

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: P776739

Luminaire Tested: HCDJBL54050CSD-HCD6TSQMB-5000lm-5000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776739
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B015-HCD6TSQMB)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD6TSQMB-5000lm-5000K
Description: 6 INCH SQUARE MEDIUM MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

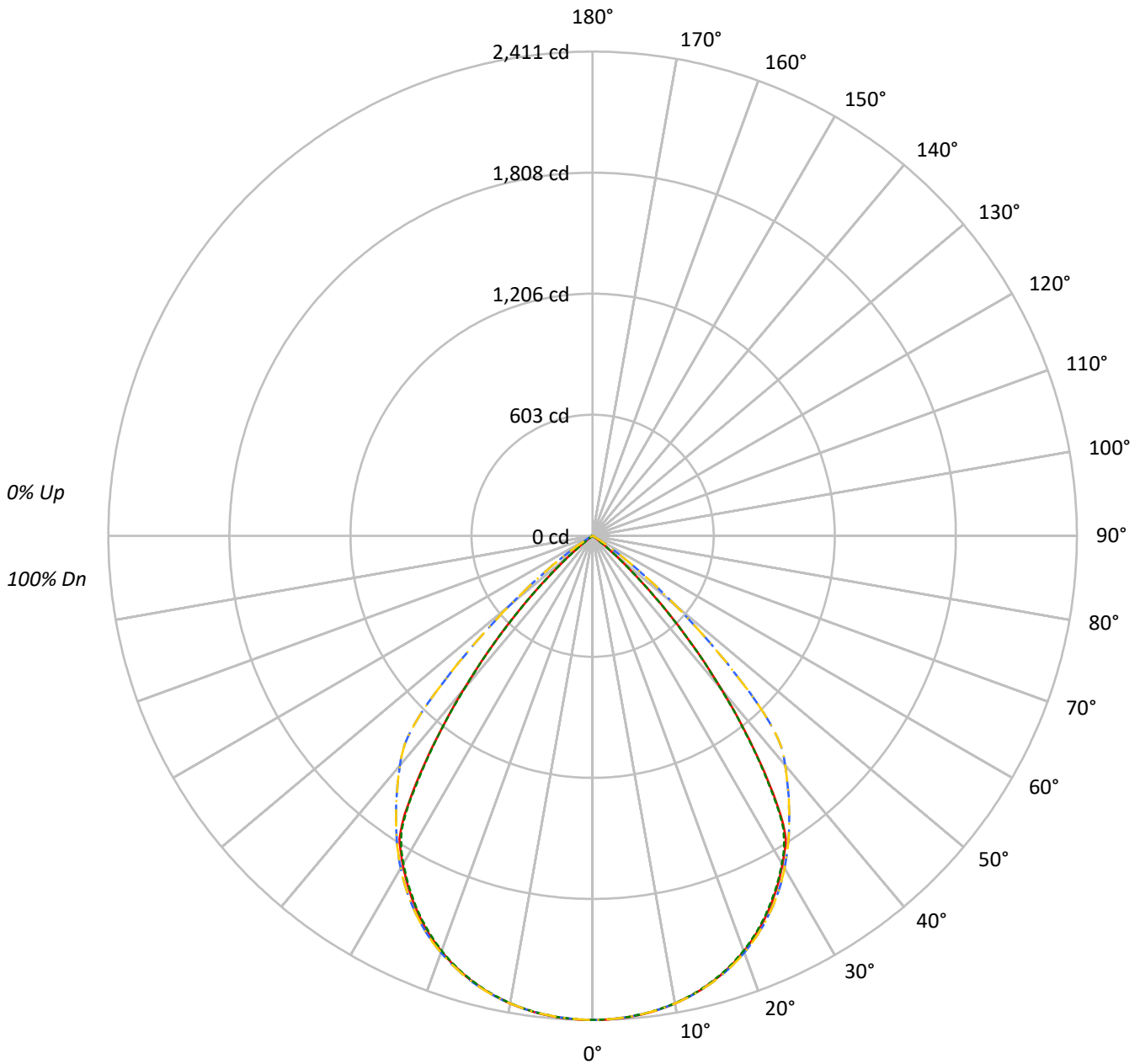
Lumens per Lamp: N/A
Luminaire Lumens: 3477.9 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.23
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

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										
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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92					92			
2	106	101	96	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84					84			
3	100	93	87	83	98	91	86	82	89	84	81	86	83	80	84	81	78	77					77			
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	74	71	70					70			
5	88	79	72	67	87	78	72	67	76	71	66	74	70	66	73	69	65	64					64			
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60	58					58			
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53					53			
8	74	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	51	49					49			
9	69	58	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47	45					45			
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	52	47	43	42					42			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	103777	103777	103777	103777
5°	103733	103689	103733	103689
10°	103380	103319	103380	103319
15°	102504	102414	102504	102414
20°	100870	100737	100870	100737
25°	98101	97849	98101	97849
30°	93974	93686	93974	93686
35°	82253	81717	82253	81717
40°	56166	55806	56166	55806
45°	29239	29270	29239	29270
50°	8520	8426	8520	8426
55°	255	330	255	330
60°	86	86	86	86
65°	51	51	51	51
70°	63	63	63	63
75°	0	83	0	83
80°	0	0	0	0
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 67612 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.9	6.6
10°-20°	648.2	18.6
20°-30°	951.4	27.4
30°-40°	1009.5	29.0
40°-50°	563.6	16.2
50°-60°	76.2	2.2
60°-70°	0.9	0.0
70°-80°	0.3	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°	1827.5	52.5
0°-40°	2837.0	81.6
0°-60°	3476.8	100.0
0°-90°	3477.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3477.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2410	2410	2410	2410	2410	
5°	2400	2399	2400	2399	2400	228
15°	2300	2298	2300	2298	2300	648
25°	2065	2060	2065	2060	2065	948
35°	1565	1555	1565	1555	1565	945
45°	480	481	480	481	480	383
55°	3	4	3	4	3	21
65°	0	0	0	0	0	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°	2410.3	2410.3	2410.3	2410.3	2410.3	2410.3	2410.3	2410.3	2410.3	2410.3	2410.3
0.5°	2411.2	2410.3	2410.3	2409.8	2410.3	2409.8	2410.3	2410.3	2411.2	2410.3	2410.3
1°	2410.7	2410.3	2409.8	2409.8	2410.3	2409.8	2409.8	2410.3	2410.7	2410.3	2409.8
1.5°	2410.3	2409.3	2409.3	2409.3	2409.3	2409.3	2409.3	2409.3	2410.3	2409.3	2409.3
2°	2409.3	2408.8	2408.3	2408.3	2408.8	2408.3	2408.3	2408.8	2409.3	2408.8	2408.3
2.5°	2408.3	2407.8	2407.4	2407.4	2407.8	2407.4	2407.4	2407.8	2408.3	2407.8	2407.4
3°	2407.4	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4	2407.4	2406.4	2406.4
3.5°	2405.9	2405.4	2404.9	2404.9	2404.9	2404.9	2404.9	2405.4	2405.9	2405.4	2404.9
4°	2404.4	2403.5	2403.0	2403.0	2403.5	2403.0	2403.0	2403.5	2404.4	2403.5	2403.0
4.5°	2402.5	2401.5	2401.5	2401.0	2401.5	2401.0	2401.5	2401.5	2402.5	2401.5	2401.5
5°	2400.1	2399.6	2399.1	2399.1	2399.1	2399.1	2399.1	2399.6	2400.1	2399.6	2399.1
5.5°	2397.6	2397.2	2396.7	2396.7	2396.7	2396.7	2396.7	2397.2	2397.6	2397.2	2396.7
6°	2395.2	2394.7	2394.2	2393.8	2394.2	2393.8	2394.2	2394.7	2395.2	2394.7	2394.2
6.5°	2392.3	2391.8	2391.3	2391.3	2391.3	2391.3	2391.3	2391.8	2392.3	2391.8	2391.3
7°	2389.4	2388.9	2388.4	2387.9	2387.9	2387.9	2388.4	2388.9	2389.4	2388.9	2388.4
7.5°	2386.0	2385.5	2385.0	2384.5	2384.5	2384.5	2385.0	2385.5	2386.0	2385.5	2385.0
8°	2382.1	2381.6	2381.6	2381.1	2381.1	2381.1	2381.6	2381.6	2382.1	2381.6	2381.6
8.5°	2378.2	2377.7	2377.7	2377.2	2376.8	2377.2	2377.7	2377.7	2378.2	2377.7	2377.7
9°	2373.8	2373.8	2373.4	2372.9	2372.4	2372.9	2373.4	2373.8	2373.8	2373.8	2373.4
9.5°	2369.5	2369.5	2369.0	2368.5	2368.0	2368.5	2369.0	2369.5	2369.5	2369.5	2369.0
10°	2364.6	2364.6	2364.6	2363.7	2363.2	2363.7	2364.6	2364.6	2364.6	2364.6	2364.6
10.5°	2359.8	2359.8	2359.8	2358.8	2358.3	2358.8	2359.8	2359.8	2359.8	2359.8	2359.8
11°	2353.9	2354.4	2354.4	2353.5	2352.5	2353.5	2354.4	2354.4	2353.9	2354.4	2354.4
11.5°	2348.6	2349.1	2349.1	2347.6	2346.7	2347.6	2349.1	2349.1	2348.6	2349.1	2349.1
12°	2342.8	2343.3	2343.3	2341.8	2340.8	2341.8	2343.3	2343.3	2342.8	2343.3	2343.3
12.5°	2336.5	2336.9	2337.4	2335.5	2334.5	2335.5	2337.4	2336.9	2336.5	2336.9	2337.4
13°	2329.7	2330.6	2331.1	2329.2	2327.7	2329.2	2331.1	2330.6	2329.7	2330.6	2331.1
13.5°	2322.9	2323.8	2324.3	2322.4	2320.9	2322.4	2324.3	2323.8	2322.9	2323.8	2324.3
14°	2315.1	2316.6	2317.5	2315.1	2313.6	2315.1	2317.5	2316.6	2315.1	2316.6	2317.5
14.5°	2307.8	2309.3	2310.2	2307.8	2305.9	2307.8	2310.2	2309.3	2307.8	2309.3	2310.2
15°	2299.6	2301.5	2302.5	2300.0	2297.6	2300.0	2302.5	2301.5	2299.6	2301.5	2302.5
15.5°	2291.8	2293.2	2294.7	2291.8	2289.4	2291.8	2294.7	2293.2	2291.8	2293.2	2294.7
16°	2283.1	2285.0	2286.4	2283.5	2280.6	2283.5	2286.4	2285.0	2283.1	2285.0	2286.4
16.5°	2274.3	2276.3	2277.7	2274.8	2271.9	2274.8	2277.7	2276.3	2274.3	2276.3	2277.7
17°	2264.6	2267.5	2269.0	2265.6	2262.2	2265.6	2269.0	2267.5	2264.6	2267.5	2269.0
17.5°	2255.4	2257.8	2259.7	2256.3	2252.5	2256.3	2259.7	2257.8	2255.4	2257.8	2259.7
18°	2245.2	2248.1	2250.0	2246.1	2242.3	2246.1	2250.0	2248.1	2245.2	2248.1	2250.0
18.5°	2235.0	2238.4	2240.3	2236.4	2232.1	2236.4	2240.3	2238.4	2235.0	2238.4	2240.3
19°	2224.3	2227.7	2230.1	2225.3	2220.9	2225.3	2230.1	2227.7	2224.3	2227.7	2230.1
19.5°	2213.1	2217.0	2219.4	2214.6	2210.2	2214.6	2219.4	2217.0	2213.1	2217.0	2219.4
20°	2201.5	2205.8	2208.8	2203.4	2198.6	2203.4	2208.8	2205.8	2201.5	2205.8	2208.8
20.5°	2189.8	2194.7	2197.6	2191.8	2186.4	2191.8	2197.6	2194.7	2189.8	2194.7	2197.6
21°	2177.7	2182.5	2185.9	2180.1	2173.8	2180.1	2185.9	2182.5	2177.7	2182.5	2185.9



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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°	2138.4	2144.7	2148.6	2141.8	2134.0	2141.8	2148.6	2144.7	2138.4	2144.7	2148.6
23°	2124.8	2131.1	2135.4	2128.2	2119.9	2128.2	2135.4	2131.1	2124.8	2131.1	2135.4
23.5°	2110.7	2117.5	2122.3	2114.1	2105.3	2114.1	2122.3	2117.5	2110.7	2117.5	2122.3
24°	2095.6	2103.4	2108.3	2099.5	2090.8	2099.5	2108.3	2103.4	2095.6	2103.4	2108.3
24.5°	2080.6	2088.3	2094.2	2084.9	2075.7	2084.9	2094.2	2088.3	2080.6	2088.3	2094.2
25°	2065.0	2073.3	2079.1	2069.4	2059.7	2069.4	2079.1	2073.3	2065.0	2073.3	2079.1
25.5°	2049.5	2057.8	2064.6	2053.9	2043.7	2053.9	2064.6	2057.8	2049.5	2057.8	2064.6
26°	2033.5	2042.2	2049.0	2038.3	2027.2	2038.3	2049.0	2042.2	2033.5	2042.2	2049.0
26.5°	2017.0	2025.7	2033.0	2021.8	2010.7	2021.8	2033.0	2025.7	2017.0	2025.7	2033.0
27°	1999.5	2009.7	2017.0	2005.3	1993.7	2005.3	2017.0	2009.7	1999.5	2009.7	2017.0
27.5°	1982.0	1992.7	2000.5	1987.8	1976.7	1987.8	2000.5	1992.7	1982.0	1992.7	2000.5
28°	1964.5	1975.2	1983.5	1970.8	1958.2	1970.8	1983.5	1975.2	1964.5	1975.2	1983.5
28.5°	1946.6	1957.7	1966.0	1953.4	1940.3	1953.4	1966.0	1957.7	1946.6	1957.7	1966.0
29°	1928.1	1940.3	1948.0	1935.4	1921.8	1935.4	1948.0	1940.3	1928.1	1940.3	1948.0
29.5°	1909.7	1921.8	1930.1	1917.4	1903.4	1917.4	1930.1	1921.8	1909.7	1921.8	1930.1
30°	1890.2	1903.4	1911.1	1899.0	1884.4	1899.0	1911.1	1903.4	1890.2	1903.4	1911.1
30.5°	1871.3	1884.9	1892.2	1880.5	1865.0	1880.5	1892.2	1884.9	1871.3	1884.9	1892.2
31°	1851.4	1866.0	1872.8	1861.6	1845.1	1861.6	1872.8	1866.0	1851.4	1866.0	1872.8
31.5°	1831.5	1847.0	1852.9	1842.2	1824.7	1842.2	1852.9	1847.0	1831.5	1847.0	1852.9
32°	1811.1	1827.1	1832.9	1822.7	1799.0	1822.7	1832.9	1827.1	1811.1	1827.1	1832.9
32.5°	1789.7	1807.2	1812.6	1802.8	1772.7	1802.8	1812.6	1807.2	1789.7	1807.2	1812.6
33°	1755.3	1787.3	1791.7	1782.9	1744.1	1782.9	1791.7	1787.3	1755.3	1787.3	1791.7
33.5°	1717.9	1767.4	1770.8	1762.5	1705.2	1762.5	1770.8	1767.4	1717.9	1767.4	1770.8
34°	1672.2	1747.0	1749.4	1737.8	1662.0	1737.8	1749.4	1747.0	1672.2	1747.0	1749.4
34.5°	1619.3	1725.2	1728.1	1710.6	1610.6	1710.6	1728.1	1725.2	1619.3	1725.2	1728.1
35°	1564.9	1692.6	1706.7	1682.9	1554.7	1682.9	1706.7	1692.6	1564.9	1692.6	1706.7
35.5°	1510.5	1660.6	1685.3	1648.0	1498.4	1648.0	1685.3	1660.6	1510.5	1660.6	1685.3
36°	1454.2	1617.4	1663.5	1609.1	1442.6	1609.1	1663.5	1617.4	1454.2	1617.4	1663.5
36.5°	1397.4	1571.7	1642.1	1562.0	1387.7	1562.0	1642.1	1571.7	1397.4	1571.7	1642.1
37°	1339.6	1519.8	1620.8	1512.0	1331.4	1512.0	1620.8	1519.8	1339.6	1519.8	1620.8
37.5°	1283.8	1467.8	1598.9	1459.1	1276.0	1459.1	1598.9	1467.8	1283.8	1467.8	1598.9
38°	1225.5	1414.4	1577.5	1405.2	1220.2	1405.2	1577.5	1414.4	1225.5	1414.4	1577.5
38.5°	1169.2	1361.0	1555.7	1352.3	1163.9	1352.3	1555.7	1361.0	1169.2	1361.0	1555.7
39°	1112.9	1306.6	1534.8	1299.8	1106.6	1299.8	1534.8	1306.6	1112.9	1306.6	1534.8
39.5°	1056.6	1253.2	1513.5	1247.4	1049.8	1247.4	1513.5	1253.2	1056.6	1253.2	1513.5
40°	999.3	1198.8	1492.1	1194.4	992.9	1194.4	1492.1	1198.8	999.3	1198.8	1492.1
40.5°	943.4	1145.4	1470.7	1141.0	937.6	1141.0	1470.7	1145.4	943.4	1145.4	1470.7
41°	889.0	1092.0	1448.9	1088.1	882.7	1088.1	1448.9	1092.0	889.0	1092.0	1448.9
41.5°	834.7	1038.6	1424.6	1034.2	830.3	1034.2	1424.6	1038.6	834.7	1038.6	1424.6
42°	780.3	985.2	1397.4	980.8	777.4	980.8	1397.4	985.2	780.3	985.2	1397.4
42.5°	728.3	932.7	1362.0	927.9	724.9	927.9	1362.0	932.7	728.3	932.7	1362.0
43°	676.4	879.8	1321.7	875.9	673.9	875.9	1321.7	879.8	676.4	879.8	1321.7
43.5°	625.9	828.3	1278.4	824.9	623.0	824.9	1278.4	828.3	625.9	828.3	1278.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	480.2	678.3	1110.4	676.4	480.7	676.4	1110.4	678.3	480.2	678.3	1110.4
45.5°	436.5	629.8	1047.3	628.3	436.5	628.3	1047.3	629.8	436.5	629.8	1047.3
46°	393.8	582.2	984.7	580.7	393.8	580.7	984.7	582.2	393.8	582.2	984.7
46.5°	351.5	535.6	923.0	534.1	350.6	534.1	923.0	535.6	351.5	535.6	923.0
47°	310.3	489.9	861.4	489.9	308.8	489.9	861.4	489.9	310.3	489.9	861.4
47.5°	270.5	446.7	802.6	447.2	270.9	447.2	802.6	446.7	270.5	446.7	802.6
48°	235.5	404.9	745.8	404.9	235.5	404.9	745.8	404.9	235.5	404.9	745.8
48.5°	203.4	364.2	690.9	363.7	203.0	363.7	690.9	364.2	203.4	364.2	690.9
49°	176.7	323.9	637.5	323.4	172.4	323.4	637.5	323.9	176.7	323.9	637.5
49.5°	151.5	285.0	585.6	285.0	148.6	285.0	585.6	285.0	151.5	285.0	585.6
50°	127.2	249.6	535.1	249.6	125.8	249.6	535.1	249.6	127.2	249.6	535.1
50.5°	104.9	218.5	486.5	215.6	103.9	215.6	486.5	218.5	104.9	218.5	486.5
51°	85.9	188.9	442.8	184.5	85.9	184.5	442.8	188.9	85.9	188.9	442.8
51.5°	68.9	163.1	400.1	159.3	67.5	159.3	400.1	163.1	68.9	163.1	400.1
52°	54.9	137.9	358.3	135.0	52.0	135.0	358.3	137.9	54.9	137.9	358.3
52.5°	41.3	114.6	317.5	111.7	36.9	111.7	317.5	114.6	41.3	114.6	317.5
53°	27.7	93.7	279.7	91.8	22.8	91.8	279.7	93.7	27.7	93.7	279.7
53.5°	18.5	74.8	245.2	71.9	13.6	71.9	245.2	74.8	18.5	74.8	245.2
54°	8.7	60.2	213.2	55.8	7.8	55.8	213.2	60.2	8.7	60.2	213.2
54.5°	5.3	46.1	185.5	41.3	5.8	41.3	185.5	46.1	5.3	46.1	185.5
55°	3.4	32.0	159.3	27.2	4.4	27.2	159.3	32.0	3.4	32.0	159.3
55.5°	1.5	20.4	135.0	18.5	2.9	18.5	135.0	20.4	1.5	20.4	135.0
56°	1.0	8.7	112.6	13.6	1.5	13.6	112.6	8.7	1.0	8.7	112.6
56.5°	1.0	4.4	91.3	8.3	1.0	8.3	91.3	4.4	1.0	4.4	91.3
57°	1.0	2.4	74.3	4.4	1.0	4.4	74.3	2.4	1.0	2.4	74.3
57.5°	1.0	1.9	59.7	1.9	1.0	1.9	59.7	1.9	1.0	1.9	59.7
58°	1.0	1.0	48.1	1.0	1.0	1.0	48.1	1.0	1.0	1.0	48.1
58.5°	1.0	1.0	37.4	1.0	1.0	1.0	37.4	1.0	1.0	1.0	37.4
59°	1.0	1.0	27.7	1.0	1.0	1.0	27.7	1.0	1.0	1.0	27.7
59.5°	1.0	1.0	20.4	1.0	1.0	1.0	20.4	1.0	1.0	1.0	20.4
60°	1.0	1.0	14.1	1.0	1.0	1.0	14.1	1.0	1.0	1.0	14.1
60.5°	1.0	1.0	9.7	1.0	1.0	1.0	9.7	1.0	1.0	1.0	9.7
61°	1.0	1.0	6.3	1.0	1.0	1.0	6.3	1.0	1.0	1.0	6.3
61.5°	1.0	1.0	3.9	1.0	1.0	1.0	3.9	1.0	1.0	1.0	3.9
62°	0.5	0.5	1.9	1.0	1.0	1.0	1.9	0.5	0.5	0.5	1.9
62.5°	0.5	0.5	1.5	0.5	0.5	0.5	1.5	0.5	0.5	0.5	1.5
63°	0.5	0.5	1.0	0.5	0.5	0.5	1.0	0.5	0.5	0.5	1.0
63.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
64°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
64.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
65°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
65.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
66°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5



TEST NUMBER: P776739

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
68°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
68.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
69°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
69.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
70°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
70.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
71°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
71.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
72°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
72.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
73°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
73.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
74°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
74.5°	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0
75°	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
75.5°	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.5	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: P776739
CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-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: P776739

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2410.3	2410.3	2410.3	2410.3	2410.3	2410.3
0.5°	2409.8	2410.3	2409.8	2410.3	2410.3	2411.2
1°	2409.8	2410.3	2409.8	2409.8	2410.3	2410.7
1.5°	2409.3	2409.3	2409.3	2409.3	2409.3	2410.3
2°	2408.3	2408.8	2408.3	2408.3	2408.8	2409.3
2.5°	2407.4	2407.8	2407.4	2407.4	2407.8	2408.3
3°	2406.4	2406.4	2406.4	2406.4	2406.4	2407.4
3.5°	2404.9	2404.9	2404.9	2404.9	2405.4	2405.9
4°	2403.0	2403.5	2403.0	2403.0	2403.5	2404.4
4.5°	2401.0	2401.5	2401.0	2401.5	2401.5	2402.5
5°	2399.1	2399.1	2399.1	2399.1	2399.6	2400.1
5.5°	2396.7	2396.7	2396.7	2396.7	2397.2	2397.6
6°	2393.8	2394.2	2393.8	2394.2	2394.7	2395.2
6.5°	2391.3	2391.3	2391.3	2391.3	2391.8	2392.3
7°	2387.9	2387.9	2387.9	2388.4	2388.9	2389.4
7.5°	2384.5	2384.5	2384.5	2385.0	2385.5	2386.0
8°	2381.1	2381.1	2381.1	2381.6	2381.6	2382.1
8.5°	2377.2	2376.8	2377.2	2377.7	2377.7	2378.2
9°	2372.9	2372.4	2372.9	2373.4	2373.8	2373.8
9.5°	2368.5	2368.0	2368.5	2369.0	2369.5	2369.5
10°	2363.7	2363.2	2363.7	2364.6	2364.6	2364.6
10.5°	2358.8	2358.3	2358.8	2359.8	2359.8	2359.8
11°	2353.5	2352.5	2353.5	2354.4	2354.4	2353.9
11.5°	2347.6	2346.7	2347.6	2349.1	2349.1	2348.6
12°	2341.8	2340.8	2341.8	2343.3	2343.3	2342.8
12.5°	2335.5	2334.5	2335.5	2337.4	2336.9	2336.5
13°	2329.2	2327.7	2329.2	2331.1	2330.6	2329.7
13.5°	2322.4	2320.9	2322.4	2324.3	2323.8	2322.9
14°	2315.1	2313.6	2315.1	2317.5	2316.6	2315.1
14.5°	2307.8	2305.9	2307.8	2310.2	2309.3	2307.8
15°	2300.0	2297.6	2300.0	2302.5	2301.5	2299.6
15.5°	2291.8	2289.4	2291.8	2294.7	2293.2	2291.8
16°	2283.5	2280.6	2283.5	2286.4	2285.0	2283.1
16.5°	2274.8	2271.9	2274.8	2277.7	2276.3	2274.3
17°	2265.6	2262.2	2265.6	2269.0	2267.5	2264.6
17.5°	2256.3	2252.5	2256.3	2259.7	2257.8	2255.4
18°	2246.1	2242.3	2246.1	2250.0	2248.1	2245.2
18.5°	2236.4	2232.1	2236.4	2240.3	2238.4	2235.0
19°	2225.3	2220.9	2225.3	2230.1	2227.7	2224.3
19.5°	2214.6	2210.2	2214.6	2219.4	2217.0	2213.1
20°	2203.4	2198.6	2203.4	2208.8	2205.8	2201.5
20.5°	2191.8	2186.4	2191.8	2197.6	2194.7	2189.8
21°	2180.1	2173.8	2180.1	2185.9	2182.5	2177.7

TEST NUMBER: P776739

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2141.8	2134.0	2141.8	2148.6	2144.7	2138.4
23°	2128.2	2119.9	2128.2	2135.4	2131.1	2124.8
23.5°	2114.1	2105.3	2114.1	2122.3	2117.5	2110.7
24°	2099.5	2090.8	2099.5	2108.3	2103.4	2095.6
24.5°	2084.9	2075.7	2084.9	2094.2	2088.3	2080.6
25°	2069.4	2059.7	2069.4	2079.1	2073.3	2065.0
25.5°	2053.9	2043.7	2053.9	2064.6	2057.8	2049.5
26°	2038.3	2027.2	2038.3	2049.0	2042.2	2033.5
26.5°	2021.8	2010.7	2021.8	2033.0	2025.7	2017.0
27°	2005.3	1993.7	2005.3	2017.0	2009.7	1999.5
27.5°	1987.8	1976.7	1987.8	2000.5	1992.7	1982.0
28°	1970.8	1958.2	1970.8	1983.5	1975.2	1964.5
28.5°	1953.4	1940.3	1953.4	1966.0	1957.7	1946.6
29°	1935.4	1921.8	1935.4	1948.0	1940.3	1928.1
29.5°	1917.4	1903.4	1917.4	1930.1	1921.8	1909.7
30°	1899.0	1884.4	1899.0	1911.1	1903.4	1890.2
30.5°	1880.5	1865.0	1880.5	1892.2	1884.9	1871.3
31°	1861.6	1845.1	1861.6	1872.8	1866.0	1851.4
31.5°	1842.2	1824.7	1842.2	1852.9	1847.0	1831.5
32°	1822.7	1799.0	1822.7	1832.9	1827.1	1811.1
32.5°	1802.8	1772.7	1802.8	1812.6	1807.2	1789.7
33°	1782.9	1744.1	1782.9	1791.7	1787.3	1755.3
33.5°	1762.5	1705.2	1762.5	1770.8	1767.4	1717.9
34°	1737.8	1662.0	1737.8	1749.4	1747.0	1672.2
34.5°	1710.6	1610.6	1710.6	1728.1	1725.2	1619.3
35°	1682.9	1554.7	1682.9	1706.7	1692.6	1564.9
35.5°	1648.0	1498.4	1648.0	1685.3	1660.6	1510.5
36°	1609.1	1442.6	1609.1	1663.5	1617.4	1454.2
36.5°	1562.0	1387.7	1562.0	1642.1	1571.7	1397.4
37°	1512.0	1331.4	1512.0	1620.8	1519.8	1339.6
37.5°	1459.1	1276.0	1459.1	1598.9	1467.8	1283.8
38°	1405.2	1220.2	1405.2	1577.5	1414.4	1225.5
38.5°	1352.3	1163.9	1352.3	1555.7	1361.0	1169.2
39°	1299.8	1106.6	1299.8	1534.8	1306.6	1112.9
39.5°	1247.4	1049.8	1247.4	1513.5	1253.2	1056.6
40°	1194.4	992.9	1194.4	1492.1	1198.8	999.3
40.5°	1141.0	937.6	1141.0	1470.7	1145.4	943.4
41°	1088.1	882.7	1088.1	1448.9	1092.0	889.0
41.5°	1034.2	830.3	1034.2	1424.6	1038.6	834.7
42°	980.8	777.4	980.8	1397.4	985.2	780.3
42.5°	927.9	724.9	927.9	1362.0	932.7	728.3
43°	875.9	673.9	875.9	1321.7	879.8	676.4
43.5°	824.9	623.0	824.9	1278.4	828.3	625.9



TEST NUMBER: P776739

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	676.4	480.7	676.4	1110.4	678.3	480.2
45.5°	628.3	436.5	628.3	1047.3	629.8	436.5
46°	580.7	393.8	580.7	984.7	582.2	393.8
46.5°	534.1	350.6	534.1	923.0	535.6	351.5
47°	489.9	308.8	489.9	861.4	489.9	310.3
47.5°	447.2	270.9	447.2	802.6	446.7	270.5
48°	404.9	235.5	404.9	745.8	404.9	235.5
48.5°	363.7	203.0	363.7	690.9	364.2	203.4
49°	323.4	172.4	323.4	637.5	323.9	176.7
49.5°	285.0	148.6	285.0	585.6	285.0	151.5
50°	249.6	125.8	249.6	535.1	249.6	127.2
50.5°	215.6	103.9	215.6	486.5	218.5	104.9
51°	184.5	85.9	184.5	442.8	188.9	85.9
51.5°	159.3	67.5	159.3	400.1	163.1	68.9
52°	135.0	52.0	135.0	358.3	137.9	54.9
52.5°	111.7	36.9	111.7	317.5	114.6	41.3
53°	91.8	22.8	91.8	279.7	93.7	27.7
53.5°	71.9	13.6	71.9	245.2	74.8	18.5
54°	55.8	7.8	55.8	213.2	60.2	8.7
54.5°	41.3	5.8	41.3	185.5	46.1	5.3
55°	27.2	4.4	27.2	159.3	32.0	3.4
55.5°	18.5	2.9	18.5	135.0	20.4	1.5
56°	13.6	1.5	13.6	112.6	8.7	1.0
56.5°	8.3	1.0	8.3	91.3	4.4	1.0
57°	4.4	1.0	4.4	74.3	2.4	1.0
57.5°	1.9	1.0	1.9	59.7	1.9	1.0
58°	1.0	1.0	1.0	48.1	1.0	1.0
58.5°	1.0	1.0	1.0	37.4	1.0	1.0
59°	1.0	1.0	1.0	27.7	1.0	1.0
59.5°	1.0	1.0	1.0	20.4	1.0	1.0
60°	1.0	1.0	1.0	14.1	1.0	1.0
60.5°	1.0	1.0	1.0	9.7	1.0	1.0
61°	1.0	1.0	1.0	6.3	1.0	1.0
61.5°	1.0	1.0	1.0	3.9	1.0	1.0
62°	1.0	1.0	1.0	1.9	0.5	0.5
62.5°	0.5	0.5	0.5	1.5	0.5	0.5
63°	0.5	0.5	0.5	1.0	0.5	0.5
63.5°	0.5	0.5	0.5	0.5	0.5	0.5
64°	0.5	0.5	0.5	0.5	0.5	0.5
64.5°	0.5	0.5	0.5	0.5	0.5	0.5
65°	0.5	0.5	0.5	0.5	0.5	0.5
65.5°	0.5	0.5	0.5	0.5	0.5	0.5
66°	0.5	0.5	0.5	0.5	0.5	0.5



TEST NUMBER: P776739

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.5	0.5	0.5	0.5	0.5	0.5
68°	0.5	0.5	0.5	0.5	0.5	0.5
68.5°	0.5	0.5	0.5	0.5	0.5	0.5
69°	0.5	0.5	0.5	0.5	0.5	0.5
69.5°	0.5	0.5	0.5	0.5	0.5	0.5
70°	0.5	0.5	0.5	0.5	0.5	0.5
70.5°	0.5	0.5	0.5	0.5	0.5	0.5
71°	0.5	0.5	0.5	0.5	0.5	0.5
71.5°	0.5	0.5	0.5	0.5	0.5	0.5
72°	0.5	0.5	0.5	0.5	0.5	0.5
72.5°	0.5	0.5	0.5	0.5	0.5	0.5
73°	0.5	0.5	0.5	0.5	0.5	0.5
73.5°	0.5	0.5	0.5	0.5	0.5	0.5
74°	0.5	0.5	0.5	0.5	0.5	0.5
74.5°	0.5	0.5	0.5	0.0	0.5	0.5
75°	0.5	0.5	0.5	0.0	0.0	0.0
75.5°	0.5	0.5	0.5	0.0	0.0	0.0
76°	0.0	0.5	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: P776739

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-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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Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
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°	2165.1	2170.4	2173.8	2167.5	2160.7	2167.5	2173.8	2170.4	2165.1	2170.4	2173.8
22°	2152.0	2157.8	2161.2	2154.9	2147.6	2154.9	2161.2	2157.8	2152.0	2157.8	2161.2



44°	575.9	776.9	1226.0	774.5	573.4	774.5	1226.0	776.9	575.9	776.9	1226.0
44.5°	527.8	727.4	1169.2	725.4	525.8	725.4	1169.2	727.4	527.8	727.4	1169.2



66.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
67°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5



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°	2167.5	2160.7	2167.5	2173.8	2170.4	2165.1
22°	2154.9	2147.6	2154.9	2161.2	2157.8	2152.0



44°	774.5	573.4	774.5	1226.0	776.9	575.9
44.5°	725.4	525.8	725.4	1169.2	727.4	527.8

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Scaled Data Report



66.5°	0.5	0.5	0.5	0.5	0.5	0.5
67°	0.5	0.5	0.5	0.5	0.5	0.5

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Scaled Data Report



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)