

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: P249122

Luminaire Tested: **LSR8B100D010 EC8B100850 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249122
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 EC8B100850 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11172.0 lumens
Efficiency: N/A
Efficacy: 105.1 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

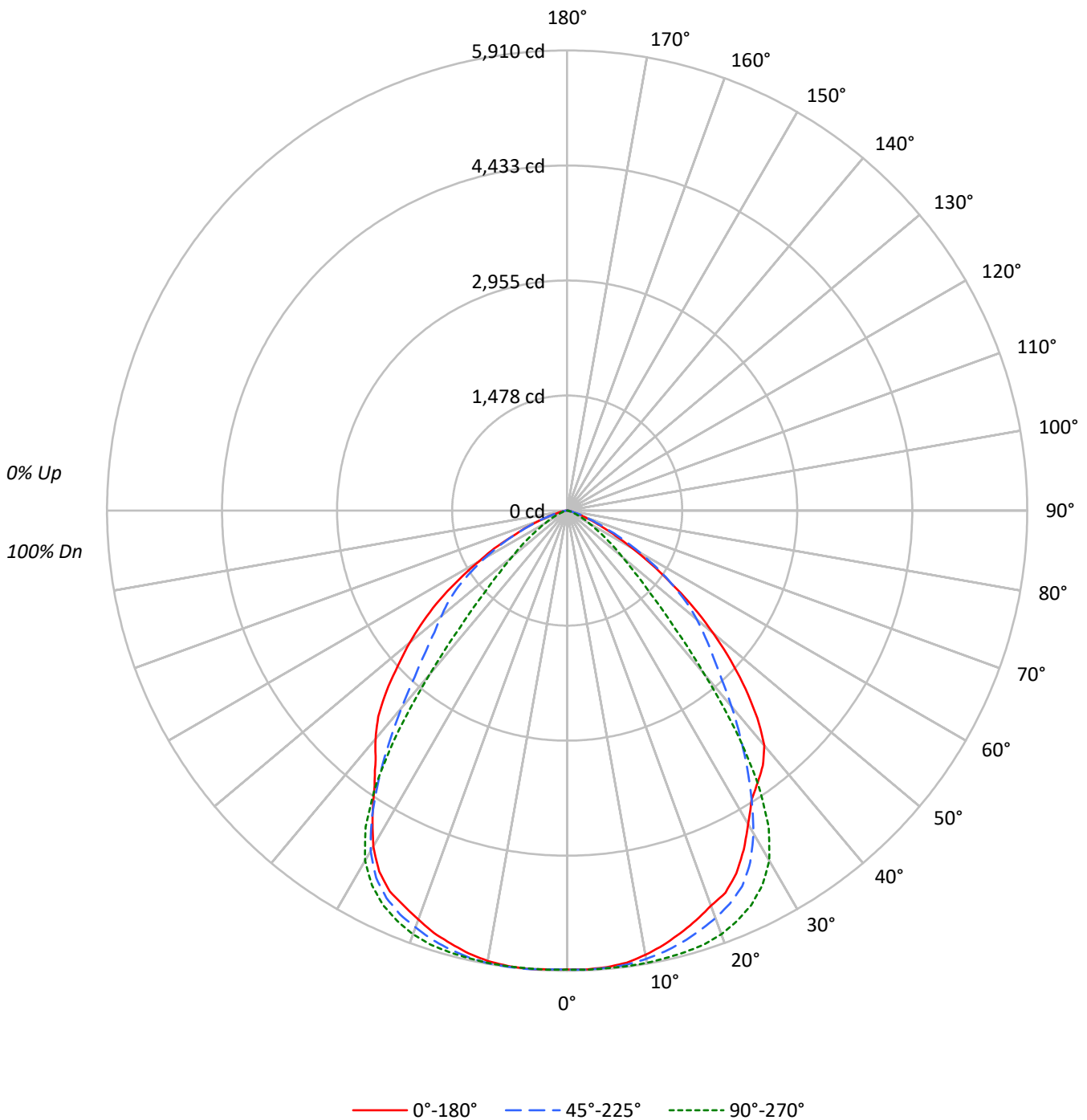
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	181768	181768	181768
5°	182165	182657	182855
10°	181400	184669	183877
15°	179391	187372	183835
20°	177236	190004	183362
25°	174935	190225	183550
30°	165500	184874	177329
35°	160556	160673	162344
40°	158568	110549	154112
45°	141294	66369	143221
50°	117485	44169	126591
55°	88115	30450	107335
60°	59711	20290	80982
65°	36015	13163	55636
70°	19970	7132	34234
75°	9043	3014	17716
80°	7867	3374	12360
85°	8951	4458	12312



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	562.6	5.0
10°-20°	1633.7	14.6
20°-30°	2479.7	22.2
30°-40°	2604.4	23.3
40°-50°	1952.6	17.5
50°-60°	1252.8	11.2
60°-70°	536.0	4.8
70°-80°	126.6	1.1
80°-90°	23.6	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°	4676.0	41.9
0°-40°	7280.4	65.2
0°-60°	10485.9	93.9
0°-90°	11172.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11172.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5895	5895	5895	5895	5895	
5°	5885	5895	5901	5910	5907	559
15°	5619	5736	5869	5831	5758	1585
25°	5142	5322	5591	5490	5395	2349
35°	4265	4028	4268	4218	4313	2677
45°	3240	2648	1522	2572	3284	2481
55°	1639	1639	566	1708	1996	1487
65°	494	582	180	750	762	527
75°	76	89	25	152	149	111
85°	25	16	13	25	35	27
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°	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6
2.5°	5897.7	5904.1	5900.9	5900.9	5897.7	5900.9	5900.9	5907.3	5907.3	5900.9	5897.7
5°	5885.0	5891.4	5891.4	5885.0	5885.0	5900.9	5891.4	5897.7	5897.7	5894.6	5894.6
7.5°	5856.6	5856.6	5869.3	5859.8	5859.8	5869.3	5866.1	5872.4	5878.8	5881.9	5881.9
10°	5793.3	5799.7	5802.8	5802.8	5806.0	5815.4	5821.8	5834.5	5840.8	5847.1	5850.3
12.5°	5714.3	5723.7	5726.9	5723.7	5733.2	5745.8	5761.7	5777.5	5787.0	5799.7	5809.2
15°	5619.3	5619.3	5625.6	5635.1	5641.5	5660.5	5676.2	5695.2	5720.5	5736.4	5752.2
17.5°	5514.9	5521.3	5530.7	5530.7	5543.4	5575.0	5584.5	5613.0	5641.5	5657.3	5688.9
20°	5401.0	5407.3	5416.8	5423.2	5439.0	5464.3	5483.2	5508.6	5540.2	5568.7	5600.3
22.5°	5312.4	5299.8	5306.0	5312.4	5328.2	5350.4	5372.5	5404.1	5435.8	5464.3	5495.9
25°	5141.5	5144.7	5154.2	5160.5	5179.5	5198.5	5223.8	5261.7	5290.2	5321.9	5356.7
27.5°	4910.6	4913.8	4929.5	4929.5	4945.3	4977.0	4992.8	5024.5	5062.5	5094.1	5135.2
30°	4648.0	4654.2	4654.2	4666.9	4676.4	4692.3	4708.1	4739.7	4758.7	4787.2	4844.2
32.5°	4407.5	4413.8	4410.6	4407.5	4398.0	4394.8	4391.6	4398.0	4404.3	4413.8	4435.9
35°	4265.1	4249.3	4236.6	4214.5	4189.2	4157.5	4129.0	4091.1	4056.3	4027.8	3996.2
37.5°	4129.0	4125.9	4106.9	4075.2	4024.6	3967.7	3901.3	3819.0	3736.7	3648.1	3562.7
40°	3939.2	3929.7	3913.9	3869.6	3812.6	3743.0	3654.5	3553.2	3420.3	3284.2	3145.0
42.5°	3616.5	3619.6	3600.7	3565.8	3512.1	3445.6	3353.8	3243.1	3100.8	2939.3	2759.0
45°	3240.0	3240.0	3233.6	3205.1	3167.2	3113.4	3043.8	2952.0	2812.8	2648.3	2455.3
47.5°	2847.6	2850.8	2841.3	2835.0	2819.1	2784.4	2733.7	2664.1	2566.0	2407.8	2214.8
50°	2449.0	2449.0	2464.8	2461.6	2461.6	2449.0	2426.8	2385.7	2300.3	2173.7	1993.4
52.5°	2050.3	2056.6	2066.1	2078.8	2094.6	2119.9	2094.6	2075.6	2021.8	1923.7	1768.7
55°	1639.0	1645.3	1661.1	1683.2	1702.3	1727.6	1733.9	1733.9	1705.4	1639.0	1521.9
57.5°	1287.8	1278.3	1291.0	1309.9	1335.2	1360.6	1379.5	1401.7	1398.5	1354.2	1259.3
60°	968.2	971.4	980.8	999.9	1018.8	1041.0	1066.3	1085.3	1094.8	1072.6	1012.5
62.5°	705.6	705.6	718.2	737.2	746.7	778.4	794.2	803.7	813.1	810.0	772.0
65°	493.6	499.9	506.2	515.8	525.2	544.2	553.7	572.7	579.0	582.2	553.7
67.5°	348.1	338.6	344.9	351.2	360.7	373.4	392.4	392.4	401.8	401.8	382.8
70°	221.5	221.5	224.7	234.1	240.5	243.6	250.0	256.3	265.8	262.6	262.6
72.5°	148.7	145.5	148.7	151.9	155.1	164.5	164.5	167.7	174.0	177.2	164.5
75°	75.9	79.1	85.4	82.3	91.7	85.4	88.6	98.1	94.9	88.6	88.6
77.5°	63.3	63.3	63.3	60.2	66.4	66.4	63.3	69.6	66.4	66.4	63.3
80°	44.3	47.5	44.3	41.1	44.3	41.1	41.1	41.1	41.1	41.1	37.9
82.5°	34.8	28.5	31.7	28.5	31.7	31.7	28.5	25.3	25.3	28.5	25.3
85°	25.3	19.0	22.1	22.1	19.0	19.0	19.0	19.0	19.0	15.8	15.8
87.5°	15.8	9.5	9.5	9.5	12.6	12.6	12.6	9.5	12.6	12.6	6.3
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°	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6
2.5°	5904.1	5900.9	5907.3	5904.1	5904.1	5900.9	5904.1	5900.9	5907.3	5894.6	5897.7
5°	5904.1	5897.7	5900.9	5904.1	5907.3	5900.9	5900.9	5900.9	5907.3	5900.9	5904.1
7.5°	5891.4	5888.2	5897.7	5904.1	5900.9	5897.7	5904.1	5900.9	5907.3	5904.1	5910.4
10°	5866.1	5869.3	5875.6	5885.0	5888.2	5891.4	5897.7	5897.7	5907.3	5894.6	5900.9
12.5°	5828.1	5840.8	5856.6	5862.9	5875.6	5875.6	5881.9	5885.0	5891.4	5888.2	5897.7
15°	5780.7	5796.5	5815.4	5831.3	5847.1	5856.6	5866.1	5869.3	5878.8	5869.3	5872.4
17.5°	5723.7	5742.7	5771.2	5790.1	5815.4	5825.0	5837.6	5843.9	5853.5	5847.1	5850.3
20°	5644.6	5666.8	5698.4	5726.9	5742.7	5764.8	5780.7	5790.1	5796.5	5790.1	5793.3
22.5°	5533.9	5565.5	5606.6	5628.8	5660.5	5679.4	5682.6	5704.7	5720.5	5704.7	5711.1
25°	5404.1	5435.8	5467.4	5514.9	5543.4	5565.5	5587.7	5590.9	5606.6	5603.5	5600.3
27.5°	5189.0	5230.2	5283.9	5321.9	5359.8	5394.7	5420.0	5426.3	5442.1	5435.8	5439.0
30°	4894.7	4939.1	4989.7	5049.8	5103.6	5138.3	5170.0	5192.1	5207.9	5198.5	5195.3
32.5°	4477.1	4521.4	4575.2	4635.3	4698.6	4749.2	4787.2	4815.7	4834.6	4828.3	4812.5
35°	3999.4	4012.0	4046.8	4094.3	4148.0	4201.8	4236.6	4268.2	4290.4	4296.7	4296.7
37.5°	3508.9	3467.8	3442.5	3442.5	3474.1	3496.2	3527.9	3546.9	3581.7	3594.3	3603.8
40°	3034.3	2939.3	2850.8	2784.4	2740.1	2736.9	2736.9	2746.3	2778.0	2819.1	2857.1
42.5°	2610.3	2458.4	2322.4	2199.0	2110.4	2059.8	2037.7	2040.8	2066.1	2104.1	2167.3
45°	2271.8	2081.9	1911.1	1762.4	1642.1	1563.0	1525.1	1521.9	1540.9	1585.1	1654.8
47.5°	2009.2	1806.6	1613.6	1442.8	1313.1	1227.6	1183.3	1170.7	1183.3	1224.5	1306.7
50°	1790.8	1582.0	1382.7	1205.5	1066.3	977.7	936.5	920.7	936.5	971.4	1053.6
52.5°	1588.3	1373.2	1186.5	1015.7	866.9	791.0	746.7	737.2	746.7	787.8	854.3
55°	1354.2	1170.7	987.2	816.3	686.6	610.7	575.8	566.4	575.8	613.8	683.4
57.5°	1123.3	965.0	803.7	648.6	537.9	471.4	439.8	427.1	449.3	474.6	556.9
60°	908.0	781.5	645.4	509.4	417.7	357.5	332.2	329.0	335.4	367.0	423.9
62.5°	711.9	607.5	499.9	389.2	313.2	287.9	256.3	253.2	259.4	278.4	322.8
65°	512.6	446.2	363.9	284.7	224.7	189.8	177.2	180.4	186.7	199.4	240.5
67.5°	357.5	310.1	253.2	199.4	155.1	139.2	126.6	123.4	126.6	148.7	170.9
70°	240.5	212.0	170.9	151.9	107.6	85.4	88.6	79.1	91.7	91.7	110.7
72.5°	158.2	139.2	113.9	88.6	75.9	60.2	60.2	57.0	63.3	66.4	82.3
75°	82.3	63.3	63.3	44.3	31.7	15.8	28.5	25.3	22.1	25.3	31.7
77.5°	57.0	47.5	44.3	34.8	31.7	25.3	25.3	25.3	25.3	28.5	31.7
80°	34.8	34.8	25.3	22.1	19.0	15.8	19.0	19.0	19.0	19.0	22.1
82.5°	22.1	19.0	19.0	15.8	15.8	12.6	12.6	12.6	12.6	12.6	19.0
85°	19.0	12.6	12.6	9.5	12.6	22.1	9.5	12.6	12.6	12.6	9.5
87.5°	6.3	9.5	9.5	9.5	6.3	3.2	6.3	9.5	9.5	15.8	12.6
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°	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6	5894.6
2.5°	5904.1	5907.3	5907.3	5904.1	5904.1	5897.7	5910.4	5900.9	5904.1	5916.7	5907.3
5°	5910.4	5913.5	5913.5	5910.4	5910.4	5910.4	5913.5	5913.5	5910.4	5907.3	5913.5
7.5°	5923.1	5919.9	5919.9	5913.5	5913.5	5907.3	5913.5	5904.1	5910.4	5904.1	5913.5
10°	5907.3	5910.4	5907.3	5904.1	5904.1	5900.9	5900.9	5891.4	5894.6	5885.0	5891.4
12.5°	5897.7	5894.6	5894.6	5888.2	5881.9	5875.6	5872.4	5862.9	5862.9	5840.8	5850.3
15°	5872.4	5875.6	5866.1	5853.5	5847.1	5831.3	5825.0	5812.3	5799.7	5783.9	5787.0
17.5°	5850.3	5840.8	5828.1	5815.4	5790.1	5777.5	5764.8	5745.8	5739.5	5720.5	5714.3
20°	5783.9	5777.5	5761.7	5739.5	5723.7	5695.2	5682.6	5663.6	5647.8	5628.8	5619.3
22.5°	5698.4	5692.0	5673.1	5650.9	5625.6	5613.0	5600.3	5565.5	5549.7	5530.7	5527.5
25°	5590.9	5581.3	5562.4	5537.0	5524.4	5489.6	5476.9	5451.6	5445.3	5426.3	5423.2
27.5°	5426.3	5413.6	5391.5	5359.8	5337.7	5315.6	5302.9	5283.9	5277.6	5258.6	5255.5
30°	5179.5	5163.7	5119.4	5106.8	5068.7	5046.6	5046.6	5021.3	5024.5	5011.8	5011.8
32.5°	4790.3	4765.0	4730.2	4704.9	4679.6	4666.9	4666.9	4657.4	4663.8	4663.8	4670.1
35°	4274.6	4239.8	4220.8	4205.0	4205.0	4217.6	4255.6	4265.1	4284.1	4299.9	4312.6
37.5°	3613.3	3610.2	3632.3	3651.3	3698.7	3752.6	3819.0	3876.0	3929.7	3967.7	4005.6
40°	2898.2	2977.4	3040.6	3129.3	3202.0	3306.4	3426.6	3524.7	3616.5	3683.0	3752.6
42.5°	2262.2	2363.5	2496.4	2626.1	2755.9	2898.2	3056.5	3192.5	3312.7	3404.5	3477.3
45°	1762.4	1901.6	2063.0	2227.5	2395.2	2572.4	2736.9	2876.1	3002.7	3097.6	3170.4
47.5°	1420.6	1572.5	1756.0	1936.4	2126.2	2312.9	2496.4	2616.7	2721.0	2797.0	2863.5
50°	1173.8	1335.2	1528.2	1733.9	1923.7	2110.4	2268.6	2385.7	2471.1	2537.5	2578.7
52.5°	980.8	1151.7	1357.4	1563.0	1752.8	1923.7	2066.1	2154.7	2224.3	2271.8	2309.7
55°	810.0	974.5	1167.5	1360.6	1547.2	1708.5	1825.6	1892.1	1945.8	1974.3	1996.5
57.5°	661.3	813.1	990.3	1167.5	1328.9	1461.8	1553.6	1620.0	1645.3	1667.4	1664.3
60°	518.9	661.3	822.6	974.5	1113.7	1221.3	1287.8	1325.7	1344.7	1354.2	1347.9
62.5°	408.2	537.9	661.3	794.2	895.4	987.2	1050.5	1050.5	1059.9	1063.1	1072.6
65°	303.7	401.8	509.4	607.5	689.7	749.9	784.7	794.2	806.9	803.7	797.3
67.5°	224.7	297.4	376.5	449.3	506.2	544.2	569.5	591.7	588.5	582.2	579.0
70°	155.1	202.5	272.1	316.4	357.5	395.5	401.8	405.0	408.2	411.3	405.0
72.5°	107.6	142.4	180.4	218.3	243.6	259.4	275.3	278.4	278.4	278.4	275.3
75°	53.8	72.8	107.6	123.4	145.5	151.9	164.5	164.5	174.0	161.3	158.2
77.5°	47.5	57.0	75.9	88.6	98.1	107.6	110.7	120.2	117.1	110.7	113.9
80°	28.5	34.8	47.5	53.8	66.4	69.6	72.8	75.9	72.8	75.9	75.9
82.5°	22.1	25.3	31.7	31.7	41.1	41.1	44.3	44.3	47.5	47.5	47.5
85°	12.6	22.1	19.0	37.9	25.3	25.3	31.7	37.9	31.7	31.7	37.9
87.5°	12.6	12.6	9.5	12.6	12.6	12.6	15.8	19.0	19.0	22.1	19.0
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: P249122

CATALOG NUMBER: LSR8B100D010 EC8B100850 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5894.6	5894.6	5894.6	5894.6
2.5°	5904.1	5910.4	5900.9	5897.7
5°	5913.5	5913.5	5907.3	5907.3
7.5°	5913.5	5913.5	5904.1	5897.7
10°	5888.2	5888.2	5878.8	5872.4
12.5°	5840.8	5840.8	5837.6	5828.1
15°	5780.7	5780.7	5768.0	5758.5
17.5°	5698.4	5704.7	5688.9	5688.9
20°	5609.8	5606.6	5594.0	5587.7
22.5°	5518.1	5511.7	5508.6	5489.6
25°	5420.0	5413.6	5404.1	5394.7
27.5°	5252.3	5249.1	5239.6	5227.0
30°	4996.0	4992.8	4980.2	4980.2
32.5°	4663.8	4660.6	4648.0	4651.1
35°	4318.9	4331.6	4325.2	4312.6
37.5°	4030.9	4040.5	4046.8	4040.5
40°	3790.5	3819.0	3822.2	3828.5
42.5°	3534.2	3572.2	3584.9	3591.1
45°	3227.3	3262.1	3290.6	3284.2
47.5°	2914.0	2939.3	2964.7	2945.7
50°	2613.5	2629.3	2638.8	2638.8
52.5°	2328.7	2328.7	2325.6	2328.7
55°	2002.8	2002.8	1990.2	1996.5
57.5°	1661.1	1667.4	1657.9	1642.1
60°	1344.7	1328.9	1322.5	1313.1
62.5°	1047.3	1047.3	1025.2	1053.6
65°	784.7	775.2	765.7	762.5
67.5°	569.5	566.4	556.9	553.7
70°	401.8	389.2	386.0	379.7
72.5°	269.0	269.0	262.6	262.6
75°	164.5	148.7	145.5	148.7
77.5°	113.9	110.7	110.7	107.6
80°	75.9	72.8	79.1	69.6
82.5°	47.5	50.6	47.5	50.6
85°	31.7	37.9	34.8	34.8
87.5°	19.0	19.0	19.0	19.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)