

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: P244228

Luminaire Tested: **LD8B40D010 ER8B40930 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244228  
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: LD8B40D010 ER8B40930 8LBDW0LI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3818.1 lumens  
Efficiency: N/A  
Efficacy: 93.4 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

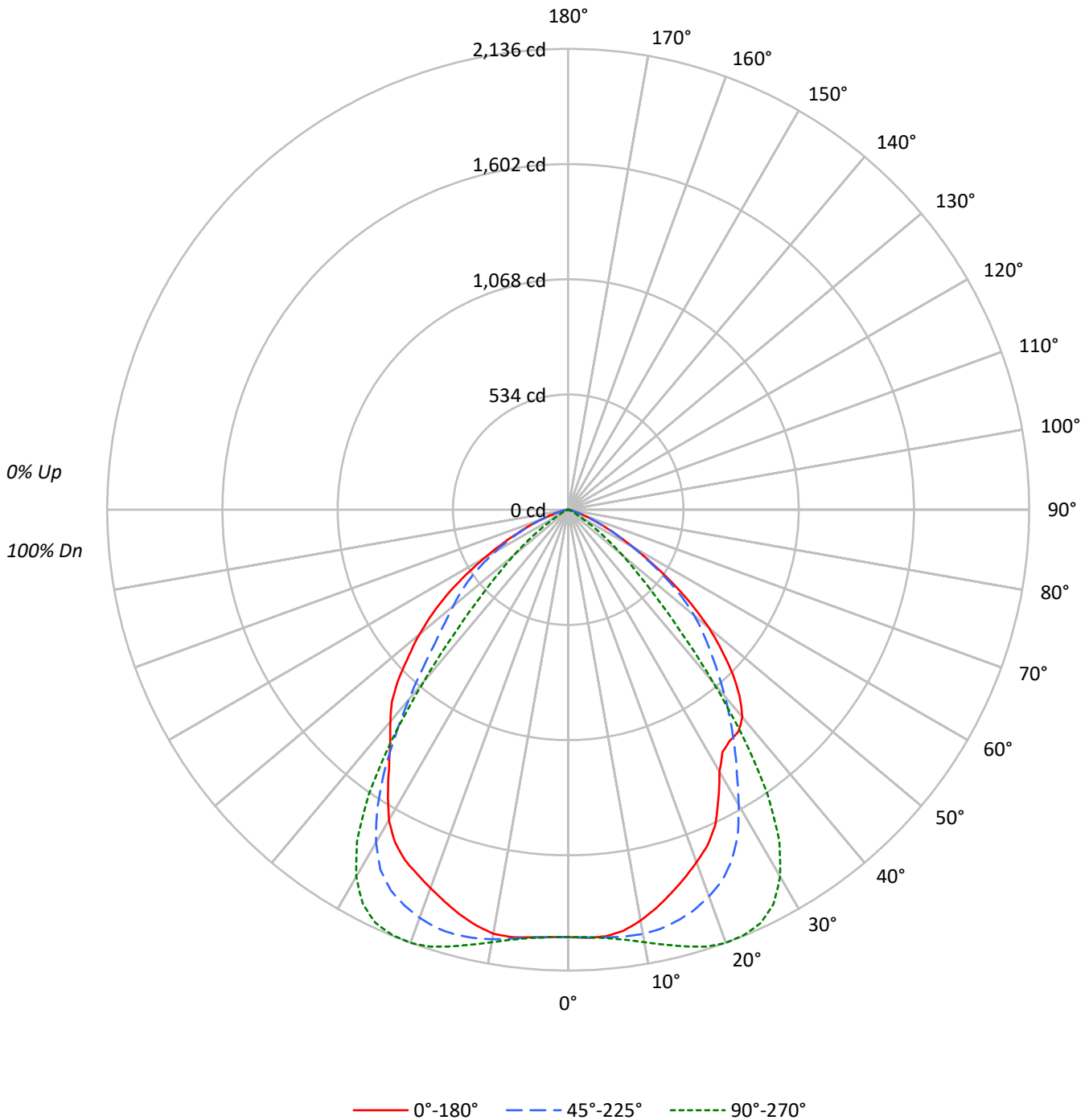
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

**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°	190.5	5.0
10°-20°	564.3	14.8
20°-30°	860.9	22.5
30°-40°	898.3	23.5
40°-50°	674.8	17.7
50°-60°	415.2	10.9
60°-70°	169.0	4.4
70°-80°	39.8	1.0
80°-90°	5.5	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°	1615.6	42.3
0°-40°	2514.0	65.8
0°-60°	3603.9	94.4
0°-90°	3818.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3818.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1981	1981	1981	1981	1981	
5°	1985	1990	1992	1990	1990	188
15°	1841	1970	2095	2038	1942	519
25°	1613	1794	2113	1946	1792	733
35°	1307	1344	1610	1488	1446	825
45°	1079	934	582	869	1112	823
55°	582	553	152	553	682	524
65°	182	184	23	247	262	190
75°	32	32	4	56	58	38
85°	3	3	1	7	9	4
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°	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7
2.5°	1986.0	1982.8	1986.0	1986.0	1987.1	1985.0	1986.0	1987.1	1985.0	1985.0	1985.0
5°	1985.0	1982.8	1985.0	1983.8	1986.0	1986.0	1988.1	1988.1	1990.2	1990.2	1993.4
7.5°	1968.1	1963.9	1968.1	1971.3	1973.3	1977.6	1982.8	1987.1	1991.2	1995.5	2000.6
10°	1933.4	1933.4	1936.5	1942.9	1949.2	1956.5	1966.0	1976.5	1987.1	1996.5	2005.9
12.5°	1890.3	1887.2	1893.5	1901.9	1911.3	1922.9	1937.6	1953.3	1970.2	1989.1	2003.9
15°	1840.9	1837.8	1845.1	1853.5	1865.1	1881.9	1899.8	1920.8	1944.9	1970.2	1994.4
17.5°	1790.5	1789.3	1796.7	1808.3	1817.8	1835.6	1858.7	1884.0	1911.3	1944.9	1976.5
20°	1738.9	1737.9	1745.2	1754.7	1767.3	1784.1	1807.3	1836.6	1869.3	1907.2	1943.9
22.5°	1685.3	1686.3	1692.6	1703.1	1713.7	1731.5	1755.7	1785.2	1821.0	1861.9	1902.9
25°	1612.8	1607.5	1615.9	1626.5	1644.3	1659.0	1682.2	1713.7	1750.4	1793.6	1841.9
27.5°	1507.6	1506.5	1513.9	1523.3	1539.1	1557.1	1582.3	1614.8	1653.7	1701.0	1748.3
30°	1402.5	1404.6	1407.8	1417.2	1427.7	1445.6	1470.9	1498.2	1535.0	1580.2	1630.6
32.5°	1331.0	1331.0	1335.2	1341.5	1348.9	1358.3	1376.3	1396.2	1424.6	1456.1	1492.9
35°	1306.7	1302.6	1306.7	1307.9	1308.9	1311.0	1314.1	1320.5	1330.0	1343.6	1357.3
37.5°	1296.3	1293.2	1293.2	1288.9	1283.7	1277.4	1269.0	1259.4	1249.0	1235.3	1224.8
40°	1255.3	1253.2	1251.0	1246.9	1235.3	1222.7	1209.0	1186.9	1162.8	1129.1	1095.6
42.5°	1176.5	1174.4	1173.2	1164.8	1154.4	1139.6	1123.9	1100.7	1070.2	1027.2	978.7
45°	1078.6	1074.5	1071.3	1063.9	1056.5	1044.0	1029.3	1008.2	977.7	933.6	875.7
47.5°	965.2	963.1	961.9	958.8	951.5	944.1	934.7	917.9	890.5	848.4	788.5
50°	850.5	846.4	848.4	847.4	844.2	839.0	832.7	821.1	800.1	762.2	707.6
52.5°	719.1	719.1	718.1	721.3	722.3	721.3	722.3	709.7	691.8	663.4	617.1
55°	582.5	582.5	585.6	589.8	594.0	595.0	594.0	588.7	576.1	553.0	512.0
57.5°	454.1	452.1	458.4	464.7	468.9	473.1	469.9	465.8	458.4	439.4	407.9
60°	345.9	345.9	350.1	354.3	358.5	362.8	361.6	360.6	354.3	341.7	316.5
62.5°	254.5	255.5	255.5	258.6	262.9	267.0	270.2	267.0	263.9	255.5	238.7
65°	181.8	180.8	181.8	185.1	188.2	192.4	194.5	193.5	190.2	184.0	171.4
67.5°	122.0	121.0	125.1	126.1	128.2	132.5	131.4	132.5	131.4	126.1	115.7
70°	79.9	77.8	79.9	78.8	82.1	83.1	85.2	86.2	85.2	82.1	78.8
72.5°	49.4	48.3	49.4	50.4	51.6	52.6	54.7	54.7	53.6	51.6	47.3
75°	31.5	28.4	29.5	27.4	29.5	29.5	31.5	32.6	31.5	31.5	29.5
77.5°	18.9	18.9	18.9	18.9	18.9	18.9	18.9	20.0	21.0	18.9	17.8
80°	9.4	9.4	10.5	10.5	10.5	11.5	10.5	10.5	10.5	11.5	8.4
82.5°	7.4	6.3	6.3	6.3	7.4	6.3	6.3	6.3	6.3	6.3	6.3
85°	3.1	4.1	3.1	2.1	3.1	3.1	4.1	3.1	3.1	3.1	4.1
87.5°	1.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	2.1	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°	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7
2.5°	1986.0	1983.8	1983.8	1982.8	1985.0	1982.8	1983.8	1982.8	1982.8	1985.0	1982.8
5°	1993.4	1994.4	1992.2	1991.2	1994.4	1994.4	1994.4	1992.2	1992.2	1993.4	1992.2
7.5°	2003.9	2005.9	2007.0	2008.0	2010.2	2011.2	2011.2	2010.2	2009.1	2012.3	2008.0
10°	2015.4	2018.6	2024.9	2028.0	2033.3	2033.3	2035.4	2035.4	2033.3	2035.4	2034.4
12.5°	2011.2	2030.1	2040.7	2048.0	2055.4	2061.6	2063.8	2064.9	2063.8	2068.0	2063.8
15°	2018.6	2034.4	2051.2	2063.8	2077.4	2084.8	2086.9	2095.3	2097.4	2098.5	2092.1
17.5°	2007.0	2035.4	2053.2	2072.2	2092.1	2105.8	2118.5	2123.7	2124.7	2126.9	2118.5
20°	1980.7	2012.3	2039.5	2066.9	2090.1	2111.1	2121.6	2136.3	2132.1	2140.5	2129.0
22.5°	1944.9	1980.7	2015.4	2051.2	2075.3	2100.5	2122.6	2133.2	2138.4	2138.4	2125.8
25°	1888.2	1930.2	1968.1	2004.9	2041.7	2072.2	2097.4	2113.2	2116.3	2115.3	2100.5
27.5°	1799.9	1845.1	1889.2	1931.4	1976.5	2012.3	2041.7	2060.6	2065.9	2065.9	2050.1
30°	1677.9	1726.3	1769.4	1819.8	1866.1	1906.0	1947.1	1963.9	1973.3	1973.3	1955.5
32.5°	1532.9	1573.9	1613.8	1663.2	1713.7	1758.8	1797.7	1821.0	1832.5	1831.4	1815.7
35°	1375.1	1395.1	1425.6	1462.5	1507.6	1549.7	1587.6	1609.6	1629.6	1628.5	1613.8
37.5°	1217.4	1212.1	1215.4	1229.1	1257.4	1286.8	1316.3	1337.4	1354.2	1361.5	1358.3
40°	1062.9	1035.6	1009.2	999.8	1001.9	1012.5	1028.2	1044.0	1062.9	1072.3	1076.6
42.5°	924.2	877.9	831.6	796.9	777.0	770.6	778.0	783.2	794.8	808.5	822.1
45°	812.7	750.6	689.6	636.1	602.4	582.5	578.2	582.5	588.7	602.4	620.2
47.5°	721.3	648.7	580.3	520.4	471.0	444.7	437.4	435.3	441.6	454.1	478.3
50°	640.2	567.7	492.0	422.6	371.2	341.7	331.1	327.0	334.3	343.8	365.9
52.5°	552.0	480.5	402.7	335.4	281.7	251.3	239.7	233.4	237.5	250.2	272.3
55°	456.2	390.0	319.6	250.2	198.6	170.3	156.6	152.5	156.6	170.3	192.4
57.5°	360.6	304.9	246.1	180.8	134.5	106.2	92.5	88.3	99.9	105.1	128.2
60°	281.7	236.5	186.1	132.5	92.5	70.4	56.7	53.6	58.9	68.3	87.2
62.5°	211.3	182.9	142.9	94.6	68.3	45.2	37.9	34.8	37.9	45.2	60.0
65°	153.5	131.4	99.9	69.4	46.3	33.6	25.2	23.1	26.3	31.5	44.2
67.5°	105.1	88.3	69.4	48.3	31.5	21.0	17.8	17.8	18.9	23.1	32.6
70°	68.3	57.8	44.2	31.5	21.0	15.8	13.7	11.5	13.7	16.8	22.1
72.5°	43.2	36.8	28.4	22.1	15.8	11.5	9.4	8.4	10.5	12.6	16.8
75°	26.3	20.0	14.7	11.5	8.4	8.4	8.4	4.1	5.3	8.4	10.5
77.5°	15.8	13.7	11.5	9.4	7.4	4.1	4.1	4.1	5.3	6.3	9.4
80°	8.4	7.4	5.3	5.3	4.1	3.1	4.1	3.1	2.1	5.3	6.3
82.5°	5.3	4.1	4.1	4.1	5.3	2.1	3.1	2.1	3.1	4.1	3.1
85°	3.1	3.1	3.1	2.1	5.3	2.1	2.1	1.0	1.0	2.1	2.1
87.5°	0.0	1.0	1.0	0.0	1.0	0.0	1.0	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



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7
2.5°	1983.8	1982.8	1983.8	1982.8	1982.8	1982.8	1983.8	1983.8	1982.8	1982.8	1985.0
5°	1992.2	1992.2	1992.2	1991.2	1990.2	1990.2	1992.2	1992.2	1989.1	1992.2	1992.2
7.5°	2010.2	2007.0	2010.2	2005.9	2003.9	2004.9	2005.9	2003.9	2001.8	2002.8	2002.8
10°	2033.3	2030.1	2030.1	2027.0	2023.9	2021.7	2019.6	2014.3	2009.1	2008.0	2003.9
12.5°	2060.6	2055.4	2052.2	2045.9	2040.7	2033.3	2027.0	2018.6	2008.0	2000.6	1993.4
15°	2088.0	2079.6	2072.2	2061.6	2050.1	2037.5	2023.9	2010.2	1993.4	1978.7	1966.0
17.5°	2110.1	2098.5	2084.8	2068.0	2051.2	2032.3	2012.3	1992.2	1968.1	1949.2	1934.5
20°	2117.3	2100.5	2082.7	2060.6	2038.5	2012.3	1987.1	1960.7	1933.4	1913.4	1896.6
22.5°	2107.9	2088.0	2065.9	2042.8	2013.3	1985.0	1955.5	1925.0	1900.8	1873.5	1857.7
25°	2081.7	2057.5	2033.3	2005.9	1977.6	1946.1	1914.4	1882.9	1853.5	1838.8	1818.8
27.5°	2028.0	2001.8	1975.4	1947.1	1914.4	1882.9	1850.3	1819.8	1794.6	1774.7	1763.1
30°	1933.4	1902.9	1872.4	1841.9	1813.6	1780.9	1750.4	1725.2	1700.0	1684.2	1672.6
32.5°	1788.3	1761.0	1730.5	1701.0	1674.8	1647.4	1622.2	1600.1	1582.3	1571.8	1563.3
35°	1592.8	1565.5	1542.3	1521.3	1499.2	1487.7	1471.9	1459.2	1451.9	1447.7	1446.7
37.5°	1346.8	1331.0	1323.7	1319.4	1315.3	1312.1	1314.1	1319.4	1323.7	1331.0	1339.4
40°	1083.9	1097.6	1101.8	1116.5	1130.2	1148.0	1168.1	1191.2	1210.1	1234.2	1251.0
42.5°	844.2	869.4	898.9	930.4	964.1	996.7	1036.6	1073.4	1107.1	1137.6	1163.8
45°	648.7	687.5	731.8	777.0	822.1	869.4	917.9	963.1	1003.0	1035.6	1062.9
47.5°	505.7	548.8	605.6	661.3	716.0	771.7	825.3	872.6	906.2	937.8	961.9
50°	400.5	450.0	512.0	576.1	636.1	694.9	751.7	795.9	829.5	854.8	872.6
52.5°	310.2	369.0	432.1	499.4	563.5	627.6	680.2	721.3	748.6	770.6	784.3
55°	231.3	289.1	356.4	425.8	491.0	553.0	602.4	638.2	662.4	675.0	682.4
57.5°	167.1	219.7	287.0	356.4	415.2	474.2	514.1	546.7	560.4	567.7	570.9
60°	122.0	170.3	230.3	290.2	345.9	393.2	427.9	450.0	460.5	464.7	463.6
62.5°	89.3	131.4	182.9	233.4	278.6	317.5	344.8	359.5	364.8	366.9	363.8
65°	68.3	100.9	145.1	184.0	218.7	247.1	267.0	276.6	279.7	278.6	276.6
67.5°	50.4	75.7	108.3	137.8	163.0	185.1	195.5	204.0	206.0	202.9	199.8
70°	35.8	55.7	78.8	98.9	117.7	130.4	141.9	142.9	142.9	141.9	139.8
72.5°	25.2	38.9	53.6	67.3	78.8	88.3	92.5	95.6	94.6	93.6	91.5
75°	16.8	24.2	38.9	42.0	52.6	55.7	60.0	60.0	61.0	57.8	57.8
77.5°	10.5	16.8	23.1	27.4	31.5	35.8	37.9	37.9	38.9	37.9	37.9
80°	6.3	10.5	12.6	18.9	18.9	22.1	23.1	24.2	22.1	25.2	22.1
82.5°	4.1	6.3	9.4	9.4	11.5	13.7	13.7	14.7	14.7	13.7	13.7
85°	3.1	4.1	5.3	6.3	6.3	7.4	6.3	6.3	7.4	8.4	7.4
87.5°	1.0	2.1	1.0	2.1	2.1	4.1	3.1	3.1	3.1	4.1	4.1
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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CATALOG NUMBER: LD8B40D010 ER8B40930 8LBDWOLI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1980.7	1980.7	1980.7	1980.7
2.5°	1982.8	1983.8	1982.8	1982.8
5°	1992.2	1991.2	1992.2	1990.2
7.5°	1999.6	1999.6	1998.6	1998.6
10°	1999.6	1995.5	1995.5	1995.5
12.5°	1983.8	1978.7	1975.4	1973.3
15°	1956.5	1947.1	1942.9	1941.8
17.5°	1920.8	1912.4	1907.2	1904.0
20°	1879.8	1871.4	1865.1	1866.1
22.5°	1844.0	1834.6	1830.4	1828.2
25°	1808.3	1796.7	1793.6	1791.5
27.5°	1750.4	1744.2	1741.0	1737.9
30°	1662.1	1659.0	1653.7	1661.1
32.5°	1560.2	1554.9	1550.7	1553.9
35°	1447.7	1444.5	1447.7	1445.6
37.5°	1344.6	1347.8	1352.0	1354.2
40°	1263.7	1275.2	1279.5	1281.5
42.5°	1182.8	1196.4	1204.9	1210.1
45°	1082.9	1096.6	1106.0	1112.4
47.5°	979.9	991.4	1000.8	999.8
50°	886.3	892.5	896.8	900.9
52.5°	791.7	791.7	792.7	792.7
55°	684.4	682.4	681.2	682.4
57.5°	566.7	564.5	563.5	560.4
60°	459.4	453.1	449.0	449.0
62.5°	359.5	352.2	349.1	348.0
65°	270.2	269.2	262.9	261.8
67.5°	195.5	191.4	187.1	188.2
70°	137.8	131.4	131.4	129.4
72.5°	89.3	86.2	85.2	85.2
75°	55.7	55.7	53.6	57.8
77.5°	36.8	36.8	35.8	36.8
80°	22.1	22.1	22.1	21.0
82.5°	13.7	14.7	13.7	13.7
85°	7.4	8.4	6.3	9.4
87.5°	4.1	5.3	4.1	5.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)