

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: P249482

Luminaire Tested: **LSR8B100D010 EC8B100940 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249482  
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 EC8B100940 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8694.0 lumens  
Efficiency: N/A  
Efficacy: 81.8 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

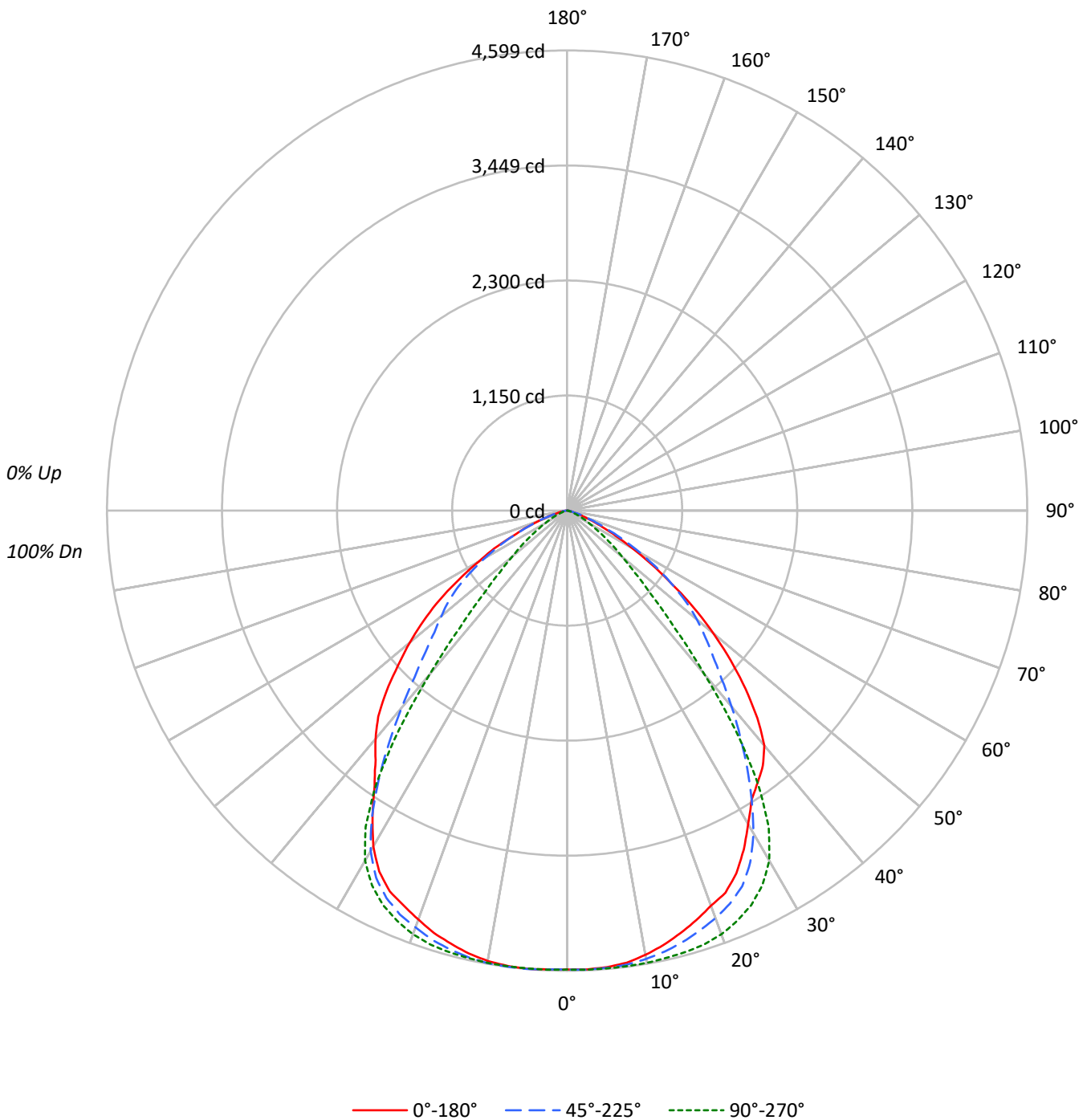
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	141449	141449	141449
5°	141761	142144	142296
10°	141164	143710	143093
15°	139601	145810	143061
20°	137926	147863	142691
25°	136134	148032	142837
30°	128789	143869	137997
35°	124945	125035	126334
40°	123398	86031	119929
45°	109952	51646	111456
50°	91427	34373	98512
55°	68567	23698	83524
60°	46464	15788	63017
65°	28026	10244	43297
70°	15543	5554	26642
75°	7041	2347	13785
80°	6126	2628	9625
85°	6970	3467	9588



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	437.8	5.0
10°-20°	1271.4	14.6
20°-30°	1929.7	22.2
30°-40°	2026.8	23.3
40°-50°	1519.5	17.5
50°-60°	975.0	11.2
60°-70°	417.1	4.8
70°-80°	98.5	1.1
80°-90°	18.3	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°	3638.8	41.9
0°-40°	5665.6	65.2
0°-60°	8160.1	93.9
0°-90°	8694.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8694.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4587	4587	4587	4587	4587	
5°	4580	4587	4592	4599	4597	435
15°	4373	4464	4567	4538	4481	1233
25°	4001	4142	4351	4272	4198	1828
35°	3319	3134	3322	3282	3356	2083
45°	2521	2061	1184	2002	2556	1931
55°	1275	1275	441	1330	1554	1157
65°	384	453	140	584	593	410
75°	59	69	20	118	116	86
85°	20	12	10	20	27	21
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°	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1
2.5°	4589.6	4594.5	4592.1	4592.1	4589.6	4592.1	4592.1	4597.0	4597.0	4592.1	4589.6
5°	4579.7	4584.7	4584.7	4579.7	4579.7	4592.1	4584.7	4589.6	4589.6	4587.1	4587.1
7.5°	4557.6	4557.6	4567.4	4560.1	4560.1	4567.4	4565.0	4569.9	4574.8	4577.3	4577.3
10°	4508.3	4513.3	4515.7	4515.7	4518.2	4525.6	4530.5	4540.4	4545.3	4550.2	4552.7
12.5°	4446.8	4454.2	4456.6	4454.2	4461.6	4471.4	4483.7	4496.0	4503.4	4513.3	4520.7
15°	4372.9	4372.9	4377.8	4385.2	4390.2	4404.9	4417.2	4432.0	4451.7	4464.0	4476.3
17.5°	4291.7	4296.6	4304.0	4304.0	4313.8	4338.4	4345.8	4368.0	4390.2	4402.5	4427.1
20°	4203.1	4207.9	4215.3	4220.3	4232.6	4252.3	4267.0	4286.7	4311.4	4333.5	4358.1
22.5°	4134.1	4124.2	4129.1	4134.1	4146.4	4163.6	4180.9	4205.5	4230.1	4252.3	4276.9
25°	4001.1	4003.6	4011.0	4015.9	4030.7	4045.4	4065.1	4094.7	4116.8	4141.5	4168.5
27.5°	3821.4	3823.9	3836.1	3836.1	3848.4	3873.1	3885.4	3910.0	3939.6	3964.2	3996.2
30°	3617.0	3621.9	3621.9	3631.8	3639.1	3651.5	3663.8	3688.4	3703.2	3725.4	3769.7
32.5°	3429.9	3434.8	3432.3	3429.9	3422.5	3420.0	3417.6	3422.5	3427.4	3434.8	3452.0
35°	3319.1	3306.8	3296.9	3279.7	3260.0	3235.4	3213.2	3183.7	3156.6	3134.4	3109.8
37.5°	3213.2	3210.7	3196.0	3171.3	3131.9	3087.6	3036.0	2971.9	2907.9	2838.9	2772.5
40°	3065.5	3058.1	3045.8	3011.3	2967.0	2912.8	2843.9	2765.1	2661.6	2555.8	2447.5
42.5°	2814.3	2816.8	2802.0	2774.9	2733.1	2681.3	2609.9	2523.8	2413.0	2287.4	2147.1
45°	2521.3	2521.3	2516.4	2494.2	2464.7	2422.8	2368.7	2297.3	2188.9	2060.9	1910.7
47.5°	2216.0	2218.5	2211.1	2206.2	2193.8	2166.8	2127.4	2073.2	1996.9	1873.7	1723.5
50°	1905.8	1905.8	1918.1	1915.6	1915.6	1905.8	1888.6	1856.5	1790.1	1691.5	1551.2
52.5°	1595.5	1600.5	1607.9	1617.7	1630.0	1649.7	1630.0	1615.2	1573.3	1497.0	1376.4
55°	1275.4	1280.4	1292.7	1309.9	1324.7	1344.4	1349.3	1349.3	1327.1	1275.4	1184.3
57.5°	1002.1	994.7	1004.6	1019.4	1039.1	1058.8	1073.5	1090.8	1088.3	1053.8	980.0
60°	753.4	755.9	763.3	778.1	792.8	810.1	829.8	844.5	851.9	834.7	787.9
62.5°	549.1	549.1	558.9	573.7	581.1	605.7	618.0	625.4	632.8	630.3	600.8
65°	384.1	389.0	394.0	401.4	408.7	423.5	430.9	445.6	450.6	453.1	430.9
67.5°	270.9	263.5	268.4	273.3	280.7	290.6	305.3	305.3	312.7	312.7	297.9
70°	172.4	172.4	174.8	182.2	187.1	189.6	194.5	199.4	206.8	204.4	204.4
72.5°	115.7	113.3	115.7	118.2	120.7	128.0	128.0	130.5	135.4	137.9	128.0
75°	59.1	61.6	66.5	64.0	71.4	66.5	68.9	76.3	73.9	68.9	68.9
77.5°	49.2	49.2	49.2	46.8	51.7	51.7	49.2	54.2	51.7	51.7	49.2
80°	34.5	36.9	34.5	32.0	34.5	32.0	32.0	32.0	32.0	32.0	29.5
82.5°	27.1	22.2	24.6	22.2	24.6	24.6	22.2	19.7	19.7	22.2	19.7
85°	19.7	14.8	17.2	17.2	14.8	14.8	14.8	14.8	14.8	12.3	12.3
87.5°	12.3	7.4	7.4	7.4	9.8	9.8	9.8	7.4	9.8	9.8	4.9
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°	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1
2.5°	4594.5	4592.1	4597.0	4594.5	4594.5	4592.1	4594.5	4592.1	4597.0	4587.1	4589.6
5°	4594.5	4589.6	4592.1	4594.5	4597.0	4592.1	4592.1	4592.1	4597.0	4592.1	4594.5
7.5°	4584.7	4582.2	4589.6	4594.5	4592.1	4589.6	4594.5	4592.1	4597.0	4594.5	4599.4
10°	4565.0	4567.4	4572.4	4579.7	4582.2	4584.7	4589.6	4589.6	4597.0	4587.1	4592.1
12.5°	4535.4	4545.3	4557.6	4562.5	4572.4	4572.4	4577.3	4579.7	4584.7	4582.2	4589.6
15°	4498.5	4510.8	4525.6	4537.9	4550.2	4557.6	4565.0	4567.4	4574.8	4567.4	4569.9
17.5°	4454.2	4468.9	4491.1	4505.9	4525.6	4533.0	4542.8	4547.7	4555.1	4550.2	4552.7
20°	4392.6	4409.9	4434.5	4456.6	4468.9	4486.2	4498.5	4505.9	4510.8	4505.9	4508.3
22.5°	4306.4	4331.1	4363.1	4380.3	4404.9	4419.7	4422.2	4439.4	4451.7	4439.4	4444.3
25°	4205.5	4230.1	4254.7	4291.7	4313.8	4331.1	4348.3	4350.8	4363.1	4360.6	4358.1
27.5°	4038.0	4070.1	4111.9	4141.5	4171.0	4198.1	4217.8	4222.7	4235.0	4230.1	4232.6
30°	3809.0	3843.6	3883.0	3929.7	3971.6	3998.6	4023.3	4040.5	4052.8	4045.4	4043.0
32.5°	3484.1	3518.5	3560.4	3607.2	3656.4	3695.8	3725.4	3747.5	3762.3	3757.3	3745.1
35°	3112.3	3122.1	3149.2	3186.1	3228.0	3269.8	3296.9	3321.5	3338.8	3343.7	3343.7
37.5°	2730.6	2698.6	2678.9	2678.9	2703.5	2720.7	2745.4	2760.1	2787.3	2797.1	2804.5
40°	2361.3	2287.4	2218.5	2166.8	2132.3	2129.8	2129.8	2137.2	2161.8	2193.8	2223.4
42.5°	2031.3	1913.1	1807.3	1711.2	1642.3	1602.9	1585.7	1588.2	1607.9	1637.4	1686.6
45°	1767.9	1620.2	1487.2	1371.5	1277.9	1216.3	1186.8	1184.3	1199.1	1233.6	1287.8
47.5°	1563.5	1405.9	1255.7	1122.8	1021.8	955.3	920.9	911.0	920.9	952.9	1016.9
50°	1393.6	1231.1	1076.0	938.1	829.8	760.9	728.8	716.5	728.8	755.9	819.9
52.5°	1236.0	1068.6	923.3	790.4	674.6	615.5	581.1	573.7	581.1	613.1	664.8
55°	1053.8	911.0	768.2	635.2	534.3	475.2	448.1	440.8	448.1	477.7	531.9
57.5°	874.1	751.0	625.4	504.7	418.6	366.8	342.3	332.4	349.6	369.3	433.4
60°	706.6	608.2	502.3	396.4	325.0	278.2	258.5	256.0	261.0	285.6	329.9
62.5°	554.0	472.8	389.0	302.9	243.8	224.1	199.4	197.0	201.9	216.6	251.2
65°	398.9	347.2	283.2	221.6	174.8	147.7	137.9	140.4	145.3	155.1	187.1
67.5°	278.2	241.3	197.0	155.1	120.7	108.3	98.5	96.0	98.5	115.7	133.0
70°	187.1	165.0	133.0	118.2	83.7	66.5	68.9	61.6	71.4	71.4	86.2
72.5°	123.1	108.3	88.6	68.9	59.1	46.8	46.8	44.3	49.2	51.7	64.0
75°	64.0	49.2	49.2	34.5	24.6	12.3	22.2	19.7	17.2	19.7	24.6
77.5°	44.3	36.9	34.5	27.1	24.6	19.7	19.7	19.7	19.7	22.2	24.6
80°	27.1	27.1	19.7	17.2	14.8	12.3	14.8	14.8	14.8	14.8	17.2
82.5°	17.2	14.8	14.8	12.3	12.3	9.8	9.8	9.8	9.8	9.8	14.8
85°	14.8	9.8	9.8	7.4	9.8	17.2	7.4	9.8	9.8	9.8	7.4
87.5°	4.9	7.4	7.4	7.4	4.9	2.5	4.9	7.4	7.4	12.3	9.8
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°	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1	4587.1
2.5°	4594.5	4597.0	4597.0	4594.5	4594.5	4589.6	4599.4	4592.1	4594.5	4604.4	4597.0
5°	4599.4	4601.9	4601.9	4599.4	4599.4	4599.4	4601.9	4601.9	4599.4	4597.0	4601.9
7.5°	4609.3	4606.8	4606.8	4601.9	4601.9	4597.0	4601.9	4594.5	4599.4	4594.5	4601.9
10°	4597.0	4599.4	4597.0	4594.5	4594.5	4592.1	4592.1	4584.7	4587.1	4579.7	4584.7
12.5°	4589.6	4587.1	4587.1	4582.2	4577.3	4572.4	4569.9	4562.5	4562.5	4545.3	4552.7
15°	4569.9	4572.4	4565.0	4555.1	4550.2	4537.9	4533.0	4523.1	4513.3	4501.0	4503.4
17.5°	4552.7	4545.3	4535.4	4525.6	4505.9	4496.0	4486.2	4471.4	4466.5	4451.7	4446.8
20°	4501.0	4496.0	4483.7	4466.5	4454.2	4432.0	4422.2	4407.4	4395.1	4380.3	4372.9
22.5°	4434.5	4429.5	4414.8	4397.5	4377.8	4368.0	4358.1	4331.1	4318.7	4304.0	4301.5
25°	4350.8	4343.4	4328.6	4308.9	4299.0	4272.0	4262.1	4242.4	4237.5	4222.7	4220.3
27.5°	4222.7	4212.9	4195.6	4171.0	4153.8	4136.5	4126.7	4111.9	4107.0	4092.2	4089.8
30°	4030.7	4018.3	3983.9	3974.1	3944.5	3927.2	3927.2	3907.5	3910.0	3900.2	3900.2
32.5°	3727.8	3708.1	3681.0	3661.3	3641.6	3631.8	3631.8	3624.4	3629.3	3629.3	3634.3
35°	3326.5	3299.4	3284.6	3272.3	3272.3	3282.1	3311.7	3319.1	3333.9	3346.2	3356.0
37.5°	2811.8	2809.4	2826.7	2841.4	2878.3	2920.2	2971.9	3016.3	3058.1	3087.6	3117.2
40°	2255.4	2317.0	2366.2	2435.2	2491.7	2573.0	2666.6	2742.9	2814.3	2866.1	2920.2
42.5°	1760.5	1839.3	1942.7	2043.6	2144.6	2255.4	2378.5	2484.4	2578.0	2649.4	2706.0
45°	1371.5	1479.8	1605.4	1733.4	1863.9	2001.8	2129.8	2238.2	2336.7	2410.5	2467.2
47.5°	1105.5	1223.7	1366.5	1506.9	1654.6	1799.9	1942.7	2036.3	2117.5	2176.6	2228.3
50°	913.5	1039.1	1189.3	1349.3	1497.0	1642.3	1765.4	1856.5	1923.0	1974.7	2006.7
52.5°	763.3	896.2	1056.3	1216.3	1364.0	1497.0	1607.9	1676.8	1730.9	1767.9	1797.4
55°	630.3	758.4	908.6	1058.8	1204.0	1329.6	1420.7	1472.4	1514.2	1536.4	1553.6
57.5°	514.6	632.8	770.7	908.6	1034.1	1137.6	1209.0	1260.7	1280.4	1297.6	1295.1
60°	403.8	514.6	640.2	758.4	866.7	950.4	1002.1	1031.7	1046.4	1053.8	1048.9
62.5°	317.6	418.6	514.6	618.0	696.8	768.2	817.5	817.5	824.8	827.3	834.7
65°	236.3	312.7	396.4	472.8	536.7	583.5	610.7	618.0	627.9	625.4	620.5
67.5°	174.8	231.5	293.0	349.6	394.0	423.5	443.2	460.5	458.0	453.1	450.6
70°	120.7	157.6	211.8	246.2	278.2	307.8	312.7	315.2	317.6	320.1	315.2
72.5°	83.7	110.8	140.4	169.9	189.6	201.9	214.2	216.6	216.6	216.6	214.2
75°	41.9	56.6	83.7	96.0	113.3	118.2	128.0	128.0	135.4	125.6	123.1
77.5°	36.9	44.3	59.1	68.9	76.3	83.7	86.2	93.6	91.1	86.2	88.6
80°	22.2	27.1	36.9	41.9	51.7	54.2	56.6	59.1	56.6	59.1	59.1
82.5°	17.2	19.7	24.6	24.6	32.0	32.0	34.5	34.5	36.9	36.9	36.9
85°	9.8	17.2	14.8	29.5	19.7	19.7	24.6	29.5	24.6	24.6	29.5
87.5°	9.8	9.8	7.4	9.8	9.8	9.8	12.3	14.8	14.8	17.2	14.8
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: P249482

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4587.1	4587.1	4587.1	4587.1
2.5°	4594.5	4599.4	4592.1	4589.6
5°	4601.9	4601.9	4597.0	4597.0
7.5°	4601.9	4601.9	4594.5	4589.6
10°	4582.2	4582.2	4574.8	4569.9
12.5°	4545.3	4545.3	4542.8	4535.4
15°	4498.5	4498.5	4488.6	4481.3
17.5°	4434.5	4439.4	4427.1	4427.1
20°	4365.5	4363.1	4353.2	4348.3
22.5°	4294.1	4289.2	4286.7	4272.0
25°	4217.8	4212.9	4205.5	4198.1
27.5°	4087.3	4084.8	4077.4	4067.6
30°	3887.8	3885.4	3875.6	3875.6
32.5°	3629.3	3626.9	3617.0	3619.5
35°	3360.9	3370.8	3365.9	3356.0
37.5°	3136.9	3144.3	3149.2	3144.3
40°	2949.7	2971.9	2974.4	2979.3
42.5°	2750.3	2779.8	2789.7	2794.6
45°	2511.4	2538.6	2560.7	2555.8
47.5°	2267.7	2287.4	2307.1	2292.3
50°	2033.8	2046.1	2053.5	2053.5
52.5°	1812.2	1812.2	1809.8	1812.2
55°	1558.6	1558.6	1548.8	1553.6
57.5°	1292.7	1297.6	1290.2	1277.9
60°	1046.4	1034.1	1029.2	1021.8
62.5°	815.0	815.0	797.8	819.9
65°	610.7	603.3	595.8	593.4
67.5°	443.2	440.8	433.4	430.9
70°	312.7	302.9	300.4	295.5
72.5°	209.3	209.3	204.4	204.4
75°	128.0	115.7	113.3	115.7
77.5°	88.6	86.2	86.2	83.7
80°	59.1	56.6	61.6	54.2
82.5°	36.9	39.4	36.9	39.4
85°	24.6	29.5	27.1	27.1
87.5°	14.8	14.8	14.8	14.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)