

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: P776004

Luminaire Tested: HCDJBL51525CSD-HCD4TSQC-2500lm-5000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776004
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2310613A001)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL51525CSD-HCD4TSQC-2500lm-5000K
Description: 4 INCH SQUARE MEDIUM SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

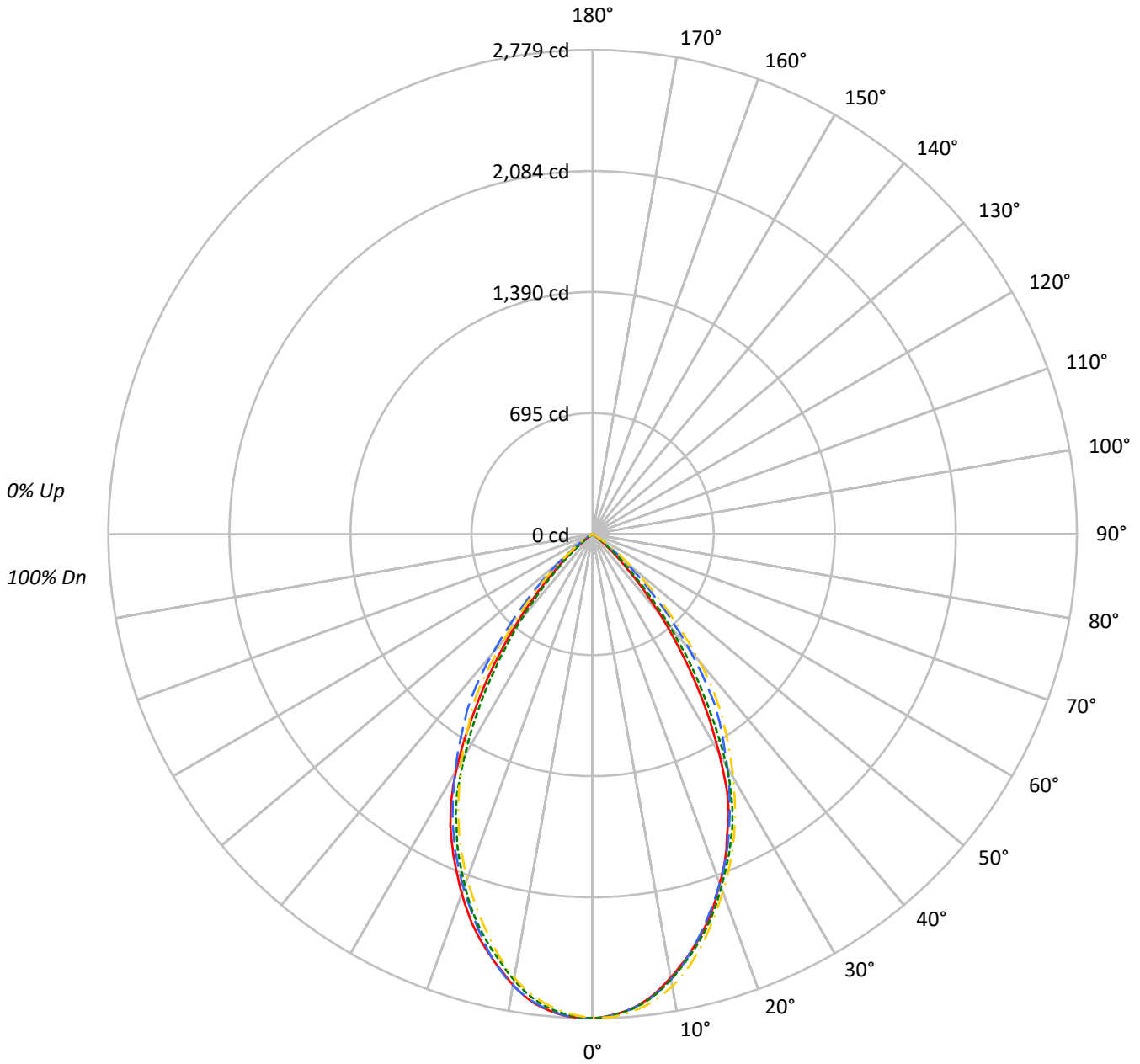
Lumens per Lamp: N/A
Luminaire Lumens: 2872.7 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.93 / 0.98
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 25
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									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93																			
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86																			
3	101	95	89	85	99	93	88	84	90	86	83	88	85	82	86	83	80	79																			
4	96	88	82	77	94	87	81	77	84	80	76	82	78	75	80	77	74	73																			
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	75	72	69	67																			
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62																			
7	81	71	65	60	79	70	64	60	69	64	60	68	63	59	67	62	59	57																			
8	77	66	60	56	75	66	60	56	65	59	55	64	59	55	63	58	55	53																			
9	73	62	56	52	71	62	56	52	61	55	52	60	55	51	59	55	51	50																			
10	69	59	53	48	68	58	52	48	57	52	48	57	52	48	56	51	48	47																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	274505	274505	274505	274505
5°	270533	270999	272815	271455
10°	259419	260503	263744	260794
15°	244443	245743	249253	245109
20°	224477	227054	230883	225728
25°	200627	206004	209243	201413
30°	165573	175411	178710	167456
35°	121822	131753	134287	124694
40°	77960	88179	89908	81056
45°	39433	48239	49707	42355
50°	13855	18453	19652	15715
55°	2585	3343	3774	3739
60°	969	909	811	1127
65°	795	725	655	842
70°	607	607	520	665
75°	496	496	382	573
80°	285	285	285	455
85°	340	340	0	340

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 135°

Vertical Angle: 45°

Luminance: 80124 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.1	8.9
10°-20°	672.5	23.4
20°-30°	854.0	29.7
30°-40°	706.2	24.6
40°-50°	323.2	11.2
50°-60°	54.3	1.9
60°-70°	3.8	0.1
70°-80°	1.4	0.1
80°-90°	0.3	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°	1783.5	62.1
0°-40°	2489.7	86.7
0°-60°	2867.2	99.8
0°-90°	2872.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2872.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2777	2777	2777	2777	2777	
5°	2727	2731	2750	2736	2727	256
15°	2389	2402	2436	2395	2389	667
25°	1840	1889	1919	1847	1840	835
35°	1010	1092	1113	1033	1010	627
45°	282	345	356	303	282	229
55°	15	19	22	22	15	24
65°	3	3	3	4	3	3
75°	1	1	1	2	1	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°	2777.2	2777.2	2777.2	2777.2	2777.2	2777.2	2777.2	2777.2	2777.2	2777.2	2777.2
0.5°	2776.7	2777.0	2777.0	2775.7	2776.7	2776.7	2776.7	2777.7	2779.3	2779.6	2779.0
1°	2773.9	2774.7	2774.9	2774.1	2775.4	2775.9	2776.7	2777.7	2779.3	2779.3	2778.5
1.5°	2771.0	2771.6	2772.1	2771.8	2772.8	2773.9	2775.7	2776.7	2778.5	2779.0	2777.2
2°	2766.7	2767.4	2768.2	2767.9	2769.5	2771.8	2773.9	2774.9	2777.0	2777.7	2775.7
2.5°	2761.7	2762.5	2763.6	2763.6	2765.1	2768.2	2771.8	2772.1	2774.1	2774.9	2773.6
3°	2756.8	2757.4	2757.9	2758.4	2760.2	2763.8	2768.2	2768.7	2771.0	2771.3	2769.5
3.5°	2750.6	2750.9	2751.7	2752.5	2754.3	2759.2	2764.3	2763.6	2766.9	2767.2	2764.8
4°	2743.9	2743.9	2744.5	2745.7	2747.6	2753.2	2758.9	2758.7	2762.0	2762.0	2759.4
4.5°	2735.7	2736.2	2737.2	2738.5	2740.3	2747.0	2753.0	2752.5	2756.6	2756.3	2753.2
5°	2726.6	2726.9	2728.7	2730.3	2731.3	2739.6	2746.5	2745.7	2749.6	2750.1	2746.0
5.5°	2716.6	2717.1	2719.4	2721.2	2722.5	2731.0	2739.3	2738.3	2742.1	2742.6	2738.5
6°	2705.5	2706.0	2709.4	2710.9	2712.2	2722.3	2730.5	2729.5	2733.9	2734.1	2729.7
6.5°	2693.9	2694.1	2698.0	2700.3	2701.1	2711.9	2721.7	2720.2	2725.1	2725.1	2721.2
7°	2680.7	2681.2	2685.9	2688.7	2689.2	2700.6	2712.2	2709.9	2714.8	2715.0	2710.9
7.5°	2667.3	2667.3	2673.2	2676.1	2675.5	2688.5	2701.4	2699.0	2702.9	2704.2	2700.1
8°	2652.6	2652.8	2658.5	2662.6	2661.4	2675.0	2689.7	2686.4	2690.0	2691.3	2687.9
8.5°	2636.8	2637.9	2644.3	2647.9	2645.6	2660.8	2677.4	2673.2	2676.1	2678.6	2674.8
9°	2619.0	2621.1	2628.3	2631.9	2629.6	2645.9	2663.9	2658.5	2660.6	2663.9	2661.6
9.5°	2601.5	2603.8	2612.1	2615.7	2612.8	2629.9	2650.0	2642.8	2644.8	2648.4	2646.9
10°	2584.7	2585.7	2594.5	2598.6	2595.5	2613.9	2635.0	2626.5	2627.8	2631.9	2630.4
10.5°	2566.1	2567.4	2576.7	2580.3	2577.5	2597.3	2618.8	2608.7	2610.0	2614.6	2613.6
11°	2547.8	2549.1	2557.9	2562.0	2559.4	2578.8	2601.0	2590.6	2590.9	2597.1	2596.3
11.5°	2528.7	2530.2	2537.5	2542.4	2540.1	2560.7	2583.9	2571.0	2571.0	2578.0	2577.7
12°	2510.4	2510.9	2516.8	2522.0	2521.0	2542.1	2565.1	2551.4	2551.9	2557.6	2557.1
12.5°	2491.3	2491.3	2494.1	2502.1	2502.1	2523.0	2544.7	2530.8	2533.9	2538.0	2537.7
13°	2471.1	2471.7	2472.7	2481.2	2483.3	2503.9	2524.1	2509.9	2515.3	2518.4	2515.3
13.5°	2451.0	2451.0	2450.5	2459.8	2463.1	2484.6	2503.9	2489.5	2495.7	2497.2	2492.3
14°	2430.6	2430.1	2427.3	2438.9	2442.8	2464.7	2480.2	2468.8	2475.8	2476.6	2468.3
14.5°	2409.7	2408.9	2404.0	2417.2	2422.4	2444.6	2457.5	2447.9	2455.9	2456.2	2444.6
15°	2388.8	2387.8	2381.3	2396.0	2401.5	2423.9	2434.5	2427.0	2435.8	2435.3	2418.5
15.5°	2367.7	2365.8	2356.6	2373.8	2380.3	2402.8	2410.2	2404.8	2414.4	2413.6	2392.9
16°	2344.7	2342.4	2332.8	2350.6	2358.4	2381.1	2384.9	2383.1	2393.7	2392.4	2366.9
16.5°	2322.0	2320.9	2308.3	2327.4	2335.9	2360.2	2360.4	2360.7	2371.5	2370.0	2342.1
17°	2298.2	2298.0	2284.0	2304.2	2312.7	2336.7	2335.1	2338.0	2348.6	2347.3	2315.8
17.5°	2273.2	2274.0	2259.3	2280.4	2288.2	2314.0	2310.1	2314.2	2324.3	2324.6	2290.5
18°	2246.1	2247.4	2234.5	2256.4	2262.9	2290.2	2285.6	2290.0	2299.3	2301.1	2264.4
18.5°	2218.0	2222.9	2209.7	2230.9	2237.6	2266.2	2261.1	2264.7	2273.7	2275.8	2239.4
19°	2189.3	2195.0	2184.4	2204.8	2211.8	2239.9	2236.0	2239.1	2248.4	2250.2	2214.4
19.5°	2162.2	2166.3	2158.6	2177.7	2185.4	2215.1	2211.3	2213.6	2222.1	2223.6	2189.1
20°	2134.1	2138.0	2133.6	2151.4	2158.6	2188.0	2186.0	2186.0	2195.0	2197.1	2163.3
20.5°	2106.7	2109.8	2108.3	2123.8	2131.5	2161.2	2160.4	2158.6	2167.6	2169.7	2137.2
21°	2079.9	2081.4	2082.2	2096.2	2103.9	2133.6	2134.6	2131.0	2140.3	2142.1	2110.3



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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°	1996.0	1997.3	2002.0	2011.2	2025.7	2049.2	2056.4	2045.3	2058.5	2056.9	2031.1
23°	1963.5	1969.4	1973.8	1982.6	1999.1	2020.8	2029.8	2016.1	2031.9	2028.3	2003.5
23.5°	1929.2	1939.8	1944.7	1951.9	1971.5	1993.9	2003.0	1987.0	2004.3	1999.4	1977.2
24°	1896.4	1907.8	1915.5	1924.5	1943.9	1964.0	1975.4	1957.8	1975.4	1970.2	1948.0
24.5°	1868.0	1874.2	1885.3	1897.2	1916.5	1934.3	1946.5	1928.9	1947.0	1941.0	1918.6
25°	1839.6	1839.1	1854.8	1869.3	1888.9	1904.7	1917.6	1899.7	1918.6	1911.6	1889.4
25.5°	1811.5	1807.1	1824.1	1837.6	1861.3	1874.7	1888.7	1870.6	1890.5	1882.5	1860.3
26°	1781.8	1777.9	1793.7	1805.8	1830.1	1845.0	1859.7	1841.7	1862.1	1853.3	1832.4
26.5°	1744.9	1749.8	1763.2	1773.5	1797.3	1817.9	1831.6	1808.1	1828.8	1819.7	1801.2
27°	1709.3	1720.9	1733.3	1745.2	1765.5	1790.3	1800.4	1778.2	1796.8	1791.4	1769.4
27.5°	1672.6	1691.0	1702.8	1718.1	1730.2	1760.6	1769.4	1750.3	1762.2	1760.6	1737.7
28°	1628.5	1653.0	1673.2	1690.7	1694.8	1726.1	1736.9	1720.1	1726.3	1726.3	1704.6
28.5°	1583.1	1616.9	1641.9	1657.7	1656.9	1693.0	1705.7	1687.1	1687.6	1694.3	1672.6
29°	1538.7	1580.8	1611.0	1625.4	1618.7	1658.7	1674.2	1655.9	1648.6	1659.2	1640.4
29.5°	1494.8	1538.9	1578.2	1593.4	1578.7	1622.6	1643.0	1621.5	1607.1	1622.6	1608.4
30°	1450.7	1495.1	1545.7	1559.6	1536.9	1585.1	1612.8	1585.9	1565.8	1585.4	1576.1
30.5°	1406.6	1450.9	1511.9	1523.7	1492.5	1545.9	1581.5	1549.8	1521.9	1546.7	1544.9
31°	1362.7	1407.6	1479.8	1486.8	1448.4	1507.2	1549.0	1512.4	1475.7	1507.7	1514.2
31.5°	1319.6	1364.5	1448.4	1449.4	1402.7	1466.7	1516.2	1474.2	1429.8	1466.4	1483.5
32°	1277.0	1322.7	1420.2	1410.9	1356.7	1425.4	1483.2	1433.9	1384.1	1425.1	1451.2
32.5°	1233.6	1280.1	1391.3	1370.7	1310.0	1382.8	1453.8	1392.6	1336.6	1382.3	1417.1
33°	1189.0	1238.3	1362.9	1330.2	1265.4	1338.2	1424.9	1350.8	1291.2	1339.2	1385.4
33.5°	1144.9	1197.5	1333.5	1288.1	1219.7	1294.0	1396.0	1308.0	1243.4	1294.0	1355.2
34°	1100.7	1156.0	1302.8	1245.5	1176.3	1249.9	1365.0	1263.8	1199.6	1248.1	1324.2
34.5°	1055.3	1114.1	1270.5	1202.4	1133.0	1206.0	1331.7	1219.7	1155.2	1203.7	1293.3
35°	1009.6	1072.1	1242.2	1159.6	1091.9	1162.9	1303.6	1177.4	1112.9	1161.9	1265.6
35.5°	964.5	1029.2	1209.6	1116.5	1049.9	1120.9	1276.0	1134.3	1068.2	1117.5	1237.8
36°	918.5	986.9	1170.9	1074.4	1008.8	1079.6	1241.9	1092.2	1026.4	1075.4	1204.0
36.5°	878.0	943.8	1133.0	1033.9	968.3	1039.0	1208.6	1050.9	984.3	1032.8	1167.6
37°	837.5	903.8	1096.1	993.6	926.5	999.0	1176.9	1009.9	943.6	994.4	1134.5
37.5°	797.0	863.8	1056.6	953.9	884.2	959.8	1141.2	970.4	901.0	953.6	1096.6
38°	756.2	823.8	1017.4	912.3	843.2	921.1	1105.6	931.4	857.9	915.2	1056.9
38.5°	717.5	783.5	978.4	875.7	802.1	882.1	1070.3	893.2	816.3	876.5	1016.3
39°	679.5	743.8	939.9	838.8	761.9	845.5	1031.6	855.0	776.8	838.3	975.3
39.5°	641.1	706.6	901.2	802.1	722.1	806.3	992.8	816.1	736.1	799.5	933.2
40°	604.2	670.5	862.8	765.5	683.4	767.8	954.4	778.4	696.8	762.1	892.5
40.5°	566.5	633.9	824.3	728.8	646.0	729.6	914.6	741.0	658.1	724.4	851.7
41°	530.1	599.5	785.9	692.7	609.6	693.5	874.4	703.8	622.2	687.8	811.9
41.5°	494.5	564.4	747.4	657.3	574.2	656.8	833.4	667.1	585.6	650.6	772.7
42°	459.9	530.9	709.0	621.7	538.6	622.0	792.8	632.0	551.0	616.0	734.2
42.5°	426.6	497.8	671.3	588.9	505.3	586.9	753.9	598.0	516.4	582.5	696.6
43°	395.4	465.1	633.3	556.4	471.3	555.4	715.1	564.9	481.8	548.9	660.7
43.5°	365.2	432.5	595.7	524.9	438.2	521.8	678.0	532.9	449.1	516.7	625.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	282.1	345.3	492.2	435.6	345.1	430.2	573.2	441.6	355.6	426.4	523.7
45.5°	256.3	318.0	460.9	407.5	316.7	400.5	540.2	412.9	327.0	398.0	491.9
46°	232.3	293.2	430.0	379.4	289.6	372.2	508.7	385.3	299.6	370.1	460.4
46.5°	209.3	269.2	401.3	352.5	264.0	344.8	477.7	357.4	273.6	343.0	429.7
47°	187.4	245.2	373.2	326.0	241.3	318.5	448.5	331.1	251.4	317.4	400.5
47.5°	167.2	222.7	346.3	301.2	218.6	292.4	418.9	306.3	229.2	292.7	372.4
48°	148.7	201.3	320.0	277.4	196.1	268.7	391.3	281.6	207.0	268.9	345.6
48.5°	131.6	181.2	295.2	254.5	173.7	247.8	363.6	258.6	185.0	248.5	320.0
49°	116.4	161.8	271.2	233.3	154.3	226.6	337.8	238.2	162.9	228.1	295.8
49.5°	102.5	144.5	248.5	213.4	136.8	205.7	311.8	217.8	144.8	208.0	272.0
50°	90.1	128.5	226.1	194.1	120.0	184.8	287.5	197.4	127.8	187.6	251.9
50.5°	80.8	113.6	206.2	174.5	104.8	163.9	264.3	177.0	112.3	167.2	232.0
51°	71.5	99.9	186.6	156.9	91.1	146.6	243.9	158.7	98.3	150.7	211.9
51.5°	62.2	88.0	168.8	140.1	78.5	130.6	223.2	141.9	85.2	134.7	191.8
52°	52.9	79.0	151.8	124.7	67.1	115.9	202.6	125.9	72.8	119.8	171.9
52.5°	45.7	69.9	136.5	109.9	56.5	101.4	181.9	111.5	61.7	105.6	155.1
53°	39.0	60.6	121.0	96.0	47.2	88.3	164.4	97.3	51.9	92.4	139.4
53.5°	32.5	51.9	108.4	85.2	38.7	76.4	148.1	84.7	42.8	80.0	124.9
54°	26.6	44.9	95.5	74.3	32.3	65.3	132.1	72.5	35.9	68.7	111.0
54.5°	20.4	38.5	85.7	63.7	25.8	55.2	117.2	61.9	28.9	58.8	98.3
55°	15.0	32.5	76.4	52.9	19.4	46.5	103.7	51.9	21.9	49.3	86.7
55.5°	10.8	26.6	66.8	42.3	13.2	37.7	90.8	42.8	15.0	40.8	76.1
56°	9.8	20.6	57.3	34.3	6.7	31.5	79.0	35.9	8.0	34.1	66.6
56.5°	8.8	15.5	47.7	27.1	6.2	25.0	67.9	29.2	5.7	27.4	57.6
57°	7.7	10.8	40.3	20.6	5.9	18.8	58.1	22.5	5.4	20.9	49.6
57.5°	6.7	9.5	34.3	14.2	5.7	12.6	49.0	15.7	5.2	14.2	42.6
58°	5.7	8.5	28.9	9.3	5.4	6.2	41.0	9.0	4.9	7.5	36.4
58.5°	5.4	7.5	24.3	8.3	5.2	5.4	34.3	5.4	4.6	5.4	30.7
59°	5.2	6.5	20.1	7.2	4.9	5.2	29.9	4.9	4.4	4.9	27.1
59.5°	5.2	5.2	16.8	6.2	4.6	4.9	25.6	4.6	4.1	4.9	23.5
60°	4.9	4.9	14.2	4.9	4.6	4.6	21.4	4.4	4.1	4.6	19.6
60.5°	4.6	4.9	11.9	4.9	4.4	4.6	17.0	4.4	3.9	4.4	16.0
61°	4.4	4.6	9.8	4.6	4.1	4.4	12.6	4.1	3.9	4.1	12.4
61.5°	4.4	4.4	8.5	4.4	4.1	4.1	10.3	3.9	3.6	4.1	10.1
62°	4.1	4.4	7.2	4.1	3.9	4.1	8.5	3.9	3.4	3.9	8.5
62.5°	3.9	4.1	5.9	4.1	3.9	3.9	7.0	3.6	3.4	3.9	7.0
63°	3.9	3.9	4.6	3.9	3.6	3.6	5.7	3.6	3.1	3.6	5.7
63.5°	3.6	3.9	4.1	3.9	3.4	3.6	4.6	3.4	3.1	3.4	4.9
64°	3.6	3.6	3.9	3.6	3.4	3.4	3.9	3.4	3.1	3.4	4.1
64.5°	3.4	3.6	3.6	3.6	3.1	3.4	3.6	3.1	2.8	3.1	3.6
65°	3.4	3.4	3.6	3.4	3.1	3.1	3.4	3.1	2.8	3.1	3.6
65.5°	3.1	3.4	3.4	3.4	3.1	3.1	3.1	2.8	2.6	3.1	3.4
66°	3.1	3.1	3.1	3.1	2.8	2.8	3.1	2.8	2.6	2.8	3.1



TEST NUMBER: P776004

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQC-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	2.6	2.8	2.8	2.8	2.6	2.6	2.8	2.6	2.3	2.6	2.8
68°	2.6	2.6	2.8	2.6	2.3	2.6	2.6	2.3	2.1	2.6	2.6
68.5°	2.3	2.6	2.6	2.6	2.3	2.3	2.6	2.3	2.1	2.3	2.6
69°	2.3	2.3	2.6	2.3	2.3	2.3	2.3	2.1	2.1	2.3	2.6
69.5°	2.3	2.3	2.3	2.3	2.1	2.3	2.3	2.1	1.8	2.1	2.3
70°	2.1	2.3	2.3	2.3	2.1	2.1	2.3	2.1	1.8	2.1	2.3
70.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.8	1.8	2.1	2.1
71°	1.8	2.1	2.1	2.1	1.8	2.1	2.1	1.8	1.8	1.8	2.1
71.5°	1.8	2.1	2.1	2.1	1.8	1.8	1.8	1.8	1.5	1.8	2.1
72°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.5	1.5	1.8	1.8
72.5°	1.5	1.8	1.8	1.8	1.5	1.8	1.8	1.5	1.5	1.5	1.8
73°	1.5	1.5	1.8	1.8	1.5	1.5	1.5	1.5	1.3	1.5	1.8
73.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.3	1.5	1.5
74°	1.3	1.5	1.5	1.5	1.3	1.5	1.5	1.3	1.3	1.5	1.5
74.5°	1.3	1.3	1.5	1.5	1.3	1.3	1.5	1.3	1.3	1.3	1.5
75°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.0	1.3	1.3
75.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.3	1.3
76°	1.0	1.3	1.3	1.3	1.0	1.3	1.3	1.0	1.0	1.0	1.3
76.5°	1.0	1.0	1.3	1.3	1.0	1.0	1.3	1.0	1.0	1.0	1.3
77°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.8	1.0	1.0
78°	0.8	0.8	1.0	1.0	0.8	1.0	1.0	0.8	0.8	0.8	1.0
78.5°	0.8	0.8	1.0	0.8	0.8	0.8	1.0	0.8	0.8	0.8	1.0
79°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.8	0.8
79.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.8	0.8
80°	0.5	0.5	0.8	0.8	0.5	0.8	0.8	0.5	0.5	0.5	0.8
80.5°	0.5	0.5	0.8	0.8	0.5	0.8	0.8	0.5	0.5	0.5	0.8
81°	0.5	0.5	0.8	0.5	0.5	0.5	0.8	0.5	0.5	0.5	0.5
81.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.5	0.5	0.5
82°	0.5	0.3	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5
82.5°	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5
83°	0.3	0.3	0.5	0.5	0.3	0.5	0.5	0.3	0.3	0.3	0.5
83.5°	0.3	0.3	0.5	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3
84°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
84.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3
85°	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
85.5°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
86°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
86.5°	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.3
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: P776004
CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQC-2500lm-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: P776004

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2777.2	2777.2	2777.2	2777.2	2777.2	2777.2
0.5°	2776.7	2776.7	2775.2	2773.6	2775.4	2776.7
1°	2775.7	2775.4	2773.1	2771.0	2773.4	2773.9
1.5°	2773.9	2773.6	2770.8	2767.9	2770.0	2771.0
2°	2771.6	2770.8	2767.4	2763.6	2766.4	2766.7
2.5°	2767.9	2766.9	2762.8	2758.9	2761.7	2761.7
3°	2763.8	2762.5	2757.4	2752.7	2756.8	2756.8
3.5°	2759.2	2757.1	2751.4	2746.8	2751.2	2750.6
4°	2753.5	2751.4	2744.7	2739.3	2744.5	2743.9
4.5°	2746.8	2743.9	2737.0	2731.8	2736.7	2735.7
5°	2739.6	2735.9	2728.7	2722.8	2728.5	2726.6
5.5°	2731.0	2727.2	2719.2	2713.2	2718.6	2716.6
6°	2721.7	2717.4	2708.8	2703.4	2708.3	2705.5
6.5°	2711.2	2706.3	2697.7	2691.5	2696.7	2693.9
7°	2699.8	2694.1	2685.1	2678.9	2684.3	2680.7
7.5°	2686.9	2681.2	2672.2	2665.7	2671.4	2667.3
8°	2673.7	2666.8	2657.2	2651.3	2657.2	2652.6
8.5°	2659.0	2651.3	2641.7	2636.1	2642.8	2636.8
9°	2643.3	2634.0	2625.2	2620.1	2626.3	2619.0
9.5°	2626.5	2616.4	2607.7	2603.3	2609.2	2601.5
10°	2609.0	2598.4	2588.8	2583.9	2591.4	2584.7
10.5°	2590.9	2579.0	2569.2	2566.9	2573.6	2566.1
11°	2571.8	2559.9	2549.9	2546.8	2555.3	2547.8
11.5°	2552.7	2539.3	2529.5	2525.3	2536.2	2528.7
12°	2532.1	2518.9	2508.3	2502.6	2516.3	2510.4
12.5°	2511.9	2499.0	2486.9	2480.7	2496.4	2491.3
13°	2491.3	2478.6	2465.2	2457.2	2476.6	2471.1
13.5°	2470.4	2458.5	2444.0	2433.5	2455.9	2451.0
14°	2449.2	2437.9	2421.9	2408.4	2434.5	2430.6
14.5°	2427.8	2417.5	2400.7	2384.2	2413.3	2409.7
15°	2406.6	2395.3	2378.2	2358.9	2391.4	2388.8
15.5°	2384.9	2373.3	2355.3	2333.8	2368.7	2367.7
16°	2362.5	2351.4	2331.8	2308.6	2346.2	2344.7
16.5°	2339.5	2328.7	2308.8	2283.5	2323.3	2322.0
17°	2315.5	2304.7	2284.8	2258.0	2299.3	2298.2
17.5°	2292.3	2280.9	2260.3	2232.9	2275.3	2273.2
18°	2267.5	2254.9	2234.7	2207.6	2250.5	2246.1
18.5°	2242.7	2228.0	2209.2	2181.8	2224.7	2218.0
19°	2216.7	2201.7	2182.4	2156.3	2197.3	2189.3
19.5°	2189.6	2174.3	2155.0	2130.5	2168.9	2162.2
20°	2162.5	2146.0	2127.6	2103.1	2140.0	2134.1
20.5°	2134.1	2118.3	2098.7	2076.8	2111.1	2106.7
21°	2106.0	2089.7	2070.3	2050.0	2081.2	2079.9



TEST NUMBER: P776004

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2019.5	2004.3	1981.3	1968.7	1992.9	1996.0
23°	1989.0	1975.9	1951.1	1940.8	1963.5	1963.5
23.5°	1959.4	1946.7	1920.9	1912.4	1934.8	1929.2
24°	1929.4	1913.9	1891.2	1882.7	1904.4	1896.4
24.5°	1899.5	1879.4	1860.8	1851.5	1872.1	1868.0
25°	1869.8	1846.8	1829.0	1820.5	1838.1	1839.6
25.5°	1839.9	1818.7	1796.0	1789.5	1803.7	1811.5
26°	1805.3	1791.1	1761.2	1758.1	1768.9	1781.8
26.5°	1770.4	1756.8	1728.4	1725.3	1738.7	1744.9
27°	1737.9	1719.6	1699.2	1693.8	1709.3	1709.3
27.5°	1707.7	1685.8	1669.8	1660.8	1680.6	1672.6
28°	1678.6	1643.0	1635.2	1628.5	1650.4	1628.5
28.5°	1645.3	1599.3	1597.5	1596.8	1616.4	1583.1
29°	1606.6	1554.7	1563.7	1566.0	1579.5	1538.7
29.5°	1572.5	1510.8	1522.7	1535.1	1545.4	1494.8
30°	1530.7	1467.2	1479.6	1504.1	1505.4	1450.7
30.5°	1489.7	1424.4	1435.5	1472.1	1464.1	1406.6
31°	1445.3	1381.3	1392.6	1439.3	1421.5	1362.7
31.5°	1402.7	1338.2	1350.3	1403.5	1378.4	1319.6
32°	1361.1	1296.1	1308.7	1368.4	1336.1	1277.0
32.5°	1320.4	1254.3	1266.4	1335.1	1294.3	1233.6
33°	1277.5	1211.7	1226.9	1304.9	1254.3	1189.0
33.5°	1238.0	1167.8	1186.7	1279.1	1213.5	1144.9
34°	1197.0	1123.2	1146.9	1254.0	1173.2	1100.7
34.5°	1158.3	1078.3	1105.4	1221.0	1132.2	1055.3
35°	1116.5	1033.4	1065.6	1190.5	1092.7	1009.6
35.5°	1076.7	989.2	1023.8	1159.3	1052.2	964.5
36°	1034.9	945.4	982.8	1119.0	1012.5	918.5
36.5°	995.4	904.3	941.0	1081.1	971.4	878.0
37°	952.6	863.3	901.5	1041.1	931.9	837.5
37.5°	911.0	822.5	862.0	998.0	892.7	797.0
38°	869.7	781.5	822.8	954.6	853.2	756.2
38.5°	829.7	740.7	783.5	910.8	814.0	717.5
39°	790.5	703.3	744.3	872.1	774.8	679.5
39.5°	752.8	666.1	707.4	833.6	735.5	641.1
40°	715.4	628.2	672.8	794.9	699.9	604.2
40.5°	679.8	590.2	637.5	756.4	664.3	566.5
41°	645.2	554.9	603.7	720.1	630.2	530.1
41.5°	611.1	516.9	569.8	684.7	595.7	494.5
42°	577.6	483.9	536.6	650.1	562.9	459.9
42.5°	544.0	450.4	503.8	616.8	530.4	426.6
43°	511.3	419.1	471.3	583.3	499.4	395.4
43.5°	479.5	386.9	440.0	550.7	467.9	365.2



TEST NUMBER: P776004

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	389.2	303.0	353.6	456.3	378.6	282.1
45.5°	361.3	276.1	327.2	427.1	351.5	256.3
46°	334.7	251.9	302.2	398.2	324.9	232.3
46.5°	309.2	228.1	278.0	371.6	300.2	209.3
47°	284.7	205.4	254.7	345.6	275.9	187.4
47.5°	261.4	183.8	231.8	321.1	252.1	167.2
48°	240.3	165.2	210.3	297.1	230.5	148.7
48.5°	219.1	146.8	190.2	275.4	209.0	131.6
49°	197.9	130.6	171.1	254.2	188.9	116.4
49.5°	177.0	115.9	153.6	234.6	169.3	102.5
50°	158.7	102.2	136.8	214.7	152.8	90.1
50.5°	141.7	89.8	121.6	196.7	136.5	80.8
51°	126.7	80.8	107.9	178.9	121.0	71.5
51.5°	112.3	71.7	95.7	162.9	106.6	62.2
52°	98.8	63.0	86.7	147.6	94.5	52.9
52.5°	87.0	53.9	77.7	132.9	85.2	45.7
53°	76.4	46.7	68.7	119.0	75.9	39.0
53.5°	67.1	40.0	59.6	106.6	66.6	32.5
54°	58.6	33.6	50.6	95.0	57.3	26.6
54.5°	51.1	27.6	44.1	85.7	48.0	20.4
55°	44.4	21.7	37.7	76.7	41.3	15.0
55.5°	37.9	16.0	31.7	67.4	35.4	10.8
56°	33.0	11.9	25.6	58.3	29.4	9.8
56.5°	28.1	8.5	20.1	49.0	24.0	8.8
57°	23.2	8.0	14.7	42.1	18.8	7.7
57.5°	18.3	7.5	10.6	36.1	13.9	6.7
58°	13.4	7.2	9.5	30.7	9.8	5.7
58.5°	8.5	6.7	8.5	25.8	8.8	5.4
59°	6.7	6.5	7.7	21.7	7.7	5.2
59.5°	6.2	6.2	6.7	18.1	6.5	5.2
60°	5.9	5.7	5.9	15.0	5.4	4.9
60.5°	5.7	5.4	5.7	12.4	5.2	4.6
61°	5.4	5.2	5.4	10.3	4.9	4.4
61.5°	5.2	4.9	5.2	9.0	4.6	4.4
62°	4.9	4.9	4.9	7.7	4.4	4.1
62.5°	4.6	4.6	4.6	6.5	4.4	3.9
63°	4.4	4.4	4.4	5.2	4.1	3.9
63.5°	4.1	4.1	4.1	4.4	3.9	3.6
64°	4.1	3.9	4.1	3.9	3.9	3.6
64.5°	3.9	3.9	3.9	3.9	3.6	3.4
65°	3.6	3.6	3.6	3.6	3.6	3.4
65.5°	3.6	3.6	3.6	3.6	3.4	3.1
66°	3.4	3.4	3.4	3.4	3.4	3.1



TEST NUMBER: P776004

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQC-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	3.1	2.8	3.1	2.8	2.8	2.6
68°	2.8	2.8	2.8	2.8	2.8	2.6
68.5°	2.8	2.6	2.8	2.6	2.6	2.3
69°	2.6	2.6	2.6	2.6	2.6	2.3
69.5°	2.6	2.6	2.6	2.6	2.3	2.3
70°	2.3	2.3	2.3	2.3	2.3	2.1
70.5°	2.3	2.3	2.3	2.3	2.3	2.1
71°	2.1	2.1	2.1	2.1	2.1	1.8
71.5°	2.1	2.1	2.1	2.1	2.1	1.8
72°	2.1	2.1	2.1	2.1	1.8	1.8
72.5°	1.8	1.8	1.8	1.8	1.8	1.5
73°	1.8	1.8	1.8	1.8	1.8	1.5
73.5°	1.8	1.8	1.8	1.8	1.5	1.5
74°	1.5	1.5	1.5	1.5	1.5	1.3
74.5°	1.5	1.5	1.5	1.5	1.5	1.3
75°	1.5	1.5	1.5	1.5	1.3	1.3
75.5°	1.3	1.3	1.3	1.3	1.3	1.3
76°	1.3	1.3	1.3	1.3	1.3	1.0
76.5°	1.3	1.3	1.3	1.3	1.3	1.0
77°	1.3	1.0	1.3	1.3	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0
78°	1.0	1.0	1.0	1.0	1.0	0.8
78.5°	1.0	1.0	1.0	1.0	0.8	0.8
79°	0.8	0.8	1.0	1.0	0.8	0.8
79.5°	0.8	0.8	0.8	0.8	0.8	0.8
80°	0.8	0.8	0.8	0.8	0.8	0.5
80.5°	0.8	0.8	0.8	0.8	0.5	0.5
81°	0.8	0.8	0.8	0.8	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°	0.5	0.5	0.5	0.5	0.3	0.3
83°	0.5	0.5	0.5	0.5	0.3	0.3
83.5°	0.5	0.5	0.5	0.5	0.3	0.3
84°	0.3	0.3	0.3	0.3	0.3	0.3
84.5°	0.3	0.3	0.3	0.3	0.3	0.3
85°	0.3	0.3	0.3	0.3	0.0	0.3
85.5°	0.3	0.3	0.3	0.3	0.0	0.0
86°	0.3	0.3	0.3	0.3	0.0	0.0
86.5°	0.3	0.3	0.3	0.3	0.0	0.0
87°	0.0	0.3	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: P776004

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQC-2500lm-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
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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°	2053.6	2053.3	2055.1	2067.8	2076.8	2106.2	2108.8	2102.9	2112.9	2114.0	2084.5
22°	2026.0	2024.1	2028.8	2039.9	2051.5	2077.6	2082.2	2075.5	2085.8	2085.3	2058.0



44°	336.0	402.4	559.5	493.7	406.2	490.9	641.1	500.9	417.3	485.2	591.0
44.5°	307.9	373.2	524.7	464.8	374.7	459.9	606.2	471.0	386.4	455.5	556.7



66.5°	2.8	3.1	3.1	3.1	2.8	2.8	2.8	2.6	2.6	2.8	3.1
67°	2.8	2.8	2.8	2.8	2.6	2.8	2.8	2.6	2.3	2.6	2.8



89°	0.0	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	0.0

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21.5°	2077.6	2060.3	2040.9	2022.6	2052.0	2053.6
22°	2048.4	2032.4	2011.5	1996.0	2022.6	2026.0



44°	448.5	358.2	410.1	518.2	436.4	336.0
44.5°	417.8	330.3	381.7	487.3	406.5	307.9

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66.5°	3.4	3.1	3.4	3.1	3.1	2.8
67°	3.1	3.1	3.1	3.1	3.1	2.8

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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)