

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: P244168

Luminaire Tested: **LSR8B40D010 EC8B40830 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244168
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B40D010 EC8B40830 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4446.0 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

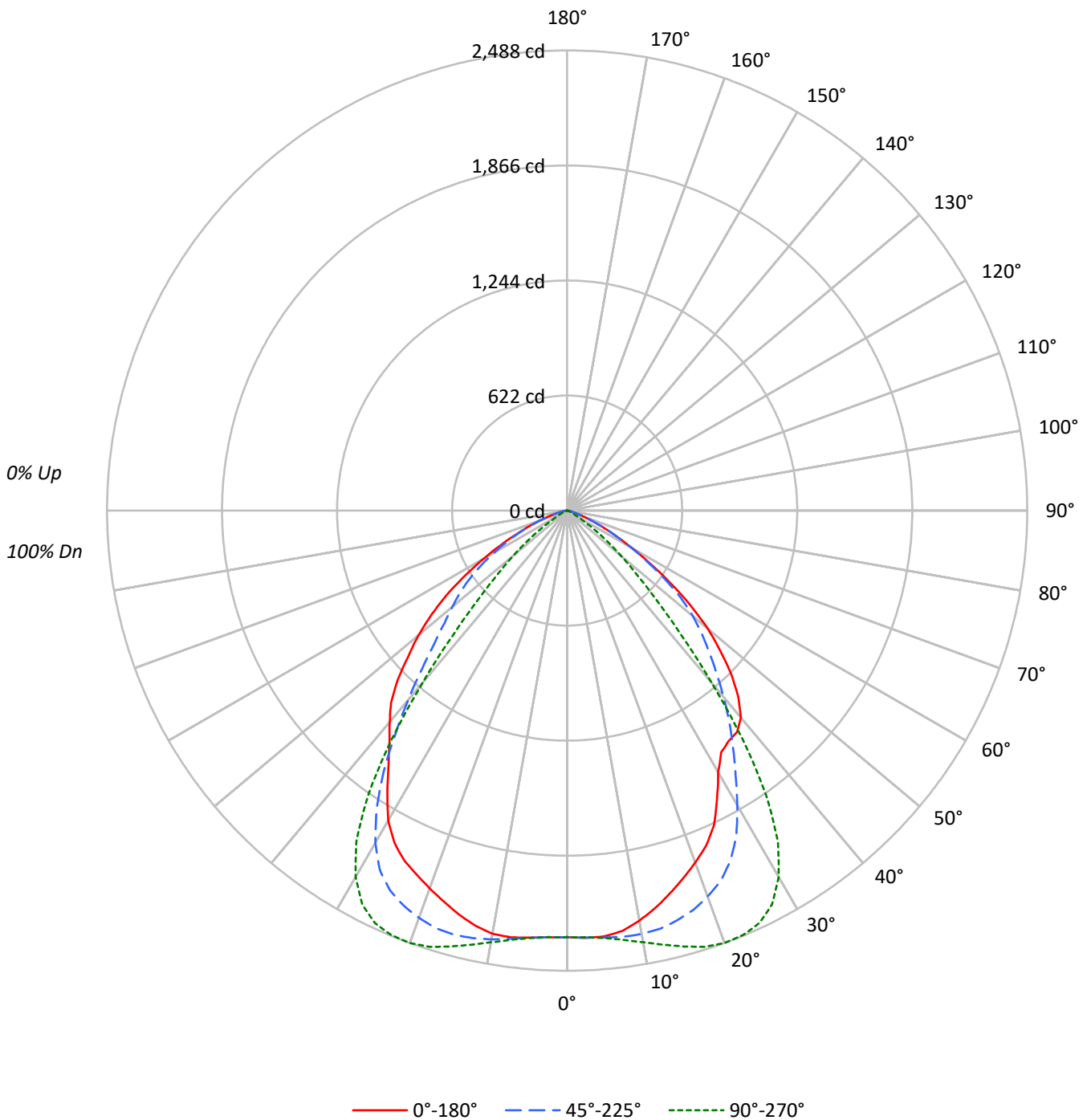
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	71121	71121	71121
5°	71544	71810	71736
10°	70493	74213	72757
15°	68433	77892	72184
20°	66448	81631	71308
25°	63897	83723	70978
30°	58149	81429	68874
35°	57283	70557	63366
40°	58839	48937	60071
45°	54777	29576	56483
50°	47512	18263	50333
55°	36461	9543	42713
60°	24842	3848	32236
65°	15454	1963	22240
70°	8385	1217	13578
75°	4373	584	8018
80°	1953	657	4351
85°	1309	425	3892



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.8	5.0
10°-20°	657.1	14.8
20°-30°	1002.4	22.5
30°-40°	1046.1	23.5
40°-50°	785.7	17.7
50°-60°	483.4	10.9
60°-70°	196.7	4.4
70°-80°	46.4	1.0
80°-90°	6.4	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°	1881.3	42.3
0°-40°	2927.4	65.8
0°-60°	4196.5	94.4
0°-90°	4446.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4446.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2306	2306	2306	2306	2306	
5°	2311	2318	2320	2318	2318	219
15°	2144	2294	2440	2372	2261	604
25°	1878	2088	2461	2266	2086	854
35°	1522	1565	1874	1732	1683	961
45°	1256	1087	678	1012	1295	958
55°	678	644	178	644	794	610
65°	212	214	27	288	305	221
75°	37	37	5	65	67	44
85°	4	4	1	9	11	5
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°	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4
2.5°	2312.6	2308.9	2312.6	2312.6	2313.8	2311.3	2312.6	2313.8	2311.3	2311.3	2311.3
5°	2311.3	2308.9	2311.3	2310.1	2312.6	2312.6	2315.0	2315.0	2317.5	2317.5	2321.1
7.5°	2291.7	2286.9	2291.7	2295.4	2297.9	2302.8	2308.9	2313.8	2318.7	2323.6	2329.7
10°	2251.3	2251.3	2255.0	2262.4	2269.7	2278.3	2289.3	2301.5	2313.8	2324.8	2335.8
12.5°	2201.2	2197.5	2204.8	2214.6	2225.6	2239.1	2256.3	2274.6	2294.2	2316.2	2333.4
15°	2143.6	2139.9	2148.5	2158.3	2171.8	2191.4	2212.2	2236.7	2264.8	2294.2	2322.4
17.5°	2084.9	2083.6	2092.2	2105.7	2116.7	2137.5	2164.4	2193.8	2225.6	2264.8	2301.5
20°	2024.9	2023.7	2032.2	2043.2	2057.9	2077.5	2104.4	2138.7	2176.7	2220.8	2263.6
22.5°	1962.4	1963.7	1971.0	1983.2	1995.5	2016.3	2044.4	2078.7	2120.3	2168.1	2215.8
25°	1878.0	1871.8	1881.6	1893.9	1914.7	1931.8	1958.8	1995.5	2038.3	2088.5	2144.9
27.5°	1755.5	1754.3	1762.9	1773.9	1792.3	1813.1	1842.5	1880.4	1925.7	1980.8	2035.9
30°	1633.1	1635.6	1639.2	1650.3	1662.5	1683.3	1712.7	1744.5	1787.4	1840.0	1898.8
32.5°	1549.9	1549.9	1554.8	1562.1	1570.7	1581.7	1602.5	1625.8	1658.8	1695.6	1738.4
35°	1521.7	1516.8	1521.7	1522.9	1524.2	1526.6	1530.3	1537.6	1548.6	1564.6	1580.5
37.5°	1509.5	1505.8	1505.8	1500.9	1494.8	1487.4	1477.6	1466.6	1454.4	1438.5	1426.2
40°	1461.7	1459.3	1456.8	1451.9	1438.5	1423.8	1407.8	1382.1	1354.0	1314.8	1275.7
42.5°	1369.9	1367.5	1366.2	1356.4	1344.2	1327.1	1308.7	1281.8	1246.3	1196.1	1139.7
45°	1256.1	1251.2	1247.5	1238.9	1230.3	1215.7	1198.5	1174.0	1138.5	1087.1	1019.8
47.5°	1123.8	1121.4	1120.2	1116.5	1107.9	1099.3	1088.3	1068.8	1036.9	987.9	918.2
50°	990.4	985.5	987.9	986.7	983.1	976.9	969.6	956.1	931.6	887.6	823.9
52.5°	837.4	837.4	836.2	839.8	841.0	839.8	841.0	826.4	805.5	772.5	718.6
55°	678.2	678.2	681.9	686.8	691.7	692.9	691.7	685.6	670.9	643.9	596.2
57.5°	528.9	526.4	533.8	541.1	546.0	550.9	547.2	542.3	533.8	511.7	475.0
60°	402.8	402.8	407.7	412.6	417.5	422.4	421.1	419.9	412.6	397.9	368.5
62.5°	296.3	297.5	297.5	301.2	306.0	311.0	314.6	311.0	307.3	297.5	277.9
65°	211.8	210.6	211.8	215.5	219.1	224.0	226.5	225.3	221.6	214.2	199.6
67.5°	142.0	140.8	145.7	146.9	149.4	154.3	153.0	154.3	153.0	146.9	134.7
70°	93.0	90.6	93.0	91.8	95.5	96.7	99.2	100.4	99.2	95.5	91.8
72.5°	57.5	56.3	57.5	58.8	60.0	61.2	63.7	63.7	62.4	60.0	55.1
75°	36.7	33.0	34.3	31.8	34.3	34.3	36.7	38.0	36.7	36.7	34.3
77.5°	22.0	22.0	22.0	22.0	22.0	22.0	22.0	23.3	24.5	22.0	20.8
80°	11.0	11.0	12.3	12.3	12.3	13.5	12.3	12.3	12.3	13.5	9.8
82.5°	8.6	7.3	7.3	7.3	8.6	7.3	7.3	7.3	7.3	7.3	7.3
85°	3.7	4.9	3.7	2.5	3.7	3.7	4.9	3.7	3.7	3.7	4.9
87.5°	1.2	1.2	0.0	0.0	0.0	1.2	0.0	1.2	1.2	2.5	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4
2.5°	2312.6	2310.1	2310.1	2308.9	2311.3	2308.9	2310.1	2308.9	2308.9	2311.3	2308.9
5°	2321.1	2322.4	2319.9	2318.7	2322.4	2322.4	2322.4	2319.9	2319.9	2321.1	2319.9
7.5°	2333.4	2335.8	2337.0	2338.3	2340.7	2342.0	2342.0	2340.7	2339.5	2343.2	2338.3
10°	2346.8	2350.5	2357.9	2361.5	2367.7	2367.7	2370.1	2370.1	2367.7	2370.1	2368.9
12.5°	2342.0	2364.0	2376.2	2384.8	2393.4	2400.7	2403.2	2404.4	2403.2	2408.1	2403.2
15°	2350.5	2368.9	2388.5	2403.2	2419.1	2427.6	2430.1	2439.9	2442.3	2443.6	2436.2
17.5°	2337.0	2370.1	2390.9	2412.9	2436.2	2452.1	2466.8	2472.9	2474.2	2476.6	2466.8
20°	2306.4	2343.2	2375.0	2406.8	2433.8	2458.2	2470.5	2487.6	2482.7	2492.5	2479.1
22.5°	2264.8	2306.4	2346.8	2388.5	2416.6	2446.0	2471.7	2483.9	2490.1	2490.1	2475.4
25°	2198.7	2247.7	2291.7	2334.6	2377.5	2412.9	2442.3	2460.7	2464.4	2463.2	2446.0
27.5°	2095.9	2148.5	2199.9	2248.9	2301.5	2343.2	2377.5	2399.5	2405.6	2405.6	2387.2
30°	1953.9	2010.2	2060.4	2119.1	2173.0	2219.5	2267.3	2286.9	2297.9	2297.9	2277.1
32.5°	1784.9	1832.7	1879.2	1936.7	1995.5	2048.1	2093.4	2120.3	2133.8	2132.6	2114.2
35°	1601.3	1624.5	1660.1	1702.9	1755.5	1804.5	1848.6	1874.3	1897.5	1896.3	1879.2
37.5°	1417.6	1411.5	1415.2	1431.1	1464.2	1498.5	1532.7	1557.2	1576.8	1585.4	1581.7
40°	1237.7	1205.9	1175.2	1164.3	1166.7	1178.9	1197.3	1215.7	1237.7	1248.7	1253.6
42.5°	1076.1	1022.2	968.3	928.0	904.7	897.4	905.9	912.0	925.5	941.4	957.4
45°	946.3	874.1	803.1	740.7	701.5	678.2	673.3	678.2	685.6	701.5	722.3
47.5°	839.8	755.3	675.8	606.0	548.4	517.9	509.3	506.8	514.2	528.9	557.0
50°	745.5	661.1	572.9	492.1	432.2	397.9	385.6	380.7	389.3	400.3	426.0
52.5°	642.7	559.5	468.9	390.5	328.1	292.6	279.1	271.8	276.7	291.4	317.1
55°	531.3	454.2	372.2	291.4	231.4	198.3	182.4	177.5	182.4	198.3	224.0
57.5°	419.9	355.0	286.5	210.6	156.7	123.7	107.7	102.8	116.3	122.4	149.4
60°	328.1	275.5	216.7	154.3	107.7	82.0	66.1	62.4	68.6	79.6	101.6
62.5°	246.1	213.0	166.5	110.2	79.6	52.6	44.1	40.4	44.1	52.6	69.8
65°	178.7	153.0	116.3	80.8	53.9	39.2	29.4	26.9	30.6	36.7	51.4
67.5°	122.4	102.8	80.8	56.3	36.7	24.5	20.8	20.8	22.0	26.9	38.0
70°	79.6	67.3	51.4	36.7	24.5	18.4	15.9	13.5	15.9	19.6	25.7
72.5°	50.2	42.8	33.0	25.7	18.4	13.5	11.0	9.8	12.3	14.7	19.6
75°	30.6	23.3	17.1	13.5	9.8	9.8	9.8	4.9	6.1	9.8	12.3
77.5°	18.4	15.9	13.5	11.0	8.6	4.9	4.9	4.9	6.1	7.3	11.0
80°	9.8	8.6	6.1	6.1	4.9	3.7	4.9	3.7	2.5	6.1	7.3
82.5°	6.1	4.9	4.9	4.9	6.1	2.5	3.7	2.5	3.7	4.9	3.7
85°	3.7	3.7	3.7	2.5	6.1	2.5	2.5	1.2	1.2	2.5	2.5
87.5°	0.0	1.2	1.2	0.0	1.2	0.0	1.2	1.2	1.2	1.2	1.2
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°	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4	2306.4
2.5°	2310.1	2308.9	2310.1	2308.9	2308.9	2308.9	2310.1	2310.1	2308.9	2308.9	2311.3
5°	2319.9	2319.9	2319.9	2318.7	2317.5	2317.5	2319.9	2319.9	2316.2	2319.9	2319.9
7.5°	2340.7	2337.0	2340.7	2335.8	2333.4	2334.6	2335.8	2333.4	2330.9	2332.2	2332.2
10°	2367.7	2364.0	2364.0	2360.3	2356.6	2354.2	2351.7	2345.6	2339.5	2338.3	2333.4
12.5°	2399.5	2393.4	2389.7	2382.3	2376.2	2367.7	2360.3	2350.5	2338.3	2329.7	2321.1
15°	2431.3	2421.5	2412.9	2400.7	2387.2	2372.5	2356.6	2340.7	2321.1	2304.0	2289.3
17.5°	2457.0	2443.6	2427.6	2408.1	2388.5	2366.4	2343.2	2319.9	2291.7	2269.7	2252.6
20°	2465.6	2446.0	2425.2	2399.5	2373.8	2343.2	2313.8	2283.2	2251.3	2228.1	2208.5
22.5°	2454.6	2431.3	2405.6	2378.7	2344.4	2311.3	2277.1	2241.5	2213.4	2181.6	2163.2
25°	2424.0	2395.8	2367.7	2335.8	2302.8	2266.0	2229.3	2192.6	2158.3	2141.2	2117.9
27.5°	2361.5	2330.9	2300.3	2267.3	2229.3	2192.6	2154.6	2119.1	2089.8	2066.5	2053.0
30°	2251.3	2215.8	2180.3	2144.9	2111.8	2073.8	2038.3	2008.9	1979.6	1961.2	1947.7
32.5°	2082.4	2050.6	2015.1	1980.8	1950.2	1918.4	1889.0	1863.3	1842.5	1830.2	1820.4
35°	1854.7	1822.9	1795.9	1771.5	1745.7	1732.3	1713.9	1699.2	1690.6	1685.8	1684.5
37.5°	1568.2	1549.9	1541.3	1536.4	1531.5	1527.8	1530.3	1536.4	1541.3	1549.9	1559.7
40°	1262.2	1278.1	1283.0	1300.1	1316.0	1336.9	1360.1	1387.1	1409.1	1437.2	1456.8
42.5°	983.1	1012.4	1046.7	1083.4	1122.6	1160.6	1207.1	1249.9	1289.1	1324.6	1355.2
45°	755.3	800.6	852.1	904.7	957.4	1012.4	1068.8	1121.4	1167.9	1205.9	1237.7
47.5°	588.9	639.1	705.2	770.0	833.7	898.6	961.0	1016.1	1055.3	1092.0	1120.2
50°	466.4	524.0	596.2	670.9	740.7	809.2	875.3	926.7	965.9	995.3	1016.1
52.5°	361.1	429.7	503.2	581.5	656.2	730.9	792.1	839.8	871.7	897.4	913.3
55°	269.3	336.7	415.0	495.8	571.7	643.9	701.5	743.1	771.3	786.0	794.5
57.5°	194.6	255.9	334.2	415.0	483.6	552.1	598.6	636.6	652.5	661.1	664.8
60°	142.0	198.3	268.1	337.9	402.8	457.9	498.3	524.0	536.2	541.1	539.9
62.5°	104.1	153.0	213.0	271.8	324.4	369.7	401.5	418.7	424.8	427.2	423.6
65°	79.6	117.5	168.9	214.2	254.6	287.7	311.0	322.0	325.6	324.4	322.0
67.5°	58.8	88.2	126.1	160.4	189.8	215.5	227.7	237.5	239.9	236.3	232.6
70°	41.6	64.9	91.8	115.1	137.1	151.8	165.3	166.5	166.5	165.3	162.8
72.5°	29.4	45.3	62.4	78.4	91.8	102.8	107.7	111.4	110.2	108.9	106.5
75°	19.6	28.2	45.3	49.0	61.2	64.9	69.8	69.8	71.0	67.3	67.3
77.5°	12.3	19.6	26.9	31.8	36.7	41.6	44.1	44.1	45.3	44.1	44.1
80°	7.3	12.3	14.7	22.0	22.0	25.7	26.9	28.2	25.7	29.4	25.7
82.5°	4.9	7.3	11.0	11.0	13.5	15.9	15.9	17.1	17.1	15.9	15.9
85°	3.7	4.9	6.1	7.3	7.3	8.6	7.3	7.3	8.6	9.8	8.6
87.5°	1.2	2.5	1.2	2.5	2.5	4.9	3.7	3.7	3.7	4.9	4.9
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: P244168

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2306.4	2306.4	2306.4	2306.4
2.5°	2308.9	2310.1	2308.9	2308.9
5°	2319.9	2318.7	2319.9	2317.5
7.5°	2328.5	2328.5	2327.2	2327.2
10°	2328.5	2323.6	2323.6	2323.6
12.5°	2310.1	2304.0	2300.3	2297.9
15°	2278.3	2267.3	2262.4	2261.1
17.5°	2236.7	2226.9	2220.8	2217.1
20°	2188.9	2179.1	2171.8	2173.0
22.5°	2147.3	2136.3	2131.4	2128.9
25°	2105.7	2092.2	2088.5	2086.1
27.5°	2038.3	2031.0	2027.3	2023.7
30°	1935.5	1931.8	1925.7	1934.3
32.5°	1816.8	1810.6	1805.7	1809.4
35°	1685.8	1682.1	1685.8	1683.3
37.5°	1565.8	1569.5	1574.4	1576.8
40°	1471.5	1485.0	1489.9	1492.3
42.5°	1377.3	1393.2	1403.0	1409.1
45°	1260.9	1276.9	1287.9	1295.2
47.5°	1141.0	1154.5	1165.5	1164.3
50°	1032.0	1039.4	1044.3	1049.2
52.5°	921.8	921.8	923.1	923.1
55°	797.0	794.5	793.3	794.5
57.5°	659.8	657.4	656.2	652.5
60°	535.0	527.7	522.7	522.7
62.5°	418.7	410.1	406.5	405.2
65°	314.6	313.4	306.0	304.8
67.5°	227.7	222.8	217.9	219.1
70°	160.4	153.0	153.0	150.6
72.5°	104.1	100.4	99.2	99.2
75°	64.9	64.9	62.4	67.3
77.5°	42.8	42.8	41.6	42.8
80°	25.7	25.7	25.7	24.5
82.5°	15.9	17.1	15.9	15.9
85°	8.6	9.8	7.3	11.0
87.5°	4.9	6.1	4.9	6.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)