

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: P775997

Luminaire Tested: HCDJBL51525CSD-HCD4TRMW-2500lm-3500K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775997
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-3500K
Description: 4 INCH ROUND MEDIUM MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

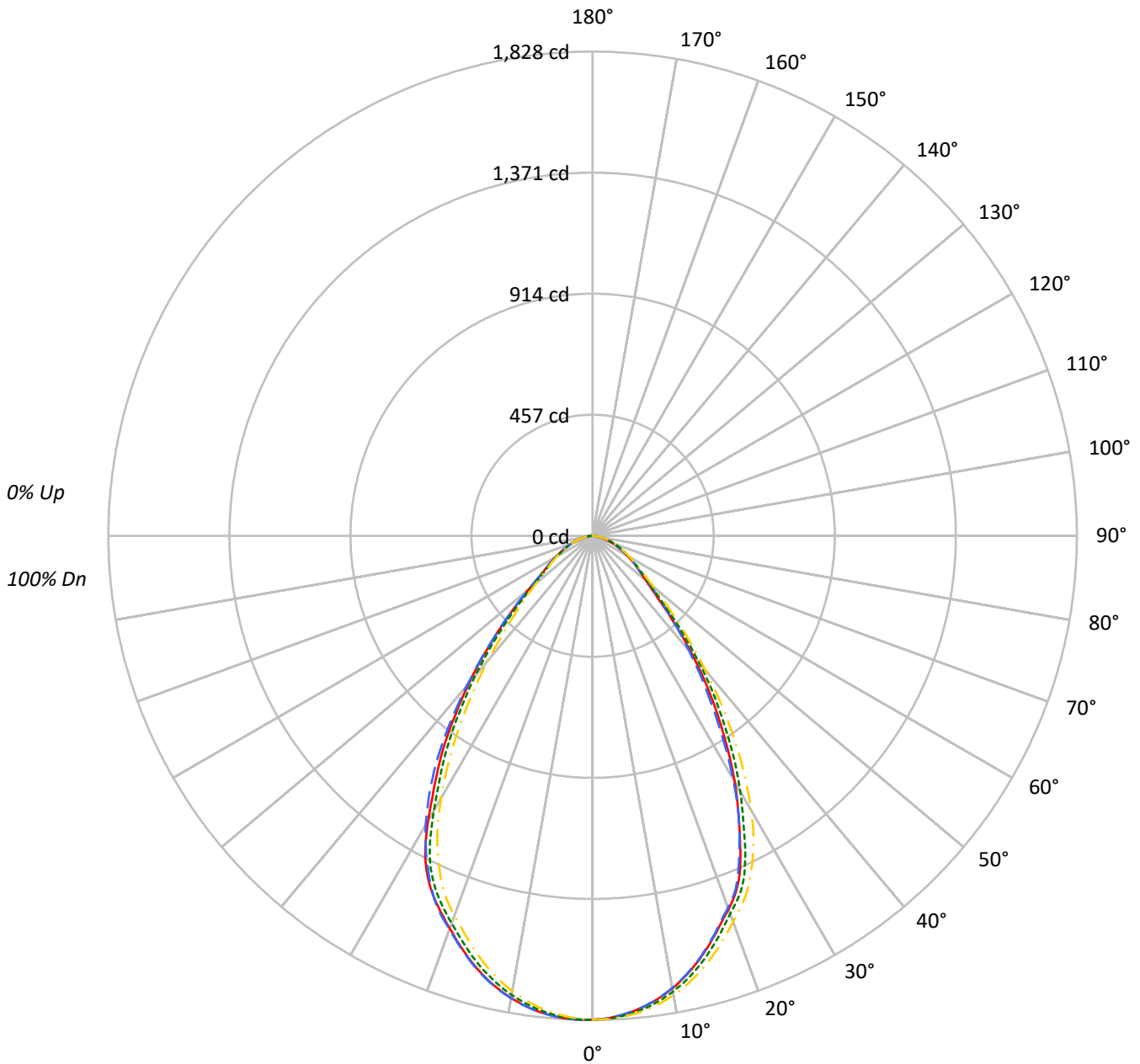
Lumens per Lamp: N/A
Luminaire Lumens: 2548.6 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.02
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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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Luminous Intensity Polar Plot





TEST NUMBER: P775997

CATALOG NUMBER: HCDJBLS1525CSD-HCD4TRMW-2500lm-3500K

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								
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°	229940	229940	229940	229940
5°	227458	228317	229580	228886
10°	221705	223302	226446	224938
15°	212176	214691	220189	217870
20°	200876	203461	211256	208470
25°	183170	189169	202083	198431
30°	155913	161885	180399	174092
35°	125888	132632	151238	144877
40°	95778	102695	119090	113110
45°	67650	73541	87690	82155
50°	51590	54644	61653	57444
55°	43948	45835	47371	45177
60°	38435	40524	41153	39391
65°	32846	35764	35169	34335
70°	27855	31829	29989	30430
75°	22416	28397	25139	26841
80°	15654	24714	19278	22902
85°	5487	19494	8664	16606

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 202.5°
 Vertical Angle: 45°
 Luminance: 88900 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.9	6.7
10°-20°	465.5	18.3
20°-30°	631.1	24.8
30°-40°	560.5	22.0
40°-50°	343.2	13.5
50°-60°	190.3	7.5
60°-70°	116.8	4.6
70°-80°	57.7	2.3
80°-90°	12.5	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°	1267.5	49.7
0°-40°	1828.0	71.7
0°-60°	2361.6	92.7
0°-90°	2548.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2548.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1827	1827	1827	1827	1827	
5°	1800	1807	1817	1812	1800	170
15°	1628	1648	1690	1672	1628	457
25°	1319	1362	1455	1429	1319	599
35°	819	863	984	943	819	511
45°	380	413	493	462	380	303
55°	200	209	216	206	200	181
65°	110	120	118	115	110	110
75°	46	58	52	55	46	49
85°	4	14	6	12	4	7
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°	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1
0.5°	1826.4	1826.6	1826.1	1825.1	1827.6	1826.9	1826.9	1827.4	1827.9	1828.4	1827.9
1°	1825.1	1825.4	1824.9	1823.9	1826.9	1826.6	1826.6	1827.6	1828.1	1828.6	1828.1
1.5°	1823.4	1823.4	1822.9	1822.1	1825.6	1825.9	1825.9	1827.4	1828.1	1828.6	1828.1
2°	1821.4	1821.1	1820.6	1820.1	1824.1	1824.6	1825.1	1826.4	1827.6	1828.4	1827.6
2.5°	1818.8	1818.6	1818.1	1817.6	1822.1	1823.1	1823.9	1825.6	1826.9	1827.6	1826.9
3°	1815.8	1815.8	1815.3	1814.8	1819.9	1821.1	1822.4	1824.4	1825.6	1826.4	1825.6
3.5°	1812.6	1812.6	1811.8	1811.8	1817.3	1818.8	1820.4	1822.6	1824.1	1824.9	1824.1
4°	1809.1	1808.8	1808.1	1808.3	1814.3	1816.3	1817.8	1820.6	1822.4	1823.1	1822.4
4.5°	1805.3	1804.8	1804.1	1804.6	1811.1	1813.1	1815.1	1818.1	1820.1	1821.1	1820.1
5°	1800.5	1800.3	1799.8	1800.3	1807.3	1809.8	1812.1	1815.3	1817.3	1818.6	1817.6
5.5°	1795.8	1795.3	1794.8	1795.5	1802.8	1805.8	1808.3	1812.3	1814.3	1815.6	1814.8
6°	1790.8	1790.0	1789.5	1790.3	1798.3	1801.8	1804.8	1808.8	1811.1	1812.3	1811.8
6.5°	1785.0	1784.2	1784.2	1785.0	1793.3	1797.0	1800.5	1804.8	1807.6	1808.8	1808.3
7°	1779.2	1778.5	1778.2	1779.2	1788.0	1792.0	1796.0	1800.5	1803.8	1805.1	1804.3
7.5°	1772.7	1771.7	1771.5	1773.0	1782.2	1786.8	1791.0	1796.0	1799.3	1800.8	1800.0
8°	1766.2	1765.2	1764.7	1766.2	1775.7	1781.0	1785.8	1791.0	1794.3	1796.0	1795.3
8.5°	1758.9	1757.9	1757.4	1758.9	1769.5	1775.0	1780.0	1785.8	1789.3	1790.8	1790.5
9°	1751.4	1750.1	1749.6	1751.7	1762.4	1768.5	1774.0	1779.7	1784.0	1785.8	1785.2
9.5°	1743.1	1741.6	1741.4	1743.6	1754.9	1761.7	1767.4	1774.0	1778.2	1780.0	1779.5
10°	1734.9	1733.1	1732.8	1735.1	1747.4	1754.4	1760.7	1767.4	1772.0	1774.2	1773.5
10.5°	1726.1	1724.3	1724.1	1726.3	1739.4	1746.9	1753.4	1760.7	1765.2	1767.7	1767.2
11°	1716.8	1715.0	1714.5	1717.3	1730.3	1738.6	1745.6	1753.7	1758.4	1760.9	1760.4
11.5°	1707.0	1704.8	1704.8	1707.8	1721.8	1730.1	1737.9	1745.6	1751.4	1753.7	1753.4
12°	1697.0	1695.0	1694.7	1697.7	1712.5	1721.3	1729.3	1737.9	1743.9	1746.4	1745.6
12.5°	1686.5	1684.2	1684.2	1687.0	1702.3	1711.8	1720.3	1729.6	1735.6	1738.4	1737.6
13°	1675.7	1673.4	1672.9	1676.4	1692.2	1702.3	1711.3	1721.1	1727.3	1730.3	1729.6
13.5°	1663.9	1661.4	1661.9	1665.1	1681.9	1692.0	1701.8	1712.0	1718.6	1721.6	1721.1
14°	1652.9	1650.1	1649.9	1653.4	1670.9	1681.4	1691.5	1702.3	1709.5	1712.5	1711.5
14.5°	1640.8	1638.1	1637.8	1641.8	1659.4	1670.7	1681.4	1692.5	1700.2	1703.0	1702.0
15°	1628.5	1625.3	1625.0	1629.3	1647.8	1659.4	1670.9	1682.2	1690.0	1693.2	1692.2
15.5°	1615.8	1612.7	1612.7	1616.8	1635.6	1647.8	1659.6	1671.9	1679.7	1683.2	1682.4
16°	1602.7	1599.7	1599.5	1603.7	1623.3	1636.1	1648.3	1661.4	1669.4	1672.9	1671.9
16.5°	1589.7	1586.2	1586.2	1590.9	1610.7	1623.8	1636.8	1650.1	1658.6	1662.1	1661.1
17°	1576.6	1572.6	1572.9	1577.6	1597.7	1611.2	1625.0	1638.8	1647.3	1651.1	1650.4
17.5°	1563.3	1559.1	1559.1	1564.1	1584.4	1598.7	1612.7	1627.0	1636.1	1640.1	1638.8
18°	1549.3	1545.3	1545.0	1550.3	1571.4	1585.7	1600.5	1615.0	1624.5	1628.5	1627.5
18.5°	1536.3	1531.8	1531.3	1536.8	1557.8	1572.4	1587.7	1603.0	1612.7	1616.8	1615.8
19°	1523.7	1519.0	1518.2	1523.5	1544.3	1559.6	1574.9	1590.7	1601.0	1605.2	1604.0
19.5°	1511.7	1506.7	1505.9	1511.2	1531.5	1546.8	1562.1	1578.6	1588.7	1593.4	1592.4
20°	1499.9	1494.6	1494.1	1499.2	1519.2	1534.8	1550.6	1566.6	1577.4	1581.9	1581.4
20.5°	1487.4	1482.1	1481.6	1486.9	1507.2	1522.7	1538.5	1554.8	1565.6	1570.9	1570.4
21°	1474.8	1469.6	1469.3	1474.8	1495.1	1511.4	1527.0	1543.0	1554.3	1560.1	1559.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1429.7	1422.2	1421.7	1430.2	1457.3	1474.3	1490.9	1507.9	1519.5	1525.5	1524.7
23°	1411.1	1403.4	1401.6	1411.9	1442.2	1459.8	1476.8	1495.6	1507.7	1513.2	1511.2
23.5°	1391.3	1383.3	1380.1	1392.6	1424.9	1443.7	1462.3	1482.9	1495.4	1499.7	1497.2
24°	1369.0	1361.3	1357.0	1371.5	1405.6	1426.7	1446.5	1469.1	1482.6	1485.6	1481.9
24.5°	1345.0	1338.7	1333.9	1349.2	1385.1	1408.4	1429.7	1454.8	1469.1	1470.6	1466.1
25°	1319.1	1314.9	1310.4	1325.9	1362.3	1388.8	1412.2	1439.2	1455.3	1454.8	1449.3
25.5°	1293.8	1289.8	1287.5	1301.6	1338.4	1367.0	1393.6	1423.2	1440.5	1438.0	1431.5
26°	1268.2	1264.2	1265.0	1276.5	1313.6	1344.5	1374.8	1405.9	1424.2	1420.7	1413.7
26.5°	1242.7	1237.1	1242.2	1250.9	1287.0	1320.9	1354.7	1387.1	1406.6	1401.9	1395.4
27°	1217.3	1210.8	1218.6	1225.4	1261.0	1296.6	1335.2	1367.8	1388.1	1383.1	1377.6
27.5°	1193.3	1184.2	1194.5	1198.8	1235.9	1272.0	1314.9	1347.7	1367.8	1363.5	1359.5
28°	1169.4	1157.2	1168.7	1172.7	1210.8	1246.7	1293.6	1326.4	1345.7	1344.5	1340.4
28.5°	1145.9	1131.6	1142.1	1147.1	1186.5	1222.8	1271.2	1304.8	1321.4	1324.1	1321.6
29°	1121.3	1106.0	1114.8	1121.3	1162.4	1199.5	1247.2	1281.8	1295.8	1303.3	1302.3
29.5°	1097.5	1080.7	1087.4	1095.5	1138.3	1176.5	1222.6	1257.7	1269.2	1281.8	1281.8
30°	1072.9	1055.1	1059.6	1069.6	1114.0	1153.4	1197.0	1232.6	1241.4	1259.7	1260.7
30.5°	1048.1	1030.3	1031.3	1043.6	1090.2	1130.6	1171.2	1205.3	1213.1	1235.6	1237.9
31°	1022.3	1004.5	1003.7	1017.5	1066.1	1107.0	1144.4	1177.5	1185.0	1211.8	1215.1
31.5°	996.7	978.9	976.4	991.9	1041.1	1083.2	1117.3	1148.4	1157.9	1187.0	1190.8
32°	969.6	953.8	948.8	966.3	1016.5	1059.1	1091.2	1119.0	1132.3	1161.4	1166.9
32.5°	943.5	928.0	921.2	940.5	991.7	1034.5	1065.1	1090.0	1107.3	1134.3	1143.1
33°	917.9	902.4	894.6	915.4	965.3	1008.7	1037.6	1060.6	1082.4	1106.8	1119.3
33.5°	892.6	878.1	868.1	890.6	939.3	982.9	1010.0	1032.5	1057.9	1079.4	1094.0
34°	868.1	852.5	841.7	865.5	913.4	956.3	982.4	1006.5	1034.0	1052.6	1069.6
34.5°	843.5	827.4	815.9	840.5	888.4	929.0	955.3	979.1	1009.2	1025.5	1042.8
35°	819.4	801.9	789.8	815.6	863.3	901.7	928.0	951.5	984.4	999.7	1016.2
35.5°	795.8	778.0	765.3	790.8	839.5	875.6	901.1	925.2	958.3	974.4	988.4
36°	772.5	752.7	741.7	765.8	814.6	848.7	873.3	898.6	931.2	949.0	961.1
36.5°	748.7	728.1	718.6	740.2	791.3	822.9	847.0	872.1	904.4	923.5	932.7
37°	724.6	704.6	696.0	715.6	767.5	796.8	819.2	845.0	877.1	897.6	904.4
37.5°	700.6	681.0	673.5	691.0	743.9	771.8	792.3	818.2	850.0	872.8	876.6
38°	676.5	657.9	651.2	667.0	720.6	746.7	765.0	791.8	824.2	846.5	848.5
38.5°	652.4	634.6	628.8	644.6	697.0	722.1	738.9	766.0	799.9	820.7	819.9
39°	629.4	613.1	607.5	622.6	671.5	697.6	712.8	740.2	774.0	794.3	792.3
39.5°	605.8	591.5	586.5	601.0	648.2	673.0	688.5	715.9	749.7	768.3	764.7
40°	583.0	570.2	565.2	579.5	625.1	648.4	662.7	691.5	724.9	741.9	737.7
40.5°	560.9	549.4	545.4	558.9	601.0	622.8	638.1	668.2	702.6	716.1	710.6
41°	539.6	529.1	526.3	538.6	578.2	598.5	613.8	644.9	678.0	690.8	685.0
41.5°	518.0	509.0	507.5	519.0	556.1	574.7	591.0	622.6	652.9	665.7	659.9
42°	496.7	489.9	490.2	499.7	535.1	551.4	568.2	601.0	628.3	640.9	635.4
42.5°	476.4	471.6	472.9	480.9	513.5	528.3	546.6	579.5	605.5	616.8	611.5
43°	456.1	453.8	456.1	462.9	492.7	506.5	525.5	557.9	581.2	592.2	587.5
43.5°	436.0	436.3	439.3	445.3	471.9	485.4	505.7	537.3	557.9	568.4	564.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	380.1	388.4	393.4	396.9	413.2	427.5	447.3	475.9	492.7	499.5	497.5
45.5°	364.1	373.6	379.1	382.1	395.2	409.7	430.0	456.3	472.6	477.7	476.2
46°	349.0	359.6	365.8	368.1	377.9	392.2	412.7	437.3	452.6	456.3	455.6
46.5°	334.7	346.0	352.3	354.3	361.6	376.4	395.9	419.0	433.5	435.5	435.8
47°	321.7	333.0	340.0	341.0	346.8	360.6	380.1	401.4	414.7	415.0	416.5
47.5°	309.9	320.4	327.7	328.5	333.0	345.8	365.1	384.1	396.4	396.2	398.4
48°	299.4	309.2	315.9	316.7	319.9	332.2	351.0	368.1	379.1	378.1	380.4
48.5°	289.4	298.1	304.6	305.4	308.2	319.4	337.5	352.8	362.1	361.1	363.3
49°	280.3	287.8	294.6	294.6	297.6	307.9	324.2	338.0	345.5	344.5	346.8
49.5°	271.5	278.1	284.3	284.3	287.8	296.6	312.2	324.2	330.0	329.2	331.5
50°	263.5	268.8	274.6	274.6	279.1	286.3	300.4	310.9	314.9	314.7	316.4
50.5°	256.0	260.0	264.8	265.5	270.3	276.8	289.4	298.4	301.4	301.4	302.4
51°	248.7	252.0	256.3	256.8	262.0	268.0	278.8	286.6	288.6	288.8	289.4
51.5°	241.5	244.0	247.7	248.7	254.5	259.8	268.8	275.6	276.8	277.3	276.8
52°	234.7	236.4	239.7	240.7	247.5	251.7	259.5	265.3	265.8	266.3	265.3
52.5°	227.9	229.2	231.9	233.4	240.2	244.2	250.5	255.3	255.8	256.0	254.5
53°	221.4	222.7	224.7	226.2	233.2	236.9	242.2	246.0	246.7	246.5	244.5
53.5°	215.4	216.4	217.9	219.4	226.4	229.9	234.2	237.7	237.9	237.7	235.7
54°	209.9	210.6	211.6	213.1	220.1	223.7	226.7	229.7	229.9	229.4	227.7
54.5°	205.1	205.6	206.4	207.9	213.9	216.9	219.6	222.2	222.7	221.7	220.1
55°	200.3	200.8	201.6	202.8	208.9	211.9	214.1	215.4	215.9	215.1	214.6
55.5°	195.6	196.1	196.8	198.1	203.8	206.6	208.9	210.1	210.6	209.9	209.1
56°	190.8	191.3	192.1	193.1	198.8	201.6	203.6	204.9	205.1	204.4	203.6
56.5°	185.8	186.5	187.3	188.6	193.8	196.3	198.1	199.6	199.6	199.1	198.3
57°	181.0	181.8	182.5	183.5	189.3	191.3	192.8	194.1	194.1	193.6	192.8
57.5°	176.3	177.0	177.5	178.8	184.3	186.3	187.8	189.1	189.6	188.6	187.6
58°	171.5	172.3	172.8	174.0	179.5	181.5	182.8	184.0	184.3	183.5	182.3
58.5°	166.7	167.5	168.2	169.5	174.8	176.5	177.8	179.3	179.0	178.5	177.3
59°	162.2	163.0	163.7	165.0	170.0	171.8	173.0	174.3	173.8	173.3	172.3
59.5°	157.5	158.5	159.2	160.2	165.5	167.0	168.0	169.2	168.7	168.2	167.2
60°	152.7	154.2	154.7	156.0	161.0	162.7	163.5	164.5	163.5	163.5	162.5
60.5°	148.2	149.7	150.4	151.4	156.7	158.0	159.0	159.7	158.5	158.5	157.7
61°	143.7	145.2	146.2	147.2	152.2	153.7	154.5	155.2	153.7	153.7	153.2
61.5°	139.4	140.9	142.2	143.2	147.9	149.4	149.9	150.7	148.9	148.9	148.7
62°	134.9	136.7	138.2	138.9	143.7	145.2	145.7	146.4	144.2	144.4	144.4
62.5°	130.6	132.6	133.9	134.9	139.4	140.9	141.7	141.9	139.7	139.9	140.2
63°	126.4	128.4	130.1	131.1	135.4	136.9	137.4	137.7	135.1	135.4	135.9
63.5°	122.4	124.4	126.1	127.1	131.4	132.9	133.4	133.1	130.6	131.1	131.9
64°	118.3	120.4	122.6	123.4	127.6	128.9	129.4	128.9	126.4	126.9	127.9
64.5°	114.3	116.6	118.8	119.9	123.9	125.1	125.6	124.9	122.1	122.9	124.1
65°	110.3	112.6	115.3	116.1	120.1	121.4	121.9	120.9	118.1	118.8	120.1
65.5°	106.6	108.8	111.6	112.6	116.6	117.6	118.3	116.8	113.8	114.8	116.3
66°	102.8	105.3	108.1	109.1	112.8	114.1	114.6	113.1	110.1	111.1	112.8



TEST NUMBER: P775997

CATALOG NUMBER: HCDJBLS1525CSD-HCD4TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	92.0	94.5	97.8	99.0	102.6	103.6	104.1	101.8	98.8	99.8	102.1
68°	88.8	91.0	94.5	95.8	99.3	100.3	100.8	98.3	95.3	96.3	98.5
68.5°	85.5	88.0	91.5	92.5	96.0	97.0	97.3	94.8	91.5	92.8	95.3
69°	82.2	84.7	88.3	89.5	92.8	93.8	94.0	91.3	88.3	89.5	92.0
69.5°	79.0	81.5	85.3	86.5	89.8	90.8	90.8	88.0	84.7	86.3	88.8
70°	75.7	78.2	82.2	83.7	86.5	87.5	87.8	84.7	81.5	83.0	85.5
70.5°	72.5	75.0	79.2	80.7	83.7	84.5	84.7	81.5	78.2	79.7	82.5
71°	69.5	72.0	76.2	77.7	80.7	81.5	81.5	78.2	75.2	76.5	79.5
71.5°	66.4	69.0	73.2	75.0	77.7	78.7	78.5	75.0	72.0	73.5	76.5
72°	63.2	65.9	70.2	72.0	74.7	75.7	75.5	72.0	69.0	70.5	73.5
72.5°	60.2	62.9	67.4	69.2	72.0	73.0	72.7	69.0	65.9	67.4	70.7
73°	57.2	59.9	64.4	66.4	69.2	70.0	69.7	65.9	62.9	64.4	67.7
73.5°	54.4	56.9	61.7	63.7	66.4	67.2	66.7	62.9	59.9	61.4	64.9
74°	51.7	54.2	58.9	61.2	63.7	64.7	64.2	60.2	57.2	58.7	62.2
74.5°	48.9	51.4	56.2	58.4	60.9	61.9	61.2	57.4	54.4	55.9	59.4
75°	46.1	48.6	53.4	55.9	58.4	59.2	58.7	54.4	51.7	53.2	56.7
75.5°	43.4	45.9	50.9	53.2	55.9	56.7	55.9	51.9	48.9	50.4	54.2
76°	40.9	43.4	48.1	50.9	53.2	54.2	53.2	48.9	46.1	47.6	51.7
76.5°	38.4	40.6	45.6	48.1	50.6	51.7	50.6	46.4	43.6	45.1	48.9
77°	35.9	38.1	43.1	45.9	48.1	49.1	48.1	43.6	40.9	42.4	46.4
77.5°	33.3	35.6	40.6	43.4	45.9	46.9	45.6	41.1	38.4	39.9	43.9
78°	30.8	33.1	38.4	41.1	43.4	44.4	43.1	38.6	35.9	37.6	41.4
78.5°	28.3	30.6	35.9	38.6	41.1	41.9	40.6	36.1	33.6	35.1	39.1
79°	26.1	28.1	33.6	36.4	38.6	39.6	38.4	33.6	31.1	32.6	36.9
79.5°	23.8	25.8	31.1	34.1	36.4	37.4	36.1	31.3	28.8	30.1	34.4
80°	21.6	23.6	28.8	31.8	34.1	35.1	33.6	28.8	26.6	27.8	32.1
80.5°	19.3	21.3	26.8	29.8	32.1	32.8	31.6	26.6	24.3	25.6	29.8
81°	17.1	19.1	24.6	27.6	29.8	30.6	29.3	24.3	22.1	23.6	27.8
81.5°	15.0	16.8	22.6	25.3	27.6	28.6	27.1	22.3	20.1	21.3	25.6
82°	12.8	14.8	20.6	23.3	25.6	26.3	25.1	20.3	17.8	19.1	23.6
82.5°	10.8	12.8	18.6	21.3	23.3	24.3	23.1	18.3	15.8	17.1	21.8
83°	8.8	11.0	16.8	19.3	21.6	22.3	21.3	16.3	13.5	14.8	20.1
83.5°	7.5	9.3	14.8	17.3	19.6	20.3	19.3	14.0	11.5	13.0	18.1
84°	6.3	8.3	13.3	15.5	17.6	18.3	17.3	12.3	9.5	11.3	16.3
84.5°	5.0	7.3	11.5	13.5	15.5	16.3	15.5	10.8	7.8	9.5	14.5
85°	3.8	6.0	9.8	11.5	13.5	14.3	13.5	9.3	6.0	8.3	12.8
85.5°	3.0	5.0	8.3	9.8	11.5	12.5	12.0	8.0	5.0	7.3	11.0
86°	2.3	4.0	6.8	8.0	9.8	10.8	10.3	7.0	4.3	6.3	9.5
86.5°	1.8	3.0	5.3	6.3	8.0	8.8	8.8	5.8	3.5	5.3	8.0
87°	1.0	2.0	3.5	4.5	6.3	7.0	7.0	4.8	2.8	4.3	6.5
87.5°	0.5	1.3	2.0	2.8	4.5	5.5	5.5	3.8	2.3	3.3	5.0
88°	0.3	0.5	0.8	1.3	3.0	3.8	4.0	2.8	1.5	2.5	3.5
88.5°	0.0	0.3	0.3	0.5	1.5	2.0	2.5	1.8	1.0	1.5	2.0



TEST NUMBER: P775997

CATALOG NUMBER: HCDJBL1525CSD-HCD4TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P775997

CATALOG NUMBER: HCDJBL1525CSD-HCD4TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1827.1	1827.1	1827.1	1827.1	1827.1	1827.1
0.5°	1826.6	1827.9	1826.9	1825.9	1826.1	1826.4
1°	1826.9	1827.6	1826.1	1824.9	1824.9	1825.1
1.5°	1826.4	1826.9	1825.1	1823.6	1823.4	1823.4
2°	1825.9	1825.9	1823.9	1821.9	1821.4	1821.4
2.5°	1824.9	1824.4	1822.4	1820.1	1819.1	1818.8
3°	1823.6	1822.6	1820.1	1817.8	1816.3	1815.8
3.5°	1822.1	1820.6	1817.8	1815.1	1813.3	1812.6
4°	1820.1	1818.3	1814.8	1812.3	1810.1	1809.1
4.5°	1817.8	1815.1	1811.8	1808.6	1806.3	1805.3
5°	1815.3	1811.8	1808.1	1804.8	1802.0	1800.5
5.5°	1812.1	1808.3	1804.3	1800.5	1797.5	1795.8
6°	1808.6	1804.6	1799.8	1796.0	1792.8	1790.8
6.5°	1805.1	1800.5	1795.3	1791.3	1787.3	1785.0
7°	1801.0	1795.8	1790.3	1785.8	1781.5	1779.2
7.5°	1796.8	1790.5	1785.0	1780.0	1775.5	1772.7
8°	1791.8	1785.5	1779.2	1773.7	1769.0	1766.2
8.5°	1786.8	1779.7	1773.2	1767.4	1762.2	1758.9
9°	1781.2	1773.5	1766.7	1760.2	1754.4	1751.4
9.5°	1775.5	1767.2	1759.9	1753.2	1746.9	1743.1
10°	1769.2	1760.2	1752.7	1745.6	1738.9	1734.9
10.5°	1762.7	1753.2	1744.9	1737.6	1730.6	1726.1
11°	1755.4	1745.6	1736.9	1729.1	1721.6	1716.8
11.5°	1748.1	1737.9	1728.6	1720.3	1711.8	1707.0
12°	1740.4	1729.3	1719.8	1710.5	1702.3	1697.0
12.5°	1732.3	1720.6	1710.5	1700.8	1692.0	1686.5
13°	1723.8	1711.5	1701.3	1691.0	1681.7	1675.7
13.5°	1715.0	1702.5	1691.2	1680.7	1670.4	1663.9
14°	1705.8	1692.7	1681.2	1669.9	1658.9	1652.9
14.5°	1696.2	1682.7	1670.7	1658.9	1647.3	1640.8
15°	1686.2	1672.2	1659.6	1647.1	1635.3	1628.5
15.5°	1675.9	1661.1	1648.3	1635.6	1623.3	1615.8
16°	1665.4	1650.4	1636.8	1623.5	1611.0	1602.7
16.5°	1654.6	1639.1	1625.0	1611.5	1597.9	1589.7
17°	1643.3	1627.0	1613.0	1599.2	1585.2	1576.6
17.5°	1632.0	1615.8	1600.7	1586.2	1571.9	1563.3
18°	1620.5	1603.7	1588.7	1573.6	1558.8	1549.3
18.5°	1608.7	1591.4	1576.4	1561.1	1546.0	1536.3
19°	1596.4	1580.1	1564.4	1549.1	1534.0	1523.7
19.5°	1585.2	1568.1	1552.6	1537.5	1522.2	1511.7
20°	1574.1	1556.6	1541.5	1525.7	1510.4	1499.9
20.5°	1563.1	1545.5	1529.5	1514.0	1498.2	1487.4
21°	1551.8	1533.8	1518.0	1501.9	1485.9	1474.8

TEST NUMBER: P775997

CATALOG NUMBER: HCDJBLS1525CSD-HCD4TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1517.2	1498.2	1480.6	1460.3	1441.7	1429.7
23°	1504.4	1485.9	1467.6	1445.0	1424.9	1411.1
23.5°	1490.9	1472.6	1453.3	1428.2	1406.1	1391.3
24°	1476.1	1459.5	1438.0	1410.6	1386.1	1369.0
24.5°	1460.8	1444.2	1421.9	1391.8	1364.8	1345.0
25°	1444.5	1429.0	1404.6	1372.8	1342.7	1319.1
25.5°	1427.4	1412.2	1386.6	1353.2	1319.4	1293.8
26°	1409.6	1394.9	1367.5	1333.7	1295.3	1268.2
26.5°	1390.3	1374.5	1347.0	1312.9	1270.5	1242.7
27°	1371.5	1354.0	1325.6	1291.3	1246.2	1217.3
27.5°	1352.5	1330.7	1303.6	1269.2	1221.6	1193.3
28°	1332.7	1306.1	1280.5	1245.9	1197.8	1169.4
28.5°	1312.4	1280.0	1256.2	1221.6	1174.2	1145.9
29°	1291.3	1253.7	1230.9	1196.3	1150.9	1121.3
29.5°	1270.2	1225.9	1204.5	1170.4	1127.8	1097.5
30°	1247.4	1198.0	1177.2	1144.1	1104.7	1072.9
30.5°	1223.8	1170.9	1148.6	1117.8	1080.9	1048.1
31°	1199.3	1144.4	1118.8	1091.2	1056.1	1022.3
31.5°	1174.0	1118.8	1090.2	1063.6	1031.5	996.7
32°	1148.1	1093.7	1061.9	1036.5	1006.7	969.6
32.5°	1121.3	1069.1	1034.0	1009.2	981.1	943.5
33°	1094.0	1044.8	1007.5	982.1	953.6	917.9
33.5°	1066.4	1020.5	980.4	954.6	927.0	892.6
34°	1039.6	995.9	954.6	927.5	899.1	868.1
34.5°	1013.0	969.4	928.2	899.6	871.8	843.5
35°	986.9	943.0	901.9	872.3	844.0	819.4
35.5°	961.3	916.4	875.3	845.5	818.2	795.8
36°	935.8	889.6	848.5	819.2	791.8	772.5
36.5°	910.2	863.3	821.9	792.8	766.5	748.7
37°	884.9	836.2	795.3	765.8	741.4	724.6
37.5°	858.5	810.4	769.3	739.7	717.6	700.6
38°	832.4	785.3	743.4	713.6	692.5	676.5
38.5°	806.6	761.0	718.1	688.3	668.2	652.4
39°	781.0	736.9	694.3	662.7	643.4	629.4
39.5°	754.5	712.6	670.5	637.9	618.3	605.8
40°	728.6	688.5	647.4	613.3	593.7	583.0
40.5°	702.6	664.5	624.8	589.5	569.7	560.9
41°	678.5	639.9	602.3	566.2	545.9	539.6
41.5°	652.9	616.3	580.5	544.4	523.0	518.0
42°	628.6	592.2	558.4	522.5	501.5	496.7
42.5°	604.0	568.9	538.3	502.5	480.9	476.4
43°	581.0	545.9	516.8	482.4	460.9	456.1
43.5°	556.6	524.0	496.2	462.9	441.5	436.0

TEST NUMBER: P775997

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	489.7	461.6	436.8	409.2	388.6	380.1
45.5°	467.6	442.0	418.5	392.9	372.8	364.1
46°	447.1	423.2	400.9	377.6	357.6	349.0
46.5°	426.5	404.4	383.6	362.6	343.3	334.7
47°	406.9	386.6	367.1	347.8	329.7	321.7
47.5°	388.4	369.1	351.8	334.2	317.2	309.9
48°	370.3	352.5	336.5	321.7	305.6	299.4
48.5°	354.0	336.2	322.4	309.7	294.6	289.4
49°	337.5	321.2	309.4	298.1	284.6	280.3
49.5°	322.7	306.9	296.9	287.1	275.3	271.5
50°	308.7	293.4	284.8	276.6	266.5	263.5
50.5°	295.4	280.6	273.6	266.8	258.3	256.0
51°	282.8	269.3	263.3	257.5	250.2	248.7
51.5°	271.5	258.8	253.5	249.0	242.7	241.5
52°	260.8	249.0	244.7	240.5	235.7	234.7
52.5°	250.7	240.2	236.2	232.7	228.7	227.9
53°	241.5	231.9	228.2	225.2	222.2	221.4
53.5°	232.7	224.4	220.6	218.4	215.9	215.4
54°	224.7	217.4	214.1	212.1	210.4	209.9
54.5°	217.6	211.4	208.6	206.9	205.4	205.1
55°	212.4	205.9	203.6	202.1	200.6	200.3
55.5°	206.9	201.1	198.6	197.1	195.6	195.6
56°	201.6	196.1	193.6	192.3	190.8	190.8
56.5°	196.3	191.1	188.8	187.3	185.8	185.8
57°	190.8	185.8	183.8	182.3	181.0	181.0
57.5°	185.8	180.5	178.5	177.3	176.3	176.3
58°	180.8	175.8	173.8	172.5	171.5	171.5
58.5°	175.8	170.8	168.7	167.7	166.7	166.7
59°	170.5	166.0	164.0	163.0	162.2	162.2
59.5°	165.7	161.0	159.2	158.5	157.7	157.5
60°	161.0	156.5	154.7	154.0	153.2	152.7
60.5°	156.2	151.7	150.2	149.7	148.9	148.2
61°	151.7	147.4	145.9	145.2	144.7	143.7
61.5°	147.2	143.2	141.7	140.9	140.2	139.4
62°	142.9	138.9	137.7	136.9	136.2	134.9
62.5°	138.7	134.6	133.1	132.9	131.9	130.6
63°	134.4	130.6	129.4	128.9	127.9	126.4
63.5°	130.6	126.6	125.4	125.1	123.9	122.4
64°	126.6	122.9	121.6	121.4	119.9	118.3
64.5°	122.6	119.1	117.8	117.6	116.1	114.3
65°	118.8	115.3	114.3	114.1	112.3	110.3
65.5°	115.1	111.8	110.8	110.3	108.6	106.6
66°	111.6	108.3	107.3	107.1	104.8	102.8



TEST NUMBER: P775997

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	101.3	98.0	97.3	96.8	94.0	92.0
68°	97.8	94.8	94.0	93.8	90.3	88.8
68.5°	94.8	91.8	90.5	90.3	87.3	85.5
69°	91.5	88.8	87.8	87.3	84.2	82.2
69.5°	88.3	85.8	84.7	84.2	81.0	79.0
70°	85.3	82.7	82.0	81.5	78.0	75.7
70.5°	82.2	80.0	79.0	78.5	74.7	72.5
71°	79.5	77.0	76.0	75.5	71.7	69.5
71.5°	76.5	74.0	73.2	72.5	68.7	66.4
72°	73.7	71.2	70.5	69.7	65.7	63.2
72.5°	70.7	68.5	67.7	66.7	62.7	60.2
73°	67.9	65.7	64.9	63.9	59.9	57.2
73.5°	65.2	62.9	62.2	61.2	56.9	54.4
74°	62.7	60.4	59.7	58.4	54.2	51.7
74.5°	59.9	57.7	56.9	55.9	51.4	48.9
75°	57.4	55.2	54.4	53.2	48.6	46.1
75.5°	54.9	52.7	51.9	50.6	46.1	43.4
76°	52.4	50.1	49.4	47.9	43.4	40.9
76.5°	49.9	47.6	46.9	45.4	40.6	38.4
77°	47.4	45.4	44.6	42.9	38.1	35.9
77.5°	45.1	42.9	42.1	40.6	35.6	33.3
78°	42.6	40.6	39.9	38.1	33.1	30.8
78.5°	40.4	38.4	37.6	35.9	30.8	28.3
79°	38.1	36.1	35.4	33.3	28.3	26.1
79.5°	35.9	33.8	33.1	31.1	26.1	23.8
80°	33.6	31.6	30.8	29.1	23.8	21.6
80.5°	31.3	29.6	28.8	26.8	21.6	19.3
81°	29.3	27.3	26.6	24.6	19.3	17.1
81.5°	27.1	25.3	24.6	22.6	17.3	15.0
82°	25.1	23.3	22.6	20.6	15.3	12.8
82.5°	23.1	21.3	20.6	18.8	13.3	10.8
83°	21.3	19.3	18.6	16.8	11.5	8.8
83.5°	19.3	17.3	16.5	15.0	10.0	7.5
84°	17.3	15.3	14.5	13.3	8.8	6.3
84.5°	15.3	13.5	12.8	11.5	7.8	5.0
85°	13.5	11.5	11.0	9.8	6.5	3.8
85.5°	11.5	9.8	9.0	8.3	5.3	3.0
86°	9.8	8.3	7.5	6.5	4.3	2.3
86.5°	8.0	6.5	5.8	5.0	3.3	1.8
87°	6.5	4.8	4.0	3.3	2.3	1.0
87.5°	4.8	3.0	2.3	1.8	1.3	0.5
88°	3.0	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: P775997

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMW-2500lm-3500K

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



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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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Scaled Data Report





21.5°	1461.8	1455.0	1455.5	1461.5	1483.4	1499.4	1515.5	1531.5	1542.5	1548.6	1548.3
22°	1446.8	1439.2	1439.7	1446.5	1471.1	1487.6	1504.2	1519.7	1531.3	1537.5	1537.0



44°	416.5	419.7	423.7	428.8	451.6	465.6	485.4	516.3	535.3	545.1	541.3
44.5°	398.2	403.7	407.7	412.7	432.3	446.3	465.6	496.2	514.3	521.8	519.0



66.5°	99.3	101.5	104.8	105.6	109.3	110.6	110.8	109.1	106.1	107.1	109.1
67°	95.5	98.0	101.3	102.3	106.1	107.1	107.6	105.6	102.6	103.6	105.6



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°	1540.3	1521.7	1505.9	1489.1	1472.3	1461.8
22°	1529.2	1510.4	1493.6	1475.1	1457.8	1446.8



44°	534.1	502.2	476.2	444.3	423.0	416.5
44.5°	511.3	481.7	456.6	426.3	405.4	398.2

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66.5°	108.1	104.8	103.8	103.6	101.0	99.3
67°	104.6	101.3	100.5	100.3	97.5	95.5

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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)