Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \# $\begin{aligned} & \text { Freq } \\ & \mathrm{MHz}\end{aligned}$ | Rdng $\mathrm{dB} \mu \mathrm{V}$ | $\begin{gathered} \text { T1 } \\ \text { dB } \end{gathered}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \end{aligned}$ | dB | Dist <br> Table | Corr dBm | Spec <br> dBm | $\begin{gathered} \text { Margin } \\ \mathrm{dB} \end{gathered}$ | Polar <br> Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1333.500 M | 52.8 | +9.9 | +0.3 | -107.0 |  | +0.0 | -44.0 | -40.0 | -4.0 | Ant1 |
| 2687.500 M | 51.6 | +9.9 | $+0.5$ | -107.0 |  | +0.0 | -45.0 | -40.0 | -5.0 | Ant1 |
| $3 \quad 633.500 \mathrm{M}$ | 50.9 | +9.9 | +0.4 | -107.0 |  | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |
| 4 448.500M | 50.2 | +9.9 | +0.4 | -107.0 |  | +0.0 | -46.5 | -40.0 | -6.5 | Ant1 |
| $5 \quad 518.000 \mathrm{M}$ | 49.0 | +9.9 | +0.4 | -107.0 |  | +0.0 | -47.7 | -40.0 | -7.7 | Ant1 |
| $6 \quad 710.500 \mathrm{M}$ | 47.3 | +9.9 | +0.5 | -107.0 |  | +0.0 | -49.3 | -40.0 | -9.3 | Ant1 |
| $\begin{aligned} & 7 \text { 3529.503M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 43.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -53.1 | -40.0 | -13.1 | Ant1 |
| $\wedge 3529.503 \mathrm{M}$ | 71.9 | +9.9 | +1.0 | -107.0 |  | +0.0 | -24.2 | -40.0 | +15.8 | Ant1 |
| $\begin{aligned} & 9 \text { 3218.381M } \\ & \text { Ave } \end{aligned}$ | 38.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -57.3 | -40.0 | -17.3 | Ant1 |
| ^ 3218.381M | 69.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -26.3 | -40.0 | +13.7 | Ant1 |
| $\begin{aligned} & 113219.970 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 38.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -57.3 | -40.0 | -17.3 | Ant1 |
| ^ 3219.970M | 67.6 | +9.9 | +0.9 | -107.0 |  | +0.0 | -28.6 | -40.0 | +11.4 | Ant1 |
| $\begin{aligned} & 133126.240 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 37.5 | +9.9 | +0.9 | -107.0 |  | +0.0 | -58.7 | -40.0 | -18.7 | Ant1 |
| $\wedge 3126.240 \mathrm{M}$ | 65.6 | +9.9 | +0.9 | -107.0 |  | +0.0 | -30.6 | -40.0 | +9.4 | Ant1 |
| $\begin{aligned} & 153277.650 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 37.2 | +9.9 | +1.0 | -107.0 |  | +0.0 | -58.9 | -40.0 | -18.9 | Ant1 |
| ^ 3277.650M | 61.4 | +9.9 | +1.0 | -107.0 |  | +0.0 | -34.7 | -40.0 | +5.3 | Ant 1 |
| $\begin{aligned} & 173326.060 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 36.4 | +9.9 | +1.0 | -107.0 |  | +0.0 | -59.7 | -40.0 | -19.7 | Ant1 |
| ^ 3326.060M | 60.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -35.3 | -40.0 | +4.7 | Ant1 |
| $\begin{aligned} & 19 \text { 3501.160M } \\ & \text { Ave } \end{aligned}$ | 34.5 | +9.9 | +1.0 | -107.0 |  | +0.0 | -61.6 | -40.0 | -21.6 | Ant1 |
| ^ 3501.160M | 57.5 | +9.9 | +1.0 | -107.0 |  | +0.0 | -38.6 | -40.0 | +1.4 | Ant 1 |
| $\begin{aligned} & 21 \text { 3043.840M } \\ & \text { Ave } \end{aligned}$ | 34.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -62.1 | -40.0 | -22.1 | Ant1 |
| $\wedge 3043.840 \mathrm{M}$ | 62.0 | +9.9 | +0.9 | -107.0 |  | +0.0 | -34.2 | -40.0 | +5.8 | Ant1 |
| $\begin{gathered} 233382.710 \mathrm{M} \\ \text { Ave } \end{gathered}$ | 33.9 | +9.9 | +1.0 | -107.0 |  | +0.0 | -62.2 | -40.0 | -22.2 | Ant1 |
| ^ 3382.710M | 56.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -40.0 | -40.0 | +0.0 | Ant1 |

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| $\begin{aligned} & 253441.420 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 33.5 | +9.9 | +1.0 | -107.0 | +0.0 | -62.6 | -40.0 | -22.6 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ^ 3441.420M | 55.3 | +9.9 | +1.0 | -107.0 | +0.0 | -40.8 | -40.0 | -0.8 | Ant1 |
| $\begin{aligned} & \hline 272863.590 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.2 | +9.9 | +0.9 | -107.0 | +0.0 | -66.0 | -40.0 | -26.0 | Ant1 |
| ^ 2863.590M | 60.1 | +9.9 | +0.9 | -107.0 | +0.0 | -36.1 | -40.0 | +3.9 | Ant1 |
| $\begin{aligned} & \hline 29 \text { 2899.640M } \\ & \text { Ave } \end{aligned}$ | 28.8 | +9.9 | $+0.9$ | -107.0 | +0.0 | -67.4 | -40.0 | -27.4 | Ant1 |
| ^ 2899.640M | 56.1 | +9.9 | +0.9 | -107.0 | +0.0 | -40.1 | -40.0 | -0.1 | Ant1 |
| $\begin{aligned} & \hline 312965.560 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 28.3 | +9.9 | $+0.9$ | -107.0 | +0.0 | -67.9 | -40.0 | -27.9 | Ant1 |
| ^ 2965.560M | 55.3 | +9.9 | $+0.9$ | -107.0 | +0.0 | -40.9 | -40.0 | -0.9 | Ant1 |
| $\begin{aligned} & \hline 33 \text { 2831.660M } \\ & \text { Ave } \end{aligned}$ | 26.7 | +9.9 | +0.9 | -107.0 | +0.0 | -69.5 | -40.0 | -29.5 | Ant1 |
| ^ 2831.660M | 53.5 | +9.9 | +0.9 | -107.0 | +0.0 | -42.7 | -40.0 | -2.7 | Ant1 |
| $\begin{aligned} & 35314.000 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 14.7 | +9.9 | +0.3 | -107.0 | +0.0 | -82.1 | -40.0 | -42.1 | Ant1 |
| ^ 314.000 M | 54.6 | +9.9 | +0.3 | -107.0 | +0.0 | -42.2 | -40.0 | -2.2 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 12:22:36
Sequence\#: 22
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 3.72-37 GHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3553.5 MHz
Modulation: QAM16
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.

Mercury Wireless WO\#: 103300 Sequence\#f: 22 Date: 3/6/2020 47 CFR $\S 96.41$ e Spurious Emissions Test Lead: 120 V 60 Hz Ant 1



Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \# | Freq $\mathrm{MHz}$ | Rdng $\mathrm{dB} \mu \mathrm{V}$ | $\begin{aligned} & \mathrm{T} 1 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 3 \\ & \mathrm{~dB} \end{aligned}$ | dB | Dist <br> Table | Corr dBm | Spec <br> dBm | Margin <br> dB | Polar Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4242.522 M | 52.0 | +9.9 | +1.1 | -107.0 |  | +0.0 | -44.0 | -40.0 | -4.0 | Ant1 |
|  | 4228.508M | 50.6 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.4 | -40.0 | -5.4 | Ant1 |
|  | $\begin{gathered} \hline 36746.994 \\ \mathrm{M} \end{gathered}$ | 47.8 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.4 | -40.0 | -5.4 | Ant1 |
|  | 4040.320M | 50.4 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.6 | -40.0 | -5.6 | Ant1 |
|  | 4000.280M | 50.3 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.7 | -40.0 | -5.7 | Ant1 |
|  | $\begin{gathered} 36771.772 \\ \mathrm{M} \end{gathered}$ | 47.4 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |
|  | 4034.314M | 50.2 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |
|  | $\begin{gathered} 36859.704 \\ \mathrm{M} \end{gathered}$ | 47.4 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |
|  | $\begin{gathered} 36807.834 \\ \mathrm{M} \end{gathered}$ | 47.4 | $+10.4$ | +3.4 | -107.0 |  | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |
|  | $\begin{gathered} \hline 36760.410 \\ \mathrm{M} \end{gathered}$ | 47.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
| 11 | $\begin{gathered} \hline 36764.362 \\ \mathrm{M} \end{gathered}$ | 47.2 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
|  | $\begin{gathered} 36794.249 \\ \text { M } \end{gathered}$ | 47.2 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
| 13 | $\begin{gathered} 36849.083 \\ \text { M } \end{gathered}$ | 47.2 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
|  | $\begin{gathered} \hline 36754.482 \\ \mathrm{M} \end{gathered}$ | 47.1 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.1 | -40.0 | -6.1 | Ant1 |
| 15 | $\begin{gathered} 36829.817 \\ \mathrm{M} \end{gathered}$ | 47.0 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.2 | -40.0 | -6.2 | Ant1 |
| 16 | $\begin{gathered} \hline 36320.568 \\ \mathrm{M} \end{gathered}$ | 46.7 | +10.5 | +3.3 | -107.0 |  | +0.0 | -46.5 | -40.0 | -6.5 | Ant1 |
| 17 | 4210.490M | 49.4 | +9.9 | +1.1 | -107.0 |  | +0.0 | -46.6 | -40.0 | -6.6 | Ant1 |
| 18 | $\begin{gathered} 36821.172 \\ \mathrm{M} \end{gathered}$ | 46.6 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.6 | -40.0 | -6.6 | Ant1 |


| $\begin{aligned} & 193830.110 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 33.8 | +9.9 | +1.0 | -107.0 | +0.0 | -62.3 | -40.0 | -22.3 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\wedge 3830.110 \mathrm{M}$ | 64.8 | +9.9 | +1.0 | -107.0 | +0.0 | -31.3 | -40.0 | +8.7 | Ant1 |
| $\begin{aligned} & 21 \text { 3812.092M } \\ & \text { Ave } \end{aligned}$ | 33.8 | +9.9 | +1.0 | -107.0 | +0.0 | -62.3 | -40.0 | -22.3 | Ant1 |
| ^ 3812.092M | 65.8 | +9.9 | +1.0 | -107.0 | +0.0 | -30.3 | -40.0 | +9.7 | Ant1 |
| $\begin{gathered} 23 \text { 3819.099M } \\ \text { Ave } \end{gathered}$ | 33.8 | +9.9 | +1.0 | -107.0 | +0.0 | -62.3 | -40.0 | -22.3 | Ant1 |
| ^ 3819.099M | 66.1 | +9.9 | +1.0 | -107.0 | +0.0 | -30.0 | -40.0 | +10.0 | Ant1 |
| $\begin{gathered} 257112.389 \mathrm{M} \\ \text { Ave } \end{gathered}$ | 32.4 | +10.0 | +1.5 | -107.0 | +0.0 | -63.1 | -40.0 | -23.1 | Ant1 |
| $\wedge$ ^ 7112.389 M | 59.0 | +10.0 | +1.5 | -107.0 | +0.0 | -36.5 | -40.0 | +3.5 | Ant1 |
| $\begin{aligned} & 27 \text { 3852.132M } \\ & \text { Ave } \end{aligned}$ | 33.0 | +9.9 | +1.0 | -107.0 | +0.0 | -63.1 | -40.0 | -23.1 | Ant1 |
| ^ 3852.132M | 65.4 | +9.9 | +1.0 | -107.0 | +0.0 | -30.7 | -40.0 | +9.3 | Ant1 |
| $\begin{aligned} & 297107.384 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 31.9 | +10.0 | +1.5 | -107.0 | +0.0 | -63.6 | -40.0 | -23.6 | Ant1 |
| $\wedge 17107.384 \mathrm{M}$ | 59.0 | +10.0 | +1.5 | -107.0 | +0.0 | -36.5 | -40.0 | +3.5 | Ant1 |
| $\begin{aligned} & 31 \text { 3907.187M } \\ & \text { Ave } \end{aligned}$ | 28.2 | +9.9 | +1.0 | -107.0 | +0.0 | -67.9 | -40.0 | -27.9 | Ant1 |
| $\wedge 3907.187 \mathrm{M}$ | 58.2 | +9.9 | +1.0 | -107.0 | +0.0 | -37.9 | -40.0 | +2.1 | Ant1 |
| $\begin{gathered} 33 \text { 3924.204M } \\ \text { Ave } \end{gathered}$ | 27.4 | +9.9 | +1.0 | -107.0 | +0.0 | -68.7 | -40.0 | -28.7 | Ant1 |
| $\wedge 3924.204 \mathrm{M}$ | 57.9 | +9.9 | +1.0 | -107.0 | +0.0 | -38.2 | -40.0 | +1.8 | Ant1 |
| $\begin{aligned} & 35 \text { 3963.243M } \\ & \text { Ave } \end{aligned}$ | 26.6 | +9.9 | +1.1 | -107.0 | +0.0 | -69.4 | -40.0 | -29.4 | Ant1 |
| ^ 3963.243M | 54.8 | +9.9 | +1.1 | -107.0 | +0.0 | -41.2 | -40.0 | -1.2 | Ant1 |
| $\begin{aligned} & 37 \text { 4019.299M } \\ & \text { Ave } \end{aligned}$ | 22.3 | +9.9 | +1.1 | -107.0 | +0.0 | -73.7 | -40.0 | -33.7 | Ant1 |
| $\wedge$ 4019.299M | 52.4 | +9.9 | +1.1 | -107.0 | +0.0 | -43.6 | -40.0 | -3.6 | Ant1 |
| $\begin{aligned} & 394249.529 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 22.1 | +9.9 | +1.1 | -107.0 | +0.0 | -73.9 | -40.0 | -33.9 | Ant1 |
| $\wedge$ ^ 4249.529 M | 53.4 | +9.9 | +1.1 | -107.0 | +0.0 | -42.6 | -40.0 | -2.6 | Ant1 |
| $\begin{aligned} & 414239.519 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 22.1 | +9.9 | +1.1 | -107.0 | +0.0 | -73.9 | -40.0 | -33.9 | Ant1 |
| $\wedge$ ^ 4239.519 M | 54.9 | +9.9 | +1.1 | -107.0 | +0.0 | -41.1 | -40.0 | -1.1 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 12:34:59
Sequence\#: 23
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3553.5 MHz
Modulation: QAM64
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.



Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \#Freq  <br>  MHz | Rdng $\mathrm{dB} \mu \mathrm{V}$ | $\begin{aligned} & \mathrm{T} 1 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \end{aligned}$ | dB | Dist <br> Table | Corr dBm | Spec <br> dBm | $\begin{gathered} \text { Margin } \\ \mathrm{dB} \end{gathered}$ | Polar <br> Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 \quad 454.500 \mathrm{M}$ | 52.3 | +9.9 | +0.4 | -107.0 |  | +0.0 | -44.4 | -40.0 | -4.4 | Ant1 |
| 2552.000 M | 50.9 | +9.9 | +0.4 | -107.0 |  | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |
| $3 \quad 346.500 \mathrm{M}$ | 50.7 | +9.9 | +0.3 | -107.0 |  | +0.0 | -46.1 | -40.0 | -6.1 | Ant1 |
| 4 711.000M | 48.4 | +9.9 | +0.5 | -107.0 |  | +0.0 | -48.2 | -40.0 | -8.2 | Ant1 |
| $\begin{aligned} & 5 \text { 3529.503M } \\ & \text { Ave } \end{aligned}$ | 43.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -53.0 | -40.0 | -13.0 | Ant1 |
| ^ 3529.503M | 72.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -23.8 | -40.0 | +16.2 | Ant1 |
| $\begin{aligned} & 7 \text { 3175.639M } \\ & \text { Ave } \end{aligned}$ | 38.3 | +9.9 | +0.9 | -107.0 |  | +0.0 | -57.9 | -40.0 | -17.9 | Ant1 |
| $\wedge 3175.639 \mathrm{M}$ | 69.8 | +9.9 | +0.9 | -107.0 |  | +0.0 | -26.4 | -40.0 | +13.6 | Ant1 |
| $\begin{aligned} & 9 \text { 3176.710M } \\ & \text { Ave } \end{aligned}$ | 38.3 | +9.9 | +0.9 | -107.0 |  | +0.0 | -57.9 | -40.0 | -17.9 | Ant1 |
| ^ 3176.710M | 65.4 | +9.9 | +0.9 | -107.0 |  | +0.0 | -30.8 | -40.0 | +9.2 | Ant1 |
| $\begin{aligned} & 113306.490 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 36.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -59.5 | -40.0 | -19.5 | Ant1 |
| ^ 3306.490M | 63.4 | +9.9 | +1.0 | -107.0 |  | +0.0 | -32.7 | -40.0 | +7.3 | Ant1 |
| $\begin{aligned} & 13 \text { 3076.800M } \\ & \text { Ave } \end{aligned}$ | 36.2 | +9.9 | +0.9 | -107.0 |  | +0.0 | -60.0 | -40.0 | -20.0 | Ant1 |
| ^ 3076.800M | 65.4 | +9.9 | +0.9 | -107.0 |  | +0.0 | -30.8 | -40.0 | +9.2 | Ant1 |
| $\begin{aligned} & 153499.100 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 34.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -61.4 | -40.0 | -21.4 | Ant1 |
| ^ 3499.100M | 57.5 | +9.9 | +1.0 | -107.0 |  | +0.0 | -38.6 | -40.0 | +1.4 | Ant 1 |
| $\begin{aligned} & 173365.200 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 34.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -61.4 | -40.0 | -21.4 | Ant1 |
| ^ 3365.200M | 58.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -37.3 | -40.0 | +2.7 | Ant1 |
| $\begin{aligned} & 19 \text { 3449.660M } \\ & \text { Ave } \end{aligned}$ | 33.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -62.3 | -40.0 | -22.3 | Ant1 |
| ^ 3449.660M | 55.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -40.3 | -40.0 | -0.3 | Ant1 |
| $\begin{aligned} & 212860.500 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.4 | +9.9 | +0.9 | -107.0 |  | +0.0 | -65.8 | -40.0 | -25.8 | Ant1 |
| $\wedge 2860.500 \mathrm{M}$ | 58.2 | +9.9 | +0.9 | -107.0 |  | +0.0 | -38.0 | -40.0 | +2.0 | Ant1 |
| $\begin{aligned} & 232977.920 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 29.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -67.1 | -40.0 | -27.1 | Ant1 |
| ^ 2977.920M | 57.3 | +9.9 | +0.9 | -107.0 |  | +0.0 | -38.9 | -40.0 | +1.1 | Ant1 |


| $\begin{gathered} 252907.880 \mathrm{M} \\ \text { Ave } \\ \hline \end{gathered}$ | 28.5 | +9.9 | +0.9 | -107.0 | +0.0 | -67.7 | -40.0 | -27.7 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ^ 2907.880M | 53.7 | +9.9 | +0.9 | -107.0 | +0.0 | -42.5 | -40.0 | -2.5 | Ant1 |
| $\begin{aligned} & 27 \text { 2830.630M } \\ & \text { Ave } \end{aligned}$ | 26.5 | +9.9 | +0.9 | -107.0 | +0.0 | -69.7 | -40.0 | -29.7 | Ant1 |
| ^ 2830.630M | 53.4 | +9.9 | +0.9 | -107.0 | +0.0 | -42.8 | -40.0 | -2.8 | Ant1 |
| $\begin{aligned} & 29316.000 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 14.8 | +9.9 | +0.3 | -107.0 | +0.0 | -82.0 | -40.0 | -42.0 | Ant1 |
| ^ 316.000M | 53.3 | +9.9 | +0.3 | -107.0 | +0.0 | -43.5 | -40.0 | -3.5 | Ant1 |
| $\begin{aligned} & 31 \quad 686.500 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 14.6 | +9.9 | +0.5 | -107.0 | +0.0 | -82.0 | -40.0 | -42.0 | Ant1 |
| ^ 686.500M | 53.5 | +9.9 | +0.5 | -107.0 | +0.0 | -43.1 | -40.0 | -3.1 | Ant1 |
| $\begin{aligned} & 33 \begin{array}{l} 640.500 \mathrm{M} \\ \text { Ave } \end{array} \end{aligned}$ | 14.4 | +9.9 | +0.5 | -107.0 | +0.0 | -82.2 | -40.0 | -42.2 | Ant1 |
| $\wedge$ ^40.500M | 52.7 | +9.9 | +0.5 | -107.0 | +0.0 | -43.9 | -40.0 | -3.9 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 14:35:40
Sequence\#: 24
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 3.72-37 GHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3553.5 MHz
Modulation: QAM64
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.

Mercury Wireless WO\#: 103300 Sequence\#f: 24 Date: 3/6/2020 47 CFR $\S 96.41$ e Spurious Emissions Test Lead: 120 V 60 Hz Ant 1


|  | Sweep Data |
| :--- | :--- |
|  | Peak Readings |
| * Readings |  |
| Average Readings | QP Readings |
|  | Software Version: 5.03 .12 |$\quad$| Ambient |
| :--- |

Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \# | Freq <br> MHz | $\begin{aligned} & \text { Rdng } \\ & \mathrm{dB} \mu \mathrm{~V} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 1 \\ & \text { dB } \end{aligned}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \end{aligned}$ | dB | Dist Table | Corr <br> dBm | Spec <br> dBm | $\begin{gathered} \text { Margin } \\ \mathrm{dB} \\ \hline \end{gathered}$ | Polar Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{cc} 1 & 36522.770 \\ \mathrm{M} \end{array}$ | 48.4 | +10.5 | +3.3 | -107.0 |  | +0.0 | -44.8 | -40.0 | -4.8 | Ant1 |
|  | $\begin{array}{cc} \hline 2 & 36705.953 \\ \mathrm{M} \end{array}$ | 48.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -44.9 | -40.0 | -4.9 | Ant1 |
|  | 34195.475 M | 50.9 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.1 | -40.0 | -5.1 | Ant1 |
|  | 4 4178.458M | 50.6 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.4 | -40.0 | -5.4 | Ant1 |
|  | 54260.540 M | 50.5 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.5 | -40.0 | -5.5 | Ant1 |
|  | 64050.330 M | 50.3 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.7 | -40.0 | -5.7 | Ant1 |
|  | $\begin{array}{cc} \hline 7 & 36846.613 \\ M \end{array}$ | 47.4 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |
|  | $\begin{array}{cc} 8 & 36770.290 \\ M \end{array}$ | 47.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
|  | $\begin{array}{cc} 9 & 36545.793 \\ \mathrm{M} \end{array}$ | 47.3 | +10.5 | +3.3 | -107.0 |  | $+0.0$ | -45.9 | -40.0 | -5.9 | Ant1 |
|  | $\begin{array}{cc} \hline 0 & 36775.724 \\ \mathrm{M} \end{array}$ | 47.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
|  | $\begin{array}{cc} 1 & 36871.807 \\ \mathrm{M} \end{array}$ | 47.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
|  | $\begin{array}{cc} 2 & 36843.155 \\ M \end{array}$ | 47.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
|  | $\begin{array}{cc} \hline 36883.910 \\ M \end{array}$ | 47.2 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
|  | $\begin{array}{cc} 4 & 36920.219 \\ \mathrm{M} \end{array}$ | 47.2 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
|  | $\begin{aligned} & 57106.383 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 33.5 | +10.0 | +1.5 | -107.0 |  | +0.0 | -62.0 | -40.0 | -22.0 | Ant1 |
|  | $\wedge 17106.383 \mathrm{M}$ | 59.4 | +10.0 | +1.5 | -107.0 |  | +0.0 | -36.1 | -40.0 | +3.9 | Ant1 |


| $\begin{aligned} & 17 \text { 3833.113M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 34.0 | +9.9 | +1.0 | -107.0 | +0.0 | -62.1 | -40.0 | -22.1 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3833.113M | 65.3 | +9.9 | +1.0 | -107.0 | +0.0 | -30.8 | -40.0 | +9.2 | Ant1 |
| 19 3779.059M Ave | 33.5 | +9.9 | +1.0 | -107.0 | $+0.0$ | -62.6 | -40.0 | -22.6 | Ant1 |
| ^ 3779.059M | 63.0 | +9.9 | +1.0 | -107.0 | +0.0 | -33.1 | -40.0 | +6.9 | Ant1 |
| $\begin{aligned} & 213855.135 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 32.7 | +9.9 | +1.0 | -107.0 | +0.0 | -63.4 | -40.0 | -23.4 | Ant1 |
| ^ 3855.135M | 65.3 | +9.9 | +1.0 | -107.0 | +0.0 | -30.8 | -40.0 | +9.2 | Ant1 |
| $\begin{aligned} & 23 \text { 3749.029M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 32.1 | +9.9 | +1.0 | -107.0 | +0.0 | -64.0 | -40.0 | -24.0 | Ant1 |
| ^ 3749.029M | 59.9 | +9.9 | +1.0 | -107.0 | +0.0 | -36.2 | -40.0 | +3.8 | Ant1 |
| $\begin{aligned} & 253902.182 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 28.5 | +9.9 | +1.0 | -107.0 | +0.0 | -67.6 | -40.0 | -27.6 | Ant1 |
| ^ 3902.182M | 58.6 | +9.9 | +1.0 | -107.0 | +0.0 | -37.5 | -40.0 | +2.5 | Ant1 |
| $\begin{aligned} & 27 \text { 3905.185M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 28.3 | +9.9 | +1.0 | -107.0 | +0.0 | -67.8 | -40.0 | -27.8 | Ant1 |
| ^ 3905.185M | 58.2 | +9.9 | +1.0 | -107.0 | +0.0 | -37.9 | -40.0 | +2.1 | Ant1 |
| $\begin{aligned} & 29 \text { 3910.190M } \\ & \text { Ave } \end{aligned}$ | 28.0 | +9.9 | +1.0 | -107.0 | +0.0 | -68.1 | -40.0 | -28.1 | Ant1 |
| ^ 3910.190M | 58.6 | +9.9 | +1.0 | -107.0 | +0.0 | -37.5 | -40.0 | +2.5 | Ant1 |
| $\begin{aligned} & 313937.217 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 27.4 | +9.9 | +1.1 | -107.0 | +0.0 | -68.6 | -40.0 | -28.6 | Ant1 |
| ^ 3937.217M | 54.9 | +9.9 | +1.1 | -107.0 | +0.0 | -41.1 | -40.0 | -1.1 | Ant1 |
| $\begin{aligned} & 33 \text { 4020.300M } \\ & \text { Ave } \end{aligned}$ | 22.6 | +9.9 | +1.1 | -107.0 | +0.0 | -73.4 | -40.0 | -33.4 | Ant1 |
| ^ 4020.300M | 52.6 | +9.9 | +1.1 | -107.0 | +0.0 | -43.4 | -40.0 | -3.4 | Ant1 |
| $\begin{aligned} & 354241.521 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 22.2 | +9.9 | +1.1 | -107.0 | +0.0 | -73.8 | -40.0 | -33.8 | Ant1 |
| $\wedge$ 4241.521M | 55.1 | +9.9 | +1.1 | -107.0 | +0.0 | -40.9 | -40.0 | -0.9 | Ant1 |
| $\begin{aligned} & 374251.531 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 22.1 | +9.9 | +1.1 | -107.0 | +0.0 | -73.9 | -40.0 | -33.9 | Ant1 |
| ^ 4251.531M | 54.4 | +9.9 | +1.1 | -107.0 | +0.0 | -41.6 | -40.0 | -1.6 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 14:47:40
Sequence\#: 25
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3625 MHz
Modulation: QPSK
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.


[^0]Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \#Freq <br>  <br> MHz | $\begin{gathered} \mathrm{Rdng} \\ \mathrm{~dB} \mu \mathrm{~V} \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{T} 1 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T3} \\ & \mathrm{~dB} \end{aligned}$ | dB | Dist Table | $\begin{aligned} & \text { Corr } \\ & \mathrm{dBm} \end{aligned}$ | $\begin{aligned} & \text { Spec } \\ & \text { dBm } \end{aligned}$ | $\begin{gathered} \text { Margin } \\ \mathrm{dB} \end{gathered}$ | $\begin{gathered} \text { Polar } \\ \text { Ant } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1358.500 M | 52.5 | +9.9 | +0.3 | -107.0 |  | +0.0 | -44.3 | -40.0 | -4.3 | Ant1 |
| 2393.500 M | 51.9 | +9.9 | +0.4 | -107.0 |  | +0.0 | -44.8 | -40.0 | -4.8 | Ant1 |
| 3 309.500M | 51.6 | +9.9 | +0.3 | -107.0 |  | +0.0 | -45.2 | -40.0 | -5.2 | Ant1 |
| $4 \quad 594.000 \mathrm{M}$ | 50.6 | +9.9 | +0.4 | -107.0 |  | +0.0 | -46.1 | -40.0 | -6.1 | Ant1 |
| $5 \quad 558.500 \mathrm{M}$ | 50.6 | +9.9 | +0.4 | -107.0 |  | +0.0 | -46.1 | -40.0 | -6.1 | Ant1 |
| 6 639.500M | 48.9 | +9.9 | +0.5 | -107.0 |  | +0.0 | -47.7 | -40.0 | -7.7 | Ant1 |
| $\begin{aligned} & \hline 7 \text { 3248.698M } \\ & \text { Ave } \end{aligned}$ | 40.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -55.5 | -40.0 | -15.5 | Ant1 |
| ^ 3248.698M | 72.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -24.1 | -40.0 | +15.9 | Ant1 |
| $\begin{aligned} & 9 \text { 3121.090M } \\ & \text { Ave } \end{aligned}$ | 37.8 | +9.9 | +0.9 | -107.0 |  | +0.0 | -58.4 | -40.0 | -18.4 | Ant1 |
| ^ 3121.090M | 66.0 | +9.9 | +0.9 | -107.0 |  | +0.0 | -30.2 | -40.0 | +9.8 | Ant1 |
| $\begin{aligned} & 113421.850 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 36.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -59.8 | -40.0 | -19.8 | Ant1 |
| ^ 3421.850M | 61.4 | +9.9 | +1.0 | -107.0 |  | +0.0 | -34.7 | -40.0 | +5.3 | Ant1 |
| $\begin{aligned} & 13 \text { 3364.170M } \\ & \text { Ave } \end{aligned}$ | 35.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -60.4 | -40.0 | -20.4 | Ant1 |
| ^ 3364.170M | 58.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -38.1 | -40.0 | +1.9 | Ant1 |
| $\begin{aligned} & 15 \text { 3462.020M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 35.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -61.0 | -40.0 | -21.0 | Ant1 |
| ^ 3462.020M | 57.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -39.1 | -40.0 | +0.9 | Ant1 |
| $\begin{aligned} & 173018.090 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 32.3 | +9.9 | +0.9 | -107.0 |  | +0.0 | -63.9 | -40.0 | -23.9 | Ant1 |
| ^ 3018.090M | 58.0 | +9.9 | +0.9 | -107.0 |  | +0.0 | -38.2 | -40.0 | +1.8 | Ant1 |


| $\begin{aligned} & 192866.680 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.8 | +9.9 | +0.9 | -107.0 | +0.0 | -65.4 | -40.0 | -25.4 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\wedge 2866.680 \mathrm{M}$ | 62.7 | +9.9 | +0.9 | -107.0 | +0.0 | -33.5 | -40.0 | +6.5 | Ant1 |
| $\begin{aligned} & 21 \text { 2889.340M } \\ & \text { Ave } \end{aligned}$ | 30.0 | +9.9 | +0.9 | -107.0 | +0.0 | -66.2 | -40.0 | -26.2 | Ant1 |
| ^ 2889.340M | 56.9 | +9.9 | +0.9 | -107.0 | +0.0 | -39.3 | -40.0 | +0.7 | Ant 1 |
| $\begin{aligned} & 23 \begin{array}{l} 2941.870 \mathrm{M} \\ \text { Ave } \end{array} \end{aligned}$ | 28.6 | +9.9 | +0.9 | -107.0 | +0.0 | -67.6 | -40.0 | -27.6 | Ant1 |
| ^ 2941.870M | 53.9 | +9.9 | +0.9 | -107.0 | +0.0 | -42.3 | -40.0 | -2.3 | Ant1 |
| $\begin{aligned} & 25 \text { 2835.780M } \\ & \text { Ave } \end{aligned}$ | 28.0 | +9.9 | +0.9 | -107.0 | +0.0 | -68.2 | -40.0 | -28.2 | Ant1 |
| ^ 2835.780M | 55.6 | +9.9 | +0.9 | -107.0 | +0.0 | -40.6 | -40.0 | -0.6 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 15:00:57
Sequence\#: 26
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 3.72-37 GHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3625 MHz
Modulation: QPSK
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.

Mercury Wireless WO\#: 103300 Sequence\#f: 26 Date: $3 / 6 / 2020$ 47 CFR $\S 96.41$ e Spurious Emissions Test Lead: 120 V 60 Hz Ant 1



Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \# $\begin{aligned} & \text { Freq } \\ & \\ & \mathrm{MHz}\end{aligned}$ | $\begin{aligned} & \text { Rdng } \\ & \mathrm{dB} \mu \mathrm{~V} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 1 \\ & \text { dB } \end{aligned}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \end{aligned}$ | dB | Dist Table | Corr <br> dBm | Spec <br> dBm | Margin dB | Polar Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14013.293 M | 52.0 | +9.9 | +1.1 | -107.0 |  | +0.0 | -44.0 | -40.0 | -4.0 | Ant1 |
| 24092.372 M | 51.5 | +9.9 | +1.1 | -107.0 |  | +0.0 | -44.5 | -40.0 | -4.5 | Ant1 |
| 3 4133.413M | 51.2 | +9.9 | +1.1 | -107.0 |  | +0.0 | -44.8 | -40.0 | -4.8 | Ant1 |
| $\begin{array}{cc} \hline 4 & 36535.783 \\ \mathrm{M} \end{array}$ | 47.9 | +10.5 | +3.3 | -107.0 |  | +0.0 | -45.3 | -40.0 | -5.3 | Ant1 |
| $\begin{array}{cc} \hline 5 & 36930.840 \\ M \end{array}$ | 47.7 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.5 | -40.0 | -5.5 | Ant1 |
| 6 4159.439M | 50.3 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.7 | -40.0 | -5.7 | Ant1 |
| 7 4209.489M | 50.3 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.7 | -40.0 | -5.7 | Ant1 |
| $\begin{array}{cc} \hline 8 & 36601.849 \\ M \end{array}$ | 47.5 | +10.5 | +3.3 | -107.0 |  | +0.0 | -45.7 | -40.0 | -5.7 | Ant1 |
| $\begin{aligned} & 93825.105 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 35.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -60.5 | -40.0 | -20.5 | Ant1 |
| ^ 3825.105M | 60.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -36.0 | -40.0 | +4.0 | Ant1 |
| $\begin{aligned} & 113746.026 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 31.9 | +9.9 | +1.0 | -107.0 |  | +0.0 | -64.2 | -40.0 | -24.2 | Ant1 |
| $\wedge 3746.026 \mathrm{M}$ | 56.5 | +9.9 | +1.0 | -107.0 |  | +0.0 | -39.6 | -40.0 | +0.4 | Ant1 |
| $\begin{aligned} & 13 \text { 3904.184M } \\ & \text { Ave } \end{aligned}$ | 31.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -65.1 | -40.0 | -25.1 | Ant1 |
| ^ 3904.184M | 66.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -30.1 | -40.0 | +9.9 | Ant1 |
| $\begin{aligned} & 153912.192 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.9 | +9.9 | +1.0 | -107.0 |  | +0.0 | -65.2 | -40.0 | -25.2 | Ant1 |
| ^ 3912.192M | 63.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -32.4 | -40.0 | +7.6 | Ant1 |
| $\begin{aligned} & 17 \text { 3867.147M } \\ & \text { Ave } \end{aligned}$ | 30.9 | +9.9 | +1.0 | -107.0 |  | +0.0 | -65.2 | -40.0 | -25.2 | Ant1 |
| ^ 3867.147M | 62.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -34.1 | -40.0 | +5.9 | Ant1 |
| $\begin{aligned} & 193878.158 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -65.3 | -40.0 | -25.3 | Ant1 |
| ^ 3878.158M | 63.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -33.1 | -40.0 | +6.9 | Ant1 |


| $\begin{aligned} & 213928.208 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.1 | +9.9 | +1.1 | -107.0 | +0.0 | -65.9 | -40.0 | -25.9 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3928.208M | 62.3 | +9.9 | +1.1 | -107.0 | +0.0 | -33.7 | -40.0 | +6.3 | Ant1 |
| $\begin{aligned} & 237251.528 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 28.8 | +10.0 | +1.5 | -107.0 | +0.0 | -66.7 | -40.0 | -26.7 | Ant1 |
| $\wedge 7251.528 \mathrm{M}$ | 53.4 | +10.0 | +1.5 | -107.0 | +0.0 | -42.1 | -40.0 | -2.1 | Ant1 |
| $\begin{aligned} & 257246.523 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 27.2 | +10.0 | +1.5 | -107.0 | +0.0 | -68.3 | -40.0 | -28.3 | Ant1 |
| $\wedge$ 7246.523M | 53.9 | +10.0 | +1.5 | -107.0 | +0.0 | -41.6 | -40.0 | -1.6 | Ant1 |
| $\begin{aligned} & 273962.242 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 27.5 | +9.9 | +1.1 | -107.0 | +0.0 | -68.5 | -40.0 | -28.5 | Ant 1 |
| ^ 3962.242M | 60.0 | +9.9 | +1.1 | -107.0 | +0.0 | -36.0 | -40.0 | +4.0 | Ant1 |
| $\begin{gathered} 29 \text { 3979.259M } \\ \text { Ave } \\ \hline \end{gathered}$ | 26.2 | +9.9 | +1.1 | -107.0 | +0.0 | -69.8 | -40.0 | -29.8 | Ant1 |
| ^ 3979.259M | 59.5 | +9.9 | +1.1 | -107.0 | +0.0 | -36.5 | -40.0 | +3.5 | Ant1 |
| $\begin{aligned} & 31 \text { 3985.265M } \\ & \text { Ave } \end{aligned}$ | 25.7 | +9.9 | +1.1 | -107.0 | +0.0 | -70.3 | -40.0 | -30.3 | Ant1 |
| ^ 3985.265M | 59.0 | +9.9 | +1.1 | -107.0 | +0.0 | -37.0 | -40.0 | +3.0 | Ant1 |
| $\begin{aligned} & 33 \text { 4002.282M } \\ & \text { Ave } \end{aligned}$ | 24.2 | +9.9 | +1.1 | -107.0 | +0.0 | -71.8 | -40.0 | -31.8 | Ant1 |
| ^ 4002.282 M | 53.7 | +9.9 | +1.1 | -107.0 | +0.0 | -42.3 | -40.0 | -2.3 | Ant1 |
| $\begin{aligned} & 354008.288 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 23.7 | +9.9 | +1.1 | -107.0 | +0.0 | -72.3 | -40.0 | -32.3 | Ant1 |
| ^ 4008.288M | 53.6 | +9.9 | +1.1 | -107.0 | +0.0 | -42.4 | -40.0 | -2.4 | Ant1 |
| $\begin{aligned} & 37 \text { 4026.306M } \\ & \text { Ave } \end{aligned}$ | 21.9 | +9.9 | +1.1 | -107.0 | +0.0 | -74.1 | -40.0 | -34.1 | Ant1 |
| ^ 4026.306M | 52.9 | +9.9 | +1.1 | -107.0 | +0.0 | -43.1 | -40.0 | -3.1 | Ant1 |
| $\begin{aligned} & 39 \text { 4186.466M } \\ & \text { Ave } \end{aligned}$ | 21.8 | +9.9 | +1.1 | -107.0 | +0.0 | -74.2 | -40.0 | -34.2 | Ant1 |
| ^ 4186.466M | 52.8 | +9.9 | +1.1 | -107.0 | +0.0 | -43.2 | -40.0 | -3.2 | Ant1 |
| $\begin{aligned} & 41 \begin{array}{l} 4197.477 \mathrm{M} \\ \text { Ave } \end{array} \\ & \hline \end{aligned}$ | 21.8 | +9.9 | +1.1 | -107.0 | +0.0 | -74.2 | -40.0 | -34.2 | Ant1 |
| ^ 4197.477M | 52.6 | +9.9 | +1.1 | -107.0 | +0.0 | -43.4 | -40.0 | -3.4 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 15:13:07
Sequence\#: 27
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3625 MHz
Modulation: QAM16
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.


- Readings QP Readings
- Ambient
1-47 CFR $\$ 96.41$ e Spurious Emissions

Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \# $\begin{aligned} & \text { Freq } \\ & \text { MHz }\end{aligned}$ | $\begin{aligned} & \hline \text { Rdng } \\ & \mathrm{dB} \mu \mathrm{~V} \end{aligned}$ | $\begin{aligned} & \hline \text { T1 } \\ & \text { dB } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { T2 } \\ & \mathrm{dB} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \end{aligned}$ | dB | Dist <br> Table | Corr dBm | Spec dBm | $\begin{gathered} \text { Margin } \\ \mathrm{dB} \end{gathered}$ | Polar Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1374.000 M | 52.3 | +9.9 | +0.3 | -107.0 |  | +0.0 | -44.5 | -40.0 | -4.5 | Ant1 |
| 2522.000 M | 51.3 | +9.9 | +0.4 | -107.0 |  | +0.0 | -45.4 | -40.0 | -5.4 | Ant1 |
| 3 2823.420M | 50.4 | +9.9 | +0.9 | -107.0 |  | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |
| $4 \quad 571.000 \mathrm{M}$ | 50.8 | +9.9 | +0.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
| 5 634.500M | 47.5 | +9.9 | +0.4 | -107.0 |  | +0.0 | -49.2 | -40.0 | -9.2 | Ant1 |
| 6 683.500M | 46.6 | +9.9 | +0.5 | -107.0 |  | +0.0 | -50.0 | -40.0 | -10.0 | Ant1 |
| $\begin{aligned} & 7 \text { 3280.506M } \\ & \text { Ave } \end{aligned}$ | 40.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -55.3 | -40.0 | -15.3 | Ant1 |
| ^ 3280.506M | 71.4 | +9.9 | +1.0 | -107.0 |  | +0.0 | -24.7 | -40.0 | +15.3 | Ant1 |
| $\begin{aligned} & \hline 9 \text { 3328.120M } \\ & \text { Ave } \end{aligned}$ | 37.9 | +9.9 | +1.0 | -107.0 |  | +0.0 | -58.2 | -40.0 | -18.2 | Ant1 |
| ^ 3328.120M | 64.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -31.8 | -40.0 | +8.2 | Ant1 |
| $\begin{aligned} & 113100.490 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 37.2 | +9.9 | +0.9 | -107.0 |  | +0.0 | -59.0 | -40.0 | -19.0 | Ant1 |
| ^ 3100.490M | 63.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -32.3 | -40.0 | +7.7 | Ant1 |
| $\begin{aligned} & 13 \text { 3401.250M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 37.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -59.1 | -40.0 | -19.1 | Ant1 |
| ^ 3401.250M | 60.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -36.0 | -40.0 | +4.0 | Ant1 |
| $\begin{aligned} & 153513.520 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 35.2 | +9.9 | +1.0 | -107.0 |  | +0.0 | -60.9 | -40.0 | -20.9 | Ant1 |
| ^ 3513.520M | 56.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -39.3 | -40.0 | +0.7 | Ant1 |
| $\begin{aligned} & 17 \text { 3019.120M } \\ & \text { Ave } \end{aligned}$ | 32.3 | +9.9 | +0.9 | -107.0 |  | +0.0 | -63.9 | -40.0 | -23.9 | Ant1 |
| ^ 3019.120M | 58.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -38.1 | -40.0 | +1.9 | Ant1 |


| $\begin{aligned} & 192865.650 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.8 | +9.9 | $+0.9$ | -107.0 | +0.0 | -65.4 | -40.0 | -25.4 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\wedge 2865.650 \mathrm{M}$ | 57.6 | +9.9 | +0.9 | -107.0 | +0.0 | -38.6 | -40.0 | +1.4 | Ant1 |
| $\begin{aligned} & 212908.910 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 28.8 | +9.9 | +0.9 | -107.0 | +0.0 | -67.4 | -40.0 | -27.4 | Ant1 |
| $\wedge 2908.910 \mathrm{M}$ | 56.2 | +9.9 | +0.9 | -107.0 | +0.0 | -40.0 | -40.0 | $+0.0$ | Ant1 |
| $\begin{aligned} & 23 \begin{array}{l} 331.000 \mathrm{M} \\ \text { Ave } \end{array} \end{aligned}$ | 16.0 | +9.9 | +0.3 | -107.0 | +0.0 | -80.8 | -40.0 | -40.8 | Ant1 |
| $\wedge 331.000 \mathrm{M}$ | 53.8 | +9.9 | +0.3 | -107.0 | +0.0 | -43.0 | -40.0 | -3.0 | Ant1 |
| $\begin{aligned} & 25307.000 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 15.8 | +9.9 | $+0.3$ | -107.0 | +0.0 | -81.0 | -40.0 | -41.0 | Ant1 |
| ^ 307.000M | 53.9 | +9.9 | +0.3 | -107.0 | +0.0 | -42.9 | -40.0 | -2.9 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 15:26:25
Sequence\#: 28
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 3.72-37 GHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3625 MHz
Modulation: QAM16
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.

Mercury Wireless WO\#: 103300 Sequence\#f: 28 Date: 3/6/2020 47 CFR $\S 96.41$ e Spurious Emissions Test Lead: 120 V 60 Hz Ant 1



Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \#Freq <br>  <br>  <br> MHz | Rdng $\mathrm{dB} \mu \mathrm{V}$ | $\begin{gathered} \mathrm{T} 1 \\ \mathrm{~dB} \end{gathered}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 3 \\ & \mathrm{~dB} \\ & \hline \end{aligned}$ | dB | $\begin{gathered} \hline \text { Dist } \\ \text { Table } \end{gathered}$ | Corr dBm | Spec <br> dBm | $\begin{gathered} \text { Margin } \\ \mathrm{dB} \\ \hline \end{gathered}$ | Polar <br> Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 4026.306M | 51.5 | +9.9 | +1.1 | -107.0 |  | +0.0 | -44.5 | -40.0 | -4.5 | Ant1 |
| $\begin{array}{cc} \hline 2 & 36466.714 \\ M \end{array}$ | 48.7 | +10.5 | +3.3 | -107.0 |  | +0.0 | -44.5 | -40.0 | -4.5 | Ant1 |
| $\begin{array}{cc} \hline 3 & 36784.863 \\ & M \end{array}$ | 47.9 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.3 | -40.0 | -5.3 | Ant1 |
| 4 4028.308M | 50.7 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.3 | -40.0 | -5.3 | Ant1 |
| 5 4138.418M | 50.7 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.3 | -40.0 | -5.3 | Ant1 |
| $\begin{aligned} & 63768.048 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 31.5 | +9.9 | +1.0 | -107.0 |  | +0.0 | -64.6 | -40.0 | -24.6 | Ant1 |
| ^ 3768.048M | 57.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -38.8 | -40.0 | +1.2 | Ant1 |
| $\begin{aligned} & 8 \text { 3905.185M } \\ & \text { Ave } \end{aligned}$ | 31.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -65.0 | -40.0 | -25.0 | Ant1 |
| ^ 3905.185M | 64.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -31.3 | -40.0 | +8.7 | Ant1 |
| $\begin{aligned} & 103880.160 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 30.9 | +9.9 | +1.0 | -107.0 |  | +0.0 | -65.2 | -40.0 | -25.2 | Ant1 |
| ^ 3880.160M | 63.5 | +9.9 | +1.0 | -107.0 |  | +0.0 | -32.6 | -40.0 | +7.4 | Ant1 |
| $\begin{aligned} & 12 \text { 3869.149M } \\ & \text { Ave } \end{aligned}$ | 30.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -65.3 | -40.0 | -25.3 | Ant1 |
| $\wedge 3869.149 \mathrm{M}$ | 61.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -35.0 | -40.0 | +5.0 | Ant1 |
| $\begin{aligned} & 143912.192 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 30.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -65.3 | -40.0 | -25.3 | Ant1 |
| ^ 3912.192M | 64.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -31.3 | -40.0 | +8.7 | Ant1 |
| $\begin{aligned} & 163931.211 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 29.9 | +9.9 | +1.1 | -107.0 |  | +0.0 | -66.1 | -40.0 | -26.1 | Ant1 |
| ^ 3931.211M | 65.7 | +9.9 | +1.1 | -107.0 |  | +0.0 | -30.3 | -40.0 | +9.7 | Ant1 |
| $\begin{aligned} & 183951.231 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 28.3 | +9.9 | +1.1 | -107.0 |  | +0.0 | -67.7 | -40.0 | -27.7 | Ant1 |
| ^ 3951.231M | 61.6 | +9.9 | +1.1 | -107.0 |  | +0.0 | -34.4 | -40.0 | +5.6 | Ant1 |
| $\begin{aligned} & 207246.523 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 27.2 | +10.0 | +1.5 | -107.0 |  | +0.0 | -68.3 | -40.0 | -28.3 | Ant1 |
| $\wedge$ ^ 7246.523 M | 54.1 | +10.0 | +1.5 | -107.0 |  | +0.0 | -41.4 | -40.0 | -1.4 | Ant1 |
| $\begin{aligned} & 22 \text { 3958.238M } \\ & \text { Ave } \end{aligned}$ | 27.7 | +9.9 | +1.1 | -107.0 |  | +0.0 | -68.3 | -40.0 | -28.3 | Ant1 |
| ^ 3958.238M | 63.7 | +9.9 | +1.1 | -107.0 |  | +0.0 | -32.3 | -40.0 | +7.7 | Ant 1 |


| $\begin{aligned} & 243987.267 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 25.6 | +9.9 | +1.1 | -107.0 | +0.0 | -70.4 | -40.0 | -30.4 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ^ 3987.267M | 54.4 | +9.9 | +1.1 | -107.0 | +0.0 | -41.6 | -40.0 | -1.6 | Ant1 |
| $\begin{gathered} \hline 26 \begin{array}{l} 3994.274 \mathrm{M} \\ \text { Ave } \end{array} \\ \hline \end{gathered}$ | 24.8 | +9.9 | +1.1 | -107.0 | $+0.0$ | -71.2 | -40.0 | -31.2 | Ant1 |
| 3994.274M | 57.5 | +9.9 | +1.1 | -107.0 | +0.0 | -38.5 | -40.0 | +1.5 | Ant1 |
| $\begin{aligned} & 28 \text { 4001.281M } \\ & \text { Ave } \end{aligned}$ | 24.1 | +9.9 | +1.1 | -107.0 | +0.0 | -71.9 | -40.0 | -31.9 | Ant1 |
| 4001.281 M | 56.1 | +9.9 | +1.1 | -107.0 | +0.0 | -39.9 | -40.0 | +0.1 | Ant1 |
| $\begin{gathered} \hline 30 \text { 4013.293M } \\ \text { Ave } \end{gathered}$ | 23.1 | +9.9 | +1.1 | -107.0 | +0.0 | -72.9 | -40.0 | -32.9 | Ant1 |
| 4013.293M | 54.0 | +9.9 | +1.1 | -107.0 | +0.0 | -42.0 | -40.0 | -2.0 | Ant1 |
| $\begin{gathered} 324208.488 \mathrm{M} \\ \text { Ave } \end{gathered}$ | 21.7 | +9.9 | +1.1 | -107.0 | +0.0 | -74.3 | -40.0 | -34.3 | Ant1 |
| ^ 4208.488M | 53.0 | +9.9 | +1.1 | -107.0 | $+0.0$ | -43.0 | -40.0 | -3.0 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 15:35:34
Sequence\#: 29
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3625 MHz
Modulation: QAM64
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.


[^1]Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \# $\begin{aligned} & \text { Freq } \\ & \\ & \\ & \text { MHz }\end{aligned}$ | $\begin{aligned} & \hline \mathrm{Rdng} \\ & \mathrm{~dB} \mu \mathrm{~V} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { T1 } \\ & \text { dB } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \\ & \hline \end{aligned}$ | dB | $\begin{gathered} \hline \text { Dist } \\ \text { Table } \end{gathered}$ | $\begin{aligned} & \hline \text { Corr } \\ & \mathrm{dBm} \\ & \hline \end{aligned}$ | Spec dBm | $\begin{gathered} \hline \text { Margin } \\ \text { dB } \end{gathered}$ | Polar Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 309.000 M | 52.7 | +9.9 | +0.3 | -107.0 |  | +0.0 | -44.1 | -40.0 | -4.1 | Ant1 |
| 2378.500 M | 52.6 | +9.9 | +0.3 | -107.0 |  | +0.0 | -44.2 | -40.0 | -4.2 | Ant1 |
| 3541.500 M | 51.0 | +9.9 | +0.4 | -107.0 |  | +0.0 | -45.7 | -40.0 | -5.7 | Ant1 |
| $4 \quad 584.000 \mathrm{M}$ | 50.9 | +9.9 | +0.4 | -107.0 |  | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |
| 5 630.500M | 49.1 | +9.9 | +0.4 | -107.0 |  | +0.0 | -47.6 | -40.0 | -7.6 | Ant1 |
| 6 451.000M | 48.1 | +9.9 | +0.4 | -107.0 |  | +0.0 | -48.6 | -40.0 | -8.6 | Ant1 |
| $\begin{aligned} & 7 \text { 3260.129M } \\ & \text { Ave } \end{aligned}$ | 40.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -55.5 | -40.0 | -15.5 | Ant1 |
| ^ 3260.129M | 71.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -24.4 | -40.0 | +15.6 | Ant1 |
| $\begin{aligned} & 9 \text { 3290.010M } \\ & \text { Ave } \end{aligned}$ | 40.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -55.5 | -40.0 | -15.5 | Ant1 |
| ^ 3290.010M | 68.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -27.4 | -40.0 | +12.6 | Ant1 |
| $\begin{aligned} & 11 \text { 3166.410M } \\ & \text { Ave } \end{aligned}$ | 38.5 | +9.9 | +0.9 | -107.0 |  | +0.0 | -57.7 | -40.0 | -17.7 | Ant1 |
| ^ 3166.410M | 64.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -31.3 | -40.0 | +8.7 | Ant1 |
| $\begin{aligned} & 133336.360 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 37.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -59.0 | -40.0 | -19.0 | Ant1 |
| ^ 3336.360M | 61.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -34.5 | -40.0 | +5.5 | Ant1 |
| $\begin{aligned} & 15 \text { 3393.010M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 35.4 | +9.9 | +1.0 | -107.0 |  | +0.0 | -60.7 | -40.0 | -20.7 | Ant1 |
| ^ 3393.010M | 61.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -35.0 | -40.0 | +5.0 | Ant1 |
| $\begin{aligned} & 173455.840 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 35.2 | +9.9 | +1.0 | -107.0 |  | +0.0 | -60.9 | -40.0 | -20.9 | Ant1 |
| ^ 3455.840M | 58.9 | +9.9 | +1.0 | -107.0 |  | +0.0 | -37.2 | -40.0 | +2.8 | Ant1 |
| $\begin{aligned} & 19 \text { 3501.160M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 34.9 | +9.9 | +1.0 | -107.0 |  | +0.0 | -61.2 | -40.0 | -21.2 | Ant1 |
| ^ 3501.160M | 57.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -39.1 | -40.0 | +0.9 | Ant1 |
| $\begin{aligned} & 213054.140 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 34.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -61.3 | -40.0 | -21.3 | Ant1 |
| ^ 3054.140M | 61.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -35.1 | -40.0 | +4.9 | Ant1 |
| $\begin{aligned} & 23 \quad 2859.470 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -65.3 | -40.0 | -25.3 | Ant1 |
| ^ 2859.470M | 58.7 | +9.9 | +0.9 | -107.0 |  | +0.0 | -37.5 | -40.0 | +2.5 | Ant1 |


| $\begin{aligned} & 25 \text { 2883.160M } \\ & \text { Ave } \end{aligned}$ | 30.1 | +9.9 | +0.9 | -107.0 | +0.0 | -66.1 | -40.0 | -26.1 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ^ 2883.160M | 55.9 | +9.9 | +0.9 | -107.0 | +0.0 | -40.3 | -40.0 | -0.3 | Ant 1 |
| $\begin{aligned} & 27 \text { 2943.930M } \\ & \text { Ave } \end{aligned}$ | 28.7 | +9.9 | +0.9 | -107.0 | +0.0 | -67.5 | -40.0 | -27.5 | Ant1 |
| ^ 2943.930M | 53.5 | +9.9 | +0.9 | -107.0 | +0.0 | -42.7 | -40.0 | -2.7 | Ant1 |
| $\begin{aligned} & 292837.840 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 28.3 | +9.9 | +0.9 | -107.0 | +0.0 | -67.9 | -40.0 | -27.9 | Ant1 |
| ^ 2837.840M | 55.7 | +9.9 | +0.9 | -107.0 | +0.0 | -40.5 | -40.0 | -0.5 | Ant1 |
| $\begin{aligned} & 31 \begin{array}{l} 333.000 \mathrm{M} \\ \text { Ave } \end{array} \end{aligned}$ | 16.0 | +9.9 | +0.3 | -107.0 | +0.0 | -80.8 | -40.0 | -40.8 | Ant1 |
| ^ 333.000M | 53.3 | +9.9 | +0.3 | -107.0 | +0.0 | -43.5 | -40.0 | -3.5 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 15:47:18
Sequence\#: 30
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 3.72-37 GHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3625 MHz
Modulation: QAM64
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.


|  | Sweep Data |
| :--- | :--- |
| O | Peak Readings |
| * | Readings |
|  | Software Readings Version: 5.03 .12 |$\quad$ QP Readings

Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. Test Lead: Ant1

| \# | Freq MHz | Rdng $\mathrm{dB} \mu \mathrm{V}$ | $\begin{gathered} \mathrm{T} 1 \\ \mathrm{~dB} \end{gathered}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \end{aligned}$ | dB | $\begin{gathered} \hline \text { Dist } \\ \text { Table } \end{gathered}$ | Corr <br> dBm | Spec <br> dBm | Margin dB | Polar <br> Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1$ | $\begin{gathered} 36914.538 \\ \mathrm{M} \end{gathered}$ | 48.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -44.9 | -40.0 | -4.9 | Ant1 |
| $2$ | $\begin{gathered} 36790.544 \\ \mathrm{M} \end{gathered}$ | 48.2 | $+10.4$ | +3.4 | -107.0 |  | +0.0 | -45.0 | -40.0 | $-5.0$ | Ant1 |
| 3 | 4020.300M | 50.8 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.2 | -40.0 | -5.2 | Ant1 |
| 4 | 4032.312M | 50.7 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.3 | -40.0 | -5.3 | Ant1 |
| 5 | $\begin{gathered} 36664.912 \\ \mathrm{M} \end{gathered}$ | 47.9 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.3 | -40.0 | -5.3 | Ant1 |
| 6 | 4159.439M | 50.5 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.5 | -40.0 | $-5.5$ | Ant1 |
| $7$ | $\begin{gathered} 36502.750 \\ \mathrm{M} \end{gathered}$ | 47.7 | +10.5 | +3.3 | -107.0 |  | +0.0 | -45.5 | -40.0 | -5.5 | Ant1 |
| 8 | 4169.449M | 50.4 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.6 | -40.0 | -5.6 | Ant1 |
| $9$ | $\begin{gathered} 36825.618 \\ M \end{gathered}$ | 47.5 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.7 | -40.0 | -5.7 | Ant1 |
| $10$ | $\begin{gathered} 36563.811 \\ \mathrm{M} \end{gathered}$ | 47.5 | +10.5 | +3.3 | -107.0 |  | +0.0 | -45.7 | -40.0 | -5.7 | Ant1 |
| 11 | 4149.429 M | 50.2 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.8 | -40.0 | $-5.8$ | Ant1 |
|  | $\begin{gathered} 36835.745 \\ \mathrm{M} \end{gathered}$ | 47.3 | $+10.4$ | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
| 13 | 4251.531M | 50.0 | +9.9 | +1.1 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
|  | $36874.277$ <br> M | 47.2 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
|  | $\begin{gathered} 36861.433 \\ \mathrm{M} \end{gathered}$ | 47.1 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.1 | -40.0 | -6.1 | Ant1 |
|  | $\begin{gathered} 36872.548 \\ \mathrm{M} \end{gathered}$ | 47.1 | $+10.4$ | +3.4 | -107.0 |  | +0.0 | -46.1 | -40.0 | -6.1 | Ant1 |
| 17 | 4042.322M | 49.8 | +9.9 | +1.1 | -107.0 |  | +0.0 | -46.2 | -40.0 | -6.2 | Ant1 |
| 18 | $\begin{gathered} 36954.552 \\ \mathrm{M} \end{gathered}$ | 47.0 | $+10.4$ | +3.4 | -107.0 |  | +0.0 | -46.2 | -40.0 | -6.2 | Ant1 |


| $\begin{aligned} & 193803.083 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 32.2 | +9.9 | +1.0 | -107.0 | +0.0 | -63.9 | -40.0 | -23.9 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3803.083M | 59.8 | +9.9 | +1.0 | -107.0 | +0.0 | -36.3 | -40.0 | +3.7 | Ant1 |
| $\begin{aligned} & 21 \text { 3910.190M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 30.9 | +9.9 | +1.0 | -107.0 | $+0.0$ | -65.2 | -40.0 | -25.2 | Ant1 |
| ^ 3910.190M | 63.3 | +9.9 | +1.0 | -107.0 | +0.0 | -32.8 | -40.0 | +7.2 | Ant1 |
| $\begin{aligned} & 23 \text { 3897.177M } \\ & \text { Ave } \end{aligned}$ | 30.8 | +9.9 | +1.0 | -107.0 | +0.0 | -65.3 | -40.0 | -25.3 | Ant1 |
| ^ 3897.177M | 63.9 | +9.9 | +1.0 | -107.0 | +0.0 | -32.2 | -40.0 | +7.8 | Ant1 |
|  | 30.7 | +9.9 | +1.0 | -107.0 | +0.0 | -65.4 | -40.0 | -25.4 | Ant1 |
| ^ 3921.201M | 64.1 | +9.9 | +1.0 | -107.0 | +0.0 | -32.0 | -40.0 | +8.0 | Ant1 |
| $\begin{aligned} & 27 \text { 3931.211M } \\ & \text { Ave } \end{aligned}$ | 29.9 | +9.9 | +1.1 | -107.0 | +0.0 | -66.1 | -40.0 | -26.1 | Ant1 |
| ^ 3931.211M | 63.0 | +9.9 | +1.1 | -107.0 | +0.0 | -33.0 | -40.0 | +7.0 | Ant1 |
| $\begin{aligned} & 297252.529 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 28.0 | +10.0 | +1.5 | -107.0 | +0.0 | -67.5 | -40.0 | -27.5 | Ant1 |
| $\wedge 7252.529 \mathrm{M}$ | 53.8 | +10.0 | +1.5 | -107.0 | +0.0 | -41.7 | -40.0 | -1.7 | Ant1 |
| $\begin{aligned} & 317247.524 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 27.8 | +10.0 | +1.5 | -107.0 | +0.0 | -67.7 | -40.0 | -27.7 | Ant1 |
| ^ 7247.524M | 53.5 | +10.0 | +1.5 | -107.0 | +0.0 | -42.0 | -40.0 | -2.0 | Ant1 |
| $\begin{aligned} & 33 \text { 3976.256M } \\ & \text { Ave } \end{aligned}$ | 26.3 | +9.9 | +1.1 | -107.0 | +0.0 | -69.7 | -40.0 | -29.7 | Ant1 |
| ^ 3976.256M | 57.7 | +9.9 | +1.1 | -107.0 | +0.0 | -38.3 | -40.0 | +1.7 | Ant1 |
| $\begin{aligned} & 353996.276 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 24.7 | +9.9 | +1.1 | -107.0 | +0.0 | -71.3 | -40.0 | -31.3 | Ant1 |
| ^ 3996.276M | 56.5 | +9.9 | +1.1 | -107.0 | +0.0 | -39.5 | -40.0 | $+0.5$ | Ant1 |
| $\begin{aligned} & 37 \text { 4018.298M } \\ & \text { Ave } \end{aligned}$ | 22.7 | +9.9 | +1.1 | -107.0 | +0.0 | -73.3 | -40.0 | -33.3 | Ant1 |
| ^ 4018.298M | 53.8 | +9.9 | +1.1 | -107.0 | +0.0 | -42.2 | -40.0 | -2.2 | Ant1 |
| $\begin{aligned} & 39 \text { 4028.308M } \\ & \text { Ave } \end{aligned}$ | 21.7 | +9.9 | +1.1 | -107.0 | +0.0 | -74.3 | -40.0 | -34.3 | Ant1 |
| ^ 4028.308M | 54.0 | +9.9 | +1.1 | -107.0 | +0.0 | -42.0 | -40.0 | -2.0 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 16:09:23
Sequence\#: 31
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3696.5 MHz
Modulation: QPSK
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.


[^2]Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \# $\quad$Freq <br>  <br>  <br>  <br> MHz | Rdng $\mathrm{dB} \mu \mathrm{V}$ | $\begin{aligned} & \mathrm{T} 1 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \end{aligned}$ | dB | Dist Table | Corr <br> dBm | Spec <br> dBm | $\begin{gathered} \text { Margin } \\ \mathrm{dB} \end{gathered}$ | Polar Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1572.000 M | 51.6 | +9.9 | +0.4 | -107.0 |  | +0.0 | -45.1 | -40.0 | -5.1 | Ant1 |
| $2 \quad 289.000 \mathrm{M}$ | 50.3 | +9.9 | +0.3 | -107.0 |  | +0.0 | -46.5 | -40.0 | -6.5 | Ant1 |
| $3 \quad 692.500 \mathrm{M}$ | 47.5 | +9.9 | +0.5 | -107.0 |  | +0.0 | -49.1 | -40.0 | -9.1 | Ant1 |
| $\begin{aligned} & 43292.070 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 43.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -52.3 | -40.0 | -12.3 | Ant1 |
| ^ 3292.070M | 71.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -25.0 | -40.0 | +15.0 | Ant1 |
| $\begin{aligned} & 6 \text { 3250.686M } \\ & \text { Ave } \end{aligned}$ | 43.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -52.8 | -40.0 | -12.8 | Ant1 |
| ^ 3250.686M | 76.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -20.1 | -40.0 | +19.9 | Ant1 |
| $\begin{aligned} & 8 \text { 3181.860M } \\ & \text { Ave } \end{aligned}$ | 41.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -55.1 | -40.0 | -15.1 | Ant1 |
| $\wedge 3181.860 \mathrm{M}$ | 67.3 | +9.9 | +0.9 | -107.0 |  | +0.0 | -28.9 | -40.0 | +11.1 | Ant1 |
| $\begin{aligned} & 103483.650 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 39.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -57.1 | -40.0 | -17.1 | Ant1 |
| $\wedge 3483.650 \mathrm{M}$ | 64.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -32.0 | -40.0 | +8.0 | Ant1 |
| $\begin{aligned} & 123395.070 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 38.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -57.3 | -40.0 | -17.3 | Ant1 |
| $\wedge 3395.070 \mathrm{M}$ | 66.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -30.1 | -40.0 | +9.9 | Ant1 |
| $\begin{aligned} & 143455.840 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 38.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -57.5 | -40.0 | -17.5 | Ant1 |
| $\wedge 3455.840 \mathrm{M}$ | 62.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -33.8 | -40.0 | +6.2 | Ant1 |
| $\begin{aligned} & 16 \text { 3048.990M } \\ & \text { Ave } \end{aligned}$ | 36.8 | +9.9 | +0.9 | -107.0 |  | +0.0 | -59.4 | -40.0 | -19.4 | Ant1 |
| ^ 3048.990M | 63.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -33.1 | -40.0 | +6.9 | Ant1 |
| $\begin{aligned} & 18 \text { 2867.710M } \\ & \text { Ave } \end{aligned}$ | 32.6 | +9.9 | +0.9 | -107.0 |  | +0.0 | -63.6 | -40.0 | -23.6 | Ant1 |
| $\wedge 2867.710 \mathrm{M}$ | 59.0 | +9.9 | +0.9 | -107.0 |  | +0.0 | -37.2 | -40.0 | +2.8 | Ant1 |
| $\begin{aligned} & 202891.400 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 31.8 | +9.9 | +0.9 | -107.0 |  | +0.0 | -64.4 | -40.0 | -24.4 | Ant1 |
| $\wedge$ 2891.400M | 58.0 | +9.9 | +0.9 | -107.0 |  | +0.0 | -38.2 | -40.0 | +1.8 | Ant1 |
| $\begin{aligned} & 222945.990 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.5 | +9.9 | +0.9 | -107.0 |  | +0.0 | -65.7 | -40.0 | -25.7 | Ant1 |
| $\wedge$ 2945.990M | 57.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -38.3 | -40.0 | +1.7 | Ant1 |


| $\begin{aligned} & 242827.540 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 27.5 | +9.9 | +0.9 | -107.0 | +0.0 | -68.7 | -40.0 | -28.7 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2827.540M | 53.2 | +9.9 | +0.9 | -107.0 | +0.0 | -43.0 | -40.0 | -3.0 | Ant1 |
| $\begin{gathered} 26 \begin{array}{c} 623.000 \mathrm{M} \\ \text { Ave } \end{array} \\ \hline \end{gathered}$ | 16.9 | +9.9 | +0.4 | -107.0 | +0.0 | -79.8 | -40.0 | -39.8 | Ant1 |
| ^ 623.000M | 54.5 | +9.9 | +0.4 | -107.0 | +0.0 | -42.2 | -40.0 | -2.2 | Ant1 |
| $\begin{gathered} 28 \quad 382.500 \mathrm{M} \\ \text { Ave } \\ \hline \end{gathered}$ | 16.1 | +9.9 | +0.3 | -107.0 | +0.0 | -80.7 | -40.0 | -40.7 | Ant1 |
| ^ 382.500 M | 54.9 | +9.9 | +0.3 | -107.0 | +0.0 | -41.9 | -40.0 | -1.9 | Ant1 |
| $\begin{gathered} 30 \begin{array}{l} 311.500 \mathrm{M} \\ \text { Ave } \end{array} \\ \hline \end{gathered}$ | 16.0 | +9.9 | +0.3 | -107.0 | +0.0 | -80.8 | -40.0 | -40.8 | Ant1 |
| ^ 311.500M | 54.1 | +9.9 | +0.3 | -107.0 | +0.0 | -42.7 | -40.0 | -2.7 | Ant1 |
| $\begin{aligned} & 32 \quad 449.500 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 15.3 | +9.9 | +0.4 | -107.0 | +0.0 | -81.4 | -40.0 | -41.4 | Ant1 |
| $\wedge 449.500 \mathrm{M}$ | 54.4 | +9.9 | +0.4 | -107.0 | +0.0 | -42.3 | -40.0 | -2.3 | Ant1 |
| $\begin{aligned} & 34 \begin{array}{l} 526.500 \mathrm{M} \\ \text { Ave } \end{array} \\ & \hline \end{aligned}$ | 14.1 | +9.9 | +0.4 | -107.0 | +0.0 | -82.6 | -40.0 | -42.6 | Ant1 |
| ^ 526.500 M | 53.7 | +9.9 | +0.4 | -107.0 | +0.0 | -43.0 | -40.0 | -3.0 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 16:25:14
Sequence\#: 32
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 3.72-37 GHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3696.5 MHz
Modulation: QPSK
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.

Mercury Wireless WO\#: 103300 Sequence\#f: 32 Date: 3/6/2020 47 CFR $\S 96.41$ e Spurious Emissions Test Lead: 120 V 60 Hz Ant 1


|  | Sweep Data |
| :--- | :--- |
|  | Peak Readings |
| * | Readings |
| Average Readings | QP Readings |
|  | Software Version: 5.03 .12 |$\quad$| Ambient |
| :--- |

Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \# | Freq <br> MHz | Rdng $\mathrm{dB} \mu \mathrm{V}$ | $\begin{gathered} \text { T1 } \\ \text { dB } \end{gathered}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \end{aligned}$ | dB | $\begin{gathered} \hline \text { Dist } \\ \text { Table } \end{gathered}$ | Corr dBm | Spec <br> dBm | $\begin{gathered} \text { Margin } \\ \mathrm{dB} \end{gathered}$ | Polar <br> Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4221.760 M | 51.9 | +9.9 | +1.1 | -107.0 |  | +0.0 | -44.1 | -40.0 | -4.1 | Ant1 |
|  | 4269.120M | 50.6 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.4 | -40.0 | -5.4 | Ant1 |
|  | 36737.000M | 45.9 | +10.4 | +3.4 | -107.0 |  | +0.0 | -47.3 | -40.0 | -7.3 | Ant1 |
|  | 4312.640M | 44.1 | +9.9 | +1.1 | -107.0 |  | +0.0 | -51.9 | -40.0 | -11.9 | Ant1 |
|  | $\begin{aligned} & 3816.000 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 33.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -62.8 | -40.0 | -22.8 | Ant1 |
|  | 3816.000 M | 55.4 | +9.9 | +1.0 | -107.0 |  | +0.0 | -40.7 | -40.0 | -0.7 | Ant1 |
|  | $\begin{aligned} & \text { 3782.720M } \\ & \text { Ave } \end{aligned}$ | 32.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -63.5 | -40.0 | -23.5 | Ant1 |
|  | 3782.720 M | 54.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -41.3 | -40.0 | -1.3 | Ant1 |
|  | $\begin{aligned} & \text { 3748.160M } \\ & \text { Ave } \end{aligned}$ | 32.4 | +9.9 | +1.0 | -107.0 |  | +0.0 | -63.7 | -40.0 | -23.7 | Ant1 |
|  | 3748.160M | 55.2 | +9.9 | +1.0 | -107.0 |  | +0.0 | -40.9 | -40.0 | -0.9 | Ant1 |
|  | $\begin{aligned} & \text { 3964.480M } \\ & \text { Ave } \end{aligned}$ | 31.0 | +9.9 | +1.1 | -107.0 |  | +0.0 | -65.0 | -40.0 | -25.0 | Ant1 |
|  | 3964.480M | 60.3 | +9.9 | +1.1 | -107.0 |  | +0.0 | -35.7 | -40.0 | +4.3 | Ant1 |
|  | $\begin{aligned} & \text { 3978.258M } \\ & \text { Ave } \end{aligned}$ | 30.9 | +9.9 | +1.1 | -107.0 |  | +0.0 | -65.1 | -40.0 | -25.1 | Ant1 |
|  | 3978.258M | 66.9 | +9.9 | +1.1 | -107.0 |  | +0.0 | -29.1 | -40.0 | +10.9 | Ant1 |
|  | $\begin{aligned} & \text { 3900.480M } \\ & \text { Ave } \end{aligned}$ | 30.2 | +9.9 | +1.0 | -107.0 |  | +0.0 | -65.9 | -40.0 | -25.9 | Ant1 |
|  | 3900.480M | 59.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -37.1 | -40.0 | +2.9 | Ant1 |
|  | $\begin{aligned} & 3991.360 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 29.7 | +9.9 | +1.1 | -107.0 |  | +0.0 | -66.3 | -40.0 | -26.3 | Ant1 |
|  | 3991.360M | 65.0 | +9.9 | +1.1 | -107.0 |  | +0.0 | -31.0 | -40.0 | +9.0 | Ant1 |
|  | $\begin{aligned} & \text { 4023.360M } \\ & \text { Ave } \end{aligned}$ | 24.5 | +9.9 | +1.1 | -107.0 |  | +0.0 | -71.5 | -40.0 | -31.5 | Ant1 |
|  | 4023.360M | 53.1 | +9.9 | +1.1 | -107.0 |  | +0.0 | -42.9 | -40.0 | -2.9 | Ant1 |
|  | $\begin{aligned} & \text { 4164.160M } \\ & \text { Ave } \end{aligned}$ | 23.3 | +9.9 | +1.1 | -107.0 |  | +0.0 | -72.7 | -40.0 | -32.7 | Ant1 |
|  | 4164.160 M | 57.8 | +9.9 | +1.1 | -107.0 |  | +0.0 | -38.2 | -40.0 | +1.8 | Ant1 |
|  | $\begin{aligned} & \text { 4089.920M } \\ & \text { Ave } \end{aligned}$ | 21.7 | +9.9 | +1.1 | -107.0 |  | +0.0 | -74.3 | -40.0 | -34.3 | Ant1 |
|  | 4089.920M | 53.5 | +9.9 | +1.1 | -107.0 |  | +0.0 | -42.5 | -40.0 | -2.5 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 16:34:56
Sequence\#: 33
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3696.5 MHz
Modulation: QAM16
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.


[^3]Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| $\begin{array}{ll}\text { \# } & \begin{array}{l}\text { Freq } \\ \text { MHz }\end{array} \\ & \\ & 1\end{array}$ | $\begin{aligned} & \hline \mathrm{Rdng} \\ & \mathrm{~dB} \mu \mathrm{~V} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{T} 1 \\ & \mathrm{~dB} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \\ & \hline \end{aligned}$ | dB | Dist <br> Table | $\begin{aligned} & \hline \text { Corr } \\ & \mathrm{dBm} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Spec } \\ & \mathrm{dBm} \\ & \hline \end{aligned}$ | $\underset{\mathrm{dB}}{\mathrm{Margin}}$ | Polar Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2830.630M | 52.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -44.1 | -40.0 | -4.1 | Ant1 |
| 2663.500 M | 50.6 | +9.9 | +0.5 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
| $\begin{aligned} & 3 \text { 3283.985M } \\ & \text { Ave } \end{aligned}$ | 43.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -52.3 | -40.0 | -12.3 | Ant1 |
| ^ 3283.985M | 75.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -20.4 | -40.0 | +19.6 | Ant1 |
| $\begin{aligned} & 5 \text { 3294.130M } \\ & \text { Ave } \end{aligned}$ | 43.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -52.4 | -40.0 | -12.4 | Ant1 |
| ^ 3294.130M | 71.5 | +9.9 | +1.0 | -107.0 |  | +0.0 | -24.6 | -40.0 | +15.4 | Ant1 |
| $\begin{aligned} & 7 \text { 3375.500M } \\ & \text { Ave } \end{aligned}$ | 40.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -55.3 | -40.0 | -15.3 | Ant1 |
| ^ 3375.500M | 68.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -27.5 | -40.0 | +12.5 | Ant1 |
| $\begin{aligned} & 9 \text { 3139.630M } \\ & \text { Ave } \end{aligned}$ | 40.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -56.1 | -40.0 | -16.1 | Ant1 |
| ^ 3139.630M | 67.0 | +9.9 | +0.9 | -107.0 |  | +0.0 | -29.2 | -40.0 | +10.8 | Ant1 |
| $\begin{aligned} & 11 \text { 3479.530M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 39.2 | +9.9 | +1.0 | -107.0 |  | +0.0 | -56.9 | -40.0 | -16.9 | Ant1 |
| ^ 3479.530M | 64.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -31.4 | -40.0 | +8.6 | Ant1 |
| $\begin{aligned} & 133431.120 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 37.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -58.4 | -40.0 | -18.4 | Ant1 |
| ^ 3431.120M | 60.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -36.0 | -40.0 | +4.0 | Ant1 |
| $\begin{aligned} & 15 \text { 3023.240M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 34.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -61.3 | -40.0 | -21.3 | Ant1 |
| ^ 3023.240M | 59.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -36.3 | -40.0 | +3.7 | Ant1 |
| $\begin{aligned} & 17 \begin{array}{l} 17 \\ \text { Ave } \end{array} \\ & \hline \end{aligned}$ | 32.3 | +9.9 | +0.9 | -107.0 |  | $+0.0$ | -63.9 | -40.0 | -23.9 | Ant1 |
| ^ 2870.800M | 60.3 | +9.9 | +0.9 | -107.0 |  | +0.0 | -35.9 | -40.0 | +4.1 | Ant1 |
| $\begin{aligned} & \hline 19 \text { 2934.660M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 30.5 | +9.9 | +0.9 | -107.0 |  | +0.0 | -65.7 | -40.0 | -25.7 | Ant1 |
| ^ 2934.660M | 57.6 | +9.9 | +0.9 | -107.0 |  | +0.0 | -38.6 | -40.0 | +1.4 | Ant1 |
| $\begin{aligned} & 21 \begin{array}{l} 631.000 \mathrm{M} \\ \text { Ave } \end{array} \end{aligned}$ | 16.7 | +9.9 | +0.4 | -107.0 |  | $+0.0$ | -80.0 | -40.0 | -40.0 | Ant1 |
| ^ 631.000M | 55.6 | +9.9 | +0.4 | -107.0 |  | +0.0 | -41.1 | -40.0 | -1.1 | Ant1 |
| $\begin{gathered} 23 \begin{array}{c} 583.500 \mathrm{M} \\ \text { Ave } \end{array} \end{gathered}$ | 15.9 | +9.9 | +0.4 | -107.0 |  | $+0.0$ | -80.8 | -40.0 | -40.8 | Ant1 |
| ^ 583.500 M | 53.2 | +9.9 | +0.4 | -107.0 |  | +0.0 | -43.5 | -40.0 | -3.5 | Ant1 |


| $\begin{aligned} & 25390.000 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 15.9 | +9.9 | $+0.3$ | -107.0 | +0.0 | -80.9 | -40.0 | -40.9 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\wedge 390.000 \mathrm{M}$ | 53.7 | +9.9 | +0.3 | -107.0 | +0.0 | -43.1 | -40.0 | -3.1 | Ant1 |
| $\begin{aligned} & 27308.500 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 15.8 | +9.9 | +0.3 | -107.0 | +0.0 | -81.0 | -40.0 | -41.0 | Ant1 |
| $\wedge 308.500 \mathrm{M}$ | 55.4 | +9.9 | $+0.3$ | -107.0 | +0.0 | -41.4 | -40.0 | -1.4 | Ant1 |
| $\begin{aligned} & 29460.500 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 14.6 | +9.9 | +0.4 | -107.0 | +0.0 | -82.1 | -40.0 | -42.1 | Ant1 |
| $\wedge 460.500 \mathrm{M}$ | 53.8 | +9.9 | +0.4 | -107.0 | +0.0 | -42.9 | -40.0 | -2.9 | Ant1 |
| $\begin{aligned} & 31 \quad 290.500 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 13.9 | +9.9 | $+0.3$ | -107.0 | +0.0 | -82.9 | -40.0 | -42.9 | Ant1 |
| $\wedge 290.500 \mathrm{M}$ | 53.6 | +9.9 | +0.3 | -107.0 | +0.0 | -43.2 | -40.0 | -3.2 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 16:47:52
Sequence\#: 34
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 3.72-37 GHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3696.5 MHz
Modulation: QAM16
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.

Mercury Wireless WO\#: 103300 Sequence\#f: 34 Date: 3/6/2020 47 CFR $\S 96.41$ e Spurious Emissions Test Lead: 120 V 60 Hz Ant 1


|  | Sweep Data |
| :--- | :--- |
| O | Peak Readings |
| * Rerage Readings | Readings |
| Software Version: 5.03 .12 | QP Readings |
|  | Ambient |
|  |  |

Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \#Freq <br>  <br>  <br> MHz | $\begin{aligned} & \text { Rdng } \\ & \mathrm{dB} \mu \mathrm{~V} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 1 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \end{aligned}$ | dB | $\begin{gathered} \hline \text { Dist } \\ \text { Table } \end{gathered}$ | Corr dBm | Spec <br> dBm | $\begin{gathered} \text { Margin } \\ \mathrm{dB} \\ \hline \end{gathered}$ | Polar <br> Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17390.000 M | 50.5 | +10.0 | +1.5 | -107.0 |  | +0.0 | -45.0 | -40.0 | -5.0 | Ant1 |
| $\begin{array}{cc} \hline 2 & 36736.000 \\ M \end{array}$ | 47.4 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |
| 3 4201.280M | 49.1 | +9.9 | +1.1 | -107.0 |  | +0.0 | -46.9 | -40.0 | -6.9 | Ant1 |
| 4 4276.800M | 45.5 | +9.9 | +1.1 | -107.0 |  | +0.0 | -50.5 | -40.0 | -10.5 | Ant1 |
| $\begin{aligned} & 5 \text { 3721.280M } \\ & \text { Ave } \end{aligned}$ | 35.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -60.8 | -40.0 | -20.8 | Ant1 |
| ^ 3721.280M | 64.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -31.4 | -40.0 | +8.6 | Ant1 |
| $\begin{aligned} & 7 \text { 3775.040M } \\ & \text { Ave } \end{aligned}$ | 34.4 | +9.9 | +1.0 | -107.0 |  | +0.0 | -61.7 | -40.0 | -21.7 | Ant1 |
| $\wedge 3775.040 \mathrm{M}$ | 59.2 | +9.9 | +1.0 | -107.0 |  | +0.0 | -36.9 | -40.0 | +3.1 | Ant1 |
| $\begin{aligned} & 9 \text { 3969.249M } \\ & \text { Ave } \end{aligned}$ | 31.1 | +9.9 | +1.1 | -107.0 |  | +0.0 | -64.9 | -40.0 | -24.9 | Ant1 |
| ^ 3969.249M | 65.7 | +9.9 | +1.1 | -107.0 |  | +0.0 | -30.3 | -40.0 | +9.7 | Ant1 |
| $\begin{aligned} & 113848.000 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -65.5 | -40.0 | -25.5 | Ant1 |
| ^ 3848.000M | 54.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -41.3 | -40.0 | -1.3 | Ant1 |
| $\begin{aligned} & 133927.360 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.3 | +9.9 | +1.1 | -107.0 |  | +0.0 | -65.7 | -40.0 | -25.7 | Ant1 |
| ^ 3927.360M | 58.2 | +9.9 | +1.1 | -107.0 |  | +0.0 | -37.8 | -40.0 | +2.2 | Ant1 |
| $\begin{aligned} & 153987.520 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.0 | +9.9 | +1.1 | -107.0 |  | +0.0 | -66.0 | -40.0 | -26.0 | Ant1 |
| ^ 3987.520M | 60.2 | +9.9 | +1.1 | -107.0 |  | +0.0 | -35.8 | -40.0 | +4.2 | Ant1 |
| $\begin{aligned} & 17 \text { 4016.960M } \\ & \text { Ave } \end{aligned}$ | 25.7 | +9.9 | +1.1 | -107.0 |  | +0.0 | -70.3 | -40.0 | -30.3 | Ant1 |
| ^ 4016.960M | 56.0 | +9.9 | +1.1 | -107.0 |  | +0.0 | -40.0 | -40.0 | +0.0 | Ant1 |
| $\begin{aligned} & 194123.200 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 22.5 | +9.9 | +1.1 | -107.0 |  | +0.0 | -73.5 | -40.0 | -33.5 | Ant1 |
| $\wedge$ 4123.200M | 57.8 | +9.9 | +1.1 | -107.0 |  | +0.0 | -38.2 | -40.0 | +1.8 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 17:00:25
Sequence\#: 35
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3696.5 MHz
Modulation: QAM64
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.


[^4]Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \#Freq <br> MHz | $\begin{aligned} & \hline \mathrm{Rdng} \\ & \mathrm{~dB} \mu \mathrm{~V} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{T} 1 \\ & \mathrm{~dB} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \\ & \hline \end{aligned}$ | dB | Dist <br> Table | $\begin{aligned} & \hline \text { Corr } \\ & \mathrm{dBm} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Spec } \\ & \mathrm{dBm} \\ & \hline \end{aligned}$ | $\underset{\mathrm{dB}}{\mathrm{Margin}}$ | Polar Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 293.000M | 52.6 | +9.9 | +0.3 | -107.0 |  | +0.0 | -44.2 | -40.0 | -4.2 | Ant1 |
| 2 690.000M | 49.1 | +9.9 | +0.5 | -107.0 |  | +0.0 | -47.5 | -40.0 | -7.5 | Ant1 |
| $\begin{aligned} & 3 \text { 3296.190M } \\ & \text { Ave } \end{aligned}$ | 43.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -52.3 | -40.0 | -12.3 | Ant1 |
| ^ 3296.190M | 72.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -23.8 | -40.0 | +16.2 | Ant1 |
| $\begin{aligned} & 5 \text { 3268.081M } \\ & \text { Ave } \end{aligned}$ | 43.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -52.4 | -40.0 | -12.4 | Ant1 |
| ^ 3268.081M | 76.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -20.1 | -40.0 | +19.9 | Ant1 |
| $\begin{aligned} & \hline 7 \text { 3189.070M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 41.3 | +9.9 | +0.9 | -107.0 |  | +0.0 | -54.9 | -40.0 | -14.9 | Ant1 |
| ^ 3189.070M | 68.6 | +9.9 | +0.9 | -107.0 |  | +0.0 | -27.6 | -40.0 | +12.4 | Ant1 |
| $\begin{aligned} & 9 \text { 3386.830M } \\ & \text { Ave } \end{aligned}$ | 39.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -56.4 | -40.0 | -16.4 | Ant1 |
| ^ 3386.830M | 70.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -25.4 | -40.0 | +14.6 | Ant1 |
| $\begin{aligned} & 113486.740 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 39.2 | +9.9 | +1.0 | -107.0 |  | +0.0 | -56.9 | -40.0 | -16.9 | Ant1 |
| ^ 3486.740M | 64.2 | +9.9 | +1.0 | -107.0 |  | +0.0 | -31.9 | -40.0 | +8.1 | Ant1 |
| $\begin{aligned} & 13 \text { 3075.770M } \\ & \text { Ave } \end{aligned}$ | 38.5 | +9.9 | +0.9 | -107.0 |  | +0.0 | -57.7 | -40.0 | -17.7 | Ant1 |
| ^ 3075.770M | 64.5 | +9.9 | +0.9 | -107.0 |  | +0.0 | -31.7 | -40.0 | +8.3 | Ant1 |
| $\begin{aligned} & 153437.300 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 38.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -58.1 | -40.0 | -18.1 | Ant1 |
| ^ 3437.300M | 61.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -35.1 | -40.0 | +4.9 | Ant1 |
| $\begin{aligned} & 172863.590 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 32.4 | +9.9 | +0.9 | -107.0 |  | $+0.0$ | -63.8 | -40.0 | -23.8 | Ant1 |
| ^ 2863.590M | 58.8 | +9.9 | +0.9 | -107.0 |  | +0.0 | -37.4 | -40.0 | +2.6 | Ant1 |
| $\begin{aligned} & \hline 19 \text { 2977.920M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 31.4 | +9.9 | +0.9 | -107.0 |  | +0.0 | -64.8 | -40.0 | -24.8 | Ant1 |
| ^ 2977.920M | 56.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -39.3 | -40.0 | +0.7 | Ant1 |
| $\begin{aligned} & 212914.060 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.6 | +9.9 | +0.9 | -107.0 |  | $+0.0$ | -65.6 | -40.0 | -25.6 | Ant1 |
| ^ 2914.060M | 56.0 | +9.9 | +0.9 | -107.0 |  | +0.0 | -40.2 | -40.0 | -0.2 | Ant1 |
| $\begin{aligned} & 232824.450 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 27.3 | +9.9 | +0.9 | -107.0 |  | $+0.0$ | -68.9 | -40.0 | -28.9 | Ant1 |
| ^ 2824.450M | 52.4 | +9.9 | +0.9 | -107.0 |  | +0.0 | -43.8 | -40.0 | -3.8 | Ant1 |


| $\begin{gathered} 25 \begin{array}{l} 420.000 \mathrm{M} \\ \text { Ave } \\ \hline \end{array}{ }^{2}+{ }^{2} \\ \hline \end{gathered}$ | 16.9 | +9.9 | +0.4 | -107.0 | +0.0 | -79.8 | -40.0 | -39.8 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\wedge$ ^ 420.000 M | 53.6 | +9.9 | +0.4 | -107.0 | +0.0 | -43.1 | -40.0 | -3.1 | Ant1 |
| $\begin{aligned} & 27630.500 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 16.7 | +9.9 | +0.4 | -107.0 | +0.0 | -80.0 | -40.0 | -40.0 | Ant1 |
| ^ 630.500M | 54.2 | +9.9 | +0.4 | -107.0 | +0.0 | -42.5 | -40.0 | -2.5 | Ant1 |
| $\begin{gathered} 29319.000 \mathrm{M} \\ \text { Ave } \\ \hline \end{gathered}$ | 16.1 | +9.9 | +0.3 | -107.0 | +0.0 | -80.7 | -40.0 | -40.7 | Ant1 |
| $\wedge 319.000 \mathrm{M}$ | 55.4 | +9.9 | +0.3 | -107.0 | +0.0 | -41.4 | -40.0 | -1.4 | Ant1 |
| $\begin{aligned} & 31 \begin{array}{l} 378.000 \mathrm{M} \\ \text { Ave } \end{array} \\ & \hline \end{aligned}$ | 15.5 | +9.9 | +0.4 | -107.0 | +0.0 | -81.2 | -40.0 | -41.2 | Ant1 |
| ^ 578.000 M | 53.0 | +9.9 | +0.4 | -107.0 | +0.0 | -43.7 | -40.0 | -3.7 | Ant1 |
| $\begin{aligned} & 33 \begin{array}{l} 506.500 \mathrm{M} \\ \text { Ave } \end{array} \\ & \hline \end{aligned}$ | 13.9 | +9.9 | +0.4 | -107.0 | +0.0 | -82.8 | -40.0 | -42.8 | Ant1 |
| $\wedge 506.500 \mathrm{M}$ | 53.4 | +9.9 | +0.4 | -107.0 | +0.0 | -43.3 | -40.0 | -3.3 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/6/2020
Time: 17:29:36
Sequence\#: 36
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 3.72-37 GHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3696.5 MHz
Modulation: QAM64
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.

Mercury Wireless WO\#: 103300 Sequence\#f: 36 Date: 3/6/2020 47 CFR $\S 96.41$ e Spurious Emissions Test Lead: 120 V 60 Hz Ant 1


|  | Sweep Data |
| :--- | :--- |
|  | Peak Readings |
| * | Readings |
| Average Readings | QP Readings |
|  | Software Version: 5.03 .12 |$\quad$| Ambient |
| :--- |

Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \#Freq <br>  <br>  <br>  <br> MHz | $\begin{aligned} & \text { Rdng } \\ & \mathrm{dB} \mu \mathrm{~V} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 1 \\ & \text { dB } \end{aligned}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \end{aligned}$ | dB | Dist Table | Corr dBm | Spec <br> dBm | Margin dB | Polar Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{cc} 1 & 36617.000 \\ \mathrm{M} \end{array}$ | 47.9 | +10.5 | +3.3 | -107.0 |  | +0.0 | -45.3 | -40.0 | -5.3 | Ant1 |
| 27395.000 M | 50.0 | +10.0 | +1.5 | -107.0 |  | +0.0 | -45.5 | -40.0 | -5.5 | Ant1 |
| 34230.900 M | 46.2 | +9.9 | +1.1 | -107.0 |  | +0.0 | -49.8 | -40.0 | -9.8 | Ant1 |
| 4 4202.820M | 45.0 | +9.9 | +1.1 | -107.0 |  | +0.0 | -51.0 | -40.0 | -11.0 | Ant1 |
| $\begin{aligned} & 5 \text { 3722.340M } \\ & \text { Ave } \end{aligned}$ | 34.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -61.5 | -40.0 | -21.5 | Ant1 |
| ^ 3722.340M | 58.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -37.5 | -40.0 | +2.5 | Ant1 |
| $\begin{aligned} & 7 \text { 3776.940M } \\ & \text { Ave } \end{aligned}$ | 34.4 | +9.9 | +1.0 | -107.0 |  | +0.0 | -61.7 | -40.0 | -21.7 | Ant1 |
| ^ 3776.940M | 59.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -36.8 | -40.0 | +3.2 | Ant1 |
| $\begin{aligned} & 9 \text { 3816.720M } \\ & \text { Ave } \end{aligned}$ | 34.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -61.8 | -40.0 | -21.8 | Ant1 |
| ^ 3816.720M | 56.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -39.8 | -40.0 | +0.2 | Ant1 |
| $\begin{aligned} & 113757.440 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 34.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -62.0 | -40.0 | -22.0 | Ant1 |
| ^ 3757.440M | 56.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -39.4 | -40.0 | +0.6 | Ant1 |
| $\begin{aligned} & 13 \text { 3975.060M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 30.8 | +9.9 | +1.1 | -107.0 |  | +0.0 | -65.2 | -40.0 | -25.2 | Ant1 |
| ^ 3975.060M | 63.3 | +9.9 | +1.1 | -107.0 |  | +0.0 | -32.7 | -40.0 | +7.3 | Ant1 |
| $\begin{aligned} & 15 \text { 3866.640M } \\ & \text { Ave } \end{aligned}$ | 30.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -65.5 | -40.0 | -25.5 | Ant1 |
| ^ 3866.640M | 57.5 | +9.9 | +1.0 | -107.0 |  | +0.0 | -38.6 | -40.0 | +1.4 | Ant1 |
| $\begin{aligned} & 17 \text { 3915.780M } \\ & \text { Ave } \end{aligned}$ | 30.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -66.0 | -40.0 | -26.0 | Ant1 |
| ^ 3915.780M | 58.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -38.0 | -40.0 | +2.0 | Ant1 |
| $\begin{aligned} & 193996.276 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 28.8 | +9.9 | +1.1 | -107.0 |  | +0.0 | -67.2 | -40.0 | -27.2 | Ant1 |
| ^ 3996.276M | 66.4 | +9.9 | +1.1 | -107.0 |  | +0.0 | -29.6 | -40.0 | +10.4 | Ant1 |


| $\begin{aligned} & 21 \text { 4014.840M } \\ & \text { Ave } \end{aligned}$ | 25.9 | +9.9 | +1.1 | -107.0 | +0.0 | -70.1 | -40.0 | -30.1 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ^ 4014.840M | 59.3 | +9.9 | +1.1 | -107.0 | +0.0 | -36.7 | -40.0 | +3.3 | Ant1 |
| $\begin{gathered} 234138.860 \mathrm{M} \\ \text { Ave } \end{gathered}$ | 23.0 | +9.9 | +1.1 | -107.0 | +0.0 | -73.0 | -40.0 | -33.0 | Ant1 |
| ^ 4138.860M | 56.7 | +9.9 | +1.1 | -107.0 | +0.0 | -39.3 | -40.0 | +0.7 | Ant1 |
| $\begin{aligned} & 25 \text { 4052.280M } \\ & \text { Ave } \end{aligned}$ | 21.9 | +9.9 | +1.1 | -107.0 | +0.0 | -74.1 | -40.0 | -34.1 | Ant1 |
| ^ 4052.280M | 54.1 | +9.9 | +1.1 | -107.0 | +0.0 | -41.9 | -40.0 | -1.9 | Ant1 |

## Channel Bandwidth 10 MHz

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240

Customer:
Specification:
Work Order \#:
Test Type:
Tested By:
Software:

Mercury Wireless
47 CFR §96.41e Spurious Emissions
103300
Conducted Emissions
Benny Lovan
EMITest 5.03.12

Date: 3/5/2020
Time: 14:43:19
Sequence\#: 1
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 9k - 3.53G

Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa
Transmit Frequency Range: 3550-3700

RBW:
200 Hz (9k-150k),
$9 \mathrm{kHz}(150 \mathrm{k}-30 \mathrm{M})$,
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$

VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3555 MHz
Modulation: QPSK
Channel Bandwidth: 10 MHz
Output Power Software Setting: 33

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.

Mercury Wireless WO\#: 103300 Sequence\#\#: 1 Date: $3 / 5 / 2020$
47 CFR $\S 96.41$ e Spurious Emissions Test Lead: 120 V 60 Hz Ant 1


[^5]- Readings QP Readings
- Ambient
1-47 CFR $\$ 96.41$ e Spurious Emissions

Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \#Freq  <br>  MHz | $\begin{gathered} \mathrm{Rdng} \\ \mathrm{~dB} \mu \mathrm{~V} \end{gathered}$ | $\begin{aligned} & \mathrm{T} 1 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T3} \\ & \mathrm{~dB} \end{aligned}$ | dB | Dist Table | $\begin{aligned} & \text { Corr } \\ & \text { dBm } \end{aligned}$ | Spec dBm | Margin dB | $\begin{gathered} \text { Polar } \\ \text { Ant } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 692.850M | 52.3 | +9.9 | +0.5 | -107.0 |  | +0.0 | -44.3 | -40.0 | -4.3 | Ant1 |
| 2666.300 M | 51.4 | +9.9 | +0.5 | -107.0 |  | +0.0 | -45.2 | -40.0 | -5.2 | Ant1 |
| 3 311.700M | 50.6 | +9.9 | +0.3 | -107.0 |  | +0.0 | -46.2 | -40.0 | -6.2 | Ant1 |
| $4 \quad 516.450 \mathrm{M}$ | 50.1 | +9.9 | +0.4 | -107.0 |  | +0.0 | -46.6 | -40.0 | -6.6 | Ant1 |
| 5393.600 M | 49.1 | +9.9 | +0.4 | -107.0 |  | +0.0 | -47.6 | -40.0 | -7.6 | Ant1 |
| $\begin{aligned} & 6 \text { 3529.503M } \\ & \text { Ave } \end{aligned}$ | 45.4 | +9.9 | +1.0 | -107.0 |  | +0.0 | -50.7 | -40.0 | -10.7 | Ant1 |
| ^ 3529.503M | 74.6 | +9.9 | +1.0 | -107.0 |  | +0.0 | -21.5 | -40.0 | +18.5 | Ant1 |
| $\begin{aligned} & \hline 83208.938 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 39.6 | +9.9 | +0.9 | -107.0 |  | +0.0 | -56.6 | -40.0 | -16.6 | Ant1 |
| 3208.938M | 67.8 | +9.9 | +0.9 | -107.0 |  | +0.0 | -28.4 | -40.0 | +11.6 | Ant1 |
| $\begin{aligned} & 10 \begin{array}{l} 3092.640 \mathrm{M} \\ \text { Ave } \end{array} \\ & \hline \end{aligned}$ | 37.6 | +9.9 | +0.9 | -107.0 |  | +0.0 | -58.6 | -40.0 | -18.6 | Ant1 |
| ^ 3092.640M | 65.0 | +9.9 | +0.9 | -107.0 |  | $+0.0$ | -31.2 | -40.0 | +8.8 | Ant1 |
| $\begin{aligned} & 122859.000 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 30.7 | +9.9 | +0.9 | -107.0 |  | +0.0 | -65.5 | -40.0 | -25.5 | Ant1 |
| ^ 2859.000M | 59.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -36.3 | -40.0 | +3.7 | Ant1 |
| $\begin{aligned} & 14 \text { 2896.000M } \\ & \text { Ave } \end{aligned}$ | 29.7 | +9.9 | +0.9 | -107.0 |  | +0.0 | -66.5 | -40.0 | -26.5 | Ant1 |
| ^ 2896.000M | 56.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -40.1 | -40.0 | -0.1 | Ant1 |
| $\begin{aligned} & 162840.000 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 29.5 | +9.9 | +0.9 | -107.0 |  | +0.0 | -66.7 | -40.0 | -26.7 | Ant1 |
| ^ 2840.000M | 55.8 | +9.9 | +0.9 | -107.0 |  | +0.0 | -40.4 | -40.0 | -0.4 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/5/2020
Time: 15:04:07
Sequence\#: 2
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 3.72-37G
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
$9 \mathrm{kHz}(150 \mathrm{k}-30 \mathrm{M})$,
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$

VBW: 3x RBW
Transmitter Settings:
Transmit Frequency: 3555 MHz
Modulation: QPSK
Channel Bandwidth: 10MHz
Output Power Software Setting: 33

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.

Mercury Wireless WO\#: 103300 Sequence\#f: 2 Date: 3/5/2020
47 CFR $\S 96.41$ e Spurious Emissions Test Lead: 120 V 60 Hz Ant 1


|  | Sweep Data |
| :--- | :--- |
| O | Peak Readings |
| * | Readings |
|  | Software Readings Version: 5.03 .12 |$\quad$ QP Readings

Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. Test Lead: Ant1

| \# | $\begin{aligned} & \text { Freq } \\ & \text { MHz } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Rdng } \\ \mathrm{dB} \mu \mathrm{~V} \end{gathered}$ | $\begin{aligned} & \mathrm{T} 1 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 3 \\ & \mathrm{~dB} \end{aligned}$ | dB | Dist Table | $\begin{aligned} & \text { Corr } \\ & \mathrm{dBm} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Spec } \\ & \text { dBm } \end{aligned}$ | $\begin{gathered} \text { Margin } \\ \mathrm{dB} \end{gathered}$ | Polar Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3993.273M | 51.2 | +9.9 | +1.1 | -107.0 |  | +0.0 | -44.8 | -40.0 | -4.8 | Ant1 |
| 2 | $\begin{gathered} \hline 36619.867 \\ \mathrm{M} \end{gathered}$ | 48.2 | +10.5 | +3.3 | -107.0 |  | +0.0 | -45.0 | -40.0 | -5.0 | Ant1 |
| 3 | $\begin{gathered} 36936.274 \\ \text { M } \end{gathered}$ | 47.7 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.5 | -40.0 | -5.5 | Ant1 |
| 4 | $\begin{gathered} 36761.398 \\ \text { M } \end{gathered}$ | 47.6 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.6 | -40.0 | -5.6 | Ant 1 |
| 5 | $\begin{gathered} 36818.208 \\ \mathrm{M} \end{gathered}$ | 47.4 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |
| 6 | $\begin{gathered} 36628.876 \\ \mathrm{M} \end{gathered}$ | 47.3 | +10.5 | +3.3 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
| 7 | $\begin{gathered} 36655.903 \\ \mathrm{M} \end{gathered}$ | 47.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
| 8 | $\begin{gathered} 36830.064 \\ \mathrm{M} \end{gathered}$ | 47.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
| 9 | $36799.930$ <br> M | 47.2 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
| 10 | $\begin{gathered} 36854.270 \\ M \end{gathered}$ | 47.2 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
| 11 | 4020.300M | 49.9 | +9.9 | +1.1 | -107.0 |  | +0.0 | -46.1 | -40.0 | -6.1 | Ant1 |
| 12 | $\begin{gathered} 36453.701 \\ \mathrm{M} \end{gathered}$ | 47.1 |  | +3.3 | -107.0 |  | +0.0 | -46.1 | -40.0 | -6.1 | Ant1 |
| 13 | $\begin{gathered} 36787.333 \\ \mathrm{M} \end{gathered}$ | 47.0 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.2 | -40.0 | -6.2 | Ant1 |
| 14 | $\begin{gathered} 36784.616 \\ \mathrm{M} \end{gathered}$ | 47.0 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.2 | -40.0 | -6.2 | Ant1 |
| 15 | $\begin{gathered} 36638.886 \\ \mathrm{M} \end{gathered}$ | 47.0 | +10.4 | +3.3 | -107.0 |  | +0.0 | -46.3 | -40.0 | -6.3 | Ant1 |
| 16 | $\begin{gathered} 36387.635 \\ \mathrm{M} \end{gathered}$ | 46.8 | +10.5 | +3.3 | -107.0 |  | +0.0 | -46.4 | -40.0 | -6.4 | Ant1 |
| 17 | $\begin{gathered} 36825.865 \\ \mathrm{M} \end{gathered}$ | 46.8 | $+10.4$ | +3.4 | -107.0 |  | +0.0 | -46.4 | -40.0 | -6.4 | Ant1 |


|  | $\begin{gathered} 36348.596 \\ \text { M } \end{gathered}$ | 46.7 | +10.5 | +3.3 | -107.0 | +0.0 | -46.5 | -40.0 | -6.5 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | $\begin{gathered} 36813.762 \\ \mathrm{M} \end{gathered}$ | 46.7 | +10.4 | +3.4 | -107.0 | +0.0 | -46.5 | -40.0 | -6.5 | Ant1 |
| 20 | $\begin{gathered} 36790.297 \\ \text { M } \end{gathered}$ | 46.6 | +10.4 | +3.4 | -107.0 | +0.0 | -46.6 | -40.0 | -6.6 | Ant1 |
| 21 | $\begin{gathered} 36322.570 \\ \mathrm{M} \end{gathered}$ | 46.5 | +10.5 | +3.3 | -107.0 | +0.0 | -46.7 | -40.0 | -6.7 | Ant1 |
| 22 | $\begin{gathered} 36236.484 \\ \text { M } \end{gathered}$ | 46.5 | +10.5 | +3.2 | -107.0 | +0.0 | -46.8 | -40.0 | -6.8 | Ant1 |
| 23 | $\begin{gathered} 36178.426 \\ M \end{gathered}$ | 46.4 | +10.5 | +3.2 | -107.0 | +0.0 | -46.9 | -40.0 | -6.9 | Ant 1 |
| 24 | $\begin{gathered} 36375.623 \\ \mathrm{M} \end{gathered}$ | 46.2 | +10.5 | +3.3 | -107.0 | +0.0 | -47.0 | -40.0 | -7.0 | Ant1 |
| 25 | 4012.292M | 48.9 | +9.9 | +1.1 | -107.0 | +0.0 | -47.1 | -40.0 | -7.1 | Ant1 |
| 26 | $\begin{gathered} 36309.557 \\ \mathrm{M} \end{gathered}$ | 46.1 | +10.5 | +3.3 | -107.0 | +0.0 | -47.1 | -40.0 | -7.1 | Ant1 |
|  | $\begin{aligned} & \text { 3830.110M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 33.8 | +9.9 | +1.0 | -107.0 | +0.0 | -62.3 | -40.0 | -22.3 | Ant1 |
| $\wedge$ | 3830.110M | 64.5 | +9.9 | +1.0 | -107.0 | +0.0 | -31.6 | -40.0 | +8.4 | Ant1 |
|  | $\begin{aligned} & \text { 7108.385M } \\ & \text { Ave } \end{aligned}$ | 31.0 | +10.0 | +1.5 | -107.0 | +0.0 | -64.5 | -40.0 | -24.5 | Ant1 |
| $\wedge$ | 7108.385M | 57.4 | +10.0 | +1.5 | -107.0 | +0.0 | -38.1 | -40.0 | +1.9 | Ant1 |
|  | $\begin{aligned} & \hline 7113.390 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 29.4 | +10.0 | +1.5 | -107.0 | +0.0 | -66.1 | -40.0 | -26.1 | Ant1 |
| $\wedge$ | 7113.390M | 56.2 | +10.0 | +1.5 | -107.0 | +0.0 | -39.3 | -40.0 | +0.7 | Ant1 |
|  | $\begin{aligned} & \text { 7105.382M } \\ & \text { Ave } \end{aligned}$ | 28.5 | +10.0 | +1.5 | -107.0 | +0.0 | -67.0 | -40.0 | -27.0 | Ant1 |
| $\wedge$ | 7105.382M | 55.9 | +10.0 | +1.5 | -107.0 | +0.0 | -39.6 | -40.0 | +0.4 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/5/2020
Time: 16:01:19
Sequence\#: 3
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 GHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$

VBW: 3x RBW
Transmitter Settings:
Transmit Frequency: 3555 MHz
Modulation: QAM16
Channel Bandwidth: 10MHz
Output Power Software Setting: 33

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.


```
Sweep Data
O Peak Readings
* Average Readings
Software Version: 5.03.12
* QP Readings
    1-47 CFR §96.41e Spurious Emissions
```

Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| $\begin{array}{ll}\text { \# } & \begin{array}{l}\text { Freq } \\ \text { MHz }\end{array} \\ & \\ & \end{array}$ | $\begin{aligned} & \hline \mathrm{Rdng} \\ & \mathrm{~dB} \mu \mathrm{~V} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{T} 1 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \hline \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \\ & \hline \end{aligned}$ | dB | Dist <br> Table | $\begin{aligned} & \hline \text { Corr } \\ & \mathrm{dBm} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Spec } \\ & \mathrm{dBm} \\ & \hline \end{aligned}$ | $\underset{\mathrm{dB}}{\mathrm{Margin}}$ | Polar Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 13529.503 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 49.8 | +9.9 | +1.0 | -107.0 |  | +0.0 | -46.3 | -40.0 | -6.3 | Ant1 |
| ^ 3529.503M | 74.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -22.0 | -40.0 | +18.0 | Ant1 |
| $\begin{aligned} & 3 \text { 3229.900M } \\ & \text { Ave } \end{aligned}$ | 40.7 | +9.9 | +0.9 | -107.0 |  | +0.0 | -55.5 | -40.0 | -15.5 | Ant1 |
| ^ 3229.900M | 70.5 | +9.9 | +0.9 | -107.0 |  | +0.0 | -25.7 | -40.0 | +14.3 | Ant1 |
| $\begin{aligned} & 53185.800 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 40.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -56.1 | -40.0 | -16.1 | Ant1 |
| ^ 3185.800M | 65.7 | +9.9 | +0.9 | -107.0 |  | +0.0 | -30.5 | -40.0 | +9.5 | Ant1 |
| $\begin{aligned} & \hline 7 \text { 3286.800M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 39.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -56.8 | -40.0 | -16.8 | Ant1 |
| ^ 3286.800M | 61.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -34.4 | -40.0 | +5.6 | Ant1 |
| $\begin{aligned} & \hline 9 \text { 3086.300M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 38.6 | +9.9 | +0.9 | -107.0 |  | $+0.0$ | -57.6 | -40.0 | -17.6 | Ant1 |
| ^ 3086.300M | 66.6 | +9.9 | +0.9 | -107.0 |  | +0.0 | -29.6 | -40.0 | +10.4 | Ant1 |
| $\begin{aligned} & 11 \text { 2997.000M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 31.5 | +9.9 | +0.9 | -107.0 |  | +0.0 | -64.7 | -40.0 | -24.7 | Ant1 |
| ^ 2997.000M | 57.7 | +9.9 | +0.9 | -107.0 |  | +0.0 | -38.5 | -40.0 | +1.5 | Ant1 |
| $\begin{aligned} & 132871.500 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 31.3 | +9.9 | +0.9 | -107.0 |  | +0.0 | -64.9 | -40.0 | -24.9 | Ant1 |
| ^ 2871.500M | 59.0 | +9.9 | +0.9 | -107.0 |  | +0.0 | -37.2 | -40.0 | +2.8 | Ant1 |
| $\begin{aligned} & 152837.500 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 30.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -66.1 | -40.0 | -26.1 | Ant1 |
| ^ 2837.500M | 55.8 | +9.9 | +0.9 | -107.0 |  | +0.0 | -40.4 | -40.0 | -0.4 | Ant1 |
| $\begin{aligned} & 17 \text { 2929.000M } \\ & \text { Ave } \end{aligned}$ | 29.8 | +9.9 | +0.9 | -107.0 |  | $+0.0$ | -66.4 | -40.0 | -26.4 | Ant1 |
| ^ 2929.000M | 56.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -40.1 | -40.0 | -0.1 | Ant1 |
| $\begin{aligned} & 19 \text { 2817.500M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 25.4 | +9.9 | +0.9 | -107.0 |  | +0.0 | -70.8 | -40.0 | -30.8 | Ant1 |
| ^ 2817.500M | 52.6 | +9.9 | +0.9 | -107.0 |  | +0.0 | -43.6 | -40.0 | -3.6 | Ant1 |
| $\begin{aligned} & 21 \begin{array}{l} 307.250 \mathrm{M} \\ \text { Ave } \end{array} \end{aligned}$ | 15.6 | +9.9 | +0.3 | -107.0 |  | $+0.0$ | -81.2 | -40.0 | -41.2 | Ant1 |
| ^ 307.250M | 53.8 | +9.9 | +0.3 | -107.0 |  | +0.0 | -43.0 | -40.0 | -3.0 | Ant1 |
| $\begin{gathered} 23 \begin{array}{c} 647.700 \mathrm{M} \\ \text { Ave } \end{array} \end{gathered}$ | 14.9 | +9.9 | +0.5 | -107.0 |  | $+0.0$ | -81.7 | -40.0 | -41.7 | Ant1 |
| ^ 647.700M | 53.7 | +9.9 | +0.5 | -107.0 |  | +0.0 | -42.9 | -40.0 | -2.9 | Ant1 |


| $\begin{aligned} & 25 \text { 498.100M } \\ & \text { Ave } \end{aligned}$ | 14.6 | +9.9 | +0.4 | -107.0 | +0.0 | -82.1 | -40.0 | -42.1 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\wedge$ ^ 498.100 M | 53.7 | +9.9 | +0.4 | -107.0 | +0.0 | -43.0 | -40.0 | -3.0 | Ant1 |
| $\begin{aligned} & 27430.450 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 14.5 | +9.9 | +0.4 | -107.0 | +0.0 | -82.2 | -40.0 | -42.2 | Ant1 |
| $\wedge 430.450 \mathrm{M}$ | 50.1 | +9.9 | +0.4 | -107.0 | +0.0 | -46.6 | -40.0 | -6.6 | Ant1 |
| $\begin{aligned} & 29689.500 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 14.3 | +9.9 | +0.5 | -107.0 | +0.0 | -82.3 | -40.0 | -42.3 | Ant1 |
| $\wedge 689.500 \mathrm{M}$ | 52.0 | +9.9 | +0.5 | -107.0 | +0.0 | -44.6 | -40.0 | -4.6 | Ant1 |
| $\begin{aligned} & 31564.100 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 13.1 | +9.9 | +0.4 | -107.0 | +0.0 | -83.6 | -40.0 | -43.6 | Ant1 |
| $\wedge 564.100 \mathrm{M}$ | 50.9 | +9.9 | +0.4 | -107.0 | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/5/2020
Time: 16:12:40
Sequence\#: 4
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 3.720-37 GHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3555 MHz
Modulation: QAM16
Channel Bandwidth: 10MHz
Output Power Software Setting: 33

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.

Mercury Wireless WO\#: 103300 Sequence\#: 4 Date: 3/5/2020
47 CFR $\S 96.41$ e Spurious Emissions Test Lead: 120 V 60 Hz Ant 1


|  | Sweep Data |
| :--- | :--- |
| O | Peak Readings |
| * | Readings |
|  | Qorage Readings |
| Software Version: 5.03 .12 | QP Readings |
|  | Ambient |
|  |  |

Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. Test Lead: Ant1

| \# | $\begin{aligned} & \text { Freq } \\ & \text { MHz } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{Rdng} \\ & \mathrm{~dB} \mu \mathrm{~V} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{T} 1 \\ & \mathrm{~dB} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { T2 } \\ & \text { dB } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \\ & \hline \end{aligned}$ | dB | Dist <br> Table | $\begin{aligned} & \hline \text { Corr } \\ & \mathrm{dBm} \\ & \hline \end{aligned}$ | Spec dBm | $\underset{\mathrm{dB}}{\text { Margin }}$ | Polar Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 36428.676 \\ \mathrm{M} \end{gathered}$ | 47.7 | +10.5 | +3.3 | -107.0 |  | +0.0 | -45.5 | -40.0 | -5.5 | Ant1 |
|  | $\begin{gathered} \hline 36811.539 \\ \mathrm{M} \end{gathered}$ | 47.7 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.5 | -40.0 | -5.5 | Ant1 |
| 3 | 4258.538M | 50.4 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.6 | -40.0 | -5.6 | Ant1 |
| 4 | 4035.315M | 50.4 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.6 | -40.0 | -5.6 | Ant1 |
|  | $\begin{gathered} \hline 36445.693 \\ \mathrm{M} \end{gathered}$ | 47.6 | +10.5 | +3.3 | -107.0 |  | +0.0 | -45.6 | -40.0 | -5.6 | Ant1 |
|  | $\begin{gathered} 36820.925 \\ \mathrm{M} \end{gathered}$ | 47.6 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.6 | -40.0 | -5.6 | Ant1 |
|  | $\begin{gathered} 36568.816 \\ \mathrm{M} \end{gathered}$ | 47.6 | +10.5 | +3.3 | -107.0 |  | +0.0 | -45.6 | -40.0 | -5.6 | Ant1 |
| 8 | 4212.492M | 50.3 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.7 | -40.0 | -5.7 | Ant1 |
|  | $\begin{gathered} 36911.080 \\ \mathrm{M} \end{gathered}$ | 47.4 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.8 | -40.0 | -5.8 | Ant1 |
| 10 | $\begin{gathered} 36761.398 \\ \mathrm{M} \end{gathered}$ | 47.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
| 11 | $\begin{gathered} 36763.621 \\ \mathrm{M} \end{gathered}$ | 47.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
| 12 | $\begin{gathered} 36700.948 \\ \mathrm{M} \end{gathered}$ | 47.3 |  | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
| 13 | 4017.297M | 50.1 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
| 14 | $\begin{gathered} \hline 36562.810 \\ \mathrm{M} \end{gathered}$ | 47.2 | +10.5 | +3.3 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
| 15 | $\begin{gathered} \hline 36529.777 \\ \mathrm{M} \end{gathered}$ |  |  |  |  |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
| 16 | $\begin{gathered} 36819.937 \\ \mathrm{M} \end{gathered}$ | 47.2 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
| 17 | $\begin{gathered} 36813.515 \\ \mathrm{M} \end{gathered}$ | 47.2 |  |  | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
| 18 | 4265.545M | 49.9 | +9.9 | +1.1 | -107.0 |  | +0.0 | -46.1 | -40.0 | -6.1 | Ant1 |


| $\begin{array}{cc} \hline 19 & 36717.965 \\ M \end{array}$ | 47.0 | +10.4 | +3.4 | -107.0 | +0.0 | -46.2 | -40.0 | -6.2 | Ant1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{cc} \hline 20 & 36815.738 \\ & M \end{array}$ | 46.9 | +10.4 | +3.4 | -107.0 | +0.0 | -46.3 | -40.0 | -6.3 | Ant1 |
| $\begin{array}{cc} 21 & 36818.208 \\ \mathrm{M} \end{array}$ | 46.9 | +10.4 | +3.4 | -107.0 | +0.0 | -46.3 | -40.0 | -6.3 | Ant1 |
| $\begin{array}{cc} \hline 22 & 36344.592 \\ \mathrm{M} \end{array}$ | 46.8 | +10.5 | +3.3 | -107.0 | +0.0 | -46.4 | -40.0 | -6.4 | Ant1 |
| $\begin{array}{cc} 23 & 36747.995 \\ \mathrm{M} \end{array}$ | 46.7 | +10.4 | +3.4 | -107.0 | +0.0 | -46.5 | -40.0 | -6.5 | Ant1 |
| $\begin{aligned} & 24 \text { 3797.077M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 35.1 | +9.9 | +1.0 | -107.0 | +0.0 | -61.0 | -40.0 | -21.0 | Ant1 |
| ^ 3797.077M | 63.4 | +9.9 | +1.0 | -107.0 | +0.0 | -32.7 | -40.0 | +7.3 | Ant1 |
| $\begin{aligned} & 263809.089 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 35.1 | +9.9 | +1.0 | -107.0 | +0.0 | -61.0 | -40.0 | -21.0 | Ant1 |
| ^ 3809.089M | 65.1 | +9.9 | +1.0 | -107.0 | +0.0 | -31.0 | -40.0 | +9.0 | Ant1 |
| $\begin{gathered} 283836.116 \mathrm{M} \\ \text { Ave } \\ \hline \end{gathered}$ | 34.8 | +9.9 | +1.0 | -107.0 | +0.0 | -61.3 | -40.0 | -21.3 | Ant1 |
| ^ 3836.116M | 66.8 | +9.9 | +1.0 | -107.0 | +0.0 | -29.3 | -40.0 | +10.7 | Ant1 |
| $\begin{aligned} & \hline 307106.383 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 29.1 | +10.0 | +1.5 | -107.0 | +0.0 | -66.4 | -40.0 | -26.4 | Ant1 |
| ^ 7106.383M | 54.0 | +10.0 | +1.5 | -107.0 | +0.0 | -41.5 | -40.0 | -1.5 | Ant1 |
| $\begin{aligned} & 327113.390 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 29.0 | +10.0 | +1.5 | -107.0 | +0.0 | -66.5 | -40.0 | -26.5 | Ant1 |
| ^ 7113.390M | 54.1 | +10.0 | +1.5 | -107.0 | +0.0 | -41.4 | -40.0 | -1.4 | Ant1 |
| $\begin{aligned} & \hline 34 \text { 3910.190M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 29.4 | +9.9 | +1.0 | -107.0 | +0.0 | -66.7 | -40.0 | -26.7 | Ant1 |
| ^ 3910.190M | 57.7 | +9.9 | +1.0 | -107.0 | +0.0 | -38.4 | -40.0 | +1.6 | Ant1 |
| $\begin{aligned} & 36 \text { 4255.535M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 22.5 | +9.9 | +1.1 | -107.0 | +0.0 | -73.5 | -40.0 | -33.5 | Ant1 |
| $\wedge$ 4255.535M | 52.2 | +9.9 | +1.1 | -107.0 | +0.0 | -43.8 | -40.0 | -3.8 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/5/2020
Time: 16:25:32
Sequence\#: 5
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$

VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3555 MHz
Modulation: QAM64
Channel Bandwidth: 10MHz
Output Power Software Setting: 33

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.


[^6]Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \#Freq  <br>  MHz | $\begin{aligned} & \text { Rdng } \\ & \mathrm{dB} \mu \mathrm{~V} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 1 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \mathrm{T} 2 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & \text { T3 } \\ & \text { dB } \end{aligned}$ | dB | Dist Table | Corr dBm | Spec <br> dBm | $\begin{gathered} \text { Margin } \\ \mathrm{dB} \\ \hline \end{gathered}$ | Polar <br> Ant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 \quad 302.000 \mathrm{M}$ | 52.5 | +9.9 | +0.3 | -107.0 |  | +0.0 | -44.3 | -40.0 | -4.3 | Ant1 |
| 2705.500 M | 51.7 | +9.9 | +0.5 | -107.0 |  | +0.0 | -44.9 | -40.0 | -4.9 | Ant1 |
| $3 \quad 644.000 \mathrm{M}$ | 49.4 | +9.9 | +0.5 | -107.0 |  | +0.0 | -47.2 | -40.0 | -7.2 | Ant1 |
| 42794.000 M | 48.8 | +9.9 | +0.9 | -107.0 |  | +0.0 | -47.4 | -40.0 | -7.4 | Ant1 |
| $5 \quad 551.500 \mathrm{M}$ | 49.2 | +9.9 | +0.4 | -107.0 |  | +0.0 | -47.5 | -40.0 | -7.5 | Ant1 |
| $\begin{aligned} & 6 \text { 3529.503M } \\ & \text { Ave } \end{aligned}$ | 46.2 | +9.9 | +1.0 | -107.0 |  | +0.0 | -49.9 | -40.0 | -9.9 | Ant1 |
| ^ 3529.503M | 75.0 | +9.9 | +1.0 | -107.0 |  | +0.0 | -21.1 | -40.0 | +18.9 | Ant1 |
| $\begin{aligned} & 8 \text { 3232.000M } \\ & \text { Ave } \end{aligned}$ | 40.7 | +9.9 | +0.9 | -107.0 |  | +0.0 | -55.5 | -40.0 | -15.5 | Ant1 |
| $\wedge 3232.000 \mathrm{M}$ | 66.2 | +9.9 | +0.9 | -107.0 |  | +0.0 | -30.0 | -40.0 | +10.0 | Ant1 |
| $\begin{aligned} & 103171.000 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 39.9 | +9.9 | +0.9 | -107.0 |  | +0.0 | -56.3 | -40.0 | -16.3 | Ant1 |
| ^ 3171.000M | 66.8 | +9.9 | +0.9 | -107.0 |  | +0.0 | -29.4 | -40.0 | +10.6 | Ant1 |
| $\begin{aligned} & 123289.000 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 39.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -56.8 | -40.0 | -16.8 | Ant1 |
| ^ 3289.000M | 60.9 | +9.9 | +1.0 | -107.0 |  | +0.0 | -35.2 | -40.0 | +4.8 | Ant1 |
| $\begin{aligned} & 143081.000 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 38.2 | +9.9 | +0.9 | -107.0 |  | +0.0 | -58.0 | -40.0 | -18.0 | Ant1 |
| ^ 3081.000M | 66.1 | +9.9 | +0.9 | -107.0 |  | +0.0 | -30.1 | -40.0 | +9.9 | Ant1 |
| $\begin{aligned} & 163517.640 \mathrm{M} \\ & \text { Ave } \\ & \hline \end{aligned}$ | 37.7 | +9.9 | +1.0 | -107.0 |  | +0.0 | -58.4 | -40.0 | -18.4 | Ant1 |
| ^ 3517.640M | 61.5 | +9.9 | +1.0 | -107.0 |  | +0.0 | -34.6 | -40.0 | +5.4 | Ant1 |
| $\begin{aligned} & 18 \text { 3362.000M } \\ & \text { Ave } \end{aligned}$ | 37.1 | +9.9 | +1.0 | -107.0 |  | +0.0 | -59.0 | -40.0 | -19.0 | Ant1 |
| $\wedge 3362.000 \mathrm{M}$ | 59.3 | +9.9 | +1.0 | -107.0 |  | +0.0 | -36.8 | -40.0 | +3.2 | Ant1 |
| $\begin{aligned} & 203456.000 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 36.9 | +9.9 | +1.0 | -107.0 |  | +0.0 | -59.2 | -40.0 | -19.2 | Ant1 |
| $\wedge 3456.000 \mathrm{M}$ | 57.5 | +9.9 | +1.0 | -107.0 |  | +0.0 | -38.6 | -40.0 | +1.4 | Ant1 |
| $\begin{aligned} & 22 \text { 2999.000M } \\ & \text { Ave } \\ & \hline \end{aligned}$ | 31.6 | +9.9 | +0.9 | -107.0 |  | +0.0 | -64.6 | -40.0 | -24.6 | Ant1 |
| ^ 2999.000M | 57.6 | +9.9 | +0.9 | -107.0 |  | +0.0 | -38.6 | -40.0 | +1.4 | Ant1 |


| $\begin{aligned} & 24 \text { 2862.000M } \\ & \text { Ave } \end{aligned}$ | 31.2 | +9.9 | +0.9 | -107.0 | +0.0 | -65.0 | -40.0 | -25.0 | Ant 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\wedge 2862.000 \mathrm{M}$ | 57.8 | +9.9 | +0.9 | -107.0 | +0.0 | -38.4 | -40.0 | +1.6 | Ant1 |
| $\begin{aligned} & 26 \text { 2919.000M } \\ & \text { Ave } \end{aligned}$ | 29.4 | +9.9 | +0.9 | -107.0 | +0.0 | -66.8 | -40.0 | -26.8 | Ant1 |
| ^ 2919.000M | 55.3 | +9.9 | +0.9 | -107.0 | +0.0 | -40.9 | -40.0 | -0.9 | Ant 1 |
| $\begin{aligned} & 28 \quad 400.000 \mathrm{M} \\ & \text { Ave } \end{aligned}$ | 15.1 | +9.9 | +0.4 | -107.0 | +0.0 | -81.6 | -40.0 | -41.6 | Ant1 |
| $\wedge 400.000 \mathrm{M}$ | 53.9 | +9.9 | +0.4 | -107.0 | +0.0 | -42.8 | -40.0 | -2.8 | Ant1 |
| $\begin{gathered} 30 \quad 462.000 \mathrm{M} \\ \text { Ave } \end{gathered}$ | 14.9 | +9.9 | +0.4 | -107.0 | +0.0 | -81.8 | -40.0 | -41.8 | Ant1 |
| $\wedge 1462.000 \mathrm{M}$ | 53.8 | +9.9 | +0.4 | -107.0 | +0.0 | -42.9 | -40.0 | -2.9 | Ant1 |

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240
Customer: Mercury Wireless
Specification: 47 CFR §96.41e Spurious Emissions
Work Order \#: 103300
Test Type: $\quad$ Conducted Emissions
Tested By: Benny Lovan
Software: EMITest 5.03.12

Date: 3/5/2020
Time: 16:39:02
Sequence\#: 6
120 V 60 Hz

## Equipment Tested:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

Support Equipment:

| Device | Manufacturer | Model \# |
| :--- | :--- | :--- |
| Configuration 1 |  | S/N |

## Test Conditions / Notes:

Conducted Spurious Emissions 3.72-37 GHz
Temperature: $23^{\circ} \mathrm{C}$
Humidity: 28\%
Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550-3700
RBW:
200Hz (9k - 150k),
9 kHz (150k-30M),
$1 \mathrm{MHz}(30 \mathrm{MHz}-37 \mathrm{GHz})$
VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3555 MHz
Modulation: QAM64
Channel Bandwidth: 10MHz
Output Power Software Setting: 33

The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10 dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

Antenna 1 through 6 are multiplexed from one radio. All 6 channels will have the same output simultaneously in normal operation. Preliminary investigatory measurements showed that all 6 ports were identical and therefore spurious emissions are only being performed on Antenna Port 1.

Mercury Wireless WO\#: 103300 Sequence\#: 6 Date: $3 / 5 / 2020$
47 CFR $\S 96.41$ e Spurious Emissions Test Lead: 120 V 60 Hz Ant 1


|  | Sweep Data |
| :--- | :--- |
| O | Peak Readings |
| * | Readings |
|  | Qorage Readings |
| Software Version: 5.03 .12 | QP Readings |
|  | Ambient |
|  |  |

Test Equipment:

| ID | Asset \# | Description | Model | Calibration Date | Cal Due Date |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | AN02668 | Spectrum Analyzer | E4446A | $12 / 17 / 2019$ | $12 / 17 / 2020$ |
| T1 | ANP06239 | Attenuator | $54 A-10$ | $12 / 18 / 2018$ | $12 / 18 / 2020$ |
| T2 | AN03356 | Cable | $32026-2-$ | $3 / 14 / 2019$ | $3 / 14 / 2021$ |
|  |  |  | $29094 K-48$ TC |  |  |
| T3 | ANdBuV | Unit Conversion |  | $8 / 24 / 2018$ | $8 / 24 / 2022$ |

Measurement Data: $\quad$ Reading listed by margin. $\quad$ Test Lead: Ant1

| \# | $\begin{aligned} & \text { Freq } \\ & \text { MHz } \end{aligned}$ | $\begin{gathered} \text { Rdng } \\ \text { dBuV } \end{gathered}$ | $\begin{aligned} & \mathrm{T} 1 \\ & \mathrm{~dB} \end{aligned}$ | $\begin{gathered} \mathrm{T} 2 \\ \mathrm{~dB} \end{gathered}$ | $\begin{aligned} & \mathrm{T3} \\ & \mathrm{~dB} \end{aligned}$ | dB | $\begin{gathered} \hline \text { Dist } \\ \text { Table } \end{gathered}$ | $\begin{aligned} & \text { Corr } \\ & \mathrm{dBm} \end{aligned}$ | $\begin{aligned} & \text { Spec } \\ & \text { dBm } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Margin } \\ \mathrm{dB} \end{gathered}$ | $\begin{gathered} \text { Polar } \\ \text { Ant } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3991.271M | 51.9 | +9.9 | +1.1 | -107.0 |  | +0.0 | -44.1 | -40.0 | -4.1 | Ant1 |
| 2 | 4237.517M | 51.1 | +9.9 | +1.1 | -107.0 |  | +0.0 | -44.9 | -40.0 | -4.9 | Ant1 |
| 3 | $\begin{gathered} 36543.791 \\ \mathrm{M} \end{gathered}$ | 48.3 | +10.5 | +3.3 | -107.0 |  | +0.0 | -44.9 | -40.0 | -4.9 | Ant1 |
|  | $\begin{gathered} 36784.369 \\ \mathrm{M} \end{gathered}$ | 48.2 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.0 | -40.0 | -5.0 | Ant1 |
| 5 | 4226.506M | 50.9 | +9.9 | +1.1 | -107.0 |  | +0.0 | -45.1 | -40.0 | -5.1 | Ant1 |
| 6 | $\begin{gathered} 36707.955 \\ \mathrm{M} \end{gathered}$ | 47.7 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.5 | -40.0 | -5.5 | Ant1 |
| 7 | $\begin{gathered} 36549.797 \\ \mathrm{M} \end{gathered}$ | 47.6 | +10.5 | +3.3 | -107.0 |  | +0.0 | -45.6 | -40.0 | -5.6 | Ant1 |
| 8 | $\begin{gathered} 36786.098 \\ \text { M } \end{gathered}$ | 47.5 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.7 | -40.0 | -5.7 | Ant1 |
| 9 | $\begin{gathered} 36656.904 \\ \text { M } \end{gathered}$ | 47.5 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.7 | -40.0 | -5.7 | Ant1 |
| 10 | $\begin{gathered} 36783.381 \\ \mathrm{M} \end{gathered}$ | 47.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
| 11 | $\begin{gathered} 36945.907 \\ \mathrm{M} \end{gathered}$ | 47.3 | +10.4 | +3.4 | -107.0 |  | +0.0 | -45.9 | -40.0 | -5.9 | Ant1 |
| 12 | $\begin{gathered} 36777.206 \\ \mathrm{M} \end{gathered}$ | 47.2 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.0 | -40.0 | -6.0 | Ant1 |
| 13 | $\begin{gathered} 36592.840 \\ \mathrm{M} \end{gathered}$ | 47.1 |  | +3.3 | -107.0 |  | +0.0 | -46.1 | -40.0 | -6.1 | Ant1 |
| 14 | $\begin{gathered} 36618.866 \\ \mathrm{M} \end{gathered}$ | 47.1 | +10.5 | +3.3 | -107.0 |  | +0.0 | -46.1 | -40.0 | -6.1 | Ant1 |
| 15 | 4048.328M | 49.8 | +9.9 | +1.1 | -107.0 |  | +0.0 | -46.2 | -40.0 | -6.2 | Ant1 |
| 16 | $\begin{gathered} 36962.703 \\ \mathrm{M} \end{gathered}$ | 46.8 | +10.4 | +3.4 | -107.0 |  | +0.0 | -46.4 | -40.0 | -6.4 | Ant1 |


[^0]:    Sweep Data
    O Peak Readings

    * Average Readings

    Software Version: 5.03.12

[^1]:    Sweep Data
    O Peak Readings

    * Average Readings

    Software Version: 5.03.12

    - Readings QP Readings
    - Ambient
    1-47 CFR $\$ 96.41$ e Spurious Emissions

[^2]:    Sweep Data
    O Peak Readings

    * Average Readings

    Software Version: 5.03.12

[^3]:    Sweep Data
    O Peak Readings

    * Average Readings

    Software Version: 5.03.12

[^4]:    - Sweep Data

    O Peak Readings

    * Average Readings

    Software Version: 5.03.12

[^5]:    Sweep Data
    Q Peak Readings

    * Average Readings

    Software Version: 5.03.12

[^6]:    Sweep Data
    O Peak Readings

    * Average Readings

    Software Version: 5.03.12

