

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: P246095

Luminaire Tested: **LD8B50D010 ER8B509727 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246095
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B50D010 ER8B509727 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
97 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3799.0 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

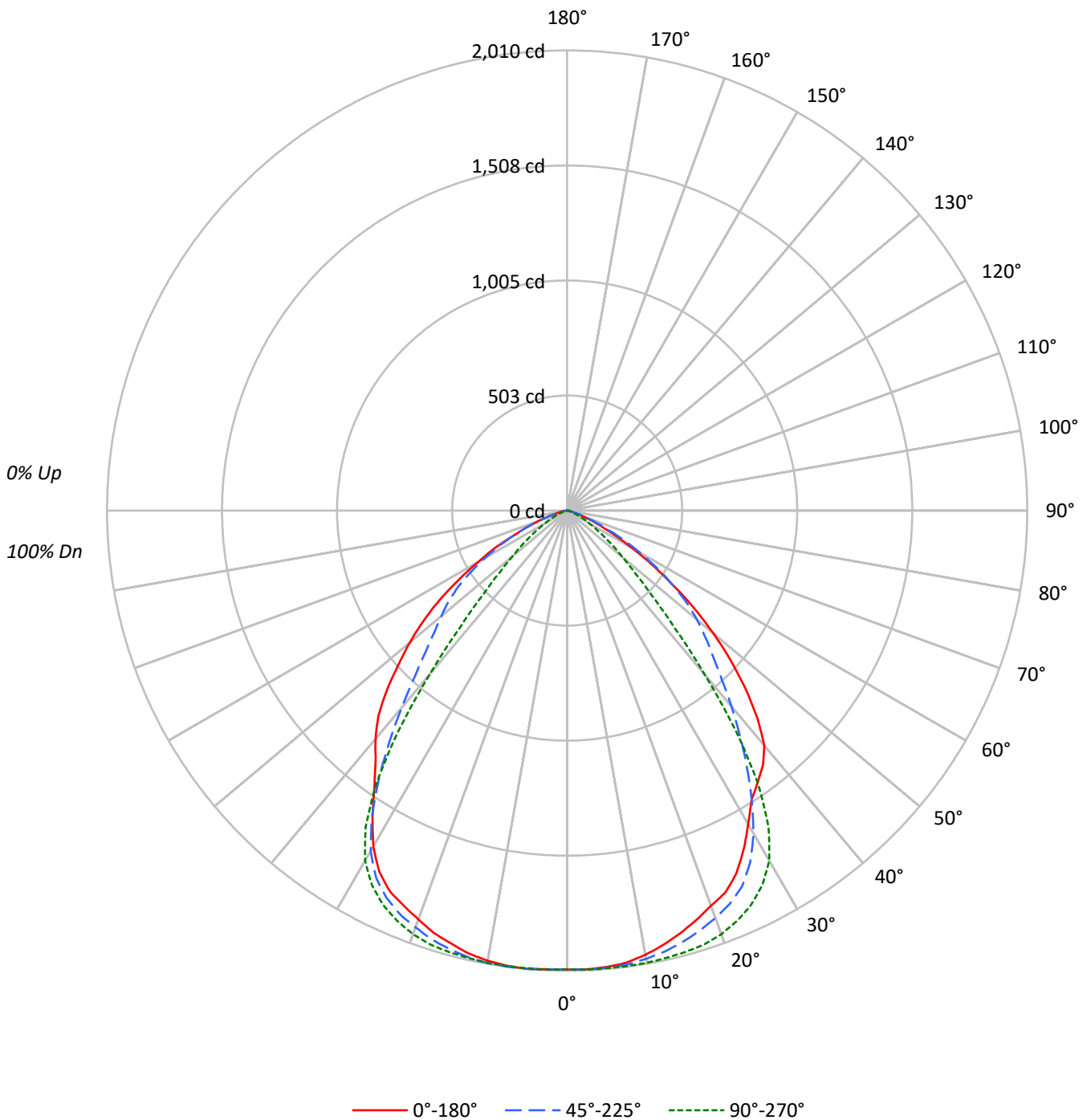
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	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°	191.3	5.0
10°-20°	555.5	14.6
20°-30°	843.2	22.2
30°-40°	885.6	23.3
40°-50°	664.0	17.5
50°-60°	426.0	11.2
60°-70°	182.2	4.8
70°-80°	43.1	1.1
80°-90°	8.0	0.2
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°	1590.1	41.9
0°-40°	2475.7	65.2
0°-60°	3565.7	93.9
0°-90°	3799.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3799.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2004	2004	2004	2004	2004	
5°	2001	2004	2007	2010	2009	190
15°	1911	1951	1996	1983	1958	539
25°	1748	1810	1901	1867	1834	799
35°	1450	1370	1451	1434	1466	910
45°	1102	900	518	875	1117	844
55°	557	557	193	581	679	506
65°	168	198	61	255	259	179
75°	26	30	9	52	51	38
85°	9	5	4	9	12	9
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°	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4
2.5°	2005.5	2007.7	2006.6	2006.6	2005.5	2006.6	2006.6	2008.7	2008.7	2006.6	2005.5
5°	2001.2	2003.3	2003.3	2001.2	2001.2	2006.6	2003.3	2005.5	2005.5	2004.4	2004.4
7.5°	1991.5	1991.5	1995.8	1992.6	1992.6	1995.8	1994.7	1996.9	1999.1	2000.1	2000.1
10°	1970.0	1972.2	1973.2	1973.2	1974.3	1977.5	1979.7	1984.0	1986.1	1988.3	1989.4
12.5°	1943.1	1946.3	1947.4	1946.3	1949.6	1953.9	1959.3	1964.6	1967.9	1972.2	1975.4
15°	1910.8	1910.8	1913.0	1916.2	1918.4	1924.8	1930.2	1936.6	1945.2	1950.6	1956.0
17.5°	1875.3	1877.5	1880.7	1880.7	1885.0	1895.8	1899.0	1908.7	1918.4	1923.7	1934.5
20°	1836.6	1838.7	1842.0	1844.1	1849.5	1858.1	1864.6	1873.2	1883.9	1893.6	1904.4
22.5°	1806.5	1802.2	1804.3	1806.5	1811.9	1819.4	1826.9	1837.7	1848.4	1858.1	1868.9
25°	1748.4	1749.4	1752.7	1754.8	1761.3	1767.7	1776.3	1789.2	1798.9	1809.7	1821.5
27.5°	1669.8	1670.9	1676.3	1676.3	1681.6	1692.4	1697.8	1708.6	1721.5	1732.2	1746.2
30°	1580.5	1582.7	1582.7	1587.0	1590.2	1595.6	1601.0	1611.7	1618.2	1627.9	1647.2
32.5°	1498.8	1500.9	1499.8	1498.8	1495.5	1494.4	1493.4	1495.5	1497.7	1500.9	1508.4
35°	1450.3	1444.9	1440.7	1433.1	1424.5	1413.8	1404.1	1391.2	1379.3	1369.6	1358.9
37.5°	1404.1	1403.0	1396.5	1385.8	1368.6	1349.2	1326.6	1298.6	1270.6	1240.5	1211.5
40°	1339.5	1336.3	1330.9	1315.8	1296.5	1272.8	1242.7	1208.3	1163.1	1116.8	1069.5
42.5°	1229.8	1230.8	1224.4	1212.5	1194.3	1171.7	1140.5	1102.8	1054.4	999.5	938.2
45°	1101.7	1101.7	1099.6	1089.9	1077.0	1058.7	1035.0	1003.8	956.5	900.5	834.9
47.5°	968.3	969.4	966.2	964.0	958.6	946.8	929.6	905.9	872.6	818.8	753.1
50°	832.8	832.8	838.1	837.1	837.1	832.8	825.2	811.2	782.2	739.2	677.8
52.5°	697.2	699.3	702.6	706.9	712.2	720.9	712.2	705.8	687.5	654.1	601.4
55°	557.3	559.5	564.8	572.4	578.9	587.5	589.6	589.6	579.9	557.3	517.5
57.5°	437.9	434.7	439.0	445.4	454.0	462.7	469.1	476.6	475.6	460.5	428.2
60°	329.2	330.3	333.5	340.0	346.4	354.0	362.6	369.0	372.3	364.7	344.3
62.5°	239.9	239.9	244.2	250.7	253.9	264.7	270.1	273.3	276.5	275.4	262.5
65°	167.9	170.0	172.1	175.4	178.6	185.0	188.3	194.7	196.9	198.0	188.3
67.5°	118.4	115.1	117.3	119.4	122.7	127.0	133.4	133.4	136.6	136.6	130.2
70°	75.3	75.3	76.4	79.6	81.8	82.8	85.0	87.1	90.4	89.3	89.3
72.5°	50.6	49.5	50.6	51.7	52.7	55.9	55.9	57.0	59.2	60.3	55.9
75°	25.8	26.9	29.0	28.0	31.2	29.0	30.1	33.4	32.3	30.1	30.1
77.5°	21.5	21.5	21.5	20.5	22.6	22.6	21.5	23.7	22.6	22.6	21.5
80°	15.1	16.1	15.1	14.0	15.1	14.0	14.0	14.0	14.0	14.0	12.9
82.5°	11.8	9.7	10.8	9.7	10.8	10.8	9.7	8.6	8.6	9.7	8.6
85°	8.6	6.5	7.5	7.5	6.5	6.5	6.5	6.5	6.5	5.4	5.4
87.5°	5.4	3.2	3.2	3.2	4.3	4.3	4.3	3.2	4.3	4.3	2.2
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4
2.5°	2007.7	2006.6	2008.7	2007.7	2007.7	2006.6	2007.7	2006.6	2008.7	2004.4	2005.5
5°	2007.7	2005.5	2006.6	2007.7	2008.7	2006.6	2006.6	2006.6	2008.7	2006.6	2007.7
7.5°	2003.3	2002.3	2005.5	2007.7	2006.6	2005.5	2007.7	2006.6	2008.7	2007.7	2009.8
10°	1994.7	1995.8	1998.0	2001.2	2002.3	2003.3	2005.5	2005.5	2008.7	2004.4	2006.6
12.5°	1981.8	1986.1	1991.5	1993.7	1998.0	1998.0	2000.1	2001.2	2003.3	2002.3	2005.5
15°	1965.7	1971.1	1977.5	1982.9	1988.3	1991.5	1994.7	1995.8	1999.1	1995.8	1996.9
17.5°	1946.3	1952.8	1962.5	1968.9	1977.5	1980.8	1985.1	1987.2	1990.4	1988.3	1989.4
20°	1919.4	1927.0	1937.7	1947.4	1952.8	1960.3	1965.7	1968.9	1971.1	1968.9	1970.0
22.5°	1881.8	1892.5	1906.5	1914.1	1924.8	1931.3	1932.3	1939.9	1945.2	1939.9	1942.0
25°	1837.7	1848.4	1859.2	1875.3	1885.0	1892.5	1900.1	1901.2	1906.5	1905.4	1904.4
27.5°	1764.5	1778.5	1796.8	1809.7	1822.6	1834.4	1843.0	1845.2	1850.6	1848.4	1849.5
30°	1664.4	1679.5	1696.7	1717.2	1735.5	1747.3	1758.0	1765.6	1770.9	1767.7	1766.7
32.5°	1522.4	1537.5	1555.8	1576.2	1597.7	1614.9	1627.9	1637.5	1644.0	1641.8	1636.5
35°	1360.0	1364.3	1376.1	1392.2	1410.5	1428.8	1440.7	1451.4	1458.9	1461.1	1461.1
37.5°	1193.2	1179.2	1170.6	1170.6	1181.3	1188.9	1199.6	1206.1	1217.9	1222.2	1225.5
40°	1031.8	999.5	969.4	946.8	931.8	930.7	930.7	933.9	944.7	958.6	971.6
42.5°	887.6	836.0	789.7	747.8	717.6	700.4	692.9	694.0	702.6	715.5	737.0
45°	772.5	708.0	649.9	599.3	558.4	531.5	518.6	517.5	524.0	539.0	562.7
47.5°	683.2	614.3	548.7	490.6	446.5	417.4	402.4	398.1	402.4	416.4	444.4
50°	609.0	538.0	470.2	409.9	362.6	332.5	318.5	313.1	318.5	330.3	358.3
52.5°	540.1	466.9	403.5	345.4	294.8	269.0	253.9	250.7	253.9	267.9	290.5
55°	460.5	398.1	335.7	277.6	233.5	207.7	195.8	192.6	195.8	208.7	232.4
57.5°	382.0	328.2	273.3	220.6	182.9	160.3	149.6	145.2	152.8	161.4	189.4
60°	308.8	265.8	219.5	173.2	142.0	121.6	113.0	111.9	114.0	124.8	144.2
62.5°	242.1	206.6	170.0	132.3	106.5	97.9	87.1	86.1	88.2	94.7	109.8
65°	174.3	151.7	123.7	96.8	76.4	64.6	60.3	61.3	63.5	67.8	81.8
67.5°	121.6	105.4	86.1	67.8	52.7	47.3	43.0	42.0	43.0	50.6	58.1
70°	81.8	72.1	58.1	51.7	36.6	29.0	30.1	26.9	31.2	31.2	37.6
72.5°	53.8	47.3	38.7	30.1	25.8	20.5	20.5	19.4	21.5	22.6	28.0
75°	28.0	21.5	21.5	15.1	10.8	5.4	9.7	8.6	7.5	8.6	10.8
77.5°	19.4	16.1	15.1	11.8	10.8	8.6	8.6	8.6	8.6	9.7	10.8
80°	11.8	11.8	8.6	7.5	6.5	5.4	6.5	6.5	6.5	6.5	7.5
82.5°	7.5	6.5	6.5	5.4	5.4	4.3	4.3	4.3	4.3	4.3	6.5
85°	6.5	4.3	4.3	3.2	4.3	7.5	3.2	4.3	4.3	4.3	3.2
87.5°	2.2	3.2	3.2	3.2	2.2	1.1	2.2	3.2	3.2	5.4	4.3
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°	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4	2004.4
2.5°	2007.7	2008.7	2008.7	2007.7	2007.7	2005.5	2009.8	2006.6	2007.7	2012.0	2008.7
5°	2009.8	2010.9	2010.9	2009.8	2009.8	2009.8	2010.9	2010.9	2009.8	2008.7	2010.9
7.5°	2014.1	2013.0	2013.0	2010.9	2010.9	2008.7	2010.9	2007.7	2009.8	2007.7	2010.9
10°	2008.7	2009.8	2008.7	2007.7	2007.7	2006.6	2006.6	2003.3	2004.4	2001.2	2003.3
12.5°	2005.5	2004.4	2004.4	2002.3	2000.1	1998.0	1996.9	1993.7	1993.7	1986.1	1989.4
15°	1996.9	1998.0	1994.7	1990.4	1988.3	1982.9	1980.8	1976.4	1972.2	1966.8	1967.9
17.5°	1989.4	1986.1	1981.8	1977.5	1968.9	1964.6	1960.3	1953.9	1951.7	1945.2	1943.1
20°	1966.8	1964.6	1959.3	1951.7	1946.3	1936.6	1932.3	1925.9	1920.5	1914.1	1910.8
22.5°	1937.7	1935.6	1929.1	1921.6	1913.0	1908.7	1904.4	1892.5	1887.1	1880.7	1879.6
25°	1901.2	1897.9	1891.5	1882.9	1878.5	1866.7	1862.4	1853.8	1851.7	1845.2	1844.1
27.5°	1845.2	1840.9	1833.4	1822.6	1815.1	1807.5	1803.2	1796.8	1794.6	1788.2	1787.1
30°	1761.3	1755.9	1740.8	1736.5	1723.6	1716.1	1716.1	1707.5	1708.6	1704.3	1704.3
32.5°	1628.9	1620.3	1608.5	1599.9	1591.3	1587.0	1587.0	1583.7	1585.9	1585.9	1588.1
35°	1453.6	1441.7	1435.3	1429.9	1429.9	1434.2	1447.1	1450.3	1456.8	1462.2	1466.5
37.5°	1228.7	1227.6	1235.2	1241.6	1257.7	1276.0	1298.6	1318.0	1336.3	1349.2	1362.1
40°	985.5	1012.4	1033.9	1064.1	1088.8	1124.3	1165.2	1198.6	1229.8	1252.4	1276.0
42.5°	769.3	803.7	848.9	893.0	937.1	985.5	1039.3	1085.6	1126.5	1157.7	1182.4
45°	599.3	646.6	701.5	757.4	814.5	874.7	930.7	978.0	1021.0	1053.3	1078.1
47.5°	483.1	534.7	597.1	658.5	723.0	786.5	848.9	889.8	925.3	951.1	973.7
50°	399.2	454.0	519.7	589.6	654.1	717.6	771.4	811.2	840.3	862.9	876.9
52.5°	333.5	391.6	461.6	531.5	596.0	654.1	702.6	732.7	756.4	772.5	785.4
55°	275.4	331.4	397.0	462.7	526.1	581.0	620.8	643.4	661.7	671.4	678.9
57.5°	224.9	276.5	336.8	397.0	451.9	497.1	528.3	550.9	559.5	567.0	565.9
60°	176.5	224.9	279.7	331.4	378.7	415.3	437.9	450.8	457.3	460.5	458.3
62.5°	138.8	182.9	224.9	270.1	304.5	335.7	357.2	357.2	360.4	361.5	364.7
65°	103.3	136.6	173.2	206.6	234.5	255.0	266.8	270.1	274.4	273.3	271.1
67.5°	76.4	101.1	128.0	152.8	172.1	185.0	193.7	201.2	200.1	198.0	196.9
70°	52.7	68.9	92.5	107.6	121.6	134.5	136.6	137.7	138.8	139.9	137.7
72.5°	36.6	48.4	61.3	74.2	82.8	88.2	93.6	94.7	94.7	94.7	93.6
75°	18.3	24.7	36.6	42.0	49.5	51.7	55.9	55.9	59.2	54.9	53.8
77.5°	16.1	19.4	25.8	30.1	33.4	36.6	37.6	40.9	39.8	37.6	38.7
80°	9.7	11.8	16.1	18.3	22.6	23.7	24.7	25.8	24.7	25.8	25.8
82.5°	7.5	8.6	10.8	10.8	14.0	14.0	15.1	15.1	16.1	16.1	16.1
85°	4.3	7.5	6.5	12.9	8.6	8.6	10.8	12.9	10.8	10.8	12.9
87.5°	4.3	4.3	3.2	4.3	4.3	4.3	5.4	6.5	6.5	7.5	6.5
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):

	165°	170°	175°	180°
0°	2004.4	2004.4	2004.4	2004.4
2.5°	2007.7	2009.8	2006.6	2005.5
5°	2010.9	2010.9	2008.7	2008.7
7.5°	2010.9	2010.9	2007.7	2005.5
10°	2002.3	2002.3	1999.1	1996.9
12.5°	1986.1	1986.1	1985.1	1981.8
15°	1965.7	1965.7	1961.4	1958.2
17.5°	1937.7	1939.9	1934.5	1934.5
20°	1907.6	1906.5	1902.2	1900.1
22.5°	1876.4	1874.2	1873.2	1866.7
25°	1843.0	1840.9	1837.7	1834.4
27.5°	1786.0	1784.9	1781.7	1777.4
30°	1698.9	1697.8	1693.5	1693.5
32.5°	1585.9	1584.8	1580.5	1581.6
35°	1468.6	1472.9	1470.8	1466.5
37.5°	1370.7	1373.9	1376.1	1373.9
40°	1288.9	1298.6	1299.7	1301.9
42.5°	1201.8	1214.7	1219.0	1221.2
45°	1097.4	1109.3	1119.0	1116.8
47.5°	990.9	999.5	1008.1	1001.7
50°	888.7	894.1	897.3	897.3
52.5°	791.9	791.9	790.8	791.9
55°	681.1	681.1	676.8	678.9
57.5°	564.8	567.0	563.8	558.4
60°	457.3	451.9	449.7	446.5
62.5°	356.1	356.1	348.6	358.3
65°	266.8	263.6	260.4	259.3
67.5°	193.7	192.6	189.4	188.3
70°	136.6	132.3	131.3	129.1
72.5°	91.5	91.5	89.3	89.3
75°	55.9	50.6	49.5	50.6
77.5°	38.7	37.6	37.6	36.6
80°	25.8	24.7	26.9	23.7
82.5°	16.1	17.2	16.1	17.2
85°	10.8	12.9	11.8	11.8
87.5°	6.5	6.5	6.5	6.5
90°	0.0	0.0	0.0	0.0

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