

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: P776420

Luminaire Tested: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-2700K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776420
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B018)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-2700K
Description: 6 INCH SQUARE MEDIUM LENSED WALLWASH KIT
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3406.6 lumens
Efficiency: N/A
Efficacy: 88.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

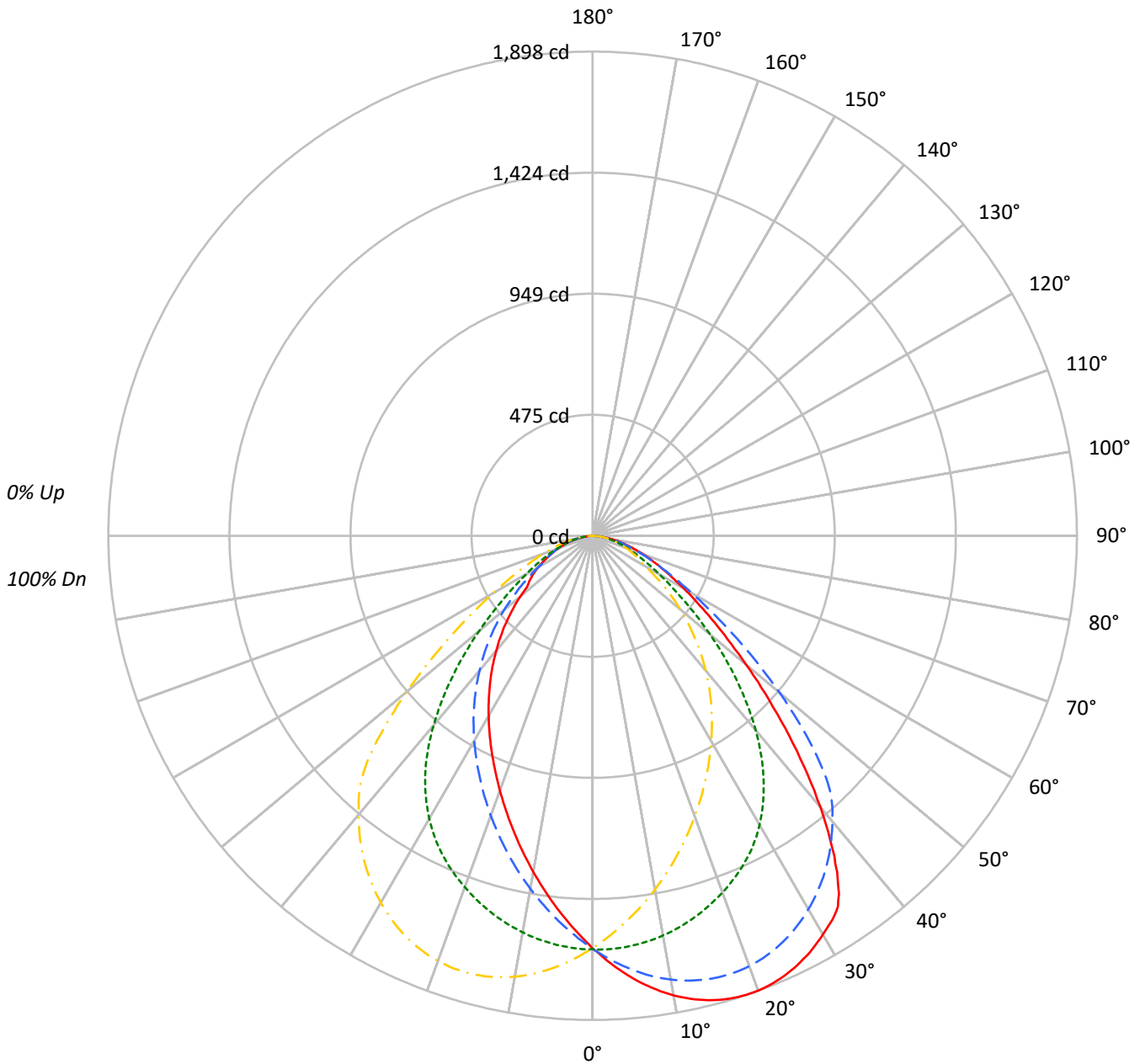
Input Watts (W): 38.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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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	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	83	80	78	76																			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66																			
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58																			
5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	51																			
6	75	63	55	49	73	62	54	49	60	53	48	59	52	48	57	52	47	45																			
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41																			
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37																			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33																			
10	57	45	38	33	56	45	37	33	44	37	32	43	37	32	42	36	32	31																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	69694	69694	69694	69694
5°	75108	69844	63918	69580
10°	79972	69545	58497	69025
15°	83965	68988	53374	68199
20°	86923	68165	48687	67166
25°	88814	67065	44423	65825
30°	89738	65049	40514	63657
35°	88208	61402	36777	60130
40°	78069	55817	33026	54457
45°	65030	48499	29087	47092
50°	52602	40203	24697	38944
55°	42607	32173	22429	31422
60°	35547	26092	21063	25825
65°	30248	21710	19214	21873
70°	26298	18619	17700	18946
75°	22940	16103	16037	16669
80°	18844	13811	13414	14480
85°	12153	10621	7410	11757

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 76697 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.9	4.5
10°-20°	434.1	12.7
20°-30°	643.8	18.9
30°-40°	735.8	21.6
40°-50°	639.7	18.8
50°-60°	416.2	12.2
60°-70°	237.2	7.0
70°-80°	118.8	3.5
80°-90°	28.2	0.8
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°	1230.8	36.1
0°-40°	1966.6	57.7
0°-60°	3022.4	88.7
0°-90°	3406.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3406.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1619	1619	1619	1619	1619	
5°	1738	1616	1479	1610	1738	169
15°	1884	1548	1197	1530	1884	533
25°	1870	1412	935	1386	1870	861
35°	1678	1168	700	1144	1678	1030
45°	1068	796	478	773	1068	825
55°	568	429	299	419	568	516
65°	297	213	189	215	297	298
75°	138	97	96	100	138	146
85°	25	22	15	24	25	32
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°	1618.7	1618.7	1618.7	1618.7	1618.7	1618.7	1618.7	1618.7	1618.7	1618.7	1618.7
0.5°	1628.7	1628.7	1628.7	1626.8	1622.2	1618.7	1606.8	1602.2	1602.2	1604.1	1609.1
1°	1641.4	1640.6	1637.5	1631.8	1622.2	1613.7	1597.6	1589.9	1588.7	1591.4	1599.5
1.5°	1654.4	1652.9	1646.7	1636.8	1622.2	1608.3	1587.6	1577.6	1574.9	1578.8	1589.5
2°	1667.1	1664.8	1655.6	1641.4	1621.8	1603.0	1578.0	1564.9	1561.5	1566.5	1579.5
2.5°	1679.4	1675.9	1664.8	1646.0	1621.4	1597.2	1568.4	1552.3	1547.7	1553.4	1569.2
3°	1691.7	1687.4	1673.2	1650.2	1620.6	1591.8	1558.0	1539.6	1534.2	1540.7	1558.8
3.5°	1703.6	1698.6	1681.3	1654.4	1619.9	1586.1	1548.0	1526.9	1520.4	1527.7	1548.4
4°	1715.1	1709.3	1689.7	1658.3	1618.3	1579.5	1537.7	1514.2	1506.9	1515.0	1538.1
4.5°	1726.6	1719.7	1697.4	1662.1	1617.2	1573.8	1527.7	1500.8	1492.7	1501.6	1527.7
5°	1737.8	1730.1	1705.1	1665.9	1616.0	1567.2	1517.3	1488.1	1478.9	1488.5	1516.9
5.5°	1748.1	1740.1	1712.8	1669.0	1614.1	1560.7	1506.6	1475.1	1465.1	1475.5	1506.2
6°	1758.5	1749.7	1719.7	1672.1	1612.2	1553.8	1495.8	1462.0	1451.3	1462.0	1495.0
6.5°	1768.9	1758.9	1726.6	1675.2	1610.3	1547.3	1485.4	1449.0	1437.1	1449.0	1484.3
7°	1778.5	1768.1	1733.1	1677.8	1607.9	1540.7	1474.7	1435.5	1422.8	1435.5	1473.2
7.5°	1787.7	1776.5	1739.7	1680.5	1605.6	1533.1	1463.6	1422.1	1408.6	1422.1	1462.0
8°	1796.5	1785.0	1745.4	1682.8	1603.0	1526.1	1452.4	1409.0	1394.8	1408.6	1450.9
8.5°	1805.3	1792.7	1751.2	1684.8	1600.3	1518.5	1441.7	1395.6	1380.6	1395.6	1439.4
9°	1813.8	1800.7	1756.6	1686.3	1597.2	1511.2	1430.5	1382.5	1366.0	1381.8	1428.2
9.5°	1821.9	1808.0	1761.6	1687.8	1594.1	1503.9	1419.4	1368.7	1352.2	1368.3	1416.7
10°	1829.2	1814.9	1766.6	1689.4	1590.7	1495.8	1407.9	1355.3	1338.0	1354.9	1405.2
10.5°	1836.4	1821.9	1771.2	1690.5	1587.6	1488.1	1396.3	1341.8	1324.1	1341.4	1393.7
11°	1843.4	1828.0	1775.0	1691.3	1583.8	1480.1	1384.8	1328.4	1309.9	1327.6	1382.1
11.5°	1849.9	1833.8	1779.2	1692.1	1579.9	1471.6	1373.3	1315.3	1295.3	1314.5	1370.6
12°	1856.0	1839.5	1782.7	1692.1	1575.7	1463.2	1361.8	1301.1	1281.5	1300.7	1358.7
12.5°	1861.8	1844.5	1785.8	1692.4	1571.5	1454.7	1350.3	1288.0	1267.7	1287.3	1347.2
13°	1866.8	1849.5	1788.8	1692.1	1567.2	1446.7	1338.4	1274.6	1253.5	1273.5	1335.3
13.5°	1871.8	1853.7	1791.5	1691.7	1562.2	1437.8	1326.5	1261.2	1239.3	1260.4	1323.4
14°	1876.0	1858.0	1793.8	1691.3	1557.6	1429.0	1314.9	1247.7	1225.5	1246.6	1311.5
14.5°	1880.2	1861.4	1795.7	1690.5	1552.6	1420.2	1302.6	1233.9	1211.2	1233.1	1299.6
15°	1883.7	1864.9	1797.3	1689.4	1547.7	1410.9	1290.7	1220.5	1197.4	1219.7	1287.7
15.5°	1887.1	1867.6	1798.8	1687.8	1542.3	1402.1	1278.8	1207.4	1183.6	1206.6	1275.4
16°	1889.8	1870.2	1799.6	1686.3	1536.9	1392.9	1266.9	1194.0	1169.8	1192.8	1263.5
16.5°	1892.1	1872.2	1800.3	1684.4	1531.5	1383.7	1255.0	1180.5	1156.3	1179.8	1251.6
17°	1894.1	1873.7	1800.7	1682.1	1525.4	1374.1	1242.7	1167.1	1142.5	1166.3	1239.7
17.5°	1895.6	1874.9	1800.7	1679.8	1519.6	1364.9	1230.8	1154.0	1129.1	1152.9	1227.4
18°	1896.7	1875.6	1800.3	1677.5	1513.5	1355.6	1218.9	1140.6	1115.2	1139.8	1215.1
18.5°	1897.5	1876.4	1799.6	1674.4	1507.3	1345.7	1206.6	1127.5	1102.2	1126.8	1203.2
19°	1897.5	1876.4	1798.4	1671.3	1500.8	1335.7	1194.7	1114.5	1089.1	1113.7	1191.3
19.5°	1897.5	1876.0	1797.3	1668.2	1494.7	1326.1	1182.4	1101.4	1075.7	1100.6	1179.4
20°	1897.1	1875.2	1795.4	1664.4	1487.7	1316.5	1170.2	1088.4	1062.6	1087.6	1167.1
20.5°	1896.0	1874.1	1793.4	1660.9	1481.2	1306.5	1158.2	1075.3	1049.2	1074.9	1154.8
21°	1894.8	1872.5	1790.7	1656.7	1473.9	1296.1	1146.0	1062.6	1036.5	1061.9	1142.9



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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°	1887.9	1865.3	1781.5	1643.3	1452.0	1265.8	1109.9	1024.6	997.7	1024.2	1106.4
23°	1885.2	1862.2	1777.7	1638.3	1444.7	1255.4	1097.6	1011.9	985.0	1011.5	1094.5
23.5°	1881.8	1858.7	1773.5	1633.3	1436.7	1245.0	1085.7	999.3	972.4	999.3	1082.6
24°	1877.9	1854.5	1769.2	1627.5	1428.6	1234.3	1073.4	987.0	960.1	986.6	1070.3
24.5°	1873.7	1850.3	1764.3	1622.2	1420.5	1223.9	1061.5	974.7	947.8	973.9	1058.4
25°	1869.5	1845.7	1759.3	1616.0	1411.7	1212.8	1049.6	962.0	935.1	961.6	1046.1
25.5°	1864.5	1840.3	1753.9	1609.9	1403.3	1202.4	1037.3	949.7	922.8	949.7	1034.6
26°	1859.1	1835.3	1748.1	1603.0	1394.0	1191.3	1025.4	937.4	910.5	937.0	1022.3
26.5°	1853.3	1829.2	1742.0	1596.4	1384.8	1180.1	1013.5	925.5	898.3	925.1	1010.4
27°	1847.6	1823.4	1735.8	1589.5	1375.2	1169.0	1001.6	913.2	886.3	912.8	998.5
27.5°	1841.4	1816.9	1728.9	1581.8	1364.9	1157.9	989.3	900.9	874.4	900.9	987.0
28°	1834.5	1810.3	1721.6	1573.8	1354.1	1146.3	977.4	888.7	862.2	888.7	975.1
28.5°	1827.6	1803.0	1714.7	1565.7	1343.7	1134.4	965.8	876.7	850.3	876.7	963.2
29°	1820.3	1795.4	1707.0	1556.9	1332.2	1122.5	953.6	864.8	838.7	864.8	951.3
29.5°	1812.6	1787.7	1699.0	1547.7	1320.7	1110.6	942.0	852.9	826.8	853.3	939.3
30°	1805.0	1779.6	1690.9	1538.1	1308.4	1098.0	929.7	841.4	814.9	841.0	927.4
30.5°	1796.9	1771.2	1682.5	1528.1	1296.1	1085.3	917.8	829.1	803.0	829.5	915.9
31°	1789.2	1762.7	1673.6	1517.7	1283.4	1073.0	905.9	817.2	791.5	818.0	904.0
31.5°	1781.5	1753.9	1664.4	1506.2	1270.4	1059.9	894.0	806.1	780.0	806.1	892.1
32°	1773.9	1744.7	1655.2	1494.7	1256.9	1046.9	882.1	794.2	768.5	794.6	880.2
32.5°	1766.6	1735.8	1645.2	1482.4	1242.7	1033.8	870.2	782.3	756.9	783.0	868.7
33°	1754.3	1726.6	1635.6	1469.7	1228.1	1020.4	858.3	771.1	745.4	771.5	856.8
33.5°	1741.6	1717.8	1625.6	1456.6	1213.9	1006.9	846.4	759.6	733.9	760.4	844.9
34°	1722.0	1708.6	1615.2	1443.2	1199.0	993.1	834.1	748.1	722.8	748.5	833.0
34.5°	1704.7	1698.6	1604.1	1428.6	1184.0	979.3	822.2	736.2	711.2	737.3	821.1
35°	1678.2	1686.7	1593.0	1413.6	1168.2	965.1	810.3	725.1	699.7	725.8	809.5
35.5°	1653.6	1673.2	1581.5	1398.3	1152.5	951.3	798.8	713.5	688.6	714.7	797.6
36°	1629.8	1654.4	1569.5	1382.1	1136.0	937.0	786.5	702.4	677.4	703.5	785.7
36.5°	1599.1	1636.0	1557.3	1366.0	1119.1	922.8	774.2	690.9	665.9	692.0	773.4
37°	1574.2	1611.8	1544.6	1349.1	1102.2	908.2	762.3	679.4	654.8	680.5	761.9
37.5°	1543.8	1586.1	1531.5	1331.1	1084.9	893.6	750.0	668.2	643.6	669.4	749.6
38°	1512.3	1564.6	1518.5	1312.6	1066.5	879.1	738.1	656.7	632.5	658.2	737.7
38.5°	1483.9	1534.2	1504.6	1294.2	1049.2	864.5	725.8	645.6	621.4	647.1	725.8
39°	1450.1	1508.5	1491.2	1275.4	1030.7	849.9	713.5	634.4	609.8	636.0	714.3
39.5°	1420.9	1480.8	1476.6	1255.4	1012.3	834.9	701.2	622.9	598.7	624.8	702.0
40°	1389.0	1449.0	1462.0	1234.7	993.1	819.5	689.0	611.8	587.6	613.7	689.7
40.5°	1353.7	1423.6	1447.0	1213.9	974.3	804.6	677.1	600.6	576.8	602.5	677.8
41°	1324.9	1391.0	1433.2	1192.8	955.1	789.6	664.4	589.5	565.7	591.4	666.3
41.5°	1290.0	1360.2	1417.9	1170.5	935.5	774.2	652.1	578.4	554.9	580.7	653.6
42°	1258.5	1331.4	1401.0	1147.9	915.9	759.2	640.2	567.2	543.8	569.5	641.7
42.5°	1227.0	1298.0	1382.9	1125.6	896.3	743.9	628.3	556.5	532.7	558.4	630.2
43°	1191.3	1270.0	1364.1	1102.6	876.4	728.9	616.0	545.3	521.5	547.6	618.3
43.5°	1163.6	1238.1	1339.5	1078.8	856.4	713.5	603.3	534.2	510.8	536.5	606.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	1068.0	1142.9	1259.6	1007.3	796.5	667.5	567.2	501.2	477.7	503.9	570.7
45.5°	1034.2	1114.5	1233.1	982.7	776.1	652.5	555.3	490.0	467.0	493.1	558.8
46°	1008.5	1083.7	1202.8	958.5	756.5	637.1	543.0	479.3	455.8	482.0	546.9
46.5°	975.4	1051.1	1172.1	933.6	736.6	622.1	531.1	468.1	444.7	471.2	534.6
47°	948.2	1024.6	1143.7	908.6	716.6	607.2	518.8	457.0	434.0	460.1	523.1
47.5°	920.1	991.6	1110.6	884.0	696.6	592.2	506.9	446.2	423.2	449.7	511.1
48°	888.7	965.8	1080.7	859.5	677.1	577.6	495.4	435.1	412.5	438.6	499.2
48.5°	866.0	936.7	1049.9	834.5	657.5	562.2	483.5	424.4	401.7	427.8	487.3
49°	834.1	906.7	1016.9	809.9	637.9	547.6	471.2	413.2	390.6	417.1	475.8
49.5°	812.6	882.1	988.1	785.0	619.1	533.0	459.7	402.5	379.8	406.3	463.9
50°	785.3	850.6	955.9	760.4	600.2	518.8	447.8	391.7	368.7	395.6	452.4
50.5°	760.4	828.4	925.1	735.8	580.7	504.2	436.3	380.6	357.9	384.8	440.9
51°	738.5	799.2	895.2	711.2	562.2	490.0	424.7	370.2	347.6	374.0	429.0
51.5°	710.5	776.1	863.3	687.4	544.6	476.6	413.2	359.1	336.4	363.3	417.8
52°	692.8	751.9	836.0	663.6	526.9	462.4	401.7	348.3	326.4	352.9	406.3
52.5°	666.7	725.8	806.1	640.2	508.8	448.9	390.9	337.6	321.4	342.2	395.2
53°	648.6	705.1	777.7	617.1	492.3	435.5	379.4	329.1	316.8	333.3	384.0
53.5°	627.5	677.4	749.6	594.5	475.4	422.1	368.3	320.7	312.2	324.5	372.9
54°	606.4	659.0	720.8	572.2	459.7	409.4	357.5	312.6	308.0	315.7	362.1
54.5°	589.1	634.0	695.9	550.7	443.9	396.3	346.8	304.2	303.4	306.8	351.8
55°	567.6	614.8	668.2	530.0	428.6	384.0	336.0	296.1	298.8	298.0	341.0
55.5°	553.0	594.1	644.4	510.0	414.0	372.1	325.7	291.5	293.8	293.4	330.7
56°	531.5	573.0	618.3	490.4	399.4	359.8	315.3	286.9	288.8	289.2	320.7
56.5°	518.1	555.3	595.3	471.6	386.0	348.3	304.5	281.9	283.8	284.2	310.7
57°	500.0	533.4	572.2	453.5	372.5	336.8	294.2	277.3	278.4	279.6	300.7
57.5°	485.8	518.1	548.8	435.9	359.8	326.4	285.0	272.3	273.0	274.6	290.3
58°	470.4	497.3	527.7	419.4	347.6	315.7	275.0	267.3	267.7	269.6	281.1
58.5°	455.1	483.1	506.2	403.2	335.6	304.9	265.4	262.3	261.9	264.6	271.1
59°	441.6	463.9	487.0	388.3	324.5	294.6	256.2	257.3	256.2	259.6	261.9
59.5°	426.3	450.5	466.6	373.3	313.8	285.0	246.9	251.9	250.4	254.2	253.1
60°	412.8	433.2	448.6	359.5	303.0	275.7	238.1	246.9	244.6	248.9	244.2
60.5°	399.0	420.1	430.1	346.0	291.9	266.5	229.7	241.2	238.9	243.5	235.8
61°	386.0	404.0	413.6	333.0	281.9	257.7	222.0	236.2	233.1	238.1	227.7
61.5°	373.7	390.9	396.3	320.7	272.3	248.9	217.0	230.4	227.0	232.7	220.4
62°	361.8	376.7	381.7	308.8	263.1	240.8	212.8	225.0	221.2	227.0	215.1
62.5°	349.5	364.4	365.6	297.6	253.8	232.7	208.1	219.7	215.4	221.6	210.8
63°	338.7	351.0	351.8	286.9	245.4	225.0	203.5	213.9	209.7	215.8	206.2
63.5°	327.2	339.5	337.6	276.1	236.9	217.4	199.3	208.5	204.3	210.5	202.0
64°	317.2	326.8	324.5	266.1	228.9	210.1	194.7	203.2	198.9	204.7	197.8
64.5°	306.1	316.1	311.5	256.5	220.8	203.2	190.1	197.8	193.6	199.7	193.2
65°	296.9	304.5	299.5	247.3	213.1	196.2	185.5	192.4	188.6	194.3	188.9
65.5°	286.9	294.6	288.0	238.9	205.8	189.7	181.3	187.4	183.6	188.9	184.3
66°	277.7	283.4	276.9	230.0	198.5	183.2	176.3	182.4	178.6	183.6	179.7



TEST NUMBER: P776420

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	250.0	254.6	245.4	205.8	178.2	165.1	162.4	167.4	164.0	168.6	165.9
68°	241.6	245.0	235.4	198.2	171.7	159.4	157.8	162.8	159.4	164.0	161.3
68.5°	233.1	236.2	226.6	190.9	165.5	154.0	153.2	158.2	154.4	159.0	156.7
69°	224.7	227.7	217.0	183.6	159.8	148.6	148.6	153.2	149.8	154.4	151.7
69.5°	216.6	218.9	208.5	176.7	153.2	143.6	144.0	148.6	145.2	149.4	147.1
70°	208.9	210.8	200.5	170.1	147.9	138.3	139.4	144.0	140.6	144.8	142.5
70.5°	200.8	202.4	192.0	163.2	142.1	133.6	135.2	139.4	135.9	140.2	138.3
71°	193.2	194.7	184.3	157.1	136.7	128.7	130.6	134.8	131.7	135.6	133.6
71.5°	185.9	187.0	176.7	150.9	131.3	124.0	126.0	130.6	127.1	131.0	129.0
72°	178.6	179.3	169.0	144.8	126.0	119.4	121.7	126.0	122.5	126.3	124.4
72.5°	171.3	172.0	161.7	139.0	121.0	114.8	117.5	121.4	118.3	121.7	120.2
73°	164.0	164.4	154.8	133.6	116.0	110.6	113.3	116.7	113.7	117.1	116.0
73.5°	157.1	157.5	147.9	127.9	111.0	106.8	109.1	112.5	109.4	112.9	111.4
74°	150.2	150.5	140.9	122.5	106.0	102.5	104.8	107.9	105.2	108.3	107.1
74.5°	143.2	143.6	134.8	117.1	101.4	99.1	100.6	103.7	100.6	104.1	102.9
75°	137.9	137.9	128.7	111.8	96.8	95.6	96.4	99.1	96.4	99.5	98.7
75.5°	131.3	131.3	122.5	106.8	92.6	92.2	92.2	94.9	92.2	95.2	94.5
76°	124.8	124.8	116.4	101.8	87.9	88.7	88.3	90.2	87.9	91.0	90.2
76.5°	117.9	118.3	110.2	96.8	83.7	84.9	84.1	86.0	83.7	86.4	86.0
77°	111.4	111.8	104.1	91.8	79.5	81.4	79.9	81.8	79.5	82.2	81.8
77.5°	105.6	106.0	98.3	86.8	75.3	77.6	75.7	77.6	75.3	78.0	77.6
78°	99.5	99.8	92.9	82.2	71.0	74.1	71.8	73.0	70.7	73.7	73.7
78.5°	93.3	94.1	87.2	77.6	67.2	70.3	67.6	68.7	66.4	69.5	69.5
79°	87.6	87.9	81.8	73.0	63.4	66.4	63.7	64.5	62.2	64.9	65.3
79.5°	81.8	82.6	76.4	68.7	59.5	63.0	59.9	60.3	58.4	60.7	61.1
80°	76.0	76.8	71.0	64.1	55.7	59.1	56.1	56.1	54.1	56.5	57.2
80.5°	70.7	71.4	66.1	59.9	51.8	55.7	52.2	51.5	49.9	52.2	53.4
81°	65.3	66.1	61.1	55.7	48.4	51.8	48.4	47.6	46.1	48.0	49.2
81.5°	59.9	60.7	56.1	51.5	44.9	48.4	44.5	43.0	41.9	43.8	45.3
82°	54.5	55.3	51.5	47.6	41.1	44.9	40.7	39.2	38.0	39.9	41.9
82.5°	49.5	50.3	46.9	43.8	38.0	41.5	37.3	35.3	33.8	36.1	38.0
83°	44.5	45.3	42.6	39.9	34.6	38.0	33.8	31.5	30.0	31.9	34.9
83.5°	39.2	39.9	38.0	36.1	31.5	34.6	30.3	28.0	26.1	28.0	31.5
84°	34.2	34.9	34.2	32.3	28.0	31.1	27.3	24.2	22.3	24.2	28.4
84.5°	29.2	30.3	30.3	28.8	25.0	27.7	23.8	20.4	18.4	20.4	25.0
85°	24.6	25.7	26.9	25.3	21.5	24.2	20.4	17.3	15.0	16.9	21.9
85.5°	19.6	21.1	23.0	21.9	18.4	20.7	17.3	14.6	12.7	14.2	18.8
86°	16.1	17.7	19.6	18.4	15.7	17.7	14.2	12.3	10.8	11.9	15.7
86.5°	13.4	14.6	16.1	15.4	12.7	14.2	11.1	10.0	8.8	9.6	13.1
87°	11.1	11.9	13.1	11.9	10.0	11.1	8.4	7.7	6.5	7.7	10.4
87.5°	8.4	8.8	10.0	8.8	7.3	8.1	5.4	5.0	4.6	5.4	7.3
88°	6.1	6.1	6.9	5.8	4.6	5.0	2.7	2.7	2.7	3.1	4.6
88.5°	3.5	3.5	3.8	2.7	1.9	2.3	0.8	0.8	1.2	1.2	1.9



TEST NUMBER: P776420

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-2700K

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	0.0	0.0



TEST NUMBER: P776420

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1618.7	1618.7	1618.7	1618.7	1618.7	1618.7
0.5°	1616.0	1621.8	1627.9	1625.2	1626.8	1628.7
1°	1610.3	1621.0	1632.1	1634.4	1638.3	1641.4
1.5°	1604.5	1620.2	1636.8	1642.9	1650.2	1654.4
2°	1598.3	1619.5	1640.6	1651.3	1661.7	1667.1
2.5°	1592.6	1618.3	1644.4	1659.8	1672.9	1679.4
3°	1586.1	1616.8	1647.9	1667.9	1684.0	1691.7
3.5°	1579.5	1615.2	1651.3	1675.9	1695.1	1703.6
4°	1573.0	1613.7	1654.4	1683.6	1705.5	1715.1
4.5°	1566.1	1611.8	1657.9	1690.9	1715.9	1726.6
5°	1559.2	1609.9	1660.6	1698.2	1725.8	1737.8
5.5°	1552.3	1607.2	1663.2	1705.1	1735.8	1748.1
6°	1545.0	1604.9	1665.6	1712.0	1745.0	1758.5
6.5°	1537.7	1602.2	1667.5	1718.2	1753.9	1768.9
7°	1530.4	1599.5	1669.8	1724.3	1762.7	1778.5
7.5°	1522.7	1596.4	1671.3	1730.1	1771.2	1787.7
8°	1515.0	1593.4	1672.9	1735.8	1779.2	1796.5
8.5°	1507.3	1589.9	1674.0	1740.8	1786.9	1805.3
9°	1499.3	1586.4	1675.2	1745.8	1794.2	1813.8
9.5°	1491.2	1582.6	1675.9	1750.4	1801.5	1821.9
10°	1483.1	1578.8	1676.3	1755.0	1808.0	1829.2
10.5°	1474.7	1574.5	1676.7	1758.9	1814.2	1836.4
11°	1466.2	1570.3	1676.7	1762.7	1820.3	1843.4
11.5°	1457.8	1566.1	1676.3	1765.8	1826.1	1849.9
12°	1449.3	1561.1	1675.9	1768.9	1831.1	1856.0
12.5°	1440.5	1556.5	1675.5	1771.9	1836.1	1861.8
13°	1431.7	1551.5	1674.4	1774.2	1840.7	1866.8
13.5°	1422.5	1546.5	1673.2	1776.5	1844.9	1871.8
14°	1413.2	1541.1	1671.7	1778.5	1848.4	1876.0
14.5°	1404.0	1535.8	1670.2	1779.6	1851.8	1880.2
15°	1394.8	1530.0	1668.2	1781.1	1854.9	1883.7
15.5°	1385.6	1524.2	1666.3	1781.9	1857.2	1887.1
16°	1376.4	1518.5	1663.6	1782.3	1859.5	1889.8
16.5°	1366.8	1512.3	1660.9	1782.3	1861.0	1892.1
17°	1356.8	1506.2	1658.3	1781.9	1862.2	1894.1
17.5°	1347.2	1499.7	1655.2	1781.5	1863.3	1895.6
18°	1337.6	1493.1	1651.7	1780.8	1863.7	1896.7
18.5°	1327.6	1486.6	1647.9	1779.6	1863.7	1897.5
19°	1318.0	1479.7	1644.4	1777.7	1863.7	1897.5
19.5°	1307.6	1472.8	1640.2	1775.8	1862.9	1897.5
20°	1297.6	1465.9	1636.0	1773.9	1861.8	1897.1
20.5°	1287.7	1458.6	1631.4	1771.2	1860.3	1896.0
21°	1277.3	1450.9	1626.8	1768.1	1858.3	1894.8

TEST NUMBER: P776420

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1246.2	1427.8	1611.0	1757.3	1850.3	1887.9
23°	1235.8	1419.8	1605.3	1753.1	1846.8	1885.2
23.5°	1225.1	1411.7	1599.1	1748.5	1843.0	1881.8
24°	1214.7	1403.3	1593.0	1743.5	1838.8	1877.9
24.5°	1203.6	1394.4	1586.4	1738.5	1834.1	1873.7
25°	1192.8	1385.6	1579.9	1732.8	1829.2	1869.5
25.5°	1182.1	1376.4	1572.6	1727.0	1823.8	1864.5
26°	1170.9	1367.2	1565.7	1720.5	1818.0	1859.1
26.5°	1159.8	1357.6	1558.0	1714.3	1811.9	1853.3
27°	1148.6	1347.6	1550.3	1707.4	1806.1	1847.6
27.5°	1137.1	1336.8	1541.9	1700.1	1799.2	1841.4
28°	1125.2	1326.5	1533.4	1692.8	1792.3	1834.5
28.5°	1113.7	1315.3	1524.6	1685.1	1784.6	1827.6
29°	1101.8	1303.8	1515.0	1677.1	1777.3	1820.3
29.5°	1089.5	1292.3	1505.4	1669.0	1769.2	1812.6
30°	1076.8	1280.4	1495.0	1660.2	1761.2	1805.0
30.5°	1064.5	1267.7	1484.3	1651.3	1752.3	1796.9
31°	1051.9	1255.4	1473.2	1642.1	1743.5	1789.2
31.5°	1039.2	1242.3	1461.6	1632.9	1734.7	1781.5
32°	1026.5	1229.3	1449.7	1622.9	1725.1	1773.9
32.5°	1013.1	1215.5	1437.1	1612.9	1715.9	1764.6
33°	1000.0	1202.0	1424.4	1603.0	1706.3	1754.3
33.5°	987.0	1188.2	1410.9	1592.6	1696.7	1741.6
34°	973.5	1173.6	1397.1	1581.8	1687.8	1722.0
34.5°	959.7	1159.0	1383.3	1570.7	1678.2	1704.7
35°	946.3	1144.0	1368.7	1559.2	1666.7	1678.2
35.5°	932.8	1127.9	1353.3	1547.7	1654.4	1653.6
36°	918.6	1112.2	1338.0	1535.4	1637.9	1629.8
36.5°	904.8	1095.3	1322.2	1523.1	1617.9	1599.1
37°	891.0	1078.4	1305.3	1510.4	1598.7	1574.2
37.5°	876.7	1060.7	1288.0	1497.3	1571.8	1543.8
38°	862.5	1042.7	1269.6	1483.9	1549.2	1512.3
38.5°	847.2	1024.6	1250.4	1469.7	1523.5	1483.9
39°	832.6	1006.2	1231.2	1456.3	1493.9	1450.1
39.5°	818.0	987.7	1210.9	1442.4	1470.8	1420.9
40°	803.0	968.9	1189.4	1427.8	1440.5	1389.0
40.5°	788.0	949.7	1167.8	1412.5	1411.3	1353.7
41°	772.7	930.1	1146.0	1398.3	1384.4	1324.9
41.5°	757.7	911.7	1124.1	1383.7	1352.6	1290.0
42°	742.7	892.1	1101.4	1368.3	1324.1	1258.5
42.5°	727.4	872.1	1078.8	1352.6	1293.8	1227.0
43°	712.4	852.6	1055.3	1335.7	1261.6	1191.3
43.5°	697.0	833.0	1031.9	1317.2	1234.3	1163.6

TEST NUMBER: P776420

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	651.7	773.4	960.1	1247.7	1142.9	1068.0
45.5°	636.3	753.9	936.3	1218.5	1109.5	1034.2
46°	621.0	734.3	911.7	1191.7	1083.0	1008.5
46.5°	606.0	714.7	887.5	1163.6	1051.9	975.4
47°	591.4	695.5	863.3	1131.7	1023.4	948.2
47.5°	576.8	675.5	838.7	1103.3	995.0	920.1
48°	561.8	656.3	814.5	1072.2	963.2	888.7
48.5°	547.2	637.5	790.7	1040.3	939.3	866.0
49°	533.0	618.3	766.5	1011.5	908.6	834.1
49.5°	519.2	599.9	742.3	978.9	884.0	812.6
50°	504.6	581.4	718.5	948.6	857.9	785.3
50.5°	490.0	563.0	694.7	919.0	828.7	760.4
51°	476.6	545.3	671.3	887.9	806.5	738.5
51.5°	463.1	527.7	648.6	859.9	777.3	710.5
52°	449.7	511.1	626.4	829.5	756.9	692.8
52.5°	435.9	494.6	604.1	800.7	732.0	666.7
53°	423.2	478.1	581.8	773.8	708.2	648.6
53.5°	410.5	462.4	561.5	744.6	686.7	627.5
54°	397.9	447.4	540.7	718.9	660.9	606.4
54.5°	386.0	433.2	521.1	691.6	642.9	589.1
55°	373.7	418.6	501.9	666.7	617.9	567.6
55.5°	362.1	404.8	483.9	642.1	600.6	553.0
56°	351.0	391.3	466.2	616.8	578.4	531.5
56.5°	339.9	379.0	449.3	594.9	560.3	518.1
57°	329.9	366.4	432.8	571.4	541.5	500.0
57.5°	319.5	354.1	417.4	550.3	521.9	485.8
58°	309.5	342.6	402.5	528.0	505.8	470.4
58.5°	299.5	331.4	387.9	508.5	486.6	455.1
59°	289.2	320.7	374.4	488.9	472.4	441.6
59.5°	280.0	309.9	361.4	469.7	454.3	426.3
60°	271.1	299.9	348.7	451.6	441.3	412.8
60.5°	262.7	289.9	336.4	433.6	424.0	399.0
61°	254.2	280.3	324.5	417.4	411.7	386.0
61.5°	246.2	271.5	313.4	400.5	395.9	373.7
62°	238.1	262.7	302.6	386.0	384.0	361.8
62.5°	230.4	253.8	292.2	371.0	369.4	349.5
63°	223.1	245.4	282.3	356.8	357.9	338.7
63.5°	215.8	237.3	272.3	342.9	344.9	327.2
64°	208.9	229.7	262.7	330.3	333.7	317.2
64.5°	202.4	222.0	253.8	317.2	321.1	306.1
65°	195.9	214.7	245.0	305.3	311.1	296.9
65.5°	189.3	207.4	236.6	293.8	299.2	286.9
66°	183.2	200.5	228.1	282.6	289.9	277.7



TEST NUMBER: P776420

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	165.5	180.5	205.1	251.9	259.6	250.0
68°	160.1	174.0	197.4	242.3	250.8	241.6
68.5°	154.8	167.8	190.5	233.1	241.6	233.1
69°	149.4	162.1	183.6	224.3	232.7	224.7
69.5°	144.4	156.3	176.7	215.4	224.3	216.6
70°	139.4	150.5	170.1	207.0	215.4	208.9
70.5°	134.4	144.8	163.6	198.9	207.4	200.8
71°	129.8	139.0	157.5	190.9	199.3	193.2
71.5°	125.2	134.0	151.3	183.2	191.6	185.9
72°	120.6	129.0	145.2	175.5	184.0	178.6
72.5°	116.0	124.0	139.4	168.6	176.3	171.3
73°	111.8	119.4	134.0	161.3	169.4	164.0
73.5°	107.5	114.4	128.7	154.0	161.7	157.1
74°	103.7	109.4	123.3	147.5	154.8	150.2
74.5°	99.5	104.8	117.9	140.6	147.9	143.2
75°	96.0	100.2	112.5	134.4	140.9	137.9
75.5°	92.6	95.6	107.5	128.3	134.8	131.3
76°	89.1	91.0	102.2	122.1	128.3	124.8
76.5°	85.3	86.8	97.5	116.0	122.1	117.9
77°	81.8	82.6	92.6	109.8	115.6	111.4
77.5°	78.0	78.3	87.9	104.1	109.4	105.6
78°	74.1	74.1	83.3	98.3	103.3	99.5
78.5°	70.7	70.3	78.3	92.6	97.5	93.3
79°	66.8	66.1	74.1	86.8	91.4	87.6
79.5°	63.0	62.2	69.5	81.4	85.6	81.8
80°	59.5	58.4	65.3	76.0	79.9	76.0
80.5°	55.7	54.5	61.1	71.0	74.5	70.7
81°	51.8	51.1	56.8	66.1	68.7	65.3
81.5°	48.4	47.2	52.6	61.1	63.4	59.9
82°	44.9	43.8	48.4	56.1	58.0	54.5
82.5°	41.5	40.3	44.5	51.5	53.0	49.5
83°	38.0	36.9	40.7	46.9	48.0	44.5
83.5°	34.6	33.4	36.9	42.6	42.6	39.2
84°	31.1	30.3	33.0	38.4	37.6	34.2
84.5°	27.7	26.9	29.6	34.2	33.0	29.2
85°	24.2	23.8	25.7	30.3	28.8	24.6
85.5°	20.7	20.7	22.3	26.5	24.6	19.6
86°	17.3	17.7	18.8	23.0	20.7	16.1
86.5°	14.2	14.6	15.4	19.2	17.3	13.4
87°	11.1	11.5	12.3	15.7	14.2	11.1
87.5°	8.1	8.8	9.2	12.7	11.1	8.4
88°	5.0	5.8	6.1	9.6	8.1	6.1
88.5°	2.3	3.1	2.7	6.5	5.4	3.5



TEST NUMBER: P776420

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-2700K

CANDELA DISTRIBUTION (continued):

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



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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°	1892.9	1870.2	1788.1	1652.5	1467.0	1285.7	1134.1	1049.9	1023.4	1049.2	1130.6
22°	1890.6	1867.9	1785.0	1647.9	1459.7	1276.1	1121.8	1037.3	1010.8	1036.5	1118.7



44°	1129.1	1204.7	1315.7	1055.7	836.4	698.2	591.4	523.1	500.0	525.4	594.1
44.5°	1099.1	1176.3	1289.2	1031.1	816.5	682.8	579.5	511.9	488.9	514.6	582.2



66.5°	268.1	274.2	265.8	221.6	191.6	177.0	171.7	177.4	173.6	178.6	175.1
67°	259.2	263.8	255.4	213.5	184.7	170.9	167.1	172.4	168.6	173.6	170.5



89°	1.2	0.8	0.8	0.8	0.4	0.4	0.0	0.4	0.0	0.4	0.4
89.5°	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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21.5°	1266.9	1443.6	1621.4	1765.0	1856.0	1892.9
22°	1256.6	1435.9	1616.4	1761.6	1853.3	1890.6



44°	681.7	813.4	1007.7	1295.0	1201.3	1129.1
44.5°	667.1	793.8	983.9	1270.4	1172.5	1099.1



66.5°	177.0	193.6	220.4	272.3	278.8	268.1
67°	171.3	187.0	212.4	261.5	270.0	259.2

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89°	0.4	0.8	0.8	3.5	2.3	1.2
89.5°	0.0	0.0	0.0	0.8	0.4	0.0

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(END OF REPORT)