

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: P776233

Luminaire Tested: HCDJBL3040CSD-HCD42TRMW-3500lm-4000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776233
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-3500lm-4000K
Description: 4 INCH ROUND NARROW MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

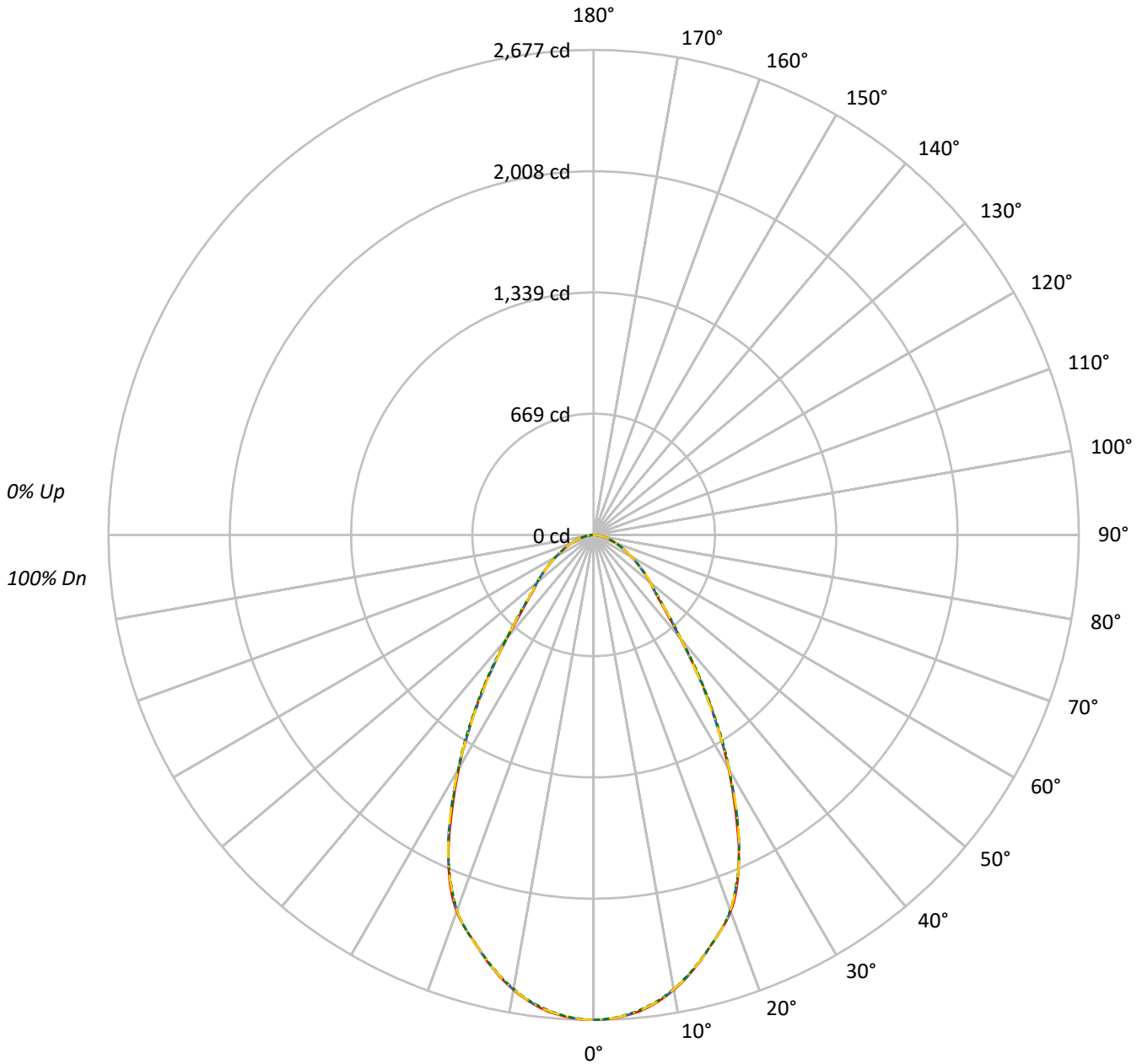
Lumens per Lamp: N/A
Luminaire Lumens: 3456.8 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 0.96 / 0.97 / 0.95
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 33.5
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



TEST NUMBER: P776233
CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-3500lm-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	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°	336912	336912	336912	336912
5°	334523	333803	334523	333803
10°	325893	325152	325893	325152
15°	311470	311092	311470	311092
20°	296165	295107	296165	295107
25°	262862	263709	262862	263709
30°	216263	217411	216263	217411
35°	167784	169597	167784	169597
40°	121867	123986	121867	123986
45°	92264	94560	92264	94560
50°	79451	80097	79451	80097
55°	69071	69861	69071	69861
60°	60383	60911	60383	60911
65°	53065	53482	53065	53482
70°	46841	47099	46841	47099
75°	41136	41136	41136	41136
80°	35585	35367	35585	35367
85°	28446	28446	28446	28446

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 94560 cd/sqm



TEST NUMBER: P776233

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-3500lm-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.4	7.2
10°-20°	671.5	19.4
20°-30°	860.0	24.9
30°-40°	681.5	19.7
40°-50°	417.3	12.1
50°-60°	285.2	8.3
60°-70°	178.6	5.2
70°-80°	90.5	2.6
80°-90°	22.8	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°	1780.9	51.5
0°-40°	2462.4	71.2
0°-60°	3164.9	91.6
0°-90°	3456.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3456.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2677	2677	2677	2677	2677	
5°	2648	2642	2648	2642	2648	250
15°	2391	2388	2391	2388	2391	672
25°	1893	1899	1893	1899	1893	858
35°	1092	1104	1092	1104	1092	681
45°	518	531	518	531	518	412
55°	315	318	315	318	315	284
65°	178	180	178	180	178	178
75°	85	85	85	85	85	90
85°	20	20	20	20	20	23
90°	0	1	0	1	0	



TEST NUMBER: P776233

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-3500lm-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2677.1	2677.1	2677.1	2677.1	2677.1	2677.1	2677.1	2677.1	2677.1	2677.1	2677.1
0.5°	2677.4	2677.1	2676.4	2676.0	2674.9	2676.0	2676.4	2677.1	2677.4	2677.1	2676.4
1°	2676.4	2676.0	2675.6	2675.3	2673.8	2675.3	2675.6	2676.0	2676.4	2676.0	2675.6
1.5°	2674.9	2674.2	2674.2	2673.5	2672.4	2673.5	2674.2	2674.2	2674.9	2674.2	2674.2
2°	2672.8	2672.4	2671.7	2671.3	2669.9	2671.3	2671.7	2672.4	2672.8	2672.4	2671.7
2.5°	2670.3	2669.5	2668.8	2668.5	2666.7	2668.5	2668.8	2669.5	2670.3	2669.5	2668.8
3°	2666.7	2666.0	2665.2	2664.5	2662.7	2664.5	2665.2	2666.0	2666.7	2666.0	2665.2
3.5°	2662.7	2662.0	2660.9	2660.2	2659.1	2660.2	2660.9	2662.0	2662.7	2662.0	2660.9
4°	2658.1	2657.7	2656.3	2655.6	2653.8	2655.6	2656.3	2657.7	2658.1	2657.7	2656.3
4.5°	2653.1	2652.3	2650.9	2650.2	2648.0	2650.2	2650.9	2652.3	2653.1	2652.3	2650.9
5°	2648.0	2647.0	2645.5	2644.8	2642.3	2644.8	2645.5	2647.0	2648.0	2647.0	2645.5
5.5°	2642.7	2640.1	2638.4	2637.6	2635.5	2637.6	2638.4	2640.1	2642.7	2640.1	2638.4
6°	2634.4	2633.0	2631.2	2630.1	2627.2	2630.1	2631.2	2633.0	2634.4	2633.0	2631.2
6.5°	2626.2	2625.1	2622.9	2621.9	2619.0	2621.9	2622.9	2625.1	2626.2	2625.1	2622.9
7°	2617.6	2616.1	2615.0	2613.3	2610.7	2613.3	2615.0	2616.1	2617.6	2616.1	2615.0
7.5°	2607.9	2606.4	2605.0	2604.3	2601.8	2604.3	2605.0	2606.4	2607.9	2606.4	2605.0
8°	2597.5	2596.4	2595.0	2593.9	2592.5	2593.9	2595.0	2596.4	2597.5	2596.4	2595.0
8.5°	2586.7	2585.3	2583.9	2582.8	2581.3	2582.8	2583.9	2585.3	2586.7	2585.3	2583.9
9°	2575.3	2574.2	2572.4	2571.3	2569.9	2571.3	2572.4	2574.2	2575.3	2574.2	2572.4
9.5°	2562.7	2562.0	2560.2	2559.1	2557.7	2559.1	2560.2	2562.0	2562.7	2562.0	2560.2
10°	2550.2	2549.1	2547.6	2546.2	2544.4	2546.2	2547.6	2549.1	2550.2	2549.1	2547.6
10.5°	2536.2	2535.5	2533.7	2532.6	2531.2	2532.6	2533.7	2535.5	2536.2	2535.5	2533.7
11°	2522.2	2521.5	2520.0	2518.6	2516.8	2518.6	2520.0	2521.5	2522.2	2521.5	2520.0
11.5°	2507.5	2506.8	2505.3	2503.9	2502.5	2503.9	2505.3	2506.8	2507.5	2506.8	2505.3
12°	2492.4	2491.7	2490.6	2488.9	2487.4	2488.9	2490.6	2491.7	2492.4	2491.7	2490.6
12.5°	2476.7	2475.9	2474.9	2473.1	2471.3	2473.1	2474.9	2475.9	2476.7	2475.9	2474.9
13°	2460.5	2459.8	2458.7	2457.3	2455.5	2457.3	2458.7	2459.8	2460.5	2459.8	2458.7
13.5°	2443.7	2443.0	2442.2	2440.8	2439.4	2440.8	2442.2	2443.0	2443.7	2443.0	2442.2
14°	2426.5	2426.1	2425.4	2424.0	2422.5	2424.0	2425.4	2426.1	2426.5	2426.1	2425.4
14.5°	2408.5	2408.2	2407.8	2406.4	2405.0	2406.4	2407.8	2408.2	2408.5	2408.2	2407.8
15°	2390.6	2390.6	2389.9	2389.2	2387.7	2389.2	2389.9	2390.6	2390.6	2390.6	2389.9
15.5°	2372.0	2372.0	2372.7	2372.0	2371.3	2372.0	2372.7	2372.0	2372.0	2372.0	2372.7
16°	2354.0	2354.4	2355.5	2355.1	2354.4	2355.1	2355.5	2354.4	2354.0	2354.4	2355.5
16.5°	2336.1	2336.8	2338.3	2338.3	2337.9	2338.3	2338.3	2336.8	2336.1	2336.8	2338.3
17°	2319.3	2320.0	2321.4	2321.1	2321.4	2321.1	2321.4	2320.0	2319.3	2320.0	2321.4
17.5°	2302.8	2303.5	2304.6	2304.2	2303.9	2304.2	2304.6	2303.5	2302.8	2303.5	2304.6
18°	2286.6	2287.0	2287.7	2287.0	2286.3	2287.0	2287.7	2287.0	2286.6	2287.0	2287.7
18.5°	2269.4	2269.4	2269.4	2268.7	2267.6	2268.7	2269.4	2269.4	2269.4	2269.4	2269.4
19°	2251.9	2250.8	2250.1	2249.0	2247.9	2249.0	2250.1	2250.8	2251.9	2250.8	2250.1
19.5°	2232.5	2231.1	2228.9	2228.2	2227.1	2228.2	2228.9	2231.1	2232.5	2231.1	2228.9
20°	2211.4	2209.6	2205.6	2206.0	2203.5	2206.0	2205.6	2209.6	2211.4	2209.6	2205.6
20.5°	2188.1	2185.2	2180.5	2182.0	2179.1	2182.0	2180.5	2185.2	2188.1	2185.2	2180.5
21°	2163.7	2159.4	2154.0	2155.8	2152.2	2155.8	2154.0	2159.4	2163.7	2159.4	2154.0



TEST NUMBER: P776233

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-3500lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	2074.4	2070.1	2066.5	2066.2	2064.4	2066.2	2066.5	2070.1	2074.4	2070.1	2066.5
23°	2040.3	2036.8	2036.0	2033.5	2032.8	2033.5	2036.0	2036.8	2040.3	2036.8	2036.0
23.5°	2005.6	2002.3	2004.1	1999.8	2001.6	1999.8	2004.1	2002.3	2005.6	2002.3	2004.1
24°	1969.4	1966.8	1971.1	1965.4	1968.6	1965.4	1971.1	1966.8	1969.4	1966.8	1971.1
24.5°	1932.1	1931.0	1936.4	1930.6	1934.9	1930.6	1936.4	1931.0	1932.1	1931.0	1936.4
25°	1893.0	1893.7	1900.2	1895.9	1899.1	1895.9	1900.2	1893.7	1893.0	1893.7	1900.2
25.5°	1852.5	1857.1	1862.9	1861.1	1861.8	1861.1	1862.9	1857.1	1852.5	1857.1	1862.9
26°	1810.9	1819.1	1824.5	1824.9	1822.0	1824.9	1824.5	1819.1	1810.9	1819.1	1824.5
26.5°	1768.2	1780.4	1784.7	1787.2	1780.8	1787.2	1784.7	1780.4	1768.2	1780.4	1784.7
27°	1726.6	1740.3	1744.6	1748.5	1738.8	1748.5	1744.6	1740.3	1726.6	1740.3	1744.6
27.5°	1685.8	1698.7	1703.7	1708.7	1696.2	1708.7	1703.7	1698.7	1685.8	1698.7	1703.7
28°	1644.9	1657.1	1662.1	1667.1	1653.5	1667.1	1662.1	1657.1	1644.9	1657.1	1662.1
28.5°	1605.1	1614.8	1620.5	1624.8	1612.3	1624.8	1620.5	1614.8	1605.1	1614.8	1620.5
29°	1565.7	1572.1	1578.9	1581.8	1573.2	1581.8	1578.9	1572.1	1565.7	1572.1	1578.9
29.5°	1526.9	1530.2	1537.7	1538.8	1534.8	1538.8	1537.7	1530.2	1526.9	1530.2	1537.7
30°	1488.2	1487.1	1495.4	1495.7	1496.1	1495.7	1495.4	1487.1	1488.2	1487.1	1495.4
30.5°	1448.1	1445.6	1453.4	1454.2	1459.5	1454.2	1453.4	1445.6	1448.1	1445.6	1453.4
31°	1408.3	1402.9	1411.1	1412.6	1420.8	1412.6	1411.1	1402.9	1408.3	1402.9	1411.1
31.5°	1367.4	1362.0	1368.8	1371.3	1381.7	1371.3	1368.8	1362.0	1367.4	1362.0	1368.8
32°	1325.8	1320.8	1326.9	1330.8	1341.6	1330.8	1326.9	1320.8	1325.8	1320.8	1326.9
32.5°	1285.7	1281.4	1285.7	1290.7	1301.4	1290.7	1285.7	1281.4	1285.7	1281.4	1285.7
33°	1245.1	1241.9	1243.3	1250.5	1260.6	1250.5	1243.3	1241.9	1245.1	1241.9	1243.3
33.5°	1208.9	1202.5	1201.4	1210.4	1219.3	1210.4	1201.4	1202.5	1208.9	1202.5	1201.4
34°	1169.9	1163.0	1159.8	1170.9	1180.2	1170.9	1159.8	1163.0	1169.9	1163.0	1159.8
34.5°	1131.1	1124.0	1119.3	1131.1	1141.5	1131.1	1119.3	1124.0	1131.1	1124.0	1119.3
35°	1092.1	1086.0	1080.9	1092.8	1103.9	1092.8	1080.9	1086.0	1092.1	1086.0	1080.9
35.5°	1054.1	1048.3	1042.9	1054.8	1067.0	1054.8	1042.9	1048.3	1054.1	1048.3	1042.9
36°	1016.8	1010.7	1006.0	1018.2	1030.7	1018.2	1006.0	1010.7	1016.8	1010.7	1006.0
36.5°	979.8	974.5	970.2	982.0	993.8	982.0	970.2	974.5	979.8	974.5	970.2
37°	942.6	938.6	935.0	946.9	957.3	946.9	935.0	938.6	942.6	938.6	935.0
37.5°	906.3	903.8	901.3	913.2	920.7	913.2	901.3	903.8	906.3	903.8	901.3
38°	870.5	870.1	869.1	880.2	884.5	880.2	869.1	870.1	870.5	870.1	869.1
38.5°	836.8	837.5	838.2	847.9	849.7	847.9	838.2	837.5	836.8	837.5	838.2
39°	804.2	806.0	807.4	816.7	816.4	816.7	807.4	806.0	804.2	806.0	807.4
39.5°	772.3	775.5	778.0	785.9	784.8	785.9	778.0	775.5	772.3	775.5	778.0
40°	741.8	745.4	749.7	756.1	754.7	756.1	749.7	745.4	741.8	745.4	749.7
40.5°	713.1	716.7	722.4	727.1	726.7	727.1	722.4	716.7	713.1	716.7	722.4
41°	685.5	689.1	696.6	699.8	700.9	699.8	696.6	689.1	685.5	689.1	696.6
41.5°	659.3	663.3	671.9	673.7	676.9	673.7	671.9	663.3	659.3	663.3	671.9
42°	634.9	638.9	648.2	649.3	653.6	649.3	648.2	638.9	634.9	638.9	648.2
42.5°	612.0	615.9	626.0	626.3	631.0	626.3	626.0	615.9	612.0	615.9	626.0
43°	590.1	594.4	604.1	604.8	609.1	604.8	604.1	594.4	590.1	594.4	604.1
43.5°	570.0	574.4	583.7	584.0	588.0	584.0	583.7	574.4	570.0	574.4	583.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	518.4	522.0	527.7	529.5	531.3	529.5	527.7	522.0	518.4	522.0	527.7
45.5°	503.4	506.2	511.6	513.4	514.8	513.4	511.6	506.2	503.4	506.2	511.6
46°	489.0	491.5	496.2	498.7	499.4	498.7	496.2	491.5	489.0	491.5	496.2
46.5°	475.8	477.9	481.5	484.4	485.1	484.4	481.5	477.9	475.8	477.9	481.5
47°	463.2	464.6	468.2	471.1	472.2	471.1	468.2	464.6	463.2	464.6	468.2
47.5°	451.4	452.5	455.7	458.9	460.3	458.9	455.7	452.5	451.4	452.5	455.7
48°	440.3	441.7	444.9	447.8	449.2	447.8	444.9	441.7	440.3	441.7	444.9
48.5°	431.3	432.0	434.5	437.4	438.5	437.4	434.5	432.0	431.3	432.0	434.5
49°	422.7	423.1	425.2	427.4	428.4	427.4	425.2	423.1	422.7	423.1	425.2
49.5°	414.4	414.8	416.2	418.0	418.4	418.0	416.2	414.8	414.4	414.8	416.2
50°	405.8	406.2	407.3	408.7	409.1	408.7	407.3	406.2	405.8	406.2	407.3
50.5°	397.2	397.6	398.3	399.8	399.8	399.8	398.3	397.6	397.2	397.6	398.3
51°	387.6	388.3	389.4	390.8	390.8	390.8	389.4	388.3	387.6	388.3	389.4
51.5°	378.2	378.6	380.0	381.8	382.2	381.8	380.0	378.6	378.2	378.6	380.0
52°	368.6	369.3	370.7	372.5	372.9	372.5	370.7	369.3	368.6	369.3	370.7
52.5°	358.9	359.6	361.4	362.8	363.5	362.8	361.4	359.6	358.9	359.6	361.4
53°	349.9	350.6	352.1	353.5	354.2	353.5	352.1	350.6	349.9	350.6	352.1
53.5°	340.6	341.3	342.7	344.5	345.3	344.5	342.7	341.3	340.6	341.3	342.7
54°	332.0	332.3	333.8	335.2	335.9	335.2	333.8	332.3	332.0	332.3	333.8
54.5°	323.4	323.7	325.2	326.6	327.3	326.6	325.2	323.7	323.4	323.7	325.2
55°	314.8	315.5	316.9	318.0	318.4	318.0	316.9	315.5	314.8	315.5	316.9
55.5°	306.5	307.3	308.7	309.8	310.1	309.8	308.7	307.3	306.5	307.3	308.7
56°	298.6	299.4	300.4	301.5	301.9	301.5	300.4	299.4	298.6	299.4	300.4
56.5°	290.8	291.5	292.6	293.6	294.0	293.6	292.6	291.5	290.8	291.5	292.6
57°	282.9	283.6	284.7	285.7	286.1	285.7	284.7	283.6	282.9	283.6	284.7
57.5°	275.0	276.1	277.1	277.9	278.6	277.9	277.1	276.1	275.0	276.1	277.1
58°	268.2	268.5	269.6	270.7	271.0	270.7	269.6	268.5	268.2	268.5	269.6
58.5°	261.0	261.4	262.4	263.2	263.5	263.2	262.4	261.4	261.0	261.4	262.4
59°	253.8	254.2	254.9	255.6	256.3	255.6	254.9	254.2	253.8	254.2	254.9
59.5°	246.7	247.0	247.7	248.8	249.2	248.8	247.7	247.0	246.7	247.0	247.7
60°	239.9	240.2	240.9	241.6	242.0	241.6	240.9	240.2	239.9	240.2	240.9
60.5°	233.0	233.4	234.1	234.8	235.2	234.8	234.1	233.4	233.0	233.4	234.1
61°	226.6	226.9	227.7	228.4	228.7	228.4	227.7	226.9	226.6	226.9	227.7
61.5°	220.1	220.5	221.2	221.9	222.3	221.9	221.2	220.5	220.1	220.5	221.2
62°	214.0	214.0	214.8	215.5	215.5	215.5	214.8	214.0	214.0	214.0	214.8
62.5°	207.6	207.9	208.3	209.0	209.4	209.0	208.3	207.9	207.6	207.9	208.3
63°	201.5	201.8	202.2	202.9	202.9	202.9	202.2	201.8	201.5	201.8	202.2
63.5°	195.4	195.8	196.1	196.8	197.2	196.8	196.1	195.8	195.4	195.8	196.1
64°	189.7	190.0	190.4	190.7	191.1	190.7	190.4	190.0	189.7	190.0	190.4
64.5°	183.9	184.3	184.6	185.0	185.4	185.0	184.6	184.3	183.9	184.3	184.6
65°	178.2	178.5	178.9	179.3	179.6	179.3	178.9	178.5	178.2	178.5	178.9
65.5°	172.8	172.8	173.2	173.9	173.9	173.9	173.2	172.8	172.8	172.8	173.2
66°	167.1	167.4	167.8	168.1	168.5	168.1	167.8	167.4	167.1	167.4	167.8



TEST NUMBER: P776233

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-3500lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	151.3	151.7	152.0	152.4	152.4	152.4	152.0	151.7	151.3	151.7	152.0
68°	146.3	146.6	147.0	147.4	147.4	147.4	147.0	146.6	146.3	146.6	147.0
68.5°	141.3	141.6	142.0	142.0	142.3	142.0	142.0	141.6	141.3	141.6	142.0
69°	136.6	136.6	136.6	137.3	137.3	137.3	136.6	136.6	136.6	136.6	136.6
69.5°	131.6	131.9	131.9	132.3	132.7	132.3	131.9	131.9	131.6	131.9	131.9
70°	127.3	127.6	127.3	127.6	128.0	127.6	127.3	127.6	127.3	127.6	127.3
70.5°	122.6	123.0	123.0	123.0	123.3	123.0	123.0	123.0	122.6	123.0	123.0
71°	118.3	118.3	118.3	118.3	118.7	118.3	118.3	118.3	118.3	118.3	118.3
71.5°	113.7	113.7	114.0	114.0	114.0	114.0	114.0	113.7	113.7	113.7	114.0
72°	109.3	109.3	109.3	109.7	109.7	109.7	109.3	109.3	109.3	109.3	109.3
72.5°	105.0	105.0	105.0	105.4	105.4	105.4	105.0	105.0	105.0	105.0	105.0
73°	100.7	100.7	100.7	101.1	101.1	101.1	100.7	100.7	100.7	100.7	100.7
73.5°	96.4	96.4	96.8	96.8	96.8	96.8	96.8	96.4	96.4	96.4	96.8
74°	92.5	92.5	92.5	92.9	92.9	92.9	92.5	92.5	92.5	92.5	92.5
74.5°	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6
75°	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6
75.5°	80.7	80.7	80.7	80.7	81.0	80.7	80.7	80.7	80.7	80.7	80.7
76°	77.1	76.7	76.7	77.1	77.1	77.1	76.7	76.7	77.1	76.7	76.7
76.5°	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
77°	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
77.5°	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
78°	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
78.5°	59.2	59.2	58.8	58.8	59.2	58.8	58.8	59.2	59.2	59.2	58.8
79°	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6
79.5°	52.3	52.3	52.0	52.3	52.3	52.3	52.0	52.3	52.3	52.3	52.0
80°	49.1	49.1	48.8	48.8	48.8	48.8	48.8	49.1	49.1	49.1	48.8
80.5°	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9
81°	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
81.5°	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
82°	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
82.5°	33.7	33.7	33.7	33.7	33.3	33.7	33.7	33.7	33.7	33.7	33.7
83°	30.8	30.8	30.8	30.5	30.5	30.5	30.8	30.8	30.8	30.8	30.8
83.5°	28.0	28.0	28.0	27.6	27.6	27.6	28.0	28.0	28.0	28.0	28.0
84°	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
84.5°	22.6	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.6	22.2	22.2
85°	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7
85.5°	17.2	16.9	17.2	16.9	17.2	16.9	17.2	16.9	17.2	16.9	17.2
86°	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
86.5°	12.2	11.8	11.8	11.8	12.2	11.8	11.8	11.8	12.2	11.8	11.8
87°	9.7	9.7	9.7	9.3	9.7	9.3	9.7	9.7	9.7	9.7	9.7
87.5°	7.2	7.2	7.2	7.2	7.5	7.2	7.2	7.2	7.2	7.2	7.2
88°	4.7	5.0	5.0	5.4	5.4	5.4	5.0	5.0	4.7	5.0	5.0
88.5°	2.9	2.9	3.2	3.6	4.3	3.6	3.2	2.9	2.9	2.9	3.2



TEST NUMBER: P776233
CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-3500lm-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	0.7	1.1	0.7	0.4	0.0	0.0	0.0	0.4



TEST NUMBER: P776233

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-3500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2677.1	2677.1	2677.1	2677.1	2677.1	2677.1
0.5°	2676.0	2674.9	2676.0	2676.4	2677.1	2677.4
1°	2675.3	2673.8	2675.3	2675.6	2676.0	2676.4
1.5°	2673.5	2672.4	2673.5	2674.2	2674.2	2674.9
2°	2671.3	2669.9	2671.3	2671.7	2672.4	2672.8
2.5°	2668.5	2666.7	2668.5	2668.8	2669.5	2670.3
3°	2664.5	2662.7	2664.5	2665.2	2666.0	2666.7
3.5°	2660.2	2659.1	2660.2	2660.9	2662.0	2662.7
4°	2655.6	2653.8	2655.6	2656.3	2657.7	2658.1
4.5°	2650.2	2648.0	2650.2	2650.9	2652.3	2653.1
5°	2644.8	2642.3	2644.8	2645.5	2647.0	2648.0
5.5°	2637.6	2635.5	2637.6	2638.4	2640.1	2642.7
6°	2630.1	2627.2	2630.1	2631.2	2633.0	2634.4
6.5°	2621.9	2619.0	2621.9	2622.9	2625.1	2626.2
7°	2613.3	2610.7	2613.3	2615.0	2616.1	2617.6
7.5°	2604.3	2601.8	2604.3	2605.0	2606.4	2607.9
8°	2593.9	2592.5	2593.9	2595.0	2596.4	2597.5
8.5°	2582.8	2581.3	2582.8	2583.9	2585.3	2586.7
9°	2571.3	2569.9	2571.3	2572.4	2574.2	2575.3
9.5°	2559.1	2557.7	2559.1	2560.2	2562.0	2562.7
10°	2546.2	2544.4	2546.2	2547.6	2549.1	2550.2
10.5°	2532.6	2531.2	2532.6	2533.7	2535.5	2536.2
11°	2518.6	2516.8	2518.6	2520.0	2521.5	2522.2
11.5°	2503.9	2502.5	2503.9	2505.3	2506.8	2507.5
12°	2488.9	2487.4	2488.9	2490.6	2491.7	2492.4
12.5°	2473.1	2471.3	2473.1	2474.9	2475.9	2476.7
13°	2457.3	2455.5	2457.3	2458.7	2459.8	2460.5
13.5°	2440.8	2439.4	2440.8	2442.2	2443.0	2443.7
14°	2424.0	2422.5	2424.0	2425.4	2426.1	2426.5
14.5°	2406.4	2405.0	2406.4	2407.8	2408.2	2408.5
15°	2389.2	2387.7	2389.2	2389.9	2390.6	2390.6
15.5°	2372.0	2371.3	2372.0	2372.7	2372.0	2372.0
16°	2355.1	2354.4	2355.1	2355.5	2354.4	2354.0
16.5°	2338.3	2337.9	2338.3	2338.3	2336.8	2336.1
17°	2321.1	2321.4	2321.1	2321.4	2320.0	2319.3
17.5°	2304.2	2303.9	2304.2	2304.6	2303.5	2302.8
18°	2287.0	2286.3	2287.0	2287.7	2287.0	2286.6
18.5°	2268.7	2267.6	2268.7	2269.4	2269.4	2269.4
19°	2249.0	2247.9	2249.0	2250.1	2250.8	2251.9
19.5°	2228.2	2227.1	2228.2	2228.9	2231.1	2232.5
20°	2206.0	2203.5	2206.0	2205.6	2209.6	2211.4
20.5°	2182.0	2179.1	2182.0	2180.5	2185.2	2188.1
21°	2155.8	2152.2	2155.8	2154.0	2159.4	2163.7



TEST NUMBER: P776233

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-3500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2066.2	2064.4	2066.2	2066.5	2070.1	2074.4
23°	2033.5	2032.8	2033.5	2036.0	2036.8	2040.3
23.5°	1999.8	2001.6	1999.8	2004.1	2002.3	2005.6
24°	1965.4	1968.6	1965.4	1971.1	1966.8	1969.4
24.5°	1930.6	1934.9	1930.6	1936.4	1931.0	1932.1
25°	1895.9	1899.1	1895.9	1900.2	1893.7	1893.0
25.5°	1861.1	1861.8	1861.1	1862.9	1857.1	1852.5
26°	1824.9	1822.0	1824.9	1824.5	1819.1	1810.9
26.5°	1787.2	1780.8	1787.2	1784.7	1780.4	1768.2
27°	1748.5	1738.8	1748.5	1744.6	1740.3	1726.6
27.5°	1708.7	1696.2	1708.7	1703.7	1698.7	1685.8
28°	1667.1	1653.5	1667.1	1662.1	1657.1	1644.9
28.5°	1624.8	1612.3	1624.8	1620.5	1614.8	1605.1
29°	1581.8	1573.2	1581.8	1578.9	1572.1	1565.7
29.5°	1538.8	1534.8	1538.8	1537.7	1530.2	1526.9
30°	1495.7	1496.1	1495.7	1495.4	1487.1	1488.2
30.5°	1454.2	1459.5	1454.2	1453.4	1445.6	1448.1
31°	1412.6	1420.8	1412.6	1411.1	1402.9	1408.3
31.5°	1371.3	1381.7	1371.3	1368.8	1362.0	1367.4
32°	1330.8	1341.6	1330.8	1326.9	1320.8	1325.8
32.5°	1290.7	1301.4	1290.7	1285.7	1281.4	1285.7
33°	1250.5	1260.6	1250.5	1243.3	1241.9	1245.1
33.5°	1210.4	1219.3	1210.4	1201.4	1202.5	1208.9
34°	1170.9	1180.2	1170.9	1159.8	1163.0	1169.9
34.5°	1131.1	1141.5	1131.1	1119.3	1124.0	1131.1
35°	1092.8	1103.9	1092.8	1080.9	1086.0	1092.1
35.5°	1054.8	1067.0	1054.8	1042.9	1048.3	1054.1
36°	1018.2	1030.7	1018.2	1006.0	1010.7	1016.8
36.5°	982.0	993.8	982.0	970.2	974.5	979.8
37°	946.9	957.3	946.9	935.0	938.6	942.6
37.5°	913.2	920.7	913.2	901.3	903.8	906.3
38°	880.2	884.5	880.2	869.1	870.1	870.5
38.5°	847.9	849.7	847.9	838.2	837.5	836.8
39°	816.7	816.4	816.7	807.4	806.0	804.2
39.5°	785.9	784.8	785.9	778.0	775.5	772.3
40°	756.1	754.7	756.1	749.7	745.4	741.8
40.5°	727.1	726.7	727.1	722.4	716.7	713.1
41°	699.8	700.9	699.8	696.6	689.1	685.5
41.5°	673.7	676.9	673.7	671.9	663.3	659.3
42°	649.3	653.6	649.3	648.2	638.9	634.9
42.5°	626.3	631.0	626.3	626.0	615.9	612.0
43°	604.8	609.1	604.8	604.1	594.4	590.1
43.5°	584.0	588.0	584.0	583.7	574.4	570.0



TEST NUMBER: P776233

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-3500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	529.5	531.3	529.5	527.7	522.0	518.4
45.5°	513.4	514.8	513.4	511.6	506.2	503.4
46°	498.7	499.4	498.7	496.2	491.5	489.0
46.5°	484.4	485.1	484.4	481.5	477.9	475.8
47°	471.1	472.2	471.1	468.2	464.6	463.2
47.5°	458.9	460.3	458.9	455.7	452.5	451.4
48°	447.8	449.2	447.8	444.9	441.7	440.3
48.5°	437.4	438.5	437.4	434.5	432.0	431.3
49°	427.4	428.4	427.4	425.2	423.1	422.7
49.5°	418.0	418.4	418.0	416.2	414.8	414.4
50°	408.7	409.1	408.7	407.3	406.2	405.8
50.5°	399.8	399.8	399.8	398.3	397.6	397.2
51°	390.8	390.8	390.8	389.4	388.3	387.6
51.5°	381.8	382.2	381.8	380.0	378.6	378.2
52°	372.5	372.9	372.5	370.7	369.3	368.6
52.5°	362.8	363.5	362.8	361.4	359.6	358.9
53°	353.5	354.2	353.5	352.1	350.6	349.9
53.5°	344.5	345.3	344.5	342.7	341.3	340.6
54°	335.2	335.9	335.2	333.8	332.3	332.0
54.5°	326.6	327.3	326.6	325.2	323.7	323.4
55°	318.0	318.4	318.0	316.9	315.5	314.8
55.5°	309.8	310.1	309.8	308.7	307.3	306.5
56°	301.5	301.9	301.5	300.4	299.4	298.6
56.5°	293.6	294.0	293.6	292.6	291.5	290.8
57°	285.7	286.1	285.7	284.7	283.6	282.9
57.5°	277.9	278.6	277.9	277.1	276.1	275.0
58°	270.7	271.0	270.7	269.6	268.5	268.2
58.5°	263.2	263.5	263.2	262.4	261.4	261.0
59°	255.6	256.3	255.6	254.9	254.2	253.8
59.5°	248.8	249.2	248.8	247.7	247.0	246.7
60°	241.6	242.0	241.6	240.9	240.2	239.9
60.5°	234.8	235.2	234.8	234.1	233.4	233.0
61°	228.4	228.7	228.4	227.7	226.9	226.6
61.5°	221.9	222.3	221.9	221.2	220.5	220.1
62°	215.5	215.5	215.5	214.8	214.0	214.0
62.5°	209.0	209.4	209.0	208.3	207.9	207.6
63°	202.9	202.9	202.9	202.2	201.8	201.5
63.5°	196.8	197.2	196.8	196.1	195.8	195.4
64°	190.7	191.1	190.7	190.4	190.0	189.7
64.5°	185.0	185.4	185.0	184.6	184.3	183.9
65°	179.3	179.6	179.3	178.9	178.5	178.2
65.5°	173.9	173.9	173.9	173.2	172.8	172.8
66°	168.1	168.5	168.1	167.8	167.4	167.1



TEST NUMBER: P776233

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-3500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	152.4	152.4	152.4	152.0	151.7	151.3
68°	147.4	147.4	147.4	147.0	146.6	146.3
68.5°	142.0	142.3	142.0	142.0	141.6	141.3
69°	137.3	137.3	137.3	136.6	136.6	136.6
69.5°	132.3	132.7	132.3	131.9	131.9	131.6
70°	127.6	128.0	127.6	127.3	127.6	127.3
70.5°	123.0	123.3	123.0	123.0	123.0	122.6
71°	118.3	118.7	118.3	118.3	118.3	118.3
71.5°	114.0	114.0	114.0	114.0	113.7	113.7
72°	109.7	109.7	109.7	109.3	109.3	109.3
72.5°	105.4	105.4	105.4	105.0	105.0	105.0
73°	101.1	101.1	101.1	100.7	100.7	100.7
73.5°	96.8	96.8	96.8	96.8	96.4	96.4
74°	92.9	92.9	92.9	92.5	92.5	92.5
74.5°	88.6	88.6	88.6	88.6	88.6	88.6
75°	84.6	84.6	84.6	84.6	84.6	84.6
75.5°	80.7	81.0	80.7	80.7	80.7	80.7
76°	77.1	77.1	77.1	76.7	76.7	77.1
76.5°	73.1	73.1	73.1	73.1	73.1	73.1
77°	69.6	69.6	69.6	69.6	69.6	69.6
77.5°	66.0	66.0	66.0	66.0	66.0	66.0
78°	62.4	62.4	62.4	62.4	62.4	62.4
78.5°	58.8	59.2	58.8	58.8	59.2	59.2
79°	55.6	55.6	55.6	55.6	55.6	55.6
79.5°	52.3	52.3	52.3	52.0	52.3	52.3
80°	48.8	48.8	48.8	48.8	49.1	49.1
80.5°	45.9	45.9	45.9	45.9	45.9	45.9
81°	42.7	42.7	42.7	42.7	42.7	42.7
81.5°	39.4	39.4	39.4	39.4	39.4	39.4
82°	36.6	36.6	36.6	36.6	36.6	36.6
82.5°	33.7	33.3	33.7	33.7	33.7	33.7
83°	30.5	30.5	30.5	30.8	30.8	30.8
83.5°	27.6	27.6	27.6	28.0	28.0	28.0
84°	25.1	25.1	25.1	25.1	25.1	25.1
84.5°	22.2	22.2	22.2	22.2	22.2	22.6
85°	19.7	19.7	19.7	19.7	19.7	19.7
85.5°	16.9	17.2	16.9	17.2	16.9	17.2
86°	14.3	14.3	14.3	14.3	14.3	14.3
86.5°	11.8	12.2	11.8	11.8	11.8	12.2
87°	9.3	9.7	9.3	9.7	9.7	9.7
87.5°	7.2	7.5	7.2	7.2	7.2	7.2
88°	5.4	5.4	5.4	5.0	5.0	4.7
88.5°	3.6	4.3	3.6	3.2	2.9	2.9



TEST NUMBER: P776233

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRMW-3500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.7	1.1	0.7	0.4	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270° - · - 135°-315°

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



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Peachtree City, GA 30269

Scaled Data Report





21.5°	2135.3	2131.8	2125.7	2127.5	2123.9	2127.5	2125.7	2131.8	2135.3	2131.8	2125.7
22°	2105.6	2102.0	2096.6	2097.3	2093.8	2097.3	2096.6	2102.0	2105.6	2102.0	2096.6



44°	551.4	555.7	564.0	564.7	568.3	564.7	564.0	555.7	551.4	555.7	564.0
44.5°	534.2	538.5	545.7	546.7	549.3	546.7	545.7	538.5	534.2	538.5	545.7



66.5°	161.7	162.1	162.4	162.8	163.1	162.8	162.4	162.1	161.7	162.1	162.4
67°	156.7	156.7	157.0	157.4	157.7	157.4	157.0	156.7	156.7	156.7	157.0



89°	1.1	1.4	2.2	2.5	2.9	2.5	2.2	1.4	1.1	1.4	2.2
89.5°	0.0	0.4	1.1	1.4	1.8	1.4	1.1	0.4	0.0	0.4	1.1

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Scaled Data Report





21.5°	2127.5	2123.9	2127.5	2125.7	2131.8	2135.3
22°	2097.3	2093.8	2097.3	2096.6	2102.0	2105.6



44°	564.7	568.3	564.7	564.0	555.7	551.4
44.5°	546.7	549.3	546.7	545.7	538.5	534.2



66.5°	162.8	163.1	162.8	162.4	162.1	161.7
67°	157.4	157.7	157.4	157.0	156.7	156.7

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Scaled Data Report



89°	2.5	2.9	2.5	2.2	1.4	1.1
89.5°	1.4	1.8	1.4	1.1	0.4	0.0

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)