

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: P776024

Luminaire Tested: HCDJBL51525CSD-HCD4TSQMW-2500lm-5000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776024
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-HCD4TSQMW-2500lm-5000K
Description: 4 INCH SQUARE MEDIUM MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

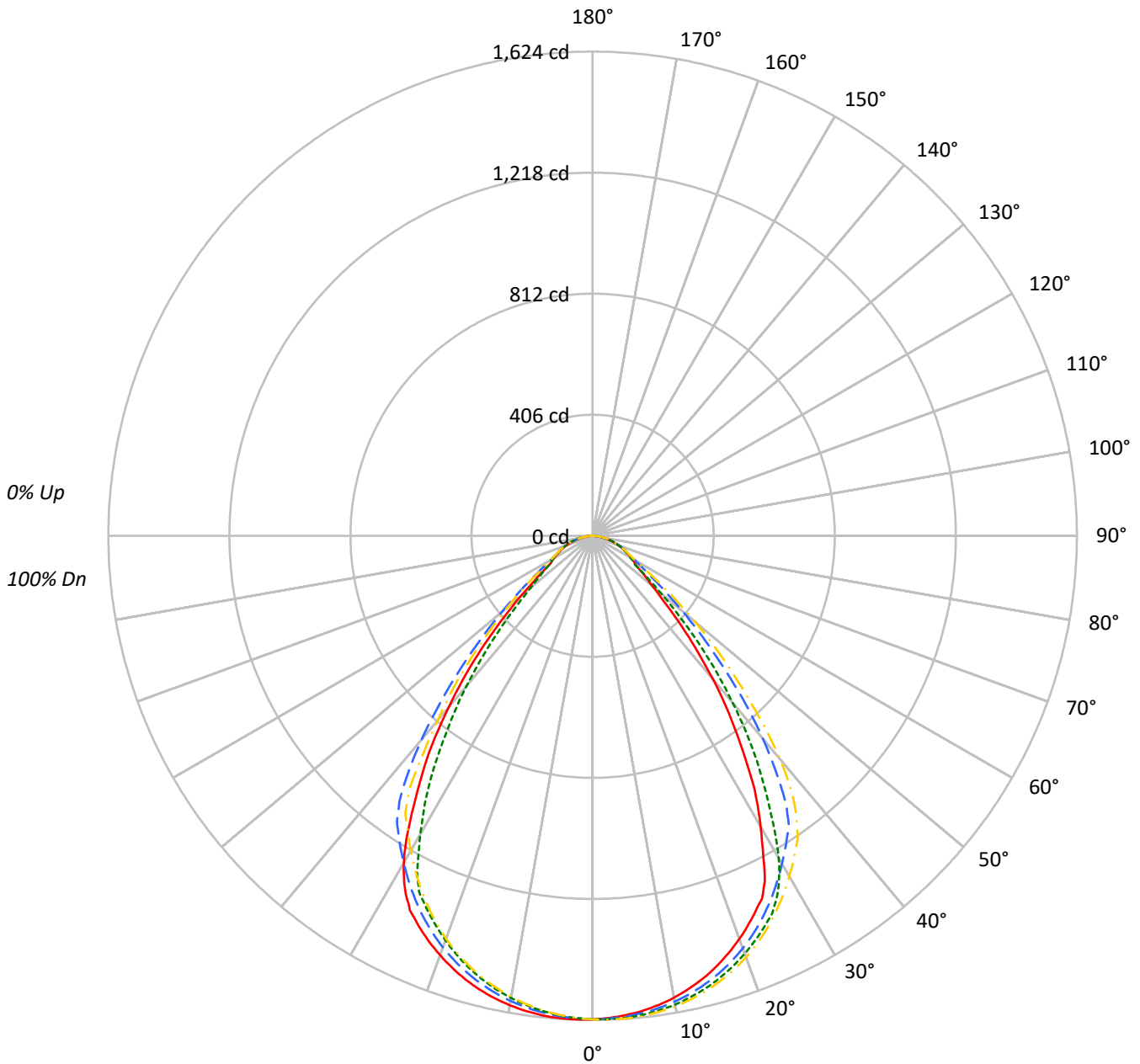
Lumens per Lamp: N/A
Luminaire Lumens: 2681.9 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.13 / 1.17
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 25
Input Voltage (V): NR
Input Current (Ain): 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: P776024
CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQMW-2500lm-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P776024

CATALOG NUMBER: HCDJBL5125CSD-HCD4TSQMW-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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	88	101	96	91	86	92	88	85	89	86	83	86	83	81	79					79			
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70					70			
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63					63			
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	58	57					57			
6	79	67	60	55	77	67	59	54	65	59	54	63	58	53	62	57	53	51					51			
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43					43			
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39			
10	61	50	43	38	60	49	43	38	48	42	38	48	42	38	47	41	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	160292	160292	160292	160292
5°	159446	160547	160706	159526
10°	157867	160206	160487	158028
15°	155274	159060	159500	155571
20°	151310	156874	157442	151878
25°	146468	153862	154320	147057
30°	128617	142404	144527	131801
35°	105521	119349	121931	109539
40°	80927	94114	96953	84927
45°	56892	68298	71038	60582
50°	40242	45716	48069	41672
55°	31846	31450	33311	32518
60°	29850	28921	29435	29791
65°	28136	27762	27949	28791
70°	25952	26616	26327	27888
75°	23372	25243	24250	26924
80°	18499	23338	21004	25273
85°	9073	19053	12588	22228

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 135°
 Vertical Angle: 45°
 Luminance: 96088 cd/sqm



TEST NUMBER: P776024

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQMW-2500lm-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.1	5.7
10°-20°	433.2	16.2
20°-30°	631.4	23.5
30°-40°	635.1	23.7
40°-50°	416.4	15.5
50°-60°	201.8	7.5
60°-70°	122.6	4.6
70°-80°	70.6	2.6
80°-90°	17.7	0.7
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°	1217.7	45.4
0°-40°	1852.8	69.1
0°-60°	2470.9	92.1
0°-90°	2681.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2681.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1622	1622	1622	1622	1622	
5°	1607	1618	1620	1608	1607	152
15°	1517	1554	1559	1520	1517	427
25°	1343	1411	1415	1348	1343	605
35°	874	989	1010	908	874	545
45°	407	489	508	433	407	320
55°	185	182	193	189	185	173
65°	120	119	120	123	120	119
75°	61	66	64	70	61	65
85°	8	17	11	20	8	12
90°	0	0	0	0	0	



TEST NUMBER: P776024

CATALOG NUMBER: HCDJBL5125CSD-HCD4TSQMW-2500lm-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1621.7	1621.7	1621.7	1621.7	1621.7	1621.7	1621.7	1621.7	1621.7	1621.7	1621.7
0.5°	1621.5	1620.9	1621.2	1621.2	1622.2	1622.5	1623.0	1623.3	1622.8	1621.7	1620.9
1°	1620.7	1620.2	1620.9	1621.5	1622.5	1623.0	1623.5	1623.8	1623.0	1621.7	1620.7
1.5°	1619.4	1619.4	1620.7	1621.5	1622.5	1623.3	1624.0	1624.0	1623.3	1621.7	1620.2
2°	1618.1	1618.4	1620.2	1621.5	1622.5	1623.3	1624.0	1624.0	1623.3	1621.5	1619.4
2.5°	1616.8	1617.3	1619.4	1620.9	1622.2	1623.3	1624.0	1624.0	1623.3	1621.2	1618.6
3°	1615.0	1615.8	1618.4	1620.4	1621.5	1623.0	1623.8	1624.0	1622.8	1620.7	1617.6
3.5°	1613.5	1614.2	1617.3	1619.9	1620.9	1622.5	1623.5	1623.5	1622.2	1619.9	1616.3
4°	1611.7	1612.7	1616.0	1619.1	1620.2	1622.0	1623.0	1623.3	1621.7	1618.9	1615.3
4.5°	1609.3	1610.6	1614.5	1618.1	1619.4	1620.9	1622.5	1622.5	1620.9	1617.8	1613.7
5°	1607.0	1608.6	1612.7	1616.8	1618.1	1620.2	1621.5	1621.5	1619.7	1616.6	1611.7
5.5°	1604.7	1606.2	1610.9	1615.5	1616.8	1618.9	1620.4	1620.4	1618.6	1615.3	1609.8
6°	1602.1	1603.9	1609.1	1614.0	1615.3	1617.3	1619.1	1619.1	1617.1	1613.5	1607.8
6.5°	1599.3	1601.3	1607.0	1612.4	1613.5	1616.0	1617.6	1617.6	1615.3	1611.7	1605.5
7°	1595.9	1598.2	1604.7	1610.6	1611.4	1614.2	1616.0	1616.0	1613.7	1609.8	1602.9
7.5°	1592.6	1595.1	1602.1	1608.6	1609.3	1612.4	1614.2	1614.0	1611.7	1607.5	1600.3
8°	1589.2	1592.0	1599.0	1606.2	1607.0	1610.4	1612.2	1611.9	1609.6	1605.2	1597.5
8.5°	1585.3	1588.2	1596.4	1603.9	1604.7	1608.0	1609.8	1609.8	1607.3	1602.6	1594.4
9°	1581.5	1584.6	1593.3	1601.3	1602.1	1605.7	1607.5	1607.5	1604.7	1600.0	1591.3
9.5°	1577.3	1580.7	1590.0	1598.2	1599.3	1603.1	1604.9	1604.7	1601.8	1596.9	1587.9
10°	1572.9	1576.8	1586.4	1595.4	1596.2	1600.0	1602.4	1602.1	1599.0	1593.8	1584.3
10.5°	1568.3	1572.4	1582.7	1592.0	1592.8	1596.9	1599.3	1599.0	1595.9	1590.7	1580.4
11°	1563.6	1567.8	1578.9	1588.7	1589.5	1593.6	1596.2	1595.9	1592.8	1587.1	1576.3
11.5°	1558.7	1563.1	1574.7	1585.1	1585.6	1590.2	1592.8	1592.3	1589.2	1583.5	1572.2
12°	1553.3	1558.2	1570.4	1581.2	1581.7	1586.9	1589.5	1588.7	1585.3	1579.6	1567.8
12.5°	1547.9	1553.1	1565.7	1577.1	1577.6	1583.0	1585.6	1584.8	1581.5	1575.5	1563.1
13°	1542.2	1547.9	1561.1	1573.2	1573.5	1578.6	1581.7	1580.9	1577.3	1571.4	1558.5
13.5°	1536.5	1542.2	1556.4	1568.5	1569.1	1574.7	1577.6	1576.5	1572.9	1566.7	1553.3
14°	1530.6	1536.3	1551.0	1564.2	1564.4	1570.1	1573.2	1572.2	1568.3	1561.8	1548.2
14.5°	1524.2	1530.1	1545.8	1559.3	1559.5	1565.2	1568.5	1567.8	1563.6	1556.9	1542.7
15°	1517.4	1523.9	1540.2	1554.4	1554.4	1560.5	1563.9	1562.6	1558.7	1552.0	1537.1
15.5°	1510.5	1517.4	1534.5	1549.2	1549.2	1555.6	1559.0	1557.7	1553.3	1546.6	1531.1
16°	1503.5	1510.7	1528.3	1543.8	1543.5	1550.0	1553.8	1552.3	1547.9	1541.2	1525.2
16.5°	1496.0	1503.8	1522.1	1537.8	1537.6	1544.5	1548.4	1546.9	1542.2	1535.3	1518.7
17°	1488.5	1496.5	1515.9	1532.2	1531.6	1538.6	1542.7	1541.4	1536.5	1529.3	1512.3
17.5°	1480.5	1489.0	1509.2	1526.2	1525.4	1532.9	1536.8	1535.5	1530.1	1523.1	1505.6
18°	1472.8	1481.6	1502.2	1519.8	1519.0	1526.7	1530.6	1529.1	1523.6	1516.7	1498.6
18.5°	1464.3	1473.3	1495.2	1513.3	1512.5	1520.0	1524.4	1522.6	1517.4	1510.2	1491.4
19°	1456.0	1465.3	1487.8	1506.9	1505.6	1513.1	1518.0	1515.9	1510.7	1503.2	1484.1
19.5°	1447.2	1456.8	1480.3	1499.6	1498.6	1506.9	1511.2	1508.9	1504.0	1496.0	1476.7
20°	1438.5	1448.5	1472.5	1492.4	1491.4	1499.4	1504.0	1502.2	1496.8	1488.8	1468.7
20.5°	1429.7	1439.7	1464.3	1484.9	1483.9	1492.1	1497.1	1494.7	1489.3	1481.3	1460.4
21°	1420.6	1430.7	1456.0	1477.4	1476.1	1484.7	1489.6	1487.2	1481.8	1473.8	1452.4



TEST NUMBER: P776024

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1391.7	1402.8	1429.9	1453.2	1452.7	1461.2	1465.8	1464.0	1458.3	1449.6	1426.3
23°	1381.9	1393.3	1420.4	1445.2	1444.1	1452.9	1457.6	1455.8	1450.1	1441.0	1417.0
23.5°	1372.1	1383.2	1410.8	1436.7	1435.6	1444.7	1449.0	1447.2	1442.1	1432.3	1407.5
24°	1361.5	1373.2	1401.3	1427.9	1427.1	1436.1	1440.3	1438.7	1433.6	1423.5	1397.9
24.5°	1352.5	1363.3	1391.5	1419.1	1418.3	1427.4	1431.0	1429.9	1424.5	1414.7	1388.1
25°	1343.0	1353.0	1381.2	1409.8	1410.8	1418.6	1421.7	1420.9	1415.0	1405.7	1377.8
25.5°	1327.5	1342.7	1370.8	1400.5	1400.5	1409.6	1412.4	1412.1	1406.2	1396.4	1367.7
26°	1310.4	1332.6	1360.3	1391.2	1386.6	1400.0	1402.6	1402.8	1397.4	1386.8	1356.9
26.5°	1294.4	1323.1	1349.7	1381.7	1374.7	1391.0	1392.8	1393.0	1381.7	1377.0	1346.3
27°	1270.4	1311.0	1338.8	1371.6	1361.0	1382.4	1382.7	1383.2	1369.5	1366.7	1335.5
27.5°	1245.1	1292.4	1327.7	1362.8	1345.5	1370.6	1372.6	1374.2	1356.1	1357.4	1324.4
28°	1220.1	1277.4	1316.4	1353.0	1328.2	1356.4	1361.8	1361.3	1340.6	1345.8	1313.0
28.5°	1195.8	1257.0	1305.0	1338.3	1310.4	1344.5	1351.5	1346.3	1324.1	1330.6	1301.9
29°	1172.3	1232.7	1293.7	1325.1	1291.1	1329.8	1340.9	1334.4	1306.0	1317.9	1290.0
29.5°	1149.6	1208.2	1282.3	1312.0	1270.4	1313.8	1330.1	1320.0	1286.9	1304.0	1278.7
30°	1126.9	1183.7	1270.4	1296.8	1247.7	1297.0	1319.0	1303.7	1266.3	1288.2	1266.8
30.5°	1104.7	1159.7	1258.8	1280.2	1223.5	1279.2	1308.1	1286.9	1244.4	1271.2	1254.9
31°	1082.5	1136.2	1246.9	1262.2	1198.4	1259.6	1297.0	1269.1	1220.6	1253.7	1243.1
31.5°	1059.8	1114.0	1234.8	1243.8	1172.1	1240.0	1285.7	1249.8	1194.8	1234.6	1231.2
32°	1035.0	1091.6	1223.2	1224.0	1145.5	1218.3	1274.0	1229.1	1168.2	1214.7	1219.1
32.5°	1011.0	1069.9	1210.8	1203.1	1118.4	1194.5	1262.7	1207.7	1141.6	1192.7	1206.7
33°	985.0	1047.4	1199.4	1179.8	1091.6	1170.0	1250.8	1184.2	1115.0	1170.0	1194.5
33.5°	957.6	1025.0	1188.3	1157.1	1065.2	1144.5	1239.7	1159.7	1087.7	1145.5	1182.4
34°	928.9	1001.0	1177.0	1132.3	1039.4	1118.4	1228.6	1134.1	1060.8	1120.5	1171.8
34.5°	902.1	976.7	1158.9	1106.3	1014.1	1092.3	1214.2	1107.8	1035.3	1094.7	1158.1
35°	874.5	951.4	1138.5	1080.2	989.1	1066.3	1195.6	1081.0	1010.5	1067.8	1137.8
35.5°	848.4	924.8	1121.0	1054.4	964.3	1040.5	1179.3	1055.7	986.2	1042.0	1119.2
36°	822.6	897.5	1098.8	1028.8	939.5	1015.4	1163.1	1029.9	961.2	1016.7	1102.1
36.5°	798.3	870.4	1073.5	1003.5	914.2	990.4	1143.4	1004.6	935.7	991.4	1079.4
37°	773.8	843.8	1047.7	978.0	888.4	965.6	1123.3	979.5	911.4	966.6	1053.9
37.5°	750.1	819.2	1020.8	953.7	862.1	941.9	1101.9	955.5	885.3	942.9	1028.1
38°	726.3	793.4	994.5	929.5	835.3	916.8	1079.2	931.0	858.7	918.6	1001.7
38.5°	702.3	769.7	967.9	905.5	808.7	892.6	1056.2	907.5	831.4	895.1	974.4
39°	677.5	746.2	941.9	881.5	782.6	868.0	1030.9	882.5	804.5	871.1	947.8
39.5°	652.5	723.2	915.5	856.9	756.0	842.5	1004.8	857.7	778.2	847.1	920.2
40°	627.2	699.0	888.2	832.9	729.4	817.2	977.5	831.9	751.4	822.3	892.6
40.5°	602.4	676.3	860.8	808.1	703.9	791.4	949.3	806.3	725.6	796.8	864.2
41°	578.2	652.5	832.9	782.9	679.6	765.3	919.7	780.0	700.0	771.2	836.3
41.5°	554.9	629.0	805.6	757.8	654.6	740.3	889.5	754.2	676.0	745.9	808.4
42°	531.7	605.0	777.4	732.5	630.3	715.5	859.0	728.7	651.2	720.9	780.3
42.5°	510.0	581.5	749.3	707.7	606.0	690.7	828.8	703.1	627.2	696.6	752.7
43°	488.6	558.0	720.9	683.2	581.8	666.2	799.6	678.8	603.7	672.4	725.8
43.5°	467.7	535.3	692.8	659.7	558.0	642.4	770.5	654.8	579.5	649.2	697.2



TEST NUMBER: P776024

CATALOG NUMBER: HCDJBL5125CSD-HCD4TSQMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	407.0	471.3	612.5	590.3	488.6	573.0	687.4	584.6	508.2	581.0	618.7
45.5°	388.2	451.2	586.9	568.1	465.9	549.3	661.8	562.2	485.8	559.6	593.1
46°	370.1	431.3	562.9	545.9	444.2	527.1	636.8	538.9	463.3	536.9	568.9
46.5°	352.8	411.9	539.7	524.0	422.8	505.4	611.2	516.2	441.9	514.7	544.9
47°	336.1	393.1	517.3	502.3	402.7	483.2	586.9	493.5	421.2	493.0	522.2
47.5°	321.1	374.8	495.3	480.9	383.0	462.0	562.7	471.3	401.4	471.8	499.7
48°	307.2	357.2	473.4	459.7	364.2	441.1	538.2	450.4	382.0	450.9	477.5
48.5°	294.5	340.2	452.2	438.5	346.6	420.2	515.2	429.8	363.9	430.8	456.1
49°	282.9	324.2	432.1	418.7	329.4	400.6	491.2	409.9	345.9	411.2	435.4
49.5°	271.8	309.5	412.5	399.6	313.1	380.7	468.2	389.7	329.1	392.6	415.6
50°	261.7	295.3	393.1	381.0	297.3	362.4	446.3	371.4	312.6	374.0	396.5
50.5°	252.7	282.4	374.3	362.9	282.1	344.1	424.6	352.8	296.8	356.5	377.4
51°	244.2	270.8	356.5	346.1	267.9	327.0	404.2	335.5	282.1	339.4	359.8
51.5°	235.9	259.9	339.4	329.1	255.0	310.8	384.3	319.0	268.4	323.4	342.8
52°	228.2	250.4	323.2	313.3	242.6	295.3	365.5	303.5	255.5	307.9	326.5
52.5°	220.4	241.1	308.2	297.6	232.3	280.1	346.6	287.5	243.1	292.4	311.0
53°	213.2	232.6	293.5	282.6	222.0	265.9	329.6	272.8	232.0	278.5	296.1
53.5°	205.5	224.6	279.8	267.9	211.7	252.2	312.6	259.4	222.2	264.6	282.1
54°	198.2	217.1	266.4	254.5	201.3	239.5	296.8	246.5	212.7	251.4	268.7
54.5°	191.3	209.6	254.2	241.6	191.3	229.2	281.3	234.1	202.9	239.0	256.6
55°	184.8	202.4	242.6	229.5	182.5	218.6	267.4	223.8	193.3	228.9	244.9
55.5°	179.1	195.1	231.8	218.6	175.5	208.3	253.2	213.7	184.6	218.9	233.6
56°	175.0	188.2	221.5	208.0	170.1	197.7	240.0	203.7	177.1	208.8	224.3
56.5°	171.9	181.2	211.9	198.5	166.7	187.4	229.5	193.6	170.9	199.0	214.7
57°	169.1	175.3	203.1	189.5	163.6	178.6	218.6	184.6	166.7	188.9	205.2
57.5°	166.0	169.8	194.6	180.9	160.8	170.9	208.0	176.3	163.6	180.4	195.9
58°	163.1	166.2	187.1	172.9	158.0	164.7	197.5	169.3	160.8	172.7	188.4
58.5°	160.3	163.1	180.4	166.5	155.1	160.8	186.6	163.4	158.0	166.5	181.2
59°	157.2	160.0	174.0	162.4	152.0	157.4	178.6	159.5	154.9	161.6	174.5
59.5°	154.1	157.2	168.3	159.0	149.2	154.6	171.4	156.2	152.0	158.2	168.5
60°	151.0	154.4	162.9	155.9	146.3	151.8	164.9	153.3	148.9	155.1	162.9
60.5°	147.6	151.3	158.0	153.1	143.5	148.7	159.3	150.2	146.1	152.3	157.7
61°	144.8	148.2	153.3	150.0	140.7	145.8	154.4	147.4	143.0	149.4	153.1
61.5°	141.7	145.1	148.9	146.9	137.8	143.0	149.4	144.5	139.9	146.3	148.7
62°	138.6	142.0	145.1	144.0	135.3	140.2	145.1	141.4	137.1	143.5	144.5
62.5°	135.3	138.6	140.9	141.2	132.4	137.3	140.9	138.3	134.2	140.4	140.4
63°	132.4	135.5	137.3	138.3	129.6	134.2	137.1	135.5	131.1	137.3	136.8
63.5°	129.3	132.4	133.7	135.3	126.7	131.4	133.4	132.4	128.3	134.5	133.4
64°	126.2	129.3	130.6	132.4	124.2	128.5	129.8	129.3	125.4	131.4	130.1
64.5°	123.1	126.5	127.5	129.6	121.3	125.7	126.7	126.5	122.3	128.3	127.0
65°	120.3	123.1	124.7	126.7	118.7	123.1	123.9	123.4	119.5	125.4	123.9
65.5°	117.2	120.0	121.8	123.9	115.9	120.3	120.8	120.5	116.7	122.3	121.1
66°	114.1	117.2	118.7	121.1	113.3	117.4	118.0	117.4	113.8	119.5	118.2



TEST NUMBER: P776024

CATALOG NUMBER: HCDJBL5125CSD-HCD4TSQMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	105.1	107.9	110.0	112.5	105.3	109.2	109.4	108.7	105.3	110.7	109.7
68°	102.2	104.8	107.1	109.7	102.7	106.3	106.3	105.8	102.5	107.9	106.9
68.5°	99.1	101.7	104.0	106.9	99.9	103.8	103.5	103.0	99.6	104.8	104.0
69°	96.3	98.9	101.2	104.0	97.3	100.9	100.7	100.1	96.8	102.0	100.9
69.5°	92.7	95.8	98.1	101.4	94.7	98.1	97.8	97.1	94.0	99.1	98.1
70°	89.8	93.7	95.2	98.6	92.1	95.5	94.7	94.2	91.1	96.3	95.2
70.5°	87.2	90.6	92.1	95.8	89.6	92.9	91.9	91.4	88.5	93.4	92.4
71°	84.4	87.5	89.3	93.4	87.0	90.1	89.0	88.5	85.7	90.6	89.6
71.5°	81.8	84.1	86.5	90.6	84.4	87.2	86.2	85.7	82.9	87.5	86.7
72°	78.7	81.0	83.6	88.0	81.8	84.7	83.4	82.9	80.0	84.7	83.9
72.5°	75.9	77.9	80.8	85.2	79.2	82.1	80.5	80.0	77.4	81.8	81.0
73°	72.8	75.1	77.9	82.6	76.4	79.5	77.7	77.2	74.6	79.0	78.2
73.5°	69.9	72.0	75.1	79.8	73.8	76.7	75.1	74.3	71.8	76.1	75.4
74°	66.9	69.2	72.3	77.2	71.5	74.1	72.3	71.5	69.2	73.3	72.5
74.5°	64.0	66.1	69.2	74.3	68.9	71.5	69.4	68.7	66.3	70.5	69.9
75°	61.2	63.0	66.3	71.8	66.1	68.7	66.9	65.8	63.5	67.6	67.1
75.5°	58.3	60.1	63.5	68.9	63.5	66.1	64.0	63.0	60.9	64.8	64.3
76°	55.2	57.0	60.7	66.3	60.9	63.5	61.2	60.1	58.1	61.9	61.4
76.5°	52.4	54.2	57.8	63.8	58.6	60.9	58.6	57.3	55.5	59.4	58.6
77°	49.6	51.1	55.0	60.9	56.0	58.3	56.0	54.5	52.7	56.5	55.8
77.5°	46.7	48.3	52.1	58.3	53.4	55.8	53.4	51.6	50.1	53.7	53.2
78°	43.9	45.2	49.6	55.5	50.8	52.9	50.6	48.8	47.5	50.8	50.3
78.5°	41.0	42.3	46.7	52.9	48.3	50.3	48.0	45.9	44.7	48.0	47.5
79°	38.2	39.2	44.1	50.1	45.9	47.8	45.4	43.1	42.1	45.2	44.9
79.5°	35.4	36.4	41.3	47.5	43.4	45.2	42.8	40.3	39.5	42.6	42.3
80°	32.5	33.6	38.7	44.9	41.0	42.6	40.3	37.7	36.9	39.7	39.7
80.5°	29.9	30.7	36.1	42.1	38.5	40.0	37.9	34.8	34.3	36.9	36.9
81°	27.1	27.6	33.6	39.5	36.1	37.4	35.4	32.3	31.7	34.1	34.6
81.5°	24.3	24.8	31.0	36.9	33.6	35.1	33.0	29.9	29.2	31.5	32.0
82°	21.4	22.2	28.4	34.3	31.2	32.5	30.5	27.4	26.3	28.7	29.4
82.5°	18.8	19.6	26.1	32.0	28.9	30.2	28.1	25.0	23.7	25.8	27.1
83°	16.0	17.3	23.7	29.4	26.6	27.6	25.8	22.7	21.4	23.5	24.8
83.5°	13.2	14.7	21.4	27.1	24.0	25.3	23.7	20.4	18.8	20.9	22.7
84°	10.6	12.6	19.1	24.5	21.7	22.7	21.4	18.1	16.3	18.3	20.6
84.5°	9.3	10.6	17.0	22.2	19.4	20.4	19.4	16.0	13.7	16.0	18.6
85°	8.0	9.0	15.0	19.6	16.8	18.1	17.0	13.7	11.1	13.4	16.5
85.5°	6.5	7.5	12.6	17.3	14.5	15.5	15.0	11.6	9.3	11.4	14.2
86°	5.2	6.2	10.6	14.7	12.1	13.2	12.9	10.1	7.7	9.8	12.4
86.5°	3.9	4.9	8.8	12.4	9.8	10.8	10.8	8.5	6.7	8.5	10.3
87°	2.8	3.4	6.7	10.1	7.5	8.5	8.8	7.0	5.7	7.2	8.3
87.5°	1.5	2.1	4.9	7.7	5.2	6.2	6.7	5.4	4.4	5.7	6.2
88°	0.5	0.8	2.8	5.7	3.1	3.9	4.6	4.1	3.4	4.4	4.4
88.5°	0.0	0.3	1.0	3.4	1.0	1.8	2.6	2.6	2.3	3.1	2.3



TEST NUMBER: P776024

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQMW-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	0.3	0.0	0.0	0.0	0.3	0.3	0.0	0.3	0.3



TEST NUMBER: P776024

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1621.7	1621.7	1621.7	1621.7	1621.7	1621.7
0.5°	1619.9	1621.2	1621.2	1621.5	1621.7	1621.5
1°	1619.4	1620.4	1620.2	1620.4	1620.9	1620.7
1.5°	1618.4	1619.4	1618.9	1619.1	1619.7	1619.4
2°	1617.3	1618.4	1617.6	1617.6	1618.1	1618.1
2.5°	1616.0	1617.1	1616.0	1616.0	1616.6	1616.8
3°	1614.5	1615.5	1614.2	1614.2	1614.7	1615.0
3.5°	1612.7	1614.0	1612.7	1612.4	1612.9	1613.5
4°	1610.9	1611.9	1610.6	1610.4	1610.9	1611.7
4.5°	1608.8	1610.1	1608.3	1608.0	1608.6	1609.3
5°	1606.5	1607.8	1605.7	1605.7	1606.2	1607.0
5.5°	1604.2	1605.5	1603.1	1602.9	1603.7	1604.7
6°	1601.6	1602.6	1600.3	1600.0	1600.8	1602.1
6.5°	1598.7	1599.8	1597.5	1597.2	1597.7	1599.3
7°	1595.6	1596.7	1594.1	1593.8	1594.6	1595.9
7.5°	1592.3	1593.6	1590.7	1590.5	1591.0	1592.6
8°	1588.9	1590.0	1587.1	1586.9	1587.6	1589.2
8.5°	1585.3	1586.4	1583.3	1583.0	1583.8	1585.3
9°	1581.7	1582.5	1579.4	1578.9	1579.6	1581.5
9.5°	1577.6	1578.4	1575.3	1574.7	1575.5	1577.3
10°	1573.2	1574.5	1570.9	1570.1	1571.1	1572.9
10.5°	1568.8	1570.1	1566.2	1565.7	1566.2	1568.3
11°	1564.2	1565.2	1561.6	1560.8	1561.6	1563.6
11.5°	1559.5	1560.3	1556.4	1555.6	1556.7	1558.7
12°	1554.4	1555.4	1551.3	1550.5	1551.3	1553.3
12.5°	1549.2	1550.0	1545.8	1545.1	1545.6	1547.9
13°	1543.8	1544.5	1540.2	1539.4	1540.2	1542.2
13.5°	1537.8	1538.9	1534.5	1533.7	1534.2	1536.5
14°	1532.2	1532.9	1528.3	1527.5	1528.3	1530.6
14.5°	1526.0	1526.7	1522.1	1521.1	1521.6	1524.2
15°	1519.8	1520.3	1515.6	1514.6	1514.9	1517.4
15.5°	1513.1	1513.6	1508.7	1507.9	1507.9	1510.5
16°	1506.3	1506.9	1501.7	1500.9	1501.2	1503.5
16.5°	1499.1	1499.9	1494.7	1493.7	1494.0	1496.0
17°	1491.9	1492.4	1487.5	1486.5	1486.5	1488.5
17.5°	1484.4	1484.9	1479.8	1478.7	1478.5	1480.5
18°	1476.9	1476.9	1472.0	1471.0	1470.7	1472.8
18.5°	1468.7	1468.9	1463.8	1463.2	1462.5	1464.3
19°	1460.7	1460.9	1455.5	1454.7	1453.9	1456.0
19.5°	1452.4	1452.4	1447.0	1446.5	1445.4	1447.2
20°	1443.6	1443.9	1438.2	1437.7	1436.4	1438.5
20.5°	1434.8	1435.1	1429.4	1428.4	1427.4	1429.7
21°	1425.8	1426.1	1420.1	1419.6	1418.1	1420.6

TEST NUMBER: P776024

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1397.7	1398.2	1391.5	1390.2	1389.2	1391.7
23°	1387.9	1388.4	1381.7	1380.4	1379.4	1381.9
23.5°	1378.3	1378.3	1371.9	1369.5	1369.3	1372.1
24°	1368.3	1368.5	1361.5	1359.2	1359.0	1361.5
24.5°	1357.9	1358.2	1351.0	1348.4	1348.4	1352.5
25°	1347.3	1348.4	1340.6	1337.5	1337.5	1343.0
25.5°	1337.0	1339.3	1329.8	1325.9	1327.2	1327.5
26°	1326.7	1327.2	1319.0	1315.3	1316.1	1310.4
26.5°	1317.4	1308.9	1308.4	1303.2	1306.6	1294.4
27°	1306.8	1294.7	1298.8	1292.1	1296.2	1270.4
27.5°	1290.0	1274.6	1287.5	1280.0	1280.0	1245.1
28°	1273.3	1250.3	1270.4	1268.1	1263.2	1220.1
28.5°	1257.3	1225.8	1253.9	1256.0	1246.4	1195.8
29°	1235.1	1201.8	1237.9	1244.1	1223.5	1172.3
29.5°	1211.1	1177.8	1215.2	1231.2	1199.2	1149.6
30°	1187.1	1154.8	1192.0	1219.3	1174.2	1126.9
30.5°	1163.6	1131.0	1167.2	1206.9	1150.7	1104.7
31°	1140.6	1108.3	1144.2	1194.5	1127.2	1082.5
31.5°	1117.1	1085.4	1120.5	1181.9	1104.2	1059.8
32°	1094.4	1062.1	1098.0	1169.2	1082.3	1035.0
32.5°	1071.7	1037.9	1075.8	1156.9	1061.1	1011.0
33°	1049.2	1013.3	1053.4	1145.0	1039.2	985.0
33.5°	1026.3	987.8	1030.9	1134.4	1018.0	957.6
34°	1002.2	961.5	1008.7	1122.8	995.5	928.9
34.5°	978.2	934.9	985.2	1103.7	972.6	902.1
35°	953.7	907.8	961.2	1081.0	947.8	874.5
35.5°	928.2	880.7	936.9	1063.9	923.5	848.4
36°	902.4	854.9	911.4	1039.4	897.2	822.6
36.5°	876.0	828.8	886.4	1009.0	871.6	798.3
37°	850.2	804.3	860.5	978.5	844.8	773.8
37.5°	824.7	779.5	835.3	948.3	819.8	750.1
38°	799.9	755.2	809.7	918.4	795.0	726.3
38.5°	775.9	731.2	786.0	889.7	771.2	702.3
39°	751.4	707.7	761.7	861.8	748.0	677.5
39.5°	727.9	683.0	739.2	835.0	725.3	652.5
40°	704.9	658.2	716.0	809.2	703.1	627.2
40.5°	682.4	634.2	693.0	784.4	680.9	602.4
41°	658.7	609.7	670.3	760.1	658.4	578.2
41.5°	635.5	585.7	647.9	735.9	635.2	554.9
42°	612.0	562.2	624.6	712.1	612.2	531.7
42.5°	589.3	539.5	601.4	689.2	589.5	510.0
43°	566.0	517.0	578.7	665.4	566.6	488.6
43.5°	543.1	495.3	555.7	641.2	544.1	467.7



TEST NUMBER: P776024

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	479.1	433.4	490.9	568.6	480.6	407.0
45.5°	459.4	413.8	471.1	545.6	461.0	388.2
46°	439.0	394.4	451.2	523.5	441.4	370.1
46.5°	419.7	375.6	431.3	501.5	422.3	352.8
47°	400.8	357.7	412.5	480.9	403.7	336.1
47.5°	382.5	340.2	393.1	461.2	385.6	321.1
48°	364.2	324.7	374.8	442.7	367.8	307.2
48.5°	347.2	309.2	357.5	424.9	350.8	294.5
49°	330.1	295.5	340.7	407.0	334.5	282.9
49.5°	314.6	282.9	324.7	390.3	319.3	271.8
50°	299.2	271.0	309.5	373.7	305.1	261.7
50.5°	285.5	260.2	295.5	357.7	291.7	252.7
51°	272.6	250.6	282.1	342.3	279.5	244.2
51.5°	260.7	241.6	270.5	327.0	268.2	235.9
52°	249.9	233.3	259.9	312.6	257.9	228.2
52.5°	240.0	225.3	249.6	298.6	248.3	220.4
53°	231.0	217.6	240.3	285.5	239.3	213.2
53.5°	223.3	210.1	231.5	272.8	230.8	205.5
54°	215.8	202.6	223.0	261.0	222.8	198.2
54.5°	208.3	195.6	215.8	249.6	215.0	191.3
55°	200.6	188.7	208.0	239.0	208.0	184.8
55.5°	193.1	182.0	200.6	228.9	200.6	179.1
56°	186.4	176.3	193.6	219.7	193.6	175.0
56.5°	179.4	171.6	186.6	210.9	186.6	171.9
57°	173.2	168.0	179.9	202.4	180.2	169.1
57.5°	167.8	165.2	173.7	194.6	174.2	166.0
58°	163.1	162.1	168.5	187.4	169.3	163.1
58.5°	159.8	159.3	164.4	180.7	165.4	160.3
59°	156.9	156.4	161.3	174.5	162.6	157.2
59.5°	154.1	153.8	158.2	168.3	159.5	154.1
60°	151.3	150.7	155.4	163.1	156.7	151.0
60.5°	148.4	148.2	152.5	158.2	153.3	147.6
61°	145.3	145.3	149.4	153.6	150.5	144.8
61.5°	142.5	142.5	146.6	149.2	147.4	141.7
62°	139.6	139.6	143.8	145.1	144.3	138.6
62.5°	136.8	136.8	140.7	141.2	140.9	135.3
63°	134.0	134.2	137.8	137.6	137.8	132.4
63.5°	131.1	131.4	135.0	134.2	134.7	129.3
64°	128.3	128.8	132.2	130.9	131.6	126.2
64.5°	125.4	126.0	129.1	128.0	128.5	123.1
65°	122.9	123.1	126.5	125.2	125.4	120.3
65.5°	120.0	120.5	123.6	122.1	122.3	117.2
66°	117.2	117.7	120.5	119.2	119.2	114.1



TEST NUMBER: P776024

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	108.9	109.7	112.3	110.7	110.0	105.1
68°	106.1	107.1	109.4	107.6	106.9	102.2
68.5°	103.5	104.3	106.6	104.5	103.8	99.1
69°	100.7	101.7	103.8	101.7	100.9	96.3
69.5°	97.8	99.1	100.9	98.6	97.8	92.7
70°	95.2	96.5	98.1	95.8	94.7	89.8
70.5°	92.4	93.4	95.5	93.2	91.9	87.2
71°	89.8	90.9	93.7	90.3	88.8	84.4
71.5°	87.0	88.5	90.9	87.2	86.0	81.8
72°	84.4	86.0	87.8	84.4	83.1	78.7
72.5°	81.6	83.4	84.9	81.6	80.0	75.9
73°	79.0	81.0	82.1	78.7	76.9	72.8
73.5°	76.4	78.2	79.2	75.6	74.1	69.9
74°	73.6	75.6	76.7	72.8	71.0	66.9
74.5°	71.0	73.0	73.8	69.9	67.9	64.0
75°	68.1	70.5	71.0	67.1	65.0	61.2
75.5°	65.6	67.9	68.4	64.3	61.9	58.3
76°	62.7	65.3	65.6	61.2	59.1	55.2
76.5°	60.1	62.5	63.0	58.3	56.0	52.4
77°	57.6	59.9	60.1	55.8	52.9	49.6
77.5°	54.7	57.3	57.6	52.9	50.1	46.7
78°	52.1	54.7	54.7	50.1	47.0	43.9
78.5°	49.3	52.1	52.1	47.2	44.1	41.0
79°	46.7	49.6	49.3	44.7	41.0	38.2
79.5°	44.1	47.0	46.7	41.8	38.2	35.4
80°	41.3	44.4	43.9	39.2	35.1	32.5
80.5°	38.7	41.8	41.3	36.7	32.3	29.9
81°	36.1	39.5	38.7	34.1	29.4	27.1
81.5°	33.8	36.9	36.1	31.5	26.8	24.3
82°	31.2	34.3	33.6	28.9	24.0	21.4
82.5°	28.7	32.0	31.0	26.6	21.7	18.8
83°	26.3	29.4	28.4	24.3	19.1	16.0
83.5°	23.7	26.8	25.8	21.9	16.8	13.2
84°	21.4	24.5	23.2	19.6	14.5	10.6
84.5°	18.8	22.2	20.9	17.6	12.4	9.3
85°	16.5	19.6	18.3	15.2	10.6	8.0
85.5°	13.9	17.3	15.7	13.2	9.0	6.5
86°	11.6	14.7	13.2	10.8	7.5	5.2
86.5°	9.0	12.4	10.8	8.8	5.9	3.9
87°	6.7	9.8	8.5	6.7	4.4	2.8
87.5°	4.4	7.7	6.5	4.9	2.8	1.5
88°	2.3	5.4	4.4	2.8	1.3	0.5
88.5°	0.8	3.1	2.3	0.8	0.5	0.0



TEST NUMBER: P776024

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

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

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

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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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°	1411.1	1421.4	1447.5	1469.7	1468.4	1476.9	1482.1	1479.8	1474.3	1465.6	1444.1
22°	1401.3	1412.1	1438.7	1461.4	1460.7	1468.9	1474.1	1472.0	1466.6	1457.8	1435.1



44°	447.3	512.6	664.9	635.5	534.3	618.7	741.3	631.1	554.9	625.4	670.1
44.5°	426.9	492.0	638.6	612.5	511.3	595.7	714.5	608.4	531.7	603.7	643.7



66.5°	111.2	114.1	115.9	118.2	110.5	114.6	115.1	114.6	111.0	116.7	115.4
67°	108.1	111.0	113.1	115.4	107.9	111.8	112.3	111.8	108.1	113.6	112.5



89°	0.0	0.3	0.3	1.3	0.3	0.5	1.0	1.3	1.3	1.8	1.0
89.5°	0.0	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.8	0.3

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21.5°	1416.8	1417.0	1410.8	1409.8	1408.5	1411.1
22°	1407.5	1407.5	1401.3	1400.3	1399.0	1401.3



44°	521.4	474.2	533.8	616.6	521.9	447.3
44.5°	500.5	453.5	512.6	592.6	501.3	426.9



66.5°	114.3	115.1	118.0	116.4	116.2	111.2
67°	111.8	112.5	115.1	113.6	113.1	108.1

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Scaled Data Report



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

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)