

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: P248428

Luminaire Tested: **LSR8B90D010 EC8B909730 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248428
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 EC8B909730 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7298.0 lumens
Efficiency: N/A
Efficacy: 84.8 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

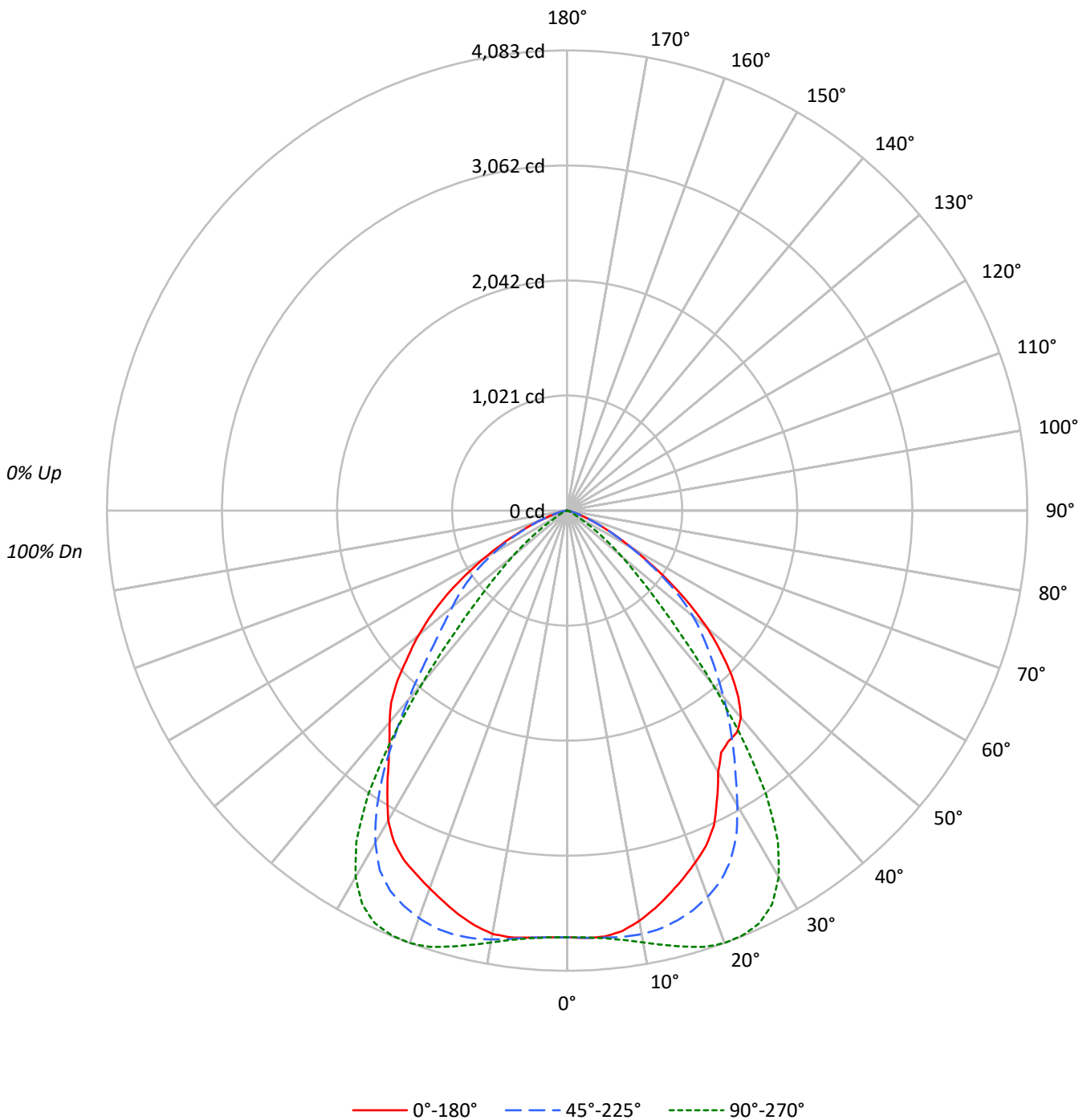
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	364.1	5.0
10°-20°	1078.6	14.8
20°-30°	1645.5	22.5
30°-40°	1717.1	23.5
40°-50°	1289.7	17.7
50°-60°	793.6	10.9
60°-70°	322.9	4.4
70°-80°	76.1	1.0
80°-90°	10.5	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°	3088.1	42.3
0°-40°	4805.2	65.8
0°-60°	6888.5	94.4
0°-90°	7298.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7298.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3786	3786	3786	3786	3786	
5°	3794	3804	3808	3804	3804	359
15°	3519	3766	4005	3894	3712	991
25°	3083	3428	4039	3720	3424	1401
35°	2498	2568	3077	2844	2763	1577
45°	2062	1784	1113	1662	2126	1573
55°	1113	1057	291	1057	1304	1001
65°	348	352	44	472	500	363
75°	60	60	8	106	110	73
85°	6	6	2	14	18	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°	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9
2.5°	3796.0	3790.0	3796.0	3796.0	3798.0	3794.0	3796.0	3798.0	3794.0	3794.0	3794.0
5°	3794.0	3790.0	3794.0	3792.0	3796.0	3796.0	3800.1	3800.1	3804.0	3804.0	3810.1
7.5°	3761.9	3753.8	3761.9	3767.9	3771.9	3779.9	3790.0	3798.0	3806.1	3814.1	3824.1
10°	3695.5	3695.5	3701.6	3713.6	3725.7	3739.7	3757.8	3777.9	3798.0	3816.1	3834.2
12.5°	3613.2	3607.1	3619.2	3635.2	3653.3	3675.5	3703.6	3733.7	3765.9	3802.0	3830.2
15°	3518.7	3512.7	3526.7	3542.8	3564.9	3597.1	3631.3	3671.4	3717.6	3765.9	3812.1
17.5°	3422.2	3420.2	3434.3	3456.4	3474.5	3508.6	3552.9	3601.1	3653.3	3717.6	3777.9
20°	3323.8	3321.8	3335.8	3353.9	3378.0	3410.2	3454.4	3510.6	3572.9	3645.3	3715.6
22.5°	3221.3	3223.3	3235.3	3255.4	3275.6	3309.7	3355.9	3412.2	3480.5	3558.9	3637.3
25°	3082.6	3072.6	3088.7	3108.8	3142.9	3171.0	3215.3	3275.6	3345.9	3428.3	3520.7
27.5°	2881.7	2879.6	2893.8	2911.8	2941.9	2976.1	3024.3	3086.6	3161.0	3251.4	3341.8
30°	2680.7	2684.7	2690.8	2708.9	2728.9	2763.1	2811.3	2863.6	2933.9	3020.3	3116.8
32.5°	2544.1	2544.1	2552.1	2564.2	2578.2	2596.3	2630.5	2668.7	2722.9	2783.2	2853.5
35°	2497.8	2489.8	2497.8	2499.9	2501.9	2505.9	2511.9	2524.0	2542.0	2568.2	2594.3
37.5°	2477.8	2471.7	2471.7	2463.7	2453.6	2441.6	2425.5	2407.4	2387.4	2361.2	2341.1
40°	2399.4	2395.4	2391.3	2383.3	2361.2	2337.1	2310.9	2268.8	2222.5	2158.2	2094.0
42.5°	2248.7	2244.7	2242.6	2226.6	2206.5	2178.3	2148.2	2104.0	2045.7	1963.3	1870.9
45°	2061.8	2053.7	2047.7	2033.7	2019.6	1995.5	1967.3	1927.1	1868.9	1784.5	1673.9
47.5°	1844.8	1840.7	1838.7	1832.7	1818.7	1804.5	1786.5	1754.3	1702.1	1621.7	1507.2
50°	1625.7	1617.7	1621.7	1619.7	1613.7	1603.6	1591.5	1569.5	1529.2	1456.9	1352.4
52.5°	1374.5	1374.5	1372.5	1378.5	1380.5	1378.5	1380.5	1356.5	1322.3	1268.0	1179.6
55°	1113.3	1113.3	1119.3	1127.4	1135.4	1137.4	1135.4	1125.4	1101.2	1057.0	978.6
57.5°	868.1	864.1	876.2	888.2	896.3	904.3	898.2	890.2	876.2	840.0	779.7
60°	661.1	661.1	669.2	677.2	685.2	693.3	691.3	689.3	677.2	653.1	604.9
62.5°	486.3	488.3	488.3	494.4	502.4	510.4	516.4	510.4	504.4	488.3	456.2
65°	347.6	345.6	347.6	353.7	359.7	367.7	371.8	369.8	363.7	351.7	327.6
67.5°	233.1	231.1	239.1	241.1	245.2	253.2	251.2	253.2	251.2	241.1	221.1
70°	152.7	148.7	152.7	150.7	156.8	158.8	162.8	164.8	162.8	156.8	150.7
72.5°	94.5	92.4	94.5	96.5	98.5	100.5	104.5	104.5	102.5	98.5	90.4
75°	60.3	54.2	56.3	52.3	56.3	56.3	60.3	62.3	60.3	60.3	56.3
77.5°	36.2	36.2	36.2	36.2	36.2	36.2	36.2	38.2	40.2	36.2	34.2
80°	18.1	18.1	20.1	20.1	20.1	22.1	20.1	20.1	20.1	22.1	16.1
82.5°	14.1	12.0	12.0	12.0	14.1	12.0	12.0	12.0	12.0	12.0	12.0
85°	6.0	8.0	6.0	4.0	6.0	6.0	8.0	6.0	6.0	6.0	8.0
87.5°	2.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	4.0	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9
2.5°	3796.0	3792.0	3792.0	3790.0	3794.0	3790.0	3792.0	3790.0	3790.0	3794.0	3790.0
5°	3810.1	3812.1	3808.1	3806.1	3812.1	3812.1	3812.1	3808.1	3808.1	3810.1	3808.1
7.5°	3830.2	3834.2	3836.2	3838.2	3842.2	3844.3	3844.3	3842.2	3840.2	3846.3	3838.2
10°	3852.3	3858.3	3870.4	3876.4	3886.4	3886.4	3890.5	3890.5	3886.4	3890.5	3888.5
12.5°	3844.3	3880.4	3900.5	3914.6	3928.6	3940.7	3944.7	3946.7	3944.7	3952.8	3944.7
15°	3858.3	3888.5	3920.6	3944.7	3970.8	3984.9	3988.9	4005.0	4009.0	4011.0	3999.0
17.5°	3836.2	3890.5	3924.6	3960.8	3999.0	4025.1	4049.2	4059.3	4061.3	4065.3	4049.2
20°	3785.9	3846.3	3898.5	3950.8	3995.0	4035.1	4055.2	4083.4	4075.4	4091.4	4069.3
22.5°	3717.6	3785.9	3852.3	3920.6	3966.8	4015.1	4057.3	4077.3	4087.4	4087.4	4063.3
25°	3609.1	3689.5	3761.9	3832.2	3902.5	3960.8	4009.0	4039.2	4045.2	4043.2	4015.1
27.5°	3440.3	3526.7	3611.1	3691.5	3777.9	3846.3	3902.5	3938.7	3948.7	3948.7	3918.6
30°	3207.2	3299.7	3382.1	3478.5	3566.9	3643.3	3721.7	3753.8	3771.9	3771.9	3737.8
32.5°	2929.9	3008.3	3084.6	3179.1	3275.6	3362.0	3436.3	3480.5	3502.6	3500.6	3470.5
35°	2628.5	2666.6	2725.0	2795.3	2881.7	2962.1	3034.4	3076.6	3114.8	3112.8	3084.6
37.5°	2327.0	2317.0	2323.0	2349.1	2403.4	2459.7	2515.9	2556.2	2588.3	2602.4	2596.3
40°	2031.7	1979.4	1929.1	1911.1	1915.1	1935.2	1965.3	1995.5	2031.7	2049.7	2057.8
42.5°	1766.4	1678.0	1589.5	1523.2	1485.0	1473.0	1487.0	1497.1	1519.2	1545.3	1571.5
45°	1553.4	1434.8	1318.2	1215.8	1151.5	1113.3	1105.2	1113.3	1125.4	1151.5	1185.6
47.5°	1378.5	1239.9	1109.3	994.7	900.3	850.1	836.0	832.0	844.0	868.1	914.3
50°	1223.8	1085.1	940.5	807.8	709.4	653.1	633.0	625.0	639.0	657.1	699.3
52.5°	1055.0	918.3	769.7	641.0	538.6	480.3	458.2	446.1	454.1	478.3	520.5
55°	872.1	745.5	610.9	478.3	379.8	325.6	299.4	291.4	299.4	325.6	367.7
57.5°	689.3	582.8	470.2	345.6	257.2	203.0	176.8	168.8	190.9	201.0	245.2
60°	538.6	452.2	355.7	253.2	176.8	134.6	108.5	102.5	112.5	130.6	166.8
62.5°	403.9	349.6	273.3	180.8	130.6	86.4	72.3	66.3	72.3	86.4	114.6
65°	293.4	251.2	190.9	132.6	88.4	64.3	48.2	44.2	50.3	60.3	84.4
67.5°	201.0	168.8	132.6	92.4	60.3	40.2	34.2	34.2	36.2	44.2	62.3
70°	130.6	110.5	84.4	60.3	40.2	30.1	26.1	22.1	26.1	32.2	42.2
72.5°	82.4	70.3	54.2	42.2	30.1	22.1	18.1	16.1	20.1	24.1	32.2
75°	50.3	38.2	28.1	22.1	16.1	16.1	16.1	8.0	10.0	16.1	20.1
77.5°	30.1	26.1	22.1	18.1	14.1	8.0	8.0	8.0	10.0	12.0	18.1
80°	16.1	14.1	10.0	10.0	8.0	6.0	8.0	6.0	4.0	10.0	12.0
82.5°	10.0	8.0	8.0	8.0	10.0	4.0	6.0	4.0	6.0	8.0	6.0
85°	6.0	6.0	6.0	4.0	10.0	4.0	4.0	2.0	2.0	4.0	4.0
87.5°	0.0	2.0	2.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0
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°	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9	3785.9
2.5°	3792.0	3790.0	3792.0	3790.0	3790.0	3790.0	3792.0	3792.0	3790.0	3790.0	3794.0
5°	3808.1	3808.1	3808.1	3806.1	3804.0	3804.0	3808.1	3808.1	3802.0	3808.1	3808.1
7.5°	3842.2	3836.2	3842.2	3834.2	3830.2	3832.2	3834.2	3830.2	3826.2	3828.2	3828.2
10°	3886.4	3880.4	3880.4	3874.4	3868.4	3864.3	3860.3	3850.3	3840.2	3838.2	3830.2
12.5°	3938.7	3928.6	3922.6	3910.5	3900.5	3886.4	3874.4	3858.3	3838.2	3824.1	3810.1
15°	3990.9	3974.9	3960.8	3940.7	3918.6	3894.5	3868.4	3842.2	3810.1	3782.0	3757.8
17.5°	4033.1	4011.0	3984.9	3952.8	3920.6	3884.4	3846.3	3808.1	3761.9	3725.7	3697.5
20°	4047.2	4015.1	3980.9	3938.7	3896.5	3846.3	3798.0	3747.8	3695.5	3657.4	3625.2
22.5°	4029.1	3990.9	3948.7	3904.5	3848.2	3794.0	3737.8	3679.4	3633.2	3581.0	3550.9
25°	3978.9	3932.7	3886.4	3834.2	3779.9	3719.7	3659.4	3599.1	3542.8	3514.7	3476.5
27.5°	3876.4	3826.2	3775.9	3721.7	3659.4	3599.1	3536.8	3478.5	3430.3	3392.1	3370.0
30°	3695.5	3637.3	3579.0	3520.7	3466.4	3404.1	3345.9	3297.6	3249.4	3219.3	3197.2
32.5°	3418.2	3366.0	3307.7	3251.4	3201.2	3148.9	3100.7	3058.5	3024.3	3004.2	2988.2
35°	3044.5	2992.2	2948.0	2907.8	2865.6	2843.5	2813.4	2789.2	2775.2	2767.1	2765.1
37.5°	2574.2	2544.1	2530.0	2522.0	2513.9	2507.9	2511.9	2522.0	2530.0	2544.1	2560.1
40°	2071.8	2097.9	2106.0	2134.1	2160.2	2194.4	2232.6	2276.8	2313.0	2359.2	2391.3
42.5°	1613.7	1661.9	1718.1	1778.4	1842.7	1905.0	1981.4	2051.7	2116.0	2174.3	2224.6
45°	1239.9	1314.2	1398.6	1485.0	1571.5	1661.9	1754.3	1840.7	1917.1	1979.4	2031.7
47.5°	966.6	1049.0	1157.5	1264.0	1368.5	1475.0	1577.5	1667.9	1732.2	1792.5	1838.7
50°	765.6	860.1	978.6	1101.2	1215.8	1328.3	1436.8	1521.2	1585.5	1633.8	1667.9
52.5°	592.8	705.3	825.9	954.5	1077.1	1199.7	1300.2	1378.5	1430.8	1473.0	1499.1
55°	442.1	552.6	681.2	813.9	938.5	1057.0	1151.5	1219.8	1266.0	1290.1	1304.2
57.5°	319.5	420.0	548.6	681.2	793.8	906.3	982.7	1045.0	1071.1	1085.1	1091.2
60°	233.1	325.6	440.1	554.6	661.1	751.6	817.9	860.1	880.2	888.2	886.2
62.5°	170.8	251.2	349.6	446.1	532.5	606.9	659.1	687.2	697.3	701.3	695.3
65°	130.6	192.9	277.3	351.7	418.0	472.2	510.4	528.5	534.5	532.5	528.5
67.5°	96.5	144.7	207.0	263.3	311.5	353.7	373.8	389.9	393.9	387.9	381.8
70°	68.3	106.5	150.7	188.9	225.1	249.2	271.3	273.3	273.3	271.3	267.3
72.5°	48.2	74.3	102.5	128.6	150.7	168.8	176.8	182.9	180.8	178.8	174.8
75°	32.2	46.2	74.3	80.4	100.5	106.5	114.6	114.6	116.5	110.5	110.5
77.5°	20.1	32.2	44.2	52.3	60.3	68.3	72.3	72.3	74.3	72.3	72.3
80°	12.0	20.1	24.1	36.2	36.2	42.2	44.2	46.2	42.2	48.2	42.2
82.5°	8.0	12.0	18.1	18.1	22.1	26.1	26.1	28.1	28.1	26.1	26.1
85°	6.0	8.0	10.0	12.0	12.0	14.1	12.0	12.0	14.1	16.1	14.1
87.5°	2.0	4.0	2.0	4.0	4.0	8.0	6.0	6.0	6.0	8.0	8.0
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: P248428

CATALOG NUMBER: LSR8B90D010 EC8B909730 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3785.9	3785.9	3785.9	3785.9
2.5°	3790.0	3792.0	3790.0	3790.0
5°	3808.1	3806.1	3808.1	3804.0
7.5°	3822.1	3822.1	3820.1	3820.1
10°	3822.1	3814.1	3814.1	3814.1
12.5°	3792.0	3782.0	3775.9	3771.9
15°	3739.7	3721.7	3713.6	3711.6
17.5°	3671.4	3655.3	3645.3	3639.3
20°	3593.1	3577.0	3564.9	3566.9
22.5°	3524.7	3506.7	3498.6	3494.6
25°	3456.4	3434.3	3428.3	3424.2
27.5°	3345.9	3333.8	3327.8	3321.8
30°	3177.1	3171.0	3161.0	3175.1
32.5°	2982.2	2972.1	2964.1	2970.1
35°	2767.1	2761.1	2767.1	2763.1
37.5°	2570.2	2576.2	2584.3	2588.3
40°	2415.5	2437.6	2445.6	2449.6
42.5°	2260.7	2286.8	2302.9	2313.0
45°	2069.8	2095.9	2114.0	2126.1
47.5°	1872.9	1895.0	1913.1	1911.1
50°	1694.1	1706.1	1714.1	1722.2
52.5°	1513.2	1513.2	1515.2	1515.2
55°	1308.2	1304.2	1302.2	1304.2
57.5°	1083.1	1079.1	1077.1	1071.1
60°	878.2	866.1	858.1	858.1
62.5°	687.2	673.2	667.2	665.2
65°	516.4	514.4	502.4	500.4
67.5°	373.8	365.7	357.7	359.7
70°	263.3	251.2	251.2	247.2
72.5°	170.8	164.8	162.8	162.8
75°	106.5	106.5	102.5	110.5
77.5°	70.3	70.3	68.3	70.3
80°	42.2	42.2	42.2	40.2
82.5°	26.1	28.1	26.1	26.1
85°	14.1	16.1	12.0	18.1
87.5°	8.0	10.0	8.0	10.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)