

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: P250904

Luminaire Tested: **LSR8B60D010 EC8B60940 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250904
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: LSR8B60D010 EC8B60940 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5872.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

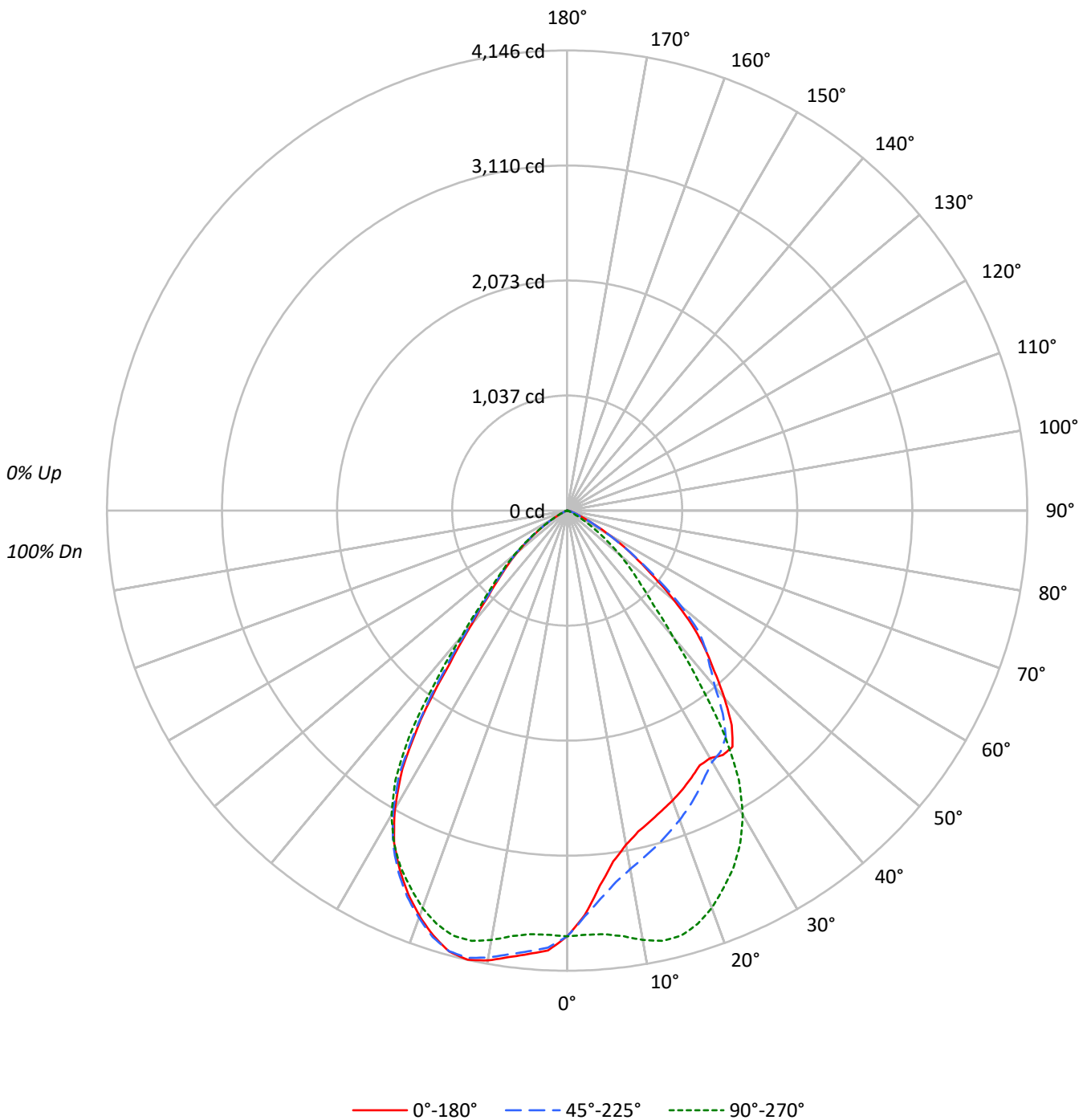
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P250904

CATALOG NUMBER: LSR8B60D010 EC8B60940 8LBSW0LI

Luminous Intensity Polar Plot





TEST NUMBER: P250904

CATALOG NUMBER: LSR8B60D010 EC8B60940 8LBSW0LI

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	118291	118291	118291
5°	104953	118585	124138
10°	95686	122987	128855
15°	92475	126582	131310
20°	91154	125023	127602
25°	90259	120711	121466
30°	91730	112653	110570
35°	97777	93222	86469
40°	88607	59681	54041
45°	76477	40831	38018
50°	60345	29786	28045
55°	41886	18317	17231
60°	26667	9263	8270
65°	13309	3677	2795
70°	7357	1821	1001
75°	5278	1322	477
80°	4297	888	178
85°	4635	708	0



TEST NUMBER: P250904

CATALOG NUMBER: LSR8B60D010 EC8B60940 8LBSW0LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	357.5	6.1
10°-20°	1032.7	17.6
20°-30°	1498.8	25.5
30°-40°	1476.2	25.1
40°-50°	925.4	15.8
50°-60°	446.5	7.6
60°-70°	108.1	1.8
70°-80°	21.8	0.4
80°-90°	5.0	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°	2889.0	49.2
0°-40°	4365.2	74.3
0°-60°	5737.1	97.7
0°-90°	5872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5872.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3836	3836	3836	3836	3836	
5°	3391	3506	3831	3986	4010	314
15°	2897	3124	3965	4110	4113	819
25°	2653	2791	3548	3596	3570	1228
35°	2597	2492	2476	2335	2297	1572
45°	1754	1766	936	897	872	1341
55°	779	804	341	337	320	717
65°	182	180	50	43	38	208
75°	44	38	11	5	4	50
85°	13	10	2	0	0	13
90°	0	0	0	0	0	



TEST NUMBER: P250904

CATALOG NUMBER: LSR8B60D010 EC8B60940 8LBSWOLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1
2.5°	3646.6	3623.4	3580.1	3632.5	3632.5	3603.2	3661.7	3626.4	3654.6	3699.0	3659.7
5°	3390.6	3371.4	3335.1	3390.6	3397.6	3370.4	3441.0	3414.8	3456.1	3510.5	3505.5
7.5°	3188.0	3163.8	3130.5	3188.0	3199.1	3180.9	3248.5	3236.4	3290.8	3361.3	3373.4
10°	3055.9	3030.7	3001.5	3053.9	3062.0	3049.9	3118.4	3111.4	3164.8	3246.4	3278.7
12.5°	2962.2	2941.0	2908.8	2964.2	2973.3	2956.2	3020.7	3017.6	3073.1	3158.8	3199.1
15°	2896.7	2871.5	2842.3	2889.6	2901.7	2882.6	2944.1	2938.0	2994.5	3079.1	3124.5
17.5°	2835.2	2812.0	2781.8	2826.1	2838.2	2818.1	2878.6	2868.5	2916.9	2997.5	3043.9
20°	2777.8	2752.6	2725.4	2770.7	2777.8	2754.6	2815.1	2802.0	2845.3	2919.9	2965.2
22.5°	2718.3	2692.1	2663.9	2708.2	2715.3	2692.1	2747.5	2732.4	2772.7	2840.3	2881.6
25°	2652.8	2628.6	2600.4	2641.7	2647.7	2622.5	2681.0	2661.9	2697.1	2756.6	2790.9
27.5°	2587.3	2564.1	2532.8	2575.2	2578.2	2554.0	2607.4	2581.2	2610.5	2664.9	2694.1
30°	2576.2	2550.0	2517.7	2552.0	2553.0	2521.8	2572.2	2540.9	2557.0	2597.4	2614.5
32.5°	2611.5	2585.3	2552.0	2580.2	2577.2	2542.9	2591.3	2553.0	2558.0	2579.2	2575.2
35°	2597.4	2566.1	2526.8	2557.0	2557.0	2515.7	2564.1	2518.7	2513.7	2516.7	2491.5
37.5°	2437.1	2412.9	2375.6	2404.8	2401.8	2370.6	2407.9	2370.6	2353.4	2346.4	2301.0
40°	2201.2	2172.0	2143.8	2175.0	2178.1	2144.8	2193.2	2150.9	2145.8	2125.7	2072.2
42.5°	1962.4	1952.3	1925.1	1951.3	1965.4	1937.2	1977.5	1957.3	1960.4	1955.3	1904.9
45°	1753.7	1736.6	1716.4	1746.7	1755.8	1741.6	1782.0	1769.9	1782.0	1807.2	1765.8
47.5°	1529.0	1511.8	1489.7	1521.9	1538.1	1511.8	1546.1	1542.1	1560.2	1603.6	1599.5
50°	1257.9	1245.8	1241.7	1245.8	1255.8	1243.7	1267.9	1268.9	1281.0	1340.5	1344.5
52.5°	995.8	992.8	978.7	991.8	991.8	972.6	996.8	985.7	997.8	1038.1	1064.3
55°	779.1	776.1	767.0	779.1	766.0	758.9	766.0	754.9	745.8	777.1	804.3
57.5°	606.8	596.7	585.6	590.6	589.6	574.5	582.6	569.5	562.4	573.5	597.7
60°	432.4	429.4	419.3	424.3	428.4	417.3	425.3	419.3	407.2	416.3	417.3
62.5°	287.3	289.3	283.2	284.2	281.2	279.2	284.2	287.3	284.2	280.2	281.2
65°	182.4	181.4	180.4	181.4	183.4	179.4	182.4	184.4	181.4	181.4	180.4
67.5°	120.9	117.9	114.9	116.9	118.9	115.9	118.9	117.9	118.9	117.9	114.9
70°	81.6	80.6	79.6	80.6	80.6	78.6	80.6	79.6	80.6	79.6	76.6
72.5°	59.5	59.5	58.5	59.5	59.5	57.5	58.5	56.4	57.5	56.4	54.4
75°	44.3	44.3	43.3	44.3	43.3	42.3	43.3	42.3	40.3	40.3	38.3
77.5°	32.3	32.3	32.3	32.3	32.3	31.2	31.2	30.2	29.2	28.2	28.2
80°	24.2	23.2	23.2	23.2	23.2	22.2	23.2	22.2	21.2	20.2	19.2
82.5°	17.1	18.1	17.1	17.1	17.1	16.1	17.1	16.1	16.1	15.1	13.1
85°	13.1	13.1	13.1	13.1	13.1	12.1	12.1	12.1	11.1	11.1	10.1
87.5°	7.1	7.1	7.1	8.1	7.1	7.1	7.1	6.0	6.0	5.0	5.0
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: P250904

CATALOG NUMBER: LSR8B60D010 EC8B60940 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1
2.5°	3712.1	3717.1	3706.0	3723.2	3789.7	3736.3	3758.5	3765.5	3815.9	3825.0	3818.9
5°	3571.0	3593.2	3607.3	3645.6	3719.1	3680.8	3720.2	3745.3	3809.9	3831.0	3836.1
7.5°	3460.1	3506.5	3540.7	3603.2	3689.9	3660.7	3720.2	3761.5	3840.1	3867.3	3880.4
10°	3377.5	3448.0	3507.5	3593.2	3690.9	3671.8	3749.4	3807.8	3895.5	3927.8	3943.9
12.5°	3315.0	3400.6	3480.3	3589.1	3695.0	3685.9	3779.6	3846.1	3938.9	3971.1	3990.3
15°	3246.4	3345.2	3437.9	3559.9	3673.8	3671.8	3772.6	3843.1	3937.9	3965.1	3983.2
17.5°	3164.8	3270.6	3372.4	3504.5	3617.3	3619.4	3721.2	3790.7	3883.4	3905.6	3917.7
20°	3082.2	3187.0	3288.8	3424.8	3535.7	3538.7	3638.5	3703.0	3791.7	3809.9	3812.9
22.5°	2994.5	3092.2	3194.0	3329.1	3435.9	3437.9	3536.7	3597.2	3672.8	3681.9	3689.9
25°	2894.7	2990.4	3086.2	3220.2	3322.0	3328.1	3417.8	3471.2	3540.7	3547.8	3550.8
27.5°	2790.9	2869.5	2961.2	3076.1	3178.9	3174.9	3259.5	3320.0	3382.5	3378.5	3377.5
30°	2686.0	2751.6	2808.0	2918.9	2994.5	2997.5	3077.1	3106.3	3171.9	3163.8	3162.8
32.5°	2612.5	2629.6	2644.7	2701.2	2772.7	2747.5	2802.0	2838.2	2883.6	2880.6	2881.6
35°	2477.4	2446.2	2400.8	2408.9	2452.2	2412.9	2442.1	2441.1	2487.5	2476.4	2489.5
37.5°	2246.6	2157.9	2057.1	1999.7	2007.7	1958.3	1948.3	1972.5	1988.6	1957.3	1968.4
40°	2000.7	1869.7	1712.4	1581.4	1574.3	1512.9	1501.8	1477.6	1508.8	1482.6	1490.7
42.5°	1819.3	1645.9	1439.3	1280.0	1245.8	1194.4	1164.1	1160.1	1169.2	1151.0	1146.0
45°	1680.2	1495.7	1258.9	1076.4	1038.1	982.7	952.5	941.4	942.4	936.3	931.3
47.5°	1516.9	1331.4	1091.6	905.1	861.8	809.3	779.1	772.0	776.1	768.0	762.0
50°	1291.1	1124.8	906.1	735.8	697.5	659.2	635.0	627.9	626.9	620.9	616.8
52.5°	1048.2	910.1	720.6	578.5	544.3	507.0	489.8	480.8	481.8	475.7	469.7
55°	811.4	725.7	558.4	437.4	406.2	377.0	360.8	349.7	346.7	340.7	337.6
57.5°	603.7	546.3	418.3	315.5	297.3	269.1	253.0	239.9	237.9	234.8	233.8
60°	423.3	382.0	294.3	224.8	203.6	186.5	170.3	157.2	151.2	150.2	147.2
62.5°	274.1	249.0	193.5	150.2	134.1	122.0	105.8	96.8	92.7	88.7	89.7
65°	170.3	151.2	120.9	96.8	87.7	78.6	66.5	58.5	54.4	50.4	51.4
67.5°	105.8	94.7	76.6	62.5	56.4	49.4	40.3	34.3	31.2	28.2	26.2
70°	71.6	61.5	52.4	44.3	40.3	35.3	29.2	24.2	22.2	20.2	18.1
72.5°	50.4	45.4	38.3	33.3	30.2	26.2	22.2	19.2	17.1	15.1	13.1
75°	36.3	32.3	28.2	24.2	22.2	20.2	17.1	15.1	13.1	11.1	9.1
77.5°	26.2	23.2	20.2	18.1	17.1	14.1	12.1	11.1	10.1	8.1	6.0
80°	18.1	16.1	13.1	12.1	12.1	10.1	9.1	8.1	7.1	5.0	4.0
82.5°	12.1	11.1	10.1	9.1	8.1	7.1	7.1	5.0	4.0	3.0	2.0
85°	9.1	8.1	7.1	6.0	6.0	5.0	4.0	3.0	3.0	2.0	1.0
87.5°	5.0	5.0	4.0	3.0	3.0	2.0	2.0	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



TEST NUMBER: P250904

CATALOG NUMBER: LSR8B60D010 EC8B60940 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1
2.5°	3870.3	3873.4	3890.5	3877.4	3910.6	3934.8	3922.7	3950.0	3940.9	3938.9	3970.1
5°	3896.5	3903.6	3926.8	3914.7	3951.0	3977.2	3965.1	3995.3	3986.2	3984.2	4016.5
7.5°	3946.9	3954.0	3974.1	3964.1	4002.4	4025.5	4010.4	4043.7	4031.6	4030.6	4061.8
10°	4010.4	4020.5	4037.6	4027.6	4062.8	4083.0	4067.9	4100.1	4089.0	4084.0	4118.3
12.5°	4057.8	4064.9	4082.0	4073.9	4108.2	4123.3	4110.2	4141.5	4127.3	4123.3	4153.5
15°	4046.7	4053.8	4067.9	4060.8	4093.1	4107.2	4090.0	4124.3	4110.2	4102.1	4129.4
17.5°	3976.2	3980.2	3990.3	3983.2	4017.5	4026.6	4007.4	4041.7	4028.6	4014.5	4040.7
20°	3872.3	3870.3	3876.4	3873.4	3901.6	3906.6	3894.5	3919.7	3904.6	3896.5	3911.7
22.5°	3743.3	3741.3	3745.3	3737.3	3765.5	3768.5	3750.4	3780.6	3765.5	3750.4	3775.6
25°	3600.2	3589.1	3587.1	3590.1	3609.3	3612.3	3593.2	3615.3	3596.2	3584.1	3608.3
27.5°	3423.8	3409.7	3406.7	3409.7	3428.9	3414.8	3398.6	3414.8	3395.6	3384.5	3399.6
30°	3206.1	3186.0	3176.9	3170.8	3191.0	3186.0	3148.7	3166.8	3136.6	3120.5	3131.5
32.5°	2912.8	2901.7	2877.5	2863.4	2882.6	2844.3	2821.1	2821.1	2809.0	2781.8	2787.8
35°	2505.6	2488.5	2466.3	2454.2	2457.3	2405.9	2367.6	2375.6	2335.3	2328.2	2331.3
37.5°	1990.6	1962.4	1954.3	1929.1	1935.2	1889.8	1837.4	1838.4	1817.2	1795.1	1788.0
40°	1495.7	1490.7	1482.6	1461.5	1469.5	1420.1	1400.0	1401.0	1386.9	1370.7	1378.8
42.5°	1156.1	1139.9	1134.9	1127.8	1129.9	1121.8	1095.6	1098.6	1086.5	1082.5	1078.5
45°	939.4	922.2	910.1	916.2	916.2	907.1	897.0	903.1	897.0	889.0	893.0
47.5°	774.1	757.9	751.9	750.9	757.9	751.9	741.8	743.8	742.8	739.8	737.8
50°	617.8	613.8	608.8	605.7	608.8	606.8	597.7	602.7	605.7	595.7	598.7
52.5°	470.7	470.7	469.7	462.6	468.7	462.6	461.6	463.6	460.6	456.6	455.6
55°	344.7	341.7	336.6	335.6	337.6	335.6	333.6	334.6	336.6	326.6	326.6
57.5°	235.8	233.8	230.8	230.8	234.8	229.8	226.8	230.8	226.8	222.7	222.7
60°	151.2	150.2	147.2	147.2	147.2	146.1	143.1	144.1	146.1	140.1	141.1
62.5°	90.7	87.7	86.7	85.7	86.7	85.7	85.7	84.7	83.7	83.7	80.6
65°	49.4	47.4	45.4	46.4	46.4	45.4	45.4	45.4	43.3	42.3	41.3
67.5°	25.2	23.2	23.2	22.2	22.2	22.2	22.2	21.2	21.2	21.2	20.2
70°	16.1	15.1	14.1	14.1	14.1	13.1	13.1	13.1	13.1	13.1	12.1
72.5°	11.1	10.1	9.1	9.1	9.1	8.1	8.1	8.1	8.1	7.1	7.1
75°	8.1	7.1	6.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0	5.0
77.5°	5.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	2.0
80°	3.0	3.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
82.5°	2.0	2.0	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: P250904

CATALOG NUMBER: LSR8B60D010 EC8B60940 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1	3836.1
2.5°	3959.0	3951.0	3956.0	3993.3	3977.2	3972.1	3929.8	3967.1
5°	4006.4	4000.3	4000.3	4042.7	4023.5	4019.5	3978.2	4010.4
7.5°	4050.7	4044.7	4045.7	4089.0	4073.9	4067.9	4026.6	4058.8
10°	4108.2	4104.2	4105.2	4146.5	4130.4	4124.3	4082.0	4115.2
12.5°	4142.5	4136.4	4136.4	4180.8	4162.6	4153.5	4113.2	4145.5
15°	4116.3	4107.2	4107.2	4151.5	4131.4	4118.3	4083.0	4113.2
17.5°	4026.6	4017.5	4017.5	4055.8	4040.7	4021.5	3985.2	4013.4
20°	3901.6	3890.5	3887.5	3931.8	3910.6	3893.5	3861.3	3888.5
22.5°	3760.5	3755.4	3746.4	3790.7	3771.6	3753.4	3719.1	3740.3
25°	3591.1	3583.1	3574.0	3617.3	3598.2	3580.1	3552.8	3570.0
27.5°	3380.5	3381.5	3376.5	3410.7	3391.6	3381.5	3348.2	3376.5
30°	3125.5	3114.4	3110.4	3150.7	3132.5	3119.4	3078.1	3105.3
32.5°	2792.9	2776.8	2755.6	2800.9	2769.7	2758.6	2723.3	2762.6
35°	2309.1	2304.1	2284.9	2323.2	2306.1	2285.9	2263.7	2297.0
37.5°	1785.0	1789.0	1787.0	1797.1	1787.0	1773.9	1749.7	1737.6
40°	1362.7	1352.6	1344.5	1362.7	1341.5	1341.5	1327.4	1342.5
42.5°	1068.4	1064.3	1074.4	1078.5	1066.4	1064.3	1062.3	1061.3
45°	881.9	881.9	883.9	888.0	883.9	881.9	875.9	871.8
47.5°	726.7	730.7	726.7	739.8	732.7	730.7	718.6	723.7
50°	588.6	583.6	588.6	592.6	593.7	587.6	581.6	584.6
52.5°	456.6	448.5	446.5	452.5	448.5	448.5	444.5	443.5
55°	321.5	324.5	319.5	324.5	322.5	319.5	316.5	320.5
57.5°	217.7	218.7	216.7	219.7	214.7	215.7	214.7	213.7
60°	141.1	137.1	137.1	140.1	135.1	135.1	134.1	134.1
62.5°	80.6	79.6	79.6	78.6	77.6	77.6	77.6	75.6
65°	41.3	40.3	39.3	39.3	39.3	39.3	38.3	38.3
67.5°	20.2	19.2	19.2	20.2	19.2	19.2	19.2	19.2
70°	12.1	12.1	11.1	12.1	11.1	11.1	11.1	11.1
72.5°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
75°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
77.5°	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)