

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: P250282

Luminaire Tested: **LSR8B90D010 EC8B909730 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250282  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B90D010 EC8B909730 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7079.0 lumens  
Efficiency: N/A  
Efficacy: 82.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

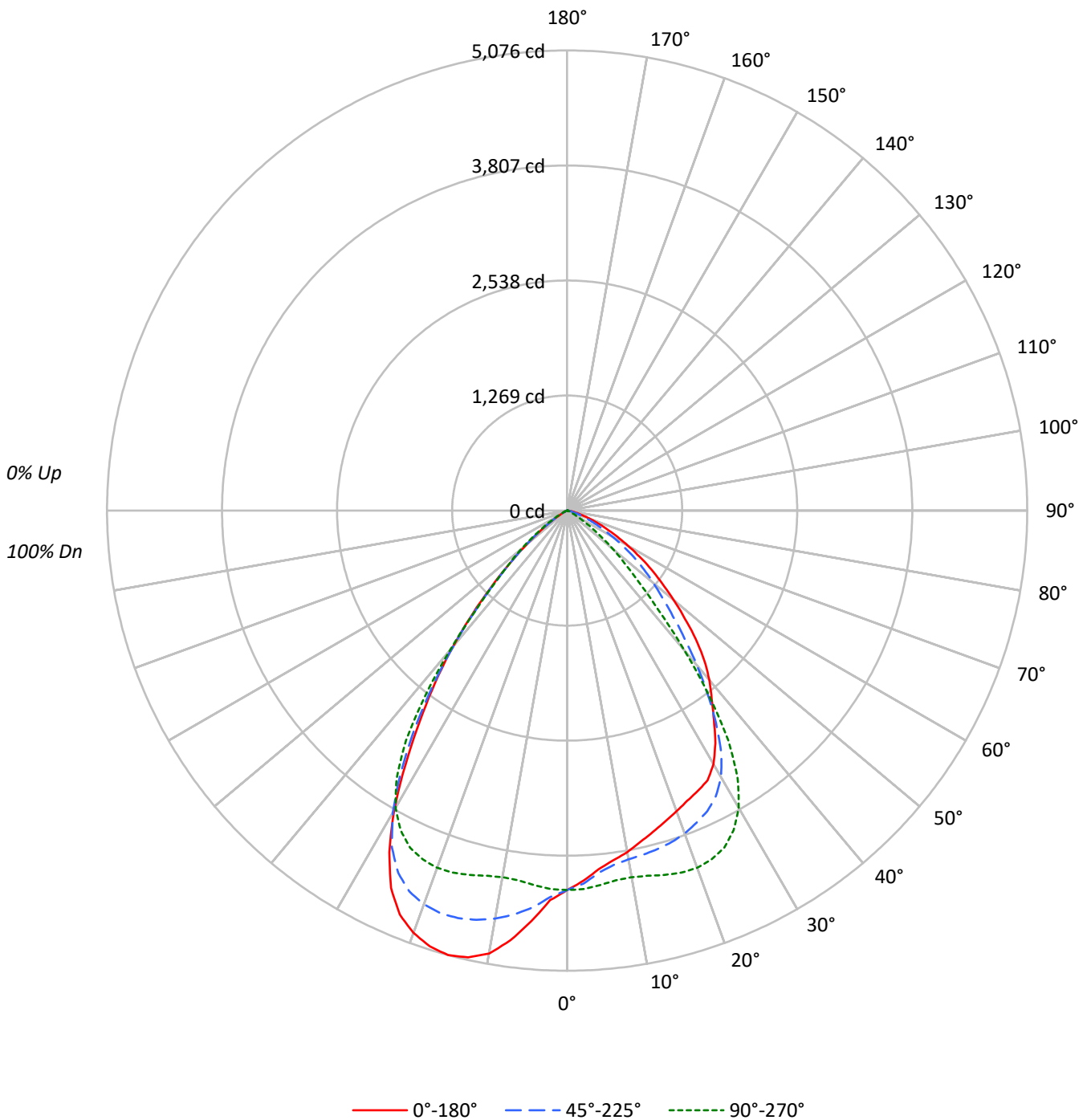
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38

**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°	402.4	5.7
10°-20°	1204.3	17.0
20°-30°	1844.3	26.1
30°-40°	1808.0	25.5
40°-50°	1088.8	15.4
50°-60°	501.1	7.1
60°-70°	176.0	2.5
70°-80°	46.0	0.7
80°-90°	7.8	0.1
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°	3451.1	48.8
0°-40°	5259.1	74.3
0°-60°	6849.1	96.8
0°-90°	7079.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7079.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4186	4186	4186	4186	4186	
5°	3973	4010	4147	4395	4546	375
15°	3668	3865	4160	4653	5076	1036
25°	3411	3658	4102	4411	4595	1571
35°	2822	2862	3098	2920	2826	1768
45°	2005	1651	1119	1127	1156	1537
55°	1138	902	321	252	243	1016
65°	483	334	51	25	27	492
75°	125	72	4	0	0	152
85°	20	10	2	0	0	27
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°	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8
2.5°	4088.0	4092.0	4092.0	4092.0	4099.8	4101.8	4099.8	4101.8	4105.6	4119.3	4125.2
5°	3972.6	3966.8	3970.7	3968.7	3978.5	3984.4	3980.4	3986.3	4000.0	4009.8	4019.6
7.5°	3890.5	3890.5	3890.5	3894.4	3900.3	3912.0	3910.1	3913.9	3927.6	3941.3	3955.0
10°	3825.9	3824.0	3824.0	3833.8	3841.6	3855.3	3859.2	3871.0	3888.5	3906.1	3921.8
12.5°	3741.8	3743.8	3753.6	3763.4	3780.9	3802.4	3814.2	3829.9	3857.3	3886.6	3904.2
15°	3667.5	3669.4	3677.3	3696.8	3718.4	3743.8	3769.2	3794.6	3827.9	3865.1	3896.4
17.5°	3595.1	3597.1	3602.9	3624.5	3651.9	3685.1	3714.4	3747.7	3790.8	3833.8	3872.9
20°	3528.6	3526.7	3536.4	3556.0	3591.3	3622.5	3651.9	3691.0	3737.9	3790.8	3835.7
22.5°	3464.0	3464.0	3473.9	3493.4	3524.8	3556.0	3587.3	3628.4	3675.3	3726.2	3779.0
25°	3411.2	3409.3	3423.0	3432.8	3456.2	3487.6	3520.8	3554.1	3601.0	3657.8	3708.6
27.5°	3354.6	3352.6	3354.6	3366.3	3387.8	3411.2	3436.7	3466.1	3505.2	3552.1	3601.0
30°	3229.4	3231.3	3231.3	3241.1	3252.9	3278.2	3291.9	3321.3	3356.5	3395.6	3438.7
32.5°	3043.5	3045.5	3045.5	3049.4	3059.2	3070.9	3082.7	3104.2	3131.5	3164.8	3203.9
35°	2822.5	2822.5	2820.5	2822.5	2828.4	2828.4	2838.2	2828.4	2842.1	2861.7	2891.0
37.5°	2619.1	2615.1	2611.3	2607.3	2601.5	2591.7	2578.0	2554.5	2548.6	2540.8	2542.8
40°	2439.1	2437.2	2425.5	2415.6	2396.1	2372.6	2339.4	2298.3	2265.1	2226.0	2192.7
42.5°	2239.6	2237.6	2227.9	2210.3	2188.8	2153.6	2100.8	2046.0	1979.5	1920.8	1860.2
45°	2004.9	2010.8	1997.1	1977.5	1952.1	1918.8	1860.2	1793.6	1727.1	1650.9	1574.5
47.5°	1760.4	1758.4	1748.7	1736.9	1715.4	1682.2	1643.1	1570.7	1500.2	1429.9	1351.6
50°	1533.5	1525.7	1521.7	1510.1	1496.4	1469.0	1427.9	1369.2	1306.6	1240.1	1167.7
52.5°	1318.4	1318.4	1308.5	1300.7	1289.0	1267.5	1232.3	1185.4	1132.5	1069.9	993.7
55°	1138.4	1134.5	1124.7	1114.9	1103.2	1089.5	1058.2	1019.1	962.3	901.7	835.2
57.5°	946.7	944.7	940.8	929.1	923.2	909.5	874.3	835.2	786.3	733.5	678.7
60°	774.6	766.8	758.9	751.1	741.3	727.7	704.1	670.9	629.8	582.9	528.1
62.5°	620.1	631.8	608.3	608.3	588.8	577.0	555.5	536.0	492.9	449.9	403.0
65°	483.1	483.1	473.3	465.5	453.8	440.1	418.6	399.0	367.7	334.4	301.2
67.5°	369.7	367.7	358.0	350.1	340.3	332.5	316.9	293.4	270.0	242.6	215.1
70°	271.9	270.0	267.9	254.3	246.4	236.7	224.9	209.3	191.7	172.1	146.7
72.5°	195.6	195.6	189.8	183.9	176.1	168.2	156.5	146.7	131.1	117.4	99.8
75°	125.2	123.3	123.3	113.4	113.4	101.7	93.9	88.0	80.2	72.4	56.8
77.5°	90.0	88.0	86.1	82.1	78.3	74.3	68.4	60.6	54.7	46.9	41.1
80°	60.6	56.8	54.7	54.7	48.9	46.9	48.9	37.2	35.2	29.3	25.4
82.5°	37.2	37.2	35.2	35.2	33.3	31.3	25.4	25.4	23.5	21.5	17.6
85°	19.6	25.4	17.6	19.6	17.6	19.6	17.6	13.7	11.8	9.7	9.7
87.5°	11.8	7.8	7.8	11.8	9.7	7.8	7.8	7.8	5.9	3.9	3.9
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°	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8
2.5°	4121.3	4135.0	4133.0	4150.6	4156.5	4170.2	4170.2	4180.0	4185.8	4199.5	4211.3
5°	4023.5	4045.0	4050.9	4072.4	4090.0	4111.5	4125.2	4146.7	4166.3	4195.7	4223.0
7.5°	3962.9	3980.4	3992.2	4017.6	4037.2	4060.6	4084.1	4113.4	4140.8	4176.1	4215.2
10°	3933.5	3957.0	3974.6	4000.0	4023.5	4049.0	4072.4	4105.6	4137.0	4182.0	4225.0
12.5°	3925.7	3953.1	3974.6	4009.8	4033.3	4060.6	4088.0	4125.2	4158.5	4205.4	4254.3
15°	3925.7	3962.9	3992.2	4031.3	4058.7	4093.9	4123.3	4160.4	4197.6	4246.5	4293.4
17.5°	3917.9	3962.9	4000.0	4045.0	4080.2	4115.5	4152.6	4187.8	4226.9	4273.9	4326.6
20°	3886.6	3943.3	3988.3	4041.1	4078.3	4117.4	4154.6	4193.6	4234.8	4283.6	4328.7
22.5°	3831.8	3898.3	3949.2	4005.9	4049.0	4088.0	4125.2	4164.3	4209.3	4256.3	4303.2
25°	3759.4	3822.0	3876.8	3935.4	3978.5	4021.5	4056.8	4101.8	4142.8	4187.8	4225.0
27.5°	3649.9	3716.4	3769.2	3829.9	3868.9	3910.1	3939.4	3976.6	4015.7	4052.8	4082.2
30°	3485.6	3546.3	3601.0	3655.7	3694.9	3724.3	3755.5	3784.9	3810.3	3835.7	3861.1
32.5°	3245.0	3299.8	3352.6	3403.4	3434.7	3460.2	3483.6	3501.2	3514.9	3528.6	3530.6
35°	2914.5	2959.4	2992.7	3037.7	3067.1	3090.5	3090.5	3098.3	3096.4	3090.5	3084.6
37.5°	2544.8	2562.3	2576.0	2593.6	2595.6	2595.6	2583.9	2574.1	2558.5	2554.5	2542.8
40°	2159.5	2135.9	2118.3	2094.9	2081.2	2051.8	2026.5	2008.8	1983.4	1979.5	1975.6
42.5°	1793.6	1738.9	1690.0	1648.9	1602.0	1560.9	1523.7	1496.4	1476.8	1474.8	1476.8
45°	1496.4	1433.7	1361.4	1304.7	1251.9	1201.0	1152.1	1118.9	1101.2	1097.3	1101.2
47.5°	1271.4	1199.0	1128.6	1064.0	1007.3	950.6	901.7	856.7	835.2	829.3	827.4
50°	1093.4	1019.1	944.7	878.2	815.7	758.9	698.3	655.3	627.9	618.1	610.3
52.5°	919.4	852.8	776.5	708.1	645.5	579.0	516.4	467.4	440.1	428.4	420.5
55°	766.8	700.3	629.8	563.3	496.8	430.3	367.7	320.8	291.4	277.8	267.9
57.5°	612.2	549.6	489.0	422.5	367.7	303.2	240.6	199.5	174.1	158.4	150.6
60°	473.3	424.5	371.6	316.9	264.1	211.3	160.4	121.2	101.7	90.0	80.2
62.5°	358.0	316.9	281.6	234.7	193.6	148.6	109.6	78.3	60.6	50.9	46.9
65°	258.2	226.9	195.6	166.3	136.9	103.7	74.3	50.9	35.2	29.3	27.4
67.5°	183.9	158.4	134.9	115.4	93.9	74.3	52.8	35.2	27.4	23.5	21.5
70°	129.1	109.6	93.9	76.3	62.6	48.9	41.1	25.4	15.6	17.6	13.7
72.5°	86.1	72.4	64.6	52.8	43.0	35.2	25.4	17.6	17.6	13.7	11.8
75°	46.9	43.0	33.3	25.4	21.5	19.6	7.8	3.9	1.9	5.9	1.9
77.5°	33.3	29.3	25.4	21.5	17.6	13.7	7.8	7.8	5.9	7.8	3.9
80°	21.5	17.6	15.6	15.6	9.7	5.9	3.9	3.9	5.9	1.9	1.9
82.5°	13.7	11.8	9.7	9.7	9.7	5.9	5.9	5.9	5.9	3.9	3.9
85°	7.8	5.9	3.9	3.9	1.9	3.9	0.0	1.9	1.9	0.0	0.0
87.5°	3.9	1.9	1.9	1.9	1.9	0.0	0.0	1.9	0.0	1.9	0.0
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8	4185.8
2.5°	4219.1	4226.9	4236.7	4244.5	4262.2	4266.0	4273.9	4281.7	4287.6	4293.4	4295.4
5°	4246.5	4275.8	4303.2	4332.5	4369.7	4395.2	4424.5	4449.9	4475.3	4496.8	4512.5
7.5°	4254.3	4299.3	4340.4	4391.2	4446.0	4493.0	4541.8	4590.7	4641.6	4680.7	4714.0
10°	4270.0	4324.7	4377.5	4438.1	4508.6	4571.2	4631.8	4696.3	4760.9	4815.7	4864.6
12.5°	4297.3	4358.0	4414.7	4481.2	4553.6	4624.0	4690.5	4762.8	4831.4	4892.0	4946.7
15°	4342.3	4399.0	4453.8	4516.4	4588.8	4653.4	4719.9	4790.2	4858.7	4921.3	4972.2
17.5°	4371.6	4424.5	4479.2	4536.0	4596.6	4655.3	4717.8	4780.5	4843.0	4899.8	4946.7
20°	4371.6	4422.5	4463.6	4514.5	4571.2	4622.0	4672.9	4727.7	4782.4	4829.3	4874.4
22.5°	4336.5	4385.3	4416.7	4455.8	4504.6	4547.7	4575.1	4635.7	4676.8	4717.8	4751.1
25°	4254.3	4289.5	4315.0	4342.3	4381.5	4410.8	4434.3	4469.5	4510.5	4526.2	4549.7
27.5°	4105.6	4131.1	4144.8	4150.6	4170.2	4185.8	4189.8	4205.4	4223.0	4226.9	4236.7
30°	3871.0	3872.9	3867.0	3865.1	3855.3	3843.6	3841.6	3839.6	3831.8	3824.0	3825.9
32.5°	3516.9	3507.1	3483.6	3458.3	3432.8	3405.4	3389.7	3370.2	3358.4	3346.7	3333.1
35°	3059.2	3035.7	3002.5	2971.2	2941.9	2920.3	2885.1	2873.3	2861.7	2846.0	2842.1
37.5°	2521.3	2507.6	2476.3	2452.8	2437.2	2427.4	2409.8	2398.1	2398.1	2392.2	2388.3
40°	1965.7	1961.9	1950.1	1956.0	1948.2	1952.1	1950.1	1946.2	1956.0	1956.0	1960.0
42.5°	1474.8	1476.8	1482.7	1486.5	1498.3	1500.2	1510.1	1510.1	1515.9	1521.7	1525.7
45°	1097.3	1105.2	1105.2	1113.0	1124.7	1126.7	1130.5	1132.5	1136.4	1146.2	1150.1
47.5°	823.5	825.4	825.4	827.4	831.3	835.2	833.3	835.2	841.1	837.1	841.1
50°	608.3	610.3	604.4	598.5	604.4	604.4	602.5	596.6	602.5	594.7	598.5
52.5°	414.7	412.7	406.8	408.8	404.9	403.0	403.0	399.0	399.0	399.0	391.2
55°	262.1	262.1	258.2	258.2	256.3	252.3	250.4	248.4	246.4	244.5	244.5
57.5°	146.7	148.6	142.8	140.8	142.8	140.8	136.9	136.9	136.9	131.1	134.9
60°	80.2	78.3	76.3	74.3	72.4	74.3	74.3	70.4	70.4	70.4	72.4
62.5°	43.0	43.0	41.1	41.1	39.1	39.1	43.0	37.2	39.1	37.2	39.1
65°	23.5	29.3	21.5	21.5	27.4	25.4	23.5	23.5	25.4	21.5	23.5
67.5°	25.4	17.6	15.6	17.6	15.6	15.6	15.6	19.6	17.6	13.7	17.6
70°	11.8	13.7	13.7	9.7	15.6	7.8	13.7	7.8	11.8	9.7	11.8
72.5°	11.8	11.8	11.8	7.8	11.8	7.8	9.7	9.7	7.8	7.8	11.8
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.9	3.9	1.9	1.9	1.9	1.9	3.9	3.9	3.9	0.0	1.9
80°	3.9	3.9	0.0	1.9	0.0	0.0	1.9	0.0	1.9	0.0	3.9
82.5°	1.9	3.9	1.9	1.9	3.9	3.9	3.9	1.9	1.9	1.9	1.9
85°	0.0	1.9	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	1.9
87.5°	0.0	1.9	0.0	0.0	0.0	0.0	1.9	1.9	0.0	0.0	0.0
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: P250282

CATALOG NUMBER: LSR8B90D010 EC8B909730 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4185.8	4185.8	4185.8	4185.8
2.5°	4297.3	4299.3	4303.2	4301.3
5°	4524.2	4539.9	4547.7	4545.8
7.5°	4737.4	4764.9	4780.5	4780.5
10°	4901.7	4933.0	4956.5	4960.4
12.5°	4989.7	5025.0	5056.3	5048.4
15°	5015.2	5050.4	5081.7	5075.8
17.5°	4985.9	5021.0	5044.6	5040.6
20°	4905.7	4935.0	4958.5	4956.5
22.5°	4780.5	4805.9	4825.5	4823.5
25°	4569.2	4586.9	4602.5	4594.7
27.5°	4244.5	4250.4	4260.1	4248.5
30°	3812.3	3816.1	3820.1	3818.1
32.5°	3327.2	3325.2	3321.3	3317.4
35°	2836.2	2836.2	2838.2	2826.4
37.5°	2390.2	2388.3	2394.1	2388.3
40°	1963.8	1961.9	1969.7	1960.0
42.5°	1531.6	1537.4	1539.4	1539.4
45°	1152.1	1154.0	1156.0	1156.0
47.5°	841.1	843.0	852.8	841.1
50°	594.7	596.6	598.5	594.7
52.5°	393.1	395.1	393.1	387.3
55°	240.6	242.6	242.6	242.6
57.5°	129.1	131.1	131.1	129.1
60°	70.4	68.4	70.4	66.5
62.5°	37.2	41.1	39.1	35.2
65°	23.5	23.5	23.5	27.4
67.5°	19.6	15.6	17.6	13.7
70°	11.8	13.7	13.7	9.7
72.5°	9.7	9.7	9.7	11.8
75°	0.0	0.0	0.0	0.0
77.5°	3.9	3.9	3.9	1.9
80°	1.9	0.0	1.9	0.0
82.5°	1.9	1.9	3.9	1.9
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)