

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: P248419

Luminaire Tested: **LSR8B90D010 EC8B909727 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248419
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B90D010 EC8B909727 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE 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: 6898.0 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

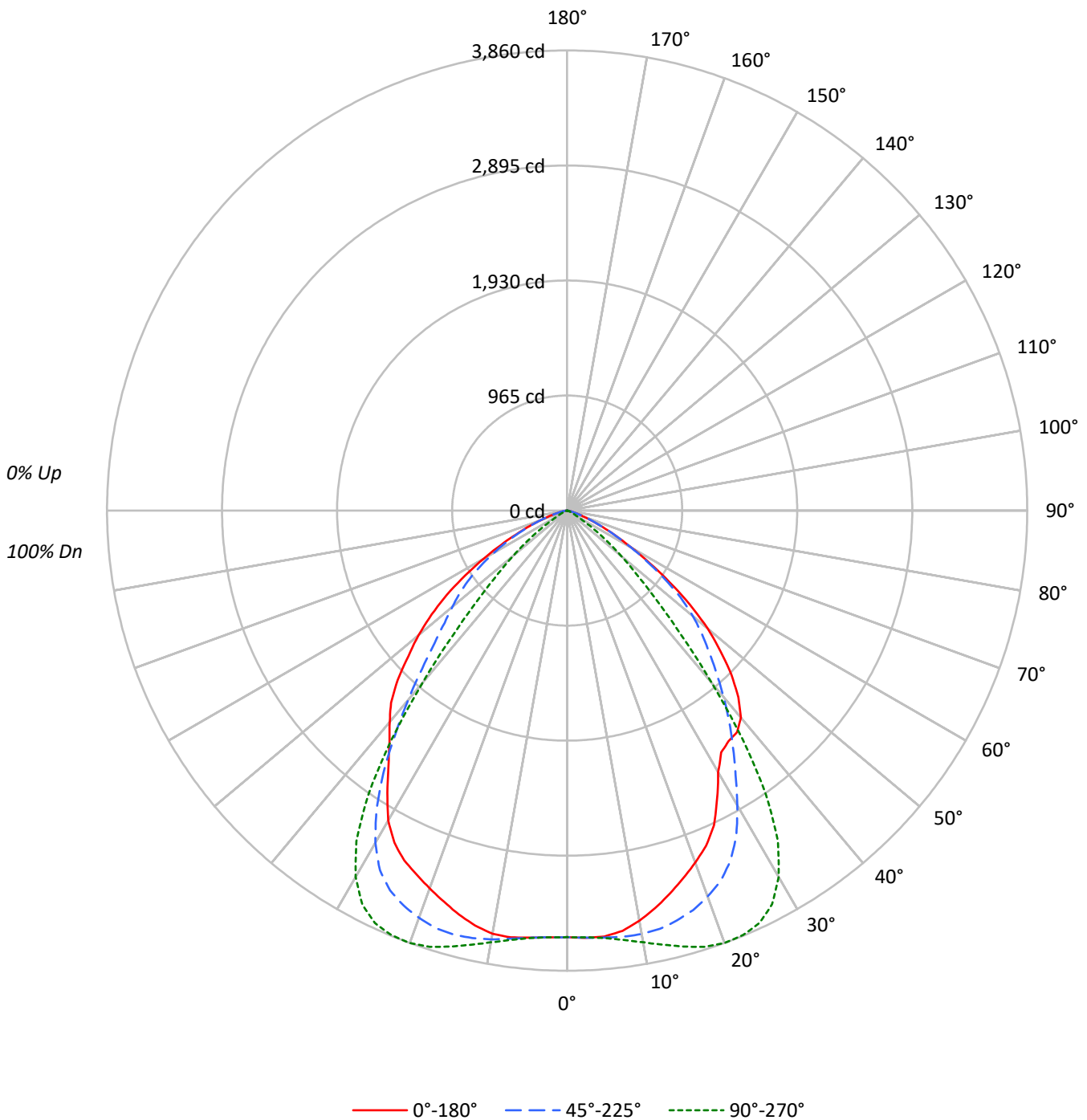
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	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°	344.1	5.0
10°-20°	1019.5	14.8
20°-30°	1555.3	22.5
30°-40°	1623.0	23.5
40°-50°	1219.1	17.7
50°-60°	750.1	10.9
60°-70°	305.2	4.4
70°-80°	71.9	1.0
80°-90°	9.9	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°	2918.9	42.3
0°-40°	4541.8	65.8
0°-60°	6510.9	94.4
0°-90°	6898.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6898.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3578	3578	3578	3578	3578	
5°	3586	3596	3599	3596	3596	339
15°	3326	3560	3786	3681	3508	937
25°	2914	3240	3818	3516	3237	1325
35°	2361	2427	2908	2688	2612	1491
45°	1949	1687	1052	1571	2010	1487
55°	1052	999	275	999	1233	946
65°	329	332	42	446	473	343
75°	57	57	8	101	104	69
85°	6	6	2	13	17	8
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°	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4
2.5°	3588.0	3582.2	3588.0	3588.0	3589.9	3586.1	3588.0	3589.9	3586.1	3586.1	3586.1
5°	3586.1	3582.2	3586.1	3584.2	3588.0	3588.0	3591.8	3591.8	3595.5	3595.5	3601.3
7.5°	3555.7	3548.1	3555.7	3561.4	3565.1	3572.8	3582.2	3589.9	3597.4	3605.1	3614.5
10°	3493.0	3493.0	3498.7	3510.1	3521.5	3534.8	3551.9	3570.9	3589.9	3606.9	3624.0
12.5°	3415.1	3409.4	3420.8	3436.0	3453.1	3474.0	3500.6	3529.1	3559.5	3593.6	3620.3
15°	3325.8	3320.1	3333.4	3348.6	3369.5	3399.9	3432.2	3470.2	3513.9	3559.5	3603.2
17.5°	3234.7	3232.8	3246.0	3267.0	3284.1	3316.3	3358.1	3403.7	3453.1	3513.9	3570.9
20°	3141.6	3139.7	3153.0	3170.1	3192.9	3223.3	3265.1	3318.2	3377.1	3445.5	3512.0
22.5°	3044.7	3046.6	3058.0	3077.0	3096.0	3128.3	3172.0	3225.2	3289.7	3363.8	3437.9
25°	2913.7	2904.2	2919.4	2938.4	2970.6	2997.2	3039.0	3096.0	3162.5	3240.4	3327.8
27.5°	2723.7	2721.8	2735.1	2752.2	2780.7	2813.0	2858.6	2917.5	2987.7	3073.2	3158.7
30°	2533.8	2537.6	2543.3	2560.4	2579.4	2611.7	2657.3	2706.7	2773.1	2854.8	2946.0
32.5°	2404.6	2404.6	2412.2	2423.6	2436.9	2454.0	2486.3	2522.4	2573.7	2630.7	2697.1
35°	2360.9	2353.4	2360.9	2362.8	2364.7	2368.6	2374.2	2385.7	2402.7	2427.4	2452.1
37.5°	2342.0	2336.3	2336.3	2328.7	2319.2	2307.8	2292.6	2275.5	2256.5	2231.8	2212.8
40°	2267.9	2264.1	2260.3	2252.7	2231.8	2209.0	2184.3	2144.4	2100.7	2039.9	1979.2
42.5°	2125.4	2121.6	2119.7	2104.5	2085.5	2058.9	2030.4	1988.7	1933.6	1855.7	1768.3
45°	1948.8	1941.2	1935.5	1922.2	1908.9	1886.1	1859.5	1821.5	1766.4	1686.7	1582.2
47.5°	1743.7	1739.8	1737.9	1732.3	1719.0	1705.6	1688.6	1658.2	1608.8	1532.8	1424.6
50°	1536.6	1529.0	1532.8	1530.9	1525.2	1515.7	1504.3	1483.4	1445.4	1377.1	1278.3
52.5°	1299.2	1299.2	1297.3	1303.0	1304.9	1303.0	1304.9	1282.1	1249.8	1198.5	1114.9
55°	1052.2	1052.2	1058.0	1065.6	1073.2	1075.1	1073.2	1063.7	1040.9	999.1	925.0
57.5°	820.5	816.8	828.1	839.5	847.1	854.7	849.0	841.4	828.1	793.9	737.0
60°	624.9	624.9	632.5	640.1	647.7	655.3	653.4	651.5	640.1	617.3	571.7
62.5°	459.6	461.5	461.5	467.3	474.8	482.5	488.1	482.5	476.7	461.5	431.1
65°	328.6	326.7	328.6	334.3	340.0	347.6	351.4	349.5	343.8	332.4	309.6
67.5°	220.3	218.4	226.0	227.9	231.7	239.3	237.4	239.3	237.4	227.9	209.0
70°	144.4	140.5	144.4	142.4	148.2	150.1	153.8	155.7	153.8	148.2	142.4
72.5°	89.3	87.4	89.3	91.2	93.1	94.9	98.8	98.8	96.9	93.1	85.5
75°	57.0	51.3	53.2	49.4	53.2	53.2	57.0	58.9	57.0	57.0	53.2
77.5°	34.2	34.2	34.2	34.2	34.2	34.2	34.2	36.1	38.0	34.2	32.3
80°	17.1	17.1	19.0	19.0	19.0	20.9	19.0	19.0	19.0	20.9	15.2
82.5°	13.3	11.4	11.4	11.4	13.3	11.4	11.4	11.4	11.4	11.4	11.4
85°	5.7	7.6	5.7	3.8	5.7	5.7	7.6	5.7	5.7	5.7	7.6
87.5°	1.9	1.9	0.0	0.0	0.0	1.9	0.0	1.9	1.9	3.8	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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4
2.5°	3588.0	3584.2	3584.2	3582.2	3586.1	3582.2	3584.2	3582.2	3582.2	3586.1	3582.2
5°	3601.3	3603.2	3599.4	3597.4	3603.2	3603.2	3603.2	3599.4	3599.4	3601.3	3599.4
7.5°	3620.3	3624.0	3625.9	3627.8	3631.7	3633.6	3633.6	3631.7	3629.7	3635.5	3627.8
10°	3641.1	3646.8	3658.2	3664.0	3673.4	3673.4	3677.2	3677.2	3673.4	3677.2	3675.3
12.5°	3633.6	3667.7	3686.7	3700.0	3713.3	3724.7	3728.5	3730.4	3728.5	3736.1	3728.5
15°	3646.8	3675.3	3705.7	3728.5	3753.2	3766.5	3770.3	3785.5	3789.3	3791.2	3779.8
17.5°	3625.9	3677.2	3709.5	3743.7	3779.8	3804.5	3827.3	3836.8	3838.7	3842.5	3827.3
20°	3578.4	3635.5	3684.8	3734.2	3776.0	3814.0	3833.0	3859.6	3852.0	3867.2	3846.3
22.5°	3513.9	3578.4	3641.1	3705.7	3749.4	3795.0	3834.9	3853.9	3863.4	3863.4	3840.6
25°	3411.3	3487.3	3555.7	3622.1	3688.6	3743.7	3789.3	3817.8	3823.5	3821.6	3795.0
27.5°	3251.8	3333.4	3413.2	3489.2	3570.9	3635.5	3688.6	3722.8	3732.3	3732.3	3703.8
30°	3031.4	3118.8	3196.7	3287.8	3371.4	3443.6	3517.7	3548.1	3565.1	3565.1	3532.9
32.5°	2769.3	2843.4	2915.6	3004.8	3096.0	3177.7	3248.0	3289.7	3310.6	3308.7	3280.3
35°	2484.4	2520.5	2575.6	2642.1	2723.7	2799.7	2868.1	2908.0	2944.1	2942.1	2915.6
37.5°	2199.5	2190.0	2195.7	2220.4	2271.7	2324.9	2378.0	2416.1	2446.4	2459.7	2454.0
40°	1920.3	1870.9	1823.4	1806.3	1810.1	1829.1	1857.6	1886.1	1920.3	1937.4	1945.0
42.5°	1669.6	1586.0	1502.4	1439.7	1403.6	1392.3	1405.5	1415.0	1435.9	1460.6	1485.3
45°	1468.2	1356.2	1246.0	1149.1	1088.4	1052.2	1044.7	1052.2	1063.7	1088.4	1120.7
47.5°	1303.0	1171.9	1048.5	940.2	850.9	803.5	790.2	786.4	797.7	820.5	864.2
50°	1156.7	1025.7	888.9	763.5	670.5	617.3	598.3	590.7	604.0	621.1	661.0
52.5°	997.2	868.0	727.5	605.9	509.0	454.0	433.1	421.7	429.2	452.1	491.9
55°	824.3	704.7	577.4	452.1	359.0	307.7	283.0	275.4	283.0	307.7	347.6
57.5°	651.5	550.8	444.4	326.7	243.1	191.8	167.1	159.5	180.5	189.9	231.7
60°	509.0	427.4	336.2	239.3	167.1	127.2	102.6	96.9	106.4	123.4	157.6
62.5°	381.8	330.5	258.3	170.9	123.4	81.7	68.4	62.7	68.4	81.7	108.3
65°	277.3	237.4	180.5	125.3	83.6	60.8	45.6	41.8	47.5	57.0	79.8
67.5°	189.9	159.5	125.3	87.4	57.0	38.0	32.3	32.3	34.2	41.8	58.9
70°	123.4	104.5	79.8	57.0	38.0	28.5	24.7	20.9	24.7	30.4	39.9
72.5°	77.9	66.5	51.3	39.9	28.5	20.9	17.1	15.2	19.0	22.8	30.4
75°	47.5	36.1	26.6	20.9	15.2	15.2	15.2	7.6	9.5	15.2	19.0
77.5°	28.5	24.7	20.9	17.1	13.3	7.6	7.6	7.6	9.5	11.4	17.1
80°	15.2	13.3	9.5	9.5	7.6	5.7	7.6	5.7	3.8	9.5	11.4
82.5°	9.5	7.6	7.6	7.6	9.5	3.8	5.7	3.8	5.7	7.6	5.7
85°	5.7	5.7	5.7	3.8	9.5	3.8	3.8	1.9	1.9	3.8	3.8
87.5°	0.0	1.9	1.9	0.0	1.9	0.0	1.9	1.9	1.9	1.9	1.9
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°	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4	3578.4
2.5°	3584.2	3582.2	3584.2	3582.2	3582.2	3582.2	3584.2	3584.2	3582.2	3582.2	3586.1
5°	3599.4	3599.4	3599.4	3597.4	3595.5	3595.5	3599.4	3599.4	3593.6	3599.4	3599.4
7.5°	3631.7	3625.9	3631.7	3624.0	3620.3	3622.1	3624.0	3620.3	3616.5	3618.4	3618.4
10°	3673.4	3667.7	3667.7	3662.0	3656.3	3652.5	3648.8	3639.2	3629.7	3627.8	3620.3
12.5°	3722.8	3713.3	3707.6	3696.2	3686.7	3673.4	3662.0	3646.8	3627.8	3614.5	3601.3
15°	3772.2	3757.0	3743.7	3724.7	3703.8	3681.0	3656.3	3631.7	3601.3	3574.7	3551.9
17.5°	3812.1	3791.2	3766.5	3736.1	3705.7	3671.5	3635.5	3599.4	3555.7	3521.5	3494.9
20°	3825.4	3795.0	3762.7	3722.8	3682.9	3635.5	3589.9	3542.4	3493.0	3456.9	3426.5
22.5°	3808.3	3772.2	3732.3	3690.5	3637.3	3586.1	3532.9	3477.8	3434.1	3384.7	3356.2
25°	3760.8	3717.1	3673.4	3624.0	3572.8	3515.8	3458.8	3401.8	3348.6	3322.0	3286.0
27.5°	3664.0	3616.5	3569.0	3517.7	3458.8	3401.8	3342.9	3287.8	3242.3	3206.2	3185.3
30°	3493.0	3437.9	3382.8	3327.8	3276.4	3217.6	3162.5	3116.9	3071.3	3042.8	3021.9
32.5°	3230.9	3181.5	3126.4	3073.2	3025.8	2976.4	2930.8	2890.9	2858.6	2839.6	2824.4
35°	2877.6	2828.2	2786.4	2748.4	2708.5	2687.7	2659.2	2636.3	2623.1	2615.5	2613.6
37.5°	2433.1	2404.6	2391.3	2383.8	2376.1	2370.5	2374.2	2383.8	2391.3	2404.6	2419.8
40°	1958.3	1983.0	1990.6	2017.2	2041.8	2074.1	2110.2	2152.0	2186.2	2229.9	2260.3
42.5°	1525.2	1570.8	1624.0	1681.0	1741.7	1800.6	1872.8	1939.3	2000.1	2055.1	2102.6
45°	1171.9	1242.2	1322.0	1403.6	1485.3	1570.8	1658.2	1739.8	1812.0	1870.9	1920.3
47.5°	913.6	991.5	1094.1	1194.7	1293.5	1394.2	1491.0	1576.5	1637.3	1694.2	1737.9
50°	723.7	812.9	925.0	1040.9	1149.1	1255.5	1358.0	1437.8	1498.6	1544.2	1576.5
52.5°	560.3	666.7	780.6	902.2	1018.1	1133.9	1228.9	1303.0	1352.4	1392.3	1416.9
55°	417.9	522.3	643.9	769.3	887.0	999.1	1088.4	1153.0	1196.6	1219.4	1232.7
57.5°	302.0	397.0	518.5	643.9	750.2	856.6	928.8	987.7	1012.4	1025.7	1031.4
60°	220.3	307.7	416.0	524.2	624.9	710.4	773.1	812.9	831.9	839.5	837.6
62.5°	161.5	237.4	330.5	421.7	503.3	573.6	623.0	649.6	659.1	662.9	657.2
65°	123.4	182.3	262.1	332.4	395.1	446.3	482.5	499.6	505.2	503.3	499.6
67.5°	91.2	136.8	195.7	248.8	294.4	334.3	353.3	368.5	372.3	366.6	360.9
70°	64.6	100.7	142.4	178.6	212.7	235.5	256.4	258.3	258.3	256.4	252.6
72.5°	45.6	70.3	96.9	121.6	142.4	159.5	167.1	172.8	170.9	169.0	165.3
75°	30.4	43.7	70.3	76.0	94.9	100.7	108.3	108.3	110.1	104.5	104.5
77.5°	19.0	30.4	41.8	49.4	57.0	64.6	68.4	68.4	70.3	68.4	68.4
80°	11.4	19.0	22.8	34.2	34.2	39.9	41.8	43.7	39.9	45.6	39.9
82.5°	7.6	11.4	17.1	17.1	20.9	24.7	24.7	26.6	26.6	24.7	24.7
85°	5.7	7.6	9.5	11.4	11.4	13.3	11.4	11.4	13.3	15.2	13.3
87.5°	1.9	3.8	1.9	3.8	3.8	7.6	5.7	5.7	5.7	7.6	7.6
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: P248419

CATALOG NUMBER: LSR8B90D010 EC8B909727 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3578.4	3578.4	3578.4	3578.4
2.5°	3582.2	3584.2	3582.2	3582.2
5°	3599.4	3597.4	3599.4	3595.5
7.5°	3612.6	3612.6	3610.7	3610.7
10°	3612.6	3605.1	3605.1	3605.1
12.5°	3584.2	3574.7	3569.0	3565.1
15°	3534.8	3517.7	3510.1	3508.2
17.5°	3470.2	3455.0	3445.5	3439.8
20°	3396.1	3380.9	3369.5	3371.4
22.5°	3331.5	3314.5	3306.8	3303.0
25°	3267.0	3246.0	3240.4	3236.6
27.5°	3162.5	3151.1	3145.4	3139.7
30°	3002.9	2997.2	2987.7	3001.0
32.5°	2818.7	2809.2	2801.6	2807.3
35°	2615.5	2609.8	2615.5	2611.7
37.5°	2429.3	2435.0	2442.6	2446.4
40°	2283.1	2304.0	2311.6	2315.3
42.5°	2136.8	2161.5	2176.7	2186.2
45°	1956.4	1981.0	1998.1	2009.6
47.5°	1770.2	1791.1	1808.2	1806.3
50°	1601.2	1612.6	1620.2	1627.8
52.5°	1430.2	1430.2	1432.1	1432.1
55°	1236.5	1232.7	1230.8	1232.7
57.5°	1023.8	1020.0	1018.1	1012.4
60°	830.0	818.7	811.0	811.0
62.5°	649.6	636.3	630.6	628.7
65°	488.1	486.2	474.8	472.9
67.5°	353.3	345.7	338.1	340.0
70°	248.8	237.4	237.4	233.6
72.5°	161.5	155.7	153.8	153.8
75°	100.7	100.7	96.9	104.5
77.5°	66.5	66.5	64.6	66.5
80°	39.9	39.9	39.9	38.0
82.5°	24.7	26.6	24.7	24.7
85°	13.3	15.2	11.4	17.1
87.5°	7.6	9.5	7.6	9.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)