

Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	l: Ant1		
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	333.500M	52.8	+9.9	+0.3	-107.0		+0.0	-44.0	-40.0	-4.0	Ant1
2	687.500M	51.6	+9.9	+0.5	-107.0		+0.0	-45.0	-40.0	-5.0	Ant1
3	633.500M	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	518.000M	49.0	+9.9	+0.4	-107.0		+0.0	-47.7	-40.0	-7.7	Ant1
6	710.500M	47.3	+9.9	+0.5	-107.0		+0.0	-49.3	-40.0	-9.3	Ant1
7	3529.503M Ave	43.0	+9.9	+1.0	-107.0		+0.0	-53.1	-40.0	-13.1	Ant1
٨	3529.503M	71.9	+9.9	+1.0	-107.0		+0.0	-24.2	-40.0	+15.8	Ant1
	3218.381M Ave	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
11	3219.970M Ave	38.9	+9.9	+0.9	-107.0		+0.0	-57.3	-40.0	-17.3	Ant1
٨	3219.970M	67.6	+9.9	+0.9	-107.0		+0.0	-28.6	-40.0	+11.4	Ant1
	3126.240M Ave	37.5	+9.9	+0.9	-107.0		+0.0	-58.7	-40.0	-18.7	Ant1
	3126.240M	65.6	+9.9	+0.9	-107.0		+0.0	-30.6	-40.0	+9.4	Ant1
	3277.650M Ave	37.2	+9.9	+1.0	-107.0		+0.0	-58.9	-40.0	-18.9	Ant1
٨	3277.650M	61.4	+9.9	+1.0	-107.0		+0.0	-34.7	-40.0	+5.3	Ant1
	3326.060M Ave	36.4	+9.9	+1.0	-107.0		+0.0	-59.7	-40.0	-19.7	Ant1
٨	3326.060M	60.8	+9.9	+1.0	-107.0		+0.0	-35.3	-40.0	+4.7	Ant1
	3501.160M Ave	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	Ant1
	3043.840M Ave	34.1	+9.9	+0.9	-107.0		+0.0	-62.1	-40.0	-22.1	Ant1
	3043.840M	62.0	+9.9	+0.9	-107.0		+0.0	-34.2	-40.0	+5.8	Ant1
	3382.710M Ave	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

Page 247 of 406 Report No.: 103300-10A



25	3441.420M Ave	33.5	+9.9	+1.0	-107.0	+0.0	-62.6	-40.0	-22.6	Ant1
٨	3441.420M	55.3	+9.9	+1.0	-107.0	+0.0	-40.8	-40.0	-0.8	Ant1
27	2863.590M Ave	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
29	2899.640M Ave	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
31	2965.560M Ave	28.3	+9.9	+0.9	-107.0	+0.0	-67.9	-40.0	-27.9	Ant1
٨	2965.560M	55.3	+9.9	+0.9	-107.0	+0.0	-40.9	-40.0	-0.9	Ant1
33	2831.660M Ave	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
35	314.000M Ave	14.7	+9.9	+0.3	-107.0	+0.0	-82.1	-40.0	-42.1	Ant1
^	314.000M	54.6	+9.9	+0.3	-107.0	+0.0	-42.2	-40.0	-2.2	Ant1

Page 248 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 12:22:36
Tested By: Benny Lovan Sequence#: 22

Software: EMITest 5.03.12 120V 60Hz

**Equipment Tested:** 

Device	Manufacturer	Model #	S/N
Configuration 1			

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 3.72 - 37 GHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3553.5 MHz

Modulation: QAM16 Channel Bandwidth: 7MHz Output Power Software Setting: 32

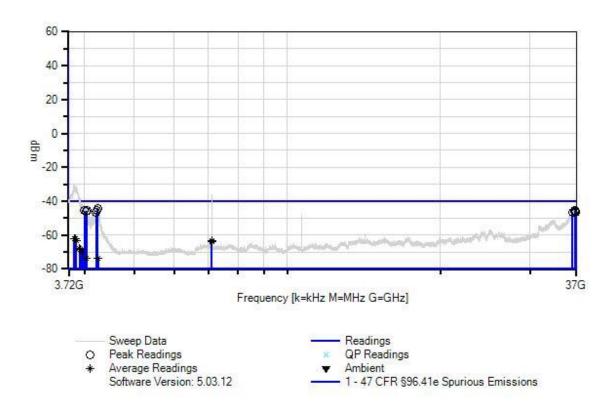
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 249 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 22 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 250 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	d: Ant1		
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	4242.522M	52.0	+9.9	+1.1	-107.0		+0.0	-44.0	-40.0	-4.0	Ant1
2	4228.508M	50.6	+9.9	+1.1	-107.0		+0.0	-45.4	-40.0	-5.4	Ant1
3	36746.994 M	47.8	+10.4	+3.4	-107.0		+0.0	-45.4	-40.0	-5.4	Ant1
4	4040.320M	50.4	+9.9	+1.1	-107.0		+0.0	-45.6	-40.0	-5.6	Ant1
5	4000.280M	50.3	+9.9	+1.1	-107.0		+0.0	-45.7	-40.0	-5.7	Ant1
6	36771.772 M	47.4	+10.4	+3.4	-107.0		+0.0	-45.8	-40.0	-5.8	Ant1
7	4034.314M	50.2	+9.9	+1.1	-107.0		+0.0	-45.8	-40.0	-5.8	Ant1
8	36859.704 M	47.4	+10.4	+3.4	-107.0		+0.0	-45.8	-40.0	-5.8	Ant1
9	36807.834 M	47.4	+10.4	+3.4	-107.0		+0.0	-45.8	-40.0	-5.8	Ant1
10	36760.410 M	47.3	+10.4	+3.4	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
11	36764.362 M	47.2	+10.4	+3.4	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
12	36794.249 M	47.2	+10.4	+3.4	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
13	36849.083 M	47.2	+10.4	+3.4	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
14	36754.482 M	47.1	+10.4	+3.4	-107.0		+0.0	-46.1	-40.0	-6.1	Ant1
15	36829.817 M	47.0	+10.4	+3.4	-107.0		+0.0	-46.2	-40.0	-6.2	Ant1
16	36320.568 M	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	36821.172 M	46.6	+10.4	+3.4	-107.0		+0.0	-46.6	-40.0	-6.6	Ant1

Page 251 of 406 Report No.: 103300-10A



19 3830.110M Ave	33.8	+9.9	+1.0	-107.0	+0.0	-62.3	-40.0	-22.3	Ant1
^ 3830.110M	64.8	+9.9	+1.0	-107.0	+0.0	-31.3	-40.0	+8.7	Ant1
21 3812.092M Ave	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
23 3819.099M Ave	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
25 7112.389M Ave	32.4	+10.0	+1.5	-107.0	+0.0	-63.1	-40.0	-23.1	Ant1
^ 7112.389M	59.0	+10.0	+1.5	-107.0	+0.0	-36.5	-40.0	+3.5	Ant1
27 3852.132M Ave	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
29 7107.384M Ave	31.9	+10.0	+1.5	-107.0	+0.0	-63.6	-40.0	-23.6	Ant1
^ 7107.384M	59.0	+10.0	+1.5	-107.0	+0.0	-36.5	-40.0	+3.5	Ant1
31 3907.187M Ave	28.2	+9.9	+1.0	-107.0	+0.0	-67.9	-40.0	-27.9	Ant1
^ 3907.187M	58.2	+9.9	+1.0	-107.0	+0.0	-37.9	-40.0	+2.1	Ant1
33 3924.204M Ave	27.4	+9.9	+1.0	-107.0	+0.0	-68.7	-40.0	-28.7	Ant1
^ 3924.204M	57.9	+9.9	+1.0	-107.0	+0.0	-38.2	-40.0	+1.8	Ant1
35 3963.243M Ave	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
37 4019.299M Ave	22.3	+9.9	+1.1	-107.0	+0.0	-73.7	-40.0	-33.7	Ant1
^ 4019.299M	52.4	+9.9	+1.1	-107.0	+0.0	-43.6	-40.0	-3.6	Ant1
39 4249.529M Ave	22.1	+9.9	+1.1	-107.0	+0.0	-73.9	-40.0	-33.9	Ant1
^ 4249.529M	53.4	+9.9	+1.1	-107.0	+0.0	-42.6	-40.0	-2.6	Ant1
41 4239.519M Ave	22.1	+9.9	+1.1	-107.0	+0.0	-73.9	-40.0	-33.9	Ant1
^ 4239.519M	54.9	+9.9	+1.1	-107.0	+0.0	-41.1	-40.0	-1.1	Ant1
L									

Page 252 of 406 Report No.: 103300-10A



Customer: **Mercury Wireless** 

47 CFR §96.41e Spurious Emissions Specification:

Work Order #: 103300 Date: 3/6/2020 Test Type: **Conducted Emissions** Time: 12:34:59 Tested By: Benny Lovan Sequence#: 23

Software: EMITest 5.03.12 120V 60Hz

Equipment Tested:

Device	Manufacturer	Model #	S/N	
Configuration 1	1/24/2/02/04/04/02	1120002 11	2/21	

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3553.5 MHz

Modulation: OAM64 Channel Bandwidth: 7MHz Output Power Software Setting: 32

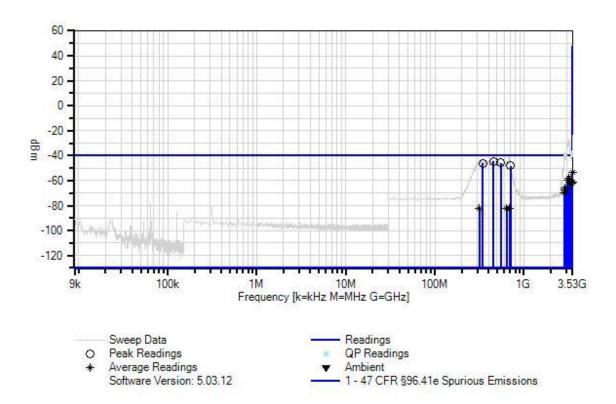
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

> Page 253 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 23 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



## Test Equipment:

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

Page 254 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	d: Ant1		
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	454.500M	52.3	+9.9	+0.4	-107.0		+0.0	-44.4	-40.0	-4.4	Ant1
2	552.000M	50.9	+9.9	+0.4	-107.0		+0.0	-45.8	-40.0	-5.8	Ant1
3	346.500M	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
5	3529.503M Ave	43.1	+9.9	+1.0	-107.0		+0.0	-53.0	-40.0	-13.0	Ant1
٨	3529.503M	72.3	+9.9	+1.0	-107.0		+0.0	-23.8	-40.0	+16.2	Ant1
7	3175.639M Ave	38.3	+9.9	+0.9	-107.0		+0.0	-57.9	-40.0	-17.9	Ant1
٨	3175.639M	69.8	+9.9	+0.9	-107.0		+0.0	-26.4	-40.0	+13.6	Ant1
9	3176.710M Ave	38.3	+9.9	+0.9	-107.0		+0.0	-57.9	-40.0	-17.9	Ant1
٨	3176.710M	65.4	+9.9	+0.9	-107.0		+0.0	-30.8	-40.0	+9.2	Ant1
11	3306.490M Ave	36.6	+9.9	+1.0	-107.0		+0.0	-59.5	-40.0	-19.5	Ant1
٨	3306.490M	63.4	+9.9	+1.0	-107.0		+0.0	-32.7	-40.0	+7.3	Ant1
13	3076.800M Ave	36.2	+9.9	+0.9	-107.0		+0.0	-60.0	-40.0	-20.0	Ant1
٨	3076.800M	65.4	+9.9	+0.9	-107.0		+0.0	-30.8	-40.0	+9.2	Ant1
15	3499.100M Ave	34.7	+9.9	+1.0	-107.0		+0.0	-61.4	-40.0	-21.4	Ant1
٨	3499.100M	57.5	+9.9	+1.0	-107.0		+0.0	-38.6	-40.0	+1.4	Ant1
17	3365.200M Ave	34.7	+9.9	+1.0	-107.0		+0.0	-61.4	-40.0	-21.4	Ant1
۸	3365.200M	58.8	+9.9	+1.0	-107.0		+0.0	-37.3	-40.0	+2.7	Ant1
19	3449.660M Ave	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
21	2860.500M Ave	30.4	+9.9	+0.9	-107.0		+0.0	-65.8	-40.0	-25.8	Ant1
٨	2860.500M	58.2	+9.9	+0.9	-107.0		+0.0	-38.0	-40.0	+2.0	Ant1
23	2977.920M Ave	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

Page 255 of 406 Report No.: 103300-10A



25	2907.880M Ave	28.5	+9.9	+0.9	-107.0	+0.0	-67.7	-40.0	-27.7	Ant1
٨	2907.880M	53.7	+9.9	+0.9	-107.0	+0.0	-42.5	-40.0	-2.5	Ant1
27	2830.630M Ave	26.5	+9.9	+0.9	-107.0	+0.0	-69.7	-40.0	-29.7	Ant1
٨	2830.630M	53.4	+9.9	+0.9	-107.0	+0.0	-42.8	-40.0	-2.8	Ant1
29	316.000M Ave	14.8	+9.9	+0.3	-107.0	+0.0	-82.0	-40.0	-42.0	Ant1
٨	316.000M	53.3	+9.9	+0.3	-107.0	+0.0	-43.5	-40.0	-3.5	Ant1
31	686.500M Ave	14.6	+9.9	+0.5	-107.0	+0.0	-82.0	-40.0	-42.0	Ant1
٨	686.500M	53.5	+9.9	+0.5	-107.0	+0.0	-43.1	-40.0	-3.1	Ant1
33	640.500M Ave	14.4	+9.9	+0.5	-107.0	+0.0	-82.2	-40.0	-42.2	Ant1
٨	640.500M	52.7	+9.9	+0.5	-107.0	+0.0	-43.9	-40.0	-3.9	Ant1

Page 256 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 14:35:40
Tested By: Benny Lovan Sequence#: 24

Software: EMITest 5.03.12 120V 60Hz

**Equipment Tested:** 

Device	Manufacturer	Model #	S/N
Configuration 1			

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 3.72 - 37 GHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3553.5 MHz

Modulation: QAM64 Channel Bandwidth: 7MHz Output Power Software Setting: 32

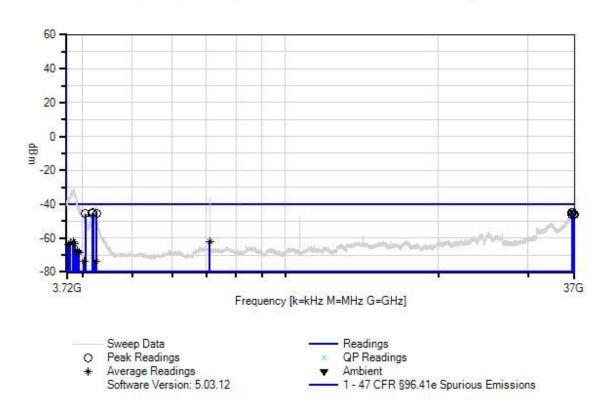
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 257 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 24 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



## Test Equipment:

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

Page 258 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	l: Ant1		
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	36522.770 M	48.4	+10.5	+3.3	-107.0		+0.0	-44.8	-40.0	-4.8	Ant1
2	36705.953 M	48.3	+10.4	+3.4	-107.0		+0.0	-44.9	-40.0	-4.9	Ant1
3	4195.475M	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
5	4260.540M	50.5	+9.9	+1.1	-107.0		+0.0	-45.5	-40.0	-5.5	Ant1
6	4050.330M	50.3	+9.9	+1.1	-107.0		+0.0	-45.7	-40.0	-5.7	Ant1
7	36846.613 M	47.4	+10.4	+3.4	-107.0		+0.0	-45.8	-40.0	-5.8	Ant1
8	36770.290 M	47.3	+10.4	+3.4	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
9	36545.793 M	47.3	+10.5	+3.3	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
10	36775.724 M	47.3	+10.4	+3.4	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
11	36871.807 M	47.3	+10.4	+3.4	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
12	36843.155 M	47.3	+10.4	+3.4	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
13	36883.910 M	47.2	+10.4	+3.4	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
14	36920.219 M	47.2	+10.4	+3.4	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
	7106.383M Ave	33.5	+10.0	+1.5	-107.0		+0.0	-62.0	-40.0	-22.0	Ant1
	7106.383M	59.4	+10.0	+1.5	-107.0		+0.0	-36.1	-40.0	+3.9	Ant1

Page 259 of 406 Report No.: 103300-10A



17 3833 Ave	3.113M	34.0	+9.9	+1.0	-107.0	+0.0	-62.1	-40.0	-22.1	Ant1
	3.113M	65.3	+9.9	+1.0	-107.0	+0.0	-30.8	-40.0	+9.2	Ant1
19 3779 Ave	9.059M	33.5	+9.9	+1.0	-107.0	+0.0	-62.6	-40.0	-22.6	Ant1
^ 3779	9.059M	63.0	+9.9	+1.0	-107.0	+0.0	-33.1	-40.0	+6.9	Ant1
21 3855 Ave		32.7	+9.9		-107.0	+0.0	-63.4	-40.0	-23.4	Ant1
	5.135M	65.3	+9.9		-107.0	+0.0	-30.8	-40.0	+9.2	Ant1
23 3749 Ave		32.1	+9.9		-107.0	+0.0	-64.0	-40.0	-24.0	Ant1
	9.029M	59.9	+9.9		-107.0	+0.0	-36.2	-40.0	+3.8	Ant1
25 3902 Ave		28.5	+9.9		-107.0	+0.0	-67.6	-40.0	-27.6	Ant1
	2.182M	58.6	+9.9		-107.0	+0.0	-37.5	-40.0	+2.5	Ant1
27 390: Ave		28.3	+9.9		-107.0	+0.0	-67.8	-40.0	-27.8	Ant1
	5.185M	58.2	+9.9		-107.0	+0.0	-37.9	-40.0	+2.1	Ant1
29 3910 Ave		28.0	+9.9		-107.0	+0.0	-68.1	-40.0	-28.1	Ant1
	0.190M	58.6	+9.9		-107.0	+0.0	-37.5	-40.0	+2.5	Ant1
31 393° Ave		27.4	+9.9		-107.0	+0.0	-68.6	-40.0	-28.6	Ant1
	7.217M	54.9	+9.9	+1.1	-107.0	+0.0	-41.1	-40.0	-1.1	Ant1
33 4020 Ave		22.6	+9.9	+1.1	-107.0	+0.0	-73.4	-40.0	-33.4	Ant1
	0.300M	52.6	+9.9	+1.1	-107.0	+0.0	-43.4	-40.0	-3.4	Ant1
35 424 Ave		22.2	+9.9	+1.1	-107.0	+0.0	-73.8	-40.0	-33.8	Ant1
	1.521M	55.1	+9.9	+1.1	-107.0	+0.0	-40.9	-40.0	-0.9	Ant1
37 425 Ave		22.1	+9.9	+1.1	-107.0	+0.0	-73.9	-40.0	-33.9	Ant1
^ 425	1.531M	54.4	+9.9	+1.1	-107.0	+0.0	-41.6	-40.0	-1.6	Ant1

Page 260 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 14:47:40
Tested By: Benny Lovan Sequence#: 25

Software: EMITest 5.03.12 120V 60Hz

#### **Equipment Tested:**

Device	Manufacturer	Model #	S/N	
Configuration 1				

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3625 MHz

Modulation: QPSK Channel Bandwidth: 7MHz Output Power Software Setting: 32

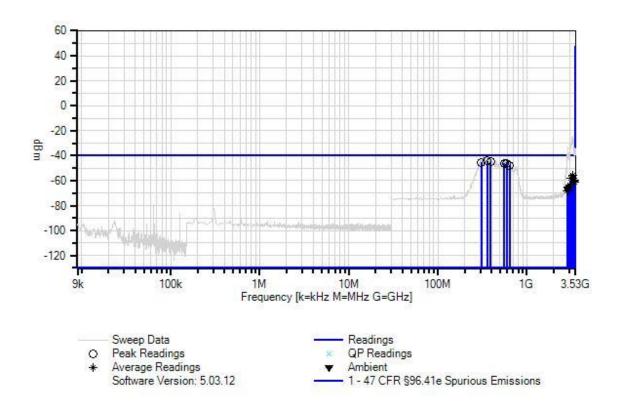
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 261 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 25 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 262 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	l: Ant1		
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	358.500M	52.5	+9.9	+0.3	-107.0		+0.0	-44.3	-40.0	-4.3	Ant1
2	393.500M	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	594.000M	50.6	+9.9	+0.4	-107.0		+0.0	-46.1	-40.0	-6.1	Ant1
5	558.500M	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
7	3248.698M Ave	40.6	+9.9	+1.0	-107.0		+0.0	-55.5	-40.0	-15.5	Ant1
٨	3248.698M	72.0	+9.9	+1.0	-107.0		+0.0	-24.1	-40.0	+15.9	Ant1
9	3121.090M Ave	37.8	+9.9	+0.9	-107.0		+0.0	-58.4	-40.0	-18.4	Ant1
٨	3121.090M	66.0	+9.9	+0.9	-107.0		+0.0	-30.2	-40.0	+9.8	Ant1
11	3421.850M Ave	36.3	+9.9	+1.0	-107.0		+0.0	-59.8	-40.0	-19.8	Ant1
٨	3421.850M	61.4	+9.9	+1.0	-107.0		+0.0	-34.7	-40.0	+5.3	Ant1
13	3364.170M Ave	35.7	+9.9	+1.0	-107.0		+0.0	-60.4	-40.0	-20.4	Ant1
٨	3364.170M	58.0	+9.9	+1.0	-107.0		+0.0	-38.1	-40.0	+1.9	Ant1
15	3462.020M Ave	35.1	+9.9	+1.0	-107.0		+0.0	-61.0	-40.0	-21.0	Ant1
٨	3462.020M	57.0	+9.9	+1.0	-107.0		+0.0	-39.1	-40.0	+0.9	Ant1
17	3018.090M Ave	32.3	+9.9	+0.9	-107.0		+0.0	-63.9	-40.0	-23.9	Ant1
٨	3018.090M	58.0	+9.9	+0.9	-107.0		+0.0	-38.2	-40.0	+1.8	Ant1

Page 263 of 406 Report No.: 103300-10A



19 2866.680M	30.8	+9.9	+0.9	-107.0	+0.0	-65.4	-40.0	-25.4	Ant1
Ave									
^ 2866.680M	62.7	+9.9	+0.9	-107.0	+0.0	-33.5	-40.0	+6.5	Ant1
21 2889.340M	30.0	+9.9	+0.9	-107.0	+0.0	-66.2	-40.0	-26.2	Ant1
Ave									
^ 2889.340M	56.9	+9.9	+0.9	-107.0	+0.0	-39.3	-40.0	+0.7	Ant1
23 2941.870M	28.6	+9.9	+0.9	-107.0	+0.0	-67.6	-40.0	-27.6	Ant1
Ave									
^ 2941.870M	53.9	+9.9	+0.9	-107.0	+0.0	-42.3	-40.0	-2.3	Ant1
25 2835.780M	28.0	+9.9	+0.9	-107.0	+0.0	-68.2	-40.0	-28.2	Ant1
Ave									
^ 2835.780M	55.6	+9.9	+0.9	-107.0	+0.0	-40.6	-40.0	-0.6	Ant1

Page 264 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 15:00:57
Tested By: Benny Lovan Sequence#: 26

Software: EMITest 5.03.12 120V 60Hz

**Equipment Tested:** 

Device	Manufacturer	Model #	S/N	
Configuration 1	1/24/2/02/04/04/02	1120002 11	2/21	

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 3.72 - 37 GHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3625 MHz

Modulation: QPSK Channel Bandwidth: 7MHz Output Power Software Setting: 32

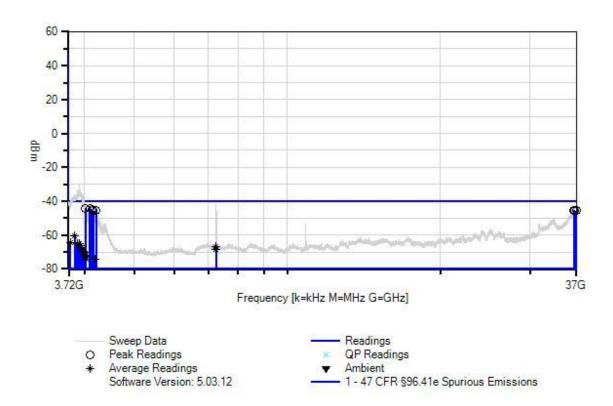
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 265 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 26 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 266 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	l: Ant1		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	4013.293M	52.0	+9.9	+1.1	-107.0		+0.0	-44.0	-40.0	-4.0	Ant1
2	4092.372M	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
4	36535.783 M	47.9	+10.5	+3.3	-107.0		+0.0	-45.3	-40.0	-5.3	Ant1
5	36930.840 M	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
8	36601.849 M	47.5	+10.5	+3.3	-107.0		+0.0	-45.7	-40.0	-5.7	Ant1
	3825.105M Ave	35.6	+9.9	+1.0	-107.0		+0.0	-60.5	-40.0	-20.5	Ant1
٨	3825.105M	60.1	+9.9	+1.0	-107.0		+0.0	-36.0	-40.0	+4.0	Ant1
	3746.026M Ave	31.9	+9.9	+1.0	-107.0		+0.0	-64.2	-40.0	-24.2	Ant1
٨	3746.026M	56.5	+9.9	+1.0	-107.0		+0.0	-39.6	-40.0	+0.4	Ant1
	3904.184M Ave	31.0	+9.9	+1.0	-107.0		+0.0	-65.1	-40.0	-25.1	Ant1
٨	3904.184M	66.0	+9.9	+1.0	-107.0		+0.0	-30.1	-40.0	+9.9	Ant1
	3912.192M Ave	30.9	+9.9	+1.0	-107.0		+0.0	-65.2	-40.0	-25.2	Ant1
٨	3912.192M	63.7	+9.9	+1.0	-107.0		+0.0	-32.4	-40.0	+7.6	Ant1
	3867.147M Ave	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
	3878.158M Ave	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

Page 267 of 406 Report No.: 103300-10A



	3928.208M Ave	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
	7251.528M Ave	28.8	+10.0	+1.5	-107.0	+0.0	-66.7	-40.0	-26.7	Ant1
۸	7251.528M	53.4	+10.0	+1.5	-107.0	+0.0	-42.1	-40.0	-2.1	Ant1
	7246.523M Ave	27.2	+10.0	+1.5	-107.0	+0.0	-68.3	-40.0	-28.3	Ant1
۸	7246.523M	53.9	+10.0	+1.5	-107.0	+0.0	-41.6	-40.0	-1.6	Ant1
	3962.242M Ave	27.5	+9.9	+1.1	-107.0	+0.0	-68.5	-40.0	-28.5	Ant1
	3962.242M	60.0	+9.9	+1.1	-107.0	+0.0	-36.0	-40.0	+4.0	Ant1
	3979.259M Ave	26.2	+9.9		-107.0	+0.0	-69.8	-40.0	-29.8	Ant1
	3979.259M	59.5	+9.9		-107.0	+0.0	-36.5	-40.0	+3.5	Ant1
	3985.265M Ave	25.7	+9.9		-107.0	+0.0	-70.3	-40.0	-30.3	Ant1
	3985.265M	59.0	+9.9		-107.0	+0.0	-37.0	-40.0	+3.0	Ant1
	4002.282M Ave	24.2	+9.9		-107.0	+0.0	-71.8	-40.0	-31.8	Ant1
	4002.282M	53.7	+9.9		-107.0	+0.0	-42.3	-40.0	-2.3	Ant1
	4008.288M Ave	23.7	+9.9		-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
	4026.306M Ave	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
	4186.466M Ave	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
	4197.477M Ave	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

Page 268 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 15:13:07
Tested By: Benny Lovan Sequence#: 27

Software: EMITest 5.03.12 120V 60Hz

## **Equipment Tested:**

Device	Manufacturer	Model #	S/N
Configuration 1			

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3625 MHz

Modulation: QAM16 Channel Bandwidth: 7MHz Output Power Software Setting: 32

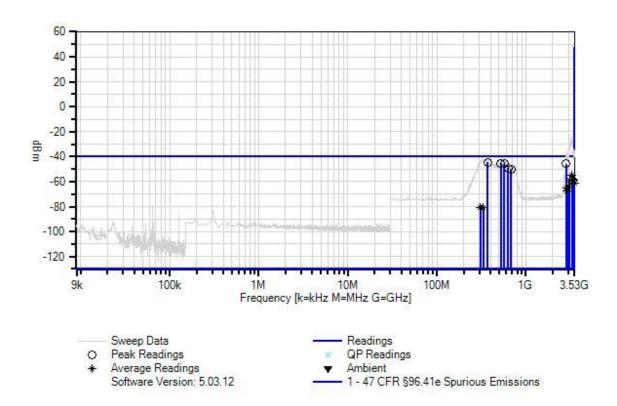
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 269 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 27 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



## Test Equipment:

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

Page 270 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	d: Ant1		
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	374.000M	52.3	+9.9	+0.3	-107.0		+0.0	-44.5	-40.0	-4.5	Ant1
2	522.000M	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	571.000M	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
	3280.506M Ave	40.8	+9.9	+1.0	-107.0		+0.0	-55.3	-40.0	-15.3	Ant1
٨	3280.506M	71.4	+9.9	+1.0	-107.0		+0.0	-24.7	-40.0	+15.3	Ant1
	3328.120M Ave	37.9	+9.9	+1.0	-107.0		+0.0	-58.2	-40.0	-18.2	Ant1
٨	3328.120M	64.3	+9.9	+1.0	-107.0		+0.0	-31.8	-40.0	+8.2	Ant1
	3100.490M Ave	37.2	+9.9	+0.9	-107.0		+0.0	-59.0	-40.0	-19.0	Ant1
٨	3100.490M	63.9	+9.9	+0.9	-107.0		+0.0	-32.3	-40.0	+7.7	Ant1
	3401.250M Ave	37.0	+9.9	+1.0	-107.0		+0.0	-59.1	-40.0	-19.1	Ant1
٨	3401.250M	60.1	+9.9	+1.0	-107.0		+0.0	-36.0	-40.0	+4.0	Ant1
15	3513.520M Ave	35.2	+9.9	+1.0	-107.0		+0.0	-60.9	-40.0	-20.9	Ant1
٨	3513.520M	56.8	+9.9	+1.0	-107.0		+0.0	-39.3	-40.0	+0.7	Ant1
	3019.120M Ave	32.3	+9.9	+0.9	-107.0		+0.0	-63.9	-40.0	-23.9	Ant1
٨	3019.120M	58.1	+9.9	+0.9	-107.0		+0.0	-38.1	-40.0	+1.9	Ant1

Page 271 of 406 Report No.: 103300-10A



	19 2865.650M	30.8	+9.9	+0.9	-107.0	+0.0	-65.4	-40.0	-25.4	Ant1
	Ave									
ĺ	^ 2865.650M	57.6	+9.9	+0.9	-107.0	+0.0	-38.6	-40.0	+1.4	Ant1
Ī	21 2908.910M	28.8	+9.9	+0.9	-107.0	+0.0	-67.4	-40.0	-27.4	Ant1
	Ave									
Ī	^ 2908.910M	56.2	+9.9	+0.9	-107.0	+0.0	-40.0	-40.0	+0.0	Ant1
	23 331.000M	16.0	+9.9	+0.3	-107.0	+0.0	-80.8	-40.0	-40.8	Ant1
	Ave									
Ī	^ 331.000M	53.8	+9.9	+0.3	-107.0	+0.0	-43.0	-40.0	-3.0	Ant1
Ī	25 307.000M	15.8	+9.9	+0.3	-107.0	+0.0	-81.0	-40.0	-41.0	Ant1
	Ave									
Ī	^ 307.000M	53.9	+9.9	+0.3	-107.0	+0.0	-42.9	-40.0	-2.9	Ant1

Page 272 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 15:26:25
Tested By: Benny Lovan Sequence#: 28

Software: EMITest 5.03.12 120V 60Hz

## **Equipment Tested:**

Device	Manufacturer	Model #	S/N	
Configuration 1				

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 3.72 - 37 GHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3625 MHz

Modulation: QAM16 Channel Bandwidth: 7MHz Output Power Software Setting: 32

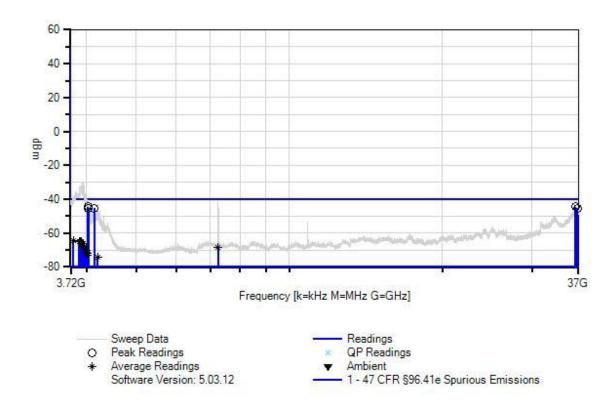
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 273 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 28 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 274 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	l: Ant1		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	4026.306M	51.5	+9.9	+1.1	-107.0		+0.0	-44.5	-40.0	-4.5	Ant1
2	36466.714	48.7	+10.5	+3.3	-107.0		+0.0	-44.5	-40.0	-4.5	Ant1
_	M	,	. 10.0	. 5.10	107.0		. 0.0		.0.0		1 222 2
3	36784.863 M	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
	3768.048M Ave	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
	3905.185M Ave	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
	3880.160M Ave	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
	3869.149M Ave	30.8	+9.9	+1.0	-107.0		+0.0	-65.3	-40.0	-25.3	Ant1
	3869.149M	61.1	+9.9	+1.0	-107.0		+0.0	-35.0	-40.0	+5.0	Ant1
	3912.192M Ave	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
	3931.211M Ave	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
	3951.231M Ave	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
	7246.523M Ave	27.2	+10.0	+1.5	-107.0		+0.0	-68.3	-40.0	-28.3	Ant1
	7246.523M	54.1	+10.0	+1.5	-107.0		+0.0	-41.4	-40.0	-1.4	Ant1
	3958.238M Ave	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	Ant1

Page 275 of 406 Report No.: 103300-10A



24 3987.267M Ave	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
26 3994.274M Ave	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
28 4001.281M Ave	24.1	+9.9	+1.1	-107.0	+0.0	-71.9	-40.0	-31.9	Ant1
^ 4001.281M	56.1	+9.9	+1.1	-107.0	+0.0	-39.9	-40.0	+0.1	Ant1
30 4013.293M Ave	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
32 4208.488M Ave	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

Page 276 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 15:35:34
Tested By: Benny Lovan Sequence#: 29

Software: EMITest 5.03.12 120V 60Hz

## **Equipment Tested:**

Device Manufacturer		Model #	S/N	
Configuration 1				

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3625 MHz

Modulation: QAM64 Channel Bandwidth: 7MHz Output Power Software Setting: 32

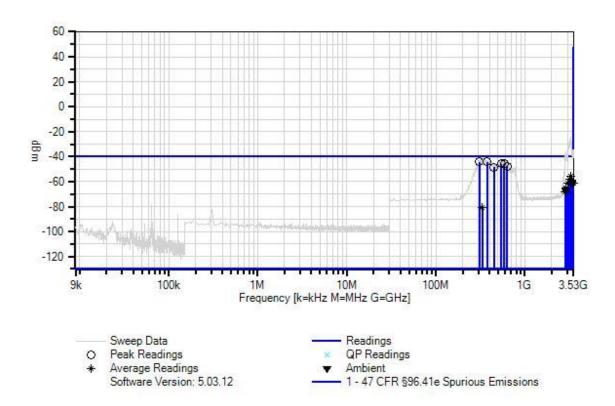
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 277 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 29 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



## Test Equipment:

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

Page 278 of 406 Report No.: 103300-10A



## Freq Rdng T1 T2 T3 Dist Corr Spec Margin Polar 1 309,000M 52.7 +9.9 +0.3 -107.0 +0.0 -44.1 -40.0 -4.1 Ant1 309,000M 52.6 +9.9 +0.3 -107.0 +0.0 -44.1 -40.0 -4.1 Ant1 2 378,500M 52.6 +9.9 +0.3 -107.0 +0.0 -45.7 -40.0 -5.7 Ant1 3 541,500M 51.0 +9.9 +0.4 -107.0 +0.0 -45.7 -40.0 -5.7 Ant1 4 584,000M 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 -48.6 -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 7 3260,129M 71.7 +9.9 +1.0 -107.0 +0.0 -55.5 -40.0 -15.5 Ant1 Ave Ave A 3290,010M 68.7 +9.9 +1.0 -107.0 +0.0 -55.5 -40.0 -15.5 Ant1 Ave A 3333,360M 61.6 +9.9 +1.0 -107.0 +0.0 -57.7 -40.0 +15.6 Ant1 13 3336,360M 37.1 +9.9 +0.9 -107.0 +0.0 -59.0 -40.0 -19.0 Ant1 Ave A 3330,300M 61.6 +9.9 +1.0 -107.0 +0.0 -59.0 -40.0 -19.0 Ant1 Ave A 3330,300M 61.6 +9.9 +1.0 -107.0 +0.0 -59.0 -40.0 -19.0 Ant1 Ave A 3330,300M 61.6 +9.9 +1.0 -107.0 +0.0 -31.3 -40.0 +8.7 Ant1 Ave A 3330,300M 61.6 +9.9 +1.0 -107.0 +0.0 -31.3 -40.0 +8.7 Ant1 Ave A 3330,300M 61.6 +9.9 +1.0 -107.0 +0.0 -30.3 -40.0 +8.7 Ant1 Ave A 3330,300M 61.6 +9.9 +1.0 -107.0 +0.0 -30.3 -40.0 +8.7 Ant1 Ave A 3350,100M 35.4 +9.9 +1.0 -107.0 +0.0 -30.5 -40.0 +5.5 Ant1 Ave A 3455,840M 58.9 +9.9 +1.0 -107.0 +0.0 -37.2 -40.0 +2.8 Ant1 Ave A 3455,840M 58.9 +9.9 +1.0 -107.0 +0.0 -37.2 -40.0 +2.8 Ant1 Ave A 350,140M 34.9 +9.9 +1.0 -107.0 +0.0 -37.2 -40.0 +2.8 Ant1 Ave A 350,140M 34.9 +9.9 +1.0 -107.0 +0.0 -37.2 -40.0 +2.8 Ant1 Ave A 350,140M 34.9 +9.9 +1.0 -107.0 +0.0 -37.2 -40.0 +2.8 Ant1 Ave A 350,140M 34.9 +9.9 +1.0 -107.0 +0.0 -35.1 -40.0 +2.8 Ant1 Ave A 350,140M 34.9 +9.9 +0.9 -107.0 +0.0 -35.1 -40.0 +2.8 Ant1 Ave A 350,140M 34.9 +9.9 +0.9 -107.0 +0.0 -35.1 -40.0 +2.8 Ant1 Ave A 350,140M 34.9 +9.9 +0.9 -107.0 +0.0 -35.1 -40.0 +2.8 Ant1 Ave A 350,140M 34.9 +9.9 +0.9 -107.0 +0.0 -35.1 -40.0 +2.5 Ant1 Ave A 355,140M 34.9 +9.9 +0.9 -107.0 +0.0 -35.1 -40.0 +2.5 Ant1 Ave A 355,140M 34.9 +9.9 +0.9 -107.0 +0.0 -35.5 -40.0 +2.5 Ant1 Ave A 355,140M 34.9 +9.9 +0.9 -107.0 +0.0 -35.5 -40.0 +2.5 Ant1 Ave A 355,140M 34.9 +9.9 +	Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	d: Ant1		
1 309,000M   52.7	#		Rdng		T2	Т3					Margin	Polar
2 378.500M 52.6 +9.9 +0.3 -107.0 +0.0 -44.2 -40.0 -4.2 Ant1 3 541.500M 51.0 +9.9 +0.4 -107.0 +0.0 -45.7 -40.0 -5.7 Ant1 4 584.000M 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 7 3260.129M 40.6 +9.9 +1.0 -107.0 +0.0 -55.5 -40.0 -15.5 Ant1 Ave			•				dB					
3 541.500M 51.0 +9.9 +0.4 -107.0 +0.0 -45.7 -40.0 -5.7 Ant1  4 584.000M 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 -45.8 -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  7 3260.129M 40.6 +9.9 +1.0 -107.0 +0.0 -55.5 -40.0 -15.5 Ant1  Ave  ^ 3260.129M 71.7 +9.9 +1.0 -107.0 +0.0 -24.4 -40.0 +15.6 Ant1  9 3290.010M 40.6 +9.9 +1.0 -107.0 +0.0 -55.5 -40.0 -15.5 Ant1  Ave  ^ 3290.010M 68.7 +9.9 +1.0 -107.0 +0.0 -57.7 -40.0 -15.5 Ant1  Ave  ^ 3166.410M 38.5 +9.9 +0.9 -107.0 +0.0 -57.7 -40.0 -17.7 Ant1  Ave  ^ 3136.360M 37.1 +9.9 +1.0 -107.0 +0.0 -59.0 -40.0 +8.7 Ant1  11 31363.360M 61.6 +9.9 +1.0 -107.0 +0.0 -34.5 -40.0 +5.5 Ant1  Ave  ^ 3336.360M 61.6 +9.9 +1.0 -107.0 +0.0 -34.5 -40.0 +5.5 Ant1  15 3393.010M 35.4 +9.9 +1.0 -107.0 +0.0 -35.5 -40.0 +5.5 Ant1  Ave  ^ 3355.840M 35.2 +9.9 +1.0 -107.0 +0.0 -60.7 -40.0 -20.7 Ant1  Ave  ^ 3355.840M 35.9 +9.9 +1.0 -107.0 +0.0 -37.2 -40.0 +5.0 Ant1  17 3455.840M 58.9 +9.9 +1.0 -107.0 +0.0 -37.2 -40.0 +2.8 Ant1  19 3501.160M 34.9 +9.9 +1.0 -107.0 +0.0 -37.2 -40.0 +2.8 Ant1  21 3054.140M 34.9 +9.9 +0.9 -107.0 +0.0 -37.1 -40.0 +0.9 Ant1  Ave  ^ 3054.140M 34.9 +9.9 +0.9 -107.0 +0.0 -61.3 -40.0 -21.2 Ant1  Ave  ^ 3054.140M 34.9 +9.9 +0.9 -107.0 +0.0 -65.3 -40.0 +2.8 Ant1  21 3054.140M 34.9 +9.9 +0.9 -107.0 +0.0 -35.1 -40.0 +0.9 Ant1  Ave  ^ 3054.140M 34.9 +9.9 +0.9 -107.0 +0.0 -35.1 -40.0 +4.9 Ant1  22 3859.470M 30.9 +9.9 +0.9 -107.0 +0.0 -35.1 -40.0 +4.9 Ant1	1	309.000M	52.7	+9.9	+0.3	-107.0		+0.0	-44.1	-40.0	-4.1	Ant1
4 584,000M 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  7 3260,129M 40.6 +9.9 +1.0 -107.0 +0.0 -55.5 -40.0 -15.5 Ant1  Ave  ^ 3260,129M 71.7 +9.9 +1.0 -107.0 +0.0 -24.4 -40.0 +15.6 Ant1  9 3290,010M 40.6 +9.9 +1.0 -107.0 +0.0 -55.5 -40.0 -15.5 Ant1  Ave  ^ 3290,010M 68.7 +9.9 +1.0 -107.0 +0.0 -55.5 -40.0 +15.6 Ant1  11 3166,410M 38.5 +9.9 +0.9 -107.0 +0.0 -57.7 -40.0 +12.6 Ant1  11 3366,410M 64.9 +9.9 +0.9 -107.0 +0.0 -57.7 -40.0 -17.7 Ant1  Ave  ^ 3166,410M 64.9 +9.9 +1.0 -107.0 +0.0 -59.0 -40.0 -19.0 Ant1  Ave  ^ 3336,360M 37.1 +9.9 +1.0 -107.0 +0.0 -59.0 -40.0 -19.0 Ant1  Ave  ^ 3336,360M 61.6 +9.9 +1.0 -107.0 +0.0 -34.5 -40.0 +5.5 Ant1  15 3393,010M 35.4 +9.9 +1.0 -107.0 +0.0 -60.7 -40.0 -20.7 Ant1  Ave  ^ 3393,010M 35.4 +9.9 +1.0 -107.0 +0.0 -60.7 -40.0 -20.7 Ant1  Ave  ^ 3355,840M 35.2 +9.9 +1.0 -107.0 +0.0 -35.0 -40.0 +5.0 Ant1  17 3455,840M 58.9 +9.9 +1.0 -107.0 +0.0 -37.2 -40.0 +2.8 Ant1  19 3501,160M 37.0 +9.9 +1.0 -107.0 +0.0 -37.2 -40.0 +2.8 Ant1  19 3501,160M 37.0 +9.9 +1.0 -107.0 +0.0 -37.2 -40.0 +2.8 Ant1  21 3054,140M 34.9 +9.9 +0.9 -107.0 +0.0 -35.1 -40.0 +2.8 Ant1  22 3859,470M 30.9 +9.9 +0.9 -107.0 +0.0 -65.3 -40.0 +4.9 Ant1  Ave  ^ 3054,140M 61.1 +9.9 +0.9 -107.0 +0.0 -65.3 -40.0 +4.9 Ant1  Ave  ^ 3054,140M 61.1 +9.9 +0.9 -107.0 +0.0 -65.3 -40.0 +4.9 Ant1	2	378.500M	52.6	+9.9	+0.3	-107.0		+0.0	-44.2	-40.0	-4.2	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           7         3260.129M         40.6         +9.9         +1.0         -107.0         +0.0         -55.5         -40.0         -15.5         Ant1           9         3290.010M         40.6         +9.9         +1.0         -107.0         +0.0         -55.5         -40.0         +15.6         Ant1           9         3290.010M         40.6         +9.9         +1.0         -107.0         +0.0         -55.5         -40.0         +15.6         Ant1           40         3290.010M         68.7         +9.9         +1.0         -107.0         +0.0         -57.7         -40.0         +12.6         Ant1           11         3166.410M         38.5         +9.9         +0.9         -107.0         +0.0         -57.7         -40.0         -17.7         Ant1           13         3336.360M         37.1         +9.9         +1.0         -107.0         +0.0	3	541.500M	51.0	+9.9	+0.4	-107.0		+0.0	-45.7	-40.0	-5.7	Ant1
6         451.000M         48.1         +9.9         +0.4         -107.0         +0.0         -48.6         -40.0         -8.6         Ant1           7         3260.129M         40.6         +9.9         +1.0         -107.0         +0.0         -55.5         -40.0         -15.5         Ant1           8         3290.010M         40.6         +9.9         +1.0         -107.0         +0.0         -55.5         -40.0         -15.5         Ant1           9         3290.010M         40.6         +9.9         +1.0         -107.0         +0.0         -55.5         -40.0         -15.5         Ant1           11         31366.410M         68.7         +9.9         +1.0         -107.0         +0.0         -57.7         -40.0         +12.6         Ant1           11         31366.410M         64.9         +9.9         +0.9         -107.0         +0.0         -57.7         -40.0         -17.7         Ant1           12         3336.360M         37.1         +9.9         +1.0         -107.0         +0.0         -31.3         -40.0         +8.7         Ant1           15         3333.010M         35.4         +9.9         +1.0         -107.0         +0.0 <td>4</td> <td>584.000M</td> <td>50.9</td> <td>+9.9</td> <td>+0.4</td> <td>-107.0</td> <td></td> <td>+0.0</td> <td>-45.8</td> <td>-40.0</td> <td>-5.8</td> <td>Ant1</td>	4	584.000M	50.9	+9.9	+0.4	-107.0		+0.0	-45.8	-40.0	-5.8	Ant1
7 3260.129M	5	630.500M	49.1	+9.9	+0.4	-107.0		+0.0	-47.6	-40.0	-7.6	Ant1
Ave	6	451.000M	48.1	+9.9	+0.4	-107.0		+0.0	-48.6	-40.0	-8.6	Ant1
^ 3260.129M         71.7         +9.9         +1.0         -107.0         +0.0         -24.4         -40.0         +15.6         Ant1           9 3290.010M         40.6         +9.9         +1.0         -107.0         +0.0         -55.5         -40.0         -15.5         Ant1           Ave         ^ 3290.010M         68.7         +9.9         +1.0         -107.0         +0.0         -27.4         -40.0         +12.6         Ant1           11 3166.410M         38.5         +9.9         +0.9         -107.0         +0.0         -57.7         -40.0         +12.6         Ant1           Ave         ^ 3166.410M         64.9         +9.9         +0.9         -107.0         +0.0         -57.7         -40.0         +8.7         Ant1           Ave         ^ 3336.360M         37.1         +9.9         +1.0         -107.0         +0.0         -59.0         -40.0         +8.7         Ant1           Ave         ^ 3336.360M         61.6         +9.9         +1.0         -107.0         +0.0         -59.0         -40.0         +5.5         Ant1           15 3393.010M         35.4         +9.9         +1.0         -107.0         +0.0         -60.7         -40.0	7		40.6	+9.9	+1.0	-107.0		+0.0	-55.5	-40.0	-15.5	Ant1
Ave         A 3290.010M         68.7         +9.9         +1.0         -107.0         +0.0         -27.4         -40.0         +12.6         Ant1           11 3166.410M         38.5         +9.9         +0.9         -107.0         +0.0         -57.7         -40.0         -17.7         Ant1           Ave         **3166.410M         64.9         +9.9         +0.9         -107.0         +0.0         -31.3         -40.0         +8.7         Ant1           13 3336.360M         37.1         +9.9         +1.0         -107.0         +0.0         -59.0         -40.0         -19.0         Ant1           Ave         **3336.360M         61.6         +9.9         +1.0         -107.0         +0.0         -34.5         -40.0         +5.5         Ant1           15 3393.010M         35.4         +9.9         +1.0         -107.0         +0.0         -60.7         -40.0         +5.5         Ant1           17 3455.840M         35.2         +9.9         +1.0         -107.0         +0.0         -60.9         -40.0         -20.9         Ant1           19 3501.160M         34.9         +9.9         +1.0         -107.0         +0.0         -61.2         -40.0         -21.2	٨		71.7	+9.9	+1.0	-107.0		+0.0	-24.4	-40.0	+15.6	Ant1
^ 3290.010M         68.7         +9.9         +1.0         -107.0         +0.0         -27.4         -40.0         +12.6         Ant1           11 3166.410M         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           13 3336.360M         37.1         +9.9         +1.0         -107.0         +0.0         -59.0         -40.0         -19.0         Ant1           Ave         ^ 3336.360M         61.6         +9.9         +1.0         -107.0         +0.0         -34.5         -40.0         +5.5         Ant1           15 3393.010M         35.4         +9.9         +1.0         -107.0         +0.0         -60.7         -40.0         -20.7         Ant1           17 3455.840M         35.2         +9.9         +1.0         -107.0         +0.0         -60.9         -40.0         -20.9         Ant1           19 3501.160M         34.9         +9.9         +1.0         -107.0         +0.0         -61.2         -40.0         -21.2         Ant1	9		40.6	+9.9	+1.0	-107.0		+0.0	-55.5	-40.0	-15.5	Ant1
Ave         ^ 3166.410M         64.9         +9.9         +0.9         -107.0         +0.0         -31.3         -40.0         +8.7         Ant1           13         3336.360M         37.1         +9.9         +1.0         -107.0         +0.0         -59.0         -40.0         -19.0         Ant1           Ave         ^ 3336.360M         61.6         +9.9         +1.0         -107.0         +0.0         -34.5         -40.0         +5.5         Ant1           15         3393.010M         35.4         +9.9         +1.0         -107.0         +0.0         -60.7         -40.0         -20.7         Ant1           Ave         ^ 3393.010M         61.1         +9.9         +1.0         -107.0         +0.0         -35.0         -40.0         -20.7         Ant1           17         3455.840M         35.2         +9.9         +1.0         -107.0         +0.0         -37.2         -40.0         +2.8         Ant1           19         3501.160M         34.9         +9.9         +1.0         -107.0         +0.0         -37.2         -40.0         +21.2         Ant1           21         3054.140M         34.9         +9.9         +1.0         -107.0         <	٨		68.7	+9.9	+1.0	-107.0		+0.0	-27.4	-40.0	+12.6	Ant1
^ 3166.410M       64.9       +9.9       +0.9       -107.0       +0.0       -31.3       -40.0       +8.7       Ant1         13       3336.360M       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         15       3393.010M       35.4       +9.9       +1.0       -107.0       +0.0       -60.7       -40.0       -20.7       Ant1         Ave       ^ 3393.010M       61.1       +9.9       +1.0       -107.0       +0.0       -35.0       -40.0       +5.0       Ant1         17       3455.840M       35.2       +9.9       +1.0       -107.0       +0.0       -60.9       -40.0       -20.9       Ant1         Ave       ^ 3455.840M       58.9       +9.9       +1.0       -107.0       +0.0       -37.2       -40.0       +2.8       Ant1         19       3501.160M       34.9       +9.9       +1.0       -107.0       +0.0       -61.2       -40.0       -21.2       Ant1         21       3054.140M       34.9       +9.9 </td <td>11</td> <td></td> <td>38.5</td> <td>+9.9</td> <td>+0.9</td> <td>-107.0</td> <td></td> <td>+0.0</td> <td>-57.7</td> <td>-40.0</td> <td>-17.7</td> <td>Ant1</td>	11		38.5	+9.9	+0.9	-107.0		+0.0	-57.7	-40.0	-17.7	Ant1
Ave         ^ 3336.360M       61.6       +9.9       +1.0       -107.0       +0.0       -34.5       -40.0       +5.5       Ant1         15 3393.010M       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         17 3455.840M       35.2       +9.9       +1.0       -107.0       +0.0       -60.9       -40.0       -20.9       Ant1         Ave       ^ 3455.840M       58.9       +9.9       +1.0       -107.0       +0.0       -37.2       -40.0       +2.8       Ant1         19 3501.160M       34.9       +9.9       +1.0       -107.0       +0.0       -61.2       -40.0       -21.2       Ant1         Ave       ^ 3501.160M       57.0       +9.9       +1.0       -107.0       +0.0       -39.1       -40.0       +0.9       Ant1         21 3054.140M       34.9       +9.9       +0.9       -107.0       +0.0       -61.3       -40.0       -21.3       Ant1         Ave       ^ 3054.140M       61.1       +9.9       +0.9<	٨		64.9	+9.9	+0.9	-107.0		+0.0	-31.3	-40.0	+8.7	Ant1
^ 3336.360M       61.6       +9.9       +1.0       -107.0       +0.0       -34.5       -40.0       +5.5       Ant1         15 3393.010M       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         17 3455.840M       35.2       +9.9       +1.0       -107.0       +0.0       -60.9       -40.0       -20.9       Ant1         Ave       ^ 3455.840M       58.9       +9.9       +1.0       -107.0       +0.0       -37.2       -40.0       +2.8       Ant1         19 3501.160M       34.9       +9.9       +1.0       -107.0       +0.0       -61.2       -40.0       -21.2       Ant1         Ave       ^ 3501.160M       57.0       +9.9       +1.0       -107.0       +0.0       -39.1       -40.0       +0.9       Ant1         21 3054.140M       34.9       +9.9       +0.9       -107.0       +0.0       -61.3       -40.0       -21.3       Ant1         Ave       ^ 3054.140M       61.1       +9.9       +0.9       -107.0       +	13		37.1	+9.9	+1.0	-107.0		+0.0	-59.0	-40.0	-19.0	Ant1
Ave         ^ 3393.010M       61.1       +9.9       +1.0       -107.0       +0.0       -35.0       -40.0       +5.0       Ant1         17 3455.840M       35.2       +9.9       +1.0       -107.0       +0.0       -60.9       -40.0       -20.9       Ant1         Ave       ^ 3455.840M       58.9       +9.9       +1.0       -107.0       +0.0       -37.2       -40.0       +2.8       Ant1         19 3501.160M       34.9       +9.9       +1.0       -107.0       +0.0       -61.2       -40.0       -21.2       Ant1         Ave       ^ 3501.160M       57.0       +9.9       +1.0       -107.0       +0.0       -39.1       -40.0       +0.9       Ant1         21 3054.140M       34.9       +9.9       +0.9       -107.0       +0.0       -61.3       -40.0       -21.3       Ant1         Ave       ^ 3054.140M       61.1       +9.9       +0.9       -107.0       +0.0       -35.1       -40.0       +4.9       Ant1         23 2859.470M       30.9       +9.9       +0.9       -107.0       +0.0       -65.3       -40.0       -25.3       Ant1         Ave	٨		61.6	+9.9	+1.0	-107.0		+0.0	-34.5	-40.0	+5.5	Ant1
^ 3393.010M       61.1       +9.9       +1.0       -107.0       +0.0       -35.0       -40.0       +5.0       Ant1         17 3455.840M       35.2       +9.9       +1.0       -107.0       +0.0       -60.9       -40.0       -20.9       Ant1         Ave       * 3455.840M       58.9       +9.9       +1.0       -107.0       +0.0       -37.2       -40.0       +2.8       Ant1         19 3501.160M       34.9       +9.9       +1.0       -107.0       +0.0       -61.2       -40.0       -21.2       Ant1         Ave       * 3501.160M       57.0       +9.9       +1.0       -107.0       +0.0       -39.1       -40.0       +0.9       Ant1         21 3054.140M       34.9       +9.9       +0.9       -107.0       +0.0       -61.3       -40.0       -21.3       Ant1         Ave       * 3054.140M       61.1       +9.9       +0.9       -107.0       +0.0       -35.1       -40.0       +4.9       Ant1         23 2859.470M       30.9       +9.9       +0.9       -107.0       +0.0       -65.3       -40.0       -25.3       Ant1         Ave	15		35.4	+9.9	+1.0	-107.0		+0.0	-60.7	-40.0	-20.7	Ant1
Ave       ^ 3455.840M       58.9       +9.9       +1.0       -107.0       +0.0       -37.2       -40.0       +2.8       Ant1         19 3501.160M       34.9       +9.9       +1.0       -107.0       +0.0       -61.2       -40.0       -21.2       Ant1         Ave       ^ 3501.160M       57.0       +9.9       +1.0       -107.0       +0.0       -39.1       -40.0       +0.9       Ant1         21 3054.140M       34.9       +9.9       +0.9       -107.0       +0.0       -61.3       -40.0       -21.3       Ant1         Ave       ^ 3054.140M       61.1       +9.9       +0.9       -107.0       +0.0       -35.1       -40.0       +4.9       Ant1         23 2859.470M       30.9       +9.9       +0.9       -107.0       +0.0       -65.3       -40.0       -25.3       Ant1         Ave	٨		61.1	+9.9	+1.0	-107.0		+0.0	-35.0	-40.0	+5.0	Ant1
^ 3455.840M       58.9       +9.9       +1.0       -107.0       +0.0       -37.2       -40.0       +2.8       Ant1         19 3501.160M       34.9       +9.9       +1.0       -107.0       +0.0       -61.2       -40.0       -21.2       Ant1         Ave       ^ 3501.160M       57.0       +9.9       +1.0       -107.0       +0.0       -39.1       -40.0       +0.9       Ant1         21 3054.140M       34.9       +9.9       +0.9       -107.0       +0.0       -61.3       -40.0       -21.3       Ant1         Ave       ^ 3054.140M       61.1       +9.9       +0.9       -107.0       +0.0       -35.1       -40.0       +4.9       Ant1         23 2859.470M       30.9       +9.9       +0.9       -107.0       +0.0       -65.3       -40.0       -25.3       Ant1         Ave	17		35.2	+9.9	+1.0	-107.0		+0.0	-60.9	-40.0	-20.9	Ant1
Ave       Ave       Ave       Ave       Ave       Autl         21 3054.140M Ave       34.9 +9.9 +0.9 -107.0 +0.0 -61.3 -40.0 -21.3 Antl       Autl         Ave       Autl       Autl       Autl         23 2859.470M Ave       30.9 +9.9 +0.9 -107.0 +0.0 -65.3 -40.0 -25.3 Antl       Autl	٨		58.9	+9.9	+1.0	-107.0		+0.0	-37.2	-40.0	+2.8	Ant1
^ 3501.160M       57.0       +9.9       +1.0       -107.0       +0.0       -39.1       -40.0       +0.9       Ant1         21 3054.140M       34.9       +9.9       +0.9       -107.0       +0.0       -61.3       -40.0       -21.3       Ant1         Ave       ^ 3054.140M       61.1       +9.9       +0.9       -107.0       +0.0       -35.1       -40.0       +4.9       Ant1         23 2859.470M       30.9       +9.9       +0.9       -107.0       +0.0       -65.3       -40.0       -25.3       Ant1         Ave			34.9	+9.9	+1.0	-107.0		+0.0	-61.2	-40.0	-21.2	Ant1
Ave  ^ 3054.140M 61.1 +9.9 +0.9 -107.0 +0.0 -35.1 -40.0 +4.9 Ant1  23 2859.470M 30.9 +9.9 +0.9 -107.0 +0.0 -65.3 -40.0 -25.3 Ant1  Ave			57.0	+9.9	+1.0	-107.0		+0.0	-39.1	-40.0	+0.9	Ant1
^ 3054.140M 61.1 +9.9 +0.9 -107.0 +0.0 -35.1 -40.0 +4.9 Ant1  23 2859.470M 30.9 +9.9 +0.9 -107.0 +0.0 -65.3 -40.0 -25.3 Ant1  Ave	21		34.9	+9.9	+0.9	-107.0		+0.0	-61.3	-40.0	-21.3	Ant1
Ave	٨		61.1	+9.9	+0.9	-107.0		+0.0	-35.1	-40.0	+4.9	Ant1
	23		30.9	+9.9	+0.9	-107.0		+0.0	-65.3	-40.0	-25.3	Ant1
	٨		58.7	+9.9	+0.9	-107.0		+0.0	-37.5	-40.0	+2.5	Ant1

Page 279 of 406 Report No.: 103300-10A



25 2883.160M	30.1	+9.9	+0.9	-107.0	+0.0	-66.1	-40.0	-26.1	Ant1
Ave									
^ 2883.160M	55.9	+9.9	+0.9	-107.0	+0.0	-40.3	-40.0	-0.3	Ant1
27 2943.930M	28.7	+9.9	+0.9	-107.0	+0.0	-67.5	-40.0	-27.5	Ant1
Ave									
^ 2943.930M	53.5	+9.9	+0.9	-107.0	+0.0	-42.7	-40.0	-2.7	Ant1
29 2837.840M	28.3	+9.9	+0.9	-107.0	+0.0	-67.9	-40.0	-27.9	Ant1
Ave									
^ 2837.840M	55.7	+9.9	+0.9	-107.0	+0.0	-40.5	-40.0	-0.5	Ant1
31 333.000M	16.0	+9.9	+0.3	-107.0	+0.0	-80.8	-40.0	-40.8	Ant1
Ave									
^ 333.000M	53.3	+9.9	+0.3	-107.0	+0.0	-43.5	-40.0	-3.5	Ant1

Page 280 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 15:47:18
Tested By: Benny Lovan Sequence#: 30

Software: EMITest 5.03.12 120V 60Hz

#### **Equipment Tested:**

Device	Manufacturer	Model #	S/N	
Configuration 1				

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 3.72 - 37 GHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

11,1112 (301,1112 3, G1

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3625 MHz

Modulation: QAM64 Channel Bandwidth: 7MHz Output Power Software Setting: 32

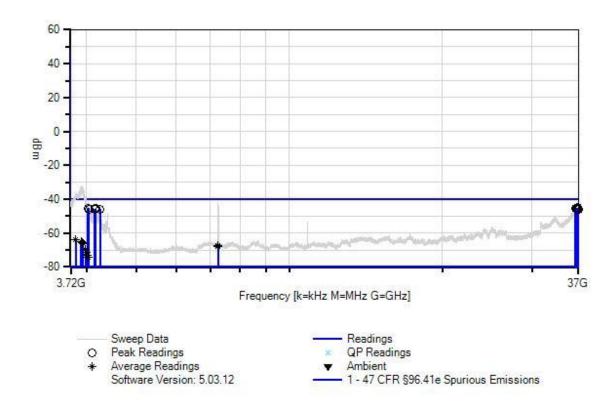
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 281 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 30 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



## Test Equipment:

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

Page 282 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	l: Ant1		
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	36914.538 M	48.3	+10.4	+3.4	-107.0		+0.0	-44.9	-40.0	-4.9	Ant1
2	36790.544 M	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	36664.912 M	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	36502.750 M	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	36825.618 M	47.5	+10.4	+3.4	-107.0		+0.0	-45.7	-40.0	-5.7	Ant1
10	36563.811 M	47.5	+10.5	+3.3	-107.0		+0.0	-45.7	-40.0	-5.7	Ant1
11	4149.429M	50.2	+9.9	+1.1	-107.0		+0.0	-45.8	-40.0	-5.8	Ant1
12	36835.745 M	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
14	36874.277 M	47.2	+10.4	+3.4	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
15	36861.433 M	47.1	+10.4	+3.4	-107.0		+0.0	-46.1	-40.0	-6.1	Ant1
16	36872.548 M	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	36954.552 M	47.0	+10.4	+3.4	-107.0		+0.0	-46.2	-40.0	-6.2	Ant1

Page 283 of 406 Report No.: 103300-10A



	3803.083M Ave	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
	3910.190M Ave	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
	3897.177M Ave	30.8	+9.9	+1.0	-107.0	+0.0	-65.3	-40.0	-25.3	Ant1
	3897.177M	63.9	+9.9		-107.0	+0.0	-32.2	-40.0	+7.8	Ant1
	3921.201M Ave	30.7	+9.9		-107.0	+0.0	-65.4	-40.0	-25.4	Ant1
	3921.201M	64.1	+9.9		-107.0	+0.0	-32.0	-40.0	+8.0	Ant1
	3931.211M Ave	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		+0.0	-33.0	-40.0	+7.0	Ant1
	7252.529M Ave	28.0	+10.0		-107.0	+0.0	-67.5	-40.0	-27.5	Ant1
	7252.529M	53.8	+10.0		-107.0	+0.0	-41.7	-40.0	-1.7	Ant1
	7247.524M Ave	27.8	+10.0		-107.0	+0.0	-67.7	-40.0	-27.7	Ant1
	7247.524M	53.5	+10.0		-107.0	+0.0	-42.0	-40.0	-2.0	Ant1
	3976.256M Ave	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
	3996.276M Ave	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
	4018.298M Ave	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
	4028.308M Ave	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

Page 284 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 16:09:23
Tested By: Benny Lovan Sequence#: 31

Software: EMITest 5.03.12 120V 60Hz

**Equipment Tested:** 

Device	Manufacturer	Model #	S/N	
Configuration 1				

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3696.5 MHz

Modulation: QPSK
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

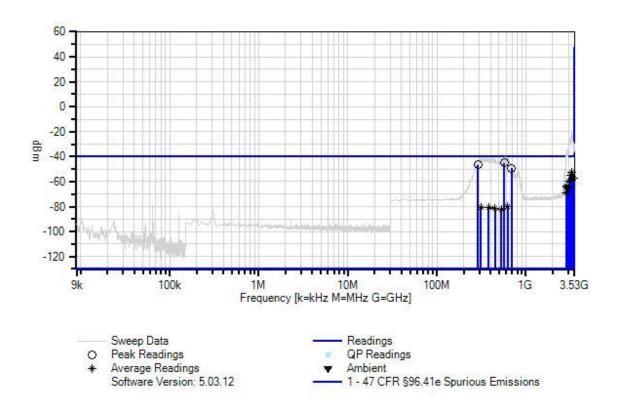
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 285 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 31 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 286 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	d: Ant1		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	572.000M	51.6	+9.9	+0.4	-107.0		+0.0	-45.1	-40.0	-5.1	Ant1
2	289.000M	50.3	+9.9	+0.3	-107.0		+0.0	-46.5	-40.0	-6.5	Ant1
3	692.500M	47.5	+9.9	+0.5	-107.0		+0.0	-49.1	-40.0	-9.1	Ant1
4	3292.070M Ave	43.8	+9.9	+1.0	-107.0		+0.0	-52.3	-40.0	-12.3	Ant1
٨	3292.070M	71.1	+9.9	+1.0	-107.0		+0.0	-25.0	-40.0	+15.0	Ant1
	3250.686M Ave	43.3	+9.9	+1.0	-107.0		+0.0	-52.8	-40.0	-12.8	Ant1
٨	3250.686M	76.0	+9.9	+1.0	-107.0		+0.0	-20.1	-40.0	+19.9	Ant1
	3181.860M Ave	41.1	+9.9	+0.9	-107.0		+0.0	-55.1	-40.0	-15.1	Ant1
٨	3181.860M	67.3	+9.9	+0.9	-107.0		+0.0	-28.9	-40.0	+11.1	Ant1
	3483.650M Ave	39.0	+9.9	+1.0	-107.0		+0.0	-57.1	-40.0	-17.1	Ant1
٨	3483.650M	64.1	+9.9	+1.0	-107.0		+0.0	-32.0	-40.0	+8.0	Ant1
	3395.070M Ave	38.8	+9.9	+1.0	-107.0		+0.0	-57.3	-40.0	-17.3	Ant1
٨	3395.070M	66.0	+9.9	+1.0	-107.0		+0.0	-30.1	-40.0	+9.9	Ant1
	3455.840M Ave	38.6	+9.9	+1.0	-107.0		+0.0	-57.5	-40.0	-17.5	Ant1
٨	3455.840M	62.3	+9.9	+1.0	-107.0		+0.0	-33.8	-40.0	+6.2	Ant1
	3048.990M Ave	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
	2867.710M Ave	32.6	+9.9	+0.9	-107.0		+0.0	-63.6	-40.0	-23.6	Ant1
٨	2867.710M	59.0	+9.9	+0.9	-107.0		+0.0	-37.2	-40.0	+2.8	Ant1
	2891.400M Ave	31.8	+9.9	+0.9	-107.0	_	+0.0	-64.4	-40.0	-24.4	Ant1
٨	2891.400M	58.0	+9.9	+0.9	-107.0		+0.0	-38.2	-40.0	+1.8	Ant1
	2945.990M Ave	30.5	+9.9	+0.9	-107.0		+0.0	-65.7	-40.0	-25.7	Ant1
	2945.990M	57.9	+9.9	+0.9	-107.0		+0.0	-38.3	-40.0	+1.7	Ant1

Page 287 of 406 Report No.: 103300-10A



	2827.540M Ave	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
26	623.000M	16.9	+9.9	+0.4	-107.0	+0.0	-79.8	-40.0	-39.8	Ant1
	Ave									
٨	623.000M	54.5	+9.9	+0.4	-107.0	+0.0	-42.2	-40.0	-2.2	Ant1
20	202 5003 5	161	0.0	0.0	107.0	0.0	00.7	40.0	40.7	A . 1
28	382.500M Ave	16.1	+9.9	+0.3	-107.0	+0.0	-80.7	-40.0	-40.7	Ant1
٨	382.500M	54.9	+9.9	+0.3	-107.0	+0.0	-41.9	-40.0	-1.9	Ant1
30	311.500M	16.0	+9.9	+0.3	-107.0	+0.0	-80.8	-40.0	-40.8	Ant1
	Ave									
٨	311.500M	54.1	+9.9	+0.3	-107.0	+0.0	-42.7	-40.0	-2.7	Ant1
22	440.5003.4	15.0	.0.0	. 0. 4	107.0	.00	01.4	40.0	41.4	A .1
32	449.500M	15.3	+9.9	+0.4	-107.0	+0.0	-81.4	-40.0	-41.4	Ant1
	Ave									
^	449.500M	54.4	+9.9	+0.4	-107.0	+0.0	-42.3	-40.0	-2.3	Ant1
34	526.500M	14.1	+9.9	+0.4	-107.0	+0.0	-82.6	-40.0	-42.6	Ant1
-	Ave						32.0	.0.0	.2.0	
٨	526.500M	53.7	+9.9	+0.4	-107.0	+0.0	-43.0	-40.0	-3.0	Ant1

Page 288 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 16:25:14
Tested By: Benny Lovan Sequence#: 32

Software: EMITest 5.03.12 120V 60Hz

**Equipment Tested:** 

Device	Manufacturer	Model #	S/N
Configuration 1			

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 3.72 - 37 GHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3696.5 MHz

Modulation: QPSK
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

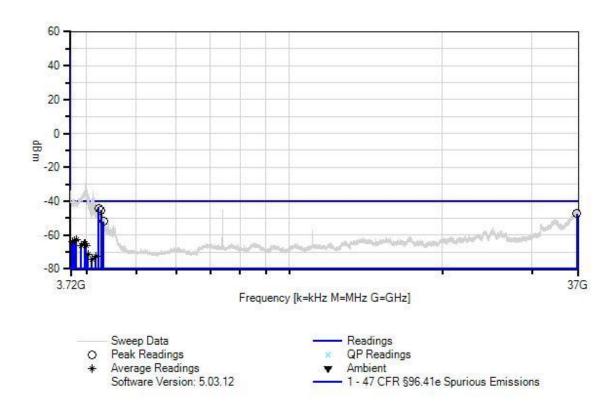
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 289 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 32 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 290 of 406 Report No.: 103300-10A



$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Spec dBm -40.0	Margin dB -4.1	Polar Ant
1 4221.760M 51.9 +9.9 +1.1 -107.0 +0.0 -44.1	-40.0		
		-4.1	A . 1
2 4269.120M 50.6 +9.9 +1.1 -107.0 +0.0 -45.4	-40.0		Ant1
		-5.4	Ant1
3 36737.000M 45.9 +10.4 +3.4 -107.0 +0.0 -47.3	-40.0	-7.3	Ant1
4 4312.640M 44.1 +9.9 +1.1 -107.0 +0.0 -51.9	-40.0	-11.9	Ant1
5 3816.000M 33.3 +9.9 +1.0 -107.0 +0.0 -62.8 Ave	-40.0	-22.8	Ant1
^ 3816.000M 55.4 +9.9 +1.0 -107.0 +0.0 -40.7	-40.0	-0.7	Ant1
7 3782.720M 32.6 +9.9 +1.0 -107.0 +0.0 -63.5 Ave	-40.0	-23.5	Ant1
^ 3782.720M 54.8 +9.9 +1.0 -107.0 +0.0 -41.3	-40.0	-1.3	Ant1
9 3748.160M 32.4 +9.9 +1.0 -107.0 +0.0 -63.7 Ave	-40.0	-23.7	Ant1
^ 3748.160M 55.2 +9.9 +1.0 -107.0 +0.0 -40.9	-40.0	-0.9	Ant1
11 3964.480M 31.0 +9.9 +1.1 -107.0 +0.0 -65.0 Ave	-40.0	-25.0	Ant1
^ 3964.480M 60.3 +9.9 +1.1 -107.0 +0.0 -35.7	-40.0	+4.3	Ant1
13 3978.258M 30.9 +9.9 +1.1 -107.0 +0.0 -65.1 Ave	-40.0	-25.1	Ant1
^ 3978.258M 66.9 +9.9 +1.1 -107.0 +0.0 -29.1	-40.0	+10.9	Ant1
15 3900.480M 30.2 +9.9 +1.0 -107.0 +0.0 -65.9 Ave	-40.0	-25.9	Ant1
^ 3900.480M 59.0 +9.9 +1.0 -107.0 +0.0 -37.1	-40.0	+2.9	Ant1
17 3991.360M 29.7 +9.9 +1.1 -107.0 +0.0 -66.3 Ave	-40.0	-26.3	Ant1
^ 3991.360M 65.0 +9.9 +1.1 -107.0 +0.0 -31.0	-40.0	+9.0	Ant1
19 4023.360M 24.5 +9.9 +1.1 -107.0 +0.0 -71.5 Ave	-40.0	-31.5	Ant1
^ 4023.360M 53.1 +9.9 +1.1 -107.0 +0.0 -42.9	-40.0	-2.9	Ant1
21 4164.160M 23.3 +9.9 +1.1 -107.0 +0.0 -72.7 Ave	-40.0	-32.7	Ant1
^ 4164.160M 57.8 +9.9 +1.1 -107.0 +0.0 -38.2	-40.0	+1.8	Ant1
23 4089.920M 21.7 +9.9 +1.1 -107.0 +0.0 -74.3 Ave	-40.0	-34.3	Ant1
^ 4089.920M 53.5 +9.9 +1.1 -107.0 +0.0 -42.5	-40.0	-2.5	Ant1

Page 291 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 16:34:56
Tested By: Benny Lovan Sequence#: 33

Software: EMITest 5.03.12 120V 60Hz

## **Equipment Tested:**

Device	Manufacturer	Model #	S/N	
Configuration 1				

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3696.5 MHz

Modulation: QAM16
Channel Bandwidth: 7MHz
Output Power Software Setting: 32

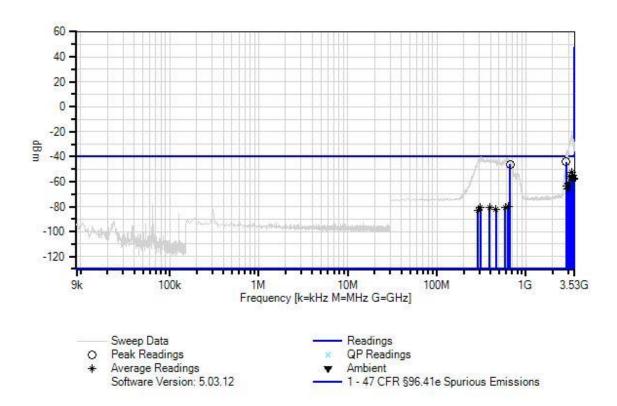
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 292 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 33 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 293 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	ading lis	ted by ma	argin.			Test Lead	d: Ant1		
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	2830.630M	52.1	+9.9	+0.9	-107.0		+0.0	-44.1	-40.0	-4.1	Ant1
2	663.500M	50.6	+9.9	+0.5	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
	3283.985M Ave	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
5	3294.130M Ave	43.7	+9.9	+1.0	-107.0		+0.0	-52.4	-40.0	-12.4	Ant1
٨	3294.130M	71.5	+9.9	+1.0	-107.0		+0.0	-24.6	-40.0	+15.4	Ant1
7	3375.500M Ave	40.8	+9.9	+1.0	-107.0		+0.0	-55.3	-40.0	-15.3	Ant1
٨	3375.500M	68.6	+9.9	+1.0	-107.0		+0.0	-27.5	-40.0	+12.5	Ant1
9	3139.630M Ave	40.1	+9.9	+0.9	-107.0		+0.0	-56.1	-40.0	-16.1	Ant1
٨	3139.630M	67.0	+9.9	+0.9	-107.0		+0.0	-29.2	-40.0	+10.8	Ant1
11	3479.530M Ave	39.2	+9.9	+1.0	-107.0		+0.0	-56.9	-40.0	-16.9	Ant1
٨		64.7	+9.9	+1.0	-107.0		+0.0	-31.4	-40.0	+8.6	Ant1
13	3431.120M Ave	37.7	+9.9	+1.0	-107.0		+0.0	-58.4	-40.0	-18.4	Ant1
٨	3431.120M	60.1	+9.9	+1.0	-107.0		+0.0	-36.0	-40.0	+4.0	Ant1
15	3023.240M Ave	34.9	+9.9	+0.9	-107.0		+0.0	-61.3	-40.0	-21.3	Ant1
٨	3023.240M	59.9	+9.9	+0.9	-107.0		+0.0	-36.3	-40.0	+3.7	Ant1
17	2870.800M Ave	32.3	+9.9	+0.9	-107.0		+0.0	-63.9	-40.0	-23.9	Ant1
٨	2870.800M	60.3	+9.9	+0.9	-107.0		+0.0	-35.9	-40.0	+4.1	Ant1
	2934.660M Ave	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
21	631.000M Ave	16.7	+9.9	+0.4	-107.0		+0.0	-80.0	-40.0	-40.0	Ant1
٨		55.6	+9.9	+0.4	-107.0		+0.0	-41.1	-40.0	-1.1	Ant1
23	583.500M Ave	15.9	+9.9	+0.4	-107.0		+0.0	-80.8	-40.0	-40.8	Ant1
٨		53.2	+9.9	+0.4	-107.0		+0.0	-43.5	-40.0	-3.5	Ant1

Page 294 of 406 Report No.: 103300-10A



25 390.000M	15.9	+9.9	+0.3	-107.0	+0.0	-80.9	-40.0	-40.9	Ant1
Ave									
^ 390.000M	53.7	+9.9	+0.3	-107.0	+0.0	-43.1	-40.0	-3.1	Ant1
27 308.500M	15.8	+9.9	+0.3	-107.0	+0.0	-81.0	-40.0	-41.0	Ant1
Ave									
^ 308.500M	55.4	+9.9	+0.3	-107.0	+0.0	-41.4	-40.0	-1.4	Ant1
29 460.500M	14.6	+9.9	+0.4	-107.0	+0.0	-82.1	-40.0	-42.1	Ant1
Ave									
^ 460.500M	53.8	+9.9	+0.4	-107.0	+0.0	-42.9	-40.0	-2.9	Ant1
31 290.500M	13.9	+9.9	+0.3	-107.0	+0.0	-82.9	-40.0	-42.9	Ant1
Ave									
^ 290.500M	53.6	+9.9	+0.3	-107.0	+0.0	-43.2	-40.0	-3.2	Ant1

Page 295 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 16:47:52
Tested By: Benny Lovan Sequence#: 34

Software: EMITest 5.03.12 120V 60Hz

**Equipment Tested:** 

Device	Manufacturer	Model #	S/N
Configuration 1			

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 3.72 - 37 GHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3696.5 MHz

Modulation: QAM16 Channel Bandwidth: 7MHz Output Power Software Setting: 32

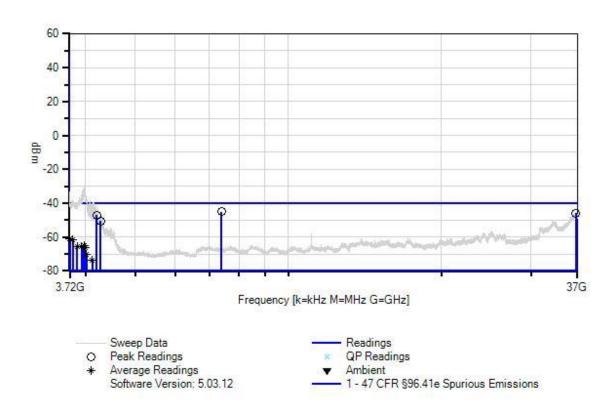
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 296 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 34 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 297 of 406 Report No.: 103300-10A



$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	l: Ant1		
1 7390.000M 50.5 +10.0 +1.5 -107.0 +0.0 -45.0 -40.0 -5.0 Ant1  2 36736.000	#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
2 36736.000		MHz	dΒμV	dB		dB	dB	Table	dBm	dBm	dB	Ant
M  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  5 3721.280M 35.3 +9.9 +1.0 -107.0 +0.0 -60.8 -40.0 -20.8 Ant1  Ave	1	7390.000M	50.5	+10.0	+1.5	-107.0		+0.0	-45.0	-40.0	-5.0	Ant1
4 4276.800M       45.5       +9.9       +1.1       -107.0       +0.0       -50.5       -40.0       -10.5       Ant1         5 3721.280M       35.3       +9.9       +1.0       -107.0       +0.0       -60.8       -40.0       -20.8       Ant1         Ave       3721.280M       64.7       +9.9       +1.0       -107.0       +0.0       -31.4       -40.0       +8.6       Ant1         7 3775.040M       34.4       +9.9       +1.0       -107.0       +0.0       -61.7       -40.0       -21.7       Ant1         Ave       - 3775.040M       59.2       +9.9       +1.0       -107.0       +0.0       -36.9       -40.0       +21.7       Ant1         9 3969.249M       31.1       +9.9       +1.1       -107.0       +0.0       -64.9       -40.0       -24.9       Ant1         Ave       - 3969.249M       65.7       +9.9       +1.1       -107.0       +0.0       -65.5       -40.0       -25.5       Ant1         11 3848.000M       30.6       +9.9       +1.0       -107.0       +0.0       -65.5       -40.0       -25.5       Ant1         Ave       - 3848.000M       54.8       +9.9       +1.1       -107.0	2		47.4	+10.4	+3.4	-107.0		+0.0	-45.8	-40.0	-5.8	Ant1
5 3721.280M         35.3         +9.9         +1.0         -107.0         +0.0         -60.8         -40.0         -20.8         Ant1           Ave         ^ 3721.280M         64.7         +9.9         +1.0         -107.0         +0.0         -31.4         -40.0         +8.6         Ant1           7 3775.040M         34.4         +9.9         +1.0         -107.0         +0.0         -61.7         -40.0         -21.7         Ant1           Ave         ^ 3775.040M         59.2         +9.9         +1.0         -107.0         +0.0         -36.9         -40.0         +3.1         Ant1           9 3969.249M         31.1         +9.9         +1.1         -107.0         +0.0         -64.9         -40.0         -24.9         Ant1           Ave         ^ 3969.249M         65.7         +9.9         +1.1         -107.0         +0.0         -64.9         -40.0         -24.9         Ant1           11 3848.000M         30.6         +9.9         +1.0         -107.0         +0.0         -65.5         -40.0         -25.5         Ant1           Ave         ^ 3848.000M         54.8         +9.9         +1.1         -107.0         +0.0         -65.7         -40.0	3	4201.280M	49.1	+9.9	+1.1	-107.0		+0.0	-46.9	-40.0	-6.9	Ant1
Ave         ^ 3721.280M         64.7         +9.9         +1.0         -107.0         +0.0         -31.4         -40.0         +8.6         Ant1           7 3775.040M         34.4         +9.9         +1.0         -107.0         +0.0         -61.7         -40.0         -21.7         Ant1           Ave         ^ 3775.040M         59.2         +9.9         +1.0         -107.0         +0.0         -36.9         -40.0         +3.1         Ant1           9 3969.249M         31.1         +9.9         +1.1         -107.0         +0.0         -64.9         -40.0         -24.9         Ant1           Ave         ^ 3969.249M         65.7         +9.9         +1.1         -107.0         +0.0         -30.3         -40.0         +9.7         Ant1           11 3848.000M         30.6         +9.9         +1.0         -107.0         +0.0         -65.5         -40.0         -25.5         Ant1           Ave         ^ 3848.000M         54.8         +9.9         +1.0         -107.0         +0.0         -65.5         -40.0         -25.5         Ant1           13 3927.360M         30.3         +9.9         +1.1         -107.0         +0.0         -65.7         -40.0	4	4276.800M	45.5	+9.9	+1.1	-107.0		+0.0	-50.5	-40.0	-10.5	Ant1
^ 3721.280M       64.7       +9.9       +1.0       -107.0       +0.0       -31.4       -40.0       +8.6       Ant1         7 3775.040M       34.4       +9.9       +1.0       -107.0       +0.0       -61.7       -40.0       -21.7       Ant1         Ave       ^ 3775.040M       59.2       +9.9       +1.0       -107.0       +0.0       -36.9       -40.0       +3.1       Ant1         9 3969.249M       31.1       +9.9       +1.1       -107.0       +0.0       -64.9       -40.0       -24.9       Ant1         Ave       ^ 3969.249M       65.7       +9.9       +1.1       -107.0       +0.0       -30.3       -40.0       +9.7       Ant1         11 3848.000M       30.6       +9.9       +1.0       -107.0       +0.0       -65.5       -40.0       -25.5       Ant1         Ave       ^ 3848.000M       54.8       +9.9       +1.0       -107.0       +0.0       -65.5       -40.0       -25.7       Ant1         13 3927.360M       30.3       +9.9       +1.1       -107.0       +0.0       -65.7       -40.0       -25.7       Ant1         Ave       ^ 3987.520M       30.0       +9.9       +1.1       -107.			35.3	+9.9	+1.0	-107.0		+0.0	-60.8	-40.0	-20.8	Ant1
Ave         ^ 3775.040M         59.2         +9.9         +1.0         -107.0         +0.0         -36.9         -40.0         +3.1         Ant1           9 3969.249M         31.1         +9.9         +1.1         -107.0         +0.0         -64.9         -40.0         -24.9         Ant1           Ave         ^ 3969.249M         65.7         +9.9         +1.1         -107.0         +0.0         -30.3         -40.0         +9.7         Ant1           11 3848.000M         30.6         +9.9         +1.0         -107.0         +0.0         -65.5         -40.0         -25.5         Ant1           Ave         - 3848.000M         54.8         +9.9         +1.0         -107.0         +0.0         -65.5         -40.0         -25.5         Ant1           Ave         - 3927.360M         30.3         +9.9         +1.1         -107.0         +0.0         -65.7         -40.0         -25.7         Ant1           Ave         - 3927.360M         58.2         +9.9         +1.1         -107.0         +0.0         -37.8         -40.0         +2.2         Ant1           Ave         - 3987.520M         30.0         +9.9         +1.1         -107.0         +0.0         -			64.7	+9.9	+1.0	-107.0		+0.0	-31.4	-40.0	+8.6	Ant1
9 3969.249M 31.1 +9.9 +1.1 -107.0 +0.0 -64.9 -40.0 -24.9 Ant1  Ave			34.4	+9.9	+1.0	-107.0		+0.0	-61.7	-40.0	-21.7	Ant1
Ave         ^ 3969.249M       65.7       +9.9       +1.1       -107.0       +0.0       -30.3       -40.0       +9.7       Ant1         11 3848.000M       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         13 3927.360M       30.3       +9.9       +1.1       -107.0       +0.0       -65.7       -40.0       -25.7       Ant1         Ave       ^ 3927.360M       58.2       +9.9       +1.1       -107.0       +0.0       -37.8       -40.0       +2.2       Ant1         15 3987.520M       30.0       +9.9       +1.1       -107.0       +0.0       -66.0       -40.0       -26.0       Ant1         Ave       ^ 3987.520M       60.2       +9.9       +1.1       -107.0       +0.0       -35.8       -40.0       +4.2       Ant1         17 4016.960M       25.7       +9.9       +1.1       -107.0       +0.0       -70.3       -40.0       -30.3       Ant1         Ave       ^ 4016.960M       56.0       +9.9       +1.1<	٨	3775.040M	59.2	+9.9	+1.0	-107.0		+0.0	-36.9	-40.0	+3.1	Ant1
11 3848.000M       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         13 3927.360M       30.3       +9.9       +1.1       -107.0       +0.0       -65.7       -40.0       -25.7       Ant1         Ave       ^ 3927.360M       58.2       +9.9       +1.1       -107.0       +0.0       -37.8       -40.0       +2.2       Ant1         15 3987.520M       30.0       +9.9       +1.1       -107.0       +0.0       -66.0       -40.0       -26.0       Ant1         Ave       ^ 3987.520M       60.2       +9.9       +1.1       -107.0       +0.0       -35.8       -40.0       +4.2       Ant1         17 4016.960M       25.7       +9.9       +1.1       -107.0       +0.0       -70.3       -40.0       -30.3       Ant1         Ave       ^ 4016.960M       56.0       +9.9       +1.1       -107.0       +0.0       -73.5       -40.0       +0.0       -33.5       Ant1         19 4123.200M       22.5       +9.9       +1.1       -			31.1	+9.9	+1.1	-107.0		+0.0	-64.9	-40.0	-24.9	Ant1
Ave         ^ 3848.000M       54.8       +9.9       +1.0       -107.0       +0.0       -41.3       -40.0       -1.3       Ant1         13 3927.360M       30.3       +9.9       +1.1       -107.0       +0.0       -65.7       -40.0       -25.7       Ant1         Ave       ^ 3927.360M       58.2       +9.9       +1.1       -107.0       +0.0       -37.8       -40.0       +2.2       Ant1         15 3987.520M       30.0       +9.9       +1.1       -107.0       +0.0       -66.0       -40.0       -26.0       Ant1         Ave       ^ 3987.520M       60.2       +9.9       +1.1       -107.0       +0.0       -35.8       -40.0       +4.2       Ant1         17 4016.960M       25.7       +9.9       +1.1       -107.0       +0.0       -70.3       -40.0       -30.3       Ant1         Ave         ^ 4016.960M       56.0       +9.9       +1.1       -107.0       +0.0       -40.0       -40.0       +0.0       Ant1         19 4123.200M       22.5       +9.9       +1.1       -107.0       +0.0       -73.5       -40.0       -33.5       Ant1         Ave	^	3969.249M	65.7	+9.9	+1.1	-107.0		+0.0	-30.3	-40.0	+9.7	Ant1
13 3927.360M 30.3 +9.9 +1.1 -107.0 +0.0 -65.7 -40.0 -25.7 Ant1 Ave  ^ 3927.360M 58.2 +9.9 +1.1 -107.0 +0.0 -37.8 -40.0 +2.2 Ant1  15 3987.520M 30.0 +9.9 +1.1 -107.0 +0.0 -66.0 -40.0 -26.0 Ant1 Ave  ^ 3987.520M 60.2 +9.9 +1.1 -107.0 +0.0 -35.8 -40.0 +4.2 Ant1  17 4016.960M 25.7 +9.9 +1.1 -107.0 +0.0 -70.3 -40.0 -30.3 Ant1 Ave  ^ 4016.960M 56.0 +9.9 +1.1 -107.0 +0.0 -40.0 -40.0 +0.0 Ant1  19 4123.200M 22.5 +9.9 +1.1 -107.0 +0.0 -73.5 -40.0 -33.5 Ant1 Ave			30.6	+9.9	+1.0	-107.0		+0.0	-65.5	-40.0	-25.5	Ant1
Ave       ^ 3927.360M       58.2       +9.9       +1.1       -107.0       +0.0       -37.8       -40.0       +2.2       Ant1         15       3987.520M       30.0       +9.9       +1.1       -107.0       +0.0       -66.0       -40.0       -26.0       Ant1         Ave       ^ 3987.520M       60.2       +9.9       +1.1       -107.0       +0.0       -35.8       -40.0       +4.2       Ant1         17       4016.960M       25.7       +9.9       +1.1       -107.0       +0.0       -70.3       -40.0       -30.3       Ant1         Ave       Aution of the control of the	^	3848.000M	54.8	+9.9	+1.0	-107.0		+0.0	-41.3	-40.0	-1.3	Ant1
15 3987.520M 30.0 +9.9 +1.1 -107.0 +0.0 -66.0 -40.0 -26.0 Ant1 Ave  ^ 3987.520M 60.2 +9.9 +1.1 -107.0 +0.0 -35.8 -40.0 +4.2 Ant1  17 4016.960M 25.7 +9.9 +1.1 -107.0 +0.0 -70.3 -40.0 -30.3 Ant1 Ave  ^ 4016.960M 56.0 +9.9 +1.1 -107.0 +0.0 -40.0 -40.0 +0.0 Ant1  19 4123.200M 22.5 +9.9 +1.1 -107.0 +0.0 -73.5 -40.0 -33.5 Ant1 Ave			30.3	+9.9	+1.1	-107.0		+0.0	-65.7	-40.0	-25.7	Ant1
Ave       Ave       +0.0       -35.8       -40.0       +4.2       Ant1         17 4016.960M Ave       25.7       +9.9       +1.1       -107.0       +0.0       -70.3       -40.0       -30.3       Ant1         Ave       Ave       +0.0       -40.0       -40.0       +0.0       Ant1         19 4123.200M Ave       22.5       +9.9       +1.1       -107.0       +0.0       -73.5       -40.0       -33.5       Ant1         Ave	٨	3927.360M	58.2	+9.9	+1.1	-107.0		+0.0	-37.8	-40.0	+2.2	Ant1
17 4016.960M 25.7 +9.9 +1.1 -107.0 +0.0 -70.3 -40.0 -30.3 Ant1 Ave  ^ 4016.960M 56.0 +9.9 +1.1 -107.0 +0.0 -40.0 -40.0 +0.0 Ant1  19 4123.200M 22.5 +9.9 +1.1 -107.0 +0.0 -73.5 -40.0 -33.5 Ant1 Ave			30.0	+9.9	+1.1	-107.0		+0.0	-66.0	-40.0	-26.0	Ant1
Ave       ^ 4016.960M       56.0       +9.9       +1.1       -107.0       +0.0       -40.0       -40.0       +0.0       Ant1         19 4123.200M       22.5       +9.9       +1.1       -107.0       +0.0       -73.5       -40.0       -33.5       Ant1         Ave	٨	3987.520M	60.2	+9.9	+1.1	-107.0		+0.0	-35.8	-40.0	+4.2	Ant1
19 4123.200M 22.5 +9.9 +1.1 -107.0 +0.0 -73.5 -40.0 -33.5 Ant1 Ave	17		25.7	+9.9	+1.1	-107.0		+0.0	-70.3	-40.0	-30.3	Ant1
Ave	٨	4016.960M	56.0	+9.9	+1.1	-107.0		+0.0	-40.0	-40.0	+0.0	Ant1
			22.5	+9.9	+1.1	-107.0		+0.0	-73.5	-40.0	-33.5	Ant1
4123.200W 57.6 +9.9 +1.1 -107.0 +0.0 -36.2 -40.0 +1.6 Allt1		4123.200M	57.8	+9.9	+1.1	-107.0		+0.0	-38.2	-40.0	+1.8	Ant1

Page 298 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 17:00:25
Tested By: Benny Lovan Sequence#: 35

Software: EMITest 5.03.12 120V 60Hz

**Equipment Tested:** 

Device	Manufacturer	Model #	S/N	
Configuration 1				

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3696.5 MHz

Modulation: QAM64 Channel Bandwidth: 7MHz Output Power Software Setting: 32

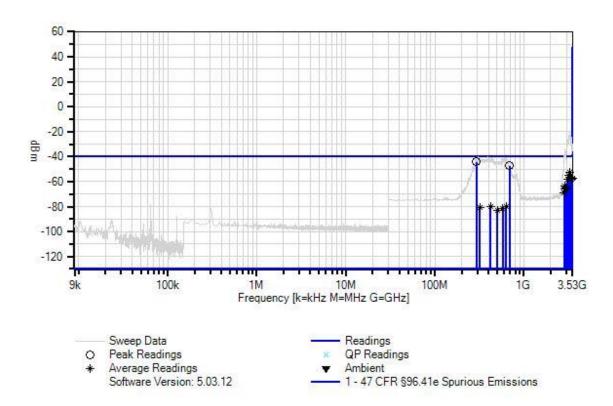
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 299 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 35 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 300 of 406 Report No.: 103300-10A



# Freq Rdng T1 T2 T3 Dist Corr Spec MHz dB $\mu$ V dB dB dB dB dB Table dBm dBm 1 293.000M 52.6 +9.9 +0.3 -107.0 +0.0 -44.2 -40.0 2 690.000M 49.1 +9.9 +0.5 -107.0 +0.0 -47.5 -40.0 3 3296.190M 43.8 +9.9 +1.0 -107.0 +0.0 -52.3 -40.0	Margin dB -4.2 -7.5	Polar Ant Ant1
1 293.000M 52.6 +9.9 +0.3 -107.0 +0.0 -44.2 -40.0 2 690.000M 49.1 +9.9 +0.5 -107.0 +0.0 -47.5 -40.0	-4.2 -7.5	Ant1
2 690.000M 49.1 +9.9 +0.5 -107.0 +0.0 -47.5 -40.0	-7.5	
		Ant1
3 3296 190M 43 8 +9 9 +1 0 -107 0 +0 0 -52 3 -40 0	-12.3	
Ave		Ant1
^ 3296.190M	+16.2	Ant1
5 3268.081M 43.7 +9.9 +1.0 -107.0 +0.0 -52.4 -40.0 Ave	-12.4	Ant1
^ 3268.081M	+19.9	Ant1
7 3189.070M 41.3 +9.9 +0.9 -107.0 +0.0 -54.9 -40.0 Ave	-14.9	Ant1
^ 3189.070M 68.6 +9.9 +0.9 -107.0 +0.0 -27.6 -40.0	+12.4	Ant1
9 3386.830M 39.7 +9.9 +1.0 -107.0 +0.0 -56.4 -40.0 Ave	-16.4	Ant1
^ 3386.830M 70.7 +9.9 +1.0 -107.0 +0.0 -25.4 -40.0	+14.6	Ant1
11 3486.740M 39.2 +9.9 +1.0 -107.0 +0.0 -56.9 -40.0 Ave	-16.9	Ant1
^ 3486.740M 64.2 +9.9 +1.0 -107.0 +0.0 -31.9 -40.0	+8.1	Ant1
13 3075.770M 38.5 +9.9 +0.9 -107.0 +0.0 -57.7 -40.0 Ave	-17.7	Ant1
^ 3075.770M 64.5 +9.9 +0.9 -107.0 +0.0 -31.7 -40.0	+8.3	Ant1
15 3437.300M 38.0 +9.9 +1.0 -107.0 +0.0 -58.1 -40.0 Ave	-18.1	Ant1
^ 3437.300M 61.0 +9.9 +1.0 -107.0 +0.0 -35.1 -40.0	+4.9	Ant1
17 2863.590M 32.4 +9.9 +0.9 -107.0 +0.0 -63.8 -40.0 Ave	-23.8	Ant1
^ 2863.590M	+2.6	Ant1
19 2977.920M 31.4 +9.9 +0.9 -107.0 +0.0 -64.8 -40.0 Ave	-24.8	Ant1
^ 2977.920M 56.9 +9.9 +0.9 -107.0 +0.0 -39.3 -40.0	+0.7	Ant1
21 2914.060M 30.6 +9.9 +0.9 -107.0 +0.0 -65.6 -40.0 Ave	-25.6	Ant1
^ 2914.060M 56.0 +9.9 +0.9 -107.0 +0.0 -40.2 -40.0	-0.2	Ant1
23 2824.450M 27.3 +9.9 +0.9 -107.0 +0.0 -68.9 -40.0 Ave	-28.9	Ant1
^ 2824.450M 52.4 +9.9 +0.9 -107.0 +0.0 -43.8 -40.0	-3.8	Ant1

Page 301 of 406 Report No.: 103300-10A



25	420.000M	16.9	+9.9	+0.4	-107.0	+0.0	-79.8	-40.0	-39.8	Ant1
	Ave									
^	420.000M	53.6	+9.9	+0.4	-107.0	+0.0	-43.1	-40.0	-3.1	Ant1
27	630.500M	16.7	+9.9	+0.4	-107.0	+0.0	-80.0	-40.0	-40.0	Ant1
	Ave									
^	630.500M	54.2	+9.9	+0.4	-107.0	+0.0	-42.5	-40.0	-2.5	Ant1
29	319.000M	16.1	+9.9	+0.3	-107.0	+0.0	-80.7	-40.0	-40.7	Ant1
	Ave									
^	319.000M	55.4	+9.9	+0.3	-107.0	+0.0	-41.4	-40.0	-1.4	Ant1
31	578.000M	15.5	+9.9	+0.4	-107.0	+0.0	-81.2	-40.0	-41.2	Ant1
	Ave									
^	578.000M	53.0	+9.9	+0.4	-107.0	+0.0	-43.7	-40.0	-3.7	Ant1
33	506.500M	13.9	+9.9	+0.4	-107.0	+0.0	-82.8	-40.0	-42.8	Ant1
	Ave									
^	506.500M	53.4	+9.9	+0.4	-107.0	+0.0	-43.3	-40.0	-3.3	Ant1

Page 302 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/6/2020
Test Type: Conducted Emissions Time: 17:29:36
Tested By: Benny Lovan Sequence#: 36

Software: EMITest 5.03.12 120V 60Hz

## **Equipment Tested:**

Device	Manufacturer	Model #	S/N	
Configuration 1				

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 3.72 - 37 GHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3696.5 MHz

Modulation: QAM64 Channel Bandwidth: 7MHz Output Power Software Setting: 32

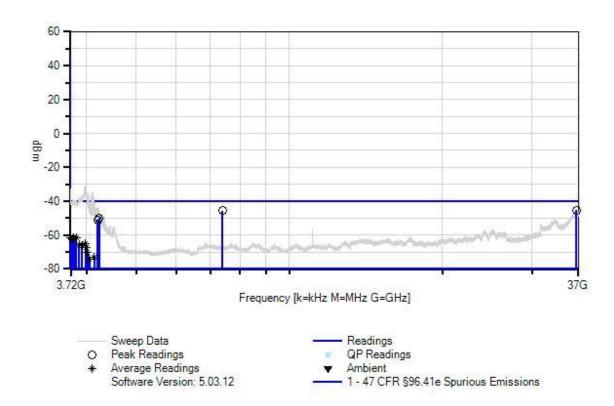
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 303 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 36 Date: 3/6/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 304 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	d: Ant1		
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	36617.000 M	47.9	+10.5	+3.3	-107.0		+0.0	-45.3	-40.0	-5.3	Ant1
2	7395.000M	50.0	+10.0	+1.5	-107.0		+0.0	-45.5	-40.0	-5.5	Ant1
3	4230.900M	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
	3722.340M Ave	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
	3776.940M Ave	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
	3816.720M Ave	34.3	+9.9	+1.0	-107.0		+0.0	-61.8	-40.0	-21.8	Ant1
٨	3816.720M	56.3	+9.9	+1.0	-107.0		+0.0	-39.8	-40.0	+0.2	Ant1
	3757.440M Ave	34.1	+9.9	+1.0	-107.0		+0.0	-62.0	-40.0	-22.0	Ant1
٨	3757.440M	56.7	+9.9	+1.0	-107.0		+0.0	-39.4	-40.0	+0.6	Ant1
	3975.060M Ave	30.8	+9.9	+1.1	-107.0		+0.0	-65.2	-40.0	-25.2	Ant1
٨	3975.060M	63.3	+9.9	+1.1	-107.0		+0.0	-32.7	-40.0	+7.3	Ant1
	3866.640M Ave	30.6	+9.9	+1.0	-107.0		+0.0	-65.5	-40.0	-25.5	Ant1
٨	3866.640M	57.5	+9.9	+1.0	-107.0		+0.0	-38.6	-40.0	+1.4	Ant1
17	3915.780M Ave	30.1	+9.9	+1.0	-107.0		+0.0	-66.0	-40.0	-26.0	Ant1
٨	3915.780M	58.1	+9.9	+1.0	-107.0		+0.0	-38.0	-40.0	+2.0	Ant1
	3996.276M Ave	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

Page 305 of 406 Report No.: 103300-10A



21 4014.840M	25.9	+9.9	+1.1	-107.0	+0.0	-70.1	-40.0	-30.1	Ant1
Ave									
^ 4014.840M	59.3	+9.9	+1.1	-107.0	+0.0	-36.7	-40.0	+3.3	Ant1
23 4138.860M	23.0	+9.9	+1.1	-107.0	+0.0	-73.0	-40.0	-33.0	Ant1
Ave									
^ 4138.860M	56.7	+9.9	+1.1	-107.0	+0.0	-39.3	-40.0	+0.7	Ant1
25 4052.280M	21.9	+9.9	+1.1	-107.0	+0.0	-74.1	-40.0	-34.1	Ant1
Ave									
^ 4052.280M	54.1	+9.9	+1.1	-107.0	+0.0	-41.9	-40.0	-1.9	Ant1

Page 306 of 406 Report No.: 103300-10A



## **Channel Bandwidth 10MHz**

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 Date: 3/5/2020 Test Type: Conducted Emissions Time: 14:43:19

Tested By: Benny Lovan Sequence#: 1

Software: EMITest 5.03.12 120V 60Hz

**Equipment Tested:** 

Device Manufacturer Model # S/N
Configuration 1

Support Equipment:

Device Manufacturer Model # S/N
Configuration 1

#### Test Conditions / Notes:

Conducted Spurious Emissions 9k - 3.53G

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3555 MHz

Modulation: QPSK

Channel Bandwidth: 10MHz Output Power Software Setting: 33

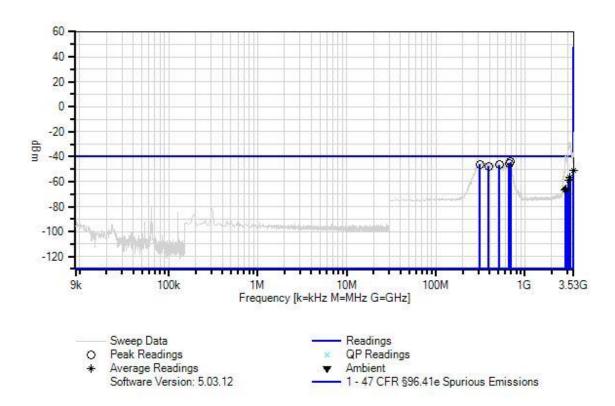
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 307 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 1 Date: 3/5/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 308 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	d: Ant1		
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	692.850M	52.3	+9.9	+0.5	-107.0		+0.0	-44.3	-40.0	-4.3	Ant1
2	666.300M	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	516.450M	50.1	+9.9	+0.4	-107.0		+0.0	-46.6	-40.0	-6.6	Ant1
5	393.600M	49.1	+9.9	+0.4	-107.0		+0.0	-47.6	-40.0	-7.6	Ant1
	3529.503M Ave	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
	3208.938M Ave	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
	3092.640M Ave	37.6	+9.9	+0.9	-107.0		+0.0	-58.6	-40.0	-18.6	Ant1
٨	3092.640M	65.0	+9.9	+0.9	-107.0		+0.0	-31.2	-40.0	+8.8	Ant1
	2859.000M Ave	30.7	+9.9	+0.9	-107.0		+0.0	-65.5	-40.0	-25.5	Ant1
٨	2859.000M	59.9	+9.9	+0.9	-107.0		+0.0	-36.3	-40.0	+3.7	Ant1
	2896.000M Ave	29.7	+9.9	+0.9	-107.0		+0.0	-66.5	-40.0	-26.5	Ant1
٨	2896.000M	56.1	+9.9	+0.9	-107.0		+0.0	-40.1	-40.0	-0.1	Ant1
	2840.000M Ave	29.5	+9.9	+0.9	-107.0		+0.0	-66.7	-40.0	-26.7	Ant1
٨	2840.000M	55.8	+9.9	+0.9	-107.0		+0.0	-40.4	-40.0	-0.4	Ant1

Page 309 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

 Work Order #:
 103300
 Date: 3/5/2020

 Test Type:
 Conducted Emissions
 Time: 15:04:07

Tested By: Benny Lovan Sequence#: 2 Software: EMITest 5.03.12 Sequence#: 2

**Equipment Tested:** 

Device	Manufacturer	Model #	S/N	
Configuration 1	1/24/2/02/04/04/02	1120002 11	2/21	

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 3.72 - 37G

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3555 MHz

Modulation: QPSK

Channel Bandwidth: 10MHz Output Power Software Setting: 33

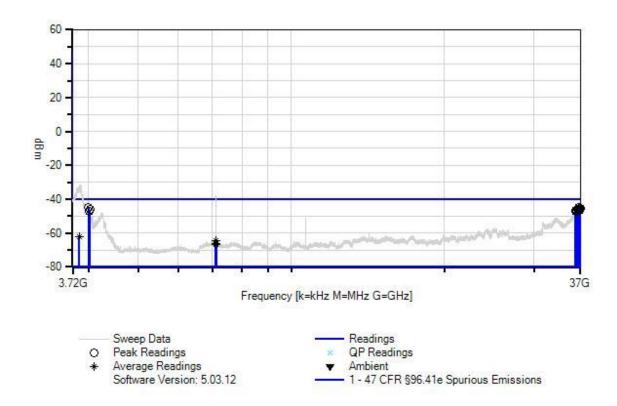
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 310 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 2 Date: 3/5/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 311 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	l: Ant1		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	3993.273M	51.2	+9.9	+1.1	-107.0		+0.0	-44.8	-40.0	-4.8	Ant1
2	36619.867 M	48.2	+10.5	+3.3	-107.0		+0.0	-45.0	-40.0	-5.0	Ant1
3	36936.274 M	47.7	+10.4	+3.4	-107.0		+0.0	-45.5	-40.0	-5.5	Ant1
4	36761.398 M	47.6	+10.4	+3.4	-107.0		+0.0	-45.6	-40.0	-5.6	Ant1
5	36818.208 M	47.4	+10.4	+3.4	-107.0		+0.0	-45.8	-40.0	-5.8	Ant1
6	36628.876 M	47.3	+10.5	+3.3	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
7	36655.903 M	47.3	+10.4	+3.4	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
8	36830.064 M	47.3	+10.4	+3.4	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
9	36799.930 M	47.2	+10.4	+3.4	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
10	36854.270 M	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	36453.701 M	47.1	+10.5	+3.3	-107.0		+0.0	-46.1	-40.0	-6.1	Ant1
13	36787.333 M	47.0	+10.4	+3.4	-107.0		+0.0	-46.2	-40.0	-6.2	Ant1
14	36784.616 M	47.0	+10.4	+3.4	-107.0		+0.0	-46.2	-40.0	-6.2	Ant1
15	36638.886 M	47.0	+10.4	+3.3	-107.0		+0.0	-46.3	-40.0	-6.3	Ant1
16	36387.635 M	46.8	+10.5	+3.3	-107.0		+0.0	-46.4	-40.0	-6.4	Ant1
17	36825.865 M	46.8	+10.4	+3.4	-107.0		+0.0	-46.4	-40.0	-6.4	Ant1

Page 312 of 406 Report No.: 103300-10A



18 36348.596 M	46.7	+10.5	+3.3	-107.0	+0.0	-46.5	-40.0	-6.5	Ant1
19 36813.762 M	46.7	+10.4	+3.4	-107.0	+0.0	-46.5	-40.0	-6.5	Ant1
20 36790.297 M	46.6	+10.4	+3.4	-107.0	+0.0	-46.6	-40.0	-6.6	Ant1
21 36322.570 M	46.5	+10.5	+3.3	-107.0	+0.0	-46.7	-40.0	-6.7	Ant1
22 36236.484 M	46.5	+10.5	+3.2	-107.0	+0.0	-46.8	-40.0	-6.8	Ant1
23 36178.426 M	46.4	+10.5	+3.2	-107.0	+0.0	-46.9	-40.0	-6.9	Ant1
24 36375.623 M	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 36309.557 M	46.1	+10.5	+3.3	-107.0	+0.0	-47.1	-40.0	-7.1	Ant1
27 3830.110M Ave	33.8	+9.9	+1.0	-107.0	+0.0	-62.3	-40.0	-22.3	Ant1
^ 3830.110M	64.5	+9.9	+1.0	-107.0	+0.0	-31.6	-40.0	+8.4	Ant1
29 7108.385M Ave	31.0	+10.0	+1.5	-107.0	+0.0	-64.5	-40.0	-24.5	Ant1
^ 7108.385M	57.4	+10.0	+1.5	-107.0	+0.0	-38.1	-40.0	+1.9	Ant1
31 7113.390M Ave	29.4	+10.0	+1.5	-107.0	+0.0	-66.1	-40.0	-26.1	Ant1
^ 7113.390M	56.2	+10.0	+1.5	-107.0	+0.0	-39.3	-40.0	+0.7	Ant1
33 7105.382M Ave	28.5	+10.0	+1.5	-107.0	+0.0	-67.0	-40.0	-27.0	Ant1
^ 7105.382M	55.9	+10.0	+1.5	-107.0	+0.0	-39.6	-40.0	+0.4	Ant1

Page 313 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

EMITest 5.03.12

 Work Order #:
 103300
 Date: 3/5/2020

 Test Type:
 Conducted Emissions
 Time: 16:01:19

Tested By: Benny Lovan Sequence#: 3

Equipment Tested:

Software:

Device	Manufacturer	Model #	S/N	
Configuration 1	1/24/2/02/04/04/02	1120002 11	2/21	

120V 60Hz

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 GHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3555 MHz

Modulation: QAM16 Channel Bandwidth: 10MHz Output Power Software Setting: 33

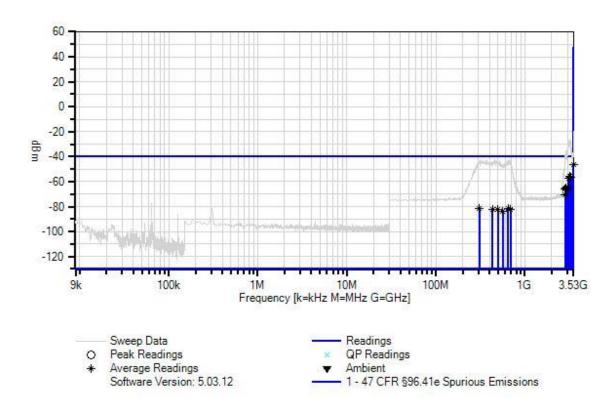
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 314 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 3 Date: 3/5/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 315 of 406 Report No.: 103300-10A



MHz dBμV dB dB dB Table dBm	Spec Marg	gin Polar
1 3529.503M 49.8 +9.9 +1.0 -107.0 +0.0 -46.3	dBm dE	
Ave	-40.0 -6	5.3 Ant1
^ 3529.503M	-40.0 +18	8.0 Ant1
3 3229.900M	-40.0 -15	5.5 Ant1
^ 3229.900M	-40.0 +14	4.3 Ant1
5 3185.800M	-40.0 -16	5.1 Ant1
^ 3185.800M 65.7 +9.9 +0.9 -107.0 +0.0 -30.5	-40.0 +9	9.5 Ant1
7 3286.800M 39.3 +9.9 +1.0 -107.0 +0.0 -56.8 -	-40.0 -16	5.8 Ant1
	-40.0 +5	5.6 Ant1
9 3086.300M 38.6 +9.9 +0.9 -107.0 +0.0 -57.6 -	-40.0 -17	7.6 Ant1
	-40.0 +10	0.4 Ant1
11 2997.000M 31.5 +9.9 +0.9 -107.0 +0.0 -64.7 -Ave	-40.0 -24	4.7 Ant1
	-40.0 +1	1.5 Ant1
13 2871.500M 31.3 +9.9 +0.9 -107.0 +0.0 -64.9 -	-40.0 -24	4.9 Ant1
	-40.0 +2	2.8 Ant1
15 2837.500M 30.1 +9.9 +0.9 -107.0 +0.0 -66.1 -	-40.0 -26	5.1 Ant1
	-40.0 -0	0.4 Ant1
17 2929.000M 29.8 +9.9 +0.9 -107.0 +0.0 -66.4 - Ave	-40.0 -26	5.4 Ant1
	-40.0 -0	).1 Ant1
19 2817.500M 25.4 +9.9 +0.9 -107.0 +0.0 -70.8 -	-40.0 -30	0.8 Ant1
	-40.0 -3	3.6 Ant1
21 307.250M 15.6 +9.9 +0.3 -107.0 +0.0 -81.2 -	-40.0 -41	1.2 Ant1
	-40.0 -3	3.0 Ant1
23 647.700M 14.9 +9.9 +0.5 -107.0 +0.0 -81.7 - Ave	-40.0 -41	1.7 Ant1
	-40.0 -2	2.9 Ant1

Page 316 of 406 Report No.: 103300-10A



25 498.100M	14.6	+9.9	+0.4	-107.0	+0.0	-82.1	-40.0	-42.1	Ant1
Ave									
^ 498.100M	53.7	+9.9	+0.4	-107.0	+0.0	-43.0	-40.0	-3.0	Ant1
27 430.450M	14.5	+9.9	+0.4	-107.0	+0.0	-82.2	-40.0	-42.2	Ant1
Ave									
^ 430.450M	50.1	+9.9	+0.4	-107.0	+0.0	-46.6	-40.0	-6.6	Ant1
29 689.500M	14.3	+9.9	+0.5	-107.0	+0.0	-82.3	-40.0	-42.3	Ant1
Ave									
^ 689.500M	52.0	+9.9	+0.5	-107.0	+0.0	-44.6	-40.0	-4.6	Ant1
31 564.100M	13.1	+9.9	+0.4	-107.0	+0.0	-83.6	-40.0	-43.6	Ant1
Ave									
^ 564.100M	50.9	+9.9	+0.4	-107.0	+0.0	-45.8	-40.0	-5.8	Ant1

Page 317 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

EMITest 5.03.12

 Work Order #:
 103300
 Date: 3/5/2020

 Test Type:
 Conducted Emissions
 Time: 16:12:40

Tested By: Benny Lovan Sequence#: 4

**Equipment Tested:** 

Software:

Device	Manufacturer	Model #	S/N	
Configuration 1	1/24/2/02/04/04/02	1120002 11	2/21	

120V 60Hz

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 3.720 - 37 GHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

1111112 (30111112 37 GI

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3555 MHz

Modulation: QAM16 Channel Bandwidth: 10MHz Output Power Software Setting: 33

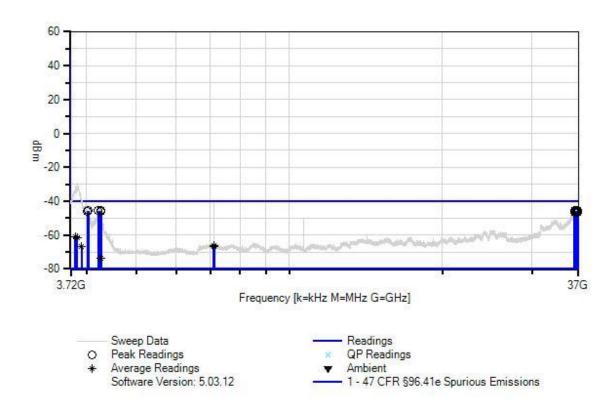
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 318 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 4 Date: 3/5/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 319 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	d: Ant1		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
1	36428.676 M	47.7	+10.5	+3.3	-107.0		+0.0	-45.5	-40.0	-5.5	Ant1
2	36811.539 M	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
5	36445.693 M	47.6	+10.5	+3.3	-107.0		+0.0	-45.6	-40.0	-5.6	Ant1
6	36820.925 M	47.6	+10.4	+3.4	-107.0		+0.0	-45.6	-40.0	-5.6	Ant1
7	36568.816 M	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
9	36911.080 M	47.4	+10.4	+3.4	-107.0		+0.0	-45.8	-40.0	-5.8	Ant1
10	36761.398 M	47.3	+10.4	+3.4	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
11	36763.621 M	47.3	+10.4	+3.4	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
12	36700.948 M	47.3	+10.4	+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	36562.810 M	47.2	+10.5	+3.3	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
15	36529.777 M	47.2	+10.5	+3.3	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
16	36819.937 M	47.2	+10.4	+3.4	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
17	36813.515 M	47.2	+10.4	+3.4	-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

Page 320 of 406 Report No.: 103300-10A



19	36717.965 M	47.0	+10.4	+3.4	-107.0	+0.0	-46.2	-40.0	-6.2	Ant1
20	36815.738 M	46.9	+10.4	+3.4	-107.0	+0.0	-46.3	-40.0	-6.3	Ant1
21	36818.208 M	46.9	+10.4	+3.4	-107.0	+0.0	-46.3	-40.0	-6.3	Ant1
22	36344.592 M	46.8	+10.5	+3.3	-107.0	+0.0	-46.4	-40.0	-6.4	Ant1
	36747.995 M	46.7	+10.4		-107.0	+0.0	-46.5	-40.0	-6.5	Ant1
	3797.077M Ave	35.1	+9.9	+1.0	-107.0	+0.0	-61.0	-40.0	-21.0	Ant1
٨	3797.077M	63.4	+9.9	+1.0	-107.0	+0.0	-32.7	-40.0	+7.3	Ant1
	3809.089M Ave	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
	3836.116M Ave	34.8	+9.9	+1.0	-107.0	+0.0	-61.3	-40.0	-21.3	Ant1
٨	3836.116M	66.8	+9.9	+1.0	-107.0	+0.0	-29.3	-40.0	+10.7	Ant1
30	7106.383M Ave	29.1	+10.0	+1.5	-107.0	+0.0	-66.4	-40.0	-26.4	Ant1
٨	7106.383M	54.0	+10.0	+1.5	-107.0	+0.0	-41.5	-40.0	-1.5	Ant1
32	7113.390M Ave	29.0	+10.0	+1.5	-107.0	+0.0	-66.5	-40.0	-26.5	Ant1
٨	7113.390M	54.1	+10.0	+1.5	-107.0	+0.0	-41.4	-40.0	-1.4	Ant1
	3910.190M Ave	29.4	+9.9	+1.0	-107.0	+0.0	-66.7	-40.0	-26.7	Ant1
٨	3910.190M	57.7	+9.9	+1.0	-107.0	+0.0	-38.4	-40.0	+1.6	Ant1
	4255.535M Ave	22.5	+9.9	+1.1	-107.0	+0.0	-73.5	-40.0	-33.5	Ant1
	4255.535M	52.2	+9.9	+1.1	-107.0	+0.0	-43.8	-40.0	-3.8	Ant1

Page 321 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

 Work Order #:
 103300
 Date: 3/5/2020

 Test Type:
 Conducted Emissions
 Time: 16:25:32

Tested By: Benny Lovan Sequence#: 5
Software: EMITest 5.03.12 Sequence#: 5
120V 60Hz

**Equipment Tested:** 

Device	Manufacturer	Model #	S/N	
Configuration 1	1/24/2/02/04/04/02	1120002 11	2/21	

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 9kHz - 3530 MHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3555 MHz

Modulation: QAM64 Channel Bandwidth: 10MHz Output Power Software Setting: 33

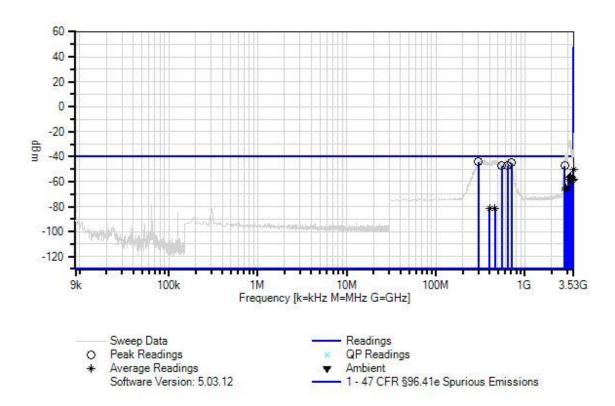
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 322 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 5 Date: 3/5/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 323 of 406 Report No.: 103300-10A



$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	l: Ant1		
1         302.000M         52.5         +9.9         +0.3         -107.0         +0.0         -44.3         -40.0         -4.3         Ant1           2         705.500M         51.7         +9.9         +0.5         -107.0         +0.0         -44.9         -40.0         -4.9         Ant1           3         644.000M         49.4         +9.9         +0.5         -107.0         +0.0         -47.2         -40.0         -7.2         Ant1           4         2794.000M         48.8         +9.9         +0.4         -107.0         +0.0         -47.4         -40.0         -7.4         Ant1           5         551.500M         49.2         +9.9         +0.4         -107.0         +0.0         -47.5         -40.0         -7.5         Ant1           6         3529.503M         46.2         +9.9         +1.0         -107.0         +0.0         -49.9         -40.0         -9.9         Ant1           8         3232.000M         40.7         +9.9         +1.0         -107.0         +0.0         -21.1         -40.0         +18.9         Ant1           Ave         A3232.000M         66.2         +9.9         +0.9         -107.0         +0.0	#		_			_					_	
2 705.500M         51.7         +9.9         +0.5         -107.0         +0.0         -44.9         -40.0         -4.9         Ant1           3 644.000M         49.4         +9.9         +0.5         -107.0         +0.0         -47.2         -40.0         -7.2         Ant1           4 2794.000M         48.8         +9.9         +0.9         -107.0         +0.0         -47.4         -40.0         -7.4         Ant1           5 551.500M         49.2         +9.9         +0.4         -107.0         +0.0         -47.5         -40.0         -7.5         Ant1           6 3529.503M         46.2         +9.9         +1.0         -107.0         +0.0         -49.9         -40.0         -9.9         Ant1           Ave         *3529.503M         75.0         +9.9         +1.0         -107.0         +0.0         -21.1         -40.0         +18.9         Ant1           Ave         *3232.000M         66.2         +9.9         +0.9         -107.0         +0.0         -55.5         -40.0         -15.5         Ant1           Ave         *3171.000M         39.9         +9.9         +0.9         -107.0         +0.0         -56.3         -40.0         +10.6         Ant1			•				dB					
3 644.000M	1	302.000M	52.5	+9.9	+0.3	-107.0		+0.0	-44.3	-40.0	-4.3	Ant1
4 2794,000M         48.8         +9.9         +0.9         -107.0         +0.0         -47.4         -40.0         -7.4         Ant1           5 551.500M         49.2         +9.9         +0.4         -107.0         +0.0         -47.5         -40.0         -7.5         Ant1           6 3529.503M         46.2         +9.9         +1.0         -107.0         +0.0         -49.9         -40.0         -9.9         Ant1           Ave         -3529.503M         75.0         +9.9         +1.0         -107.0         +0.0         -21.1         -40.0         +18.9         Ant1           8 3232.000M         40.7         +9.9         +0.9         -107.0         +0.0         -55.5         -40.0         -15.5         Ant1           Ave         -3232.000M         66.2         +9.9         +0.9         -107.0         +0.0         -30.0         -40.0         +10.0         Ant1           10 3171.000M         39.9         +9.9         +0.9         -107.0         +0.0         -56.3         -40.0         +16.3         Ant1           Ave         -3171.000M         39.3         +9.9         +1.0         -107.0         +0.0         -56.8         -40.0         +16.8 <td< th=""><th>2</th><th>705.500M</th><th>51.7</th><th>+9.9</th><th>+0.5</th><th>-107.0</th><th></th><th>+0.0</th><th>-44.9</th><th>-40.0</th><th>-4.9</th><th>Ant1</th></td<>	2	705.500M	51.7	+9.9	+0.5	-107.0		+0.0	-44.9	-40.0	-4.9	Ant1
5         551.500M         49.2         +9.9         +0.4         -107.0         +0.0         -47.5         -40.0         -7.5         Ant1           6         3529.503M         46.2         +9.9         +1.0         -107.0         +0.0         -49.9         -40.0         -9.9         Ant1           Ave         **3529.503M         75.0         +9.9         +1.0         -107.0         +0.0         -21.1         -40.0         +18.9         Ant1           8         3232.000M         40.7         +9.9         +0.9         -107.0         +0.0         -55.5         -40.0         -15.5         Ant1           Ave         **3232.000M         66.2         +9.9         +0.9         -107.0         +0.0         -56.3         -40.0         +10.0         Ant1           Ave         **3171.000M         39.9         +9.9         +0.9         -107.0         +0.0         -56.3         -40.0         +16.3         Ant1           Ave         **3171.000M         66.8         +9.9         +0.9         -107.0         +0.0         -56.8         -40.0         +16.8         Ant1           Ave         **3289.000M         39.3         +9.9         +1.0         -107.0	3	644.000M	49.4	+9.9	+0.5	-107.0		+0.0	-47.2	-40.0	-7.2	Ant1
6 3529,503M         46.2         +9.9         +1.0         -107.0         +0.0         -49.9         -40.0         -9.9         Ant1           Ave         3529,503M         75.0         +9.9         +1.0         -107.0         +0.0         -21.1         -40.0         +18.9         Ant1           8 3232,000M         40.7         +9.9         +0.9         -107.0         +0.0         -55.5         -40.0         -15.5         Ant1           Ave         -3232,000M         66.2         +9.9         +0.9         -107.0         +0.0         -30.0         -40.0         +10.0         Ant1           10 3171,000M         39.9         +9.9         +0.9         -107.0         +0.0         -56.3         -40.0         -16.3         Ant1           Ave         -40.0         -40.9         +0.9         -107.0         +0.0         -29.4         -40.0         +10.6         Ant1           Ave         -40.0         -40.9         +1.0         -107.0         +0.0         -56.8         -40.0         -16.8         Ant1           Ave         -40.0         -40.0         +9.9         +1.0         -107.0         +0.0         -58.0         -40.0         -18.0         Ant1	4	2794.000M	48.8	+9.9	+0.9	-107.0		+0.0	-47.4	-40.0	-7.4	Ant1
Ave         ^ 3529.503M         75.0         +9.9         +1.0         -107.0         +0.0         -21.1         -40.0         +18.9         Ant1           8 3232.000M         40.7         +9.9         +0.9         -107.0         +0.0         -55.5         -40.0         -15.5         Ant1           Ave         ^ 3232.000M         66.2         +9.9         +0.9         -107.0         +0.0         -30.0         -40.0         +10.0         Ant1           10 3171.000M         39.9         +9.9         +0.9         -107.0         +0.0         -56.3         -40.0         +10.3         Ant1           Ave         ^ 3171.000M         66.8         +9.9         +0.9         -107.0         +0.0         -29.4         -40.0         +10.6         Ant1           Ave         ^ 3289.000M         39.3         +9.9         +1.0         -107.0         +0.0         -56.8         -40.0         +16.8         Ant1           Ave         ^ 3289.000M         38.2         +9.9         +1.0         -107.0         +0.0         -35.2         -40.0         +4.8         Ant1           Ave         ^ 3081.000M         38.2         +9.9         +0.9         -107.0         +0.0 <td< td=""><td>5</td><td>551.500M</td><td>49.2</td><td>+9.9</td><td>+0.4</td><td>-107.0</td><td></td><td>+0.0</td><td>-47.5</td><td>-40.0</td><td>-7.5</td><td>Ant1</td></td<>	5	551.500M	49.2	+9.9	+0.4	-107.0		+0.0	-47.5	-40.0	-7.5	Ant1
8 3232.000M       40.7       +9.9       +0.9       -107.0       +0.0       -55.5       -40.0       -15.5       Ant1         Ave       * 3232.000M       66.2       +9.9       +0.9       -107.0       +0.0       -30.0       -40.0       +10.0       Ant1         10 3171.000M       39.9       +9.9       +0.9       -107.0       +0.0       -56.3       -40.0       -16.3       Ant1         Ave       * 3171.000M       66.8       +9.9       +0.9       -107.0       +0.0       -29.4       -40.0       +10.6       Ant1         12 3289.000M       39.3       +9.9       +1.0       -107.0       +0.0       -56.8       -40.0       -16.8       Ant1         Ave       * 3289.000M       60.9       +9.9       +1.0       -107.0       +0.0       -35.2       -40.0       +4.8       Ant1         14 3081.000M       38.2       +9.9       +0.9       -107.0       +0.0       -58.0       -40.0       +18.0       Ant1         Ave       * 3081.000M       66.1       +9.9       +1.0       -107.0       +0.0       -58.4       -40.0       +18.4       Ant1         16 3517.640M       37.7       +9.9       +1.0       -			46.2	+9.9	+1.0	-107.0		+0.0	-49.9	-40.0	-9.9	Ant1
Ave         ^ 3232.000M         66.2         +9.9         +0.9         -107.0         +0.0         -30.0         -40.0         +10.0         Ant1           10         3171.000M         39.9         +9.9         +0.9         -107.0         +0.0         -56.3         -40.0         -16.3         Ant1           Ave         ^ 3171.000M         66.8         +9.9         +0.9         -107.0         +0.0         -29.4         -40.0         +10.6         Ant1           12         3289.000M         39.3         +9.9         +1.0         -107.0         +0.0         -56.8         -40.0         -16.8         Ant1           Ave         ^ 3289.000M         60.9         +9.9         +1.0         -107.0         +0.0         -35.2         -40.0         +4.8         Ant1           14         3081.000M         38.2         +9.9         +0.9         -107.0         +0.0         -58.0         -40.0         -18.0         Ant1           Ave         ^ 3081.000M         66.1         +9.9         +0.9         -107.0         +0.0         -58.4         -40.0         +9.9         Ant1           Ave         ^ 3517.640M         37.7         +9.9         +1.0         -107.0	^	3529.503M	75.0	+9.9	+1.0	-107.0		+0.0	-21.1	-40.0	+18.9	Ant1
10 3171.000M   39.9   +9.9   +0.9   -107.0   +0.0   -56.3   -40.0   -16.3   Ant1			40.7	+9.9	+0.9	-107.0		+0.0	-55.5	-40.0	-15.5	Ant1
Ave         ^ 3171.000M         66.8         +9.9         +0.9         -107.0         +0.0         -29.4         -40.0         +10.6         Ant1           12 3289.000M         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           14 3081.000M         38.2         +9.9         +0.9         -107.0         +0.0         -58.0         -40.0         -18.0         Ant1           Ave         ^ 3081.000M         66.1         +9.9         +0.9         -107.0         +0.0         -30.1         -40.0         +9.9         Ant1           16 3517.640M         37.7         +9.9         +1.0         -107.0         +0.0         -58.4         -40.0         -18.4         Ant1           Ave         ^ 3517.640M         61.5         +9.9         +1.0         -107.0         +0.0         -34.6         -40.0         +5.4         Ant1           18 3362.000M         37.1         +9.9         +1.0         -107.0         +0.0         -59.0         -40.0         -19.0	٨	3232.000M	66.2	+9.9	+0.9	-107.0		+0.0	-30.0	-40.0	+10.0	Ant1
12 3289.000M       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         14 3081.000M       38.2       +9.9       +0.9       -107.0       +0.0       -58.0       -40.0       -18.0       Ant1         Ave       ^ 3081.000M       66.1       +9.9       +0.9       -107.0       +0.0       -30.1       -40.0       +9.9       Ant1         16 3517.640M       37.7       +9.9       +1.0       -107.0       +0.0       -58.4       -40.0       -18.4       Ant1         Ave       ^ 3517.640M       61.5       +9.9       +1.0       -107.0       +0.0       -34.6       -40.0       +5.4       Ant1         18 3362.000M       37.1       +9.9       +1.0       -107.0       +0.0       -59.0       -40.0       -19.0       Ant1         Ave       ^ 3362.000M       59.3       +9.9       +1.0       -107.0       +0.0       -36.8       -40.0       +3.2       Ant1         20 3456.000M       36.9       +9.9       +1.0       -107.0			39.9	+9.9	+0.9	-107.0		+0.0	-56.3	-40.0	-16.3	Ant1
Ave         ^ 3289.000M       60.9       +9.9       +1.0       -107.0       +0.0       -35.2       -40.0       +4.8       Ant1         14 3081.000M       38.2       +9.9       +0.9       -107.0       +0.0       -58.0       -40.0       -18.0       Ant1         Ave       16 3517.640M       37.7       +9.9       +1.0       -107.0       +0.0       -58.4       -40.0       +18.4       Ant1         Ave       18 3362.000M       61.5       +9.9       +1.0       -107.0       +0.0       -34.6       -40.0       +5.4       Ant1         18 3362.000M       37.1       +9.9       +1.0       -107.0       +0.0       -59.0       -40.0       -19.0       Ant1         Ave       10 3456.000M       36.9       +9.9       +1.0       -107.0       +0.0       -59.2       -40.0       +3.2       Ant1         20 3456.000M       36.9       +9.9       +1.0       -107.0       +0.0       -59.2       -40.0       -19.2       Ant1         Ave       10 3456.000M       36.9       +9.9       +1.0       -107.0       +0.0       -59.2       -40.0       -19.2       Ant1	^	3171.000M	66.8	+9.9	+0.9	-107.0		+0.0	-29.4	-40.0	+10.6	Ant1
^ 3289.000M       60.9       +9.9       +1.0       -107.0       +0.0       -35.2       -40.0       +4.8       Ant1         14 3081.000M       38.2       +9.9       +0.9       -107.0       +0.0       -58.0       -40.0       -18.0       Ant1         Ave       16 3517.640M       37.7       +9.9       +1.0       -107.0       +0.0       -58.4       -40.0       +18.4       Ant1         Ave       Ave       -3517.640M       61.5       +9.9       +1.0       -107.0       +0.0       -34.6       -40.0       +5.4       Ant1         18 3362.000M       37.1       +9.9       +1.0       -107.0       +0.0       -59.0       -40.0       -19.0       Ant1         Ave       A362.000M       59.3       +9.9       +1.0       -107.0       +0.0       -36.8       -40.0       +3.2       Ant1         20 3456.000M       36.9       +9.9       +1.0       -107.0       +0.0       -59.2       -40.0       -19.2       Ant1         Ave			39.3	+9.9	+1.0	-107.0		+0.0	-56.8	-40.0	-16.8	Ant1
Ave         ^ 3081.000M       66.1       +9.9       +0.9       -107.0       +0.0       -30.1       -40.0       +9.9       Ant1         16 3517.640M       37.7       +9.9       +1.0       -107.0       +0.0       -58.4       -40.0       -18.4       Ant1         Ave       ^ 3517.640M       61.5       +9.9       +1.0       -107.0       +0.0       -34.6       -40.0       +5.4       Ant1         18 3362.000M       37.1       +9.9       +1.0       -107.0       +0.0       -59.0       -40.0       -19.0       Ant1         Ave       ^ 3362.000M       59.3       +9.9       +1.0       -107.0       +0.0       -36.8       -40.0       +3.2       Ant1         20 3456.000M       36.9       +9.9       +1.0       -107.0       +0.0       -59.2       -40.0       -19.2       Ant1         Ave			60.9	+9.9	+1.0	-107.0		+0.0	-35.2	-40.0	+4.8	Ant1
16 3517.640M       37.7       +9.9       +1.0       -107.0       +0.0       -58.4       -40.0       -18.4       Ant1         Ave       ^ 3517.640M       61.5       +9.9       +1.0       -107.0       +0.0       -34.6       -40.0       +5.4       Ant1         18 3362.000M       37.1       +9.9       +1.0       -107.0       +0.0       -59.0       -40.0       -19.0       Ant1         Ave       ^ 3362.000M       59.3       +9.9       +1.0       -107.0       +0.0       -36.8       -40.0       +3.2       Ant1         20 3456.000M       36.9       +9.9       +1.0       -107.0       +0.0       -59.2       -40.0       -19.2       Ant1         Ave			38.2	+9.9	+0.9	-107.0		+0.0	-58.0	-40.0	-18.0	Ant1
Ave  ^ 3517.640M 61.5 +9.9 +1.0 -107.0 +0.0 -34.6 -40.0 +5.4 Ant1  18 3362.000M 37.1 +9.9 +1.0 -107.0 +0.0 -59.0 -40.0 -19.0 Ant1  Ave  ^ 3362.000M 59.3 +9.9 +1.0 -107.0 +0.0 -36.8 -40.0 +3.2 Ant1  20 3456.000M 36.9 +9.9 +1.0 -107.0 +0.0 -59.2 -40.0 -19.2 Ant1  Ave			66.1	+9.9	+0.9	-107.0		+0.0	-30.1	-40.0	+9.9	Ant1
18 3362.000M 37.1 +9.9 +1.0 -107.0 +0.0 -59.0 -40.0 -19.0 Ant1 Ave  ^ 3362.000M 59.3 +9.9 +1.0 -107.0 +0.0 -36.8 -40.0 +3.2 Ant1  20 3456.000M 36.9 +9.9 +1.0 -107.0 +0.0 -59.2 -40.0 -19.2 Ant1 Ave			37.7	+9.9	+1.0	-107.0		+0.0	-58.4	-40.0	-18.4	Ant1
Ave     ^ 3362.000M    59.3	٨	3517.640M	61.5	+9.9	+1.0	-107.0		+0.0	-34.6	-40.0	+5.4	Ant1
20 3456.000M 36.9 +9.9 +1.0 -107.0 +0.0 -59.2 -40.0 -19.2 Ant1 Ave			37.1	+9.9	+1.0	-107.0		+0.0	-59.0	-40.0	-19.0	Ant1
Ave	٨	3362.000M	59.3	+9.9	+1.0	-107.0		+0.0	-36.8	-40.0	+3.2	Ant1
^ 3456.000M 57.5 +9.9 +1.0 -107.0 +0.0 -38.6 -40.0 +1.4 Ant1			36.9	+9.9	+1.0	-107.0		+0.0	-59.2	-40.0	-19.2	Ant1
			57.5	+9.9	+1.0	-107.0		+0.0	-38.6	-40.0	+1.4	Ant1
22 2999.000M 31.6 +9.9 +0.9 -107.0 +0.0 -64.6 -40.0 -24.6 Ant1 Ave			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			57.6	+9.9	+0.9	-107.0		+0.0	-38.6	-40.0	+1.4	Ant1

Page 324 of 406 Report No.: 103300-10A



24 2862.000M	31.2	+9.9	+0.9	-107.0	+0.0	-65.0	-40.0	-25.0	Ant1
Ave									
^ 2862.000M	57.8	+9.9	+0.9	-107.0	+0.0	-38.4	-40.0	+1.6	Ant1
26 2919.000M	29.4	+9.9	+0.9	-107.0	+0.0	-66.8	-40.0	-26.8	Ant1
Ave									
^ 2919.000M	55.3	+9.9	+0.9	-107.0	+0.0	-40.9	-40.0	-0.9	Ant1
28 400.000M	15.1	+9.9	+0.4	-107.0	+0.0	-81.6	-40.0	-41.6	Ant1
Ave									
^ 400.000M	53.9	+9.9	+0.4	-107.0	+0.0	-42.8	-40.0	-2.8	Ant1
30 462.000M	14.9	+9.9	+0.4	-107.0	+0.0	-81.8	-40.0	-41.8	Ant1
Ave									
^ 462.000M	53.8	+9.9	+0.4	-107.0	+0.0	-42.9	-40.0	-2.9	Ant1

Page 325 of 406 Report No.: 103300-10A



Customer: Mercury Wireless

Specification: 47 CFR §96.41e Spurious Emissions

Work Order #: 103300 Date: 3/5/2020
Test Type: Conducted Emissions Time: 16:39:02
Tested By: Benny Lovan Sequence#: 6

Software: EMITest 5.03.12 Sequence... 5

**Equipment Tested:** 

Device	Manufacturer	Model #	S/N	
Configuration 1			~.*1	

## Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 1				

#### Test Conditions / Notes:

Conducted Spurious Emissions 3.72 - 37 GHz

Temperature: 23°C Humidity: 28%

Atmospheric Pressure: 102.5 kPa

Transmit Frequency Range: 3550 - 3700

RBW:

200Hz (9k - 150k), 9kHz (150k-30M), 1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:

Transmit Frequency: 3555 MHz

Modulation: QAM64 Channel Bandwidth: 10MHz Output Power Software Setting: 33

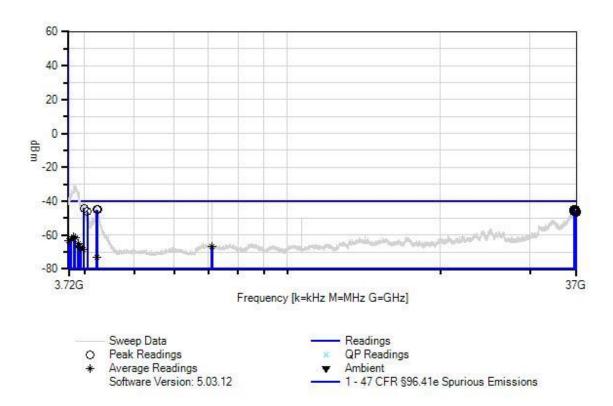
The EUT is a CBSD and is located on a table, directly connected to a spectrum analyzer through 10dB of attenuation. The unit was programmed to output the transmitter settings specified above in a continuous transmit mode.

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.

Page 326 of 406 Report No.: 103300-10A



Mercury Wireless WO#: 103300 Sequence#: 6 Date: 3/5/2020 47 CFR §96.41e Spurious Emissions Test Lead: 120V 60Hz Ant1



# Test Equipment:

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

Page 327 of 406 Report No.: 103300-10A



Measu	rement Data:	Re	eading lis	ted by m	argin.			Test Lead	l: Ant1		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dBm	dBm	dB	Ant
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	36543.791 M	48.3	+10.5	+3.3	-107.0		+0.0	-44.9	-40.0	-4.9	Ant1
4	36784.369 M	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	36707.955 M	47.7	+10.4	+3.4	-107.0		+0.0	-45.5	-40.0	-5.5	Ant1
7	36549.797 M	47.6	+10.5	+3.3	-107.0		+0.0	-45.6	-40.0	-5.6	Ant1
8	36786.098 M	47.5	+10.4	+3.4	-107.0		+0.0	-45.7	-40.0	-5.7	Ant1
9	36656.904 M	47.5	+10.4	+3.4	-107.0		+0.0	-45.7	-40.0	-5.7	Ant1
10	36783.381 M	47.3	+10.4	+3.4	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
11	36945.907 M	47.3	+10.4	+3.4	-107.0		+0.0	-45.9	-40.0	-5.9	Ant1
12	36777.206 M	47.2	+10.4	+3.4	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
13	36592.840 M	47.1	+10.5	+3.3	-107.0		+0.0	-46.1	-40.0	-6.1	Ant1
14	36618.866 M	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	36962.703 M	46.8	+10.4	+3.4	-107.0		+0.0	-46.4	-40.0	-6.4	Ant1

Page 328 of 406 Report No.: 103300-10A