

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: P249492

Luminaire Tested: **LSR8B120D010 EC8B120950 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249492  
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: LSR8B120D010 EC8B120950 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 5000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10203.0 lumens  
Efficiency: N/A  
Efficacy: 86.2 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

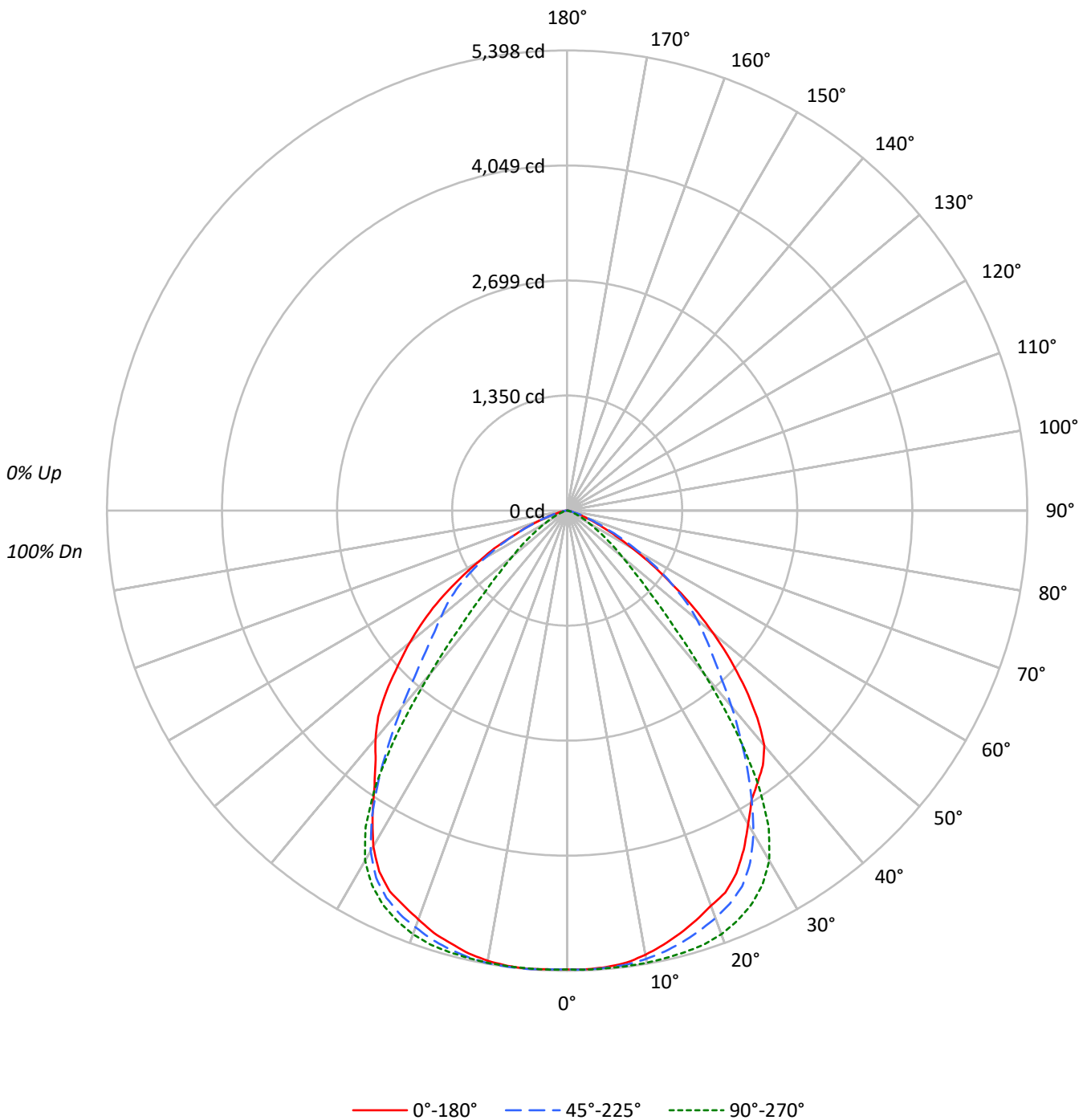
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249492

CATALOG NUMBER: LSR8B120D010 EC8B120950 8LBDW0B

### Luminous Intensity Polar Plot





TEST NUMBER: P249492

CATALOG NUMBER: LSR8B120D010 EC8B120950 8LBDW0B

**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°	166001	166001	166001
5°	166366	166815	166994
10°	165666	168653	167929
15°	163831	171120	167892
20°	161865	173524	167457
25°	159764	173724	167630
30°	151143	168840	161946
35°	146632	146737	148262
40°	144814	100961	140744
45°	129035	60612	130801
50°	107296	40340	115610
55°	80470	27811	98023
60°	54531	18533	73958
65°	32893	12017	50813
70°	18239	6519	31258
75°	8268	2752	16180
80°	7174	3072	11294
85°	8173	4069	11251



TEST NUMBER: P249492

CATALOG NUMBER: LSR8B120D010 EC8B120950 8LBDW0B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	513.8	5.0
10°-20°	1492.0	14.6
20°-30°	2264.6	22.2
30°-40°	2378.5	23.3
40°-50°	1783.3	17.5
50°-60°	1144.2	11.2
60°-70°	489.5	4.8
70°-80°	115.6	1.1
80°-90°	21.5	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°	4270.4	41.9
0°-40°	6648.9	65.2
0°-60°	9576.4	93.9
0°-90°	10203.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10203.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5383	5383	5383	5383	5383	
5°	5375	5383	5389	5398	5395	511
15°	5132	5239	5360	5326	5259	1447
25°	4696	4860	5106	5014	4927	2145
35°	3895	3678	3898	3852	3938	2445
45°	2959	2419	1390	2349	2999	2266
55°	1497	1497	517	1560	1823	1358
65°	451	532	165	685	696	481
75°	69	81	23	139	136	101
85°	23	14	12	23	32	24
90°	0	0	0	0	0	



TEST NUMBER: P249492

CATALOG NUMBER: LSR8B120D010 EC8B120950 8LBDW0B

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3
2.5°	5386.2	5392.0	5389.1	5389.1	5386.2	5389.1	5389.1	5394.9	5394.9	5389.1	5386.2
5°	5374.6	5380.4	5380.4	5374.6	5374.6	5389.1	5380.4	5386.2	5386.2	5383.3	5383.3
7.5°	5348.7	5348.7	5360.2	5351.6	5351.6	5360.2	5357.3	5363.1	5368.9	5371.8	5371.8
10°	5290.8	5296.6	5299.5	5299.5	5302.4	5311.0	5316.8	5328.4	5334.2	5340.0	5342.9
12.5°	5218.6	5227.3	5230.2	5227.3	5236.0	5247.5	5262.0	5276.4	5285.1	5296.6	5305.3
15°	5131.9	5131.9	5137.7	5146.4	5152.2	5169.5	5183.9	5201.2	5224.4	5238.9	5253.3
17.5°	5036.6	5042.4	5051.0	5051.0	5062.6	5091.4	5100.1	5126.2	5152.2	5166.6	5195.5
20°	4932.6	4938.3	4947.0	4952.8	4967.2	4990.3	5007.7	5030.8	5059.7	5085.7	5114.6
22.5°	4851.6	4840.1	4845.8	4851.6	4866.1	4886.3	4906.5	4935.4	4964.3	4990.3	5019.2
25°	4695.6	4698.5	4707.2	4712.9	4730.3	4747.6	4770.7	4805.4	4831.4	4860.3	4892.1
27.5°	4484.7	4487.6	4502.0	4502.0	4516.4	4545.3	4559.7	4588.7	4623.4	4652.2	4689.8
30°	4244.8	4250.6	4250.6	4262.2	4270.8	4285.3	4299.7	4328.6	4345.9	4372.0	4424.0
32.5°	4025.2	4031.0	4028.1	4025.2	4016.5	4013.6	4010.7	4016.5	4022.3	4031.0	4051.2
35°	3895.2	3880.7	3869.2	3849.0	3825.8	3796.9	3770.9	3736.3	3704.4	3678.4	3649.6
37.5°	3770.9	3768.0	3750.7	3721.8	3675.5	3623.6	3562.9	3487.7	3412.6	3331.7	3253.7
40°	3597.5	3588.8	3574.4	3534.0	3481.9	3418.4	3337.5	3245.0	3123.6	2999.4	2872.3
42.5°	3302.8	3305.7	3288.4	3256.5	3207.5	3146.7	3063.0	2961.8	2831.8	2684.4	2519.7
45°	2958.9	2958.9	2953.1	2927.1	2892.5	2843.3	2779.8	2696.0	2568.9	2418.6	2242.3
47.5°	2600.6	2603.5	2594.8	2589.1	2574.6	2542.9	2496.6	2433.1	2343.5	2199.0	2022.7
50°	2236.6	2236.6	2251.0	2248.1	2248.1	2236.6	2216.3	2178.7	2100.7	1985.1	1820.5
52.5°	1872.4	1878.2	1886.9	1898.5	1912.9	1936.0	1912.9	1895.6	1846.4	1756.8	1615.3
55°	1496.8	1502.6	1517.0	1537.2	1554.6	1577.7	1583.5	1583.5	1557.5	1496.8	1389.9
57.5°	1176.1	1167.4	1179.0	1196.3	1219.4	1242.5	1259.9	1280.1	1277.2	1236.7	1150.1
60°	884.2	887.1	895.7	913.1	930.5	950.7	973.8	991.1	999.8	979.6	924.7
62.5°	644.4	644.4	655.9	673.2	681.9	710.9	725.3	734.0	742.6	739.7	705.1
65°	450.8	456.5	462.3	471.0	479.7	497.0	505.7	523.0	528.8	531.7	505.7
67.5°	317.9	309.2	315.0	320.7	329.4	341.0	358.3	358.3	367.0	367.0	349.6
70°	202.3	202.3	205.2	213.8	219.6	222.5	228.3	234.0	242.7	239.8	239.8
72.5°	135.8	132.9	135.8	138.7	141.6	150.2	150.2	153.1	158.9	161.8	150.2
75°	69.4	72.3	78.0	75.2	83.8	78.0	80.9	89.6	86.7	80.9	80.9
77.5°	57.8	57.8	57.8	54.9	60.7	60.7	57.8	63.6	60.7	60.7	57.8
80°	40.4	43.3	40.4	37.5	40.4	37.5	37.5	37.5	37.5	37.5	34.6
82.5°	31.8	26.0	28.9	26.0	28.9	28.9	26.0	23.1	23.1	26.0	23.1
85°	23.1	17.3	20.2	20.2	17.3	17.3	17.3	17.3	17.3	14.4	14.4
87.5°	14.4	8.7	8.7	8.7	11.5	11.5	11.5	8.7	11.5	11.5	5.8
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: P249492

CATALOG NUMBER: LSR8B120D010 EC8B120950 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3
2.5°	5392.0	5389.1	5394.9	5392.0	5392.0	5389.1	5392.0	5389.1	5394.9	5383.3	5386.2
5°	5392.0	5386.2	5389.1	5392.0	5394.9	5389.1	5389.1	5389.1	5394.9	5389.1	5392.0
7.5°	5380.4	5377.5	5386.2	5392.0	5389.1	5386.2	5392.0	5389.1	5394.9	5392.0	5397.7
10°	5357.3	5360.2	5366.0	5374.6	5377.5	5380.4	5386.2	5386.2	5394.9	5383.3	5389.1
12.5°	5322.6	5334.2	5348.7	5354.4	5366.0	5366.0	5371.8	5374.6	5380.4	5377.5	5386.2
15°	5279.3	5293.7	5311.0	5325.5	5340.0	5348.7	5357.3	5360.2	5368.9	5360.2	5363.1
17.5°	5227.3	5244.6	5270.6	5287.9	5311.0	5319.7	5331.3	5337.1	5345.8	5340.0	5342.9
20°	5155.0	5175.3	5204.1	5230.2	5244.6	5264.8	5279.3	5287.9	5293.7	5287.9	5290.8
22.5°	5053.9	5082.8	5120.4	5140.6	5169.5	5186.8	5189.7	5209.9	5224.4	5209.9	5215.7
25°	4935.4	4964.3	4993.2	5036.6	5062.6	5082.8	5103.0	5105.9	5120.4	5117.5	5114.6
27.5°	4738.9	4776.5	4825.6	4860.3	4895.0	4926.8	4949.9	4955.6	4970.1	4964.3	4967.2
30°	4470.2	4510.7	4556.9	4611.8	4660.9	4692.7	4721.6	4741.8	4756.2	4747.6	4744.7
32.5°	4088.8	4129.2	4178.4	4233.2	4291.1	4337.2	4372.0	4398.0	4415.3	4409.5	4395.1
35°	3652.5	3664.0	3695.8	3739.2	3788.2	3837.4	3869.2	3898.0	3918.3	3924.1	3924.1
37.5°	3204.6	3167.0	3143.9	3143.9	3172.8	3193.0	3221.9	3239.2	3271.0	3282.6	3291.3
40°	2771.1	2684.4	2603.5	2542.9	2502.4	2499.5	2499.5	2508.1	2537.1	2574.6	2609.3
42.5°	2383.9	2245.2	2121.0	2008.3	1927.4	1881.1	1860.9	1863.8	1886.9	1921.6	1979.3
45°	2074.7	1901.4	1745.3	1609.5	1499.7	1427.4	1392.8	1389.9	1407.2	1447.7	1511.3
47.5°	1834.9	1649.9	1473.7	1317.6	1199.2	1121.1	1080.7	1069.2	1080.7	1118.2	1193.4
50°	1635.5	1444.8	1262.8	1100.9	973.8	892.9	855.3	840.9	855.3	887.1	962.2
52.5°	1450.6	1254.1	1083.6	927.6	791.7	722.4	681.9	673.2	681.9	719.5	780.2
55°	1236.7	1069.2	901.5	745.5	627.1	557.7	525.9	517.3	525.9	560.6	624.2
57.5°	1025.8	881.3	734.0	592.4	491.2	430.5	401.7	390.1	410.3	433.4	508.6
60°	829.3	713.8	589.5	465.2	381.4	326.5	303.4	300.5	306.3	335.2	387.2
62.5°	650.2	554.8	456.5	355.4	286.1	262.9	234.0	231.2	236.9	254.3	294.8
65°	468.1	407.5	332.3	260.0	205.2	173.4	161.8	164.7	170.5	182.1	219.6
67.5°	326.5	283.2	231.2	182.1	141.6	127.1	115.6	112.7	115.6	135.8	156.0
70°	219.6	193.6	156.0	138.7	98.3	78.0	80.9	72.3	83.8	83.8	101.1
72.5°	144.4	127.1	104.0	80.9	69.4	54.9	54.9	52.0	57.8	60.7	75.2
75°	75.2	57.8	57.8	40.4	28.9	14.4	26.0	23.1	20.2	23.1	28.9
77.5°	52.0	43.3	40.4	31.8	28.9	23.1	23.1	23.1	23.1	26.0	28.9
80°	31.8	31.8	23.1	20.2	17.3	14.4	17.3	17.3	17.3	17.3	20.2
82.5°	20.2	17.3	17.3	14.4	14.4	11.5	11.5	11.5	11.5	11.5	17.3
85°	17.3	11.5	11.5	8.7	11.5	20.2	8.7	11.5	11.5	11.5	8.7
87.5°	5.8	8.7	8.7	8.7	5.8	2.9	5.8	8.7	8.7	14.4	11.5
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: P249492

CATALOG NUMBER: LSR8B120D010 EC8B120950 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3	5383.3
2.5°	5392.0	5394.9	5394.9	5392.0	5392.0	5386.2	5397.7	5389.1	5392.0	5403.5	5394.9
5°	5397.7	5400.6	5400.6	5397.7	5397.7	5397.7	5400.6	5400.6	5397.7	5394.9	5400.6
7.5°	5409.3	5406.4	5406.4	5400.6	5400.6	5394.9	5400.6	5392.0	5397.7	5392.0	5400.6
10°	5394.9	5397.7	5394.9	5392.0	5392.0	5389.1	5389.1	5380.4	5383.3	5374.6	5380.4
12.5°	5386.2	5383.3	5383.3	5377.5	5371.8	5366.0	5363.1	5354.4	5354.4	5334.2	5342.9
15°	5363.1	5366.0	5357.3	5345.8	5340.0	5325.5	5319.7	5308.1	5296.6	5282.2	5285.1
17.5°	5342.9	5334.2	5322.6	5311.0	5287.9	5276.4	5264.8	5247.5	5241.7	5224.4	5218.6
20°	5282.2	5276.4	5262.0	5241.7	5227.3	5201.2	5189.7	5172.4	5157.9	5140.6	5131.9
22.5°	5204.1	5198.3	5181.0	5160.8	5137.7	5126.2	5114.6	5082.8	5068.3	5051.0	5048.1
25°	5105.9	5097.2	5079.9	5056.8	5045.2	5013.5	5001.9	4978.7	4973.0	4955.6	4952.8
27.5°	4955.6	4944.1	4923.9	4895.0	4874.7	4854.5	4843.0	4825.6	4819.9	4802.5	4799.6
30°	4730.3	4715.8	4675.3	4663.8	4629.1	4608.9	4608.9	4585.8	4588.7	4577.1	4577.1
32.5°	4374.9	4351.7	4319.9	4296.8	4273.7	4262.2	4262.2	4253.5	4259.3	4259.3	4265.1
35°	3903.8	3872.1	3854.7	3840.3	3840.3	3851.8	3886.5	3895.2	3912.5	3927.0	3938.5
37.5°	3299.9	3297.1	3317.3	3334.6	3377.9	3427.1	3487.7	3539.8	3588.8	3623.6	3658.2
40°	2646.9	2719.1	2776.9	2857.8	2924.2	3019.6	3129.4	3219.0	3302.8	3363.5	3427.1
42.5°	2066.0	2158.5	2279.9	2398.3	2516.8	2646.9	2791.4	2915.6	3025.4	3109.2	3175.7
45°	1609.5	1736.6	1884.0	2034.3	2187.4	2349.3	2499.5	2626.6	2742.2	2828.9	2895.4
47.5°	1297.4	1436.1	1603.7	1768.4	1941.8	2112.3	2279.9	2389.7	2485.0	2554.4	2615.1
50°	1072.0	1219.4	1395.7	1583.5	1756.8	1927.4	2071.8	2178.7	2256.8	2317.5	2355.0
52.5°	895.7	1051.8	1239.6	1427.4	1600.8	1756.8	1886.9	1967.8	2031.4	2074.7	2109.4
55°	739.7	890.0	1066.3	1242.5	1413.0	1560.4	1667.3	1728.0	1777.1	1803.1	1823.3
57.5°	603.9	742.6	904.4	1066.3	1213.6	1335.0	1418.8	1479.5	1502.6	1522.8	1519.9
60°	473.9	603.9	751.3	890.0	1017.1	1115.4	1176.1	1210.7	1228.1	1236.7	1231.0
62.5°	372.7	491.2	603.9	725.3	817.8	901.5	959.4	959.4	968.0	970.9	979.6
65°	277.4	367.0	465.2	554.8	629.9	684.8	716.7	725.3	736.9	734.0	728.2
67.5°	205.2	271.6	343.8	410.3	462.3	497.0	520.1	540.4	537.5	531.7	528.8
70°	141.6	185.0	248.5	289.0	326.5	361.2	367.0	369.9	372.7	375.6	369.9
72.5°	98.3	130.0	164.7	199.4	222.5	236.9	251.4	254.3	254.3	254.3	251.4
75°	49.1	66.5	98.3	112.7	132.9	138.7	150.2	150.2	158.9	147.3	144.4
77.5°	43.3	52.0	69.4	80.9	89.6	98.3	101.1	109.8	106.9	101.1	104.0
80°	26.0	31.8	43.3	49.1	60.7	63.6	66.5	69.4	66.5	69.4	69.4
82.5°	20.2	23.1	28.9	28.9	37.5	37.5	40.4	40.4	43.3	43.3	43.3
85°	11.5	20.2	17.3	34.6	23.1	23.1	28.9	34.6	28.9	28.9	34.6
87.5°	11.5	11.5	8.7	11.5	11.5	11.5	14.4	17.3	17.3	20.2	17.3
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: P249492

CATALOG NUMBER: LSR8B120D010 EC8B120950 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5383.3	5383.3	5383.3	5383.3
2.5°	5392.0	5397.7	5389.1	5386.2
5°	5400.6	5400.6	5394.9	5394.9
7.5°	5400.6	5400.6	5392.0	5386.2
10°	5377.5	5377.5	5368.9	5363.1
12.5°	5334.2	5334.2	5331.3	5322.6
15°	5279.3	5279.3	5267.7	5259.1
17.5°	5204.1	5209.9	5195.5	5195.5
20°	5123.3	5120.4	5108.8	5103.0
22.5°	5039.5	5033.7	5030.8	5013.5
25°	4949.9	4944.1	4935.4	4926.8
27.5°	4796.7	4793.8	4785.2	4773.6
30°	4562.6	4559.7	4548.2	4548.2
32.5°	4259.3	4256.4	4244.8	4247.7
35°	3944.3	3955.9	3950.1	3938.5
37.5°	3681.3	3690.0	3695.8	3690.0
40°	3461.7	3487.7	3490.6	3496.4
42.5°	3227.7	3262.3	3273.9	3279.7
45°	2947.4	2979.2	3005.2	2999.4
47.5°	2661.3	2684.4	2707.5	2690.2
50°	2386.8	2401.2	2409.9	2409.9
52.5°	2126.8	2126.8	2123.9	2126.8
55°	1829.1	1829.1	1817.6	1823.3
57.5°	1517.0	1522.8	1514.1	1499.7
60°	1228.1	1213.6	1207.8	1199.2
62.5°	956.5	956.5	936.3	962.2
65°	716.7	708.0	699.3	696.4
67.5°	520.1	517.3	508.6	505.7
70°	367.0	355.4	352.5	346.7
72.5°	245.6	245.6	239.8	239.8
75°	150.2	135.8	132.9	135.8
77.5°	104.0	101.1	101.1	98.3
80°	69.4	66.5	72.3	63.6
82.5°	43.3	46.2	43.3	46.2
85°	28.9	34.6	31.8	31.8
87.5°	17.3	17.3	17.3	17.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)