

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: P249609

Luminaire Tested: **LSR8B120D010 EC8B120927 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249609
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 EC8B120927 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9684.0 lumens
Efficiency: N/A
Efficacy: 81.9 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

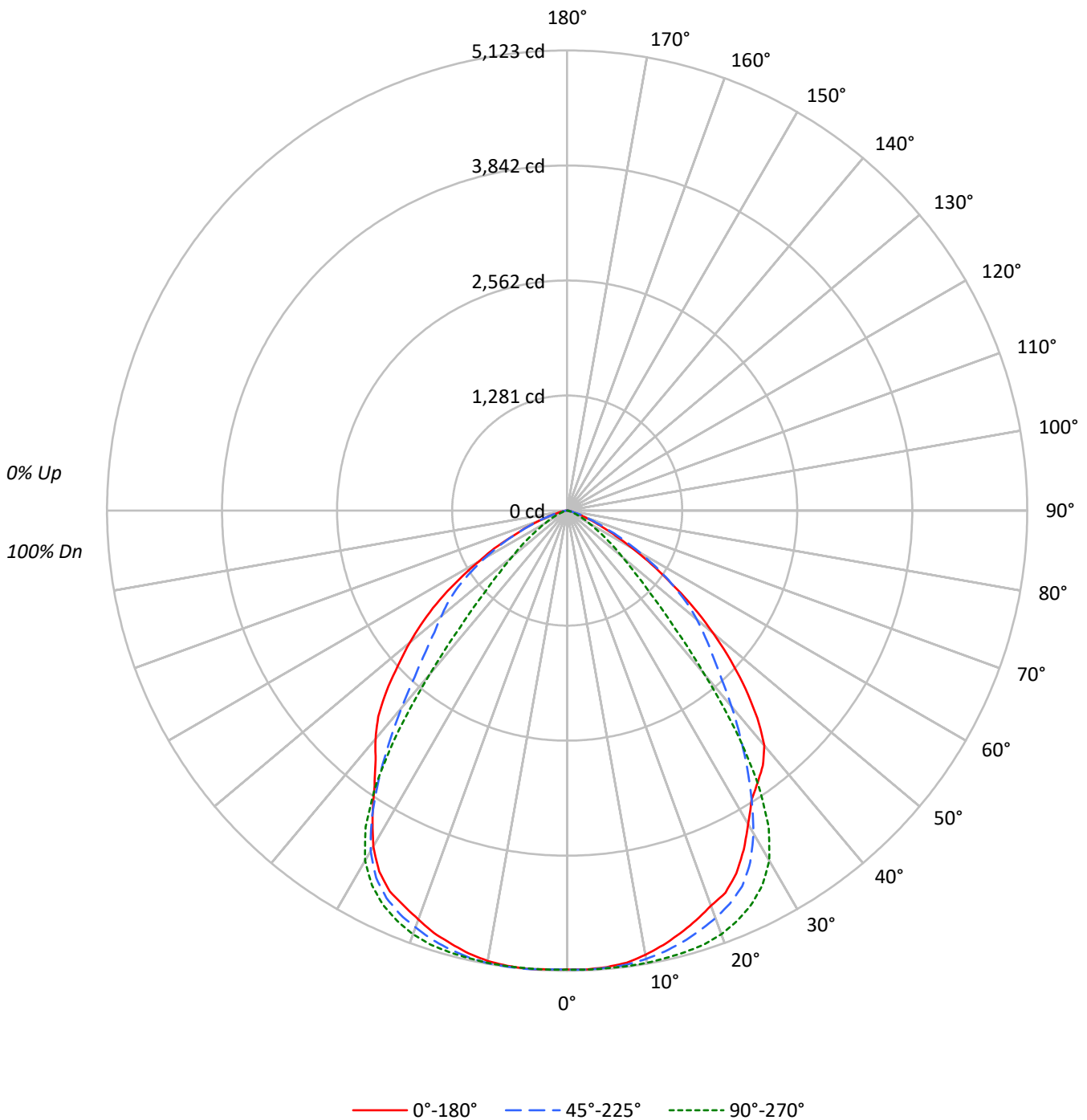
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	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°	487.6	5.0
10°-20°	1416.1	14.6
20°-30°	2149.4	22.2
30°-40°	2257.5	23.3
40°-50°	1692.6	17.5
50°-60°	1086.0	11.2
60°-70°	464.6	4.8
70°-80°	109.7	1.1
80°-90°	20.4	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°	4053.2	41.9
0°-40°	6310.7	65.2
0°-60°	9089.3	93.9
0°-90°	9684.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9684.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5110	5110	5110	5110	5110	
5°	5101	5110	5115	5123	5120	485
15°	4871	4972	5088	5055	4992	1374
25°	4457	4613	4846	4758	4676	2036
35°	3697	3491	3700	3656	3738	2320
45°	2808	2296	1319	2230	2847	2151
55°	1421	1421	491	1481	1731	1289
65°	428	505	156	650	661	457
75°	66	77	22	132	129	96
85°	22	14	11	22	30	23
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°	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5
2.5°	5112.2	5117.7	5114.9	5114.9	5112.2	5114.9	5114.9	5120.4	5120.4	5114.9	5112.2
5°	5101.2	5106.7	5106.7	5101.2	5101.2	5114.9	5106.7	5112.2	5112.2	5109.5	5109.5
7.5°	5076.6	5076.6	5087.5	5079.4	5079.4	5087.5	5084.8	5090.3	5095.8	5098.5	5098.5
10°	5021.7	5027.2	5030.0	5030.0	5032.7	5040.9	5046.4	5057.4	5062.8	5068.3	5071.0
12.5°	4953.2	4961.4	4964.1	4961.4	4969.6	4980.6	4994.3	5008.0	5016.3	5027.2	5035.5
15°	4870.8	4870.8	4876.3	4884.6	4890.2	4906.6	4920.2	4936.7	4958.7	4972.4	4986.1
17.5°	4780.3	4785.9	4794.1	4794.1	4805.1	4832.4	4840.7	4865.4	4890.2	4903.8	4931.2
20°	4681.7	4687.1	4695.3	4700.8	4714.5	4736.5	4752.9	4774.8	4802.3	4827.0	4854.4
22.5°	4604.8	4593.9	4599.3	4604.8	4618.6	4637.8	4656.9	4684.4	4711.8	4736.5	4763.9
25°	4456.7	4459.5	4467.7	4473.1	4489.7	4506.1	4528.0	4561.0	4585.6	4613.1	4643.2
27.5°	4256.6	4259.2	4273.0	4273.0	4286.7	4314.2	4327.8	4355.2	4388.2	4415.6	4451.3
30°	4029.0	4034.4	4034.4	4045.4	4053.5	4067.3	4080.9	4108.4	4124.9	4149.6	4199.0
32.5°	3820.5	3825.9	3823.2	3820.5	3812.2	3809.5	3806.8	3812.2	3817.7	3825.9	3845.1
35°	3697.1	3683.4	3672.3	3653.2	3631.3	3603.8	3579.1	3546.2	3516.0	3491.3	3464.0
37.5°	3579.1	3576.4	3560.0	3532.5	3488.5	3439.2	3381.6	3310.3	3239.0	3162.3	3088.2
40°	3414.6	3406.3	3392.6	3354.2	3304.8	3244.5	3167.8	3079.9	2964.7	2846.8	2726.2
42.5°	3134.8	3137.5	3121.1	3090.9	3044.4	2986.6	2907.1	2811.2	2687.7	2547.9	2391.5
45°	2808.5	2808.5	2802.9	2778.2	2745.3	2698.8	2638.4	2558.8	2438.2	2295.6	2128.3
47.5°	2468.4	2471.1	2462.8	2457.5	2443.6	2413.5	2369.6	2309.3	2224.2	2087.1	1919.8
50°	2122.8	2122.8	2136.5	2133.8	2133.8	2122.8	2103.6	2067.9	1993.8	1884.2	1727.9
52.5°	1777.2	1782.7	1791.0	1801.9	1815.6	1837.6	1815.6	1799.1	1752.5	1667.5	1533.1
55°	1420.6	1426.2	1439.9	1459.0	1475.6	1497.5	1502.9	1502.9	1478.2	1420.6	1319.2
57.5°	1116.2	1108.0	1119.0	1135.5	1157.4	1179.3	1195.8	1215.0	1212.2	1173.8	1091.6
60°	839.2	842.0	850.2	866.7	883.1	902.4	924.3	940.7	948.9	929.8	877.6
62.5°	611.7	611.7	622.6	639.0	647.2	674.7	688.4	696.6	704.8	702.1	669.2
65°	427.8	433.4	438.9	447.1	455.3	471.7	479.9	496.4	501.9	504.7	479.9
67.5°	301.7	293.5	298.9	304.4	312.6	323.7	340.1	340.1	348.3	348.3	331.9
70°	192.0	192.0	194.7	203.0	208.5	211.2	216.7	222.1	230.4	227.6	227.6
72.5°	128.9	126.1	128.9	131.6	134.4	142.6	142.6	145.4	150.9	153.6	142.6
75°	65.8	68.6	74.0	71.3	79.5	74.0	76.7	85.0	82.2	76.7	76.7
77.5°	54.8	54.8	54.8	52.1	57.6	57.6	54.8	60.3	57.6	57.6	54.8
80°	38.4	41.2	38.4	35.7	38.4	35.7	35.7	35.7	35.7	35.7	32.8
82.5°	30.2	24.8	27.4	24.8	27.4	27.4	24.8	21.9	21.9	24.8	21.9
85°	21.9	16.4	19.2	19.2	16.4	16.4	16.4	16.4	16.4	13.7	13.7
87.5°	13.7	8.2	8.2	8.2	10.9	10.9	10.9	8.2	10.9	10.9	5.5
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°	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5
2.5°	5117.7	5114.9	5120.4	5117.7	5117.7	5114.9	5117.7	5114.9	5120.4	5109.5	5112.2
5°	5117.7	5112.2	5114.9	5117.7	5120.4	5114.9	5114.9	5114.9	5120.4	5114.9	5117.7
7.5°	5106.7	5104.0	5112.2	5117.7	5114.9	5112.2	5117.7	5114.9	5120.4	5117.7	5123.1
10°	5084.8	5087.5	5093.0	5101.2	5104.0	5106.7	5112.2	5112.2	5120.4	5109.5	5114.9
12.5°	5051.9	5062.8	5076.6	5082.1	5093.0	5093.0	5098.5	5101.2	5106.7	5104.0	5112.2
15°	5010.8	5024.5	5040.9	5054.6	5068.3	5076.6	5084.8	5087.5	5095.8	5087.5	5090.3
17.5°	4961.4	4977.8	5002.5	5019.0	5040.9	5049.1	5060.0	5065.5	5073.9	5068.3	5071.0
20°	4892.7	4912.1	4939.4	4964.1	4977.8	4997.0	5010.8	5019.0	5024.5	5019.0	5021.7
22.5°	4796.8	4824.2	4859.9	4879.1	4906.6	4923.0	4925.7	4944.9	4958.7	4944.9	4950.4
25°	4684.4	4711.8	4739.3	4780.3	4805.1	4824.2	4843.5	4846.2	4859.9	4857.2	4854.4
27.5°	4497.9	4533.5	4580.1	4613.1	4645.9	4676.2	4698.1	4703.5	4717.3	4711.8	4714.5
30°	4242.8	4281.2	4325.2	4377.2	4423.8	4454.0	4481.4	4500.6	4514.3	4506.1	4503.4
32.5°	3880.8	3919.2	3965.8	4017.9	4072.8	4116.6	4149.6	4174.3	4190.7	4185.2	4171.5
35°	3466.7	3477.6	3507.9	3548.9	3595.5	3642.2	3672.3	3699.8	3718.9	3724.4	3724.4
37.5°	3041.5	3005.9	2984.0	2984.0	3011.4	3030.5	3058.0	3074.4	3104.7	3115.6	3123.8
40°	2630.1	2547.9	2471.1	2413.5	2375.1	2372.4	2372.4	2380.6	2408.0	2443.6	2476.6
42.5°	2262.6	2131.0	2013.1	1906.1	1829.4	1785.5	1766.2	1769.1	1791.0	1823.8	1878.6
45°	1969.2	1804.6	1656.6	1527.6	1423.5	1354.8	1322.0	1319.2	1335.6	1374.1	1434.4
47.5°	1741.6	1566.0	1398.7	1250.7	1138.2	1064.1	1025.8	1014.8	1025.8	1061.3	1132.6
50°	1552.3	1371.4	1198.6	1044.9	924.3	847.5	811.8	798.1	811.8	842.0	913.3
52.5°	1376.8	1190.2	1028.5	880.4	751.5	685.7	647.2	639.0	647.2	682.9	740.5
55°	1173.8	1014.8	855.7	707.6	595.1	529.3	499.2	491.0	499.2	532.1	592.4
57.5°	973.7	836.4	696.6	562.3	466.3	408.6	381.3	370.2	389.5	411.4	482.7
60°	787.1	677.5	559.5	441.6	362.0	309.9	288.0	285.2	290.7	318.2	367.4
62.5°	617.1	526.6	433.4	337.4	271.5	249.5	222.1	219.5	224.9	241.3	279.8
65°	444.3	386.8	315.4	246.8	194.7	164.6	153.6	156.4	161.8	172.8	208.5
67.5°	309.9	268.8	219.5	172.8	134.4	120.7	109.7	107.0	109.7	128.9	148.0
70°	208.5	183.7	148.0	131.6	93.3	74.0	76.7	68.6	79.5	79.5	96.0
72.5°	137.1	120.7	98.7	76.7	65.8	52.1	52.1	49.4	54.8	57.6	71.3
75°	71.3	54.8	54.8	38.4	27.4	13.7	24.8	21.9	19.2	21.9	27.4
77.5°	49.4	41.2	38.4	30.2	27.4	21.9	21.9	21.9	21.9	24.8	27.4
80°	30.2	30.2	21.9	19.2	16.4	13.7	16.4	16.4	16.4	16.4	19.2
82.5°	19.2	16.4	16.4	13.7	13.7	10.9	10.9	10.9	10.9	10.9	16.4
85°	16.4	10.9	10.9	8.2	10.9	19.2	8.2	10.9	10.9	10.9	8.2
87.5°	5.5	8.2	8.2	8.2	5.5	2.7	5.5	8.2	8.2	13.7	10.9
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5	5109.5
2.5°	5117.7	5120.4	5120.4	5117.7	5117.7	5112.2	5123.1	5114.9	5117.7	5128.7	5120.4
5°	5123.1	5126.0	5126.0	5123.1	5123.1	5123.1	5126.0	5126.0	5123.1	5120.4	5126.0
7.5°	5134.2	5131.5	5131.5	5126.0	5126.0	5120.4	5126.0	5117.7	5123.1	5117.7	5126.0
10°	5120.4	5123.1	5120.4	5117.7	5117.7	5114.9	5114.9	5106.7	5109.5	5101.2	5106.7
12.5°	5112.2	5109.5	5109.5	5104.0	5098.5	5093.0	5090.3	5082.1	5082.1	5062.8	5071.0
15°	5090.3	5093.0	5084.8	5073.9	5068.3	5054.6	5049.1	5038.1	5027.2	5013.4	5016.3
17.5°	5071.0	5062.8	5051.9	5040.9	5019.0	5008.0	4997.0	4980.6	4975.1	4958.7	4953.2
20°	5013.4	5008.0	4994.3	4975.1	4961.4	4936.7	4925.7	4909.3	4895.6	4879.1	4870.8
22.5°	4939.4	4933.9	4917.5	4898.2	4876.3	4865.4	4854.4	4824.2	4810.5	4794.1	4791.3
25°	4846.2	4838.0	4821.5	4799.6	4788.6	4758.4	4747.4	4725.4	4720.0	4703.5	4700.8
27.5°	4703.5	4692.6	4673.4	4645.9	4626.8	4607.6	4596.6	4580.1	4574.7	4558.2	4555.5
30°	4489.7	4475.9	4437.6	4426.5	4393.7	4374.4	4374.4	4352.5	4355.2	4344.3	4344.3
32.5°	4152.4	4130.3	4100.2	4078.2	4056.3	4045.4	4045.4	4037.1	4042.6	4042.6	4048.1
35°	3705.3	3675.2	3658.6	3644.9	3644.9	3655.9	3688.8	3697.1	3713.5	3727.2	3738.2
37.5°	3132.0	3129.3	3148.5	3165.0	3206.1	3252.7	3310.3	3359.7	3406.3	3439.2	3472.1
40°	2512.2	2580.8	2635.6	2712.5	2775.5	2866.0	2970.2	3055.3	3134.8	3192.4	3252.7
42.5°	1961.0	2048.7	2163.9	2276.3	2388.8	2512.2	2649.4	2767.3	2871.6	2951.0	3014.1
45°	1527.6	1648.2	1788.2	1930.8	2076.2	2229.8	2372.4	2493.0	2602.8	2685.0	2748.2
47.5°	1231.4	1363.0	1522.1	1678.5	1843.0	2004.9	2163.9	2268.1	2358.6	2424.5	2482.1
50°	1017.4	1157.4	1324.7	1502.9	1667.5	1829.4	1966.4	2067.9	2142.0	2199.6	2235.2
52.5°	850.2	998.3	1176.6	1354.8	1519.4	1667.5	1791.0	1867.7	1928.0	1969.2	2002.0
55°	702.1	844.8	1012.0	1179.3	1341.1	1481.0	1582.4	1640.1	1686.7	1711.4	1730.6
57.5°	573.2	704.8	858.5	1012.0	1151.9	1267.1	1346.6	1404.2	1426.2	1445.4	1442.6
60°	449.8	573.2	713.0	844.8	965.4	1058.6	1116.2	1149.2	1165.6	1173.8	1168.3
62.5°	353.8	466.3	573.2	688.4	776.1	855.7	910.6	910.6	918.8	921.5	929.8
65°	263.2	348.3	441.6	526.6	597.8	650.0	680.2	688.4	699.4	696.6	691.1
67.5°	194.7	257.8	326.4	389.5	438.9	471.7	493.6	512.9	510.2	504.7	501.9
70°	134.4	175.5	235.9	274.3	309.9	342.9	348.3	351.0	353.8	356.5	351.0
72.5°	93.3	123.4	156.4	189.2	211.2	224.9	238.6	241.3	241.3	241.3	238.6
75°	46.7	63.1	93.3	107.0	126.1	131.6	142.6	142.6	150.9	139.8	137.1
77.5°	41.2	49.4	65.8	76.7	85.0	93.3	96.0	104.2	101.5	96.0	98.7
80°	24.8	30.2	41.2	46.7	57.6	60.3	63.1	65.8	63.1	65.8	65.8
82.5°	19.2	21.9	27.4	27.4	35.7	35.7	38.4	38.4	41.2	41.2	41.2
85°	10.9	19.2	16.4	32.8	21.9	21.9	27.4	32.8	27.4	27.4	32.8
87.5°	10.9	10.9	8.2	10.9	10.9	10.9	13.7	16.4	16.4	19.2	16.4
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: P249609

CATALOG NUMBER: LSR8B120D010 EC8B120927 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5109.5	5109.5	5109.5	5109.5
2.5°	5117.7	5123.1	5114.9	5112.2
5°	5126.0	5126.0	5120.4	5120.4
7.5°	5126.0	5126.0	5117.7	5112.2
10°	5104.0	5104.0	5095.8	5090.3
12.5°	5062.8	5062.8	5060.0	5051.9
15°	5010.8	5010.8	4999.7	4991.5
17.5°	4939.4	4944.9	4931.2	4931.2
20°	4862.7	4859.9	4849.0	4843.5
22.5°	4783.2	4777.7	4774.8	4758.4
25°	4698.1	4692.6	4684.4	4676.2
27.5°	4552.8	4550.0	4541.7	4530.8
30°	4330.6	4327.8	4316.8	4316.8
32.5°	4042.6	4039.9	4029.0	4031.7
35°	3743.7	3754.7	3749.2	3738.2
37.5°	3494.0	3502.4	3507.9	3502.4
40°	3285.7	3310.3	3313.1	3318.5
42.5°	3063.5	3096.3	3107.4	3112.9
45°	2797.4	2827.6	2852.3	2846.8
47.5°	2526.0	2547.9	2569.8	2553.4
50°	2265.4	2279.1	2287.4	2287.4
52.5°	2018.6	2018.6	2015.8	2018.6
55°	1736.1	1736.1	1725.1	1730.6
57.5°	1439.9	1445.4	1437.1	1423.5
60°	1165.6	1151.9	1146.4	1138.2
62.5°	907.9	907.9	888.6	913.3
65°	680.2	672.0	663.6	660.9
67.5°	493.6	491.0	482.7	479.9
70°	348.3	337.4	334.6	329.1
72.5°	233.1	233.1	227.6	227.6
75°	142.6	128.9	126.1	128.9
77.5°	98.7	96.0	96.0	93.3
80°	65.8	63.1	68.6	60.3
82.5°	41.2	43.9	41.2	43.9
85°	27.4	32.8	30.2	30.2
87.5°	16.4	16.4	16.4	16.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)