.6	3558.9	3544.6	3504.5	3452.9	3389.9	3309.7	3218.0	3097.6	2974.4	2848.3
42.5°	3275.3	3278.1	3261.0	3229.4	3180.7	3120.5	3037.4	2937.2	2808.2	2662.0	2498.7
45°	2934.3	2934.3	2928.5	2902.7	2868.4	2819.7	2756.6	2673.5	2547.5	2398.4	2223.6
47.5°	2579.0	2581.8	2573.2	2567.5	2553.2	2521.7	2475.8	2412.8	2323.9	2180.6	2005.8
50°	2217.9	2217.9	2232.2	2229.4	2229.4	2217.9	2197.9	2160.6	2083.2	1968.6	1805.3
52.5°	1856.8	1862.6	1871.2	1882.6	1897.0	1919.9	1897.0	1879.8	1831.0	1742.2	1601.8
55°	1484.3	1490.1	1504.4	1524.4	1541.7	1564.6	1570.3	1570.3	1544.5	1484.3	1378.3
57.5°	1166.3	1157.7	1169.2	1186.3	1209.3	1232.2	1249.4	1269.4	1266.6	1226.4	1140.5
60°	876.9	879.7	888.3	905.5	922.7	942.8	965.7	982.9	991.5	971.4	917.0
62.5°	639.0	639.0	650.5	667.6	676.3	704.9	719.2	727.9	736.4	733.5	699.2
65°	447.0	452.7	458.5	467.1	475.7	492.8	501.5	518.6	524.4	527.3	501.5
67.5°	315.2	306.6	312.4	318.0	326.7	338.2	355.3	355.3	363.9	363.9	346.7
70°	200.6	200.6	203.5	212.0	217.8	220.7	226.4	232.1	240.7	237.8	237.8
72.5°	134.7	131.8	134.7	137.6	140.4	149.0	149.0	151.9	157.6	160.5	149.0
75°	68.8	71.7	77.3	74.5	83.1	77.3	80.2	88.8	86.0	80.2	80.2
77.5°	57.3	57.3	57.3	54.5	60.2	60.2	57.3	63.0	60.2	60.2	57.3
80°	40.1	43.0	40.1	37.2	40.1	37.2	37.2	37.2	37.2	37.2	34.4
82.5°	31.6	25.8	28.7	25.8	28.7	28.7	25.8	22.9	22.9	25.8	22.9
85°	22.9	17.2	20.1	20.1	17.2	17.2	17.2	17.2	17.2	14.3	14.3
87.5°	14.3	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5
2.5°	5347.1	5344.2	5350.0	5347.1	5347.1	5344.2	5347.1	5344.2	5350.0	5338.5	5341.3
5°	5347.1	5341.3	5344.2	5347.1	5350.0	5344.2	5344.2	5344.2	5350.0	5344.2	5347.1
7.5°	5335.6	5332.7	5341.3	5347.1	5344.2	5341.3	5347.1	5344.2	5350.0	5347.1	5352.8
10°	5312.7	5315.5	5321.3	5329.8	5332.7	5335.6	5341.3	5341.3	5350.0	5338.5	5344.2
12.5°	5278.3	5289.7	5304.1	5309.8	5321.3	5321.3	5327.0	5329.8	5335.6	5332.7	5341.3
15°	5235.3	5249.6	5266.8	5281.2	5295.5	5304.1	5312.7	5315.5	5324.2	5315.5	5318.4
17.5°	5183.7	5200.9	5226.7	5243.9	5266.8	5275.4	5286.9	5292.6	5301.2	5295.5	5298.3
20°	5112.1	5132.2	5160.8	5186.6	5200.9	5220.9	5235.3	5243.9	5249.6	5243.9	5246.7
22.5°	5011.8	5040.5	5077.7	5097.8	5126.4	5143.6	5146.5	5166.5	5180.8	5166.5	5172.3
25°	4894.3	4923.0	4951.6	4994.6	5020.4	5040.5	5060.5	5063.4	5077.7	5074.8	5072.0
27.5°	4699.4	4736.7	4785.4	4819.8	4854.2	4885.7	4908.7	4914.3	4928.7	4923.0	4925.8
30°	4432.9	4473.1	4519.0	4573.4	4622.1	4653.6	4682.3	4702.3	4716.6	4708.1	4705.2
32.5°	4054.7	4094.8	4143.6	4198.0	4255.3	4301.1	4335.5	4361.3	4378.5	4372.8	4358.5
35°	3622.0	3633.5	3665.0	3708.0	3756.7	3805.4	3837.0	3865.6	3885.6	3891.4	3891.4
37.5°	3177.9	3140.6	3117.7	3117.7	3146.3	3166.4	3195.1	3212.2	3243.8	3255.2	3263.8
40°	2748.0	2662.0	2581.8	2521.7	2481.6	2478.7	2478.7	2487.2	2515.9	2553.2	2587.6
42.5°	2364.1	2226.5	2103.3	1991.5	1911.3	1865.5	1845.4	1848.3	1871.2	1905.6	1962.9
45°	2057.4	1885.5	1730.8	1596.1	1487.2	1415.5	1381.2	1378.3	1395.5	1435.6	1498.7
47.5°	1819.6	1636.2	1461.4	1306.7	1189.2	1111.8	1071.7	1060.3	1071.7	1108.9	1183.5
50°	1621.9	1432.8	1252.2	1091.8	965.7	885.5	848.2	833.9	848.2	879.7	954.2
52.5°	1438.5	1243.6	1074.6	919.8	785.1	716.4	676.3	667.6	676.3	713.5	773.7
55°	1226.4	1060.3	894.0	739.3	621.8	553.1	521.5	513.0	521.5	555.9	619.0
57.5°	1017.3	874.0	727.9	587.4	487.2	426.9	398.3	386.8	406.9	429.8	504.3
60°	822.4	707.8	584.5	461.4	378.3	323.8	300.9	298.0	303.7	332.4	383.9
62.5°	644.8	550.2	452.7	352.5	283.7	260.8	232.1	229.3	235.0	252.1	292.3
65°	464.2	404.1	329.5	257.9	203.5	171.9	160.5	163.4	169.0	180.5	217.8
67.5°	323.8	280.8	229.3	180.5	140.4	126.1	114.6	111.8	114.6	134.7	154.7
70°	217.8	192.0	154.7	137.6	97.5	77.3	80.2	71.7	83.1	83.1	100.3
72.5°	143.2	126.1	103.1	80.2	68.8	54.5	54.5	51.6	57.3	60.2	74.5
75°	74.5	57.3	57.3	40.1	28.7	14.3	25.8	22.9	20.1	22.9	28.7
77.5°	51.6	43.0	40.1	31.6	28.7	22.9	22.9	22.9	22.9	25.8	28.7
80°	31.6	31.6	22.9	20.1	17.2	14.3	17.2	17.2	17.2	17.2	20.1
82.5°	20.1	17.2	17.2	14.3	14.3	11.4	11.4	11.4	11.4	11.4	17.2
85°	17.2	11.4	11.4	8.6	11.4	20.1	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	14.3	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5	5338.5
2.5°	5347.1	5350.0	5350.0	5347.1	5347.1	5341.3	5352.8	5344.2	5347.1	5358.5	5350.0
5°	5352.8	5355.6	5355.6	5352.8	5352.8	5352.8	5355.6	5355.6	5352.8	5350.0	5355.6
7.5°	5364.3	5361.4	5361.4	5355.6	5355.6	5350.0	5355.6	5347.1	5352.8	5347.1	5355.6
10°	5350.0	5352.8	5350.0	5347.1	5347.1	5344.2	5344.2	5335.6	5338.5	5329.8	5335.6
12.5°	5341.3	5338.5	5338.5	5332.7	5327.0	5321.3	5318.4	5309.8	5309.8	5289.7	5298.3
15°	5318.4	5321.3	5312.7	5301.2	5295.5	5281.2	5275.4	5263.9	5252.5	5238.2	5241.1
17.5°	5298.3	5289.7	5278.3	5266.8	5243.9	5232.4	5220.9	5203.8	5198.0	5180.8	5175.2
20°	5238.2	5232.4	5218.1	5198.0	5183.7	5157.9	5146.5	5129.3	5114.9	5097.8	5089.1
22.5°	5160.8	5155.0	5137.9	5117.8	5094.9	5083.4	5072.0	5040.5	5026.1	5008.9	5006.0
25°	5063.4	5054.8	5037.6	5014.7	5003.2	4971.7	4960.2	4937.3	4931.6	4914.3	4911.5
27.5°	4914.3	4902.9	4882.9	4854.2	4834.1	4814.1	4802.6	4785.4	4779.7	4762.5	4759.7
30°	4690.9	4676.5	4636.4	4625.0	4590.5	4570.5	4570.5	4547.6	4550.4	4539.0	4539.0
32.5°	4338.4	4315.5	4283.9	4261.0	4238.1	4226.6	4226.6	4218.0	4223.8	4223.8	4229.5
35°	3871.3	3839.8	3822.6	3808.3	3808.3	3819.7	3854.1	3862.8	3879.9	3894.2	3905.7
37.5°	3272.4	3269.6	3289.6	3306.8	3349.8	3398.5	3458.7	3510.3	3558.9	3593.4	3627.7
40°	2624.8	2696.5	2753.8	2834.0	2899.9	2994.5	3103.3	3192.2	3275.3	3335.5	3398.5
42.5°	2048.8	2140.5	2260.9	2378.4	2495.9	2624.8	2768.1	2891.3	3000.2	3083.3	3149.2
45°	1596.1	1722.2	1868.3	2017.3	2169.2	2329.7	2478.7	2604.8	2719.4	2805.4	2871.3
47.5°	1286.6	1424.2	1590.3	1753.7	1925.6	2094.7	2260.9	2369.8	2464.3	2533.1	2593.3
50°	1063.1	1209.3	1384.1	1570.3	1742.2	1911.3	2054.6	2160.6	2238.0	2298.1	2335.4
52.5°	888.3	1043.0	1229.3	1415.5	1587.5	1742.2	1871.2	1951.4	2014.5	2057.4	2091.8
55°	733.5	882.6	1057.4	1232.2	1401.2	1547.4	1653.4	1713.6	1762.3	1788.1	1808.1
57.5°	598.9	736.4	896.9	1057.4	1203.5	1323.9	1407.0	1467.1	1490.1	1510.1	1507.3
60°	470.0	598.9	745.0	882.6	1008.7	1106.1	1166.3	1200.6	1217.8	1226.4	1220.7
62.5°	369.6	487.2	598.9	719.2	810.9	894.0	951.4	951.4	959.9	962.8	971.4
65°	275.1	363.9	461.4	550.2	624.7	679.1	710.7	719.2	730.7	727.9	722.1
67.5°	203.5	269.4	341.0	406.9	458.5	492.8	515.8	535.9	533.0	527.3	524.4
70°	140.4	183.4	246.5	286.6	323.8	358.2	363.9	366.8	369.6	372.5	366.8
72.5°	97.5	128.9	163.4	197.7	220.7	235.0	249.3	252.1	252.1	252.1	249.3
75°	48.7	65.9	97.5	111.8	131.8	137.6	149.0	149.0	157.6	146.1	143.2
77.5°	43.0	51.6	68.8	80.2	88.8	97.5	100.3	108.9	106.0	100.3	103.1
80°	25.8	31.6	43.0	48.7	60.2	63.0	65.9	68.8	65.9	68.8	68.8
82.5°	20.1	22.9	28.7	28.7	37.2	37.2	40.1	40.1	43.0	43.0	43.0
85°	11.4	20.1	17.2	34.4	22.9	22.9	28.7	34.4	28.7	28.7	34.4
87.5°	11.4	11.4	8.6	11.4	11.4	11.4	14.3	17.2	17.2	20.1	17.2
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: P249275

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5338.5	5338.5	5338.5	5338.5
2.5°	5347.1	5352.8	5344.2	5341.3
5°	5355.6	5355.6	5350.0	5350.0
7.5°	5355.6	5355.6	5347.1	5341.3
10°	5332.7	5332.7	5324.2	5318.4
12.5°	5289.7	5289.7	5286.9	5278.3
15°	5235.3	5235.3	5223.8	5215.3
17.5°	5160.8	5166.5	5152.2	5152.2
20°	5080.6	5077.7	5066.3	5060.5
22.5°	4997.5	4991.7	4988.9	4971.7
25°	4908.7	4902.9	4894.3	4885.7
27.5°	4756.8	4753.9	4745.3	4733.9
30°	4524.6	4521.8	4510.3	4510.3
32.5°	4223.8	4220.9	4209.5	4212.3
35°	3911.4	3922.9	3917.2	3905.7
37.5°	3650.7	3659.3	3665.0	3659.3
40°	3432.9	3458.7	3461.6	3467.3
42.5°	3200.8	3235.2	3246.7	3252.3
45°	2922.8	2954.3	2980.2	2974.4
47.5°	2639.1	2662.0	2685.0	2667.8
50°	2366.9	2381.2	2389.9	2389.9
52.5°	2109.0	2109.0	2106.2	2109.0
55°	1813.9	1813.9	1802.4	1808.1
57.5°	1504.4	1510.1	1501.5	1487.2
60°	1217.8	1203.5	1197.8	1189.2
62.5°	948.5	948.5	928.5	954.2
65°	710.7	702.1	693.4	690.6
67.5°	515.8	513.0	504.3	501.5
70°	363.9	352.5	349.6	343.8
72.5°	243.6	243.6	237.8	237.8
75°	149.0	134.7	131.8	134.7
77.5°	103.1	100.3	100.3	97.5
80°	68.8	65.9	71.7	63.0
82.5°	43.0	45.9	43.0	45.9
85°	28.7	34.4	31.6	31.6
87.5°	17.2	17.2	17.2	17.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)