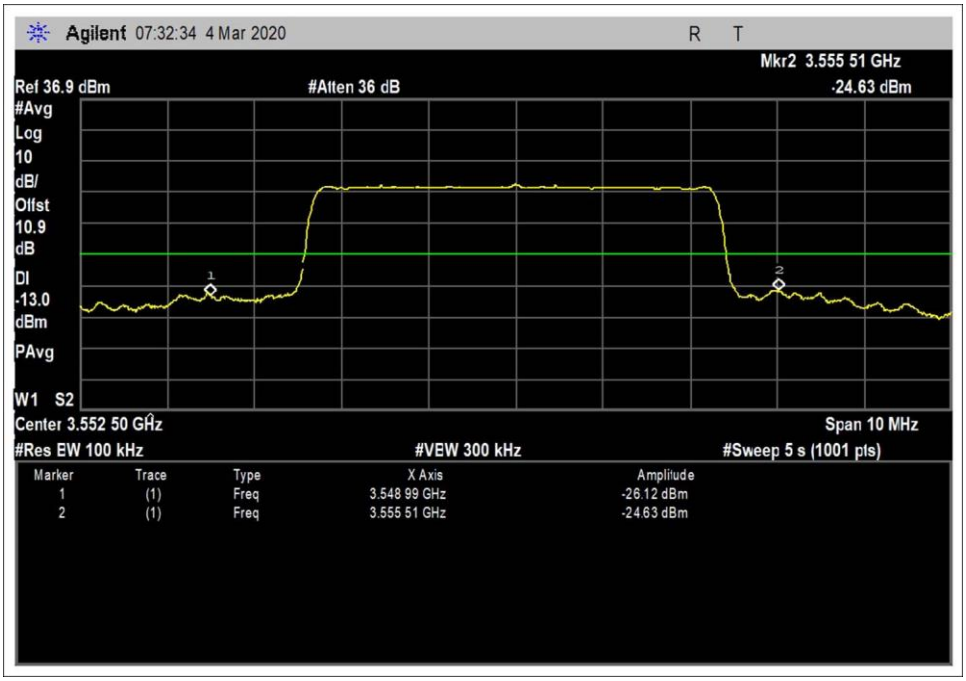
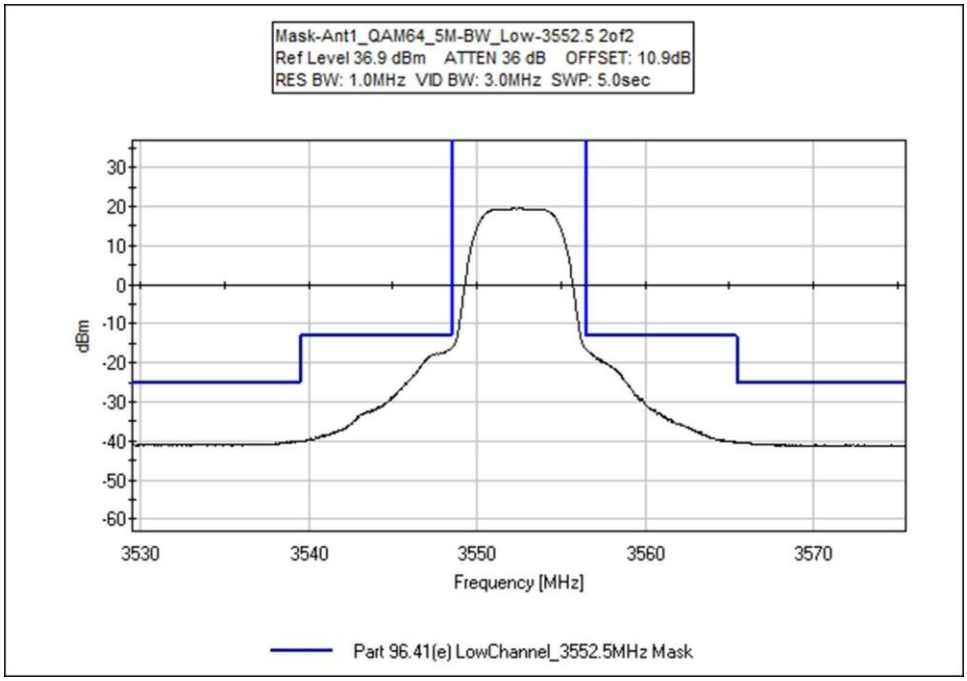
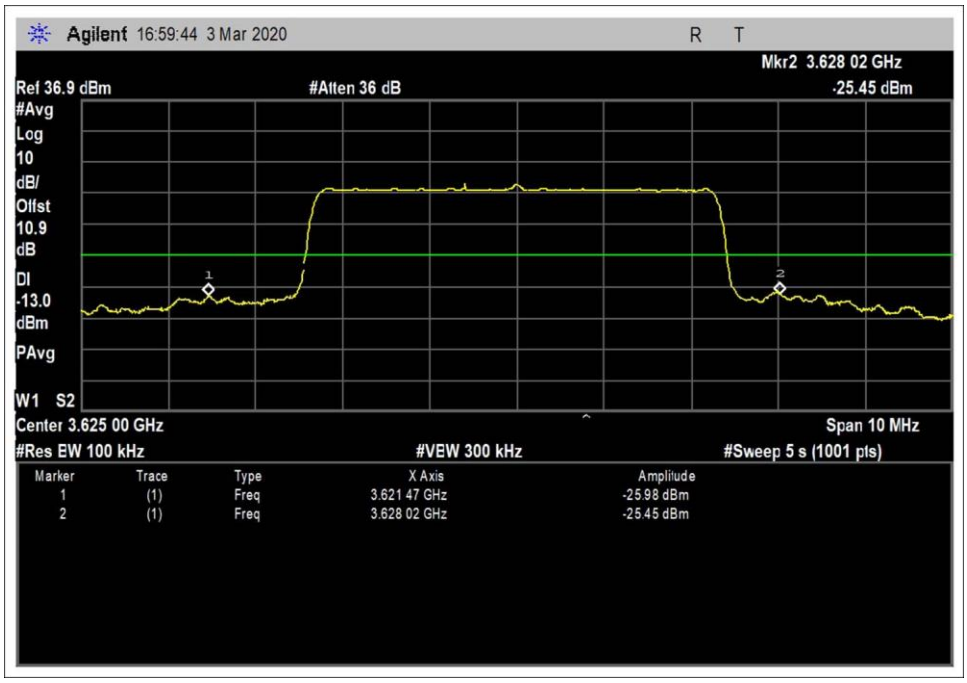
QAM64

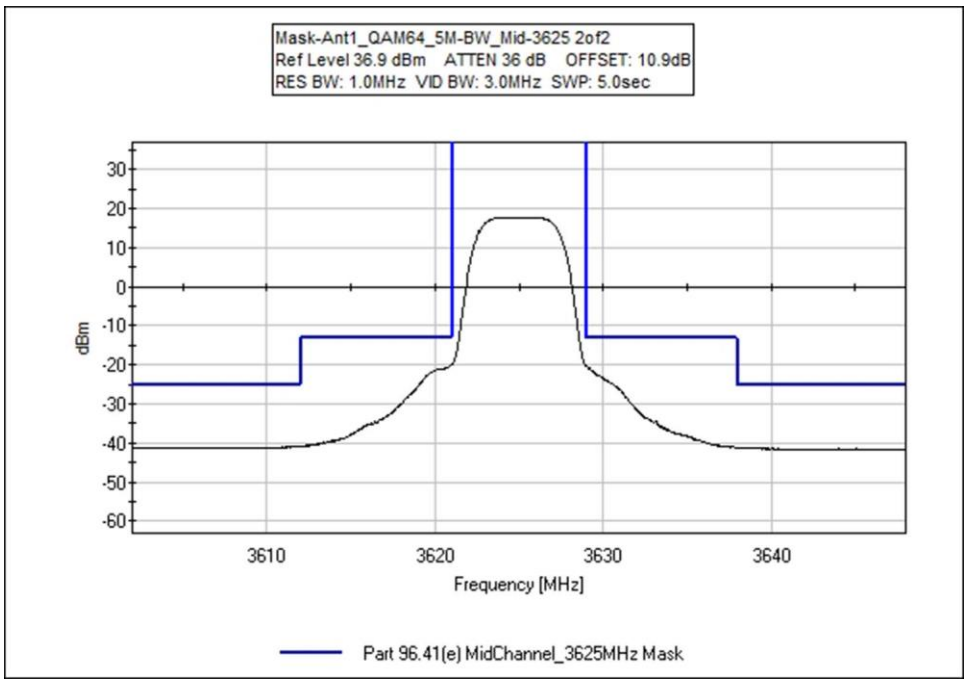


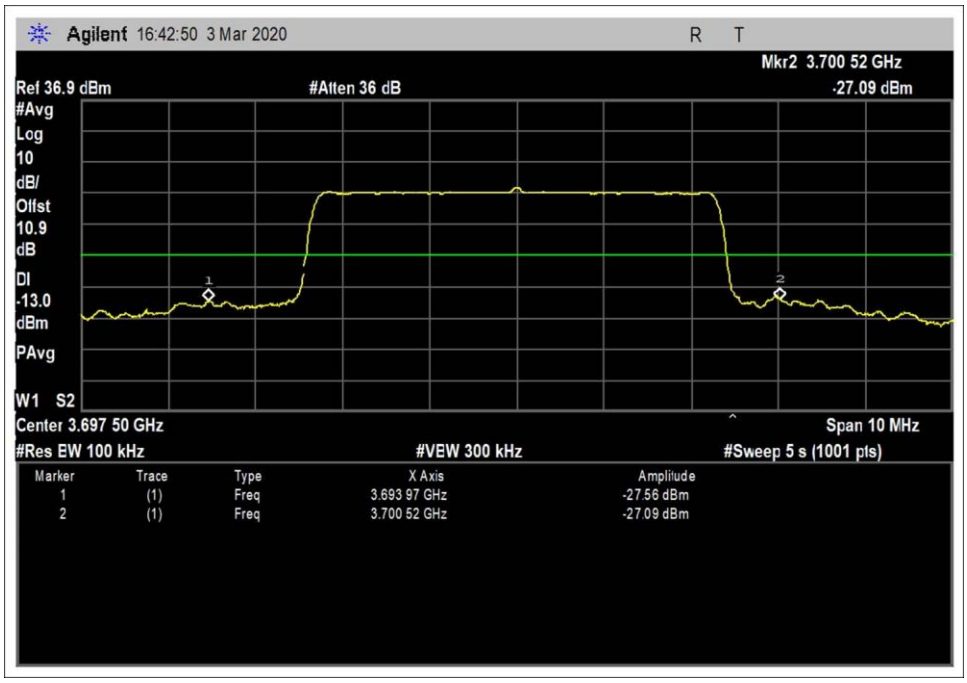
Low Channel



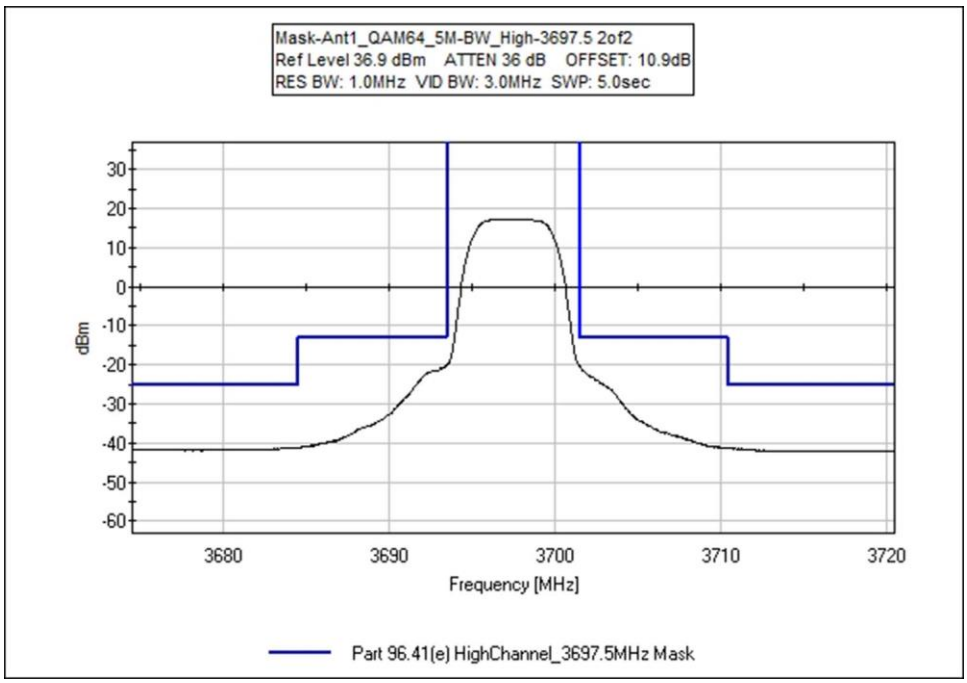


Middle Channel

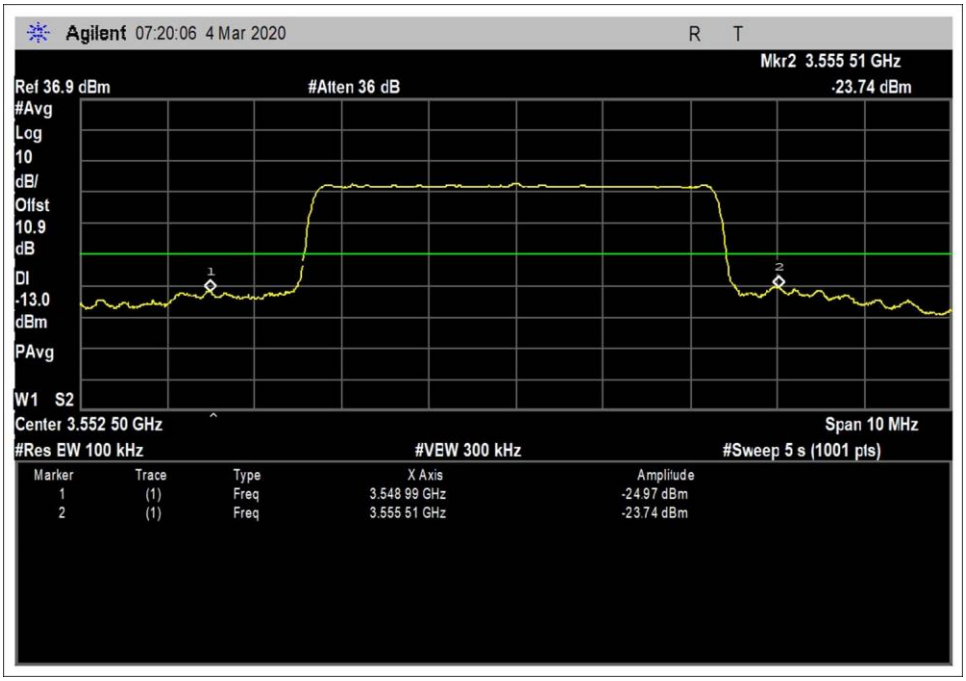




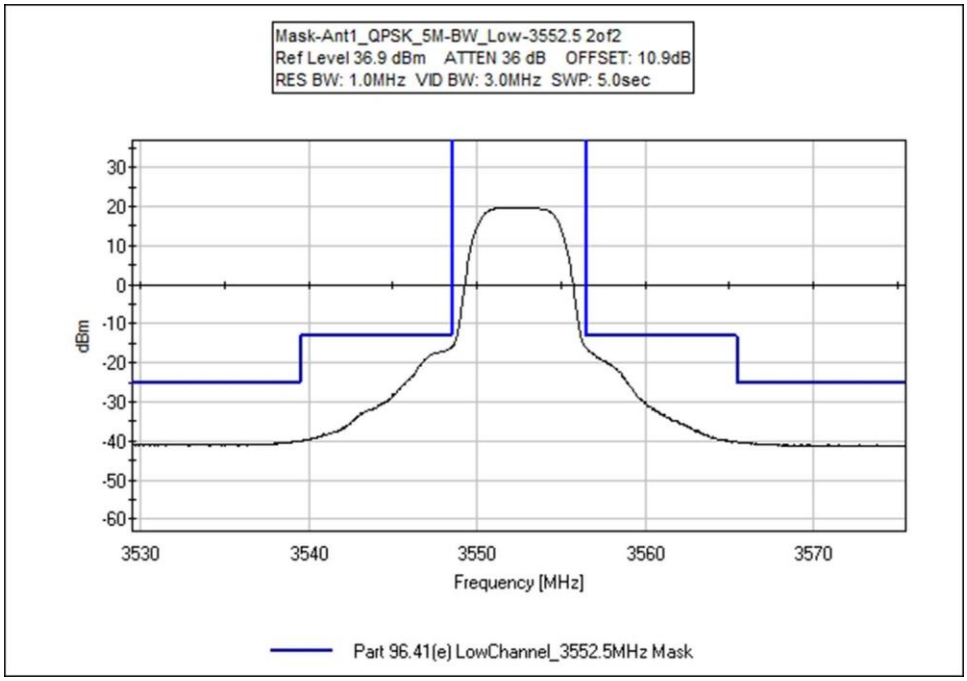
High Channel

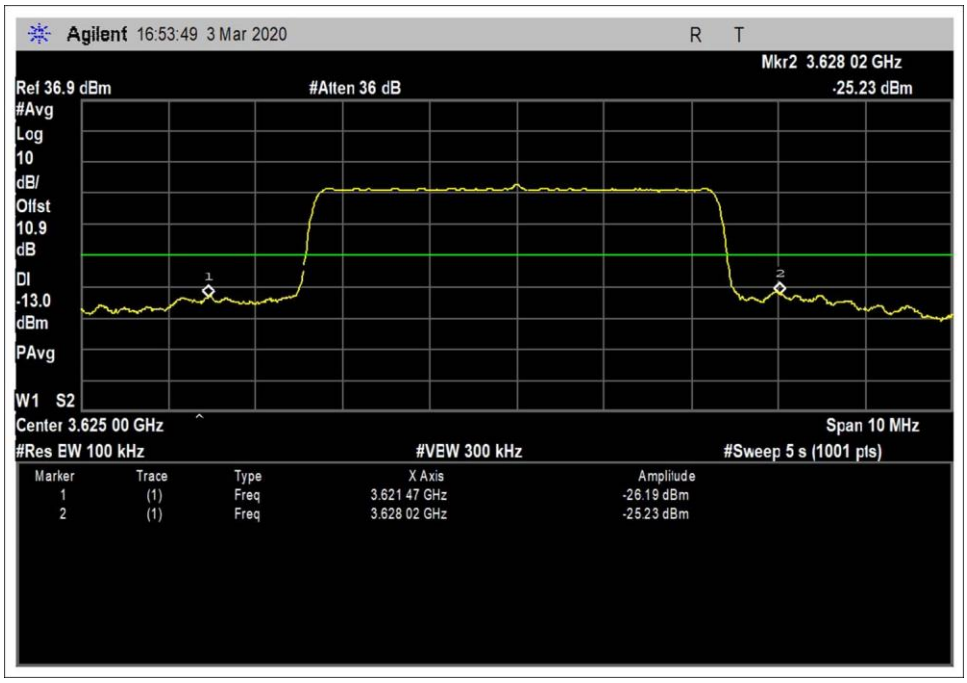


QPSK

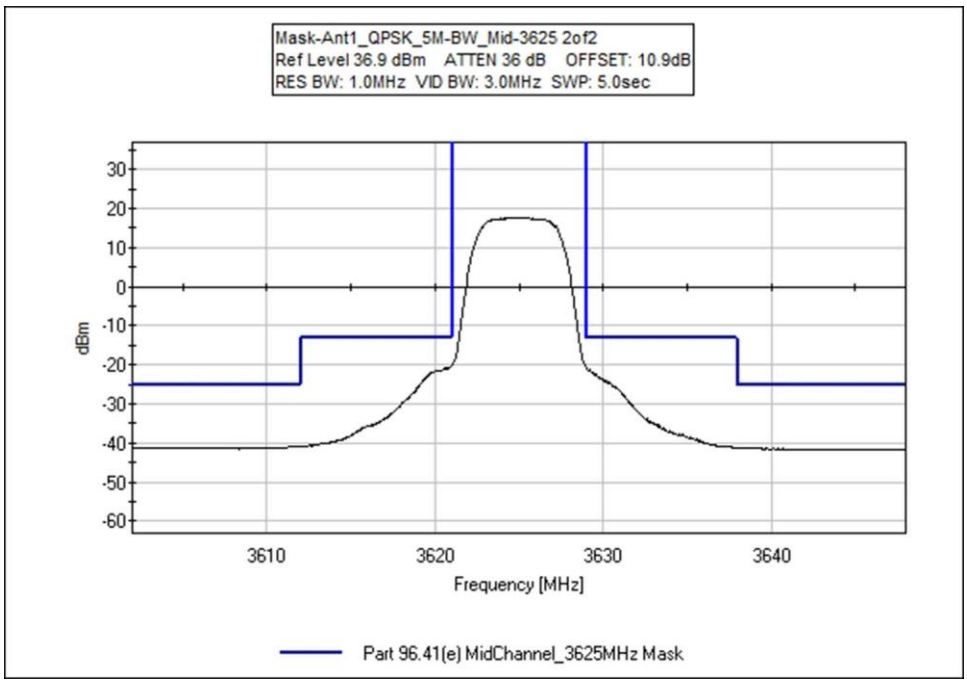


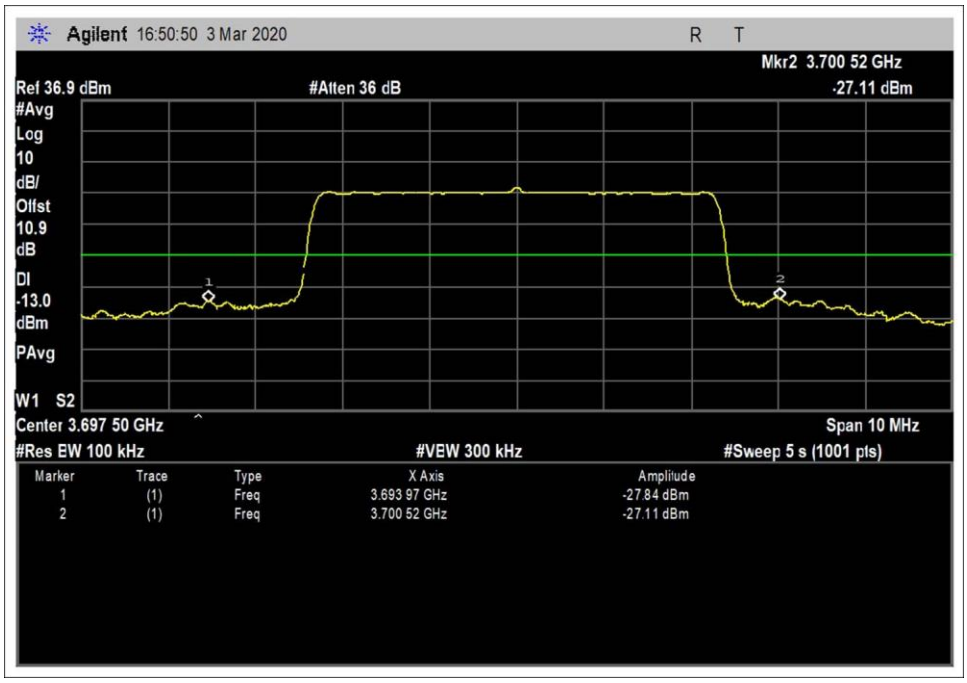
Low Channel



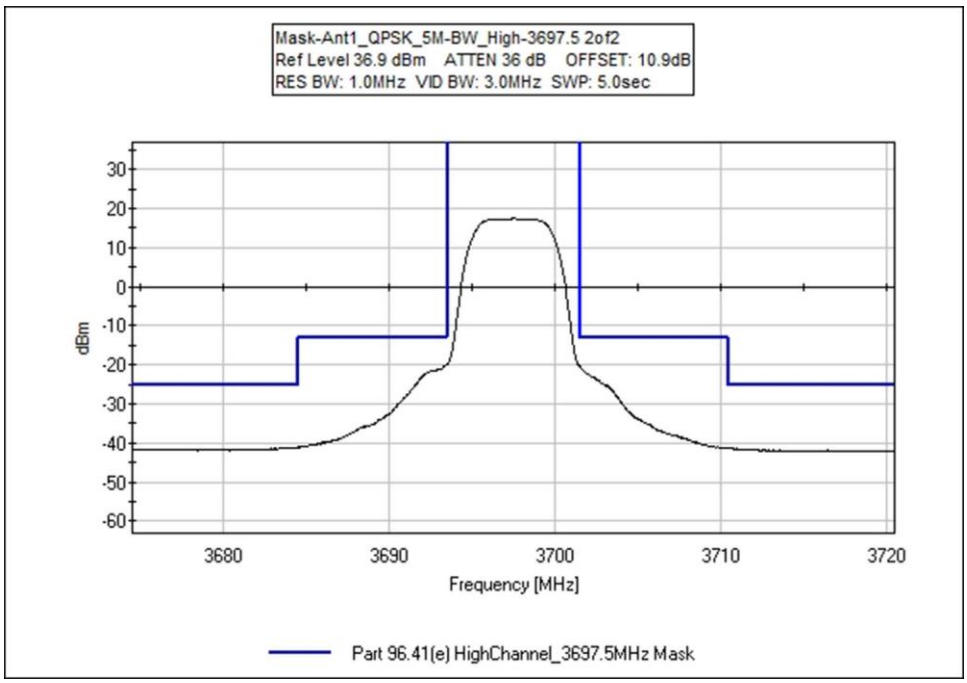


Middle Channel



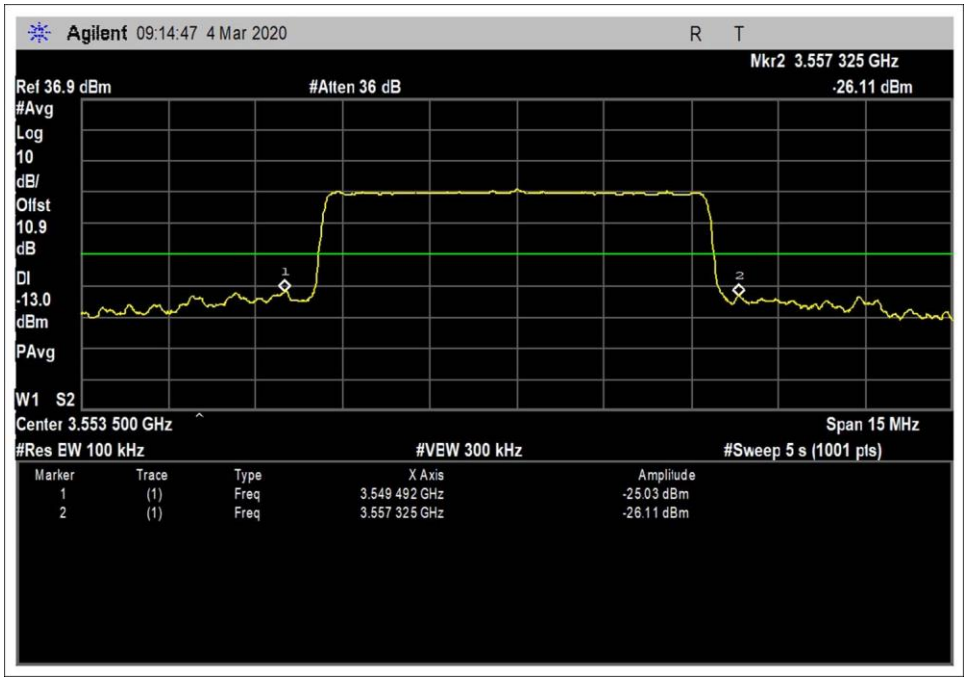


High Channel

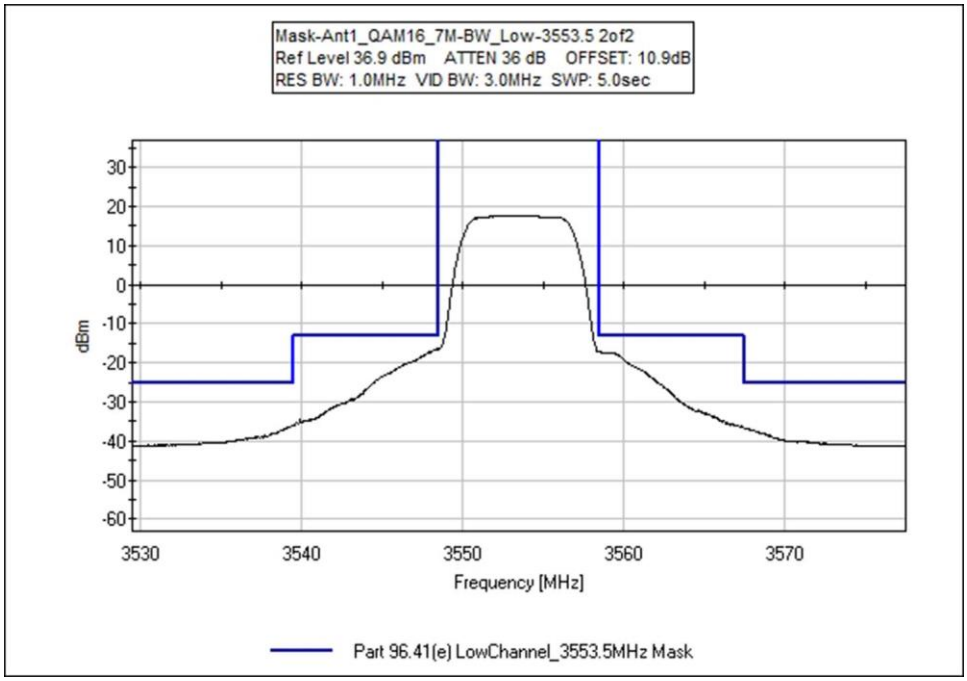


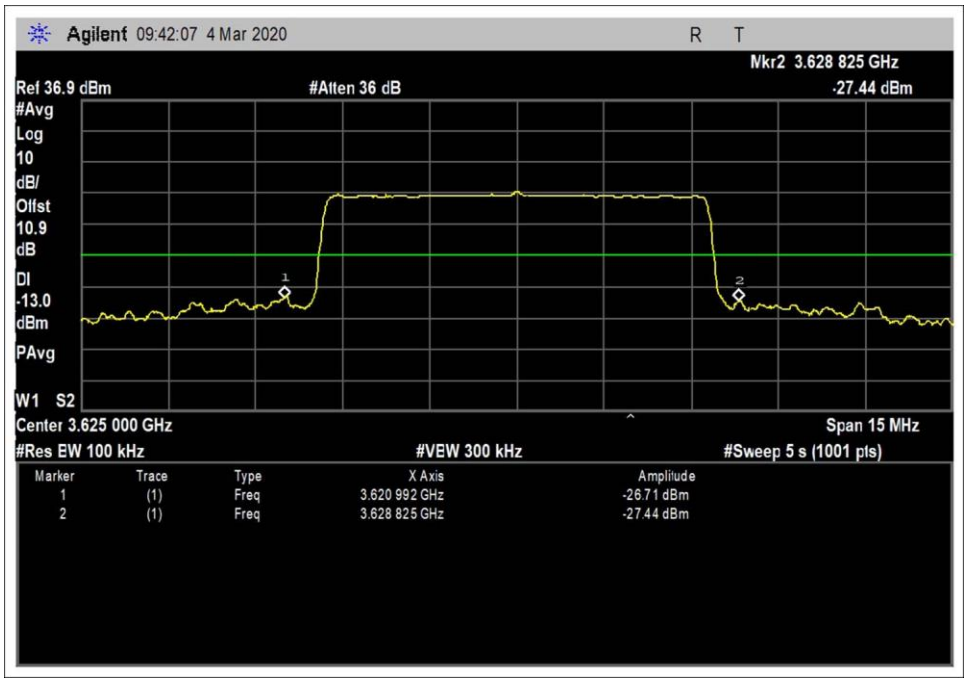
Channel Bandwidth 7MHz

QAM16

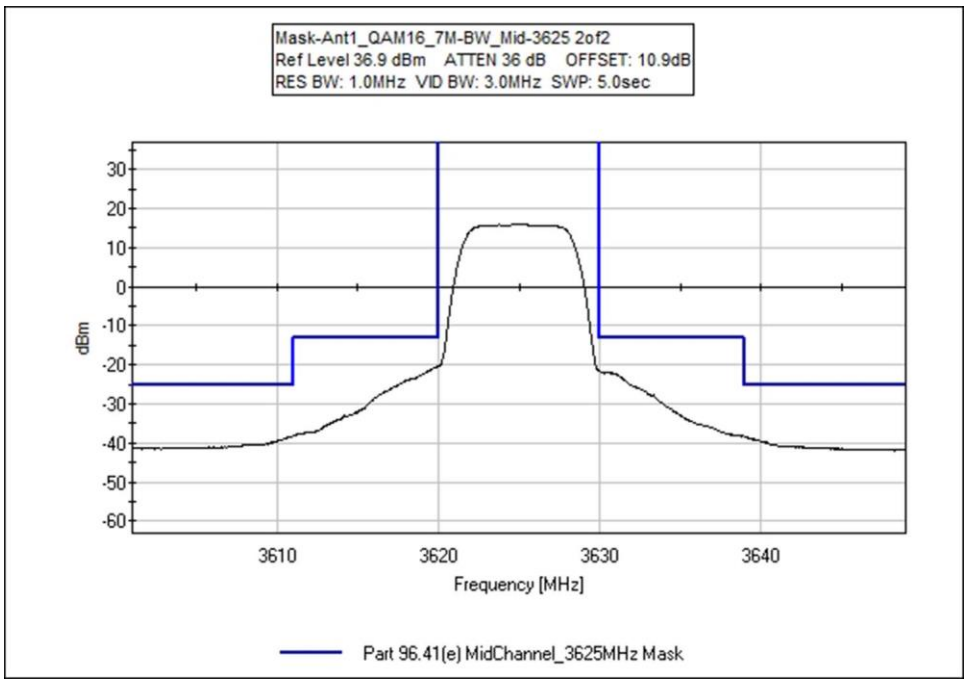


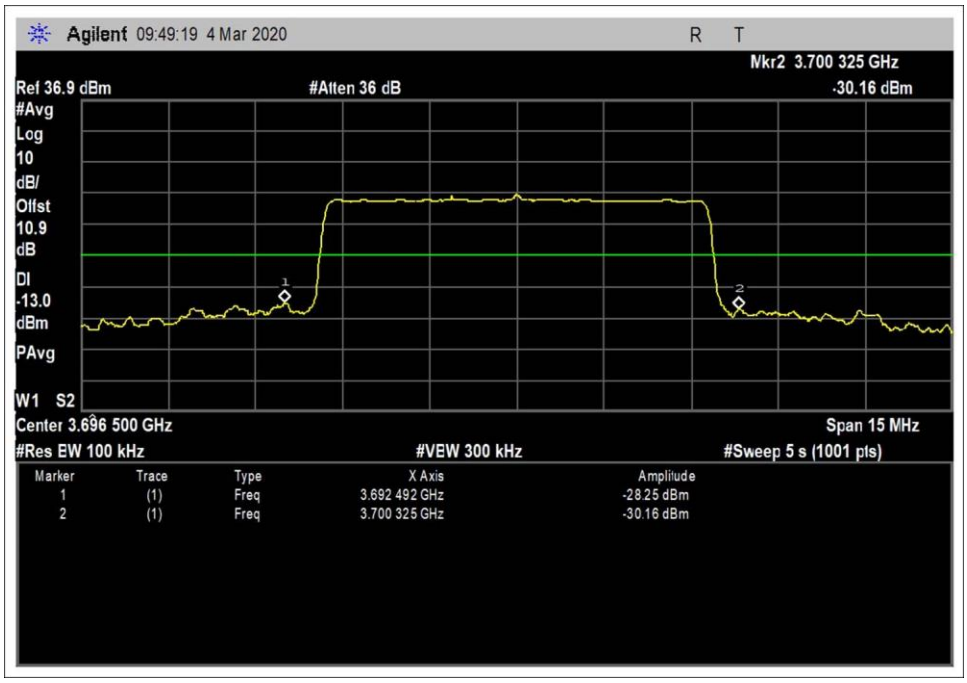
Low Channel



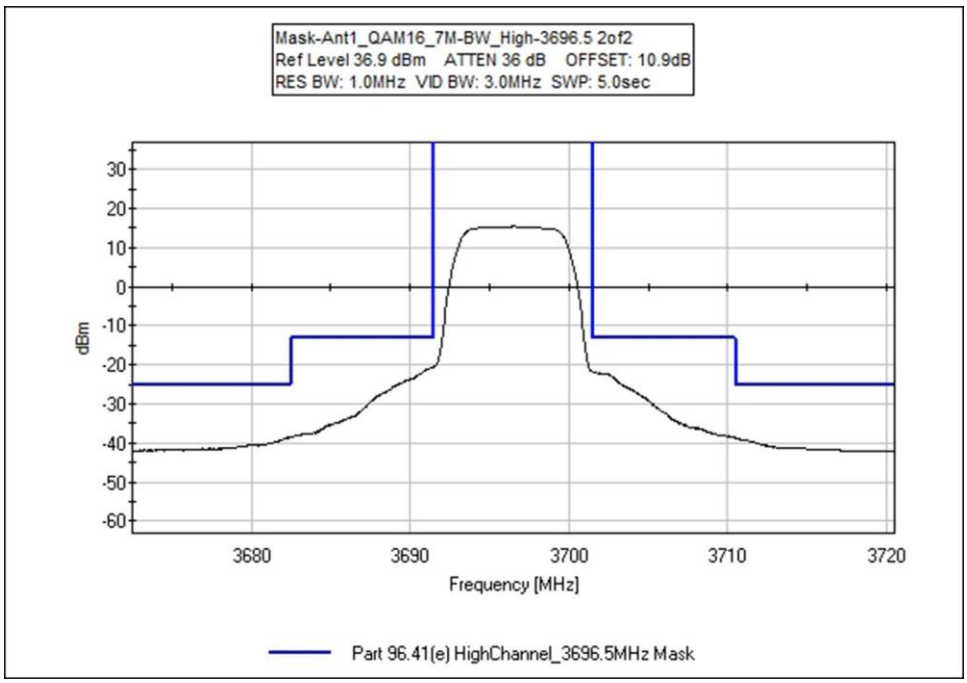


Middle Channel

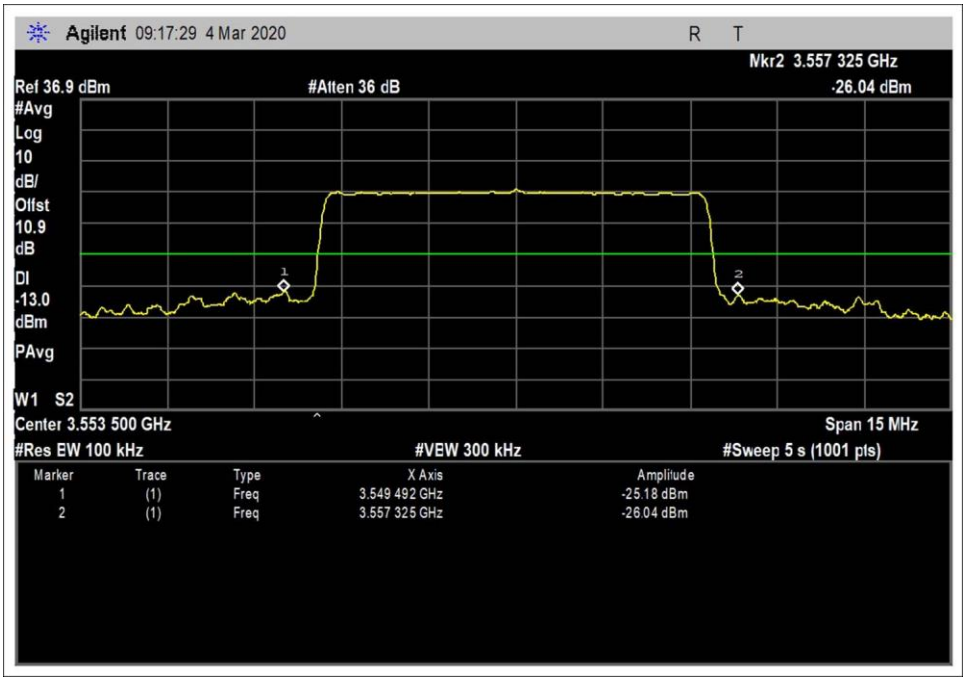




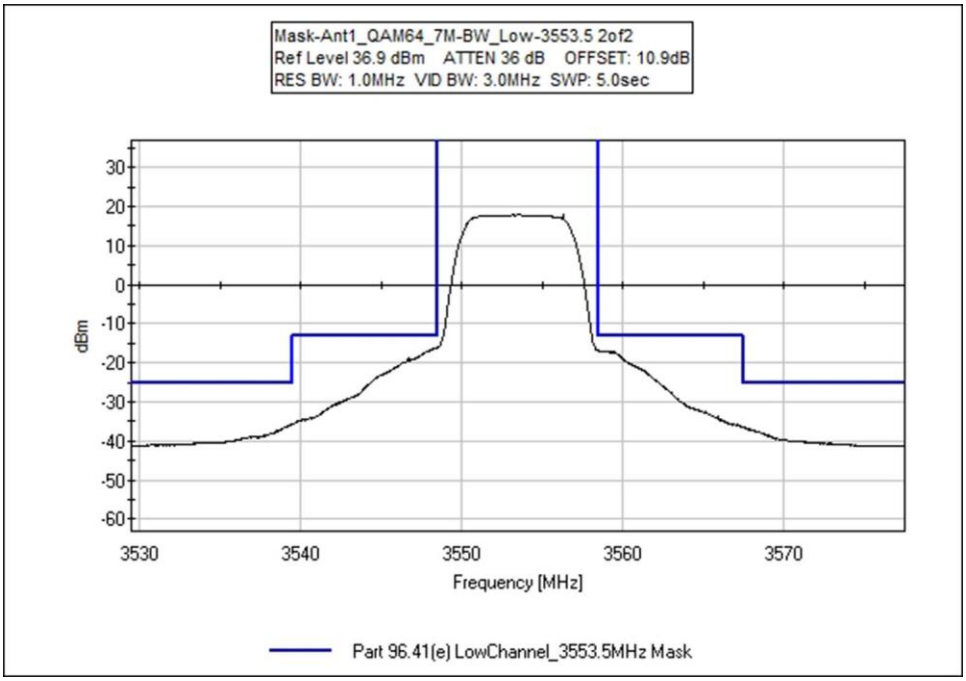
High Channel

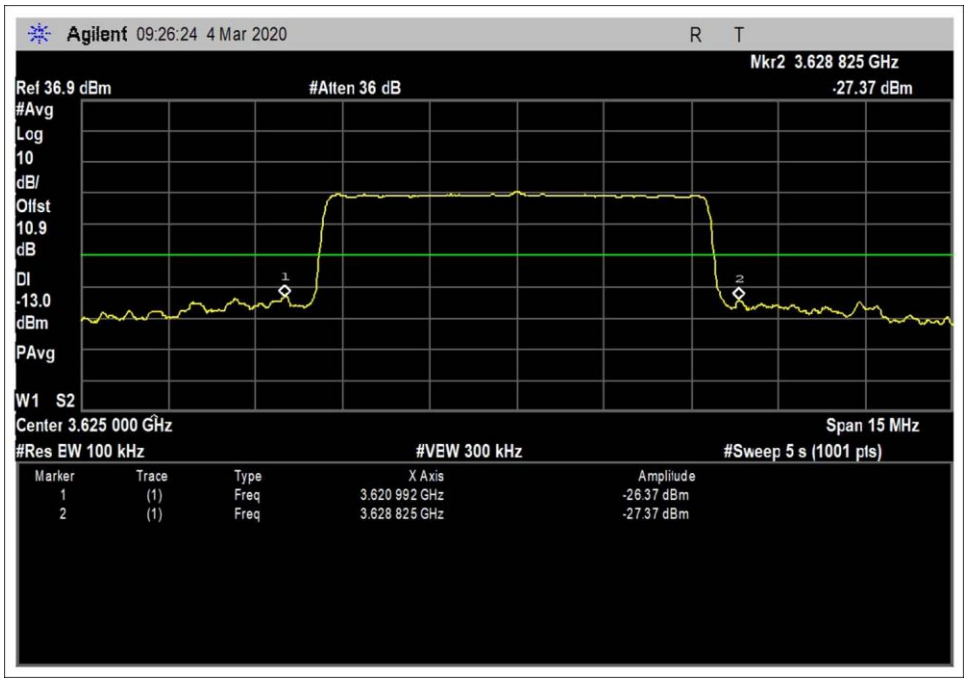


QAM64

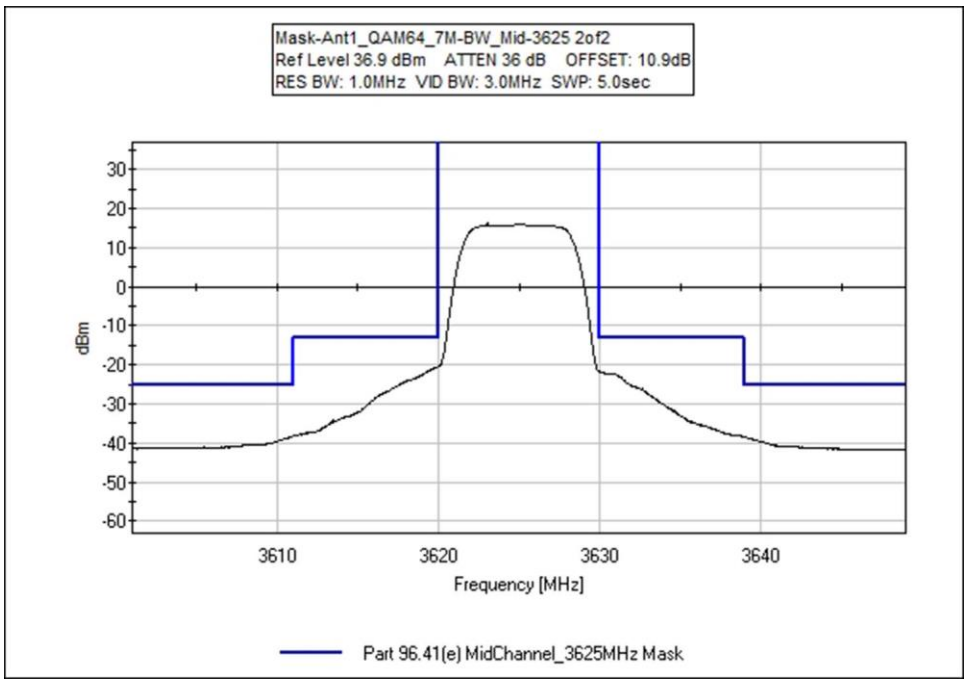


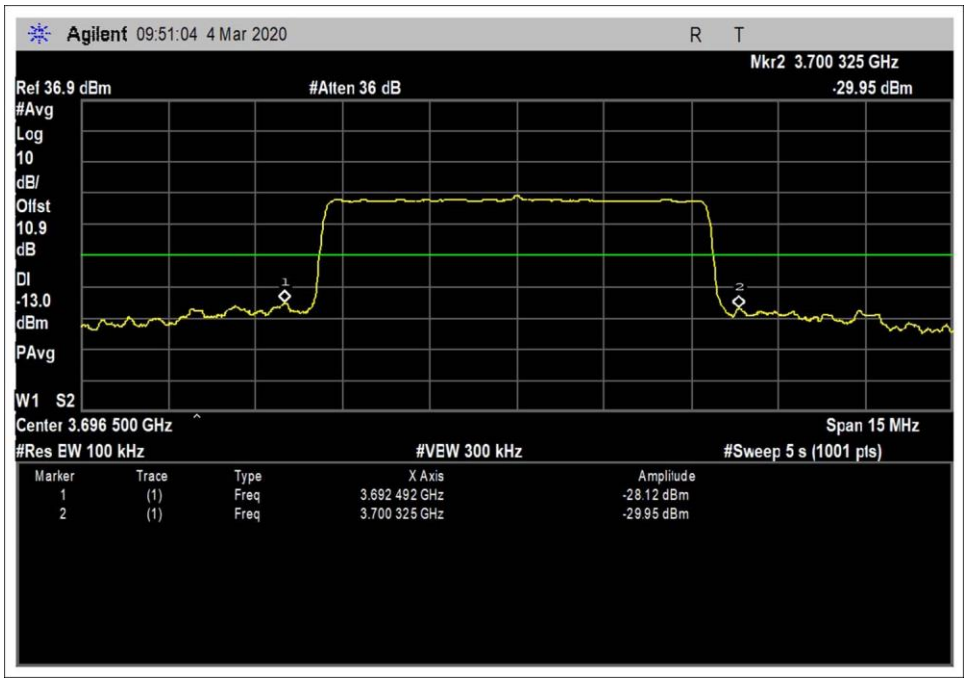
Low Channel



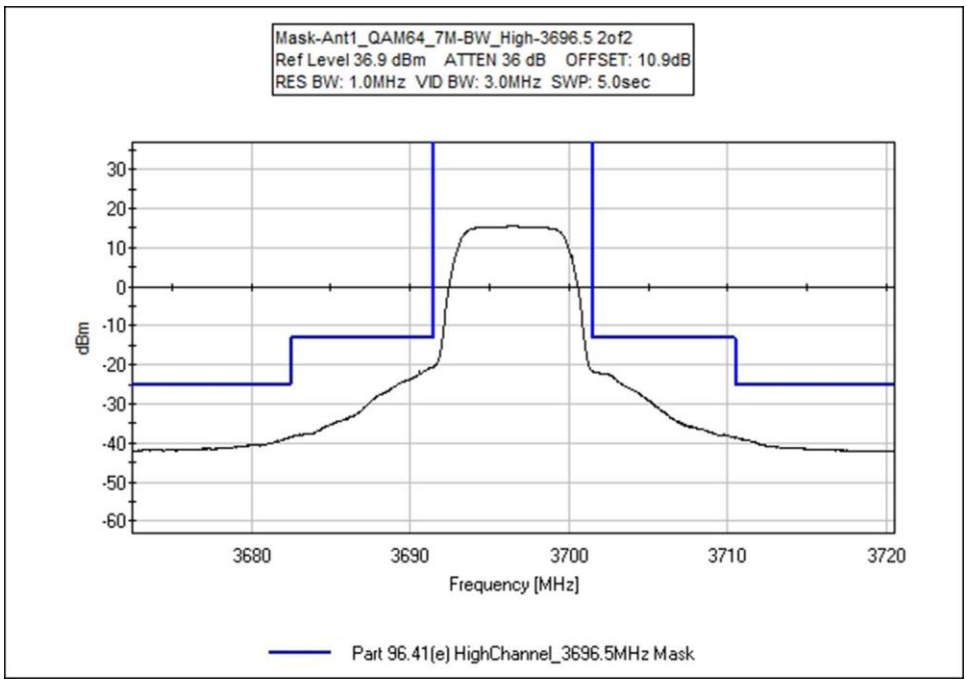


Middle Channel

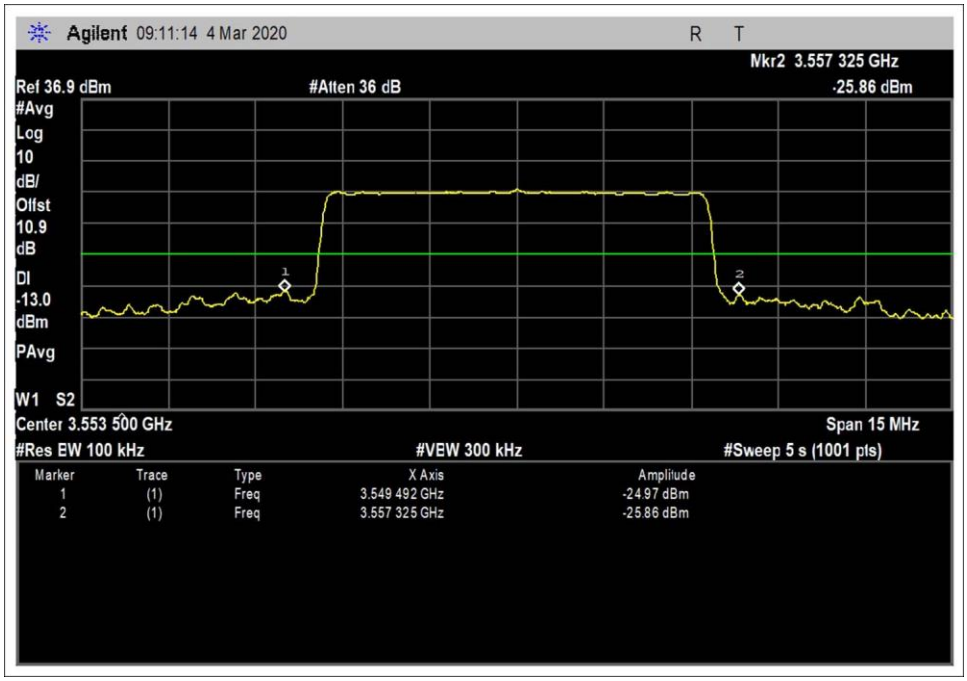




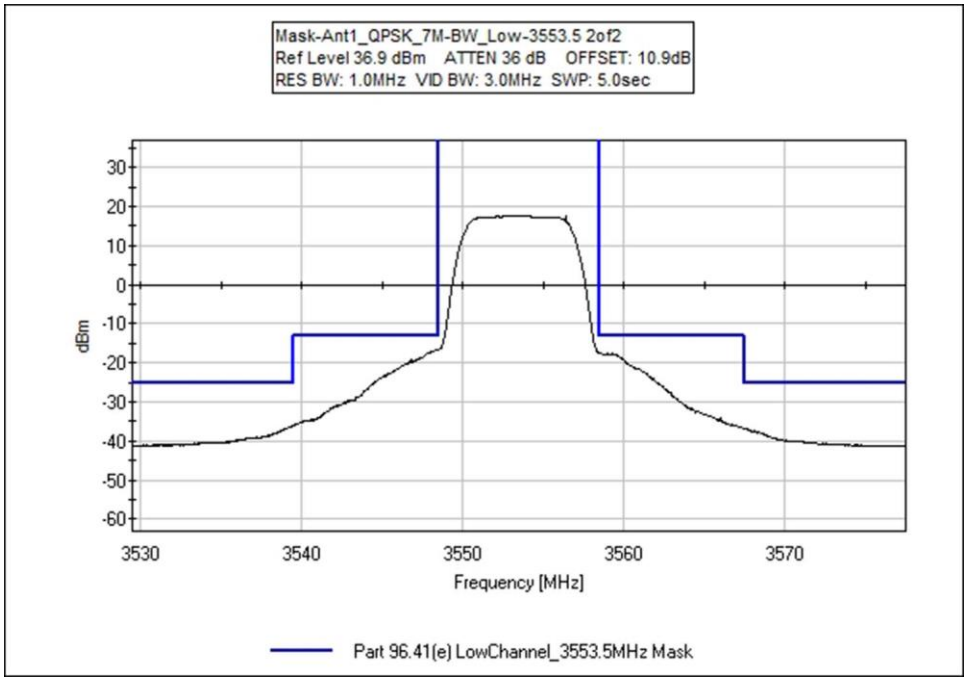
High Channel

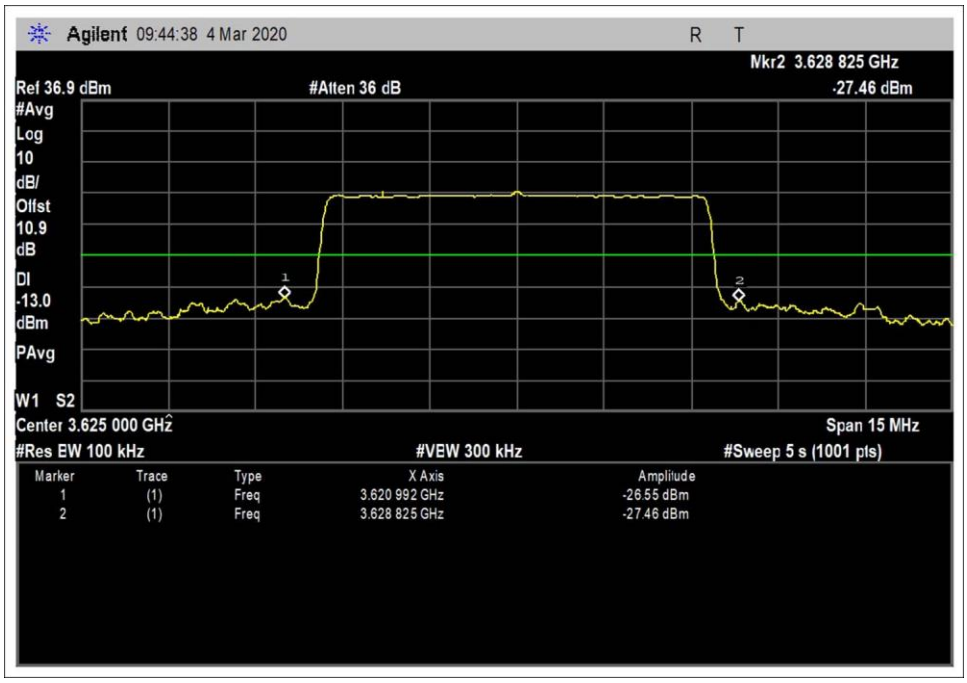


QPSK

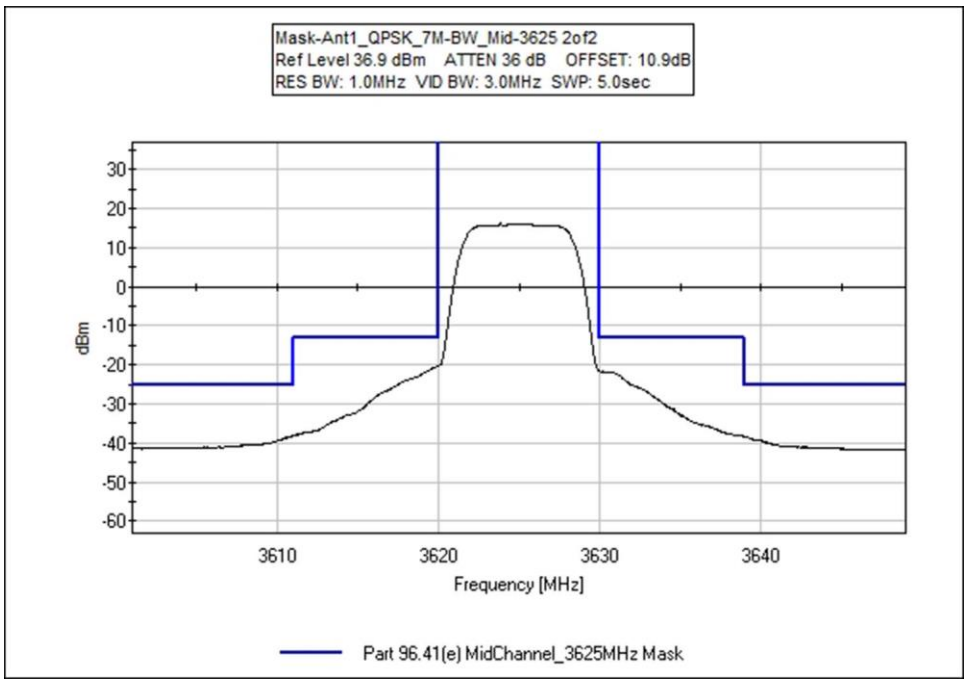


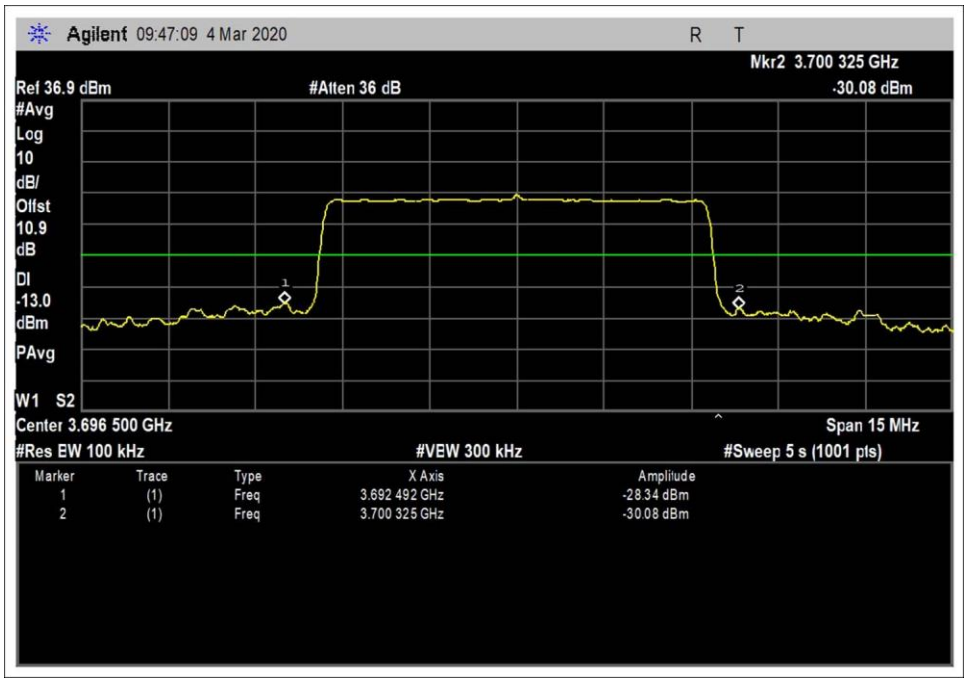
Low Channel



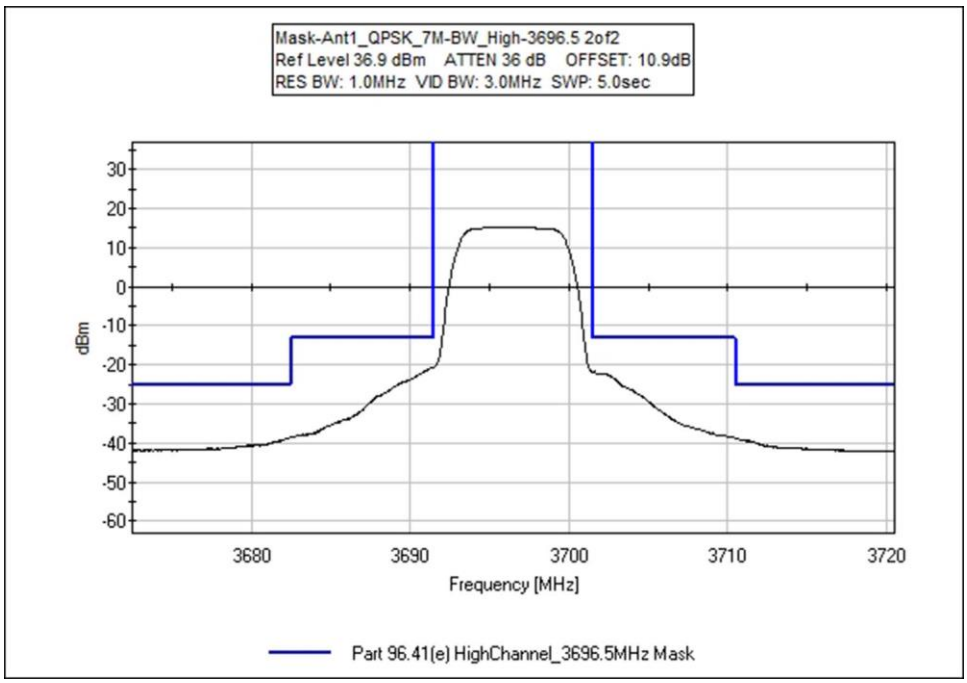


Middle Channel



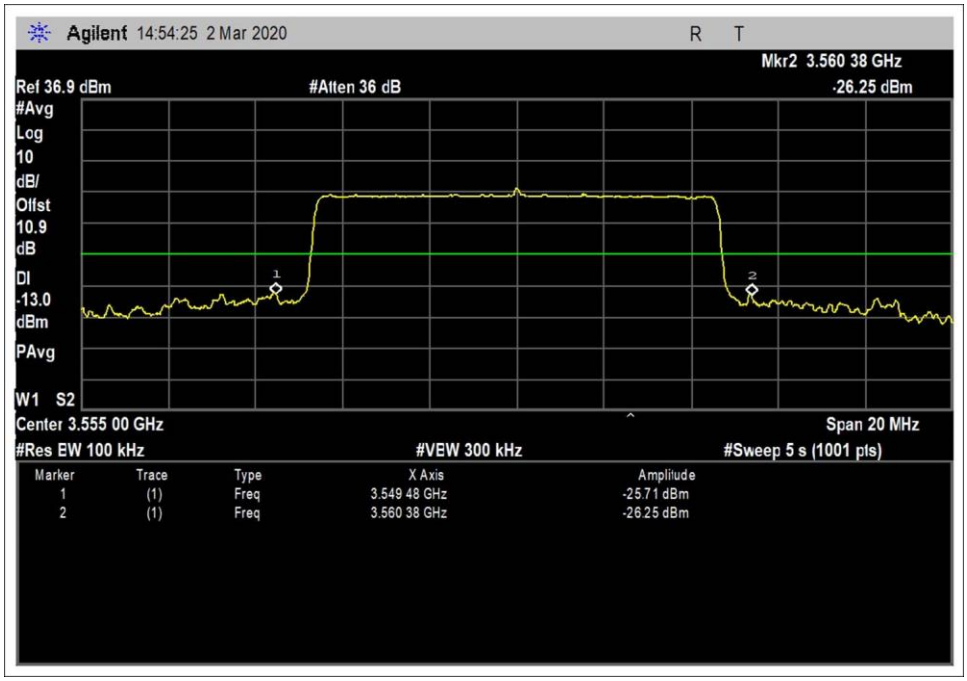


High Channel

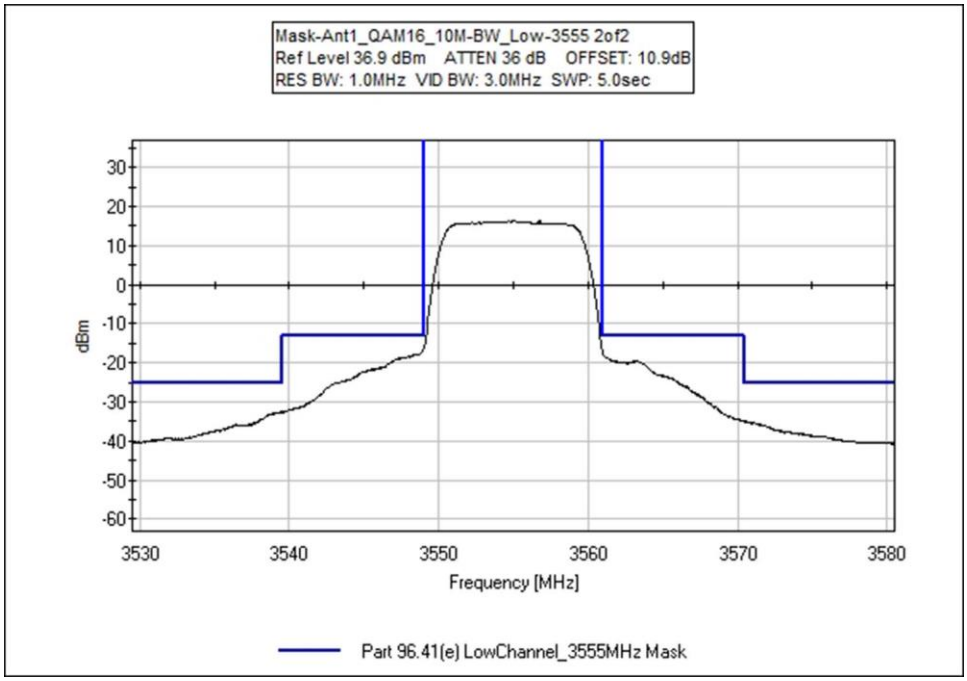


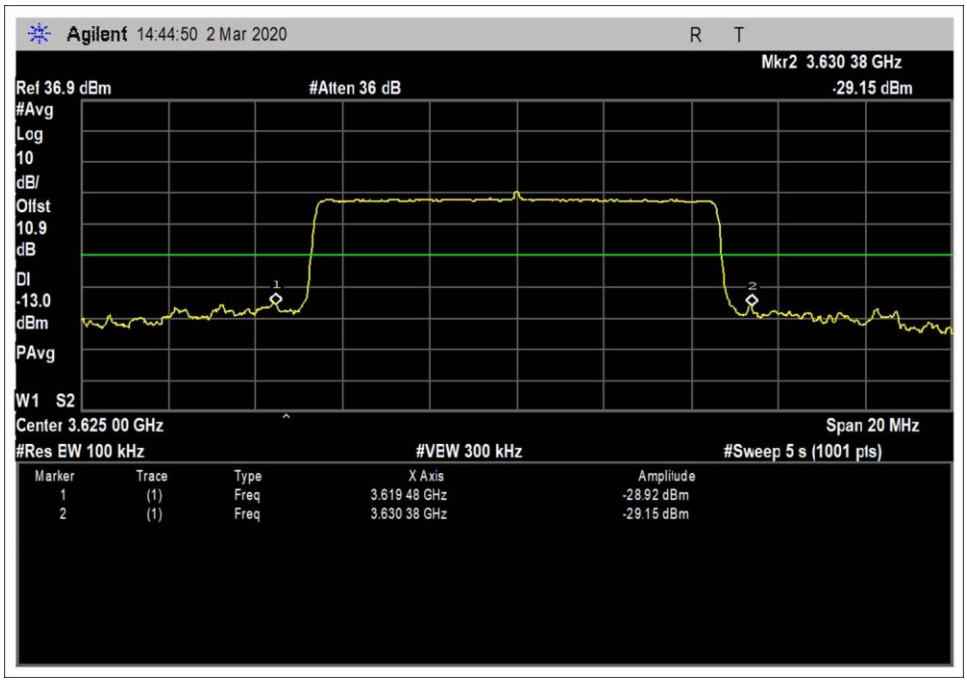
Channel Bandwidth 10MHz

QAM16

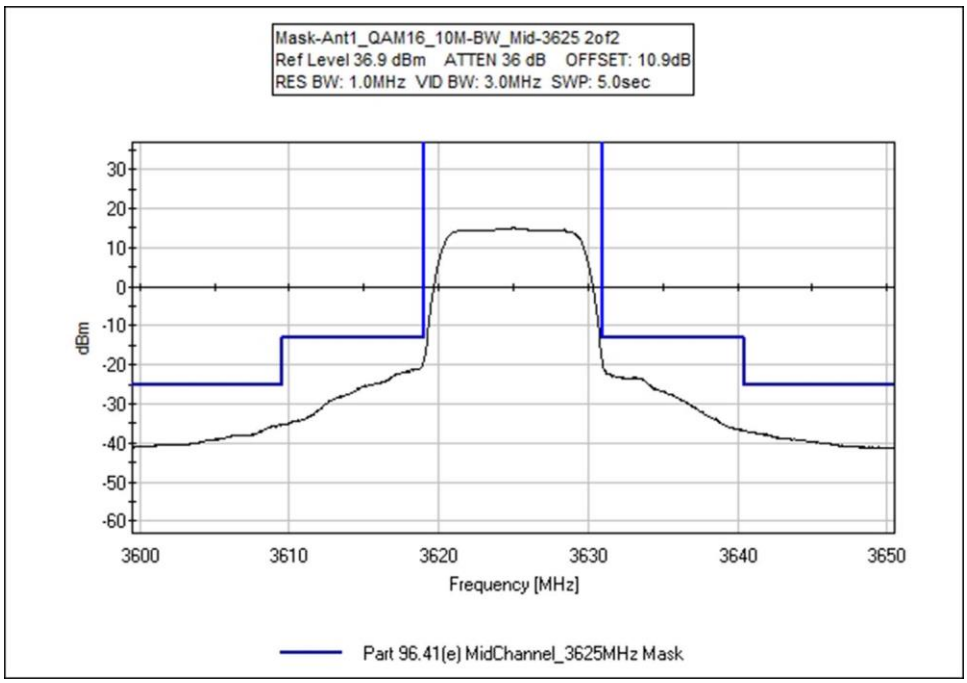


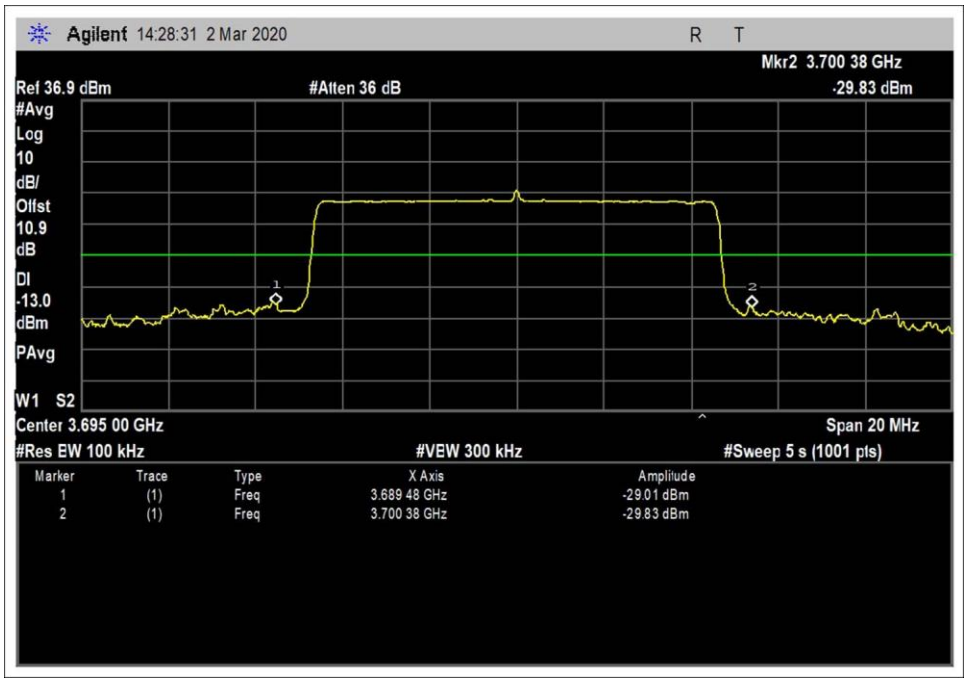
Low Channel



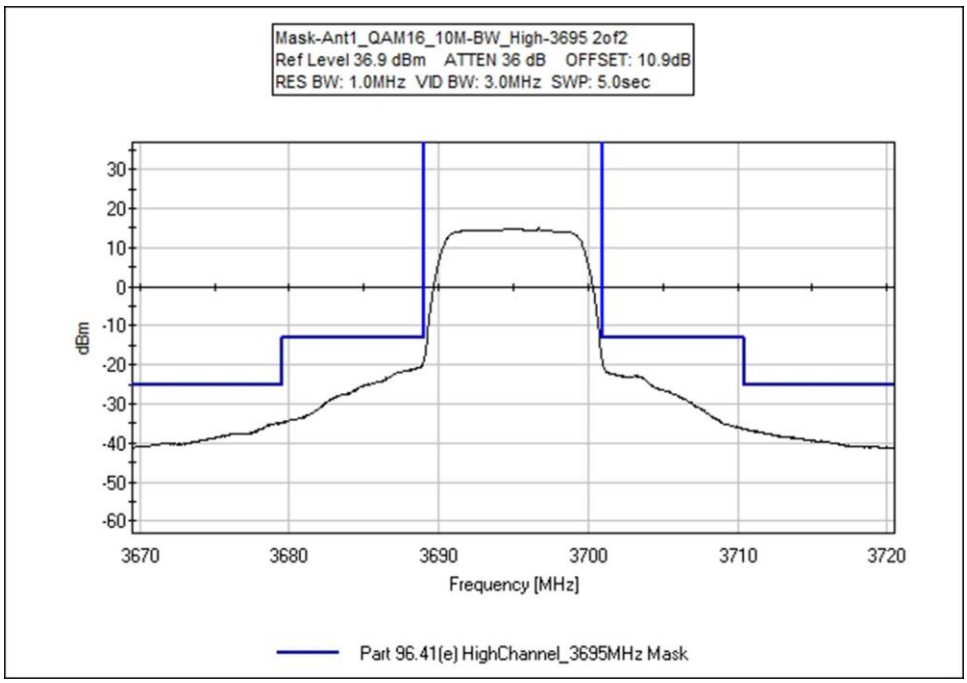


Middle Channel

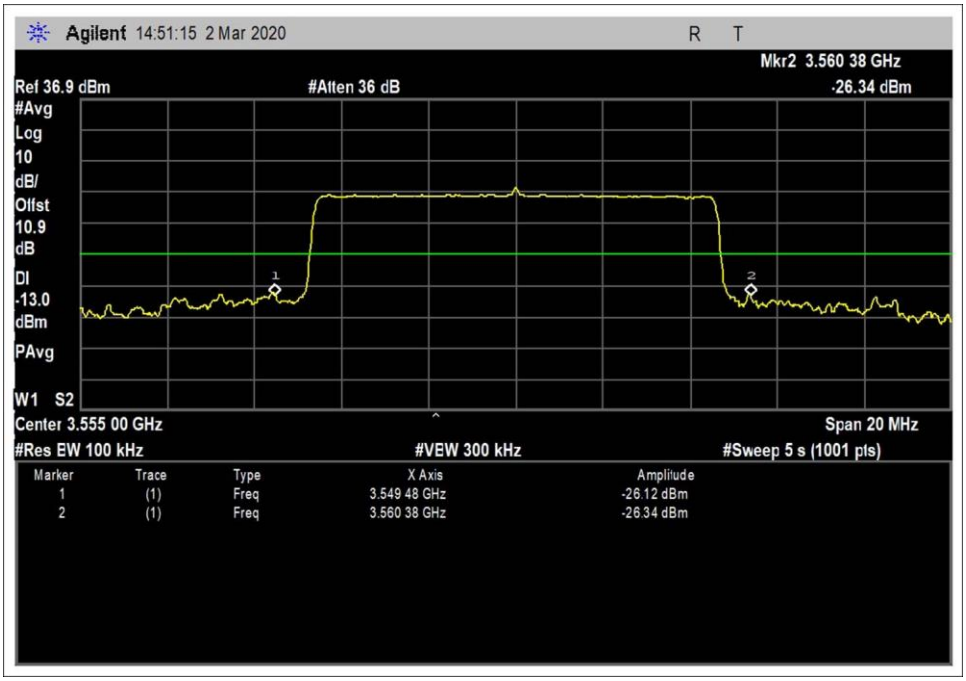




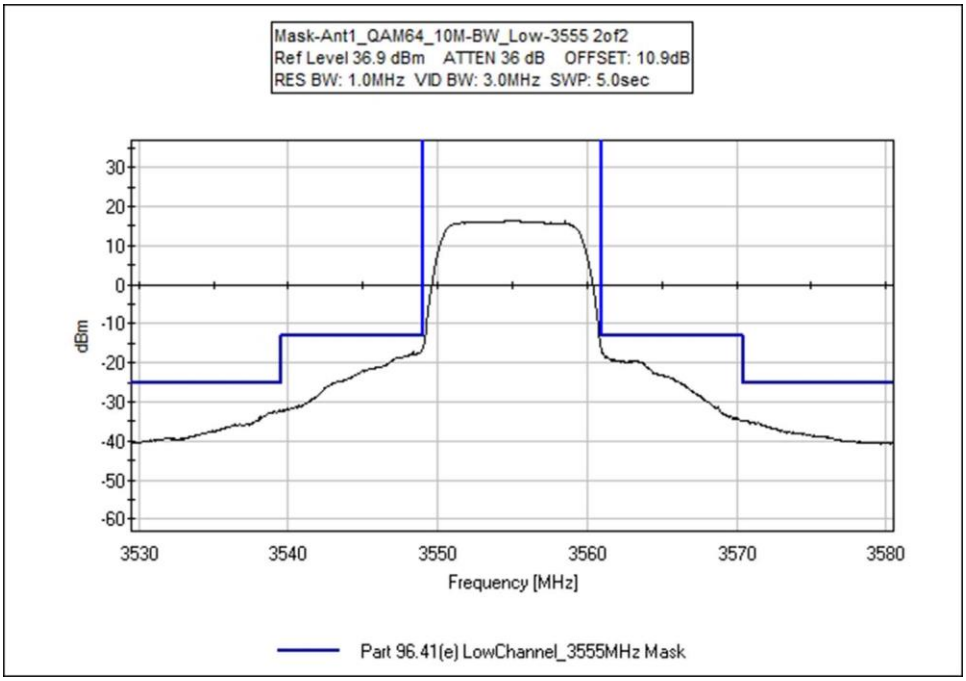
High Channel

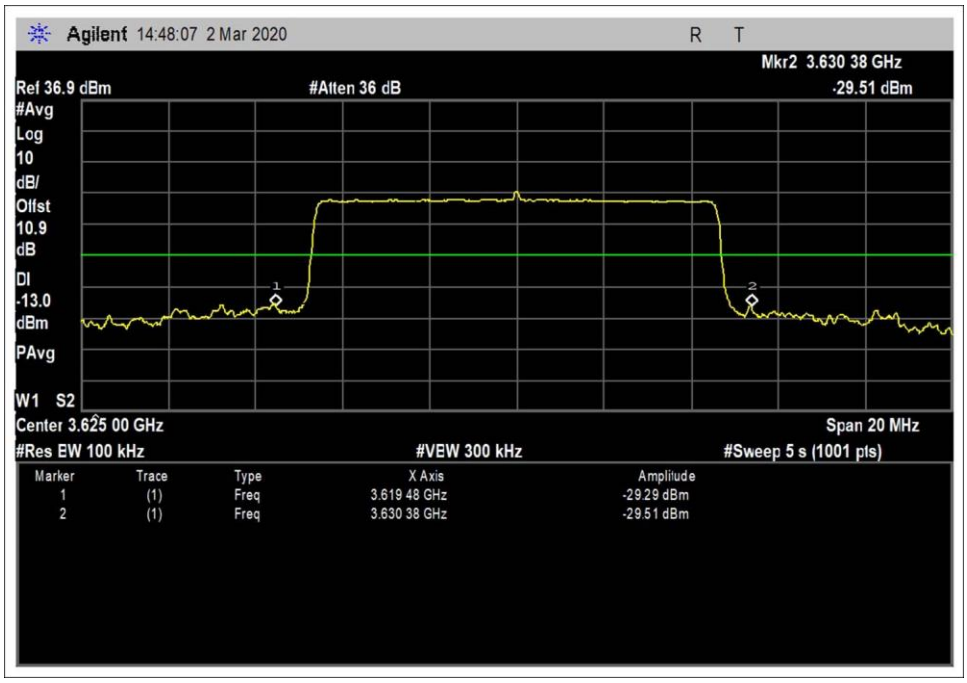


QAM64

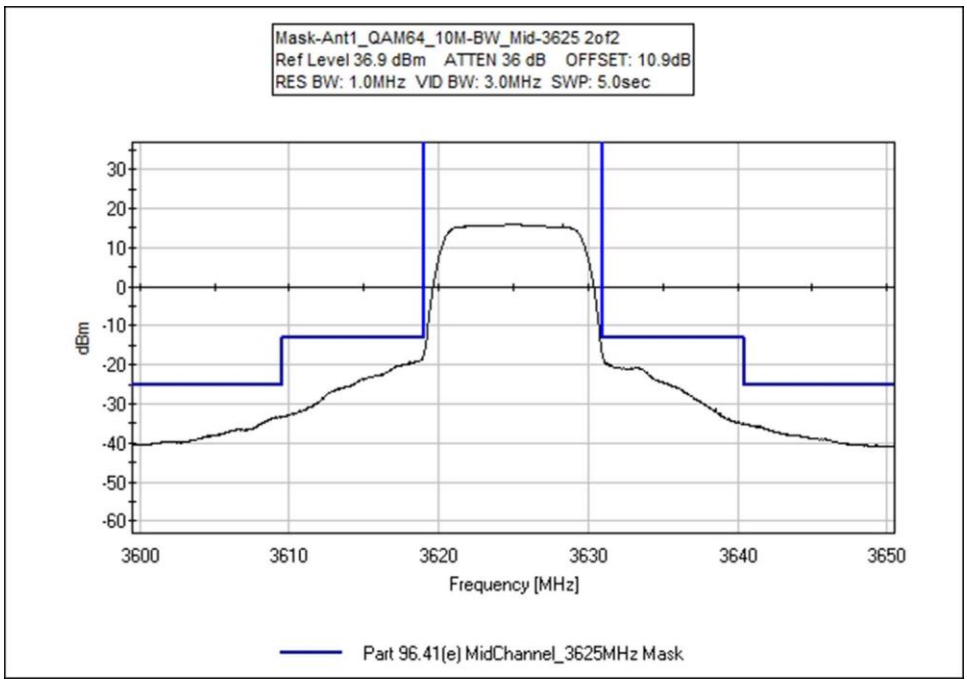


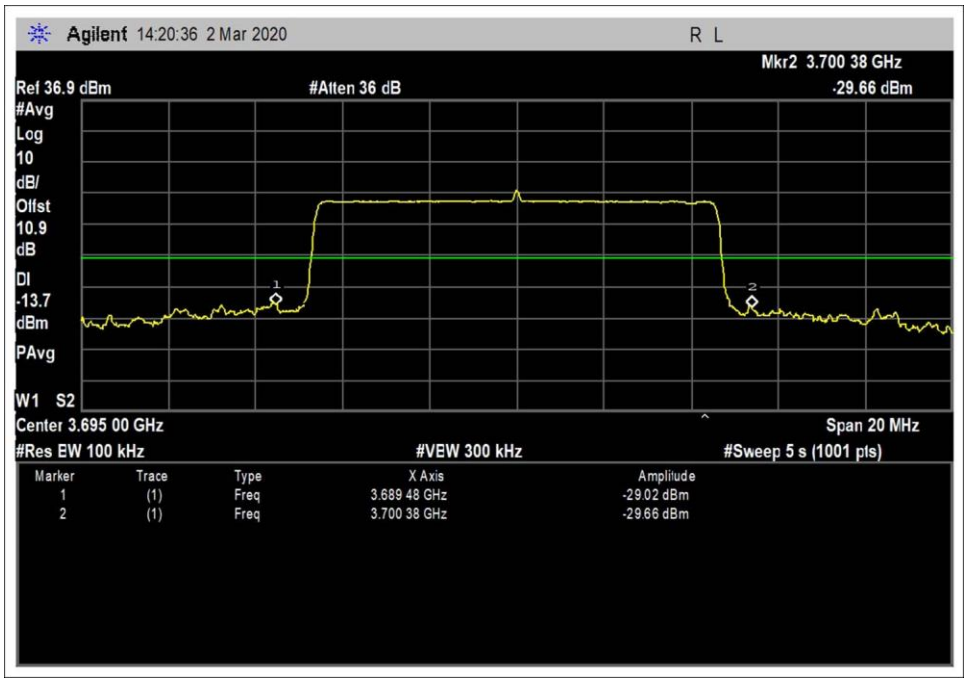
Low Channel



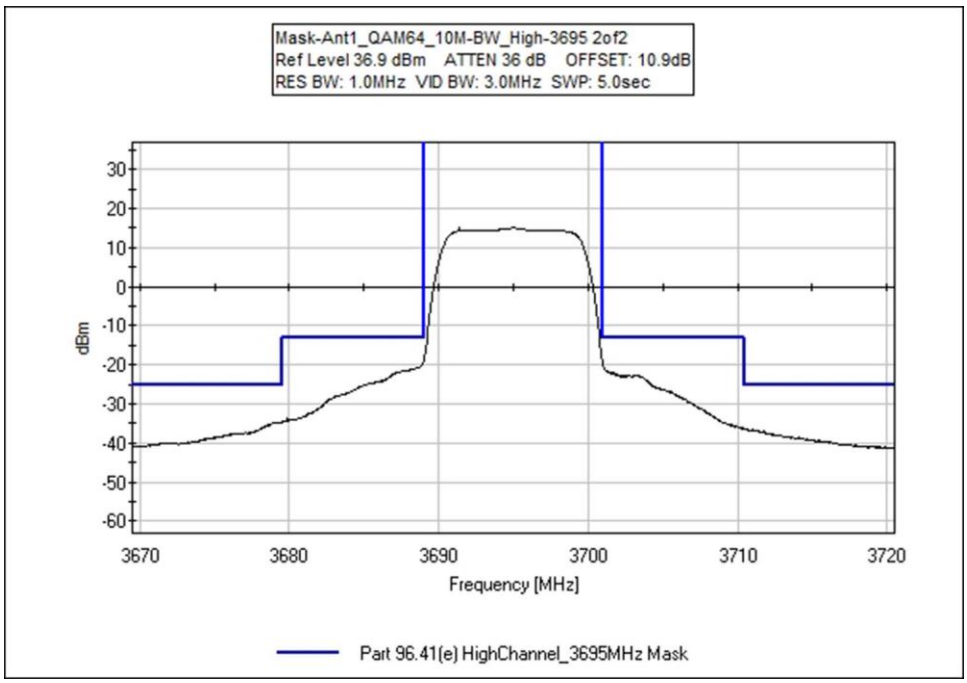


Middle Channel

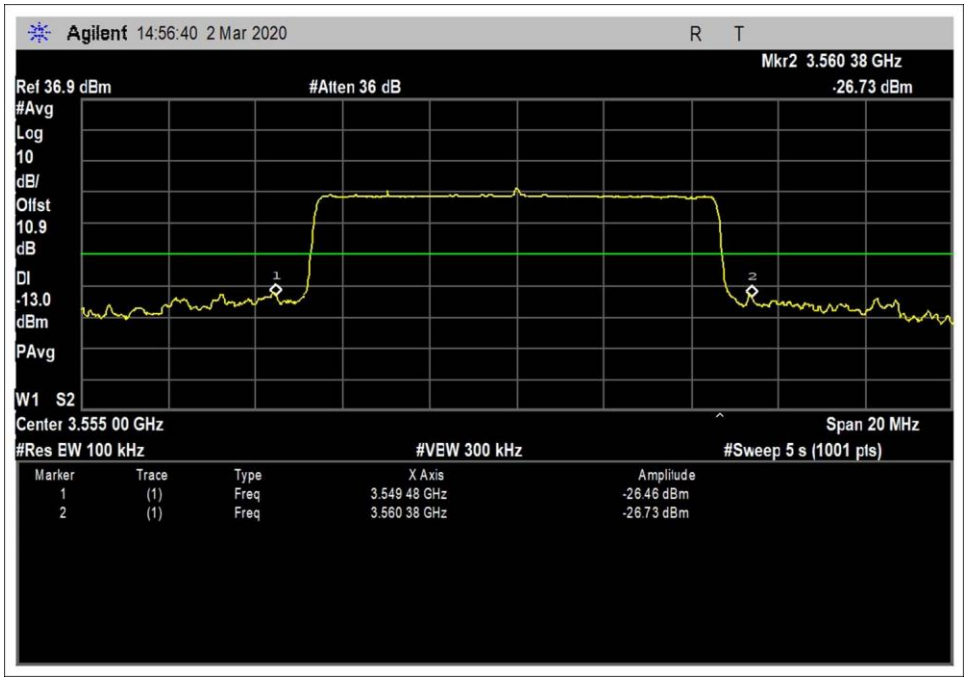




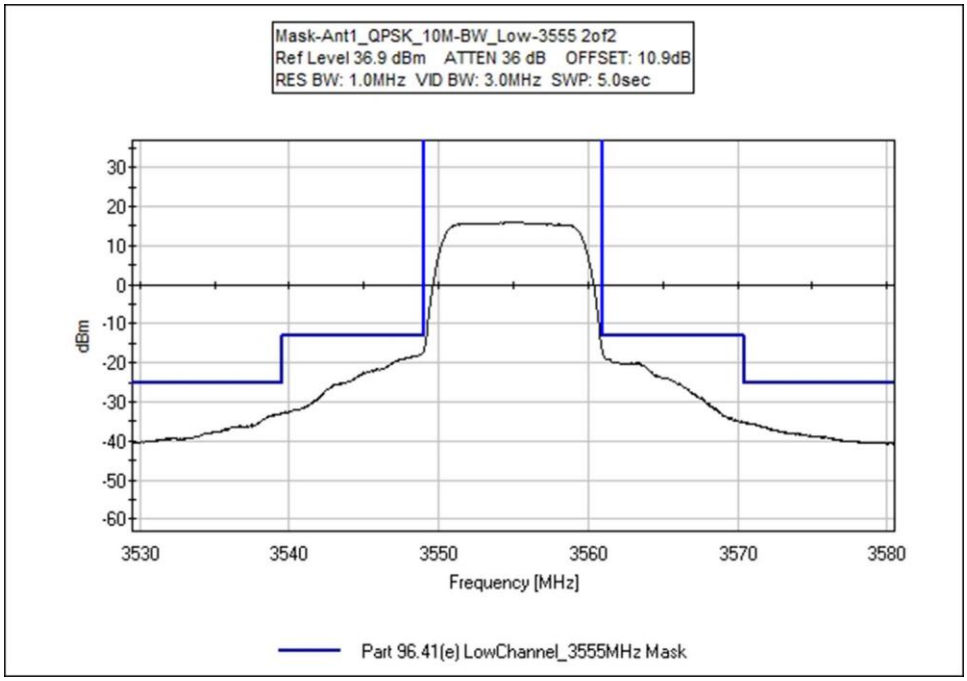
High Channel

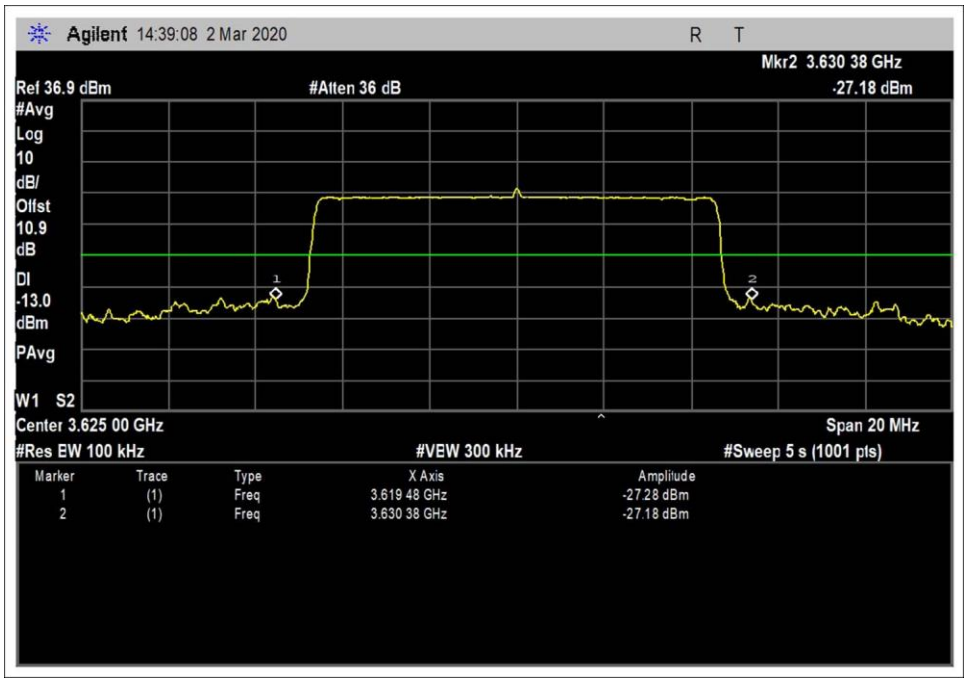


QPSK

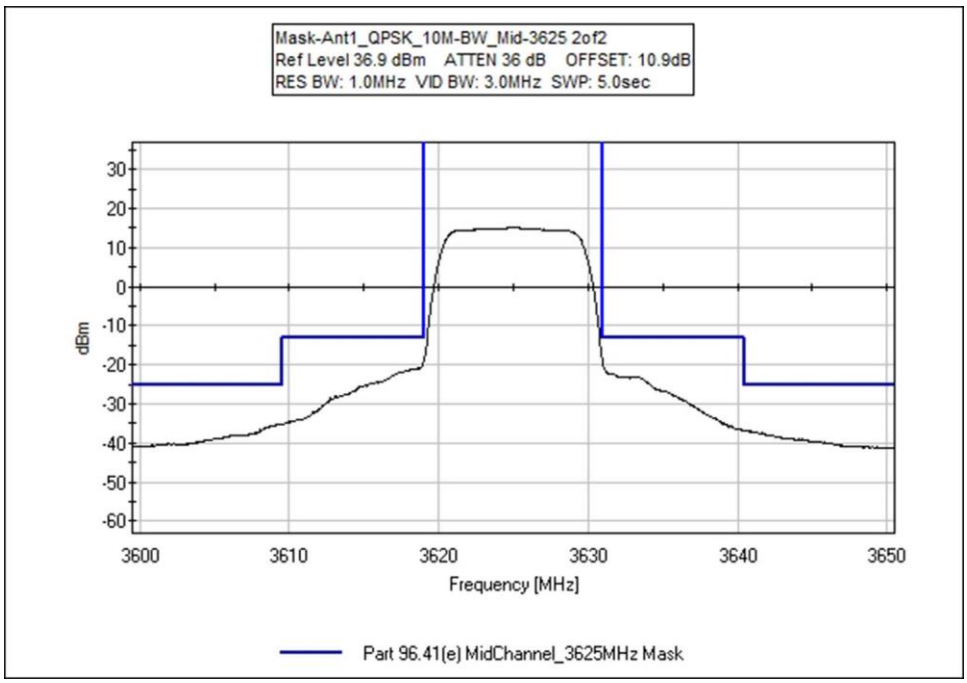


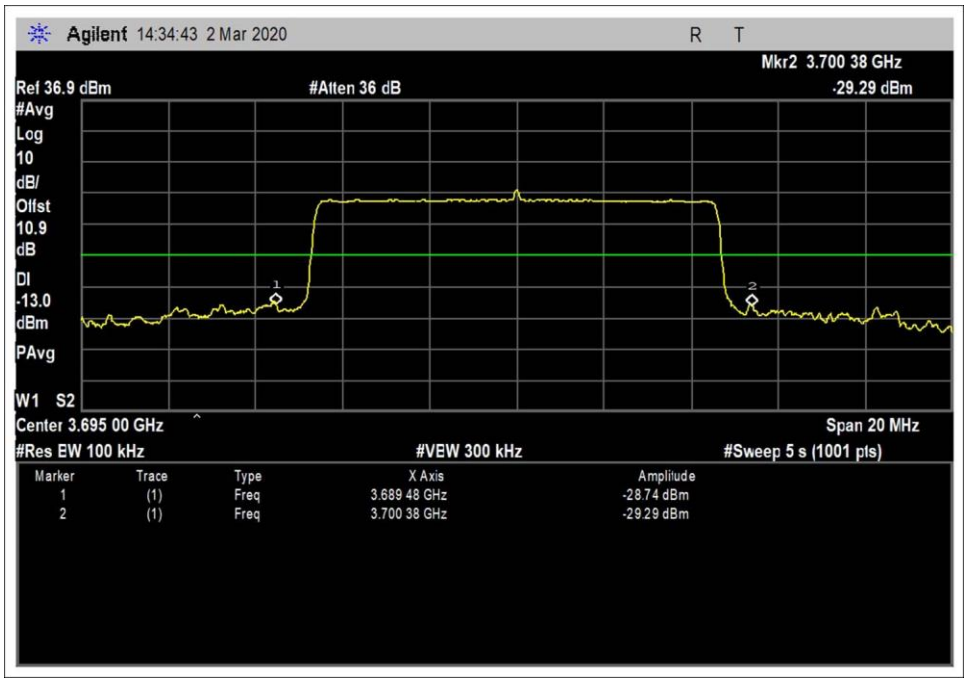
Low Channel



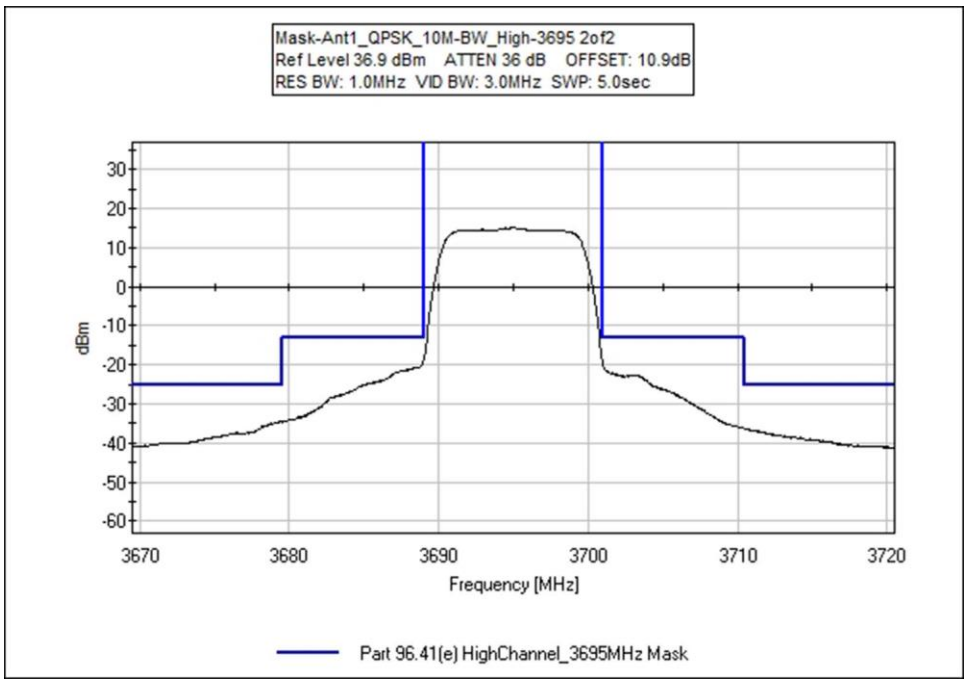


Middle Channel

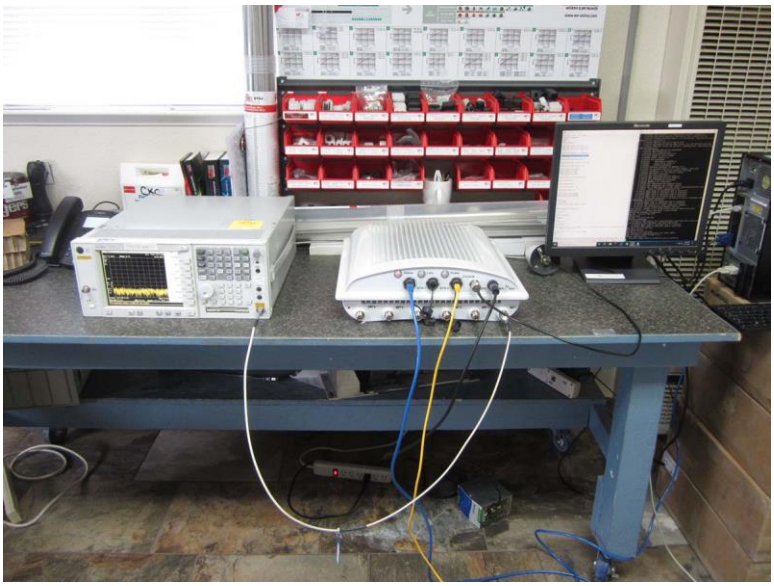




High Channel



Test Setup Photo



96.41e Radiated Spurious Emissions

Radiated Emissions 9kHz – 30MHz					
Frequency (MHz)	**Polarity**	**Pk/Ave**	**Measured (dBm / MHz)**	**Limit (dBm / MHz)**	**Results**
0.011885	Parallel	Pk	-44.4	< -40	Pass
0.010230	Parallel	Pk	-45.1	< -40	Pass
0.012889	Parallel	Pk	-45.3	< -40	Pass
0.00900	Perpendicular	Pk	-44.9	< -40	Pass
0.014645	Perpendicular	Pk	-47.7	< -40	Pass
0.021795	Perpendicular	Pk	-49.2	< -40	Pass
24.691	Z-Axis	Pk	-44.6	< -40	Pass
0.009125	Z-Axis	Pk	-44.6	< -40	Pass
24.637	Z-Axis	Pk	-45.0	< -40	Pass

Radiated Emissions 30MHz – 37GHz					
Frequency (MHz)	**Polarity**	**Pk/Ave**	**Measured (dBm / MHz)**	**Limit (dBm / MHz)**	**Results**
7250.065	Vert	Ave	-53.9	< -40	Pass
7107.100	Vert	Ave	-55.1	< -40	Pass
7386.150	Vert	Ave	-57.0	< -40	Pass
7250.055	Horiz	Ave	-58.3	< -40	Pass
7110.075	Horiz	Ave	-58.5	< -40	Pass
7106.050	Horiz	Ave	-58.6	< -40	Pass

Test Setup / Conditions / Data

Test Location:	CKC Laboratories Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510 249-1170		
Customer:	**Mercury Wireless**		
Specification:	**47 CFR §96.41e Spurious Emissions**		
Work Order #:	**103300**	Date:	4/24/2020
Test Type:	**Radiated Scan**	Time:	14:18:00
Tested By:	Benny Lovan	Sequence#:	74
Software:	EMITest 5.03.12		

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Radiated Spurious Emissions 9kHz - 30 MHz

Temperature: 22.5°C
Humidity: 41%
Atmospheric Pressure: 102.4 kPa

Transmit Frequency Range: 3550 - 3700

RBW:
200Hz (9kHz- 150kHz),
9kHz (150kHz-30MHz),

VBW: 3x RBW

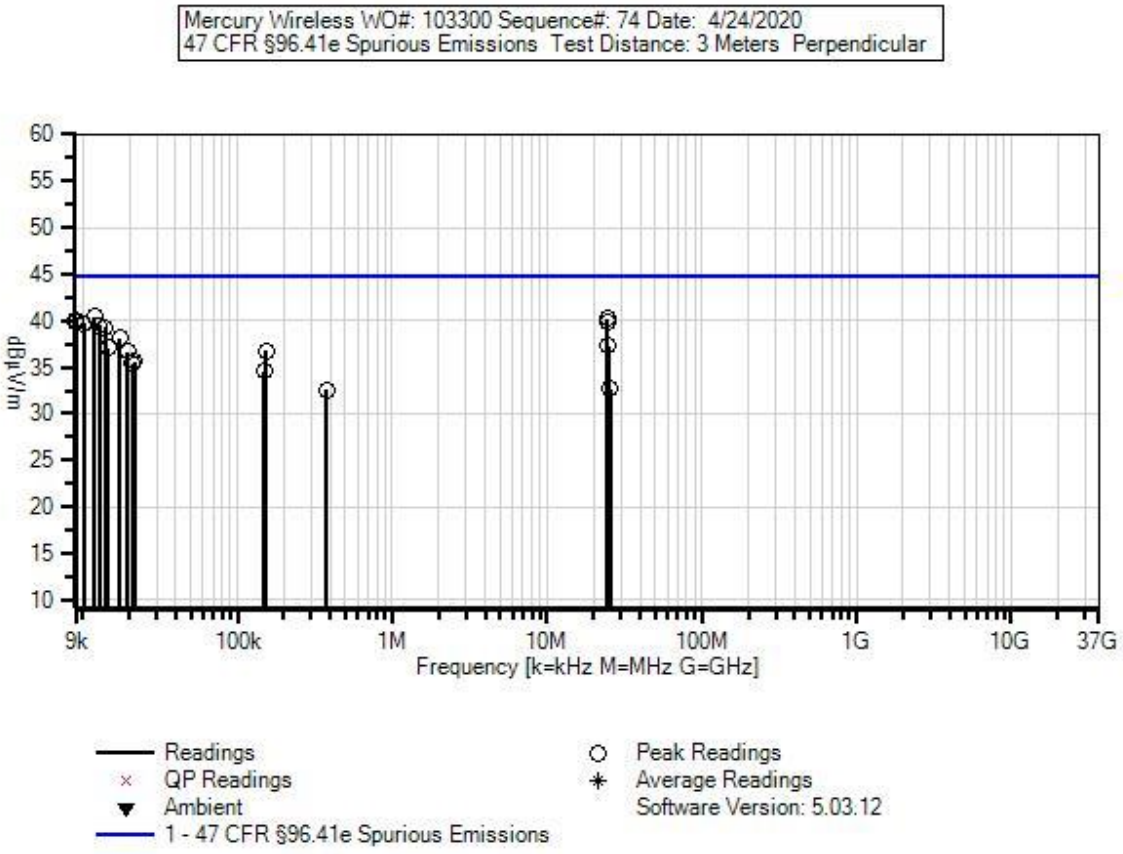
Transmitter Settings:
Transmit Frequency: Low Mid and High
Modulation: QPSK, QAM16 and QAM64
Channel Bandwidth: 3.5, 5, 7 and 10 MHz
Output Power Software Setting: 33

The EUT is a CBSD and is located at the center of an 80cm table with all antenna ports terminated into characteristic load. 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 investigation performed utilizing a resolution bandwidth lower than specified. No EUT emissions detected within 6 dB of the limit.

Test Location: Fremont C3
Test Method: ANSI C63.26 (2015), KDB 940660 DO1 Part 96 CBRS Eqpt v02 (April 19, 2019)



Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00226	Loop Antenna	6502	6/1/2018	6/1/2020
T2	ANP00880	Cable	RG214U	5/14/2018	5/14/2020
T3	ANP06691	Cable	PE3062-180	5/14/2018	5/14/2020
	AN02660	Spectrum Analyzer	E4446A	10/19/2018	10/19/2020

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:	3/12/2020
Test Type:	**Radiated Scan**	Time:	15:46:39
Tested By:	Randy Clark	Sequence#:	73
Software:	EMITest 5.03.12		

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Radiated Spurious Emissions 30MHz - 37 GHz

Temperature: 20.1 - 26.6° C
Humidity: 36.0 - 44.9%
Atmospheric Pressure: 101.5 - 101.9 kPa

Transmit Frequency Range: 3550 - 3700

RBW:
1MHz (30MHz - 37GHz)

VBW: 3x RBW

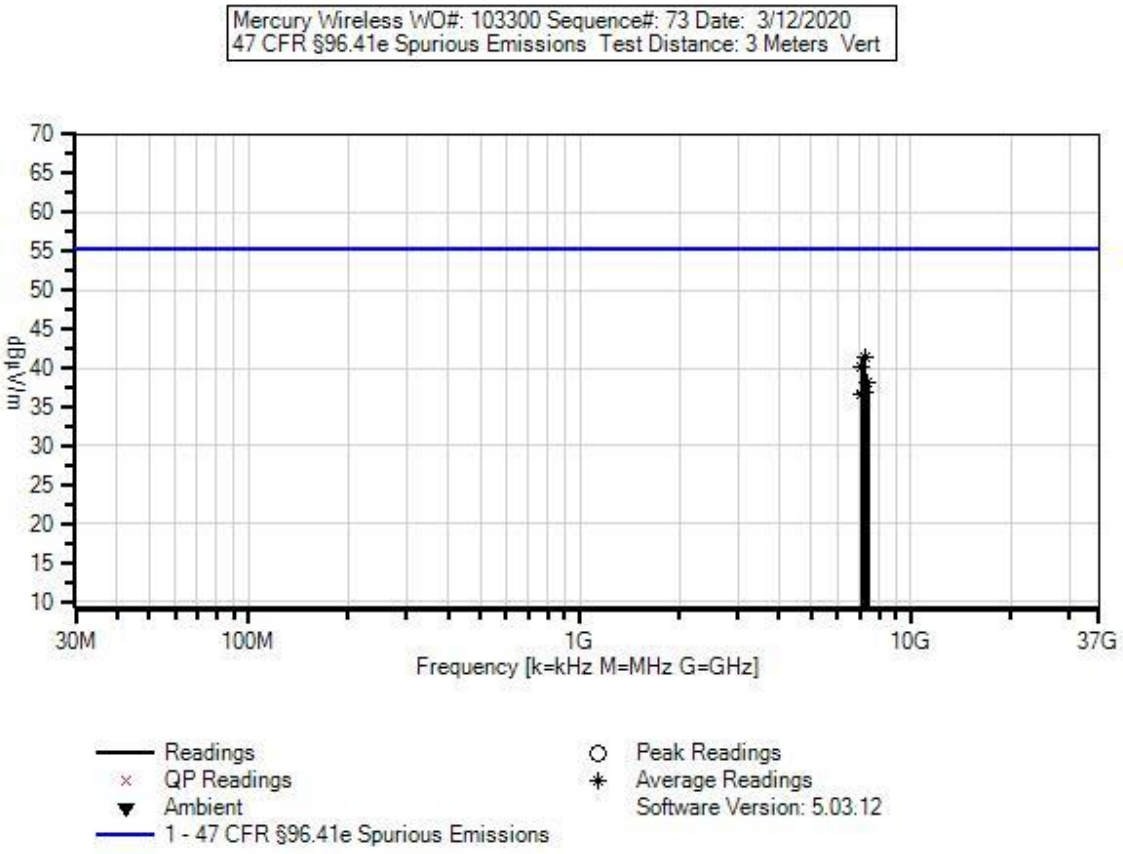
Transmitter Settings:
Transmit Frequency: Low Mid and High
Modulation: QPSK, QAM16 and QAM64
Channel Bandwidth: 3.5, 5.5, 7 and 10 MHz
Output Power Software Setting: 33

The EUT is a CBSD and is located at the center of an 80cm table with all antenna ports terminated into characteristic load. 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 investigation performed utilizing a resolution bandwidth lower than specified. Other than those reported below, there were no EUT emissions detected within 6 dB of the limit.

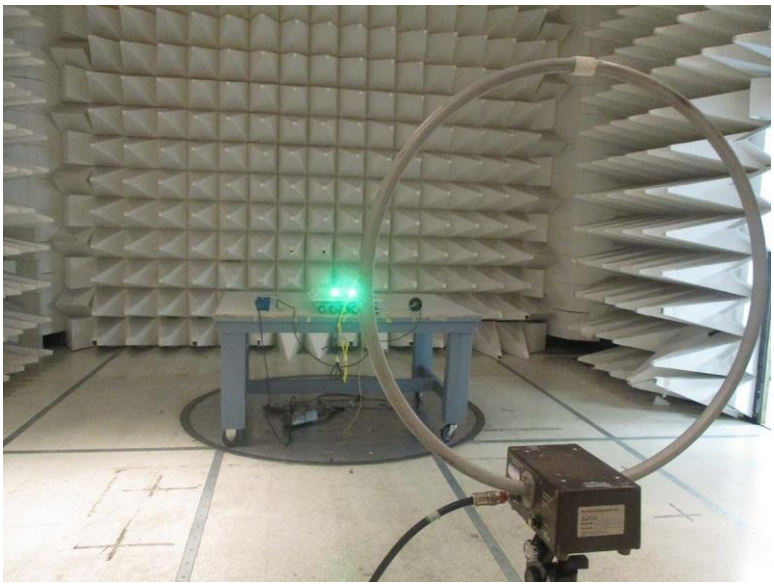
Test Location: Mariposa Lab A
Test Method: ANSI C63.26 (2015), KDB 940660 DO1 Part 96 CBRS Eqpt v02 (April 19, 2019)



Test Equipment:

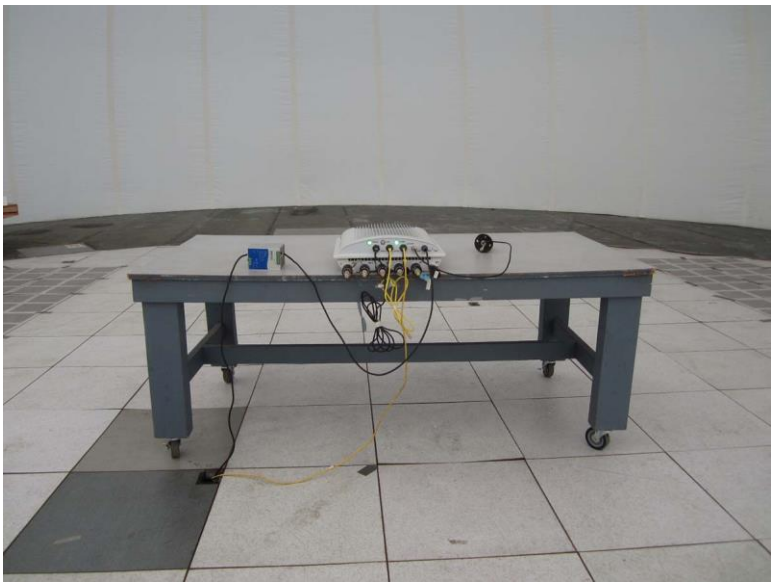
ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02668	Spectrum Analyzer	E4446A	12/17/2019	12/17/2020
	AN00449	Preamp-Upper Ports (dB)	8447F	1/13/2020	1/13/2022
	ANP05656	Attenuator	PE7004-6	2/17/2020	2/17/2022
	AN01996	Biconilog Antenna	CBL6111C	6/11/2019	6/11/2021
	ANP04249	Cable		3/12/2018	3/12/2020
	ANP06230	Cable-Insertion Loss (+45C to 15C)	CXTA04A-50	11/19/2018	11/19/2020
	ANP06847	Cable	LMR195-FR-6	8/16/2019	8/16/2021
	ANP06883	Cable	LMR195-FR-3	8/16/2019	8/16/2021
T2	AN01273	Horn Antenna	3115	3/14/2018	3/14/2020
	AN03366	Horn Antenna	GH-62-25	6/20/2018	6/20/2020
	AN02046	Horn Antenna	MWH-1826/B	11/16/2018	11/16/2020
	AN02045	Horn Antenna-ANSI C63.5 3m	MWH-2640/B	8/21/2018	8/21/2020
T3	AN02115	Preamp	83051A	4/3/2019	4/3/2021
T4	ANP07585	Cable	32026-2-29094K-360TC	8/26/2019	8/26/2021
T5	AN03356	Cable	32026-2-29094K-48TC	3/14/2019	3/14/2021

Test Setup Photo(s)

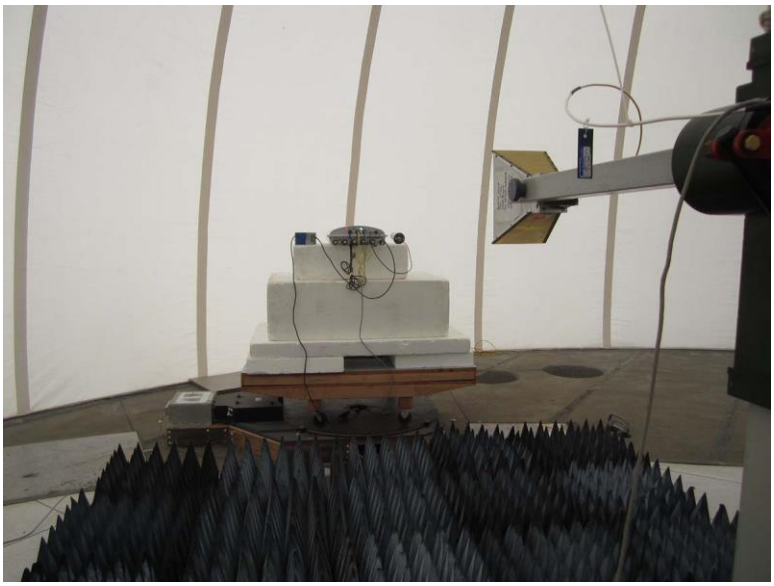


9kHz-30MHz

30MHz-1GHz



30MHz-1GHz



Above 1GHz

96.41e Conducted Spurious Emissions

Test Setup Summary	
Test Setup:	The EUT is connected directly to the spectrum analyzer through 10.9dB of loss from the attenuator/cable chain used for measurement. See data sheets for EUT configuration used during testing Test Location: Mariposa Lab A Test Method: ANSI C63.26 (2015), KDB 940660 DO1 Part 96 CBRS Eqpt v02 (April 19, 2019)
Declaration:	Software output power setting was varied dependent upon channel bandwidth setting. See tables below for software setting. The testing was performed from 9kHz – 3530MHz and from 3720MHz to 37000MHz. The range between 3530 and 3720 was covered during the emissions mask.

Test Setup / Conditions / Data

Channel Bandwidth 3.5MHz

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:	3/10/2020
Test Type:	**Conducted Emissions**	Time:	15:26:51
Tested By:	Randy Clark	Sequence#:	55
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

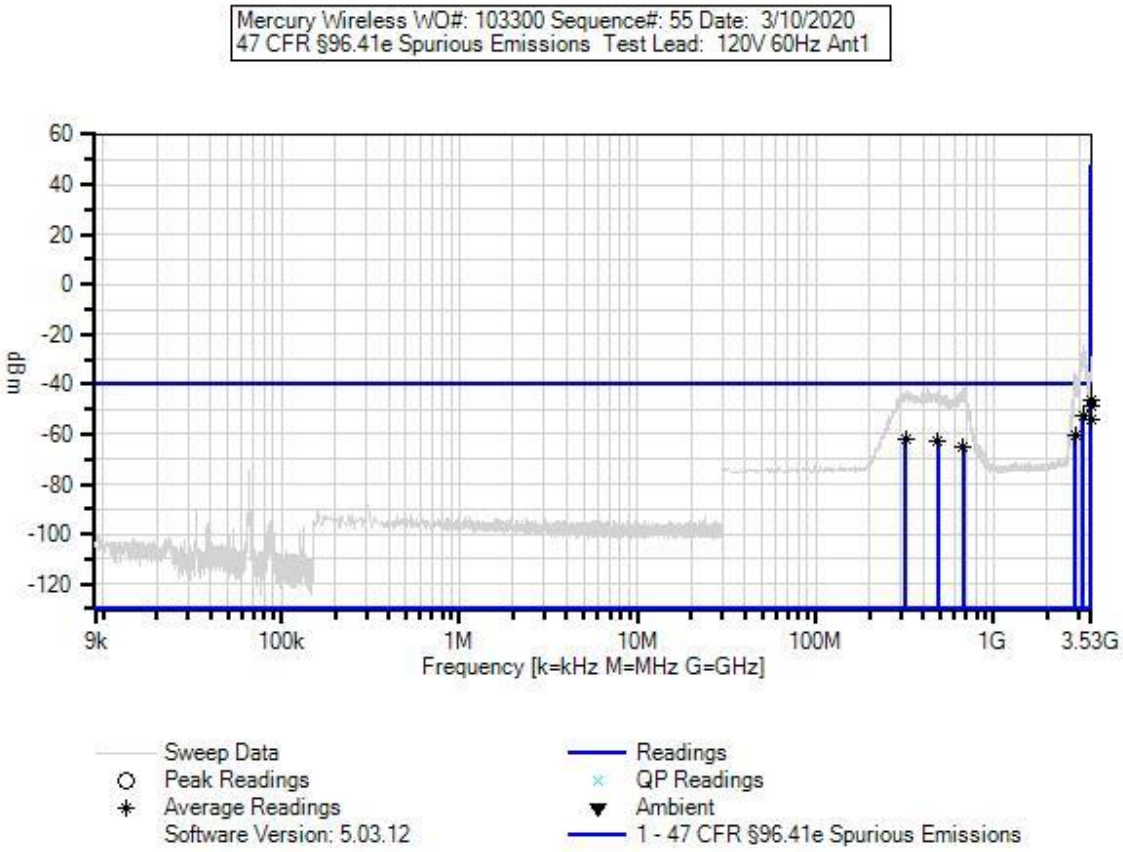
RBW:
200Hz (9k - 150k),
9kHz (150k-30M),
1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3552.5 MHz
Modulation: QPSK
Channel Bandwidth: 3.5MHz
Output Power Software Setting: 31

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.



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	32026-2-29094K-48TC	3/14/2019	3/14/2021
T3	ANdBuV	Unit Conversion		8/24/2018	8/24/2022

Measurement Data: Reading listed by margin. Test Lead: Ant1

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	3528.820M Ave	50.1	+9.9	+1.0	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
2	3528.832M Ave	47.5	+9.9	+1.0	-107.0		+0.0	-48.6	-40.0	-8.6	Ant1
^	3528.810M	66.4	+9.9	+1.0	-107.0		+0.0	-29.7	-40.0	+10.3	Ant1
4	3174.100M Ave	43.8	+9.9	+0.9	-107.0		+0.0	-52.4	-40.0	-12.4	Ant1
^	3174.100M	69.5	+9.9	+0.9	-107.0		+0.0	-26.7	-40.0	+13.3	Ant1
6	3508.305M Ave	42.3	+9.9	+1.0	-107.0		+0.0	-53.8	-40.0	-13.8	Ant1
^	3508.280M	62.6	+9.9	+1.0	-107.0		+0.0	-33.5	-40.0	+6.5	Ant1
8	2864.059M Ave	35.7	+9.9	+0.9	-107.0		+0.0	-60.5	-40.0	-20.5	Ant1
^	2864.040M	60.9	+9.9	+0.9	-107.0		+0.0	-35.3	-40.0	+4.7	Ant1
10	321.626M Ave	34.9	+9.9	+0.3	-107.0		+0.0	-61.9	-40.0	-21.9	Ant1
^	321.620M	55.8	+9.9	+0.3	-107.0		+0.0	-41.0	-40.0	-1.0	Ant1
12	484.064M Ave	33.7	+9.9	+0.4	-107.0		+0.0	-63.0	-40.0	-23.0	Ant1
^	484.060M	54.0	+9.9	+0.4	-107.0		+0.0	-42.7	-40.0	-2.7	Ant1
14	674.696M Ave	31.5	+9.9	+0.5	-107.0		+0.0	-65.1	-40.0	-25.1	Ant1
^	674.690M	52.9	+9.9	+0.5	-107.0		+0.0	-43.7	-40.0	-3.7	Ant1

Test Location:	CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240		
Customer:	**Mercury Wireless**		
Specification:	**47 CFR §96.41e Spurious Emissions**		
Work Order #:	**103300**	Date:	3/10/2020
Test Type:	**Conducted Emissions**	Time:	15:39:27
Tested By:	Randy Clark	Sequence#:	56
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: 3552.5 MHz
Modulation: QPSK
Channel Bandwidth: 3.5MHz
Output Power Software Setting: 31

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.

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	32026-2-29094K-48TC	3/14/2019	3/14/2021
T3	ANdBuV	Unit Conversion		8/24/2018	8/24/2022

Measurement Data: Reading listed by margin. Test Lead: Ant1

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	14213.755 M	40.4	+10.0	+2.0	-107.0		+0.0	-54.6	-40.0	-14.6	Ant1
2	3824.142M Ave	39.7	+9.9	+1.0	-107.0		+0.0	-56.4	-40.0	-16.4	Ant1
^	3824.130M	69.8	+9.9	+1.0	-107.0		+0.0	-26.3	-40.0	+13.7	Ant1
4	7105.033M Ave	38.6	+10.0	+1.5	-107.0		+0.0	-56.9	-40.0	-16.9	Ant1
^	7105.035M	64.4	+10.0	+1.5	-107.0		+0.0	-31.1	-40.0	+8.9	Ant1
6	3963.750M Ave	32.7	+9.9	+1.1	-107.0		+0.0	-63.3	-40.0	-23.3	Ant1
^	3963.750M	58.1	+9.9	+1.1	-107.0		+0.0	-37.9	-40.0	+2.1	Ant1
8	4251.187M Ave	31.0	+9.9	+1.1	-107.0		+0.0	-65.0	-40.0	-25.0	Ant1
^	4251.180M	55.3	+9.9	+1.1	-107.0		+0.0	-40.7	-40.0	-0.7	Ant1
10	10657.004 M Ave	29.3	+10.0	+1.9	-107.0		+0.0	-65.8	-40.0	-25.8	Ant1
^	10657.000 M	51.1	+10.0	+1.9	-107.0		+0.0	-44.0	-40.0	-4.0	Ant1

Test Location:	CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240		
Customer:	**Mercury Wireless**		
Specification:	**47 CFR §96.41e Spurious Emissions**		
Work Order #:	**103300**	Date:	3/10/2020
Test Type:	**Conducted Emissions**	Time:	15:47:51
Tested By:	Randy Clark	Sequence#:	57
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

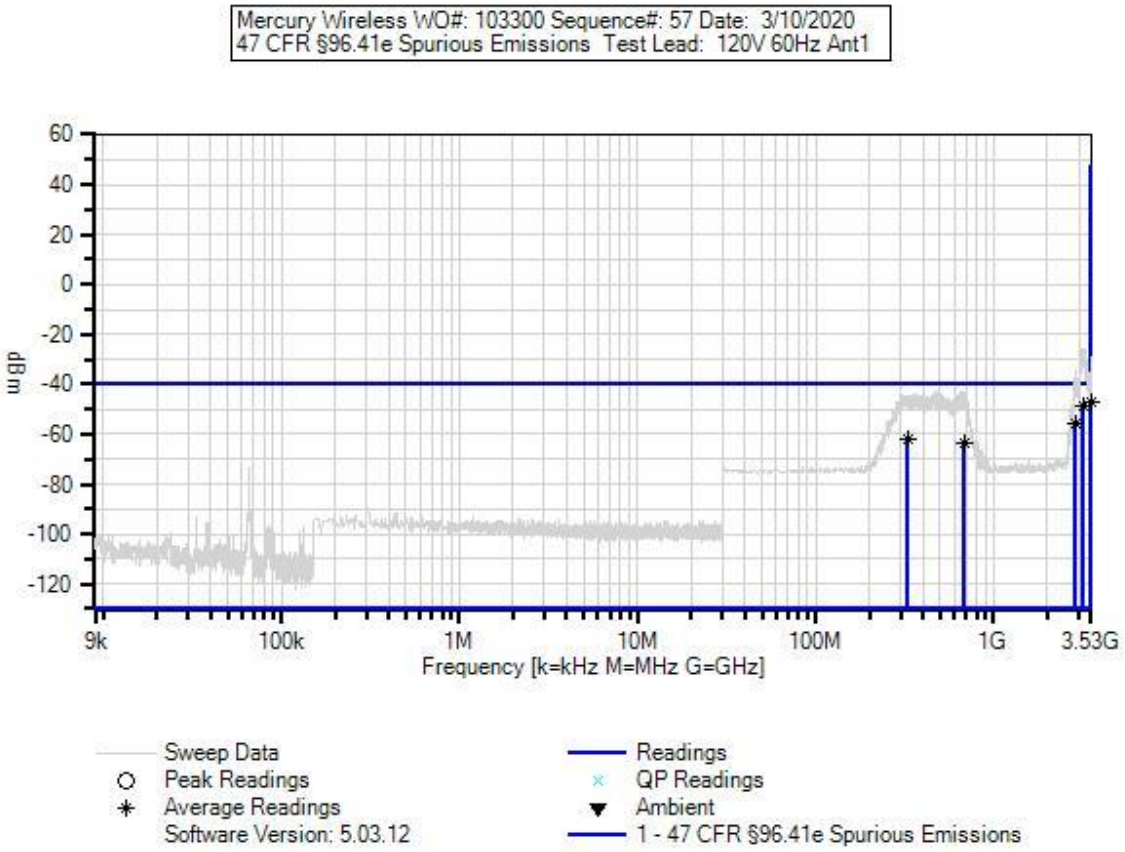
RBW:
200Hz (9k - 150k),
9kHz (150k-30M),
1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3552.5 MHz
Modulation: QAM16
Channel Bandwidth: 3.5MHz
Output Power Software Setting: 31

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.



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	32026-2-29094K-48TC	3/14/2019	3/14/2021
T3	ANdBuV	Unit Conversion		8/24/2018	8/24/2022

Measurement Data: Reading listed by margin. Test Lead: Ant1

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	3529.777M Ave	48.8	+9.9	+1.0	-107.0		+0.0	-47.3	-40.0	-7.3	Ant1
^	3529.760M	64.9	+9.9	+1.0	-107.0		+0.0	-31.2	-40.0	+8.8	Ant1
3	3173.884M Ave	47.3	+9.9	+0.9	-107.0		+0.0	-48.9	-40.0	-8.9	Ant1
^	3173.870M	71.0	+9.9	+0.9	-107.0		+0.0	-25.2	-40.0	+14.8	Ant1
5	2867.388M Ave	40.1	+9.9	+0.9	-107.0		+0.0	-56.1	-40.0	-16.1	Ant1
^	2867.380M	60.5	+9.9	+0.9	-107.0		+0.0	-35.7	-40.0	+4.3	Ant1
7	327.337M Ave	35.2	+9.9	+0.3	-107.0		+0.0	-61.6	-40.0	-21.6	Ant1
^	327.330M	53.3	+9.9	+0.3	-107.0		+0.0	-43.5	-40.0	-3.5	Ant1
9	680.407M Ave	33.0	+9.9	+0.5	-107.0		+0.0	-63.6	-40.0	-23.6	Ant1
^	680.400M	54.3	+9.9	+0.5	-107.0		+0.0	-42.3	-40.0	-2.3	Ant1

Test Location:	CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240		
Customer:	**Mercury Wireless**		
Specification:	**47 CFR §96.41e Spurious Emissions**		
Work Order #:	**103300**	Date:	3/10/2020
Test Type:	**Conducted Emissions**	Time:	15:56:37
Tested By:	Randy Clark	Sequence#:	58
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: 3552.5 MHz
Modulation: QAM16
Channel Bandwidth: 3.5MHz
Output Power Software Setting: 31

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.

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	32026-2-29094K-48TC	3/14/2019	3/14/2021
T3	ANdBuV	Unit Conversion		8/24/2018	8/24/2022

Measurement Data: Reading listed by margin. Test Lead: Ant1

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	7105.897M Ave	42.4	+10.0	+1.5	-107.0		+0.0	-53.1	-40.0	-13.1	Ant1
^	7105.865M	64.7	+10.0	+1.5	-107.0		+0.0	-30.8	-40.0	+9.2	Ant1
3	14212.020 M	40.1	+10.0	+2.0	-107.0		+0.0	-54.9	-40.0	-14.9	Ant1
4	3968.860M Ave	36.3	+9.9	+1.1	-107.0		+0.0	-59.7	-40.0	-19.7	Ant1
^	3968.820M	55.7	+9.9	+1.1	-107.0		+0.0	-40.3	-40.0	-0.3	Ant1
6	3821.032M Ave	34.8	+9.9	+1.0	-107.0		+0.0	-61.3	-40.0	-21.3	Ant1
^	3821.010M	67.5	+9.9	+1.0	-107.0		+0.0	-28.6	-40.0	+11.4	Ant1
8	10657.752 M Ave	31.3	+10.0	+1.9	-107.0		+0.0	-63.8	-40.0	-23.8	Ant1
^	10657.723 M	51.5	+10.0	+1.9	-107.0		+0.0	-43.6	-40.0	-3.6	Ant1
10	4246.737M Ave	31.8	+9.9	+1.1	-107.0		+0.0	-64.2	-40.0	-24.2	Ant1
^	4246.695M	52.9	+9.9	+1.1	-107.0		+0.0	-43.1	-40.0	-3.1	Ant1

Test Location:	CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240		
Customer:	**Mercury Wireless**		
Specification:	**47 CFR §96.41e Spurious Emissions**		
Work Order #:	**103300**	Date:	3/10/2020
Test Type:	**Conducted Emissions**	Time:	16:04:51
Tested By:	Randy Clark	Sequence#:	59
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

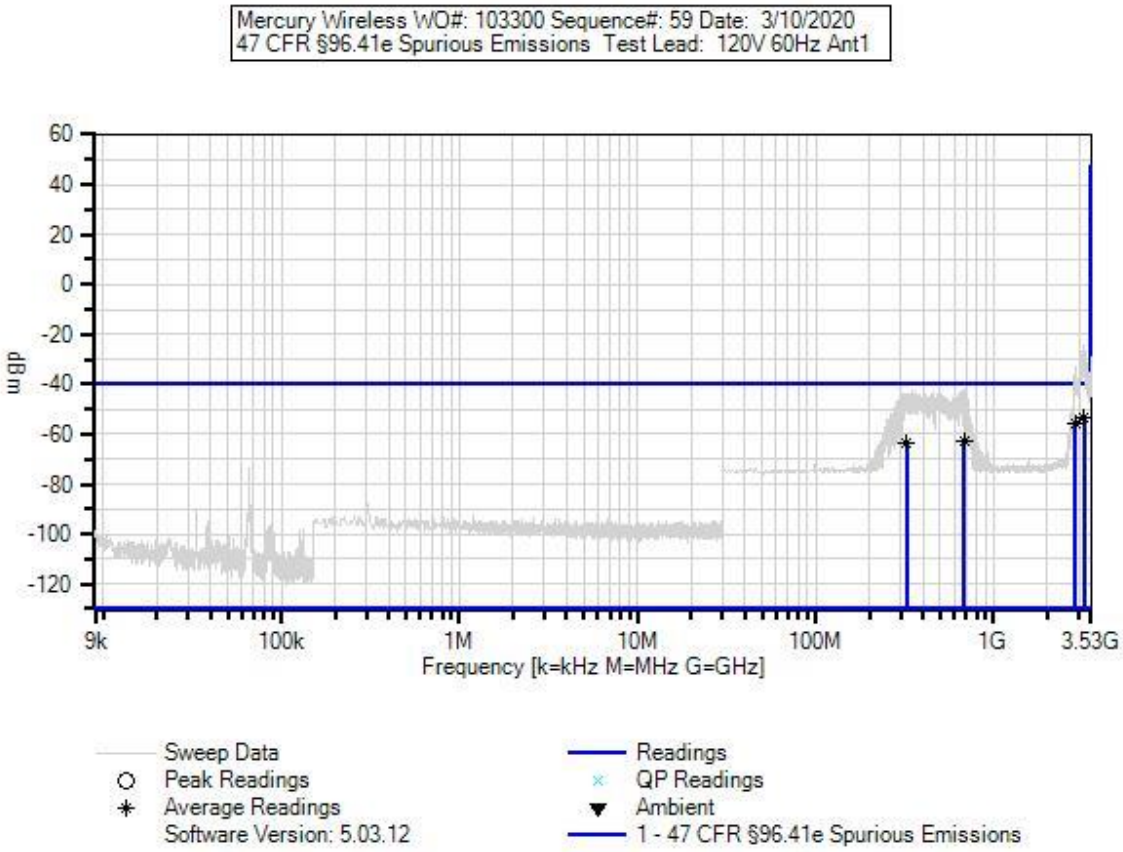
RBW:
200Hz (9k - 150k),
9kHz (150k-30M),
1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3552.5 MHz
Modulation: QAM64
Channel Bandwidth: 3.5MHz
Output Power Software Setting: 31

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.



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	32026-2-29094K-48TC	3/14/2019	3/14/2021
T3	ANdBuV	Unit Conversion		8/24/2018	8/24/2022

Measurement Data: Reading listed by margin. Test Lead: Ant1

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	3197.025M Ave	43.0	+9.9	+0.9	-107.0		+0.0	-53.2	-40.0	-13.2	Ant1
^	3197.020M	69.6	+9.9	+0.9	-107.0		+0.0	-26.6	-40.0	+13.4	Ant1
3	2865.470M Ave	40.5	+9.9	+0.9	-107.0		+0.0	-55.7	-40.0	-15.7	Ant1
^	2865.470M	61.2	+9.9	+0.9	-107.0		+0.0	-35.0	-40.0	+5.0	Ant1
5	679.987M Ave	33.5	+9.9	+0.5	-107.0		+0.0	-63.1	-40.0	-23.1	Ant1
^	679.980M	54.8	+9.9	+0.5	-107.0		+0.0	-41.8	-40.0	-1.8	Ant1
7	326.052M Ave	33.0	+9.9	+0.3	-107.0		+0.0	-63.8	-40.0	-23.8	Ant1
^	326.050M	53.2	+9.9	+0.3	-107.0		+0.0	-43.6	-40.0	-3.6	Ant1

Test Location:	CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240		
Customer:	**Mercury Wireless**		
Specification:	**47 CFR §96.41e Spurious Emissions**		
Work Order #:	**103300**	Date:	3/10/2020
Test Type:	**Conducted Emissions**	Time:	16:12:48
Tested By:	Randy Clark	Sequence#:	60
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: 3552.5 MHz
Modulation: QAM64
Channel Bandwidth: 3.5MHz
Output Power Software Setting: 31

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.

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	32026-2-29094K-48TC	3/14/2019	3/14/2021
T3	ANdBuV	Unit Conversion		8/24/2018	8/24/2022

Measurement Data: Reading listed by margin. Test Lead: Ant1

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	10657.750 M	50.7	+10.0	+1.9	-107.0		+0.0	-44.4	-40.0	-4.4	Ant1
2	7105.045M Ave	43.0	+10.0	+1.5	-107.0		+0.0	-52.5	-40.0	-12.5	Ant1
^	7105.035M	63.7	+10.0	+1.5	-107.0		+0.0	-31.8	-40.0	+8.2	Ant1
4	14210.025 M	39.9	+10.0	+2.0	-107.0		+0.0	-55.1	-40.0	-15.1	Ant1
5	3839.535M Ave	35.9	+9.9	+1.0	-107.0		+0.0	-60.2	-40.0	-20.2	Ant1
^	3839.535M	67.5	+9.9	+1.0	-107.0		+0.0	-28.6	-40.0	+11.4	Ant1
7	4246.147M Ave	31.7	+9.9	+1.1	-107.0		+0.0	-64.3	-40.0	-24.3	Ant1
^	4246.110M	56.1	+9.9	+1.1	-107.0		+0.0	-39.9	-40.0	+0.1	Ant1
9	3998.319M Ave	31.0	+9.9	+1.1	-107.0		+0.0	-65.0	-40.0	-25.0	Ant1
^	3998.265M	55.5	+9.9	+1.1	-107.0		+0.0	-40.5	-40.0	-0.5	Ant1

Test Location:	CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240		
Customer:	**Mercury Wireless**		
Specification:	**47 CFR §96.41e Spurious Emissions**		
Work Order #:	**103300**	Date:	3/10/2020
Test Type:	**Conducted Emissions**	Time:	16:21:31
Tested By:	Randy Clark	Sequence#:	61
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

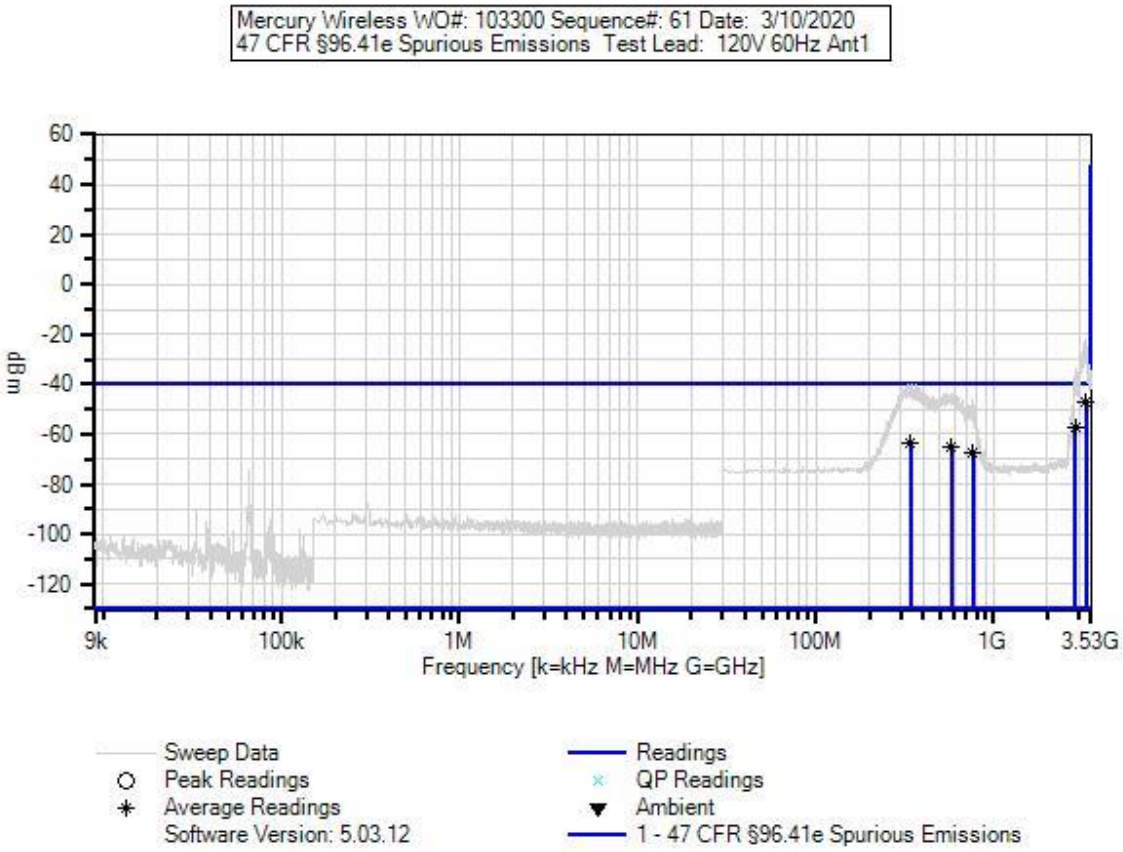
RBW:
200Hz (9k - 150k),
9kHz (150k-30M),
1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3625 MHz
Modulation: QPSK
Channel Bandwidth: 3.5MHz
Output Power Software Setting: 31

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.



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	32026-2-29094K-48TC	3/14/2019	3/14/2021
T3	ANdBuV	Unit Conversion		8/24/2018	8/24/2022

Measurement Data: Reading listed by margin. Test Lead: Ant1

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	3297.771M Ave	48.8	+9.9	+1.0	-107.0		+0.0	-47.3	-40.0	-7.3	Ant1
^	3297.750M	75.5	+9.9	+1.0	-107.0		+0.0	-20.6	-40.0	+19.4	Ant1
3	2867.146M Ave	39.2	+9.9	+0.9	-107.0		+0.0	-57.0	-40.0	-17.0	Ant1
^	2867.140M	63.4	+9.9	+0.9	-107.0		+0.0	-32.8	-40.0	+7.2	Ant1
5	339.233M Ave	33.3	+9.9	+0.3	-107.0		+0.0	-63.5	-40.0	-23.5	Ant1
^	339.230M	57.1	+9.9	+0.3	-107.0		+0.0	-39.7	-40.0	+0.3	Ant1
7	576.057M Ave	31.8	+9.9	+0.4	-107.0		+0.0	-64.9	-40.0	-24.9	Ant1
^	576.050M	53.5	+9.9	+0.4	-107.0		+0.0	-43.2	-40.0	-3.2	Ant1
9	768.256M Ave	29.3	+9.9	+0.5	-107.0		+0.0	-67.3	-40.0	-27.3	Ant1
^	768.250M	49.4	+9.9	+0.5	-107.0		+0.0	-47.2	-40.0	-7.2	Ant1

Test Location:	CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240		
Customer:	**Mercury Wireless**		
Specification:	**47 CFR §96.41e Spurious Emissions**		
Work Order #:	**103300**	Date:	3/10/2020
Test Type:	**Conducted Emissions**	Time:	16:29:16
Tested By:	Randy Clark	Sequence#:	62
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: QPSK
Channel Bandwidth: 3.5MHz
Output Power Software Setting: 31

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.

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	32026-2-29094K-48TC	3/14/2019	3/14/2021
T3	ANdBuV	Unit Conversion		8/24/2018	8/24/2022

Measurement Data: Reading listed by margin. Test Lead: Ant1

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	10873.663 M	44.8	+10.0	+1.9	-107.0		+0.0	-50.3	-40.0	-10.3	Ant1
2	3908.970M Ave	45.3	+9.9	+1.0	-107.0		+0.0	-50.8	-40.0	-10.8	Ant1
^	3908.955M	67.2	+9.9	+1.0	-107.0		+0.0	-28.9	-40.0	+11.1	Ant1
4	4386.120M	43.8	+9.9	+1.1	-107.0		+0.0	-52.2	-40.0	-12.2	Ant1
5	7250.525M Ave	38.7	+10.0	+1.5	-107.0		+0.0	-56.8	-40.0	-16.8	Ant1
^	7250.488M	59.6	+10.0	+1.5	-107.0		+0.0	-35.9	-40.0	+4.1	Ant1
7	14500.935 M	36.4	+10.0	+2.0	-107.0		+0.0	-58.6	-40.0	-18.6	Ant1
8	4166.782M Ave	31.2	+9.9	+1.1	-107.0		+0.0	-64.8	-40.0	-24.8	Ant1
^	4166.745M	53.7	+9.9	+1.1	-107.0		+0.0	-42.3	-40.0	-2.3	Ant1

Test Location:	CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240		
Customer:	**Mercury Wireless**		
Specification:	**47 CFR §96.41e Spurious Emissions**		
Work Order #:	**103300**	Date:	3/10/2020
Test Type:	**Conducted Emissions**	Time:	16:39:40
Tested By:	Randy Clark	Sequence#:	63
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

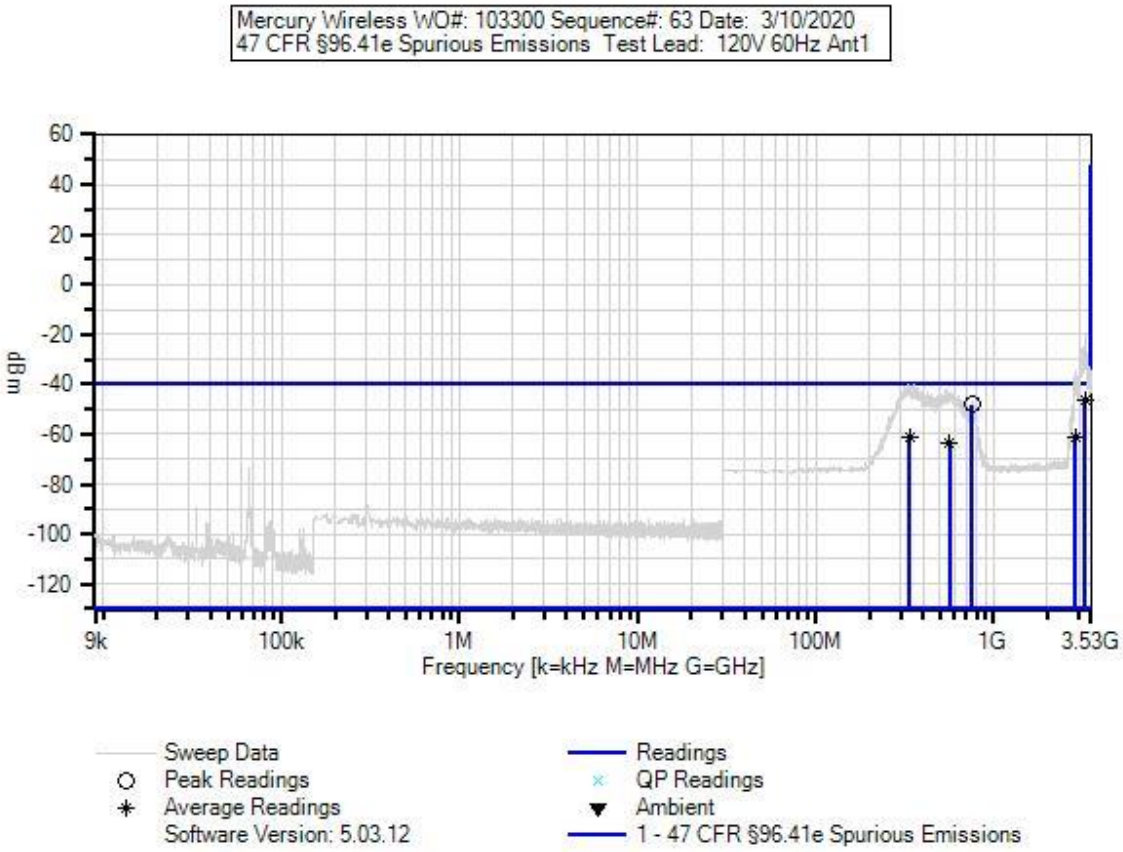
RBW:
200Hz (9k - 150k),
9kHz (150k-30M),
1MHz (30MHz - 37GHz)

VBW: 3x RBW

Transmitter Settings:
Transmit Frequency: 3625 MHz
Modulation: QAM16
Channel Bandwidth: 3.5MHz
Output Power Software Setting: 31

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.



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	32026-2-29094K-48TC	3/14/2019	3/14/2021
T3	ANdBuV	Unit Conversion		8/24/2018	8/24/2022

Measurement Data: Reading listed by margin. Test Lead: Ant1

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	3250.504M Ave	50.1	+9.9	+1.0	-107.0		+0.0	-46.0	-40.0	-6.0	Ant1
^	3250.490M	74.5	+9.9	+1.0	-107.0		+0.0	-21.6	-40.0	+18.4	Ant1
3	756.060M	48.5	+9.9	+0.5	-107.0		+0.0	-48.1	-40.0	-8.1	Ant1
4	2856.423M Ave	35.1	+9.9	+0.9	-107.0		+0.0	-61.1	-40.0	-21.1	Ant1
^	2856.400M	64.9	+9.9	+0.9	-107.0		+0.0	-31.3	-40.0	+8.7	Ant1
6	335.556M Ave	35.4	+9.9	+0.3	-107.0		+0.0	-61.4	-40.0	-21.4	Ant1
^	335.550M	57.2	+9.9	+0.3	-107.0		+0.0	-39.6	-40.0	+0.4	Ant1
8	563.325M Ave	33.1	+9.9	+0.4	-107.0		+0.0	-63.6	-40.0	-23.6	Ant1
^	563.320M	55.8	+9.9	+0.4	-107.0		+0.0	-40.9	-40.0	-0.9	Ant1

Test Location:	CKC Laboratories Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • 209-966-5240		
Customer:	**Mercury Wireless**		
Specification:	**47 CFR §96.41e Spurious Emissions**		
Work Order #:	**103300**	Date:	3/10/2020
Test Type:	**Conducted Emissions**	Time:	16:47:45
Tested By:	Randy Clark	Sequence#:	64
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: 3.5MHz
Output Power Software Setting: 31

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.

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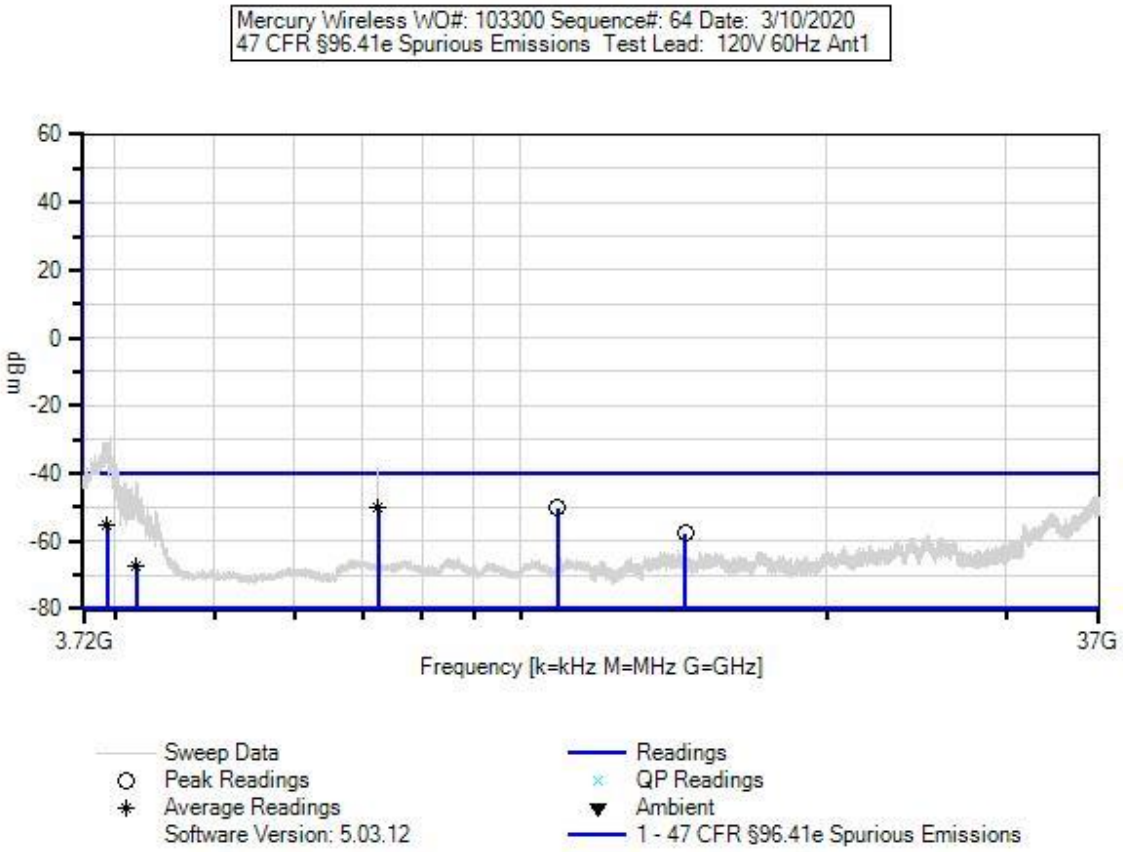

Test Equipment:

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	32026-2-29094K-48TC	3/14/2019	3/14/2021
T3	ANdBuV	Unit Conversion		8/24/2018	8/24/2022