

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: P776283

Luminaire Tested: HCDJBL3040CSD-HCD42TRMW-4000lm-4000K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776283  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156A001)  
Test Lab:  
Issue Date: 2/13/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBS3040CSD-HCD42TRMW-4000lm-4000K  
Description: 4 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: 3886.1 lumens  
Efficiency: N/A  
Efficacy: 100.9 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 0.97 / 0.95  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

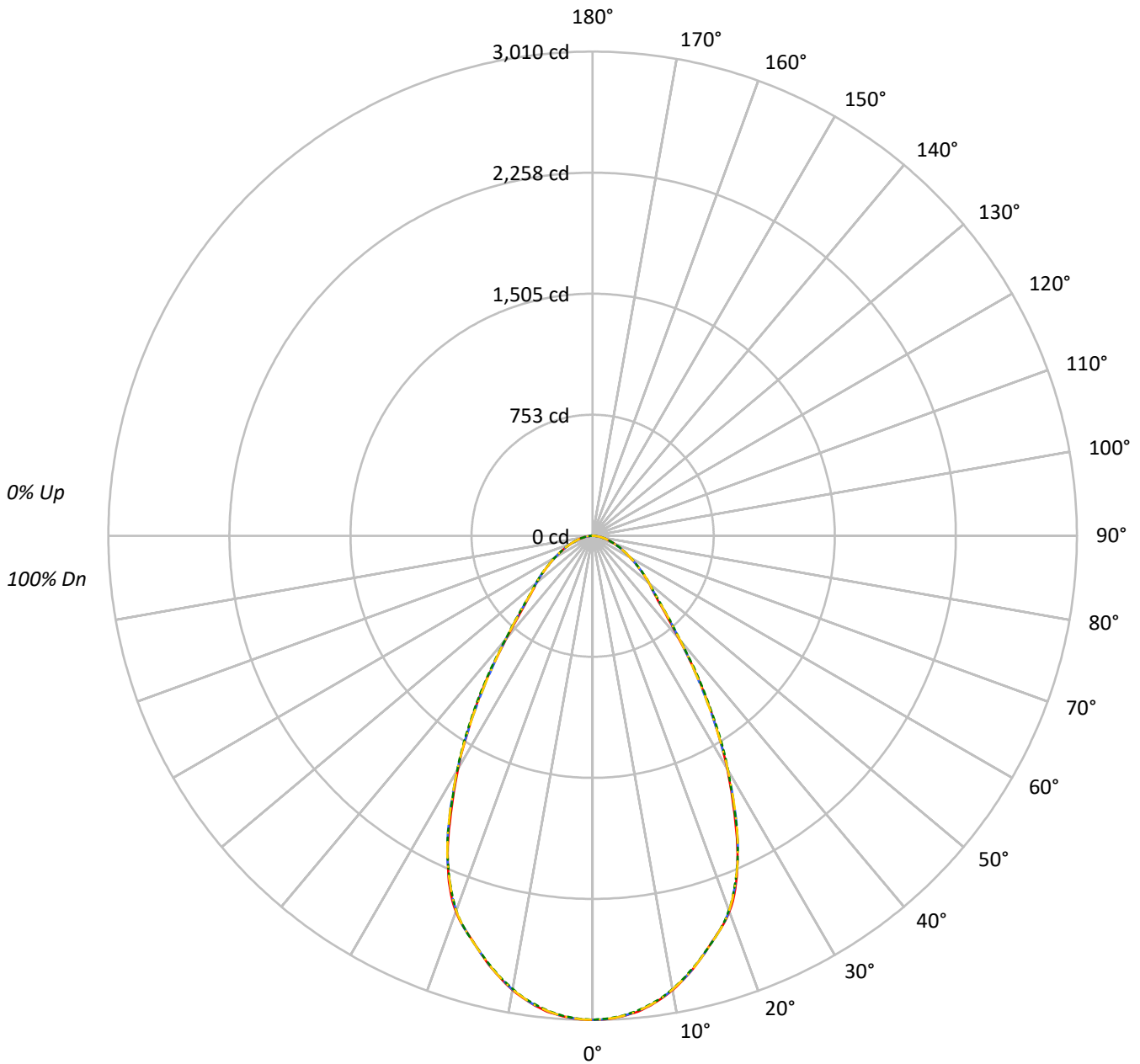
Input Watts (W): 38.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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								
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89								
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80								
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71								
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64								
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58								
6	80	69	62	57	78	68	61	56	67	60	56	65	60	55	64	59	55	53								
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49								
8	71	60	52	48	70	59	52	47	58	52	47	57	51	47	56	51	47	45								
9	67	56	49	44	66	55	48	44	54	48	44	53	48	44	52	47	43	42								
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	378758	378758	378758	378758
5°	376073	375265	376073	375265
10°	366365	365534	366365	365534
15°	350152	349736	350152	349736
20°	332941	331749	332941	331749
25°	295508	296466	295508	296466
30°	243133	244412	243133	244412
35°	188617	190660	188617	190660
40°	136997	139380	136997	139380
45°	103726	106307	103726	106307
50°	89338	90043	89338	90043
55°	77650	78528	77650	78528
60°	67858	68487	67858	68487
65°	59647	60123	59647	60123
70°	52655	52949	52655	52949
75°	46242	46242	46242	46242
80°	40006	39716	40006	39716
85°	32056	32056	32056	32056

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 106307 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	280.4	7.2
10°-20°	754.9	19.4
20°-30°	966.8	24.9
30°-40°	766.1	19.7
40°-50°	469.1	12.1
50°-60°	320.7	8.3
60°-70°	200.7	5.2
70°-80°	101.7	2.6
80°-90°	25.7	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°	2002.1	51.5
0°-40°	2768.2	71.2
0°-60°	3558.0	91.6
0°-90°	3886.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3886.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3010	3010	3010	3010	3010	
5°	2977	2970	2977	2970	2977	281
15°	2688	2684	2688	2684	2688	755
25°	2128	2135	2128	2135	2128	965
35°	1228	1241	1228	1241	1228	765
45°	583	597	583	597	583	463
55°	354	358	354	358	354	319
65°	200	202	200	202	200	200
75°	95	95	95	95	95	102
85°	22	22	22	22	22	26
90°	0	1	0	1	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°	3009.6	3009.6	3009.6	3009.6	3009.6	3009.6	3009.6	3009.6	3009.6	3009.6	3009.6
0.5°	3010.0	3009.6	3008.8	3008.4	3007.2	3008.4	3008.8	3009.6	3010.0	3009.6	3008.8
1°	3008.8	3008.4	3008.0	3007.6	3005.9	3007.6	3008.0	3008.4	3008.8	3008.4	3008.0
1.5°	3007.2	3006.3	3006.3	3005.5	3004.3	3005.5	3006.3	3006.3	3007.2	3006.3	3006.3
2°	3004.7	3004.3	3003.5	3003.1	3001.5	3003.1	3003.5	3004.3	3004.7	3004.3	3003.5
2.5°	3001.9	3001.1	3000.3	2999.9	2997.9	2999.9	3000.3	3001.1	3001.9	3001.1	3000.3
3°	2997.9	2997.1	2996.3	2995.5	2993.5	2995.5	2996.3	2997.1	2997.9	2997.1	2996.3
3.5°	2993.5	2992.6	2991.4	2990.6	2989.4	2990.6	2991.4	2992.6	2993.5	2992.6	2991.4
4°	2988.2	2987.8	2986.2	2985.4	2983.4	2985.4	2986.2	2987.8	2988.2	2987.8	2986.2
4.5°	2982.6	2981.8	2980.2	2979.3	2976.9	2979.3	2980.2	2981.8	2982.6	2981.8	2980.2
5°	2976.9	2975.7	2974.1	2973.3	2970.5	2973.3	2974.1	2975.7	2976.9	2975.7	2974.1
5.5°	2970.9	2968.1	2966.0	2965.2	2962.8	2965.2	2966.0	2968.1	2970.9	2968.1	2966.0
6°	2961.6	2960.0	2958.0	2956.8	2953.5	2956.8	2958.0	2960.0	2961.6	2960.0	2958.0
6.5°	2952.3	2951.1	2948.7	2947.5	2944.3	2947.5	2948.7	2951.1	2952.3	2951.1	2948.7
7°	2942.7	2941.1	2939.8	2937.8	2935.0	2937.8	2939.8	2941.1	2942.7	2941.1	2939.8
7.5°	2931.8	2930.2	2928.6	2927.8	2924.9	2927.8	2928.6	2930.2	2931.8	2930.2	2928.6
8°	2920.1	2918.9	2917.3	2916.1	2914.5	2916.1	2917.3	2918.9	2920.1	2918.9	2917.3
8.5°	2908.0	2906.4	2904.8	2903.6	2902.0	2903.6	2904.8	2906.4	2908.0	2906.4	2904.8
9°	2895.1	2893.9	2891.9	2890.7	2889.1	2890.7	2891.9	2893.9	2895.1	2893.9	2891.9
9.5°	2881.0	2880.2	2878.2	2877.0	2875.4	2877.0	2878.2	2880.2	2881.0	2880.2	2878.2
10°	2866.9	2865.7	2864.1	2862.5	2860.4	2862.5	2864.1	2865.7	2866.9	2865.7	2864.1
10.5°	2851.2	2850.4	2848.4	2847.1	2845.5	2847.1	2848.4	2850.4	2851.2	2850.4	2848.4
11°	2835.5	2834.7	2833.0	2831.4	2829.4	2831.4	2833.0	2834.7	2835.5	2834.7	2833.0
11.5°	2818.9	2818.1	2816.5	2814.9	2813.3	2814.9	2816.5	2818.1	2818.9	2818.1	2816.5
12°	2802.0	2801.2	2800.0	2798.0	2796.4	2798.0	2800.0	2801.2	2802.0	2801.2	2800.0
12.5°	2784.3	2783.5	2782.3	2780.2	2778.2	2780.2	2782.3	2783.5	2784.3	2783.5	2782.3
13°	2766.1	2765.3	2764.1	2762.5	2760.5	2762.5	2764.1	2765.3	2766.1	2765.3	2764.1
13.5°	2747.2	2746.4	2745.6	2744.0	2742.4	2744.0	2745.6	2746.4	2747.2	2746.4	2745.6
14°	2727.8	2727.4	2726.6	2725.0	2723.4	2725.0	2726.6	2727.4	2727.8	2727.4	2726.6
14.5°	2707.7	2707.3	2706.9	2705.3	2703.7	2705.3	2706.9	2707.3	2707.7	2707.3	2706.9
15°	2687.5	2687.5	2686.7	2685.9	2684.3	2685.9	2686.7	2687.5	2687.5	2687.5	2686.7
15.5°	2666.6	2666.6	2667.4	2666.6	2665.8	2666.6	2667.4	2666.6	2666.6	2666.6	2667.4
16°	2646.4	2646.8	2648.0	2647.6	2646.8	2647.6	2648.0	2646.8	2646.4	2646.8	2648.0
16.5°	2626.3	2627.1	2628.7	2628.7	2628.3	2628.7	2628.7	2627.1	2626.3	2627.1	2628.7
17°	2607.3	2608.1	2609.7	2609.3	2609.7	2609.3	2609.7	2608.1	2607.3	2608.1	2609.7
17.5°	2588.8	2589.6	2590.8	2590.4	2590.0	2590.4	2590.8	2589.6	2588.8	2589.6	2590.8
18°	2570.7	2571.1	2571.9	2571.1	2570.2	2571.1	2571.9	2571.1	2570.7	2571.1	2571.9
18.5°	2551.3	2551.3	2551.3	2550.5	2549.3	2550.5	2551.3	2551.3	2551.3	2551.3	2551.3
19°	2531.6	2530.3	2529.5	2528.3	2527.1	2528.3	2529.5	2530.3	2531.6	2530.3	2529.5
19.5°	2509.8	2508.2	2505.8	2505.0	2503.7	2505.0	2505.8	2508.2	2509.8	2508.2	2505.8
20°	2486.0	2484.0	2479.6	2480.0	2477.1	2480.0	2479.6	2484.0	2486.0	2484.0	2479.6
20.5°	2459.8	2456.6	2451.3	2453.0	2449.7	2453.0	2451.3	2456.6	2459.8	2456.6	2451.3
21°	2432.4	2427.6	2421.5	2423.5	2419.5	2423.5	2421.5	2427.6	2432.4	2427.6	2421.5



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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°	2332.0	2327.2	2323.2	2322.8	2320.8	2322.8	2323.2	2327.2	2332.0	2327.2	2323.2
23°	2293.8	2289.7	2288.9	2286.1	2285.3	2286.1	2288.9	2289.7	2293.8	2289.7	2288.9
23.5°	2254.7	2251.0	2253.0	2248.2	2250.2	2248.2	2253.0	2251.0	2254.7	2251.0	2253.0
24°	2214.0	2211.1	2216.0	2209.5	2213.1	2209.5	2216.0	2211.1	2214.0	2211.1	2216.0
24.5°	2172.0	2170.8	2176.9	2170.4	2175.3	2170.4	2176.9	2170.8	2172.0	2170.8	2176.9
25°	2128.1	2128.9	2136.2	2131.3	2135.0	2131.3	2136.2	2128.9	2128.1	2128.9	2136.2
25.5°	2082.6	2087.8	2094.2	2092.2	2093.0	2092.2	2094.2	2087.8	2082.6	2087.8	2094.2
26°	2035.8	2045.1	2051.1	2051.5	2048.3	2051.5	2051.1	2045.1	2035.8	2045.1	2051.1
26.5°	1987.8	2001.5	2006.4	2009.2	2001.9	2009.2	2006.4	2001.5	1987.8	2001.5	2006.4
27°	1941.1	1956.4	1961.2	1965.7	1954.8	1965.7	1961.2	1956.4	1941.1	1956.4	1961.2
27.5°	1895.1	1909.7	1915.3	1920.9	1906.8	1920.9	1915.3	1909.7	1895.1	1909.7	1915.3
28°	1849.2	1862.9	1868.5	1874.2	1858.9	1874.2	1868.5	1862.9	1849.2	1862.9	1868.5
28.5°	1804.5	1815.3	1821.8	1826.6	1812.5	1826.6	1821.8	1815.3	1804.5	1815.3	1821.8
29°	1760.1	1767.4	1775.0	1778.3	1768.6	1778.3	1775.0	1767.4	1760.1	1767.4	1775.0
29.5°	1716.6	1720.2	1728.7	1729.9	1725.5	1729.9	1728.7	1720.2	1716.6	1720.2	1728.7
30°	1673.1	1671.9	1681.1	1681.5	1681.9	1681.5	1681.1	1671.9	1673.1	1671.9	1681.1
30.5°	1627.9	1625.1	1634.0	1634.8	1640.8	1634.8	1634.0	1625.1	1627.9	1625.1	1634.0
31°	1583.2	1577.1	1586.4	1588.0	1597.3	1588.0	1586.4	1577.1	1583.2	1577.1	1586.4
31.5°	1537.2	1531.2	1538.8	1541.7	1553.4	1541.7	1538.8	1531.2	1537.2	1531.2	1538.8
32°	1490.5	1484.8	1491.7	1496.1	1508.2	1496.1	1491.7	1484.8	1490.5	1484.8	1491.7
32.5°	1445.3	1440.5	1445.3	1451.0	1463.1	1451.0	1445.3	1440.5	1445.3	1440.5	1445.3
33°	1399.8	1396.2	1397.8	1405.8	1417.1	1405.8	1397.8	1396.2	1399.8	1396.2	1397.8
33.5°	1359.1	1351.8	1350.6	1360.7	1370.8	1360.7	1350.6	1351.8	1359.1	1351.8	1350.6
34°	1315.2	1307.5	1303.9	1316.4	1326.8	1316.4	1303.9	1307.5	1315.2	1307.5	1303.9
34.5°	1271.6	1263.6	1258.3	1271.6	1283.3	1271.6	1258.3	1263.6	1271.6	1263.6	1258.3
35°	1227.7	1220.8	1215.2	1228.5	1241.0	1228.5	1215.2	1220.8	1227.7	1220.8	1215.2
35.5°	1185.0	1178.5	1172.5	1185.8	1199.5	1185.8	1172.5	1178.5	1185.0	1178.5	1172.5
36°	1143.0	1136.2	1131.0	1144.7	1158.8	1144.7	1131.0	1136.2	1143.0	1136.2	1131.0
36.5°	1101.5	1095.5	1090.7	1104.0	1117.3	1104.0	1090.7	1095.5	1101.5	1095.5	1090.7
37°	1059.6	1055.2	1051.2	1064.5	1076.1	1064.5	1051.2	1055.2	1059.6	1055.2	1051.2
37.5°	1018.9	1016.1	1013.3	1026.6	1035.0	1026.6	1013.3	1016.1	1018.9	1016.1	1013.3
38°	978.6	978.2	977.0	989.5	994.3	989.5	977.0	978.2	978.6	978.2	977.0
38.5°	940.7	941.5	942.3	953.2	955.2	953.2	942.3	941.5	940.7	941.5	942.3
39°	904.0	906.1	907.7	918.1	917.7	918.1	907.7	906.1	904.0	906.1	907.7
39.5°	868.2	871.8	874.6	883.5	882.3	883.5	874.6	871.8	868.2	871.8	874.6
40°	833.9	837.9	842.8	850.0	848.4	850.0	842.8	837.9	833.9	837.9	842.8
40.5°	801.7	805.7	812.1	817.4	817.0	817.4	812.1	805.7	801.7	805.7	812.1
41°	770.6	774.7	783.1	786.8	788.0	786.8	783.1	774.7	770.6	774.7	783.1
41.5°	741.2	745.6	755.3	757.3	761.0	757.3	755.3	745.6	741.2	745.6	755.3
42°	713.8	718.2	728.7	729.9	734.8	729.9	728.7	718.2	713.8	718.2	728.7
42.5°	688.0	692.4	703.7	704.1	709.4	704.1	703.7	692.4	688.0	692.4	703.7
43°	663.4	668.3	679.1	679.9	684.8	679.9	679.1	668.3	663.4	668.3	679.1
43.5°	640.8	645.7	656.2	656.6	661.0	656.6	656.2	645.7	640.8	645.7	656.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	582.8	586.8	593.3	595.3	597.3	595.3	593.3	586.8	582.8	586.8	593.3
45.5°	565.9	569.1	575.2	577.2	578.8	577.2	575.2	569.1	565.9	569.1	575.2
46°	549.8	552.6	557.8	560.6	561.4	560.6	557.8	552.6	549.8	552.6	557.8
46.5°	534.8	537.3	541.3	544.5	545.3	544.5	541.3	537.3	534.8	537.3	541.3
47°	520.7	522.4	526.4	529.6	530.8	529.6	526.4	522.4	520.7	522.4	526.4
47.5°	507.4	508.6	512.3	515.9	517.5	515.9	512.3	508.6	507.4	508.6	512.3
48°	494.9	496.6	500.2	503.4	505.0	503.4	500.2	496.6	494.9	496.6	500.2
48.5°	484.9	485.7	488.5	491.7	492.9	491.7	488.5	485.7	484.9	485.7	488.5
49°	475.2	475.6	478.0	480.4	481.6	480.4	478.0	475.6	475.2	475.6	478.0
49.5°	465.9	466.3	467.9	470.0	470.4	470.0	467.9	466.3	465.9	466.3	467.9
50°	456.3	456.7	457.9	459.5	459.9	459.5	457.9	456.7	456.3	456.7	457.9
50.5°	446.6	447.0	447.8	449.4	449.4	449.4	447.8	447.0	446.6	447.0	447.8
51°	435.7	436.5	437.7	439.3	439.3	439.3	437.7	436.5	435.7	436.5	437.7
51.5°	425.2	425.6	427.2	429.2	429.7	429.2	427.2	425.6	425.2	425.6	427.2
52°	414.3	415.1	416.8	418.8	419.2	418.8	416.8	415.1	414.3	415.1	416.8
52.5°	403.5	404.3	406.3	407.9	408.7	407.9	406.3	404.3	403.5	404.3	406.3
53°	393.4	394.2	395.8	397.4	398.2	397.4	395.8	394.2	393.4	394.2	395.8
53.5°	382.9	383.7	385.3	387.3	388.1	387.3	385.3	383.7	382.9	383.7	385.3
54°	373.2	373.6	375.2	376.9	377.7	376.9	375.2	373.6	373.2	373.6	375.2
54.5°	363.6	364.0	365.6	367.2	368.0	367.2	365.6	364.0	363.6	364.0	365.6
55°	353.9	354.7	356.3	357.5	357.9	357.5	356.3	354.7	353.9	354.7	356.3
55.5°	344.6	345.4	347.0	348.2	348.6	348.2	347.0	345.4	344.6	345.4	347.0
56°	335.7	336.5	337.8	339.0	339.4	339.0	337.8	336.5	335.7	336.5	337.8
56.5°	326.9	327.7	328.9	330.1	330.5	330.1	328.9	327.7	326.9	327.7	328.9
57°	318.0	318.8	320.0	321.2	321.6	321.2	320.0	318.8	318.0	318.8	320.0
57.5°	309.1	310.3	311.6	312.4	313.2	312.4	311.6	310.3	309.1	310.3	311.6
58°	301.5	301.9	303.1	304.3	304.7	304.3	303.1	301.9	301.5	301.9	303.1
58.5°	293.4	293.8	295.0	295.8	296.2	295.8	295.0	293.8	293.4	293.8	295.0
59°	285.4	285.8	286.6	287.4	288.2	287.4	286.6	285.8	285.4	285.8	286.6
59.5°	277.3	277.7	278.5	279.7	280.1	279.7	278.5	277.7	277.3	277.7	278.5
60°	269.6	270.0	270.8	271.7	272.1	271.7	270.8	270.0	269.6	270.0	270.8
60.5°	262.0	262.4	263.2	264.0	264.4	264.0	263.2	262.4	262.0	262.4	263.2
61°	254.7	255.1	255.9	256.7	257.1	256.7	255.9	255.1	254.7	255.1	255.9
61.5°	247.5	247.9	248.7	249.5	249.9	249.5	248.7	247.9	247.5	247.9	248.7
62°	240.6	240.6	241.4	242.2	242.2	242.2	241.4	240.6	240.6	240.6	241.4
62.5°	233.4	233.8	234.2	235.0	235.4	235.0	234.2	233.8	233.4	233.8	234.2
63°	226.5	226.9	227.3	228.1	228.1	228.1	227.3	226.9	226.5	226.9	227.3
63.5°	219.7	220.1	220.5	221.3	221.7	221.3	220.5	220.1	219.7	220.1	220.5
64°	213.2	213.6	214.0	214.4	214.8	214.4	214.0	213.6	213.2	213.6	214.0
64.5°	206.8	207.2	207.6	208.0	208.4	208.0	207.6	207.2	206.8	207.2	207.6
65°	200.3	200.7	201.1	201.5	201.9	201.5	201.1	200.7	200.3	200.7	201.1
65.5°	194.3	194.3	194.7	195.5	195.5	195.5	194.7	194.3	194.3	194.3	194.7
66°	187.8	188.2	188.6	189.0	189.4	189.0	188.6	188.2	187.8	188.2	188.6





TEST NUMBER: P776283

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-4000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	170.1	170.5	170.9	171.3	171.3	171.3	170.9	170.5	170.1	170.5	170.9
68°	164.4	164.8	165.3	165.7	165.7	165.7	165.3	164.8	164.4	164.8	165.3
68.5°	158.8	159.2	159.6	159.6	160.0	159.6	159.6	159.2	158.8	159.2	159.6
69°	153.6	153.6	153.6	154.4	154.4	154.4	153.6	153.6	153.6	153.6	153.6
69.5°	147.9	148.3	148.3	148.7	149.1	148.7	148.3	148.3	147.9	148.3	148.3
70°	143.1	143.5	143.1	143.5	143.9	143.5	143.1	143.5	143.1	143.5	143.1
70.5°	137.8	138.2	138.2	138.2	138.6	138.2	138.2	138.2	137.8	138.2	138.2
71°	133.0	133.0	133.0	133.0	133.4	133.0	133.0	133.0	133.0	133.0	133.0
71.5°	127.8	127.8	128.2	128.2	128.2	128.2	128.2	127.8	127.8	127.8	128.2
72°	122.9	122.9	122.9	123.3	123.3	123.3	122.9	122.9	122.9	122.9	122.9
72.5°	118.1	118.1	118.1	118.5	118.5	118.5	118.1	118.1	118.1	118.1	118.1
73°	113.3	113.3	113.3	113.7	113.7	113.7	113.3	113.3	113.3	113.3	113.3
73.5°	108.4	108.4	108.8	108.8	108.8	108.8	108.8	108.4	108.4	108.4	108.8
74°	104.0	104.0	104.0	104.4	104.4	104.4	104.0	104.0	104.0	104.0	104.0
74.5°	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
75°	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
75.5°	90.7	90.7	90.7	90.7	91.1	90.7	90.7	90.7	90.7	90.7	90.7
76°	86.7	86.3	86.3	86.7	86.7	86.7	86.3	86.3	86.7	86.3	86.3
76.5°	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
77°	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2
77.5°	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
78°	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1
78.5°	66.5	66.5	66.1	66.1	66.5	66.1	66.1	66.5	66.5	66.5	66.1
79°	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5
79.5°	58.8	58.8	58.4	58.8	58.8	58.8	58.4	58.8	58.8	58.8	58.4
80°	55.2	55.2	54.8	54.8	54.8	54.8	54.8	55.2	55.2	55.2	54.8
80.5°	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
81°	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
81.5°	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3
82°	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
82.5°	37.9	37.9	37.9	37.9	37.5	37.9	37.9	37.9	37.9	37.9	37.9
83°	34.7	34.7	34.7	34.3	34.3	34.3	34.7	34.7	34.7	34.7	34.7
83.5°	31.4	31.4	31.4	31.0	31.0	31.0	31.4	31.4	31.4	31.4	31.4
84°	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
84.5°	25.4	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.4	25.0	25.0
85°	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
85.5°	19.3	18.9	19.3	18.9	19.3	18.9	19.3	18.9	19.3	18.9	19.3
86°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
86.5°	13.7	13.3	13.3	13.3	13.7	13.3	13.3	13.3	13.7	13.3	13.3
87°	10.9	10.9	10.9	10.5	10.9	10.5	10.9	10.9	10.9	10.9	10.9
87.5°	8.1	8.1	8.1	8.1	8.5	8.1	8.1	8.1	8.1	8.1	8.1
88°	5.2	5.6	5.6	6.0	6.0	6.0	5.6	5.6	5.2	5.6	5.6
88.5°	3.2	3.2	3.6	4.0	4.8	4.0	3.6	3.2	3.2	3.2	3.6



TEST NUMBER: P776283

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-4000lm-4000K

**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P776283

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-4000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3009.6	3009.6	3009.6	3009.6	3009.6	3009.6
0.5°	3008.4	3007.2	3008.4	3008.8	3009.6	3010.0
1°	3007.6	3005.9	3007.6	3008.0	3008.4	3008.8
1.5°	3005.5	3004.3	3005.5	3006.3	3006.3	3007.2
2°	3003.1	3001.5	3003.1	3003.5	3004.3	3004.7
2.5°	2999.9	2997.9	2999.9	3000.3	3001.1	3001.9
3°	2995.5	2993.5	2995.5	2996.3	2997.1	2997.9
3.5°	2990.6	2989.4	2990.6	2991.4	2992.6	2993.5
4°	2985.4	2983.4	2985.4	2986.2	2987.8	2988.2
4.5°	2979.3	2976.9	2979.3	2980.2	2981.8	2982.6
5°	2973.3	2970.5	2973.3	2974.1	2975.7	2976.9
5.5°	2965.2	2962.8	2965.2	2966.0	2968.1	2970.9
6°	2956.8	2953.5	2956.8	2958.0	2960.0	2961.6
6.5°	2947.5	2944.3	2947.5	2948.7	2951.1	2952.3
7°	2937.8	2935.0	2937.8	2939.8	2941.1	2942.7
7.5°	2927.8	2924.9	2927.8	2928.6	2930.2	2931.8
8°	2916.1	2914.5	2916.1	2917.3	2918.9	2920.1
8.5°	2903.6	2902.0	2903.6	2904.8	2906.4	2908.0
9°	2890.7	2889.1	2890.7	2891.9	2893.9	2895.1
9.5°	2877.0	2875.4	2877.0	2878.2	2880.2	2881.0
10°	2862.5	2860.4	2862.5	2864.1	2865.7	2866.9
10.5°	2847.1	2845.5	2847.1	2848.4	2850.4	2851.2
11°	2831.4	2829.4	2831.4	2833.0	2834.7	2835.5
11.5°	2814.9	2813.3	2814.9	2816.5	2818.1	2818.9
12°	2798.0	2796.4	2798.0	2800.0	2801.2	2802.0
12.5°	2780.2	2778.2	2780.2	2782.3	2783.5	2784.3
13°	2762.5	2760.5	2762.5	2764.1	2765.3	2766.1
13.5°	2744.0	2742.4	2744.0	2745.6	2746.4	2747.2
14°	2725.0	2723.4	2725.0	2726.6	2727.4	2727.8
14.5°	2705.3	2703.7	2705.3	2706.9	2707.3	2707.7
15°	2685.9	2684.3	2685.9	2686.7	2687.5	2687.5
15.5°	2666.6	2665.8	2666.6	2667.4	2666.6	2666.6
16°	2647.6	2646.8	2647.6	2648.0	2646.8	2646.4
16.5°	2628.7	2628.3	2628.7	2628.7	2627.1	2626.3
17°	2609.3	2609.7	2609.3	2609.7	2608.1	2607.3
17.5°	2590.4	2590.0	2590.4	2590.8	2589.6	2588.8
18°	2571.1	2570.2	2571.1	2571.9	2571.1	2570.7
18.5°	2550.5	2549.3	2550.5	2551.3	2551.3	2551.3
19°	2528.3	2527.1	2528.3	2529.5	2530.3	2531.6
19.5°	2505.0	2503.7	2505.0	2505.8	2508.2	2509.8
20°	2480.0	2477.1	2480.0	2479.6	2484.0	2486.0
20.5°	2453.0	2449.7	2453.0	2451.3	2456.6	2459.8
21°	2423.5	2419.5	2423.5	2421.5	2427.6	2432.4

TEST NUMBER: P776283

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-4000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2322.8	2320.8	2322.8	2323.2	2327.2	2332.0
23°	2286.1	2285.3	2286.1	2288.9	2289.7	2293.8
23.5°	2248.2	2250.2	2248.2	2253.0	2251.0	2254.7
24°	2209.5	2213.1	2209.5	2216.0	2211.1	2214.0
24.5°	2170.4	2175.3	2170.4	2176.9	2170.8	2172.0
25°	2131.3	2135.0	2131.3	2136.2	2128.9	2128.1
25.5°	2092.2	2093.0	2092.2	2094.2	2087.8	2082.6
26°	2051.5	2048.3	2051.5	2051.1	2045.1	2035.8
26.5°	2009.2	2001.9	2009.2	2006.4	2001.5	1987.8
27°	1965.7	1954.8	1965.7	1961.2	1956.4	1941.1
27.5°	1920.9	1906.8	1920.9	1915.3	1909.7	1895.1
28°	1874.2	1858.9	1874.2	1868.5	1862.9	1849.2
28.5°	1826.6	1812.5	1826.6	1821.8	1815.3	1804.5
29°	1778.3	1768.6	1778.3	1775.0	1767.4	1760.1
29.5°	1729.9	1725.5	1729.9	1728.7	1720.2	1716.6
30°	1681.5	1681.9	1681.5	1681.1	1671.9	1673.1
30.5°	1634.8	1640.8	1634.8	1634.0	1625.1	1627.9
31°	1588.0	1597.3	1588.0	1586.4	1577.1	1583.2
31.5°	1541.7	1553.4	1541.7	1538.8	1531.2	1537.2
32°	1496.1	1508.2	1496.1	1491.7	1484.8	1490.5
32.5°	1451.0	1463.1	1451.0	1445.3	1440.5	1445.3
33°	1405.8	1417.1	1405.8	1397.8	1396.2	1399.8
33.5°	1360.7	1370.8	1360.7	1350.6	1351.8	1359.1
34°	1316.4	1326.8	1316.4	1303.9	1307.5	1315.2
34.5°	1271.6	1283.3	1271.6	1258.3	1263.6	1271.6
35°	1228.5	1241.0	1228.5	1215.2	1220.8	1227.7
35.5°	1185.8	1199.5	1185.8	1172.5	1178.5	1185.0
36°	1144.7	1158.8	1144.7	1131.0	1136.2	1143.0
36.5°	1104.0	1117.3	1104.0	1090.7	1095.5	1101.5
37°	1064.5	1076.1	1064.5	1051.2	1055.2	1059.6
37.5°	1026.6	1035.0	1026.6	1013.3	1016.1	1018.9
38°	989.5	994.3	989.5	977.0	978.2	978.6
38.5°	953.2	955.2	953.2	942.3	941.5	940.7
39°	918.1	917.7	918.1	907.7	906.1	904.0
39.5°	883.5	882.3	883.5	874.6	871.8	868.2
40°	850.0	848.4	850.0	842.8	837.9	833.9
40.5°	817.4	817.0	817.4	812.1	805.7	801.7
41°	786.8	788.0	786.8	783.1	774.7	770.6
41.5°	757.3	761.0	757.3	755.3	745.6	741.2
42°	729.9	734.8	729.9	728.7	718.2	713.8
42.5°	704.1	709.4	704.1	703.7	692.4	688.0
43°	679.9	684.8	679.9	679.1	668.3	663.4
43.5°	656.6	661.0	656.6	656.2	645.7	640.8



TEST NUMBER: P776283

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-4000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	595.3	597.3	595.3	593.3	586.8	582.8
45.5°	577.2	578.8	577.2	575.2	569.1	565.9
46°	560.6	561.4	560.6	557.8	552.6	549.8
46.5°	544.5	545.3	544.5	541.3	537.3	534.8
47°	529.6	530.8	529.6	526.4	522.4	520.7
47.5°	515.9	517.5	515.9	512.3	508.6	507.4
48°	503.4	505.0	503.4	500.2	496.6	494.9
48.5°	491.7	492.9	491.7	488.5	485.7	484.9
49°	480.4	481.6	480.4	478.0	475.6	475.2
49.5°	470.0	470.4	470.0	467.9	466.3	465.9
50°	459.5	459.9	459.5	457.9	456.7	456.3
50.5°	449.4	449.4	449.4	447.8	447.0	446.6
51°	439.3	439.3	439.3	437.7	436.5	435.7
51.5°	429.2	429.7	429.2	427.2	425.6	425.2
52°	418.8	419.2	418.8	416.8	415.1	414.3
52.5°	407.9	408.7	407.9	406.3	404.3	403.5
53°	397.4	398.2	397.4	395.8	394.2	393.4
53.5°	387.3	388.1	387.3	385.3	383.7	382.9
54°	376.9	377.7	376.9	375.2	373.6	373.2
54.5°	367.2	368.0	367.2	365.6	364.0	363.6
55°	357.5	357.9	357.5	356.3	354.7	353.9
55.5°	348.2	348.6	348.2	347.0	345.4	344.6
56°	339.0	339.4	339.0	337.8	336.5	335.7
56.5°	330.1	330.5	330.1	328.9	327.7	326.9
57°	321.2	321.6	321.2	320.0	318.8	318.0
57.5°	312.4	313.2	312.4	311.6	310.3	309.1
58°	304.3	304.7	304.3	303.1	301.9	301.5
58.5°	295.8	296.2	295.8	295.0	293.8	293.4
59°	287.4	288.2	287.4	286.6	285.8	285.4
59.5°	279.7	280.1	279.7	278.5	277.7	277.3
60°	271.7	272.1	271.7	270.8	270.0	269.6
60.5°	264.0	264.4	264.0	263.2	262.4	262.0
61°	256.7	257.1	256.7	255.9	255.1	254.7
61.5°	249.5	249.9	249.5	248.7	247.9	247.5
62°	242.2	242.2	242.2	241.4	240.6	240.6
62.5°	235.0	235.4	235.0	234.2	233.8	233.4
63°	228.1	228.1	228.1	227.3	226.9	226.5
63.5°	221.3	221.7	221.3	220.5	220.1	219.7
64°	214.4	214.8	214.4	214.0	213.6	213.2
64.5°	208.0	208.4	208.0	207.6	207.2	206.8
65°	201.5	201.9	201.5	201.1	200.7	200.3
65.5°	195.5	195.5	195.5	194.7	194.3	194.3
66°	189.0	189.4	189.0	188.6	188.2	187.8



TEST NUMBER: P776283

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-4000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	171.3	171.3	171.3	170.9	170.5	170.1
68°	165.7	165.7	165.7	165.3	164.8	164.4
68.5°	159.6	160.0	159.6	159.6	159.2	158.8
69°	154.4	154.4	154.4	153.6	153.6	153.6
69.5°	148.7	149.1	148.7	148.3	148.3	147.9
70°	143.5	143.9	143.5	143.1	143.5	143.1
70.5°	138.2	138.6	138.2	138.2	138.2	137.8
71°	133.0	133.4	133.0	133.0	133.0	133.0
71.5°	128.2	128.2	128.2	128.2	127.8	127.8
72°	123.3	123.3	123.3	122.9	122.9	122.9
72.5°	118.5	118.5	118.5	118.1	118.1	118.1
73°	113.7	113.7	113.7	113.3	113.3	113.3
73.5°	108.8	108.8	108.8	108.8	108.4	108.4
74°	104.4	104.4	104.4	104.0	104.0	104.0
74.5°	99.6	99.6	99.6	99.6	99.6	99.6
75°	95.1	95.1	95.1	95.1	95.1	95.1
75.5°	90.7	91.1	90.7	90.7	90.7	90.7
76°	86.7	86.7	86.7	86.3	86.3	86.7
76.5°	82.2	82.2	82.2	82.2	82.2	82.2
77°	78.2	78.2	78.2	78.2	78.2	78.2
77.5°	74.2	74.2	74.2	74.2	74.2	74.2
78°	70.1	70.1	70.1	70.1	70.1	70.1
78.5°	66.1	66.5	66.1	66.1	66.5	66.5
79°	62.5	62.5	62.5	62.5	62.5	62.5
79.5°	58.8	58.8	58.8	58.4	58.8	58.8
80°	54.8	54.8	54.8	54.8	55.2	55.2
80.5°	51.6	51.6	51.6	51.6	51.6	51.6
81°	48.0	48.0	48.0	48.0	48.0	48.0
81.5°	44.3	44.3	44.3	44.3	44.3	44.3
82°	41.1	41.1	41.1	41.1	41.1	41.1
82.5°	37.9	37.5	37.9	37.9	37.9	37.9
83°	34.3	34.3	34.3	34.7	34.7	34.7
83.5°	31.0	31.0	31.0	31.4	31.4	31.4
84°	28.2	28.2	28.2	28.2	28.2	28.2
84.5°	25.0	25.0	25.0	25.0	25.0	25.4
85°	22.2	22.2	22.2	22.2	22.2	22.2
85.5°	18.9	19.3	18.9	19.3	18.9	19.3
86°	16.1	16.1	16.1	16.1	16.1	16.1
86.5°	13.3	13.7	13.3	13.3	13.3	13.7
87°	10.5	10.9	10.5	10.9	10.9	10.9
87.5°	8.1	8.5	8.1	8.1	8.1	8.1
88°	6.0	6.0	6.0	5.6	5.6	5.2
88.5°	4.0	4.8	4.0	3.6	3.2	3.2



TEST NUMBER: P776283

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-4000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.8	1.2	0.8	0.4	0.0	0.0



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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°	2400.6	2396.5	2389.7	2391.7	2387.7	2391.7	2389.7	2396.5	2400.6	2396.5	2389.7
22°	2367.1	2363.1	2357.0	2357.8	2353.8	2357.8	2357.0	2363.1	2367.1	2363.1	2357.0



44°	619.9	624.7	634.0	634.8	638.8	634.8	634.0	624.7	619.9	624.7	634.0
44.5°	600.5	605.4	613.4	614.7	617.5	614.7	613.4	605.4	600.5	605.4	613.4



66.5°	181.8	182.2	182.6	183.0	183.4	183.0	182.6	182.2	181.8	182.2	182.6
67°	176.1	176.1	176.5	176.9	177.3	176.9	176.5	176.1	176.1	176.1	176.5



89°	1.2	1.6	2.4	2.8	3.2	2.8	2.4	1.6	1.2	1.6	2.4
89.5°	0.0	0.4	1.2	1.6	2.0	1.6	1.2	0.4	0.0	0.4	1.2



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21.5°	2391.7	2387.7	2391.7	2389.7	2396.5	2400.6
22°	2357.8	2353.8	2357.8	2357.0	2363.1	2367.1



44°	634.8	638.8	634.8	634.0	624.7	619.9
44.5°	614.7	617.5	614.7	613.4	605.4	600.5



66.5°	183.0	183.4	183.0	182.6	182.2	181.8
67°	176.9	177.3	176.9	176.5	176.1	176.1

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89°	2.8	3.2	2.8	2.4	1.6	1.2
89.5°	1.6	2.0	1.6	1.2	0.4	0.0

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)