

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: P249524

Luminaire Tested: **LSR8B70D010 EC8B70830 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249524
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: LSR8B70D010 EC8B70830 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7257.0 lumens
Efficiency: N/A
Efficacy: 95.6 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

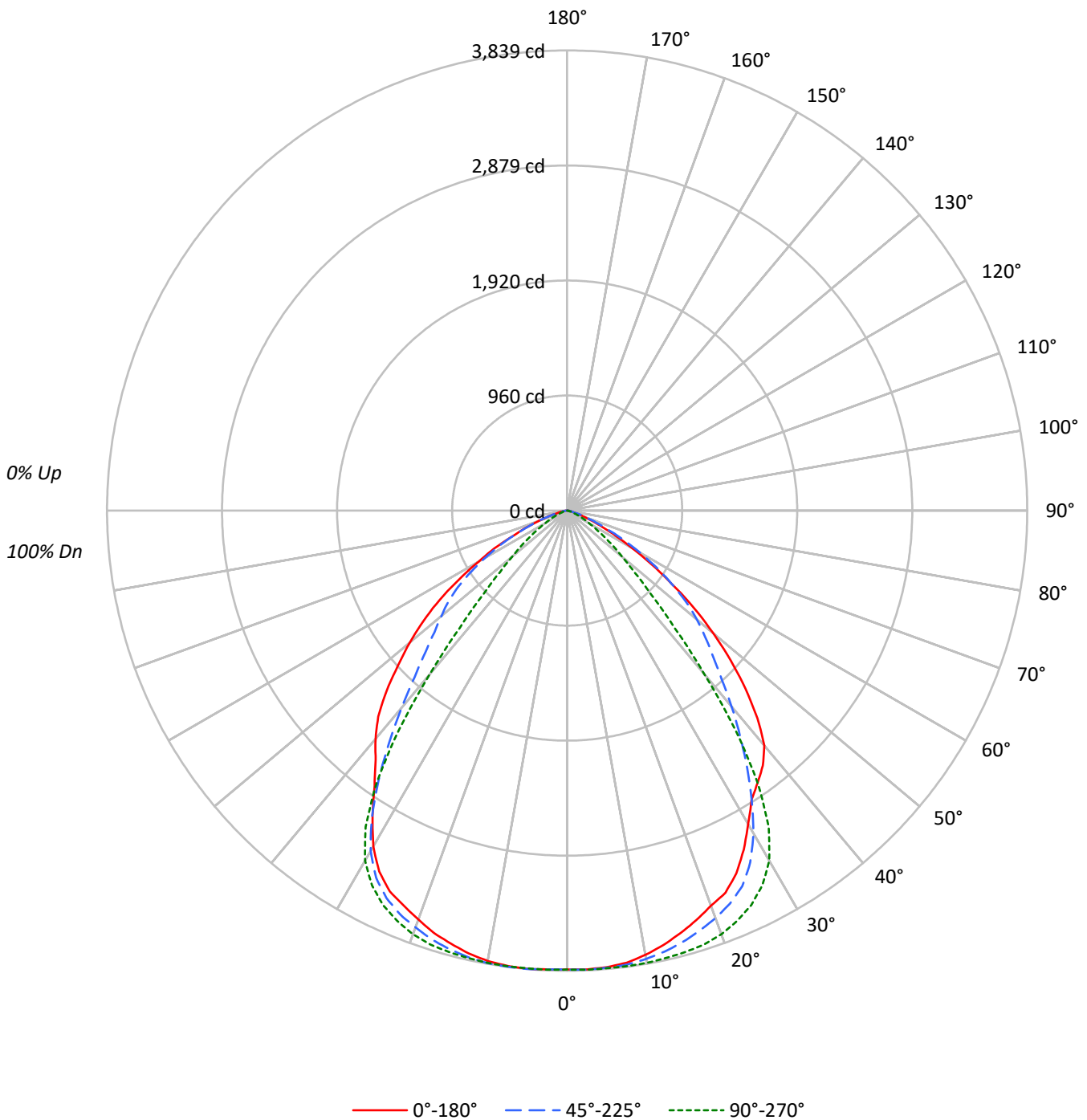
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	51	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°	118069	118069	118069
5°	118331	118650	118777
10°	117833	119956	119443
15°	116526	121711	119415
20°	115126	123422	119106
25°	113634	123565	119227
30°	107504	120091	115188
35°	104293	104369	105453
40°	103002	71809	100108
45°	91780	43112	93031
50°	76315	28693	82230
55°	57234	19779	69718
60°	38786	13179	52601
65°	23393	8551	36140
70°	12974	4634	22233
75°	5874	1954	11509
80°	5114	2184	8027
85°	5802	2901	7996



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	365.4	5.0
10°-20°	1061.2	14.6
20°-30°	1610.7	22.2
30°-40°	1691.8	23.3
40°-50°	1268.4	17.5
50°-60°	813.8	11.2
60°-70°	348.1	4.8
70°-80°	82.2	1.1
80°-90°	15.3	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°	3037.4	41.9
0°-40°	4729.1	65.2
0°-60°	6811.3	93.9
0°-90°	7257.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7257.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3829	3829	3829	3829	3829	
5°	3823	3829	3833	3839	3837	363
15°	3650	3726	3812	3788	3741	1030
25°	3340	3457	3632	3566	3504	1526
35°	2770	2616	2772	2740	2801	1739
45°	2105	1720	989	1671	2133	1612
55°	1065	1065	368	1110	1297	966
65°	321	378	117	487	495	342
75°	49	58	16	99	97	72
85°	16	10	8	16	23	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°	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9
2.5°	3831.0	3835.1	3833.1	3833.1	3831.0	3833.1	3833.1	3837.2	3837.2	3833.1	3831.0
5°	3822.8	3826.9	3826.9	3822.8	3822.8	3833.1	3826.9	3831.0	3831.0	3828.9	3828.9
7.5°	3804.3	3804.3	3812.5	3806.4	3806.4	3812.5	3810.4	3814.6	3818.7	3820.7	3820.7
10°	3763.2	3767.3	3769.3	3769.3	3771.4	3777.5	3781.7	3789.9	3794.0	3798.1	3800.2
12.5°	3711.8	3717.9	3720.0	3717.9	3724.1	3732.3	3742.6	3752.9	3759.1	3767.3	3773.5
15°	3650.1	3650.1	3654.2	3660.4	3664.5	3676.9	3687.1	3699.4	3715.9	3726.2	3736.5
17.5°	3582.3	3586.4	3592.6	3592.6	3600.8	3621.3	3627.5	3646.0	3664.5	3674.8	3695.4
20°	3508.3	3512.4	3518.6	3522.7	3533.0	3549.4	3561.8	3578.2	3598.8	3617.3	3637.8
22.5°	3450.8	3442.6	3446.6	3450.8	3461.1	3475.5	3489.8	3510.4	3530.9	3549.4	3570.0
25°	3339.8	3341.8	3348.0	3352.1	3364.5	3376.8	3393.2	3417.9	3436.4	3456.9	3479.5
27.5°	3189.8	3191.8	3202.1	3202.1	3212.3	3232.9	3243.2	3263.7	3288.4	3309.0	3335.7
30°	3019.2	3023.3	3023.3	3031.5	3037.6	3048.0	3058.2	3078.8	3091.1	3109.6	3146.6
32.5°	2863.0	2867.1	2865.0	2863.0	2856.8	2854.7	2852.7	2856.8	2860.9	2867.1	2881.4
35°	2770.5	2760.2	2752.0	2737.6	2721.2	2700.6	2682.1	2657.5	2634.8	2616.3	2595.8
37.5°	2682.1	2680.0	2667.7	2647.2	2614.3	2577.3	2534.2	2480.7	2427.2	2369.7	2314.2
40°	2558.8	2552.6	2542.3	2513.6	2476.6	2431.4	2373.8	2308.1	2221.7	2133.3	2042.9
42.5°	2349.1	2351.2	2338.9	2316.3	2281.3	2238.2	2178.6	2106.6	2014.2	1909.3	1792.2
45°	2104.6	2104.6	2100.5	2082.0	2057.3	2022.4	1977.2	1917.6	1827.1	1720.2	1594.9
47.5°	1849.7	1851.8	1845.6	1841.5	1831.2	1808.6	1775.7	1730.5	1666.8	1564.0	1438.7
50°	1590.8	1590.8	1601.0	1599.0	1599.0	1590.8	1576.4	1549.6	1494.2	1412.0	1294.8
52.5°	1331.8	1335.9	1342.1	1350.3	1360.6	1377.0	1360.6	1348.2	1313.3	1249.6	1148.9
55°	1064.6	1068.7	1079.0	1093.4	1105.7	1122.2	1126.3	1126.3	1107.8	1064.6	988.6
57.5°	836.5	830.3	838.6	850.9	867.3	883.8	896.1	910.5	908.4	879.7	818.0
60°	628.9	631.0	637.1	649.5	661.8	676.2	692.6	704.9	711.1	696.7	657.7
62.5°	458.3	458.3	466.5	478.9	485.0	505.6	515.9	522.0	528.2	526.1	501.5
65°	320.6	324.7	328.8	335.0	341.2	353.5	359.7	372.0	376.1	378.2	359.7
67.5°	226.1	219.9	224.0	228.1	234.3	242.5	254.9	254.9	261.0	261.0	248.7
70°	143.9	143.9	145.9	152.1	156.2	158.3	162.4	166.5	172.6	170.6	170.6
72.5°	96.6	94.5	96.6	98.7	100.7	106.9	106.9	108.9	113.0	115.1	106.9
75°	49.3	51.4	55.5	53.5	59.6	55.5	57.5	63.7	61.7	57.5	57.5
77.5°	41.1	41.1	41.1	39.1	43.1	43.1	41.1	45.2	43.1	43.1	41.1
80°	28.8	30.8	28.8	26.7	28.8	26.7	26.7	26.7	26.7	26.7	24.6
82.5°	22.6	18.5	20.6	18.5	20.6	20.6	18.5	16.4	16.4	18.5	16.4
85°	16.4	12.3	14.4	14.4	12.3	12.3	12.3	12.3	12.3	10.3	10.3
87.5°	10.3	6.2	6.2	6.2	8.2	8.2	8.2	6.2	8.2	8.2	4.1
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°	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9
2.5°	3835.1	3833.1	3837.2	3835.1	3835.1	3833.1	3835.1	3833.1	3837.2	3828.9	3831.0
5°	3835.1	3831.0	3833.1	3835.1	3837.2	3833.1	3833.1	3833.1	3837.2	3833.1	3835.1
7.5°	3826.9	3824.8	3831.0	3835.1	3833.1	3831.0	3835.1	3833.1	3837.2	3835.1	3839.2
10°	3810.4	3812.5	3816.6	3822.8	3824.8	3826.9	3831.0	3831.0	3837.2	3828.9	3833.1
12.5°	3785.8	3794.0	3804.3	3808.4	3816.6	3816.6	3820.7	3822.8	3826.9	3824.8	3831.0
15°	3755.0	3765.2	3777.5	3787.8	3798.1	3804.3	3810.4	3812.5	3818.7	3812.5	3814.6
17.5°	3717.9	3730.3	3748.8	3761.1	3777.5	3783.7	3791.9	3796.0	3802.2	3798.1	3800.2
20°	3666.6	3681.0	3701.5	3720.0	3730.3	3744.7	3755.0	3761.1	3765.2	3761.1	3763.2
22.5°	3594.6	3615.2	3641.9	3656.3	3676.9	3689.2	3691.2	3705.6	3715.9	3705.6	3709.8
25°	3510.4	3530.9	3551.5	3582.3	3600.8	3615.2	3629.6	3631.7	3641.9	3639.9	3637.8
27.5°	3370.6	3397.4	3432.3	3456.9	3481.6	3504.2	3520.7	3524.7	3535.0	3530.9	3533.0
30°	3179.5	3208.3	3241.2	3280.2	3315.1	3337.7	3358.3	3372.7	3382.9	3376.8	3374.7
32.5°	2908.2	2937.0	2971.9	3010.9	3052.1	3084.9	3109.6	3128.1	3140.4	3136.3	3126.0
35°	2597.9	2606.1	2628.7	2659.5	2694.4	2729.4	2752.0	2772.5	2786.9	2791.0	2791.0
37.5°	2279.3	2252.6	2236.1	2236.1	2256.7	2271.0	2291.6	2303.9	2326.6	2334.8	2340.9
40°	1971.0	1909.3	1851.8	1808.6	1779.9	1777.8	1777.8	1783.9	1804.5	1831.2	1855.9
42.5°	1695.6	1596.9	1508.6	1428.4	1370.9	1338.0	1323.6	1325.7	1342.1	1366.7	1407.8
45°	1475.7	1352.4	1241.4	1144.8	1066.7	1015.3	990.6	988.6	1000.9	1029.7	1074.9
47.5°	1305.1	1173.5	1048.2	937.2	852.9	797.4	768.7	760.5	768.7	795.4	848.8
50°	1163.3	1027.6	898.2	783.0	692.6	635.1	608.3	598.1	608.3	631.0	684.4
52.5°	1031.7	892.0	770.7	659.7	563.1	513.8	485.0	478.9	485.0	511.7	554.9
55°	879.7	760.5	641.2	530.2	446.0	396.7	374.0	367.9	374.0	398.7	443.9
57.5°	729.6	626.8	522.0	421.3	349.4	306.2	285.7	277.4	291.8	308.3	361.7
60°	589.8	507.7	419.3	330.9	271.3	232.2	215.8	213.7	217.9	238.4	275.4
62.5°	462.5	394.6	324.7	252.8	203.5	187.0	166.5	164.4	168.5	180.8	209.7
65°	333.0	289.8	236.4	185.0	145.9	123.3	115.1	117.2	121.2	129.5	156.2
67.5°	232.2	201.4	164.4	129.5	100.7	90.4	82.2	80.2	82.2	96.6	111.0
70°	156.2	137.7	111.0	98.7	69.9	55.5	57.5	51.4	59.6	59.6	71.9
72.5°	102.7	90.4	74.0	57.5	49.3	39.1	39.1	37.0	41.1	43.1	53.5
75°	53.5	41.1	41.1	28.8	20.6	10.3	18.5	16.4	14.4	16.4	20.6
77.5°	37.0	30.8	28.8	22.6	20.6	16.4	16.4	16.4	16.4	18.5	20.6
80°	22.6	22.6	16.4	14.4	12.3	10.3	12.3	12.3	12.3	12.3	14.4
82.5°	14.4	12.3	12.3	10.3	10.3	8.2	8.2	8.2	8.2	8.2	12.3
85°	12.3	8.2	8.2	6.2	8.2	14.4	6.2	8.2	8.2	8.2	6.2
87.5°	4.1	6.2	6.2	6.2	4.1	2.1	4.1	6.2	6.2	10.3	8.2
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°	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9	3828.9
2.5°	3835.1	3837.2	3837.2	3835.1	3835.1	3831.0	3839.2	3833.1	3835.1	3843.3	3837.2
5°	3839.2	3841.3	3841.3	3839.2	3839.2	3839.2	3841.3	3841.3	3839.2	3837.2	3841.3
7.5°	3847.4	3845.4	3845.4	3841.3	3841.3	3837.2	3841.3	3835.1	3839.2	3835.1	3841.3
10°	3837.2	3839.2	3837.2	3835.1	3835.1	3833.1	3833.1	3826.9	3828.9	3822.8	3826.9
12.5°	3831.0	3828.9	3828.9	3824.8	3820.7	3816.6	3814.6	3808.4	3808.4	3794.0	3800.2
15°	3814.6	3816.6	3810.4	3802.2	3798.1	3787.8	3783.7	3775.5	3767.3	3757.0	3759.1
17.5°	3800.2	3794.0	3785.8	3777.5	3761.1	3752.9	3744.7	3732.3	3728.2	3715.9	3711.8
20°	3757.0	3752.9	3742.6	3728.2	3717.9	3699.4	3691.2	3678.9	3668.6	3656.3	3650.1
22.5°	3701.5	3697.4	3685.1	3670.7	3654.2	3646.0	3637.8	3615.2	3604.9	3592.6	3590.5
25°	3631.7	3625.5	3613.1	3596.7	3588.5	3565.9	3557.6	3541.2	3537.1	3524.7	3522.7
27.5°	3524.7	3516.5	3502.2	3481.6	3467.2	3452.8	3444.6	3432.3	3428.2	3415.8	3413.8
30°	3364.5	3354.2	3325.4	3317.2	3292.5	3278.1	3278.1	3261.7	3263.7	3255.5	3255.5
32.5°	3111.7	3095.2	3072.6	3056.1	3039.7	3031.5	3031.5	3025.3	3029.4	3029.4	3033.6
35°	2776.6	2754.1	2741.7	2731.4	2731.4	2739.6	2764.3	2770.5	2782.8	2793.1	2801.3
37.5°	2347.1	2345.1	2359.4	2371.8	2402.6	2437.5	2480.7	2517.7	2552.6	2577.3	2601.9
40°	1882.6	1934.0	1975.1	2032.7	2079.9	2147.7	2225.8	2289.5	2349.1	2392.3	2437.5
42.5°	1469.5	1535.3	1621.6	1705.8	1790.1	1882.6	1985.4	2073.8	2151.9	2211.4	2258.7
45°	1144.8	1235.2	1340.0	1446.9	1555.8	1670.9	1777.8	1868.2	1950.4	2012.1	2059.4
47.5°	922.8	1021.5	1140.7	1257.8	1381.1	1502.4	1621.6	1699.7	1767.5	1816.8	1860.0
50°	762.5	867.3	992.7	1126.3	1249.6	1370.9	1473.6	1549.6	1605.2	1648.3	1675.0
52.5°	637.1	748.1	881.7	1015.3	1138.6	1249.6	1342.1	1399.6	1444.8	1475.7	1500.3
55°	526.1	633.0	758.4	883.8	1005.0	1109.8	1185.9	1229.1	1264.0	1282.5	1296.8
57.5°	429.6	528.2	643.3	758.4	863.2	949.6	1009.1	1052.3	1068.7	1083.1	1081.1
60°	337.1	429.6	534.4	633.0	723.5	793.3	836.5	861.1	873.5	879.7	875.5
62.5°	265.1	349.4	429.6	515.9	581.6	641.2	682.4	682.4	688.5	690.6	696.7
65°	197.3	261.0	330.9	394.6	448.0	487.1	509.7	515.9	524.1	522.0	517.9
67.5°	145.9	193.2	244.6	291.8	328.8	353.5	369.9	384.4	382.3	378.2	376.1
70°	100.7	131.6	176.8	205.5	232.2	256.9	261.0	263.1	265.1	267.2	263.1
72.5°	69.9	92.5	117.2	141.8	158.3	168.5	178.8	180.8	180.8	180.8	178.8
75°	35.0	47.3	69.9	80.2	94.5	98.7	106.9	106.9	113.0	104.8	102.7
77.5°	30.8	37.0	49.3	57.5	63.7	69.9	71.9	78.1	76.0	71.9	74.0
80°	18.5	22.6	30.8	35.0	43.1	45.2	47.3	49.3	47.3	49.3	49.3
82.5°	14.4	16.4	20.6	20.6	26.7	26.7	28.8	28.8	30.8	30.8	30.8
85°	8.2	14.4	12.3	24.6	16.4	16.4	20.6	24.6	20.6	20.6	24.6
87.5°	8.2	8.2	6.2	8.2	8.2	8.2	10.3	12.3	12.3	14.4	12.3
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: P249524

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3828.9	3828.9	3828.9	3828.9
2.5°	3835.1	3839.2	3833.1	3831.0
5°	3841.3	3841.3	3837.2	3837.2
7.5°	3841.3	3841.3	3835.1	3831.0
10°	3824.8	3824.8	3818.7	3814.6
12.5°	3794.0	3794.0	3791.9	3785.8
15°	3755.0	3755.0	3746.7	3740.6
17.5°	3701.5	3705.6	3695.4	3695.4
20°	3644.0	3641.9	3633.7	3629.6
22.5°	3584.4	3580.3	3578.2	3565.9
25°	3520.7	3516.5	3510.4	3504.2
27.5°	3411.7	3409.7	3403.5	3395.3
30°	3245.2	3243.2	3235.0	3235.0
32.5°	3029.4	3027.4	3019.2	3021.2
35°	2805.4	2813.7	2809.5	2801.3
37.5°	2618.4	2624.6	2628.7	2624.6
40°	2462.2	2480.7	2482.8	2486.9
42.5°	2295.7	2320.4	2328.6	2332.7
45°	2096.3	2119.0	2137.5	2133.3
47.5°	1892.9	1909.3	1925.8	1913.4
50°	1697.6	1707.9	1714.1	1714.1
52.5°	1512.7	1512.7	1510.6	1512.7
55°	1301.0	1301.0	1292.8	1296.8
57.5°	1079.0	1083.1	1076.9	1066.7
60°	873.5	863.2	859.1	852.9
62.5°	680.3	680.3	665.9	684.4
65°	509.7	503.5	497.4	495.3
67.5°	369.9	367.9	361.7	359.7
70°	261.0	252.8	250.7	246.6
72.5°	174.7	174.7	170.6	170.6
75°	106.9	96.6	94.5	96.6
77.5°	74.0	71.9	71.9	69.9
80°	49.3	47.3	51.4	45.2
82.5°	30.8	32.9	30.8	32.9
85°	20.6	24.6	22.6	22.6
87.5°	12.3	12.3	12.3	12.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)