

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO COMMERCIAL

Report Number: P776375

Luminaire Tested: HCDJBL3040CSD-HCD62TRMB-4000lm-2700K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776375  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156B058)  
Test Lab:  
Issue Date: 2/13/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBS3040CSD-HCD62TRMB-4000lm-2700K  
Description: 6 INCH ROUND NARROW MATTE BLACK TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

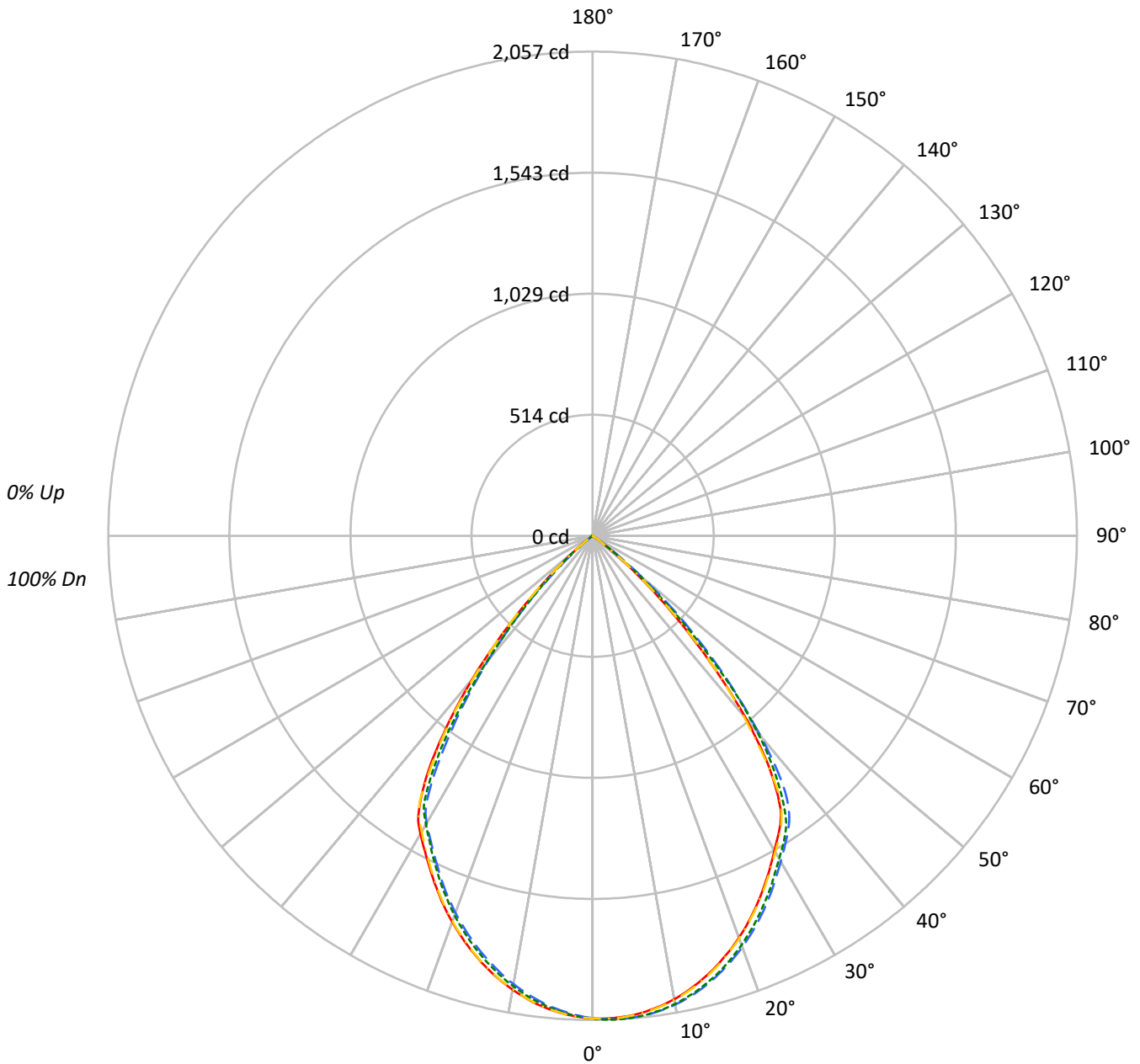
Lumens per Lamp: N/A  
Luminaire Lumens: 2677.7 lumens  
Efficiency: N/A  
Efficacy: 69.6 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.11 / 1.11  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 38.5  
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: 24 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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	113	110	107	105	111	108	105	103	104	102	100	100	98	97	97	95	94	92	92	92	92
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85	85	85	85
3	101	94	88	84	98	92	87	83	89	85	82	87	83	80	85	82	79	77	77	77	77
4	95	86	80	76	93	85	80	75	83	78	74	81	77	73	79	75	72	71	71	71	71
5	89	80	73	69	87	79	73	68	77	72	68	75	71	67	74	70	66	65	65	65	65
6	84	74	67	63	82	73	67	62	72	66	62	70	65	62	69	64	61	60	60	60	60
7	79	69	62	57	78	68	62	57	67	61	57	65	60	57	64	60	56	55	55	55	55
8	75	64	57	53	73	63	57	53	62	57	52	61	56	52	60	56	52	51	51	51	51
9	70	60	53	49	69	59	53	49	58	53	49	57	52	48	56	52	48	47	47	47	47
10	67	56	50	45	66	55	49	45	55	49	45	54	49	45	53	48	45	44	44	44	44

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	112409	112409	112409	112409
5°	112398	112987	111253	110852
10°	111259	112412	109010	108159
15°	109093	110687	105801	104518
20°	106001	107926	101830	100103
25°	102097	104304	97100	94802
30°	97800	100307	92571	89653
35°	92548	95118	81238	76714
40°	72407	77932	56849	50387
45°	42586	49168	28708	25196
50°	16776	20281	8384	8418
55°	2456	3192	698	841
60°	548	592	504	417
65°	402	402	350	298
70°	305	305	240	240
75°	254	254	169	169
80°	126	126	126	126
85°	0	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 67.5°  
 Vertical Angle: 45°  
 Luminance: 54378 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.3	7.2
10°-20°	532.5	19.9
20°-30°	757.1	28.3
30°-40°	781.9	29.2
40°-50°	373.6	14.0
50°-60°	36.1	1.3
60°-70°	2.9	0.1
70°-80°	1.1	0.0
80°-90°	0.2	0.0
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°	1482.0	55.3
0°-40°	2263.9	84.5
0°-60°	2673.6	99.8
0°-90°	2677.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2677.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2050	2050	2050	2050	2050	
5°	2042	2053	2022	2014	2042	194
15°	1922	1950	1864	1842	1922	541
25°	1688	1724	1605	1567	1688	776
35°	1383	1421	1214	1146	1383	837
45°	549	634	370	325	549	431
55°	26	33	7	9	26	46
65°	3	3	3	2	3	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2050.5	2050.5	2050.5	2050.5	2050.5	2050.5	2050.5	2050.5	2050.5	2050.5	2050.5
0.5°	2050.9	2050.9	2051.3	2050.5	2053.6	2052.8	2051.7	2051.3	2049.0	2047.8	2046.3
1°	2051.7	2052.1	2052.8	2052.5	2055.1	2053.6	2052.5	2050.9	2047.5	2045.5	2044.0
1.5°	2051.7	2052.8	2054.0	2054.0	2055.9	2054.4	2052.8	2050.1	2045.2	2042.9	2040.5
2°	2051.7	2053.6	2055.1	2055.5	2057.1	2055.1	2052.5	2048.6	2043.2	2039.8	2037.1
2.5°	2050.9	2053.6	2055.9	2056.3	2057.1	2055.1	2052.1	2046.7	2040.5	2036.7	2033.2
3°	2049.8	2053.6	2055.9	2056.7	2057.1	2054.8	2050.9	2045.2	2037.5	2032.9	2029.0
3.5°	2048.6	2052.8	2055.9	2057.1	2056.7	2054.0	2049.8	2042.9	2034.4	2029.0	2024.4
4°	2047.1	2051.7	2055.1	2056.7	2055.9	2053.2	2048.2	2039.8	2030.6	2024.4	2019.4
4.5°	2045.2	2050.1	2054.4	2056.3	2055.1	2051.7	2046.3	2036.7	2026.7	2019.4	2014.4
5°	2042.5	2048.2	2053.2	2055.1	2053.2	2049.8	2044.0	2033.2	2021.7	2014.4	2009.0
5.5°	2039.8	2046.7	2052.1	2054.0	2051.3	2047.8	2041.3	2029.8	2016.7	2008.7	2002.9
6°	2036.7	2044.4	2050.1	2052.1	2049.4	2045.5	2038.2	2026.3	2011.7	2003.3	1996.4
6.5°	2032.9	2041.7	2047.8	2050.5	2046.7	2042.5	2035.2	2021.7	2006.4	1997.1	1989.5
7°	2029.0	2038.2	2045.2	2048.2	2044.0	2039.4	2031.3	2017.1	2000.6	1990.2	1982.5
7.5°	2024.8	2034.8	2042.1	2045.5	2040.5	2035.9	2027.5	2012.1	1994.4	1983.3	1975.2
8°	2020.6	2030.9	2039.0	2042.9	2037.5	2032.1	2022.9	2006.7	1987.5	1976.4	1967.9
8.5°	2015.6	2026.7	2035.2	2039.0	2033.2	2027.9	2018.3	2001.0	1980.6	1968.7	1959.9
9°	2010.2	2022.5	2031.3	2035.6	2029.0	2023.6	2012.9	1994.4	1974.1	1961.0	1951.8
9.5°	2004.8	2017.5	2027.1	2031.3	2024.4	2018.3	2007.5	1988.3	1966.4	1953.0	1943.0
10°	1998.7	2012.1	2022.1	2026.7	2019.4	2013.3	2001.7	1981.0	1958.3	1944.5	1934.5
10.5°	1992.5	2006.4	2017.1	2022.1	2014.0	2007.9	1995.6	1974.1	1950.3	1935.3	1925.3
11°	1986.0	2000.6	2012.1	2016.7	2008.3	2001.7	1989.1	1966.8	1941.8	1926.5	1915.7
11.5°	1979.5	1994.4	2006.0	2011.4	2002.1	1995.2	1982.5	1959.1	1933.4	1917.2	1905.7
12°	1972.2	1987.5	2000.2	2005.6	1995.6	1989.1	1975.2	1951.0	1924.2	1908.0	1896.1
12.5°	1964.1	1980.6	1993.7	1999.4	1989.1	1982.2	1967.6	1942.6	1914.9	1898.0	1885.4
13°	1956.4	1973.3	1986.8	1992.9	1981.8	1975.2	1959.9	1934.1	1905.3	1887.7	1875.4
13.5°	1948.4	1966.0	1979.5	1986.4	1974.5	1967.2	1952.2	1924.5	1895.0	1877.7	1864.6
14°	1939.9	1958.3	1972.2	1978.7	1966.8	1959.5	1943.4	1915.7	1885.0	1866.9	1853.5
14.5°	1931.1	1950.3	1964.1	1971.4	1958.3	1950.7	1934.5	1906.1	1874.6	1856.2	1841.9
15°	1922.2	1941.8	1956.4	1963.3	1950.3	1941.8	1925.7	1895.7	1864.2	1845.0	1830.4
15.5°	1913.0	1932.6	1948.4	1954.9	1941.8	1932.6	1916.1	1885.7	1853.5	1833.5	1819.3
16°	1903.0	1923.4	1939.1	1946.4	1932.6	1923.4	1906.5	1875.4	1841.9	1822.0	1807.4
16.5°	1893.0	1914.2	1929.9	1937.6	1923.4	1914.2	1896.9	1864.6	1830.8	1809.7	1795.5
17°	1883.0	1904.6	1920.3	1928.8	1913.4	1904.6	1886.5	1853.9	1819.3	1798.2	1782.8
17.5°	1872.7	1894.6	1911.1	1919.2	1903.4	1894.2	1876.1	1843.1	1807.4	1786.2	1770.1
18°	1862.3	1884.2	1901.1	1909.2	1893.0	1883.8	1865.4	1831.6	1795.5	1773.6	1757.1
18.5°	1851.5	1873.4	1890.7	1899.2	1882.7	1872.7	1853.9	1820.1	1783.2	1760.9	1744.4
19°	1839.6	1863.1	1880.7	1889.2	1871.9	1862.3	1843.1	1808.1	1770.9	1747.8	1731.3
19.5°	1828.5	1852.3	1870.0	1878.4	1861.2	1850.8	1832.0	1796.2	1758.2	1735.2	1717.5
20°	1817.0	1841.2	1859.2	1867.7	1850.0	1839.6	1820.4	1783.6	1745.5	1721.7	1703.7
20.5°	1805.1	1829.7	1848.1	1856.5	1838.5	1827.7	1808.5	1771.6	1732.1	1707.9	1689.8
21°	1793.5	1818.1	1836.6	1845.4	1826.2	1816.2	1796.2	1758.6	1718.6	1694.4	1675.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1755.5	1781.6	1800.8	1809.3	1789.7	1779.3	1758.6	1719.4	1677.5	1651.8	1632.6
23°	1742.5	1768.2	1788.6	1797.4	1777.0	1766.7	1745.5	1706.0	1662.9	1637.2	1617.2
23.5°	1729.0	1755.5	1775.9	1784.3	1764.0	1753.6	1732.5	1692.1	1648.7	1622.6	1602.2
24°	1715.2	1742.1	1763.2	1772.4	1750.9	1740.5	1719.0	1678.3	1634.1	1608.0	1586.9
24.5°	1701.7	1729.4	1750.1	1759.4	1737.5	1727.1	1705.6	1664.5	1619.9	1592.6	1571.9
25°	1687.9	1715.6	1737.1	1745.9	1724.4	1713.6	1691.7	1650.3	1605.3	1578.0	1556.1
25.5°	1673.7	1701.7	1723.2	1732.5	1710.6	1699.8	1677.9	1636.0	1590.3	1562.7	1540.8
26°	1659.9	1688.7	1709.8	1719.0	1697.1	1686.0	1664.1	1621.5	1575.7	1547.7	1525.4
26.5°	1645.3	1674.8	1696.0	1705.6	1683.3	1671.8	1649.9	1607.2	1561.1	1532.3	1510.8
27°	1631.1	1661.0	1682.1	1691.7	1669.5	1657.9	1635.7	1592.6	1545.8	1517.7	1495.5
27.5°	1616.5	1646.4	1668.3	1677.5	1655.3	1643.7	1621.5	1577.7	1531.6	1503.1	1480.9
28°	1602.2	1632.2	1654.1	1663.7	1640.7	1629.9	1606.9	1563.4	1517.3	1489.3	1466.3
28.5°	1587.3	1618.0	1640.3	1649.1	1626.1	1615.3	1592.6	1549.6	1503.9	1475.1	1452.8
29°	1572.7	1603.8	1626.1	1635.3	1612.2	1601.1	1578.8	1535.4	1490.1	1460.9	1438.2
29.5°	1558.8	1589.6	1611.8	1621.5	1598.4	1587.3	1565.4	1522.0	1475.9	1446.7	1424.0
30°	1545.0	1575.7	1598.0	1607.2	1584.6	1573.8	1551.5	1508.1	1462.4	1432.8	1409.8
30.5°	1531.2	1561.9	1584.2	1593.4	1571.1	1560.0	1538.5	1495.1	1448.6	1418.2	1394.0
31°	1517.7	1548.8	1571.1	1580.0	1558.5	1546.9	1525.0	1481.6	1434.0	1402.9	1377.9
31.5°	1503.9	1535.4	1557.7	1566.9	1545.0	1533.9	1512.0	1467.8	1418.6	1384.1	1357.2
32°	1490.5	1522.0	1544.2	1553.5	1531.9	1520.8	1498.5	1453.2	1396.3	1358.7	1329.1
32.5°	1477.0	1508.5	1531.6	1540.8	1518.5	1507.7	1484.7	1437.4	1371.4	1329.1	1296.9
33°	1462.8	1495.1	1518.1	1527.0	1504.7	1492.8	1469.7	1418.6	1343.3	1295.3	1260.0
33.5°	1447.4	1481.2	1504.7	1514.3	1488.9	1477.8	1453.6	1395.6	1313.4	1259.2	1221.9
34°	1430.9	1465.9	1489.7	1499.7	1470.5	1460.1	1435.5	1369.8	1282.6	1220.8	1181.2
34.5°	1408.6	1449.4	1474.3	1483.9	1447.1	1439.4	1415.6	1340.6	1249.2	1183.1	1140.9
35°	1382.9	1429.8	1456.3	1464.3	1421.3	1414.8	1392.5	1310.3	1213.9	1145.1	1099.4
35.5°	1354.9	1407.9	1436.7	1441.3	1393.7	1387.9	1366.4	1277.6	1177.0	1106.7	1059.8
36°	1323.7	1381.4	1412.9	1415.2	1366.0	1358.7	1336.0	1243.1	1136.7	1069.4	1017.6
36.5°	1292.6	1352.9	1387.1	1387.1	1336.4	1326.8	1300.3	1205.8	1095.6	1032.2	977.2
37°	1258.4	1319.9	1357.2	1357.5	1306.5	1293.4	1259.6	1167.4	1052.9	991.8	936.5
37.5°	1222.3	1284.6	1323.7	1327.6	1274.2	1257.3	1215.8	1125.5	1011.8	951.9	896.2
38°	1183.5	1244.6	1284.6	1295.7	1241.5	1220.0	1168.6	1081.7	968.8	909.3	854.3
38.5°	1142.8	1202.7	1244.2	1261.9	1205.0	1180.8	1123.2	1035.3	925.8	867.0	812.1
39°	1100.2	1157.0	1200.1	1226.6	1168.2	1139.0	1077.9	989.9	882.0	822.8	770.6
39.5°	1056.8	1112.1	1153.6	1188.5	1129.0	1096.3	1035.3	941.5	839.3	779.8	729.5
40°	1011.8	1065.2	1107.9	1149.7	1089.0	1050.6	992.2	893.5	794.4	736.4	687.6
40.5°	966.1	1016.8	1062.5	1109.4	1047.2	1005.3	951.1	845.9	750.6	695.7	647.3
41°	917.7	968.4	1018.0	1066.4	1006.1	960.7	908.5	799.0	706.0	653.4	607.3
41.5°	869.7	923.5	974.6	1022.6	961.9	916.6	865.5	752.1	661.1	613.5	568.1
42°	820.5	878.1	930.4	976.5	917.3	873.1	820.9	707.2	615.4	572.8	529.0
42.5°	773.3	832.8	887.7	931.5	870.1	830.1	775.2	663.4	570.8	532.4	489.8
43°	726.0	787.5	843.6	885.1	823.2	786.7	730.6	620.4	527.0	491.3	451.7
43.5°	681.1	742.9	800.2	839.7	774.8	743.7	687.2	577.7	485.2	452.1	414.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	549.3	610.0	667.2	701.4	634.2	613.1	561.6	460.2	370.3	341.5	311.5
45.5°	509.0	567.4	625.8	657.3	587.7	570.4	520.9	423.3	335.7	306.2	277.0
46°	467.9	526.3	583.5	612.7	543.6	528.6	480.9	389.5	301.2	270.4	242.4
46.5°	427.9	487.1	543.2	569.7	499.4	487.9	442.1	355.7	266.6	235.1	212.8
47°	389.5	449.4	502.8	527.0	457.1	447.1	402.6	321.9	237.4	205.5	184.4
47.5°	352.6	412.6	463.7	484.8	416.0	407.6	368.0	288.1	209.4	177.1	158.6
48°	317.7	376.8	425.2	443.3	380.3	370.3	333.4	254.3	183.2	150.2	135.2
48.5°	284.3	342.7	386.4	403.3	344.6	333.0	298.9	224.0	159.4	127.2	114.1
49°	252.8	309.2	349.6	363.8	308.8	295.8	264.7	195.9	137.1	106.4	95.3
49.5°	223.6	277.3	313.8	327.3	273.1	258.5	235.1	170.6	117.2	88.0	79.1
50°	196.7	246.6	279.3	291.6	237.8	224.7	204.7	146.0	98.3	72.6	64.9
50.5°	171.7	216.7	247.0	257.4	206.7	193.6	176.7	123.7	81.8	59.9	53.4
51°	147.9	188.2	214.7	225.9	178.2	164.0	150.2	104.1	66.8	51.5	45.7
51.5°	127.5	161.0	185.2	195.1	152.1	138.3	126.4	86.0	57.6	42.6	38.0
52°	110.2	136.4	158.3	167.5	127.2	114.5	102.6	69.9	48.4	34.2	30.3
52.5°	93.0	118.3	132.1	141.0	104.5	93.0	82.2	59.9	39.2	25.7	22.7
53°	75.7	99.9	113.7	121.8	83.7	74.5	64.5	49.9	30.0	17.3	15.0
53.5°	58.4	81.4	95.3	102.6	65.7	59.2	54.2	40.3	20.7	12.7	10.8
54°	46.1	63.0	76.8	83.7	54.9	49.2	43.8	30.7	11.5	9.2	8.1
54.5°	35.0	44.9	58.4	64.5	44.2	39.6	33.8	20.7	8.5	7.3	6.9
55°	25.7	32.7	40.0	45.7	33.4	30.0	23.4	11.1	7.3	6.5	6.5
55.5°	17.7	23.4	28.8	33.4	22.3	20.4	13.1	8.1	6.5	6.5	6.1
56°	11.9	15.7	19.6	23.4	11.5	10.8	9.2	6.9	6.5	6.1	5.8
56.5°	10.4	13.8	13.1	15.4	8.5	8.1	7.3	6.5	6.1	5.8	5.8
57°	8.8	11.9	11.5	13.1	7.3	6.9	6.9	6.5	5.8	5.8	5.4
57.5°	7.3	10.0	9.6	10.8	6.9	6.5	6.5	6.1	5.8	5.4	5.0
58°	6.1	8.1	8.1	8.8	6.5	6.5	6.1	5.8	5.4	5.0	5.0
58.5°	5.8	6.1	6.5	6.5	6.1	6.1	6.1	5.8	5.0	5.0	4.6
59°	5.4	5.8	6.1	6.1	5.8	5.8	5.8	5.4	5.0	4.6	4.6
59.5°	5.4	5.8	5.8	6.1	5.8	5.8	5.4	5.0	4.6	4.6	4.2
60°	5.0	5.4	5.8	5.8	5.4	5.4	5.4	5.0	4.6	4.2	4.2
60.5°	4.6	5.0	5.4	5.4	5.0	5.0	5.0	4.6	4.2	4.2	3.8
61°	4.6	5.0	5.0	5.4	5.0	5.0	4.6	4.2	3.8	3.8	3.8
61.5°	4.2	4.6	5.0	5.0	4.6	4.6	4.6	4.2	3.8	3.8	3.5
62°	4.2	4.2	4.6	4.6	4.2	4.2	4.2	3.8	3.5	3.5	3.5
62.5°	3.8	4.2	4.2	4.6	4.2	4.2	4.2	3.8	3.5	3.5	3.1
63°	3.8	3.8	4.2	4.2	3.8	3.8	3.8	3.5	3.5	3.1	3.1
63.5°	3.5	3.8	3.8	4.2	3.8	3.8	3.8	3.5	3.1	3.1	3.1
64°	3.5	3.5	3.8	3.8	3.5	3.5	3.5	3.1	3.1	3.1	2.7
64.5°	3.1	3.5	3.5	3.8	3.5	3.5	3.5	3.1	2.7	2.7	2.7
65°	3.1	3.1	3.5	3.5	3.1	3.1	3.1	3.1	2.7	2.7	2.7
65.5°	2.7	3.1	3.1	3.5	3.1	3.1	3.1	2.7	2.7	2.7	2.3
66°	2.7	3.1	3.1	3.1	3.1	3.1	2.7	2.7	2.3	2.3	2.3





TEST NUMBER: P776375

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMB-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	2.3	2.3	2.7	2.7	2.7	2.7	2.3	2.3	1.9	1.9	1.9
68°	2.3	2.3	2.7	2.7	2.3	2.3	2.3	2.3	1.9	1.9	1.9
68.5°	1.9	2.3	2.3	2.3	2.3	2.3	2.3	1.9	1.9	1.9	1.9
69°	1.9	2.3	2.3	2.3	2.3	2.3	2.3	1.9	1.9	1.9	1.5
69.5°	1.9	1.9	2.3	2.3	1.9	1.9	1.9	1.9	1.5	1.5	1.5
70°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.5	1.5
70.5°	1.5	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.5	1.5	1.5
71°	1.5	1.9	1.9	1.9	1.9	1.9	1.5	1.5	1.5	1.5	1.5
71.5°	1.5	1.5	1.9	1.9	1.5	1.5	1.5	1.5	1.2	1.2	1.2
72°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2	1.2
72.5°	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2	1.2	1.2
73°	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2	1.2	1.2
73.5°	1.2	1.2	1.5	1.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2
74°	1.2	1.2	1.2	1.5	1.2	1.2	1.2	1.2	1.2	0.8	0.8
74.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.8	0.8
75°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.8	0.8
75.5°	0.8	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.8	0.8	0.8
76°	0.8	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.8	0.8	0.8
76.5°	0.8	0.8	1.2	1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.8
77°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.8
78°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4
78.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4
79°	0.4	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4
79.5°	0.4	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4
80.5°	0.4	0.4	0.4	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4
81°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
81.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
82°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0
83°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0
83.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0
84°	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	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	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776375

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMB-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
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: P776375

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMB-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2050.5	2050.5	2050.5	2050.5	2050.5	2050.5
0.5°	2045.5	2049.8	2049.4	2049.4	2050.9	2050.9
1°	2042.5	2047.1	2047.1	2047.8	2050.1	2051.7
1.5°	2039.0	2044.4	2044.4	2045.9	2049.0	2051.7
2°	2035.2	2041.3	2041.7	2043.6	2047.8	2051.7
2.5°	2030.9	2037.5	2038.2	2040.5	2046.3	2050.9
3°	2026.7	2033.6	2034.8	2037.5	2044.0	2049.8
3.5°	2021.7	2029.4	2030.6	2034.0	2041.3	2048.6
4°	2016.3	2024.8	2026.3	2030.2	2038.6	2047.1
4.5°	2011.0	2019.8	2021.7	2025.9	2035.6	2045.2
5°	2005.6	2014.4	2016.7	2021.3	2032.1	2042.5
5.5°	1999.1	2009.0	2011.4	2016.7	2027.9	2039.8
6°	1992.5	2002.9	2005.2	2011.4	2023.6	2036.7
6.5°	1985.6	1996.8	1999.4	2005.6	2019.4	2032.9
7°	1978.7	1990.2	1993.3	1999.8	2014.4	2029.0
7.5°	1971.0	1983.3	1986.4	1993.7	2009.0	2024.8
8°	1963.0	1976.0	1979.5	1986.8	2003.3	2020.6
8.5°	1954.9	1967.9	1971.8	1980.2	1997.5	2015.6
9°	1946.0	1959.9	1964.1	1972.9	1991.4	2010.2
9.5°	1937.2	1951.8	1956.0	1964.9	1984.8	2004.8
10°	1928.8	1943.0	1947.6	1957.2	1977.5	1998.7
10.5°	1919.2	1934.5	1939.1	1948.7	1970.2	1992.5
11°	1909.6	1924.9	1929.9	1940.7	1962.2	1986.0
11.5°	1899.6	1915.7	1920.7	1931.8	1954.9	1979.5
12°	1889.2	1906.1	1911.1	1922.6	1946.8	1972.2
12.5°	1878.8	1895.7	1901.5	1913.0	1938.0	1964.1
13°	1868.1	1885.7	1891.5	1903.4	1928.8	1956.4
13.5°	1856.9	1875.0	1881.1	1893.4	1920.3	1948.4
14°	1845.8	1864.2	1870.8	1883.4	1910.7	1939.9
14.5°	1834.6	1853.1	1860.0	1873.1	1901.5	1931.1
15°	1822.7	1841.6	1848.5	1862.3	1891.1	1922.2
15.5°	1810.8	1830.4	1837.3	1851.2	1881.1	1913.0
16°	1798.9	1818.5	1825.4	1840.0	1870.8	1903.0
16.5°	1786.2	1806.2	1813.5	1828.9	1860.0	1893.0
17°	1774.0	1794.3	1801.6	1817.4	1848.9	1883.0
17.5°	1760.9	1781.6	1789.3	1805.1	1837.7	1872.7
18°	1747.8	1769.0	1777.0	1793.2	1826.6	1862.3
18.5°	1735.2	1755.9	1764.0	1780.5	1814.7	1851.5
19°	1721.3	1742.8	1750.9	1767.8	1802.8	1839.6
19.5°	1707.5	1729.4	1737.8	1755.1	1790.9	1828.5
20°	1693.3	1715.9	1724.0	1742.1	1778.2	1817.0
20.5°	1679.5	1701.7	1710.6	1729.0	1765.9	1805.1
21°	1665.2	1687.5	1696.4	1715.2	1752.8	1793.5

TEST NUMBER: P776375

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMB-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1620.7	1644.1	1653.3	1673.3	1713.6	1755.5
23°	1605.3	1629.1	1638.7	1659.1	1699.4	1742.5
23.5°	1590.3	1613.8	1623.8	1644.5	1685.6	1729.0
24°	1574.6	1598.4	1608.8	1629.9	1671.4	1715.2
24.5°	1559.6	1583.0	1593.8	1614.9	1657.6	1701.7
25°	1543.9	1567.3	1578.0	1599.6	1643.0	1687.9
25.5°	1528.1	1551.9	1563.1	1584.6	1628.4	1673.7
26°	1512.7	1536.2	1547.3	1569.6	1613.8	1659.9
26.5°	1497.4	1520.8	1531.9	1554.2	1598.8	1645.3
27°	1482.0	1505.1	1516.6	1538.9	1584.2	1631.1
27.5°	1467.4	1489.7	1501.2	1524.3	1569.2	1616.5
28°	1452.8	1474.3	1485.8	1509.3	1554.6	1602.2
28.5°	1438.2	1459.7	1471.3	1494.7	1539.6	1587.3
29°	1424.0	1445.5	1457.0	1480.5	1525.4	1572.7
29.5°	1409.4	1430.9	1442.4	1466.6	1511.6	1558.8
30°	1394.8	1416.3	1428.2	1452.8	1497.4	1545.0
30.5°	1379.1	1401.3	1413.6	1438.2	1483.9	1531.2
31°	1362.5	1386.7	1399.0	1423.6	1470.5	1517.7
31.5°	1338.3	1371.0	1383.3	1409.0	1456.7	1503.9
32°	1309.9	1352.6	1365.2	1392.9	1442.1	1490.5
32.5°	1278.0	1325.7	1339.9	1372.9	1427.1	1477.0
33°	1241.2	1293.0	1310.7	1347.6	1410.6	1462.8
33.5°	1202.7	1257.3	1278.4	1314.9	1387.1	1447.4
34°	1163.2	1221.9	1242.3	1275.7	1360.2	1430.9
34.5°	1123.6	1184.7	1203.1	1236.2	1329.5	1408.6
35°	1082.9	1146.3	1160.1	1195.8	1295.3	1382.9
35.5°	1039.9	1107.5	1116.7	1156.3	1260.7	1354.9
36°	996.1	1064.8	1074.1	1117.5	1224.3	1323.7
36.5°	951.1	1021.8	1030.3	1078.7	1185.1	1292.6
37°	907.0	976.5	987.6	1039.9	1145.1	1258.4
37.5°	862.4	931.9	945.8	999.1	1103.6	1222.3
38°	819.8	885.4	902.7	955.4	1062.5	1183.5
38.5°	777.1	840.9	860.9	911.6	1020.3	1142.8
39°	734.9	795.9	818.6	867.0	980.3	1100.2
39.5°	693.0	750.6	775.6	822.4	938.8	1056.8
40°	650.7	704.1	732.6	777.9	897.3	1011.8
40.5°	608.5	660.0	689.9	736.8	852.8	966.1
41°	567.0	617.3	647.7	695.3	809.4	917.7
41.5°	527.0	575.8	606.6	655.3	763.3	869.7
42°	486.3	536.3	566.6	616.2	717.6	820.5
42.5°	449.1	496.3	527.0	576.2	672.2	773.3
43°	413.3	459.8	488.6	535.1	627.7	726.0
43.5°	381.8	423.3	451.0	494.8	583.5	681.1



TEST NUMBER: P776375

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMB-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	288.1	325.0	342.7	379.9	456.4	549.3
45.5°	257.0	295.4	310.0	344.6	416.0	509.0
46°	227.8	267.0	279.3	310.4	377.2	467.9
46.5°	202.8	240.1	249.3	276.2	339.6	427.9
47°	179.4	215.5	221.6	243.9	303.1	389.5
47.5°	157.9	191.7	195.1	212.8	269.7	352.6
48°	137.1	169.4	170.9	182.5	238.2	317.7
48.5°	117.9	148.7	148.3	155.2	209.4	284.3
49°	100.6	130.6	129.5	129.8	182.5	252.8
49.5°	84.9	114.5	112.9	112.6	157.9	223.6
50°	70.7	98.7	96.0	95.7	134.8	196.7
50.5°	58.0	82.6	79.5	78.4	118.3	171.7
51°	49.2	66.8	62.6	61.5	101.8	147.9
51.5°	40.3	54.5	50.7	50.3	85.3	127.5
52°	31.9	43.8	40.7	40.7	68.4	110.2
52.5°	23.0	33.8	31.5	32.7	52.2	93.0
53°	14.2	25.0	23.8	25.4	41.5	75.7
53.5°	9.6	17.7	17.3	18.8	32.3	58.4
54°	7.3	11.9	11.9	13.4	24.2	46.1
54.5°	6.5	10.4	10.4	11.5	17.7	35.0
55°	6.1	8.8	8.8	9.6	12.3	25.7
55.5°	5.8	7.3	7.3	7.7	10.8	17.7
56°	5.8	5.8	5.8	6.1	9.2	11.9
56.5°	5.4	5.8	5.4	5.8	7.3	10.4
57°	5.0	5.4	5.4	5.4	5.8	8.8
57.5°	5.0	5.0	5.0	5.4	5.8	7.3
58°	4.6	5.0	5.0	5.0	5.4	6.1
58.5°	4.6	4.6	4.6	4.6	5.4	5.8
59°	4.2	4.6	4.2	4.6	5.0	5.4
59.5°	4.2	4.2	4.2	4.2	4.6	5.4
60°	3.8	3.8	3.8	3.8	4.6	5.0
60.5°	3.8	3.8	3.8	3.8	4.2	4.6
61°	3.5	3.5	3.5	3.5	3.8	4.6
61.5°	3.5	3.5	3.5	3.5	3.8	4.2
62°	3.1	3.5	3.1	3.5	3.5	4.2
62.5°	3.1	3.1	3.1	3.1	3.5	3.8
63°	2.7	3.1	3.1	3.1	3.1	3.8
63.5°	2.7	2.7	2.7	2.7	3.1	3.5
64°	2.7	2.7	2.7	2.7	3.1	3.5
64.5°	2.3	2.7	2.3	2.7	2.7	3.1
65°	2.3	2.3	2.3	2.3	2.7	3.1
65.5°	2.3	2.3	2.3	2.3	2.7	2.7
66°	2.3	2.3	2.3	2.3	2.3	2.7



TEST NUMBER: P776375

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMB-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	1.9	1.9	1.9	1.9	1.9	2.3
68°	1.9	1.9	1.5	1.9	1.9	2.3
68.5°	1.5	1.5	1.5	1.5	1.9	1.9
69°	1.5	1.5	1.5	1.5	1.9	1.9
69.5°	1.5	1.5	1.5	1.5	1.5	1.9
70°	1.5	1.5	1.5	1.5	1.5	1.9
70.5°	1.2	1.5	1.2	1.2	1.5	1.5
71°	1.2	1.2	1.2	1.2	1.5	1.5
71.5°	1.2	1.2	1.2	1.2	1.2	1.5
72°	1.2	1.2	1.2	1.2	1.2	1.5
72.5°	1.2	1.2	1.2	1.2	1.2	1.2
73°	1.2	1.2	1.2	1.2	1.2	1.2
73.5°	0.8	0.8	0.8	0.8	1.2	1.2
74°	0.8	0.8	0.8	0.8	1.2	1.2
74.5°	0.8	0.8	0.8	0.8	0.8	1.2
75°	0.8	0.8	0.8	0.8	0.8	1.2
75.5°	0.8	0.8	0.8	0.8	0.8	0.8
76°	0.8	0.8	0.8	0.8	0.8	0.8
76.5°	0.8	0.8	0.8	0.8	0.8	0.8
77°	0.8	0.8	0.4	0.4	0.8	0.8
77.5°	0.4	0.4	0.4	0.4	0.8	0.8
78°	0.4	0.4	0.4	0.4	0.4	0.8
78.5°	0.4	0.4	0.4	0.4	0.4	0.8
79°	0.4	0.4	0.4	0.4	0.4	0.4
79.5°	0.4	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4
80.5°	0.4	0.4	0.4	0.4	0.4	0.4
81°	0.4	0.4	0.4	0.4	0.4	0.4
81.5°	0.4	0.4	0.4	0.4	0.4	0.4
82°	0.4	0.4	0.4	0.4	0.4	0.4
82.5°	0.0	0.4	0.4	0.0	0.4	0.4
83°	0.0	0.0	0.0	0.0	0.0	0.4
83.5°	0.0	0.0	0.0	0.0	0.0	0.4
84°	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	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
85.5°	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0
87°	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
88°	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776375  
CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMB-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0



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Scaled Data Report





— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - 135°-315°

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Scaled Data Report



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21.5°	1780.9	1805.5	1824.3	1833.5	1814.3	1804.3	1783.9	1745.5	1704.8	1680.6	1661.4
22°	1767.8	1793.5	1813.1	1821.6	1802.0	1791.6	1771.3	1732.5	1691.4	1666.4	1646.8



44°	636.1	698.0	755.6	793.2	728.3	700.3	644.6	537.4	444.8	412.6	380.7
44.5°	592.7	653.4	711.8	747.2	680.7	656.9	603.1	498.6	405.3	377.2	346.1



66.5°	2.7	2.7	3.1	3.1	2.7	2.7	2.7	2.7	2.3	2.3	2.3
67°	2.3	2.7	2.7	2.7	2.7	2.7	2.7	2.3	2.3	2.3	1.9



89°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	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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21.5°	1650.6	1672.9	1682.5	1701.4	1740.1	1780.9
22°	1635.3	1657.9	1667.9	1687.5	1726.7	1767.8



44°	350.7	389.1	413.3	455.2	540.9	636.1
44.5°	319.2	356.1	378.0	417.6	497.8	592.7



66.5°	1.9	1.9	1.9	1.9	2.3	2.7
67°	1.9	1.9	1.9	1.9	2.3	2.3

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89°	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)