

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: P775999

Luminaire Tested: HCDJBL51525CSD-HCD4TRMW-2500lm-5000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775999
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-HCD4TRMW-2500lm-5000K
Description: 4 INCH ROUND MEDIUM MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

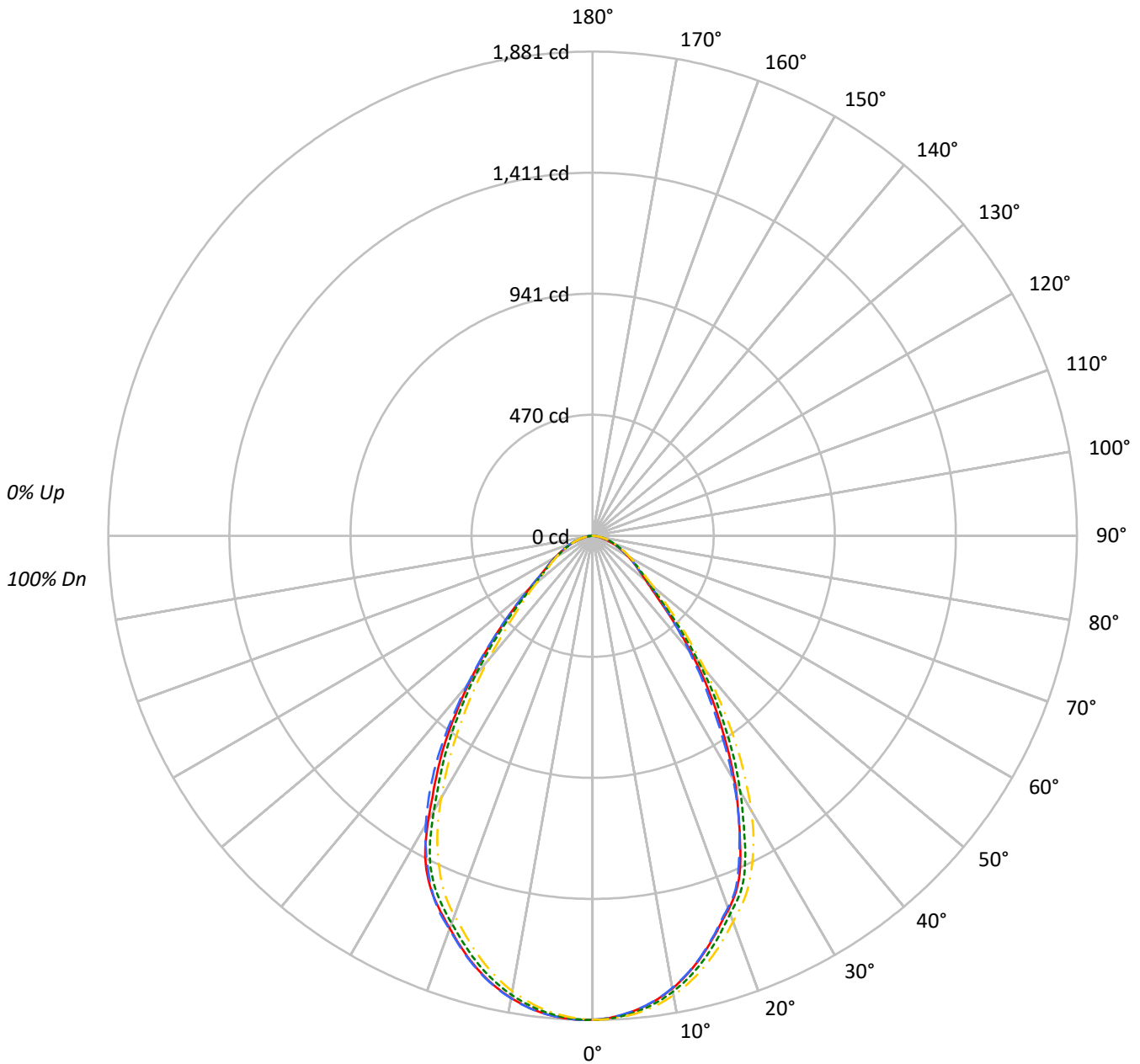
Lumens per Lamp: N/A
Luminaire Lumens: 2622.6 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.02
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMW-2500lm-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P775999

CATALOG NUMBER: HCDJBLS1525CSD-HCD4TRMW-2500lm-5000K

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	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	95	93	92	90								
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80								
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72								
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65								
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58								
6	80	69	62	56	78	68	61	56	66	60	56	65	60	55	64	59	55	53								
7	75	64	57	51	74	63	56	51	62	56	51	60	55	51	59	54	50	49								
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45								
9	67	55	48	44	65	55	48	43	54	48	43	53	47	43	52	47	43	41								
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	236623	236623	236623	236623
5°	234065	234949	236251	235531
10°	228133	229781	233015	231468
15°	218339	220932	226573	224189
20°	206716	209367	217390	214524
25°	188488	194654	207943	204180
30°	160447	166593	185630	179149
35°	129544	136473	155631	149087
40°	98555	105668	122540	116396
45°	69625	75676	90235	84540
50°	53098	56230	63455	59108
55°	45243	47152	48753	46472
60°	39542	41681	42336	40524
65°	33799	36806	36181	35347
70°	28664	32748	30872	31313
75°	23097	29223	25868	27619
80°	16089	25438	19785	23554
85°	5631	20071	8953	17183

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 202.5°
 Vertical Angle: 45°
 Luminance: 91481 cd/sqm



TEST NUMBER: P775999

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.9	6.7
10°-20°	479.0	18.3
20°-30°	649.4	24.8
30°-40°	576.8	22.0
40°-50°	353.2	13.5
50°-60°	195.9	7.5
60°-70°	120.2	4.6
70°-80°	59.4	2.3
80°-90°	12.9	0.5
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°	1304.3	49.7
0°-40°	1881.1	71.7
0°-60°	2430.1	92.7
0°-90°	2622.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2622.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1880	1880	1880	1880	1880	
5°	1853	1860	1870	1864	1853	175
15°	1676	1696	1739	1721	1676	470
25°	1357	1402	1498	1470	1357	617
35°	843	888	1013	970	843	525
45°	391	425	507	475	391	312
55°	206	215	222	212	206	186
65°	114	124	122	119	114	114
75°	48	60	53	57	48	51
85°	4	14	6	12	4	7
90°	0	0	0	0	0	



TEST NUMBER: P775999

CATALOG NUMBER: HCDJBL5125CSD-HCD4TRMW-2500lm-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1880.2	1880.2	1880.2	1880.2	1880.2	1880.2	1880.2	1880.2	1880.2	1880.2	1880.2
0.5°	1879.4	1879.6	1879.1	1878.1	1880.7	1879.9	1879.9	1880.4	1880.9	1881.5	1880.9
1°	1878.1	1878.4	1877.8	1876.8	1879.9	1879.6	1879.6	1880.7	1881.2	1881.7	1881.2
1.5°	1876.3	1876.3	1875.8	1875.0	1878.6	1878.9	1878.9	1880.4	1881.2	1881.7	1881.2
2°	1874.2	1874.0	1873.5	1872.9	1877.1	1877.6	1878.1	1879.4	1880.7	1881.5	1880.7
2.5°	1871.6	1871.4	1870.9	1870.4	1875.0	1876.0	1876.8	1878.6	1879.9	1880.7	1879.9
3°	1868.6	1868.6	1868.0	1867.5	1872.7	1874.0	1875.3	1877.3	1878.6	1879.4	1878.6
3.5°	1865.2	1865.2	1864.4	1864.4	1870.1	1871.6	1873.2	1875.5	1877.1	1877.8	1877.1
4°	1861.6	1861.3	1860.6	1860.8	1867.0	1869.1	1870.6	1873.5	1875.3	1876.0	1875.3
4.5°	1857.7	1857.2	1856.4	1856.9	1863.6	1865.7	1867.8	1870.9	1872.9	1874.0	1872.9
5°	1852.8	1852.6	1852.0	1852.6	1859.8	1862.4	1864.7	1868.0	1870.1	1871.4	1870.4
5.5°	1847.9	1847.4	1846.9	1847.7	1855.1	1858.2	1860.8	1864.9	1867.0	1868.3	1867.5
6°	1842.8	1842.0	1841.5	1842.2	1850.5	1854.1	1857.2	1861.3	1863.6	1864.9	1864.4
6.5°	1836.8	1836.0	1836.0	1836.8	1845.3	1849.2	1852.8	1857.2	1860.0	1861.3	1860.8
7°	1830.9	1830.1	1829.8	1830.9	1839.9	1844.0	1848.2	1852.8	1856.2	1857.5	1856.7
7.5°	1824.2	1823.1	1822.9	1824.4	1834.0	1838.6	1843.0	1848.2	1851.5	1853.1	1852.3
8°	1817.5	1816.4	1815.9	1817.5	1827.3	1832.7	1837.6	1843.0	1846.4	1848.2	1847.4
8.5°	1810.0	1808.9	1808.4	1810.0	1820.8	1826.5	1831.7	1837.6	1841.2	1842.8	1842.5
9°	1802.2	1801.0	1800.4	1802.5	1813.6	1819.8	1825.5	1831.4	1835.8	1837.6	1837.1
9.5°	1793.7	1792.2	1791.9	1794.2	1805.9	1812.8	1818.8	1825.5	1829.8	1831.7	1831.1
10°	1785.2	1783.4	1783.1	1785.5	1798.1	1805.3	1811.8	1818.8	1823.4	1825.7	1824.9
10.5°	1776.2	1774.4	1774.1	1776.4	1789.9	1797.6	1804.3	1811.8	1816.4	1819.0	1818.5
11°	1766.6	1764.8	1764.3	1767.2	1780.6	1789.1	1796.3	1804.6	1809.5	1812.0	1811.5
11.5°	1756.6	1754.3	1754.3	1757.3	1771.8	1780.3	1788.3	1796.3	1802.2	1804.6	1804.3
12°	1746.3	1744.2	1743.9	1747.0	1762.2	1771.3	1779.5	1788.3	1794.5	1797.1	1796.3
12.5°	1735.4	1733.1	1733.1	1735.9	1751.7	1761.5	1770.2	1779.8	1786.0	1788.8	1788.1
13°	1724.3	1722.0	1721.5	1725.1	1741.3	1751.7	1761.0	1771.0	1777.5	1780.6	1779.8
13.5°	1712.2	1709.6	1710.1	1713.5	1730.8	1741.1	1751.2	1761.7	1768.4	1771.5	1771.0
14°	1700.8	1698.0	1697.7	1701.4	1719.4	1730.3	1740.6	1751.7	1759.2	1762.2	1761.2
14.5°	1688.5	1685.6	1685.4	1689.5	1707.5	1719.2	1730.3	1741.6	1749.6	1752.4	1751.4
15°	1675.8	1672.5	1672.2	1676.6	1695.7	1707.5	1719.4	1731.0	1739.0	1742.4	1741.3
15.5°	1662.7	1659.6	1659.6	1663.7	1683.0	1695.7	1707.8	1720.5	1728.4	1732.1	1731.3
16°	1649.2	1646.1	1645.9	1650.3	1670.4	1683.6	1696.2	1709.6	1717.9	1721.5	1720.5
16.5°	1635.8	1632.2	1632.2	1637.1	1657.5	1670.9	1684.3	1698.0	1706.8	1710.4	1709.4
17°	1622.4	1618.3	1618.5	1623.4	1644.1	1658.0	1672.2	1686.4	1695.2	1699.0	1698.3
17.5°	1608.7	1604.3	1604.3	1609.5	1630.4	1645.1	1659.6	1674.3	1683.6	1687.7	1686.4
18°	1594.3	1590.2	1589.9	1595.3	1617.0	1631.7	1646.9	1661.9	1671.7	1675.8	1674.8
18.5°	1580.9	1576.2	1575.7	1581.4	1603.1	1618.0	1633.8	1649.5	1659.6	1663.7	1662.7
19°	1568.0	1563.1	1562.3	1567.7	1589.1	1604.9	1620.6	1636.9	1647.4	1651.8	1650.5
19.5°	1555.6	1550.4	1549.6	1555.1	1576.0	1591.7	1607.4	1624.5	1634.8	1639.7	1638.7
20°	1543.5	1538.0	1537.5	1542.7	1563.3	1579.3	1595.6	1612.1	1623.2	1627.8	1627.3
20.5°	1530.6	1525.1	1524.6	1530.0	1550.9	1566.9	1583.2	1600.0	1611.1	1616.5	1616.0
21°	1517.6	1512.2	1512.0	1517.6	1538.5	1555.3	1571.3	1587.8	1599.4	1605.4	1604.9



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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°	1471.2	1463.5	1463.0	1471.7	1499.6	1517.1	1534.2	1551.7	1563.6	1569.8	1569.0
23°	1452.1	1444.1	1442.3	1452.9	1484.1	1502.2	1519.7	1539.1	1551.5	1557.1	1555.1
23.5°	1431.7	1423.5	1420.1	1433.0	1466.3	1485.7	1504.7	1525.9	1538.8	1543.2	1540.6
24°	1408.8	1400.8	1396.4	1411.3	1446.4	1468.1	1488.5	1511.7	1525.6	1528.7	1524.9
24.5°	1384.0	1377.5	1372.6	1388.4	1425.3	1449.3	1471.2	1497.0	1511.7	1513.3	1508.6
25°	1357.4	1353.0	1348.4	1364.4	1401.8	1429.2	1453.1	1481.0	1497.5	1497.0	1491.3
25.5°	1331.4	1327.2	1324.9	1339.4	1377.3	1406.7	1434.1	1464.5	1482.3	1479.7	1473.0
26°	1305.0	1300.9	1301.7	1313.6	1351.7	1383.5	1414.7	1446.7	1465.5	1461.9	1454.7
26.5°	1278.7	1273.1	1278.2	1287.2	1324.4	1359.2	1394.1	1427.3	1447.5	1442.6	1435.9
27°	1252.7	1246.0	1254.0	1260.9	1297.6	1334.2	1373.9	1407.5	1428.4	1423.2	1417.5
27.5°	1227.9	1218.6	1229.2	1233.6	1271.8	1308.9	1353.0	1386.8	1407.5	1403.1	1399.0
28°	1203.4	1190.7	1202.6	1206.7	1246.0	1282.9	1331.1	1364.9	1384.8	1383.5	1379.4
28.5°	1179.1	1164.4	1175.3	1180.4	1220.9	1258.3	1308.1	1342.7	1359.7	1362.6	1360.0
29°	1153.8	1138.1	1147.1	1153.8	1196.2	1234.3	1283.4	1319.0	1333.4	1341.2	1340.1
29.5°	1129.3	1112.0	1119.0	1127.3	1171.4	1210.6	1258.1	1294.2	1306.1	1319.0	1319.0
30°	1104.1	1085.7	1090.4	1100.7	1146.4	1186.9	1231.8	1268.4	1277.4	1296.3	1297.3
30.5°	1078.5	1060.2	1061.2	1073.9	1121.9	1163.4	1205.2	1240.3	1248.3	1271.5	1273.8
31°	1051.9	1033.6	1032.8	1047.0	1097.1	1139.1	1177.6	1211.6	1219.4	1247.0	1250.3
31.5°	1025.6	1007.3	1004.7	1020.7	1071.3	1114.6	1149.7	1181.7	1191.5	1221.4	1225.3
32°	997.7	981.5	976.3	994.4	1046.0	1089.9	1122.9	1151.5	1165.2	1195.1	1200.8
32.5°	970.9	954.9	948.0	967.8	1020.5	1064.6	1096.1	1121.6	1139.4	1167.3	1176.3
33°	944.6	928.6	920.6	942.0	993.4	1038.0	1067.7	1091.4	1113.9	1138.9	1151.8
33.5°	918.5	903.6	893.3	916.5	966.5	1011.4	1039.3	1062.5	1088.6	1110.8	1125.7
34°	893.3	877.3	866.2	890.7	940.0	984.1	1010.9	1035.7	1064.1	1083.2	1100.7
34.5°	868.0	851.5	839.6	864.9	914.2	955.9	983.0	1007.6	1038.5	1055.3	1073.1
35°	843.2	825.1	812.8	839.3	888.3	927.8	954.9	979.2	1013.0	1028.7	1045.7
35.5°	818.9	800.6	787.5	813.8	863.8	901.0	927.3	952.1	986.1	1002.7	1017.1
36°	794.9	774.6	763.2	788.0	838.3	873.4	898.7	924.7	958.3	976.6	989.0
36.5°	770.4	749.3	739.5	761.7	814.3	846.8	871.6	897.4	930.7	950.3	959.8
37°	745.7	725.0	716.3	736.4	789.8	820.0	842.9	869.5	902.5	923.7	930.7
37.5°	720.9	700.8	693.0	711.1	765.5	794.2	815.3	841.9	874.7	898.2	902.0
38°	696.1	677.0	670.1	686.3	741.5	768.4	787.2	814.8	848.1	871.1	873.1
38.5°	671.4	653.0	647.1	663.4	717.3	743.1	760.4	788.2	823.1	844.5	843.7
39°	647.6	630.8	625.2	640.7	691.0	717.8	733.5	761.7	796.5	817.4	815.3
39.5°	623.4	608.7	603.5	618.5	667.0	692.5	708.5	736.6	771.5	790.6	786.9
40°	599.9	586.7	581.6	596.3	643.2	667.2	681.9	711.6	745.9	763.5	759.1
40.5°	577.2	565.3	561.2	575.1	618.5	640.9	656.7	687.6	723.0	736.9	731.2
41°	555.3	544.4	541.6	554.2	595.0	615.9	631.6	663.6	697.7	710.8	704.9
41.5°	533.1	523.8	522.2	534.1	572.3	591.4	608.1	640.7	671.9	685.0	679.1
42°	511.1	504.2	504.4	514.2	550.6	567.4	584.7	618.5	646.6	659.5	653.8
42.5°	490.2	485.3	486.6	494.9	528.4	543.6	562.5	596.3	623.1	634.7	629.3
43°	469.3	467.0	469.3	476.3	507.0	521.2	540.8	574.1	598.1	609.4	604.5
43.5°	448.7	448.9	452.0	458.2	485.6	499.5	520.4	552.9	574.1	584.9	580.5



TEST NUMBER: P775999

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	391.2	399.7	404.8	408.4	425.2	439.9	460.3	489.7	507.0	514.0	511.9
45.5°	374.6	384.4	390.1	393.2	406.6	421.6	442.5	469.6	486.4	491.5	490.0
46°	359.2	370.0	376.4	378.8	388.8	403.5	424.7	450.0	465.7	469.6	468.8
46.5°	344.5	356.1	362.5	364.6	372.1	387.3	407.4	431.1	446.1	448.2	448.4
47°	331.0	342.6	349.9	350.9	356.8	371.0	391.2	413.1	426.8	427.0	428.6
47.5°	318.9	329.7	337.2	338.0	342.6	355.8	375.7	395.3	407.9	407.7	410.0
48°	308.1	318.1	325.1	325.9	329.2	341.9	361.2	378.8	390.1	389.1	391.4
48.5°	297.8	306.8	313.5	314.3	317.1	328.7	347.3	363.0	372.6	371.5	373.9
49°	288.5	296.2	303.2	303.2	306.3	316.8	333.6	347.8	355.5	354.5	356.8
49.5°	279.4	286.1	292.6	292.6	296.2	305.2	321.2	333.6	339.5	338.8	341.1
50°	271.2	276.6	282.5	282.5	287.2	294.7	309.1	319.9	324.1	323.8	325.6
50.5°	263.4	267.6	272.5	273.2	278.1	284.8	297.8	307.0	310.1	310.1	311.2
51°	256.0	259.3	263.7	264.2	269.6	275.8	286.9	294.9	297.0	297.2	297.8
51.5°	248.5	251.0	254.9	256.0	261.9	267.3	276.6	283.6	284.8	285.4	284.8
52°	241.5	243.3	246.7	247.7	254.7	259.0	267.0	273.0	273.5	274.0	273.0
52.5°	234.5	235.8	238.7	240.2	247.2	251.3	257.8	262.7	263.2	263.4	261.9
53°	227.8	229.1	231.2	232.7	240.0	243.8	249.2	253.1	253.9	253.6	251.6
53.5°	221.6	222.7	224.2	225.8	233.0	236.6	241.0	244.6	244.9	244.6	242.5
54°	216.0	216.7	217.8	219.3	226.5	230.2	233.2	236.3	236.6	236.1	234.3
54.5°	211.1	211.6	212.3	213.9	220.1	223.2	226.0	228.6	229.1	228.1	226.5
55°	206.2	206.7	207.4	208.7	214.9	218.0	220.3	221.6	222.2	221.4	220.9
55.5°	201.3	201.8	202.5	203.8	209.8	212.6	214.9	216.2	216.7	216.0	215.2
56°	196.4	196.9	197.6	198.7	204.6	207.4	209.5	210.8	211.1	210.3	209.5
56.5°	191.2	192.0	192.7	194.0	199.4	202.0	203.8	205.4	205.4	204.9	204.1
57°	186.3	187.1	187.8	188.9	194.8	196.9	198.4	199.7	199.7	199.2	198.4
57.5°	181.4	182.2	182.7	184.0	189.6	191.7	193.3	194.5	195.1	194.0	193.0
58°	176.5	177.3	177.8	179.1	184.7	186.8	188.1	189.4	189.6	188.9	187.6
58.5°	171.6	172.4	173.1	174.4	179.8	181.6	182.9	184.5	184.2	183.7	182.4
59°	166.9	167.7	168.5	169.8	174.9	176.7	178.0	179.3	178.8	178.3	177.3
59.5°	162.0	163.1	163.8	164.9	170.3	171.8	172.9	174.2	173.6	173.1	172.1
60°	157.1	158.7	159.2	160.5	165.6	167.5	168.2	169.3	168.2	168.2	167.2
60.5°	152.5	154.0	154.8	155.8	161.3	162.6	163.6	164.4	163.1	163.1	162.3
61°	147.8	149.4	150.4	151.5	156.6	158.2	158.9	159.7	158.2	158.2	157.6
61.5°	143.5	145.0	146.3	147.3	152.2	153.8	154.3	155.1	153.3	153.3	153.0
62°	138.8	140.6	142.2	142.9	147.8	149.4	149.9	150.7	148.4	148.6	148.6
62.5°	134.4	136.5	137.8	138.8	143.5	145.0	145.8	146.0	143.7	144.0	144.2
63°	130.0	132.1	133.9	134.9	139.3	140.9	141.4	141.7	139.1	139.3	139.8
63.5°	125.9	128.0	129.8	130.8	135.2	136.7	137.3	137.0	134.4	134.9	135.7
64°	121.8	123.8	126.2	126.9	131.3	132.6	133.1	132.6	130.0	130.6	131.6
64.5°	117.7	120.0	122.3	123.3	127.5	128.7	129.3	128.5	125.7	126.4	127.7
65°	113.5	115.8	118.7	119.5	123.6	124.9	125.4	124.4	121.5	122.3	123.6
65.5°	109.7	112.0	114.8	115.8	120.0	121.0	121.8	120.2	117.1	118.2	119.7
66°	105.8	108.4	111.2	112.2	116.1	117.4	117.9	116.4	113.3	114.3	116.1



TEST NUMBER: P775999

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	94.7	97.3	100.6	101.9	105.5	106.6	107.1	104.8	101.7	102.7	105.0
68°	91.3	93.7	97.3	98.6	102.2	103.2	103.7	101.1	98.0	99.1	101.4
68.5°	88.0	90.6	94.2	95.2	98.8	99.9	100.1	97.5	94.2	95.5	98.0
69°	84.6	87.2	90.8	92.1	95.5	96.5	96.8	93.9	90.8	92.1	94.7
69.5°	81.3	83.9	87.7	89.0	92.4	93.4	93.4	90.6	87.2	88.8	91.3
70°	77.9	80.5	84.6	86.2	89.0	90.0	90.3	87.2	83.9	85.4	88.0
70.5°	74.6	77.1	81.5	83.1	86.2	87.0	87.2	83.9	80.5	82.0	84.9
71°	71.5	74.1	78.4	80.0	83.1	83.9	83.9	80.5	77.4	78.7	81.8
71.5°	68.4	71.0	75.3	77.1	80.0	81.0	80.8	77.1	74.1	75.6	78.7
72°	65.0	67.9	72.2	74.1	76.9	77.9	77.7	74.1	71.0	72.5	75.6
72.5°	61.9	64.8	69.4	71.2	74.1	75.1	74.8	71.0	67.9	69.4	72.8
73°	58.8	61.7	66.3	68.4	71.2	72.0	71.7	67.9	64.8	66.3	69.7
73.5°	56.0	58.6	63.5	65.5	68.4	69.1	68.6	64.8	61.7	63.2	66.8
74°	53.2	55.7	60.6	63.0	65.5	66.6	66.1	61.9	58.8	60.4	64.0
74.5°	50.3	52.9	57.8	60.1	62.7	63.7	63.0	59.1	56.0	57.5	61.1
75°	47.5	50.1	55.0	57.5	60.1	60.9	60.4	56.0	53.2	54.7	58.3
75.5°	44.6	47.2	52.4	54.7	57.5	58.3	57.5	53.4	50.3	51.9	55.7
76°	42.1	44.6	49.5	52.4	54.7	55.7	54.7	50.3	47.5	49.0	53.2
76.5°	39.5	41.8	47.0	49.5	52.1	53.2	52.1	47.7	44.9	46.4	50.3
77°	36.9	39.2	44.4	47.2	49.5	50.6	49.5	44.9	42.1	43.6	47.7
77.5°	34.3	36.6	41.8	44.6	47.2	48.2	47.0	42.3	39.5	41.0	45.2
78°	31.7	34.1	39.5	42.3	44.6	45.7	44.4	39.7	36.9	38.7	42.6
78.5°	29.2	31.5	36.9	39.7	42.3	43.1	41.8	37.2	34.6	36.1	40.3
79°	26.8	28.9	34.6	37.4	39.7	40.8	39.5	34.6	32.0	33.5	37.9
79.5°	24.5	26.6	32.0	35.1	37.4	38.4	37.2	32.3	29.7	31.0	35.3
80°	22.2	24.3	29.7	32.8	35.1	36.1	34.6	29.7	27.3	28.6	33.0
80.5°	19.9	21.9	27.6	30.7	33.0	33.8	32.5	27.3	25.0	26.3	30.7
81°	17.5	19.6	25.3	28.4	30.7	31.5	30.2	25.0	22.7	24.3	28.6
81.5°	15.5	17.3	23.2	26.1	28.4	29.4	27.9	23.0	20.6	21.9	26.3
82°	13.2	15.2	21.2	24.0	26.3	27.1	25.8	20.9	18.3	19.6	24.3
82.5°	11.1	13.2	19.1	21.9	24.0	25.0	23.7	18.8	16.3	17.5	22.4
83°	9.0	11.4	17.3	19.9	22.2	23.0	21.9	16.8	13.9	15.2	20.6
83.5°	7.7	9.5	15.2	17.8	20.1	20.9	19.9	14.4	11.9	13.4	18.6
84°	6.5	8.5	13.7	16.0	18.1	18.8	17.8	12.6	9.8	11.6	16.8
84.5°	5.2	7.5	11.9	13.9	16.0	16.8	16.0	11.1	8.0	9.8	15.0
85°	3.9	6.2	10.1	11.9	13.9	14.7	13.9	9.5	6.2	8.5	13.2
85.5°	3.1	5.2	8.5	10.1	11.9	12.9	12.4	8.3	5.2	7.5	11.4
86°	2.3	4.1	7.0	8.3	10.1	11.1	10.6	7.2	4.4	6.5	9.8
86.5°	1.8	3.1	5.4	6.5	8.3	9.0	9.0	5.9	3.6	5.4	8.3
87°	1.0	2.1	3.6	4.6	6.5	7.2	7.2	4.9	2.8	4.4	6.7
87.5°	0.5	1.3	2.1	2.8	4.6	5.7	5.7	3.9	2.3	3.4	5.2
88°	0.3	0.5	0.8	1.3	3.1	3.9	4.1	2.8	1.5	2.6	3.6
88.5°	0.0	0.3	0.3	0.5	1.5	2.1	2.6	1.8	1.0	1.5	2.1



TEST NUMBER: P775999
CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0



TEST NUMBER: P775999

CATALOG NUMBER: HCDJBLS1525CSD-HCD4TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1880.2	1880.2	1880.2	1880.2	1880.2	1880.2
0.5°	1879.6	1880.9	1879.9	1878.9	1879.1	1879.4
1°	1879.9	1880.7	1879.1	1877.8	1877.8	1878.1
1.5°	1879.4	1879.9	1878.1	1876.6	1876.3	1876.3
2°	1878.9	1878.9	1876.8	1874.7	1874.2	1874.2
2.5°	1877.8	1877.3	1875.3	1872.9	1871.9	1871.6
3°	1876.6	1875.5	1872.9	1870.6	1869.1	1868.6
3.5°	1875.0	1873.5	1870.6	1867.8	1866.0	1865.2
4°	1872.9	1871.1	1867.5	1864.9	1862.6	1861.6
4.5°	1870.6	1867.8	1864.4	1861.1	1858.7	1857.7
5°	1868.0	1864.4	1860.6	1857.2	1854.4	1852.8
5.5°	1864.7	1860.8	1856.7	1852.8	1849.7	1847.9
6°	1861.1	1856.9	1852.0	1848.2	1844.8	1842.8
6.5°	1857.5	1852.8	1847.4	1843.3	1839.1	1836.8
7°	1853.3	1847.9	1842.2	1837.6	1833.2	1830.9
7.5°	1848.9	1842.5	1836.8	1831.7	1827.0	1824.2
8°	1843.8	1837.3	1830.9	1825.2	1820.3	1817.5
8.5°	1838.6	1831.4	1824.7	1818.8	1813.3	1810.0
9°	1832.9	1824.9	1818.0	1811.3	1805.3	1802.2
9.5°	1827.0	1818.5	1811.0	1804.0	1797.6	1793.7
10°	1820.6	1811.3	1803.5	1796.3	1789.3	1785.2
10.5°	1813.9	1804.0	1795.5	1788.1	1780.8	1776.2
11°	1806.4	1796.3	1787.3	1779.3	1771.5	1766.6
11.5°	1798.9	1788.3	1778.8	1770.2	1761.5	1756.6
12°	1790.9	1779.5	1769.7	1760.2	1751.7	1746.3
12.5°	1782.6	1770.5	1760.2	1750.1	1741.1	1735.4
13°	1773.9	1761.2	1750.6	1740.1	1730.5	1724.3
13.5°	1764.8	1751.9	1740.3	1729.5	1718.9	1712.2
14°	1755.3	1741.9	1730.0	1718.4	1707.0	1700.8
14.5°	1745.5	1731.5	1719.2	1707.0	1695.2	1688.5
15°	1735.2	1720.7	1707.8	1694.9	1682.8	1675.8
15.5°	1724.6	1709.4	1696.2	1683.0	1670.4	1662.7
16°	1713.7	1698.3	1684.3	1670.7	1657.8	1649.2
16.5°	1702.6	1686.7	1672.2	1658.3	1644.3	1635.8
17°	1691.0	1674.3	1659.8	1645.6	1631.2	1622.4
17.5°	1679.4	1662.7	1647.2	1632.2	1617.5	1608.7
18°	1667.6	1650.3	1634.8	1619.3	1604.1	1594.3
18.5°	1655.4	1637.6	1622.1	1606.4	1590.9	1580.9
19°	1642.8	1626.0	1609.8	1594.0	1578.5	1568.0
19.5°	1631.2	1613.6	1597.6	1582.2	1566.4	1555.6
20°	1619.8	1601.8	1586.3	1570.0	1554.3	1543.5
20.5°	1608.5	1590.4	1573.9	1557.9	1541.6	1530.6
21°	1596.9	1578.3	1562.0	1545.5	1529.0	1517.6

TEST NUMBER: P775999

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1561.3	1541.6	1523.6	1502.7	1483.6	1471.2
23°	1548.1	1529.0	1510.2	1486.9	1466.3	1452.1
23.5°	1534.2	1515.3	1495.5	1469.7	1447.0	1431.7
24°	1518.9	1501.9	1479.7	1451.6	1426.3	1408.8
24.5°	1503.2	1486.2	1463.2	1432.2	1404.4	1384.0
25°	1486.4	1470.4	1445.4	1412.6	1381.7	1357.4
25.5°	1468.9	1453.1	1426.8	1392.5	1357.7	1331.4
26°	1450.6	1435.3	1407.2	1372.4	1332.9	1305.0
26.5°	1430.7	1414.4	1386.1	1351.0	1307.4	1278.7
27°	1411.3	1393.3	1364.1	1328.8	1282.3	1252.7
27.5°	1391.7	1369.3	1341.4	1306.1	1257.1	1227.9
28°	1371.4	1344.0	1317.7	1282.1	1232.5	1203.4
28.5°	1350.5	1317.2	1292.7	1257.1	1208.3	1179.1
29°	1328.8	1290.1	1266.6	1231.0	1184.3	1153.8
29.5°	1307.1	1261.4	1239.5	1204.4	1160.6	1129.3
30°	1283.6	1232.8	1211.4	1177.3	1136.8	1104.1
30.5°	1259.4	1204.9	1182.0	1150.2	1112.3	1078.5
31°	1234.1	1177.6	1151.3	1122.9	1086.8	1051.9
31.5°	1208.0	1151.3	1121.9	1094.5	1061.5	1025.6
32°	1181.5	1125.5	1092.7	1066.6	1035.9	997.7
32.5°	1153.8	1100.2	1064.1	1038.5	1009.6	970.9
33°	1125.7	1075.2	1036.7	1010.6	981.2	944.6
33.5°	1097.3	1050.1	1008.8	982.3	953.9	918.5
34°	1069.7	1024.8	982.3	954.4	925.2	893.3
34.5°	1042.4	997.5	955.2	925.8	897.1	868.0
35°	1015.6	970.4	928.1	897.6	868.5	843.2
35.5°	989.2	943.0	900.7	870.0	841.9	818.9
36°	962.9	915.4	873.1	842.9	814.8	794.9
36.5°	936.6	888.3	845.8	815.8	788.8	770.4
37°	910.5	860.5	818.4	788.0	763.0	745.7
37.5°	883.4	833.9	791.6	761.1	738.4	720.9
38°	856.6	808.1	765.0	734.3	712.6	696.1
38.5°	830.0	783.1	739.0	708.3	687.6	671.4
39°	803.7	758.3	714.4	681.9	662.1	647.6
39.5°	776.4	733.3	689.9	656.4	636.3	623.4
40°	749.8	708.5	666.2	631.1	611.0	599.9
40.5°	723.0	683.7	643.0	606.6	586.2	577.2
41°	698.2	658.5	619.8	582.6	561.7	555.3
41.5°	671.9	634.2	597.3	560.2	538.2	533.1
42°	646.8	609.4	574.6	537.7	516.0	511.1
42.5°	621.6	585.4	554.0	517.1	494.9	490.2
43°	597.8	561.7	531.8	496.4	474.2	469.3
43.5°	572.8	539.3	510.6	476.3	454.4	448.7



TEST NUMBER: P775999

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	503.9	475.0	449.5	421.1	399.9	391.2
45.5°	481.2	454.9	430.6	404.3	383.7	374.6
46°	460.0	435.5	412.6	388.6	367.9	359.2
46.5°	438.9	416.2	394.8	373.1	353.2	344.5
47°	418.8	397.9	377.7	357.9	339.3	331.0
47.5°	399.7	379.8	362.0	343.9	326.4	318.9
48°	381.1	362.8	346.3	331.0	314.5	308.1
48.5°	364.3	346.0	331.8	318.6	303.2	297.8
49°	347.3	330.5	318.4	306.8	292.8	288.5
49.5°	332.1	315.8	305.5	295.4	283.3	279.4
50°	317.6	301.9	293.1	284.6	274.3	271.2
50.5°	303.9	288.7	281.5	274.5	265.8	263.4
51°	291.0	277.1	270.9	265.0	257.5	256.0
51.5°	279.4	266.3	260.9	256.2	249.8	248.5
52°	268.3	256.2	251.8	247.4	242.5	241.5
52.5°	258.0	247.2	243.1	239.4	235.3	234.5
53°	248.5	238.7	234.8	231.7	228.6	227.8
53.5°	239.4	230.9	227.1	224.7	222.2	221.6
54°	231.2	223.7	220.3	218.3	216.5	216.0
54.5°	224.0	217.5	214.7	212.9	211.3	211.1
55°	218.5	211.8	209.5	208.0	206.4	206.2
55.5°	212.9	206.9	204.3	202.8	201.3	201.3
56°	207.4	201.8	199.2	197.9	196.4	196.4
56.5°	202.0	196.6	194.3	192.7	191.2	191.2
57°	196.4	191.2	189.1	187.6	186.3	186.3
57.5°	191.2	185.8	183.7	182.4	181.4	181.4
58°	186.0	180.9	178.8	177.5	176.5	176.5
58.5°	180.9	175.7	173.6	172.6	171.6	171.6
59°	175.5	170.8	168.7	167.7	166.9	166.9
59.5°	170.5	165.6	163.8	163.1	162.3	162.0
60°	165.6	161.0	159.2	158.4	157.6	157.1
60.5°	160.7	156.1	154.6	154.0	153.3	152.5
61°	156.1	151.7	150.2	149.4	148.9	147.8
61.5°	151.5	147.3	145.8	145.0	144.2	143.5
62°	147.1	142.9	141.7	140.9	140.1	138.8
62.5°	142.7	138.6	137.0	136.7	135.7	134.4
63°	138.3	134.4	133.1	132.6	131.6	130.0
63.5°	134.4	130.3	129.0	128.7	127.5	125.9
64°	130.3	126.4	125.1	124.9	123.3	121.8
64.5°	126.2	122.6	121.3	121.0	119.5	117.7
65°	122.3	118.7	117.7	117.4	115.6	113.5
65.5°	118.4	115.1	114.0	113.5	111.7	109.7
66°	114.8	111.5	110.4	110.2	107.9	105.8



TEST NUMBER: P775999

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	104.2	100.9	100.1	99.6	96.8	94.7
68°	100.6	97.5	96.8	96.5	92.9	91.3
68.5°	97.5	94.4	93.1	92.9	89.8	88.0
69°	94.2	91.3	90.3	89.8	86.7	84.6
69.5°	90.8	88.2	87.2	86.7	83.3	81.3
70°	87.7	85.1	84.4	83.9	80.2	77.9
70.5°	84.6	82.3	81.3	80.8	76.9	74.6
71°	81.8	79.2	78.2	77.7	73.8	71.5
71.5°	78.7	76.1	75.3	74.6	70.7	68.4
72°	75.9	73.3	72.5	71.7	67.6	65.0
72.5°	72.8	70.4	69.7	68.6	64.5	61.9
73°	69.9	67.6	66.8	65.8	61.7	58.8
73.5°	67.1	64.8	64.0	63.0	58.6	56.0
74°	64.5	62.2	61.4	60.1	55.7	53.2
74.5°	61.7	59.3	58.6	57.5	52.9	50.3
75°	59.1	56.8	56.0	54.7	50.1	47.5
75.5°	56.5	54.2	53.4	52.1	47.5	44.6
76°	53.9	51.6	50.8	49.3	44.6	42.1
76.5°	51.3	49.0	48.2	46.7	41.8	39.5
77°	48.8	46.7	45.9	44.1	39.2	36.9
77.5°	46.4	44.1	43.3	41.8	36.6	34.3
78°	43.9	41.8	41.0	39.2	34.1	31.7
78.5°	41.5	39.5	38.7	36.9	31.7	29.2
79°	39.2	37.2	36.4	34.3	29.2	26.8
79.5°	36.9	34.8	34.1	32.0	26.8	24.5
80°	34.6	32.5	31.7	29.9	24.5	22.2
80.5°	32.3	30.4	29.7	27.6	22.2	19.9
81°	30.2	28.1	27.3	25.3	19.9	17.5
81.5°	27.9	26.1	25.3	23.2	17.8	15.5
82°	25.8	24.0	23.2	21.2	15.7	13.2
82.5°	23.7	21.9	21.2	19.4	13.7	11.1
83°	21.9	19.9	19.1	17.3	11.9	9.0
83.5°	19.9	17.8	17.0	15.5	10.3	7.7
84°	17.8	15.7	15.0	13.7	9.0	6.5
84.5°	15.7	13.9	13.2	11.9	8.0	5.2
85°	13.9	11.9	11.4	10.1	6.7	3.9
85.5°	11.9	10.1	9.3	8.5	5.4	3.1
86°	10.1	8.5	7.7	6.7	4.4	2.3
86.5°	8.3	6.7	5.9	5.2	3.4	1.8
87°	6.7	4.9	4.1	3.4	2.3	1.0
87.5°	4.9	3.1	2.3	1.8	1.3	0.5
88°	3.1	1.5	1.0	0.8	0.5	0.3
88.5°	1.5	0.5	0.3	0.3	0.3	0.0



TEST NUMBER: P775999

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.3	0.0

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

Scaled Data Report



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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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Scaled Data Report





21.5°	1504.2	1497.3	1497.8	1504.0	1526.4	1542.9	1559.4	1576.0	1587.3	1593.5	1593.2
22°	1488.8	1481.0	1481.5	1488.5	1513.8	1530.8	1547.8	1563.8	1575.7	1582.2	1581.6



44°	428.6	431.9	436.0	441.2	464.7	479.1	499.5	531.3	550.9	560.9	557.1
44.5°	409.7	415.4	419.5	424.7	444.8	459.3	479.1	510.6	529.2	536.9	534.1



66.5°	102.2	104.5	107.9	108.6	112.5	113.8	114.0	112.2	109.1	110.2	112.2
67°	98.3	100.9	104.2	105.3	109.1	110.2	110.7	108.6	105.5	106.6	108.6



89°	0.0	0.3	0.0	0.0	0.5	0.8	1.0	1.0	0.5	0.8	0.8
89.5°	0.0	0.3	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.3	0.3

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21.5°	1585.0	1565.9	1549.6	1532.4	1515.1	1504.2
22°	1573.6	1554.3	1537.0	1517.9	1500.1	1488.8



44°	549.6	516.8	490.0	457.2	435.3	428.6
44.5°	526.1	495.6	469.8	438.6	417.2	409.7

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Scaled Data Report



66.5°	111.2	107.9	106.8	106.6	104.0	102.2
67°	107.6	104.2	103.5	103.2	100.4	98.3

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Scaled Data Report



89°	0.5	0.0	0.0	0.0	0.3	0.0
89.5°	0.0	0.0	0.0	0.0	0.3	0.0

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)