

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: P251217

Luminaire Tested: **LSR8B70D010 EC8B709727 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P251217
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B70D010 EC8B709727 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5344.0 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

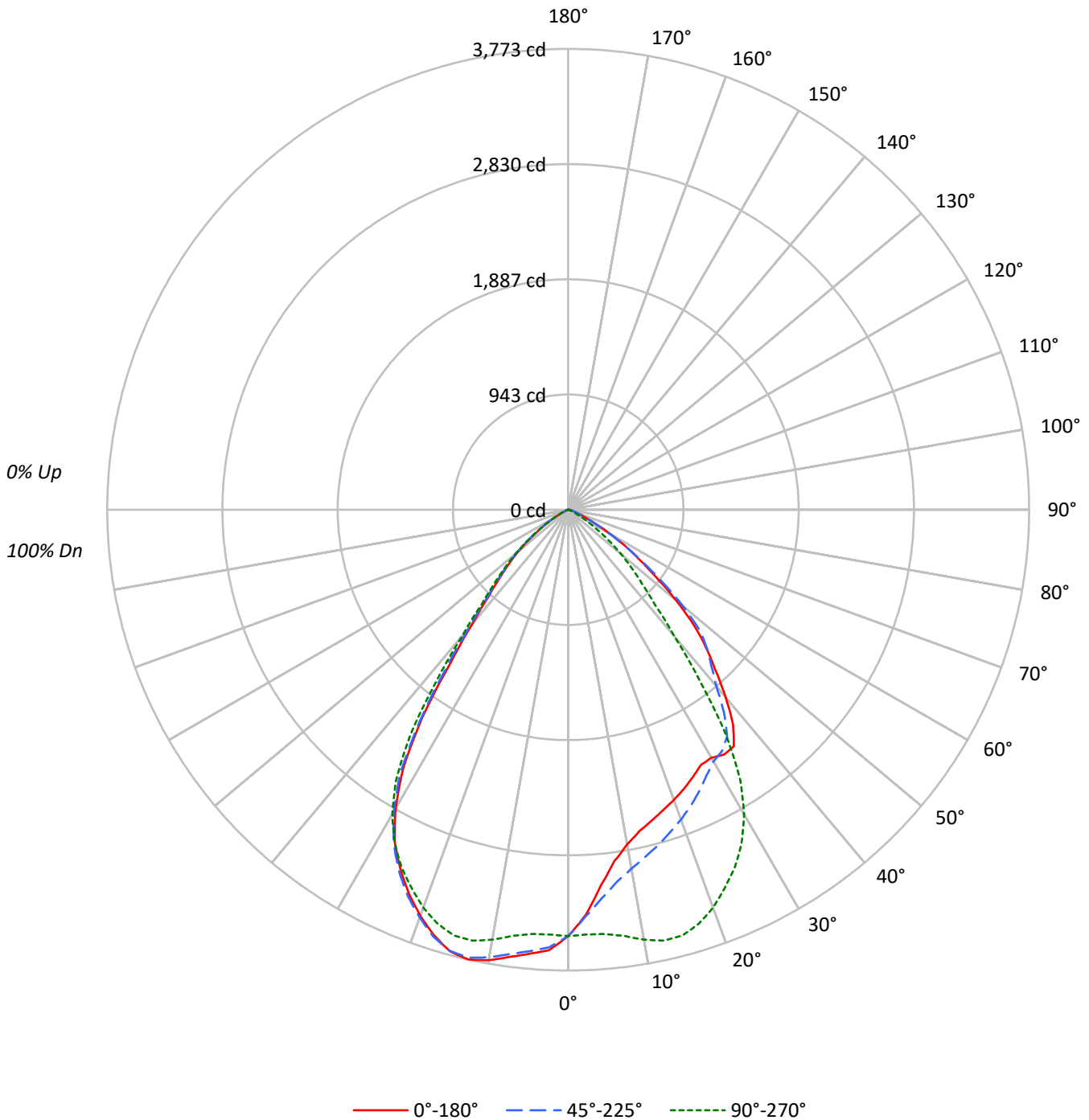
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91						
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82						
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74						
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67						
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60						
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55						
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50						
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46						
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42						
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39						

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°	325.4	6.1
10°-20°	939.8	17.6
20°-30°	1364.1	25.5
30°-40°	1343.5	25.1
40°-50°	842.1	15.8
50°-60°	406.4	7.6
60°-70°	98.3	1.8
70°-80°	19.9	0.4
80°-90°	4.6	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°	2629.2	49.2
0°-40°	3972.7	74.3
0°-60°	5221.2	97.7
0°-90°	5344.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5344.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3491	3491	3491	3491	3491	
5°	3086	3190	3486	3628	3650	286
15°	2636	2844	3608	3741	3743	745
25°	2414	2540	3229	3273	3249	1117
35°	2364	2268	2254	2125	2090	1430
45°	1596	1607	852	816	793	1220
55°	709	732	310	306	292	652
65°	166	164	46	39	35	189
75°	40	35	10	5	4	45
85°	12	9	2	0	0	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1
2.5°	3318.7	3297.6	3258.1	3305.8	3305.8	3279.2	3332.4	3300.3	3326.0	3366.4	3330.6
5°	3085.7	3068.3	3035.2	3085.7	3092.1	3067.3	3131.6	3107.7	3145.3	3194.8	3190.3
7.5°	2901.3	2879.3	2849.0	2901.3	2911.4	2894.9	2956.4	2945.4	2994.9	3059.1	3070.1
10°	2781.2	2758.2	2731.6	2779.3	2786.7	2775.7	2838.0	2831.6	2880.2	2954.5	2983.9
12.5°	2695.9	2676.6	2647.2	2697.7	2705.9	2690.4	2749.1	2746.3	2796.8	2874.7	2911.4
15°	2636.2	2613.3	2586.7	2629.8	2640.8	2623.4	2679.3	2673.8	2725.2	2802.3	2843.5
17.5°	2580.3	2559.2	2531.7	2572.0	2583.0	2564.7	2619.7	2610.5	2654.6	2728.0	2770.2
20°	2528.0	2505.1	2480.3	2521.6	2528.0	2506.9	2561.9	2550.0	2589.5	2657.3	2698.6
22.5°	2473.9	2450.0	2424.3	2464.7	2471.1	2450.0	2500.5	2486.7	2523.4	2584.9	2622.5
25°	2414.3	2392.2	2366.6	2404.2	2409.7	2386.7	2439.9	2422.5	2454.6	2508.7	2539.9
27.5°	2354.6	2333.5	2305.1	2343.6	2346.4	2324.4	2373.0	2349.1	2375.7	2425.3	2451.9
30°	2344.5	2320.7	2291.3	2322.5	2323.4	2295.0	2340.9	2312.4	2327.1	2363.8	2379.4
32.5°	2376.6	2352.8	2322.5	2348.2	2345.5	2314.3	2358.3	2323.4	2328.0	2347.3	2343.6
35°	2363.8	2335.4	2299.6	2327.1	2327.1	2289.5	2333.5	2292.3	2287.7	2290.4	2267.5
37.5°	2218.0	2195.9	2162.0	2188.6	2185.9	2157.4	2191.4	2157.4	2141.8	2135.4	2094.1
40°	2003.3	1976.7	1951.0	1979.5	1982.2	1951.9	1996.0	1957.5	1952.9	1934.5	1885.9
42.5°	1785.9	1776.8	1752.0	1775.8	1788.7	1763.0	1799.7	1781.3	1784.1	1779.5	1733.6
45°	1596.0	1580.5	1562.1	1589.6	1597.9	1585.0	1621.7	1610.7	1621.7	1644.7	1607.1
47.5°	1391.5	1375.9	1355.7	1385.1	1399.8	1375.9	1407.1	1403.4	1419.9	1459.4	1455.7
50°	1144.8	1133.7	1130.1	1133.7	1142.9	1131.9	1153.9	1154.8	1165.8	1220.0	1223.6
52.5°	906.3	903.5	890.7	902.6	902.6	885.2	907.2	897.1	908.1	944.8	968.6
55°	709.0	706.3	698.0	709.0	697.1	690.7	697.1	687.0	678.8	707.2	732.0
57.5°	552.2	543.0	532.9	537.5	536.6	522.8	530.2	518.3	511.8	521.9	543.9
60°	393.5	390.8	381.6	386.2	389.8	379.7	387.1	381.6	370.6	378.8	379.7
62.5°	261.4	263.3	257.8	258.7	255.9	254.1	258.7	261.4	258.7	255.0	255.9
65°	166.0	165.1	164.2	165.1	166.9	163.3	166.0	167.9	165.1	165.1	164.2
67.5°	110.1	107.3	104.6	106.4	108.2	105.5	108.2	107.3	108.2	107.3	104.6
70°	74.3	73.4	72.5	73.4	73.4	71.5	73.4	72.5	73.4	72.5	69.7
72.5°	54.1	54.1	53.2	54.1	54.1	52.3	53.2	51.4	52.3	51.4	49.5
75°	40.4	40.4	39.4	40.4	39.4	38.5	39.4	38.5	36.7	36.7	34.9
77.5°	29.4	29.4	29.4	29.4	29.4	28.4	28.4	27.5	26.6	25.7	25.7
80°	22.0	21.1	21.1	21.1	21.1	20.2	21.1	20.2	19.3	18.3	17.4
82.5°	15.6	16.5	15.6	15.6	15.6	14.7	15.6	14.7	14.7	13.8	11.9
85°	11.9	11.9	11.9	11.9	11.9	11.0	11.0	11.0	10.1	10.1	9.2
87.5°	6.4	6.4	6.4	7.3	6.4	6.4	6.4	5.5	5.5	4.6	4.6
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1
2.5°	3378.3	3382.9	3372.8	3388.4	3448.9	3400.3	3420.5	3426.9	3472.8	3481.0	3475.5
5°	3249.9	3270.1	3282.9	3317.8	3384.7	3349.9	3385.6	3408.6	3467.3	3486.5	3491.1
7.5°	3149.0	3191.2	3222.4	3279.2	3358.1	3331.5	3385.6	3423.2	3494.8	3519.6	3531.5
10°	3073.8	3138.0	3192.1	3270.1	3359.0	3341.6	3412.2	3465.4	3545.2	3574.6	3589.3
12.5°	3016.9	3094.9	3167.3	3266.4	3362.7	3354.5	3439.8	3500.3	3584.7	3614.0	3631.5
15°	2954.5	3044.4	3128.8	3239.8	3343.4	3341.6	3433.3	3497.5	3583.8	3608.5	3625.0
17.5°	2880.2	2976.5	3069.2	3189.3	3292.1	3293.9	3386.6	3449.8	3534.2	3554.4	3565.4
20°	2805.0	2900.4	2993.0	3116.9	3217.8	3220.5	3311.3	3370.0	3450.8	3467.3	3470.0
22.5°	2725.2	2814.2	2906.8	3029.7	3127.0	3128.8	3218.7	3273.7	3342.5	3350.8	3358.1
25°	2634.4	2721.5	2808.7	2930.7	3023.3	3028.8	3110.5	3159.1	3222.4	3228.8	3231.5
27.5°	2539.9	2611.5	2694.9	2799.5	2893.1	2889.4	2966.4	3021.5	3078.4	3074.7	3073.8
30°	2444.5	2504.1	2555.5	2656.4	2725.2	2728.0	2800.4	2827.0	2886.6	2879.3	2878.4
32.5°	2377.6	2393.2	2406.9	2458.3	2523.4	2500.5	2550.0	2583.0	2624.3	2621.6	2622.5
35°	2254.6	2226.2	2184.9	2192.3	2231.7	2195.9	2222.5	2221.6	2263.8	2253.7	2265.7
37.5°	2044.6	1963.9	1872.1	1819.9	1827.2	1782.3	1773.1	1795.1	1809.8	1781.3	1791.4
40°	1820.8	1701.5	1558.4	1439.2	1432.8	1376.8	1366.7	1344.7	1373.2	1349.3	1356.6
42.5°	1655.7	1497.9	1309.9	1164.9	1133.7	1087.0	1059.4	1055.8	1064.0	1047.5	1042.9
45°	1529.1	1361.2	1145.7	979.6	944.8	894.3	866.8	856.7	857.6	852.1	847.6
47.5°	1380.5	1211.7	993.4	823.7	784.3	736.6	709.0	702.6	706.3	699.0	693.5
50°	1175.0	1023.7	824.6	669.6	634.8	599.9	577.9	571.5	570.5	565.0	561.4
52.5°	954.0	828.3	655.8	526.5	495.3	461.4	445.8	437.5	438.5	433.0	427.4
55°	738.4	660.4	508.2	398.1	369.7	343.1	328.4	318.3	315.5	310.0	307.3
57.5°	549.4	497.2	380.7	287.1	270.6	244.9	230.2	218.3	216.5	213.7	212.8
60°	385.3	347.6	267.8	204.6	185.3	169.7	155.0	143.1	137.6	136.7	133.9
62.5°	249.5	226.6	176.1	136.7	122.0	111.0	96.3	88.1	84.4	80.7	81.6
65°	155.0	137.6	110.1	88.1	79.8	71.5	60.5	53.2	49.5	45.9	46.8
67.5°	96.3	86.2	69.7	56.9	51.4	44.9	36.7	31.2	28.4	25.7	23.8
70°	65.1	56.0	47.7	40.4	36.7	32.1	26.6	22.0	20.2	18.3	16.5
72.5°	45.9	41.3	34.9	30.3	27.5	23.8	20.2	17.4	15.6	13.8	11.9
75°	33.0	29.4	25.7	22.0	20.2	18.3	15.6	13.8	11.9	10.1	8.3
77.5°	23.8	21.1	18.3	16.5	15.6	12.8	11.0	10.1	9.2	7.3	5.5
80°	16.5	14.7	11.9	11.0	11.0	9.2	8.3	7.3	6.4	4.6	3.7
82.5°	11.0	10.1	9.2	8.3	7.3	6.4	6.4	4.6	3.7	2.8	1.8
85°	8.3	7.3	6.4	5.5	5.5	4.6	3.7	2.8	2.8	1.8	0.9
87.5°	4.6	4.6	3.7	2.8	2.8	1.8	1.8	0.9	0.9	0.9	0.9
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1
2.5°	3522.3	3525.1	3540.7	3528.7	3559.0	3581.0	3570.0	3594.8	3586.5	3584.7	3613.1
5°	3546.2	3552.6	3573.7	3562.7	3595.7	3619.5	3608.5	3636.1	3627.8	3626.0	3655.3
7.5°	3592.0	3598.4	3616.8	3607.6	3642.5	3663.6	3649.8	3680.1	3669.1	3668.2	3696.6
10°	3649.8	3659.0	3674.6	3665.4	3697.5	3715.9	3702.1	3731.5	3721.4	3716.8	3748.0
12.5°	3692.9	3699.3	3714.9	3707.6	3738.8	3752.5	3740.6	3769.1	3756.2	3752.5	3780.1
15°	3682.8	3689.3	3702.1	3695.7	3725.0	3737.9	3722.3	3753.5	3740.6	3733.3	3758.1
17.5°	3618.6	3622.3	3631.5	3625.0	3656.2	3664.5	3647.1	3678.2	3666.3	3653.5	3677.3
20°	3524.1	3522.3	3527.8	3525.1	3550.7	3555.3	3544.3	3567.3	3553.5	3546.2	3559.9
22.5°	3406.7	3404.9	3408.6	3401.2	3426.9	3429.7	3413.2	3440.7	3426.9	3413.2	3436.1
25°	3276.5	3266.4	3264.6	3267.3	3284.7	3287.5	3270.1	3290.2	3272.8	3261.8	3283.8
27.5°	3116.0	3103.1	3100.4	3103.1	3120.6	3107.7	3093.0	3107.7	3090.3	3080.2	3093.9
30°	2917.8	2899.5	2891.2	2885.7	2904.1	2899.5	2865.5	2882.1	2854.5	2839.9	2850.0
32.5°	2650.9	2640.8	2618.8	2606.0	2623.4	2588.5	2567.4	2567.4	2556.4	2531.7	2537.2
35°	2280.3	2264.7	2244.6	2233.6	2236.3	2189.5	2154.7	2162.0	2125.3	2118.9	2121.6
37.5°	1811.6	1785.9	1778.6	1755.7	1761.2	1719.9	1672.2	1673.1	1653.8	1633.7	1627.2
40°	1361.2	1356.6	1349.3	1330.0	1337.4	1292.4	1274.1	1275.0	1262.2	1247.5	1254.8
42.5°	1052.1	1037.4	1032.8	1026.4	1028.3	1020.9	997.1	999.8	988.8	985.1	981.5
45°	854.9	839.3	828.3	833.8	833.8	825.5	816.4	821.9	816.4	809.0	812.7
47.5°	704.5	689.8	684.3	683.4	689.8	684.3	675.1	676.9	676.0	673.3	671.4
50°	562.3	558.6	554.0	551.3	554.0	552.2	543.9	548.5	551.3	542.1	544.9
52.5°	428.4	428.4	427.4	421.0	426.5	421.0	420.1	421.9	419.2	415.5	414.6
55°	313.7	311.0	306.4	305.5	307.3	305.5	303.6	304.5	306.4	297.2	297.2
57.5°	214.6	212.8	210.1	210.1	213.7	209.1	206.4	210.1	206.4	202.7	202.7
60°	137.6	136.7	133.9	133.9	133.9	133.0	130.3	131.2	133.0	127.5	128.4
62.5°	82.6	79.8	78.9	78.0	78.9	78.0	78.0	77.1	76.1	76.1	73.4
65°	44.9	43.1	41.3	42.2	42.2	41.3	41.3	41.3	39.4	38.5	37.6
67.5°	22.9	21.1	21.1	20.2	20.2	20.2	20.2	19.3	19.3	19.3	18.3
70°	14.7	13.8	12.8	12.8	12.8	11.9	11.9	11.9	11.9	11.9	11.0
72.5°	10.1	9.2	8.3	8.3	8.3	7.3	7.3	7.3	7.3	6.4	6.4
75°	7.3	6.4	5.5	5.5	5.5	4.6	4.6	4.6	4.6	4.6	4.6
77.5°	4.6	3.7	3.7	3.7	3.7	2.8	2.8	2.8	2.8	2.8	1.8
80°	2.8	2.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9
82.5°	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
85°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0
87.5°	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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



TEST NUMBER: P251217

CATALOG NUMBER: LSR8B70D010 EC8B709727 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1	3491.1
2.5°	3603.0	3595.7	3600.3	3634.2	3619.5	3615.0	3576.4	3610.4
5°	3646.1	3640.6	3640.6	3679.2	3661.7	3658.1	3620.5	3649.8
7.5°	3686.5	3681.0	3681.9	3721.4	3707.6	3702.1	3664.5	3693.8
10°	3738.8	3735.1	3736.0	3773.6	3759.0	3753.5	3714.9	3745.2
12.5°	3770.0	3764.5	3764.5	3804.8	3788.3	3780.1	3743.4	3772.7
15°	3746.1	3737.9	3737.9	3778.2	3759.9	3748.0	3715.9	3743.4
17.5°	3664.5	3656.2	3656.2	3691.1	3677.3	3659.9	3626.9	3652.6
20°	3550.7	3540.7	3537.9	3578.3	3559.0	3543.4	3514.1	3538.8
22.5°	3422.3	3417.7	3409.5	3449.8	3432.4	3415.9	3384.7	3404.0
25°	3268.2	3260.9	3252.6	3292.1	3274.7	3258.1	3233.4	3249.0
27.5°	3076.5	3077.4	3072.9	3104.0	3086.6	3077.4	3047.2	3072.9
30°	2844.5	2834.4	2830.7	2867.4	2850.9	2838.9	2801.3	2826.1
32.5°	2541.8	2527.1	2507.8	2549.1	2520.7	2510.6	2478.5	2514.2
35°	2101.5	2096.9	2079.4	2114.3	2098.7	2080.4	2060.2	2090.5
37.5°	1624.5	1628.2	1626.3	1635.5	1626.3	1614.4	1592.4	1581.4
40°	1240.1	1231.0	1223.6	1240.1	1220.9	1220.9	1208.0	1221.8
42.5°	972.3	968.6	977.8	981.5	970.5	968.6	966.8	965.9
45°	802.6	802.6	804.4	808.1	804.4	802.6	797.1	793.4
47.5°	661.4	665.0	661.4	673.3	666.9	665.0	654.0	658.6
50°	535.7	531.1	535.7	539.4	540.3	534.8	529.3	532.0
52.5°	415.5	408.2	406.4	411.9	408.2	408.2	404.5	403.6
55°	292.6	295.4	290.8	295.4	293.5	290.8	288.0	291.7
57.5°	198.1	199.0	197.2	200.0	195.4	196.3	195.4	194.5
60°	128.4	124.7	124.7	127.5	122.9	122.9	122.0	122.0
62.5°	73.4	72.5	72.5	71.5	70.6	70.6	70.6	68.8
65°	37.6	36.7	35.8	35.8	35.8	35.8	34.9	34.9
67.5°	18.3	17.4	17.4	18.3	17.4	17.4	17.4	17.4
70°	11.0	11.0	10.1	11.0	10.1	10.1	10.1	10.1
72.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
75°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
77.5°	2.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)