

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: P776383

Luminaire Tested: HCDJBL3040CSD-HCD62TRMW-4000lm-4000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776383
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B057-HCD62TRMW)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS3040CSD-HCD62TRMW-4000lm-4000K
Description: 6 INCH ROUND NARROW MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

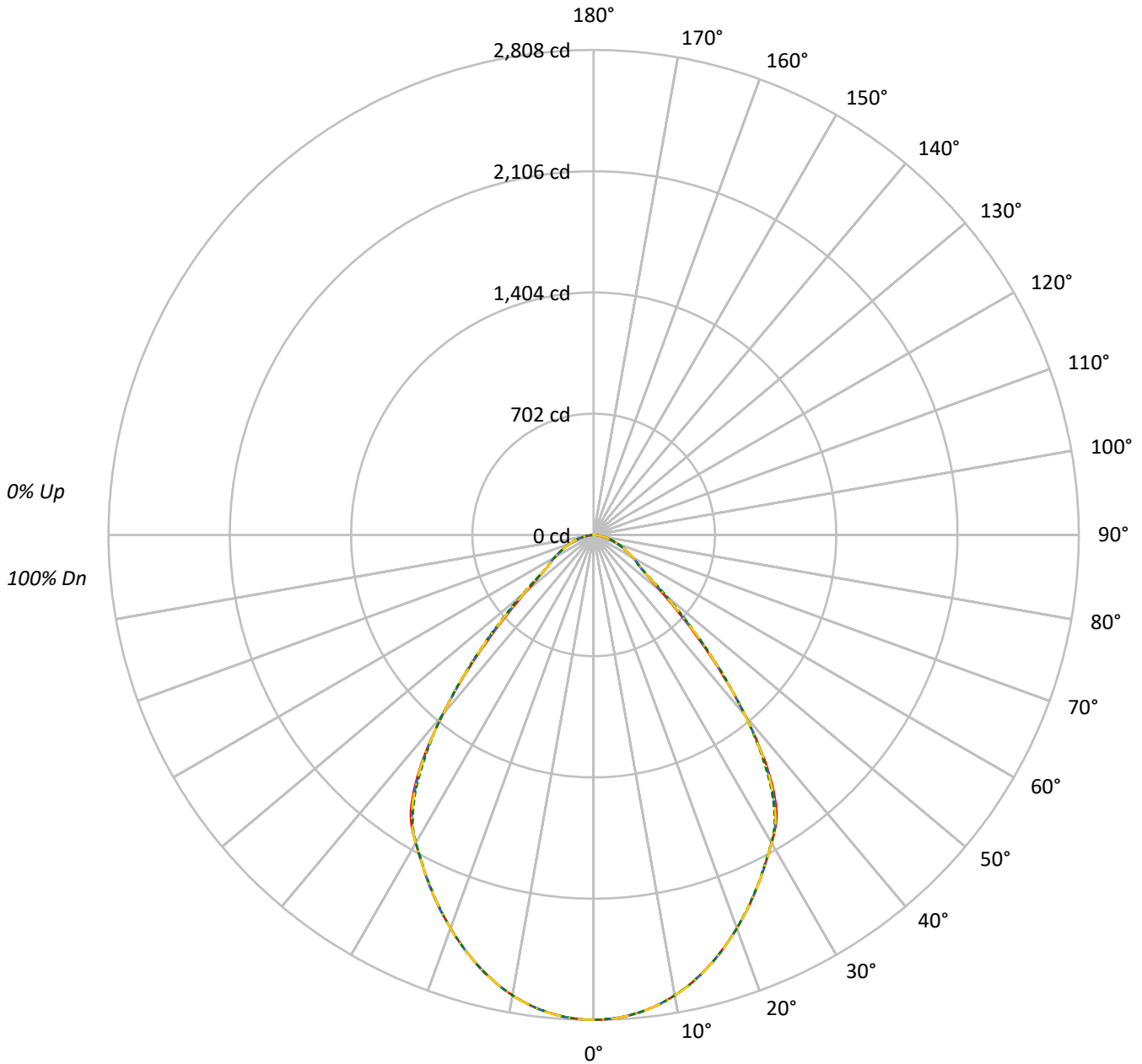
Lumens per Lamp: N/A
Luminaire Lumens: 4470.1 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.11 / 1.14
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P776383
CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMW-4000lm-4000K

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								
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89								
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79								
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71								
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63								
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57								
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52								
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47								
8	69	58	51	45	68	57	50	45	56	50	45	55	49	45	54	49	45	43								
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	40								
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	153930	153930	153930	153930
5°	153120	153054	153120	153054
10°	150676	150676	150676	150676
15°	146556	146624	146556	146624
20°	141366	141319	141366	141319
25°	135752	135534	135752	135534
30°	130412	130210	130412	130210
35°	121619	119839	121619	119839
40°	97619	97733	97619	97733
45°	68309	70364	68309	70364
50°	43666	46523	43666	46523
55°	31769	32266	31769	32266
60°	28846	28715	28846	28715
65°	25917	25813	25917	25813
70°	22985	23305	22985	23305
75°	20058	21075	20058	21075
80°	16543	18689	16543	18689
85°	10127	15473	10127	15473

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 70364 cd/sqm



TEST NUMBER: P776383

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMW-4000lm-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.2	5.9
10°-20°	726.2	16.2
20°-30°	1032.7	23.1
30°-40°	1104.0	24.7
40°-50°	697.6	15.6
50°-60°	317.4	7.1
60°-70°	198.8	4.4
70°-80°	104.4	2.3
80°-90°	25.7	0.6
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°	2022.1	45.2
0°-40°	3126.1	69.9
0°-60°	4141.1	92.6
0°-90°	4470.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4470.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2808	2808	2808	2808	2808	
5°	2782	2781	2782	2781	2782	263
15°	2582	2584	2582	2584	2582	726
25°	2244	2241	2244	2241	2244	1033
35°	1817	1791	1817	1791	1817	1109
45°	881	908	881	908	881	687
55°	332	338	332	338	332	313
65°	200	199	200	199	200	199
75°	95	100	95	100	95	101
85°	16	25	16	25	16	21
90°	0	1	0	1	0	



TEST NUMBER: P776383

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2807.9	2807.9	2807.9	2807.9	2807.9	2807.9	2807.9	2807.9	2807.9	2807.9	2807.9
0.5°	2807.5	2807.9	2807.5	2807.5	2806.3	2807.5	2807.5	2807.9	2807.5	2807.9	2807.5
1°	2806.7	2807.1	2807.1	2806.7	2805.5	2806.7	2807.1	2807.1	2806.7	2807.1	2807.1
1.5°	2805.5	2805.9	2805.5	2805.5	2804.3	2805.5	2805.5	2805.9	2805.5	2805.9	2805.5
2°	2803.9	2803.9	2803.9	2803.9	2802.3	2803.9	2803.9	2803.9	2803.9	2803.9	2803.9
2.5°	2801.5	2801.5	2801.9	2801.5	2800.3	2801.5	2801.9	2801.5	2801.5	2801.5	2801.9
3°	2798.7	2799.1	2799.1	2799.1	2797.5	2799.1	2799.1	2799.1	2798.7	2799.1	2799.1
3.5°	2795.4	2795.4	2795.8	2795.8	2794.2	2795.8	2795.8	2795.4	2795.4	2795.4	2795.8
4°	2791.8	2791.8	2791.8	2791.8	2790.6	2791.8	2791.8	2791.8	2791.8	2791.8	2791.8
4.5°	2787.4	2787.8	2787.8	2787.8	2786.2	2787.8	2787.8	2787.8	2787.4	2787.8	2787.8
5°	2782.5	2783.0	2783.0	2783.0	2781.3	2783.0	2783.0	2783.0	2782.5	2783.0	2783.0
5.5°	2777.3	2777.7	2777.7	2777.7	2776.1	2777.7	2777.7	2777.7	2777.3	2777.7	2777.7
6°	2771.7	2771.7	2771.7	2771.7	2770.5	2771.7	2771.7	2771.7	2771.7	2771.7	2771.7
6.5°	2765.2	2765.2	2765.6	2765.6	2764.4	2765.6	2765.6	2765.2	2765.2	2765.2	2765.6
7°	2758.4	2758.8	2758.8	2758.8	2757.6	2758.8	2758.8	2758.8	2758.4	2758.8	2758.8
7.5°	2751.1	2751.1	2751.5	2751.5	2750.3	2751.5	2751.5	2751.1	2751.1	2751.1	2751.5
8°	2743.1	2743.5	2743.9	2743.9	2742.7	2743.9	2743.9	2743.5	2743.1	2743.5	2743.9
8.5°	2734.6	2735.0	2735.4	2735.4	2734.2	2735.4	2735.4	2735.0	2734.6	2735.0	2735.4
9°	2725.7	2726.1	2726.6	2727.0	2725.7	2727.0	2726.6	2726.1	2725.7	2726.1	2726.6
9.5°	2716.5	2716.9	2717.3	2717.7	2716.5	2717.7	2717.3	2716.9	2716.5	2716.9	2717.3
10°	2706.8	2706.8	2707.2	2708.0	2706.8	2708.0	2707.2	2706.8	2706.8	2706.8	2707.2
10.5°	2696.3	2696.3	2697.1	2697.5	2696.3	2697.5	2697.1	2696.3	2696.3	2696.3	2697.1
11°	2685.5	2685.5	2686.3	2687.1	2685.5	2687.1	2686.3	2685.5	2685.5	2685.5	2686.3
11.5°	2673.8	2674.2	2675.0	2675.8	2674.6	2675.8	2675.0	2674.2	2673.8	2674.2	2675.0
12°	2662.1	2662.5	2663.3	2664.1	2662.9	2664.1	2663.3	2662.5	2662.1	2662.5	2663.3
12.5°	2650.0	2650.4	2650.8	2651.6	2650.8	2651.6	2650.8	2650.4	2650.0	2650.4	2650.8
13°	2637.1	2637.5	2638.3	2639.1	2638.3	2639.1	2638.3	2637.5	2637.1	2637.5	2638.3
13.5°	2624.2	2624.6	2625.4	2626.2	2625.0	2626.2	2625.4	2624.6	2624.2	2624.6	2625.4
14°	2610.5	2611.3	2612.1	2612.5	2611.7	2612.5	2612.1	2611.3	2610.5	2611.3	2612.1
14.5°	2596.8	2597.2	2598.0	2598.8	2598.0	2598.8	2598.0	2597.2	2596.8	2597.2	2598.0
15°	2582.3	2583.1	2583.9	2584.7	2583.5	2584.7	2583.9	2583.1	2582.3	2583.1	2583.9
15.5°	2567.8	2568.2	2569.0	2569.8	2568.6	2569.8	2569.0	2568.2	2567.8	2568.2	2569.0
16°	2552.5	2553.3	2554.1	2554.9	2553.7	2554.9	2554.1	2553.3	2552.5	2553.3	2554.1
16.5°	2537.6	2538.0	2538.8	2539.6	2538.4	2539.6	2538.8	2538.0	2537.6	2538.0	2538.8
17°	2521.9	2522.3	2523.1	2523.9	2522.7	2523.9	2523.1	2522.3	2521.9	2522.3	2523.1
17.5°	2506.2	2506.2	2507.0	2507.8	2506.6	2507.8	2507.0	2506.2	2506.2	2506.2	2507.0
18°	2489.7	2490.5	2490.9	2491.3	2490.1	2491.3	2490.9	2490.5	2489.7	2490.5	2490.9
18.5°	2473.2	2474.0	2474.4	2474.8	2473.6	2474.8	2474.4	2474.0	2473.2	2474.0	2474.4
19°	2456.6	2457.4	2457.8	2457.8	2457.0	2457.8	2457.8	2457.4	2456.6	2457.4	2457.8
19.5°	2440.1	2440.5	2440.9	2441.3	2440.1	2441.3	2440.9	2440.5	2440.1	2440.5	2440.9
20°	2423.2	2423.6	2424.0	2424.0	2422.4	2424.0	2424.0	2423.6	2423.2	2423.6	2424.0
20.5°	2406.3	2406.3	2406.3	2406.3	2405.1	2406.3	2406.3	2406.3	2406.3	2406.3	2406.3
21°	2388.1	2388.6	2389.0	2388.6	2387.3	2388.6	2389.0	2388.6	2388.1	2388.6	2389.0



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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°	2335.8	2335.8	2335.4	2335.0	2333.4	2335.0	2335.4	2335.8	2335.8	2335.8	2335.4
23°	2317.6	2317.6	2317.2	2316.8	2315.2	2316.8	2317.2	2317.6	2317.6	2317.6	2317.2
23.5°	2299.5	2299.5	2299.1	2298.3	2297.1	2298.3	2299.1	2299.5	2299.5	2299.5	2299.1
24°	2281.4	2281.4	2281.0	2279.8	2278.2	2279.8	2281.0	2281.4	2281.4	2281.4	2281.0
24.5°	2263.3	2262.9	2262.5	2261.2	2259.6	2261.2	2262.5	2262.9	2263.3	2262.9	2262.5
25°	2244.3	2244.3	2243.9	2242.7	2240.7	2242.7	2243.9	2244.3	2244.3	2244.3	2243.9
25.5°	2225.8	2225.8	2225.4	2223.8	2222.2	2223.8	2225.4	2225.8	2225.8	2225.8	2225.4
26°	2207.3	2207.3	2206.9	2205.7	2203.6	2205.7	2206.9	2207.3	2207.3	2207.3	2206.9
26.5°	2188.3	2188.3	2187.9	2186.3	2184.7	2186.3	2187.9	2188.3	2188.3	2188.3	2187.9
27°	2169.4	2169.8	2169.4	2167.8	2165.8	2167.8	2169.4	2169.8	2169.4	2169.8	2169.4
27.5°	2150.9	2150.9	2150.5	2149.3	2147.2	2149.3	2150.5	2150.9	2150.9	2150.9	2150.5
28°	2131.5	2132.3	2131.9	2130.7	2129.1	2130.7	2131.9	2132.3	2131.5	2132.3	2131.9
28.5°	2113.4	2114.2	2113.8	2112.6	2111.0	2112.6	2113.8	2114.2	2113.4	2114.2	2113.8
29°	2095.3	2096.1	2095.7	2094.9	2092.9	2094.9	2095.7	2096.1	2095.3	2096.1	2095.7
29.5°	2077.5	2077.9	2077.9	2076.7	2075.1	2076.7	2077.9	2077.9	2077.5	2077.9	2077.9
30°	2060.2	2060.2	2060.2	2058.6	2057.0	2058.6	2060.2	2060.2	2060.2	2060.2	2060.2
30.5°	2042.5	2042.9	2042.1	2040.9	2038.9	2040.9	2042.1	2042.9	2042.5	2042.9	2042.1
31°	2025.2	2025.2	2024.4	2022.4	2019.9	2022.4	2024.4	2025.2	2025.2	2025.2	2024.4
31.5°	2006.6	2006.6	2005.0	2003.0	1999.8	2003.0	2005.0	2006.6	2006.6	2006.6	2005.0
32°	1987.7	1986.5	1983.7	1980.1	1975.6	1980.1	1983.7	1986.5	1987.7	1986.5	1983.7
32.5°	1967.2	1964.3	1959.9	1953.9	1948.6	1953.9	1959.9	1964.3	1967.2	1964.3	1959.9
33°	1943.8	1940.6	1932.9	1926.1	1920.4	1926.1	1932.9	1940.6	1943.8	1940.6	1932.9
33.5°	1916.8	1914.0	1903.5	1896.3	1890.6	1896.3	1903.5	1914.0	1916.8	1914.0	1903.5
34°	1886.2	1885.0	1872.5	1864.4	1859.6	1864.4	1872.5	1885.0	1886.2	1885.0	1872.5
34.5°	1852.7	1850.7	1839.5	1830.6	1826.2	1830.6	1839.5	1850.7	1852.7	1850.7	1839.5
35°	1817.3	1814.1	1804.4	1794.7	1790.7	1794.7	1804.4	1814.1	1817.3	1814.1	1804.4
35.5°	1779.8	1775.4	1767.7	1757.7	1752.4	1757.7	1767.7	1775.4	1779.8	1775.4	1767.7
36°	1739.9	1734.3	1729.5	1719.4	1713.0	1719.4	1729.5	1734.3	1739.9	1734.3	1729.5
36.5°	1698.1	1692.0	1688.8	1679.1	1671.1	1679.1	1688.8	1692.0	1698.1	1692.0	1688.8
37°	1654.1	1648.5	1646.1	1637.2	1629.2	1637.2	1646.1	1648.5	1654.1	1648.5	1646.1
37.5°	1608.2	1604.2	1601.8	1594.5	1586.5	1594.5	1601.8	1604.2	1608.2	1604.2	1601.8
38°	1560.7	1558.3	1555.8	1551.0	1544.2	1551.0	1555.8	1558.3	1560.7	1558.3	1555.8
38.5°	1511.9	1511.9	1507.9	1506.3	1500.2	1506.3	1507.9	1511.9	1511.9	1511.9	1507.9
39°	1463.6	1464.4	1460.4	1460.0	1457.5	1460.0	1460.4	1464.4	1463.6	1464.4	1460.4
39.5°	1414.0	1415.2	1411.2	1412.4	1412.0	1412.4	1411.2	1415.2	1414.0	1415.2	1411.2
40°	1364.1	1366.5	1362.9	1364.9	1365.7	1364.9	1362.9	1366.5	1364.1	1366.5	1362.9
40.5°	1313.3	1316.9	1314.5	1317.8	1318.6	1317.8	1314.5	1316.9	1313.3	1316.9	1314.5
41°	1263.8	1267.8	1267.0	1269.8	1272.6	1269.8	1267.0	1267.8	1263.8	1267.8	1267.0
41.5°	1214.6	1217.4	1219.9	1223.5	1224.7	1223.5	1219.9	1217.4	1214.6	1217.4	1219.9
42°	1165.5	1167.9	1172.7	1175.9	1179.2	1175.9	1172.7	1167.9	1165.5	1167.9	1172.7
42.5°	1116.7	1119.1	1126.0	1130.0	1132.8	1130.0	1126.0	1119.1	1116.7	1119.1	1126.0
43°	1068.0	1071.2	1080.1	1083.7	1086.5	1083.7	1080.1	1071.2	1068.0	1071.2	1080.1
43.5°	1020.0	1022.9	1033.7	1037.4	1039.8	1037.4	1033.7	1022.9	1020.0	1022.9	1033.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	881.1	885.9	898.0	904.8	907.6	904.8	898.0	885.9	881.1	885.9	898.0
45.5°	836.3	842.4	854.9	862.5	865.3	862.5	854.9	842.4	836.3	842.4	854.9
46°	793.6	800.5	812.6	821.4	825.1	821.4	812.6	800.5	793.6	800.5	812.6
46.5°	752.1	759.8	771.5	781.5	785.6	781.5	771.5	759.8	752.1	759.8	771.5
47°	711.9	720.3	731.6	742.5	746.9	742.5	731.6	720.3	711.9	720.3	731.6
47.5°	673.6	681.6	693.7	705.0	709.0	705.0	693.7	681.6	673.6	681.6	693.7
48°	637.3	645.4	657.5	669.1	673.6	669.1	657.5	645.4	637.3	645.4	657.5
48.5°	603.5	610.3	622.4	634.5	639.3	634.5	622.4	610.3	603.5	610.3	622.4
49°	570.9	577.3	589.0	601.9	606.3	601.9	589.0	577.3	570.9	577.3	589.0
49.5°	540.2	545.9	558.0	570.0	575.3	570.0	558.0	545.9	540.2	545.9	558.0
50°	512.0	516.1	528.6	540.6	545.5	540.6	528.6	516.1	512.0	516.1	528.6
50.5°	485.8	488.7	501.2	512.4	517.3	512.4	501.2	488.7	485.8	488.7	501.2
51°	461.7	464.1	475.4	485.4	491.1	485.4	475.4	464.1	461.7	464.1	475.4
51.5°	439.1	441.1	451.6	460.9	466.1	460.9	451.6	441.1	439.1	441.1	451.6
52°	418.6	420.6	430.3	437.9	442.3	437.9	430.3	420.6	418.6	420.6	430.3
52.5°	399.6	401.2	409.7	416.2	420.2	416.2	409.7	401.2	399.6	401.2	409.7
53°	382.3	385.1	391.2	396.4	399.6	396.4	391.2	385.1	382.3	385.1	391.2
53.5°	368.6	370.2	374.3	378.7	381.1	378.7	374.3	370.2	368.6	370.2	374.3
54°	355.7	356.1	358.9	362.2	364.2	362.2	358.9	356.1	355.7	356.1	358.9
54.5°	344.0	344.0	345.3	347.7	350.1	347.7	345.3	344.0	344.0	344.0	345.3
55°	332.4	332.8	334.4	336.0	337.6	336.0	334.4	332.8	332.4	332.8	334.4
55.5°	321.5	323.1	324.7	325.9	328.7	325.9	324.7	323.1	321.5	323.1	324.7
56°	313.8	314.6	315.8	316.6	319.9	316.6	315.8	314.6	313.8	314.6	315.8
56.5°	307.4	307.4	307.4	308.2	311.0	308.2	307.4	307.4	307.4	307.4	307.4
57°	301.3	301.3	300.5	300.1	302.1	300.1	300.5	301.3	301.3	301.3	300.5
57.5°	295.7	295.3	294.5	293.7	293.3	293.7	294.5	295.3	295.7	295.3	294.5
58°	289.7	289.3	288.4	287.6	286.8	287.6	288.4	289.3	289.7	289.3	288.4
58.5°	283.2	282.8	282.0	281.2	280.8	281.2	282.0	282.8	283.2	282.8	282.0
59°	276.8	276.4	276.0	275.2	274.3	275.2	276.0	276.4	276.8	276.4	276.0
59.5°	269.9	269.9	269.1	268.7	268.3	268.7	269.1	269.9	269.9	269.9	269.1
60°	263.1	263.1	262.7	262.3	261.9	262.3	262.7	263.1	263.1	263.1	262.7
60.5°	256.2	256.2	255.8	255.4	255.0	255.4	255.8	256.2	256.2	256.2	255.8
61°	249.8	249.8	249.4	249.0	248.6	249.0	249.4	249.8	249.8	249.8	249.4
61.5°	243.3	243.3	242.9	242.5	242.1	242.5	242.9	243.3	243.3	243.3	242.9
62°	236.9	236.9	236.5	236.1	235.7	236.1	236.5	236.9	236.9	236.9	236.5
62.5°	230.4	230.4	230.0	229.6	229.2	229.6	230.0	230.4	230.4	230.4	230.0
63°	224.4	224.0	224.0	223.2	223.2	223.2	224.0	224.0	224.4	224.0	224.0
63.5°	217.9	217.9	217.5	217.1	217.1	217.1	217.5	217.9	217.9	217.9	217.5
64°	211.9	211.9	211.5	211.1	210.7	211.1	211.5	211.9	211.9	211.9	211.5
64.5°	205.9	205.9	205.5	205.1	205.1	205.1	205.5	205.9	205.9	205.9	205.5
65°	199.8	200.2	199.8	199.4	199.0	199.4	199.8	200.2	199.8	200.2	199.8
65.5°	193.8	194.2	194.2	193.8	193.4	193.8	194.2	194.2	193.8	194.2	194.2
66°	188.1	188.5	188.1	187.7	187.7	187.7	188.1	188.5	188.1	188.5	188.1



TEST NUMBER: P776383

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMW-4000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	170.8	171.6	171.6	171.2	171.2	171.2	171.6	171.6	170.8	171.6	171.6
68°	165.2	166.0	166.4	166.0	166.0	166.0	166.4	166.0	165.2	166.0	166.4
68.5°	159.9	160.7	161.1	160.7	160.7	160.7	161.1	160.7	159.9	160.7	161.1
69°	154.3	155.5	155.9	155.9	155.5	155.9	155.9	155.5	154.3	155.5	155.9
69.5°	148.7	150.3	151.1	150.7	150.7	150.7	151.1	150.3	148.7	150.3	151.1
70°	143.4	144.6	145.8	145.8	145.4	145.8	145.8	144.6	143.4	144.6	145.8
70.5°	138.2	139.8	141.0	140.6	140.6	140.6	141.0	139.8	138.2	139.8	141.0
71°	133.3	135.0	136.2	136.2	135.8	136.2	136.2	135.0	133.3	135.0	136.2
71.5°	128.1	129.7	131.3	131.3	130.9	131.3	131.3	129.7	128.1	129.7	131.3
72°	123.3	124.9	126.5	126.5	126.1	126.5	126.5	124.9	123.3	124.9	126.5
72.5°	118.4	120.1	122.1	121.7	121.7	121.7	122.1	120.1	118.4	120.1	122.1
73°	113.2	115.2	117.2	117.2	116.8	117.2	117.2	115.2	113.2	115.2	117.2
73.5°	108.4	110.4	112.8	112.8	112.4	112.8	112.8	110.4	108.4	110.4	112.8
74°	103.9	105.5	108.0	108.4	108.0	108.4	108.0	105.5	103.9	105.5	108.0
74.5°	99.1	101.1	103.5	103.9	103.5	103.9	103.5	101.1	99.1	101.1	103.5
75°	94.7	96.3	99.1	99.5	99.5	99.5	99.1	96.3	94.7	96.3	99.1
75.5°	90.2	91.9	95.1	95.1	95.1	95.1	95.1	91.9	90.2	91.9	95.1
76°	85.8	87.4	90.6	91.0	91.0	91.0	90.6	87.4	85.8	87.4	90.6
76.5°	81.4	83.0	86.2	87.0	86.6	87.0	86.2	83.0	81.4	83.0	86.2
77°	76.9	79.0	82.2	83.0	82.6	83.0	82.2	79.0	76.9	79.0	82.2
77.5°	72.5	74.5	78.2	79.0	78.6	79.0	78.2	74.5	72.5	74.5	78.2
78°	68.5	70.5	73.7	74.9	74.5	74.9	73.7	70.5	68.5	70.5	73.7
78.5°	64.5	66.1	69.7	70.9	70.9	70.9	69.7	66.1	64.5	66.1	69.7
79°	60.4	62.0	65.7	66.9	66.9	66.9	65.7	62.0	60.4	62.0	65.7
79.5°	56.4	58.0	62.0	63.2	63.2	63.2	62.0	58.0	56.4	58.0	62.0
80°	52.4	54.0	58.0	59.2	59.2	59.2	58.0	54.0	52.4	54.0	58.0
80.5°	48.7	50.4	54.4	55.6	55.6	55.6	54.4	50.4	48.7	50.4	54.4
81°	44.7	46.3	50.4	52.0	52.0	52.0	50.4	46.3	44.7	46.3	50.4
81.5°	41.1	42.3	46.7	48.3	48.3	48.3	46.7	42.3	41.1	42.3	46.7
82°	37.5	38.7	43.1	44.7	44.7	44.7	43.1	38.7	37.5	38.7	43.1
82.5°	33.4	35.0	39.5	41.5	41.5	41.5	39.5	35.0	33.4	35.0	39.5
83°	29.8	31.4	35.9	37.9	37.9	37.9	35.9	31.4	29.8	31.4	35.9
83.5°	26.2	27.8	32.6	34.6	34.2	34.6	32.6	27.8	26.2	27.8	32.6
84°	23.0	24.2	29.4	31.0	31.0	31.0	29.4	24.2	23.0	24.2	29.4
84.5°	19.3	20.5	26.2	27.8	27.8	27.8	26.2	20.5	19.3	20.5	26.2
85°	16.1	17.3	23.0	24.6	24.6	24.6	23.0	17.3	16.1	17.3	23.0
85.5°	12.9	14.5	19.7	21.4	21.4	21.4	19.7	14.5	12.9	14.5	19.7
86°	10.5	11.7	16.9	18.1	18.1	18.1	16.9	11.7	10.5	11.7	16.9
86.5°	8.5	9.7	13.7	14.9	15.3	14.9	13.7	9.7	8.5	9.7	13.7
87°	6.4	7.7	11.3	12.1	12.1	12.1	11.3	7.7	6.4	7.7	11.3
87.5°	4.8	5.6	8.5	9.3	9.3	9.3	8.5	5.6	4.8	5.6	8.5
88°	3.2	4.0	6.0	6.4	6.8	6.4	6.0	4.0	3.2	4.0	6.0
88.5°	1.6	2.4	4.0	4.8	5.2	4.8	4.0	2.4	1.6	2.4	4.0



TEST NUMBER: P776383

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMW-4000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.4	0.4	0.8	1.2	0.8	0.4	0.4	0.0	0.4	0.4



TEST NUMBER: P776383

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMW-4000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2807.9	2807.9	2807.9	2807.9	2807.9	2807.9
0.5°	2807.5	2806.3	2807.5	2807.5	2807.9	2807.5
1°	2806.7	2805.5	2806.7	2807.1	2807.1	2806.7
1.5°	2805.5	2804.3	2805.5	2805.5	2805.9	2805.5
2°	2803.9	2802.3	2803.9	2803.9	2803.9	2803.9
2.5°	2801.5	2800.3	2801.5	2801.9	2801.5	2801.5
3°	2799.1	2797.5	2799.1	2799.1	2799.1	2798.7
3.5°	2795.8	2794.2	2795.8	2795.8	2795.4	2795.4
4°	2791.8	2790.6	2791.8	2791.8	2791.8	2791.8
4.5°	2787.8	2786.2	2787.8	2787.8	2787.8	2787.4
5°	2783.0	2781.3	2783.0	2783.0	2783.0	2782.5
5.5°	2777.7	2776.1	2777.7	2777.7	2777.7	2777.3
6°	2771.7	2770.5	2771.7	2771.7	2771.7	2771.7
6.5°	2765.6	2764.4	2765.6	2765.6	2765.2	2765.2
7°	2758.8	2757.6	2758.8	2758.8	2758.8	2758.4
7.5°	2751.5	2750.3	2751.5	2751.5	2751.1	2751.1
8°	2743.9	2742.7	2743.9	2743.9	2743.5	2743.1
8.5°	2735.4	2734.2	2735.4	2735.4	2735.0	2734.6
9°	2727.0	2725.7	2727.0	2726.6	2726.1	2725.7
9.5°	2717.7	2716.5	2717.7	2717.3	2716.9	2716.5
10°	2708.0	2706.8	2708.0	2707.2	2706.8	2706.8
10.5°	2697.5	2696.3	2697.5	2697.1	2696.3	2696.3
11°	2687.1	2685.5	2687.1	2686.3	2685.5	2685.5
11.5°	2675.8	2674.6	2675.8	2675.0	2674.2	2673.8
12°	2664.1	2662.9	2664.1	2663.3	2662.5	2662.1
12.5°	2651.6	2650.8	2651.6	2650.8	2650.4	2650.0
13°	2639.1	2638.3	2639.1	2638.3	2637.5	2637.1
13.5°	2626.2	2625.0	2626.2	2625.4	2624.6	2624.2
14°	2612.5	2611.7	2612.5	2612.1	2611.3	2610.5
14.5°	2598.8	2598.0	2598.8	2598.0	2597.2	2596.8
15°	2584.7	2583.5	2584.7	2583.9	2583.1	2582.3
15.5°	2569.8	2568.6	2569.8	2569.0	2568.2	2567.8
16°	2554.9	2553.7	2554.9	2554.1	2553.3	2552.5
16.5°	2539.6	2538.4	2539.6	2538.8	2538.0	2537.6
17°	2523.9	2522.7	2523.9	2523.1	2522.3	2521.9
17.5°	2507.8	2506.6	2507.8	2507.0	2506.2	2506.2
18°	2491.3	2490.1	2491.3	2490.9	2490.5	2489.7
18.5°	2474.8	2473.6	2474.8	2474.4	2474.0	2473.2
19°	2457.8	2457.0	2457.8	2457.8	2457.4	2456.6
19.5°	2441.3	2440.1	2441.3	2440.9	2440.5	2440.1
20°	2424.0	2422.4	2424.0	2424.0	2423.6	2423.2
20.5°	2406.3	2405.1	2406.3	2406.3	2406.3	2406.3
21°	2388.6	2387.3	2388.6	2389.0	2388.6	2388.1



TEST NUMBER: P776383

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMW-4000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2335.0	2333.4	2335.0	2335.4	2335.8	2335.8
23°	2316.8	2315.2	2316.8	2317.2	2317.6	2317.6
23.5°	2298.3	2297.1	2298.3	2299.1	2299.5	2299.5
24°	2279.8	2278.2	2279.8	2281.0	2281.4	2281.4
24.5°	2261.2	2259.6	2261.2	2262.5	2262.9	2263.3
25°	2242.7	2240.7	2242.7	2243.9	2244.3	2244.3
25.5°	2223.8	2222.2	2223.8	2225.4	2225.8	2225.8
26°	2205.7	2203.6	2205.7	2206.9	2207.3	2207.3
26.5°	2186.3	2184.7	2186.3	2187.9	2188.3	2188.3
27°	2167.8	2165.8	2167.8	2169.4	2169.8	2169.4
27.5°	2149.3	2147.2	2149.3	2150.5	2150.9	2150.9
28°	2130.7	2129.1	2130.7	2131.9	2132.3	2131.5
28.5°	2112.6	2111.0	2112.6	2113.8	2114.2	2113.4
29°	2094.9	2092.9	2094.9	2095.7	2096.1	2095.3
29.5°	2076.7	2075.1	2076.7	2077.9	2077.9	2077.5
30°	2058.6	2057.0	2058.6	2060.2	2060.2	2060.2
30.5°	2040.9	2038.9	2040.9	2042.1	2042.9	2042.5
31°	2022.4	2019.9	2022.4	2024.4	2025.2	2025.2
31.5°	2003.0	1999.8	2003.0	2005.0	2006.6	2006.6
32°	1980.1	1975.6	1980.1	1983.7	1986.5	1987.7
32.5°	1953.9	1948.6	1953.9	1959.9	1964.3	1967.2
33°	1926.1	1920.4	1926.1	1932.9	1940.6	1943.8
33.5°	1896.3	1890.6	1896.3	1903.5	1914.0	1916.8
34°	1864.4	1859.6	1864.4	1872.5	1885.0	1886.2
34.5°	1830.6	1826.2	1830.6	1839.5	1850.7	1852.7
35°	1794.7	1790.7	1794.7	1804.4	1814.1	1817.3
35.5°	1757.7	1752.4	1757.7	1767.7	1775.4	1779.8
36°	1719.4	1713.0	1719.4	1729.5	1734.3	1739.9
36.5°	1679.1	1671.1	1679.1	1688.8	1692.0	1698.1
37°	1637.2	1629.2	1637.2	1646.1	1648.5	1654.1
37.5°	1594.5	1586.5	1594.5	1601.8	1604.2	1608.2
38°	1551.0	1544.2	1551.0	1555.8	1558.3	1560.7
38.5°	1506.3	1500.2	1506.3	1507.9	1511.9	1511.9
39°	1460.0	1457.5	1460.0	1460.4	1464.4	1463.6
39.5°	1412.4	1412.0	1412.4	1411.2	1415.2	1414.0
40°	1364.9	1365.7	1364.9	1362.9	1366.5	1364.1
40.5°	1317.8	1318.6	1317.8	1314.5	1316.9	1313.3
41°	1269.8	1272.6	1269.8	1267.0	1267.8	1263.8
41.5°	1223.5	1224.7	1223.5	1219.9	1217.4	1214.6
42°	1175.9	1179.2	1175.9	1172.7	1167.9	1165.5
42.5°	1130.0	1132.8	1130.0	1126.0	1119.1	1116.7
43°	1083.7	1086.5	1083.7	1080.1	1071.2	1068.0
43.5°	1037.4	1039.8	1037.4	1033.7	1022.9	1020.0



TEST NUMBER: P776383

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMW-4000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	904.8	907.6	904.8	898.0	885.9	881.1
45.5°	862.5	865.3	862.5	854.9	842.4	836.3
46°	821.4	825.1	821.4	812.6	800.5	793.6
46.5°	781.5	785.6	781.5	771.5	759.8	752.1
47°	742.5	746.9	742.5	731.6	720.3	711.9
47.5°	705.0	709.0	705.0	693.7	681.6	673.6
48°	669.1	673.6	669.1	657.5	645.4	637.3
48.5°	634.5	639.3	634.5	622.4	610.3	603.5
49°	601.9	606.3	601.9	589.0	577.3	570.9
49.5°	570.0	575.3	570.0	558.0	545.9	540.2
50°	540.6	545.5	540.6	528.6	516.1	512.0
50.5°	512.4	517.3	512.4	501.2	488.7	485.8
51°	485.4	491.1	485.4	475.4	464.1	461.7
51.5°	460.9	466.1	460.9	451.6	441.1	439.1
52°	437.9	442.3	437.9	430.3	420.6	418.6
52.5°	416.2	420.2	416.2	409.7	401.2	399.6
53°	396.4	399.6	396.4	391.2	385.1	382.3
53.5°	378.7	381.1	378.7	374.3	370.2	368.6
54°	362.2	364.2	362.2	358.9	356.1	355.7
54.5°	347.7	350.1	347.7	345.3	344.0	344.0
55°	336.0	337.6	336.0	334.4	332.8	332.4
55.5°	325.9	328.7	325.9	324.7	323.1	321.5
56°	316.6	319.9	316.6	315.8	314.6	313.8
56.5°	308.2	311.0	308.2	307.4	307.4	307.4
57°	300.1	302.1	300.1	300.5	301.3	301.3
57.5°	293.7	293.3	293.7	294.5	295.3	295.7
58°	287.6	286.8	287.6	288.4	289.3	289.7
58.5°	281.2	280.8	281.2	282.0	282.8	283.2
59°	275.2	274.3	275.2	276.0	276.4	276.8
59.5°	268.7	268.3	268.7	269.1	269.9	269.9
60°	262.3	261.9	262.3	262.7	263.1	263.1
60.5°	255.4	255.0	255.4	255.8	256.2	256.2
61°	249.0	248.6	249.0	249.4	249.8	249.8
61.5°	242.5	242.1	242.5	242.9	243.3	243.3
62°	236.1	235.7	236.1	236.5	236.9	236.9
62.5°	229.6	229.2	229.6	230.0	230.4	230.4
63°	223.2	223.2	223.2	224.0	224.0	224.4
63.5°	217.1	217.1	217.1	217.5	217.9	217.9
64°	211.1	210.7	211.1	211.5	211.9	211.9
64.5°	205.1	205.1	205.1	205.5	205.9	205.9
65°	199.4	199.0	199.4	199.8	200.2	199.8
65.5°	193.8	193.4	193.8	194.2	194.2	193.8
66°	187.7	187.7	187.7	188.1	188.5	188.1



TEST NUMBER: P776383

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMW-4000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	171.2	171.2	171.2	171.6	171.6	170.8
68°	166.0	166.0	166.0	166.4	166.0	165.2
68.5°	160.7	160.7	160.7	161.1	160.7	159.9
69°	155.9	155.5	155.9	155.9	155.5	154.3
69.5°	150.7	150.7	150.7	151.1	150.3	148.7
70°	145.8	145.4	145.8	145.8	144.6	143.4
70.5°	140.6	140.6	140.6	141.0	139.8	138.2
71°	136.2	135.8	136.2	136.2	135.0	133.3
71.5°	131.3	130.9	131.3	131.3	129.7	128.1
72°	126.5	126.1	126.5	126.5	124.9	123.3
72.5°	121.7	121.7	121.7	122.1	120.1	118.4
73°	117.2	116.8	117.2	117.2	115.2	113.2
73.5°	112.8	112.4	112.8	112.8	110.4	108.4
74°	108.4	108.0	108.4	108.0	105.5	103.9
74.5°	103.9	103.5	103.9	103.5	101.1	99.1
75°	99.5	99.5	99.5	99.1	96.3	94.7
75.5°	95.1	95.1	95.1	95.1	91.9	90.2
76°	91.0	91.0	91.0	90.6	87.4	85.8
76.5°	87.0	86.6	87.0	86.2	83.0	81.4
77°	83.0	82.6	83.0	82.2	79.0	76.9
77.5°	79.0	78.6	79.0	78.2	74.5	72.5
78°	74.9	74.5	74.9	73.7	70.5	68.5
78.5°	70.9	70.9	70.9	69.7	66.1	64.5
79°	66.9	66.9	66.9	65.7	62.0	60.4
79.5°	63.2	63.2	63.2	62.0	58.0	56.4
80°	59.2	59.2	59.2	58.0	54.0	52.4
80.5°	55.6	55.6	55.6	54.4	50.4	48.7
81°	52.0	52.0	52.0	50.4	46.3	44.7
81.5°	48.3	48.3	48.3	46.7	42.3	41.1
82°	44.7	44.7	44.7	43.1	38.7	37.5
82.5°	41.5	41.5	41.5	39.5	35.0	33.4
83°	37.9	37.9	37.9	35.9	31.4	29.8
83.5°	34.6	34.2	34.6	32.6	27.8	26.2
84°	31.0	31.0	31.0	29.4	24.2	23.0
84.5°	27.8	27.8	27.8	26.2	20.5	19.3
85°	24.6	24.6	24.6	23.0	17.3	16.1
85.5°	21.4	21.4	21.4	19.7	14.5	12.9
86°	18.1	18.1	18.1	16.9	11.7	10.5
86.5°	14.9	15.3	14.9	13.7	9.7	8.5
87°	12.1	12.1	12.1	11.3	7.7	6.4
87.5°	9.3	9.3	9.3	8.5	5.6	4.8
88°	6.4	6.8	6.4	6.0	4.0	3.2
88.5°	4.8	5.2	4.8	4.0	2.4	1.6



TEST NUMBER: P776383
CATALOG NUMBER: HCDJBL3040CSD-HCD62TRMW-4000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.8	1.2	0.8	0.4	0.4	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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Peachtree City, GA 30269

Scaled Data Report



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Peachtree City, GA 30269

Scaled Data Report





21.5°	2370.8	2371.2	2370.8	2370.8	2369.6	2370.8	2370.8	2371.2	2370.8	2371.2	2370.8
22°	2353.5	2353.5	2353.5	2352.7	2351.5	2352.7	2353.5	2353.5	2353.5	2353.5	2353.5



44°	972.5	975.3	987.4	992.6	995.1	992.6	987.4	975.3	972.5	975.3	987.4
44.5°	925.8	930.2	941.9	948.3	950.7	948.3	941.9	930.2	925.8	930.2	941.9



66.5°	182.1	182.9	182.9	182.5	182.1	182.5	182.9	182.9	182.1	182.9	182.9
67°	176.5	177.3	177.3	176.9	176.5	176.9	177.3	177.3	176.5	177.3	177.3



89°	0.8	1.2	2.4	3.2	3.6	3.2	2.4	1.2	0.8	1.2	2.4
89.5°	0.4	0.4	1.2	2.0	2.4	2.0	1.2	0.4	0.4	0.4	1.2

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21.5°	2370.8	2369.6	2370.8	2370.8	2371.2	2370.8
22°	2352.7	2351.5	2352.7	2353.5	2353.5	2353.5



44°	992.6	995.1	992.6	987.4	975.3	972.5
44.5°	948.3	950.7	948.3	941.9	930.2	925.8



66.5°	182.5	182.1	182.5	182.9	182.9	182.1
67°	176.9	176.5	176.9	177.3	177.3	176.5

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89°	3.2	3.6	3.2	2.4	1.2	0.8
89.5°	2.0	2.4	2.0	1.2	0.4	0.4

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Scaled Data Report



(END OF REPORT)