

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: P776689

Luminaire Tested: HCDJBS4050CSD-HCD62TRMB-5000lm-5000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776689
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B058)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD62TRMB-5000lm-5000K
Description: 6 INCH ROUND NARROW MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

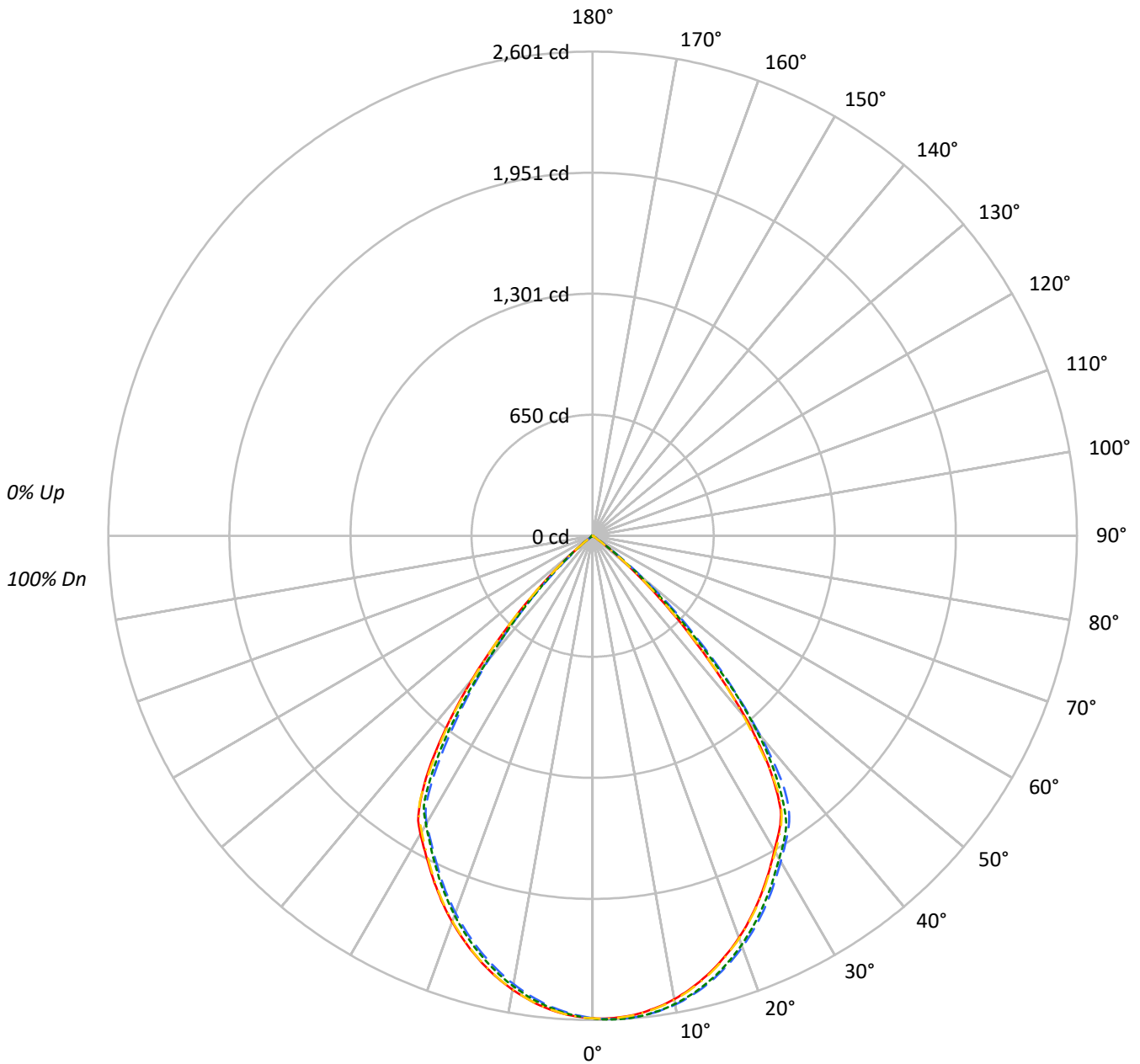
Lumens per Lamp: N/A
Luminaire Lumens: 3385.8 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.11 / 1.11
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 48
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





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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
1	113	110	107	105	111	108	105	103	104	102	100	100	98	97	97	95	94				92
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86				85
3	101	94	88	84	98	92	87	83	89	85	82	87	83	80	85	82	79				77
4	95	86	80	76	93	85	80	75	83	78	74	81	77	73	79	75	72				71
5	89	80	73	69	87	79	73	68	77	72	68	75	71	67	74	70	66				65
6	84	74	67	63	82	73	67	62	72	66	62	70	65	62	69	64	61				60
7	79	69	62	57	78	68	62	57	67	61	57	65	60	57	64	60	56				55
8	75	64	57	53	73	63	57	53	62	57	52	61	56	52	60	56	52				51
9	70	60	53	49	69	59	53	49	58	53	49	57	52	48	56	52	48				47
10	67	56	50	45	66	55	49	45	55	49	45	54	49	45	53	48	45				43

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	142132	142132	142132	142132
5°	142114	142862	140672	140166
10°	140679	142137	137840	136754
15°	137941	139955	133781	132152
20°	134027	136465	128759	126577
25°	129092	131887	122777	119868
30°	123658	126830	117050	113359
35°	117022	120267	102714	96998
40°	91557	98542	71885	63712
45°	53851	62169	36298	31856
50°	21210	25645	10601	10644
55°	3106	4043	879	1070
60°	691	746	636	537
65°	506	506	441	376
70°	385	385	305	305
75°	318	318	212	212
80°	158	158	158	158
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 68759 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.1	7.2
10°-20°	673.3	19.9
20°-30°	957.3	28.3
30°-40°	988.6	29.2
40°-50°	472.4	14.0
50°-60°	45.6	1.3
60°-70°	3.7	0.1
70°-80°	1.3	0.0
80°-90°	0.2	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1873.8	55.3
0°-40°	2862.5	84.5
0°-60°	3380.5	99.8
0°-90°	3385.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3385.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2593	2593	2593	2593	2593	
5°	2582	2596	2556	2547	2582	245
15°	2430	2466	2357	2328	2430	684
25°	2134	2180	2030	1982	2134	981
35°	1749	1797	1535	1449	1749	1058
45°	695	802	468	411	695	544
55°	32	42	9	11	32	59
65°	4	4	3	3	4	4
75°	2	2	1	1	2	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2592.7	2592.7	2592.7	2592.7	2592.7	2592.7	2592.7	2592.7	2592.7	2592.7	2592.7
0.5°	2593.2	2593.2	2593.7	2592.7	2596.6	2595.6	2594.2	2593.7	2590.8	2589.3	2587.4
1°	2594.2	2594.7	2595.6	2595.2	2598.6	2596.6	2595.2	2593.2	2588.8	2586.4	2584.5
1.5°	2594.2	2595.6	2597.1	2597.1	2599.5	2597.6	2595.6	2592.2	2585.9	2583.0	2580.1
2°	2594.2	2596.6	2598.6	2599.0	2601.0	2598.6	2595.2	2590.3	2583.5	2579.1	2575.7
2.5°	2593.2	2596.6	2599.5	2600.0	2601.0	2598.6	2594.7	2587.9	2580.1	2575.2	2570.9
3°	2591.8	2596.6	2599.5	2600.5	2601.0	2598.1	2593.2	2585.9	2576.2	2570.4	2565.5
3.5°	2590.3	2595.6	2599.5	2601.0	2600.5	2597.1	2591.8	2583.0	2572.3	2565.5	2559.7
4°	2588.4	2594.2	2598.6	2600.5	2599.5	2596.1	2589.8	2579.1	2567.5	2559.7	2553.4
4.5°	2585.9	2592.2	2597.6	2600.0	2598.6	2594.2	2587.4	2575.2	2562.6	2553.4	2547.1
5°	2582.5	2589.8	2596.1	2598.6	2596.1	2591.8	2584.5	2570.9	2556.3	2547.1	2540.3
5.5°	2579.1	2587.9	2594.7	2597.1	2593.7	2589.3	2581.1	2566.5	2550.0	2539.8	2532.5
6°	2575.2	2585.0	2592.2	2594.7	2591.3	2586.4	2577.2	2562.1	2543.7	2533.0	2524.2
6.5°	2570.4	2581.6	2589.3	2592.7	2587.9	2582.5	2573.3	2556.3	2536.9	2525.2	2515.5
7°	2565.5	2577.2	2585.9	2589.8	2584.5	2578.6	2568.4	2550.5	2529.6	2516.5	2506.8
7.5°	2560.2	2572.8	2582.0	2586.4	2580.1	2574.3	2563.6	2544.2	2521.8	2507.7	2497.5
8°	2554.8	2568.0	2578.2	2583.0	2576.2	2569.4	2557.8	2537.4	2513.1	2499.0	2488.3
8.5°	2548.5	2562.6	2573.3	2578.2	2570.9	2564.1	2551.9	2530.1	2504.3	2489.3	2478.1
9°	2541.7	2557.3	2568.4	2573.8	2565.5	2558.7	2545.1	2521.8	2496.1	2479.6	2467.9
9.5°	2534.9	2551.0	2563.1	2568.4	2559.7	2551.9	2538.3	2514.0	2486.4	2469.4	2456.7
10°	2527.2	2544.2	2556.8	2562.6	2553.4	2545.6	2531.0	2504.8	2476.2	2458.7	2446.0
10.5°	2519.4	2536.9	2550.5	2556.8	2546.6	2538.8	2523.3	2496.1	2466.0	2447.0	2434.4
11°	2511.1	2529.6	2544.2	2550.0	2539.3	2531.0	2515.0	2486.8	2455.3	2435.8	2422.2
11.5°	2502.9	2521.8	2536.4	2543.2	2531.5	2522.8	2506.8	2477.1	2444.6	2424.2	2409.6
12°	2493.6	2513.1	2529.1	2535.9	2523.3	2515.0	2497.5	2466.9	2432.9	2412.5	2397.5
12.5°	2483.4	2504.3	2520.8	2528.1	2515.0	2506.3	2487.8	2456.2	2421.3	2399.9	2383.9
13°	2473.7	2495.1	2512.1	2519.9	2505.8	2497.5	2478.1	2445.6	2409.1	2386.8	2371.2
13.5°	2463.5	2485.9	2502.9	2511.6	2496.6	2487.3	2468.4	2433.4	2396.0	2374.2	2357.6
14°	2452.8	2476.2	2493.6	2501.9	2486.8	2477.6	2457.2	2422.2	2383.4	2360.6	2343.6
14.5°	2441.7	2466.0	2483.4	2492.7	2476.2	2466.4	2446.0	2410.1	2370.3	2347.0	2329.0
15°	2430.5	2455.3	2473.7	2482.5	2466.0	2455.3	2434.9	2397.0	2357.2	2332.9	2314.4
15.5°	2418.8	2443.6	2463.5	2471.8	2455.3	2443.6	2422.7	2384.4	2343.6	2318.3	2300.3
16°	2406.2	2432.0	2451.9	2461.1	2443.6	2432.0	2410.6	2371.2	2329.0	2303.7	2285.3
16.5°	2393.6	2420.3	2440.2	2449.9	2432.0	2420.3	2398.4	2357.6	2314.9	2288.2	2270.2
17°	2381.0	2408.2	2428.1	2438.8	2419.3	2408.2	2385.3	2344.0	2300.3	2273.6	2254.2
17.5°	2367.8	2395.5	2416.4	2426.6	2406.7	2395.0	2372.2	2330.4	2285.3	2258.6	2238.2
18°	2354.7	2382.4	2403.8	2414.0	2393.6	2381.9	2358.6	2315.9	2270.2	2242.5	2221.6
18.5°	2341.1	2368.8	2390.7	2401.4	2380.5	2367.8	2344.0	2301.3	2254.7	2226.5	2205.6
19°	2326.1	2355.7	2378.0	2388.7	2366.9	2354.7	2330.4	2286.2	2239.1	2210.0	2189.1
19.5°	2312.0	2342.1	2364.4	2375.1	2353.3	2340.2	2316.4	2271.2	2223.1	2194.0	2171.6
20°	2297.4	2328.0	2350.8	2361.5	2339.2	2326.1	2301.8	2255.2	2207.1	2177.0	2154.1
20.5°	2282.4	2313.4	2336.8	2347.4	2324.6	2311.0	2286.7	2240.1	2190.1	2159.5	2136.6
21°	2267.8	2298.9	2322.2	2333.4	2309.1	2296.4	2271.2	2223.6	2173.1	2142.5	2118.7



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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°	2219.7	2252.7	2277.0	2287.7	2262.9	2249.8	2223.6	2174.0	2121.1	2088.6	2064.3
23°	2203.2	2235.7	2261.5	2272.6	2246.9	2233.8	2207.1	2157.0	2102.6	2070.1	2044.8
23.5°	2186.2	2219.7	2245.4	2256.1	2230.4	2217.3	2190.6	2139.6	2084.7	2051.6	2025.9
24°	2168.7	2202.7	2229.4	2241.1	2213.9	2200.8	2173.6	2122.1	2066.2	2033.2	2006.5
24.5°	2151.7	2186.7	2212.9	2224.6	2196.9	2183.8	2156.6	2104.6	2048.2	2013.8	1987.5
25°	2134.2	2169.2	2196.4	2207.6	2180.4	2166.8	2139.1	2086.6	2029.8	1995.3	1967.6
25.5°	2116.2	2151.7	2178.9	2190.6	2162.9	2149.3	2121.6	2068.6	2010.8	1975.9	1948.2
26°	2098.8	2135.2	2161.9	2173.6	2145.9	2131.8	2104.1	2050.2	1992.4	1956.9	1928.8
26.5°	2080.3	2117.7	2144.4	2156.6	2128.4	2113.8	2086.1	2032.2	1973.9	1937.5	1910.3
27°	2062.3	2100.2	2126.9	2139.1	2110.9	2096.3	2068.2	2013.8	1954.5	1919.0	1890.9
27.5°	2043.9	2081.8	2109.4	2121.1	2092.9	2078.4	2050.2	1994.8	1936.5	1900.6	1872.4
28°	2025.9	2063.8	2091.5	2103.6	2074.5	2060.9	2031.7	1976.8	1918.6	1883.1	1854.0
28.5°	2007.0	2045.8	2074.0	2085.2	2056.0	2042.4	2013.8	1959.4	1901.6	1865.1	1837.0
29°	1988.5	2027.8	2056.0	2067.7	2038.5	2024.4	1996.3	1941.4	1884.1	1847.2	1818.5
29.5°	1971.0	2009.9	2038.0	2050.2	2021.0	2007.0	1979.3	1924.4	1866.1	1829.2	1800.5
30°	1953.5	1992.4	2020.6	2032.2	2003.6	1990.0	1961.8	1906.9	1849.1	1811.7	1782.6
30.5°	1936.0	1974.9	2003.1	2014.7	1986.6	1972.5	1945.3	1890.4	1831.6	1793.2	1762.6
31°	1919.0	1958.4	1986.6	1997.7	1970.5	1956.0	1928.3	1873.4	1813.2	1773.8	1742.2
31.5°	1901.6	1941.4	1969.6	1981.2	1953.5	1939.4	1911.8	1855.9	1793.7	1750.0	1716.0
32°	1884.6	1924.4	1952.6	1964.2	1937.0	1922.9	1894.8	1837.4	1775.6	1731.0	1696.6
32.5°	1867.6	1907.4	1936.5	1948.2	1920.0	1906.4	1877.3	1817.5	1757.4	1713.0	1678.6
33°	1849.6	1890.4	1919.5	1930.7	1902.5	1887.5	1858.3	1793.7	1733.5	1689.0	1654.2
33.5°	1830.2	1872.9	1902.5	1914.7	1882.6	1868.5	1837.9	1764.6	1704.6	1660.6	1626.6
34°	1809.3	1853.5	1883.6	1896.2	1859.3	1846.2	1815.1	1732.0	1671.8	1628.6	1595.6
34.5°	1781.1	1832.6	1864.2	1876.3	1829.7	1820.0	1789.8	1695.1	1634.9	1592.0	1559.6
35°	1748.6	1807.8	1841.3	1851.5	1797.1	1788.9	1760.7	1656.8	1594.8	1552.9	1521.0
35.5°	1713.1	1780.1	1816.6	1822.4	1762.2	1754.9	1727.7	1615.5	1553.2	1512.3	1481.0
36°	1673.8	1746.6	1786.4	1789.4	1727.2	1718.0	1689.3	1571.8	1508.2	1468.2	1438.6
36.5°	1634.4	1710.7	1753.9	1753.9	1689.8	1677.6	1644.1	1524.6	1460.2	1421.1	1392.6
37°	1591.2	1668.9	1716.0	1716.5	1651.9	1635.4	1592.6	1476.1	1411.3	1372.1	1343.2
37.5°	1545.5	1624.2	1673.8	1678.6	1611.1	1589.7	1537.3	1423.1	1357.4	1318.6	1290.2
38°	1496.5	1573.7	1624.2	1638.3	1569.8	1542.6	1477.5	1367.8	1301.0	1262.6	1234.2
38.5°	1445.0	1520.8	1573.2	1595.6	1523.7	1493.1	1420.2	1309.0	1241.6	1203.2	1174.8
39°	1391.1	1463.0	1517.4	1550.9	1477.0	1440.1	1362.9	1251.7	1183.2	1145.8	1118.4
39.5°	1336.2	1406.1	1458.6	1502.8	1427.5	1386.2	1309.0	1190.5	1121.3	1084.0	1056.6
40°	1279.4	1346.9	1400.8	1453.7	1377.0	1328.4	1254.6	1129.8	1060.5	1023.1	995.7
40.5°	1221.6	1285.7	1343.5	1402.7	1324.0	1271.1	1202.6	1069.5	1000.1	962.7	935.3
41°	1160.4	1224.5	1287.1	1348.3	1272.1	1214.8	1148.7	1010.3	940.9	903.5	876.1
41.5°	1099.6	1167.6	1232.2	1293.0	1216.2	1158.9	1094.3	951.0	881.6	844.2	816.8
42°	1037.5	1110.3	1176.4	1234.7	1159.9	1104.0	1038.0	894.2	824.8	787.4	760.0
42.5°	977.7	1053.0	1122.5	1177.8	1100.1	1049.6	980.2	838.8	769.4	732.0	704.6
43°	918.0	995.7	1066.6	1119.1	1040.9	994.7	923.8	784.4	715.0	677.6	650.2
43.5°	861.2	939.4	1011.7	1061.8	979.7	940.3	868.9	730.5	661.1	623.7	596.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	694.6	771.3	843.7	886.9	801.9	775.2	710.1	581.9	468.2	431.8	393.9
45.5°	643.6	717.4	791.2	831.1	743.1	721.3	658.6	535.3	424.5	387.1	350.2
46°	591.6	665.4	737.8	774.7	687.3	668.3	608.1	492.5	380.8	341.9	306.5
46.5°	541.1	615.9	686.8	720.3	631.4	616.9	559.1	449.8	337.1	297.3	269.1
47°	492.5	568.3	635.8	666.4	578.0	565.4	509.0	407.0	300.2	259.9	233.1
47.5°	445.9	521.7	586.3	613.0	526.0	515.3	465.3	364.3	264.7	223.9	200.6
48°	401.7	476.5	537.7	560.5	480.9	468.2	421.6	321.5	231.7	189.9	171.0
48.5°	359.4	433.3	488.6	510.0	435.7	421.1	377.9	283.2	201.6	160.8	144.3
49°	319.6	391.0	442.0	460.0	390.5	374.0	334.7	247.7	173.4	134.5	120.5
49.5°	282.7	350.7	396.8	413.8	345.3	326.9	297.3	215.7	148.1	111.2	100.1
50°	248.7	311.8	353.1	368.7	300.7	284.1	258.9	184.6	124.3	91.8	82.1
50.5°	217.1	273.9	312.3	325.4	261.3	244.8	223.4	156.4	103.5	75.8	67.5
51°	187.0	238.0	271.5	285.6	225.4	207.4	189.9	131.6	84.5	65.1	57.8
51.5°	161.3	203.5	234.1	246.7	192.3	174.9	159.8	108.8	72.9	53.9	48.1
52°	139.4	172.4	200.1	211.8	160.8	144.7	129.7	88.4	61.2	43.2	38.4
52.5°	117.5	149.6	167.1	178.3	132.1	117.5	103.9	75.8	49.5	32.5	28.7
53°	95.7	126.3	143.8	154.0	105.9	94.2	81.6	63.1	37.9	21.9	18.9
53.5°	73.8	103.0	120.5	129.7	83.1	74.8	68.5	51.0	26.2	16.0	13.6
54°	58.3	79.7	97.1	105.9	69.5	62.2	55.4	38.9	14.6	11.7	10.2
54.5°	44.2	56.8	73.8	81.6	55.9	50.0	42.7	26.2	10.7	9.2	8.7
55°	32.5	41.3	50.5	57.8	42.3	37.9	29.6	14.1	9.2	8.3	8.3
55.5°	22.3	29.6	36.4	42.3	28.2	25.7	16.5	10.2	8.3	8.3	7.8
56°	15.1	19.9	24.8	29.6	14.6	13.6	11.7	8.7	8.3	7.8	7.3
56.5°	13.1	17.5	16.5	19.4	10.7	10.2	9.2	8.3	7.8	7.3	7.3
57°	11.2	15.1	14.6	16.5	9.2	8.7	8.7	8.3	7.3	7.3	6.8
57.5°	9.2	12.6	12.1	13.6	8.7	8.3	8.3	7.8	7.3	6.8	6.3
58°	7.8	10.2	10.2	11.2	8.3	8.3	7.8	7.3	6.8	6.3	6.3
58.5°	7.3	7.8	8.3	8.3	7.8	7.8	7.8	7.3	6.3	6.3	5.8
59°	6.8	7.3	7.8	7.8	7.3	7.3	7.3	6.8	6.3	5.8	5.8
59.5°	6.8	7.3	7.3	7.8	7.3	7.3	6.8	6.3	5.8	5.8	5.3
60°	6.3	6.8	7.3	7.3	6.8	6.8	6.8	6.3	5.8	5.3	5.3
60.5°	5.8	6.3	6.8	6.8	6.3	6.3	6.3	5.8	5.3	5.3	4.9
61°	5.8	6.3	6.3	6.8	6.3	6.3	5.8	5.3	4.9	4.9	4.9
61.5°	5.3	5.8	6.3	6.3	5.8	5.8	5.8	5.3	4.9	4.9	4.4
62°	5.3	5.3	5.8	5.8	5.3	5.3	5.3	4.9	4.4	4.4	4.4
62.5°	4.9	5.3	5.3	5.8	5.3	5.3	5.3	4.9	4.4	4.4	3.9
63°	4.9	4.9	5.3	5.3	4.9	4.9	4.9	4.4	4.4	3.9	3.9
63.5°	4.4	4.9	4.9	5.3	4.9	4.9	4.9	4.4	3.9	3.9	3.9
64°	4.4	4.4	4.9	4.9	4.4	4.4	4.4	3.9	3.9	3.9	3.4
64.5°	3.9	4.4	4.4	4.9	4.4	4.4	4.4	3.9	3.4	3.4	3.4
65°	3.9	3.9	4.4	4.4	3.9	3.9	3.9	3.9	3.4	3.4	3.4
65.5°	3.4	3.9	3.9	4.4	3.9	3.9	3.9	3.4	3.4	3.4	2.9
66°	3.4	3.9	3.9	3.9	3.9	3.9	3.4	3.4	2.9	2.9	2.9



TEST NUMBER: P776689

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	2.9	2.9	3.4	3.4	3.4	3.4	2.9	2.9	2.4	2.4	2.4
68°	2.9	2.9	3.4	3.4	2.9	2.9	2.9	2.9	2.4	2.4	2.4
68.5°	2.4	2.9	2.9	2.9	2.9	2.9	2.9	2.4	2.4	2.4	2.4
69°	2.4	2.9	2.9	2.9	2.9	2.9	2.9	2.4	2.4	2.4	1.9
69.5°	2.4	2.4	2.9	2.9	2.4	2.4	2.4	2.4	1.9	1.9	1.9
70°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	1.9	1.9	1.9
70.5°	1.9	2.4	2.4	2.4	2.4	2.4	2.4	1.9	1.9	1.9	1.9
71°	1.9	2.4	2.4	2.4	2.4	2.4	1.9	1.9	1.9	1.9	1.9
71.5°	1.9	1.9	2.4	2.4	1.9	1.9	1.9	1.9	1.5	1.5	1.5
72°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.5	1.5
72.5°	1.5	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.5	1.5	1.5
73°	1.5	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.5	1.5	1.5
73.5°	1.5	1.5	1.9	1.9	1.5	1.5	1.5	1.5	1.5	1.5	1.5
74°	1.5	1.5	1.5	1.9	1.5	1.5	1.5	1.5	1.5	1.0	1.0
74.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0
75°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0
75.5°	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0
76°	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0
76.5°	1.0	1.0	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0
77°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0
78°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5
78.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5
79°	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
79.5°	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
80°	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80.5°	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
81°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
81.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
83°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
83.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
84°	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.5	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: P776689
CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-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: P776689

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2592.7	2592.7	2592.7	2592.7	2592.7	2592.7
0.5°	2586.4	2591.8	2591.3	2591.3	2593.2	2593.2
1°	2582.5	2588.4	2588.4	2589.3	2592.2	2594.2
1.5°	2578.2	2585.0	2585.0	2586.9	2590.8	2594.2
2°	2573.3	2581.1	2581.6	2584.0	2589.3	2594.2
2.5°	2568.0	2576.2	2577.2	2580.1	2587.4	2593.2
3°	2562.6	2571.4	2572.8	2576.2	2584.5	2591.8
3.5°	2556.3	2566.0	2567.5	2571.8	2581.1	2590.3
4°	2549.5	2560.2	2562.1	2567.0	2577.7	2588.4
4.5°	2542.7	2553.9	2556.3	2561.6	2573.8	2585.9
5°	2535.9	2547.1	2550.0	2555.8	2569.4	2582.5
5.5°	2527.6	2540.3	2543.2	2550.0	2564.1	2579.1
6°	2519.4	2532.5	2535.4	2543.2	2558.7	2575.2
6.5°	2510.6	2524.7	2528.1	2535.9	2553.4	2570.4
7°	2501.9	2516.5	2520.4	2528.6	2547.1	2565.5
7.5°	2492.2	2507.7	2511.6	2520.8	2540.3	2560.2
8°	2482.0	2498.5	2502.9	2512.1	2533.0	2554.8
8.5°	2471.8	2488.3	2493.2	2503.8	2525.7	2548.5
9°	2460.6	2478.1	2483.4	2494.6	2517.9	2541.7
9.5°	2449.4	2467.9	2473.2	2484.4	2509.7	2534.9
10°	2438.8	2456.7	2462.6	2474.7	2500.4	2527.2
10.5°	2426.6	2446.0	2451.9	2464.0	2491.2	2519.4
11°	2414.5	2433.9	2440.2	2453.8	2481.0	2511.1
11.5°	2401.8	2422.2	2428.6	2442.6	2471.8	2502.9
12°	2388.7	2410.1	2416.4	2431.0	2461.6	2493.6
12.5°	2375.6	2397.0	2404.3	2418.8	2450.4	2483.4
13°	2362.0	2384.4	2391.6	2406.7	2438.8	2473.7
13.5°	2347.9	2370.8	2378.5	2394.1	2428.1	2463.5
14°	2333.8	2357.2	2365.4	2381.4	2415.9	2452.8
14.5°	2319.8	2343.1	2351.8	2368.3	2404.3	2441.7
15°	2304.7	2328.5	2337.2	2354.7	2391.2	2430.5
15.5°	2289.6	2314.4	2323.2	2340.6	2378.5	2418.8
16°	2274.6	2299.4	2308.1	2326.6	2365.4	2406.2
16.5°	2258.6	2283.8	2293.0	2312.5	2351.8	2393.6
17°	2243.0	2268.8	2278.0	2297.9	2337.7	2381.0
17.5°	2226.5	2252.7	2262.4	2282.4	2323.6	2367.8
18°	2210.0	2236.7	2246.9	2267.3	2309.6	2354.7
18.5°	2194.0	2220.2	2230.4	2251.3	2294.5	2341.1
19°	2176.5	2203.7	2213.9	2235.2	2279.4	2326.1
19.5°	2159.0	2186.7	2197.4	2219.2	2264.4	2312.0
20°	2141.0	2169.7	2179.9	2202.7	2248.4	2297.4
20.5°	2123.5	2151.7	2162.9	2186.2	2232.8	2282.4
21°	2105.6	2133.7	2144.9	2168.7	2216.3	2267.8



TEST NUMBER: P776689

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2049.2	2078.8	2090.5	2115.8	2166.8	2219.7
23°	2029.8	2059.9	2072.0	2097.8	2148.8	2203.2
23.5°	2010.8	2040.5	2053.1	2079.3	2131.3	2186.2
24°	1990.9	2021.0	2034.2	2060.9	2113.3	2168.7
24.5°	1972.0	2001.6	2015.2	2041.9	2095.8	2151.7
25°	1952.1	1981.7	1995.3	2022.5	2077.4	2134.2
25.5°	1932.2	1962.3	1976.4	2003.6	2058.9	2116.2
26°	1912.7	1942.4	1956.4	1984.6	2040.5	2098.8
26.5°	1893.3	1922.9	1937.0	1965.2	2021.5	2080.3
27°	1873.9	1903.0	1917.6	1945.8	2003.1	2062.3
27.5°	1855.4	1883.6	1898.2	1927.3	1984.1	2043.9
28°	1837.0	1864.2	1878.7	1908.4	1965.7	2025.9
28.5°	1818.5	1845.7	1860.3	1889.9	1946.7	2007.0
29°	1800.5	1827.7	1842.3	1871.9	1928.8	1988.5
29.5°	1782.1	1809.3	1823.8	1854.4	1911.3	1971.0
30°	1763.6	1790.8	1805.9	1837.0	1893.3	1953.5
30.5°	1743.7	1771.9	1787.4	1818.5	1876.3	1936.0
31°	1722.8	1753.4	1769.0	1800.0	1859.3	1919.0
31.5°	1692.2	1733.5	1749.0	1781.6	1841.8	1901.6
32°	1656.3	1710.2	1726.2	1761.2	1823.4	1884.6
32.5°	1616.0	1676.2	1694.2	1735.9	1804.4	1867.6
33°	1569.3	1634.9	1657.2	1703.9	1783.5	1849.6
33.5°	1520.8	1589.7	1616.4	1662.6	1753.9	1830.2
34°	1470.7	1545.0	1570.8	1613.0	1719.9	1809.3
34.5°	1420.7	1497.9	1521.2	1563.0	1681.0	1781.1
35°	1369.2	1449.4	1466.8	1512.0	1637.8	1748.6
35.5°	1314.8	1400.3	1412.0	1462.0	1594.1	1713.1
36°	1259.4	1346.4	1358.0	1412.9	1548.0	1673.8
36.5°	1202.6	1292.0	1302.7	1363.9	1498.4	1634.4
37°	1146.8	1234.7	1248.8	1314.8	1447.9	1591.2
37.5°	1090.4	1178.3	1195.8	1263.3	1395.4	1545.5
38°	1036.5	1119.6	1141.4	1208.0	1343.5	1496.5
38.5°	982.6	1063.2	1088.5	1152.6	1290.0	1445.0
39°	929.2	1006.4	1035.0	1096.2	1239.5	1391.1
39.5°	876.2	949.1	980.7	1039.9	1187.1	1336.2
40°	822.8	890.3	926.3	983.6	1134.6	1279.4
40.5°	769.4	834.5	872.3	931.6	1078.3	1221.6
41°	716.9	780.5	818.9	879.1	1023.4	1160.4
41.5°	666.4	728.1	766.9	828.6	965.1	1099.6
42°	614.9	678.1	716.4	779.1	907.3	1037.5
42.5°	567.8	627.5	666.4	728.6	850.0	977.7
43°	522.6	581.4	617.8	676.6	793.7	918.0
43.5°	482.8	535.3	570.2	625.6	737.8	861.2



TEST NUMBER: P776689

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	364.3	410.9	433.3	480.4	577.0	694.6
45.5°	324.9	373.5	392.0	435.7	526.0	643.6
46°	288.0	337.6	353.1	392.5	477.0	591.6
46.5°	256.5	303.6	315.2	349.2	429.4	541.1
47°	226.8	272.5	280.3	308.4	383.2	492.5
47.5°	199.6	242.4	246.7	269.1	341.0	445.9
48°	173.4	214.2	216.1	230.7	301.1	401.7
48.5°	149.1	188.0	187.5	196.2	264.7	359.4
49°	127.3	165.1	163.7	164.2	230.7	319.6
49.5°	107.3	144.7	142.8	142.3	199.6	282.7
50°	89.4	124.8	121.4	120.9	170.5	248.7
50.5°	73.3	104.4	100.5	99.1	149.6	217.1
51°	62.2	84.5	79.2	77.7	128.7	187.0
51.5°	51.0	69.0	64.1	63.6	107.8	161.3
52°	40.3	55.4	51.5	51.5	86.5	139.4
52.5°	29.1	42.7	39.8	41.3	66.1	117.5
53°	18.0	31.6	30.1	32.1	52.5	95.7
53.5°	12.1	22.3	21.9	23.8	40.8	73.8
54°	9.2	15.1	15.1	17.0	30.6	58.3
54.5°	8.3	13.1	13.1	14.6	22.3	44.2
55°	7.8	11.2	11.2	12.1	15.5	32.5
55.5°	7.3	9.2	9.2	9.7	13.6	22.3
56°	7.3	7.3	7.3	7.8	11.7	15.1
56.5°	6.8	7.3	6.8	7.3	9.2	13.1
57°	6.3	6.8	6.8	6.8	7.3	11.2
57.5°	6.3	6.3	6.3	6.8	7.3	9.2
58°	5.8	6.3	6.3	6.3	6.8	7.8
58.5°	5.8	5.8	5.8	5.8	6.8	7.3
59°	5.3	5.8	5.3	5.8	6.3	6.8
59.5°	5.3	5.3	5.3	5.3	5.8	6.8
60°	4.9	4.9	4.9	4.9	5.8	6.3
60.5°	4.9	4.9	4.9	4.9	5.3	5.8
61°	4.4	4.4	4.4	4.4	4.9	5.8
61.5°	4.4	4.4	4.4	4.4	4.9	5.3
62°	3.9	4.4	3.9	4.4	4.4	5.3
62.5°	3.9	3.9	3.9	3.9	4.4	4.9
63°	3.4	3.9	3.9	3.9	3.9	4.9
63.5°	3.4	3.4	3.4	3.4	3.9	4.4
64°	3.4	3.4	3.4	3.4	3.9	4.4
64.5°	2.9	3.4	2.9	3.4	3.4	3.9
65°	2.9	2.9	2.9	2.9	3.4	3.9
65.5°	2.9	2.9	2.9	2.9	3.4	3.4
66°	2.9	2.9	2.9	2.9	2.9	3.4



TEST NUMBER: P776689

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	2.4	2.4	2.4	2.4	2.4	2.9
68°	2.4	2.4	1.9	2.4	2.4	2.9
68.5°	1.9	1.9	1.9	1.9	2.4	2.4
69°	1.9	1.9	1.9	1.9	2.4	2.4
69.5°	1.9	1.9	1.9	1.9	1.9	2.4
70°	1.9	1.9	1.9	1.9	1.9	2.4
70.5°	1.5	1.9	1.5	1.5	1.9	1.9
71°	1.5	1.5	1.5	1.5	1.9	1.9
71.5°	1.5	1.5	1.5	1.5	1.5	1.9
72°	1.5	1.5	1.5	1.5	1.5	1.9
72.5°	1.5	1.5	1.5	1.5	1.5	1.5
73°	1.5	1.5	1.5	1.5	1.5	1.5
73.5°	1.0	1.0	1.0	1.0	1.5	1.5
74°	1.0	1.0	1.0	1.0	1.5	1.5
74.5°	1.0	1.0	1.0	1.0	1.0	1.5
75°	1.0	1.0	1.0	1.0	1.0	1.5
75.5°	1.0	1.0	1.0	1.0	1.0	1.0
76°	1.0	1.0	1.0	1.0	1.0	1.0
76.5°	1.0	1.0	1.0	1.0	1.0	1.0
77°	1.0	1.0	0.5	0.5	1.0	1.0
77.5°	0.5	0.5	0.5	0.5	1.0	1.0
78°	0.5	0.5	0.5	0.5	0.5	1.0
78.5°	0.5	0.5	0.5	0.5	0.5	1.0
79°	0.5	0.5	0.5	0.5	0.5	0.5
79.5°	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5
80.5°	0.5	0.5	0.5	0.5	0.5	0.5
81°	0.5	0.5	0.5	0.5	0.5	0.5
81.5°	0.5	0.5	0.5	0.5	0.5	0.5
82°	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.0	0.5	0.5	0.0	0.5	0.5
83°	0.0	0.0	0.0	0.0	0.0	0.5
83.5°	0.0	0.0	0.0	0.0	0.0	0.5
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: P776689
CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-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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Scaled Data Report





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

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21.5°	2251.8	2282.8	2306.6	2318.3	2294.0	2281.4	2255.6	2207.1	2155.6	2125.0	2100.7
22°	2235.2	2267.8	2292.6	2303.2	2278.5	2265.4	2239.6	2190.6	2138.6	2107.0	2082.2



44°	804.3	882.5	955.4	1003.0	920.9	885.5	815.0	679.5	562.5	521.7	481.3
44.5°	749.5	826.2	900.0	944.7	860.7	830.6	762.6	630.5	512.4	477.0	437.6



66.5°	3.4	3.4	3.9	3.9	3.4	3.4	3.4	3.4	2.9	2.9	2.9
67°	2.9	3.4	3.4	3.4	3.4	3.4	3.4	2.9	2.9	2.9	2.4



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°	2087.1	2115.3	2127.4	2151.2	2200.3	2251.8
22°	2067.7	2096.3	2109.0	2133.7	2183.3	2235.2



44°	443.5	492.0	522.6	575.6	683.9	804.3
44.5°	403.6	450.3	477.9	528.0	629.5	749.5

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66.5°	2.4	2.4	2.4	2.4	2.9	3.4
67°	2.4	2.4	2.4	2.4	2.9	2.9

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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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Scaled Data Report



(END OF REPORT)