

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: P775926

Luminaire Tested: HCDJBS1525CSD-HCD41TRC-2500lm-3000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775926
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B028)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL51525CSD-HCD41TRC-2500lm-3000K
Description: 4 INCH ROUND SHALLOW-WIDE SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT
Ballast/Driver: -

Summary

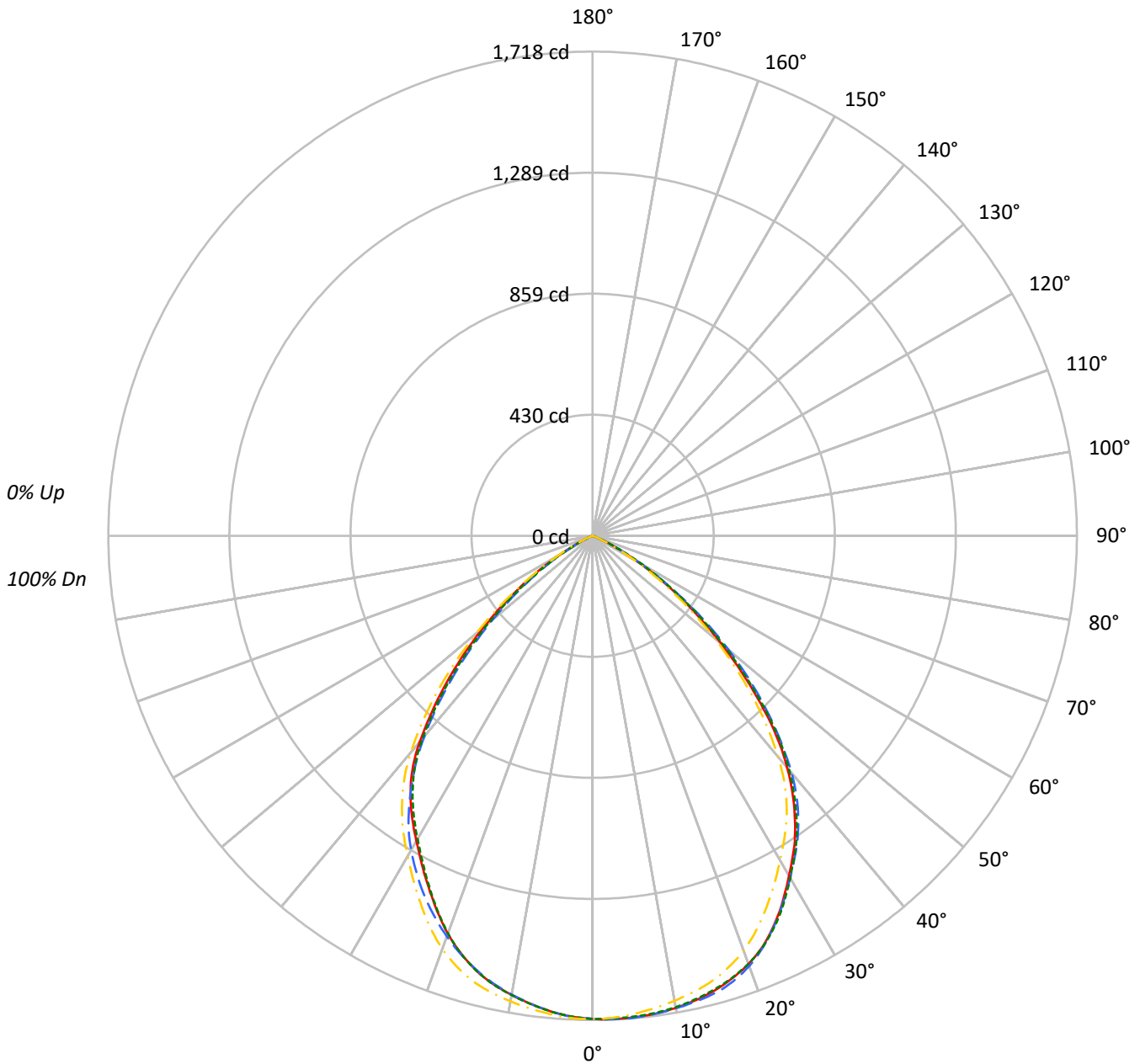
Lumens per Lamp: N/A
Luminaire Lumens: 2989.2 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.22
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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



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Luminous Intensity Polar Plot





TEST NUMBER: P775926

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20										
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	112	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	93	91								
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81								
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72								
4	91	81	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64								
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58								
6	79	68	61	55	77	67	60	55	65	59	55	64	58	54	62	58	54	52								
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47								
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43								
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39								
10	61	49	42	38	60	49	42	38	48	42	38	47	42	37	46	41	37	36								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	215744	215744	215744	215744
5°	216669	216290	214042	214080
10°	217398	217028	211431	211533
15°	217661	217179	207994	208098
20°	216519	216452	201158	200970
25°	211525	212275	191210	190585
30°	202473	203737	181721	180530
35°	192412	193979	173023	171041
40°	176360	178233	156597	154280
45°	150249	152848	129533	126098
50°	116611	119704	98657	94389
55°	81819	85132	66043	61479
60°	47143	50390	34080	30103
65°	16408	18612	9261	7355
70°	552	1177	552	442
75°	486	583	486	486
80°	362	507	362	362
85°	0	289	0	289

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 154912 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.8	5.4
10°-20°	460.1	15.4
20°-30°	667.6	22.3
30°-40°	740.4	24.8
40°-50°	601.2	20.1
50°-60°	301.8	10.1
60°-70°	54.9	1.8
70°-80°	1.1	0.0
80°-90°	0.2	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°	1289.5	43.1
0°-40°	2029.9	67.9
0°-60°	2932.9	98.1
0°-90°	2989.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2989.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1714	1714	1714	1714	1714	
5°	1715	1712	1694	1695	1715	163
15°	1671	1667	1596	1597	1671	471
25°	1523	1529	1377	1372	1523	699
35°	1252	1263	1126	1113	1252	778
45°	844	859	728	708	844	646
55°	373	388	301	280	373	336
65°	55	62	31	25	55	65
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	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°	1714.3	1714.3	1714.3	1714.3	1714.3	1714.3	1714.3	1714.3	1714.3	1714.3	1714.3
0.5°	1715.1	1715.1	1715.3	1715.8	1713.8	1714.3	1714.6	1714.6	1713.3	1713.1	1713.6
1°	1715.8	1715.8	1716.1	1716.3	1714.3	1714.1	1714.1	1714.1	1712.3	1711.9	1712.6
1.5°	1716.3	1716.3	1716.8	1716.8	1714.6	1713.8	1713.3	1712.6	1711.1	1710.6	1711.4
2°	1716.5	1716.8	1717.0	1717.0	1714.3	1713.3	1712.3	1710.9	1709.6	1708.9	1709.6
2.5°	1716.5	1717.3	1717.5	1717.0	1714.1	1712.8	1711.4	1709.4	1707.9	1707.2	1707.9
3°	1716.5	1717.3	1717.5	1717.0	1713.8	1712.1	1710.1	1707.4	1705.7	1704.9	1705.9
3.5°	1716.5	1717.3	1717.5	1716.8	1713.8	1711.1	1708.4	1705.2	1703.0	1702.2	1703.5
4°	1716.1	1717.0	1717.3	1716.8	1713.1	1710.4	1706.7	1703.0	1700.2	1699.7	1700.7
4.5°	1715.6	1716.8	1717.0	1716.3	1712.6	1709.1	1704.9	1700.5	1697.3	1696.5	1697.5
5°	1715.1	1716.1	1716.3	1715.8	1712.1	1708.1	1702.7	1697.5	1694.3	1693.3	1694.3
5.5°	1714.1	1715.6	1715.6	1714.8	1711.4	1706.7	1700.5	1694.6	1690.6	1689.9	1690.8
6°	1713.1	1714.6	1714.6	1714.1	1710.6	1705.2	1698.0	1691.3	1687.1	1686.4	1687.1
6.5°	1712.3	1713.6	1713.3	1712.8	1709.6	1703.7	1695.5	1688.1	1683.7	1682.7	1683.4
7°	1711.1	1712.3	1712.3	1711.6	1708.6	1701.7	1692.8	1684.7	1679.7	1678.7	1679.5
7.5°	1710.1	1710.9	1710.9	1710.4	1707.2	1700.0	1690.1	1681.2	1675.8	1674.8	1675.0
8°	1708.6	1709.1	1709.4	1708.9	1705.9	1698.0	1687.4	1677.8	1671.8	1670.6	1671.1
8.5°	1706.9	1707.4	1707.7	1707.2	1704.4	1695.8	1684.7	1674.3	1667.6	1666.4	1666.4
9°	1705.2	1705.7	1705.9	1705.2	1702.5	1693.6	1681.7	1670.3	1663.7	1662.2	1661.9
9.5°	1703.2	1703.5	1704.2	1703.0	1700.5	1691.3	1678.5	1666.6	1659.2	1657.7	1657.5
10°	1701.2	1701.2	1702.5	1700.7	1698.3	1688.6	1675.5	1662.7	1654.5	1653.5	1652.8
10.5°	1698.8	1699.0	1700.7	1698.8	1696.0	1685.7	1672.1	1658.7	1650.1	1649.3	1648.1
11°	1696.3	1696.5	1699.0	1696.3	1693.3	1682.4	1668.6	1654.5	1645.1	1644.6	1642.9
11.5°	1693.6	1693.8	1696.8	1693.6	1690.4	1679.0	1665.1	1650.3	1640.2	1639.9	1637.7
12°	1691.1	1691.3	1695.0	1690.8	1687.4	1675.8	1661.4	1646.1	1634.7	1635.0	1632.5
12.5°	1688.1	1688.6	1692.8	1687.6	1684.4	1672.1	1657.7	1641.7	1629.3	1630.1	1627.1
13°	1685.2	1685.9	1690.8	1684.4	1681.2	1668.4	1654.0	1637.2	1623.6	1624.6	1621.2
13.5°	1681.7	1682.7	1688.4	1681.0	1677.8	1664.2	1649.8	1632.5	1617.5	1619.2	1615.0
14°	1678.2	1679.2	1685.9	1677.5	1674.3	1660.2	1645.4	1627.3	1611.0	1613.5	1608.3
14.5°	1674.8	1675.5	1682.9	1673.8	1670.6	1655.8	1640.7	1621.7	1604.1	1607.1	1601.6
15°	1670.6	1671.8	1680.0	1669.6	1666.9	1651.1	1635.7	1616.0	1596.4	1600.6	1594.7
15.5°	1666.4	1667.4	1676.3	1665.1	1662.9	1646.4	1630.5	1609.5	1588.5	1593.7	1587.3
16°	1661.9	1662.4	1672.6	1660.2	1658.5	1641.2	1624.9	1603.1	1580.4	1586.1	1579.4
16.5°	1657.0	1657.2	1667.9	1655.0	1654.0	1635.5	1618.7	1596.0	1571.7	1578.4	1572.0
17°	1651.8	1651.8	1662.9	1649.3	1649.3	1629.8	1612.0	1588.8	1562.6	1570.5	1564.3
17.5°	1646.4	1646.1	1657.5	1643.6	1644.4	1623.4	1605.1	1580.9	1553.4	1561.8	1556.2
18°	1641.2	1640.2	1651.8	1637.5	1639.2	1617.2	1598.4	1572.2	1544.1	1553.0	1548.0
18.5°	1635.5	1634.0	1645.6	1631.0	1633.8	1610.3	1590.8	1563.8	1534.2	1543.1	1539.4
19°	1629.8	1627.6	1639.0	1624.6	1628.3	1603.6	1582.9	1554.7	1523.8	1533.4	1530.7
19.5°	1623.6	1620.9	1632.0	1617.9	1622.4	1596.4	1574.5	1545.0	1513.2	1523.3	1521.8
20°	1616.7	1613.7	1624.9	1610.8	1616.2	1588.8	1565.8	1535.2	1502.0	1512.7	1512.9
20.5°	1609.8	1606.3	1616.7	1603.1	1609.3	1580.9	1556.7	1524.3	1490.9	1501.1	1503.3
21°	1602.1	1598.4	1608.3	1595.5	1602.4	1572.5	1547.0	1513.2	1478.6	1489.4	1493.6



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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°	1576.7	1572.5	1580.1	1569.5	1578.7	1544.5	1515.6	1476.8	1441.2	1452.1	1463.5
23°	1567.3	1563.1	1569.5	1560.4	1569.5	1534.7	1504.3	1464.5	1428.4	1439.0	1453.1
23.5°	1556.9	1553.4	1558.9	1551.0	1559.9	1524.3	1492.9	1451.4	1415.5	1425.9	1443.0
24°	1546.3	1543.6	1547.8	1541.3	1550.0	1513.7	1480.8	1438.3	1402.4	1412.8	1432.6
24.5°	1535.2	1533.7	1536.6	1531.7	1539.6	1502.5	1468.9	1424.9	1389.8	1399.2	1422.0
25°	1523.3	1523.5	1525.3	1522.1	1528.7	1491.9	1456.8	1411.6	1377.0	1385.9	1410.9
25.5°	1511.7	1513.2	1513.7	1511.9	1517.4	1480.5	1444.7	1397.8	1364.1	1372.3	1399.5
26°	1499.6	1502.8	1501.5	1501.8	1506.0	1469.2	1432.4	1384.9	1351.5	1359.0	1387.9
26.5°	1487.2	1492.4	1489.7	1491.7	1494.1	1457.6	1419.7	1371.6	1338.7	1345.1	1376.0
27°	1474.4	1481.8	1477.6	1481.0	1481.5	1445.4	1407.4	1358.2	1325.8	1331.3	1363.9
27.5°	1461.0	1470.9	1465.2	1469.9	1468.9	1433.1	1394.8	1344.9	1312.7	1317.9	1351.3
28°	1447.7	1459.5	1452.6	1458.8	1455.8	1420.7	1381.9	1331.5	1299.9	1304.6	1338.9
28.5°	1434.1	1448.2	1439.8	1447.2	1442.2	1408.1	1369.1	1318.2	1287.5	1291.5	1326.1
29°	1420.5	1436.3	1426.7	1435.3	1428.9	1395.3	1355.7	1305.1	1274.9	1278.6	1313.2
29.5°	1407.1	1424.7	1414.3	1423.5	1415.5	1382.7	1342.9	1292.2	1262.6	1265.5	1300.4
30°	1393.3	1413.1	1401.7	1411.1	1402.0	1369.8	1330.0	1279.4	1250.5	1252.7	1287.3
30.5°	1380.0	1401.0	1388.9	1398.7	1387.9	1357.2	1317.2	1266.5	1238.6	1240.1	1274.4
31°	1366.6	1388.6	1375.8	1386.4	1374.5	1344.9	1304.6	1254.4	1226.7	1227.7	1260.8
31.5°	1353.8	1376.5	1363.7	1373.5	1361.4	1332.0	1292.0	1242.6	1214.6	1215.1	1246.5
32°	1339.9	1364.1	1351.0	1361.2	1348.3	1319.4	1279.6	1230.4	1202.8	1203.0	1231.4
32.5°	1327.3	1351.8	1338.9	1348.3	1335.0	1307.1	1267.3	1218.1	1191.2	1190.2	1215.9
33°	1313.7	1338.4	1325.8	1335.5	1322.1	1294.5	1254.7	1205.7	1178.6	1177.1	1199.1
33.5°	1299.4	1324.6	1313.2	1321.6	1308.0	1281.6	1241.3	1192.9	1165.7	1163.2	1181.8
34°	1283.8	1309.3	1299.6	1306.8	1293.7	1267.5	1228.0	1180.0	1152.9	1149.6	1164.5
34.5°	1268.3	1293.7	1285.3	1291.0	1278.4	1253.4	1214.1	1166.7	1139.5	1135.3	1146.4
35°	1252.4	1277.2	1270.7	1274.7	1262.6	1238.1	1200.1	1153.1	1126.2	1121.0	1128.4
35.5°	1236.1	1260.6	1256.4	1258.4	1246.5	1223.0	1185.5	1139.3	1112.3	1105.9	1110.3
36°	1219.8	1243.5	1241.6	1240.8	1230.7	1207.5	1169.9	1125.2	1098.0	1090.8	1091.8
36.5°	1203.3	1226.2	1226.0	1223.5	1212.9	1190.7	1154.1	1110.3	1083.2	1074.5	1073.0
37°	1185.5	1208.2	1209.4	1205.5	1195.9	1173.4	1137.5	1094.8	1067.6	1058.2	1054.2
37.5°	1167.9	1189.7	1193.4	1187.2	1177.8	1155.6	1120.7	1079.2	1051.5	1041.1	1035.2
38°	1149.1	1170.4	1175.8	1168.4	1159.5	1137.5	1103.4	1061.9	1034.5	1022.1	1015.7
38.5°	1130.6	1151.1	1157.5	1149.1	1141.2	1119.2	1084.4	1043.4	1016.2	1001.9	994.7
39°	1112.6	1132.1	1139.3	1130.1	1123.2	1100.2	1064.6	1024.3	996.2	981.1	972.0
39.5°	1093.0	1111.8	1119.5	1110.1	1104.2	1080.9	1044.6	1004.1	975.2	960.1	949.7
40°	1073.5	1090.8	1098.0	1089.3	1084.9	1060.4	1023.9	983.3	953.2	938.1	927.2
40.5°	1052.8	1069.1	1076.2	1067.6	1064.6	1039.4	1002.3	962.3	931.2	914.9	904.2
41°	1033.0	1047.1	1054.2	1045.6	1044.6	1017.9	980.4	940.6	908.9	891.9	881.5
41.5°	1011.5	1024.6	1031.5	1023.4	1023.6	995.9	958.6	918.8	886.2	869.1	858.0
42°	989.7	1002.1	1009.0	1001.4	1002.3	973.2	936.6	896.6	864.0	845.2	834.6
42.5°	966.3	979.1	986.5	979.1	979.6	950.7	914.1	874.1	841.2	821.0	810.6
43°	943.8	956.4	963.8	956.1	956.9	928.2	891.6	851.4	818.7	797.2	787.1
43.5°	919.6	933.2	940.6	933.4	932.4	904.5	868.4	829.1	796.0	773.5	763.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	844.2	862.5	870.4	863.5	858.8	832.8	798.0	760.4	727.8	702.3	691.7
45.5°	818.7	838.8	846.7	841.0	833.1	808.1	774.5	738.4	705.1	679.1	668.5
46°	793.3	815.0	822.9	817.3	807.6	782.9	750.5	715.4	682.1	655.6	644.5
46.5°	767.3	790.8	799.2	792.8	782.4	758.2	727.0	692.9	659.8	632.9	621.0
47°	742.1	766.6	775.0	768.1	757.2	733.5	702.8	670.0	636.8	610.2	597.3
47.5°	717.2	741.6	750.8	744.3	732.0	708.5	679.1	647.5	614.4	586.9	574.3
48°	692.2	717.2	727.0	720.1	707.8	683.6	655.1	624.5	592.1	564.7	551.1
48.5°	667.2	692.7	702.6	695.7	683.6	658.6	632.2	602.3	569.9	542.9	528.4
49°	643.8	668.5	678.9	671.2	659.3	634.6	608.4	579.3	547.4	520.5	505.9
49.5°	619.3	644.3	654.9	647.0	635.1	610.7	585.2	556.8	525.6	498.7	483.9
50°	595.6	619.8	630.7	622.5	611.4	586.7	562.0	534.0	503.9	477.2	461.6
50.5°	571.6	595.1	606.7	598.5	588.4	562.5	539.0	511.8	482.6	456.2	440.4
51°	548.6	571.4	582.0	574.1	564.9	539.2	516.0	489.8	460.9	434.7	419.4
51.5°	525.4	548.1	558.5	550.8	542.0	516.7	493.5	468.1	440.1	414.2	399.1
52°	503.2	524.7	534.8	527.6	519.2	493.8	471.3	446.6	419.6	393.9	378.8
52.5°	480.2	501.2	511.3	504.6	496.2	472.0	449.3	424.6	398.9	374.2	359.1
53°	458.4	478.2	487.8	481.7	474.0	449.5	427.0	403.6	378.6	353.9	339.8
53.5°	435.9	455.7	463.9	458.7	452.0	427.8	405.8	383.0	358.6	334.6	321.5
54°	414.9	433.5	440.6	435.9	430.2	406.3	384.8	362.5	338.8	315.6	303.0
54.5°	393.9	411.0	417.9	414.2	408.7	385.8	364.0	342.5	319.5	297.0	284.7
55°	372.9	390.0	395.9	392.4	388.0	365.3	344.0	322.5	301.0	278.8	267.4
55.5°	352.2	368.5	373.4	371.4	367.7	344.7	323.7	303.0	282.2	261.2	250.3
56°	332.4	347.5	351.9	350.4	346.7	325.0	304.0	284.2	264.2	243.9	234.5
56.5°	312.9	326.7	330.9	329.4	326.7	305.4	285.2	265.9	246.4	228.1	219.0
57°	293.1	306.9	310.1	309.7	306.9	286.7	266.4	247.4	230.1	212.3	203.4
57.5°	274.3	287.4	289.6	289.9	288.2	268.4	248.1	230.6	213.8	196.5	187.6
58°	256.0	267.9	269.9	270.9	269.1	250.3	231.6	214.0	197.5	180.7	172.0
58.5°	238.2	249.4	251.1	252.1	250.8	233.8	215.0	197.2	181.1	164.6	157.9
59°	220.9	231.3	232.5	233.5	234.0	217.5	198.4	180.4	164.8	150.5	144.3
59.5°	203.6	213.8	214.8	216.0	217.0	200.9	181.9	163.8	149.8	136.7	130.7
60°	187.3	196.5	197.7	198.9	200.2	184.4	165.6	148.8	135.4	123.3	118.4
60.5°	171.3	179.7	180.9	182.4	183.1	168.0	151.0	134.4	121.8	111.0	106.3
61°	155.7	163.8	164.8	165.8	166.3	153.2	136.2	120.8	108.5	98.9	95.1
61.5°	141.4	148.5	150.0	150.7	151.0	138.6	122.8	107.7	96.1	87.7	84.5
62°	126.8	133.9	135.7	135.9	136.4	125.0	110.0	95.1	84.3	77.1	74.4
62.5°	113.2	119.6	121.8	121.8	122.1	111.7	97.6	83.5	73.1	67.0	65.0
63°	100.6	106.3	108.5	108.2	108.7	98.9	85.8	72.9	62.3	57.8	56.3
63.5°	88.2	93.7	96.4	95.4	96.1	87.0	75.1	62.5	52.9	49.2	48.2
64°	77.1	83.0	84.5	84.0	84.3	75.6	65.0	53.4	44.2	41.5	41.3
64.5°	66.0	72.7	74.6	73.9	72.9	65.2	55.6	44.5	36.3	34.8	34.6
65°	55.1	62.0	64.7	63.8	62.5	55.6	47.0	36.8	31.1	29.9	29.9
65.5°	44.0	51.4	54.9	53.6	52.9	46.5	38.8	31.6	26.2	25.2	25.2
66°	32.9	41.0	45.0	43.5	44.0	38.3	33.1	26.2	21.0	20.5	20.8



TEST NUMBER: P775926
 CATALOG NUMBER: HCDJBL51525CSD-HCD41TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	11.1	19.8	23.2	22.2	25.0	21.3	16.6	10.1	7.4	7.9	8.2
68°	9.1	14.6	17.3	16.8	19.3	15.6	10.9	7.4	4.7	5.4	5.4
68.5°	7.2	10.4	12.4	12.1	13.8	9.9	7.4	4.9	2.7	3.5	3.5
69°	5.2	8.6	8.4	8.4	8.2	6.7	4.9	3.2	1.7	2.2	2.2
69.5°	3.2	6.9	6.7	6.7	5.2	4.2	2.7	2.0	1.5	1.5	1.5
70°	1.5	5.2	4.9	4.9	3.2	2.2	1.7	1.5	1.5	1.5	1.5
70.5°	1.2	3.2	3.2	3.2	2.0	1.5	1.5	1.2	1.2	1.5	1.5
71°	1.2	1.5	1.7	1.7	1.5	1.5	1.2	1.2	1.2	1.2	1.5
71.5°	1.2	1.5	1.5	1.5	1.5	1.2	1.2	1.2	1.2	1.2	1.2
72°	1.2	1.2	1.5	1.5	1.5	1.2	1.2	1.2	1.2	1.2	1.2
72.5°	1.2	1.2	1.5	1.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2
73°	1.2	1.2	1.5	1.5	1.2	1.2	1.2	1.0	1.2	1.2	1.2
73.5°	1.0	1.2	1.2	1.2	1.2	1.2	1.0	1.0	1.0	1.2	1.2
74°	1.0	1.2	1.2	1.2	1.2	1.2	1.0	1.0	1.0	1.0	1.2
74.5°	1.0	1.2	1.2	1.2	1.2	1.0	1.0	1.0	1.0	1.0	1.0
75°	1.0	1.0	1.2	1.2	1.2	1.0	1.0	1.0	1.0	1.0	1.0
75.5°	1.0	1.0	1.2	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0
76°	1.0	1.0	1.0	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0
76.5°	0.7	1.0	1.0	1.0	1.0	1.0	1.0	0.7	0.7	1.0	1.0
77°	0.7	1.0	1.0	1.0	1.0	1.0	0.7	0.7	0.7	0.7	1.0
77.5°	0.7	0.7	1.0	1.0	1.0	0.7	0.7	0.7	0.7	0.7	0.7
78°	0.7	0.7	1.0	1.0	1.0	0.7	0.7	0.7	0.7	0.7	0.7
78.5°	0.7	0.7	1.0	1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
79°	0.7	0.7	0.7	1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
79.5°	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.7
80°	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.7
80.5°	0.5	0.5	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.5
81°	0.5	0.5	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5
81.5°	0.5	0.5	0.5	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5
82°	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.5
83°	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
83.5°	0.2	0.2	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2
84°	0.2	0.2	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2
84.5°	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.2	0.0	0.2	0.2
85°	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2
85.5°	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.2
86°	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.2
86.5°	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775926
CATALOG NUMBER: HCDJBL51525CSD-HCD41TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2



TEST NUMBER: P775926

CATALOG NUMBER: HCDJBLS1525CSD-HCD41TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1714.3	1714.3	1714.3	1714.3	1714.3	1714.3
0.5°	1714.1	1712.8	1713.8	1714.6	1715.3	1715.1
1°	1713.1	1711.9	1713.3	1714.6	1715.8	1715.8
1.5°	1711.9	1710.6	1712.6	1714.6	1715.8	1716.3
2°	1710.6	1709.1	1711.4	1713.8	1715.6	1716.5
2.5°	1708.9	1707.4	1710.1	1712.8	1715.3	1716.5
3°	1706.9	1705.4	1708.1	1711.6	1714.8	1716.5
3.5°	1704.7	1703.2	1706.2	1710.1	1714.1	1716.5
4°	1702.0	1700.5	1703.9	1708.6	1713.1	1716.1
4.5°	1699.0	1697.8	1701.2	1706.7	1712.1	1715.6
5°	1695.8	1694.6	1698.5	1704.4	1711.1	1715.1
5.5°	1692.3	1691.1	1695.5	1702.2	1709.9	1714.1
6°	1688.6	1687.6	1692.3	1699.7	1708.4	1713.1
6.5°	1684.9	1683.9	1689.1	1697.3	1706.7	1712.3
7°	1681.0	1680.2	1685.9	1694.8	1705.2	1711.1
7.5°	1677.0	1676.3	1682.2	1692.1	1703.2	1710.1
8°	1673.1	1672.3	1678.7	1689.4	1701.5	1708.6
8.5°	1668.9	1668.4	1675.0	1686.6	1699.3	1706.9
9°	1664.7	1664.2	1671.3	1683.7	1696.8	1705.2
9.5°	1660.5	1659.7	1667.4	1680.5	1694.1	1703.2
10°	1656.2	1655.3	1663.2	1677.3	1691.3	1701.2
10.5°	1651.8	1650.8	1659.2	1674.0	1688.4	1698.8
11°	1647.4	1646.1	1655.0	1670.8	1685.2	1696.3
11.5°	1642.7	1640.9	1650.3	1667.4	1682.0	1693.6
12°	1638.0	1636.0	1645.9	1663.9	1678.7	1691.1
12.5°	1633.0	1630.3	1640.9	1660.0	1675.0	1688.1
13°	1627.8	1624.6	1635.7	1656.2	1671.1	1685.2
13.5°	1622.6	1618.2	1630.5	1651.8	1667.1	1681.7
14°	1616.7	1611.5	1624.6	1647.1	1662.7	1678.2
14.5°	1610.5	1604.6	1618.2	1642.2	1658.0	1674.8
15°	1604.1	1597.2	1611.5	1636.5	1653.0	1670.6
15.5°	1596.9	1589.3	1604.4	1630.5	1647.4	1666.4
16°	1589.5	1580.9	1596.7	1624.4	1641.7	1661.9
16.5°	1581.6	1572.2	1588.5	1617.7	1635.2	1657.0
17°	1573.5	1563.1	1580.1	1610.5	1629.1	1651.8
17.5°	1565.1	1553.7	1571.2	1602.9	1622.4	1646.4
18°	1555.9	1543.8	1562.1	1595.2	1615.5	1641.2
18.5°	1546.5	1533.7	1553.0	1586.8	1608.3	1635.5
19°	1536.6	1523.3	1542.8	1578.2	1601.1	1629.8
19.5°	1526.3	1512.2	1532.4	1569.0	1593.5	1623.6
20°	1515.4	1500.6	1521.6	1559.4	1585.6	1616.7
20.5°	1504.0	1488.9	1510.4	1549.5	1576.9	1609.8
21°	1492.4	1476.6	1498.8	1538.9	1567.8	1602.1

TEST NUMBER: P775926

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1454.8	1438.8	1462.0	1505.0	1539.1	1576.7
23°	1441.7	1425.4	1448.9	1492.7	1528.7	1567.3
23.5°	1428.4	1412.3	1436.3	1480.3	1518.4	1556.9
24°	1415.1	1399.2	1423.2	1467.9	1507.2	1546.3
24.5°	1401.2	1385.9	1410.1	1455.1	1495.9	1535.2
25°	1387.6	1372.5	1397.0	1442.0	1484.2	1523.3
25.5°	1374.0	1359.2	1384.2	1429.4	1473.1	1511.7
26°	1359.9	1346.1	1370.6	1416.5	1461.3	1499.6
26.5°	1345.9	1332.5	1357.5	1403.7	1449.2	1487.2
27°	1332.0	1319.2	1344.1	1390.3	1437.0	1474.4
27.5°	1318.4	1305.8	1331.0	1377.2	1424.7	1461.0
28°	1304.8	1293.0	1317.4	1363.9	1411.8	1447.7
28.5°	1291.5	1280.1	1304.8	1350.8	1399.2	1434.1
29°	1277.9	1266.8	1292.0	1337.7	1386.1	1420.5
29.5°	1264.8	1254.4	1279.1	1325.1	1373.3	1407.1
30°	1252.2	1242.3	1266.3	1312.2	1360.4	1393.3
30.5°	1239.8	1230.0	1254.2	1299.6	1348.1	1380.0
31°	1227.2	1217.8	1242.1	1287.0	1335.7	1366.6
31.5°	1214.4	1205.2	1229.5	1274.9	1322.9	1353.8
32°	1202.0	1193.1	1217.1	1261.8	1310.0	1339.9
32.5°	1189.4	1180.8	1204.7	1249.5	1297.4	1327.3
33°	1175.8	1167.7	1191.9	1236.6	1284.6	1313.7
33.5°	1162.0	1154.6	1178.6	1222.8	1270.7	1299.4
34°	1148.2	1140.7	1165.2	1208.7	1255.9	1283.8
34.5°	1134.1	1127.1	1151.1	1194.4	1240.3	1268.3
35°	1119.2	1113.3	1137.0	1179.5	1224.8	1252.4
35.5°	1104.7	1099.2	1122.9	1164.7	1208.7	1236.1
36°	1088.8	1084.1	1108.6	1149.1	1192.4	1219.8
36.5°	1072.8	1068.8	1093.5	1133.8	1175.3	1203.3
37°	1055.5	1053.0	1077.5	1117.3	1157.8	1185.5
37.5°	1038.7	1036.9	1061.4	1099.7	1139.5	1167.9
38°	1020.4	1019.6	1044.6	1082.2	1121.0	1149.1
38.5°	1000.4	1001.1	1026.6	1064.1	1102.4	1130.6
39°	979.6	981.6	1007.3	1044.6	1083.2	1112.6
39.5°	958.6	960.8	986.8	1023.9	1063.6	1093.0
40°	935.6	939.1	965.5	1002.3	1043.1	1073.5
40.5°	912.6	916.6	944.0	980.8	1022.1	1052.8
41°	889.2	893.6	922.0	958.9	999.9	1033.0
41.5°	865.9	870.1	899.3	936.9	977.1	1011.5
42°	842.0	847.9	877.3	914.4	955.4	989.7
42.5°	818.0	824.4	854.6	891.4	932.7	966.3
43°	794.0	801.7	832.1	868.4	909.7	943.8
43.5°	770.8	777.5	809.1	845.2	885.5	919.6



TEST NUMBER: P775926

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	697.6	708.5	740.4	774.5	813.5	844.2
45.5°	674.7	685.0	717.7	751.0	789.1	818.7
46°	650.4	662.3	695.2	727.5	764.4	793.3
46.5°	627.0	639.3	671.9	703.1	739.2	767.3
47°	603.7	616.6	649.2	679.6	714.4	742.1
47.5°	581.2	593.1	626.0	655.9	689.7	717.2
48°	558.3	570.9	603.0	632.4	665.0	692.2
48.5°	536.0	548.1	579.8	608.4	640.1	667.2
49°	513.5	526.1	557.0	585.9	616.1	643.8
49.5°	492.8	504.1	534.3	562.2	591.9	619.3
50°	470.3	482.1	511.8	539.0	567.9	595.6
50.5°	449.0	460.2	488.8	516.0	543.7	571.6
51°	427.8	438.9	467.1	493.5	520.5	548.6
51.5°	407.0	417.9	445.1	470.8	497.5	525.4
52°	387.0	397.4	423.6	449.0	475.2	503.2
52.5°	366.7	377.1	401.8	426.8	452.5	480.2
53°	347.0	356.6	381.1	405.0	430.7	458.4
53.5°	327.7	336.8	360.3	383.0	409.2	435.9
54°	308.9	317.6	339.8	362.3	388.0	414.9
54.5°	290.1	298.8	320.0	342.0	367.5	393.9
55°	272.3	280.2	300.5	321.3	347.0	372.9
55.5°	254.8	261.7	281.0	301.0	327.2	352.2
56°	237.7	244.2	262.2	282.2	307.7	332.4
56.5°	221.7	226.9	243.9	263.4	288.9	312.9
57°	205.9	210.1	226.1	244.9	270.4	293.1
57.5°	190.0	193.3	208.3	226.9	251.8	274.3
58°	174.2	177.9	192.3	209.6	234.5	256.0
58.5°	159.6	162.4	175.7	193.0	218.0	238.2
59°	145.6	147.5	160.1	176.9	201.4	220.9
59.5°	132.0	133.4	145.1	161.6	185.6	203.6
60°	119.1	119.6	130.7	146.3	170.3	187.3
60.5°	107.0	106.8	117.1	132.7	154.9	171.3
61°	95.1	94.2	104.0	119.1	140.4	155.7
61.5°	84.3	83.8	91.7	106.5	126.8	141.4
62°	73.9	73.9	82.0	94.2	113.4	126.8
62.5°	64.3	64.0	72.2	84.0	100.6	113.2
63°	55.6	54.1	62.5	74.4	88.7	100.6
63.5°	47.4	44.0	52.6	64.7	78.8	88.2
64°	40.3	36.6	43.0	55.1	69.2	77.1
64.5°	33.9	30.4	35.6	45.5	59.6	66.0
65°	29.4	24.7	29.2	38.1	49.7	55.1
65.5°	24.7	20.0	23.5	31.1	40.0	44.0
66°	20.0	15.8	18.5	25.0	32.4	32.9



TEST NUMBER: P775926

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	7.9	7.4	8.2	11.1	14.6	11.1
68°	5.4	5.7	6.4	7.9	10.4	9.1
68.5°	3.5	4.0	4.7	6.2	8.4	7.2
69°	2.2	2.0	3.2	4.4	6.7	5.2
69.5°	1.5	1.5	1.5	3.0	4.9	3.2
70°	1.5	1.2	1.2	1.2	3.0	1.5
70.5°	1.5	1.2	1.2	1.2	1.2	1.2
71°	1.2	1.2	1.2	1.2	1.2	1.2
71.5°	1.2	1.2	1.2	1.2	1.2	1.2
72°	1.2	1.2	1.0	1.0	1.2	1.2
72.5°	1.2	1.2	1.0	1.0	1.0	1.2
73°	1.2	1.0	1.0	1.0	1.0	1.2
73.5°	1.2	1.0	1.0	1.0	1.0	1.0
74°	1.0	1.0	1.0	1.0	1.0	1.0
74.5°	1.0	1.0	1.0	1.0	1.0	1.0
75°	1.0	1.0	1.0	1.0	1.0	1.0
75.5°	1.0	1.0	0.7	0.7	0.7	1.0
76°	1.0	1.0	0.7	0.7	0.7	1.0
76.5°	1.0	0.7	0.7	0.7	0.7	0.7
77°	1.0	0.7	0.7	0.7	0.7	0.7
77.5°	0.7	0.7	0.7	0.7	0.7	0.7
78°	0.7	0.7	0.7	0.7	0.7	0.7
78.5°	0.7	0.7	0.7	0.7	0.7	0.7
79°	0.7	0.7	0.7	0.5	0.5	0.7
79.5°	0.7	0.7	0.5	0.5	0.5	0.5
80°	0.7	0.5	0.5	0.5	0.5	0.5
80.5°	0.5	0.5	0.5	0.5	0.5	0.5
81°	0.5	0.5	0.5	0.5	0.5	0.5
81.5°	0.5	0.5	0.5	0.5	0.5	0.5
82°	0.5	0.5	0.5	0.5	0.2	0.5
82.5°	0.5	0.5	0.5	0.2	0.2	0.2
83°	0.5	0.5	0.2	0.2	0.2	0.2
83.5°	0.2	0.2	0.2	0.2	0.2	0.2
84°	0.2	0.2	0.2	0.2	0.2	0.2
84.5°	0.2	0.2	0.2	0.2	0.2	0.2
85°	0.2	0.2	0.2	0.2	0.2	0.0
85.5°	0.2	0.2	0.2	0.2	0.0	0.0
86°	0.2	0.2	0.2	0.2	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775926

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.2	0.2	0.0	0.0	0.0	0.0



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

Scaled Data Report





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

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Scaled Data Report





21.5°	1594.0	1590.0	1599.2	1587.1	1595.0	1563.6	1536.9	1501.5	1466.2	1477.1	1483.8
22°	1585.8	1581.4	1589.8	1578.7	1587.1	1554.4	1526.8	1489.4	1453.9	1464.7	1473.9



44°	894.8	909.9	917.3	910.4	908.9	880.3	844.7	805.9	772.8	749.5	739.4
44.5°	868.4	886.4	893.9	887.4	883.0	856.3	821.5	783.4	750.3	725.6	715.7



66.5°	24.5	32.9	36.8	35.6	36.1	32.6	27.7	20.8	15.8	15.6	16.1
67°	16.8	25.9	29.7	28.4	30.4	26.9	22.0	15.6	10.9	10.9	11.4



89°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
89.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2

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21.5°	1480.3	1464.5	1487.0	1527.7	1558.6	1594.0
22°	1467.4	1451.4	1474.6	1516.6	1549.0	1585.8



44°	745.3	754.5	785.9	821.9	861.7	894.8
44.5°	721.4	731.3	763.1	798.2	838.0	868.4



66.5°	15.3	12.4	14.3	19.8	25.5	24.5
67°	10.9	9.4	10.9	15.1	19.5	16.8

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89°	0.2	0.2	0.0	0.0	0.0	0.0
89.5°	0.2	0.2	0.0	0.0	0.0	0.0

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(END OF REPORT)