

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: P250909

Luminaire Tested: **LSR8B70D010 EC8B70927 8LBSW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250909  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B70D010 EC8B70927 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6233.7 lumens  
Efficiency: N/A  
Efficacy: 82.1 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

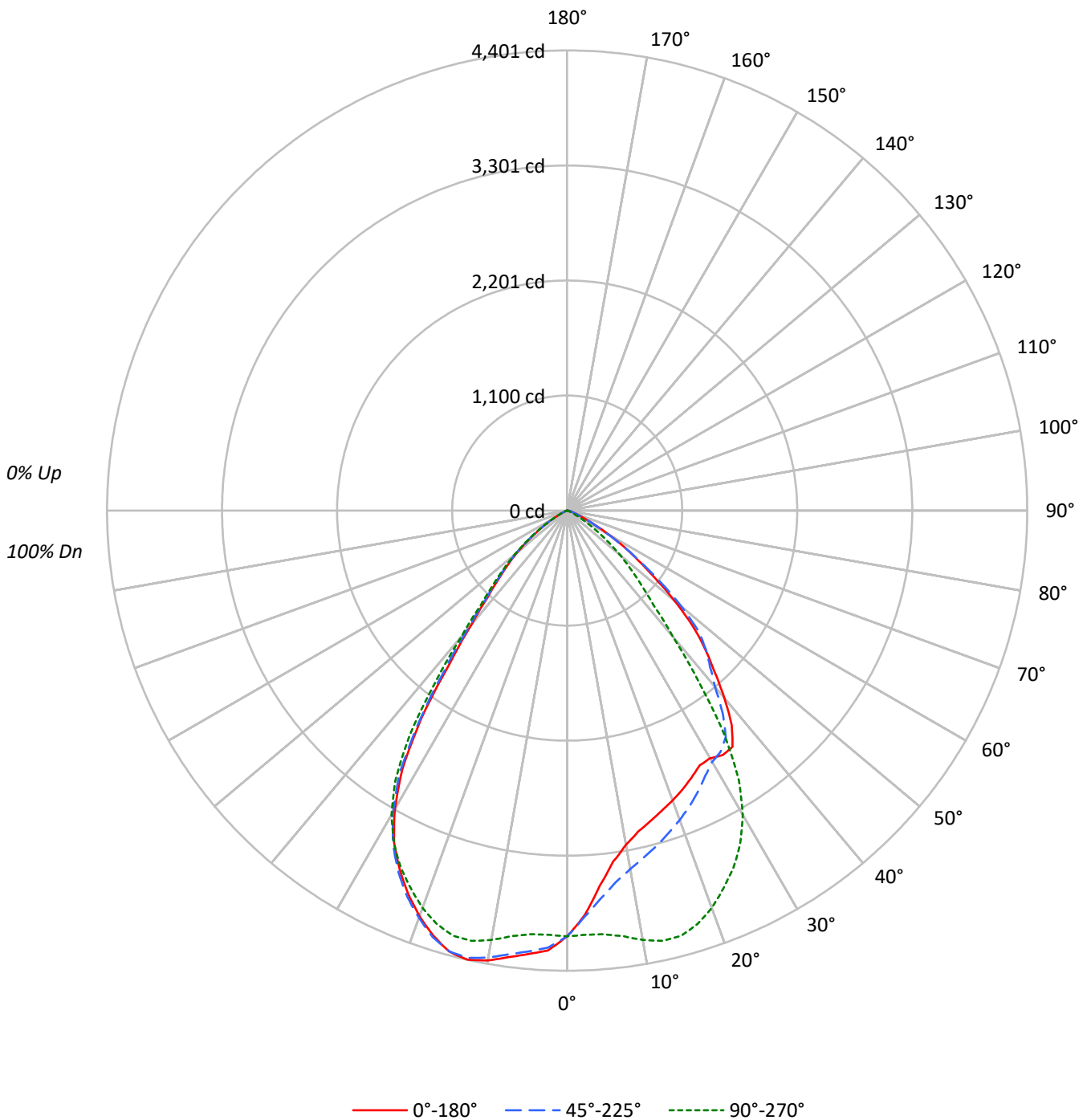
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

**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°	379.5	6.1
10°-20°	1096.3	17.6
20°-30°	1591.1	25.5
30°-40°	1567.1	25.1
40°-50°	982.3	15.8
50°-60°	474.0	7.6
60°-70°	114.7	1.8
70°-80°	23.2	0.4
80°-90°	5.3	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°	3066.9	49.2
0°-40°	4634.1	74.3
0°-60°	6090.4	97.7
0°-90°	6233.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6233.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4072	4072	4072	4072	4072	
5°	3599	3721	4067	4232	4257	333
15°	3075	3317	4209	4363	4367	869
25°	2816	2963	3766	3818	3790	1303
35°	2757	2645	2629	2479	2438	1668
45°	1862	1875	994	952	926	1423
55°	827	854	362	357	340	761
65°	194	192	54	46	41	221
75°	47	41	12	5	4	53
85°	14	11	2	0	0	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3
2.5°	3871.1	3846.5	3800.5	3856.2	3856.2	3825.1	3887.2	3849.8	3879.7	3926.8	3885.1
5°	3599.3	3579.1	3540.5	3599.3	3606.9	3578.0	3652.9	3625.1	3669.0	3726.7	3721.4
7.5°	3384.3	3358.7	3323.4	3384.3	3396.0	3376.8	3448.5	3435.6	3493.5	3568.4	3581.2
10°	3244.2	3217.4	3186.3	3242.0	3250.6	3237.8	3310.5	3303.0	3359.7	3446.3	3480.6
12.5°	3144.6	3122.2	3087.9	3146.7	3156.4	3138.2	3206.7	3203.4	3262.4	3353.3	3396.0
15°	3075.1	3048.3	3017.4	3067.6	3080.5	3060.1	3125.4	3119.0	3178.9	3268.8	3317.0
17.5°	3009.8	2985.2	2953.1	3000.2	3013.1	2991.6	3055.8	3045.2	3096.5	3182.1	3231.3
20°	2948.8	2922.1	2893.2	2941.3	2948.8	2924.2	2988.5	2974.5	3020.5	3099.7	3147.9
22.5°	2885.7	2857.8	2827.9	2875.0	2882.5	2857.8	2916.8	2900.7	2943.5	3015.2	3059.0
25°	2816.2	2790.5	2760.5	2804.4	2810.8	2784.0	2846.1	2825.8	2863.2	2926.4	2962.7
27.5°	2746.6	2722.0	2688.9	2733.8	2737.0	2711.2	2768.1	2740.2	2771.2	2829.0	2860.0
30°	2734.9	2707.0	2672.8	2709.1	2710.2	2677.0	2730.6	2697.4	2714.5	2757.3	2775.5
32.5°	2772.3	2744.4	2709.1	2739.2	2735.9	2699.5	2750.8	2710.2	2715.5	2738.0	2733.8
35°	2757.3	2724.2	2682.5	2714.5	2714.5	2670.6	2722.0	2673.9	2668.5	2671.8	2645.0
37.5°	2587.2	2561.5	2521.9	2553.0	2549.7	2516.5	2556.1	2516.5	2498.4	2490.9	2442.7
40°	2336.8	2305.8	2275.9	2309.0	2312.2	2276.9	2328.3	2283.3	2278.0	2256.5	2199.8
42.5°	2083.3	2072.5	2043.7	2071.5	2086.4	2056.5	2099.2	2077.9	2081.1	2075.7	2022.2
45°	1861.8	1843.5	1822.2	1854.2	1863.9	1848.9	1891.7	1878.9	1891.7	1918.5	1874.6
47.5°	1623.1	1604.9	1581.4	1615.6	1632.8	1604.9	1641.4	1637.1	1656.3	1702.4	1698.1
50°	1335.4	1322.4	1318.2	1322.4	1333.1	1320.3	1346.1	1347.1	1359.9	1423.0	1427.3
52.5°	1057.2	1053.9	1038.9	1052.9	1052.9	1032.5	1058.2	1046.5	1059.3	1102.0	1129.8
55°	827.1	823.8	814.3	827.1	813.2	805.7	813.2	801.4	791.8	825.0	853.9
57.5°	644.2	633.4	621.7	627.0	625.9	609.9	618.4	604.6	597.0	608.8	634.5
60°	459.0	455.8	445.2	450.4	454.7	442.9	451.6	445.2	432.2	441.9	442.9
62.5°	305.0	307.1	300.7	301.7	298.6	296.4	301.7	305.0	301.7	297.4	298.6
65°	193.6	192.6	191.5	192.6	194.7	190.5	193.6	195.8	192.6	192.6	191.5
67.5°	128.4	125.2	122.0	124.1	126.2	123.1	126.2	125.2	126.2	125.2	122.0
70°	86.6	85.6	84.5	85.6	85.6	83.5	85.6	84.5	85.6	84.5	81.3
72.5°	63.1	63.1	62.1	63.1	63.1	61.0	62.1	60.0	61.0	60.0	57.8
75°	47.0	47.0	46.0	47.0	46.0	44.9	46.0	44.9	42.8	42.8	40.6
77.5°	34.2	34.2	34.2	34.2	34.2	33.2	33.2	32.1	31.0	29.9	29.9
80°	25.6	24.6	24.6	24.6	24.6	23.5	24.6	23.5	22.5	21.4	20.4
82.5°	18.2	19.2	18.2	18.2	18.2	17.1	18.2	17.1	17.1	16.1	14.0
85°	14.0	14.0	14.0	14.0	14.0	12.8	12.8	12.8	11.8	11.8	10.7
87.5°	7.5	7.5	7.5	8.5	7.5	7.5	7.5	6.4	6.4	5.4	5.4
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3
2.5°	3940.6	3946.0	3934.2	3952.5	4023.1	3966.4	3989.9	3997.4	4050.9	4060.6	4054.2
5°	3790.9	3814.4	3829.4	3870.1	3948.2	3907.6	3949.2	3976.0	4044.5	4067.0	4072.3
7.5°	3673.2	3722.4	3758.8	3825.1	3917.1	3886.1	3949.2	3993.1	4076.6	4105.5	4119.4
10°	3585.5	3660.4	3723.5	3814.4	3918.3	3897.9	3980.2	4042.4	4135.4	4169.7	4186.8
12.5°	3519.1	3610.1	3694.6	3810.2	3922.5	3912.9	4012.4	4083.0	4181.4	4215.7	4236.0
15°	3446.3	3551.2	3649.6	3779.1	3900.0	3897.9	4004.9	4079.8	4180.4	4209.3	4228.5
17.5°	3359.7	3472.1	3580.1	3720.3	3840.1	3842.2	3950.3	4024.1	4122.6	4146.1	4159.0
20°	3272.0	3383.2	3491.3	3635.8	3753.4	3756.7	3862.6	3931.1	4025.2	4044.5	4047.6
22.5°	3178.9	3282.6	3390.8	3534.1	3647.5	3649.6	3754.6	3818.7	3898.9	3908.6	3917.1
25°	3072.9	3174.6	3276.2	3418.5	3526.6	3533.1	3628.2	3684.9	3758.8	3766.3	3769.5
27.5°	2962.7	3046.2	3143.6	3265.5	3374.7	3370.4	3460.3	3524.5	3590.8	3586.5	3585.5
30°	2851.4	2921.1	2980.9	3098.6	3178.9	3182.1	3266.7	3297.6	3367.2	3358.7	3357.6
32.5°	2773.4	2791.6	2807.5	2867.5	2943.5	2916.8	2974.5	3013.1	3061.1	3058.0	3059.0
35°	2630.0	2596.8	2548.7	2557.2	2603.2	2561.5	2592.6	2591.4	2640.7	2628.9	2642.8
37.5°	2385.0	2290.8	2183.8	2122.8	2131.4	2079.0	2068.2	2094.0	2111.1	2077.9	2089.7
40°	2123.9	1984.8	1817.9	1678.7	1671.3	1606.0	1594.2	1568.6	1601.8	1573.9	1582.5
42.5°	1931.3	1747.2	1527.9	1358.9	1322.4	1267.9	1235.8	1231.5	1241.2	1221.9	1216.6
45°	1783.7	1587.8	1336.4	1142.8	1102.0	1043.2	1011.2	999.3	1000.5	994.0	988.6
47.5°	1610.3	1413.4	1158.8	960.9	914.8	859.2	827.1	819.6	823.8	815.3	808.9
50°	1370.6	1194.1	961.9	781.1	740.4	699.8	674.1	666.6	665.6	659.1	654.9
52.5°	1112.7	966.2	765.0	614.1	577.8	538.2	520.0	510.4	511.4	505.0	498.6
55°	861.3	770.4	592.8	464.4	431.2	400.2	383.1	371.2	368.1	361.7	358.4
57.5°	640.9	579.9	444.0	334.9	315.7	285.6	268.5	254.7	252.6	249.3	248.3
60°	449.4	405.6	312.4	238.6	216.1	198.0	180.8	167.0	160.5	159.4	156.3
62.5°	291.0	264.3	205.4	159.4	142.3	129.5	112.4	102.7	98.4	94.2	95.2
65°	180.8	160.5	128.4	102.7	93.0	83.5	70.6	62.1	57.8	53.6	54.6
67.5°	112.4	100.6	81.3	66.4	60.0	52.4	42.8	36.3	33.2	29.9	27.8
70°	75.9	65.2	55.7	47.0	42.8	37.5	31.0	25.6	23.5	21.4	19.2
72.5°	53.6	48.2	40.6	35.3	32.1	27.8	23.5	20.4	18.2	16.1	14.0
75°	38.5	34.2	29.9	25.6	23.5	21.4	18.2	16.1	14.0	11.8	9.7
77.5°	27.8	24.6	21.4	19.2	18.2	15.0	12.8	11.8	10.7	8.5	6.4
80°	19.2	17.1	14.0	12.8	12.8	10.7	9.7	8.5	7.5	5.4	4.3
82.5°	12.8	11.8	10.7	9.7	8.5	7.5	7.5	5.4	4.3	3.3	2.1
85°	9.7	8.5	7.5	6.4	6.4	5.4	4.3	3.3	3.3	2.1	1.1
87.5°	5.4	5.4	4.3	3.3	3.3	2.1	2.1	1.1	1.1	1.1	1.1
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3
2.5°	4108.7	4111.9	4130.1	4116.2	4151.5	4177.1	4164.3	4193.2	4183.5	4181.4	4214.6
5°	4136.5	4143.9	4168.6	4155.8	4194.2	4222.1	4209.3	4241.4	4231.7	4229.6	4263.9
7.5°	4190.0	4197.5	4218.9	4208.2	4248.9	4273.4	4257.4	4292.7	4279.8	4278.8	4312.0
10°	4257.4	4268.1	4286.2	4275.6	4313.0	4334.4	4318.4	4352.6	4340.8	4335.5	4371.9
12.5°	4307.7	4315.2	4333.4	4324.8	4361.2	4377.3	4363.3	4396.5	4381.5	4377.3	4409.3
15°	4295.9	4303.5	4318.4	4310.9	4345.1	4360.2	4341.9	4378.3	4363.3	4354.8	4383.7
17.5°	4221.0	4225.3	4236.0	4228.5	4264.9	4274.6	4254.2	4290.5	4276.7	4261.7	4289.5
20°	4110.9	4108.7	4115.1	4111.9	4141.8	4147.2	4134.4	4161.2	4145.1	4136.5	4152.6
22.5°	3973.8	3971.7	3976.0	3967.4	3997.4	4000.6	3981.4	4013.4	3997.4	3981.4	4008.2
25°	3822.0	3810.2	3808.0	3811.3	3831.5	3834.8	3814.4	3837.9	3817.7	3804.9	3830.5
27.5°	3634.6	3619.7	3616.5	3619.7	3640.0	3625.1	3608.0	3625.1	3604.7	3592.9	3609.0
30°	3403.6	3382.2	3372.5	3366.1	3387.5	3382.2	3342.6	3361.8	3329.8	3312.7	3324.4
32.5°	3092.2	3080.5	3054.7	3039.8	3060.1	3019.5	2994.9	2994.9	2982.0	2953.1	2959.5
35°	2660.0	2641.7	2618.2	2605.4	2608.5	2554.0	2513.4	2521.9	2479.2	2471.6	2474.9
37.5°	2113.2	2083.3	2074.7	2048.0	2054.4	2006.2	1950.5	1951.6	1929.2	1905.6	1898.1
40°	1587.8	1582.5	1573.9	1551.5	1560.0	1507.6	1486.2	1487.2	1472.3	1455.2	1463.7
42.5°	1227.3	1210.2	1204.8	1197.3	1199.5	1190.9	1163.0	1166.3	1153.5	1149.2	1144.9
45°	997.2	979.0	966.2	972.6	972.6	963.0	952.3	958.7	952.3	943.8	948.0
47.5°	821.7	804.6	798.2	797.2	804.6	798.2	787.5	789.6	788.5	785.4	783.2
50°	655.9	651.6	646.3	643.1	646.3	644.2	634.5	639.8	643.1	632.4	635.5
52.5°	499.7	499.7	498.6	491.1	497.6	491.1	490.0	492.2	488.9	484.6	483.6
55°	366.0	362.7	357.4	356.3	358.4	356.3	354.2	355.3	357.4	346.7	346.7
57.5°	250.4	248.3	245.0	245.0	249.3	243.9	240.8	245.0	240.8	236.5	236.5
60°	160.5	159.4	156.3	156.3	156.3	155.1	152.0	153.0	155.1	148.7	149.8
62.5°	96.3	93.0	92.0	90.9	92.0	90.9	90.9	89.9	88.8	88.8	85.6
65°	52.4	50.3	48.2	49.2	49.2	48.2	48.2	48.2	46.0	44.9	43.9
67.5°	26.8	24.6	24.6	23.5	23.5	23.5	23.5	22.5	22.5	22.5	21.4
70°	17.1	16.1	15.0	15.0	15.0	14.0	14.0	14.0	14.0	14.0	12.8
72.5°	11.8	10.7	9.7	9.7	9.7	8.5	8.5	8.5	8.5	7.5	7.5
75°	8.5	7.5	6.4	6.4	6.4	5.4	5.4	5.4	5.4	5.4	5.4
77.5°	5.4	4.3	4.3	4.3	4.3	3.3	3.3	3.3	3.3	3.3	2.1
80°	3.3	3.3	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1
82.5°	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0
85°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0
87.5°	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: P250909

CATALOG NUMBER: LSR8B70D010 EC8B70927 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3	4072.3
2.5°	4202.9	4194.2	4199.6	4239.2	4222.1	4216.7	4171.8	4211.4
5°	4253.2	4246.7	4246.7	4291.7	4271.3	4267.0	4223.1	4257.4
7.5°	4300.2	4293.8	4294.8	4340.8	4324.8	4318.4	4274.6	4308.8
10°	4361.2	4356.9	4358.0	4401.9	4384.7	4378.3	4333.4	4368.7
12.5°	4397.6	4391.1	4391.1	4438.2	4419.0	4409.3	4366.6	4400.8
15°	4369.7	4360.2	4360.2	4407.2	4385.8	4371.9	4334.4	4366.6
17.5°	4274.6	4264.9	4264.9	4305.6	4289.5	4269.2	4230.7	4260.6
20°	4141.8	4130.1	4126.8	4174.0	4151.5	4133.2	4099.0	4128.0
22.5°	3992.1	3986.7	3977.1	4024.1	4003.9	3984.5	3948.2	3970.7
25°	3812.3	3803.7	3794.1	3840.1	3819.8	3800.5	3771.7	3789.8
27.5°	3588.6	3589.8	3584.4	3620.8	3600.4	3589.8	3554.4	3584.4
30°	3318.0	3306.2	3301.9	3344.7	3325.5	3311.6	3267.7	3296.6
32.5°	2964.9	2947.7	2925.3	2973.5	2940.3	2928.5	2891.0	2932.8
35°	2451.3	2446.0	2425.6	2466.2	2448.1	2426.7	2403.1	2438.4
37.5°	1895.0	1899.2	1897.1	1907.8	1897.1	1883.1	1857.5	1844.7
40°	1446.6	1436.0	1427.3	1446.6	1424.1	1424.1	1409.2	1425.1
42.5°	1134.1	1129.8	1140.6	1144.9	1132.0	1129.8	1127.7	1126.7
45°	936.2	936.2	938.4	942.6	938.4	936.2	929.8	925.5
47.5°	771.4	775.7	771.4	785.4	777.8	775.7	762.9	768.3
50°	624.8	619.5	624.8	629.1	630.2	623.8	617.4	620.6
52.5°	484.6	476.1	474.0	480.4	476.1	476.1	471.8	470.8
55°	341.3	344.5	339.2	344.5	342.3	339.2	335.9	340.2
57.5°	231.1	232.2	230.1	233.2	227.9	228.9	227.9	226.8
60°	149.8	145.5	145.5	148.7	143.3	143.3	142.3	142.3
62.5°	85.6	84.5	84.5	83.5	82.4	82.4	82.4	80.2
65°	43.9	42.8	41.7	41.7	41.7	41.7	40.6	40.6
67.5°	21.4	20.4	20.4	21.4	20.4	20.4	20.4	20.4
70°	12.8	12.8	11.8	12.8	11.8	11.8	11.8	11.8
72.5°	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
75°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
77.5°	3.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)