

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: P776031

Luminaire Tested: HCDJBL51525CSD-HCD61TRH-2500lm-3000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776031
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B036)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL51525CSD-HCD61TRH-2500lm-3000K
Description: 6 INCH ROUND SHALLOW-WIDE HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT
Ballast/Driver: -

Summary

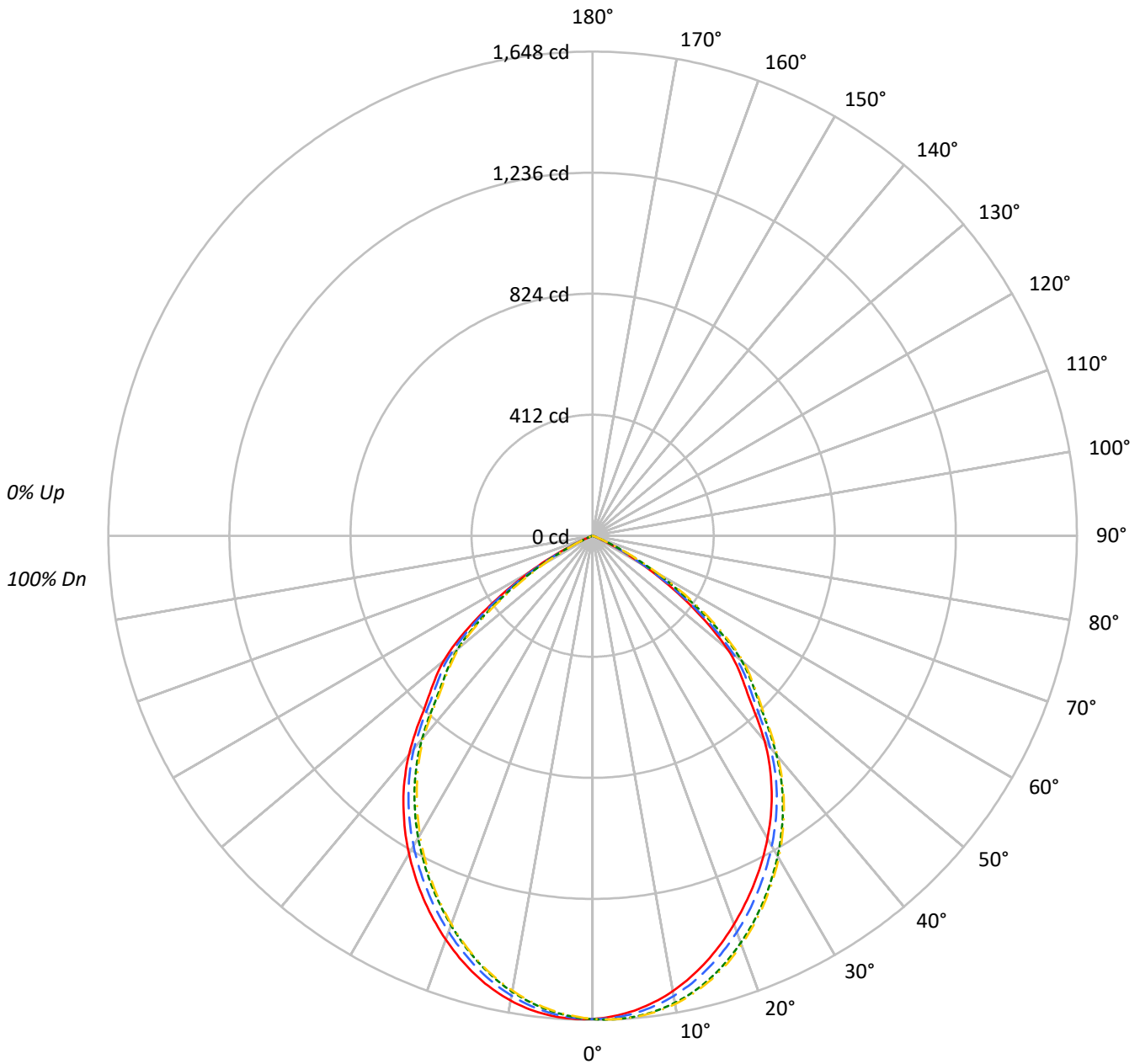
Lumens per Lamp: N/A
Luminaire Lumens: 2937.3 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.2
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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: P776031

CATALOG NUMBER: HCDJBLS1525CSD-HCD61TRH-2500lm-3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	112	108	105	103	109	106	103	101	102	100	98	98	97	95	95	93	92	90																			
2	104	98	93	89	102	96	92	87	93	89	86	90	87	84	87	84	82	80																			
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71																			
4	90	80	73	68	88	79	72	67	77	71	66	74	70	65	72	68	65	63																			
5	84	73	65	60	82	72	65	60	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	53	76	66	58	53	64	58	53	62	57	52	61	56	52	50																			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45																			
8	68	56	49	43	67	55	48	43	54	48	43	53	47	43	52	47	43	41																			
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37																			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	90168	90168	90168	90168
5°	89285	90414	90210	89341
10°	87585	89850	89427	87735
15°	85091	88355	87742	85301
20°	82076	86026	85291	82263
25°	78821	83098	82408	78869
30°	75341	79734	79126	75138
35°	71106	75523	75121	70711
40°	65058	69652	69545	64685
45°	57246	62053	61844	56843
50°	50924	56467	56254	51154
55°	37542	43468	43774	38555
60°	21457	26785	27432	23024
65°	6187	10066	9482	8042
70°	160	240	160	481
75°	106	106	106	106
80°	63	63	63	63
85°	126	0	0	126

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 135°

Vertical Angle: 45°

Luminance: 62650 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.5	5.3
10°-20°	429.3	14.6
20°-30°	614.2	20.9
30°-40°	679.8	23.1
40°-50°	597.3	20.3
50°-60°	380.3	12.9
60°-70°	81.0	2.8
70°-80°	0.6	0.0
80°-90°	0.3	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°	1198.0	40.8
0°-40°	1877.8	63.9
0°-60°	2855.4	97.2
0°-90°	2937.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2937.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1645	1645	1645	1645	1645	
5°	1622	1643	1639	1624	1622	153
15°	1499	1557	1546	1503	1499	422
25°	1303	1374	1362	1304	1303	599
35°	1062	1128	1122	1057	1062	661
45°	738	800	798	733	738	574
55°	393	455	458	403	393	350
65°	48	78	73	62	48	63
75°	0	0	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	1	0	



TEST NUMBER: P776031

CATALOG NUMBER: HCDJBL5125CSD-HCD61TRH-2500lm-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1644.8	1644.8	1644.8	1644.8	1644.8	1644.8	1644.8	1644.8	1644.8	1644.8	1644.8
0.5°	1643.5	1644.3	1645.0	1644.8	1646.5	1646.3	1645.5	1645.3	1645.3	1645.3	1645.0
1°	1642.3	1643.3	1644.8	1644.8	1647.0	1647.0	1646.3	1646.0	1645.8	1645.3	1644.5
1.5°	1640.8	1642.3	1644.0	1644.8	1647.5	1647.7	1647.0	1646.5	1645.8	1645.0	1643.8
2°	1638.8	1640.8	1643.0	1644.3	1647.5	1648.0	1647.5	1646.7	1645.8	1644.3	1642.8
2.5°	1636.9	1639.1	1641.8	1643.5	1647.5	1648.2	1647.5	1646.7	1645.3	1643.5	1641.6
3°	1634.6	1637.1	1640.3	1642.8	1647.0	1648.0	1647.5	1646.3	1644.8	1642.5	1640.1
3.5°	1631.9	1634.9	1638.6	1641.6	1646.5	1647.5	1647.2	1645.8	1643.8	1641.1	1638.1
4°	1629.0	1632.4	1636.6	1640.1	1645.5	1647.0	1646.5	1645.0	1642.5	1639.6	1635.9
4.5°	1625.8	1629.7	1634.2	1638.1	1644.5	1646.3	1645.8	1644.0	1641.1	1637.6	1633.7
5°	1622.5	1626.5	1631.4	1636.1	1643.0	1645.0	1644.5	1642.5	1639.3	1635.4	1631.2
5.5°	1618.8	1623.0	1628.5	1633.9	1641.6	1643.5	1643.3	1641.1	1637.1	1632.9	1628.2
6°	1614.6	1619.3	1625.5	1631.4	1639.6	1642.1	1641.6	1639.1	1634.9	1630.0	1624.8
6.5°	1610.7	1615.4	1622.0	1628.5	1637.4	1640.1	1639.6	1636.9	1632.4	1627.0	1621.6
7°	1606.2	1611.2	1618.3	1625.3	1634.9	1637.9	1637.4	1634.4	1629.7	1623.8	1617.8
7.5°	1601.3	1606.7	1614.4	1621.8	1631.9	1635.4	1634.9	1631.7	1626.5	1620.1	1613.6
8°	1596.4	1601.8	1609.9	1618.1	1629.2	1632.7	1632.2	1628.5	1623.0	1616.4	1609.4
8.5°	1590.9	1596.8	1605.5	1614.4	1625.8	1629.7	1629.2	1625.3	1619.3	1612.2	1604.8
9°	1585.5	1591.4	1600.8	1609.9	1622.0	1626.2	1625.8	1621.6	1615.1	1607.7	1599.8
9.5°	1579.6	1586.0	1595.6	1605.5	1618.1	1622.8	1622.0	1617.8	1610.9	1603.0	1594.9
10°	1573.4	1579.8	1590.2	1600.8	1614.1	1618.8	1618.3	1613.6	1606.5	1598.1	1589.4
10.5°	1567.0	1573.6	1584.7	1595.6	1609.7	1614.6	1614.1	1609.2	1601.8	1592.9	1583.8
11°	1560.3	1567.5	1578.8	1590.2	1605.0	1610.2	1609.7	1604.3	1596.4	1587.5	1577.8
11.5°	1553.4	1560.8	1572.6	1584.5	1599.8	1605.2	1604.8	1599.3	1590.9	1581.5	1571.7
12°	1546.5	1553.9	1566.5	1578.6	1594.6	1600.3	1599.8	1593.9	1585.5	1575.4	1565.2
12.5°	1539.0	1546.9	1559.8	1572.6	1588.9	1594.9	1594.4	1588.4	1579.6	1569.2	1558.6
13°	1531.4	1539.8	1552.9	1566.2	1583.0	1589.4	1588.7	1582.5	1573.1	1562.5	1551.6
13.5°	1523.7	1532.1	1545.7	1559.5	1576.8	1583.5	1582.8	1576.3	1567.0	1555.8	1544.7
14°	1515.8	1524.5	1538.5	1552.4	1570.4	1577.3	1576.6	1569.9	1560.0	1548.7	1537.3
14.5°	1507.7	1516.3	1530.9	1545.7	1563.7	1570.7	1569.9	1563.3	1552.9	1541.5	1529.4
15°	1499.3	1508.2	1523.2	1538.1	1556.8	1564.0	1563.3	1556.1	1546.0	1533.9	1521.7
15.5°	1490.9	1500.0	1515.1	1530.6	1549.7	1556.8	1556.1	1548.9	1538.5	1526.2	1513.8
16°	1482.0	1491.4	1506.9	1522.2	1542.3	1549.9	1548.7	1541.5	1530.4	1518.3	1505.4
16.5°	1473.3	1482.7	1498.8	1514.8	1534.3	1542.3	1541.0	1533.9	1522.7	1510.1	1497.0
17°	1463.9	1473.8	1490.1	1506.4	1526.4	1534.6	1533.4	1525.9	1514.6	1502.0	1488.6
17.5°	1454.8	1464.9	1481.2	1497.8	1518.3	1526.2	1525.5	1517.5	1506.4	1493.3	1480.0
18°	1445.4	1455.8	1472.6	1488.9	1509.9	1518.0	1516.8	1509.1	1497.8	1484.7	1470.6
18.5°	1436.0	1446.4	1463.4	1480.5	1501.2	1509.4	1508.4	1500.8	1488.9	1475.8	1462.0
19°	1426.4	1437.3	1454.3	1471.4	1492.4	1500.8	1499.8	1491.9	1480.2	1466.9	1452.6
19.5°	1417.0	1427.9	1444.9	1462.5	1483.5	1491.9	1490.9	1483.2	1471.1	1457.8	1443.4
20°	1406.9	1418.0	1435.3	1452.8	1474.6	1482.7	1481.7	1474.1	1462.0	1448.4	1433.8
20.5°	1397.0	1408.1	1425.7	1443.2	1464.9	1473.6	1472.6	1464.7	1452.8	1439.0	1424.4
21°	1386.9	1398.5	1416.0	1433.8	1455.5	1463.9	1463.0	1455.3	1443.2	1429.4	1414.3



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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°	1356.0	1368.1	1385.9	1403.7	1425.9	1434.3	1433.6	1425.7	1414.0	1399.7	1384.4
23°	1345.9	1358.0	1375.5	1393.5	1415.5	1424.2	1423.4	1415.8	1403.9	1389.6	1373.8
23.5°	1335.2	1347.6	1365.1	1383.2	1405.4	1414.0	1413.1	1405.6	1393.5	1379.5	1363.6
24°	1324.6	1337.0	1354.3	1372.5	1395.3	1403.7	1402.9	1395.0	1383.4	1369.1	1353.0
24.5°	1314.0	1326.3	1343.9	1362.2	1384.6	1392.5	1392.3	1384.4	1372.8	1358.2	1342.6
25°	1303.1	1315.7	1333.0	1351.0	1373.8	1381.9	1381.4	1373.8	1362.4	1347.8	1331.8
25.5°	1292.5	1305.1	1322.4	1340.4	1362.9	1371.1	1370.6	1363.2	1351.8	1337.0	1321.2
26°	1281.4	1294.5	1311.5	1329.6	1352.0	1359.7	1359.4	1352.5	1340.9	1326.1	1310.0
26.5°	1270.3	1283.4	1300.2	1318.4	1340.9	1348.8	1348.6	1341.4	1329.8	1315.0	1299.2
27°	1259.4	1272.5	1289.0	1307.3	1329.8	1337.2	1337.5	1329.8	1318.9	1303.9	1288.1
27.5°	1248.0	1261.4	1277.9	1295.5	1318.2	1325.8	1326.1	1318.7	1307.8	1292.7	1276.7
28°	1236.7	1250.0	1266.3	1284.1	1306.8	1314.7	1314.2	1307.6	1296.5	1281.4	1265.1
28.5°	1225.1	1238.4	1254.7	1272.2	1295.0	1302.4	1302.4	1296.0	1285.1	1269.8	1254.0
29°	1213.4	1227.3	1243.1	1260.6	1283.4	1290.5	1290.8	1283.9	1273.5	1258.2	1242.3
29.5°	1201.8	1215.4	1231.5	1248.5	1271.5	1278.4	1278.9	1272.0	1261.9	1246.5	1230.7
30°	1190.2	1203.8	1219.6	1236.7	1259.6	1266.8	1266.6	1260.4	1250.0	1234.7	1218.6
30.5°	1177.9	1192.0	1207.5	1224.8	1246.8	1254.0	1254.0	1248.3	1237.7	1222.6	1206.5
31°	1165.5	1179.8	1195.4	1212.2	1234.7	1241.4	1241.9	1235.4	1225.8	1210.7	1194.7
31.5°	1153.4	1167.7	1182.8	1199.6	1221.8	1228.8	1229.0	1223.3	1213.2	1198.4	1182.6
32°	1141.1	1155.6	1170.5	1187.0	1209.2	1216.4	1216.2	1210.7	1201.1	1185.8	1170.2
32.5°	1128.5	1142.8	1157.9	1174.4	1196.4	1203.1	1202.8	1198.1	1188.5	1173.4	1157.4
33°	1115.6	1130.2	1145.0	1161.6	1183.3	1189.7	1190.2	1185.0	1175.6	1160.8	1144.8
33.5°	1102.8	1117.1	1132.2	1148.2	1169.7	1176.4	1176.6	1171.9	1162.3	1148.2	1132.2
34°	1089.4	1104.3	1119.1	1135.4	1156.4	1163.3	1163.1	1158.6	1149.2	1134.9	1119.1
34.5°	1076.1	1091.2	1105.7	1121.3	1142.8	1148.7	1149.2	1144.8	1135.9	1121.5	1106.0
35°	1062.5	1077.6	1092.4	1107.7	1128.5	1135.1	1135.4	1130.9	1122.5	1108.5	1092.4
35.5°	1048.4	1064.0	1078.8	1093.6	1114.6	1120.6	1121.1	1117.1	1108.5	1095.1	1078.8
36°	1034.3	1050.4	1064.7	1079.6	1100.3	1106.5	1106.7	1103.0	1094.9	1081.5	1065.7
36.5°	1019.8	1035.8	1050.6	1065.0	1086.0	1091.2	1092.2	1088.2	1080.5	1067.2	1051.9
37°	1005.4	1021.3	1036.3	1050.4	1070.4	1076.3	1076.8	1073.4	1066.5	1053.1	1037.6
37.5°	990.6	1006.2	1021.5	1035.6	1055.3	1060.5	1061.3	1058.3	1051.4	1039.0	1023.2
38°	975.1	991.4	1006.4	1019.8	1039.8	1045.0	1046.0	1042.7	1036.1	1024.2	1009.4
38.5°	959.5	975.8	990.9	1004.0	1023.7	1029.2	1030.1	1026.7	1021.0	1009.1	993.8
39°	943.2	960.0	974.8	988.1	1007.4	1012.4	1013.6	1010.6	1005.4	993.8	978.3
39.5°	926.4	942.4	957.8	970.9	990.4	995.6	996.8	994.1	989.1	977.5	961.7
40°	909.1	925.2	940.0	953.3	973.3	978.5	979.5	977.3	971.8	961.0	946.2
40.5°	890.3	906.9	921.9	935.3	955.0	960.5	962.2	959.7	954.6	943.7	928.1
41°	872.3	888.6	903.7	917.2	937.3	942.7	943.9	941.7	937.0	925.6	910.1
41.5°	854.5	870.3	885.4	899.2	919.5	924.7	926.4	923.7	918.7	907.1	891.8
42°	836.5	852.0	867.1	880.9	901.4	907.6	909.1	906.6	901.2	889.8	875.0
42.5°	816.7	832.8	848.1	862.2	883.4	889.3	891.3	889.1	883.4	872.0	856.5
43°	798.9	814.7	830.3	844.1	864.9	871.1	873.0	870.3	864.9	853.0	838.2
43.5°	782.4	797.9	813.5	827.3	847.6	853.8	855.5	852.3	845.9	834.0	819.2



TEST NUMBER: P776031

CATALOG NUMBER: HCDJBL51525CSD-HCD61TRH-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	738.4	753.7	768.5	781.6	800.4	806.3	808.1	804.6	797.7	785.6	771.5
45.5°	724.6	740.1	754.9	767.8	786.1	791.8	793.5	790.0	783.1	771.5	757.2
46°	711.7	727.3	741.6	754.5	772.2	777.7	779.4	775.9	769.3	757.7	743.6
46.5°	698.9	714.4	728.5	741.1	758.7	764.3	766.1	762.9	755.9	744.3	730.2
47°	686.3	701.6	715.9	728.3	745.3	751.0	752.7	749.5	742.6	731.5	717.6
47.5°	673.7	689.0	703.1	715.4	732.2	738.1	739.9	736.2	729.5	718.6	704.8
48°	660.8	676.1	689.7	702.6	719.1	725.3	726.8	723.3	716.9	706.0	692.2
48.5°	646.5	661.6	675.9	689.0	706.3	712.5	714.2	711.0	704.1	693.2	679.6
49°	630.9	645.0	659.6	673.9	692.2	698.9	701.1	697.6	690.2	678.9	665.8
49.5°	615.1	628.5	643.3	658.1	677.4	684.5	686.5	682.6	675.2	663.3	650.0
50°	597.1	609.9	624.8	640.8	662.1	670.0	671.9	667.7	659.6	647.7	634.4
50.5°	578.1	591.2	606.5	623.0	645.3	653.4	655.1	652.2	643.3	631.4	617.1
51°	558.6	572.1	586.5	603.8	627.2	634.6	637.4	634.4	626.0	613.4	599.3
51.5°	538.8	552.1	566.7	583.5	608.2	616.1	619.6	615.4	608.0	594.9	580.8
52°	518.5	531.6	546.0	562.3	587.5	596.8	600.3	596.3	588.4	575.6	561.8
52.5°	498.0	510.9	525.7	540.8	566.2	577.1	580.5	576.6	567.7	555.3	542.2
53°	477.0	489.9	503.7	518.3	544.2	556.6	561.0	555.8	545.7	534.1	522.5
53.5°	456.0	468.4	482.5	495.8	522.0	536.1	541.3	535.6	524.2	513.3	501.7
54°	434.8	446.9	460.0	472.8	499.5	514.3	520.5	513.3	502.2	491.6	480.7
54.5°	413.8	426.4	437.7	450.3	477.3	492.8	499.0	491.6	479.7	469.9	459.5
55°	392.8	404.6	415.0	427.6	454.8	471.8	478.3	470.4	458.0	448.1	438.7
55.5°	371.5	383.2	393.0	405.1	433.1	449.6	457.3	448.6	436.8	425.9	417.0
56°	350.8	361.4	370.8	382.2	410.6	427.4	435.0	425.9	414.8	403.4	395.5
56.5°	330.3	340.7	348.3	360.2	388.6	405.9	413.3	404.4	393.3	381.4	374.0
57°	310.0	319.2	326.1	338.2	366.6	383.2	391.3	382.9	371.8	359.9	353.0
57.5°	289.8	298.4	304.8	317.2	345.9	361.7	369.8	361.9	351.3	338.4	331.3
58°	270.0	277.7	284.1	296.0	324.9	339.7	347.6	340.4	330.3	316.9	310.5
58.5°	250.7	257.7	263.3	275.9	304.6	318.7	325.8	319.9	310.5	296.7	290.3
59°	231.7	237.4	243.1	255.9	284.1	297.4	304.1	298.9	290.0	276.7	269.8
59.5°	213.9	218.4	223.8	236.2	264.1	276.9	282.6	279.4	269.8	257.4	250.2
60°	195.7	198.9	204.8	217.4	244.3	256.4	261.9	258.6	250.2	239.4	231.7
60.5°	178.1	180.8	186.5	199.1	225.8	237.4	242.3	239.9	232.0	221.3	213.4
61°	161.3	163.0	168.5	180.6	207.5	218.4	222.8	221.3	213.7	203.3	195.2
61.5°	145.0	146.5	151.7	164.5	189.0	199.4	203.3	202.6	195.4	185.3	176.9
62°	129.0	129.9	135.9	147.7	170.5	180.3	183.8	183.8	177.1	167.2	158.6
62.5°	114.1	114.6	120.3	131.9	153.2	161.3	164.3	165.0	158.8	150.9	142.5
63°	99.6	99.8	106.0	117.1	136.6	144.0	146.7	147.7	140.1	135.4	127.0
63.5°	84.7	86.5	91.9	102.8	120.6	127.0	129.9	130.7	122.5	120.3	112.4
64°	72.4	75.6	81.0	88.9	105.5	111.4	114.1	114.9	105.5	105.7	98.6
64.5°	60.0	65.0	70.2	77.8	90.9	96.3	99.1	99.3	88.9	92.1	85.5
65°	47.7	54.6	59.3	66.7	77.6	82.0	85.0	85.0	73.1	78.8	73.4
65.5°	35.3	44.0	48.4	55.6	64.7	68.9	71.6	71.1	59.0	66.7	62.5
66°	25.9	33.4	37.5	44.5	52.9	56.6	59.3	58.3	45.9	55.1	51.6



TEST NUMBER: P776031

CATALOG NUMBER: HCDJBL51525CSD-HCD61TRH-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	8.2	14.1	16.3	18.0	27.7	29.9	32.1	31.4	21.0	30.6	28.9
68°	6.4	9.6	11.4	12.1	20.5	22.2	24.0	23.7	12.6	23.5	22.5
68.5°	4.7	7.4	6.9	7.7	13.1	14.6	16.1	16.1	4.2	16.3	15.8
69°	3.0	5.4	5.4	5.9	5.9	7.2	8.2	8.4	2.0	9.4	9.4
69.5°	1.2	3.2	4.0	4.2	3.0	3.7	4.2	4.7	1.2	5.7	5.4
70°	1.0	1.2	2.5	2.5	1.5	1.7	2.0	2.2	1.0	3.0	3.0
70.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0	1.5	1.5
71°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
71.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.0	1.0	1.0
72°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.0	1.0
72.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
73°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
73.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
74°	0.5	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7
74.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
76°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
76.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
77°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
77.5°	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.5	0.5
78°	0.5	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.5
78.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
79°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
79.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
80.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
81°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
81.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
83°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
83.5°	0.2	0.2	0.2	0.2	0.2	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	0.2	0.0	0.0	0.2	0.2
84.5°	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.2	0.2
85°	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2
85.5°	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2
86°	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2
86.5°	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2
87°	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2
87.5°	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2
88°	0.2	0.5	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2
88.5°	0.2	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.2	0.2



TEST NUMBER: P776031
CATALOG NUMBER: HCDJBL51525CSD-HCD61TRH-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.2	0.7	0.7	0.5	0.2	0.0	0.0	0.2	0.0	0.5	0.2



TEST NUMBER: P776031

CATALOG NUMBER: HCDJBL1525CSD-HCD61TRH-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1644.8	1644.8	1644.8	1644.8	1644.8	1644.8
0.5°	1643.8	1644.5	1643.8	1642.8	1643.0	1643.5
1°	1643.0	1643.3	1642.3	1641.3	1641.6	1642.3
1.5°	1641.8	1641.6	1640.3	1639.3	1639.6	1640.8
2°	1640.6	1639.8	1638.4	1637.4	1637.9	1638.8
2.5°	1638.8	1637.6	1636.1	1634.9	1635.4	1636.9
3°	1636.9	1635.4	1633.7	1632.4	1632.9	1634.6
3.5°	1634.9	1632.7	1630.9	1629.7	1630.2	1631.9
4°	1632.4	1630.0	1628.0	1626.7	1627.2	1629.0
4.5°	1629.7	1626.7	1624.8	1623.3	1624.0	1625.8
5°	1626.7	1623.5	1621.6	1620.1	1620.6	1622.5
5.5°	1623.5	1619.8	1617.8	1616.1	1616.6	1618.8
6°	1620.1	1616.1	1613.9	1612.4	1612.7	1614.6
6.5°	1616.1	1612.2	1609.9	1608.2	1608.2	1610.7
7°	1612.2	1607.7	1605.5	1603.8	1604.0	1606.2
7.5°	1608.0	1603.0	1600.8	1599.1	1599.3	1601.3
8°	1603.3	1598.3	1595.9	1594.1	1594.1	1596.4
8.5°	1598.3	1593.1	1590.9	1588.9	1588.9	1590.9
9°	1593.1	1587.7	1585.5	1583.8	1583.3	1585.5
9.5°	1587.7	1582.0	1579.8	1578.1	1577.6	1579.6
10°	1582.0	1576.1	1573.9	1572.1	1571.4	1573.4
10.5°	1576.1	1569.9	1567.7	1566.0	1565.2	1567.0
11°	1569.7	1563.5	1561.3	1559.5	1558.6	1560.3
11.5°	1563.3	1556.6	1554.6	1552.9	1551.9	1553.4
12°	1556.8	1549.9	1547.7	1546.0	1544.7	1546.5
12.5°	1549.7	1542.5	1540.5	1538.8	1537.6	1539.0
13°	1542.5	1535.1	1533.4	1531.6	1529.9	1531.4
13.5°	1534.8	1527.2	1525.7	1523.7	1522.2	1523.7
14°	1527.2	1519.3	1517.8	1515.8	1514.3	1515.8
14.5°	1519.5	1511.4	1509.9	1507.9	1506.2	1507.7
15°	1511.1	1503.0	1501.5	1499.5	1497.5	1499.3
15.5°	1502.7	1494.6	1492.8	1491.1	1489.1	1490.9
16°	1494.3	1485.7	1484.0	1482.2	1480.5	1482.0
16.5°	1485.7	1476.8	1475.3	1473.6	1471.4	1473.3
17°	1477.0	1467.9	1466.2	1464.4	1462.5	1463.9
17.5°	1468.1	1458.5	1456.8	1455.0	1452.8	1454.8
18°	1458.8	1449.1	1447.4	1445.7	1443.4	1445.4
18.5°	1449.4	1439.5	1437.5	1436.0	1433.8	1436.0
19°	1439.7	1429.9	1427.9	1426.1	1424.2	1426.4
19.5°	1430.3	1420.2	1418.0	1416.3	1414.3	1417.0
20°	1420.7	1410.1	1407.6	1405.9	1404.2	1406.9
20.5°	1410.8	1400.0	1397.5	1395.8	1394.0	1397.0
21°	1400.9	1389.3	1387.1	1385.1	1383.7	1386.9



TEST NUMBER: P776031

CATALOG NUMBER: HCDJBL51525CSD-HCD61TRH-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1370.3	1358.2	1355.0	1353.0	1352.3	1356.0
23°	1359.9	1347.3	1344.1	1341.4	1341.7	1345.9
23.5°	1349.6	1336.5	1333.0	1330.8	1330.8	1335.2
24°	1338.9	1325.6	1321.6	1319.2	1319.9	1324.6
24.5°	1328.1	1314.7	1310.5	1308.1	1308.6	1314.0
25°	1317.4	1303.9	1298.9	1296.2	1297.4	1303.1
25.5°	1306.6	1292.7	1287.6	1285.1	1286.6	1292.5
26°	1295.5	1281.4	1275.7	1272.7	1275.2	1281.4
26.5°	1284.3	1269.8	1264.3	1261.4	1263.8	1270.3
27°	1273.2	1258.4	1252.2	1249.3	1252.2	1259.4
27.5°	1262.1	1246.8	1240.4	1237.2	1240.4	1248.0
28°	1250.7	1234.9	1228.3	1225.1	1228.5	1236.7
28.5°	1239.1	1223.1	1216.2	1212.7	1216.7	1225.1
29°	1227.5	1211.2	1203.8	1200.1	1204.8	1213.4
29.5°	1215.9	1199.1	1191.5	1187.8	1192.4	1201.8
30°	1204.1	1187.0	1178.6	1175.4	1180.1	1190.2
30.5°	1192.0	1174.7	1166.0	1162.6	1167.7	1177.9
31°	1180.1	1162.1	1153.2	1149.5	1155.1	1165.5
31.5°	1167.5	1149.5	1140.3	1136.6	1142.3	1153.4
32°	1154.9	1136.9	1127.0	1123.5	1129.7	1141.1
32.5°	1142.5	1124.0	1113.9	1110.4	1116.6	1128.5
33°	1129.7	1110.7	1100.8	1097.3	1103.5	1115.6
33.5°	1116.9	1097.3	1087.5	1083.8	1090.4	1102.8
34°	1103.5	1084.0	1074.1	1070.2	1077.1	1089.4
34.5°	1090.2	1070.4	1060.0	1056.6	1063.5	1076.1
35°	1076.8	1056.6	1046.2	1042.7	1049.7	1062.5
35.5°	1063.2	1042.5	1032.6	1028.9	1035.8	1048.4
36°	1049.7	1028.2	1018.3	1014.8	1021.7	1034.3
36.5°	1035.3	1013.8	1004.2	1000.5	1007.7	1019.8
37°	1020.8	999.0	989.4	986.2	993.1	1005.4
37.5°	1006.2	983.9	974.6	971.6	978.3	990.6
38°	991.1	968.9	959.7	956.5	963.2	975.1
38.5°	975.8	953.1	944.2	941.2	947.6	959.5
39°	959.7	937.3	928.9	925.9	932.3	943.2
39.5°	943.9	920.7	912.3	909.8	915.3	926.4
40°	927.4	903.9	895.3	892.8	898.0	909.1
40.5°	909.8	886.4	877.7	875.3	879.9	890.3
41°	891.8	868.3	859.9	857.2	862.4	872.3
41.5°	873.8	850.3	841.9	839.7	844.1	854.5
42°	856.5	833.3	824.6	821.9	826.8	836.5
42.5°	838.7	815.5	806.6	803.1	807.8	816.7
43°	820.7	796.9	788.3	785.6	789.8	798.9
43.5°	802.1	778.9	770.5	767.8	772.5	782.4

TEST NUMBER: P776031

CATALOG NUMBER: HCDJBLS1525CSD-HCD61TRH-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	754.5	733.2	725.3	723.1	728.0	738.4
45.5°	740.4	719.1	711.2	709.5	714.4	724.6
46°	727.0	706.0	698.4	696.4	701.6	711.7
46.5°	713.7	693.4	685.5	683.8	688.7	698.9
47°	701.6	681.1	672.9	671.2	676.1	686.3
47.5°	688.7	668.0	660.6	658.6	663.8	673.7
48°	676.4	656.1	648.2	646.2	651.2	660.8
48.5°	664.0	643.0	635.9	633.4	638.1	646.5
49°	650.4	629.9	622.3	619.6	623.5	630.9
49.5°	635.4	614.6	608.2	605.2	608.0	615.1
50°	619.8	599.8	592.9	589.9	591.4	597.1
50.5°	603.0	582.5	576.6	572.6	573.1	578.1
51°	584.7	564.7	558.3	554.1	554.4	558.6
51.5°	566.5	545.5	539.3	534.1	535.1	538.8
52°	547.9	526.2	519.0	513.6	514.1	518.5
52.5°	528.4	505.7	498.3	492.8	493.1	498.0
53°	508.6	485.4	477.3	471.3	471.8	477.0
53.5°	488.1	464.7	455.8	449.9	450.3	456.0
54°	467.9	444.2	434.5	428.4	428.9	434.8
54.5°	447.4	423.9	413.5	406.9	407.4	413.8
55°	427.4	403.4	392.0	385.1	386.1	392.8
55.5°	406.6	382.4	371.3	363.1	365.4	371.5
56°	385.6	362.2	350.3	341.9	344.6	350.8
56.5°	365.4	342.1	330.0	321.1	324.4	330.3
57°	344.4	322.4	309.3	300.4	303.9	310.0
57.5°	324.4	302.9	289.5	280.4	283.8	289.8
58°	304.3	283.6	270.3	261.1	264.3	270.0
58.5°	284.1	264.3	251.5	241.8	245.8	250.7
59°	264.3	245.8	233.2	223.6	226.5	231.7
59.5°	245.8	227.8	214.9	205.8	209.0	213.9
60°	227.5	210.0	197.4	188.5	191.7	195.7
60.5°	209.2	191.9	180.6	172.2	174.7	178.1
61°	191.0	175.1	164.0	156.6	157.9	161.3
61.5°	172.7	158.6	148.7	142.0	143.0	145.0
62°	155.6	142.3	133.6	127.2	128.0	129.0
62.5°	139.3	126.7	119.3	113.9	113.4	114.1
63°	123.5	111.9	105.7	100.8	99.6	99.6
63.5°	108.4	97.8	93.1	88.9	87.2	84.7
64°	94.1	84.2	82.5	79.1	77.1	72.4
64.5°	81.3	73.1	72.1	68.9	66.9	60.0
65°	68.7	62.0	61.8	59.0	56.6	47.7
65.5°	57.3	51.1	51.1	49.2	46.4	35.3
66°	46.9	40.0	40.8	39.3	36.1	25.9



TEST NUMBER: P776031

CATALOG NUMBER: HCDJBL51525CSD-HCD61TRH-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	25.7	18.0	19.0	18.8	15.6	8.2
68°	19.8	12.8	13.8	13.3	10.9	6.4
68.5°	13.8	8.9	9.1	8.9	8.9	4.7
69°	7.9	6.9	7.2	6.9	6.9	3.0
69.5°	4.7	4.9	5.2	4.9	4.9	1.2
70°	2.5	3.0	3.0	3.0	3.0	1.0
70.5°	1.2	1.0	1.0	1.0	1.0	1.0
71°	1.0	1.0	1.0	1.0	1.0	1.0
71.5°	1.0	0.7	0.7	0.7	0.7	0.7
72°	0.7	0.7	0.7	0.7	0.7	0.7
72.5°	0.7	0.7	0.7	0.7	0.7	0.7
73°	0.7	0.7	0.7	0.7	0.7	0.7
73.5°	0.7	0.7	0.7	0.7	0.7	0.7
74°	0.7	0.7	0.7	0.7	0.5	0.5
74.5°	0.5	0.5	0.5	0.5	0.5	0.5
75°	0.5	0.5	0.5	0.5	0.5	0.5
75.5°	0.5	0.5	0.5	0.5	0.5	0.5
76°	0.5	0.5	0.5	0.5	0.5	0.5
76.5°	0.5	0.5	0.5	0.5	0.5	0.5
77°	0.5	0.5	0.5	0.5	0.5	0.5
77.5°	0.5	0.5	0.5	0.5	0.5	0.5
78°	0.5	0.5	0.5	0.5	0.5	0.5
78.5°	0.2	0.5	0.5	0.5	0.5	0.2
79°	0.2	0.2	0.5	0.5	0.5	0.2
79.5°	0.2	0.2	0.5	0.5	0.2	0.2
80°	0.2	0.2	0.5	0.5	0.2	0.2
80.5°	0.2	0.2	0.5	0.5	0.2	0.2
81°	0.2	0.2	0.5	0.5	0.2	0.2
81.5°	0.2	0.2	0.5	0.5	0.2	0.2
82°	0.2	0.2	0.5	0.5	0.2	0.2
82.5°	0.2	0.2	0.5	0.5	0.2	0.2
83°	0.2	0.2	0.5	0.5	0.2	0.2
83.5°	0.2	0.2	0.5	0.5	0.2	0.2
84°	0.2	0.2	0.5	0.5	0.2	0.2
84.5°	0.2	0.2	0.5	0.5	0.2	0.2
85°	0.2	0.2	0.5	0.5	0.5	0.2
85.5°	0.2	0.2	0.5	0.5	0.5	0.2
86°	0.2	0.2	0.5	0.5	0.5	0.2
86.5°	0.2	0.2	0.5	0.7	0.5	0.2
87°	0.2	0.2	0.7	0.7	0.7	0.2
87.5°	0.2	0.5	0.7	1.0	0.7	0.2
88°	0.2	0.5	1.0	1.2	1.0	0.2
88.5°	0.2	0.5	1.2	1.5	1.2	0.2



TEST NUMBER: P776031

CATALOG NUMBER: HCDJBL1525CSD-HCD61TRH-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.2	1.0	1.7	1.2	1.7	0.2



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Peachtree City, GA 30269

Scaled Data Report





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

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21.5°	1376.7	1388.3	1405.9	1423.7	1445.9	1454.1	1453.1	1445.4	1433.3	1419.7	1404.4
22°	1366.4	1378.2	1395.8	1414.0	1436.0	1444.4	1443.4	1435.5	1423.7	1409.8	1394.3



44°	766.8	782.6	797.7	811.5	831.3	837.5	838.9	835.5	828.6	816.5	802.4
44.5°	752.2	767.8	782.9	796.2	815.5	821.4	822.9	819.9	812.8	800.6	785.8



66.5°	18.8	25.7	29.4	33.4	42.2	45.2	47.9	46.7	37.5	44.7	42.2
67°	12.8	19.3	22.5	25.2	35.1	37.5	40.0	39.0	29.2	37.5	35.6



89°	0.2	0.5	0.7	0.5	0.0	0.0	0.0	0.2	0.0	0.2	0.2
89.5°	0.2	0.7	0.7	0.5	0.2	0.0	0.0	0.2	0.0	0.2	0.2

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21.5°	1391.1	1379.0	1376.5	1374.5	1373.5	1376.7
22°	1380.4	1368.6	1365.9	1363.4	1362.7	1366.4



44°	785.1	762.9	754.9	752.0	757.2	766.8
44.5°	769.3	747.8	739.6	737.4	742.3	752.2

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66.5°	37.8	31.4	32.9	31.6	28.4	18.8
67°	31.6	24.0	25.4	24.7	21.5	12.8



89°	0.2	0.7	1.2	1.7	1.2	0.2
89.5°	0.2	0.7	1.5	1.7	1.5	0.2

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(END OF REPORT)