

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: P776007

Luminaire Tested: HCDJBS1525CSD-HCD4TSQH-2500lm-3500K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776007
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-3500K
Description: 4 INCH SQUARE MEDIUM HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

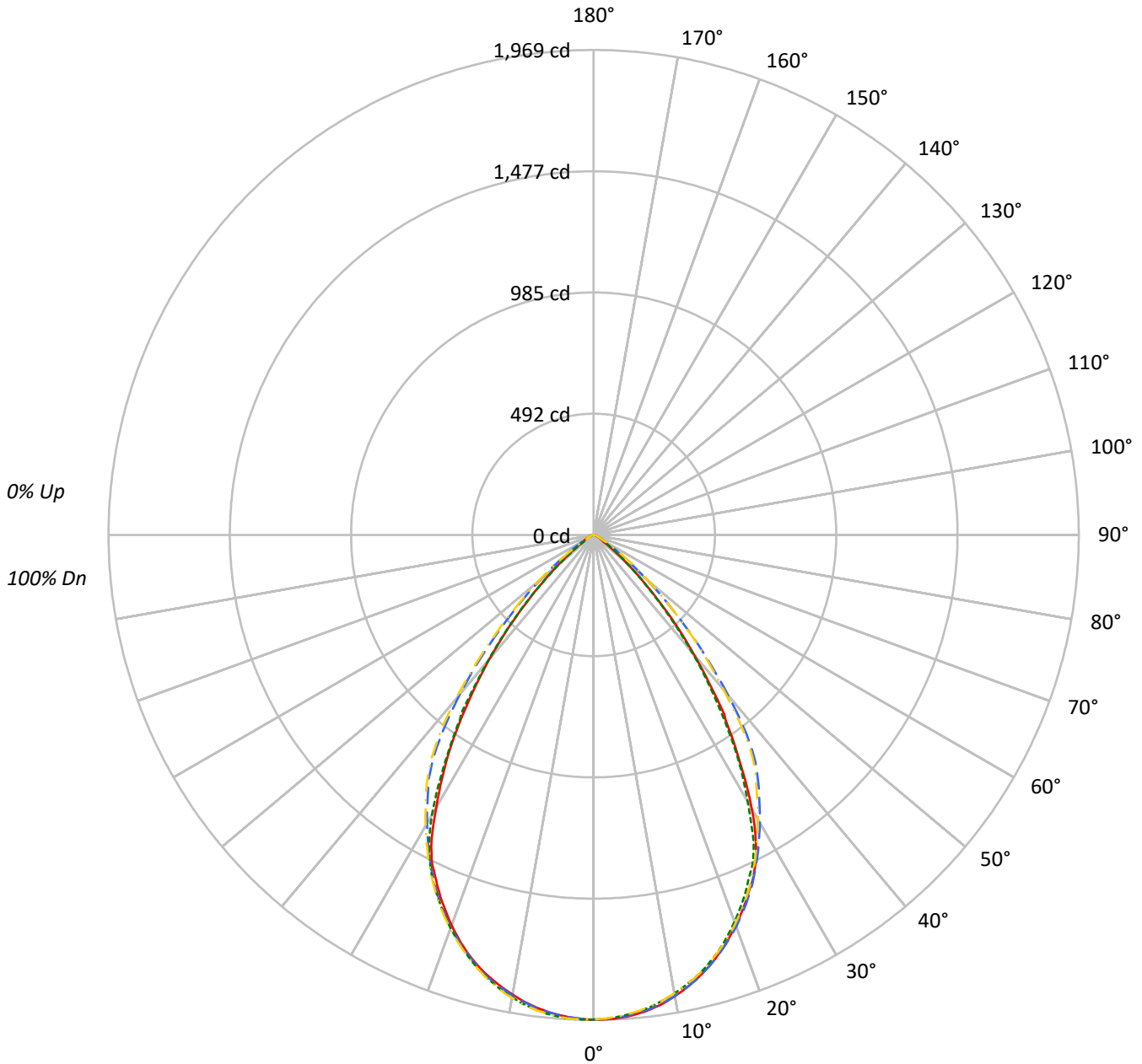
Lumens per Lamp: N/A
Luminaire Lumens: 2518.6 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.05 / 1.09
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	194452	194452	194452	194452
5°	193925	193082	193330	194104
10°	190838	189684	190205	191390
15°	185430	184438	185410	186259
20°	177427	175765	177322	178689
25°	167288	164496	166241	168705
30°	146536	142723	145931	149766
35°	114993	112531	117225	118794
40°	81805	80063	84953	85792
45°	50015	48743	53020	53342
50°	24557	25326	27341	26449
55°	9202	12700	13390	10288
60°	6682	8481	8580	6781
65°	5286	6689	6806	5449
70°	4190	5375	5433	4422
75°	3246	4201	4201	3628
80°	2163	3301	3131	2846
85°	907	2608	1474	2041

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 315°
 Vertical Angle: 45°
 Luminance: 76713 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.6	7.3
10°-20°	508.8	20.2
20°-30°	700.2	27.8
30°-40°	643.3	25.5
40°-50°	347.9	13.8
50°-60°	93.7	3.7
60°-70°	26.8	1.1
70°-80°	11.2	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°	1393.5	55.3
0°-40°	2036.8	80.9
0°-60°	2478.4	98.4
0°-90°	2518.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2518.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1967	1967	1967	1967	1967	
5°	1954	1946	1948	1956	1954	185
15°	1812	1802	1812	1820	1812	509
25°	1534	1508	1524	1547	1534	696
35°	953	933	972	984	953	592
45°	358	349	379	382	358	282
55°	53	74	78	60	53	62
65°	23	29	29	23	23	23
75°	8	11	11	10	8	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°	1967.3	1967.3	1967.3	1967.3	1967.3	1967.3	1967.3	1967.3	1967.3	1967.3	1967.3
0.5°	1968.3	1967.6	1966.8	1966.1	1967.3	1966.1	1966.6	1966.8	1967.6	1967.6	1966.6
1°	1968.3	1967.1	1966.1	1965.6	1966.3	1965.1	1965.3	1965.6	1966.6	1967.1	1966.1
1.5°	1967.6	1966.1	1965.8	1964.3	1964.6	1963.1	1963.8	1964.1	1965.6	1965.8	1964.8
2°	1967.1	1965.3	1964.3	1963.1	1962.6	1961.6	1961.8	1962.3	1963.6	1964.6	1963.6
2.5°	1965.8	1964.1	1963.1	1961.3	1960.6	1959.3	1959.8	1960.1	1962.1	1962.8	1962.1
3°	1964.3	1961.8	1961.3	1959.6	1958.6	1956.8	1957.3	1957.8	1960.1	1961.3	1960.1
3.5°	1962.3	1959.8	1959.1	1957.3	1956.0	1954.0	1954.3	1955.0	1957.6	1959.1	1958.1
4°	1960.1	1957.3	1957.3	1954.8	1953.0	1951.3	1951.3	1952.3	1954.5	1956.8	1955.5
4.5°	1957.6	1954.3	1954.0	1952.0	1949.5	1947.5	1948.0	1949.0	1951.8	1954.3	1952.5
5°	1954.5	1951.0	1951.0	1948.5	1946.0	1944.0	1944.3	1945.5	1948.5	1950.8	1949.3
5.5°	1950.8	1947.5	1947.8	1945.0	1942.0	1939.8	1940.3	1941.5	1944.8	1947.8	1945.8
6°	1947.3	1943.3	1943.8	1941.0	1937.7	1935.2	1936.0	1937.5	1940.5	1943.8	1941.8
6.5°	1943.0	1939.0	1939.8	1937.0	1933.0	1930.5	1931.2	1932.7	1936.2	1940.0	1937.7
7°	1938.2	1934.0	1935.0	1932.0	1928.0	1925.2	1926.5	1928.2	1931.5	1935.5	1933.2
7.5°	1933.2	1929.0	1930.2	1927.5	1922.5	1919.9	1920.9	1923.0	1926.2	1930.7	1928.2
8°	1928.0	1923.5	1925.5	1921.4	1916.7	1913.7	1915.2	1916.9	1920.9	1925.5	1923.0
8.5°	1922.0	1917.7	1919.7	1915.4	1910.2	1907.9	1909.4	1911.2	1914.9	1919.7	1917.4
9°	1915.7	1911.7	1913.7	1909.4	1903.9	1901.1	1902.9	1904.9	1908.7	1913.7	1911.7
9.5°	1908.9	1904.4	1907.7	1903.1	1896.9	1894.4	1896.1	1898.1	1901.9	1907.7	1905.2
10°	1901.4	1897.4	1900.6	1895.9	1889.9	1887.4	1889.4	1891.4	1895.1	1901.1	1898.6
10.5°	1894.1	1889.6	1893.6	1888.6	1882.6	1880.1	1882.3	1884.1	1887.9	1894.4	1891.4
11°	1886.4	1881.8	1886.9	1881.1	1875.1	1872.6	1874.8	1876.6	1880.6	1887.1	1884.1
11.5°	1878.3	1873.8	1878.3	1873.3	1866.8	1864.3	1866.5	1869.6	1873.3	1879.6	1876.3
12°	1869.6	1865.0	1870.3	1864.8	1858.5	1856.3	1858.5	1861.3	1865.0	1872.3	1871.1
12.5°	1861.0	1856.0	1861.3	1856.3	1850.2	1848.0	1850.2	1853.3	1856.8	1863.8	1862.5
13°	1852.0	1847.0	1852.8	1847.2	1842.2	1839.7	1842.0	1845.0	1848.5	1855.5	1854.0
13.5°	1842.7	1837.2	1843.5	1838.0	1833.7	1831.4	1833.7	1837.0	1840.2	1847.2	1845.5
14°	1832.9	1827.7	1833.5	1828.4	1823.7	1821.2	1824.2	1826.9	1831.9	1839.0	1837.2
14.5°	1822.4	1816.9	1823.2	1818.7	1813.1	1810.9	1813.9	1816.7	1822.2	1830.7	1825.4
15°	1812.1	1806.4	1813.1	1808.6	1802.4	1800.6	1803.1	1806.6	1811.9	1820.7	1815.1
15.5°	1801.1	1795.6	1802.6	1797.6	1791.3	1789.3	1792.1	1795.6	1801.1	1810.4	1804.4
16°	1790.1	1784.3	1791.1	1786.3	1780.0	1778.3	1780.8	1784.8	1790.1	1799.6	1793.6
16.5°	1778.0	1773.3	1779.5	1775.0	1768.0	1766.3	1769.5	1773.3	1779.0	1788.3	1782.3
17°	1766.3	1760.7	1768.3	1763.5	1755.7	1754.5	1757.7	1761.7	1767.5	1777.0	1770.5
17.5°	1754.0	1748.7	1756.0	1751.2	1742.9	1742.2	1745.5	1749.2	1754.7	1765.5	1758.5
18°	1741.2	1735.9	1743.9	1738.4	1728.9	1729.2	1733.2	1736.9	1741.4	1753.5	1746.5
18.5°	1727.4	1722.6	1730.9	1725.9	1714.9	1715.6	1720.1	1723.9	1728.2	1740.7	1733.9
19°	1714.4	1709.1	1718.4	1712.6	1700.3	1701.6	1707.1	1710.4	1714.4	1727.4	1720.9
19.5°	1700.6	1695.6	1705.1	1698.3	1686.0	1687.3	1693.8	1696.6	1700.3	1713.6	1707.6
20°	1686.8	1681.5	1691.8	1683.8	1671.0	1672.2	1680.3	1682.3	1685.8	1699.6	1694.3
20.5°	1672.2	1667.2	1678.0	1669.0	1655.9	1657.2	1666.0	1667.5	1671.0	1685.3	1680.0
21°	1657.5	1652.2	1663.2	1653.7	1640.4	1641.9	1651.7	1652.4	1655.9	1670.2	1666.0



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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°	1612.3	1606.3	1618.8	1606.1	1593.3	1594.5	1606.8	1605.3	1609.1	1623.9	1621.8
23°	1595.5	1590.5	1603.3	1589.3	1576.5	1578.0	1591.5	1588.5	1593.3	1607.8	1606.3
23.5°	1580.0	1574.7	1587.0	1573.5	1558.9	1561.9	1575.2	1572.2	1576.5	1591.5	1590.0
24°	1563.9	1557.9	1571.2	1556.4	1540.9	1544.9	1558.7	1555.7	1559.4	1575.2	1573.5
24.5°	1549.4	1541.4	1554.4	1539.9	1524.1	1527.3	1541.1	1538.9	1541.6	1558.4	1556.4
25°	1533.9	1523.8	1537.1	1521.6	1508.3	1509.3	1523.8	1521.6	1524.3	1541.1	1539.4
25.5°	1513.5	1507.5	1519.3	1503.5	1492.5	1491.0	1505.8	1503.8	1508.0	1523.1	1521.8
26°	1495.2	1491.7	1500.8	1484.7	1476.7	1473.2	1487.7	1485.7	1492.7	1505.0	1504.3
26.5°	1475.4	1476.2	1483.0	1466.9	1453.6	1456.4	1468.9	1467.2	1473.9	1486.7	1485.7
27°	1451.9	1455.6	1464.4	1449.6	1429.3	1440.3	1450.1	1449.4	1449.4	1469.9	1467.2
27.5°	1427.3	1435.8	1445.6	1433.6	1406.5	1423.8	1431.1	1432.1	1427.8	1454.1	1448.4
28°	1401.5	1414.8	1426.0	1417.3	1375.2	1404.7	1411.8	1415.8	1401.2	1436.8	1429.3
28.5°	1374.4	1392.7	1407.2	1399.2	1343.3	1378.9	1392.4	1397.0	1370.9	1412.3	1410.5
29°	1346.3	1368.6	1387.4	1374.4	1312.7	1357.6	1373.1	1372.9	1340.3	1389.9	1390.9
29.5°	1315.5	1343.6	1368.6	1351.3	1281.4	1331.3	1352.8	1350.8	1309.0	1367.4	1371.9
30°	1283.9	1316.2	1349.3	1326.8	1250.5	1300.2	1333.3	1326.0	1278.6	1338.3	1352.3
30.5°	1250.5	1289.9	1329.5	1296.7	1220.5	1269.1	1313.0	1296.2	1247.5	1307.2	1332.8
31°	1217.0	1259.6	1309.5	1265.3	1190.6	1239.0	1292.4	1266.8	1218.2	1277.1	1312.7
31.5°	1182.9	1230.0	1289.4	1234.8	1160.5	1208.2	1271.6	1236.0	1188.9	1246.3	1292.2
32°	1148.0	1197.1	1269.1	1204.4	1131.2	1178.3	1251.5	1205.9	1159.3	1216.5	1272.4
32.5°	1114.4	1165.8	1250.3	1173.8	1100.1	1149.3	1231.0	1175.8	1129.2	1186.6	1252.1
33°	1081.6	1132.5	1232.0	1144.2	1068.8	1120.7	1211.7	1147.3	1099.4	1157.3	1233.0
33.5°	1049.0	1098.6	1212.4	1114.9	1034.9	1091.3	1192.9	1117.7	1069.0	1127.7	1216.2
34°	1017.1	1066.0	1190.1	1085.8	1001.8	1062.3	1174.6	1089.6	1037.4	1098.6	1198.9
34.5°	985.0	1033.2	1170.8	1056.2	966.7	1031.9	1155.3	1060.5	1004.3	1069.3	1173.6
35°	953.0	1000.3	1151.0	1026.4	932.6	1003.1	1134.0	1032.7	971.5	1039.7	1148.0
35.5°	921.6	969.2	1129.7	995.8	898.3	971.0	1110.4	1003.1	938.7	1009.1	1125.9
36°	902.3	938.4	1104.6	965.0	866.0	939.2	1086.6	974.3	905.6	978.5	1098.6
36.5°	867.2	908.3	1075.8	933.1	833.1	906.8	1056.2	943.7	872.7	947.2	1068.3
37°	831.4	878.0	1048.7	900.8	801.8	874.5	1025.9	913.1	839.4	915.1	1037.2
37.5°	795.5	847.4	1019.6	869.5	770.9	841.4	993.3	882.3	808.0	882.5	1005.9
38°	759.7	817.1	985.8	838.1	740.9	809.8	958.0	851.2	777.5	851.2	974.0
38.5°	727.6	786.7	950.7	807.0	710.5	779.2	922.9	819.6	747.1	818.8	942.2
39°	695.7	756.1	916.6	775.7	681.4	749.4	887.8	788.7	716.8	788.2	909.6
39.5°	664.6	725.1	882.8	744.4	650.8	721.3	854.2	758.4	687.2	757.9	877.2
40°	634.0	694.5	848.9	714.5	620.5	691.7	821.1	729.3	658.4	728.1	844.6
40.5°	604.7	663.4	815.1	685.7	589.9	663.4	789.2	699.5	628.3	698.5	812.6
41°	575.4	633.8	781.0	657.4	560.6	635.8	758.2	671.4	598.4	669.9	779.5
41.5°	546.3	604.7	747.1	629.3	530.5	608.5	727.6	643.8	568.1	642.1	747.4
42°	518.2	576.6	714.8	600.7	502.2	579.6	697.7	616.2	539.0	613.7	714.5
42.5°	490.1	548.6	683.2	573.1	474.6	551.3	668.9	589.2	510.7	585.9	682.4
43°	462.8	521.5	651.8	545.3	447.8	523.7	640.3	561.6	483.1	557.6	649.8
43.5°	434.7	495.2	621.3	517.7	421.4	496.9	611.7	534.5	456.0	529.8	618.8



TEST NUMBER: P776007

CATALOG NUMBER: HCDJBL5125CSD-HCD4TSQH-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	357.8	417.9	531.5	437.7	348.7	418.4	526.5	455.3	379.3	449.5	528.0
45.5°	333.7	392.6	502.2	412.9	325.4	394.9	499.2	429.5	355.3	424.2	499.9
46°	310.6	368.5	474.1	388.4	302.6	371.1	471.8	405.1	331.9	399.6	471.8
46.5°	288.1	345.0	446.8	365.3	281.3	348.2	445.8	381.1	309.4	376.1	445.0
47°	266.8	322.4	419.9	342.7	261.0	325.9	420.7	358.0	287.1	352.8	419.4
47.5°	247.0	300.4	394.1	320.4	241.9	304.4	396.4	334.9	266.3	329.7	394.4
48°	227.6	279.3	369.5	298.6	225.9	283.3	373.8	313.1	246.4	308.4	370.0
48.5°	209.6	259.5	346.0	277.8	209.8	263.2	351.2	292.3	229.1	287.1	346.5
49°	192.3	240.4	323.4	258.5	193.8	244.2	329.9	271.5	212.1	266.8	324.9
49.5°	175.5	222.1	302.1	239.4	178.0	227.6	309.6	252.0	194.8	247.2	302.1
50°	159.7	204.6	281.3	220.9	164.7	211.1	290.1	235.2	177.8	229.9	281.0
50.5°	145.2	187.5	260.7	203.1	152.4	194.6	271.5	218.4	164.0	212.4	261.5
51°	131.6	171.7	241.7	187.0	141.9	178.0	252.7	201.3	151.2	194.8	243.2
51.5°	119.1	156.9	223.4	172.0	131.9	164.5	236.4	184.5	139.6	177.5	226.1
52°	107.3	142.9	206.3	157.9	122.3	151.9	220.6	167.7	128.9	162.7	209.3
52.5°	96.5	129.4	189.5	145.4	113.3	140.4	204.6	153.7	119.3	149.4	192.5
53°	86.5	116.8	174.2	133.9	104.8	129.9	188.5	140.9	110.1	137.4	175.7
53.5°	78.2	105.5	159.7	123.6	97.0	120.3	172.5	129.4	101.5	126.4	160.5
54°	69.9	95.0	146.2	113.8	89.0	111.6	159.0	118.8	93.3	116.3	146.9
54.5°	61.7	85.0	133.1	104.8	81.2	103.0	146.2	109.1	85.2	106.8	134.4
55°	53.4	75.7	121.8	96.8	73.7	95.0	134.1	100.3	77.7	98.3	122.3
55.5°	47.9	68.9	110.8	88.8	66.9	87.5	122.8	92.0	70.2	90.3	111.3
56°	45.9	62.4	100.8	82.2	60.9	80.0	112.3	84.0	63.7	82.5	101.0
56.5°	44.1	55.7	91.5	75.5	56.7	72.7	102.5	76.7	58.4	75.2	91.8
57°	42.6	49.1	84.7	68.7	54.2	65.7	93.5	69.7	54.7	67.9	83.0
57.5°	40.9	42.4	77.7	61.9	52.1	59.4	85.2	62.9	52.6	61.2	75.2
58°	39.4	40.9	71.0	56.2	50.1	53.7	77.5	56.4	50.6	55.4	68.2
58.5°	37.9	39.4	64.2	51.1	48.4	49.4	70.7	51.1	48.6	50.9	61.7
59°	36.4	37.9	57.4	47.4	46.4	47.1	64.2	47.1	46.9	47.9	56.2
59.5°	35.1	36.4	52.4	45.4	44.6	45.1	58.7	44.9	45.1	46.1	51.4
60°	33.8	35.1	48.1	43.4	42.9	43.4	53.7	43.1	43.4	44.4	47.1
60.5°	32.3	33.8	44.1	41.9	41.1	41.9	49.1	41.4	41.6	42.6	43.1
61°	31.1	32.3	40.9	40.1	39.6	40.1	45.1	39.6	40.1	40.9	40.1
61.5°	30.1	31.3	37.9	38.6	38.1	38.6	41.6	38.1	38.6	39.4	37.1
62°	28.8	30.1	35.4	36.9	36.6	37.1	38.6	36.6	36.9	37.9	34.6
62.5°	27.6	28.8	32.8	35.6	35.1	35.6	36.1	35.1	35.6	36.4	32.3
63°	26.6	27.8	30.8	34.1	33.6	34.1	33.6	33.8	34.1	34.8	30.6
63.5°	25.6	26.6	29.1	32.6	32.3	32.8	31.6	32.3	32.8	33.6	28.8
64°	24.6	25.6	27.8	31.3	31.1	31.6	29.6	31.1	31.3	32.1	27.6
64.5°	23.6	24.6	26.8	30.1	29.8	30.3	28.1	29.8	30.1	30.8	26.3
65°	22.6	23.8	25.6	28.8	28.6	29.1	26.8	28.6	29.1	29.6	25.3
65.5°	21.8	22.8	24.6	27.8	27.3	27.8	25.8	27.3	27.8	28.3	24.3
66°	20.8	21.8	23.8	26.6	26.1	26.8	24.8	26.3	26.6	27.3	23.3



TEST NUMBER: P776007

CATALOG NUMBER: HCDJBL5125CSD-HCD4TSQH-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	18.3	19.3	21.1	23.3	23.1	23.6	22.1	23.1	23.3	24.1	20.6
68°	17.5	18.6	20.1	22.3	22.1	22.6	21.1	22.1	22.3	23.1	19.8
68.5°	16.8	17.5	19.3	21.6	21.1	21.6	20.3	21.1	21.3	22.1	19.1
69°	16.0	16.8	18.6	20.6	20.3	20.8	19.3	20.3	20.6	21.1	18.3
69.5°	15.3	16.0	17.8	19.8	19.3	19.8	18.6	19.3	19.6	20.1	17.5
70°	14.5	15.3	17.0	18.8	18.6	19.1	17.8	18.6	18.8	19.3	16.5
70.5°	13.8	14.8	16.3	18.1	17.5	18.3	16.8	17.5	17.8	18.3	16.0
71°	13.3	14.0	15.5	17.3	16.8	17.3	16.0	16.8	17.0	17.5	15.3
71.5°	12.5	13.3	14.8	16.3	16.0	16.5	15.3	16.0	16.0	16.5	14.5
72°	12.0	12.8	14.0	15.8	15.3	15.8	14.8	15.3	15.3	15.8	13.8
72.5°	11.3	12.0	13.5	15.0	14.5	15.0	14.0	14.5	14.5	15.0	13.3
73°	10.8	11.5	12.8	14.3	13.8	14.3	13.3	13.8	13.8	14.3	12.5
73.5°	10.0	10.8	12.0	13.5	13.0	13.5	12.8	13.0	13.0	13.5	12.0
74°	9.5	10.3	11.5	12.8	12.5	13.0	12.0	12.3	12.5	13.0	11.5
74.5°	9.0	9.8	11.0	12.3	11.8	12.3	11.5	11.8	11.8	12.3	10.8
75°	8.5	9.0	10.3	11.5	11.0	11.8	10.8	11.0	11.0	11.5	10.3
75.5°	8.0	8.5	9.8	11.0	10.5	11.0	10.3	10.5	10.5	11.0	9.8
76°	7.3	8.0	9.3	10.5	10.0	10.5	9.8	9.8	9.8	10.3	9.3
76.5°	6.8	7.5	8.8	9.8	9.3	10.0	9.3	9.3	9.3	9.8	8.5
77°	6.5	7.0	8.3	9.3	8.8	9.3	8.8	8.5	8.5	9.0	8.0
77.5°	6.0	6.5	7.8	8.8	8.3	8.8	8.3	8.0	8.0	8.5	7.5
78°	5.5	6.0	7.3	8.3	7.8	8.3	7.8	7.5	7.5	8.0	7.0
78.5°	5.0	5.5	6.8	7.8	7.3	7.8	7.3	7.0	7.0	7.3	6.8
79°	4.8	5.0	6.3	7.3	6.8	7.3	6.8	6.5	6.5	6.8	6.3
79.5°	4.3	4.5	6.0	6.8	6.3	6.8	6.3	6.0	6.0	6.3	5.8
80°	3.8	4.3	5.5	6.3	5.8	6.3	6.0	5.5	5.5	5.8	5.3
80.5°	3.5	3.8	5.0	5.8	5.5	5.8	5.5	5.0	5.0	5.3	5.0
81°	3.0	3.3	4.8	5.3	5.0	5.3	5.0	4.5	4.5	4.8	4.5
81.5°	2.8	3.0	4.3	4.8	4.5	5.0	4.8	4.0	4.0	4.3	4.3
82°	2.5	2.5	4.0	4.5	4.3	4.5	4.3	3.8	3.8	3.8	3.8
82.5°	2.0	2.3	3.5	4.0	3.8	4.3	4.0	3.3	3.3	3.3	3.5
83°	1.8	2.0	3.3	3.8	3.5	3.8	3.5	3.0	2.8	3.0	3.0
83.5°	1.3	1.5	2.8	3.3	3.3	3.5	3.3	2.5	2.5	2.5	2.8
84°	1.0	1.3	2.5	3.0	2.8	3.0	3.0	2.3	2.0	2.3	2.5
84.5°	1.0	1.0	2.3	2.5	2.5	2.8	2.5	2.0	1.8	1.8	2.3
85°	0.8	1.0	2.0	2.3	2.3	2.5	2.3	1.5	1.3	1.5	2.0
85.5°	0.5	0.8	1.8	2.0	1.8	2.0	2.0	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: P776007

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQH-2500lm-3500K

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: P776007

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1967.3	1967.3	1967.3	1967.3	1967.3	1967.3
0.5°	1966.8	1968.6	1967.6	1968.1	1967.6	1968.3
1°	1966.6	1968.3	1967.6	1968.1	1967.6	1968.3
1.5°	1965.8	1968.3	1967.6	1967.8	1967.6	1967.6
2°	1964.8	1967.6	1967.3	1967.3	1967.1	1967.1
2.5°	1963.6	1967.1	1966.3	1967.1	1966.1	1965.8
3°	1961.8	1965.8	1965.1	1965.6	1964.8	1964.3
3.5°	1959.8	1963.8	1963.6	1964.1	1963.1	1962.3
4°	1957.3	1961.6	1961.6	1962.1	1961.3	1960.1
4.5°	1954.5	1959.1	1959.3	1959.8	1958.8	1957.6
5°	1951.5	1956.3	1956.5	1957.1	1956.0	1954.5
5.5°	1948.0	1953.3	1953.5	1953.8	1952.8	1950.8
6°	1944.3	1949.5	1950.0	1950.5	1949.3	1947.3
6.5°	1940.0	1945.5	1946.3	1946.5	1945.3	1943.0
7°	1935.5	1941.3	1942.0	1942.5	1941.0	1938.2
7.5°	1930.5	1936.7	1937.7	1937.7	1936.2	1933.2
8°	1925.0	1931.2	1932.5	1933.0	1931.0	1928.0
8.5°	1919.4	1926.0	1927.2	1927.5	1925.5	1922.0
9°	1913.7	1919.7	1921.7	1922.0	1919.2	1915.7
9.5°	1907.2	1913.2	1915.2	1915.7	1913.4	1908.9
10°	1900.4	1906.9	1908.4	1909.4	1906.4	1901.4
10.5°	1893.1	1899.9	1901.6	1902.4	1899.4	1894.1
11°	1886.1	1892.1	1894.1	1894.9	1891.9	1886.4
11.5°	1878.3	1884.6	1886.4	1887.4	1884.1	1878.3
12°	1870.3	1876.1	1878.3	1879.3	1875.3	1869.6
12.5°	1861.3	1867.8	1869.8	1870.6	1867.0	1861.0
13°	1852.5	1859.0	1861.3	1862.3	1858.3	1852.0
13.5°	1843.7	1850.0	1852.3	1852.8	1848.7	1842.7
14°	1834.7	1840.7	1843.0	1842.7	1839.2	1832.9
14.5°	1827.7	1830.7	1833.2	1832.4	1829.2	1822.4
15°	1817.4	1820.2	1823.2	1822.2	1818.9	1812.1
15.5°	1806.6	1809.9	1811.9	1811.6	1808.1	1801.1
16°	1795.6	1798.9	1801.4	1801.1	1797.1	1790.1
16.5°	1784.3	1787.6	1790.3	1789.6	1786.1	1778.0
17°	1772.5	1775.5	1778.8	1777.8	1774.5	1766.3
17.5°	1760.5	1763.8	1766.8	1766.0	1762.2	1754.0
18°	1748.0	1751.0	1754.5	1753.7	1750.0	1741.2
18.5°	1735.2	1738.4	1741.9	1740.7	1736.7	1727.4
19°	1722.4	1725.4	1728.9	1728.2	1723.4	1714.4
19.5°	1708.6	1712.4	1715.4	1714.9	1710.1	1700.6
20°	1694.8	1698.8	1702.1	1701.6	1696.3	1686.8
20.5°	1680.8	1684.5	1688.0	1687.5	1682.0	1672.2
21°	1666.2	1670.2	1673.2	1673.5	1667.0	1657.5

TEST NUMBER: P776007

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1621.1	1625.1	1628.4	1629.1	1621.6	1612.3
23°	1605.8	1609.6	1612.6	1613.6	1605.8	1595.5
23.5°	1589.8	1593.5	1596.8	1597.5	1589.8	1580.0
24°	1573.0	1577.0	1580.5	1581.2	1573.7	1563.9
24.5°	1556.7	1561.2	1563.9	1564.4	1557.2	1549.4
25°	1540.1	1546.9	1546.6	1547.6	1540.1	1533.9
25.5°	1522.6	1527.3	1529.3	1530.3	1522.6	1513.5
26°	1504.8	1508.5	1513.0	1512.3	1506.0	1495.2
26.5°	1489.5	1489.5	1497.7	1494.7	1490.5	1475.4
27°	1472.4	1467.2	1477.2	1476.9	1474.7	1451.9
27.5°	1451.1	1445.1	1458.1	1458.4	1454.4	1427.3
28°	1432.3	1421.3	1438.3	1439.3	1434.1	1401.5
28.5°	1411.5	1396.2	1416.5	1421.0	1414.3	1374.4
29°	1389.9	1369.1	1394.5	1402.5	1391.9	1346.3
29.5°	1366.4	1341.8	1370.4	1383.4	1368.6	1315.5
30°	1342.6	1312.2	1345.6	1364.4	1343.8	1283.9
30.5°	1317.0	1280.9	1320.0	1345.1	1317.0	1250.5
31°	1290.7	1247.5	1291.9	1325.5	1289.7	1217.0
31.5°	1262.8	1215.9	1263.1	1305.7	1260.6	1182.9
32°	1234.5	1181.9	1233.5	1286.1	1231.0	1148.0
32.5°	1203.9	1147.3	1202.2	1268.6	1199.9	1114.4
33°	1172.3	1114.4	1169.3	1249.3	1167.3	1081.6
33.5°	1140.0	1081.3	1136.5	1228.7	1134.5	1049.0
34°	1107.9	1049.0	1103.6	1210.4	1101.6	1017.1
34.5°	1074.5	1015.9	1071.3	1188.9	1068.8	985.0
35°	1042.5	984.5	1038.4	1164.6	1035.9	953.0
35.5°	1010.9	953.2	1006.1	1140.7	1004.6	921.6
36°	979.5	922.1	975.3	1116.7	973.8	902.3
36.5°	947.9	904.1	944.7	1089.8	942.9	867.2
37°	917.6	868.7	914.1	1062.0	912.8	831.4
37.5°	887.5	832.4	883.5	1033.2	882.5	795.5
38°	857.7	796.0	852.9	1002.8	852.4	759.7
38.5°	827.3	759.7	822.3	972.0	822.1	727.6
39°	797.0	728.3	791.7	939.4	791.7	695.7
39.5°	766.7	696.2	761.2	907.3	761.7	664.6
40°	736.1	664.9	729.8	873.0	730.1	634.0
40.5°	705.5	634.5	698.5	838.4	699.5	604.7
41°	674.9	605.5	668.1	804.0	669.6	575.4
41.5°	645.3	575.4	638.1	769.7	640.1	546.3
42°	616.5	547.1	609.2	735.3	611.5	518.2
42.5°	587.9	519.2	580.4	702.2	582.9	490.1
43°	560.1	489.9	552.8	669.9	555.3	462.8
43.5°	532.8	461.8	525.2	638.3	527.7	434.7

TEST NUMBER: P776007

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	455.0	381.6	445.0	548.8	449.5	357.8
45.5°	430.0	356.5	418.9	521.0	424.2	333.7
46°	405.1	332.2	393.9	493.4	399.6	310.6
46.5°	380.3	308.9	368.3	465.6	375.1	288.1
47°	356.8	286.6	344.7	438.7	352.0	266.8
47.5°	333.7	264.8	321.4	412.4	328.9	247.0
48°	311.4	243.9	298.8	387.6	306.9	227.6
48.5°	290.1	224.6	277.5	362.3	285.1	209.6
49°	269.3	206.1	257.0	338.5	265.3	192.3
49.5°	250.0	188.8	236.7	315.4	245.4	175.5
50°	232.2	172.0	218.1	292.8	225.9	159.7
50.5°	214.4	155.9	200.3	271.8	207.8	145.2
51°	196.6	141.4	182.8	251.5	190.8	131.6
51.5°	179.0	128.1	167.0	231.9	174.5	119.1
52°	163.0	115.8	152.2	213.6	159.2	107.3
52.5°	148.2	104.0	137.6	196.1	144.4	96.5
53°	134.1	93.3	124.6	179.5	130.4	86.5
53.5°	120.8	85.0	112.1	164.2	117.6	78.2
54°	108.3	76.5	100.8	148.7	105.8	69.9
54.5°	97.3	67.9	90.5	135.1	95.0	61.7
55°	87.0	59.7	82.0	122.3	86.2	53.4
55.5°	77.7	51.1	73.7	110.1	77.7	47.9
56°	68.4	47.1	65.2	98.8	69.2	45.9
56.5°	60.2	45.1	56.9	88.3	60.7	44.1
57°	52.9	43.4	48.4	81.0	52.1	42.6
57.5°	46.6	41.6	43.6	74.0	45.9	40.9
58°	41.9	40.1	41.9	66.7	41.9	39.4
58.5°	40.1	38.6	40.4	59.4	40.1	37.9
59°	38.4	37.1	38.9	52.4	38.6	36.4
59.5°	37.1	35.9	37.4	47.6	37.1	35.1
60°	35.6	34.3	35.9	43.6	35.9	33.8
60.5°	34.3	33.1	34.6	40.1	34.3	32.3
61°	33.1	31.8	33.3	37.1	33.1	31.1
61.5°	31.8	30.6	32.1	34.3	31.8	30.1
62°	30.6	29.6	30.8	32.1	30.6	28.8
62.5°	29.3	28.3	29.6	30.1	29.6	27.6
63°	28.3	27.3	28.6	28.3	28.3	26.6
63.5°	27.3	26.3	27.3	27.1	27.1	25.6
64°	26.1	25.3	26.3	26.1	26.1	24.6
64.5°	25.3	24.3	25.3	25.1	25.1	23.6
65°	24.3	23.3	24.3	24.1	24.1	22.6
65.5°	23.3	22.3	23.6	23.1	23.1	21.8
66°	22.3	21.6	22.6	22.3	22.3	20.8



TEST NUMBER: P776007

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	20.1	19.1	20.1	19.8	19.6	18.3
68°	19.1	18.3	19.1	18.8	18.8	17.5
68.5°	18.3	17.5	18.3	18.1	18.1	16.8
69°	17.5	16.8	17.5	17.3	17.3	16.0
69.5°	16.8	16.0	16.8	16.5	16.5	15.3
70°	16.0	15.3	16.3	15.8	15.8	14.5
70.5°	15.5	14.8	15.5	15.3	15.0	13.8
71°	14.8	14.0	14.8	14.5	14.3	13.3
71.5°	14.0	13.5	14.0	13.8	13.5	12.5
72°	13.5	12.8	13.5	13.3	13.0	12.0
72.5°	13.0	12.3	12.8	12.5	12.3	11.3
73°	12.3	11.5	12.3	12.0	11.5	10.8
73.5°	11.8	11.0	11.8	11.5	11.0	10.0
74°	11.3	10.5	11.0	10.8	10.5	9.5
74.5°	10.8	10.0	10.5	10.3	9.8	9.0
75°	10.0	9.5	10.0	9.8	9.3	8.5
75.5°	9.5	9.0	9.5	9.3	8.8	8.0
76°	9.0	8.5	9.0	8.8	8.3	7.3
76.5°	8.5	8.0	8.5	8.3	7.8	6.8
77°	8.0	7.5	8.0	7.5	7.3	6.5
77.5°	7.5	7.0	7.5	7.3	6.5	6.0
78°	7.0	6.5	7.0	6.8	6.0	5.5
78.5°	6.8	6.3	6.5	6.3	5.8	5.0
79°	6.3	5.8	6.0	5.8	5.3	4.8
79.5°	5.8	5.3	5.8	5.3	4.8	4.3
80°	5.3	5.0	5.3	5.0	4.3	3.8
80.5°	5.0	4.8	5.0	4.5	3.8	3.5
81°	4.5	4.3	4.5	4.3	3.5	3.0
81.5°	4.3	4.0	4.0	3.8	3.0	2.8
82°	3.8	3.5	3.8	3.5	2.5	2.5
82.5°	3.5	3.3	3.5	3.0	2.3	2.0
83°	3.3	3.0	3.0	2.8	2.0	1.8
83.5°	2.8	2.8	2.8	2.5	1.8	1.3
84°	2.5	2.5	2.5	2.3	1.3	1.0
84.5°	2.3	2.3	2.0	2.0	1.0	1.0
85°	2.0	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: P776007

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQH-2500lm-3500K

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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Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





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

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Peachtree City, GA 30269

Scaled Data Report



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Peachtree City, GA 30269

Scaled Data Report





21.5°	1642.7	1636.9	1648.7	1637.9	1625.1	1626.1	1637.1	1636.9	1640.4	1654.9	1651.4
22°	1627.6	1621.8	1633.9	1622.1	1609.6	1610.6	1621.8	1621.1	1624.9	1639.4	1637.1



44°	408.2	469.1	590.9	490.1	396.6	469.3	582.7	507.7	429.0	502.7	587.7
44.5°	382.6	443.3	561.1	463.1	372.1	444.0	554.3	481.1	403.9	475.8	557.3



66.5°	20.1	21.1	22.8	25.6	25.1	25.6	23.8	25.1	25.6	26.1	22.3
67°	19.1	20.1	21.8	24.3	24.1	24.6	22.8	24.1	24.3	25.1	21.6



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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21.5°	1651.2	1655.2	1658.7	1659.0	1652.2	1642.7
22°	1636.4	1640.4	1643.7	1644.2	1637.1	1627.6



44°	506.4	435.0	497.9	607.7	501.4	408.2
44.5°	480.9	407.9	471.3	577.6	475.1	382.6



66.5°	21.6	20.6	21.6	21.3	21.3	20.1
67°	20.8	19.8	20.8	20.6	20.3	19.1



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)