

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: P250274

Luminaire Tested: **LSR8B80D010 EC8B809727 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250274  
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: LSR8B80D010 EC8B809727 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5941.0 lumens  
Efficiency: N/A  
Efficacy: 79.9 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

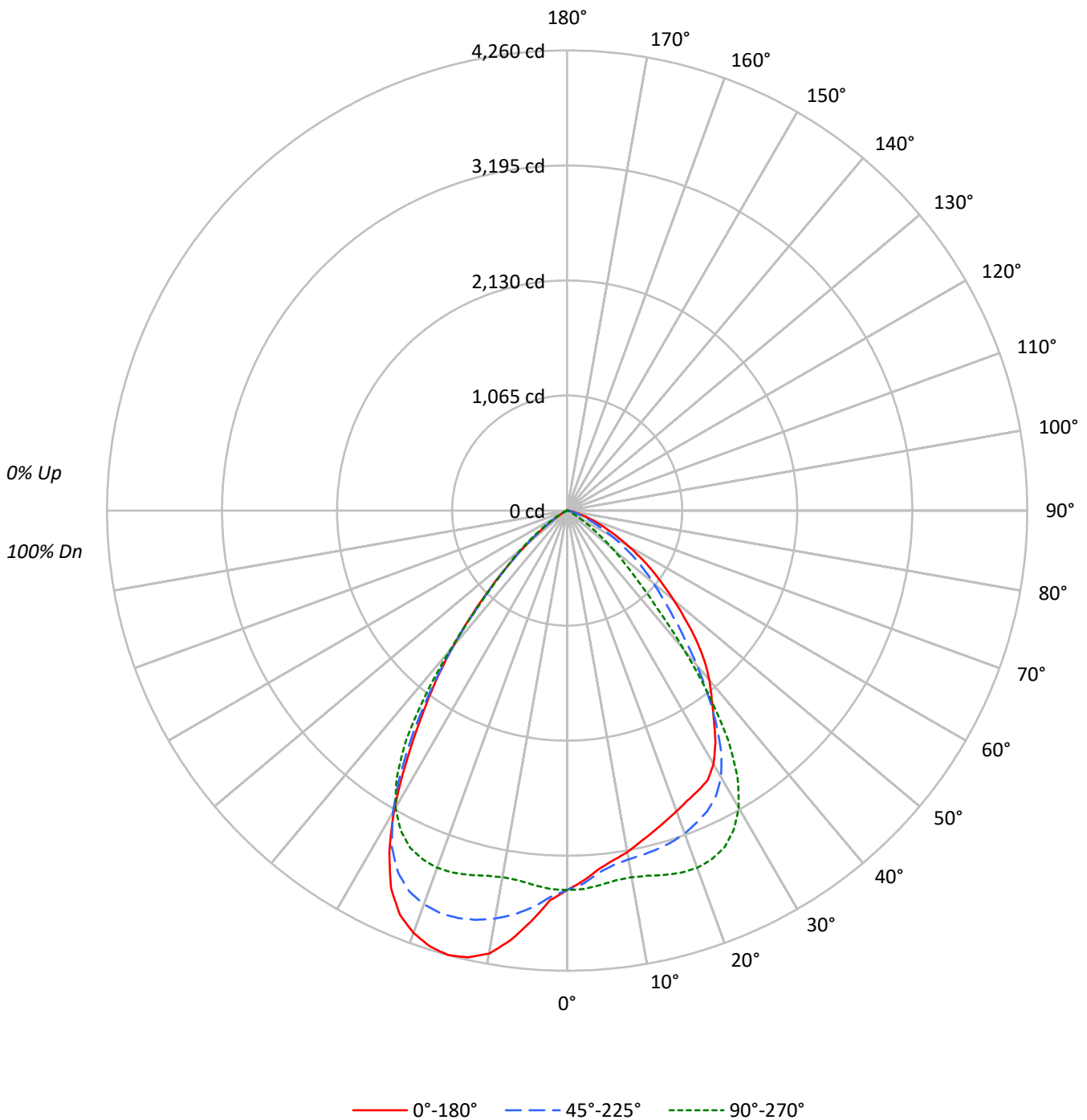
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	337.7	5.7
10°-20°	1010.7	17.0
20°-30°	1547.8	26.1
30°-40°	1517.4	25.5
40°-50°	913.8	15.4
50°-60°	420.6	7.1
60°-70°	147.7	2.5
70°-80°	38.6	0.7
80°-90°	6.6	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°	2896.3	48.8
0°-40°	4413.7	74.3
0°-60°	5748.0	96.8
0°-90°	5941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5941.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3513	3513	3513	3513	3513	
5°	3334	3365	3480	3689	3815	315
15°	3078	3244	3492	3905	4260	870
25°	2863	3070	3442	3702	3856	1319
35°	2369	2402	2600	2451	2372	1484
45°	1683	1386	939	946	970	1290
55°	955	757	269	212	204	852
65°	406	281	43	21	23	413
75°	105	61	3	0	0	127
85°	16	8	2	0	0	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°	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9
2.5°	3430.8	3434.1	3434.1	3434.1	3440.7	3442.4	3440.7	3442.4	3445.6	3457.1	3462.0
5°	3334.0	3329.1	3332.4	3330.7	3338.9	3343.9	3340.6	3345.5	3357.0	3365.2	3373.4
7.5°	3265.1	3265.1	3265.1	3268.3	3273.3	3283.1	3281.5	3284.7	3296.2	3307.7	3319.2
10°	3210.9	3209.3	3209.3	3217.5	3224.0	3235.5	3238.8	3248.7	3263.4	3278.2	3291.3
12.5°	3140.3	3142.0	3150.2	3158.4	3173.1	3191.2	3201.0	3214.2	3237.2	3261.8	3276.6
15°	3077.9	3079.5	3086.2	3102.5	3120.6	3142.0	3163.3	3184.6	3212.5	3243.7	3270.0
17.5°	3017.2	3018.8	3023.7	3041.8	3064.8	3092.7	3117.3	3145.2	3181.4	3217.5	3250.3
20°	2961.4	2959.7	2967.9	2984.3	3013.9	3040.2	3064.8	3097.7	3137.0	3181.4	3219.1
22.5°	2907.2	2907.2	2915.4	2931.8	2958.1	2984.3	3010.6	3045.1	3084.5	3127.2	3171.5
25°	2862.9	2861.2	2872.7	2881.0	2900.6	2926.9	2954.8	2982.7	3022.1	3069.7	3112.4
27.5°	2815.3	2813.7	2815.3	2825.2	2843.2	2862.9	2884.2	2908.9	2941.7	2981.1	3022.1
30°	2710.2	2711.8	2711.8	2720.1	2729.9	2751.2	2762.7	2787.4	2816.9	2849.7	2885.9
32.5°	2554.3	2555.9	2555.9	2559.2	2567.4	2577.2	2587.1	2605.2	2628.1	2656.0	2688.9
35°	2368.8	2368.8	2367.1	2368.8	2373.7	2373.7	2381.9	2373.7	2385.2	2401.6	2426.2
37.5°	2198.1	2194.7	2191.5	2188.2	2183.3	2175.1	2163.6	2143.9	2138.9	2132.4	2134.0
40°	2047.0	2045.4	2035.6	2027.3	2010.9	1991.2	1963.3	1928.9	1901.0	1868.1	1840.2
42.5°	1879.6	1877.9	1869.7	1854.9	1836.9	1807.4	1763.1	1717.1	1661.3	1612.0	1561.2
45°	1682.6	1687.5	1676.0	1659.6	1638.3	1610.3	1561.2	1505.3	1449.5	1385.5	1321.4
47.5°	1477.4	1475.8	1467.6	1457.7	1439.7	1411.8	1378.9	1318.2	1259.1	1200.0	1134.3
50°	1287.0	1280.4	1277.1	1267.3	1255.8	1232.8	1198.3	1149.1	1096.6	1040.7	980.0
52.5°	1106.4	1106.4	1098.2	1091.6	1081.8	1063.7	1034.2	994.8	950.5	897.9	833.9
55°	955.4	952.1	943.9	935.7	925.8	914.3	888.1	855.3	807.6	756.8	701.0
57.5°	794.5	792.8	789.6	779.7	774.8	763.3	733.8	701.0	659.9	615.6	569.6
60°	650.1	643.5	636.9	630.3	622.2	610.7	590.9	563.0	528.6	489.2	443.2
62.5°	520.4	530.2	510.5	510.5	494.1	484.3	466.2	449.8	413.7	377.6	338.2
65°	405.5	405.5	397.2	390.7	380.8	369.3	351.3	334.9	308.6	280.7	252.8
67.5°	310.3	308.6	300.4	293.9	285.6	279.1	265.9	246.2	226.6	203.6	180.5
70°	228.2	226.6	224.9	213.4	206.8	198.6	188.8	175.7	160.9	144.5	123.1
72.5°	164.1	164.1	159.3	154.3	147.8	141.1	131.4	123.1	110.0	98.5	83.7
75°	105.1	103.4	103.4	95.2	95.2	85.3	78.8	73.9	67.3	60.7	47.6
77.5°	75.5	73.9	72.2	68.9	65.7	62.4	57.4	50.9	45.9	39.4	34.5
80°	50.9	47.6	45.9	45.9	41.0	39.4	41.0	31.2	29.5	24.6	21.4
82.5°	31.2	31.2	29.5	29.5	27.9	26.3	21.4	21.4	19.7	18.0	14.8
85°	16.4	21.4	14.8	16.4	14.8	16.4	14.8	11.5	9.9	8.2	8.2
87.5°	9.9	6.6	6.6	9.9	8.2	6.6	6.6	6.6	4.9	3.3	3.3
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°	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9
2.5°	3458.8	3470.3	3468.6	3483.4	3488.3	3499.8	3499.8	3508.0	3512.9	3524.4	3534.3
5°	3376.7	3394.7	3399.7	3417.7	3432.5	3450.6	3462.0	3480.1	3496.5	3521.2	3544.1
7.5°	3325.8	3340.6	3350.4	3371.8	3388.2	3407.9	3427.6	3452.2	3475.2	3504.8	3537.6
10°	3301.2	3320.9	3335.6	3357.0	3376.7	3398.1	3417.7	3445.6	3471.9	3509.7	3545.8
12.5°	3294.6	3317.6	3335.6	3365.2	3384.9	3407.9	3430.8	3462.0	3490.0	3529.3	3570.4
15°	3294.6	3325.8	3350.4	3383.3	3406.2	3435.8	3460.4	3491.6	3522.8	3563.8	3603.2
17.5°	3288.1	3325.8	3357.0	3394.7	3424.3	3453.9	3485.0	3514.6	3547.4	3586.8	3631.1
20°	3261.8	3309.4	3347.1	3391.4	3422.7	3455.5	3486.7	3519.5	3554.0	3595.0	3632.8
22.5°	3215.8	3271.6	3314.3	3361.9	3398.1	3430.8	3462.0	3494.9	3532.7	3572.0	3611.4
25°	3155.1	3207.6	3253.6	3302.8	3338.9	3375.0	3404.6	3442.4	3476.8	3514.6	3545.8
27.5°	3063.1	3118.9	3163.3	3214.2	3247.0	3281.5	3306.1	3337.3	3370.2	3401.3	3426.0
30°	2925.3	2976.2	3022.1	3068.1	3100.9	3125.6	3151.8	3176.4	3197.8	3219.1	3240.4
32.5°	2723.3	2769.3	2813.7	2856.3	2882.6	2903.9	2923.6	2938.4	2949.9	2961.4	2963.0
35°	2446.0	2483.7	2511.6	2549.3	2574.0	2593.7	2593.7	2600.2	2598.6	2593.7	2588.7
37.5°	2135.7	2150.4	2161.9	2176.7	2178.3	2178.3	2168.5	2160.3	2147.2	2143.9	2134.0
40°	1812.3	1792.6	1777.8	1758.1	1746.6	1722.0	1700.7	1685.9	1664.5	1661.3	1658.0
42.5°	1505.3	1459.3	1418.3	1383.9	1344.5	1309.9	1278.8	1255.8	1239.4	1237.7	1239.4
45°	1255.8	1203.3	1142.5	1094.9	1050.6	1007.9	966.9	939.0	924.2	920.9	924.2
47.5°	1067.0	1006.3	947.2	893.0	845.4	797.8	756.8	719.0	701.0	696.0	694.4
50°	917.6	855.3	792.8	737.0	684.5	636.9	586.0	549.9	527.0	518.7	512.2
52.5°	771.6	715.7	651.7	594.3	541.7	485.9	433.4	392.3	369.3	359.5	352.9
55°	643.5	587.7	528.6	472.8	417.0	361.2	308.6	269.2	244.6	233.1	224.9
57.5°	513.8	461.3	410.4	354.6	308.6	254.5	201.9	167.4	146.1	133.0	126.4
60°	397.2	356.2	311.9	265.9	221.6	177.3	134.6	101.8	85.3	75.5	67.3
62.5°	300.4	265.9	236.4	197.0	162.5	124.7	92.0	65.7	50.9	42.7	39.4
65°	216.7	190.4	164.1	139.5	114.9	87.0	62.4	42.7	29.5	24.6	23.0
67.5°	154.3	133.0	113.2	96.8	78.8	62.4	44.3	29.5	23.0	19.7	18.0
70°	108.3	92.0	78.8	64.1	52.5	41.0	34.5	21.4	13.1	14.8	11.5
72.5°	72.2	60.7	54.2	44.3	36.1	29.5	21.4	14.8	14.8	11.5	9.9
75°	39.4	36.1	27.9	21.4	18.0	16.4	6.6	3.3	1.6	4.9	1.6
77.5°	27.9	24.6	21.4	18.0	14.8	11.5	6.6	6.6	4.9	6.6	3.3
80°	18.0	14.8	13.1	13.1	8.2	4.9	3.3	3.3	4.9	1.6	1.6
82.5°	11.5	9.9	8.2	8.2	8.2	4.9	4.9	4.9	4.9	3.3	3.3
85°	6.6	4.9	3.3	3.3	1.6	3.3	0.0	1.6	1.6	0.0	0.0
87.5°	3.3	1.6	1.6	1.6	1.6	0.0	0.0	1.6	0.0	1.6	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°	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9	3512.9
2.5°	3540.8	3547.4	3555.6	3562.2	3577.0	3580.2	3586.8	3593.4	3598.3	3603.2	3604.9
5°	3563.8	3588.5	3611.4	3636.0	3667.3	3688.6	3713.2	3734.5	3755.9	3773.9	3787.0
7.5°	3570.4	3608.1	3642.7	3685.3	3731.2	3770.7	3811.7	3852.7	3895.4	3928.3	3956.2
10°	3583.5	3629.5	3673.8	3724.7	3783.8	3836.3	3887.2	3941.4	3995.6	4041.5	4082.6
12.5°	3606.5	3657.4	3705.0	3760.8	3821.6	3880.6	3936.4	3997.2	4054.7	4105.6	4151.5
15°	3644.3	3691.8	3737.9	3790.4	3851.1	3905.3	3961.1	4020.2	4077.7	4130.2	4172.9
17.5°	3668.9	3713.2	3759.1	3806.8	3857.7	3906.9	3959.4	4012.0	4064.5	4112.1	4151.5
20°	3668.9	3711.6	3746.0	3788.7	3836.3	3879.0	3921.7	3967.7	4013.6	4053.0	4090.8
22.5°	3639.3	3680.4	3706.6	3739.5	3780.5	3816.6	3839.6	3890.5	3925.0	3959.4	3987.3
25°	3570.4	3600.0	3621.3	3644.3	3677.1	3701.7	3721.4	3751.0	3785.4	3798.6	3818.3
27.5°	3445.6	3467.0	3478.5	3483.4	3499.8	3512.9	3516.2	3529.3	3544.1	3547.4	3555.6
30°	3248.7	3250.3	3245.4	3243.7	3235.5	3225.7	3224.0	3222.4	3215.8	3209.3	3210.9
32.5°	2951.5	2943.3	2923.6	2902.3	2881.0	2858.0	2844.8	2828.4	2818.5	2808.7	2797.2
35°	2567.4	2547.7	2519.8	2493.5	2468.9	2450.8	2421.3	2411.4	2401.6	2388.5	2385.2
37.5°	2116.0	2104.5	2078.2	2058.5	2045.4	2037.2	2022.4	2012.6	2012.6	2007.6	2004.3
40°	1649.7	1646.5	1636.6	1641.6	1635.0	1638.3	1636.6	1633.3	1641.6	1641.6	1644.9
42.5°	1237.7	1239.4	1244.3	1247.6	1257.4	1259.1	1267.3	1267.3	1272.2	1277.1	1280.4
45°	920.9	927.5	927.5	934.1	943.9	945.5	948.8	950.5	953.7	962.0	965.2
47.5°	691.1	692.7	692.7	694.4	697.6	701.0	699.3	701.0	705.9	702.6	705.9
50°	510.5	512.2	507.2	502.3	507.2	507.2	505.6	500.7	505.6	499.1	502.3
52.5°	348.0	346.4	341.4	343.1	339.8	338.2	338.2	334.9	334.9	334.9	328.3
55°	220.0	220.0	216.7	216.7	215.1	211.8	210.1	208.4	206.8	205.2	205.2
57.5°	123.1	124.7	119.9	118.2	119.9	118.2	114.9	114.9	114.9	110.0	113.2
60°	67.3	65.7	64.1	62.4	60.7	62.4	62.4	59.1	59.1	59.1	60.7
62.5°	36.1	36.1	34.5	34.5	32.8	32.8	36.1	31.2	32.8	31.2	32.8
65°	19.7	24.6	18.0	18.0	23.0	21.4	19.7	19.7	21.4	18.0	19.7
67.5°	21.4	14.8	13.1	14.8	13.1	13.1	13.1	16.4	14.8	11.5	14.8
70°	9.9	11.5	11.5	8.2	13.1	6.6	11.5	6.6	9.9	8.2	9.9
72.5°	9.9	9.9	9.9	6.6	9.9	6.6	8.2	8.2	6.6	6.6	9.9
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°	3.3	3.3	1.6	1.6	1.6	1.6	3.3	3.3	3.3	0.0	1.6
80°	3.3	3.3	0.0	1.6	0.0	0.0	1.6	0.0	1.6	0.0	3.3
82.5°	1.6	3.3	1.6	1.6	3.3	3.3	3.3	1.6	1.6	1.6	1.6
85°	0.0	1.6	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	1.6
87.5°	0.0	1.6	0.0	0.0	0.0	0.0	1.6	1.6	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: P250274

CATALOG NUMBER: LSR8B80D010 EC8B809727 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3512.9	3512.9	3512.9	3512.9
2.5°	3606.5	3608.1	3611.4	3609.8
5°	3796.9	3810.1	3816.6	3815.0
7.5°	3975.8	3998.9	4012.0	4012.0
10°	4113.7	4140.0	4159.7	4163.0
12.5°	4187.6	4217.2	4243.5	4236.8
15°	4208.9	4238.5	4264.8	4259.8
17.5°	4184.3	4213.9	4233.6	4230.3
20°	4117.1	4141.6	4161.4	4159.7
22.5°	4012.0	4033.3	4049.8	4048.1
25°	3834.7	3849.5	3862.6	3856.0
27.5°	3562.2	3567.1	3575.3	3565.5
30°	3199.4	3202.7	3206.0	3204.3
32.5°	2792.3	2790.6	2787.4	2784.1
35°	2380.3	2380.3	2381.9	2372.0
37.5°	2006.0	2004.3	2009.3	2004.3
40°	1648.1	1646.5	1653.1	1644.9
42.5°	1285.3	1290.3	1291.9	1291.9
45°	966.9	968.5	970.1	970.1
47.5°	705.9	707.5	715.7	705.9
50°	499.1	500.7	502.3	499.1
52.5°	329.9	331.6	329.9	325.0
55°	201.9	203.6	203.6	203.6
57.5°	108.3	110.0	110.0	108.3
60°	59.1	57.4	59.1	55.8
62.5°	31.2	34.5	32.8	29.5
65°	19.7	19.7	19.7	23.0
67.5°	16.4	13.1	14.8	11.5
70°	9.9	11.5	11.5	8.2
72.5°	8.2	8.2	8.2	9.9
75°	0.0	0.0	0.0	0.0
77.5°	3.3	3.3	3.3	1.6
80°	1.6	0.0	1.6	0.0
82.5°	1.6	1.6	3.3	1.6
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)