

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: P776009

Luminaire Tested: HCDJBS1525CSD-HCD4TSQH-2500lm-5000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776009
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2310613A001)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL51525CSD-HCD4TSQH-2500lm-5000K
Description: 4 INCH SQUARE MEDIUM HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2591.7 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.05 / 1.09
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

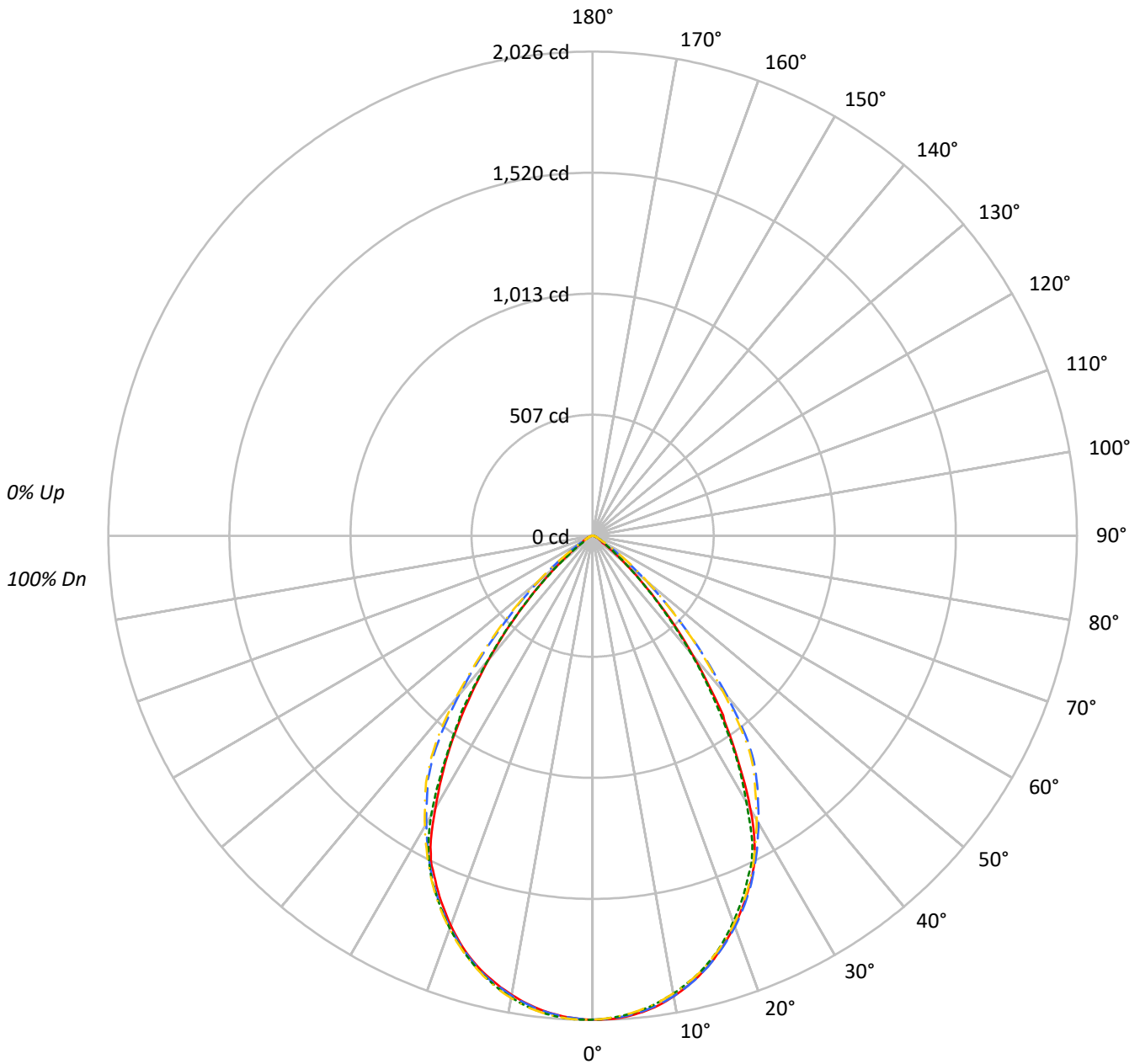
Input Watts (W): 25
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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															
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92				92															
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	85	84				84															
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76				76															
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				70															
5	88	79	72	67	87	78	72	67	76	71	66	74	70	66	73	69	65	64				64															
6	83	73	66	61	82	72	66	61	71	65	61	69	64	60	68	63	60	58				58															
7	78	68	61	56	77	67	61	56	66	60	56	65	59	56	63	59	55	54				54															
8	74	63	56	52	73	63	56	52	61	56	51	60	55	51	59	55	51	49				49															
9	70	59	52	48	69	58	52	48	57	52	48	57	51	47	56	51	47	46				46															
10	66	55	49	44	65	55	49	44	54	48	44	53	48	44	52	47	44	43				43															

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	200096	200096	200096	200096
5°	199561	198688	198946	199739
10°	196378	195184	195726	196950
15°	190813	189790	190792	191662
20°	182571	180867	182466	183875
25°	172141	169272	171072	173602
30°	150793	146867	150165	154114
35°	118323	115801	120628	122245
40°	84192	82385	87417	88282
45°	51468	50168	54558	54893
50°	25265	26064	28125	27217
55°	9478	13062	13786	10581
60°	6879	8718	8817	6978
65°	5426	6876	6993	5613
70°	4335	5520	5578	4537
75°	3361	4354	4354	3743
80°	2220	3358	3244	2960
85°	907	2608	1474	2041

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 315°
 Vertical Angle: 45°
 Luminance: 78936 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.9	7.3
10°-20°	523.5	20.2
20°-30°	720.5	27.8
30°-40°	662.0	25.5
40°-50°	358.0	13.8
50°-60°	96.5	3.7
60°-70°	27.5	1.1
70°-80°	11.5	0.4
80°-90°	2.2	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°	1434.0	55.3
0°-40°	2095.9	80.9
0°-60°	2550.4	98.4
0°-90°	2591.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2591.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2024	2024	2024	2024	2024	
5°	2011	2002	2005	2013	2011	190
15°	1865	1855	1864	1873	1865	523
25°	1578	1552	1569	1592	1578	716
35°	981	960	1000	1013	981	609
45°	368	359	390	393	368	290
55°	55	76	80	61	55	64
65°	23	29	30	24	23	23
75°	9	11	11	10	9	9
85°	1	2	1	2	1	1
90°	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°	2024.4	2024.4	2024.4	2024.4	2024.4	2024.4	2024.4	2024.4	2024.4	2024.4	2024.4
0.5°	2025.5	2024.7	2023.9	2023.1	2024.4	2023.1	2023.7	2023.9	2024.7	2024.7	2023.7
1°	2025.5	2024.2	2023.1	2022.6	2023.4	2022.1	2022.4	2022.6	2023.7	2024.2	2023.1
1.5°	2024.7	2023.1	2022.9	2021.3	2021.6	2020.1	2020.8	2021.1	2022.6	2022.9	2021.9
2°	2024.2	2022.4	2021.3	2020.1	2019.5	2018.5	2018.8	2019.3	2020.6	2021.6	2020.6
2.5°	2022.9	2021.1	2020.1	2018.2	2017.5	2016.2	2016.7	2017.0	2019.0	2019.8	2019.0
3°	2021.3	2018.8	2018.2	2016.4	2015.4	2013.6	2014.1	2014.6	2017.0	2018.2	2017.0
3.5°	2019.3	2016.7	2015.9	2014.1	2012.8	2010.8	2011.0	2011.8	2014.4	2015.9	2014.9
4°	2017.0	2014.1	2014.1	2011.5	2009.7	2007.9	2007.9	2009.0	2011.3	2013.6	2012.3
4.5°	2014.4	2011.0	2010.8	2008.7	2006.1	2004.1	2004.6	2005.6	2008.4	2011.0	2009.2
5°	2011.3	2007.7	2007.7	2005.1	2002.5	2000.4	2000.7	2002.0	2005.1	2007.4	2005.9
5.5°	2007.4	2004.1	2004.3	2001.5	1998.4	1996.1	1996.6	1997.9	2001.2	2004.3	2002.3
6°	2003.8	1999.7	2000.2	1997.4	1994.0	1991.4	1992.2	1993.7	1996.8	2000.2	1998.1
6.5°	1999.4	1995.3	1996.1	1993.2	1989.1	1986.5	1987.3	1988.8	1992.4	1996.3	1994.0
7°	1994.5	1990.1	1991.2	1988.1	1983.9	1981.1	1982.4	1984.2	1987.5	1991.7	1989.4
7.5°	1989.4	1985.0	1986.3	1983.4	1978.3	1975.7	1976.7	1978.8	1982.1	1986.8	1984.2
8°	1983.9	1979.3	1981.4	1977.2	1972.3	1969.2	1970.8	1972.6	1976.7	1981.4	1978.8
8.5°	1977.7	1973.4	1975.4	1971.0	1965.6	1963.3	1964.8	1966.6	1970.5	1975.4	1973.1
9°	1971.3	1967.2	1969.2	1964.8	1959.2	1956.3	1958.1	1960.2	1964.1	1969.2	1967.2
9.5°	1964.3	1959.7	1963.0	1958.4	1951.9	1949.4	1951.2	1953.2	1957.1	1963.0	1960.5
10°	1956.6	1952.5	1955.8	1950.9	1944.7	1942.1	1944.2	1946.3	1950.1	1956.3	1953.8
10.5°	1949.1	1944.5	1948.6	1943.4	1937.2	1934.7	1937.0	1938.8	1942.7	1949.4	1946.3
11°	1941.1	1936.5	1941.6	1935.7	1929.5	1926.9	1929.2	1931.0	1935.2	1941.9	1938.8
11.5°	1932.9	1928.2	1932.9	1927.7	1921.0	1918.4	1920.7	1923.8	1927.7	1934.1	1930.8
12°	1923.8	1919.2	1924.6	1918.9	1912.5	1910.2	1912.5	1915.3	1919.2	1926.7	1925.4
12.5°	1915.1	1909.9	1915.3	1910.2	1904.0	1901.6	1904.0	1907.1	1910.7	1917.9	1916.6
13°	1905.8	1900.6	1906.5	1900.9	1895.7	1893.1	1895.4	1898.5	1902.2	1909.4	1907.8
13.5°	1896.2	1890.5	1897.0	1891.3	1886.9	1884.6	1886.9	1890.3	1893.6	1900.9	1899.1
14°	1886.2	1880.7	1886.7	1881.5	1876.6	1874.0	1877.1	1880.0	1885.1	1892.3	1890.5
14.5°	1875.3	1869.6	1876.1	1871.5	1865.8	1863.5	1866.6	1869.4	1875.1	1883.8	1878.4
15°	1864.7	1858.8	1865.8	1861.1	1854.7	1852.9	1855.5	1859.1	1864.5	1873.5	1867.8
15.5°	1853.4	1847.7	1854.9	1849.8	1843.3	1841.3	1844.1	1847.7	1853.4	1862.9	1856.7
16°	1842.0	1836.1	1843.1	1838.2	1831.7	1829.9	1832.5	1836.6	1842.0	1851.8	1845.7
16.5°	1829.7	1824.8	1831.2	1826.6	1819.3	1817.5	1820.9	1824.8	1830.7	1840.2	1834.0
17°	1817.5	1811.9	1819.6	1814.7	1806.7	1805.4	1808.8	1812.9	1818.8	1828.6	1821.9
17.5°	1804.9	1799.5	1807.0	1802.1	1793.5	1792.8	1796.1	1800.0	1805.7	1816.8	1809.5
18°	1791.7	1786.3	1794.6	1788.9	1779.1	1779.3	1783.5	1787.3	1792.0	1804.4	1797.2
18.5°	1777.5	1772.6	1781.2	1776.0	1764.6	1765.4	1770.1	1773.9	1778.3	1791.2	1784.3
19°	1764.1	1758.7	1768.3	1762.3	1749.7	1751.0	1756.6	1760.0	1764.1	1777.5	1770.8
19.5°	1749.9	1744.8	1754.6	1747.6	1735.0	1736.3	1743.0	1745.8	1749.7	1763.4	1757.2
20°	1735.7	1730.3	1740.9	1732.7	1719.5	1720.8	1729.0	1731.1	1734.7	1748.9	1743.5
20.5°	1720.8	1715.6	1726.7	1717.4	1704.0	1705.3	1714.3	1715.9	1719.5	1734.2	1728.8
21°	1705.6	1700.1	1711.5	1701.7	1688.0	1689.6	1699.6	1700.4	1704.0	1718.7	1714.3



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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°	1659.1	1652.9	1665.8	1652.7	1639.5	1640.8	1653.5	1651.9	1655.8	1671.0	1668.9
23°	1641.8	1636.7	1649.8	1635.4	1622.2	1623.8	1637.7	1634.6	1639.5	1654.5	1652.9
23.5°	1625.8	1620.4	1633.1	1619.1	1604.2	1607.3	1620.9	1617.8	1622.2	1637.7	1636.2
24°	1609.3	1603.1	1616.8	1601.6	1585.6	1589.7	1603.9	1600.8	1604.7	1620.9	1619.1
24.5°	1594.4	1586.1	1599.5	1584.6	1568.3	1571.7	1585.9	1583.5	1586.4	1603.7	1601.6
25°	1578.4	1568.1	1581.7	1565.7	1552.1	1553.1	1568.1	1565.7	1568.6	1585.9	1584.1
25.5°	1557.5	1551.3	1563.4	1547.2	1535.8	1534.3	1549.5	1547.4	1551.8	1567.3	1566.0
26°	1538.6	1535.0	1544.3	1527.8	1519.6	1515.9	1530.9	1528.8	1536.1	1548.7	1547.9
26.5°	1518.3	1519.0	1526.0	1509.5	1495.8	1498.7	1511.6	1509.8	1516.7	1529.9	1528.8
27°	1494.0	1497.9	1506.9	1491.7	1470.8	1482.1	1492.2	1491.4	1491.4	1512.6	1509.8
27.5°	1468.7	1477.5	1487.6	1475.2	1447.3	1465.1	1472.6	1473.6	1469.2	1496.3	1490.4
28°	1442.2	1455.8	1467.4	1458.4	1415.1	1445.5	1452.7	1456.9	1441.9	1478.5	1470.8
28.5°	1414.3	1433.1	1448.1	1439.8	1382.3	1418.9	1432.9	1437.5	1410.7	1453.3	1451.4
29°	1385.4	1408.4	1427.7	1414.3	1350.8	1397.0	1413.0	1412.7	1379.2	1430.3	1431.3
29.5°	1353.7	1382.6	1408.4	1390.6	1318.6	1369.9	1392.1	1390.0	1347.0	1407.1	1411.7
30°	1321.2	1354.4	1388.5	1365.3	1286.8	1337.9	1372.0	1364.5	1315.7	1377.1	1391.6
30.5°	1286.8	1327.4	1368.1	1334.3	1255.9	1305.9	1351.1	1333.8	1283.8	1345.2	1371.5
31°	1252.3	1296.1	1347.5	1302.1	1225.2	1275.0	1329.9	1303.6	1253.6	1314.2	1350.8
31.5°	1217.2	1265.7	1326.8	1270.6	1194.2	1243.2	1308.5	1271.9	1223.4	1282.5	1329.7
32°	1181.3	1231.9	1305.9	1239.4	1164.0	1212.5	1287.9	1240.9	1192.9	1251.8	1309.3
32.5°	1146.8	1199.6	1286.6	1207.9	1132.1	1182.6	1266.7	1210.0	1162.0	1221.1	1288.4
33°	1113.0	1165.3	1267.8	1177.5	1099.8	1153.2	1246.9	1180.6	1131.3	1190.9	1268.8
33.5°	1079.4	1130.5	1247.6	1147.3	1065.0	1123.0	1227.5	1150.1	1100.1	1160.4	1251.5
34°	1046.7	1097.0	1224.7	1117.4	1030.9	1093.1	1208.7	1121.2	1067.6	1130.5	1233.7
34.5°	1013.6	1063.2	1204.8	1086.9	994.8	1061.9	1188.8	1091.3	1033.5	1100.3	1207.6
35°	980.6	1029.4	1184.4	1056.2	959.7	1032.2	1166.9	1062.7	999.7	1069.9	1181.3
35.5°	948.4	997.4	1162.5	1024.7	924.4	999.2	1142.6	1032.2	965.9	1038.4	1158.6
36°	928.5	965.7	1136.7	993.0	891.1	966.4	1118.1	1002.5	931.9	1006.9	1130.5
36.5°	892.4	934.7	1107.0	960.2	857.3	933.1	1086.9	971.1	898.1	974.7	1099.3
37°	855.5	903.5	1079.2	927.0	825.0	899.9	1055.7	939.6	863.7	941.7	1067.3
37.5°	818.6	872.0	1049.2	894.7	793.3	865.8	1022.2	907.9	831.5	908.1	1035.1
38°	781.7	840.8	1014.4	862.5	762.4	833.3	985.8	875.9	800.0	875.9	1002.3
38.5°	748.7	809.6	978.3	830.5	731.1	801.8	949.7	843.4	768.8	842.6	969.5
39°	715.9	778.1	943.2	798.2	701.2	771.1	913.5	811.6	737.6	811.1	936.0
39.5°	683.9	746.1	908.4	766.0	669.7	742.2	879.0	780.4	707.1	779.9	902.7
40°	652.5	714.6	873.6	735.3	638.5	711.8	844.9	750.5	677.5	749.2	869.2
40.5°	622.3	682.6	838.7	705.6	607.0	682.6	812.1	719.8	646.5	718.8	836.1
41°	592.1	652.2	803.6	676.4	576.9	654.3	780.2	690.9	615.8	689.3	802.1
41.5°	562.2	622.3	768.8	647.6	545.9	626.1	748.7	662.5	584.6	660.7	769.1
42°	533.3	593.4	735.5	618.1	516.8	596.5	718.0	634.1	554.7	631.6	735.3
42.5°	504.4	564.5	703.0	589.8	488.4	567.3	688.3	606.3	525.5	602.9	702.2
43°	476.2	536.6	670.8	561.1	460.8	538.9	658.9	577.9	497.1	573.8	668.7
43.5°	447.4	509.5	639.3	532.7	433.7	511.3	629.5	550.0	469.3	545.1	636.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	368.2	430.1	546.9	450.4	358.9	430.6	541.8	468.5	390.3	462.6	543.3
45.5°	343.4	404.0	516.8	424.9	334.9	406.3	513.7	441.9	365.6	436.5	514.4
46°	319.6	379.2	487.9	399.6	311.4	381.8	485.5	416.9	341.6	411.2	485.5
46.5°	296.4	355.0	459.7	375.9	289.5	358.3	458.7	392.1	318.4	387.0	457.9
47°	274.5	331.8	432.1	352.7	268.6	335.4	432.9	368.4	295.4	363.0	431.6
47.5°	254.1	309.1	405.6	329.7	249.0	313.2	407.9	344.7	274.0	339.3	405.8
48°	234.3	287.4	380.3	307.3	232.4	291.5	384.7	322.2	253.6	317.3	380.8
48.5°	215.7	267.0	356.0	285.9	215.9	270.9	361.4	300.8	235.8	295.4	356.5
49°	197.9	247.4	332.8	266.0	199.4	251.3	339.5	279.4	218.3	274.5	334.4
49.5°	180.6	228.6	310.9	246.4	183.2	234.3	318.6	259.3	200.5	254.4	310.9
50°	164.3	210.5	289.5	227.3	169.5	217.2	298.5	242.0	182.9	236.6	289.2
50.5°	149.4	193.0	268.3	209.0	156.9	200.2	279.4	224.7	168.7	218.5	269.1
51°	135.4	176.7	248.7	192.5	146.0	183.2	260.1	207.2	155.6	200.5	250.2
51.5°	122.5	161.5	229.9	177.0	135.7	169.2	243.3	189.9	143.7	182.7	232.7
52°	110.4	147.1	212.3	162.5	125.9	156.3	227.0	172.6	132.6	167.4	215.4
52.5°	99.3	133.1	195.0	149.6	116.6	144.5	210.5	158.1	122.8	153.8	198.1
53°	89.0	120.2	179.3	137.8	107.8	133.6	194.0	145.0	113.3	141.4	180.9
53.5°	80.5	108.6	164.3	127.2	99.8	123.8	177.5	133.1	104.5	130.0	165.1
54°	72.0	97.8	150.4	117.1	91.6	114.8	163.6	122.3	96.0	119.7	151.2
54.5°	63.5	87.5	137.0	107.8	83.6	106.0	150.4	112.2	87.7	109.9	138.3
55°	55.0	77.9	125.4	99.6	75.8	97.8	138.0	103.2	80.0	101.1	125.9
55.5°	49.3	70.9	114.0	91.3	68.9	90.0	126.4	94.7	72.2	92.9	114.5
56°	47.2	64.2	103.7	84.6	62.7	82.3	115.6	86.4	65.5	84.9	104.0
56.5°	45.4	57.3	94.2	77.7	58.3	74.8	105.5	78.9	60.1	77.4	94.4
57°	43.9	50.6	87.2	70.7	55.7	67.6	96.2	71.7	56.2	69.9	85.4
57.5°	42.1	43.6	80.0	63.7	53.7	61.1	87.7	64.8	54.2	62.9	77.4
58°	40.5	42.1	73.0	57.8	51.6	55.2	79.7	58.0	52.1	57.0	70.2
58.5°	39.0	40.5	66.0	52.6	49.8	50.8	72.8	52.6	50.0	52.4	63.5
59°	37.4	39.0	59.1	48.8	47.7	48.5	66.0	48.5	48.2	49.3	57.8
59.5°	36.1	37.4	53.9	46.7	45.9	46.4	60.4	46.2	46.4	47.5	52.9
60°	34.8	36.1	49.5	44.6	44.1	44.6	55.2	44.4	44.6	45.7	48.5
60.5°	33.3	34.8	45.4	43.1	42.3	43.1	50.6	42.6	42.8	43.9	44.4
61°	32.0	33.3	42.1	41.3	40.8	41.3	46.4	40.8	41.3	42.1	41.3
61.5°	31.0	32.2	39.0	39.7	39.2	39.7	42.8	39.2	39.7	40.5	38.2
62°	29.7	31.0	36.4	37.9	37.7	38.2	39.7	37.7	37.9	39.0	35.6
62.5°	28.4	29.7	33.8	36.6	36.1	36.6	37.2	36.1	36.6	37.4	33.3
63°	27.3	28.6	31.7	35.1	34.6	35.1	34.6	34.8	35.1	35.9	31.5
63.5°	26.3	27.3	29.9	33.5	33.3	33.8	32.5	33.3	33.8	34.6	29.7
64°	25.3	26.3	28.6	32.2	32.0	32.5	30.4	32.0	32.2	33.0	28.4
64.5°	24.3	25.3	27.6	31.0	30.7	31.2	28.9	30.7	31.0	31.7	27.1
65°	23.2	24.5	26.3	29.7	29.4	29.9	27.6	29.4	29.9	30.4	26.1
65.5°	22.4	23.5	25.3	28.6	28.1	28.6	26.6	28.1	28.6	29.2	25.0
66°	21.4	22.4	24.5	27.3	26.8	27.6	25.5	27.1	27.3	28.1	24.0



TEST NUMBER: P776009

CATALOG NUMBER: HCDJBL5125CSD-HCD4TSQH-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	18.8	19.9	21.7	24.0	23.7	24.3	22.7	23.7	24.0	24.8	21.2
68°	18.1	19.1	20.6	23.0	22.7	23.2	21.7	22.7	23.0	23.7	20.4
68.5°	17.3	18.1	19.9	22.2	21.7	22.2	20.9	21.7	21.9	22.7	19.6
69°	16.5	17.3	19.1	21.2	20.9	21.4	19.9	20.9	21.2	21.7	18.8
69.5°	15.7	16.5	18.3	20.4	19.9	20.4	19.1	19.9	20.1	20.6	18.1
70°	15.0	15.7	17.5	19.3	19.1	19.6	18.3	19.1	19.3	19.9	17.0
70.5°	14.2	15.2	16.8	18.6	18.1	18.8	17.3	18.1	18.3	18.8	16.5
71°	13.7	14.4	16.0	17.8	17.3	17.8	16.5	17.3	17.5	18.1	15.7
71.5°	12.9	13.7	15.2	16.8	16.5	17.0	15.7	16.5	16.5	17.0	15.0
72°	12.4	13.2	14.4	16.3	15.7	16.3	15.2	15.7	15.7	16.3	14.2
72.5°	11.6	12.4	13.9	15.5	15.0	15.5	14.4	15.0	15.0	15.5	13.7
73°	11.1	11.9	13.2	14.7	14.2	14.7	13.7	14.2	14.2	14.7	12.9
73.5°	10.3	11.1	12.4	13.9	13.4	13.9	13.2	13.4	13.4	13.9	12.4
74°	9.8	10.6	11.9	13.2	12.9	13.4	12.4	12.6	12.9	13.4	11.9
74.5°	9.3	10.1	11.4	12.6	12.1	12.6	11.9	12.1	12.1	12.6	11.1
75°	8.8	9.3	10.6	11.9	11.4	12.1	11.1	11.4	11.4	11.9	10.6
75.5°	8.3	8.8	10.1	11.4	10.8	11.4	10.6	10.8	10.8	11.4	10.1
76°	7.5	8.3	9.5	10.8	10.3	10.8	10.1	10.1	10.1	10.6	9.5
76.5°	7.0	7.7	9.0	10.1	9.5	10.3	9.5	9.5	9.5	10.1	8.8
77°	6.7	7.2	8.5	9.5	9.0	9.5	9.0	8.8	8.8	9.3	8.3
77.5°	6.2	6.7	8.0	9.0	8.5	9.0	8.5	8.3	8.3	8.8	7.7
78°	5.7	6.2	7.5	8.5	8.0	8.5	8.0	7.7	7.7	8.3	7.2
78.5°	5.2	5.7	7.0	8.0	7.5	8.0	7.5	7.2	7.2	7.5	7.0
79°	4.9	5.2	6.4	7.5	7.0	7.5	7.0	6.7	6.7	7.0	6.4
79.5°	4.4	4.6	6.2	7.0	6.4	7.0	6.4	6.2	6.2	6.4	5.9
80°	3.9	4.4	5.7	6.4	5.9	6.4	6.2	5.7	5.7	5.9	5.4
80.5°	3.6	3.9	5.2	5.9	5.7	5.9	5.7	5.2	5.2	5.4	5.2
81°	3.1	3.4	4.9	5.4	5.2	5.4	5.2	4.6	4.6	4.9	4.6
81.5°	2.8	3.1	4.4	4.9	4.6	5.2	4.9	4.1	4.1	4.4	4.4
82°	2.6	2.6	4.1	4.6	4.4	4.6	4.4	3.9	3.9	3.9	3.9
82.5°	2.1	2.3	3.6	4.1	3.9	4.4	4.1	3.4	3.4	3.4	3.6
83°	1.8	2.1	3.4	3.9	3.6	3.9	3.6	3.1	2.8	3.1	3.1
83.5°	1.3	1.5	2.8	3.4	3.4	3.6	3.4	2.6	2.6	2.6	2.8
84°	1.0	1.3	2.6	3.1	2.8	3.1	3.1	2.3	2.1	2.3	2.6
84.5°	1.0	1.0	2.3	2.6	2.6	2.8	2.6	2.1	1.8	1.8	2.3
85°	0.8	1.0	2.1	2.3	2.3	2.6	2.3	1.5	1.3	1.5	2.1
85.5°	0.5	0.8	1.8	2.1	1.8	2.1	2.1	1.3	1.0	1.3	1.5
86°	0.5	0.5	1.3	1.5	1.5	1.8	1.8	1.0	1.0	1.0	1.3
86.5°	0.5	0.5	1.0	1.3	1.3	1.5	1.5	1.0	0.8	0.8	1.0
87°	0.3	0.3	0.8	1.0	1.0	1.0	1.3	0.8	0.8	0.8	0.8
87.5°	0.0	0.3	0.5	0.8	0.8	0.8	1.0	0.5	0.5	0.5	0.5
88°	0.0	0.0	0.3	0.5	0.5	0.5	0.8	0.5	0.5	0.5	0.3
88.5°	0.0	0.0	0.0	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3



TEST NUMBER: P776009

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQH-2500lm-5000K

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: P776009

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2024.4	2024.4	2024.4	2024.4	2024.4	2024.4
0.5°	2023.9	2025.7	2024.7	2025.2	2024.7	2025.5
1°	2023.7	2025.5	2024.7	2025.2	2024.7	2025.5
1.5°	2022.9	2025.5	2024.7	2025.0	2024.7	2024.7
2°	2021.9	2024.7	2024.4	2024.4	2024.2	2024.2
2.5°	2020.6	2024.2	2023.4	2024.2	2023.1	2022.9
3°	2018.8	2022.9	2022.1	2022.6	2021.9	2021.3
3.5°	2016.7	2020.8	2020.6	2021.1	2020.1	2019.3
4°	2014.1	2018.5	2018.5	2019.0	2018.2	2017.0
4.5°	2011.3	2015.9	2016.2	2016.7	2015.7	2014.4
5°	2008.2	2013.1	2013.3	2013.9	2012.8	2011.3
5.5°	2004.6	2010.0	2010.3	2010.5	2009.5	2007.4
6°	2000.7	2006.1	2006.6	2007.2	2005.9	2003.8
6.5°	1996.3	2002.0	2002.8	2003.0	2001.7	1999.4
7°	1991.7	1997.6	1998.4	1998.9	1997.4	1994.5
7.5°	1986.5	1993.0	1994.0	1994.0	1992.4	1989.4
8°	1980.8	1987.3	1988.6	1989.1	1987.0	1983.9
8.5°	1975.2	1981.9	1983.2	1983.4	1981.4	1977.7
9°	1969.2	1975.4	1977.5	1977.7	1974.9	1971.3
9.5°	1962.5	1968.7	1970.8	1971.3	1969.0	1964.3
10°	1955.6	1962.3	1963.8	1964.8	1961.7	1956.6
10.5°	1948.1	1955.0	1956.8	1957.6	1954.5	1949.1
11°	1940.9	1947.0	1949.1	1949.9	1946.8	1941.1
11.5°	1932.9	1939.3	1941.1	1942.1	1938.8	1932.9
12°	1924.6	1930.5	1932.9	1933.9	1929.8	1923.8
12.5°	1915.3	1922.0	1924.1	1924.9	1921.2	1915.1
13°	1906.3	1913.0	1915.3	1916.3	1912.2	1905.8
13.5°	1897.3	1903.7	1906.0	1906.5	1902.4	1896.2
14°	1888.0	1894.2	1896.5	1896.2	1892.6	1886.2
14.5°	1880.7	1883.8	1886.4	1885.6	1882.3	1875.3
15°	1870.2	1873.0	1876.1	1875.1	1871.7	1864.7
15.5°	1859.1	1862.4	1864.5	1864.2	1860.6	1853.4
16°	1847.7	1851.1	1853.7	1853.4	1849.3	1842.0
16.5°	1836.1	1839.5	1842.3	1841.5	1837.9	1829.7
17°	1824.0	1827.1	1830.4	1829.4	1826.0	1817.5
17.5°	1811.6	1815.0	1818.0	1817.3	1813.4	1804.9
18°	1798.7	1801.8	1805.4	1804.6	1800.8	1791.7
18.5°	1785.5	1788.9	1792.5	1791.2	1787.1	1777.5
19°	1772.4	1775.5	1779.1	1778.3	1773.4	1764.1
19.5°	1758.2	1762.1	1765.2	1764.6	1759.7	1749.9
20°	1744.0	1748.1	1751.5	1751.0	1745.6	1735.7
20.5°	1729.6	1733.4	1737.0	1736.5	1730.8	1720.8
21°	1714.6	1718.7	1721.8	1722.1	1715.4	1705.6

TEST NUMBER: P776009

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1668.2	1672.3	1675.6	1676.4	1668.7	1659.1
23°	1652.4	1656.3	1659.4	1660.4	1652.4	1641.8
23.5°	1635.9	1639.8	1643.1	1643.9	1635.9	1625.8
24°	1618.6	1622.8	1626.4	1627.1	1619.4	1609.3
24.5°	1601.9	1606.5	1609.3	1609.9	1602.4	1594.4
25°	1584.8	1591.8	1591.5	1592.6	1584.8	1578.4
25.5°	1566.8	1571.7	1573.7	1574.8	1566.8	1557.5
26°	1548.4	1552.3	1557.0	1556.2	1549.7	1538.6
26.5°	1532.7	1532.7	1541.2	1538.1	1533.7	1518.3
27°	1515.2	1509.8	1520.1	1519.8	1517.5	1494.0
27.5°	1493.2	1487.0	1500.5	1500.7	1496.6	1468.7
28°	1473.9	1462.5	1480.1	1481.1	1475.7	1442.2
28.5°	1452.5	1436.7	1457.6	1462.3	1455.3	1414.3
29°	1430.3	1408.9	1434.9	1443.2	1432.4	1385.4
29.5°	1406.0	1380.8	1410.2	1423.6	1408.4	1353.7
30°	1381.5	1350.3	1384.6	1404.0	1382.8	1321.2
30.5°	1355.2	1318.1	1358.3	1384.1	1355.2	1286.8
31°	1328.1	1283.8	1329.4	1364.0	1327.1	1252.3
31.5°	1299.5	1251.2	1299.7	1343.6	1297.2	1217.2
32°	1270.3	1216.2	1269.3	1323.5	1266.7	1181.3
32.5°	1238.9	1180.6	1237.1	1305.4	1234.7	1146.8
33°	1206.4	1146.8	1203.3	1285.6	1201.2	1113.0
33.5°	1173.1	1112.7	1169.5	1264.4	1167.4	1079.4
34°	1140.1	1079.4	1135.7	1245.6	1133.6	1046.7
34.5°	1105.7	1045.4	1102.4	1223.4	1099.8	1013.6
35°	1072.7	1013.1	1068.6	1198.4	1066.0	980.6
35.5°	1040.2	980.9	1035.3	1173.8	1033.8	948.4
36°	1008.0	948.9	1003.6	1149.1	1002.0	928.5
36.5°	975.5	930.3	972.1	1121.5	970.3	892.4
37°	944.2	893.9	940.6	1092.8	939.3	855.5
37.5°	913.3	856.5	909.2	1063.2	908.1	818.6
38°	882.6	819.1	877.7	1032.0	877.2	781.7
38.5°	851.4	781.7	846.2	1000.2	845.9	748.7
39°	820.1	749.5	814.7	966.7	814.7	715.9
39.5°	788.9	716.4	783.3	933.7	783.8	683.9
40°	757.5	684.2	751.0	898.3	751.3	652.5
40.5°	726.0	653.0	718.8	862.7	719.8	622.3
41°	694.5	623.0	687.5	827.4	689.1	592.1
41.5°	664.1	592.1	656.6	792.0	658.6	562.2
42°	634.4	562.9	626.9	756.7	629.2	533.3
42.5°	605.0	534.3	597.2	722.6	599.8	504.4
43°	576.3	504.1	568.9	689.3	571.4	476.2
43.5°	548.2	475.2	540.5	656.8	543.1	447.4

TEST NUMBER: P776009

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	468.2	392.7	457.9	564.7	462.6	368.2
45.5°	442.5	366.9	431.1	536.1	436.5	343.4
46°	416.9	341.8	405.3	507.7	411.2	319.6
46.5°	391.4	317.8	379.0	479.1	386.0	296.4
47°	367.1	294.9	354.7	451.5	362.2	274.5
47.5°	343.4	272.4	330.7	424.4	338.5	254.1
48°	320.4	251.0	307.5	398.9	315.8	234.3
48.5°	298.5	231.2	285.6	372.8	293.3	215.7
49°	277.1	212.1	264.4	348.3	273.0	197.9
49.5°	257.2	194.3	243.5	324.6	252.6	180.6
50°	238.9	177.0	224.5	301.3	232.4	164.3
50.5°	220.6	160.5	206.1	279.7	213.9	149.4
51°	202.3	145.5	188.1	258.8	196.3	135.4
51.5°	184.2	131.8	171.8	238.6	179.6	122.5
52°	167.7	119.2	156.6	219.8	163.8	110.4
52.5°	152.5	107.1	141.6	201.7	148.6	99.3
53°	138.0	96.0	128.2	184.7	134.2	89.0
53.5°	124.4	87.5	115.3	169.0	121.0	80.5
54°	111.5	78.7	103.7	153.0	108.9	72.0
54.5°	100.1	69.9	93.1	139.1	97.8	63.5
55°	89.5	61.4	84.4	125.9	88.7	55.0
55.5°	80.0	52.6	75.8	113.3	80.0	49.3
56°	70.4	48.5	67.1	101.6	71.2	47.2
56.5°	61.9	46.4	58.6	90.8	62.4	45.4
57°	54.4	44.6	49.8	83.3	53.7	43.9
57.5°	48.0	42.8	44.9	76.1	47.2	42.1
58°	43.1	41.3	43.1	68.6	43.1	40.5
58.5°	41.3	39.7	41.5	61.1	41.3	39.0
59°	39.5	38.2	40.0	53.9	39.7	37.4
59.5°	38.2	36.9	38.4	49.0	38.2	36.1
60°	36.6	35.3	36.9	44.9	36.9	34.8
60.5°	35.3	34.1	35.6	41.3	35.3	33.3
61°	34.1	32.8	34.3	38.2	34.1	32.0
61.5°	32.8	31.5	33.0	35.3	32.8	31.0
62°	31.5	30.4	31.7	33.0	31.5	29.7
62.5°	30.2	29.2	30.4	31.0	30.4	28.4
63°	29.2	28.1	29.4	29.2	29.2	27.3
63.5°	28.1	27.1	28.1	27.9	27.9	26.3
64°	26.8	26.1	27.1	26.8	26.8	25.3
64.5°	26.1	25.0	26.1	25.8	25.8	24.3
65°	25.0	24.0	25.0	24.8	24.8	23.2
65.5°	24.0	23.0	24.3	23.7	23.7	22.4
66°	23.0	22.2	23.2	23.0	23.0	21.4



TEST NUMBER: P776009

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	20.6	19.6	20.6	20.4	20.1	18.8
68°	19.6	18.8	19.6	19.3	19.3	18.1
68.5°	18.8	18.1	18.8	18.6	18.6	17.3
69°	18.1	17.3	18.1	17.8	17.8	16.5
69.5°	17.3	16.5	17.3	17.0	17.0	15.7
70°	16.5	15.7	16.8	16.3	16.3	15.0
70.5°	16.0	15.2	16.0	15.7	15.5	14.2
71°	15.2	14.4	15.2	15.0	14.7	13.7
71.5°	14.4	13.9	14.4	14.2	13.9	12.9
72°	13.9	13.2	13.9	13.7	13.4	12.4
72.5°	13.4	12.6	13.2	12.9	12.6	11.6
73°	12.6	11.9	12.6	12.4	11.9	11.1
73.5°	12.1	11.4	12.1	11.9	11.4	10.3
74°	11.6	10.8	11.4	11.1	10.8	9.8
74.5°	11.1	10.3	10.8	10.6	10.1	9.3
75°	10.3	9.8	10.3	10.1	9.5	8.8
75.5°	9.8	9.3	9.8	9.5	9.0	8.3
76°	9.3	8.8	9.3	9.0	8.5	7.5
76.5°	8.8	8.3	8.8	8.5	8.0	7.0
77°	8.3	7.7	8.3	7.7	7.5	6.7
77.5°	7.7	7.2	7.7	7.5	6.7	6.2
78°	7.2	6.7	7.2	7.0	6.2	5.7
78.5°	7.0	6.4	6.7	6.4	5.9	5.2
79°	6.4	5.9	6.2	5.9	5.4	4.9
79.5°	5.9	5.4	5.9	5.4	4.9	4.4
80°	5.4	5.2	5.4	5.2	4.4	3.9
80.5°	5.2	4.9	5.2	4.6	3.9	3.6
81°	4.6	4.4	4.6	4.4	3.6	3.1
81.5°	4.4	4.1	4.1	3.9	3.1	2.8
82°	3.9	3.6	3.9	3.6	2.6	2.6
82.5°	3.6	3.4	3.6	3.1	2.3	2.1
83°	3.4	3.1	3.1	2.8	2.1	1.8
83.5°	2.8	2.8	2.8	2.6	1.8	1.3
84°	2.6	2.6	2.6	2.3	1.3	1.0
84.5°	2.3	2.3	2.1	2.1	1.0	1.0
85°	2.1	1.8	1.8	1.5	1.0	0.8
85.5°	1.5	1.5	1.5	1.3	0.8	0.5
86°	1.3	1.3	1.3	1.0	0.5	0.5
86.5°	1.0	1.0	1.0	0.8	0.5	0.5
87°	0.8	0.8	0.8	0.5	0.3	0.3
87.5°	0.5	0.5	0.5	0.3	0.3	0.0
88°	0.3	0.3	0.3	0.3	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776009

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-5000K

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

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

Scaled Data Report





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

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Scaled Data Report



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Scaled Data Report





21.5°	1690.3	1684.4	1696.5	1685.4	1672.3	1673.3	1684.7	1684.4	1688.0	1703.0	1699.4
22°	1674.9	1668.9	1681.3	1669.2	1656.3	1657.3	1668.9	1668.2	1672.0	1687.0	1684.7



44°	420.0	482.7	608.1	504.4	408.1	483.0	599.6	522.4	441.4	517.3	604.7
44.5°	393.7	456.1	577.4	476.5	382.9	456.9	570.4	495.1	415.6	489.7	573.5



66.5°	20.6	21.7	23.5	26.3	25.8	26.3	24.5	25.8	26.3	26.8	23.0
67°	19.6	20.6	22.4	25.0	24.8	25.3	23.5	24.8	25.0	25.8	22.2



89°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	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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Scaled Data Report





21.5°	1699.1	1703.2	1706.9	1707.1	1700.1	1690.3
22°	1683.9	1688.0	1691.4	1691.9	1684.7	1674.9



44°	521.1	447.6	512.4	625.4	516.0	420.0
44.5°	494.8	419.7	485.0	594.4	488.9	393.7



66.5°	22.2	21.2	22.2	21.9	21.9	20.6
67°	21.4	20.4	21.4	21.2	20.9	19.6



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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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)