

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: P776404

Luminaire Tested: HCDJBS3040CSD-HCD6TRMB-4000lm-5000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776404
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B001-HCD6TRMB)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL3040CSD-HCD6TRMB-4000lm-5000K
Description: 6 INCH ROUND MEDIUM MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3024.2 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.14
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

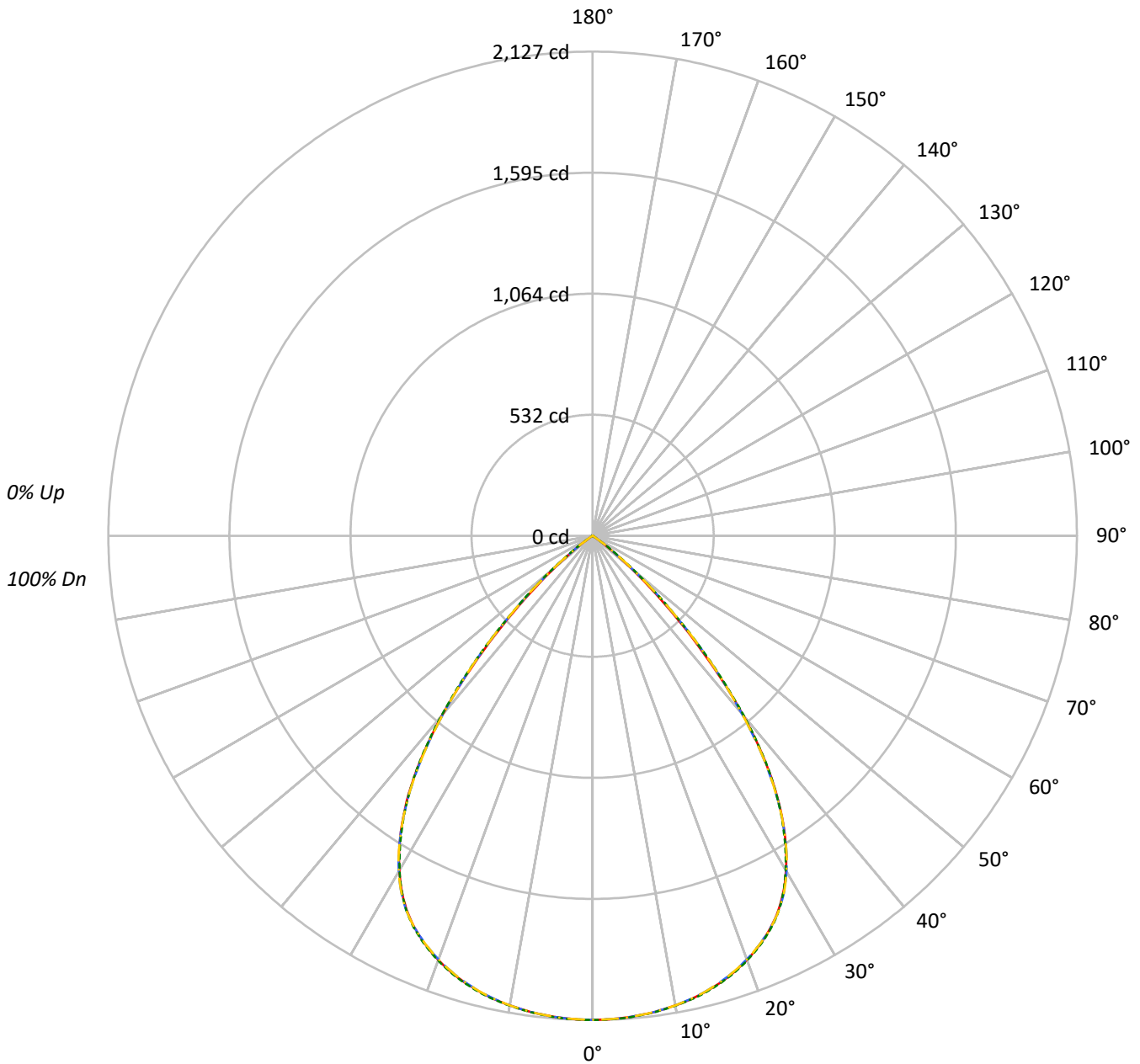
Input Watts (W): 38.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92	92	92	92
2	107	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84	84	84	84
3	100	93	88	83	98	92	87	83	89	85	81	87	83	80	84	81	79	77	77	77	77
4	94	86	80	75	92	85	79	75	83	78	74	80	76	73	79	75	72	70	70	70	70
5	89	79	73	68	87	78	72	68	77	71	67	75	70	66	73	69	66	64	64	64	64
6	83	73	67	62	82	73	66	62	71	65	61	70	65	61	68	64	60	59	59	59	59
7	79	68	61	57	77	67	61	56	66	60	56	65	60	56	64	59	56	54	54	54	54
8	74	63	57	52	73	63	56	52	62	56	52	60	55	51	59	55	51	50	50	50	50
9	70	59	52	48	69	58	52	48	57	52	48	57	51	47	56	51	47	46	46	46	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42	42	42	42

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	116592	116592	116592	116592
5°	116586	116630	116586	116630
10°	116614	116703	116614	116703
15°	116482	116618	116482	116618
20°	115679	115825	115679	115825
25°	113462	113686	113462	113686
30°	107485	107327	107485	107327
35°	95278	94977	95278	94977
40°	73481	74096	73481	74096
45°	43919	46106	43919	46106
50°	18166	20878	18166	20878
55°	3517	4138	3517	4138
60°	274	274	274	274
65°	104	104	104	104
70°	64	64	64	64
75°	0	0	0	0
80°	0	0	0	0
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 46206 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.5	6.7
10°-20°	578.6	19.1
20°-30°	859.3	28.4
30°-40°	870.9	28.8
40°-50°	455.8	15.1
50°-60°	57.0	1.9
60°-70°	1.0	0.0
70°-80°	0.1	0.0
80°-90°	0.0	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°	1639.4	54.2
0°-40°	2510.3	83.0
0°-60°	3023.1	100.0
0°-90°	3024.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3024.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2127	2127	2127	2127	2127	
5°	2119	2119	2119	2119	2119	201
15°	2052	2055	2052	2055	2052	579
25°	1876	1880	1876	1880	1876	859
35°	1424	1419	1424	1419	1424	872
45°	566	595	566	595	566	444
55°	37	43	37	43	37	53
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
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°	2126.8	2126.8	2126.8	2126.8	2126.8	2126.8	2126.8	2126.8	2126.8	2126.8	2126.8
0.5°	2126.8	2126.4	2126.4	2126.4	2127.2	2126.4	2126.4	2126.4	2126.8	2126.4	2126.4
1°	2126.4	2126.4	2126.0	2126.0	2127.2	2126.0	2126.0	2126.4	2126.4	2126.4	2126.0
1.5°	2126.0	2126.0	2125.6	2125.6	2126.8	2125.6	2125.6	2126.0	2126.0	2126.0	2125.6
2°	2125.6	2125.1	2125.1	2125.1	2126.0	2125.1	2125.1	2125.1	2125.6	2125.1	2125.1
2.5°	2124.7	2124.3	2124.3	2124.3	2125.6	2124.3	2124.3	2124.3	2124.7	2124.3	2124.3
3°	2123.5	2123.5	2123.5	2123.5	2124.7	2123.5	2123.5	2123.5	2123.5	2123.5	2123.5
3.5°	2122.7	2122.7	2122.7	2122.3	2123.5	2122.3	2122.7	2122.7	2122.7	2122.7	2122.7
4°	2121.5	2121.5	2121.5	2121.5	2122.3	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5
4.5°	2119.8	2119.8	2119.8	2119.8	2121.1	2119.8	2119.8	2119.8	2119.8	2119.8	2119.8
5°	2118.6	2118.6	2118.6	2118.6	2119.4	2118.6	2118.6	2118.6	2118.6	2118.6	2118.6
5.5°	2117.0	2117.0	2117.0	2117.0	2118.2	2117.0	2117.0	2117.0	2117.0	2117.0	2117.0
6°	2115.3	2114.9	2114.9	2114.9	2116.2	2114.9	2114.9	2114.9	2115.3	2114.9	2114.9
6.5°	2113.3	2112.9	2113.3	2113.3	2114.5	2113.3	2113.3	2112.9	2113.3	2112.9	2113.3
7°	2111.3	2110.8	2110.8	2111.3	2112.1	2111.3	2110.8	2110.8	2111.3	2110.8	2110.8
7.5°	2108.8	2108.8	2108.8	2108.8	2110.0	2108.8	2108.8	2108.8	2108.8	2108.8	2108.8
8°	2106.3	2106.3	2106.3	2106.3	2107.6	2106.3	2106.3	2106.3	2106.3	2106.3	2106.3
8.5°	2103.9	2103.5	2103.5	2103.9	2105.1	2103.9	2103.5	2103.5	2103.9	2103.5	2103.5
9°	2101.0	2101.0	2101.0	2101.0	2102.3	2101.0	2101.0	2101.0	2101.0	2101.0	2101.0
9.5°	2098.2	2097.8	2097.8	2098.2	2099.4	2098.2	2097.8	2097.8	2098.2	2097.8	2097.8
10°	2094.9	2094.9	2094.5	2094.9	2096.5	2094.9	2094.5	2094.9	2094.9	2094.9	2094.5
10.5°	2092.0	2091.2	2091.2	2091.6	2093.3	2091.6	2091.2	2091.2	2092.0	2091.2	2091.2
11°	2088.4	2088.0	2087.5	2088.4	2090.0	2088.4	2087.5	2088.0	2088.4	2088.0	2087.5
11.5°	2084.7	2083.9	2083.9	2084.7	2086.3	2084.7	2083.9	2083.9	2084.7	2083.9	2083.9
12°	2080.6	2080.2	2079.8	2080.6	2082.6	2080.6	2079.8	2080.2	2080.6	2080.2	2079.8
12.5°	2076.5	2075.7	2075.3	2076.5	2078.5	2076.5	2075.3	2075.7	2076.5	2075.7	2075.3
13°	2072.4	2071.6	2070.8	2072.0	2074.5	2072.0	2070.8	2071.6	2072.4	2071.6	2070.8
13.5°	2067.5	2066.7	2066.3	2067.5	2070.0	2067.5	2066.3	2066.7	2067.5	2066.7	2066.3
14°	2063.0	2061.8	2061.0	2062.6	2065.1	2062.6	2061.0	2061.8	2063.0	2061.8	2061.0
14.5°	2057.7	2056.9	2056.1	2057.3	2060.2	2057.3	2056.1	2056.9	2057.7	2056.9	2056.1
15°	2052.4	2051.2	2050.3	2052.0	2054.8	2052.0	2050.3	2051.2	2052.4	2051.2	2050.3
15.5°	2046.7	2045.4	2044.6	2046.3	2049.1	2046.3	2044.6	2045.4	2046.7	2045.4	2044.6
16°	2040.9	2039.7	2038.5	2040.5	2043.4	2040.5	2038.5	2039.7	2040.9	2039.7	2038.5
16.5°	2034.8	2033.2	2032.4	2034.4	2037.3	2034.4	2032.4	2033.2	2034.8	2033.2	2032.4
17°	2028.3	2026.6	2025.8	2027.9	2030.7	2027.9	2025.8	2026.6	2028.3	2026.6	2025.8
17.5°	2021.3	2020.1	2018.9	2020.9	2024.2	2020.9	2018.9	2020.1	2021.3	2020.1	2018.9
18°	2014.4	2012.7	2011.5	2014.0	2016.8	2014.0	2011.5	2012.7	2014.4	2012.7	2011.5
18.5°	2006.6	2005.4	2004.2	2006.6	2009.5	2006.6	2004.2	2005.4	2006.6	2005.4	2004.2
19°	1999.3	1997.6	1996.4	1998.8	2001.7	1998.8	1996.4	1997.6	1999.3	1997.6	1996.4
19.5°	1991.1	1989.8	1988.2	1990.7	1993.9	1990.7	1988.2	1989.8	1991.1	1989.8	1988.2
20°	1982.9	1981.3	1980.0	1982.5	1985.4	1982.5	1980.0	1981.3	1982.9	1981.3	1980.0
20.5°	1973.9	1972.7	1971.5	1973.9	1976.8	1973.9	1971.5	1972.7	1973.9	1972.7	1971.5
21°	1964.9	1963.7	1962.5	1964.9	1967.4	1964.9	1962.5	1963.7	1964.9	1963.7	1962.5



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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°	1935.1	1933.8	1933.4	1935.5	1937.9	1935.5	1933.4	1933.8	1935.1	1933.8	1933.4
23°	1924.0	1923.2	1922.8	1925.3	1926.9	1925.3	1922.8	1923.2	1924.0	1923.2	1922.8
23.5°	1912.6	1912.2	1912.2	1914.2	1915.9	1914.2	1912.2	1912.2	1912.6	1912.2	1912.2
24°	1901.1	1900.7	1901.1	1902.4	1904.4	1902.4	1901.1	1900.7	1901.1	1900.7	1901.1
24.5°	1888.9	1888.9	1889.3	1890.5	1892.2	1890.5	1889.3	1888.9	1888.9	1888.9	1889.3
25°	1875.8	1876.2	1877.0	1877.8	1879.5	1877.8	1877.0	1876.2	1875.8	1876.2	1877.0
25.5°	1862.3	1862.7	1864.0	1864.0	1865.6	1864.0	1864.0	1862.7	1862.3	1862.7	1864.0
26°	1847.6	1848.4	1849.6	1849.6	1851.3	1849.6	1849.6	1848.4	1847.6	1848.4	1849.6
26.5°	1832.5	1833.7	1835.3	1834.5	1835.3	1834.5	1835.3	1833.7	1832.5	1833.7	1835.3
27°	1816.1	1817.8	1819.4	1818.2	1819.0	1818.2	1819.4	1817.8	1816.1	1817.8	1819.4
27.5°	1799.0	1801.0	1802.6	1801.0	1801.0	1801.0	1802.6	1801.0	1799.0	1801.0	1802.6
28°	1780.6	1783.0	1785.1	1782.6	1781.4	1782.6	1785.1	1783.0	1780.6	1783.0	1785.1
28.5°	1761.4	1764.2	1766.3	1763.4	1761.4	1763.4	1766.3	1764.2	1761.4	1764.2	1766.3
29°	1741.3	1744.2	1746.2	1743.4	1740.5	1743.4	1746.2	1744.2	1741.3	1744.2	1746.2
29.5°	1720.1	1723.3	1725.4	1722.1	1718.4	1722.1	1725.4	1723.3	1720.1	1723.3	1725.4
30°	1698.0	1700.4	1702.9	1699.2	1695.5	1699.2	1702.9	1700.4	1698.0	1700.4	1702.9
30.5°	1675.1	1677.6	1679.6	1675.5	1671.4	1675.5	1679.6	1677.6	1675.1	1677.6	1679.6
31°	1651.0	1653.0	1655.1	1651.4	1646.9	1651.4	1655.1	1653.0	1651.0	1653.0	1655.1
31.5°	1626.1	1627.3	1629.3	1625.2	1621.1	1625.2	1629.3	1627.3	1626.1	1627.3	1629.3
32°	1600.3	1600.3	1602.3	1598.3	1595.0	1598.3	1602.3	1600.3	1600.3	1600.3	1602.3
32.5°	1573.3	1572.9	1574.1	1570.1	1567.6	1570.1	1574.1	1572.9	1573.3	1572.9	1574.1
33°	1545.5	1543.9	1545.1	1541.0	1540.2	1541.0	1545.1	1543.9	1545.5	1543.9	1545.1
33.5°	1517.3	1514.5	1514.9	1511.2	1510.8	1511.2	1514.9	1514.5	1517.3	1514.5	1514.9
34°	1487.1	1483.8	1483.8	1479.7	1481.8	1479.7	1483.8	1483.8	1487.1	1483.8	1483.8
34.5°	1456.0	1452.3	1451.5	1447.4	1451.1	1447.4	1451.5	1452.3	1456.0	1452.3	1451.5
35°	1423.7	1419.6	1418.0	1415.1	1419.2	1415.1	1418.0	1419.6	1423.7	1419.6	1418.0
35.5°	1389.8	1386.5	1383.7	1382.0	1386.5	1382.0	1383.7	1386.5	1389.8	1386.5	1383.7
36°	1354.6	1352.2	1348.1	1347.3	1352.6	1347.3	1348.1	1352.2	1354.6	1352.2	1348.1
36.5°	1318.3	1316.2	1311.3	1311.7	1317.8	1311.7	1311.3	1316.2	1318.3	1316.2	1311.3
37°	1280.2	1279.0	1273.3	1275.3	1281.1	1275.3	1273.3	1279.0	1280.2	1279.0	1273.3
37.5°	1241.0	1240.6	1233.6	1237.3	1242.6	1237.3	1233.6	1240.6	1241.0	1240.6	1233.6
38°	1200.9	1200.5	1192.8	1198.1	1203.4	1198.1	1192.8	1200.5	1200.9	1200.5	1192.8
38.5°	1159.2	1158.8	1150.3	1157.6	1162.9	1157.6	1150.3	1158.8	1159.2	1158.8	1150.3
39°	1116.7	1115.5	1107.3	1116.7	1121.6	1116.7	1107.3	1115.5	1116.7	1115.5	1107.3
39.5°	1073.0	1071.0	1063.6	1074.2	1079.1	1074.2	1063.6	1071.0	1073.0	1071.0	1063.6
40°	1026.8	1025.2	1019.0	1030.1	1035.4	1030.1	1019.0	1025.2	1026.8	1025.2	1019.0
40.5°	981.0	979.0	974.9	985.5	990.0	985.5	974.9	979.0	981.0	979.0	974.9
41°	934.0	932.8	932.0	941.0	945.1	941.0	932.0	932.8	934.0	932.8	932.0
41.5°	887.4	886.2	889.1	896.4	900.1	896.4	889.1	886.2	887.4	886.2	889.1
42°	840.0	840.4	846.5	851.4	855.9	851.4	846.5	840.4	840.0	840.4	846.5
42.5°	793.0	795.0	803.6	807.7	811.8	807.7	803.6	795.0	793.0	795.0	803.6
43°	746.0	750.1	760.7	764.4	767.2	764.4	760.7	750.1	746.0	750.1	760.7
43.5°	699.8	705.5	717.8	721.5	723.1	721.5	717.8	705.5	699.8	705.5	717.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	566.5	574.7	591.1	596.0	594.7	596.0	591.1	574.7	566.5	574.7	591.1
45.5°	524.4	533.0	550.2	556.7	553.5	556.7	550.2	533.0	524.4	533.0	550.2
46°	483.2	493.4	511.4	517.9	513.0	517.9	511.4	493.4	483.2	493.4	511.4
46.5°	445.5	454.5	472.5	478.7	474.2	478.7	472.5	454.5	445.5	454.5	472.5
47°	407.9	416.5	434.1	441.1	436.1	441.1	434.1	416.5	407.9	416.5	434.1
47.5°	371.6	379.7	396.1	403.9	400.2	403.9	396.1	379.7	371.6	379.7	396.1
48°	335.6	344.2	360.1	368.7	366.2	368.7	360.1	344.2	335.6	344.2	360.1
48.5°	301.3	310.7	325.8	335.2	333.1	335.2	325.8	310.7	301.3	310.7	325.8
49°	269.8	278.8	292.7	302.9	303.3	302.9	292.7	278.8	269.8	278.8	292.7
49.5°	240.8	247.7	260.8	272.2	273.9	272.2	260.8	247.7	240.8	247.7	260.8
50°	213.0	219.1	230.1	242.4	244.8	242.4	230.1	219.1	213.0	219.1	230.1
50.5°	186.8	191.7	201.1	213.8	216.6	213.8	201.1	191.7	186.8	191.7	201.1
51°	162.7	167.2	176.2	187.2	190.1	187.2	176.2	167.2	162.7	167.2	176.2
51.5°	141.0	144.7	152.5	162.3	166.8	162.3	152.5	144.7	141.0	144.7	152.5
52°	120.6	123.9	130.4	139.0	143.9	139.0	130.4	123.9	120.6	123.9	130.4
52.5°	103.4	104.2	109.1	117.3	121.8	117.3	109.1	104.2	103.4	104.2	109.1
53°	87.5	87.1	91.2	98.9	102.2	98.9	91.2	87.1	87.5	87.1	91.2
53.5°	71.9	72.8	76.0	83.0	84.2	83.0	76.0	72.8	71.9	72.8	76.0
54°	58.5	59.7	61.7	67.9	67.9	67.9	61.7	59.7	58.5	59.7	61.7
54.5°	47.0	47.8	48.6	54.0	53.5	54.0	48.6	47.8	47.0	47.8	48.6
55°	36.8	36.4	37.2	41.7	43.3	41.7	37.2	36.4	36.8	36.4	37.2
55.5°	27.0	27.0	28.2	31.1	33.5	31.1	28.2	27.0	27.0	27.0	28.2
56°	18.0	19.2	21.3	23.7	25.8	23.7	21.3	19.2	18.0	19.2	21.3
56.5°	12.3	12.7	15.5	16.8	18.4	16.8	15.5	12.7	12.3	12.7	15.5
57°	9.8	9.0	10.2	11.0	11.0	11.0	10.2	9.0	9.8	9.0	10.2
57.5°	7.8	6.9	7.4	8.2	7.4	8.2	7.4	6.9	7.8	6.9	7.4
58°	6.1	5.7	6.1	6.5	5.3	6.5	6.1	5.7	6.1	5.7	6.1
58.5°	4.1	4.5	4.9	5.3	4.5	5.3	4.9	4.5	4.1	4.5	4.9
59°	3.7	3.7	3.7	4.1	3.7	4.1	3.7	3.7	3.7	3.7	3.7
59.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
60°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
60.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
61°	1.6	1.6	1.6	2.0	1.6	2.0	1.6	1.6	1.6	1.6	1.6
61.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
62°	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.2	1.6	1.6
62.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
63°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
63.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
64°	0.8	0.8	0.8	0.8	1.2	0.8	0.8	0.8	0.8	0.8	0.8
64.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
65°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
65.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
66°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8



TEST NUMBER: P776404

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRMB-4000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
68°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
68.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
69°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
69.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
70°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
70.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
71°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
71.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
72°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
72.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
73°	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
73.5°	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.4
74°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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: P776404

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRMB-4000lm-5000K

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: P776404

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRMB-4000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2126.8	2126.8	2126.8	2126.8	2126.8	2126.8
0.5°	2126.4	2127.2	2126.4	2126.4	2126.4	2126.8
1°	2126.0	2127.2	2126.0	2126.0	2126.4	2126.4
1.5°	2125.6	2126.8	2125.6	2125.6	2126.0	2126.0
2°	2125.1	2126.0	2125.1	2125.1	2125.1	2125.6
2.5°	2124.3	2125.6	2124.3	2124.3	2124.3	2124.7
3°	2123.5	2124.7	2123.5	2123.5	2123.5	2123.5
3.5°	2122.3	2123.5	2122.3	2122.7	2122.7	2122.7
4°	2121.5	2122.3	2121.5	2121.5	2121.5	2121.5
4.5°	2119.8	2121.1	2119.8	2119.8	2119.8	2119.8
5°	2118.6	2119.4	2118.6	2118.6	2118.6	2118.6
5.5°	2117.0	2118.2	2117.0	2117.0	2117.0	2117.0
6°	2114.9	2116.2	2114.9	2114.9	2114.9	2115.3
6.5°	2113.3	2114.5	2113.3	2113.3	2112.9	2113.3
7°	2111.3	2112.1	2111.3	2110.8	2110.8	2111.3
7.5°	2108.8	2110.0	2108.8	2108.8	2108.8	2108.8
8°	2106.3	2107.6	2106.3	2106.3	2106.3	2106.3
8.5°	2103.9	2105.1	2103.9	2103.5	2103.5	2103.9
9°	2101.0	2102.3	2101.0	2101.0	2101.0	2101.0
9.5°	2098.2	2099.4	2098.2	2097.8	2097.8	2098.2
10°	2094.9	2096.5	2094.9	2094.5	2094.9	2094.9
10.5°	2091.6	2093.3	2091.6	2091.2	2091.2	2092.0
11°	2088.4	2090.0	2088.4	2087.5	2088.0	2088.4
11.5°	2084.7	2086.3	2084.7	2083.9	2083.9	2084.7
12°	2080.6	2082.6	2080.6	2079.8	2080.2	2080.6
12.5°	2076.5	2078.5	2076.5	2075.3	2075.7	2076.5
13°	2072.0	2074.5	2072.0	2070.8	2071.6	2072.4
13.5°	2067.5	2070.0	2067.5	2066.3	2066.7	2067.5
14°	2062.6	2065.1	2062.6	2061.0	2061.8	2063.0
14.5°	2057.3	2060.2	2057.3	2056.1	2056.9	2057.7
15°	2052.0	2054.8	2052.0	2050.3	2051.2	2052.4
15.5°	2046.3	2049.1	2046.3	2044.6	2045.4	2046.7
16°	2040.5	2043.4	2040.5	2038.5	2039.7	2040.9
16.5°	2034.4	2037.3	2034.4	2032.4	2033.2	2034.8
17°	2027.9	2030.7	2027.9	2025.8	2026.6	2028.3
17.5°	2020.9	2024.2	2020.9	2018.9	2020.1	2021.3
18°	2014.0	2016.8	2014.0	2011.5	2012.7	2014.4
18.5°	2006.6	2009.5	2006.6	2004.2	2005.4	2006.6
19°	1998.8	2001.7	1998.8	1996.4	1997.6	1999.3
19.5°	1990.7	1993.9	1990.7	1988.2	1989.8	1991.1
20°	1982.5	1985.4	1982.5	1980.0	1981.3	1982.9
20.5°	1973.9	1976.8	1973.9	1971.5	1972.7	1973.9
21°	1964.9	1967.4	1964.9	1962.5	1963.7	1964.9



TEST NUMBER: P776404

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRMB-4000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1935.5	1937.9	1935.5	1933.4	1933.8	1935.1
23°	1925.3	1926.9	1925.3	1922.8	1923.2	1924.0
23.5°	1914.2	1915.9	1914.2	1912.2	1912.2	1912.6
24°	1902.4	1904.4	1902.4	1901.1	1900.7	1901.1
24.5°	1890.5	1892.2	1890.5	1889.3	1888.9	1888.9
25°	1877.8	1879.5	1877.8	1877.0	1876.2	1875.8
25.5°	1864.0	1865.6	1864.0	1864.0	1862.7	1862.3
26°	1849.6	1851.3	1849.6	1849.6	1848.4	1847.6
26.5°	1834.5	1835.3	1834.5	1835.3	1833.7	1832.5
27°	1818.2	1819.0	1818.2	1819.4	1817.8	1816.1
27.5°	1801.0	1801.0	1801.0	1802.6	1801.0	1799.0
28°	1782.6	1781.4	1782.6	1785.1	1783.0	1780.6
28.5°	1763.4	1761.4	1763.4	1766.3	1764.2	1761.4
29°	1743.4	1740.5	1743.4	1746.2	1744.2	1741.3
29.5°	1722.1	1718.4	1722.1	1725.4	1723.3	1720.1
30°	1699.2	1695.5	1699.2	1702.9	1700.4	1698.0
30.5°	1675.5	1671.4	1675.5	1679.6	1677.6	1675.1
31°	1651.4	1646.9	1651.4	1655.1	1653.0	1651.0
31.5°	1625.2	1621.1	1625.2	1629.3	1627.3	1626.1
32°	1598.3	1595.0	1598.3	1602.3	1600.3	1600.3
32.5°	1570.1	1567.6	1570.1	1574.1	1572.9	1573.3
33°	1541.0	1540.2	1541.0	1545.1	1543.9	1545.5
33.5°	1511.2	1510.8	1511.2	1514.9	1514.5	1517.3
34°	1479.7	1481.8	1479.7	1483.8	1483.8	1487.1
34.5°	1447.4	1451.1	1447.4	1451.5	1452.3	1456.0
35°	1415.1	1419.2	1415.1	1418.0	1419.6	1423.7
35.5°	1382.0	1386.5	1382.0	1383.7	1386.5	1389.8
36°	1347.3	1352.6	1347.3	1348.1	1352.2	1354.6
36.5°	1311.7	1317.8	1311.7	1311.3	1316.2	1318.3
37°	1275.3	1281.1	1275.3	1273.3	1279.0	1280.2
37.5°	1237.3	1242.6	1237.3	1233.6	1240.6	1241.0
38°	1198.1	1203.4	1198.1	1192.8	1200.5	1200.9
38.5°	1157.6	1162.9	1157.6	1150.3	1158.8	1159.2
39°	1116.7	1121.6	1116.7	1107.3	1115.5	1116.7
39.5°	1074.2	1079.1	1074.2	1063.6	1071.0	1073.0
40°	1030.1	1035.4	1030.1	1019.0	1025.2	1026.8
40.5°	985.5	990.0	985.5	974.9	979.0	981.0
41°	941.0	945.1	941.0	932.0	932.8	934.0
41.5°	896.4	900.1	896.4	889.1	886.2	887.4
42°	851.4	855.9	851.4	846.5	840.4	840.0
42.5°	807.7	811.8	807.7	803.6	795.0	793.0
43°	764.4	767.2	764.4	760.7	750.1	746.0
43.5°	721.5	723.1	721.5	717.8	705.5	699.8



TEST NUMBER: P776404

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRMB-4000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	596.0	594.7	596.0	591.1	574.7	566.5
45.5°	556.7	553.5	556.7	550.2	533.0	524.4
46°	517.9	513.0	517.9	511.4	493.4	483.2
46.5°	478.7	474.2	478.7	472.5	454.5	445.5
47°	441.1	436.1	441.1	434.1	416.5	407.9
47.5°	403.9	400.2	403.9	396.1	379.7	371.6
48°	368.7	366.2	368.7	360.1	344.2	335.6
48.5°	335.2	333.1	335.2	325.8	310.7	301.3
49°	302.9	303.3	302.9	292.7	278.8	269.8
49.5°	272.2	273.9	272.2	260.8	247.7	240.8
50°	242.4	244.8	242.4	230.1	219.1	213.0
50.5°	213.8	216.6	213.8	201.1	191.7	186.8
51°	187.2	190.1	187.2	176.2	167.2	162.7
51.5°	162.3	166.8	162.3	152.5	144.7	141.0
52°	139.0	143.9	139.0	130.4	123.9	120.6
52.5°	117.3	121.8	117.3	109.1	104.2	103.4
53°	98.9	102.2	98.9	91.2	87.1	87.5
53.5°	83.0	84.2	83.0	76.0	72.8	71.9
54°	67.9	67.9	67.9	61.7	59.7	58.5
54.5°	54.0	53.5	54.0	48.6	47.8	47.0
55°	41.7	43.3	41.7	37.2	36.4	36.8
55.5°	31.1	33.5	31.1	28.2	27.0	27.0
56°	23.7	25.8	23.7	21.3	19.2	18.0
56.5°	16.8	18.4	16.8	15.5	12.7	12.3
57°	11.0	11.0	11.0	10.2	9.0	9.8
57.5°	8.2	7.4	8.2	7.4	6.9	7.8
58°	6.5	5.3	6.5	6.1	5.7	6.1
58.5°	5.3	4.5	5.3	4.9	4.5	4.1
59°	4.1	3.7	4.1	3.7	3.7	3.7
59.5°	2.9	2.9	2.9	2.9	2.9	2.9
60°	2.5	2.5	2.5	2.5	2.5	2.5
60.5°	2.0	2.0	2.0	2.0	2.0	2.0
61°	2.0	1.6	2.0	1.6	1.6	1.6
61.5°	1.6	1.6	1.6	1.6	1.6	1.6
62°	1.6	1.6	1.6	1.6	1.6	1.2
62.5°	1.2	1.2	1.2	1.2	1.2	1.2
63°	1.2	1.2	1.2	1.2	1.2	1.2
63.5°	1.2	1.2	1.2	1.2	1.2	1.2
64°	0.8	1.2	0.8	0.8	0.8	0.8
64.5°	0.8	0.8	0.8	0.8	0.8	0.8
65°	0.8	0.8	0.8	0.8	0.8	0.8
65.5°	0.8	0.8	0.8	0.8	0.8	0.8
66°	0.8	0.8	0.8	0.8	0.8	0.8



TEST NUMBER: P776404

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRMB-4000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.4	0.4	0.4	0.4	0.4	0.4
68°	0.4	0.4	0.4	0.4	0.4	0.4
68.5°	0.4	0.4	0.4	0.4	0.4	0.4
69°	0.4	0.4	0.4	0.4	0.4	0.4
69.5°	0.4	0.4	0.4	0.4	0.4	0.4
70°	0.4	0.4	0.4	0.4	0.4	0.4
70.5°	0.4	0.4	0.4	0.4	0.4	0.4
71°	0.4	0.4	0.4	0.4	0.4	0.4
71.5°	0.4	0.4	0.4	0.4	0.4	0.4
72°	0.4	0.4	0.4	0.4	0.4	0.4
72.5°	0.4	0.4	0.4	0.4	0.4	0.4
73°	0.4	0.4	0.4	0.4	0.4	0.0
73.5°	0.4	0.4	0.4	0.4	0.0	0.0
74°	0.0	0.0	0.0	0.0	0.0	0.0
74.5°	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0
75.5°	0.0	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	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: P776404

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRMB-4000lm-5000K

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°	1955.5	1953.9	1953.1	1955.5	1958.0	1955.5	1953.1	1953.9	1955.5	1953.9	1953.1
22°	1945.3	1944.5	1943.3	1945.7	1947.7	1945.7	1943.3	1944.5	1945.3	1944.5	1943.3



44°	654.0	661.4	674.9	679.0	679.8	679.0	674.9	661.4	654.0	661.4	674.9
44.5°	609.9	617.6	632.8	637.3	636.8	637.3	632.8	617.6	609.9	617.6	632.8



66.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
67°	0.4	0.4	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.8



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

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21.5°	1955.5	1958.0	1955.5	1953.1	1953.9	1955.5
22°	1945.7	1947.7	1945.7	1943.3	1944.5	1945.3



44°	679.0	679.8	679.0	674.9	661.4	654.0
44.5°	637.3	636.8	637.3	632.8	617.6	609.9

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66.5°	0.8	0.8	0.8	0.8	0.8	0.8
67°	0.8	0.8	0.8	0.8	0.4	0.4

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

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(END OF REPORT)