

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: P249254

Luminaire Tested: **LSR8B70D010 EC8B70935 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249254
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 EC8B70935 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6475.0 lumens
Efficiency: N/A
Efficacy: 85.3 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

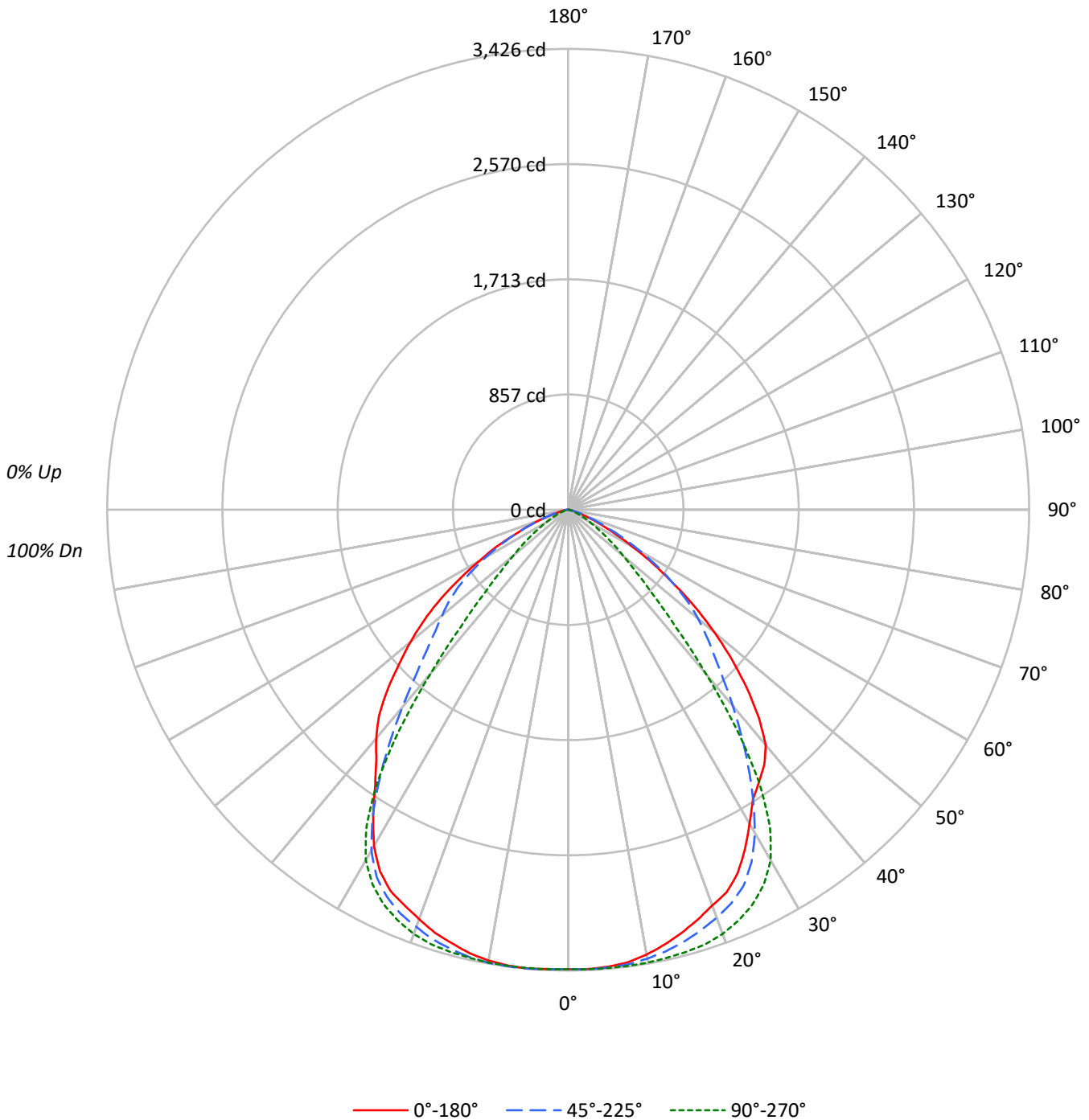
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	105346	105346	105346
5°	105578	105863	105978
10°	105133	107031	106570
15°	103970	108596	106547
20°	102722	110122	106272
25°	101388	110248	106380
30°	95917	107148	102775
35°	93056	93124	94092
40°	91904	64072	89319
45°	81889	38463	83010
50°	68093	25598	73370
55°	51068	17650	62207
60°	34605	11761	46933
65°	20875	7625	32243
70°	11576	4138	19835
75°	5242	1751	10270
80°	4564	1953	7156
85°	5201	2583	7147



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.0	5.0
10°-20°	946.9	14.6
20°-30°	1437.2	22.2
30°-40°	1509.5	23.3
40°-50°	1131.7	17.5
50°-60°	726.1	11.2
60°-70°	310.6	4.8
70°-80°	73.4	1.1
80°-90°	13.7	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°	2710.1	41.9
0°-40°	4219.5	65.2
0°-60°	6077.3	93.9
0°-90°	6475.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6475.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3416	3416	3416	3416	3416	
5°	3411	3416	3420	3426	3424	324
15°	3257	3325	3402	3380	3338	919
25°	2980	3084	3240	3182	3127	1361
35°	2472	2334	2474	2444	2500	1551
45°	1878	1535	882	1491	1904	1438
55°	950	950	328	990	1157	862
65°	286	337	104	435	442	305
75°	44	51	15	88	86	64
85°	15	9	7	15	20	16
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°	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3
2.5°	3418.2	3421.9	3420.0	3420.0	3418.2	3420.0	3420.0	3423.7	3423.7	3420.0	3418.2
5°	3410.8	3414.5	3414.5	3410.8	3410.8	3420.0	3414.5	3418.2	3418.2	3416.3	3416.3
7.5°	3394.4	3394.4	3401.7	3396.2	3396.2	3401.7	3399.8	3403.5	3407.2	3409.0	3409.0
10°	3357.6	3361.3	3363.2	3363.2	3365.0	3370.5	3374.2	3381.5	3385.2	3388.8	3390.7
12.5°	3311.8	3317.3	3319.1	3317.3	3322.8	3330.1	3339.3	3348.5	3354.0	3361.3	3366.8
15°	3256.8	3256.8	3260.5	3266.0	3269.7	3280.7	3289.8	3300.8	3315.5	3324.7	3333.8
17.5°	3196.3	3200.0	3205.4	3205.4	3212.8	3231.1	3236.6	3253.1	3269.7	3278.8	3297.2
20°	3130.3	3133.9	3139.4	3143.1	3152.3	3167.0	3177.9	3192.6	3211.0	3227.5	3245.8
22.5°	3078.9	3071.6	3075.2	3078.9	3088.1	3100.9	3113.8	3132.1	3150.4	3167.0	3185.3
25°	2979.9	2981.7	2987.2	2990.9	3001.9	3012.9	3027.6	3049.6	3066.1	3084.4	3104.6
27.5°	2846.0	2847.9	2857.0	2857.0	2866.2	2884.5	2893.7	2912.0	2934.1	2952.4	2976.3
30°	2693.8	2697.5	2697.5	2704.8	2710.3	2719.5	2728.7	2747.0	2758.0	2774.5	2807.5
32.5°	2554.5	2558.1	2556.3	2554.5	2549.0	2547.1	2545.3	2549.0	2552.6	2558.1	2570.9
35°	2472.0	2462.8	2455.5	2442.6	2427.9	2409.6	2393.1	2371.1	2350.9	2334.4	2316.1
37.5°	2393.1	2391.2	2380.3	2361.9	2332.6	2299.6	2261.1	2213.4	2165.7	2114.4	2064.9
40°	2283.1	2277.5	2268.4	2242.7	2209.7	2169.4	2118.0	2059.3	1982.3	1903.5	1822.8
42.5°	2096.0	2097.8	2086.8	2066.7	2035.5	1997.0	1943.8	1879.6	1797.1	1703.6	1599.1
45°	1877.8	1877.8	1874.1	1857.6	1835.6	1804.4	1764.1	1710.9	1630.3	1534.9	1423.0
47.5°	1650.4	1652.2	1646.7	1643.1	1633.9	1613.7	1584.4	1544.1	1487.2	1395.5	1283.6
50°	1419.4	1419.4	1428.5	1426.7	1426.7	1419.4	1406.5	1382.7	1333.2	1259.8	1155.3
52.5°	1188.3	1192.0	1197.5	1204.8	1214.0	1228.6	1214.0	1203.0	1171.8	1114.9	1025.1
55°	949.9	953.6	962.7	975.6	986.6	1001.3	1004.9	1004.9	988.4	949.9	882.0
57.5°	746.4	740.8	748.2	759.2	773.9	788.5	799.5	812.4	810.5	784.9	729.9
60°	561.1	563.0	568.5	579.5	590.5	603.3	618.0	629.0	634.5	621.7	586.8
62.5°	408.9	408.9	416.3	427.3	432.8	451.1	460.3	465.8	471.3	469.4	447.4
65°	286.1	289.7	293.4	298.9	304.4	315.4	320.9	331.9	335.6	337.4	320.9
67.5°	201.7	196.2	199.9	203.5	209.0	216.4	227.4	227.4	232.9	232.9	221.9
70°	128.4	128.4	130.2	135.7	139.4	141.2	144.9	148.5	154.0	152.2	152.2
72.5°	86.2	84.4	86.2	88.0	89.9	95.3	95.3	97.2	100.9	102.7	95.3
75°	44.0	45.9	49.5	47.7	53.2	49.5	51.3	56.8	55.0	51.3	51.3
77.5°	36.7	36.7	36.7	34.9	38.5	38.5	36.7	40.3	38.5	38.5	36.7
80°	25.7	27.5	25.7	23.8	25.7	23.8	23.8	23.8	23.8	23.8	22.0
82.5°	20.2	16.5	18.4	16.5	18.4	18.4	16.5	14.7	14.7	16.5	14.7
85°	14.7	11.0	12.8	12.8	11.0	11.0	11.0	11.0	11.0	9.2	9.2
87.5°	9.2	5.5	5.5	5.5	7.3	7.3	7.3	5.5	7.3	7.3	3.7
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°	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3
2.5°	3421.9	3420.0	3423.7	3421.9	3421.9	3420.0	3421.9	3420.0	3423.7	3416.3	3418.2
5°	3421.9	3418.2	3420.0	3421.9	3423.7	3420.0	3420.0	3420.0	3423.7	3420.0	3421.9
7.5°	3414.5	3412.7	3418.2	3421.9	3420.0	3418.2	3421.9	3420.0	3423.7	3421.9	3425.5
10°	3399.8	3401.7	3405.3	3410.8	3412.7	3414.5	3418.2	3418.2	3423.7	3416.3	3420.0
12.5°	3377.8	3385.2	3394.4	3398.0	3405.3	3405.3	3409.0	3410.8	3414.5	3412.7	3418.2
15°	3350.3	3359.5	3370.5	3379.7	3388.8	3394.4	3399.8	3401.7	3407.2	3401.7	3403.5
17.5°	3317.3	3328.3	3344.8	3355.8	3370.5	3376.0	3383.3	3387.0	3392.5	3388.8	3390.7
20°	3271.5	3284.3	3302.6	3319.1	3328.3	3341.1	3350.3	3355.8	3359.5	3355.8	3357.6
22.5°	3207.3	3225.6	3249.5	3262.3	3280.7	3291.6	3293.5	3306.3	3315.5	3306.3	3310.0
25°	3132.1	3150.4	3168.8	3196.3	3212.8	3225.6	3238.5	3240.3	3249.5	3247.6	3245.8
27.5°	3007.4	3031.3	3062.4	3084.4	3106.4	3126.6	3141.3	3144.9	3154.1	3150.4	3152.3
30°	2836.8	2862.6	2891.9	2926.7	2957.9	2978.1	2996.4	3009.2	3018.4	3012.9	3011.1
32.5°	2594.8	2620.5	2651.7	2686.5	2723.2	2752.5	2774.5	2791.0	2802.0	2798.3	2789.2
35°	2317.9	2325.2	2345.4	2372.9	2404.1	2435.3	2455.5	2473.8	2486.6	2490.3	2490.3
37.5°	2033.7	2009.8	1995.2	1995.2	2013.5	2026.3	2044.7	2055.7	2075.9	2083.2	2088.7
40°	1758.6	1703.6	1652.2	1613.7	1588.1	1586.2	1586.2	1591.7	1610.1	1633.9	1655.9
42.5°	1512.9	1424.8	1346.0	1274.5	1223.1	1193.8	1181.0	1182.8	1197.5	1219.5	1256.1
45°	1316.7	1206.6	1107.6	1021.4	951.7	905.9	883.9	882.0	893.0	918.7	959.1
47.5°	1164.5	1047.1	935.2	836.2	761.0	711.5	685.8	678.5	685.8	709.7	757.4
50°	1037.9	916.9	801.4	698.7	618.0	566.7	542.8	533.6	542.8	563.0	610.6
52.5°	920.5	795.9	687.7	588.6	502.5	458.4	432.8	427.3	432.8	456.6	495.1
55°	784.9	678.5	572.1	473.1	397.9	353.9	333.7	328.3	333.7	355.8	396.1
57.5°	651.0	559.3	465.8	375.9	311.8	273.2	254.9	247.5	260.4	275.1	322.7
60°	526.3	453.0	374.1	295.2	242.1	207.2	192.5	190.7	194.4	212.7	245.7
62.5°	412.6	352.1	289.7	225.6	181.5	166.9	148.5	146.7	150.4	161.4	187.1
65°	297.1	258.6	210.9	165.0	130.2	110.0	102.7	104.5	108.2	115.5	139.4
67.5°	207.2	179.7	146.7	115.5	89.9	80.7	73.4	71.5	73.4	86.2	99.0
70°	139.4	122.9	99.0	88.0	62.4	49.5	51.3	45.9	53.2	53.2	64.2
72.5°	91.7	80.7	66.0	51.3	44.0	34.9	34.9	33.0	36.7	38.5	47.7
75°	47.7	36.7	36.7	25.7	18.4	9.2	16.5	14.7	12.8	14.7	18.4
77.5°	33.0	27.5	25.7	20.2	18.4	14.7	14.7	14.7	14.7	16.5	18.4
80°	20.2	20.2	14.7	12.8	11.0	9.2	11.0	11.0	11.0	11.0	12.8
82.5°	12.8	11.0	11.0	9.2	9.2	7.3	7.3	7.3	7.3	7.3	11.0
85°	11.0	7.3	7.3	5.5	7.3	12.8	5.5	7.3	7.3	7.3	5.5
87.5°	3.7	5.5	5.5	5.5	3.7	1.8	3.7	5.5	5.5	9.2	7.3
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°	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3	3416.3
2.5°	3421.9	3423.7	3423.7	3421.9	3421.9	3418.2	3425.5	3420.0	3421.9	3429.2	3423.7
5°	3425.5	3427.3	3427.3	3425.5	3425.5	3425.5	3427.3	3427.3	3425.5	3423.7	3427.3
7.5°	3432.8	3431.0	3431.0	3427.3	3427.3	3423.7	3427.3	3421.9	3425.5	3421.9	3427.3
10°	3423.7	3425.5	3423.7	3421.9	3421.9	3420.0	3420.0	3414.5	3416.3	3410.8	3414.5
12.5°	3418.2	3416.3	3416.3	3412.7	3409.0	3405.3	3403.5	3398.0	3398.0	3385.2	3390.7
15°	3403.5	3405.3	3399.8	3392.5	3388.8	3379.7	3376.0	3368.6	3361.3	3352.2	3354.0
17.5°	3390.7	3385.2	3377.8	3370.5	3355.8	3348.5	3341.1	3330.1	3326.5	3315.5	3311.8
20°	3352.2	3348.5	3339.3	3326.5	3317.3	3300.8	3293.5	3282.5	3273.3	3262.3	3256.8
22.5°	3302.6	3299.0	3288.0	3275.1	3260.5	3253.1	3245.8	3225.6	3216.4	3205.4	3203.6
25°	3240.3	3234.8	3223.8	3209.1	3201.8	3181.6	3174.3	3159.6	3156.0	3144.9	3143.1
27.5°	3144.9	3137.6	3124.8	3106.4	3093.6	3080.8	3073.4	3062.4	3058.8	3047.7	3045.9
30°	3001.9	2992.7	2967.1	2959.7	2937.7	2924.9	2924.9	2910.2	2912.0	2904.7	2904.7
32.5°	2776.4	2761.7	2741.5	2726.8	2712.2	2704.8	2704.8	2699.3	2703.0	2703.0	2706.7
35°	2477.4	2457.3	2446.3	2437.1	2437.1	2444.4	2466.4	2472.0	2483.0	2492.1	2499.5
37.5°	2094.2	2092.4	2105.2	2116.2	2143.7	2174.9	2213.4	2246.4	2277.5	2299.6	2321.6
40°	1679.7	1725.6	1762.3	1813.6	1855.8	1916.3	1986.0	2042.8	2096.0	2134.5	2174.9
42.5°	1311.1	1369.8	1446.9	1522.0	1597.2	1679.7	1771.5	1850.3	1920.0	1973.1	2015.3
45°	1021.4	1102.1	1195.6	1291.0	1388.2	1490.9	1586.2	1666.9	1740.3	1795.3	1837.5
47.5°	823.4	911.4	1017.7	1122.3	1232.3	1340.5	1446.9	1516.6	1577.0	1621.1	1659.6
50°	680.3	773.9	885.7	1004.9	1114.9	1223.1	1314.8	1382.7	1432.2	1470.7	1494.5
52.5°	568.5	667.5	786.7	905.9	1015.9	1114.9	1197.5	1248.8	1289.2	1316.7	1338.6
55°	469.4	564.8	676.7	788.5	896.7	990.2	1058.1	1096.6	1127.8	1144.3	1157.1
57.5°	383.3	471.3	574.0	676.7	770.2	847.2	900.4	938.9	953.6	966.4	964.6
60°	300.8	383.3	476.8	564.8	645.5	707.8	746.4	768.3	779.3	784.9	781.2
62.5°	236.6	311.8	383.3	460.3	519.0	572.1	608.8	608.8	614.3	616.2	621.7
65°	176.0	232.9	295.2	352.1	399.7	434.6	454.8	460.3	467.6	465.8	462.1
67.5°	130.2	172.4	218.2	260.4	293.4	315.4	330.1	342.9	341.1	337.4	335.6
70°	89.9	117.4	157.7	183.4	207.2	229.2	232.9	234.7	236.6	238.4	234.7
72.5°	62.4	82.5	104.5	126.5	141.2	150.4	159.6	161.4	161.4	161.4	159.6
75°	31.2	42.2	62.4	71.5	84.4	88.0	95.3	95.3	100.9	93.5	91.7
77.5°	27.5	33.0	44.0	51.3	56.8	62.4	64.2	69.7	67.8	64.2	66.0
80°	16.5	20.2	27.5	31.2	38.5	40.3	42.2	44.0	42.2	44.0	44.0
82.5°	12.8	14.7	18.4	18.4	23.8	23.8	25.7	25.7	27.5	27.5	27.5
85°	7.3	12.8	11.0	22.0	14.7	14.7	18.4	22.0	18.4	18.4	22.0
87.5°	7.3	7.3	5.5	7.3	7.3	7.3	9.2	11.0	11.0	12.8	11.0
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: P249254

CATALOG NUMBER: LSR8B70D010 EC8B70935 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3416.3	3416.3	3416.3	3416.3
2.5°	3421.9	3425.5	3420.0	3418.2
5°	3427.3	3427.3	3423.7	3423.7
7.5°	3427.3	3427.3	3421.9	3418.2
10°	3412.7	3412.7	3407.2	3403.5
12.5°	3385.2	3385.2	3383.3	3377.8
15°	3350.3	3350.3	3343.0	3337.5
17.5°	3302.6	3306.3	3297.2	3297.2
20°	3251.3	3249.5	3242.2	3238.5
22.5°	3198.1	3194.5	3192.6	3181.6
25°	3141.3	3137.6	3132.1	3126.6
27.5°	3044.1	3042.3	3036.7	3029.4
30°	2895.5	2893.7	2886.4	2886.4
32.5°	2703.0	2701.2	2693.8	2695.7
35°	2503.1	2510.5	2506.8	2499.5
37.5°	2336.2	2341.8	2345.4	2341.8
40°	2196.9	2213.4	2215.2	2218.9
42.5°	2048.3	2070.3	2077.7	2081.3
45°	1870.4	1890.6	1907.1	1903.5
47.5°	1688.9	1703.6	1718.2	1707.2
50°	1514.7	1523.9	1529.4	1529.4
52.5°	1349.7	1349.7	1347.8	1349.7
55°	1160.8	1160.8	1153.5	1157.1
57.5°	962.7	966.4	960.9	951.7
60°	779.3	770.2	766.5	761.0
62.5°	607.0	607.0	594.2	610.6
65°	454.8	449.3	443.8	441.9
67.5°	330.1	328.3	322.7	320.9
70°	232.9	225.6	223.7	220.0
72.5°	155.9	155.9	152.2	152.2
75°	95.3	86.2	84.4	86.2
77.5°	66.0	64.2	64.2	62.4
80°	44.0	42.2	45.9	40.3
82.5°	27.5	29.3	27.5	29.3
85°	18.4	22.0	20.2	20.2
87.5°	11.0	11.0	11.0	11.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)