

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: P776374

Luminaire Tested: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-5000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776374
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B061)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS3040CSD-HCD62TRH-HCD62TRLWW-4000lm-5000K
Description: 6 INCH ROUND NARROW LENSED WALLWASH KIT
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4662.9 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.09 / 1.15
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

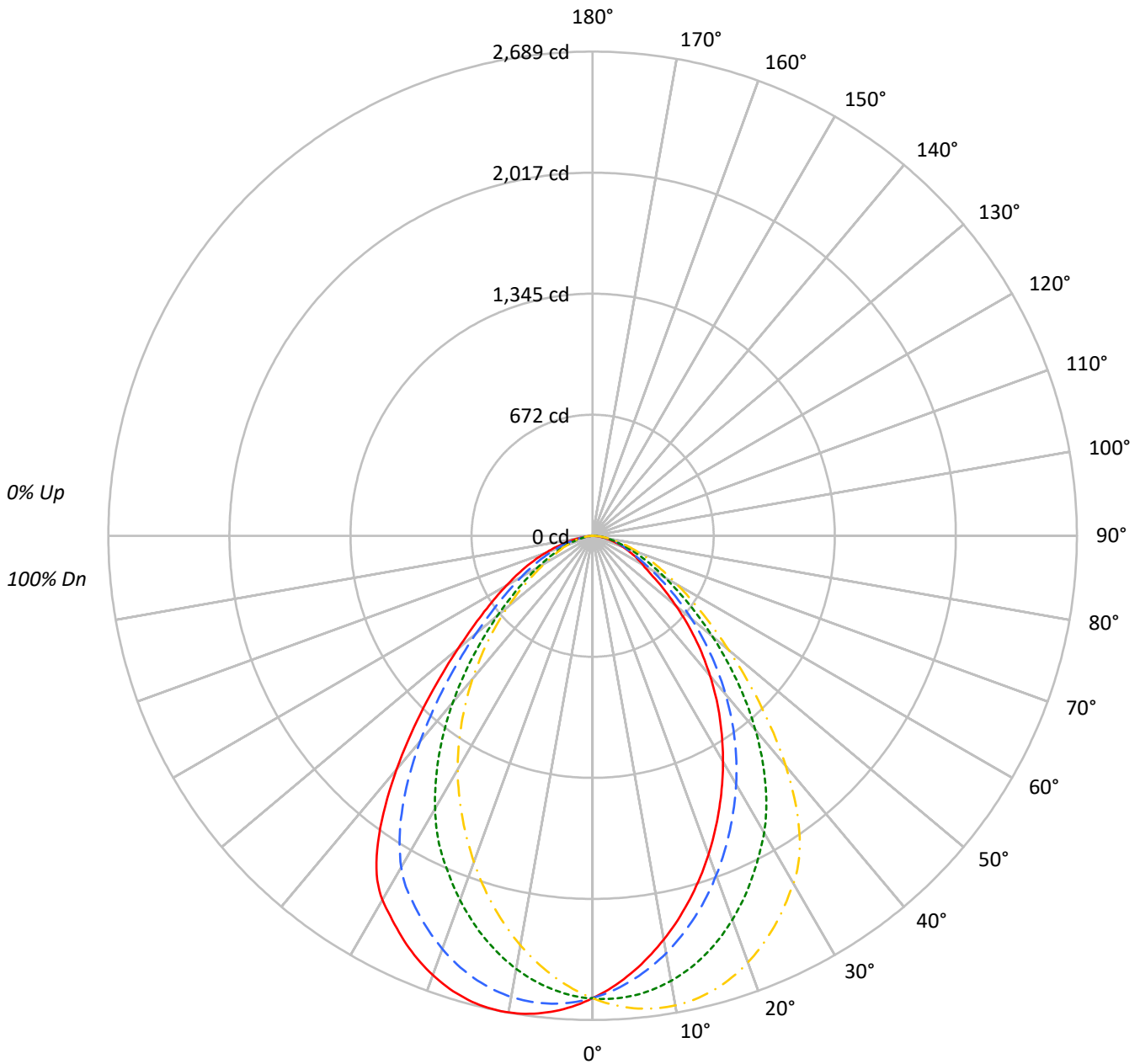
Input Watts (W): 38.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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				100															
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88															
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	81	79	77				77															
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	67				67															
4	88	78	70	64	86	76	69	64	74	68	63	72	67	62	70	65	61	60				60															
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53				53															
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	48				48															
7	71	59	51	46	70	58	51	46	57	50	45	55	49	45	54	49	45	43				43															
8	67	54	47	41	65	54	46	41	53	46	41	51	45	41	50	45	41	39				39															
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				36															
10	59	47	40	35	58	46	39	35	45	39	35	44	39	34	44	38	34	33				33															

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	140795	140795	140795	140795
5°	134267	141107	146059	139192
10°	126734	139732	149658	135975
15°	118536	136777	151448	131346
20°	109793	132364	151452	125591
25°	100754	126775	149954	119106
30°	91615	120531	147795	110770
35°	82295	111882	138979	99515
40°	72607	100617	121105	86362
45°	62239	87505	101080	72101
50°	51478	73874	83358	58702
55°	41509	61293	70162	47492
60°	35293	50851	60620	38604
65°	32040	42806	53002	31352
70°	28450	35920	44831	25036
75°	24951	30310	35605	19656
80°	20647	26203	24025	14711
85°	12831	25223	8491	8240

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 157.5°
 Vertical Angle: 45°
 Luminance: 103236 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.9	5.2
10°-20°	666.0	14.3
20°-30°	943.3	20.2
30°-40°	1005.0	21.6
40°-50°	806.6	17.3
50°-60°	523.7	11.2
60°-70°	303.7	6.5
70°-80°	142.8	3.1
80°-90°	31.1	0.7
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°	1850.2	39.7
0°-40°	2855.1	61.2
0°-60°	4185.4	89.8
0°-90°	4662.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4662.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2568	2568	2568	2568	2568	
5°	2440	2564	2654	2529	2440	228
15°	2089	2410	2668	2314	2089	585
25°	1666	2096	2479	1969	1666	765
35°	1230	1672	2077	1487	1230	767
45°	803	1129	1304	930	803	619
55°	434	641	734	497	434	395
65°	247	330	409	242	247	245
75°	118	143	168	93	118	126
85°	20	40	14	13	20	27
90°	0	6	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°	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3
0.5°	2557.6	2557.6	2560.5	2565.0	2572.4	2574.8	2577.3	2578.5	2579.7	2576.5	2573.6
1°	2546.2	2547.8	2553.6	2561.7	2573.2	2579.7	2585.5	2588.7	2589.5	2585.5	2579.3
1.5°	2534.3	2537.6	2545.4	2558.1	2573.6	2584.6	2593.2	2598.1	2599.4	2593.6	2584.6
2°	2522.1	2526.6	2537.6	2553.6	2574.0	2588.7	2600.6	2607.1	2608.4	2601.4	2589.5
2.5°	2509.0	2515.1	2529.0	2548.6	2573.2	2592.0	2607.5	2615.7	2617.4	2608.8	2594.0
3°	2495.9	2503.7	2520.0	2543.7	2572.4	2595.3	2613.7	2623.9	2625.5	2615.7	2597.7
3.5°	2482.8	2491.4	2510.6	2538.0	2571.1	2597.7	2619.4	2631.7	2633.7	2621.9	2601.4
4°	2468.9	2479.1	2500.8	2531.9	2569.5	2600.2	2624.7	2639.0	2640.7	2628.0	2603.9
4.5°	2454.6	2466.4	2490.6	2525.3	2567.1	2601.8	2629.6	2645.6	2647.6	2633.3	2606.7
5°	2439.9	2453.0	2479.9	2518.0	2564.2	2602.6	2634.1	2652.1	2654.2	2638.2	2608.4
5.5°	2425.1	2439.5	2468.9	2511.0	2560.9	2603.4	2637.8	2657.8	2659.9	2642.7	2610.0
6°	2409.6	2425.6	2457.9	2502.8	2557.2	2603.4	2641.1	2662.7	2665.2	2646.4	2610.8
6.5°	2394.1	2411.2	2446.0	2494.7	2552.7	2603.0	2643.9	2667.2	2670.1	2650.1	2611.2
7°	2378.1	2396.5	2433.7	2485.7	2548.2	2602.2	2646.0	2671.3	2674.2	2652.5	2611.2
7.5°	2362.2	2381.4	2421.5	2476.3	2542.9	2601.0	2647.6	2675.0	2677.9	2655.0	2610.8
8°	2345.8	2366.3	2408.4	2466.9	2537.2	2599.0	2648.8	2677.9	2681.2	2656.6	2610.0
8.5°	2328.6	2350.7	2394.9	2457.0	2531.1	2596.5	2649.7	2680.7	2683.6	2657.8	2608.4
9°	2311.9	2334.4	2381.4	2446.4	2524.5	2593.6	2649.7	2682.4	2686.1	2658.7	2606.3
9.5°	2294.3	2318.0	2367.5	2435.4	2517.6	2590.4	2649.3	2684.0	2687.3	2659.1	2603.9
10°	2276.7	2302.0	2353.2	2423.9	2510.2	2586.3	2648.4	2684.8	2688.5	2658.7	2601.0
10.5°	2258.7	2285.7	2338.4	2412.5	2502.0	2582.2	2647.2	2685.2	2688.9	2657.4	2597.3
11°	2241.1	2268.5	2323.3	2400.2	2493.8	2577.3	2645.2	2684.8	2688.9	2656.2	2593.2
11.5°	2222.3	2250.9	2307.8	2387.9	2484.4	2572.0	2642.7	2684.0	2688.1	2654.2	2588.3
12°	2203.9	2233.7	2292.2	2374.8	2475.4	2565.8	2639.8	2682.8	2686.9	2651.7	2583.4
12.5°	2185.1	2215.3	2276.3	2361.3	2466.0	2559.7	2636.2	2680.7	2685.2	2648.8	2578.1
13°	2166.3	2198.2	2260.3	2347.8	2455.8	2552.7	2632.1	2678.3	2682.8	2645.2	2572.0
13.5°	2146.6	2179.8	2243.6	2334.4	2444.8	2545.4	2627.2	2675.4	2679.9	2641.5	2565.4
14°	2127.8	2161.4	2226.8	2320.0	2433.7	2537.6	2622.3	2671.7	2676.7	2637.0	2558.5
14.5°	2107.8	2142.1	2210.0	2304.9	2422.3	2529.0	2616.5	2667.7	2673.0	2631.7	2551.1
15°	2088.6	2123.7	2192.4	2290.2	2410.0	2520.0	2610.4	2663.2	2668.5	2625.9	2543.3
15.5°	2067.7	2104.1	2174.4	2274.2	2398.2	2511.0	2603.9	2657.8	2663.2	2619.8	2534.7
16°	2048.1	2084.9	2157.3	2259.1	2385.1	2501.2	2596.5	2652.1	2657.8	2613.3	2526.2
16.5°	2028.0	2065.3	2139.3	2242.7	2372.0	2491.0	2588.7	2646.0	2651.7	2606.3	2517.2
17°	2007.6	2046.0	2120.9	2226.4	2358.1	2480.4	2580.5	2639.0	2645.2	2599.0	2507.8
17.5°	1986.7	2026.0	2102.1	2209.6	2344.6	2469.3	2572.0	2632.1	2638.2	2590.8	2497.5
18°	1966.3	2006.4	2083.7	2192.9	2329.9	2457.0	2562.6	2623.9	2630.8	2582.6	2486.9
18.5°	1945.0	1985.9	2064.4	2175.3	2315.1	2445.2	2552.7	2615.7	2622.7	2573.6	2475.9
19°	1924.6	1965.9	2045.6	2157.7	2300.0	2432.9	2542.9	2607.1	2614.1	2564.2	2464.8
19.5°	1903.3	1945.0	2026.0	2140.1	2284.9	2420.2	2532.3	2598.1	2605.1	2554.4	2453.4
20°	1882.0	1925.0	2006.8	2122.5	2268.9	2407.1	2521.2	2588.3	2596.1	2544.6	2441.5
20.5°	1860.4	1904.1	1987.1	2103.7	2253.0	2393.2	2509.8	2578.1	2585.9	2533.9	2428.8
21°	1839.5	1883.3	1967.1	2085.7	2236.2	2379.3	2497.9	2567.9	2575.6	2522.5	2416.1



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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°	1774.5	1820.3	1906.6	2028.9	2186.3	2335.2	2460.7	2533.9	2542.5	2487.7	2376.1
23°	1752.8	1798.6	1886.1	2009.6	2168.3	2319.6	2447.2	2522.1	2530.7	2475.0	2361.8
23.5°	1731.5	1777.8	1866.1	1990.0	2150.7	2304.5	2433.3	2509.0	2518.4	2462.4	2347.4
24°	1709.9	1756.1	1845.2	1970.8	2132.3	2287.7	2419.4	2496.3	2505.7	2448.9	2332.7
24.5°	1687.8	1734.8	1824.4	1950.7	2114.3	2271.8	2405.1	2482.8	2492.6	2435.4	2317.6
25°	1665.7	1713.5	1803.9	1930.7	2095.9	2255.4	2390.0	2469.7	2479.1	2421.5	2301.6
25.5°	1644.0	1691.5	1783.1	1910.3	2077.5	2238.2	2375.2	2455.4	2465.6	2407.1	2286.5
26°	1622.4	1670.2	1761.8	1890.6	2058.3	2221.5	2360.1	2441.1	2451.3	2392.4	2271.0
26.5°	1600.7	1648.5	1741.4	1871.0	2039.9	2204.3	2344.2	2426.0	2436.6	2377.7	2255.4
27°	1578.6	1627.7	1720.5	1850.6	2020.3	2186.7	2327.8	2411.6	2421.9	2362.6	2240.7
27.5°	1556.5	1606.0	1699.6	1830.1	2001.5	2168.7	2311.9	2395.7	2407.1	2348.7	2225.2
28°	1534.4	1583.5	1678.4	1810.1	1981.8	2150.7	2295.5	2380.6	2392.4	2334.4	2208.4
28.5°	1513.2	1561.8	1657.5	1790.0	1963.0	2132.7	2278.7	2365.0	2378.5	2320.4	2189.6
29°	1491.1	1540.6	1636.3	1769.2	1943.4	2114.7	2262.0	2349.9	2365.0	2304.9	2169.1
29.5°	1469.0	1518.9	1615.0	1748.3	1924.2	2097.6	2246.0	2335.2	2350.3	2287.7	2147.9
30°	1447.3	1497.2	1593.7	1727.9	1904.1	2078.8	2230.1	2320.4	2334.8	2268.5	2125.4
30.5°	1425.6	1475.5	1572.0	1706.6	1883.7	2059.9	2212.5	2304.5	2318.0	2247.2	2101.7
31°	1403.6	1453.9	1550.8	1684.1	1862.4	2039.9	2194.9	2287.7	2299.2	2224.8	2075.9
31.5°	1381.9	1432.6	1528.7	1662.8	1840.3	2019.0	2175.3	2268.1	2278.3	2201.0	2049.7
32°	1359.8	1410.1	1507.0	1640.3	1818.2	1996.5	2154.0	2247.7	2255.8	2175.3	2023.1
32.5°	1338.1	1388.4	1485.3	1617.9	1794.9	1972.8	2131.1	2225.6	2230.9	2147.9	1994.9
33°	1316.9	1366.7	1462.9	1595.4	1770.8	1948.7	2108.2	2201.8	2203.9	2118.4	1965.5
33.5°	1295.2	1345.1	1441.2	1572.0	1747.1	1924.2	2082.8	2175.3	2174.4	2087.3	1935.2
34°	1273.5	1323.0	1418.7	1548.7	1722.1	1898.8	2057.1	2147.0	2143.0	2055.8	1904.9
34.5°	1251.8	1301.7	1396.6	1524.6	1697.2	1873.0	2029.7	2116.8	2111.1	2022.7	1872.2
35°	1229.7	1279.6	1374.1	1500.9	1671.8	1845.6	2000.6	2084.9	2076.7	1988.8	1839.9
35.5°	1208.9	1258.0	1351.6	1476.8	1646.1	1818.7	1970.8	2052.2	2041.5	1953.2	1806.8
36°	1187.6	1236.3	1329.1	1452.6	1620.3	1790.8	1940.1	2018.2	2005.5	1917.2	1772.8
36.5°	1165.9	1214.6	1306.6	1428.1	1594.1	1762.6	1908.2	1982.6	1967.9	1881.2	1738.5
37°	1143.9	1192.1	1283.7	1404.0	1568.0	1733.6	1875.9	1946.2	1929.5	1843.6	1702.9
37.5°	1122.6	1170.4	1261.2	1379.8	1541.4	1703.7	1842.0	1909.4	1891.0	1805.6	1667.3
38°	1100.9	1148.8	1237.9	1355.3	1514.0	1675.5	1808.0	1872.6	1851.8	1766.7	1631.8
38.5°	1079.2	1127.1	1215.8	1330.8	1487.8	1644.0	1773.7	1834.6	1812.5	1729.1	1596.2
39°	1058.0	1105.0	1193.3	1306.6	1460.4	1613.8	1738.9	1796.2	1772.0	1689.4	1560.2
39.5°	1036.3	1083.7	1170.4	1281.7	1433.4	1582.7	1702.9	1756.9	1732.4	1651.0	1524.6
40°	1014.6	1062.1	1147.1	1257.1	1406.0	1552.4	1666.9	1717.6	1692.3	1611.7	1487.4
40.5°	993.4	1040.4	1125.1	1232.6	1377.8	1518.9	1631.3	1678.4	1652.2	1573.7	1451.4
41°	971.7	1018.7	1102.2	1208.1	1350.4	1487.8	1595.4	1639.1	1612.1	1533.6	1415.4
41.5°	950.4	997.9	1079.7	1183.5	1322.6	1455.9	1559.4	1599.0	1571.6	1496.0	1379.8
42°	928.8	976.2	1057.2	1158.6	1295.2	1425.2	1522.2	1559.8	1532.4	1456.3	1343.4
42.5°	907.9	955.3	1035.1	1134.5	1267.4	1391.7	1486.2	1521.3	1493.5	1419.1	1309.1
43°	886.6	934.1	1012.6	1109.1	1239.2	1360.2	1450.2	1482.9	1454.3	1380.7	1273.5
43.5°	865.4	912.8	990.5	1086.2	1211.3	1327.5	1414.6	1444.9	1415.8	1343.8	1238.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	802.8	849.8	924.3	1013.0	1128.7	1232.6	1308.3	1331.6	1303.8	1235.1	1138.1
45.5°	781.9	829.4	902.6	990.5	1100.9	1200.7	1273.5	1296.4	1267.4	1200.3	1105.8
46°	761.9	808.9	881.3	966.8	1074.3	1169.6	1239.6	1260.4	1232.2	1165.5	1073.9
46.5°	741.4	788.5	859.6	943.1	1046.9	1139.4	1206.0	1226.5	1197.0	1132.0	1042.4
47°	721.0	768.4	838.4	918.9	1019.9	1109.1	1171.7	1190.9	1163.1	1099.3	1011.8
47.5°	701.0	748.0	817.5	896.9	993.4	1078.4	1139.4	1158.2	1130.0	1067.0	982.3
48°	680.9	728.0	796.7	874.0	967.6	1049.0	1107.9	1125.5	1098.1	1035.9	952.9
48.5°	661.3	708.3	775.8	851.9	941.4	1020.4	1076.4	1094.4	1067.0	1005.6	924.7
49°	642.1	688.7	755.8	828.6	916.1	992.1	1046.1	1062.1	1035.9	976.6	896.4
49.5°	622.8	669.5	735.3	806.9	890.7	963.1	1016.3	1032.6	1006.9	947.6	869.9
50°	603.6	649.8	714.9	784.8	866.2	935.7	986.8	1002.8	977.4	919.8	843.7
50.5°	585.2	630.2	695.2	763.1	840.8	908.7	957.8	974.6	949.2	892.4	818.3
51°	566.8	611.8	675.6	741.9	817.1	882.1	930.8	946.3	921.8	866.2	793.4
51.5°	548.8	593.4	656.0	720.2	794.6	856.4	904.2	919.3	896.0	841.2	769.7
52°	531.2	575.4	637.2	699.3	770.9	830.6	877.2	893.2	870.3	817.1	746.8
52.5°	514.1	557.0	617.9	678.9	747.6	805.2	851.9	868.6	845.7	793.4	723.9
53°	497.3	539.4	599.5	658.4	725.5	781.5	826.9	843.3	822.0	770.1	702.2
53.5°	480.5	521.8	580.3	638.8	703.4	757.8	803.2	819.6	798.3	748.4	681.3
54°	465.0	505.5	562.7	619.2	682.6	734.9	779.9	796.2	776.2	727.1	660.5
54.5°	449.4	489.1	545.6	599.9	661.3	712.4	756.6	773.8	754.5	706.3	640.8
55°	434.3	472.8	528.0	581.1	641.3	690.7	735.3	752.1	734.1	686.6	621.6
55.5°	419.6	457.2	510.8	563.1	621.2	669.9	713.2	730.8	713.2	666.6	603.2
56°	406.1	441.7	494.4	544.7	601.6	649.4	692.4	710.0	693.2	648.6	585.2
56.5°	392.6	426.5	477.7	527.6	582.8	629.4	671.9	689.5	674.0	629.8	567.2
57°	379.9	412.6	461.3	510.4	564.0	610.2	651.9	670.3	655.6	612.2	550.5
57.5°	367.7	398.3	445.0	493.2	546.4	590.9	633.1	651.1	637.2	594.6	533.7
58°	357.0	384.8	430.2	477.3	528.8	573.4	614.3	633.1	619.6	578.3	518.2
58.5°	346.4	371.3	415.1	461.3	512.0	555.8	596.3	615.1	602.4	561.5	502.2
59°	337.0	359.5	400.4	446.2	495.7	538.2	578.7	597.5	585.2	545.1	486.7
59.5°	328.4	347.6	386.1	430.6	479.3	521.0	560.7	580.3	568.9	529.6	471.9
60°	321.9	336.6	373.0	415.9	463.8	504.7	543.9	563.5	552.9	514.9	457.6
60.5°	314.9	325.9	359.5	402.0	448.6	488.7	528.0	547.2	537.4	498.9	443.3
61°	307.5	317.4	346.8	388.1	433.9	473.2	512.0	531.2	521.4	484.2	429.4
61.5°	300.2	309.2	334.9	374.2	419.6	458.0	496.5	515.7	506.7	470.3	415.5
62°	292.4	302.6	323.5	361.5	405.7	443.7	480.9	500.6	492.4	456.4	402.4
62.5°	284.6	295.3	312.0	348.4	391.8	429.0	465.8	485.4	477.7	442.1	388.9
63°	276.9	287.9	301.8	336.2	378.7	414.7	451.1	470.7	462.9	428.2	376.2
63.5°	269.5	280.5	291.2	323.9	365.6	401.6	436.8	456.0	449.0	414.7	363.6
64°	261.7	273.2	281.4	312.9	353.8	388.1	422.9	442.1	435.5	402.0	351.7
64.5°	254.4	265.4	272.0	301.4	341.9	375.4	409.0	428.6	421.6	388.5	339.8
65°	247.0	258.5	263.4	290.4	330.0	362.3	395.9	415.1	408.6	376.2	328.0
65.5°	239.7	251.5	254.8	279.7	318.2	350.5	382.8	401.6	395.1	363.2	316.1
66°	232.3	244.2	246.6	269.5	305.9	338.6	369.7	388.1	381.6	350.9	304.3



TEST NUMBER: P776374

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	211.0	222.9	224.5	240.1	274.0	302.6	333.3	350.5	342.7	314.5	271.1
68°	204.5	215.9	218.0	231.5	263.4	291.6	321.4	338.2	330.0	302.2	260.1
68.5°	197.5	209.0	211.4	222.5	253.1	280.5	309.2	325.9	317.4	290.0	249.9
69°	191.0	202.4	205.3	213.9	243.3	269.5	297.7	313.7	304.3	278.1	239.7
69.5°	184.0	195.9	199.2	205.7	233.5	259.3	285.9	301.0	292.0	266.6	229.4
70°	177.5	189.3	193.0	197.9	224.1	248.6	274.8	289.5	279.7	254.8	219.2
70.5°	170.9	182.8	186.9	190.2	215.1	238.8	264.2	277.7	267.9	243.7	209.8
71°	164.8	176.3	180.8	182.8	206.1	229.0	253.6	266.6	256.0	233.1	200.4
71.5°	158.7	170.1	175.0	175.4	197.5	219.6	242.9	254.8	244.2	222.1	190.6
72°	152.5	164.0	168.9	168.9	188.9	210.2	232.7	244.2	232.7	211.4	181.6
72.5°	147.6	157.9	163.2	161.9	180.8	200.8	222.5	233.1	221.7	200.8	172.6
73°	141.5	151.7	157.5	155.8	173.0	192.2	212.7	222.5	210.6	190.6	163.6
73.5°	135.8	147.6	151.7	149.7	165.2	183.2	202.8	212.3	199.2	180.8	155.0
74°	129.6	141.9	148.5	144.0	157.9	175.0	193.4	202.0	188.9	170.9	146.4
74.5°	123.5	135.8	142.3	138.2	150.5	166.4	184.4	191.8	178.3	161.1	138.2
75°	117.8	129.6	136.6	132.9	143.1	158.3	175.4	182.0	168.1	151.7	130.0
75.5°	112.5	123.5	130.9	127.2	136.2	150.5	166.4	172.6	157.9	142.7	122.3
76°	106.7	117.8	124.7	121.9	129.6	143.1	157.5	163.2	147.6	133.7	114.5
76.5°	101.4	112.5	119.4	116.6	123.1	135.4	148.9	153.8	138.2	125.1	106.7
77°	96.1	106.7	114.1	111.6	117.0	128.0	140.7	144.8	128.8	116.6	99.8
77.5°	90.8	101.4	109.2	106.7	110.4	121.1	132.5	136.2	119.4	108.4	92.4
78°	85.5	96.1	103.9	102.2	104.7	114.1	124.7	128.0	110.4	100.2	85.9
78.5°	80.6	90.8	99.0	97.3	99.0	107.6	117.0	119.4	101.4	92.4	78.9
79°	75.2	85.9	94.1	92.8	93.7	101.0	109.6	111.2	92.8	85.1	72.4
79.5°	70.3	80.6	89.2	88.3	87.9	94.9	102.2	103.9	84.2	77.7	66.3
80°	65.4	75.7	84.2	83.8	83.0	88.7	95.3	96.1	76.1	70.3	60.1
80.5°	60.9	70.8	79.3	79.7	78.1	83.0	88.3	88.7	68.3	63.8	54.4
81°	56.0	65.8	74.8	75.2	73.2	77.3	81.8	81.4	60.5	57.3	48.7
81.5°	51.1	60.9	69.9	70.8	68.7	71.6	75.2	74.0	53.2	50.7	43.3
82°	46.6	56.4	65.4	66.7	64.2	66.3	68.7	66.7	46.2	45.0	38.9
82.5°	42.1	51.5	60.9	62.2	59.7	60.9	62.6	59.7	40.5	39.7	33.9
83°	37.6	47.0	56.4	58.1	55.6	56.4	56.8	53.2	34.8	34.4	29.4
83.5°	33.5	42.5	51.9	54.0	51.5	51.5	51.5	47.0	29.0	29.0	24.9
84°	29.0	38.0	47.8	49.9	47.4	46.6	45.8	41.3	23.3	23.7	20.0
84.5°	24.5	33.5	43.8	46.2	43.8	42.5	41.3	35.6	17.6	18.4	16.8
85°	20.4	29.0	39.7	42.1	40.1	38.4	36.8	30.3	13.5	14.3	13.1
85.5°	16.4	24.9	35.6	38.0	36.4	34.4	31.9	24.5	10.6	10.6	10.2
86°	13.9	20.9	31.9	34.4	32.7	30.7	27.4	19.2	8.2	7.8	7.4
86.5°	11.5	17.6	27.8	30.3	29.4	26.6	22.5	15.1	6.5	5.3	4.9
87°	9.0	14.7	24.1	26.6	25.8	22.5	18.8	11.9	4.9	3.3	2.9
87.5°	6.1	12.3	20.4	22.9	22.5	19.2	15.1	8.6	3.7	1.6	1.2
88°	4.5	9.4	16.8	19.2	19.2	15.5	11.9	5.7	2.5	0.8	0.4
88.5°	2.5	7.0	13.9	15.5	15.5	12.7	8.6	3.7	1.2	0.4	0.0



TEST NUMBER: P776374

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.4	4.1	5.7	6.1	4.1	1.6	0.4	0.0	0.0	0.0



TEST NUMBER: P776374

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3
0.5°	2570.3	2568.7	2563.4	2559.7	2557.2	2557.6
1°	2572.4	2566.2	2556.8	2549.9	2545.8	2546.2
1.5°	2574.0	2563.4	2549.9	2539.7	2533.9	2534.3
2°	2574.8	2559.7	2542.5	2529.4	2521.7	2522.1
2.5°	2575.6	2556.0	2534.7	2518.4	2509.4	2509.0
3°	2575.6	2551.5	2526.6	2507.3	2496.3	2495.9
3.5°	2574.8	2546.6	2518.0	2495.5	2482.8	2482.8
4°	2574.0	2541.3	2508.6	2483.6	2469.3	2468.9
4.5°	2572.8	2535.6	2499.2	2470.9	2455.4	2454.6
5°	2570.7	2529.4	2488.9	2458.3	2440.7	2439.9
5.5°	2568.3	2522.9	2478.7	2444.8	2425.6	2425.1
6°	2565.4	2515.5	2468.1	2431.3	2410.8	2409.6
6.5°	2562.1	2508.2	2456.6	2417.0	2395.3	2394.1
7°	2558.5	2500.0	2445.2	2402.6	2379.3	2378.1
7.5°	2554.0	2491.4	2432.9	2387.9	2363.0	2362.2
8°	2549.1	2482.4	2420.2	2372.8	2346.6	2345.8
8.5°	2543.7	2473.0	2407.6	2357.3	2329.9	2328.6
9°	2538.4	2463.2	2394.1	2341.7	2313.1	2311.9
9.5°	2532.3	2453.0	2380.6	2325.4	2295.1	2294.3
10°	2525.7	2442.7	2366.7	2309.0	2277.9	2276.7
10.5°	2518.4	2431.3	2352.3	2292.2	2259.9	2258.7
11°	2511.0	2419.8	2337.2	2275.1	2241.9	2241.1
11.5°	2502.8	2408.0	2322.1	2257.9	2223.5	2222.3
12°	2494.3	2395.7	2307.0	2240.3	2204.7	2203.9
12.5°	2485.7	2383.4	2291.0	2222.3	2185.9	2185.1
13°	2476.3	2369.9	2275.1	2203.9	2166.7	2166.3
13.5°	2466.9	2356.4	2258.7	2185.5	2147.9	2146.6
14°	2456.2	2342.9	2241.9	2167.1	2128.2	2127.8
14.5°	2445.6	2329.0	2225.2	2148.3	2108.6	2107.8
15°	2434.5	2314.3	2208.0	2129.1	2088.6	2088.6
15.5°	2423.1	2299.6	2190.4	2109.8	2068.1	2067.7
16°	2411.6	2284.5	2172.0	2090.2	2048.1	2048.1
16.5°	2399.0	2268.9	2154.0	2070.6	2028.0	2028.0
17°	2386.7	2253.4	2135.6	2050.5	2007.2	2007.6
17.5°	2373.6	2237.4	2117.2	2030.5	1986.7	1986.7
18°	2360.1	2220.7	2098.4	2010.5	1965.5	1966.3
18.5°	2346.6	2204.3	2079.2	1989.6	1945.0	1945.0
19°	2332.7	2187.1	2060.3	1969.1	1923.8	1924.6
19.5°	2318.8	2170.4	2040.7	1948.7	1902.5	1903.3
20°	2303.7	2152.8	2021.5	1927.8	1881.2	1882.0
20.5°	2289.0	2135.2	2001.9	1907.0	1859.5	1860.4
21°	2273.4	2117.2	1981.8	1885.3	1838.3	1839.5



TEST NUMBER: P776374

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2226.0	2062.0	1921.3	1822.3	1773.3	1774.5
23°	2209.6	2043.6	1901.3	1800.7	1751.6	1752.8
23.5°	2192.9	2024.8	1880.8	1779.4	1729.9	1731.5
24°	2176.1	2006.4	1860.8	1758.5	1707.8	1709.9
24.5°	2158.9	1987.6	1840.7	1737.3	1686.1	1687.8
25°	2142.1	1969.1	1820.7	1714.8	1664.5	1665.7
25.5°	2125.4	1949.9	1799.4	1694.7	1642.8	1644.0
26°	2108.6	1931.1	1779.4	1672.2	1621.1	1622.4
26.5°	2091.4	1911.5	1758.9	1651.8	1599.0	1600.7
27°	2073.4	1890.2	1737.7	1630.1	1577.0	1578.6
27.5°	2053.8	1867.3	1715.2	1608.9	1555.3	1556.5
28°	2032.5	1845.2	1692.7	1586.4	1533.6	1534.4
28.5°	2010.5	1821.5	1669.8	1565.1	1511.9	1513.2
29°	1988.0	1798.6	1646.9	1543.0	1489.8	1491.1
29.5°	1964.7	1774.5	1624.0	1520.9	1468.2	1469.0
30°	1939.7	1749.9	1600.3	1497.2	1446.9	1447.3
30.5°	1914.8	1725.0	1576.5	1475.9	1425.2	1425.6
31°	1889.0	1700.1	1552.0	1452.6	1402.7	1403.6
31.5°	1862.8	1674.3	1527.5	1429.7	1381.1	1381.9
32°	1835.4	1648.1	1502.9	1406.0	1359.0	1359.8
32.5°	1808.0	1621.5	1478.4	1383.9	1336.9	1338.1
33°	1780.2	1595.4	1453.4	1360.6	1315.2	1316.9
33.5°	1752.0	1568.4	1428.1	1337.3	1293.1	1295.2
34°	1722.5	1541.8	1403.6	1314.0	1271.1	1273.5
34.5°	1692.7	1513.2	1377.8	1290.7	1248.6	1251.8
35°	1663.2	1487.0	1353.3	1267.4	1226.5	1229.7
35.5°	1633.4	1458.8	1327.5	1244.1	1204.8	1208.9
36°	1603.1	1431.4	1303.4	1220.8	1182.7	1187.6
36.5°	1571.6	1403.6	1278.0	1197.8	1160.6	1165.9
37°	1539.7	1375.7	1253.5	1174.5	1138.5	1143.9
37.5°	1508.2	1347.9	1227.7	1152.0	1116.9	1122.6
38°	1476.4	1319.3	1203.6	1128.3	1094.4	1100.9
38.5°	1444.5	1291.1	1178.2	1105.4	1072.7	1079.2
39°	1412.1	1263.3	1153.3	1082.9	1050.6	1058.0
39.5°	1379.8	1235.5	1127.9	1060.0	1028.9	1036.3
40°	1347.5	1206.8	1103.0	1036.3	1007.3	1014.6
40.5°	1315.2	1178.6	1077.6	1013.0	985.6	993.4
41°	1283.3	1150.4	1052.3	990.1	964.3	971.7
41.5°	1250.6	1122.6	1027.3	967.6	942.7	950.4
42°	1219.1	1094.8	1003.2	945.5	921.4	928.8
42.5°	1187.2	1067.0	978.6	923.8	900.5	907.9
43°	1155.7	1039.2	954.5	901.8	879.7	886.6
43.5°	1124.2	1011.4	930.8	880.1	858.8	865.4



TEST NUMBER: P776374

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	1033.9	930.0	860.9	815.9	795.8	802.8
45.5°	1004.4	903.8	837.6	795.0	775.0	781.9
46°	975.8	878.4	815.5	774.6	754.9	761.9
46.5°	946.7	852.7	793.0	753.7	734.5	741.4
47°	918.1	828.1	770.9	733.7	714.9	721.0
47.5°	891.1	803.2	748.8	713.6	695.6	701.0
48°	864.5	779.1	726.7	693.2	676.4	680.9
48.5°	838.4	755.8	705.0	673.6	656.8	661.3
49°	813.0	732.5	684.6	654.3	638.4	642.1
49.5°	787.7	710.8	664.2	634.7	620.0	622.8
50°	763.9	688.3	643.7	615.9	601.2	603.6
50.5°	739.8	666.6	623.3	597.1	582.8	585.2
51°	716.5	645.8	603.6	578.3	565.6	566.8
51.5°	694.8	625.7	584.8	559.9	548.0	548.8
52°	673.6	605.7	566.4	542.7	530.8	531.2
52.5°	651.9	586.0	548.0	525.1	513.7	514.1
53°	631.4	567.2	530.0	507.5	496.9	497.3
53.5°	611.4	548.8	512.4	490.3	480.1	480.5
54°	592.2	530.8	495.3	473.6	463.8	465.0
54.5°	573.0	513.7	478.9	457.2	447.8	449.4
55°	555.4	496.9	462.9	441.3	432.7	434.3
55.5°	537.4	480.5	446.6	425.7	417.1	419.6
56°	520.2	464.6	431.5	410.6	402.8	406.1
56.5°	503.4	449.0	416.3	395.9	388.1	392.6
57°	487.5	433.9	401.6	381.6	374.2	379.9
57.5°	471.5	419.2	387.7	367.7	361.1	367.7
58°	456.4	404.9	373.8	354.6	348.4	357.0
58.5°	441.3	391.4	360.7	341.5	336.6	346.4
59°	426.5	377.9	347.6	329.2	325.1	337.0
59.5°	412.6	364.8	335.3	317.4	314.5	328.4
60°	398.7	352.1	323.1	305.5	304.7	321.9
60.5°	385.7	339.4	310.8	294.5	295.3	314.9
61°	373.0	327.6	299.8	283.8	286.3	307.5
61.5°	359.9	315.7	288.3	273.6	278.5	300.2
62°	348.0	304.7	277.7	264.2	271.6	292.4
62.5°	335.8	293.2	267.5	254.8	264.6	284.6
63°	323.9	282.2	256.8	245.4	257.6	276.9
63.5°	311.6	271.6	247.0	236.8	250.7	269.5
64°	301.0	261.3	237.6	228.6	243.7	261.7
64.5°	290.0	251.5	228.6	220.8	236.8	254.4
65°	278.9	241.7	219.6	213.1	230.2	247.0
65.5°	268.3	231.9	210.6	205.7	223.7	239.7
66°	258.1	222.5	202.4	198.8	216.7	232.3



TEST NUMBER: P776374

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	228.2	195.9	178.7	179.9	197.5	211.0
68°	218.4	187.7	171.4	174.2	191.0	204.5
68.5°	209.4	179.5	164.4	168.9	184.4	197.5
69°	200.4	171.8	157.5	163.2	178.3	191.0
69.5°	191.4	164.0	150.9	157.9	171.8	184.0
70°	182.8	156.2	145.2	152.5	166.0	177.5
70.5°	174.2	149.3	139.0	146.8	159.9	170.9
71°	166.4	142.7	133.3	141.5	153.8	164.8
71.5°	158.3	135.8	127.6	136.6	147.6	158.7
72°	150.1	129.2	121.5	131.7	141.9	152.5
72.5°	142.7	122.7	116.1	126.8	136.6	147.6
73°	135.4	116.1	110.8	121.9	130.9	141.5
73.5°	128.0	109.6	105.9	116.6	125.6	135.8
74°	120.6	103.9	101.0	111.6	119.8	129.6
74.5°	114.1	98.2	96.5	106.7	114.5	123.5
75°	107.6	92.8	92.0	101.8	109.2	117.8
75.5°	101.0	87.5	87.5	97.3	103.9	112.5
76°	94.9	82.2	83.0	92.4	98.6	106.7
76.5°	88.7	77.3	78.9	87.5	93.7	101.4
77°	83.0	72.4	74.8	83.0	88.3	96.1
77.5°	77.3	67.9	70.8	78.5	83.4	90.8
78°	72.0	63.4	66.7	74.0	78.5	85.5
78.5°	66.3	58.9	62.6	69.5	73.6	80.6
79°	61.3	54.4	58.9	65.0	68.7	75.2
79.5°	56.4	50.3	54.8	60.5	63.8	70.3
80°	51.5	46.6	51.1	56.4	59.3	65.4
80.5°	47.0	42.9	47.4	52.3	54.4	60.9
81°	42.5	39.3	43.8	48.3	49.9	56.0
81.5°	38.4	35.6	39.7	44.2	45.4	51.1
82°	34.8	31.9	36.4	40.1	40.9	46.6
82.5°	30.7	28.6	32.7	36.0	36.4	42.1
83°	26.6	25.4	29.0	32.3	31.9	37.6
83.5°	22.9	22.1	25.8	28.6	27.8	33.5
84°	19.2	18.8	22.1	24.9	23.7	29.0
84.5°	15.9	15.9	18.8	21.7	20.0	24.5
85°	13.1	13.1	15.5	18.0	16.8	20.4
85.5°	9.8	10.2	12.3	14.7	14.3	16.4
86°	7.4	7.0	9.0	11.9	11.9	13.9
86.5°	4.9	4.1	6.1	8.6	9.4	11.5
87°	2.5	1.6	2.9	5.7	7.0	9.0
87.5°	0.8	0.4	0.8	2.5	4.5	6.1
88°	0.0	0.0	0.0	0.4	2.5	4.5
88.5°	0.0	0.0	0.0	0.0	0.8	2.5



TEST NUMBER: P776374

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-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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Scaled Data Report



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Scaled Data Report





21.5°	1817.8	1862.4	1947.1	2066.5	2219.8	2365.0	2486.1	2556.8	2565.0	2511.4	2403.1
22°	1796.6	1841.6	1927.0	2048.1	2203.1	2349.9	2473.4	2545.4	2554.0	2499.6	2390.0



44°	844.5	891.5	968.0	1061.7	1183.9	1296.4	1378.6	1405.6	1377.4	1306.2	1204.8
44.5°	823.6	871.1	945.9	1037.5	1156.5	1263.7	1342.6	1368.4	1341.0	1270.2	1171.7



66.5°	224.9	236.8	238.8	259.3	295.3	326.4	357.4	375.4	368.1	339.0	292.8
67°	218.0	229.8	231.5	249.9	284.2	314.5	345.6	363.2	355.4	326.8	282.2



89°	1.2	4.5	10.6	12.3	12.3	9.8	5.7	2.0	0.4	0.0	0.0
89.5°	0.0	2.5	7.4	9.0	9.4	7.0	3.7	0.8	0.0	0.0	0.0

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21.5°	2258.3	2098.8	1961.0	1864.5	1816.2	1817.8
22°	2241.9	2080.8	1941.7	1843.6	1794.9	1796.6



44°	1093.6	984.0	907.5	858.0	837.6	844.5
44.5°	1063.7	957.4	884.2	837.1	816.7	823.6



66.5°	247.8	213.5	194.3	192.2	210.2	224.9
67°	237.6	204.9	186.5	186.1	203.7	218.0

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89°	0.0	0.0	0.0	0.0	0.4	1.2
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report



(END OF REPORT)