

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: P249292

Luminaire Tested: **LSR8B90D010 EC8B909730 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249292  
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: LSR8B90D010 EC8B909730 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7006.0 lumens  
Efficiency: N/A  
Efficacy: 81.4 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

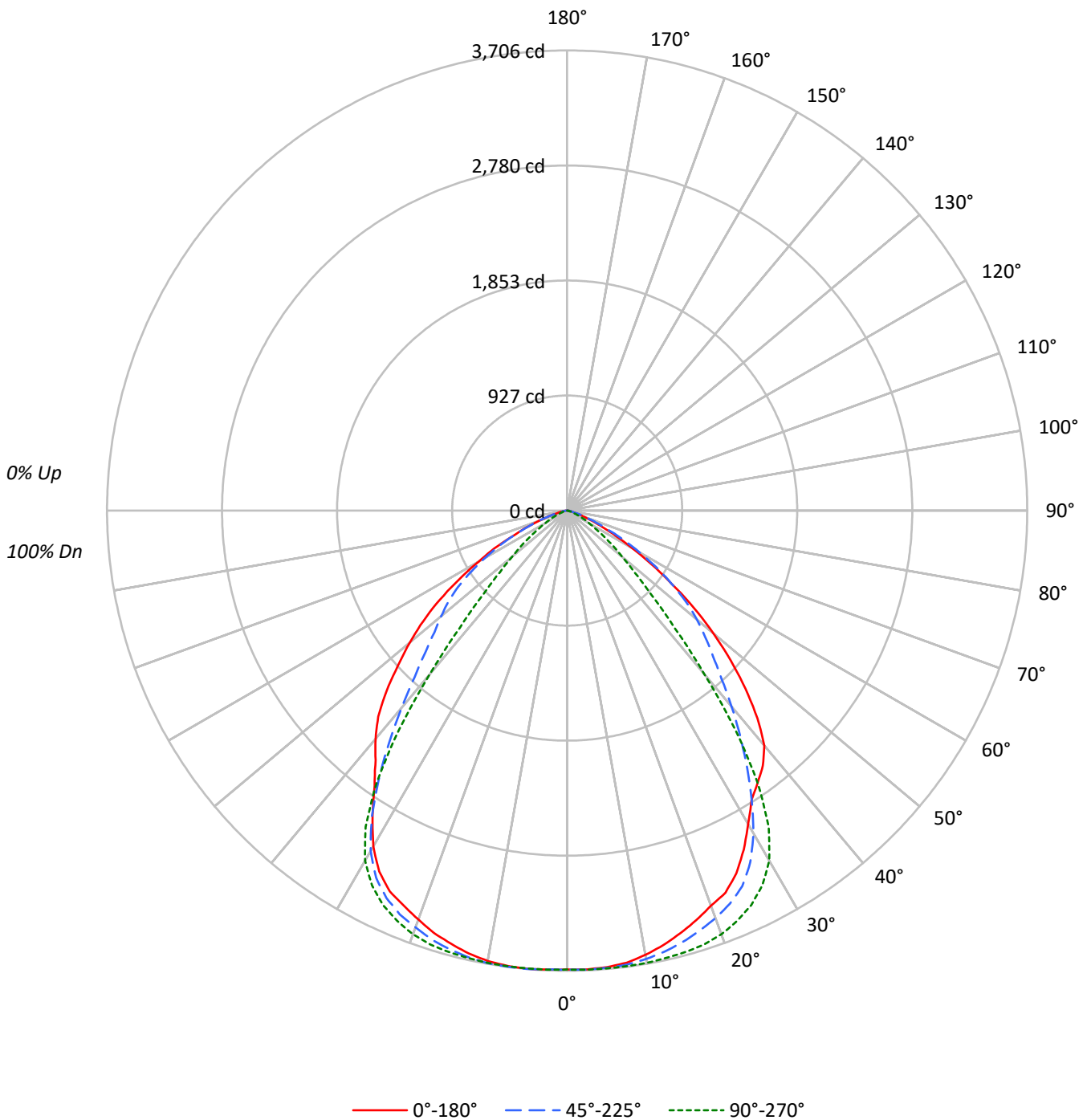
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	352.8	5.0
10°-20°	1024.5	14.6
20°-30°	1555.0	22.2
30°-40°	1633.2	23.3
40°-50°	1224.5	17.5
50°-60°	785.7	11.2
60°-70°	336.1	4.8
70°-80°	79.4	1.1
80°-90°	14.8	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°	2932.3	41.9
0°-40°	4565.6	65.2
0°-60°	6575.7	93.9
0°-90°	7006.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7006.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3696	3696	3696	3696	3696	
5°	3690	3696	3700	3706	3704	351
15°	3524	3597	3681	3657	3611	994
25°	3224	3337	3506	3442	3383	1473
35°	2675	2526	2677	2645	2704	1679
45°	2032	1661	954	1613	2060	1556
55°	1028	1028	355	1071	1252	932
65°	310	365	113	470	478	330
75°	48	56	16	95	93	69
85°	16	10	8	16	22	17
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°	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5
2.5°	3698.5	3702.5	3700.5	3700.5	3698.5	3700.5	3700.5	3704.5	3704.5	3700.5	3698.5
5°	3690.5	3694.5	3694.5	3690.5	3690.5	3700.5	3694.5	3698.5	3698.5	3696.5	3696.5
7.5°	3672.7	3672.7	3680.6	3674.7	3674.7	3680.6	3678.6	3682.6	3686.6	3688.6	3688.6
10°	3633.0	3637.0	3639.0	3639.0	3641.0	3646.9	3650.9	3658.8	3662.8	3666.7	3668.7
12.5°	3583.4	3589.4	3591.3	3589.4	3595.3	3603.2	3613.2	3623.1	3629.1	3637.0	3643.0
15°	3523.9	3523.9	3527.8	3533.8	3537.8	3549.7	3559.6	3571.5	3587.4	3597.3	3607.2
17.5°	3458.4	3462.4	3468.3	3468.3	3476.3	3496.1	3502.1	3519.9	3537.8	3547.7	3567.6
20°	3387.0	3390.9	3396.9	3400.9	3410.8	3426.7	3438.6	3454.4	3474.3	3492.2	3512.0
22.5°	3331.4	3323.5	3327.4	3331.4	3341.4	3355.2	3369.1	3388.9	3408.8	3426.7	3446.5
25°	3224.3	3226.3	3232.2	3236.2	3248.1	3260.0	3275.9	3299.7	3317.5	3337.4	3359.2
27.5°	3079.4	3081.4	3091.3	3091.3	3101.2	3121.1	3131.0	3150.9	3174.7	3194.5	3220.3
30°	2914.8	2918.7	2918.7	2926.7	2932.6	2942.5	2952.4	2972.3	2984.2	3002.1	3037.8
32.5°	2764.0	2767.9	2765.9	2764.0	2758.0	2756.0	2754.0	2758.0	2762.0	2767.9	2781.8
35°	2674.7	2664.7	2656.8	2642.9	2627.1	2607.2	2589.3	2565.5	2543.7	2525.8	2506.0
37.5°	2589.3	2587.3	2575.4	2555.6	2523.8	2488.2	2446.5	2394.9	2343.3	2287.7	2234.2
40°	2470.3	2464.3	2454.4	2426.6	2390.9	2347.3	2291.7	2228.2	2144.9	2059.6	1972.3
42.5°	2267.9	2269.9	2258.0	2236.1	2202.4	2160.7	2103.2	2033.8	1944.5	1843.3	1730.2
45°	2031.8	2031.8	2027.8	2009.9	1986.2	1952.4	1908.8	1851.2	1763.9	1660.7	1539.7
47.5°	1785.7	1787.7	1781.8	1777.8	1767.9	1746.1	1714.3	1670.7	1609.2	1509.9	1388.9
50°	1535.8	1535.8	1545.7	1543.7	1543.7	1535.8	1521.9	1496.1	1442.5	1363.1	1250.0
52.5°	1285.7	1289.7	1295.7	1303.6	1313.5	1329.4	1313.5	1301.6	1267.9	1206.4	1109.2
55°	1027.8	1031.8	1041.7	1055.6	1067.5	1083.4	1087.3	1087.3	1069.4	1027.8	954.4
57.5°	807.6	801.6	809.6	821.5	837.3	853.2	865.1	879.0	877.0	849.2	789.7
60°	607.2	609.1	615.1	627.0	638.9	652.8	668.7	680.6	686.5	672.7	634.9
62.5°	442.5	442.5	450.4	462.3	468.3	488.1	498.0	504.0	509.9	507.9	484.1
65°	309.6	313.5	317.5	323.4	329.4	341.3	347.2	359.1	363.1	365.1	347.2
67.5°	218.3	212.3	216.3	220.2	226.2	234.2	246.0	246.0	252.0	252.0	240.1
70°	138.9	138.9	140.9	146.8	150.8	152.8	156.8	160.7	166.7	164.7	164.7
72.5°	93.3	91.3	93.3	95.3	97.2	103.2	103.2	105.2	109.1	111.1	103.2
75°	47.6	49.6	53.6	51.6	57.5	53.6	55.5	61.5	59.5	55.5	55.5
77.5°	39.7	39.7	39.7	37.7	41.7	41.7	39.7	43.6	41.7	41.7	39.7
80°	27.8	29.8	27.8	25.8	27.8	25.8	25.8	25.8	25.8	25.8	23.8
82.5°	21.8	17.9	19.9	17.9	19.9	19.9	17.9	15.9	15.9	17.9	15.9
85°	15.9	11.9	13.9	13.9	11.9	11.9	11.9	11.9	11.9	9.9	9.9
87.5°	9.9	6.0	6.0	6.0	7.9	7.9	7.9	6.0	7.9	7.9	4.0
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5
2.5°	3702.5	3700.5	3704.5	3702.5	3702.5	3700.5	3702.5	3700.5	3704.5	3696.5	3698.5
5°	3702.5	3698.5	3700.5	3702.5	3704.5	3700.5	3700.5	3700.5	3704.5	3700.5	3702.5
7.5°	3694.5	3692.5	3698.5	3702.5	3700.5	3698.5	3702.5	3700.5	3704.5	3702.5	3706.4
10°	3678.6	3680.6	3684.6	3690.5	3692.5	3694.5	3698.5	3698.5	3704.5	3696.5	3700.5
12.5°	3654.8	3662.8	3672.7	3676.6	3684.6	3684.6	3688.6	3690.5	3694.5	3692.5	3698.5
15°	3625.1	3635.0	3646.9	3656.8	3666.7	3672.7	3678.6	3680.6	3686.6	3680.6	3682.6
17.5°	3589.4	3601.3	3619.1	3631.0	3646.9	3652.9	3660.8	3664.8	3670.7	3666.7	3668.7
20°	3539.7	3553.7	3573.5	3591.3	3601.3	3615.1	3625.1	3631.0	3635.0	3631.0	3633.0
22.5°	3470.3	3490.2	3515.9	3529.8	3549.7	3561.6	3563.6	3577.5	3587.4	3577.5	3581.4
25°	3388.9	3408.8	3428.7	3458.4	3476.3	3490.2	3504.1	3506.0	3515.9	3514.0	3512.0
27.5°	3254.0	3279.9	3313.5	3337.4	3361.2	3383.0	3398.9	3402.8	3412.8	3408.8	3410.8
30°	3069.5	3097.3	3129.1	3166.7	3200.5	3222.3	3242.1	3256.0	3265.9	3260.0	3258.0
32.5°	2807.6	2835.4	2869.1	2906.8	2946.5	2978.2	3002.1	3019.9	3031.8	3027.8	3017.9
35°	2508.0	2515.9	2537.8	2567.5	2601.2	2635.0	2656.8	2676.6	2690.5	2694.5	2694.5
37.5°	2200.5	2174.7	2158.8	2158.8	2178.6	2192.5	2212.3	2224.2	2246.1	2254.0	2260.0
40°	1902.8	1843.3	1787.7	1746.1	1718.3	1716.3	1716.3	1722.2	1742.1	1767.9	1791.7
42.5°	1636.9	1541.7	1456.4	1379.0	1323.5	1291.7	1277.8	1279.8	1295.7	1319.5	1359.1
45°	1424.6	1305.6	1198.4	1105.2	1029.8	980.2	956.4	954.4	966.3	994.1	1037.7
47.5°	1260.0	1132.9	1011.9	904.8	823.4	769.8	742.1	734.2	742.1	767.9	819.5
50°	1123.0	992.1	867.1	756.0	668.7	613.1	587.3	577.4	587.3	609.1	660.7
52.5°	996.0	861.1	744.1	636.9	543.7	496.0	468.3	462.3	468.3	494.0	535.7
55°	849.2	734.2	619.1	511.9	430.6	383.0	361.1	355.2	361.1	384.9	428.6
57.5°	704.4	605.2	504.0	406.7	337.3	295.6	275.8	267.8	281.7	297.6	349.2
60°	569.4	490.1	404.8	319.5	261.9	224.2	208.3	206.3	210.3	230.2	265.9
62.5°	446.5	381.0	313.5	244.1	196.4	180.6	160.7	158.8	162.7	174.6	202.4
65°	321.4	279.8	228.2	178.6	140.9	119.0	111.1	113.1	117.1	125.0	150.8
67.5°	224.2	194.4	158.8	125.0	97.2	87.3	79.4	77.4	79.4	93.3	107.1
70°	150.8	132.9	107.1	95.3	67.5	53.6	55.5	49.6	57.5	57.5	69.4
72.5°	99.2	87.3	71.4	55.5	47.6	37.7	37.7	35.7	39.7	41.7	51.6
75°	51.6	39.7	39.7	27.8	19.9	9.9	17.9	15.9	13.9	15.9	19.9
77.5°	35.7	29.8	27.8	21.8	19.9	15.9	15.9	15.9	15.9	17.9	19.9
80°	21.8	21.8	15.9	13.9	11.9	9.9	11.9	11.9	11.9	11.9	13.9
82.5°	13.9	11.9	11.9	9.9	9.9	7.9	7.9	7.9	7.9	7.9	11.9
85°	11.9	7.9	7.9	6.0	7.9	13.9	6.0	7.9	7.9	7.9	6.0
87.5°	4.0	6.0	6.0	6.0	4.0	2.0	4.0	6.0	6.0	9.9	7.9
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5	3696.5
2.5°	3702.5	3704.5	3704.5	3702.5	3702.5	3698.5	3706.4	3700.5	3702.5	3710.4	3704.5
5°	3706.4	3708.4	3708.4	3706.4	3706.4	3706.4	3708.4	3708.4	3706.4	3704.5	3708.4
7.5°	3714.4	3712.4	3712.4	3708.4	3708.4	3704.5	3708.4	3702.5	3706.4	3702.5	3708.4
10°	3704.5	3706.4	3704.5	3702.5	3702.5	3700.5	3700.5	3694.5	3696.5	3690.5	3694.5
12.5°	3698.5	3696.5	3696.5	3692.5	3688.6	3684.6	3682.6	3676.6	3676.6	3662.8	3668.7
15°	3682.6	3684.6	3678.6	3670.7	3666.7	3656.8	3652.9	3644.9	3637.0	3627.1	3629.1
17.5°	3668.7	3662.8	3654.8	3646.9	3631.0	3623.1	3615.1	3603.2	3599.3	3587.4	3583.4
20°	3627.1	3623.1	3613.2	3599.3	3589.4	3571.5	3563.6	3551.7	3541.7	3529.8	3523.9
22.5°	3573.5	3569.5	3557.6	3543.7	3527.8	3519.9	3512.0	3490.2	3480.2	3468.3	3466.3
25°	3506.0	3500.1	3488.2	3472.3	3464.3	3442.5	3434.6	3418.7	3414.8	3402.8	3400.9
27.5°	3402.8	3394.9	3381.0	3361.2	3347.3	3333.4	3325.5	3313.5	3309.6	3297.7	3295.7
30°	3248.1	3238.1	3210.4	3202.5	3178.6	3164.7	3164.7	3148.9	3150.9	3142.9	3142.9
32.5°	3004.0	2988.2	2966.3	2950.4	2934.6	2926.7	2926.7	2920.7	2924.7	2924.7	2928.6
35°	2680.6	2658.8	2646.9	2637.0	2637.0	2644.9	2668.7	2674.7	2686.6	2696.5	2704.4
37.5°	2265.9	2264.0	2277.8	2289.7	2319.5	2353.2	2394.9	2430.6	2464.3	2488.2	2511.9
40°	1817.5	1867.1	1906.8	1962.4	2008.0	2073.4	2148.8	2210.4	2267.9	2309.6	2353.2
42.5°	1418.7	1482.2	1565.5	1646.8	1728.2	1817.5	1916.7	2002.0	2077.4	2135.0	2180.6
45°	1105.2	1192.5	1293.7	1396.9	1502.0	1613.2	1716.3	1803.6	1883.0	1942.5	1988.1
47.5°	890.9	986.1	1101.2	1214.3	1333.4	1450.4	1565.5	1640.9	1706.4	1754.0	1795.7
50°	736.1	837.3	958.4	1087.3	1206.4	1323.5	1422.6	1496.1	1549.6	1591.3	1617.1
52.5°	615.1	722.2	851.2	980.2	1099.2	1206.4	1295.7	1351.2	1394.9	1424.6	1448.4
55°	507.9	611.1	732.2	853.2	970.3	1071.4	1144.8	1186.5	1220.2	1238.1	1252.0
57.5°	414.7	509.9	621.0	732.2	833.4	916.7	974.2	1015.9	1031.8	1045.7	1043.7
60°	325.4	414.7	515.9	611.1	698.4	765.9	807.6	831.4	843.3	849.2	845.2
62.5°	256.0	337.3	414.7	498.0	561.5	619.1	658.8	658.8	664.7	666.7	672.7
65°	190.5	252.0	319.5	381.0	432.5	470.2	492.1	498.0	506.0	504.0	500.0
67.5°	140.9	186.5	236.1	281.7	317.5	341.3	357.1	371.1	369.1	365.1	363.1
70°	97.2	127.0	170.7	198.4	224.2	248.0	252.0	254.0	256.0	257.9	254.0
72.5°	67.5	89.3	113.1	136.9	152.8	162.7	172.6	174.6	174.6	174.6	172.6
75°	33.7	45.6	67.5	77.4	91.3	95.3	103.2	103.2	109.1	101.2	99.2
77.5°	29.8	35.7	47.6	55.5	61.5	67.5	69.4	75.4	73.4	69.4	71.4
80°	17.9	21.8	29.8	33.7	41.7	43.6	45.6	47.6	45.6	47.6	47.6
82.5°	13.9	15.9	19.9	19.9	25.8	25.8	27.8	27.8	29.8	29.8	29.8
85°	7.9	13.9	11.9	23.8	15.9	15.9	19.9	23.8	19.9	19.9	23.8
87.5°	7.9	7.9	6.0	7.9	7.9	7.9	9.9	11.9	11.9	13.9	11.9
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: P249292

CATALOG NUMBER: LSR8B90D010 EC8B909730 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3696.5	3696.5	3696.5	3696.5
2.5°	3702.5	3706.4	3700.5	3698.5
5°	3708.4	3708.4	3704.5	3704.5
7.5°	3708.4	3708.4	3702.5	3698.5
10°	3692.5	3692.5	3686.6	3682.6
12.5°	3662.8	3662.8	3660.8	3654.8
15°	3625.1	3625.1	3617.1	3611.2
17.5°	3573.5	3577.5	3567.6	3567.6
20°	3517.9	3515.9	3508.0	3504.1
22.5°	3460.4	3456.4	3454.4	3442.5
25°	3398.9	3394.9	3388.9	3383.0
27.5°	3293.7	3291.7	3285.8	3277.9
30°	3133.0	3131.0	3123.1	3123.1
32.5°	2924.7	2922.7	2914.8	2916.8
35°	2708.4	2716.3	2712.4	2704.4
37.5°	2527.8	2533.8	2537.8	2533.8
40°	2377.0	2394.9	2396.9	2400.9
42.5°	2216.3	2240.1	2248.1	2252.0
45°	2023.8	2045.7	2063.5	2059.6
47.5°	1827.4	1843.3	1859.2	1847.3
50°	1638.9	1648.8	1654.8	1654.8
52.5°	1460.4	1460.4	1458.4	1460.4
55°	1256.0	1256.0	1248.1	1252.0
57.5°	1041.7	1045.7	1039.7	1029.8
60°	843.3	833.4	829.4	823.4
62.5°	656.8	656.8	642.9	660.7
65°	492.1	486.1	480.2	478.2
67.5°	357.1	355.2	349.2	347.2
70°	252.0	244.1	242.1	238.1
72.5°	168.7	168.7	164.7	164.7
75°	103.2	93.3	91.3	93.3
77.5°	71.4	69.4	69.4	67.5
80°	47.6	45.6	49.6	43.6
82.5°	29.8	31.8	29.8	31.8
85°	19.9	23.8	21.8	21.8
87.5°	11.9	11.9	11.9	11.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)