

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: P249608

Luminaire Tested: **LSR8B100D010 EC8B100927 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249608
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 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: 8542.1 lumens
Efficiency: N/A
Efficacy: 80.4 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

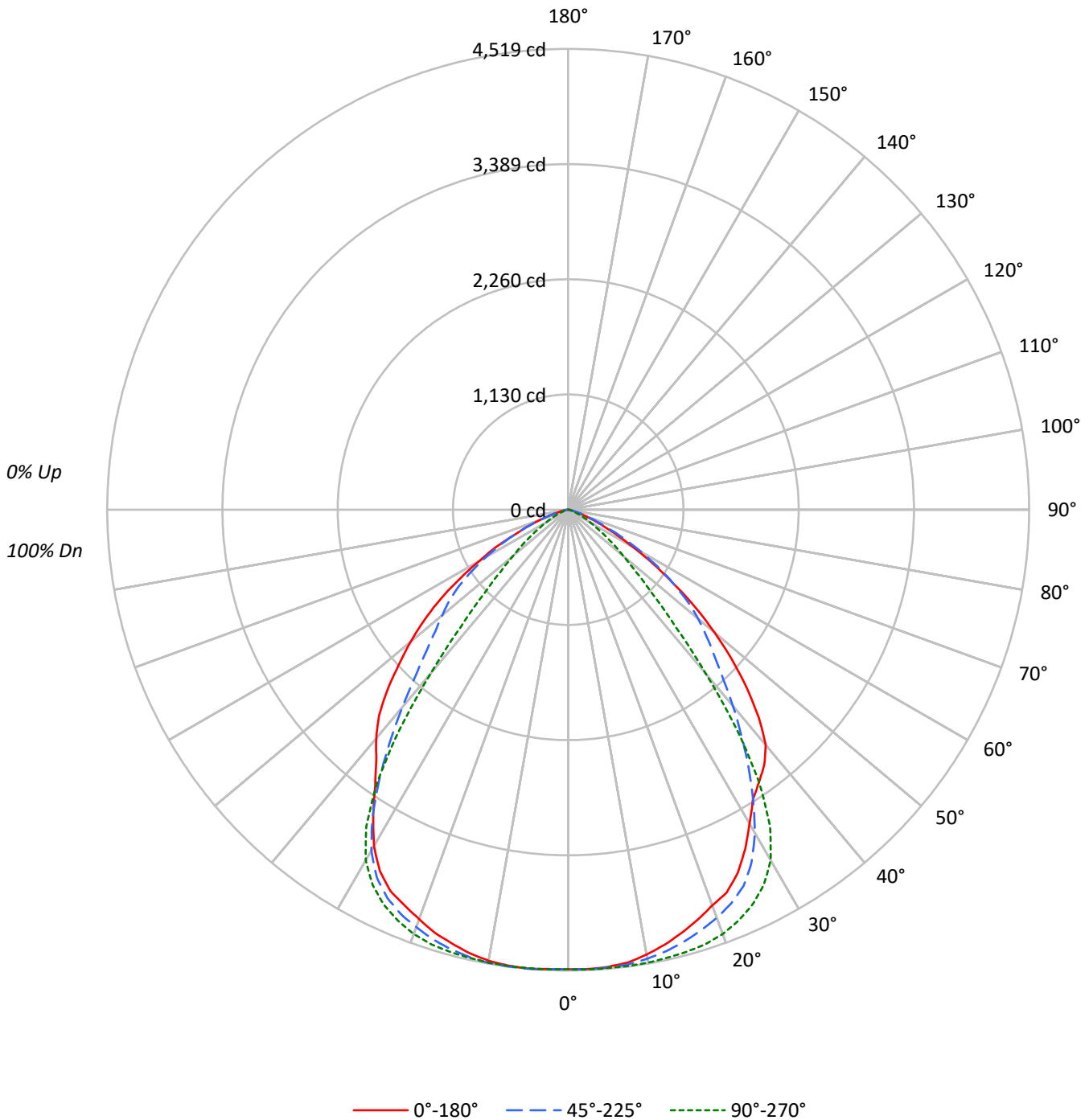
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	430.1	5.0
10°-20°	1249.2	14.6
20°-30°	1896.0	22.2
30°-40°	1991.3	23.3
40°-50°	1493.0	17.5
50°-60°	957.9	11.2
60°-70°	409.8	4.8
70°-80°	96.8	1.1
80°-90°	18.0	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°	3575.3	41.9
0°-40°	5566.6	65.2
0°-60°	8017.5	93.9
0°-90°	8542.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8542.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4507	4507	4507	4507	4507	
5°	4500	4507	4512	4519	4517	427
15°	4296	4386	4488	4459	4403	1212
25°	3931	4069	4275	4197	4125	1796
35°	3261	3080	3264	3225	3297	2047
45°	2477	2025	1164	1967	2511	1897
55°	1253	1253	433	1306	1526	1137
65°	377	445	138	573	583	403
75°	58	68	19	116	114	85
85°	19	12	10	19	27	20
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°	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0
2.5°	4509.4	4514.3	4511.8	4511.8	4509.4	4511.8	4511.8	4516.7	4516.7	4511.8	4509.4
5°	4499.7	4504.6	4504.6	4499.7	4499.7	4511.8	4504.6	4509.4	4509.4	4507.0	4507.0
7.5°	4478.0	4478.0	4487.6	4480.4	4480.4	4487.6	4485.3	4490.1	4494.9	4497.3	4497.3
10°	4429.6	4434.4	4436.9	4436.9	4439.2	4446.4	4451.4	4461.1	4465.8	4470.8	4473.1
12.5°	4369.2	4376.4	4378.7	4376.4	4383.7	4393.2	4405.4	4417.5	4424.7	4434.4	4441.7
15°	4296.5	4296.5	4301.3	4308.6	4313.5	4328.0	4340.0	4354.5	4373.9	4386.0	4398.2
17.5°	4216.7	4221.6	4228.8	4228.8	4238.4	4262.6	4269.9	4291.7	4313.5	4325.5	4349.8
20°	4129.7	4134.4	4141.7	4146.5	4158.7	4178.0	4192.5	4211.9	4236.1	4257.8	4282.0
22.5°	4061.8	4052.2	4057.0	4061.8	4074.0	4091.0	4107.8	4132.0	4156.2	4178.0	4202.2
25°	3931.2	3933.7	3940.9	3945.7	3960.2	3974.7	3994.1	4023.1	4044.9	4069.1	4095.7
27.5°	3754.7	3757.0	3769.1	3769.1	3781.2	3805.4	3817.5	3841.8	3870.8	3895.0	3926.4
30°	3553.9	3558.6	3558.6	3568.4	3575.6	3587.7	3599.8	3624.0	3638.5	3660.3	3703.8
32.5°	3369.9	3374.8	3372.4	3369.9	3362.7	3360.3	3357.9	3362.7	3367.6	3374.8	3391.8
35°	3261.2	3249.0	3239.3	3222.5	3203.1	3178.8	3157.1	3128.1	3101.4	3079.7	3055.5
37.5°	3157.1	3154.6	3140.1	3115.9	3077.2	3033.7	2982.9	2920.0	2857.0	2789.3	2724.1
40°	3012.0	3004.6	2992.6	2958.8	2915.1	2861.9	2794.2	2716.8	2615.2	2511.1	2404.7
42.5°	2765.1	2767.6	2753.1	2726.4	2685.4	2634.5	2564.3	2479.7	2370.8	2247.4	2109.6
45°	2477.2	2477.2	2472.4	2450.7	2421.7	2380.5	2327.3	2257.1	2150.7	2024.9	1877.3
47.5°	2177.3	2179.7	2172.4	2167.6	2155.5	2129.0	2090.2	2037.0	1962.0	1841.0	1693.5
50°	1872.4	1872.4	1884.6	1882.1	1882.1	1872.4	1855.6	1824.1	1758.8	1662.0	1524.1
52.5°	1567.7	1572.5	1579.7	1589.4	1601.6	1620.9	1601.6	1587.0	1545.9	1470.8	1352.4
55°	1253.1	1258.0	1270.1	1287.0	1301.5	1321.0	1325.7	1325.7	1304.0	1253.1	1163.6
57.5°	984.6	977.4	987.1	1001.6	1020.9	1040.3	1054.8	1071.7	1069.3	1035.4	962.9
60°	740.2	742.7	749.9	764.4	778.9	795.9	815.3	829.8	837.1	820.1	774.1
62.5°	539.6	539.6	549.1	563.6	570.9	595.1	607.2	614.5	621.7	619.3	590.3
65°	377.4	382.2	387.1	394.3	401.6	416.0	423.3	437.8	442.7	445.2	423.3
67.5°	266.2	258.9	263.7	268.5	275.7	285.5	300.0	300.0	307.2	307.2	292.7
70°	169.3	169.3	171.8	179.0	183.8	186.3	191.1	196.0	203.2	200.8	200.8
72.5°	113.7	111.3	113.7	116.1	118.6	125.8	125.8	128.2	133.1	135.5	125.8
75°	58.0	60.5	65.2	62.9	70.2	65.2	67.7	75.0	72.6	67.7	67.7
77.5°	48.4	48.4	48.4	46.0	50.7	50.7	48.4	53.2	50.7	50.7	48.4
80°	33.9	36.3	33.9	31.4	33.9	31.4	31.4	31.4	31.4	31.4	29.0
82.5°	26.7	21.8	24.2	21.8	24.2	24.2	21.8	19.3	19.3	21.8	19.3
85°	19.3	14.5	16.9	16.9	14.5	14.5	14.5	14.5	14.5	12.0	12.0
87.5°	12.0	7.3	7.3	7.3	9.7	9.7	9.7	7.3	9.7	9.7	4.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0
2.5°	4514.3	4511.8	4516.7	4514.3	4514.3	4511.8	4514.3	4511.8	4516.7	4507.0	4509.4
5°	4514.3	4509.4	4511.8	4514.3	4516.7	4511.8	4511.8	4511.8	4516.7	4511.8	4514.3
7.5°	4504.6	4502.1	4509.4	4514.3	4511.8	4509.4	4514.3	4511.8	4516.7	4514.3	4519.1
10°	4485.3	4487.6	4492.5	4499.7	4502.1	4504.6	4509.4	4509.4	4516.7	4507.0	4511.8
12.5°	4456.2	4465.8	4478.0	4482.8	4492.5	4492.5	4497.3	4499.7	4504.6	4502.1	4509.4
15°	4419.9	4432.0	4446.4	4458.6	4470.8	4478.0	4485.3	4487.6	4494.9	4487.6	4490.1
17.5°	4376.4	4390.9	4412.6	4427.1	4446.4	4453.8	4463.4	4468.3	4475.6	4470.8	4473.1
20°	4315.8	4332.8	4357.0	4378.7	4390.9	4407.8	4419.9	4427.1	4432.0	4427.1	4429.6
22.5°	4231.2	4255.4	4286.8	4303.8	4328.0	4342.5	4344.9	4361.8	4373.9	4361.8	4366.7
25°	4132.0	4156.2	4180.4	4216.7	4238.4	4255.4	4272.3	4274.8	4286.8	4284.4	4282.0
27.5°	3967.5	3999.0	4040.1	4069.1	4098.2	4124.8	4144.2	4148.9	4161.0	4156.2	4158.7
30°	3742.5	3776.4	3815.1	3861.1	3902.2	3928.8	3953.0	3969.9	3982.0	3974.7	3972.4
32.5°	3423.2	3457.0	3498.2	3544.1	3592.6	3631.2	3660.3	3682.0	3696.5	3691.7	3679.6
35°	3057.9	3067.5	3094.2	3130.5	3171.6	3212.7	3239.3	3263.5	3280.4	3285.3	3285.3
37.5°	2682.9	2651.5	2632.2	2632.2	2656.2	2673.2	2697.4	2711.9	2738.6	2748.3	2755.5
40°	2320.0	2247.4	2179.7	2129.0	2095.1	2092.6	2092.6	2099.8	2124.1	2155.5	2184.5
42.5°	1995.9	1879.8	1775.7	1681.3	1613.6	1574.9	1558.0	1560.4	1579.7	1608.8	1657.1
45°	1737.0	1591.9	1461.3	1347.5	1255.6	1195.1	1166.1	1163.6	1178.1	1212.0	1265.3
47.5°	1536.2	1381.4	1233.8	1103.2	1004.0	938.7	904.8	895.2	904.8	936.2	999.1
50°	1369.2	1209.6	1057.2	921.7	815.3	747.6	716.1	704.0	716.1	742.7	805.6
52.5°	1214.4	1050.0	907.2	776.6	662.8	604.8	570.9	563.6	570.9	602.3	653.2
55°	1035.4	895.2	754.8	624.2	525.0	466.9	440.3	433.0	440.3	469.4	522.6
57.5°	858.8	737.9	614.5	495.9	411.3	360.4	336.3	326.6	343.5	362.8	425.8
60°	694.2	597.6	493.5	389.5	319.4	273.4	254.0	251.6	256.4	280.7	324.1
62.5°	544.4	464.5	382.2	297.6	239.5	220.2	196.0	193.6	198.3	212.8	246.8
65°	392.0	341.1	278.2	217.7	171.8	145.1	135.5	137.9	142.8	152.4	183.8
67.5°	273.4	237.0	193.6	152.4	118.6	106.4	96.8	94.4	96.8	113.7	130.6
70°	183.8	162.1	130.6	116.1	82.2	65.2	67.7	60.5	70.2	70.2	84.6
72.5°	120.9	106.4	87.1	67.7	58.0	46.0	46.0	43.5	48.4	50.7	62.9
75°	62.9	48.4	48.4	33.9	24.2	12.0	21.8	19.3	16.9	19.3	24.2
77.5°	43.5	36.3	33.9	26.7	24.2	19.3	19.3	19.3	19.3	21.8	24.2
80°	26.7	26.7	19.3	16.9	14.5	12.0	14.5	14.5	14.5	14.5	16.9
82.5°	16.9	14.5	14.5	12.0	12.0	9.7	9.7	9.7	9.7	9.7	14.5
85°	14.5	9.7	9.7	7.3	9.7	16.9	7.3	9.7	9.7	9.7	7.3
87.5°	4.8	7.3	7.3	7.3	4.8	2.5	4.8	7.3	7.3	12.0	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°	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0	4507.0
2.5°	4514.3	4516.7	4516.7	4514.3	4514.3	4509.4	4519.1	4511.8	4514.3	4524.0	4516.7
5°	4519.1	4521.5	4521.5	4519.1	4519.1	4519.1	4521.5	4521.5	4519.1	4516.7	4521.5
7.5°	4528.8	4526.3	4526.3	4521.5	4521.5	4516.7	4521.5	4514.3	4519.1	4514.3	4521.5
10°	4516.7	4519.1	4516.7	4514.3	4514.3	4511.8	4511.8	4504.6	4507.0	4499.7	4504.6
12.5°	4509.4	4507.0	4507.0	4502.1	4497.3	4492.5	4490.1	4482.8	4482.8	4465.8	4473.1
15°	4490.1	4492.5	4485.3	4475.6	4470.8	4458.6	4453.8	4444.1	4434.4	4422.4	4424.7
17.5°	4473.1	4465.8	4456.2	4446.4	4427.1	4417.5	4407.8	4393.2	4388.4	4373.9	4369.2
20°	4422.4	4417.5	4405.4	4388.4	4376.4	4354.5	4344.9	4330.5	4318.3	4303.8	4296.5
22.5°	4357.0	4352.2	4337.7	4320.7	4301.3	4291.7	4282.0	4255.4	4243.3	4228.8	4226.4
25°	4274.8	4267.5	4253.0	4233.6	4223.9	4197.4	4187.6	4168.2	4163.5	4148.9	4146.5
27.5°	4148.9	4139.3	4122.3	4098.2	4081.2	4064.3	4054.6	4040.1	4035.3	4020.8	4018.4
30°	3960.2	3948.2	3914.3	3904.6	3875.5	3858.6	3858.6	3839.3	3841.8	3832.1	3832.1
32.5°	3662.7	3643.3	3616.8	3597.3	3578.0	3568.4	3568.4	3561.1	3565.9	3565.9	3570.8
35°	3268.4	3241.8	3227.2	3215.1	3215.1	3224.8	3253.8	3261.2	3275.7	3287.7	3297.4
37.5°	2762.7	2760.3	2777.3	2791.8	2828.0	2869.2	2920.0	2963.6	3004.6	3033.7	3062.7
40°	2216.0	2276.4	2324.8	2392.6	2448.2	2528.1	2620.0	2695.0	2765.1	2816.0	2869.2
42.5°	1729.7	1807.1	1908.8	2007.9	2107.1	2216.0	2337.0	2441.0	2532.9	2603.0	2658.7
45°	1347.5	1454.0	1577.4	1703.1	1831.4	1966.8	2092.6	2199.0	2295.9	2368.5	2424.0
47.5°	1086.2	1202.4	1342.7	1480.6	1625.7	1768.4	1908.8	2000.7	2080.5	2138.6	2189.4
50°	897.5	1020.9	1168.5	1325.7	1470.8	1613.6	1734.5	1824.1	1889.4	1940.2	1971.7
52.5°	749.9	880.5	1037.8	1195.1	1340.2	1470.8	1579.7	1647.4	1700.7	1737.0	1766.0
55°	619.3	745.1	892.7	1040.3	1183.0	1306.4	1395.9	1446.8	1487.8	1509.5	1526.5
57.5°	505.7	621.7	757.2	892.7	1016.1	1117.7	1187.9	1238.6	1258.0	1275.0	1272.5
60°	396.8	505.7	629.0	745.1	851.5	933.8	984.6	1013.6	1028.1	1035.4	1030.6
62.5°	312.1	411.3	505.7	607.2	684.7	754.8	803.2	803.2	810.4	812.8	820.1
65°	232.2	307.2	389.5	464.5	527.4	573.3	600.0	607.2	616.9	614.5	609.6
67.5°	171.8	227.5	287.9	343.5	387.1	416.0	435.5	452.5	450.0	445.2	442.7
70°	118.6	154.8	208.0	241.9	273.4	302.4	307.2	309.6	312.1	314.6	309.6
72.5°	82.2	108.9	137.9	167.0	186.3	198.3	210.5	212.8	212.8	212.8	210.5
75°	41.2	55.7	82.2	94.4	111.3	116.1	125.8	125.8	133.1	123.4	120.9
77.5°	36.3	43.5	58.0	67.7	75.0	82.2	84.6	91.9	89.6	84.6	87.1
80°	21.8	26.7	36.3	41.2	50.7	53.2	55.7	58.0	55.7	58.0	58.0
82.5°	16.9	19.3	24.2	24.2	31.4	31.4	33.9	33.9	36.3	36.3	36.3
85°	9.7	16.9	14.5	29.0	19.3	19.3	24.2	29.0	24.2	24.2	29.0
87.5°	9.7	9.7	7.3	9.7	9.7	9.7	12.0	14.5	14.5	16.9	14.5
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: P249608

CATALOG NUMBER: LSR8B100D010 EC8B100927 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4507.0	4507.0	4507.0	4507.0
2.5°	4514.3	4519.1	4511.8	4509.4
5°	4521.5	4521.5	4516.7	4516.7
7.5°	4521.5	4521.5	4514.3	4509.4
10°	4502.1	4502.1	4494.9	4490.1
12.5°	4465.8	4465.8	4463.4	4456.2
15°	4419.9	4419.9	4410.2	4403.0
17.5°	4357.0	4361.8	4349.8	4349.8
20°	4289.3	4286.8	4277.2	4272.3
22.5°	4219.1	4214.2	4211.9	4197.4
25°	4144.2	4139.3	4132.0	4124.8
27.5°	4015.9	4013.4	4006.2	3996.6
30°	3819.9	3817.5	3807.9	3807.9
32.5°	3565.9	3563.6	3553.9	3556.2
35°	3302.2	3311.9	3307.0	3297.4
37.5°	3082.0	3089.4	3094.2	3089.4
40°	2898.2	2920.0	2922.4	2927.2
42.5°	2702.2	2731.3	2741.0	2745.8
45°	2467.6	2494.2	2516.0	2511.1
47.5°	2228.1	2247.4	2266.8	2252.2
50°	1998.2	2010.4	2017.7	2017.7
52.5°	1780.5	1780.5	1778.2	1780.5
55°	1531.4	1531.4	1521.7	1526.5
57.5°	1270.1	1275.0	1267.6	1255.6
60°	1028.1	1016.1	1011.3	1004.0
62.5°	800.8	800.8	783.9	805.6
65°	600.0	592.8	585.4	583.0
67.5°	435.5	433.0	425.8	423.3
70°	307.2	297.6	295.1	290.2
72.5°	205.6	205.6	200.8	200.8
75°	125.8	113.7	111.3	113.7
77.5°	87.1	84.6	84.6	82.2
80°	58.0	55.7	60.5	53.2
82.5°	36.3	38.7	36.3	38.7
85°	24.2	29.0	26.7	26.7
87.5°	14.5	14.5	14.5	14.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)