

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: P249086

Luminaire Tested: **LSR8B100D010 EC8B100827 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249086  
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 EC8B100827 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10347.0 lumens  
Efficiency: N/A  
Efficacy: 97.3 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

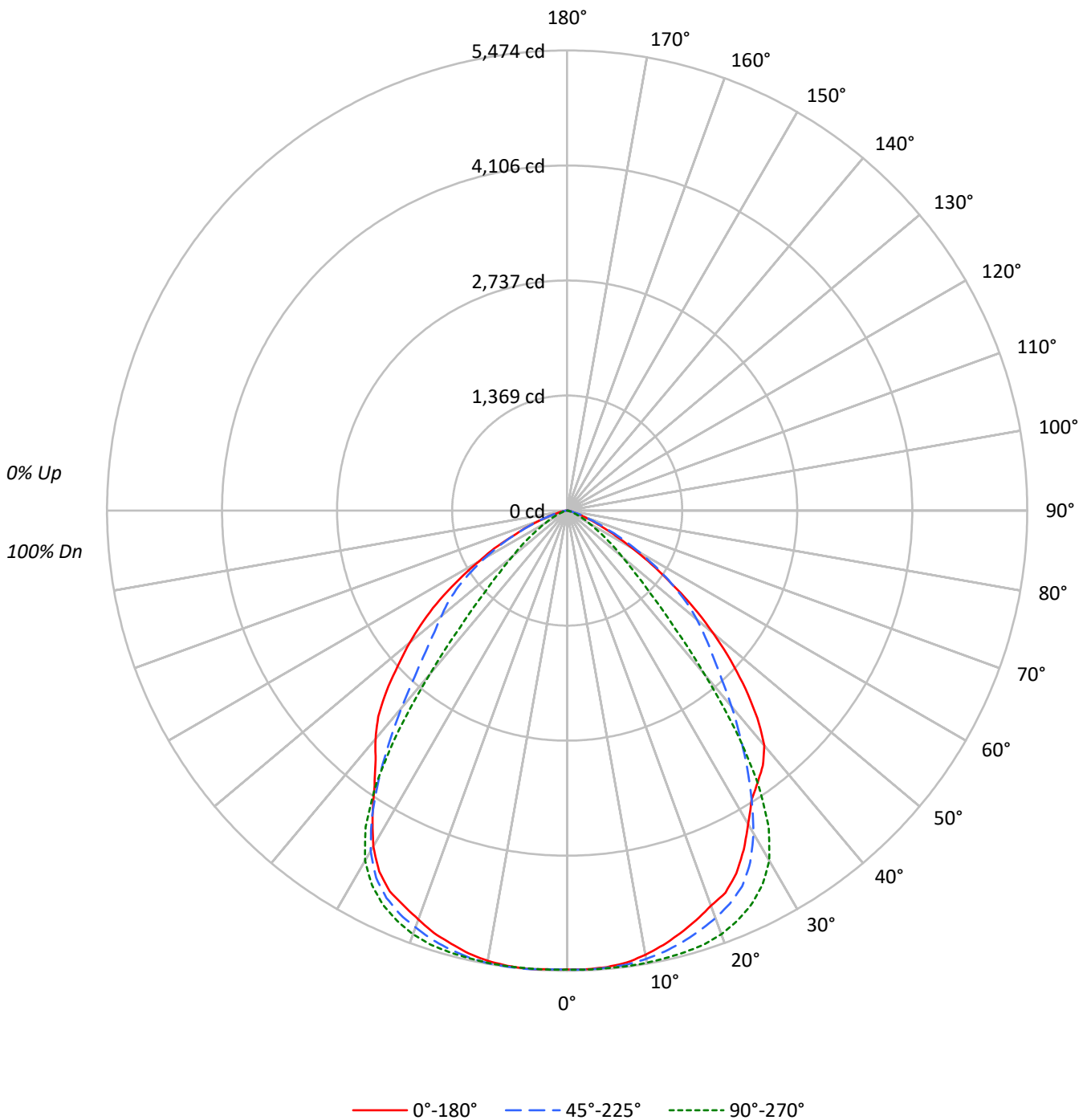
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	168345	168345	168345
5°	168715	169170	169350
10°	168005	171032	170300
15°	166143	173533	170261
20°	164149	175975	169823
25°	162016	176177	169995
30°	153276	171222	164232
35°	148702	148807	150355
40°	146858	102386	142732
45°	130858	61467	132646
50°	108807	40906	117241
55°	81605	28203	99405
60°	55302	18792	75000
65°	33360	12192	51528
70°	18492	6609	31700
75°	8376	2788	16406
80°	7281	3125	11454
85°	8279	4140	11428



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	521.0	5.0
10°-20°	1513.1	14.6
20°-30°	2296.6	22.2
30°-40°	2412.1	23.3
40°-50°	1808.4	17.5
50°-60°	1160.3	11.2
60°-70°	496.4	4.8
70°-80°	117.3	1.1
80°-90°	21.8	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°	4330.7	41.9
0°-40°	6742.8	65.2
0°-60°	9711.5	93.9
0°-90°	10347.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10347.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5459	5459	5459	5459	5459	
5°	5450	5459	5465	5474	5471	518
15°	5204	5313	5436	5401	5333	1468
25°	4762	4929	5178	5084	4996	2175
35°	3950	3730	3953	3906	3994	2479
45°	3001	2453	1410	2382	3042	2298
55°	1518	1518	525	1582	1849	1377
65°	457	539	167	694	706	488
75°	70	82	23	141	138	102
85°	23	15	12	23	32	25
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°	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3
2.5°	5462.2	5468.1	5465.2	5465.2	5462.2	5465.2	5465.2	5471.0	5471.0	5465.2	5462.2
5°	5450.5	5456.3	5456.3	5450.5	5450.5	5465.2	5456.3	5462.2	5462.2	5459.3	5459.3
7.5°	5424.1	5424.1	5435.8	5427.1	5427.1	5435.8	5432.9	5438.8	5444.7	5447.6	5447.6
10°	5365.5	5371.4	5374.3	5374.3	5377.3	5386.0	5391.9	5403.6	5409.4	5415.3	5418.3
12.5°	5292.3	5301.0	5304.0	5301.0	5309.9	5321.5	5336.2	5350.9	5359.7	5371.4	5380.2
15°	5204.3	5204.3	5210.2	5219.0	5224.9	5242.5	5257.1	5274.7	5298.1	5312.8	5327.4
17.5°	5107.7	5113.5	5122.3	5122.3	5134.0	5163.3	5172.1	5198.5	5224.9	5239.5	5268.8
20°	5002.2	5008.0	5016.8	5022.7	5037.3	5060.8	5078.3	5101.8	5131.1	5157.5	5186.7
22.5°	4920.1	4908.4	4914.2	4920.1	4934.8	4955.3	4975.8	5005.1	5034.4	5060.8	5090.1
25°	4761.8	4764.8	4773.6	4779.4	4797.0	4814.6	4838.1	4873.2	4899.6	4928.9	4961.1
27.5°	4548.0	4550.9	4565.5	4565.5	4580.1	4609.5	4624.1	4653.4	4688.6	4717.9	4756.0
30°	4304.7	4310.6	4310.6	4322.3	4331.1	4345.8	4360.4	4389.7	4407.3	4433.7	4486.4
32.5°	4082.0	4087.8	4084.9	4082.0	4073.2	4070.3	4067.3	4073.2	4079.1	4087.8	4108.4
35°	3950.2	3935.5	3923.8	3903.3	3879.8	3850.5	3824.1	3789.0	3756.7	3730.3	3701.1
37.5°	3824.1	3821.2	3803.6	3774.3	3727.4	3674.7	3613.2	3537.0	3460.7	3378.7	3299.6
40°	3648.3	3639.5	3624.9	3583.9	3531.1	3466.6	3384.6	3290.8	3167.7	3041.7	2912.8
42.5°	3349.4	3352.3	3334.8	3302.5	3252.7	3191.1	3106.2	3003.6	2871.8	2722.3	2555.3
45°	3000.7	3000.7	2994.8	2968.4	2933.3	2883.5	2819.0	2734.0	2605.1	2452.7	2273.9
47.5°	2637.3	2640.3	2631.4	2625.6	2610.9	2578.7	2531.9	2467.4	2376.5	2230.0	2051.2
50°	2268.1	2268.1	2282.8	2279.8	2279.8	2268.1	2247.6	2209.5	2130.4	2013.2	1846.2
52.5°	1898.9	1904.8	1913.6	1925.3	1939.9	1963.3	1939.9	1922.3	1872.5	1781.6	1638.1
55°	1517.9	1523.8	1538.4	1558.9	1576.6	1600.0	1605.8	1605.8	1579.4	1517.9	1409.5
57.5°	1192.7	1183.9	1195.6	1213.2	1236.6	1260.1	1277.6	1298.2	1295.2	1254.2	1166.3
60°	896.7	899.6	908.4	926.0	943.6	964.1	987.5	1005.1	1013.9	993.4	937.7
62.5°	653.5	653.5	665.2	682.7	691.6	720.9	735.5	744.3	753.1	750.1	715.0
65°	457.2	463.0	468.9	477.7	486.4	504.0	512.8	530.4	536.3	539.2	512.8
67.5°	322.4	313.6	319.4	325.2	334.1	345.8	363.4	363.4	372.1	372.1	354.6
70°	205.1	205.1	208.1	216.8	222.7	225.6	231.5	237.3	246.2	243.2	243.2
72.5°	137.7	134.8	137.7	140.7	143.6	152.4	152.4	155.3	161.2	164.1	152.4
75°	70.3	73.3	79.1	76.2	85.0	79.1	82.0	90.8	87.9	82.0	82.0
77.5°	58.6	58.6	58.6	55.7	61.5	61.5	58.6	64.5	61.5	61.5	58.6
80°	41.0	44.0	41.0	38.1	41.0	38.1	38.1	38.1	38.1	38.1	35.1
82.5°	32.3	26.4	29.3	26.4	29.3	29.3	26.4	23.4	23.4	26.4	23.4
85°	23.4	17.6	20.5	20.5	17.6	17.6	17.6	17.6	17.6	14.6	14.6
87.5°	14.6	8.8	8.8	8.8	11.7	11.7	11.7	8.8	11.7	11.7	5.9
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: P249086

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3
2.5°	5468.1	5465.2	5471.0	5468.1	5468.1	5465.2	5468.1	5465.2	5471.0	5459.3	5462.2
5°	5468.1	5462.2	5465.2	5468.1	5471.0	5465.2	5465.2	5465.2	5471.0	5465.2	5468.1
7.5°	5456.3	5453.4	5462.2	5468.1	5465.2	5462.2	5468.1	5465.2	5471.0	5468.1	5473.9
10°	5432.9	5435.8	5441.7	5450.5	5453.4	5456.3	5462.2	5462.2	5471.0	5459.3	5465.2
12.5°	5397.8	5409.4	5424.1	5430.0	5441.7	5441.7	5447.6	5450.5	5456.3	5453.4	5462.2
15°	5353.8	5368.4	5386.0	5400.7	5415.3	5424.1	5432.9	5435.8	5444.7	5435.8	5438.8
17.5°	5301.0	5318.6	5345.0	5362.6	5386.0	5394.8	5406.5	5412.4	5421.2	5415.3	5418.3
20°	5227.8	5248.3	5277.6	5304.0	5318.6	5339.1	5353.8	5362.6	5368.4	5362.6	5365.5
22.5°	5125.2	5154.5	5192.6	5213.1	5242.5	5260.0	5263.0	5283.5	5298.1	5283.5	5289.3
25°	5005.1	5034.4	5063.7	5107.7	5134.0	5154.5	5175.1	5178.0	5192.6	5189.7	5186.7
27.5°	4805.8	4843.9	4893.7	4928.9	4964.0	4996.3	5019.7	5025.6	5040.3	5034.4	5037.3
30°	4533.3	4574.3	4621.2	4676.9	4726.7	4758.9	4788.2	4808.7	4823.4	4814.6	4811.7
32.5°	4146.5	4187.5	4237.3	4293.0	4351.6	4398.5	4433.7	4460.0	4477.6	4471.7	4457.1
35°	3704.0	3715.7	3748.0	3791.9	3841.7	3891.5	3923.8	3953.0	3973.6	3979.4	3979.4
37.5°	3249.8	3211.7	3188.3	3188.3	3217.5	3238.0	3267.4	3284.9	3317.2	3328.9	3337.7
40°	2810.2	2722.3	2640.3	2578.7	2537.7	2534.8	2534.8	2543.5	2572.9	2610.9	2646.1
42.5°	2417.6	2276.9	2150.9	2036.6	1954.6	1907.7	1887.2	1890.1	1913.6	1948.7	2007.3
45°	2104.0	1928.2	1770.0	1632.2	1520.9	1447.6	1412.4	1409.5	1427.1	1468.1	1532.6
47.5°	1860.8	1673.2	1494.5	1336.2	1216.1	1137.0	1096.0	1084.3	1096.0	1134.0	1210.2
50°	1658.6	1465.2	1280.6	1116.5	987.5	905.5	867.4	852.7	867.4	899.6	975.8
52.5°	1471.0	1271.8	1098.9	940.7	802.9	732.6	691.6	682.7	691.6	729.6	791.2
55°	1254.2	1084.3	914.3	756.0	635.9	565.6	533.3	524.6	533.3	568.5	633.0
57.5°	1040.3	893.8	744.3	600.7	498.2	436.6	407.3	395.6	416.1	439.5	515.7
60°	841.0	723.8	597.8	471.8	386.8	331.1	307.7	304.7	310.6	339.9	392.6
62.5°	659.4	562.6	463.0	360.4	290.1	266.7	237.3	234.5	240.3	257.8	298.9
65°	474.7	413.2	337.0	263.7	208.1	175.8	164.1	167.1	172.9	184.6	222.7
67.5°	331.1	287.2	234.5	184.6	143.6	128.9	117.2	114.3	117.2	137.7	158.2
70°	222.7	196.3	158.2	140.7	99.7	79.1	82.0	73.3	85.0	85.0	102.5
72.5°	146.5	128.9	105.5	82.0	70.3	55.7	55.7	52.8	58.6	61.5	76.2
75°	76.2	58.6	58.6	41.0	29.3	14.6	26.4	23.4	20.5	23.4	29.3
77.5°	52.8	44.0	41.0	32.3	29.3	23.4	23.4	23.4	23.4	26.4	29.3
80°	32.3	32.3	23.4	20.5	17.6	14.6	17.6	17.6	17.6	17.6	20.5
82.5°	20.5	17.6	17.6	14.6	14.6	11.7	11.7	11.7	11.7	11.7	17.6
85°	17.6	11.7	11.7	8.8	11.7	20.5	8.8	11.7	11.7	11.7	8.8
87.5°	5.9	8.8	8.8	8.8	5.9	2.9	5.9	8.8	8.8	14.6	11.7
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: P249086

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3
2.5°	5468.1	5471.0	5471.0	5468.1	5468.1	5462.2	5473.9	5465.2	5468.1	5479.8	5471.0
5°	5473.9	5476.8	5476.8	5473.9	5473.9	5473.9	5476.8	5476.8	5473.9	5471.0	5476.8
7.5°	5485.7	5482.7	5482.7	5476.8	5476.8	5471.0	5476.8	5468.1	5473.9	5468.1	5476.8
10°	5471.0	5473.9	5471.0	5468.1	5468.1	5465.2	5465.2	5456.3	5459.3	5450.5	5456.3
12.5°	5462.2	5459.3	5459.3	5453.4	5447.6	5441.7	5438.8	5430.0	5430.0	5409.4	5418.3
15°	5438.8	5441.7	5432.9	5421.2	5415.3	5400.7	5394.8	5383.1	5371.4	5356.7	5359.7
17.5°	5418.3	5409.4	5397.8	5386.0	5362.6	5350.9	5339.1	5321.5	5315.7	5298.1	5292.3
20°	5356.7	5350.9	5336.2	5315.7	5301.0	5274.7	5263.0	5245.4	5230.7	5213.1	5204.3
22.5°	5277.6	5271.7	5254.1	5233.6	5210.2	5198.5	5186.7	5154.5	5139.9	5122.3	5119.3
25°	5178.0	5169.2	5151.6	5128.2	5116.4	5084.2	5072.5	5049.0	5043.2	5025.6	5022.7
27.5°	5025.6	5013.9	4993.4	4964.0	4943.5	4923.0	4911.3	4893.7	4887.9	4870.3	4867.4
30°	4797.0	4782.3	4741.3	4729.6	4694.4	4673.9	4673.9	4650.5	4653.4	4641.7	4641.7
32.5°	4436.6	4413.2	4380.9	4357.4	4334.0	4322.3	4322.3	4313.5	4319.4	4319.4	4325.2
35°	3958.9	3926.7	3909.1	3894.5	3894.5	3906.2	3941.4	3950.2	3967.7	3982.4	3994.1
37.5°	3346.5	3343.6	3364.1	3381.7	3425.6	3475.4	3537.0	3589.7	3639.5	3674.7	3709.8
40°	2684.2	2757.5	2816.1	2898.2	2965.5	3062.2	3173.6	3264.4	3349.4	3411.0	3475.4
42.5°	2095.2	2189.0	2312.1	2432.2	2552.4	2684.2	2830.8	2956.8	3068.1	3153.1	3220.5
45°	1632.2	1761.1	1910.6	2063.0	2218.3	2382.4	2534.8	2663.7	2780.9	2868.8	2936.2
47.5°	1315.7	1456.4	1626.3	1793.4	1969.2	2142.1	2312.1	2423.4	2520.1	2590.4	2652.0
50°	1087.1	1236.6	1415.4	1605.8	1781.6	1954.6	2101.1	2209.5	2288.6	2350.2	2388.2
52.5°	908.4	1066.6	1257.1	1447.6	1623.4	1781.6	1913.6	1995.6	2060.1	2104.0	2139.1
55°	750.1	902.6	1081.3	1260.1	1433.0	1582.4	1690.8	1752.4	1802.1	1828.5	1849.0
57.5°	612.5	753.1	917.2	1081.3	1230.8	1353.9	1438.8	1500.4	1523.8	1544.3	1541.4
60°	480.6	612.5	761.9	902.6	1031.5	1131.1	1192.7	1227.8	1245.4	1254.2	1248.3
62.5°	378.0	498.2	612.5	735.5	829.3	914.3	972.9	972.9	981.7	984.6	993.4
65°	281.3	372.1	471.8	562.6	638.8	694.5	726.8	735.5	747.3	744.3	738.5
67.5°	208.1	275.5	348.7	416.1	468.9	504.0	527.4	548.0	545.1	539.2	536.3
70°	143.6	187.6	252.0	293.0	331.1	366.3	372.1	375.1	378.0	381.0	375.1
72.5°	99.7	131.9	167.1	202.2	225.6	240.3	255.0	257.8	257.8	257.8	255.0
75°	49.8	67.4	99.7	114.3	134.8	140.7	152.4	152.4	161.2	149.4	146.5
77.5°	44.0	52.8	70.3	82.0	90.8	99.7	102.5	111.4	108.4	102.5	105.5
80°	26.4	32.3	44.0	49.8	61.5	64.5	67.4	70.3	67.4	70.3	70.3
82.5°	20.5	23.4	29.3	29.3	38.1	38.1	41.0	41.0	44.0	44.0	44.0
85°	11.7	20.5	17.6	35.1	23.4	23.4	29.3	35.1	29.3	29.3	35.1
87.5°	11.7	11.7	8.8	11.7	11.7	11.7	14.6	17.6	17.6	20.5	17.6
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: P249086

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5459.3	5459.3	5459.3	5459.3
2.5°	5468.1	5473.9	5465.2	5462.2
5°	5476.8	5476.8	5471.0	5471.0
7.5°	5476.8	5476.8	5468.1	5462.2
10°	5453.4	5453.4	5444.7	5438.8
12.5°	5409.4	5409.4	5406.5	5397.8
15°	5353.8	5353.8	5342.0	5333.3
17.5°	5277.6	5283.5	5268.8	5268.8
20°	5195.6	5192.6	5180.9	5175.1
22.5°	5110.6	5104.7	5101.8	5084.2
25°	5019.7	5013.9	5005.1	4996.3
27.5°	4864.4	4861.5	4852.7	4841.0
30°	4627.0	4624.1	4612.4	4612.4
32.5°	4319.4	4316.4	4304.7	4307.7
35°	3999.9	4011.7	4005.8	3994.1
37.5°	3733.3	3742.1	3748.0	3742.1
40°	3510.6	3537.0	3539.9	3545.8
42.5°	3273.2	3308.4	3320.1	3325.9
45°	2989.0	3021.2	3047.6	3041.7
47.5°	2698.8	2722.3	2745.7	2728.2
50°	2420.5	2435.1	2443.9	2443.9
52.5°	2156.8	2156.8	2153.8	2156.8
55°	1854.9	1854.9	1843.2	1849.0
57.5°	1538.4	1544.3	1535.5	1520.9
60°	1245.4	1230.8	1224.9	1216.1
62.5°	970.0	970.0	949.5	975.8
65°	726.8	717.9	709.1	706.2
67.5°	527.4	524.6	515.7	512.8
70°	372.1	360.4	357.5	351.6
72.5°	249.1	249.1	243.2	243.2
75°	152.4	137.7	134.8	137.7
77.5°	105.5	102.5	102.5	99.7
80°	70.3	67.4	73.3	64.5
82.5°	44.0	46.9	44.0	46.9
85°	29.3	35.1	32.3	32.3
87.5°	17.6	17.6	17.6	17.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)