

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: P245434

Luminaire Tested: **LSR8B40D010 EC8B40940 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245434
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: LSR8B40D010 EC8B40940 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3995.0 lumens
Efficiency: N/A
Efficacy: 97.7 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

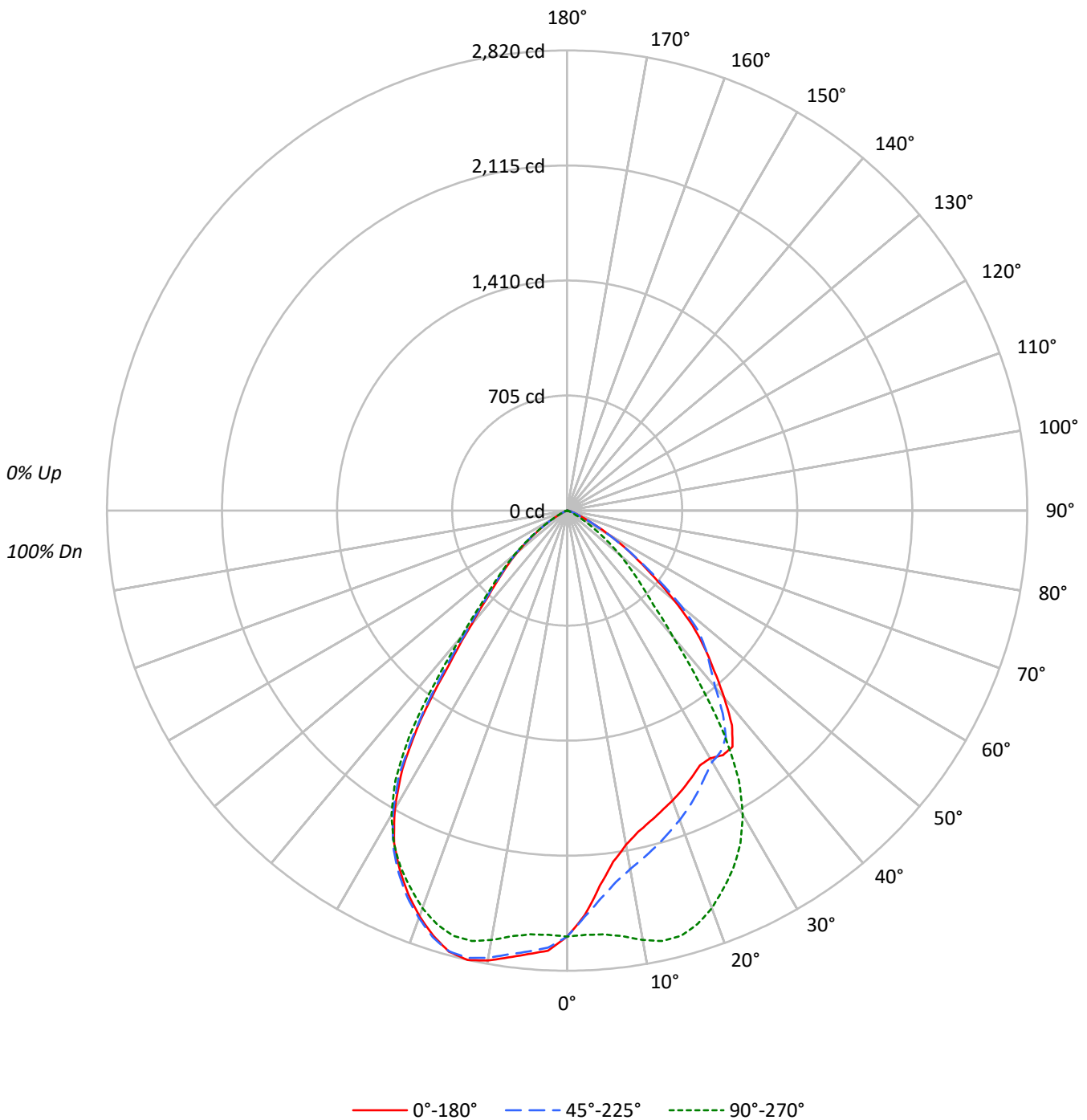
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	80480	80480	80480
5°	71405	80679	84458
10°	65101	83675	87667
15°	62916	86118	89336
20°	62014	85057	86813
25°	61407	82124	82638
30°	62408	76643	75226
35°	66521	63423	58830
40°	60284	40604	36768
45°	52034	27779	25865
50°	41055	20264	19079
55°	28499	12462	11725
60°	18144	6303	5625
65°	9055	2503	1904
70°	5004	1235	676
75°	3598	894	322
80°	2930	604	124
85°	3149	495	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.2	6.1
10°-20°	702.6	17.6
20°-30°	1019.7	25.5
30°-40°	1004.3	25.1
40°-50°	629.6	15.8
50°-60°	303.8	7.6
60°-70°	73.5	1.8
70°-80°	14.9	0.4
80°-90°	3.4	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°	1965.5	49.2
0°-40°	2969.9	74.3
0°-60°	3903.2	97.7
0°-90°	3995.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3995.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2610	2610	2610	2610	2610	
5°	2307	2385	2606	2712	2728	214
15°	1971	2126	2698	2796	2798	557
25°	1805	1899	2414	2447	2429	835
35°	1767	1695	1685	1589	1563	1069
45°	1193	1201	637	610	593	912
55°	530	547	232	229	218	488
65°	124	123	34	30	26	142
75°	30	26	8	3	3	34
85°	9	7	1	0	0	9
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°	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9
2.5°	2480.9	2465.2	2435.7	2471.3	2471.3	2451.5	2491.2	2467.2	2486.4	2516.6	2489.9
5°	2306.8	2293.7	2269.0	2306.8	2311.6	2293.0	2341.1	2323.2	2351.3	2388.4	2384.9
7.5°	2168.9	2152.5	2129.8	2168.9	2176.5	2164.1	2210.1	2201.8	2238.9	2286.9	2295.1
10°	2079.1	2062.0	2042.1	2077.7	2083.2	2075.0	2121.6	2116.8	2153.2	2208.7	2230.6
12.5°	2015.3	2000.9	1979.0	2016.7	2022.9	2011.2	2055.1	2053.0	2090.8	2149.0	2176.5
15°	1970.8	1953.6	1933.7	1966.0	1974.2	1961.2	2003.0	1998.9	2037.3	2094.9	2125.7
17.5°	1928.9	1913.2	1892.6	1922.8	1931.0	1917.3	1958.4	1951.6	1984.5	2039.3	2070.9
20°	1889.8	1872.7	1854.2	1885.0	1889.8	1874.1	1915.2	1906.3	1935.8	1986.5	2017.4
22.5°	1849.4	1831.6	1812.4	1842.5	1847.3	1831.6	1869.3	1859.0	1886.4	1932.4	1960.5
25°	1804.8	1788.4	1769.2	1797.3	1801.4	1784.2	1824.0	1811.0	1835.0	1875.4	1898.8
27.5°	1760.2	1744.5	1723.2	1752.0	1754.1	1737.6	1774.0	1756.1	1776.0	1813.0	1832.9
30°	1752.7	1734.9	1712.9	1736.2	1736.9	1715.7	1750.0	1728.7	1739.7	1767.1	1778.8
32.5°	1776.7	1758.9	1736.2	1755.4	1753.4	1730.1	1763.0	1736.9	1740.4	1754.8	1752.0
35°	1767.1	1745.8	1719.1	1739.7	1739.7	1711.6	1744.5	1713.6	1710.2	1712.2	1695.1
37.5°	1658.1	1641.6	1616.2	1636.1	1634.1	1612.8	1638.2	1612.8	1601.2	1596.4	1565.5
40°	1497.6	1477.7	1458.5	1479.8	1481.8	1459.2	1492.1	1463.3	1459.9	1446.2	1409.8
42.5°	1335.1	1328.2	1309.7	1327.6	1337.2	1318.0	1345.4	1331.7	1333.7	1330.3	1296.0
45°	1193.2	1181.5	1167.8	1188.4	1194.5	1184.9	1212.4	1204.1	1212.4	1229.5	1201.4
47.5°	1040.2	1028.6	1013.5	1035.4	1046.4	1028.6	1051.9	1049.2	1061.5	1091.0	1088.2
50°	855.8	847.6	844.8	847.6	854.4	846.2	862.6	863.3	871.6	912.0	914.8
52.5°	677.5	675.4	665.8	674.7	674.7	661.7	678.2	670.6	678.9	706.3	724.1
55°	530.1	528.0	521.8	530.1	521.1	516.3	521.1	513.6	507.4	528.7	547.2
57.5°	412.8	405.9	398.4	401.8	401.1	390.9	396.3	387.4	382.6	390.2	406.6
60°	294.2	292.1	285.3	288.7	291.4	283.9	289.4	285.3	277.0	283.2	283.9
62.5°	195.4	196.8	192.7	193.4	191.3	189.9	193.4	195.4	193.4	190.6	191.3
65°	124.1	123.4	122.7	123.4	124.8	122.1	124.1	125.5	123.4	123.4	122.7
67.5°	82.3	80.2	78.2	79.5	80.9	78.9	80.9	80.2	80.9	80.2	78.2
70°	55.5	54.9	54.2	54.9	54.9	53.5	54.9	54.2	54.9	54.2	52.1
72.5°	40.5	40.5	39.8	40.5	40.5	39.1	39.8	38.4	39.1	38.4	37.0
75°	30.2	30.2	29.5	30.2	29.5	28.8	29.5	28.8	27.4	27.4	26.1
77.5°	21.9	21.9	21.9	21.9	21.9	21.3	21.3	20.6	19.9	19.2	19.2
80°	16.5	15.8	15.8	15.8	15.8	15.1	15.8	15.1	14.4	13.7	13.0
82.5°	11.7	12.3	11.7	11.7	11.7	11.0	11.7	11.0	11.0	10.3	8.9
85°	8.9	8.9	8.9	8.9	8.9	8.2	8.2	8.2	7.5	7.5	6.9
87.5°	4.8	4.8	4.8	5.5	4.8	4.8	4.8	4.1	4.1	3.4	3.4
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°	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9
2.5°	2525.5	2528.9	2521.4	2533.1	2578.3	2542.0	2557.1	2561.9	2596.1	2602.3	2598.2
5°	2429.5	2444.6	2454.2	2480.3	2530.3	2504.3	2531.0	2548.1	2592.0	2606.4	2609.9
7.5°	2354.1	2385.6	2408.9	2451.5	2510.4	2490.5	2531.0	2559.1	2612.6	2631.1	2640.0
10°	2297.8	2345.9	2386.3	2444.6	2511.1	2498.1	2550.9	2590.7	2650.3	2672.3	2683.2
12.5°	2255.3	2313.6	2367.8	2441.9	2513.9	2507.7	2571.5	2616.7	2679.8	2701.7	2714.8
15°	2208.7	2275.9	2339.0	2422.0	2499.5	2498.1	2566.7	2614.7	2679.1	2697.6	2710.0
17.5°	2153.2	2225.2	2294.4	2384.3	2461.1	2462.4	2531.7	2579.0	2642.1	2657.2	2665.4
20°	2096.9	2168.2	2237.5	2330.1	2405.5	2407.6	2475.5	2519.3	2579.7	2592.0	2594.1
22.5°	2037.3	2103.8	2173.0	2264.9	2337.6	2339.0	2406.2	2447.3	2498.8	2504.9	2510.4
25°	1969.4	2034.5	2099.7	2190.9	2260.1	2264.2	2325.3	2361.6	2408.9	2413.7	2415.8
27.5°	1898.8	1952.2	2014.6	2092.8	2162.8	2160.0	2217.6	2258.8	2301.3	2298.5	2297.8
30°	1827.4	1872.0	1910.4	1985.8	2037.3	2039.3	2093.5	2113.4	2158.0	2152.5	2151.8
32.5°	1777.4	1789.0	1799.3	1837.7	1886.4	1869.3	1906.3	1931.0	1961.8	1959.8	1960.5
35°	1685.5	1664.2	1633.4	1638.9	1668.4	1641.6	1661.5	1660.8	1692.4	1684.8	1693.7
37.5°	1528.5	1468.1	1399.6	1360.5	1366.0	1332.4	1325.5	1342.0	1352.9	1331.7	1339.2
40°	1361.2	1272.0	1165.0	1075.9	1071.1	1029.3	1021.7	1005.3	1026.5	1008.7	1014.2
42.5°	1237.7	1119.8	979.2	870.9	847.6	812.6	792.0	789.3	795.4	783.1	779.7
45°	1143.1	1017.6	856.5	732.3	706.3	668.6	648.0	640.5	641.1	637.0	633.6
47.5°	1032.0	905.8	742.6	615.8	586.3	550.6	530.1	525.3	528.0	522.5	518.4
50°	878.4	765.3	616.5	500.6	474.5	448.5	432.0	427.2	426.5	422.4	419.7
52.5°	713.1	619.2	490.3	393.6	370.3	344.9	333.3	327.1	327.8	323.7	319.5
55°	552.0	493.7	379.9	297.6	276.3	256.5	245.5	237.9	235.9	231.8	229.7
57.5°	410.7	371.7	284.6	214.6	202.3	183.1	172.1	163.2	161.8	159.8	159.1
60°	288.0	259.9	200.2	152.9	138.5	126.9	115.9	107.0	102.9	102.2	100.1
62.5°	186.5	169.4	131.7	102.2	91.2	83.0	72.0	65.8	63.1	60.3	61.0
65°	115.9	102.9	82.3	65.8	59.7	53.5	45.3	39.8	37.0	34.3	35.0
67.5°	72.0	64.5	52.1	42.5	38.4	33.6	27.4	23.3	21.3	19.2	17.8
70°	48.7	41.8	35.7	30.2	27.4	24.0	19.9	16.5	15.1	13.7	12.3
72.5°	34.3	30.9	26.1	22.6	20.6	17.8	15.1	13.0	11.7	10.3	8.9
75°	24.7	21.9	19.2	16.5	15.1	13.7	11.7	10.3	8.9	7.5	6.2
77.5°	17.8	15.8	13.7	12.3	11.7	9.6	8.2	7.5	6.9	5.5	4.1
80°	12.3	11.0	8.9	8.2	8.2	6.9	6.2	5.5	4.8	3.4	2.7
82.5°	8.2	7.5	6.9	6.2	5.5	4.8	4.8	3.4	2.7	2.1	1.4
85°	6.2	5.5	4.8	4.1	4.1	3.4	2.7	2.1	2.1	1.4	0.7
87.5°	3.4	3.4	2.7	2.1	2.1	1.4	1.4	0.7	0.7	0.7	0.7
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9
2.5°	2633.2	2635.2	2646.9	2638.0	2660.6	2677.1	2668.8	2687.3	2681.2	2679.8	2701.1
5°	2651.0	2655.8	2671.6	2663.3	2688.0	2705.9	2697.6	2718.2	2712.0	2710.7	2732.6
7.5°	2685.3	2690.1	2703.8	2696.9	2723.0	2738.8	2728.5	2751.1	2742.9	2742.2	2763.5
10°	2728.5	2735.3	2747.0	2740.1	2764.1	2777.9	2767.6	2789.5	2782.0	2778.5	2801.9
12.5°	2760.7	2765.5	2777.2	2771.7	2795.0	2805.3	2796.4	2817.6	2808.0	2805.3	2825.9
15°	2753.2	2758.0	2767.6	2762.8	2784.7	2794.3	2782.7	2806.0	2796.4	2790.9	2809.4
17.5°	2705.2	2707.9	2714.8	2710.0	2733.3	2739.5	2726.4	2749.7	2740.8	2731.2	2749.1
20°	2634.5	2633.2	2637.3	2635.2	2654.4	2657.9	2649.6	2666.8	2656.5	2651.0	2661.3
22.5°	2546.8	2545.4	2548.1	2542.7	2561.9	2563.9	2551.6	2572.1	2561.9	2551.6	2568.7
25°	2449.4	2441.9	2440.5	2442.5	2455.6	2457.6	2444.6	2459.7	2446.7	2438.4	2454.9
27.5°	2329.4	2319.8	2317.7	2319.8	2332.8	2323.2	2312.2	2323.2	2310.2	2302.6	2312.9
30°	2181.3	2167.6	2161.4	2157.3	2171.0	2167.6	2142.2	2154.5	2134.0	2123.0	2130.5
32.5°	1981.7	1974.2	1957.7	1948.1	1961.2	1935.1	1919.3	1919.3	1911.1	1892.6	1896.7
35°	1704.7	1693.0	1678.0	1669.7	1671.8	1636.8	1610.8	1616.2	1588.8	1584.0	1586.1
37.5°	1354.3	1335.1	1329.6	1312.5	1316.6	1285.7	1250.1	1250.8	1236.4	1221.3	1216.5
40°	1017.6	1014.2	1008.7	994.3	999.8	966.2	952.5	953.2	943.6	932.6	938.1
42.5°	786.5	775.5	772.1	767.3	768.7	763.2	745.4	747.4	739.2	736.5	733.7
45°	639.1	627.4	619.2	623.3	623.3	617.1	610.3	614.4	610.3	604.8	607.5
47.5°	526.6	515.7	511.5	510.9	515.7	511.5	504.7	506.1	505.4	503.3	501.9
50°	420.3	417.6	414.2	412.1	414.2	412.8	406.6	410.1	412.1	405.3	407.3
52.5°	320.2	320.2	319.5	314.7	318.9	314.7	314.1	315.4	313.4	310.6	309.9
55°	234.5	232.5	229.0	228.3	229.7	228.3	227.0	227.7	229.0	222.2	222.2
57.5°	160.5	159.1	157.0	157.0	159.8	156.3	154.3	157.0	154.3	151.5	151.5
60°	102.9	102.2	100.1	100.1	100.1	99.4	97.4	98.1	99.4	95.3	96.0
62.5°	61.7	59.7	59.0	58.3	59.0	58.3	58.3	57.6	56.9	56.9	54.9
65°	33.6	32.2	30.9	31.5	31.5	30.9	30.9	30.9	29.5	28.8	28.1
67.5°	17.1	15.8	15.8	15.1	15.1	15.1	15.1	14.4	14.4	14.4	13.7
70°	11.0	10.3	9.6	9.6	9.6	8.9	8.9	8.9	8.9	8.9	8.2
72.5°	7.5	6.9	6.2	6.2	6.2	5.5	5.5	5.5	5.5	4.8	4.8
75°	5.5	4.8	4.1	4.1	4.1	3.4	3.4	3.4	3.4	3.4	3.4
77.5°	3.4	2.7	2.7	2.7	2.7	2.1	2.1	2.1	2.1	2.1	1.4
80°	2.1	2.1	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7
82.5°	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0
87.5°	0.7	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: P245434

CATALOG NUMBER: LSR8B40D010 EC8B40940 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9	2609.9
2.5°	2693.5	2688.0	2691.5	2716.8	2705.9	2702.4	2673.6	2699.0
5°	2725.7	2721.6	2721.6	2750.4	2737.4	2734.7	2706.5	2728.5
7.5°	2755.9	2751.8	2752.5	2782.0	2771.7	2767.6	2739.5	2761.4
10°	2795.0	2792.3	2792.9	2821.1	2810.1	2806.0	2777.2	2799.8
12.5°	2818.3	2814.2	2814.2	2844.4	2832.0	2825.9	2798.4	2820.4
15°	2800.5	2794.3	2794.3	2824.5	2810.8	2801.9	2777.9	2798.4
17.5°	2739.5	2733.3	2733.3	2759.3	2749.1	2736.0	2711.3	2730.5
20°	2654.4	2646.9	2644.8	2675.0	2660.6	2648.9	2627.0	2645.5
22.5°	2558.4	2555.0	2548.8	2579.0	2566.0	2553.6	2530.3	2544.7
25°	2443.2	2437.7	2431.6	2461.1	2448.0	2435.7	2417.2	2428.8
27.5°	2299.9	2300.6	2297.2	2320.5	2307.4	2300.6	2278.0	2297.2
30°	2126.4	2118.9	2116.1	2143.6	2131.2	2122.3	2094.2	2112.7
32.5°	1900.1	1889.2	1874.8	1905.6	1884.4	1876.8	1852.8	1879.6
35°	1571.0	1567.6	1554.5	1580.6	1568.9	1555.2	1540.1	1562.8
37.5°	1214.4	1217.2	1215.8	1222.6	1215.8	1206.9	1190.4	1182.2
40°	927.1	920.2	914.8	927.1	912.7	912.7	903.1	913.4
42.5°	726.9	724.1	731.0	733.7	725.5	724.1	722.7	722.1
45°	600.0	600.0	601.4	604.1	601.4	600.0	595.9	593.1
47.5°	494.4	497.1	494.4	503.3	498.5	497.1	488.9	492.3
50°	400.5	397.0	400.5	403.2	403.9	399.8	395.7	397.7
52.5°	310.6	305.1	303.8	307.9	305.1	305.1	302.4	301.7
55°	218.7	220.8	217.4	220.8	219.4	217.4	215.3	218.1
57.5°	148.1	148.8	147.4	149.5	146.1	146.7	146.1	145.4
60°	96.0	93.3	93.3	95.3	91.9	91.9	91.2	91.2
62.5°	54.9	54.2	54.2	53.5	52.8	52.8	52.8	51.4
65°	28.1	27.4	26.7	26.7	26.7	26.7	26.1	26.1
67.5°	13.7	13.0	13.0	13.7	13.0	13.0	13.0	13.0
70°	8.2	8.2	7.5	8.2	7.5	7.5	7.5	7.5
72.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
75°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
77.5°	2.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)