

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: P249372

Luminaire Tested: **LSR8B80D010 EC8B80940 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249372  
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: LSR8B80D010 EC8B80940 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7390.0 lumens  
Efficiency: N/A  
Efficacy: 99.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

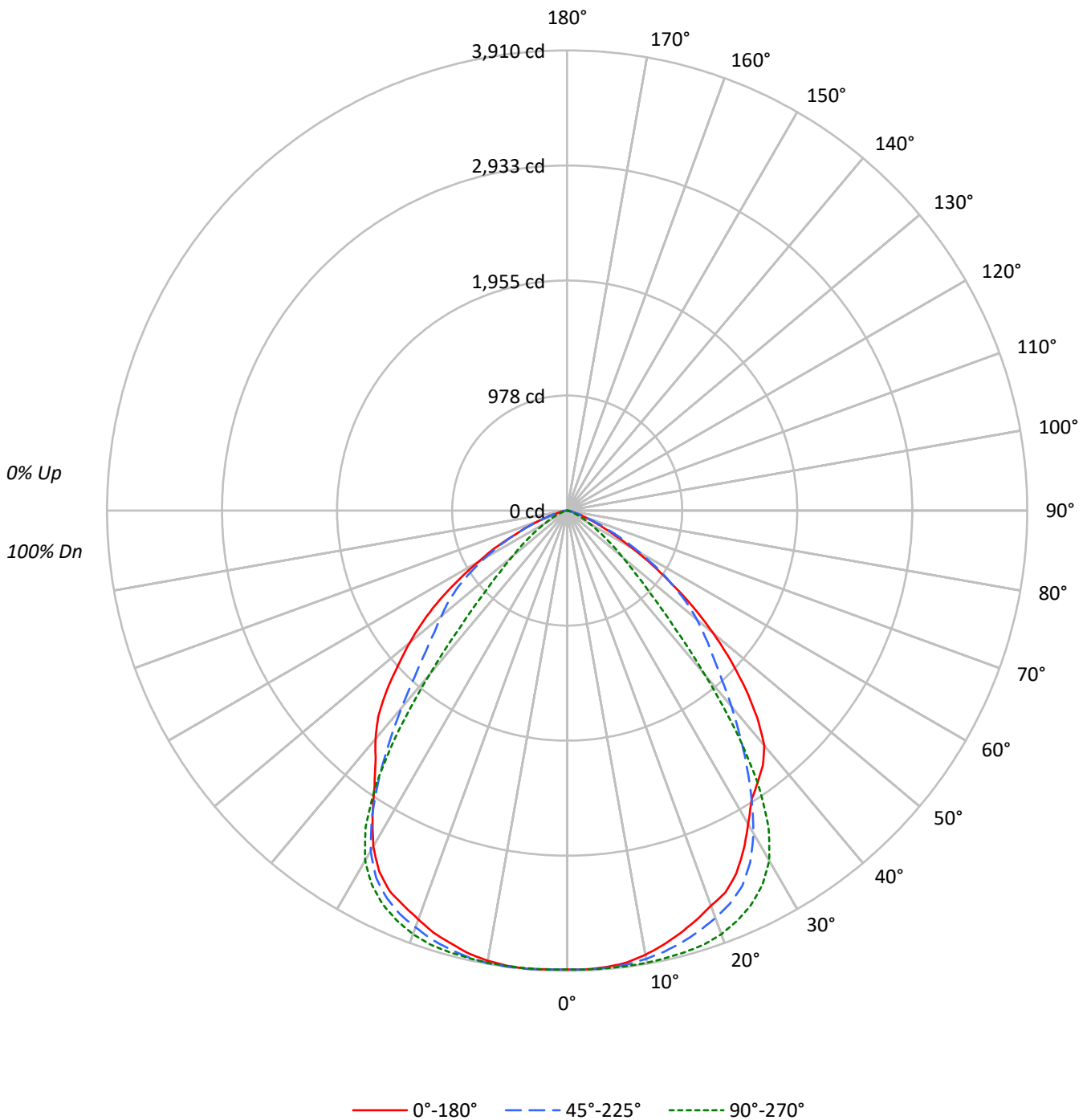
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249372

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0GPH

### Luminous Intensity Polar Plot





TEST NUMBER: P249372

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0GPH

**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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	52	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	120234	120234	120234
5°	120498	120823	120953
10°	119991	122154	121632
15°	118662	123942	121602
20°	117236	125683	121289
25°	115716	125828	121412
30°	109473	122291	117299
35°	106206	106281	107388
40°	104890	73125	101943
45°	93463	43901	94736
50°	77711	29215	83737
55°	58283	20144	70997
60°	39495	13420	53569
65°	23823	8705	36804
70°	13208	4715	22639
75°	5981	1990	11724
80°	5203	2220	8169
85°	5909	2937	8138



TEST NUMBER: P249372

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0GPH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	372.1	5.0
10°-20°	1080.7	14.6
20°-30°	1640.3	22.2
30°-40°	1722.8	23.3
40°-50°	1291.6	17.5
50°-60°	828.7	11.2
60°-70°	354.5	4.8
70°-80°	83.7	1.1
80°-90°	15.6	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°	3093.0	41.9
0°-40°	4815.8	65.2
0°-60°	6936.2	93.9
0°-90°	7390.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7390.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3899	3899	3899	3899	3899	
5°	3893	3899	3903	3910	3908	370
15°	3717	3794	3882	3857	3809	1048
25°	3401	3520	3698	3631	3568	1554
35°	2821	2664	2823	2790	2853	1771
45°	2143	1752	1007	1702	2172	1641
55°	1084	1084	375	1130	1321	983
65°	326	385	119	496	504	349
75°	50	59	17	100	98	73
85°	17	10	8	17	23	18
90°	0	0	0	0	0	



TEST NUMBER: P249372

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0GPH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1
2.5°	3901.2	3905.4	3903.3	3903.3	3901.2	3903.3	3903.3	3907.5	3907.5	3903.3	3901.2
5°	3892.8	3897.0	3897.0	3892.8	3892.8	3903.3	3897.0	3901.2	3901.2	3899.1	3899.1
7.5°	3874.0	3874.0	3882.4	3876.1	3876.1	3882.4	3880.3	3884.5	3888.7	3890.8	3890.8
10°	3832.1	3836.3	3838.4	3838.4	3840.5	3846.8	3851.0	3859.4	3863.5	3867.7	3869.8
12.5°	3779.8	3786.1	3788.2	3786.1	3792.4	3800.7	3811.2	3821.7	3828.0	3836.3	3842.6
15°	3717.0	3717.0	3721.2	3727.5	3731.7	3744.2	3754.7	3767.2	3784.0	3794.5	3804.9
17.5°	3648.0	3652.2	3658.4	3658.4	3666.8	3687.7	3694.0	3712.9	3731.7	3742.1	3763.1
20°	3572.6	3576.8	3583.1	3587.3	3597.7	3614.5	3627.0	3643.8	3664.7	3683.6	3704.5
22.5°	3514.0	3505.7	3509.8	3514.0	3524.5	3539.2	3553.8	3574.7	3595.6	3614.5	3635.4
25°	3401.0	3403.1	3409.4	3413.5	3426.1	3438.7	3455.4	3480.5	3499.4	3520.3	3543.3
27.5°	3248.2	3250.3	3260.8	3260.8	3271.2	3292.2	3302.6	3323.6	3348.7	3369.6	3396.8
30°	3074.5	3078.7	3078.7	3087.1	3093.3	3103.8	3114.3	3135.2	3147.8	3166.6	3204.3
32.5°	2915.5	2919.6	2917.5	2915.5	2909.2	2907.1	2905.0	2909.2	2913.4	2919.6	2934.3
35°	2821.3	2810.8	2802.4	2787.8	2771.0	2750.1	2731.3	2706.2	2683.1	2664.3	2643.4
37.5°	2731.3	2729.2	2716.6	2695.7	2662.2	2624.5	2580.6	2526.2	2471.7	2413.1	2356.7
40°	2605.7	2599.4	2588.9	2559.6	2522.0	2475.9	2417.3	2350.4	2262.4	2172.4	2080.4
42.5°	2392.2	2394.3	2381.7	2358.7	2323.2	2279.2	2218.5	2145.3	2051.1	1944.3	1825.0
45°	2143.2	2143.2	2139.0	2120.1	2095.0	2059.4	2013.4	1952.7	1860.6	1751.8	1624.1
47.5°	1883.6	1885.7	1879.4	1875.3	1864.8	1841.8	1808.3	1762.3	1697.4	1592.7	1465.0
50°	1619.9	1619.9	1630.4	1628.3	1628.3	1619.9	1605.3	1578.0	1521.6	1437.8	1318.6
52.5°	1356.2	1360.4	1366.7	1375.1	1385.5	1402.2	1385.5	1373.0	1337.4	1272.5	1170.0
55°	1084.1	1088.3	1098.8	1113.4	1126.0	1142.8	1146.9	1146.9	1128.1	1084.1	1006.7
57.5°	851.8	845.5	853.9	866.5	883.2	900.0	912.5	927.2	925.1	895.8	833.0
60°	640.4	642.5	648.8	661.4	673.9	688.6	705.3	717.9	724.2	709.5	669.7
62.5°	466.7	466.7	475.1	487.6	493.9	514.9	525.3	531.6	537.9	535.8	510.7
65°	326.5	330.7	334.9	341.2	347.4	360.0	366.3	378.8	383.0	385.1	366.3
67.5°	230.2	223.9	228.1	232.3	238.6	247.0	259.5	259.5	265.8	265.8	253.2
70°	146.5	146.5	148.6	154.9	159.1	161.2	165.4	169.5	175.8	173.7	173.7
72.5°	98.4	96.3	98.4	100.5	102.6	108.8	108.8	110.9	115.1	117.2	108.8
75°	50.2	52.3	56.5	54.4	60.7	56.5	58.6	64.9	62.8	58.6	58.6
77.5°	41.8	41.8	41.8	39.8	43.9	43.9	41.8	46.0	43.9	43.9	41.8
80°	29.3	31.4	29.3	27.2	29.3	27.2	27.2	27.2	27.2	27.2	25.1
82.5°	23.0	18.8	20.9	18.8	20.9	20.9	18.8	16.7	16.7	18.8	16.7
85°	16.7	12.5	14.6	14.6	12.5	12.5	12.5	12.5	12.5	10.4	10.4
87.5°	10.4	6.3	6.3	6.3	8.3	8.3	8.3	6.3	8.3	8.3	4.2
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: P249372

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1
2.5°	3905.4	3903.3	3907.5	3905.4	3905.4	3903.3	3905.4	3903.3	3907.5	3899.1	3901.2
5°	3905.4	3901.2	3903.3	3905.4	3907.5	3903.3	3903.3	3903.3	3907.5	3903.3	3905.4
7.5°	3897.0	3894.9	3901.2	3905.4	3903.3	3901.2	3905.4	3903.3	3907.5	3905.4	3909.6
10°	3880.3	3882.4	3886.6	3892.8	3894.9	3897.0	3901.2	3901.2	3907.5	3899.1	3903.3
12.5°	3855.2	3863.5	3874.0	3878.2	3886.6	3886.6	3890.8	3892.8	3897.0	3894.9	3901.2
15°	3823.8	3834.2	3846.8	3857.3	3867.7	3874.0	3880.3	3882.4	3888.7	3882.4	3884.5
17.5°	3786.1	3798.6	3817.5	3830.0	3846.8	3853.1	3861.4	3865.6	3871.9	3867.7	3869.8
20°	3733.8	3748.4	3769.3	3788.2	3798.6	3813.3	3823.8	3830.0	3834.2	3830.0	3832.1
22.5°	3660.5	3681.5	3708.7	3723.3	3744.2	3756.8	3758.9	3773.5	3784.0	3773.5	3777.7
25°	3574.7	3595.6	3616.6	3648.0	3666.8	3681.5	3696.1	3698.2	3708.7	3706.6	3704.5
27.5°	3432.4	3459.6	3495.2	3520.3	3545.4	3568.4	3585.2	3589.3	3599.8	3595.6	3597.7
30°	3237.7	3267.1	3300.6	3340.3	3375.9	3398.9	3419.8	3434.5	3444.9	3438.7	3436.6
32.5°	2961.5	2990.8	3026.4	3066.1	3108.0	3141.5	3166.6	3185.4	3198.0	3193.8	3183.3
35°	2645.5	2653.8	2676.9	2708.3	2743.8	2779.4	2802.4	2823.3	2838.0	2842.2	2842.2
37.5°	2321.1	2293.9	2277.1	2277.1	2298.0	2312.7	2333.6	2346.2	2369.2	2377.5	2383.8
40°	2007.1	1944.3	1885.7	1841.8	1812.5	1810.4	1810.4	1816.6	1837.6	1864.8	1889.9
42.5°	1726.7	1626.2	1536.2	1454.6	1396.0	1362.5	1347.9	1350.0	1366.7	1391.8	1433.6
45°	1502.7	1377.1	1264.1	1165.8	1086.2	1033.9	1008.8	1006.7	1019.2	1048.5	1094.6
47.5°	1329.0	1195.0	1067.4	954.4	868.6	812.0	782.8	774.4	782.8	809.9	864.4
50°	1184.6	1046.5	914.6	797.4	705.3	646.7	619.5	609.0	619.5	642.5	696.9
52.5°	1050.6	908.3	784.9	671.8	573.5	523.2	493.9	487.6	493.9	521.1	565.1
55°	895.8	774.4	653.0	540.0	454.2	403.9	380.9	374.7	380.9	406.0	452.1
57.5°	743.0	638.3	531.6	429.0	355.8	311.8	290.9	282.5	297.2	313.9	368.4
60°	600.6	517.0	426.9	337.0	276.3	236.5	219.7	217.6	221.8	242.8	280.4
62.5°	470.9	401.8	330.7	257.4	207.2	190.5	169.5	167.5	171.6	184.2	213.5
65°	339.1	295.1	240.7	188.4	148.6	125.6	117.2	119.3	123.5	131.9	159.1
67.5°	236.5	205.1	167.5	131.9	102.6	92.1	83.7	81.6	83.7	98.4	113.0
70°	159.1	140.2	113.0	100.5	71.2	56.5	58.6	52.3	60.7	60.7	73.2
72.5°	104.6	92.1	75.3	58.6	50.2	39.8	39.8	37.7	41.8	43.9	54.4
75°	54.4	41.8	41.8	29.3	20.9	10.4	18.8	16.7	14.6	16.7	20.9
77.5°	37.7	31.4	29.3	23.0	20.9	16.7	16.7	16.7	16.7	18.8	20.9
80°	23.0	23.0	16.7	14.6	12.5	10.4	12.5	12.5	12.5	12.5	14.6
82.5°	14.6	12.5	12.5	10.4	10.4	8.3	8.3	8.3	8.3	8.3	12.5
85°	12.5	8.3	8.3	6.3	8.3	14.6	6.3	8.3	8.3	8.3	6.3
87.5°	4.2	6.3	6.3	6.3	4.2	2.1	4.2	6.3	6.3	10.4	8.3
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: P249372

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1	3899.1
2.5°	3905.4	3907.5	3907.5	3905.4	3905.4	3901.2	3909.6	3903.3	3905.4	3913.8	3907.5
5°	3909.6	3911.7	3911.7	3909.6	3909.6	3909.6	3911.7	3911.7	3909.6	3907.5	3911.7
7.5°	3918.0	3915.9	3915.9	3911.7	3911.7	3907.5	3911.7	3905.4	3909.6	3905.4	3911.7
10°	3907.5	3909.6	3907.5	3905.4	3905.4	3903.3	3903.3	3897.0	3899.1	3892.8	3897.0
12.5°	3901.2	3899.1	3899.1	3894.9	3890.8	3886.6	3884.5	3878.2	3878.2	3863.5	3869.8
15°	3884.5	3886.6	3880.3	3871.9	3867.7	3857.3	3853.1	3844.7	3836.3	3825.9	3828.0
17.5°	3869.8	3863.5	3855.2	3846.8	3830.0	3821.7	3813.3	3800.7	3796.5	3784.0	3779.8
20°	3825.9	3821.7	3811.2	3796.5	3786.1	3767.2	3758.9	3746.3	3735.9	3723.3	3717.0
22.5°	3769.3	3765.1	3752.6	3738.0	3721.2	3712.9	3704.5	3681.5	3671.0	3658.4	3656.3
25°	3698.2	3691.9	3679.4	3662.6	3654.2	3631.2	3622.8	3606.1	3601.9	3589.3	3587.3
27.5°	3589.3	3581.0	3566.3	3545.4	3530.8	3516.1	3507.8	3495.2	3491.0	3478.4	3476.4
30°	3426.1	3415.6	3386.3	3378.0	3352.8	3338.2	3338.2	3321.5	3323.6	3315.2	3315.2
32.5°	3168.7	3151.9	3128.9	3112.2	3095.4	3087.1	3087.1	3080.8	3085.0	3085.0	3089.2
35°	2827.5	2804.5	2791.9	2781.5	2781.5	2789.8	2815.0	2821.3	2833.8	2844.3	2852.7
37.5°	2390.1	2388.0	2402.7	2415.2	2446.6	2482.2	2526.2	2563.8	2599.4	2624.5	2649.6
40°	1917.1	1969.4	2011.3	2069.9	2118.0	2187.1	2266.6	2331.5	2392.2	2436.2	2482.2
42.5°	1496.4	1563.4	1651.3	1737.1	1822.9	1917.1	2021.8	2111.8	2191.3	2252.0	2300.1
45°	1165.8	1257.8	1364.6	1473.4	1584.3	1701.6	1810.4	1902.5	1986.2	2049.0	2097.1
47.5°	939.7	1040.2	1161.6	1280.9	1406.4	1529.9	1651.3	1730.9	1799.9	1850.1	1894.1
50°	776.5	883.2	1010.9	1146.9	1272.5	1396.0	1500.6	1578.0	1634.6	1678.5	1705.7
52.5°	648.8	761.8	897.9	1033.9	1159.5	1272.5	1366.7	1425.3	1471.3	1502.7	1527.8
55°	535.8	644.6	772.3	900.0	1023.4	1130.2	1207.6	1251.6	1287.1	1306.0	1320.6
57.5°	437.4	537.9	655.1	772.3	879.0	967.0	1027.6	1071.6	1088.3	1103.0	1100.9
60°	343.3	437.4	544.2	644.6	736.7	807.8	851.8	876.9	889.5	895.8	891.6
62.5°	270.0	355.8	437.4	525.3	592.3	653.0	694.9	694.9	701.1	703.2	709.5
65°	200.9	265.8	337.0	401.8	456.2	496.0	519.1	525.3	533.7	531.6	527.4
67.5°	148.6	196.7	249.0	297.2	334.9	360.0	376.7	391.4	389.3	385.1	383.0
70°	102.6	134.0	180.0	209.3	236.5	261.6	265.8	267.9	270.0	272.1	267.9
72.5°	71.2	94.2	119.3	144.4	161.2	171.6	182.1	184.2	184.2	184.2	182.1
75°	35.6	48.1	71.2	81.6	96.3	100.5	108.8	108.8	115.1	106.7	104.6
77.5°	31.4	37.7	50.2	58.6	64.9	71.2	73.2	79.5	77.4	73.2	75.3
80°	18.8	23.0	31.4	35.6	43.9	46.0	48.1	50.2	48.1	50.2	50.2
82.5°	14.6	16.7	20.9	20.9	27.2	27.2	29.3	29.3	31.4	31.4	31.4
85°	8.3	14.6	12.5	25.1	16.7	16.7	20.9	25.1	20.9	20.9	25.1
87.5°	8.3	8.3	6.3	8.3	8.3	8.3	10.4	12.5	12.5	14.6	12.5
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: P249372

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3899.1	3899.1	3899.1	3899.1
2.5°	3905.4	3909.6	3903.3	3901.2
5°	3911.7	3911.7	3907.5	3907.5
7.5°	3911.7	3911.7	3905.4	3901.2
10°	3894.9	3894.9	3888.7	3884.5
12.5°	3863.5	3863.5	3861.4	3855.2
15°	3823.8	3823.8	3815.4	3809.1
17.5°	3769.3	3773.5	3763.1	3763.1
20°	3710.8	3708.7	3700.3	3696.1
22.5°	3650.1	3645.9	3643.8	3631.2
25°	3585.2	3581.0	3574.7	3568.4
27.5°	3474.3	3472.2	3465.9	3457.5
30°	3304.7	3302.6	3294.3	3294.3
32.5°	3085.0	3082.9	3074.5	3076.6
35°	2856.8	2865.2	2861.0	2852.7
37.5°	2666.4	2672.7	2676.9	2672.7
40°	2507.3	2526.2	2528.3	2532.5
42.5°	2337.8	2362.9	2371.3	2375.4
45°	2134.8	2157.8	2176.6	2172.4
47.5°	1927.6	1944.3	1961.1	1948.5
50°	1728.8	1739.2	1745.5	1745.5
52.5°	1540.4	1540.4	1538.3	1540.4
55°	1324.8	1324.8	1316.5	1320.6
57.5°	1098.8	1103.0	1096.7	1086.2
60°	889.5	879.0	874.8	868.6
62.5°	692.8	692.8	678.1	696.9
65°	519.1	512.8	506.5	504.4
67.5°	376.7	374.7	368.4	366.3
70°	265.8	257.4	255.3	251.1
72.5°	177.9	177.9	173.7	173.7
75°	108.8	98.4	96.3	98.4
77.5°	75.3	73.2	73.2	71.2
80°	50.2	48.1	52.3	46.0
82.5°	31.4	33.5	31.4	33.5
85°	20.9	25.1	23.0	23.0
87.5°	12.5	12.5	12.5	12.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)