

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: P776831

Luminaire Tested: HCDJBL54050CSD-HCD8TSQH-HCD8TSQLWW-5000lm-3000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776831
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B027)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD8TSQH-HCD8TSQLWW-5000lm-3000K
Description: 8 INCH SQUARE MEDIUM LENSED WALLWASH KIT
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4155.5 lumens
Efficiency: N/A
Efficacy: 86.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.2 / 1.3
Luminous Opening: Rectangular (W 0.67' x L: 0.67' x H: 0')
CIE Type: Direct

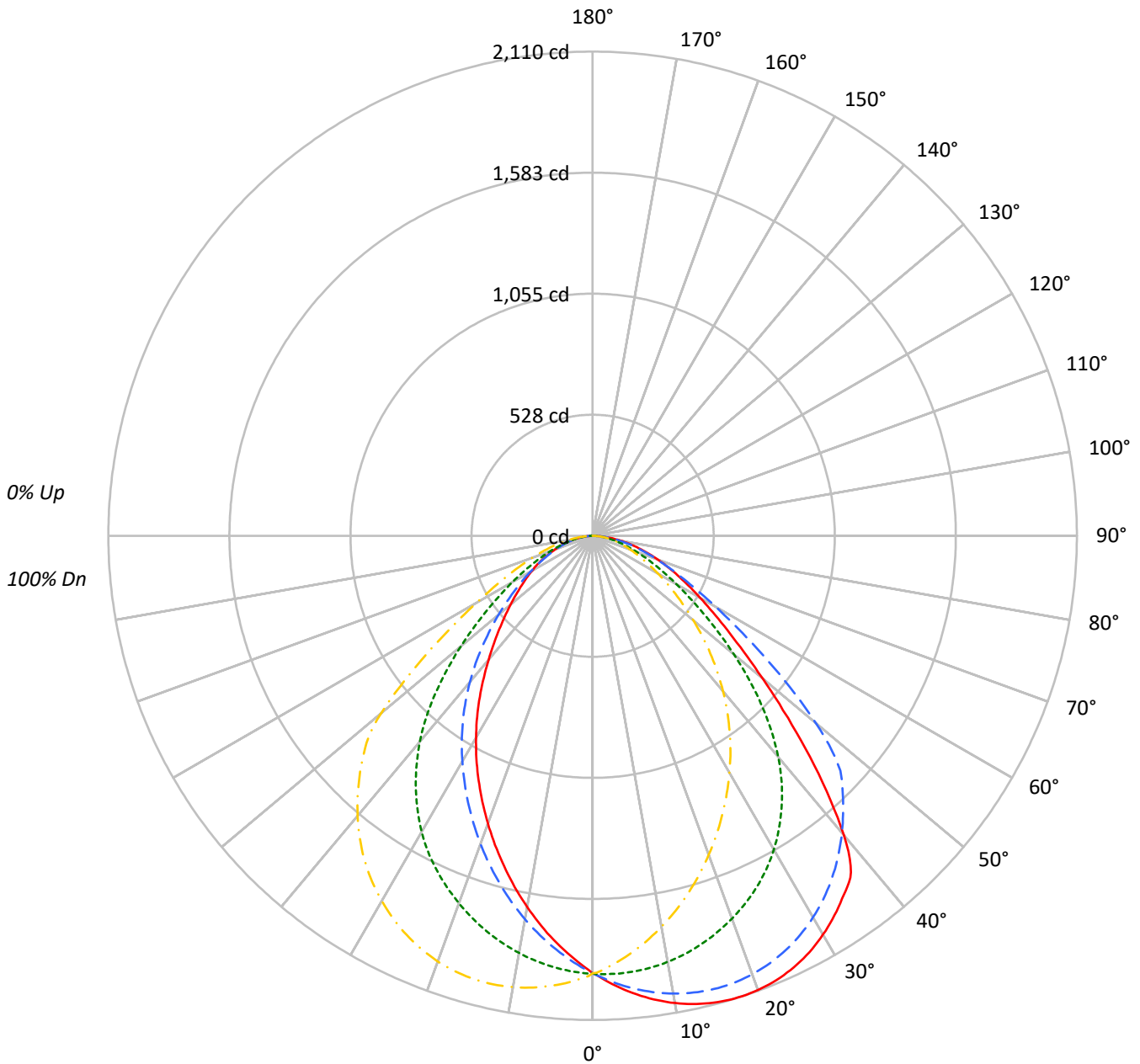
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	87					87			
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75					75			
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65					65			
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57					57			
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50					50			
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44					44			
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40					40			
8	64	52	44	38	63	51	43	38	50	43	38	49	42	38	47	42	38	36					36			
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30					30			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	45724	45724	45724	45724
5°	48135	45933	42902	45451
10°	50343	45909	39985	44949
15°	52225	45689	37008	44294
20°	53755	45293	34048	43479
25°	54899	44713	31098	42538
30°	55575	43719	28134	41238
35°	55887	42047	25083	39316
40°	53294	39352	22052	36648
45°	44521	35247	19482	32775
50°	36103	30007	17395	27944
55°	29920	24619	15802	23219
60°	25925	20199	14612	19355
65°	23217	16862	13464	16312
70°	21131	14232	12178	13804
75°	19233	11961	11062	11664
80°	17247	9873	9680	9556
85°	14059	7676	6273	7016

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 52192 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.8	4.3
10°-20°	508.7	12.2
20°-30°	752.4	18.1
30°-40°	867.1	20.9
40°-50°	789.5	19.0
50°-60°	540.6	13.0
60°-70°	317.4	7.6
70°-80°	160.0	3.9
80°-90°	40.1	1.0
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°	1440.8	34.7
0°-40°	2307.9	55.5
0°-60°	3638.0	87.5
0°-90°	4155.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4155.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1907	1907	1907	1907	1907	
5°	2000	1908	1782	1888	2000	193
15°	2104	1840	1491	1784	2104	595
25°	2075	1690	1175	1608	2075	956
35°	1909	1436	857	1343	1909	1188
45°	1313	1039	574	966	1313	1014
55°	716	589	378	555	716	650
65°	409	297	237	288	409	409
75°	208	129	119	126	208	221
85°	51	28	23	26	51	59
90°	0	0	0	0	0	



TEST NUMBER: P776831

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-HCD8TSQLWW-5000lm-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1906.9	1906.9	1906.9	1906.9	1906.9	1906.9	1906.9	1906.9	1906.9	1906.9	1906.9
0.5°	1914.3	1914.8	1914.8	1912.5	1910.2	1906.9	1904.1	1893.0	1892.5	1893.4	1897.6
1°	1925.0	1924.5	1922.7	1917.6	1910.6	1903.2	1897.1	1882.7	1880.9	1882.7	1888.8
1.5°	1935.2	1934.8	1930.1	1921.8	1911.5	1899.5	1889.7	1872.5	1869.7	1871.6	1880.0
2°	1945.0	1944.5	1938.0	1926.4	1911.5	1895.3	1881.8	1861.9	1857.7	1860.0	1870.7
2.5°	1955.2	1953.8	1945.4	1930.6	1911.5	1891.1	1873.9	1851.2	1845.6	1848.8	1861.4
3°	1964.5	1962.6	1952.9	1934.8	1911.5	1886.9	1866.0	1839.6	1833.5	1837.2	1851.6
3.5°	1973.8	1971.5	1959.8	1938.5	1911.1	1882.3	1857.7	1828.4	1821.0	1825.2	1841.9
4°	1983.1	1980.3	1966.3	1941.7	1910.6	1877.2	1848.8	1817.3	1808.4	1813.1	1831.7
4.5°	1991.4	1988.6	1972.4	1945.0	1909.7	1872.5	1840.5	1805.7	1795.4	1800.5	1821.4
5°	1999.8	1996.5	1978.9	1948.2	1908.3	1867.0	1831.2	1793.1	1782.4	1788.0	1810.8
5.5°	2008.1	2004.4	1984.9	1951.0	1906.9	1861.9	1821.9	1781.5	1769.0	1775.5	1800.1
6°	2016.0	2011.9	1990.5	1953.3	1905.5	1855.8	1812.6	1769.0	1755.5	1762.5	1789.4
6.5°	2023.5	2018.8	1995.6	1955.7	1903.6	1850.2	1802.9	1756.9	1742.5	1749.5	1778.7
7°	2030.9	2026.3	2000.7	1957.5	1901.8	1843.7	1793.1	1743.9	1728.1	1736.0	1767.1
7.5°	2037.9	2032.8	2005.8	1959.8	1899.5	1837.7	1782.9	1730.9	1714.6	1723.0	1756.0
8°	2044.4	2039.3	2010.5	1961.2	1897.1	1831.2	1772.7	1717.9	1700.2	1709.1	1744.4
8.5°	2050.4	2045.3	2014.6	1962.6	1894.8	1824.2	1762.0	1704.9	1685.8	1695.6	1732.7
9°	2056.4	2050.9	2018.4	1963.6	1892.0	1817.7	1751.8	1691.9	1671.4	1681.2	1720.7
9.5°	2062.5	2056.4	2022.5	1964.5	1888.8	1810.3	1741.1	1678.4	1657.0	1667.7	1709.1
10°	2067.6	2061.6	2025.8	1965.0	1885.5	1802.9	1730.0	1664.5	1642.2	1653.3	1697.0
10.5°	2072.7	2066.2	2029.0	1965.4	1881.8	1795.4	1718.8	1651.0	1627.8	1638.9	1684.4
11°	2077.8	2070.8	2031.8	1965.4	1878.1	1787.5	1707.2	1637.1	1612.9	1625.0	1671.9
11.5°	2082.0	2075.0	2034.6	1965.4	1874.4	1779.6	1696.1	1623.1	1598.1	1610.1	1658.9
12°	2086.2	2078.7	2036.9	1965.0	1870.2	1771.8	1684.4	1609.2	1582.7	1595.7	1646.4
12.5°	2089.9	2082.4	2038.8	1964.5	1866.0	1763.4	1672.8	1594.8	1567.9	1581.3	1633.8
13°	2093.6	2085.7	2040.7	1963.6	1861.4	1755.0	1660.8	1580.4	1552.5	1566.0	1620.8
13.5°	2096.4	2088.5	2042.0	1962.2	1856.3	1746.2	1648.7	1566.0	1537.2	1551.2	1607.8
14°	2099.2	2091.3	2043.4	1960.8	1851.2	1737.4	1636.1	1551.2	1521.9	1536.3	1594.3
14.5°	2102.0	2093.6	2044.4	1959.4	1846.1	1728.6	1624.1	1536.8	1506.6	1521.4	1580.9
15°	2103.8	2095.5	2044.8	1957.5	1840.5	1718.8	1611.5	1521.4	1490.8	1506.1	1567.4
15.5°	2105.7	2097.3	2045.3	1955.2	1834.9	1709.5	1599.0	1507.0	1475.5	1491.2	1553.9
16°	2107.1	2098.7	2044.8	1952.9	1828.9	1699.8	1586.0	1492.2	1459.7	1475.9	1540.5
16.5°	2108.5	2099.6	2044.4	1950.1	1823.3	1690.0	1573.0	1477.3	1444.3	1461.1	1527.0
17°	2108.9	2100.1	2043.9	1947.3	1816.8	1680.3	1560.0	1462.0	1428.5	1445.3	1512.6
17.5°	2109.4	2100.1	2043.0	1944.1	1810.3	1670.0	1546.5	1447.1	1412.8	1430.4	1499.1
18°	2109.8	2100.6	2041.6	1940.8	1803.8	1659.8	1533.5	1432.3	1397.0	1414.2	1485.2
18.5°	2109.4	2100.1	2040.2	1937.1	1796.8	1649.6	1520.0	1416.9	1381.2	1399.3	1470.8
19°	2108.9	2099.2	2038.3	1932.9	1789.4	1638.9	1506.6	1401.6	1365.4	1384.0	1456.9
19.5°	2108.0	2098.2	2036.0	1928.7	1782.4	1628.2	1493.1	1386.8	1350.1	1368.6	1442.9
20°	2106.6	2096.8	2033.7	1924.5	1775.0	1617.6	1479.6	1371.4	1334.3	1352.8	1428.1
20.5°	2105.2	2095.5	2030.9	1919.9	1767.6	1606.4	1465.7	1356.1	1318.0	1337.1	1413.7
21°	2102.9	2093.1	2027.6	1915.3	1759.7	1595.7	1451.8	1340.3	1302.2	1321.7	1399.8



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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°	2095.0	2084.8	2016.5	1899.0	1735.5	1561.4	1409.5	1294.8	1254.9	1275.3	1356.1
23°	2091.7	2081.5	2012.3	1893.0	1726.7	1549.8	1395.6	1279.0	1239.1	1259.5	1341.7
23.5°	2088.0	2077.8	2007.7	1886.9	1717.9	1538.2	1381.6	1263.2	1223.3	1244.2	1327.3
24°	2083.8	2073.6	2003.0	1880.9	1709.1	1526.1	1367.2	1247.9	1207.5	1228.4	1312.4
24.5°	2079.7	2069.0	1997.5	1874.4	1699.8	1514.0	1352.8	1232.6	1191.2	1213.1	1297.6
25°	2075.0	2064.3	1991.9	1867.4	1690.0	1501.9	1338.5	1217.2	1175.4	1197.3	1283.2
25.5°	2069.4	2059.2	1985.9	1860.0	1680.3	1488.9	1324.1	1201.9	1160.1	1181.5	1268.8
26°	2063.9	2053.7	1980.3	1853.0	1670.5	1476.4	1309.7	1186.1	1143.9	1166.2	1253.5
26.5°	2058.3	2047.6	1973.8	1845.1	1660.3	1463.8	1295.3	1170.3	1127.6	1150.4	1239.1
27°	2052.3	2041.6	1966.8	1837.7	1649.6	1450.8	1280.4	1154.5	1111.8	1135.0	1224.2
27.5°	2045.8	2035.1	1959.8	1829.3	1638.5	1437.8	1266.0	1139.2	1096.5	1118.8	1209.3
28°	2038.3	2028.1	1952.4	1820.5	1627.3	1424.4	1251.1	1123.9	1080.2	1103.5	1194.5
28.5°	2031.4	2020.7	1945.0	1811.7	1615.7	1410.9	1236.7	1108.1	1064.0	1087.7	1180.1
29°	2023.5	2012.8	1937.1	1802.9	1604.1	1397.0	1221.9	1092.3	1048.2	1071.9	1164.8
29.5°	2015.6	2004.9	1929.2	1793.6	1591.6	1383.5	1207.0	1077.0	1032.4	1056.1	1149.9
30°	2007.2	1997.0	1920.4	1783.8	1579.0	1369.1	1192.2	1060.7	1016.1	1040.3	1135.0
30.5°	1998.9	1988.2	1911.5	1773.6	1566.0	1354.7	1177.8	1045.4	999.9	1024.5	1120.2
31°	1989.6	1979.3	1902.7	1762.9	1553.0	1339.8	1162.4	1029.1	984.1	1009.2	1105.3
31.5°	1980.3	1970.1	1893.4	1752.2	1539.5	1325.4	1147.1	1013.8	968.3	993.4	1090.5
32°	1971.0	1960.8	1883.7	1740.6	1525.6	1310.6	1132.3	998.0	952.5	977.6	1075.6
32.5°	1960.8	1950.6	1873.5	1729.0	1511.2	1294.8	1116.9	982.2	936.3	961.8	1060.7
33°	1951.0	1940.8	1863.2	1717.4	1496.8	1279.5	1102.1	966.0	920.9	946.0	1045.9
33.5°	1940.8	1930.1	1852.6	1704.9	1482.4	1264.1	1086.7	951.1	904.7	930.7	1031.0
34°	1930.1	1919.9	1842.3	1692.3	1467.1	1248.8	1071.4	934.9	888.4	914.9	1015.2
34.5°	1919.4	1908.8	1830.7	1679.3	1451.8	1233.0	1056.1	919.1	872.6	899.1	1000.4
35°	1909.2	1897.6	1819.6	1665.9	1436.4	1217.2	1040.8	903.3	856.9	883.8	985.5
35.5°	1899.0	1886.5	1807.5	1651.5	1420.2	1201.0	1025.0	888.0	841.1	868.0	970.2
36°	1889.3	1874.9	1795.9	1637.5	1403.9	1185.7	1009.6	872.2	825.3	852.2	954.8
36.5°	1878.1	1863.7	1783.8	1622.7	1386.8	1169.4	994.3	855.9	809.5	836.4	939.5
37°	1865.1	1852.6	1770.8	1607.8	1370.0	1152.7	978.5	840.1	794.2	820.6	924.2
37.5°	1848.8	1841.4	1758.3	1593.0	1352.4	1136.0	962.3	824.8	778.8	805.3	908.9
38°	1825.2	1830.7	1744.8	1577.2	1333.8	1119.7	946.9	809.0	763.5	790.0	893.5
38.5°	1800.5	1818.2	1731.3	1560.9	1315.7	1103.0	931.2	793.2	748.6	774.2	878.2
39°	1770.8	1804.3	1717.9	1543.7	1296.7	1086.3	915.4	777.9	733.8	759.3	862.9
39.5°	1737.9	1784.3	1703.9	1527.0	1277.6	1069.1	899.6	762.6	718.9	744.0	847.1
40°	1702.6	1762.5	1689.6	1509.4	1257.2	1051.9	883.8	747.2	704.5	729.1	831.8
40.5°	1664.0	1734.6	1675.6	1490.8	1237.2	1035.2	868.0	731.9	690.6	714.3	816.4
41°	1627.3	1705.8	1660.8	1471.3	1216.8	1017.5	851.7	717.5	676.7	700.3	800.7
41.5°	1587.4	1669.6	1645.9	1451.8	1195.9	1000.4	836.0	702.7	663.2	685.5	784.9
42°	1549.3	1636.6	1630.6	1430.9	1174.5	982.7	820.2	688.3	649.7	671.5	769.5
42.5°	1509.4	1598.5	1615.2	1409.5	1152.7	965.5	804.4	673.9	636.7	657.6	754.2
43°	1469.9	1563.2	1600.4	1387.2	1130.9	947.9	788.6	659.9	623.7	644.1	738.9
43.5°	1429.5	1523.8	1584.6	1365.9	1108.6	929.8	772.8	645.5	610.7	630.2	723.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	1312.9	1409.0	1539.1	1292.9	1039.4	876.8	725.4	605.6	574.5	591.7	677.6
45.5°	1272.5	1369.6	1523.8	1268.3	1016.1	858.7	709.6	592.6	562.4	579.1	662.7
46°	1237.2	1332.4	1506.1	1242.8	992.9	841.1	693.8	579.6	551.3	566.6	647.4
46.5°	1197.7	1292.5	1488.0	1216.3	969.2	822.9	678.5	567.1	539.7	554.5	632.5
47°	1164.8	1257.2	1462.0	1189.4	945.6	805.3	662.7	555.0	528.5	542.9	618.1
47.5°	1125.7	1218.2	1437.4	1161.5	921.4	787.2	647.4	543.4	517.8	531.3	603.7
48°	1095.1	1184.3	1405.8	1133.2	898.6	769.5	632.1	530.8	507.1	520.1	589.8
48.5°	1058.4	1145.3	1376.1	1104.8	874.5	751.9	616.7	519.2	496.5	509.0	575.4
49°	1029.6	1113.7	1340.3	1076.5	850.8	734.2	601.9	508.1	486.2	497.9	561.5
49.5°	994.8	1077.0	1306.9	1047.7	827.6	716.6	587.0	496.9	476.5	487.2	548.0
50°	967.8	1046.8	1268.8	1018.9	804.4	698.9	572.2	485.8	466.3	476.5	534.5
50.5°	935.3	1012.9	1232.1	989.2	780.2	681.3	557.8	475.1	456.5	466.3	521.1
51°	910.3	982.7	1194.0	959.5	757.9	664.1	543.8	464.4	447.7	456.5	508.1
51.5°	880.1	951.1	1157.3	930.2	735.2	647.4	529.9	453.7	438.4	446.3	495.5
52°	855.9	923.3	1118.3	901.4	712.9	630.2	516.0	444.0	429.1	436.6	483.0
52.5°	829.0	894.5	1082.6	872.6	690.6	613.0	502.5	433.8	419.8	427.3	470.5
53°	806.2	867.1	1044.9	843.4	669.7	596.3	489.5	424.0	411.0	417.5	458.4
53.5°	781.2	840.1	1009.6	814.6	648.3	580.1	476.5	414.3	402.7	408.7	446.3
54°	758.9	813.7	973.0	786.3	627.9	563.8	463.5	405.4	394.3	399.9	435.2
54.5°	736.6	789.5	938.6	758.9	607.5	547.5	450.9	396.6	386.4	391.5	423.5
55°	715.7	764.0	905.2	731.5	588.9	531.8	438.9	387.3	378.0	382.7	412.4
55.5°	695.7	744.0	871.2	705.5	569.4	516.0	426.8	378.5	370.1	374.3	401.3
56°	675.3	718.5	840.1	679.9	550.8	500.6	414.7	369.7	361.8	366.0	391.0
56.5°	657.6	700.3	808.1	655.3	532.7	485.8	403.6	360.9	354.8	357.6	380.8
57°	637.2	676.7	779.3	631.1	515.5	470.9	392.4	353.4	347.4	349.7	370.6
57.5°	621.9	659.9	748.6	608.4	498.3	456.5	381.8	345.5	340.0	341.8	360.4
58°	602.8	638.1	721.2	585.6	482.1	442.6	370.6	337.6	332.5	333.9	350.2
58.5°	588.9	620.9	694.3	564.7	466.3	428.7	359.9	329.7	325.1	326.5	340.4
59°	570.3	601.9	667.8	544.3	450.5	415.2	348.8	321.8	318.1	319.1	330.7
59.5°	557.8	585.2	643.7	524.8	435.6	402.7	338.6	314.4	311.2	311.6	321.4
60°	540.6	567.5	618.6	505.8	421.2	390.1	328.3	307.0	304.7	304.7	312.1
60.5°	526.6	549.9	597.2	487.6	406.8	377.6	319.1	299.5	297.7	297.7	303.3
61°	511.8	535.0	573.1	470.0	393.8	365.0	309.3	292.1	291.2	290.7	294.4
61.5°	497.9	517.4	553.6	453.7	380.8	352.5	299.5	285.2	284.7	284.2	286.1
62°	484.4	503.9	532.7	437.9	367.4	340.4	290.7	278.7	278.2	277.3	277.3
62.5°	470.9	488.1	512.3	422.6	354.4	329.3	281.9	271.7	271.2	270.8	269.4
63°	457.9	474.2	494.6	407.8	342.7	317.7	273.1	265.2	264.3	264.3	261.5
63.5°	445.4	459.8	476.0	393.8	330.7	307.0	264.3	258.7	257.8	257.8	253.6
64°	433.3	445.4	459.3	379.4	319.5	296.3	255.9	252.2	250.8	251.2	246.1
64.5°	420.8	432.8	442.6	366.4	308.4	286.1	248.0	245.7	243.8	244.3	238.7
65°	409.2	419.4	425.9	353.9	297.2	275.9	240.1	239.2	237.3	237.8	231.3
65.5°	397.5	407.3	411.5	341.3	286.5	266.1	232.7	232.2	230.8	231.3	224.3
66°	385.9	394.8	396.1	329.3	276.3	256.4	225.2	225.7	224.3	225.2	217.3



TEST NUMBER: P776831

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-HCD8TSQLWW-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	353.0	358.5	354.8	295.4	247.1	228.5	203.9	207.1	205.3	206.7	197.8
68°	342.7	347.4	341.8	285.2	237.8	220.1	197.4	201.1	198.8	200.6	191.8
68.5°	332.1	336.2	329.7	274.9	229.0	211.8	190.9	195.5	192.7	194.6	185.3
69°	321.8	325.6	317.2	264.7	220.1	203.4	184.4	189.5	186.2	188.6	179.3
69.5°	312.1	314.9	305.6	255.0	211.3	195.1	178.3	183.4	180.2	183.0	173.7
70°	301.4	304.2	294.4	245.2	203.0	187.2	172.3	177.9	173.7	176.9	167.7
70.5°	291.7	293.5	283.3	235.9	194.6	179.7	166.7	172.3	168.1	171.4	162.1
71°	281.9	283.3	272.6	227.1	186.7	172.8	160.7	166.3	161.6	165.3	156.5
71.5°	272.1	273.5	261.9	218.3	178.8	165.3	155.1	160.7	156.0	159.3	150.9
72°	262.9	263.8	251.7	209.5	171.4	157.9	149.5	154.7	150.5	153.7	145.8
72.5°	253.6	254.0	242.0	200.6	163.9	151.4	144.0	149.1	145.4	148.1	140.7
73°	244.3	244.7	232.2	192.7	156.5	144.4	138.9	143.5	140.3	143.0	135.6
73.5°	234.5	235.0	222.5	184.4	149.5	137.9	133.8	138.4	134.7	137.5	130.5
74°	225.7	225.7	213.2	176.5	142.6	131.4	128.6	133.3	129.6	132.4	125.4
74.5°	216.9	216.4	203.9	168.6	136.1	125.4	123.5	127.7	124.5	126.8	120.3
75°	207.6	207.6	195.1	161.6	129.1	119.4	118.9	123.1	119.4	121.7	115.2
75.5°	199.2	198.8	186.2	154.2	122.6	113.3	113.8	117.5	114.2	116.6	110.5
76°	190.4	189.9	177.9	147.2	116.6	107.7	109.1	112.4	109.1	111.5	105.4
76.5°	181.6	181.1	169.5	139.8	110.5	102.2	104.5	107.3	104.5	106.4	100.3
77°	173.2	172.8	161.6	132.8	104.5	96.6	99.8	102.2	99.4	101.2	96.1
77.5°	165.3	164.4	153.7	125.9	98.5	91.5	94.7	97.1	94.7	96.1	91.0
78°	157.4	156.5	145.8	118.9	92.9	86.4	90.1	92.0	89.6	91.0	86.4
78.5°	149.1	148.6	137.9	112.4	87.3	81.3	85.5	87.3	85.0	86.4	81.7
79°	141.2	140.3	130.0	105.9	82.2	76.6	81.3	82.2	79.9	81.3	77.1
79.5°	132.8	132.4	122.1	99.4	76.6	72.0	76.6	77.1	75.2	76.6	72.4
80°	124.9	124.5	114.7	93.3	71.5	67.3	72.0	72.0	70.1	72.0	67.8
80.5°	117.0	116.6	107.3	86.8	66.4	63.2	67.8	66.9	65.5	66.9	63.2
81°	109.6	109.1	100.3	81.3	61.8	59.0	63.2	61.8	60.8	62.2	59.0
81.5°	101.7	101.2	93.3	75.2	57.1	54.8	58.5	56.7	55.7	57.1	54.3
82°	94.3	94.3	86.4	69.7	52.5	50.6	53.9	52.0	51.1	52.5	50.2
82.5°	86.8	86.8	79.4	64.1	47.8	46.9	49.7	46.9	46.4	47.8	45.5
83°	79.4	79.4	72.9	58.5	44.1	43.2	45.0	42.3	41.3	42.7	41.3
83.5°	72.0	72.4	65.9	52.9	39.9	39.5	40.9	37.2	36.7	38.1	37.2
84°	65.0	65.5	59.4	48.3	35.8	35.8	36.7	32.5	32.0	33.4	33.0
84.5°	58.1	58.5	53.4	43.2	31.6	32.0	33.0	27.9	27.4	28.8	29.3
85°	51.1	51.6	47.4	38.5	27.9	28.3	28.8	22.8	22.8	23.7	25.1
85.5°	44.1	44.6	41.8	33.4	23.7	24.6	24.6	18.6	18.1	19.5	21.4
86°	37.2	38.1	36.2	29.3	20.0	21.4	20.9	14.9	14.4	15.3	17.6
86.5°	30.2	31.6	31.1	24.6	16.7	17.6	17.2	11.6	11.1	12.1	13.9
87°	23.7	25.5	25.5	20.4	13.5	13.9	13.5	8.4	8.4	9.3	10.7
87.5°	19.0	20.4	20.4	15.8	10.2	10.7	10.2	5.6	5.6	6.0	7.0
88°	15.3	15.8	15.8	12.1	7.0	7.4	6.5	2.8	2.8	3.3	3.7
88.5°	11.6	12.1	12.1	8.4	4.2	3.7	3.3	0.9	0.9	0.9	0.9



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CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P776831

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-HCD8TSQLWW-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1906.9	1906.9	1906.9	1906.9	1906.9	1906.9
0.5°	1902.3	1908.3	1912.9	1918.0	1912.5	1914.3
1°	1896.7	1906.9	1915.7	1924.5	1921.8	1925.0
1.5°	1891.1	1905.0	1918.5	1930.6	1930.6	1935.2
2°	1885.1	1903.6	1920.8	1936.6	1939.4	1945.0
2.5°	1879.0	1901.3	1923.2	1942.7	1948.2	1955.2
3°	1872.5	1899.5	1925.0	1947.8	1957.1	1964.5
3.5°	1866.0	1896.7	1926.4	1953.3	1965.0	1973.8
4°	1859.5	1894.4	1927.8	1958.4	1972.8	1983.1
4.5°	1852.6	1891.6	1929.2	1963.1	1980.3	1991.4
5°	1845.1	1888.3	1930.1	1967.3	1987.7	1999.8
5.5°	1838.2	1885.1	1931.0	1971.5	1994.2	2008.1
6°	1830.7	1881.8	1931.5	1975.6	2001.2	2016.0
6.5°	1822.8	1878.1	1931.5	1979.3	2007.7	2023.5
7°	1814.9	1873.9	1931.5	1983.1	2013.7	2030.9
7.5°	1806.6	1870.2	1931.5	1985.9	2019.8	2037.9
8°	1798.2	1865.6	1931.0	1988.6	2025.3	2044.4
8.5°	1789.9	1861.4	1930.6	1991.4	2030.4	2050.4
9°	1781.5	1856.3	1929.2	1993.7	2035.5	2056.4
9.5°	1772.7	1851.6	1928.3	1995.6	2040.2	2062.5
10°	1763.4	1846.1	1926.9	1997.5	2044.4	2067.6
10.5°	1754.6	1841.0	1925.5	1998.9	2048.5	2072.7
11°	1745.3	1835.4	1923.6	2000.2	2052.3	2077.8
11.5°	1735.5	1829.8	1921.3	2001.2	2055.5	2082.0
12°	1725.8	1823.8	1919.0	2002.1	2058.8	2086.2
12.5°	1716.0	1817.7	1916.7	2002.6	2061.6	2089.9
13°	1706.3	1811.2	1913.4	2002.6	2063.9	2093.6
13.5°	1696.1	1804.7	1910.6	2002.1	2066.2	2096.4
14°	1685.8	1798.2	1907.4	2001.6	2068.1	2099.2
14.5°	1675.2	1791.3	1903.6	2001.2	2069.4	2102.0
15°	1664.5	1784.3	1899.9	1999.8	2070.4	2103.8
15.5°	1653.8	1776.9	1895.8	1998.4	2071.3	2105.7
16°	1643.1	1769.4	1891.6	1997.0	2072.2	2107.1
16.5°	1632.0	1762.0	1887.4	1995.1	2072.2	2108.5
17°	1620.8	1754.1	1882.7	1992.8	2072.2	2108.9
17.5°	1609.2	1746.2	1877.6	1990.5	2071.8	2109.4
18°	1598.1	1737.9	1872.5	1987.7	2070.8	2109.8
18.5°	1586.5	1729.5	1867.4	1984.5	2069.9	2109.4
19°	1574.8	1721.1	1861.9	1981.2	2068.5	2108.9
19.5°	1563.2	1712.8	1855.8	1977.5	2066.7	2108.0
20°	1551.2	1703.9	1850.2	1973.8	2064.3	2106.6
20.5°	1539.1	1695.1	1843.7	1969.6	2062.0	2105.2
21°	1527.0	1685.8	1837.2	1964.5	2059.2	2102.9

TEST NUMBER: P776831

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-HCD8TSQLWW-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1490.3	1658.0	1816.8	1949.6	2049.0	2095.0
23°	1477.8	1648.2	1809.8	1944.1	2044.8	2091.7
23.5°	1465.2	1638.5	1802.4	1938.0	2040.7	2088.0
24°	1452.7	1628.7	1795.0	1932.0	2036.0	2083.8
24.5°	1439.7	1618.5	1787.1	1925.5	2030.9	2079.7
25°	1427.2	1607.8	1779.2	1919.0	2025.3	2075.0
25.5°	1414.2	1597.1	1770.8	1912.0	2019.3	2069.4
26°	1401.1	1586.5	1762.5	1904.6	2013.7	2063.9
26.5°	1387.7	1575.3	1753.6	1897.1	2007.2	2058.3
27°	1374.7	1564.2	1744.8	1889.3	2000.2	2052.3
27.5°	1361.2	1552.5	1735.5	1881.4	1993.3	2045.8
28°	1347.7	1540.5	1725.8	1873.0	1985.9	2038.3
28.5°	1333.3	1528.4	1716.0	1864.6	1978.0	2031.4
29°	1319.9	1515.9	1705.8	1855.8	1970.1	2023.5
29.5°	1305.5	1502.9	1695.6	1847.0	1961.2	2015.6
30°	1291.1	1489.4	1684.4	1837.7	1952.9	2007.2
30.5°	1276.7	1475.9	1672.8	1828.4	1944.1	1998.9
31°	1261.8	1462.5	1661.7	1818.2	1934.8	1989.6
31.5°	1247.4	1448.1	1649.6	1808.4	1925.0	1980.3
32°	1232.6	1433.7	1637.1	1798.2	1915.3	1971.0
32.5°	1217.2	1419.3	1624.1	1787.5	1905.0	1960.8
33°	1202.4	1404.4	1611.1	1776.9	1894.4	1951.0
33.5°	1186.6	1389.5	1597.6	1765.3	1883.7	1940.8
34°	1170.8	1373.7	1583.7	1754.1	1873.0	1930.1
34.5°	1155.5	1358.9	1569.3	1742.5	1861.9	1919.4
35°	1140.6	1343.1	1554.9	1730.4	1850.2	1909.2
35.5°	1124.4	1327.3	1540.0	1718.3	1838.6	1899.0
36°	1108.6	1310.6	1525.1	1705.8	1827.0	1889.3
36.5°	1092.8	1294.3	1509.4	1692.8	1814.9	1878.1
37°	1077.4	1277.6	1493.6	1679.3	1802.9	1865.1
37.5°	1061.2	1260.4	1477.3	1665.9	1790.8	1848.8
38°	1045.4	1242.8	1460.6	1651.9	1779.2	1825.2
38.5°	1029.1	1225.1	1443.4	1637.5	1767.6	1800.5
39°	1013.8	1207.5	1426.2	1623.1	1756.4	1770.8
39.5°	996.6	1189.8	1407.7	1608.3	1743.0	1737.9
40°	980.9	1170.8	1389.5	1593.0	1729.0	1702.6
40.5°	964.6	1151.8	1370.5	1577.6	1707.2	1664.0
41°	948.3	1132.7	1350.5	1562.3	1685.8	1627.3
41.5°	932.1	1113.2	1330.1	1546.0	1658.0	1587.4
42°	915.8	1093.2	1309.7	1529.8	1629.2	1549.3
42.5°	899.6	1072.8	1288.3	1513.5	1595.3	1509.4
43°	883.3	1051.9	1266.0	1497.3	1563.7	1469.9
43.5°	866.6	1031.0	1242.8	1480.1	1527.5	1429.5



TEST NUMBER: P776831

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-HCD8TSQLWW-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	816.9	966.5	1168.9	1427.6	1421.1	1312.9
45.5°	799.7	944.2	1143.4	1409.5	1384.0	1272.5
46°	783.0	922.8	1116.5	1392.3	1348.2	1237.2
46.5°	766.3	901.0	1090.0	1373.7	1311.5	1197.7
47°	749.6	878.7	1062.6	1356.1	1276.2	1164.8
47.5°	733.3	856.9	1035.7	1336.1	1239.1	1125.7
48°	716.1	835.0	1008.3	1315.7	1204.7	1095.1
48.5°	699.9	813.2	980.4	1292.9	1168.9	1058.4
49°	683.2	791.8	953.0	1263.7	1136.0	1029.6
49.5°	666.9	770.9	926.0	1235.8	1101.6	994.8
50°	650.6	749.1	898.6	1202.8	1070.5	967.8
50.5°	633.9	728.2	871.2	1169.4	1036.6	935.3
51°	618.1	707.3	843.8	1134.6	1005.9	910.3
51.5°	601.9	687.3	817.4	1098.3	975.3	880.1
52°	586.1	666.9	791.4	1061.7	946.9	855.9
52.5°	570.3	647.4	765.8	1027.3	916.8	829.0
53°	554.5	628.4	739.8	991.5	888.0	806.2
53.5°	539.7	609.8	715.2	956.7	862.0	781.2
54°	524.3	590.7	691.5	921.9	834.6	758.9
54.5°	509.5	573.1	668.3	888.9	809.9	736.6
55°	494.6	555.4	646.0	856.9	782.5	715.7
55.5°	480.2	538.7	623.7	824.3	760.7	695.7
56°	465.8	522.0	602.3	794.2	734.7	675.3
56.5°	452.3	505.8	582.4	764.0	714.7	657.6
57°	438.4	489.5	562.4	735.6	689.7	637.2
57.5°	424.9	474.2	543.4	707.8	671.1	621.9
58°	411.9	459.3	524.8	681.3	648.3	602.8
58.5°	399.9	444.9	507.6	655.8	630.2	588.9
59°	387.8	431.0	490.9	630.2	610.2	570.3
59.5°	375.7	417.0	474.6	607.9	591.7	557.8
60°	363.6	403.6	458.4	584.7	574.0	540.6
60.5°	351.1	390.1	443.5	562.9	556.4	526.6
61°	339.5	377.6	428.7	541.5	540.6	511.8
61.5°	328.8	365.5	414.7	521.5	522.9	497.9
62°	317.7	353.4	401.3	502.5	509.0	484.4
62.5°	307.0	341.3	388.3	484.4	492.7	470.9
63°	296.3	330.2	374.8	466.7	478.4	457.9
63.5°	286.5	319.1	362.7	450.0	464.0	445.4
64°	276.8	307.9	350.6	432.8	449.1	433.3
64.5°	267.0	297.2	339.0	418.0	436.1	420.8
65°	257.3	287.5	327.4	402.7	422.2	409.2
65.5°	248.0	276.8	316.3	388.7	410.1	397.5
66°	239.2	267.0	305.6	374.3	397.1	385.9



TEST NUMBER: P776831

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-HCD8TSQLWW-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	213.6	238.7	274.9	336.2	360.4	353.0
68°	205.7	230.4	264.7	323.2	349.2	342.7
68.5°	197.8	221.5	255.4	312.1	338.1	332.1
69°	190.4	213.2	246.1	300.5	326.5	321.8
69.5°	182.5	204.8	237.3	289.3	315.8	312.1
70°	175.5	196.9	228.5	278.7	305.1	301.4
70.5°	168.1	188.6	219.7	268.0	294.4	291.7
71°	161.2	181.1	210.8	257.8	284.7	281.9
71.5°	154.7	173.2	203.0	247.5	274.5	272.1
72°	148.1	166.7	194.6	237.8	264.3	262.9
72.5°	141.6	159.8	186.7	228.5	254.5	253.6
73°	135.1	152.8	178.8	218.7	244.7	244.3
73.5°	129.1	145.8	170.9	209.9	235.5	234.5
74°	123.1	138.9	163.9	201.1	226.2	225.7
74.5°	117.5	132.4	157.0	191.8	216.9	216.9
75°	111.9	125.9	150.0	183.4	207.6	207.6
75.5°	106.4	119.4	142.6	175.1	198.8	199.2
76°	100.8	113.3	135.6	165.3	190.4	190.4
76.5°	95.7	107.3	128.6	157.9	181.6	181.6
77°	91.0	101.7	122.1	150.5	172.8	173.2
77.5°	86.4	95.7	115.6	143.0	164.4	165.3
78°	81.3	90.1	109.1	135.1	156.5	157.4
78.5°	76.6	85.0	103.1	127.7	148.6	149.1
79°	72.4	79.4	96.6	120.3	140.7	141.2
79.5°	68.3	74.3	90.6	112.9	132.4	132.8
80°	64.1	69.2	84.5	105.4	124.5	124.9
80.5°	59.9	64.6	79.0	98.5	116.6	117.0
81°	55.7	59.4	73.4	91.5	109.1	109.6
81.5°	51.6	54.8	67.8	84.5	101.7	101.7
82°	47.8	50.6	62.2	77.6	93.8	94.3
82.5°	43.7	46.0	57.1	71.1	86.8	86.8
83°	39.9	41.8	52.0	64.6	79.4	79.4
83.5°	36.2	37.6	46.9	58.1	72.4	72.0
84°	32.5	33.4	41.8	52.0	65.0	65.0
84.5°	28.8	29.7	37.2	46.0	58.1	58.1
85°	25.1	25.5	32.5	40.4	51.6	51.1
85.5°	21.4	22.3	27.9	35.3	44.6	44.1
86°	17.6	18.6	23.7	29.7	38.1	37.2
86.5°	14.4	15.3	19.5	24.6	32.0	30.2
87°	10.7	12.1	15.8	20.0	26.5	23.7
87.5°	7.0	8.8	12.1	14.9	21.4	19.0
88°	3.7	5.6	8.4	11.1	16.7	15.3
88.5°	0.9	2.3	4.6	7.4	12.5	11.6



TEST NUMBER: P776831

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-HCD8TSQLWW-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.5	0.5



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Peachtree City, GA 30269

Scaled Data Report





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

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Scaled Data Report



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Scaled Data Report





21.5°	2100.6	2090.8	2024.4	1910.2	1751.8	1584.1	1437.8	1325.0	1286.9	1306.4	1385.4
22°	2098.2	2088.0	2020.7	1904.6	1743.9	1573.0	1423.9	1309.7	1270.6	1291.1	1370.5



44°	1390.5	1485.7	1569.3	1342.2	1085.8	912.1	757.0	632.5	598.6	617.2	707.8
44.5°	1350.5	1446.7	1553.9	1318.0	1063.1	894.5	741.2	618.6	586.1	604.2	692.9



66.5°	375.2	382.2	381.8	317.7	266.6	246.6	217.8	219.7	217.8	218.7	210.8
67°	364.1	370.6	368.3	306.5	256.8	237.8	210.8	213.6	211.3	212.7	204.3



89°	7.9	7.9	7.9	4.6	1.4	0.9	0.9	0.5	0.0	0.5	0.5
89.5°	4.2	4.2	4.2	0.9	0.0	0.0	0.0	0.5	0.0	0.5	0.0

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21.5°	1514.9	1676.5	1830.7	1959.8	2056.4	2100.6
22°	1502.9	1667.3	1823.8	1955.2	2052.7	2098.2



44°	849.9	1009.6	1219.1	1462.9	1493.6	1390.5
44.5°	833.6	988.3	1194.5	1445.3	1456.4	1350.5

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66.5°	230.8	257.8	294.9	361.3	384.5	375.2
67°	222.0	248.5	284.7	348.3	372.9	364.1

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89°	0.0	0.5	0.9	3.7	8.4	7.9
89.5°	0.0	0.0	0.0	0.5	4.6	4.2

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Scaled Data Report



(END OF REPORT)