

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 EC8B1209727 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 EC8B1209727 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: 8608.0 lumens
Efficiency: N/A
Efficacy: 72.8 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

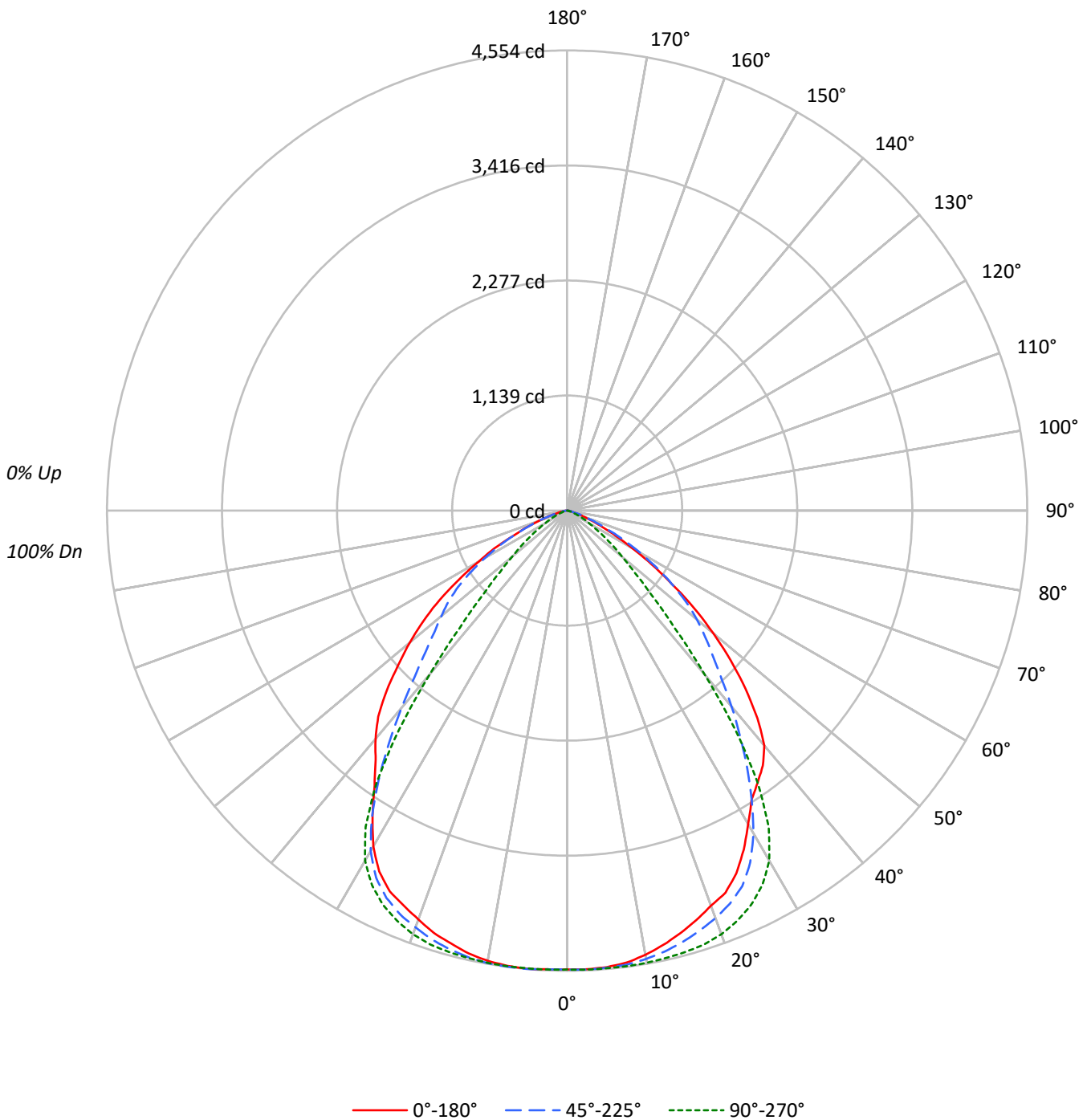
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	433.4	5.0
10°-20°	1258.8	14.6
20°-30°	1910.6	22.2
30°-40°	2006.7	23.3
40°-50°	1504.5	17.5
50°-60°	965.3	11.2
60°-70°	412.9	4.8
70°-80°	97.6	1.1
80°-90°	18.1	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°	3602.8	41.9
0°-40°	5609.5	65.2
0°-60°	8079.3	93.9
0°-90°	8608.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8608.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4542	4542	4542	4542	4542	
5°	4534	4542	4547	4554	4552	431
15°	4330	4420	4522	4493	4437	1221
25°	3962	4100	4308	4230	4157	1810
35°	3286	3103	3289	3250	3323	2063
45°	2496	2040	1173	1982	2530	1912
55°	1263	1263	436	1316	1538	1145
65°	380	449	139	578	588	406
75°	58	68	20	117	115	85
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°	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8
2.5°	4544.2	4549.1	4546.6	4546.6	4544.2	4546.6	4546.6	4551.5	4551.5	4546.6	4544.2
5°	4534.4	4539.3	4539.3	4534.4	4534.4	4546.6	4539.3	4544.2	4544.2	4541.8	4541.8
7.5°	4512.5	4512.5	4522.2	4515.0	4515.0	4522.2	4519.8	4524.7	4529.6	4532.0	4532.0
10°	4463.7	4468.6	4471.1	4471.1	4473.5	4480.8	4485.7	4495.5	4500.3	4505.2	4507.6
12.5°	4402.8	4410.1	4412.5	4410.1	4417.4	4427.2	4439.4	4451.6	4458.9	4468.6	4476.0
15°	4329.6	4329.6	4334.5	4341.9	4346.8	4361.4	4373.5	4388.2	4407.7	4419.9	4432.1
17.5°	4249.2	4254.1	4261.4	4261.4	4271.2	4295.5	4302.8	4324.8	4346.8	4358.9	4383.3
20°	4161.5	4166.3	4173.6	4178.5	4190.7	4210.2	4224.8	4244.3	4268.7	4290.7	4315.0
22.5°	4093.2	4083.5	4088.3	4093.2	4105.4	4122.5	4139.5	4163.9	4188.3	4210.2	4234.6
25°	3961.5	3964.0	3971.3	3976.1	3990.8	4005.4	4024.9	4054.2	4076.1	4100.5	4127.3
27.5°	3783.6	3786.0	3798.2	3798.2	3810.4	3834.8	3846.9	3871.3	3900.6	3925.0	3956.7
30°	3581.3	3586.1	3586.1	3595.9	3603.1	3615.4	3627.5	3651.9	3666.6	3688.5	3732.4
32.5°	3396.0	3400.8	3398.4	3396.0	3388.6	3386.2	3383.8	3388.6	3393.5	3400.8	3417.9
35°	3286.3	3274.1	3264.3	3247.3	3227.8	3203.4	3181.4	3152.2	3125.3	3103.4	3079.1
37.5°	3181.4	3179.0	3164.4	3140.0	3100.9	3057.1	3005.9	2942.5	2879.1	2810.9	2745.1
40°	3035.2	3027.8	3015.6	2981.5	2937.6	2884.0	2815.8	2737.7	2635.3	2530.5	2423.3
42.5°	2786.5	2788.9	2774.3	2747.5	2706.1	2654.8	2584.1	2498.8	2389.1	2264.8	2125.8
45°	2496.4	2496.4	2491.5	2469.5	2440.3	2398.9	2345.2	2274.5	2167.3	2040.5	1891.8
47.5°	2194.1	2196.5	2189.2	2184.4	2172.1	2145.3	2106.3	2052.7	1977.1	1855.2	1706.5
50°	1886.9	1886.9	1899.1	1896.7	1896.7	1886.9	1869.9	1838.1	1772.3	1674.8	1535.9
52.5°	1579.7	1584.6	1592.0	1601.7	1613.9	1633.4	1613.9	1599.2	1557.8	1482.2	1362.8
55°	1262.8	1267.7	1279.9	1296.9	1311.6	1331.1	1335.9	1335.9	1314.0	1262.8	1172.6
57.5°	992.2	984.9	994.7	1009.3	1028.8	1048.3	1062.9	1080.0	1077.5	1043.4	970.3
60°	746.0	748.4	755.7	770.4	785.0	802.1	821.6	836.2	843.5	826.5	780.1
62.5°	543.7	543.7	553.4	568.0	575.3	599.7	611.9	619.2	626.5	624.1	594.8
65°	380.3	385.2	390.1	397.4	404.7	419.3	426.6	441.2	446.1	448.6	426.6
67.5°	268.2	260.9	265.7	270.6	277.9	287.7	302.3	302.3	309.6	309.6	295.0
70°	170.7	170.7	173.1	180.4	185.3	187.7	192.6	197.4	204.8	202.3	202.3
72.5°	114.6	112.1	114.6	117.0	119.5	126.8	126.8	129.2	134.1	136.5	126.8
75°	58.5	61.0	65.8	63.4	70.7	65.8	68.2	75.6	73.1	68.2	68.2
77.5°	48.7	48.7	48.7	46.3	51.2	51.2	48.7	53.6	51.2	51.2	48.7
80°	34.1	36.6	34.1	31.7	34.1	31.7	31.7	31.7	31.7	31.7	29.2
82.5°	26.8	22.0	24.4	22.0	24.4	24.4	22.0	19.5	19.5	22.0	19.5
85°	19.5	14.6	17.1	17.1	14.6	14.6	14.6	14.6	14.6	12.2	12.2
87.5°	12.2	7.3	7.3	7.3	9.7	9.7	9.7	7.3	9.7	9.7	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°	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8
2.5°	4549.1	4546.6	4551.5	4549.1	4549.1	4546.6	4549.1	4546.6	4551.5	4541.8	4544.2
5°	4549.1	4544.2	4546.6	4549.1	4551.5	4546.6	4546.6	4546.6	4551.5	4546.6	4549.1
7.5°	4539.3	4536.9	4544.2	4549.1	4546.6	4544.2	4549.1	4546.6	4551.5	4549.1	4553.9
10°	4519.8	4522.2	4527.1	4534.4	4536.9	4539.3	4544.2	4544.2	4551.5	4541.8	4546.6
12.5°	4490.6	4500.3	4512.5	4517.4	4527.1	4527.1	4532.0	4534.4	4539.3	4536.9	4544.2
15°	4454.0	4466.2	4480.8	4493.0	4505.2	4512.5	4519.8	4522.2	4529.6	4522.2	4524.7
17.5°	4410.1	4424.7	4446.7	4461.3	4480.8	4488.1	4497.8	4502.7	4510.1	4505.2	4507.6
20°	4349.1	4366.3	4390.6	4412.5	4424.7	4441.8	4454.0	4461.3	4466.2	4461.3	4463.7
22.5°	4263.8	4288.2	4319.9	4337.0	4361.4	4376.0	4378.4	4395.5	4407.7	4395.5	4400.4
25°	4163.9	4188.3	4212.7	4249.2	4271.2	4288.2	4305.3	4307.7	4319.9	4317.5	4315.0
27.5°	3998.1	4029.8	4071.2	4100.5	4129.7	4156.6	4176.1	4180.9	4193.2	4188.3	4190.7
30°	3771.4	3805.5	3844.6	3890.8	3932.3	3959.1	3983.5	4000.5	4012.7	4005.4	4003.0
32.5°	3449.6	3483.7	3525.2	3571.5	3620.3	3659.2	3688.5	3710.5	3725.1	3720.2	3708.0
35°	3081.5	3091.2	3118.1	3154.6	3196.0	3237.5	3264.3	3288.7	3305.7	3310.6	3310.6
37.5°	2703.6	2671.9	2652.4	2652.4	2676.8	2693.8	2718.2	2732.8	2759.7	2769.4	2776.7
40°	2337.9	2264.8	2196.5	2145.3	2111.2	2108.8	2108.8	2116.1	2140.4	2172.1	2201.4
42.5°	2011.2	1894.2	1789.4	1694.3	1626.1	1587.1	1570.0	1572.5	1592.0	1621.2	1669.9
45°	1750.4	1604.1	1472.5	1357.9	1265.3	1204.3	1175.1	1172.6	1187.2	1221.4	1275.0
47.5°	1548.1	1392.0	1243.3	1111.7	1011.7	945.9	911.8	902.0	911.8	943.4	1006.8
50°	1379.8	1219.0	1065.4	928.8	821.6	753.3	721.6	709.4	721.6	748.4	811.8
52.5°	1223.8	1058.0	914.2	782.6	668.0	609.5	575.3	568.0	575.3	607.0	658.2
55°	1043.4	902.0	760.6	629.0	529.0	470.5	443.7	436.4	443.7	473.0	526.6
57.5°	865.5	743.5	619.2	499.8	414.5	363.2	338.9	329.1	346.2	365.7	429.1
60°	699.6	602.2	497.3	392.5	321.8	275.5	256.0	253.5	258.4	282.8	326.6
62.5°	548.5	468.1	385.2	299.9	241.3	221.8	197.4	195.1	199.9	214.5	248.7
65°	394.9	343.8	280.4	219.4	173.1	146.3	136.5	139.0	143.8	153.6	185.3
67.5°	275.5	238.9	195.1	153.6	119.5	107.3	97.5	95.1	97.5	114.6	131.6
70°	185.3	163.3	131.6	117.0	82.9	65.8	68.2	61.0	70.7	70.7	85.3
72.5°	121.9	107.3	87.7	68.2	58.5	46.3	46.3	43.9	48.7	51.2	63.4
75°	63.4	48.7	48.7	34.1	24.4	12.2	22.0	19.5	17.1	19.5	24.4
77.5°	43.9	36.6	34.1	26.8	24.4	19.5	19.5	19.5	19.5	22.0	24.4
80°	26.8	26.8	19.5	17.1	14.6	12.2	14.6	14.6	14.6	14.6	17.1
82.5°	17.1	14.6	14.6	12.2	12.2	9.7	9.7	9.7	9.7	9.7	14.6
85°	14.6	9.7	9.7	7.3	9.7	17.1	7.3	9.7	9.7	9.7	7.3
87.5°	4.9	7.3	7.3	7.3	4.9	2.4	4.9	7.3	7.3	12.2	9.7
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°	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8	4541.8
2.5°	4549.1	4551.5	4551.5	4549.1	4549.1	4544.2	4553.9	4546.6	4549.1	4558.8	4551.5
5°	4553.9	4556.4	4556.4	4553.9	4553.9	4553.9	4556.4	4556.4	4553.9	4551.5	4556.4
7.5°	4563.7	4561.3	4561.3	4556.4	4556.4	4551.5	4556.4	4549.1	4553.9	4549.1	4556.4
10°	4551.5	4553.9	4551.5	4549.1	4549.1	4546.6	4546.6	4539.3	4541.8	4534.4	4539.3
12.5°	4544.2	4541.8	4541.8	4536.9	4532.0	4527.1	4524.7	4517.4	4517.4	4500.3	4507.6
15°	4524.7	4527.1	4519.8	4510.1	4505.2	4493.0	4488.1	4478.3	4468.6	4456.4	4458.9
17.5°	4507.6	4500.3	4490.6	4480.8	4461.3	4451.6	4441.8	4427.2	4422.3	4407.7	4402.8
20°	4456.4	4451.6	4439.4	4422.3	4410.1	4388.2	4378.4	4363.8	4351.6	4337.0	4329.6
22.5°	4390.6	4385.7	4371.1	4354.0	4334.5	4324.8	4315.0	4288.2	4276.0	4261.4	4258.9
25°	4307.7	4300.4	4285.8	4266.3	4256.5	4229.7	4219.9	4200.4	4195.6	4180.9	4178.5
27.5°	4180.9	4171.2	4154.1	4129.7	4112.7	4095.6	4085.9	4071.2	4066.4	4051.7	4049.3
30°	3990.8	3978.6	3944.5	3934.7	3905.5	3888.4	3888.4	3868.9	3871.3	3861.6	3861.6
32.5°	3691.0	3671.4	3644.6	3625.1	3605.6	3595.9	3595.9	3588.5	3593.4	3593.4	3598.3
35°	3293.6	3266.8	3252.1	3239.9	3239.9	3249.7	3278.9	3286.3	3300.9	3313.1	3322.8
37.5°	2784.0	2781.6	2798.7	2813.3	2849.9	2891.3	2942.5	2986.4	3027.8	3057.1	3086.3
40°	2233.1	2294.0	2342.8	2411.1	2467.1	2547.6	2640.2	2715.8	2786.5	2837.7	2891.3
42.5°	1743.1	1821.1	1923.5	2023.4	2123.4	2233.1	2355.0	2459.8	2552.5	2623.1	2679.2
45°	1357.9	1465.1	1589.5	1716.3	1845.5	1982.0	2108.8	2216.0	2313.6	2386.7	2442.8
47.5°	1094.6	1211.6	1353.0	1492.0	1638.2	1782.1	1923.5	2016.1	2096.5	2155.1	2206.3
50°	904.4	1028.8	1177.5	1335.9	1482.2	1626.1	1747.9	1838.1	1904.0	1955.2	1986.8
52.5°	755.7	887.4	1045.9	1204.3	1350.6	1482.2	1592.0	1660.2	1713.8	1750.4	1779.6
55°	624.1	750.9	899.6	1048.3	1192.1	1316.4	1406.6	1457.9	1499.3	1521.2	1538.3
57.5°	509.5	626.5	763.1	899.6	1023.9	1126.3	1197.0	1248.2	1267.7	1284.8	1282.3
60°	399.8	509.5	633.8	750.9	858.1	941.0	992.2	1021.5	1036.1	1043.4	1038.5
62.5°	314.5	414.5	509.5	611.9	689.9	760.6	809.4	809.4	816.7	819.1	826.5
65°	234.0	309.6	392.5	468.1	531.4	577.8	604.6	611.9	621.7	619.2	614.3
67.5°	173.1	229.2	290.1	346.2	390.1	419.3	438.8	455.9	453.5	448.6	446.1
70°	119.5	156.0	209.7	243.8	275.5	304.8	309.6	312.0	314.5	316.9	312.0
72.5°	82.9	109.7	139.0	168.2	187.7	199.9	212.1	214.5	214.5	214.5	212.1
75°	41.5	56.1	82.9	95.1	112.1	117.0	126.8	126.8	134.1	124.3	121.9
77.5°	36.6	43.9	58.5	68.2	75.6	82.9	85.3	92.6	90.2	85.3	87.7
80°	22.0	26.8	36.6	41.5	51.2	53.6	56.1	58.5	56.1	58.5	58.5
82.5°	17.1	19.5	24.4	24.4	31.7	31.7	34.1	34.1	36.6	36.6	36.6
85°	9.7	17.1	14.6	29.2	19.5	19.5	24.4	29.2	24.4	24.4	29.2
87.5°	9.7	9.7	7.3	9.7	9.7	9.7	12.2	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: P249609

CATALOG NUMBER: LSR8B120D010 EC8B1209727 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4541.8	4541.8	4541.8	4541.8
2.5°	4549.1	4553.9	4546.6	4544.2
5°	4556.4	4556.4	4551.5	4551.5
7.5°	4556.4	4556.4	4549.1	4544.2
10°	4536.9	4536.9	4529.6	4524.7
12.5°	4500.3	4500.3	4497.8	4490.6
15°	4454.0	4454.0	4444.2	4436.9
17.5°	4390.6	4395.5	4383.3	4383.3
20°	4322.4	4319.9	4310.2	4305.3
22.5°	4251.7	4246.8	4244.3	4229.7
25°	4176.1	4171.2	4163.9	4156.6
27.5°	4046.9	4044.4	4037.1	4027.4
30°	3849.4	3846.9	3837.2	3837.2
32.5°	3593.4	3591.0	3581.3	3583.7
35°	3327.7	3337.5	3332.6	3322.8
37.5°	3105.8	3113.2	3118.1	3113.2
40°	2920.6	2942.5	2945.0	2949.8
42.5°	2723.1	2752.3	2762.1	2767.0
45°	2486.6	2513.4	2535.4	2530.5
47.5°	2245.3	2264.8	2284.3	2269.7
50°	2013.7	2025.9	2033.2	2033.2
52.5°	1794.3	1794.3	1791.8	1794.3
55°	1543.2	1543.2	1533.4	1538.3
57.5°	1279.9	1284.8	1277.4	1265.3
60°	1036.1	1023.9	1019.0	1011.7
62.5°	807.0	807.0	789.9	811.8
65°	604.6	597.3	589.9	587.5
67.5°	438.8	436.4	429.1	426.6
70°	309.6	299.9	297.4	292.5
72.5°	207.2	207.2	202.3	202.3
75°	126.8	114.6	112.1	114.6
77.5°	87.7	85.3	85.3	82.9
80°	58.5	56.1	61.0	53.6
82.5°	36.6	39.0	36.6	39.0
85°	24.4	29.2	26.8	26.8
87.5°	14.6	14.6	14.6	14.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)