

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: P249176

Luminaire Tested: **LSR8B100D010 EC8B100927 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249176  
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 EC8B100927 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8640.0 lumens  
Efficiency: N/A  
Efficacy: 81.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

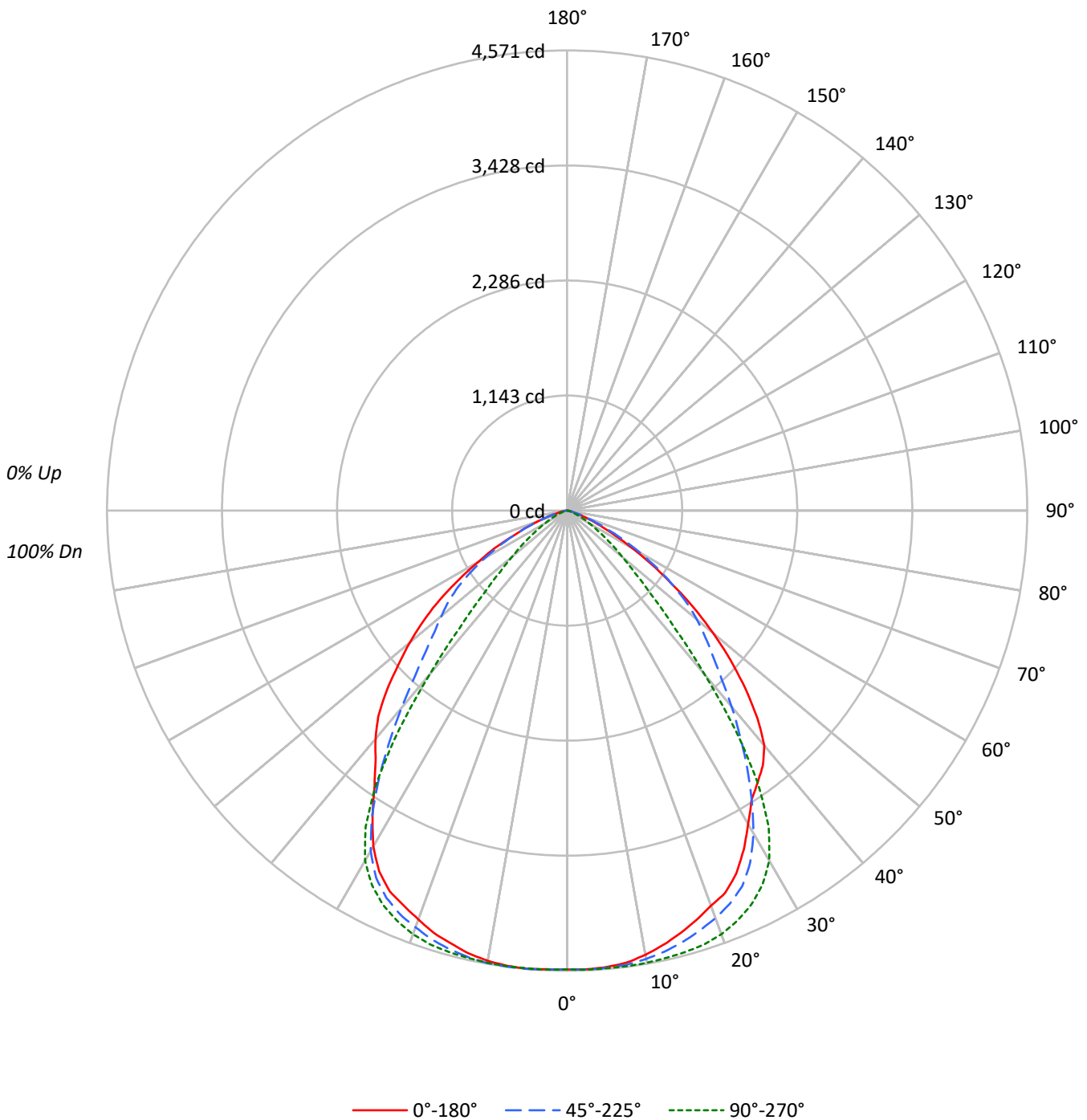
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90	90	90	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79	79	79	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70	70	70	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62	62	62	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55	55	55	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50	50	50	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45	45	45	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41	41	41	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37	37	37	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34	34	34	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	435.1	5.0
10°-20°	1263.5	14.6
20°-30°	1917.7	22.2
30°-40°	2014.2	23.3
40°-50°	1510.1	17.5
50°-60°	968.9	11.2
60°-70°	414.5	4.8
70°-80°	97.9	1.1
80°-90°	18.2	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°	3616.2	41.9
0°-40°	5630.4	65.2
0°-60°	8109.4	93.9
0°-90°	8640.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8640.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4559	4559	4559	4559	4559	
5°	4551	4559	4564	4571	4568	432
15°	4346	4436	4539	4510	4453	1226
25°	3976	4116	4324	4245	4172	1817
35°	3298	3115	3301	3262	3335	2070
45°	2506	2048	1177	1989	2540	1919
55°	1268	1268	438	1321	1544	1150
65°	382	450	140	580	590	407
75°	59	68	20	117	115	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°	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6
2.5°	4561.1	4566.0	4563.6	4563.6	4561.1	4563.6	4563.6	4568.4	4568.4	4563.6	4561.1
5°	4551.3	4556.1	4556.1	4551.3	4551.3	4563.6	4556.1	4561.1	4561.1	4558.6	4558.6
7.5°	4529.2	4529.2	4539.0	4531.7	4531.7	4539.0	4536.6	4541.5	4546.5	4548.8	4548.8
10°	4480.3	4485.3	4487.7	4487.7	4490.1	4497.4	4502.4	4512.2	4517.0	4521.9	4524.4
12.5°	4419.2	4426.5	4428.9	4426.5	4433.8	4443.6	4455.9	4468.2	4475.5	4485.3	4492.6
15°	4345.8	4345.8	4350.6	4358.0	4362.9	4377.6	4389.8	4404.5	4424.1	4436.3	4448.5
17.5°	4265.0	4269.9	4277.2	4277.2	4287.0	4311.4	4318.9	4340.9	4362.9	4375.1	4399.7
20°	4176.9	4181.8	4189.2	4194.1	4206.3	4225.8	4240.6	4260.2	4284.6	4306.6	4331.0
22.5°	4108.4	4098.6	4103.4	4108.4	4120.7	4137.8	4155.0	4179.4	4203.8	4225.8	4250.4
25°	3976.2	3978.7	3986.1	3990.9	4005.7	4020.3	4039.9	4069.2	4091.3	4115.7	4142.6
27.5°	3797.7	3800.1	3812.3	3812.3	3824.6	3849.1	3861.2	3885.8	3915.1	3939.5	3971.4
30°	3594.6	3599.4	3599.4	3609.2	3616.5	3628.8	3641.1	3665.5	3680.2	3702.3	3746.2
32.5°	3408.6	3413.5	3411.0	3408.6	3401.2	3398.7	3396.4	3401.2	3406.2	3413.5	3430.6
35°	3298.5	3286.2	3276.5	3259.4	3239.8	3215.2	3193.2	3164.0	3137.0	3114.9	3090.5
37.5°	3193.2	3190.8	3176.1	3151.6	3112.4	3068.4	3017.1	2953.5	2889.8	2821.3	2755.2
40°	3046.4	3039.1	3026.8	2992.6	2948.5	2894.7	2826.2	2747.9	2645.1	2539.9	2432.2
42.5°	2796.9	2799.2	2784.6	2757.7	2716.1	2664.7	2593.7	2508.1	2398.0	2273.2	2133.8
45°	2505.7	2505.7	2500.8	2478.7	2449.4	2407.7	2354.0	2283.0	2175.3	2048.1	1898.8
47.5°	2202.2	2204.7	2197.4	2192.5	2180.2	2153.4	2114.2	2060.3	1984.5	1862.1	1712.8
50°	1893.9	1893.9	1906.2	1903.7	1903.7	1893.9	1876.8	1845.0	1779.0	1681.1	1541.6
52.5°	1585.6	1590.5	1597.8	1607.6	1619.9	1639.5	1619.9	1605.1	1563.5	1487.7	1367.9
55°	1267.5	1272.4	1284.6	1301.7	1316.5	1336.0	1340.9	1340.9	1318.8	1267.5	1177.0
57.5°	996.0	988.5	998.3	1013.1	1032.6	1052.2	1066.8	1083.9	1081.6	1047.3	973.9
60°	748.8	751.3	758.5	773.2	787.9	805.1	824.6	839.2	846.7	829.6	783.0
62.5°	545.6	545.6	555.4	570.2	577.5	602.0	614.1	621.6	628.9	626.4	597.0
65°	381.7	386.6	391.5	398.9	406.1	420.9	428.2	442.9	447.8	450.2	428.2
67.5°	269.2	261.8	266.7	271.6	279.0	288.8	303.4	303.4	310.7	310.7	296.1
70°	171.3	171.3	173.7	181.0	186.0	188.4	193.3	198.2	205.5	203.1	203.1
72.5°	115.0	112.6	115.0	117.4	119.9	127.2	127.2	129.7	134.5	137.0	127.2
75°	58.7	61.2	66.0	63.7	71.0	66.0	68.5	75.8	73.4	68.5	68.5
77.5°	48.9	48.9	48.9	46.6	51.4	51.4	48.9	53.8	51.4	51.4	48.9
80°	34.2	36.7	34.2	31.8	34.2	31.8	31.8	31.8	31.8	31.8	29.4
82.5°	26.9	22.0	24.5	22.0	24.5	24.5	22.0	19.6	19.6	22.0	19.6
85°	19.6	14.6	17.1	17.1	14.6	14.6	14.6	14.6	14.6	12.3	12.3
87.5°	12.3	7.3	7.3	7.3	9.8	9.8	9.8	7.3	9.8	9.8	5.0
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°	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6
2.5°	4566.0	4563.6	4568.4	4566.0	4566.0	4563.6	4566.0	4563.6	4568.4	4558.6	4561.1
5°	4566.0	4561.1	4563.6	4566.0	4568.4	4563.6	4563.6	4563.6	4568.4	4563.6	4566.0
7.5°	4556.1	4553.8	4561.1	4566.0	4563.6	4561.1	4566.0	4563.6	4568.4	4566.0	4570.9
10°	4536.6	4539.0	4544.0	4551.3	4553.8	4556.1	4561.1	4561.1	4568.4	4558.6	4563.6
12.5°	4507.3	4517.0	4529.2	4534.2	4544.0	4544.0	4548.8	4551.3	4556.1	4553.8	4561.1
15°	4470.5	4482.8	4497.4	4509.7	4521.9	4529.2	4536.6	4539.0	4546.5	4539.0	4541.5
17.5°	4426.5	4441.2	4463.2	4477.8	4497.4	4504.8	4514.6	4519.5	4526.9	4521.9	4524.4
20°	4365.3	4382.4	4407.0	4428.9	4441.2	4458.3	4470.5	4477.8	4482.8	4477.8	4480.3
22.5°	4279.7	4304.1	4336.0	4353.1	4377.6	4392.2	4394.7	4411.8	4424.1	4411.8	4416.8
25°	4179.4	4203.8	4228.3	4265.0	4287.0	4304.1	4321.3	4323.7	4336.0	4333.5	4331.0
27.5°	4013.0	4044.8	4086.3	4115.7	4145.1	4172.1	4191.6	4196.5	4208.7	4203.8	4206.3
30°	3785.4	3819.7	3858.9	3905.3	3947.0	3973.8	3998.2	4015.5	4027.6	4020.3	4017.8
32.5°	3462.4	3496.7	3538.2	3584.7	3633.8	3672.8	3702.3	3724.2	3738.9	3734.0	3721.8
35°	3093.0	3102.8	3129.6	3166.3	3207.9	3249.6	3276.5	3300.9	3318.0	3322.9	3322.9
37.5°	2713.6	2681.9	2662.3	2662.3	2686.7	2703.8	2728.4	2743.0	2770.0	2779.6	2787.1
40°	2346.6	2273.2	2204.7	2153.4	2119.0	2116.6	2116.6	2123.9	2148.4	2180.2	2209.6
42.5°	2018.7	1901.2	1796.1	1700.7	1632.1	1593.0	1575.9	1578.3	1597.8	1627.2	1676.1
45°	1756.9	1610.1	1477.9	1362.9	1269.9	1208.8	1179.4	1177.0	1191.6	1225.9	1279.8
47.5°	1553.9	1397.1	1248.0	1115.8	1015.5	949.4	915.2	905.4	915.2	946.9	1010.6
50°	1385.0	1223.4	1069.3	932.3	824.6	756.1	724.3	712.0	724.3	751.3	814.8
52.5°	1228.4	1062.0	917.6	785.5	670.5	611.7	577.5	570.2	577.5	609.3	660.7
55°	1047.3	905.4	763.4	631.4	531.0	472.3	445.4	438.1	445.4	474.8	528.5
57.5°	868.7	746.3	621.6	501.6	416.0	364.6	340.1	330.3	347.4	367.0	430.6
60°	702.2	604.5	499.2	394.0	323.0	276.5	257.0	254.5	259.3	283.8	327.8
62.5°	550.6	469.8	386.6	300.9	242.2	222.6	198.2	195.8	200.6	215.3	249.6
65°	396.4	345.0	281.4	220.2	173.7	146.8	137.0	139.5	144.3	154.1	186.0
67.5°	276.5	239.7	195.8	154.1	119.9	107.7	97.9	95.4	97.9	115.0	132.2
70°	186.0	163.9	132.2	117.4	83.2	66.0	68.5	61.2	71.0	71.0	85.6
72.5°	122.3	107.7	88.1	68.5	58.7	46.6	46.6	44.1	48.9	51.4	63.7
75°	63.7	48.9	48.9	34.2	24.5	12.3	22.0	19.6	17.1	19.6	24.5
77.5°	44.1	36.7	34.2	26.9	24.5	19.6	19.6	19.6	19.6	22.0	24.5
80°	26.9	26.9	19.6	17.1	14.6	12.3	14.6	14.6	14.6	14.6	17.1
82.5°	17.1	14.6	14.6	12.3	12.3	9.8	9.8	9.8	9.8	9.8	14.6
85°	14.6	9.8	9.8	7.3	9.8	17.1	7.3	9.8	9.8	9.8	7.3
87.5°	5.0	7.3	7.3	7.3	5.0	2.5	5.0	7.3	7.3	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°	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6	4558.6
2.5°	4566.0	4568.4	4568.4	4566.0	4566.0	4561.1	4570.9	4563.6	4566.0	4575.7	4568.4
5°	4570.9	4573.3	4573.3	4570.9	4570.9	4570.9	4573.3	4573.3	4570.9	4568.4	4573.3
7.5°	4580.7	4578.2	4578.2	4573.3	4573.3	4568.4	4573.3	4566.0	4570.9	4566.0	4573.3
10°	4568.4	4570.9	4568.4	4566.0	4566.0	4563.6	4563.6	4556.1	4558.6	4551.3	4556.1
12.5°	4561.1	4558.6	4558.6	4553.8	4548.8	4544.0	4541.5	4534.2	4534.2	4517.0	4524.4
15°	4541.5	4544.0	4536.6	4526.9	4521.9	4509.7	4504.8	4494.9	4485.3	4473.0	4475.5
17.5°	4524.4	4517.0	4507.3	4497.4	4477.8	4468.2	4458.3	4443.6	4438.7	4424.1	4419.2
20°	4473.0	4468.2	4455.9	4438.7	4426.5	4404.5	4394.7	4380.1	4367.8	4353.1	4345.8
22.5°	4407.0	4402.0	4387.4	4370.2	4350.6	4340.9	4331.0	4304.1	4291.9	4277.2	4274.8
25°	4323.7	4316.4	4301.8	4282.1	4272.3	4245.4	4235.6	4216.0	4211.2	4196.5	4194.1
27.5°	4196.5	4186.7	4169.6	4145.1	4128.0	4110.9	4101.1	4086.3	4081.5	4066.8	4064.4
30°	4005.7	3993.4	3959.1	3949.4	3920.0	3902.8	3902.8	3883.3	3885.8	3876.0	3876.0
32.5°	3704.6	3685.0	3658.2	3638.6	3619.0	3609.2	3609.2	3601.9	3606.8	3606.8	3611.7
35°	3305.8	3278.9	3264.2	3251.9	3251.9	3261.7	3291.2	3298.5	3313.1	3325.4	3335.2
37.5°	2794.4	2792.0	2809.1	2823.8	2860.4	2902.0	2953.5	2997.6	3039.1	3068.4	3097.8
40°	2241.3	2302.5	2351.5	2420.1	2476.2	2557.0	2650.0	2725.9	2796.9	2848.3	2902.0
42.5°	1749.5	1827.9	1930.6	2031.0	2131.3	2241.3	2363.7	2468.9	2562.0	2633.0	2689.2
45°	1362.9	1470.6	1595.5	1722.6	1852.3	1989.3	2116.6	2224.2	2322.1	2395.6	2451.8
47.5°	1098.7	1216.1	1358.0	1497.5	1644.3	1788.6	1930.6	2023.6	2104.3	2163.0	2214.5
50°	907.8	1032.6	1181.9	1340.9	1487.7	1632.1	1754.4	1845.0	1911.0	1962.4	1994.3
52.5°	758.5	890.7	1049.7	1208.8	1355.6	1487.7	1597.8	1666.4	1720.2	1756.9	1786.3
55°	626.4	753.6	902.9	1052.2	1196.6	1321.3	1411.9	1463.3	1504.8	1526.9	1544.0
57.5°	511.4	628.9	765.9	902.9	1027.7	1130.5	1201.5	1252.8	1272.4	1289.6	1287.1
60°	401.3	511.4	636.2	753.6	861.3	944.4	996.0	1025.2	1040.0	1047.3	1042.4
62.5°	315.7	416.0	511.4	614.1	692.4	763.4	812.4	812.4	819.7	822.2	829.6
65°	234.9	310.7	394.0	469.8	533.4	579.9	606.8	614.1	624.0	621.6	616.6
67.5°	173.7	230.1	291.2	347.4	391.5	420.9	440.4	457.6	455.2	450.2	447.8
70°	119.9	156.6	210.5	244.7	276.5	305.9	310.7	313.2	315.7	318.2	313.2
72.5°	83.2	110.1	139.5	168.9	188.4	200.6	212.8	215.3	215.3	215.3	212.8
75°	41.6	56.2	83.2	95.4	112.6	117.4	127.2	127.2	134.5	124.8	122.3
77.5°	36.7	44.1	58.7	68.5	75.8	83.2	85.6	93.0	90.6	85.6	88.1
80°	22.0	26.9	36.7	41.6	51.4	53.8	56.2	58.7	56.2	58.7	58.7
82.5°	17.1	19.6	24.5	24.5	31.8	31.8	34.2	34.2	36.7	36.7	36.7
85°	9.8	17.1	14.6	29.4	19.6	19.6	24.5	29.4	24.5	24.5	29.4
87.5°	9.8	9.8	7.3	9.8	9.8	9.8	12.3	14.6	14.6	17.1	14.6
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: P249176

CATALOG NUMBER: LSR8B100D010 EC8B100927 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4558.6	4558.6	4558.6	4558.6
2.5°	4566.0	4570.9	4563.6	4561.1
5°	4573.3	4573.3	4568.4	4568.4
7.5°	4573.3	4573.3	4566.0	4561.1
10°	4553.8	4553.8	4546.5	4541.5
12.5°	4517.0	4517.0	4514.6	4507.3
15°	4470.5	4470.5	4460.7	4453.4
17.5°	4407.0	4411.8	4399.7	4399.7
20°	4338.4	4336.0	4326.2	4321.3
22.5°	4267.5	4262.5	4260.2	4245.4
25°	4191.6	4186.7	4179.4	4172.1
27.5°	4061.9	4059.4	4052.1	4042.4
30°	3863.7	3861.2	3851.4	3851.4
32.5°	3606.8	3604.3	3594.6	3597.1
35°	3340.0	3349.9	3345.0	3335.2
37.5°	3117.4	3124.8	3129.6	3124.8
40°	2931.4	2953.5	2955.9	2960.8
42.5°	2733.2	2762.5	2772.5	2777.3
45°	2495.8	2522.8	2544.9	2539.9
47.5°	2253.6	2273.2	2292.8	2278.1
50°	2021.2	2033.4	2040.8	2040.8
52.5°	1801.0	1801.0	1798.5	1801.0
55°	1548.9	1548.9	1539.1	1544.0
57.5°	1284.6	1289.6	1282.2	1269.9
60°	1040.0	1027.7	1022.8	1015.5
62.5°	810.0	810.0	792.8	814.8
65°	606.8	599.5	592.1	589.7
67.5°	440.4	438.1	430.6	428.2
70°	310.7	300.9	298.6	293.6
72.5°	208.0	208.0	203.1	203.1
75°	127.2	115.0	112.6	115.0
77.5°	88.1	85.6	85.6	83.2
80°	58.7	56.2	61.2	53.8
82.5°	36.7	39.2	36.7	39.2
85°	24.5	29.4	26.9	26.9
87.5°	14.6	14.6	14.6	14.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)