

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: P245464

Luminaire Tested: **LSR8B40D010 EC8B40830 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245464  
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 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4323.0 lumens  
Efficiency: N/A  
Efficacy: 105.7 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

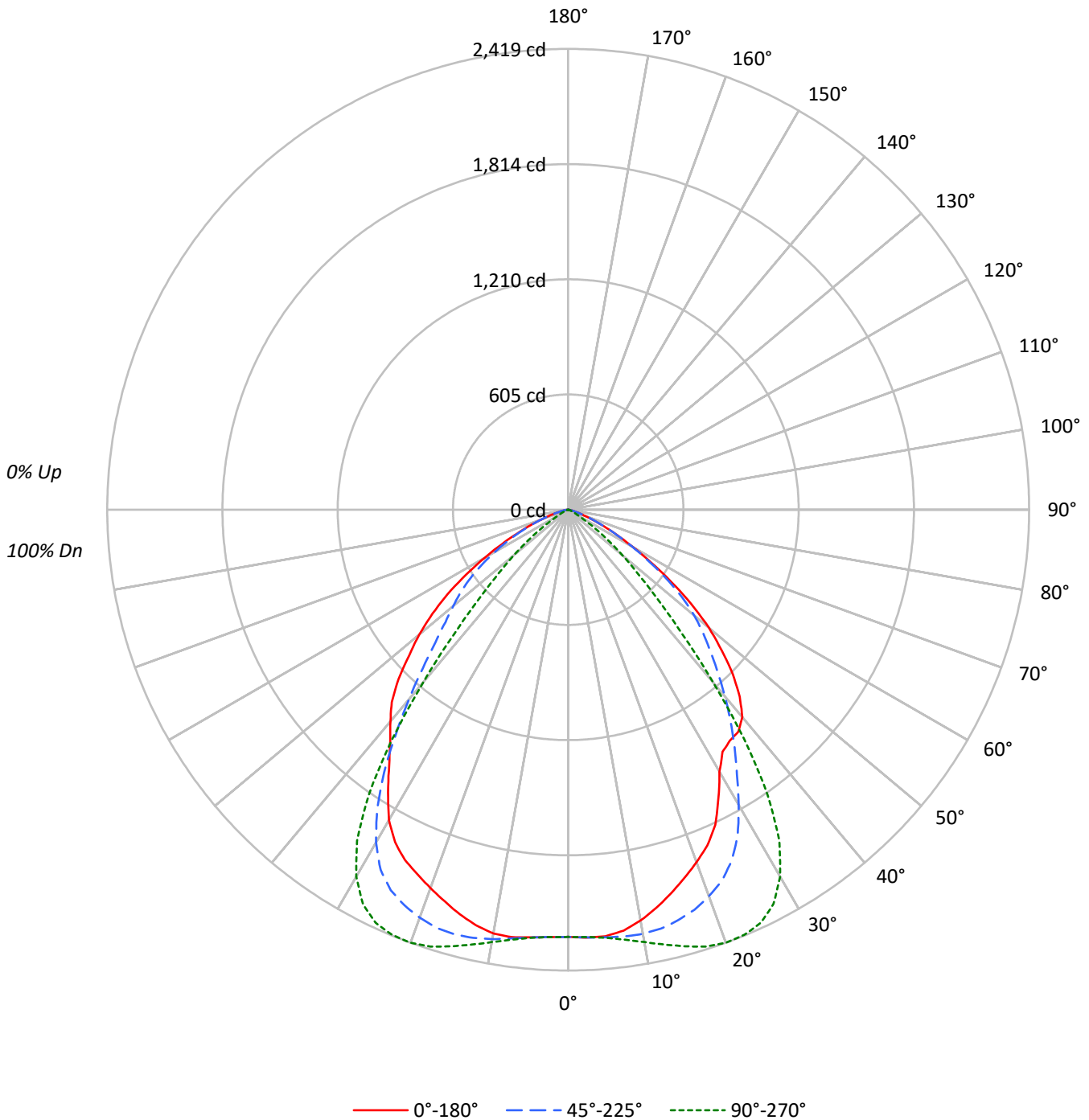
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P245464

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0WH

### Luminous Intensity Polar Plot





TEST NUMBER: P245464

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0WH

**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°	69154	69154	69154
5°	69566	69823	69749
10°	68545	72159	70743
15°	66539	75737	70188
20°	64610	79374	69335
25°	62128	81406	69015
30°	56540	79175	66969
35°	55698	68603	61612
40°	57213	47580	58408
45°	53260	28756	54921
50°	46198	17760	48937
55°	35450	9279	41531
60°	24151	3744	31348
65°	15023	1912	21627
70°	8159	1181	13199
75°	4253	560	7804
80°	1900	639	4226
85°	1274	425	3786



TEST NUMBER: P245464

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0WH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.7	5.0
10°-20°	638.9	14.8
20°-30°	974.7	22.5
30°-40°	1017.1	23.5
40°-50°	764.0	17.7
50°-60°	470.1	10.9
60°-70°	191.3	4.4
70°-80°	45.1	1.0
80°-90°	6.2	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°	1829.3	42.3
0°-40°	2846.4	65.8
0°-60°	4080.4	94.4
0°-90°	4323.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4323.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2243	2243	2243	2243	2243	
5°	2247	2253	2256	2253	2253	213
15°	2084	2231	2372	2307	2199	587
25°	1826	2031	2393	2203	2028	830
35°	1480	1521	1822	1684	1637	934
45°	1221	1057	659	984	1259	932
55°	659	626	173	626	772	593
65°	206	208	26	280	296	215
75°	36	36	5	63	66	43
85°	4	4	1	8	11	5
90°	0	0	0	0	0	



TEST NUMBER: P245464

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0WH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6
2.5°	2248.6	2245.0	2248.6	2248.6	2249.8	2247.4	2248.6	2249.8	2247.4	2247.4	2247.4
5°	2247.4	2245.0	2247.4	2246.2	2248.6	2248.6	2251.0	2251.0	2253.3	2253.3	2256.9
7.5°	2228.3	2223.6	2228.3	2231.9	2234.3	2239.1	2245.0	2249.8	2254.5	2259.3	2265.3
10°	2189.1	2189.1	2192.6	2199.8	2206.9	2215.2	2226.0	2237.9	2249.8	2260.5	2271.2
12.5°	2140.3	2136.7	2143.8	2153.3	2164.1	2177.2	2193.8	2211.7	2230.7	2252.1	2268.8
15°	2084.3	2080.7	2089.1	2098.6	2111.7	2130.7	2151.0	2174.8	2202.2	2230.7	2258.1
17.5°	2027.2	2026.0	2034.3	2047.4	2058.1	2078.3	2104.6	2133.1	2164.1	2202.2	2237.9
20°	1968.9	1967.7	1976.0	1986.7	2001.0	2020.0	2046.2	2079.5	2116.4	2159.3	2201.0
22.5°	1908.1	1909.3	1916.5	1928.4	1940.3	1960.5	1987.9	2021.2	2061.7	2108.1	2154.5
25°	1826.0	1820.1	1829.6	1841.5	1861.7	1878.4	1904.6	1940.3	1981.9	2030.8	2085.5
27.5°	1707.0	1705.8	1714.1	1724.8	1742.7	1762.9	1791.5	1828.4	1872.4	1926.0	1979.6
30°	1587.9	1590.3	1593.9	1604.6	1616.5	1636.7	1665.3	1696.3	1737.9	1789.1	1846.2
32.5°	1507.0	1507.0	1511.8	1518.9	1527.2	1537.9	1558.2	1580.8	1612.9	1648.7	1690.3
35°	1479.6	1474.9	1479.6	1480.8	1482.0	1484.4	1487.9	1495.1	1505.8	1521.3	1536.7
37.5°	1467.7	1464.1	1464.1	1459.4	1453.4	1446.3	1436.8	1426.0	1414.2	1398.7	1386.8
40°	1421.3	1418.9	1416.5	1411.8	1398.7	1384.4	1368.9	1343.9	1316.5	1278.4	1240.4
42.5°	1332.0	1329.6	1328.4	1318.9	1307.0	1290.3	1272.5	1246.3	1211.8	1163.0	1108.2
45°	1221.3	1216.5	1213.0	1204.7	1196.3	1182.0	1165.4	1141.5	1107.0	1057.0	991.6
47.5°	1092.8	1090.4	1089.2	1085.6	1077.3	1068.9	1058.2	1039.2	1008.2	960.6	892.8
50°	963.0	958.2	960.6	959.4	955.9	949.9	942.8	929.7	905.9	863.0	801.1
52.5°	814.2	814.2	813.0	816.6	817.8	816.6	817.8	803.5	783.3	751.1	698.7
55°	659.4	659.4	663.0	667.8	672.6	673.7	672.6	666.6	652.3	626.1	579.7
57.5°	514.2	511.9	519.0	526.1	530.9	535.7	532.1	527.3	519.0	497.6	461.9
60°	391.6	391.6	396.4	401.2	405.9	410.7	409.5	408.3	401.2	386.9	358.3
62.5°	288.1	289.3	289.3	292.8	297.6	302.4	305.9	302.4	298.8	289.3	270.2
65°	205.9	204.7	205.9	209.5	213.1	217.8	220.2	219.0	215.4	208.3	194.0
67.5°	138.1	136.9	141.6	142.8	145.2	150.0	148.8	150.0	148.8	142.8	131.0
70°	90.5	88.1	90.5	89.3	92.9	94.0	96.4	97.6	96.4	92.9	89.3
72.5°	56.0	54.8	56.0	57.1	58.3	59.5	61.9	61.9	60.7	58.3	53.6
75°	35.7	32.1	33.3	31.0	33.3	33.3	35.7	36.9	35.7	35.7	33.3
77.5°	21.4	21.4	21.4	21.4	21.4	21.4	21.4	22.6	23.8	21.4	20.2
80°	10.7	10.7	11.9	11.9	11.9	13.1	11.9	11.9	11.9	13.1	9.5
82.5°	8.3	7.1	7.1	7.1	8.3	7.1	7.1	7.1	7.1	7.1	7.1
85°	3.6	4.7	3.6	2.4	3.6	3.6	4.7	3.6	3.6	3.6	4.7
87.5°	1.2	1.2	0.0	0.0	0.0	1.2	0.0	1.2	1.2	2.4	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: P245464

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6
2.5°	2248.6	2246.2	2246.2	2245.0	2247.4	2245.0	2246.2	2245.0	2245.0	2247.4	2245.0
5°	2256.9	2258.1	2255.7	2254.5	2258.1	2258.1	2258.1	2255.7	2255.7	2256.9	2255.7
7.5°	2268.8	2271.2	2272.4	2273.6	2276.0	2277.2	2277.2	2276.0	2274.8	2278.4	2273.6
10°	2281.9	2285.5	2292.6	2296.2	2302.2	2302.2	2304.5	2304.5	2302.2	2304.5	2303.3
12.5°	2277.2	2298.6	2310.5	2318.8	2327.1	2334.3	2336.7	2337.9	2336.7	2341.4	2336.7
15°	2285.5	2303.3	2322.4	2336.7	2352.1	2360.5	2362.9	2372.4	2374.8	2376.0	2368.8
17.5°	2272.4	2304.5	2324.8	2346.2	2368.8	2384.3	2398.6	2404.5	2405.7	2408.1	2398.6
20°	2242.6	2278.4	2309.3	2340.2	2366.4	2390.2	2402.1	2418.8	2414.1	2423.6	2410.5
22.5°	2202.2	2242.6	2281.9	2322.4	2349.8	2378.3	2403.3	2415.2	2421.2	2421.2	2406.9
25°	2137.9	2185.5	2228.3	2270.0	2311.7	2346.2	2374.8	2392.6	2396.2	2395.0	2378.3
27.5°	2037.9	2089.1	2139.1	2186.7	2237.9	2278.4	2311.7	2333.1	2339.1	2339.1	2321.2
30°	1899.8	1954.6	2003.4	2060.5	2112.9	2158.1	2204.6	2223.6	2234.3	2234.3	2214.1
32.5°	1735.5	1782.0	1827.2	1883.1	1940.3	1991.5	2035.5	2061.7	2074.8	2073.6	2055.7
35°	1557.0	1579.6	1614.1	1655.8	1707.0	1754.6	1797.4	1822.4	1845.0	1843.9	1827.2
37.5°	1378.4	1372.5	1376.1	1391.5	1423.7	1457.0	1490.3	1514.1	1533.2	1541.5	1537.9
40°	1203.5	1172.5	1142.7	1132.0	1134.4	1146.3	1164.2	1182.0	1203.5	1214.2	1218.9
42.5°	1046.3	994.0	941.6	902.3	879.7	872.5	880.9	886.8	899.9	915.4	930.9
45°	920.2	849.9	780.9	720.2	682.1	659.4	654.7	659.4	666.6	682.1	702.3
47.5°	816.6	734.4	657.1	589.2	533.3	503.5	495.2	492.8	499.9	514.2	541.6
50°	724.9	642.8	557.1	478.5	420.2	386.9	375.0	370.2	378.5	389.2	414.2
52.5°	624.9	544.0	455.9	379.7	319.0	284.5	271.4	264.3	269.0	283.3	308.3
55°	516.6	441.6	361.9	283.3	225.0	192.8	177.3	172.6	177.3	192.8	217.8
57.5°	408.3	345.2	278.5	204.7	152.4	120.2	104.7	100.0	113.1	119.0	145.2
60°	319.0	267.8	210.7	150.0	104.7	79.7	64.3	60.7	66.7	77.4	98.8
62.5°	239.3	207.1	161.9	107.1	77.4	51.2	42.8	39.3	42.8	51.2	67.9
65°	173.8	148.8	113.1	78.6	52.4	38.1	28.6	26.2	29.8	35.7	50.0
67.5°	119.0	100.0	78.6	54.8	35.7	23.8	20.2	20.2	21.4	26.2	36.9
70°	77.4	65.5	50.0	35.7	23.8	17.9	15.5	13.1	15.5	19.0	25.0
72.5°	48.8	41.7	32.1	25.0	17.9	13.1	10.7	9.5	11.9	14.3	19.0
75°	29.8	22.6	16.7	13.1	9.5	9.5	9.5	4.7	5.9	9.5	11.9
77.5°	17.9	15.5	13.1	10.7	8.3	4.7	4.7	4.7	5.9	7.1	10.7
80°	9.5	8.3	5.9	5.9	4.7	3.6	4.7	3.6	2.4	5.9	7.1
82.5°	5.9	4.7	4.7	4.7	5.9	2.4	3.6	2.4	3.6	4.7	3.6
85°	3.6	3.6	3.6	2.4	5.9	2.4	2.4	1.2	1.2	2.4	2.4
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



TEST NUMBER: P245464

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6	2242.6
2.5°	2246.2	2245.0	2246.2	2245.0	2245.0	2245.0	2246.2	2246.2	2245.0	2245.0	2247.4
5°	2255.7	2255.7	2255.7	2254.5	2253.3	2253.3	2255.7	2255.7	2252.1	2255.7	2255.7
7.5°	2276.0	2272.4	2276.0	2271.2	2268.8	2270.0	2271.2	2268.8	2266.4	2267.6	2267.6
10°	2302.2	2298.6	2298.6	2295.0	2291.4	2289.0	2286.7	2280.7	2274.8	2273.6	2268.8
12.5°	2333.1	2327.1	2323.6	2316.4	2310.5	2302.2	2295.0	2285.5	2273.6	2265.3	2256.9
15°	2364.0	2354.5	2346.2	2334.3	2321.2	2306.9	2291.4	2276.0	2256.9	2240.3	2226.0
17.5°	2389.0	2376.0	2360.5	2341.4	2322.4	2301.0	2278.4	2255.7	2228.3	2206.9	2190.3
20°	2397.4	2378.3	2358.1	2333.1	2308.1	2278.4	2249.8	2220.0	2189.1	2166.5	2147.4
22.5°	2386.7	2364.0	2339.1	2312.9	2279.5	2247.4	2214.1	2179.5	2152.2	2121.2	2103.4
25°	2356.9	2329.5	2302.2	2271.2	2239.1	2203.4	2167.6	2131.9	2098.6	2081.9	2059.3
27.5°	2296.2	2266.4	2236.7	2204.6	2167.6	2131.9	2095.0	2060.5	2032.0	2009.3	1996.2
30°	2189.1	2154.5	2120.0	2085.5	2053.4	2016.5	1981.9	1953.4	1924.8	1906.9	1893.9
32.5°	2024.8	1993.9	1959.3	1926.0	1896.3	1865.3	1836.7	1811.7	1791.5	1779.6	1770.0
35°	1803.4	1772.4	1746.3	1722.5	1697.4	1684.4	1666.5	1652.2	1643.9	1639.1	1637.9
37.5°	1524.8	1507.0	1498.7	1493.9	1489.1	1485.6	1487.9	1493.9	1498.7	1507.0	1516.5
40°	1227.3	1242.7	1247.5	1264.2	1279.6	1299.9	1322.5	1348.7	1370.1	1397.5	1416.5
42.5°	955.9	984.4	1017.8	1053.5	1091.6	1128.5	1173.7	1215.3	1253.4	1288.0	1317.7
45°	734.4	778.5	828.5	879.7	930.9	984.4	1039.2	1090.4	1135.6	1172.5	1203.5
47.5°	572.6	621.4	685.7	748.7	810.6	873.7	934.4	988.0	1026.1	1061.8	1089.2
50°	453.5	509.5	579.7	652.3	720.2	786.8	851.1	901.1	939.2	967.8	988.0
52.5°	351.1	417.8	489.2	565.4	638.0	710.6	770.2	816.6	847.5	872.5	888.0
55°	261.9	327.3	403.5	482.1	555.9	626.1	682.1	722.6	749.9	764.2	772.5
57.5°	189.3	248.8	325.0	403.5	470.2	536.9	582.1	619.0	634.5	642.8	646.4
60°	138.1	192.8	260.7	328.5	391.6	445.2	484.5	509.5	521.4	526.1	524.9
62.5°	101.2	148.8	207.1	264.3	315.4	359.5	390.4	407.1	413.1	415.4	411.9
65°	77.4	114.3	164.3	208.3	247.6	279.7	302.4	313.1	316.6	315.4	313.1
67.5°	57.1	85.7	122.6	155.9	184.5	209.5	221.4	230.9	233.3	229.7	226.2
70°	40.5	63.1	89.3	111.9	133.3	147.6	160.7	161.9	161.9	160.7	158.3
72.5°	28.6	44.0	60.7	76.2	89.3	100.0	104.7	108.3	107.1	105.9	103.6
75°	19.0	27.4	44.0	47.6	59.5	63.1	67.9	67.9	69.0	65.5	65.5
77.5°	11.9	19.0	26.2	31.0	35.7	40.5	42.8	42.8	44.0	42.8	42.8
80°	7.1	11.9	14.3	21.4	21.4	25.0	26.2	27.4	25.0	28.6	25.0
82.5°	4.7	7.1	10.7	10.7	13.1	15.5	15.5	16.7	16.7	15.5	15.5
85°	3.6	4.7	5.9	7.1	7.1	8.3	7.1	7.1	8.3	9.5	8.3
87.5°	1.2	2.4	1.2	2.4	2.4	4.7	3.6	3.6	3.6	4.7	4.7
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: P245464

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2242.6	2242.6	2242.6	2242.6
2.5°	2245.0	2246.2	2245.0	2245.0
5°	2255.7	2254.5	2255.7	2253.3
7.5°	2264.1	2264.1	2262.9	2262.9
10°	2264.1	2259.3	2259.3	2259.3
12.5°	2246.2	2240.3	2236.7	2234.3
15°	2215.2	2204.6	2199.8	2198.6
17.5°	2174.8	2165.3	2159.3	2155.7
20°	2128.4	2118.8	2111.7	2112.9
22.5°	2087.9	2077.2	2072.4	2070.0
25°	2047.4	2034.3	2030.8	2028.4
27.5°	1981.9	1974.8	1971.2	1967.7
30°	1882.0	1878.4	1872.4	1880.8
32.5°	1766.5	1760.5	1755.8	1759.4
35°	1639.1	1635.5	1639.1	1636.7
37.5°	1522.5	1526.0	1530.8	1533.2
40°	1430.8	1443.9	1448.7	1451.0
42.5°	1339.2	1354.6	1364.1	1370.1
45°	1226.1	1241.5	1252.2	1259.4
47.5°	1109.4	1122.5	1133.2	1132.0
50°	1003.5	1010.6	1015.4	1020.1
52.5°	896.3	896.3	897.5	897.5
55°	774.9	772.5	771.3	772.5
57.5°	641.6	639.2	638.0	634.5
60°	520.2	513.1	508.3	508.3
62.5°	407.1	398.8	395.2	394.0
65°	305.9	304.7	297.6	296.4
67.5°	221.4	216.6	211.9	213.1
70°	155.9	148.8	148.8	146.4
72.5°	101.2	97.6	96.4	96.4
75°	63.1	63.1	60.7	65.5
77.5°	41.7	41.7	40.5	41.7
80°	25.0	25.0	25.0	23.8
82.5°	15.5	16.7	15.5	15.5
85°	8.3	9.5	7.1	10.7
87.5°	4.7	5.9	4.7	5.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)