

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: P250909

Luminaire Tested: **LSR8B70D010 EC8B709727 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250909
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 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE 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: 5541.0 lumens
Efficiency: N/A
Efficacy: 73.0 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

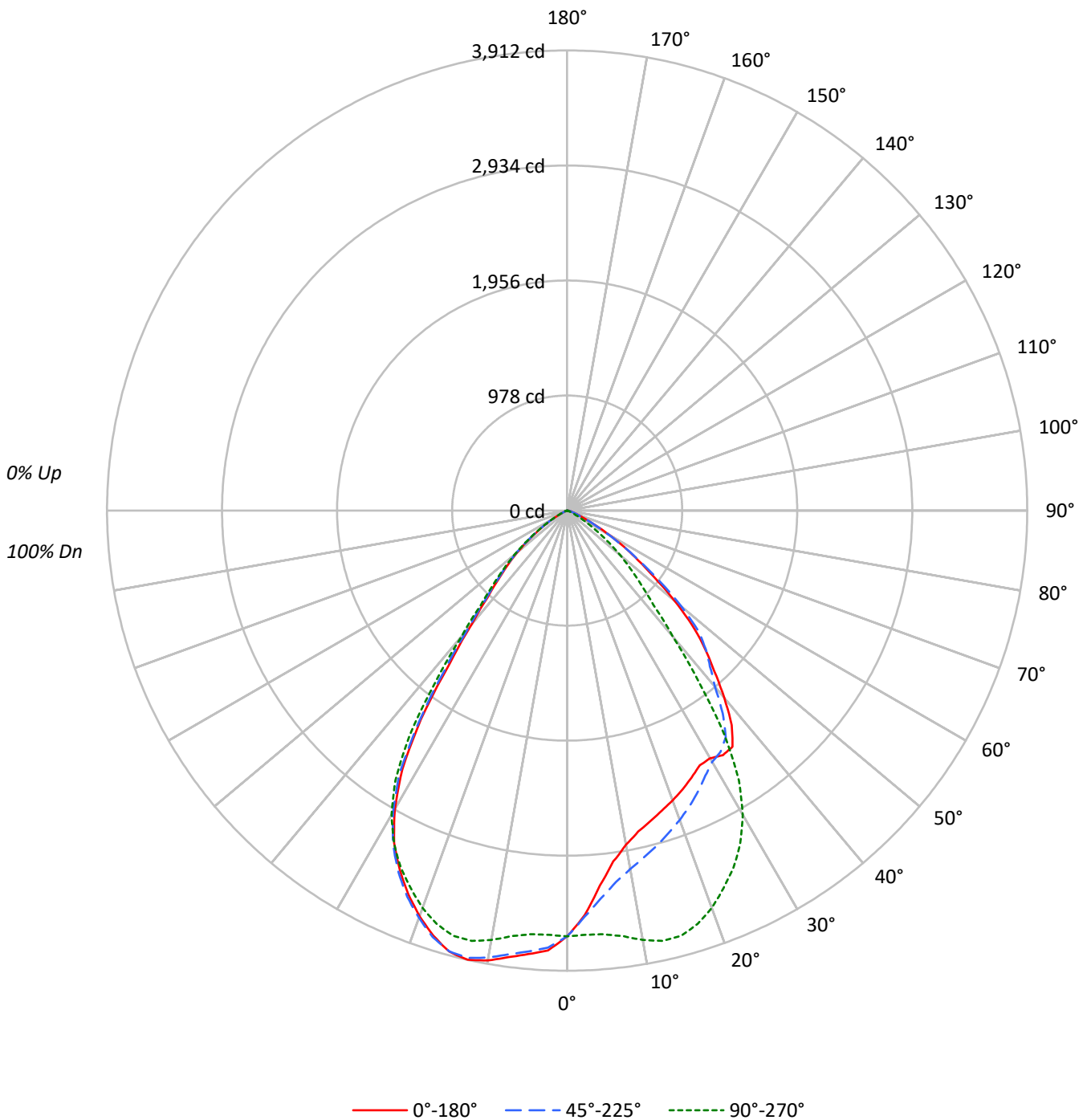
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	337.4	6.1
10°-20°	974.5	17.6
20°-30°	1414.3	25.5
30°-40°	1393.0	25.1
40°-50°	873.2	15.8
50°-60°	421.4	7.6
60°-70°	102.0	1.8
70°-80°	20.6	0.4
80°-90°	4.8	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°	2726.2	49.2
0°-40°	4119.2	74.3
0°-60°	5413.7	97.7
0°-90°	5541.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5541.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3620	3620	3620	3620	3620	
5°	3199	3308	3615	3762	3784	296
15°	2733	2948	3742	3878	3881	773
25°	2503	2634	3348	3394	3369	1158
35°	2451	2351	2337	2204	2168	1483
45°	1655	1666	884	846	823	1265
55°	735	759	322	318	302	676
65°	172	170	48	41	36	196
75°	42	36	10	5	4	47
85°	12	10	2	0	0	13
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°	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8
2.5°	3441.0	3419.1	3378.2	3427.7	3427.7	3400.1	3455.3	3422.0	3448.6	3490.5	3453.4
5°	3199.4	3181.4	3147.1	3199.4	3206.1	3180.4	3247.0	3222.3	3261.3	3312.6	3307.9
7.5°	3008.3	2985.5	2954.1	3008.3	3018.7	3001.6	3065.3	3053.9	3105.3	3171.9	3183.3
10°	2883.7	2859.9	2832.3	2881.8	2889.4	2878.0	2942.7	2936.0	2986.4	3063.4	3093.9
12.5°	2795.2	2775.3	2744.8	2797.1	2805.7	2789.5	2850.4	2847.5	2899.9	2980.7	3018.7
15°	2733.4	2709.6	2682.1	2726.8	2738.2	2720.1	2778.1	2772.4	2825.7	2905.6	2948.4
17.5°	2675.4	2653.5	2625.0	2666.8	2678.3	2659.2	2716.3	2706.8	2752.4	2828.5	2872.3
20°	2621.2	2597.4	2571.7	2614.5	2621.2	2599.3	2656.4	2644.0	2684.9	2755.3	2798.1
22.5°	2565.1	2540.3	2513.7	2555.6	2562.2	2540.3	2592.7	2578.4	2616.4	2680.2	2719.1
25°	2503.3	2480.4	2453.8	2492.8	2498.5	2474.7	2529.9	2511.8	2545.1	2601.2	2633.5
27.5°	2441.4	2419.6	2390.1	2430.0	2432.9	2410.0	2460.5	2435.7	2463.3	2514.7	2542.2
30°	2431.0	2406.2	2375.8	2408.1	2409.1	2379.6	2427.2	2397.7	2412.9	2450.9	2467.1
32.5°	2464.3	2439.5	2408.1	2434.8	2431.9	2399.6	2445.2	2409.1	2413.8	2433.8	2430.0
35°	2450.9	2421.5	2384.4	2412.9	2412.9	2373.9	2419.6	2376.8	2372.0	2374.9	2351.1
37.5°	2299.7	2276.9	2241.7	2269.3	2266.4	2236.9	2272.1	2236.9	2220.8	2214.1	2171.3
40°	2077.2	2049.6	2023.0	2052.4	2055.3	2023.9	2069.6	2029.6	2024.9	2005.8	1955.4
42.5°	1851.8	1842.2	1816.6	1841.3	1854.6	1828.0	1866.0	1847.0	1849.9	1845.1	1797.5
45°	1654.9	1638.7	1619.7	1648.2	1656.8	1643.5	1681.5	1670.1	1681.5	1705.3	1666.3
47.5°	1442.8	1426.6	1405.7	1436.1	1451.4	1426.6	1459.0	1455.2	1472.3	1513.2	1509.4
50°	1187.0	1175.5	1171.7	1175.5	1185.0	1173.6	1196.5	1197.4	1208.8	1264.9	1268.7
52.5°	939.7	936.8	923.5	935.9	935.9	917.8	940.6	930.2	941.6	979.6	1004.3
55°	735.2	732.3	723.8	735.2	722.8	716.2	722.8	712.4	703.8	733.3	759.0
57.5°	572.6	563.0	552.6	557.3	556.4	542.1	549.7	537.4	530.7	541.2	564.0
60°	408.0	405.2	395.7	400.4	404.2	393.7	401.4	395.7	384.2	392.8	393.7
62.5°	271.1	273.0	267.3	268.2	265.4	263.5	268.2	271.1	268.2	264.4	265.4
65°	172.1	171.2	170.2	171.2	173.1	169.3	172.1	174.0	171.2	171.2	170.2
67.5°	114.1	111.3	108.4	110.3	112.2	109.4	112.2	111.3	112.2	111.3	108.4
70°	77.0	76.1	75.1	76.1	76.1	74.2	76.1	75.1	76.1	75.1	72.3
72.5°	56.1	56.1	55.2	56.1	56.1	54.2	55.2	53.3	54.2	53.3	51.4
75°	41.8	41.8	40.9	41.8	40.9	39.9	40.9	39.9	38.0	38.0	36.1
77.5°	30.4	30.4	30.4	30.4	30.4	29.5	29.5	28.5	27.6	26.6	26.6
80°	22.8	21.9	21.9	21.9	21.9	20.9	21.9	20.9	20.0	19.0	18.1
82.5°	16.2	17.1	16.2	16.2	16.2	15.2	16.2	15.2	15.2	14.3	12.4
85°	12.4	12.4	12.4	12.4	12.4	11.4	11.4	11.4	10.5	10.5	9.5
87.5°	6.7	6.7	6.7	7.6	6.7	6.7	6.7	5.7	5.7	4.8	4.8
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°	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8
2.5°	3502.8	3507.6	3497.1	3513.3	3576.1	3525.7	3546.6	3553.2	3600.8	3609.4	3603.7
5°	3369.7	3390.6	3403.9	3440.1	3509.5	3473.4	3510.4	3534.2	3595.1	3615.1	3619.8
7.5°	3265.1	3308.8	3341.2	3400.1	3481.9	3454.3	3510.4	3549.4	3623.6	3649.3	3661.7
10°	3187.1	3253.7	3309.8	3390.6	3482.9	3464.8	3538.0	3593.2	3675.9	3706.4	3721.6
12.5°	3128.1	3209.0	3284.1	3386.8	3486.7	3478.1	3566.6	3629.3	3716.8	3747.3	3765.3
15°	3063.4	3156.6	3244.1	3359.2	3466.7	3464.8	3559.9	3626.5	3715.9	3741.6	3758.7
17.5°	2986.4	3086.3	3182.3	3306.9	3413.4	3415.3	3511.4	3577.0	3664.5	3685.4	3696.9
20°	2908.4	3007.3	3103.4	3231.8	3336.4	3339.3	3433.4	3494.3	3578.0	3595.1	3597.9
22.5°	2825.7	2917.9	3014.0	3141.4	3242.2	3244.1	3337.4	3394.4	3465.7	3474.3	3481.9
25°	2731.5	2821.9	2912.2	3038.7	3134.8	3140.5	3225.1	3275.5	3341.2	3347.8	3350.7
27.5°	2633.5	2707.7	2794.3	2902.7	2999.7	2995.9	3075.8	3132.9	3191.8	3188.0	3187.1
30°	2534.6	2596.5	2649.7	2754.3	2825.7	2828.5	2903.7	2931.2	2993.1	2985.5	2984.5
32.5°	2465.2	2481.4	2495.6	2548.9	2616.4	2592.7	2644.0	2678.3	2721.0	2718.2	2719.1
35°	2337.8	2308.3	2265.5	2273.1	2314.0	2276.9	2304.5	2303.5	2347.3	2336.8	2349.2
37.5°	2120.0	2036.3	1941.2	1886.9	1894.6	1848.0	1838.4	1861.3	1876.5	1847.0	1857.5
40°	1887.9	1764.3	1615.9	1492.2	1485.6	1427.6	1417.1	1394.3	1423.8	1399.0	1406.7
42.5°	1716.7	1553.1	1358.1	1207.9	1175.5	1127.0	1098.5	1094.7	1103.3	1086.1	1081.4
45°	1585.5	1411.4	1187.9	1015.8	979.6	927.3	898.8	888.3	889.3	883.6	878.8
47.5°	1431.4	1256.4	1030.0	854.1	813.2	763.7	735.2	728.5	732.3	724.7	719.0
50°	1218.3	1061.4	855.0	694.3	658.1	622.0	599.2	592.5	591.6	585.9	582.1
52.5°	989.1	858.8	680.0	545.9	513.6	478.4	462.2	453.7	454.6	448.9	443.2
55°	765.6	684.8	526.9	412.8	383.3	355.7	340.5	330.0	327.2	321.5	318.6
57.5°	569.7	515.5	394.7	297.7	280.6	253.9	238.7	226.4	224.5	221.6	220.7
60°	399.5	360.5	277.7	212.1	192.1	176.0	160.7	148.4	142.7	141.7	138.9
62.5°	258.7	234.9	182.6	141.7	126.5	115.1	99.9	91.3	87.5	83.7	84.6
65°	160.7	142.7	114.1	91.3	82.7	74.2	62.8	55.2	51.4	47.6	48.5
67.5°	99.9	89.4	72.3	59.0	53.3	46.6	38.0	32.3	29.5	26.6	24.7
70°	67.5	58.0	49.5	41.8	38.0	33.3	27.6	22.8	20.9	19.0	17.1
72.5°	47.6	42.8	36.1	31.4	28.5	24.7	20.9	18.1	16.2	14.3	12.4
75°	34.2	30.4	26.6	22.8	20.9	19.0	16.2	14.3	12.4	10.5	8.6
77.5°	24.7	21.9	19.0	17.1	16.2	13.3	11.4	10.5	9.5	7.6	5.7
80°	17.1	15.2	12.4	11.4	11.4	9.5	8.6	7.6	6.7	4.8	3.8
82.5°	11.4	10.5	9.5	8.6	7.6	6.7	6.7	4.8	3.8	2.9	1.9
85°	8.6	7.6	6.7	5.7	5.7	4.8	3.8	2.9	2.9	1.9	1.0
87.5°	4.8	4.8	3.8	2.9	2.9	1.9	1.9	1.0	1.0	1.0	1.0
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8
2.5°	3652.2	3655.0	3671.2	3658.8	3690.2	3713.0	3701.6	3727.3	3718.7	3716.8	3746.3
5°	3676.9	3683.5	3705.4	3694.0	3728.2	3753.0	3741.6	3770.1	3761.5	3759.6	3790.1
7.5°	3724.4	3731.1	3750.1	3740.6	3776.8	3798.6	3784.4	3815.7	3804.3	3803.4	3832.9
10°	3784.4	3793.9	3810.0	3800.5	3833.8	3852.8	3838.6	3869.0	3858.5	3853.8	3886.1
12.5°	3829.1	3835.7	3851.9	3844.3	3876.6	3890.9	3878.5	3908.0	3894.7	3890.9	3919.4
15°	3818.6	3825.3	3838.6	3831.9	3862.3	3875.7	3859.5	3891.8	3878.5	3870.9	3896.6
17.5°	3752.0	3755.8	3765.3	3758.7	3791.0	3799.6	3781.5	3813.8	3801.5	3788.2	3812.9
20°	3654.1	3652.2	3657.9	3655.0	3681.6	3686.4	3675.0	3698.8	3684.5	3676.9	3691.2
22.5°	3532.3	3530.4	3534.2	3526.6	3553.2	3556.1	3539.0	3567.5	3553.2	3539.0	3562.8
25°	3397.3	3386.8	3384.9	3387.8	3405.8	3408.7	3390.6	3411.5	3393.5	3382.1	3404.9
27.5°	3230.8	3217.5	3214.7	3217.5	3235.6	3222.3	3207.1	3222.3	3204.2	3193.7	3208.0
30°	3025.4	3006.4	2997.8	2992.1	3011.1	3006.4	2971.2	2988.3	2959.8	2944.6	2955.0
32.5°	2748.6	2738.2	2715.3	2702.0	2720.1	2684.0	2662.1	2662.1	2650.7	2625.0	2630.7
35°	2364.4	2348.2	2327.3	2315.9	2318.7	2270.2	2234.1	2241.7	2203.7	2197.0	2199.9
37.5°	1878.4	1851.8	1844.2	1820.4	1826.1	1783.3	1733.8	1734.8	1714.8	1693.9	1687.2
40°	1411.4	1406.7	1399.0	1379.1	1386.7	1340.1	1321.1	1322.0	1308.7	1293.5	1301.1
42.5°	1090.9	1075.7	1070.9	1064.3	1066.2	1058.6	1033.8	1036.7	1025.3	1021.5	1017.7
45°	886.4	870.2	858.8	864.5	864.5	856.0	846.5	852.2	846.5	838.9	842.7
47.5°	730.4	715.2	709.5	708.6	715.2	709.5	700.0	701.9	700.9	698.1	696.2
50°	583.0	579.2	574.5	571.6	574.5	572.6	564.0	568.7	571.6	562.1	564.9
52.5°	444.2	444.2	443.2	436.5	442.3	436.5	435.6	437.5	434.6	430.8	429.9
55°	325.3	322.4	317.7	316.7	318.6	316.7	314.8	315.8	317.7	308.2	308.2
57.5°	222.6	220.7	217.8	217.8	221.6	216.8	214.0	217.8	214.0	210.2	210.2
60°	142.7	141.7	138.9	138.9	138.9	137.9	135.1	136.0	137.9	132.2	133.2
62.5°	85.6	82.7	81.8	80.8	81.8	80.8	80.8	79.9	78.9	78.9	76.1
65°	46.6	44.7	42.8	43.7	43.7	42.8	42.8	42.8	40.9	39.9	39.0
67.5°	23.8	21.9	21.9	20.9	20.9	20.9	20.9	20.0	20.0	20.0	19.0
70°	15.2	14.3	13.3	13.3	13.3	12.4	12.4	12.4	12.4	12.4	11.4
72.5°	10.5	9.5	8.6	8.6	8.6	7.6	7.6	7.6	7.6	6.7	6.7
75°	7.6	6.7	5.7	5.7	5.7	4.8	4.8	4.8	4.8	4.8	4.8
77.5°	4.8	3.8	3.8	3.8	3.8	2.9	2.9	2.9	2.9	2.9	1.9
80°	2.9	2.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0
82.5°	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
87.5°	1.0	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: P250909

CATALOG NUMBER: LSR8B70D010 EC8B709727 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8	3619.8
2.5°	3735.9	3728.2	3733.0	3768.2	3753.0	3748.2	3708.3	3743.5
5°	3780.6	3774.8	3774.8	3814.8	3796.7	3792.9	3753.9	3784.4
7.5°	3822.4	3816.7	3817.6	3858.5	3844.3	3838.6	3799.6	3830.0
10°	3876.6	3872.8	3873.8	3912.8	3897.5	3891.8	3851.9	3883.3
12.5°	3909.0	3903.2	3903.2	3945.1	3928.0	3919.4	3881.4	3911.8
15°	3884.2	3875.7	3875.7	3917.5	3898.5	3886.1	3852.8	3881.4
17.5°	3799.6	3791.0	3791.0	3827.2	3812.9	3794.8	3760.6	3787.2
20°	3681.6	3671.2	3668.3	3710.2	3690.2	3674.0	3643.6	3669.3
22.5°	3548.5	3543.7	3535.2	3577.0	3559.0	3541.8	3509.5	3529.5
25°	3388.7	3381.1	3372.5	3413.4	3395.4	3378.2	3352.6	3368.7
27.5°	3189.9	3190.9	3186.1	3218.5	3200.4	3190.9	3159.5	3186.1
30°	2949.3	2938.8	2935.0	2973.1	2956.0	2943.6	2904.6	2930.3
32.5°	2635.5	2620.2	2600.3	2643.1	2613.6	2603.1	2569.8	2606.9
35°	2178.9	2174.2	2156.1	2192.2	2176.1	2157.1	2136.1	2167.5
37.5°	1684.4	1688.2	1686.3	1695.8	1686.3	1673.9	1651.1	1639.7
40°	1285.9	1276.4	1268.7	1285.9	1265.9	1265.9	1252.6	1266.8
42.5°	1008.1	1004.3	1013.9	1017.7	1006.2	1004.3	1002.4	1001.5
45°	832.2	832.2	834.1	837.9	834.1	832.2	826.5	822.7
47.5°	685.7	689.5	685.7	698.1	691.4	689.5	678.1	682.9
50°	555.4	550.7	555.4	559.2	560.2	554.5	548.8	551.6
52.5°	430.8	423.2	421.3	427.0	423.2	423.2	419.4	418.5
55°	303.4	306.2	301.5	306.2	304.3	301.5	298.6	302.4
57.5°	205.4	206.4	204.5	207.3	202.6	203.5	202.6	201.6
60°	133.2	129.3	129.3	132.2	127.4	127.4	126.5	126.5
62.5°	76.1	75.1	75.1	74.2	73.2	73.2	73.2	71.3
65°	39.0	38.0	37.1	37.1	37.1	37.1	36.1	36.1
67.5°	19.0	18.1	18.1	19.0	18.1	18.1	18.1	18.1
70°	11.4	11.4	10.5	11.4	10.5	10.5	10.5	10.5
72.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
75°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
77.5°	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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)