

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



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: P775934

Luminaire Tested: HCDJBL51525CSD-HCD41TRH-2500lm-5000K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P775934  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156B029)  
Test Lab:  
Issue Date: 2/13/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBL51525CSD-HCD41TRH-2500lm-5000K  
Description: 4 INCH ROUND SHALLOW-WIDE HAZE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3019.7 lumens  
Efficiency: N/A  
Efficacy: 120.8 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.22  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

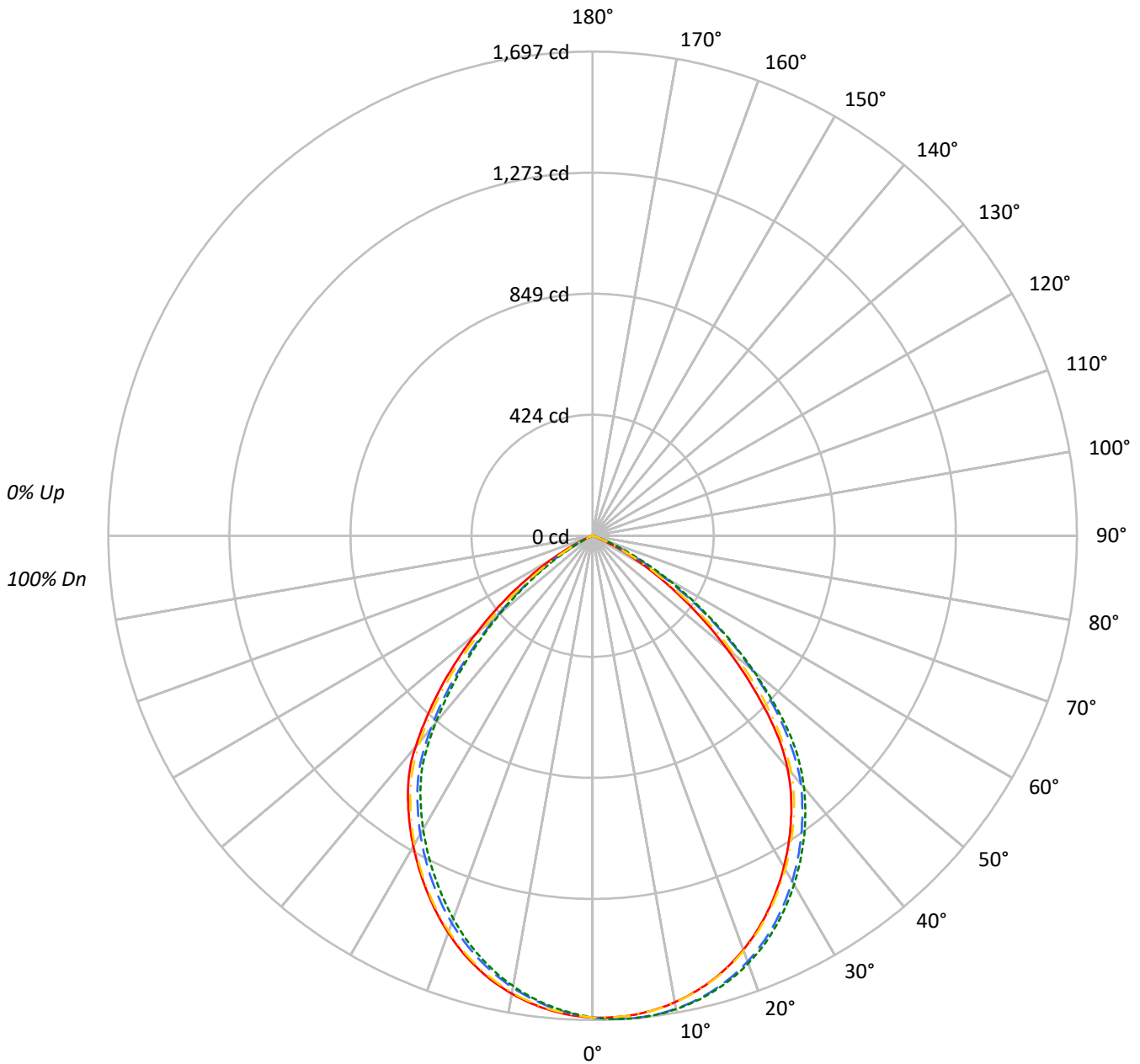
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P775934

CATALOG NUMBER: HCDJBLS1525CSD-HCD41TRH-2500lm-5000K

### 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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	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	77	95	87	82	77	85	80	76	82	78	74	80	76	73	71								
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63								
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57								
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51								
7	73	62	54	49	72	61	54	49	59	53	48	58	52	48	57	52	48	46								
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42								
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38								
10	60	49	42	37	59	48	41	37	47	41	37	46	41	36	46	40	36	35								

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

	0°	90°	180°	270°
0°	212447	212447	212447	212447
5°	212867	214370	211010	209216
10°	212159	215328	208300	204798
15°	210287	215134	204163	198887
20°	206863	213599	198292	191234
25°	201611	210289	190863	182254
30°	194742	205132	182637	172581
35°	186143	198403	173330	161316
40°	174454	189257	158502	140579
45°	151317	172906	133644	112785
50°	119665	143923	104668	82524
55°	85966	111220	73503	52396
60°	52555	75812	42109	25145
65°	22066	40499	15753	7445
70°	4931	11885	4563	3238
75°	3404	4376	3161	2139
80°	2464	3334	2247	1522
85°	722	3032	433	433

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 172906 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.1	5.3
10°-20°	447.6	14.8
20°-30°	650.4	21.5
30°-40°	728.5	24.1
40°-50°	613.4	20.3
50°-60°	330.3	10.9
60°-70°	81.4	2.7
70°-80°	7.8	0.3
80°-90°	1.3	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°	1257.0	41.6
0°-40°	1985.6	65.8
0°-60°	2929.2	97.0
0°-90°	3019.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3019.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1688	1688	1688	1688	1688	
5°	1685	1697	1670	1656	1685	160
15°	1614	1651	1567	1526	1614	455
25°	1452	1514	1374	1312	1452	668
35°	1212	1291	1128	1050	1212	756
45°	850	972	751	634	850	650
55°	392	507	335	239	392	353
65°	74	136	53	25	74	83
75°	7	9	6	4	7	8
85°	0	2	0	0	0	1
90°	0	0	0	0	0	



TEST NUMBER: P775934

CATALOG NUMBER: HCDJBL5125CSD-HCD41TRH-2500lm-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1688.1	1688.1	1688.1	1688.1	1688.1	1688.1	1688.1	1688.1	1688.1	1688.1	1688.1
0.5°	1689.1	1690.1	1690.7	1690.1	1689.6	1688.6	1688.1	1687.6	1687.6	1687.6	1687.0
1°	1689.4	1691.4	1692.2	1691.9	1691.2	1690.1	1688.6	1687.3	1686.5	1685.8	1684.7
1.5°	1689.6	1692.2	1693.8	1693.5	1692.7	1691.2	1689.1	1687.0	1685.2	1683.7	1682.4
2°	1689.6	1693.0	1694.8	1694.8	1694.0	1691.9	1689.1	1686.3	1683.9	1681.6	1679.8
2.5°	1689.4	1693.5	1695.8	1695.8	1695.0	1692.5	1689.1	1685.2	1682.1	1679.3	1676.7
3°	1688.9	1693.8	1696.3	1696.6	1695.8	1693.0	1688.6	1684.2	1680.3	1676.7	1673.9
3.5°	1688.1	1693.8	1696.9	1697.4	1696.3	1693.0	1688.1	1682.9	1678.0	1673.6	1670.5
4°	1687.3	1693.5	1697.1	1697.6	1696.9	1693.0	1687.6	1681.4	1675.7	1670.8	1667.2
4.5°	1686.3	1693.0	1697.1	1697.9	1697.1	1692.7	1686.5	1679.6	1673.1	1667.7	1663.3
5°	1685.0	1692.5	1696.9	1698.1	1696.9	1692.2	1685.2	1677.5	1670.3	1664.1	1659.4
5.5°	1683.4	1691.7	1696.3	1697.9	1696.9	1691.4	1683.9	1675.4	1667.2	1660.5	1655.6
6°	1681.6	1690.7	1696.1	1697.4	1696.3	1690.7	1682.1	1672.8	1664.1	1656.6	1651.2
6.5°	1679.6	1689.4	1695.0	1696.6	1695.6	1689.4	1680.3	1670.3	1660.5	1652.5	1646.5
7°	1677.8	1687.8	1694.0	1695.8	1694.8	1688.1	1678.3	1667.4	1656.8	1648.3	1641.6
7.5°	1675.2	1686.3	1692.7	1694.8	1693.5	1686.5	1676.2	1664.3	1653.0	1643.7	1636.7
8°	1672.6	1684.5	1691.2	1693.5	1692.2	1684.7	1673.6	1661.0	1648.8	1638.8	1631.6
8.5°	1669.8	1682.1	1689.6	1691.9	1690.7	1682.9	1670.8	1657.4	1644.2	1633.6	1626.1
9°	1666.9	1679.8	1687.8	1690.1	1688.9	1680.6	1667.9	1653.5	1639.8	1628.5	1620.5
9.5°	1663.6	1677.2	1685.5	1688.3	1687.0	1678.3	1664.8	1649.6	1634.9	1623.3	1614.8
10°	1660.2	1674.7	1683.2	1686.0	1685.0	1675.7	1661.5	1645.5	1630.0	1617.6	1608.8
10.5°	1656.6	1671.6	1680.6	1683.7	1682.4	1672.8	1657.9	1640.8	1624.6	1611.7	1602.4
11°	1652.7	1668.5	1677.8	1681.1	1679.8	1669.8	1654.0	1636.2	1619.2	1605.7	1595.9
11.5°	1648.6	1664.8	1674.9	1678.3	1677.0	1666.4	1650.1	1631.3	1613.5	1599.3	1589.5
12°	1644.5	1661.2	1671.6	1675.2	1674.1	1662.8	1646.0	1626.4	1607.5	1592.8	1582.5
12.5°	1639.8	1657.4	1667.9	1671.8	1670.8	1659.2	1641.4	1620.7	1601.4	1586.4	1575.3
13°	1635.2	1653.2	1664.3	1668.5	1667.4	1655.3	1636.7	1615.3	1594.9	1579.4	1568.3
13.5°	1630.0	1648.8	1660.2	1664.6	1663.6	1651.2	1631.8	1609.6	1588.4	1571.9	1560.6
14°	1624.8	1644.2	1656.3	1660.7	1659.7	1647.0	1626.9	1603.7	1581.2	1564.7	1552.8
14.5°	1619.4	1639.6	1651.9	1656.3	1655.6	1642.4	1621.5	1597.2	1574.2	1557.0	1545.1
15°	1614.0	1634.6	1647.3	1651.9	1651.2	1637.5	1616.1	1590.5	1567.0	1549.5	1537.1
15.5°	1608.1	1629.2	1642.4	1647.3	1646.5	1632.6	1610.1	1583.8	1559.3	1541.0	1528.3
16°	1601.9	1623.8	1637.5	1642.6	1641.6	1627.2	1604.4	1577.1	1551.5	1532.7	1519.8
16.5°	1595.4	1618.1	1632.1	1637.5	1636.7	1621.7	1598.0	1569.6	1543.3	1524.4	1511.0
17°	1589.0	1611.9	1626.6	1632.1	1631.6	1616.1	1591.5	1562.1	1535.3	1515.7	1502.2
17.5°	1582.0	1606.0	1620.7	1626.4	1625.9	1610.1	1584.8	1554.6	1526.5	1506.6	1492.7
18°	1575.0	1599.5	1614.8	1620.5	1620.2	1603.9	1577.9	1546.9	1517.7	1497.3	1483.4
18.5°	1567.8	1592.8	1608.6	1614.3	1614.3	1597.7	1570.9	1538.6	1508.7	1487.8	1473.6
19°	1560.3	1585.9	1601.9	1608.1	1608.1	1591.0	1563.4	1530.4	1499.4	1478.0	1464.0
19.5°	1552.6	1578.6	1595.2	1601.4	1601.6	1584.3	1555.9	1521.6	1490.1	1468.4	1453.7
20°	1544.6	1571.2	1588.2	1594.4	1594.9	1577.1	1547.9	1512.8	1480.6	1458.6	1443.6
20.5°	1536.3	1563.7	1580.7	1587.4	1587.9	1569.9	1540.2	1503.8	1470.7	1448.0	1433.3
21°	1527.8	1555.7	1573.2	1580.2	1580.7	1562.1	1531.9	1494.7	1460.4	1437.7	1422.7



TEST NUMBER: P775934

CATALOG NUMBER: HCDJBLS1525CSD-HCD41TRH-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1500.9	1530.6	1549.0	1556.4	1557.7	1538.1	1505.6	1465.8	1429.4	1405.2	1390.0
23°	1491.9	1521.6	1540.4	1547.9	1549.7	1529.6	1496.6	1456.0	1418.9	1394.3	1378.9
23.5°	1482.1	1512.6	1531.7	1539.7	1541.2	1521.1	1487.0	1445.7	1407.8	1383.0	1367.2
24°	1472.3	1503.3	1522.6	1530.6	1532.4	1512.0	1477.5	1435.6	1396.9	1371.6	1355.6
24.5°	1462.2	1493.5	1513.3	1521.6	1523.4	1502.8	1467.6	1424.8	1385.8	1360.3	1344.0
25°	1451.9	1483.9	1503.8	1512.3	1514.4	1493.5	1457.8	1414.5	1374.5	1348.9	1332.4
25.5°	1441.6	1474.1	1494.2	1503.0	1505.3	1484.2	1447.8	1403.6	1363.1	1336.8	1320.5
26°	1431.0	1463.8	1484.2	1493.2	1495.5	1474.1	1437.7	1392.8	1352.0	1324.9	1308.4
26.5°	1420.2	1453.5	1474.4	1483.4	1485.5	1464.0	1427.1	1381.4	1340.1	1312.8	1296.3
27°	1409.6	1442.9	1464.0	1473.3	1475.6	1453.7	1416.5	1370.6	1328.3	1300.9	1283.9
27.5°	1398.2	1432.0	1453.5	1463.3	1465.3	1443.4	1405.4	1359.2	1316.6	1288.8	1271.5
28°	1386.9	1421.2	1442.6	1452.7	1455.0	1432.5	1394.9	1347.9	1304.8	1276.4	1259.1
28.5°	1375.5	1410.3	1431.8	1441.8	1444.4	1422.2	1383.8	1336.0	1292.6	1264.3	1246.2
29°	1363.9	1399.0	1420.7	1431.0	1433.6	1411.4	1372.4	1324.4	1280.8	1251.9	1233.5
29.5°	1352.0	1387.6	1409.6	1420.2	1422.7	1400.3	1360.8	1312.8	1268.6	1239.0	1220.9
30°	1340.1	1375.8	1398.0	1408.5	1411.6	1388.7	1349.7	1301.2	1256.8	1226.6	1207.7
30.5°	1328.3	1364.1	1386.6	1397.7	1400.3	1377.3	1337.8	1289.0	1244.1	1213.9	1194.6
31°	1315.9	1352.5	1374.7	1386.1	1388.9	1365.9	1325.9	1276.9	1231.7	1201.0	1181.1
31.5°	1303.7	1340.1	1363.1	1374.2	1377.0	1354.1	1313.8	1264.8	1219.3	1188.1	1167.7
32°	1291.1	1328.0	1350.7	1362.1	1365.2	1341.9	1302.2	1252.9	1206.9	1174.9	1154.0
32.5°	1278.7	1315.6	1338.8	1350.5	1353.3	1330.1	1289.8	1240.5	1194.3	1161.5	1140.1
33°	1265.3	1303.0	1326.5	1338.3	1341.2	1318.2	1277.7	1228.4	1181.1	1148.1	1126.4
33.5°	1252.6	1290.6	1313.8	1325.9	1328.8	1305.5	1265.3	1215.2	1168.0	1134.4	1112.0
34°	1239.0	1277.7	1300.9	1313.6	1316.6	1293.4	1252.6	1202.6	1154.8	1121.0	1097.8
34.5°	1225.8	1264.3	1288.5	1300.9	1303.7	1280.8	1240.0	1189.4	1141.6	1106.8	1083.6
35°	1211.6	1250.6	1275.4	1288.3	1291.4	1267.9	1226.8	1176.2	1128.2	1092.9	1068.6
35.5°	1198.7	1237.4	1261.9	1274.8	1278.4	1254.7	1213.4	1163.1	1114.5	1078.7	1053.4
36°	1184.5	1223.7	1248.2	1261.9	1265.3	1241.5	1200.2	1149.6	1100.6	1064.2	1038.7
36.5°	1170.6	1209.8	1235.1	1248.2	1251.6	1228.1	1186.6	1136.2	1086.7	1049.2	1022.4
37°	1155.6	1195.6	1221.1	1234.3	1237.7	1214.2	1172.6	1122.0	1072.2	1033.2	1004.6
37.5°	1141.9	1181.4	1207.2	1220.6	1224.0	1200.5	1158.9	1107.8	1057.2	1015.7	985.7
38°	1126.2	1167.2	1192.8	1206.7	1210.3	1186.6	1144.5	1093.4	1041.0	997.4	965.9
38.5°	1110.7	1152.7	1178.8	1192.2	1196.1	1172.1	1129.8	1078.1	1023.7	978.5	945.2
39°	1094.4	1137.3	1164.6	1178.0	1181.9	1157.6	1115.1	1061.6	1005.4	958.9	924.3
39.5°	1078.9	1121.5	1149.6	1163.6	1167.5	1142.4	1099.6	1043.8	986.0	938.3	903.4
40°	1061.9	1105.8	1134.2	1148.1	1152.0	1127.4	1082.8	1025.8	964.8	917.3	882.2
40.5°	1044.1	1089.2	1118.2	1132.6	1136.7	1111.2	1065.0	1006.4	943.9	895.9	860.0
41°	1025.8	1072.0	1101.6	1116.9	1121.0	1095.2	1046.7	986.8	923.0	874.0	838.1
41.5°	1006.7	1053.4	1083.6	1099.6	1104.7	1078.1	1028.1	967.2	901.9	852.8	816.7
42°	987.0	1034.5	1065.0	1081.8	1088.0	1060.3	1008.5	947.0	880.2	829.3	793.7
42.5°	966.1	1014.9	1045.9	1063.4	1070.4	1041.5	988.8	926.1	858.5	806.9	771.3
43°	943.9	994.5	1026.5	1044.1	1052.3	1021.9	968.7	904.2	837.3	784.7	748.0
43.5°	921.0	973.6	1006.9	1024.5	1033.0	1002.0	948.1	882.8	816.2	762.5	725.8



TEST NUMBER: P775934

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRH-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	850.2	909.1	945.7	963.8	971.5	938.0	883.8	817.7	750.9	695.1	656.9
45.5°	825.7	887.1	925.3	943.2	948.8	915.8	861.6	796.0	729.7	673.2	633.9
46°	801.2	864.4	903.9	922.0	926.4	892.8	839.1	774.1	707.5	651.0	610.7
46.5°	777.2	840.7	882.5	900.3	903.1	869.9	816.4	752.1	685.8	629.0	588.2
47°	752.9	817.7	861.1	878.6	879.1	846.1	792.9	729.7	664.1	607.1	565.5
47.5°	728.9	794.2	838.4	856.4	855.4	822.1	769.7	707.8	642.5	586.4	543.1
48°	704.7	770.7	816.2	834.0	830.9	798.1	746.2	685.8	620.3	564.2	521.1
48.5°	680.9	747.0	793.7	811.3	806.9	773.8	722.7	663.9	598.8	542.8	500.0
49°	657.7	723.5	771.8	788.5	782.6	749.6	699.0	641.2	577.4	521.4	478.0
49.5°	633.9	699.2	748.5	765.6	758.9	725.3	675.5	619.5	556.2	500.7	457.1
50°	611.2	675.5	725.6	741.8	735.1	700.8	651.5	596.8	534.6	480.1	436.2
50.5°	587.5	652.0	702.3	718.1	712.4	676.5	627.7	574.8	513.4	459.4	416.1
51°	565.0	628.8	679.4	694.8	687.9	652.8	604.0	552.1	492.7	439.3	396.2
51.5°	542.3	605.0	655.6	670.8	664.6	629.8	581.0	530.9	472.4	419.4	377.4
52°	520.4	582.6	633.2	648.1	641.9	606.6	557.8	509.0	452.0	399.6	358.3
52.5°	497.9	559.9	609.4	624.1	619.7	582.6	535.1	487.1	431.6	379.9	339.9
53°	476.2	537.1	585.9	600.9	596.0	559.6	512.1	465.4	411.7	360.8	321.4
53.5°	454.5	514.4	562.2	576.6	573.0	537.1	490.2	444.7	392.1	342.3	303.8
54°	433.4	492.2	539.2	553.9	550.6	514.7	467.4	423.6	373.0	323.7	286.8
54.5°	412.2	470.8	516.2	530.7	529.4	492.5	446.3	402.4	353.6	305.6	270.0
55°	391.8	449.1	493.5	508.5	506.9	470.3	424.9	382.3	335.0	288.3	254.2
55.5°	371.2	427.7	470.8	485.3	484.7	449.1	404.2	362.4	316.5	271.0	239.5
56°	351.8	406.8	448.1	464.1	463.1	427.4	383.6	342.5	298.4	254.5	224.6
56.5°	331.9	386.4	426.1	441.9	442.4	406.5	363.2	322.9	280.6	239.0	209.6
57°	313.4	366.0	403.4	420.2	420.7	385.9	343.6	304.3	263.3	223.8	194.9
57.5°	294.5	345.9	382.3	398.3	399.8	366.0	324.5	286.0	246.2	208.3	179.9
58°	276.4	326.5	361.4	378.4	379.7	346.4	305.9	267.7	230.2	193.1	166.7
58.5°	258.9	307.7	340.7	357.5	359.0	327.3	287.8	250.4	214.2	177.6	154.1
59°	241.9	288.3	320.3	337.1	339.4	308.7	269.7	234.1	198.2	163.6	141.7
59.5°	225.3	270.0	300.4	316.7	320.3	290.4	252.4	217.6	182.2	150.5	129.8
60°	208.8	252.2	281.1	298.1	301.2	272.3	236.7	201.3	167.3	137.6	118.7
60.5°	193.1	234.4	262.2	279.0	282.6	255.3	220.9	185.1	153.1	125.4	107.6
61°	177.8	217.1	243.9	259.9	264.3	239.3	205.2	170.4	139.4	113.6	97.3
61.5°	163.4	200.8	226.6	242.1	247.3	223.5	189.5	156.4	126.2	102.7	87.8
62°	149.4	184.8	209.6	224.6	230.5	207.5	173.7	142.7	113.8	92.1	78.7
62.5°	135.5	169.3	192.8	207.3	213.7	191.8	159.5	129.8	101.4	82.3	69.9
63°	122.1	154.1	176.8	190.7	196.9	175.8	145.8	116.9	90.3	72.8	61.4
63.5°	108.9	139.6	161.6	174.2	180.2	161.6	132.9	105.3	79.8	64.3	53.9
64°	96.0	125.4	146.9	159.0	164.7	147.6	120.3	94.5	69.9	56.0	47.0
64.5°	84.9	111.8	132.9	144.0	150.0	134.0	108.9	84.1	61.2	48.5	40.3
65°	74.1	98.9	119.5	130.1	136.0	121.3	97.6	74.3	52.9	41.8	34.6
65.5°	63.2	87.8	106.6	116.7	122.3	108.9	87.2	65.3	44.9	35.6	30.5
66°	52.4	77.4	94.5	103.5	109.2	97.1	76.9	57.0	38.2	30.2	26.3





TEST NUMBER: P775934

CATALOG NUMBER: HCDJBLS1525CSD-HCD41TRH-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	27.1	47.0	64.8	71.8	74.6	65.6	51.4	35.6	25.0	19.9	13.9
68°	21.7	39.5	54.7	62.2	64.5	56.5	43.9	30.2	21.4	16.3	12.1
68.5°	17.8	32.8	44.9	52.4	55.2	48.3	37.2	26.8	17.8	12.9	11.1
69°	15.5	27.1	37.2	42.6	46.5	40.8	31.5	23.7	14.2	11.6	10.3
69.5°	14.2	22.5	30.5	35.4	38.7	34.1	27.6	20.4	13.2	10.8	9.6
70°	13.4	18.6	24.8	29.2	32.3	29.9	24.0	17.0	12.4	10.1	9.0
70.5°	12.6	15.5	19.9	23.7	28.4	25.8	20.4	13.9	11.6	9.6	8.5
71°	11.9	13.2	16.3	19.4	24.5	21.7	16.8	12.6	10.8	9.0	7.7
71.5°	11.1	12.1	13.7	16.0	20.6	17.6	13.2	11.9	10.1	8.3	7.2
72°	10.3	11.4	12.1	13.4	16.8	13.4	12.1	11.1	9.6	7.7	7.0
72.5°	9.8	10.6	11.1	12.1	12.9	12.1	11.4	10.3	8.8	7.2	6.5
73°	9.3	9.8	10.3	11.4	11.9	11.4	10.6	9.8	8.3	6.7	5.9
73.5°	8.5	9.3	9.8	10.6	11.1	10.6	9.8	9.0	7.7	6.5	5.7
74°	8.0	8.8	9.3	9.8	10.3	9.8	9.3	8.5	7.2	5.9	5.2
74.5°	7.5	8.0	8.5	9.3	9.8	9.3	8.5	8.0	6.7	5.4	4.9
75°	7.0	7.5	8.0	8.5	9.0	8.5	8.0	7.5	6.5	5.2	4.4
75.5°	6.5	7.0	7.5	8.0	8.5	8.0	7.5	7.0	5.9	4.9	4.1
76°	6.2	6.7	7.0	7.5	8.0	7.5	7.0	6.5	5.4	4.4	3.9
76.5°	5.7	6.2	6.5	7.0	7.5	7.0	6.5	5.9	5.2	4.1	3.6
77°	5.4	5.7	6.2	6.5	7.0	6.5	6.2	5.7	4.9	3.9	3.4
77.5°	4.9	5.4	5.7	6.2	6.5	6.2	5.7	5.2	4.4	3.6	3.1
78°	4.6	5.2	5.4	5.7	5.9	5.7	5.2	4.9	4.1	3.4	2.8
78.5°	4.4	4.6	4.9	5.4	5.7	5.4	4.9	4.4	3.9	3.1	2.6
79°	3.9	4.4	4.6	4.9	5.2	4.9	4.6	4.1	3.6	2.8	2.3
79.5°	3.6	4.1	4.4	4.6	4.9	4.6	4.1	3.9	3.4	2.6	2.3
80°	3.4	3.6	3.9	4.4	4.6	4.4	3.9	3.6	3.1	2.3	2.1
80.5°	3.1	3.4	3.6	4.1	4.1	4.1	3.6	3.4	2.8	2.1	1.8
81°	2.8	3.1	3.4	3.9	3.9	3.6	3.4	3.1	2.6	1.8	1.5
81.5°	2.6	2.8	3.1	3.6	3.6	3.4	3.1	2.8	2.3	1.5	1.5
82°	2.1	2.6	2.8	3.4	3.4	3.1	2.8	2.6	2.1	1.3	1.3
82.5°	1.8	2.3	2.8	3.1	3.1	3.1	2.6	2.3	1.5	1.0	1.3
83°	1.5	2.1	2.6	2.8	2.8	2.8	2.6	2.1	1.3	1.0	1.0
83.5°	1.0	1.8	2.3	2.6	2.6	2.6	2.3	1.8	1.0	0.8	1.0
84°	0.8	1.5	2.1	2.3	2.6	2.3	2.1	1.5	0.8	0.5	0.8
84.5°	0.5	1.3	1.8	2.1	2.3	2.1	1.8	1.3	0.5	0.5	0.5
85°	0.5	1.0	1.8	2.1	2.1	2.1	1.8	1.0	0.3	0.5	0.5
85.5°	0.3	1.0	1.5	1.8	1.8	1.8	1.5	1.0	0.3	0.3	0.3
86°	0.3	0.8	1.5	1.5	1.8	1.5	1.3	0.8	0.3	0.3	0.3
86.5°	0.3	0.8	1.3	1.5	1.5	1.5	1.3	0.8	0.3	0.3	0.0
87°	0.3	0.8	1.0	1.3	1.3	1.3	1.0	0.5	0.0	0.0	0.0
87.5°	0.0	0.5	1.0	1.0	1.3	1.0	0.8	0.5	0.0	0.0	0.0
88°	0.0	0.3	0.8	1.0	1.0	1.0	0.8	0.3	0.0	0.0	0.0
88.5°	0.0	0.3	0.5	0.8	0.8	0.8	0.5	0.3	0.0	0.0	0.0



TEST NUMBER: P775934

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRH-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	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.3



TEST NUMBER: P775934

CATALOG NUMBER: HCDJBL1525CSD-HCD41TRH-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1688.1	1688.1	1688.1	1688.1	1688.1	1688.1
0.5°	1686.0	1685.2	1685.2	1686.3	1687.3	1689.1
1°	1683.7	1682.9	1683.4	1685.0	1687.0	1689.4
1.5°	1681.1	1680.3	1681.1	1683.4	1686.5	1689.6
2°	1678.3	1677.5	1678.8	1681.9	1685.5	1689.6
2.5°	1675.4	1674.7	1676.2	1679.8	1684.5	1689.4
3°	1672.1	1671.3	1673.6	1677.8	1683.2	1688.9
3.5°	1668.5	1667.9	1670.5	1675.4	1681.6	1688.1
4°	1664.8	1664.1	1667.4	1672.8	1679.8	1687.3
4.5°	1661.0	1660.2	1663.8	1670.0	1678.0	1686.3
5°	1656.8	1656.1	1660.2	1667.2	1675.9	1685.0
5.5°	1652.5	1651.7	1656.3	1664.1	1673.4	1683.4
6°	1647.8	1647.3	1652.2	1660.7	1670.8	1681.6
6.5°	1643.2	1642.6	1647.8	1657.1	1667.9	1679.6
7°	1638.3	1637.5	1643.2	1653.0	1665.1	1677.8
7.5°	1633.1	1632.3	1638.5	1648.8	1661.7	1675.2
8°	1627.7	1626.6	1633.4	1644.5	1658.7	1672.6
8.5°	1622.0	1621.2	1628.2	1640.1	1655.0	1669.8
9°	1616.3	1615.3	1622.5	1635.4	1651.2	1666.9
9.5°	1610.4	1609.1	1616.8	1630.3	1646.8	1663.6
10°	1604.2	1602.6	1610.9	1625.1	1642.6	1660.2
10.5°	1597.7	1596.2	1604.7	1619.9	1638.3	1656.6
11°	1591.0	1589.5	1598.5	1614.5	1633.6	1652.7
11.5°	1584.1	1582.5	1591.8	1608.6	1628.7	1648.6
12°	1577.1	1575.3	1585.1	1602.4	1623.5	1644.5
12.5°	1569.6	1567.5	1577.9	1595.9	1617.9	1639.8
13°	1562.1	1560.1	1570.4	1589.7	1612.4	1635.2
13.5°	1554.4	1552.1	1562.9	1582.8	1606.8	1630.0
14°	1546.4	1543.8	1555.1	1575.8	1600.8	1624.8
14.5°	1538.1	1535.5	1546.9	1568.6	1594.4	1619.4
15°	1529.6	1526.5	1538.6	1561.3	1587.9	1614.0
15.5°	1521.1	1517.5	1529.9	1553.6	1581.0	1608.1
16°	1512.0	1508.4	1521.3	1545.6	1574.0	1601.9
16.5°	1502.8	1499.1	1512.0	1537.6	1567.0	1595.4
17°	1493.5	1489.6	1503.0	1529.3	1559.8	1589.0
17.5°	1483.9	1479.8	1493.5	1520.8	1551.8	1582.0
18°	1474.4	1469.7	1483.9	1511.8	1544.0	1575.0
18.5°	1464.3	1459.4	1473.8	1502.8	1535.8	1567.8
19°	1454.2	1449.1	1463.8	1493.5	1527.5	1560.3
19.5°	1443.6	1438.7	1453.7	1484.2	1519.0	1552.6
20°	1433.1	1427.9	1443.4	1474.4	1510.2	1544.6
20.5°	1422.5	1416.8	1432.8	1464.5	1501.2	1536.3
21°	1411.6	1405.7	1421.7	1454.5	1491.9	1527.8

TEST NUMBER: P775934

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRH-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1378.1	1371.6	1388.9	1423.3	1463.3	1500.9
23°	1366.5	1360.0	1377.3	1412.7	1453.2	1491.9
23.5°	1355.1	1348.4	1366.2	1401.8	1443.1	1482.1
24°	1343.2	1336.5	1354.6	1390.5	1432.5	1472.3
24.5°	1331.4	1324.7	1343.0	1379.4	1422.2	1462.2
25°	1319.5	1312.5	1330.8	1368.0	1411.4	1451.9
25.5°	1307.1	1300.4	1319.2	1356.7	1400.5	1441.6
26°	1295.0	1288.5	1307.1	1345.0	1389.7	1431.0
26.5°	1282.6	1276.1	1295.2	1333.4	1378.6	1420.2
27°	1270.2	1264.0	1283.1	1321.6	1367.2	1409.6
27.5°	1257.8	1251.3	1271.0	1309.7	1355.9	1398.2
28°	1245.2	1238.7	1258.6	1297.5	1344.0	1386.9
28.5°	1232.2	1226.1	1245.9	1285.4	1332.4	1375.5
29°	1219.9	1213.7	1233.8	1273.0	1320.3	1363.9
29.5°	1206.9	1200.8	1221.1	1260.6	1308.4	1352.0
30°	1193.8	1187.6	1208.5	1248.2	1296.3	1340.1
30.5°	1180.4	1174.4	1195.6	1235.3	1283.6	1328.3
31°	1166.9	1161.3	1182.2	1222.7	1271.0	1315.9
31.5°	1153.5	1147.8	1169.0	1209.5	1258.6	1303.7
32°	1139.6	1134.4	1155.8	1196.4	1245.7	1291.1
32.5°	1126.2	1120.7	1142.4	1182.9	1232.8	1278.7
33°	1112.2	1106.8	1128.7	1169.8	1219.1	1265.3
33.5°	1098.3	1093.4	1115.3	1156.1	1205.7	1252.6
34°	1084.1	1079.2	1101.6	1142.4	1192.2	1239.0
34.5°	1069.6	1064.7	1087.2	1128.2	1178.0	1225.8
35°	1054.7	1050.0	1072.7	1114.5	1164.4	1211.6
35.5°	1039.9	1035.0	1058.3	1100.1	1150.2	1198.7
36°	1024.7	1018.8	1043.3	1085.6	1136.0	1184.5
36.5°	1007.4	1001.7	1027.0	1069.9	1121.5	1170.6
37°	988.8	982.9	1009.0	1054.4	1106.0	1155.6
37.5°	969.7	962.8	990.1	1037.1	1090.3	1141.9
38°	949.4	942.1	970.0	1018.8	1074.3	1126.2
38.5°	928.7	921.0	949.4	999.7	1057.8	1110.7
39°	907.5	899.8	928.4	980.3	1040.2	1094.4
39.5°	885.9	878.1	907.0	960.7	1021.6	1078.9
40°	863.4	855.7	885.9	940.1	1001.7	1061.9
40.5°	841.7	833.2	863.9	919.2	982.1	1044.1
41°	818.7	811.0	842.7	898.0	961.7	1025.8
41.5°	796.3	788.8	820.8	876.0	941.1	1006.7
42°	773.3	766.9	799.1	854.1	920.2	987.0
42.5°	750.9	744.4	777.4	832.2	898.0	966.1
43°	727.4	721.9	756.0	809.5	875.8	943.9
43.5°	704.9	700.0	734.1	786.5	852.8	921.0



TEST NUMBER: P775934

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRH-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	637.0	633.7	667.5	718.1	782.9	850.2
45.5°	614.6	611.7	645.3	694.3	759.1	825.7
46°	592.4	589.8	622.3	672.4	735.1	801.2
46.5°	570.7	567.9	599.3	649.2	710.3	777.2
47°	548.2	546.2	577.7	626.2	686.1	752.9
47.5°	526.8	524.7	554.9	602.7	661.8	728.9
48°	505.9	503.6	533.5	580.5	637.8	704.7
48.5°	484.7	482.7	511.6	557.0	613.3	680.9
49°	463.8	462.3	489.9	535.1	589.8	657.7
49.5°	442.9	441.6	469.0	512.4	566.3	633.9
50°	422.8	421.5	447.8	490.2	542.6	611.2
50.5°	402.7	401.4	426.9	466.7	519.3	587.5
51°	383.3	382.0	406.0	446.3	496.9	565.0
51.5°	364.5	362.9	386.1	424.3	474.7	542.3
52°	345.1	344.1	366.3	403.2	453.0	520.4
52.5°	326.8	325.7	346.9	381.0	431.3	497.9
53°	308.7	307.4	327.5	361.6	410.1	476.2
53.5°	291.2	289.6	308.4	341.5	389.8	454.5
54°	274.1	272.3	289.9	321.1	369.4	433.4
54.5°	257.3	255.5	272.3	302.0	350.0	412.2
55°	242.4	238.8	254.8	283.4	330.6	391.8
55.5°	227.1	222.8	237.2	265.3	311.8	371.2
56°	212.2	206.8	220.7	247.8	293.5	351.8
56.5°	196.9	191.5	204.4	230.5	275.9	331.9
57°	181.7	176.8	188.9	214.0	258.4	313.4
57.5°	168.3	162.4	173.7	198.5	241.3	294.5
58°	155.4	148.7	159.0	183.3	224.8	276.4
58.5°	142.7	135.5	145.3	168.8	209.1	258.9
59°	131.1	123.1	131.9	154.6	193.6	241.9
59.5°	119.2	111.2	119.5	141.4	178.6	225.3
60°	108.2	99.9	107.6	129.1	164.2	208.8
60.5°	97.6	89.3	96.3	116.7	150.2	193.1
61°	88.0	80.3	87.0	105.1	136.8	177.8
61.5°	78.2	71.2	78.0	94.5	124.2	163.4
62°	69.4	62.5	68.9	85.7	112.3	149.4
62.5°	61.4	53.4	59.9	76.7	100.4	135.5
63°	53.9	46.2	50.8	67.9	89.3	122.1
63.5°	46.5	40.0	43.9	59.1	80.0	108.9
64°	40.0	34.1	37.7	50.3	71.0	96.0
64.5°	34.1	29.4	32.5	43.4	61.9	84.9
65°	30.5	25.0	27.9	37.2	52.9	74.1
65.5°	26.8	21.4	24.0	31.5	45.4	63.2
66°	23.2	18.1	20.4	26.6	38.5	52.4



TEST NUMBER: P775934

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRH-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	12.6	12.1	13.2	15.7	22.5	27.1
68°	11.4	11.4	11.9	13.7	18.8	21.7
68.5°	10.6	10.6	11.1	12.1	15.7	17.8
69°	10.1	9.8	10.3	11.4	13.7	15.5
69.5°	9.3	9.3	9.8	10.6	12.4	14.2
70°	8.8	8.8	9.3	10.1	11.6	13.4
70.5°	8.3	8.3	8.5	9.3	10.8	12.6
71°	7.5	7.5	8.0	8.8	10.1	11.9
71.5°	7.0	7.0	7.5	8.3	9.6	11.1
72°	6.7	6.7	7.0	7.7	9.0	10.3
72.5°	6.2	6.2	6.5	7.2	8.3	9.8
73°	5.7	5.7	5.9	6.7	7.7	9.3
73.5°	5.4	5.4	5.7	6.2	7.2	8.5
74°	4.9	4.9	5.2	5.7	6.7	8.0
74.5°	4.6	4.6	4.9	5.4	6.2	7.5
75°	4.4	4.4	4.6	5.2	5.9	7.0
75.5°	4.1	4.1	4.4	4.6	5.4	6.5
76°	3.9	3.9	3.9	4.4	5.2	6.2
76.5°	3.6	3.6	3.6	4.1	4.6	5.7
77°	3.4	3.4	3.4	3.9	4.4	5.4
77.5°	3.1	3.1	3.1	3.6	4.1	4.9
78°	2.8	2.8	3.1	3.4	3.9	4.6
78.5°	2.6	2.6	2.8	3.1	3.4	4.4
79°	2.3	2.3	2.6	2.8	3.1	3.9
79.5°	2.3	2.3	2.3	2.6	2.8	3.6
80°	2.1	2.1	2.1	2.3	2.6	3.4
80.5°	1.8	1.8	2.1	2.1	2.3	3.1
81°	1.8	1.8	1.8	1.8	2.1	2.8
81.5°	1.5	1.5	1.5	1.8	1.8	2.6
82°	1.3	1.3	1.5	1.5	1.5	2.1
82.5°	1.3	1.3	1.3	1.3	1.3	1.8
83°	1.0	1.0	1.0	1.3	1.0	1.5
83.5°	1.0	0.8	1.0	1.0	1.0	1.0
84°	0.8	0.8	0.8	1.0	0.8	0.8
84.5°	0.5	0.5	0.5	0.8	0.8	0.5
85°	0.5	0.3	0.5	0.5	0.5	0.5
85.5°	0.3	0.3	0.3	0.5	0.5	0.3
86°	0.0	0.0	0.0	0.3	0.3	0.3
86.5°	0.0	0.0	0.0	0.0	0.3	0.3
87°	0.0	0.0	0.0	0.0	0.0	0.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.3	0.0	0.0	0.0	0.0
88.5°	0.3	0.3	0.3	0.0	0.0	0.0



TEST NUMBER: P775934

CATALOG NUMBER: HCDJBL1525CSD-HCD41TRH-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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Scaled Data Report



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Scaled Data Report





21.5°	1519.0	1547.7	1565.5	1572.2	1573.5	1554.4	1523.1	1485.2	1450.4	1426.9	1411.9
22°	1510.2	1539.1	1557.5	1564.4	1565.5	1546.4	1514.4	1475.4	1440.0	1416.3	1401.1



44°	897.7	952.4	987.0	1004.6	1013.1	981.1	927.2	861.6	794.2	739.5	702.3
44.5°	874.5	931.0	966.6	984.2	993.0	959.7	905.5	839.9	772.5	717.6	679.4



66.5°	41.6	67.4	84.7	91.4	97.1	86.0	67.6	49.0	32.3	26.6	22.2
67°	33.6	57.0	74.6	81.6	85.4	75.4	59.1	41.8	28.7	23.2	18.1



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



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21.5°	1400.3	1394.6	1410.9	1444.4	1482.6	1519.0
22°	1389.2	1383.0	1400.0	1433.8	1472.8	1510.2



44°	682.2	678.1	711.9	763.8	830.1	897.7
44.5°	659.7	655.6	689.2	740.3	807.1	874.5

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66.5°	19.9	15.7	17.3	22.2	32.5	41.6
67°	16.3	13.4	15.0	18.6	27.1	33.6

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Scaled Data Report



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

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)