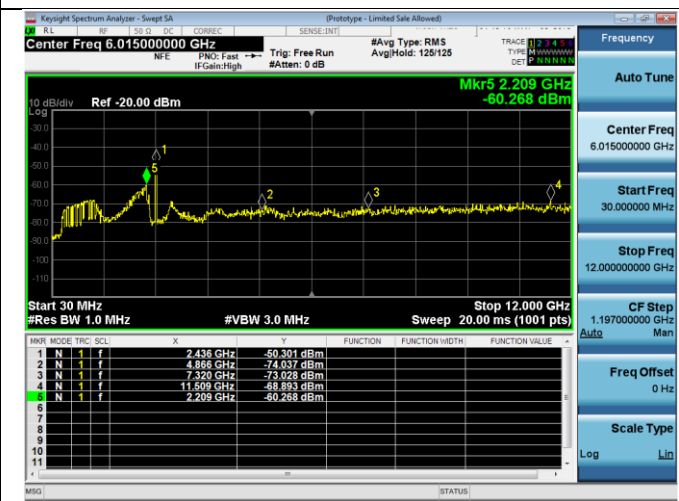
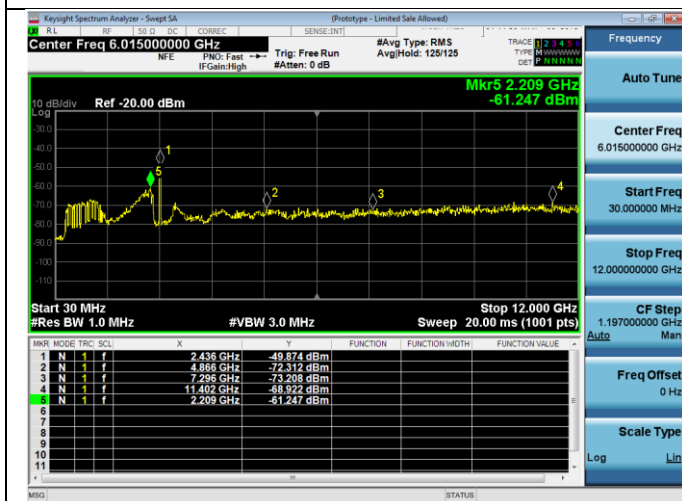


Conducted Spurious Average, 2437, HT20, M0

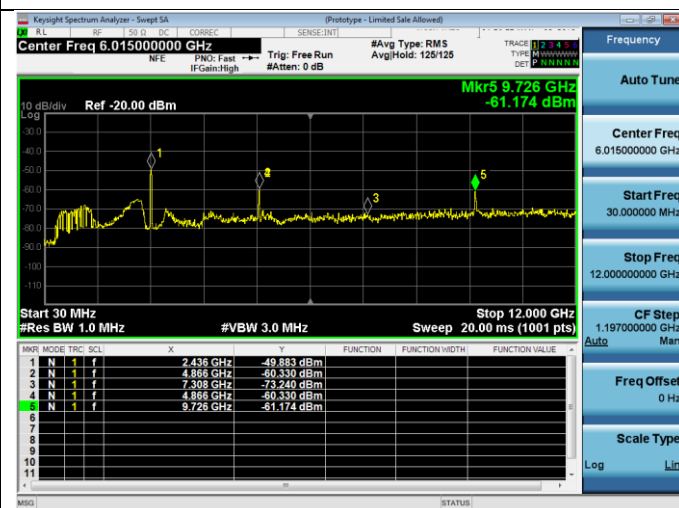
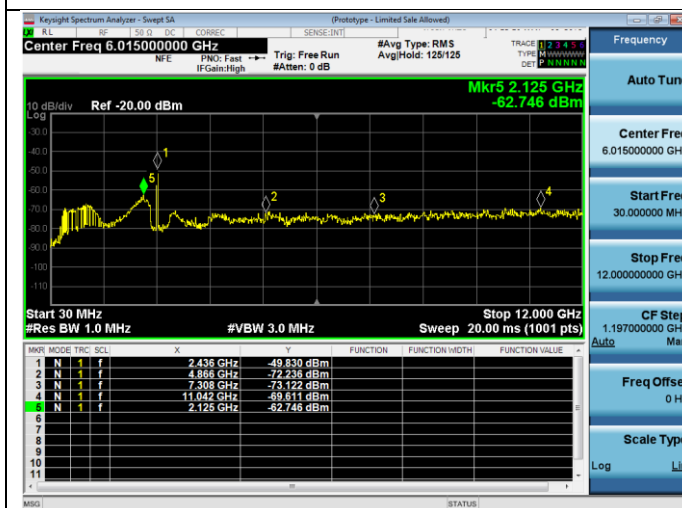
Antenna A

Antenna B



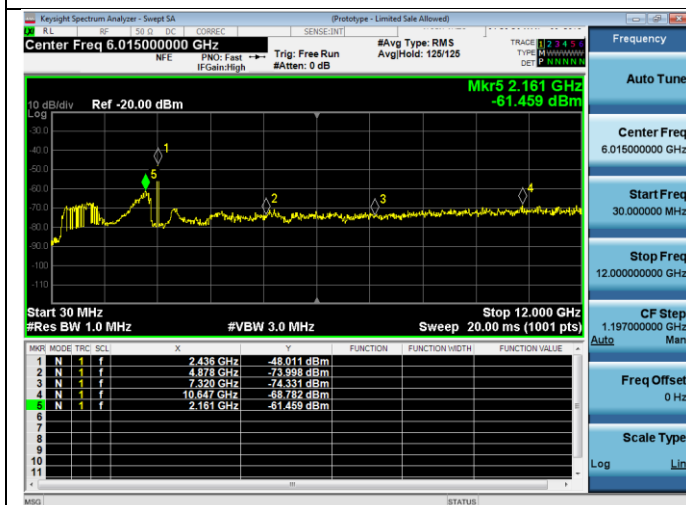
Antenna C

Antenna D

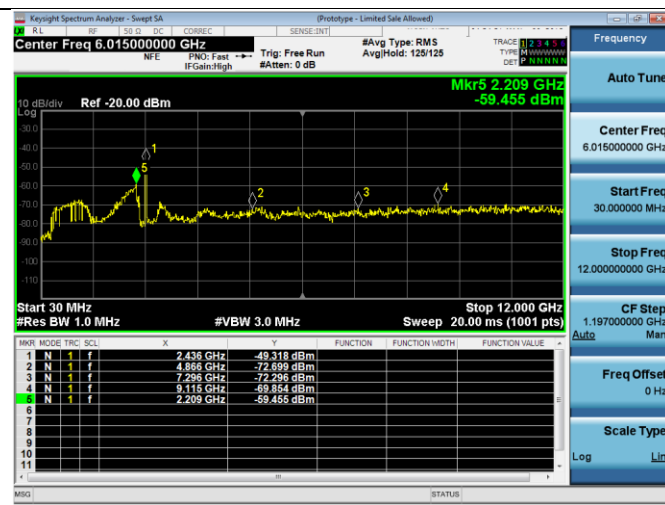


Conducted Spurious Average, 2437, HE20, M0h1

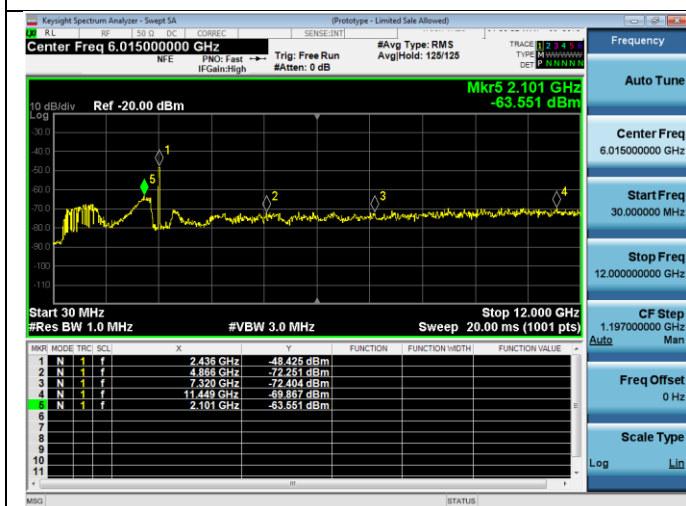
Antenna A



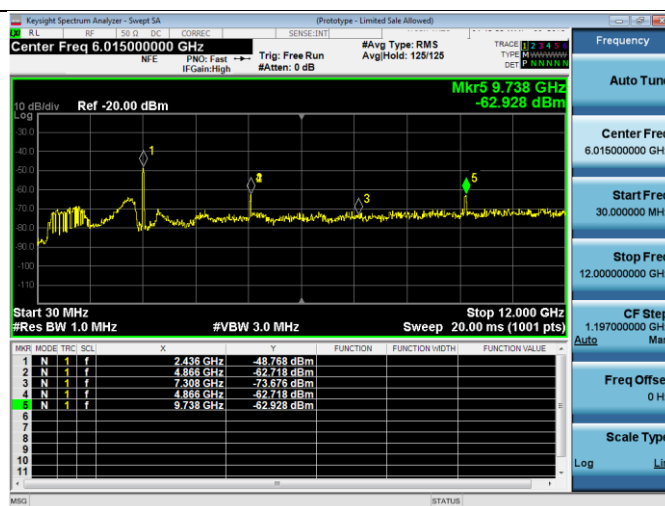
Antenna B



Antenna C



Antenna D



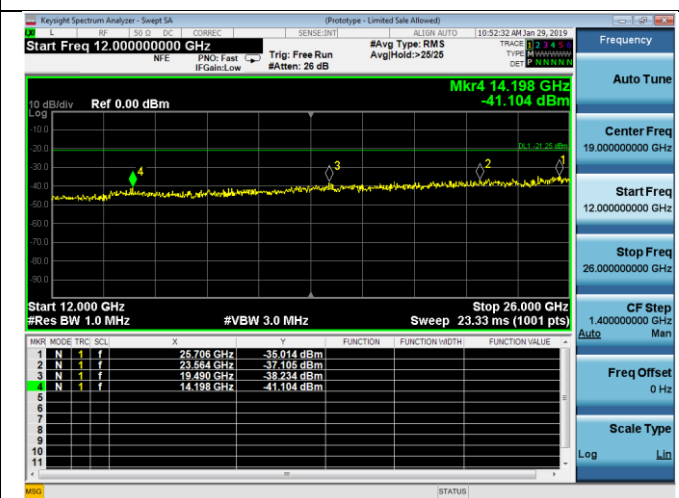
5.6.9 Conducted Spurious Peak Screenshots 12GHz-26GHz

Plots representative of all modes

Conducted Spurious Peak 12GHz-26GHz index power 17dBm

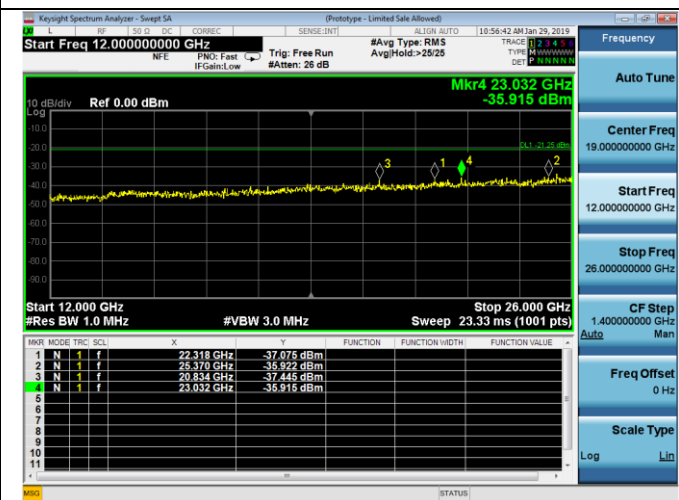
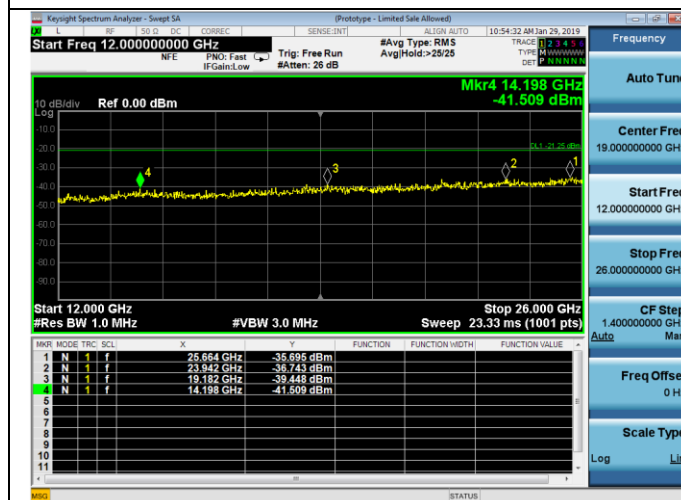
Antenna A

Antenna B



Antenna C

Antenna D



5.7 Conducted Band Edge

5.7.1 Conducted Band Edge Test Requirement

15.247 / LP0002 (2018-01-10) (3.10.1.5) (2.8):

(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

RSS-247

5.5 Unwanted emissions

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

15.205 / RSS-Gen Issue 5

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), and RSS-Gen Issue 5 Section 8.10 must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)) and RSS-Gen Issue 5 Section 8.9.

5.7.2 Conducted Band Edge Test Method

Ref. KDB 558074 D01 DTS Meas. Guidance v04

ANSI C63.10: 2013

Conducted Band Edge Test Procedure	
1. Connect the antenna port(s) to the spectrum analyzer input. 2. Place the radio in continuous transmit mode. Use the procedures in KDB 558074 D01 DTS Meas. Guidance v04 to substitute conducted measurements in place of radiated measurements. 3. Configure Spectrum analyzer as per test parameters below (be sure to enter all losses between the transmitter output and the spectrum analyzer). 4. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. 5. The “measure-and-sum technique” is used for measuring in-band transmit power of a device. In the measure-and-sum approach, the conducted emission level is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in linear power units. The worst case output is recorded. 6. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands 7. Capture graphs and record pertinent measurement data.	
Conducted Band Edge Test parameters non-restricted Band KDB 558074 D01 v04 section 11.1b, 11.2-3, also see ANSI C63.10: 2013 section 11.10.3	Conducted Band Edge Test parameters restricted Band KDB 558074 D01 v04 section 12.2.4 & 12.2.5.3 also see ANSI C63.10: 2013 section 11.12.4 & 11.12.5.3
RBW = 100 kHz VBW $\geq 3 \times$ RBW Sweep = Auto couple Detector = Peak Trace = Max Hold.	RBW = 1 MHz VBW $\geq 3 \times$ RBW for Peak, 100Hz for Average Sweep = Auto couple Detector = Peak Trace = Max Hold.

5.7.3 Conducted Band Edge Test Information

Samples, Systems, and Modes

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	☒	☐
	Support	S02	☐	☒

Tested By: Julian Land	Date of testing: 11/5/2018 – 11/8/2018
Test Result: PASS	

Test Equipment

See Appendix A for list of test equipment

5.7.4 Conducted Band Edge (Restricted Band) Data Table Average

Frequency (MHz)	Mode	Tx Paths	Index Power (dBm)	Correlated Antenna Gain (dBi)	Tx 1 Bandedge Level (dBm)	Tx 2 Bandedge Level (dBm)	Tx 3 Bandedge Level (dBm)	Tx 4 Bandedge Level (dBm)	Total Tx Bandedge Level (dBm)	Limit (dBm)	Margin (dB)
2412	CCK, 1 to 11 MB/s	1	17	3	-56.6				-53.6	-41.25	12.4
	CCK, 1 to 11 MB/s	2	17	3	-56.6	-57.4			-51.0	-41.25	9.7
	CCK, 1 to 11 MB/s	3	17	3	-56.6	-57.4	-57.5		-49.4	-41.25	8.1
	CCK, 1 to 11 MB/s	4	17	3	-56.6	-57.4	-57.5	-55.2	-47.6	-41.25	6.3
	Non HT20, 6 to 54 Mbps	1	15	3	-48.1				-45.1	-41.25	3.9
	Non HT20, 6 to 54 Mbps	2	15	3	-48.1	-48.9			-42.5	-41.25	1.2
	Non HT20, 6 to 54 Mbps	3	14	3	-52.3	-51.5	-51.8		-44.1	-41.25	2.8
	Non HT20, 6 to 54 Mbps	4	14	3	-52.3	-51.5	-51.8	-49.0	-41.9	-41.25	0.7
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	6	-52.3	-51.5			-42.9	-41.25	1.6
	Non HT20 Beam Forming, 6 to 54 Mbps	3	13	8	-54.7	-54.7	-53.9		-41.6	-41.25	0.4
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	9	-57.4	-58.4	-57.3	-56.1	-42.2	-41.25	1.0
	HT20, M0 to M7	1	16	3	-44.8				-41.8	-41.25	0.5
	HT20, M0 to M7	2	15	3	-48.8	-50.0			-43.3	-41.25	2.1
	HT20, M8 to M15	2	15	3	-48.8	-50.0			-43.3	-41.25	2.1
	HT20, M0 to M7	3	15	3	-48.8	-50.0	-49.0		-41.5	-41.25	0.2
	HT20, M8 to M15	3	15	3	-48.8	-50.0	-49.0		-41.5	-41.25	0.2
	HT20, M16 to M23	3	15	3	-48.8	-50.0	-49.0		-41.5	-41.25	0.2
	HT20, M0 to M7	4	14	3	-52.8	-52.9	-51.0	-50.0	-42.5	-41.25	1.2
	HT20, M8 to M15	4	14	3	-52.8	-52.9	-51.0	-50.0	-42.5	-41.25	1.2
	HT20, M16 to M23	4	14	3	-52.8	-52.9	-51.0	-50.0	-42.5	-41.25	1.2
	HT20, M24 to M31	4	14	3	-52.8	-52.9	-51.0	-50.0	-42.5	-41.25	1.2
	HT20 Beam Forming, M0 to M7	2	14	6	-52.8	-52.9			-43.8	-41.25	2.6
	HT20 Beam Forming, M8 to M15	2	15	3	-48.8	-50.0			-43.3	-41.25	2.1
	HT20 Beam Forming, M0 to M7	3	13	8	-54.7	-54.7	-53.6		-41.5	-41.25	0.3
	HT20 Beam Forming, M8 to M15	3	14	5	-52.8	-52.9	-51.0		-42.4	-41.25	1.1
	HT20 Beam Forming, M16 to M23	3	15	3	-48.8	-50.0	-49.0		-41.5	-41.25	0.2
	HT20 Beam Forming, M0 to M7	4	11	9	-57.5	-57.6	-57.3	-55.8	-42.0	-41.25	0.7
	HT20 Beam Forming, M8 to M15	4	13	6	-54.7	-54.7	-53.6	-52.6	-41.8	-41.25	0.5
	HT20 Beam Forming, M16 to M23	4	14	4	-52.8	-52.9	-51.0	-50.0	-41.5	-41.25	0.2