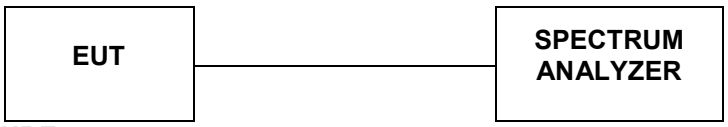
4.5. 6dB Bandwidth

TEST CONFIGURATION



TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with RBW=100 KHz and VBW=300KHz.
The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.
According to KDB558074 D01 for one of the following procedures may be used to determine the modulated DTS device signal bandwidth.

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

LIMIT

For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz

TEST RESULTS

Temperature	24.2℃	Humidity	54.9%
Test Engineer	Moon Tan	Configurations	IEEE 802.11b/g/n

Antenna 9:

Type	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	01	7.200	≥500	Pass
	06	7.680		
	11	8.040		
802.11g	01	16.360	≥500	Pass
	06	15.800		
	11	16.360		
802.11nHT20	01	17.640	≥500	Pass
	06	17.640		
	11	17.640		
802.11nHT40	03	36.400	≥500	Pass
	06	36.240		
	09	36.240		
802.11axHT20	01	18.640	≥500	Pass
	06	18.880		
	11	18.760		
802.11axHT40	03	37.040	≥500	Pass
	06	38.000		
	09	37.840		

Antenna 10:

Type	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	01	7.080	≥500	Pass
	06	8.160		
	11	7.640		
802.11g	01	16.440	≥500	Pass
	06	16.440		
	11	16.400		
802.11nHT20	01	17.640	≥500	Pass
	06	17.640		
	11	17.680		
802.11nHT40	03	35.760	≥500	Pass
	06	36.480		
	09	36.080		
802.11axHT20	01	18.800	≥500	Pass
	06	19.040		
	11	18.800		
802.11axHT40	03	38.080	≥500	Pass
	06	38.240		
	09	37.600		

Antenna 11:

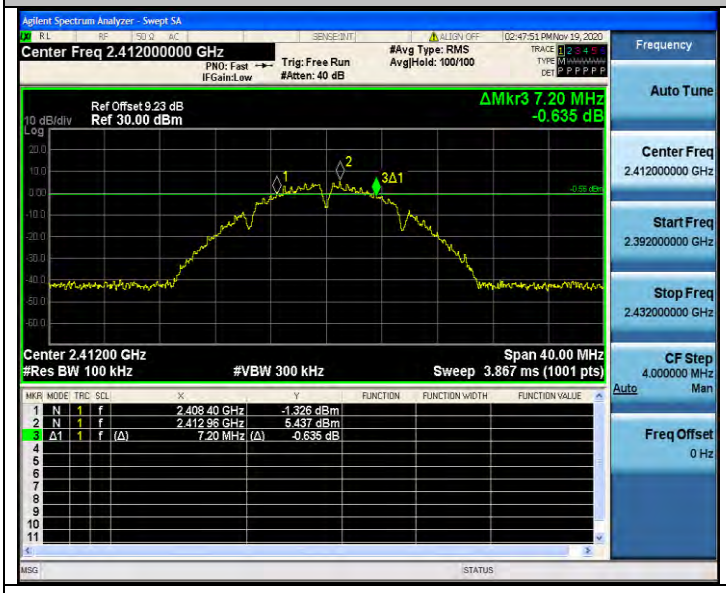
Type	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	01	7.640	≥500	Pass
	06	7.160		
	11	6.720		
802.11g	01	16.360	≥500	Pass
	06	16.000		
	11	16.040		
802.11nHT20	01	17.600	≥500	Pass
	06	17.640		
	11	17.640		
802.11nHT40	03	35.760	≥500	Pass
	06	36.480		
	09	36.240		
802.11axHT20	01	19.000	≥500	Pass
	06	18.760		
	11	18.840		
802.11axHT40	03	37.680	≥500	Pass
	06	37.600		
	09	37.440		

Antenna 12:

Type	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	01	7.120	≥500	Pass
	06	7.640		
	11	7.600		
802.11g	01	16.160	≥500	Pass
	06	16.040		
	11	16.040		
802.11nHT20	01	17.240	≥500	Pass
	06	17.640		
	11	17.640		
802.11nHT40	03	36.240	≥500	Pass
	06	36.000		
	09	36.480		
802.11axHT20	01	18.880	≥500	Pass
	06	18.600		
	11	18.920		
802.11axHT40	03	36.240	≥500	Pass
	06	37.120		
	09	38.000		

Antenna 9:

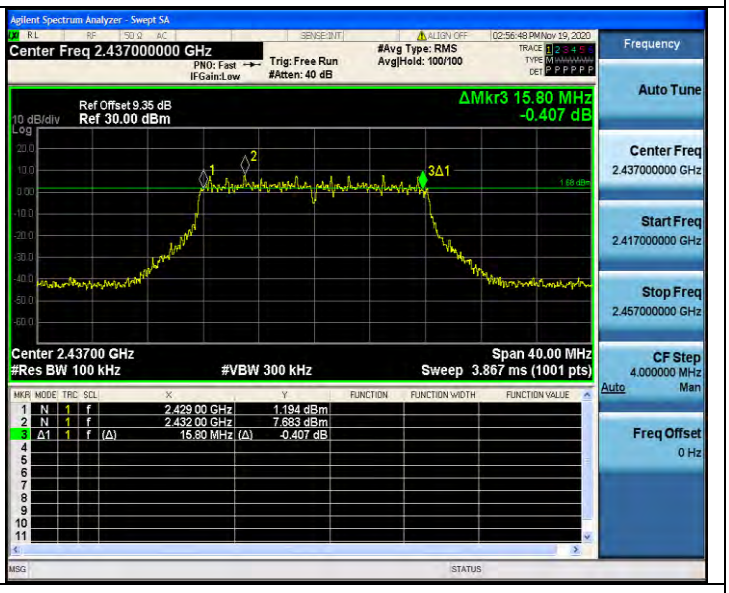
802.11b



802.11g

CH01

CH01

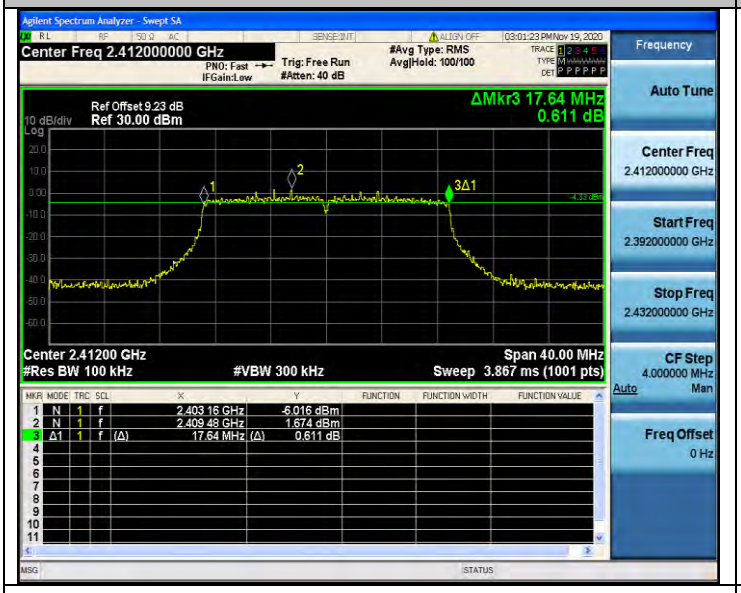


CH06

CH06

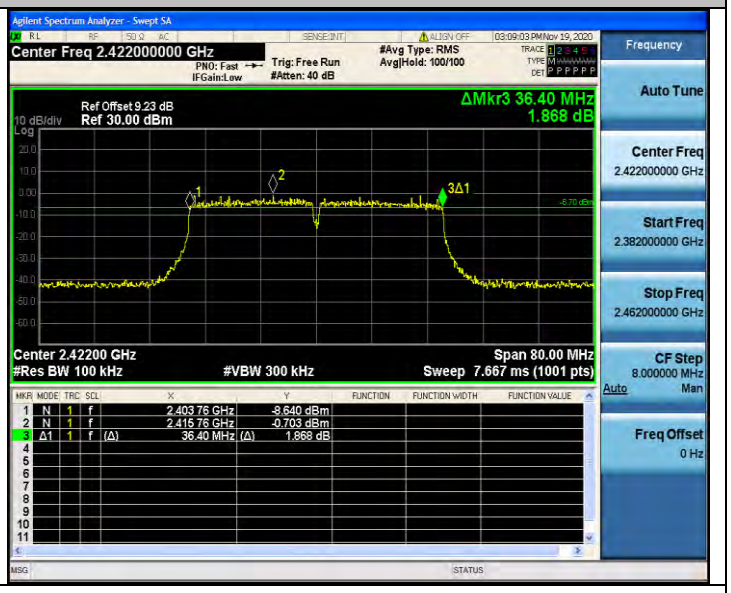
CH11

802.11n HT20

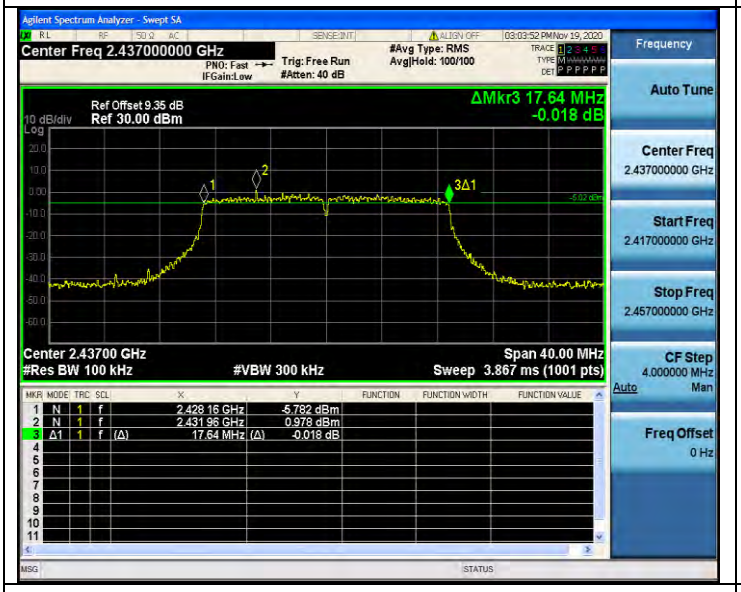


CH11

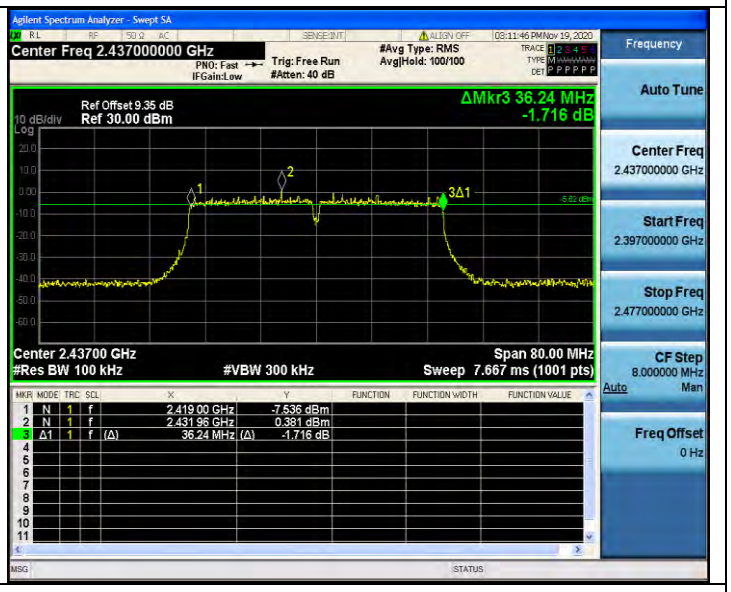
802.11n HT40



CH01

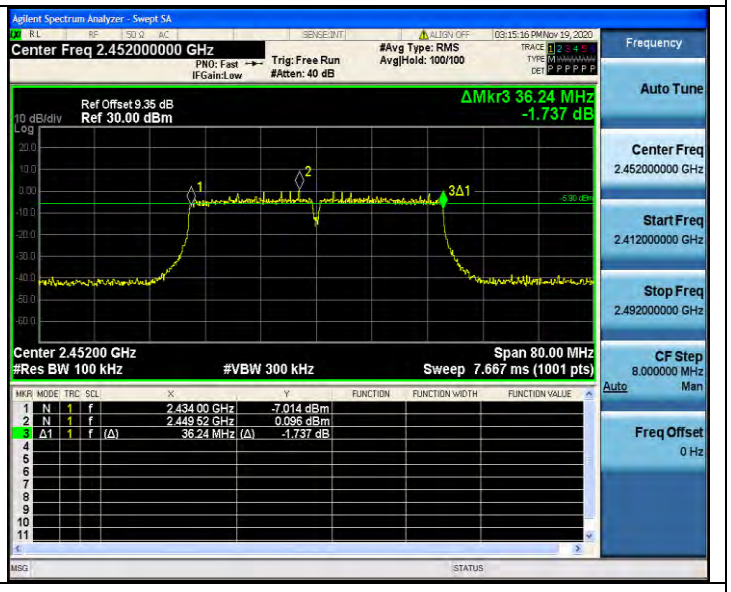


CH03



CH06

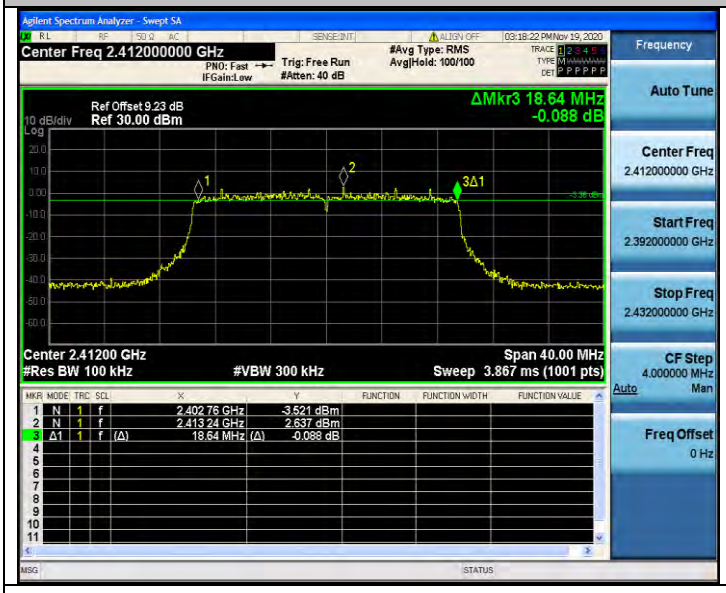
CH06



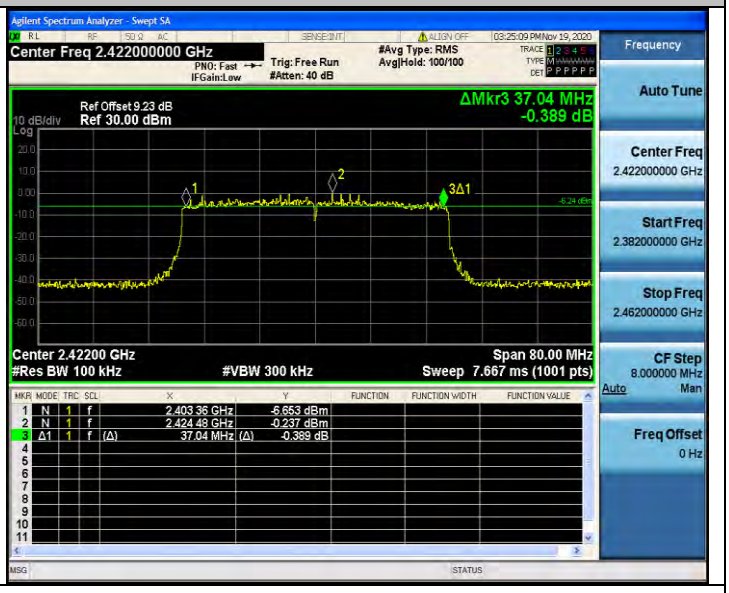
CH11

CH09

802.11ax HT20

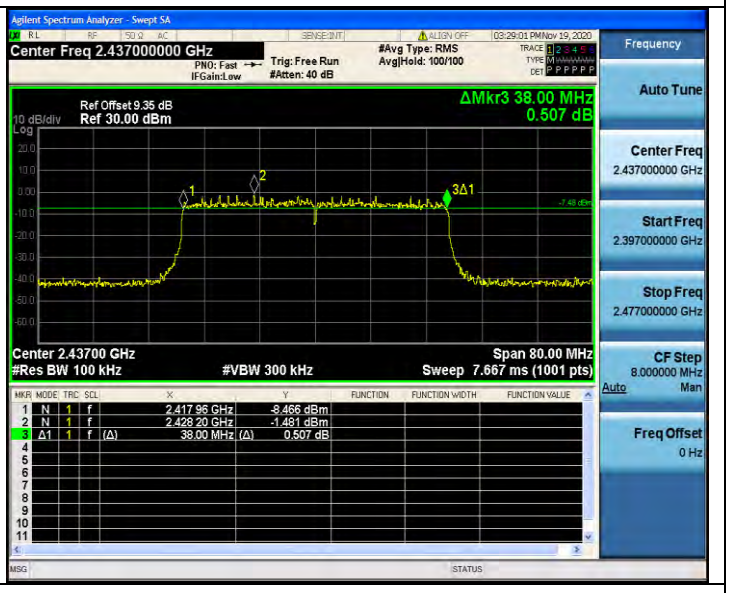


802.11ax HT40



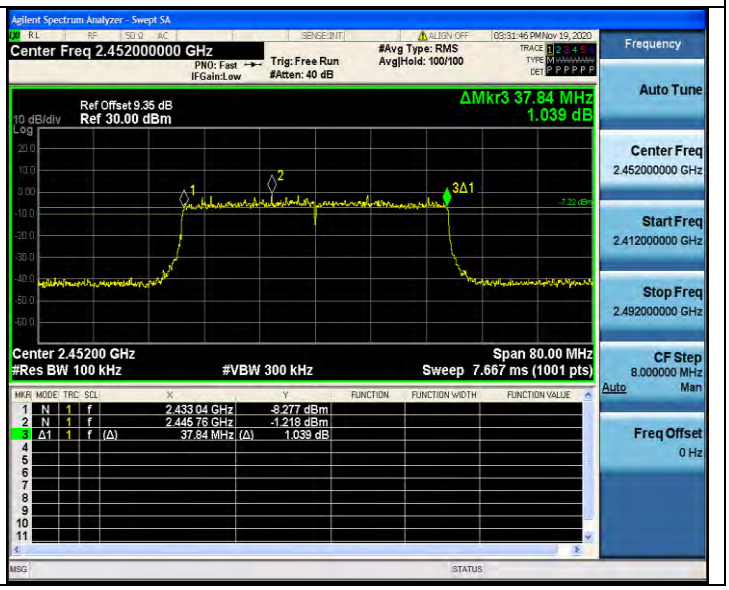
CH01

CH03



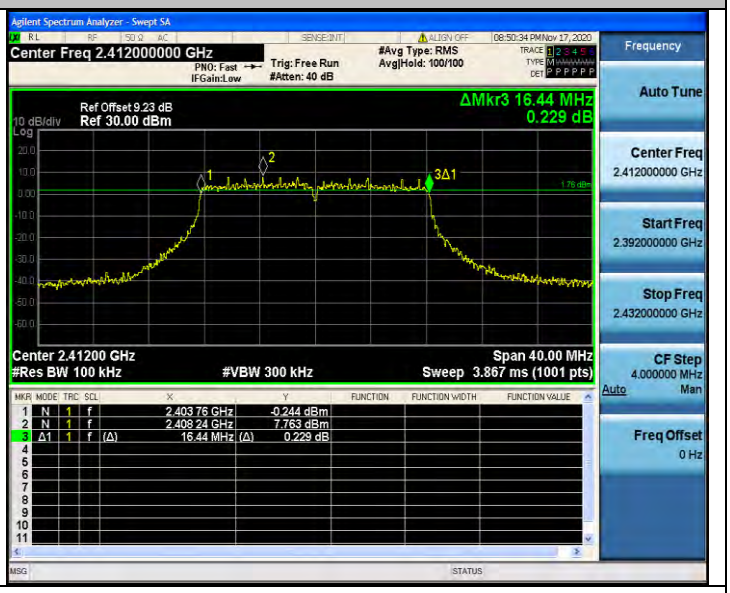
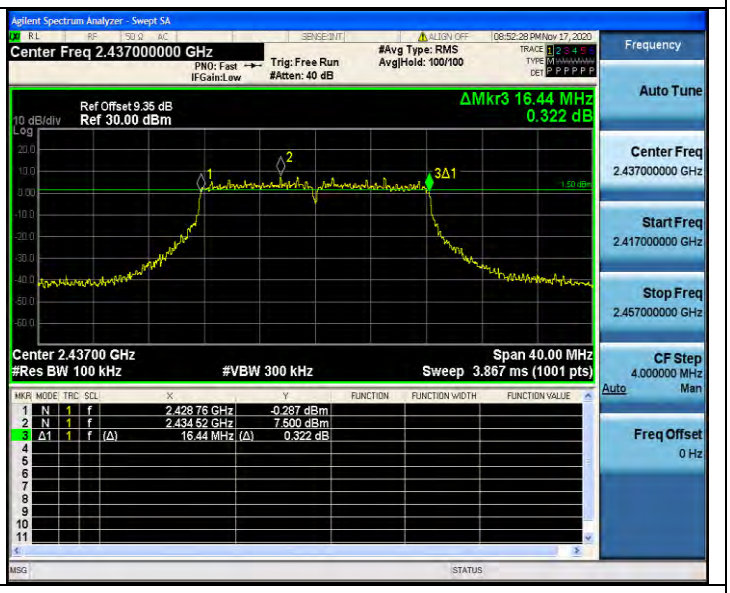
CH06

CH06



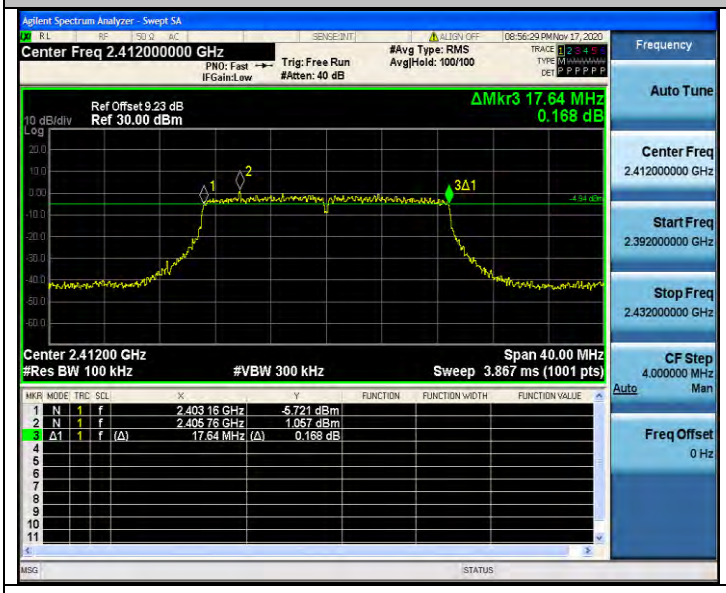
CH11	CH09

Antenna 10:

802.11b	802.11g
	
CH01	CH01
	
CH06	CH06

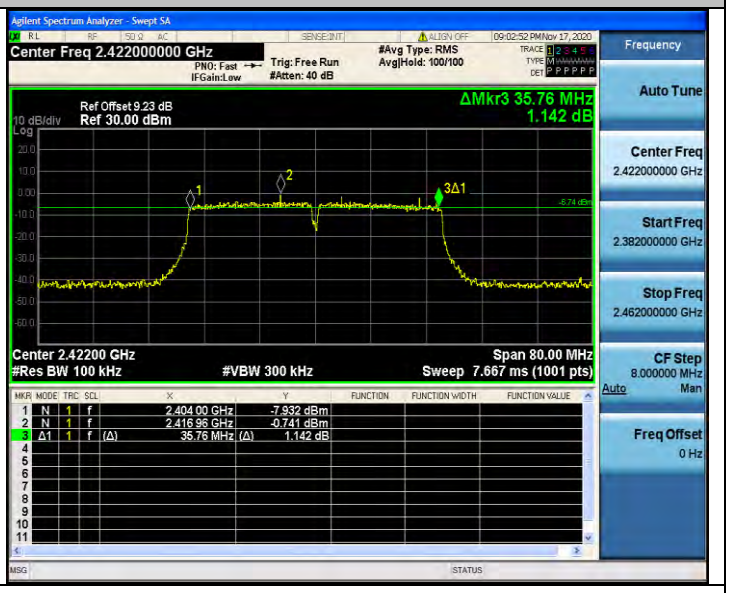
CH11

802.11n HT20

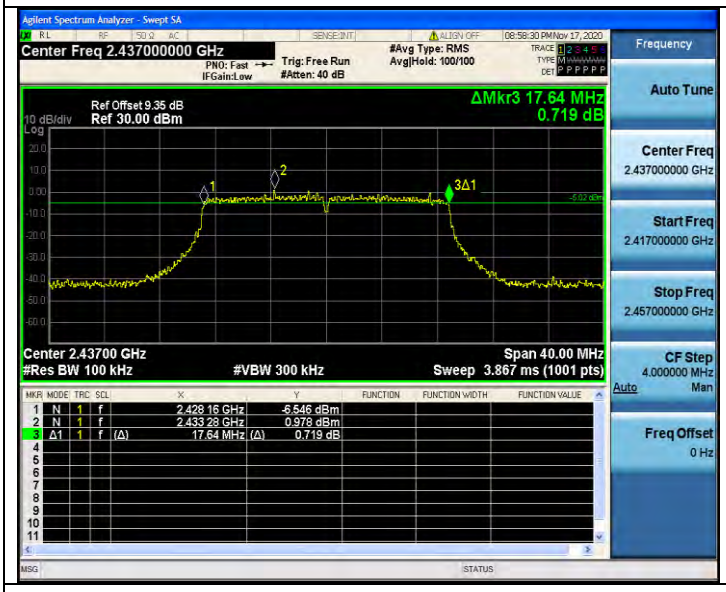


CH11

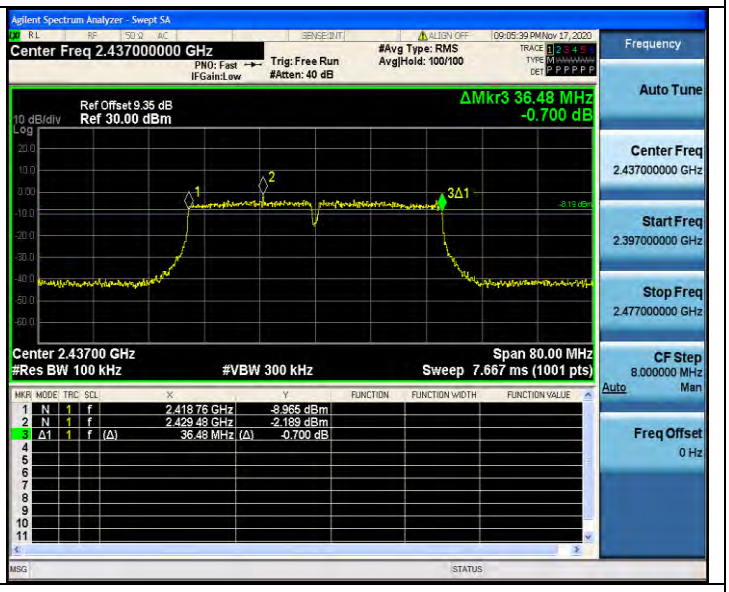
802.11n HT40



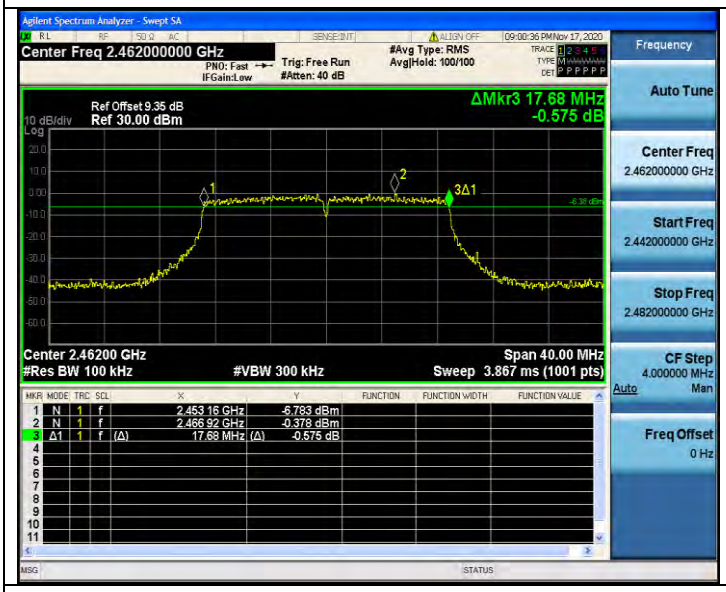
CH01



CH03



CH06



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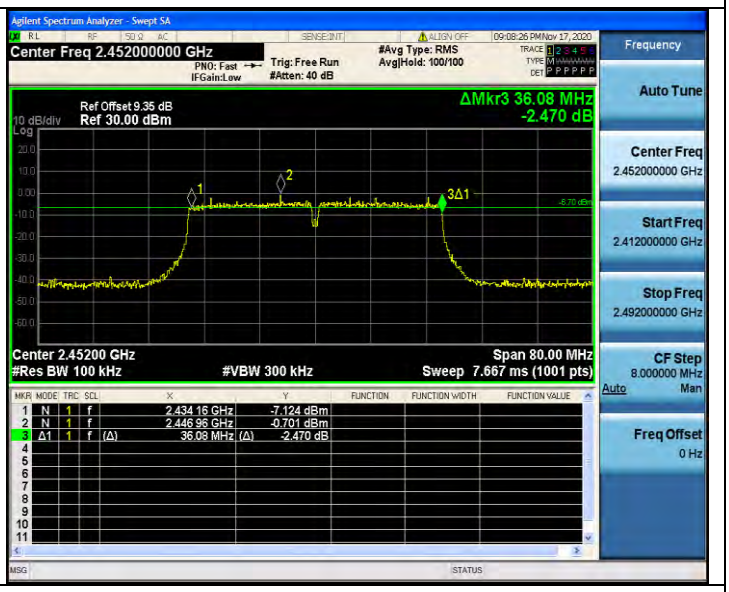
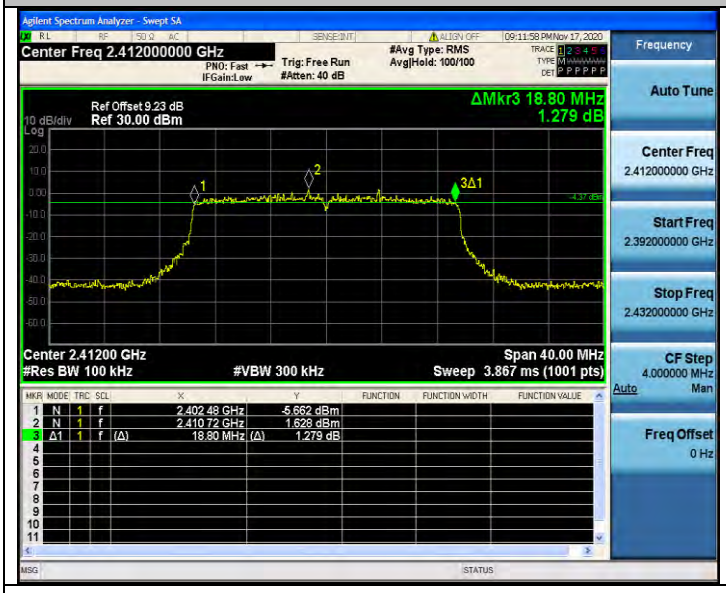


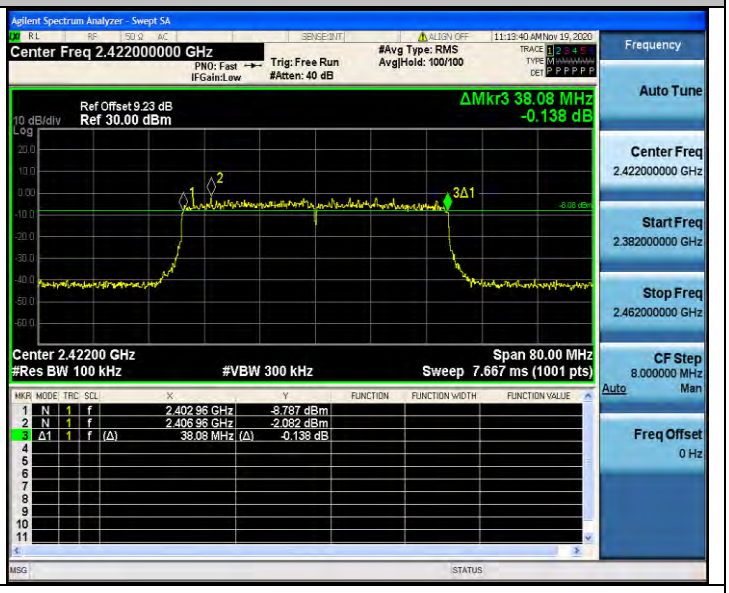
CH11

CH09

802.11ax HT20

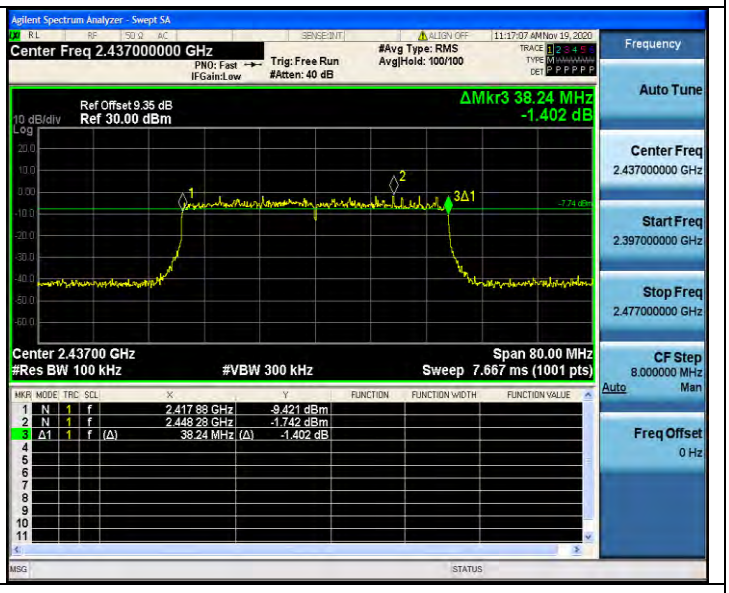


802.11ax HT40



CH01

CH03



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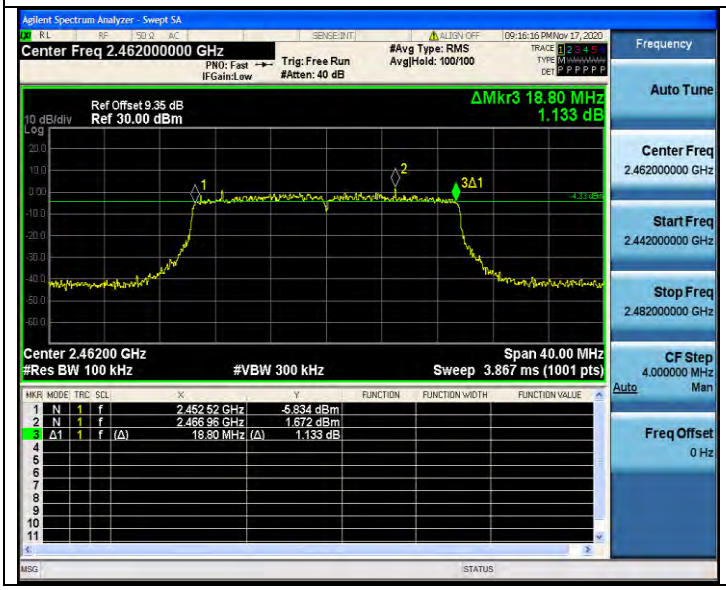
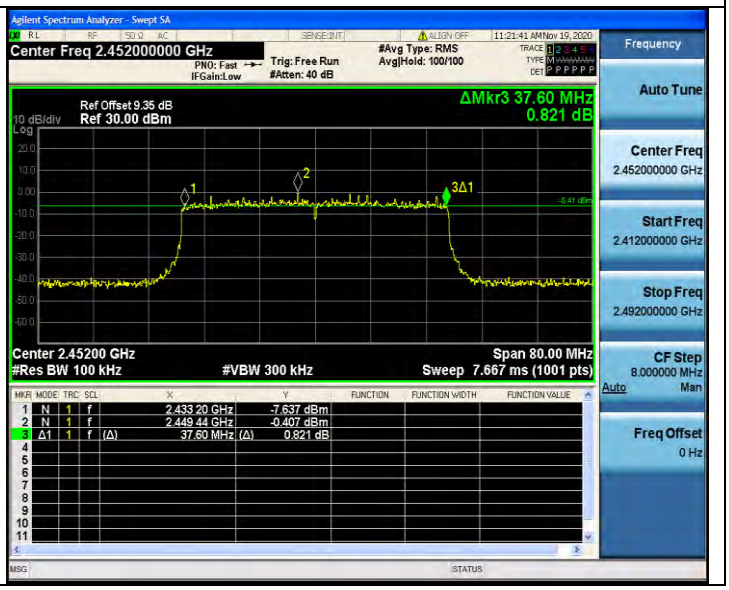


CH06



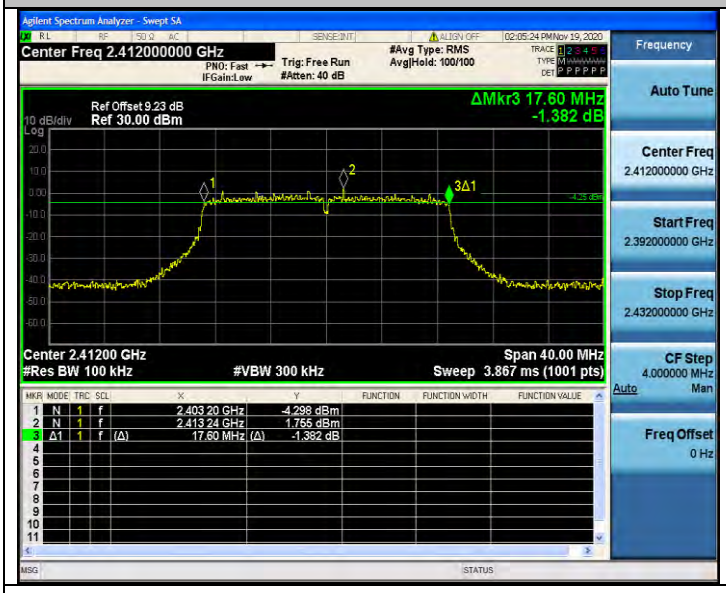
CH11	CH09

Antenna 11:

802.11b	802.11g
CH01	CH01
CH06	CH06

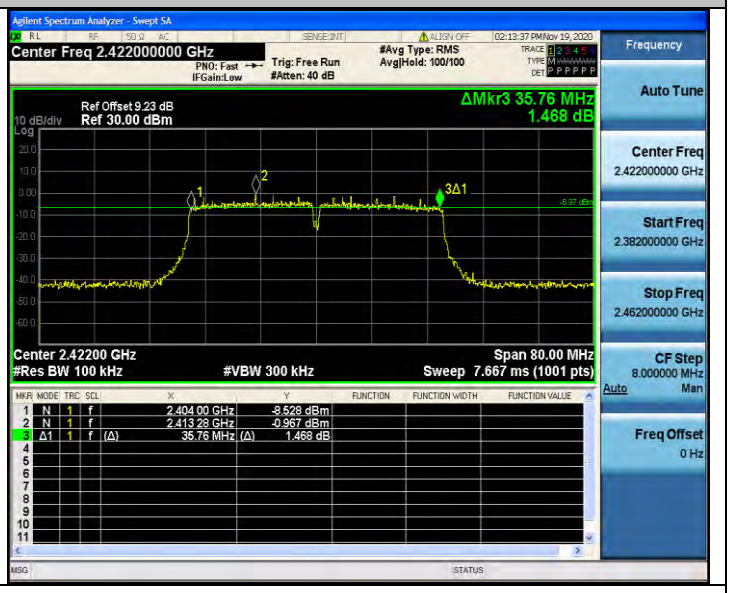
CH11

802.11n HT20



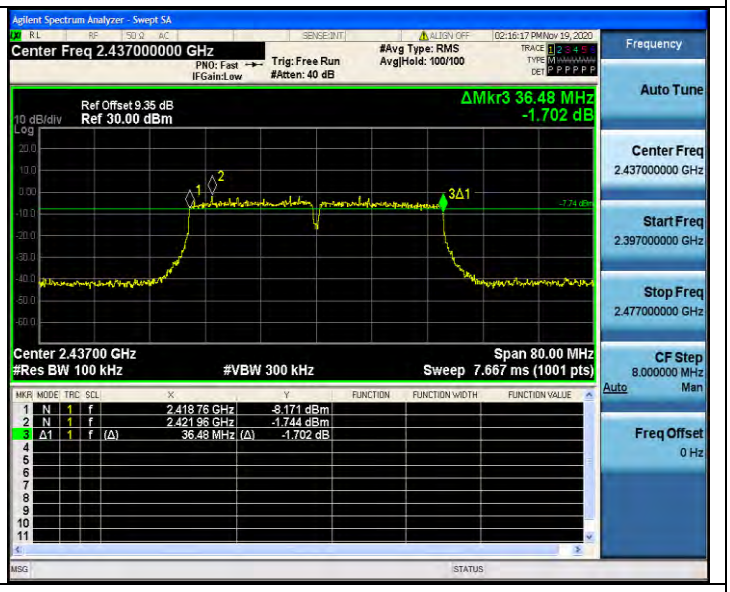
CH11

802.11n HT40

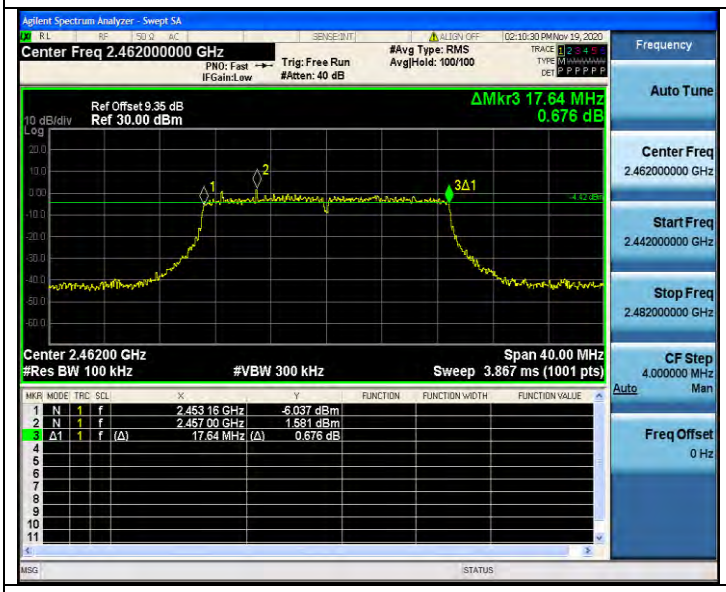


CH01

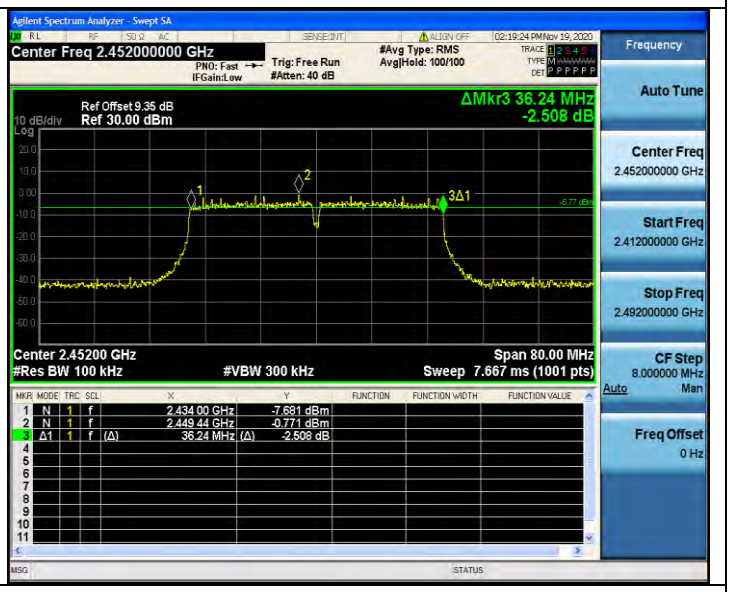
CH03



CH06



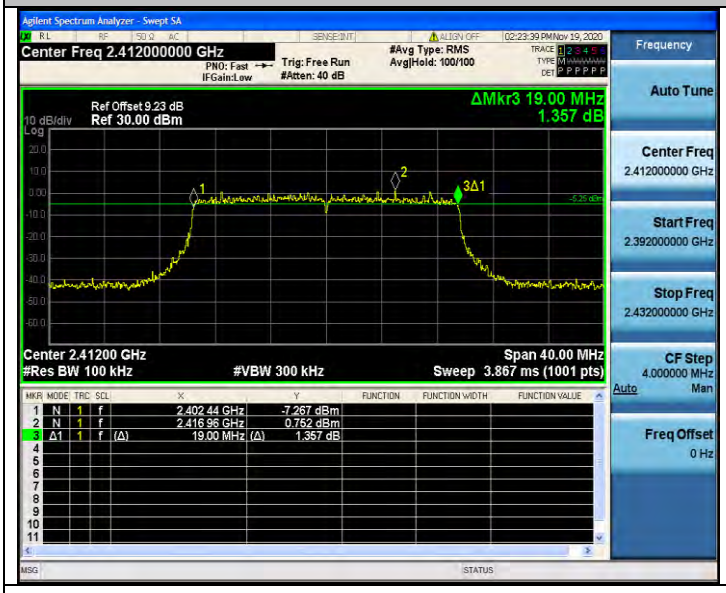
CH06



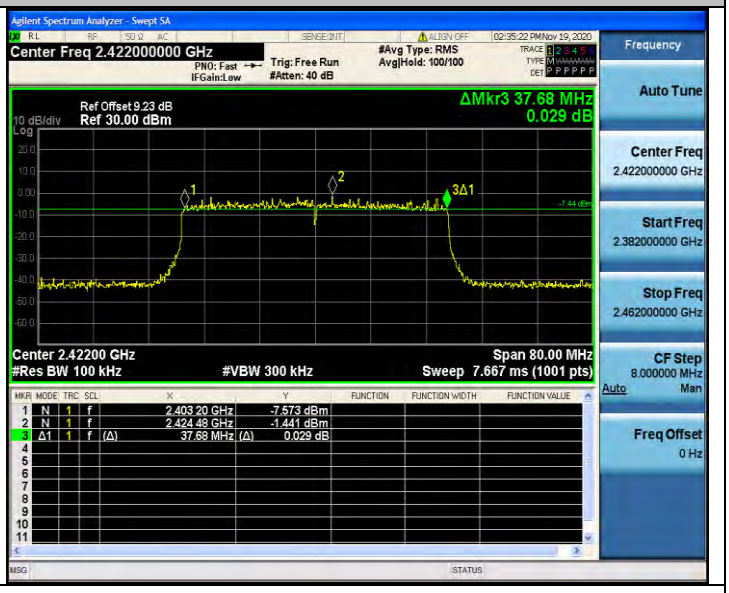
CH11

CH09

802.11ax HT20

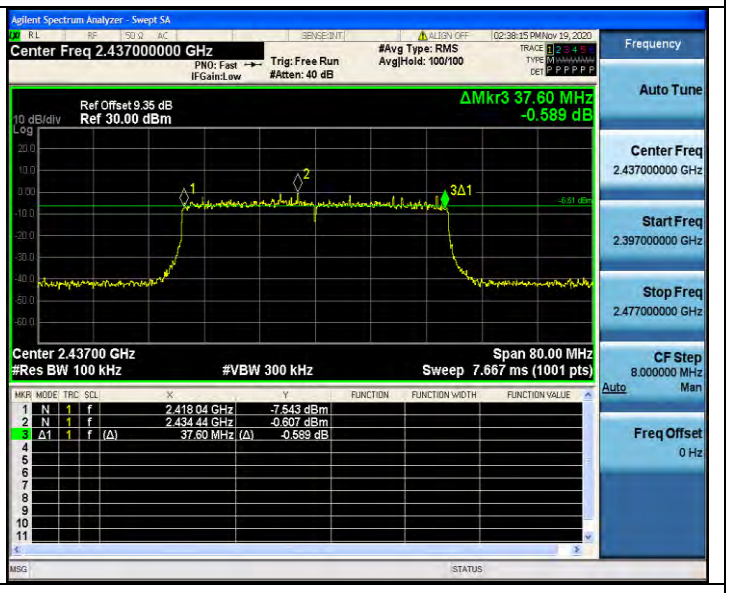


802.11ax HT40



CH01

CH03



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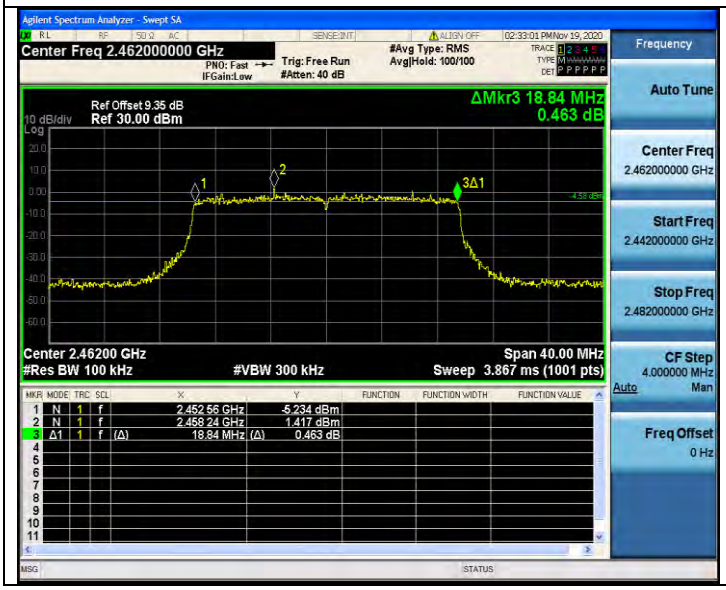

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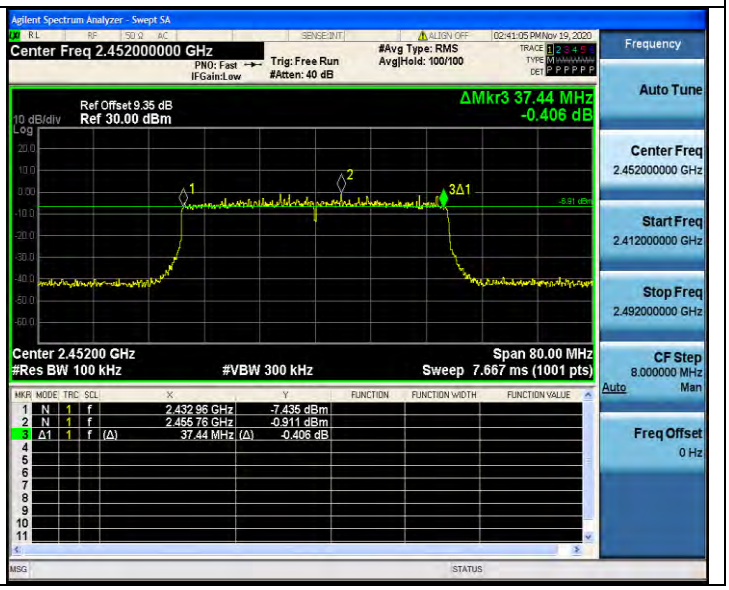

CH11	CH09

Antenna 12:

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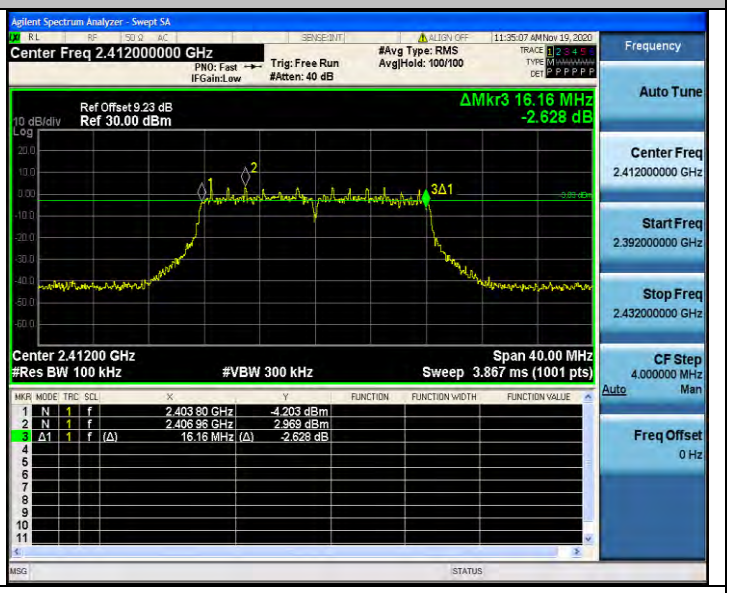
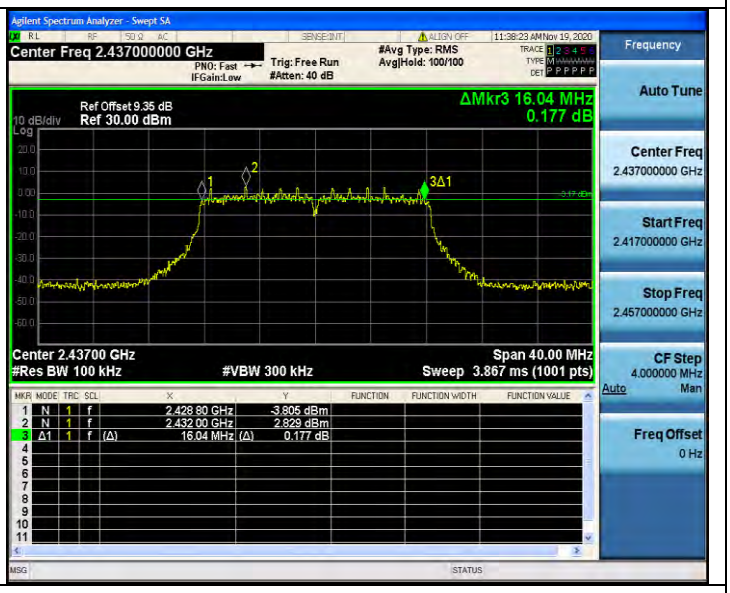
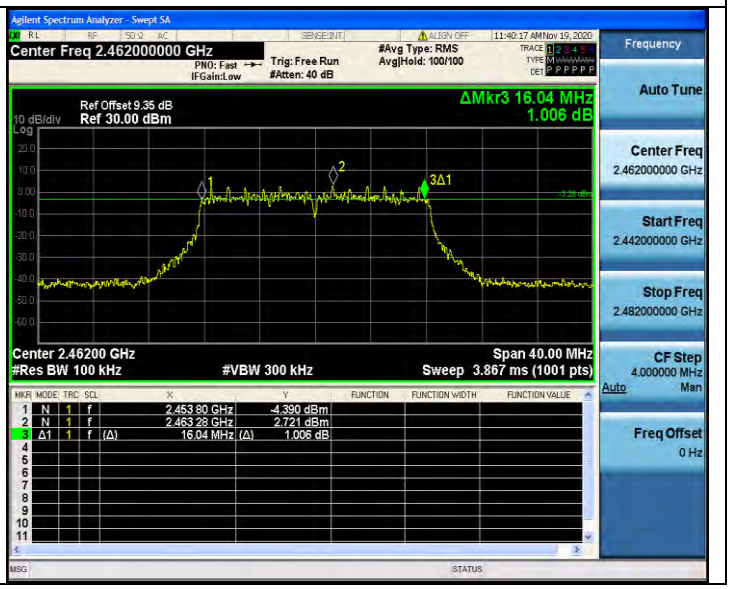
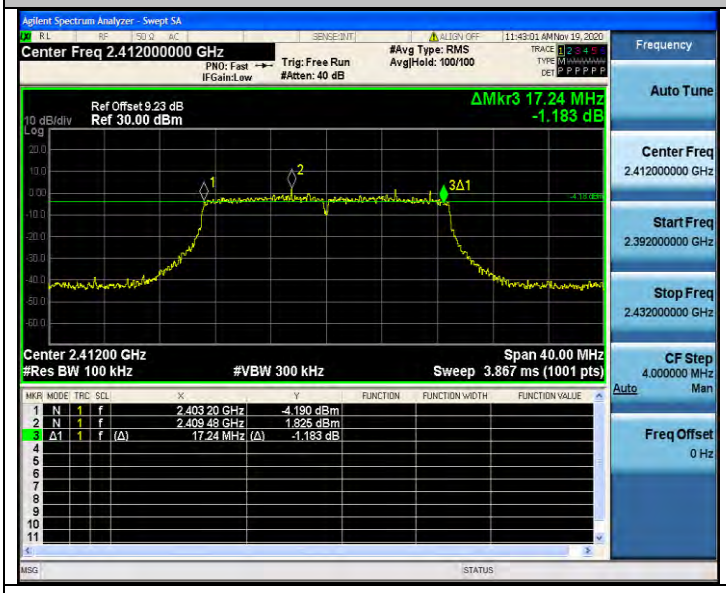
	
CH01	CH01
	
CH06	CH06
	

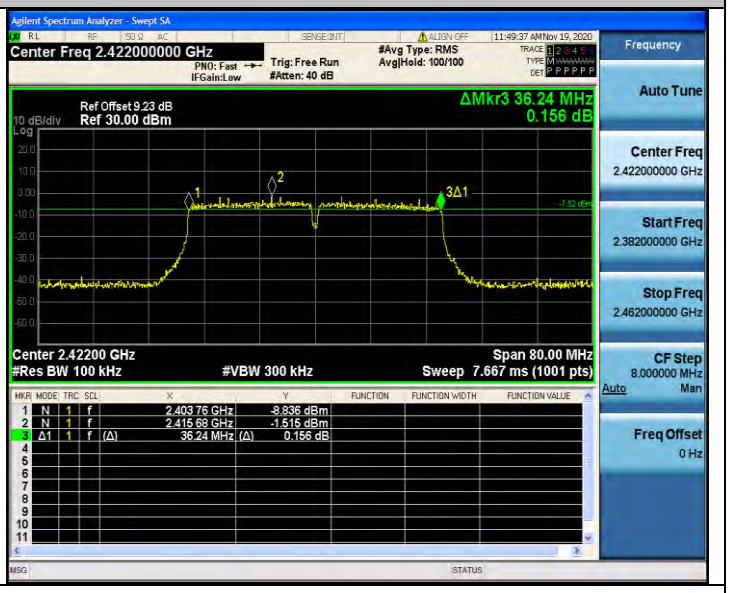
CH11

802.11n HT20



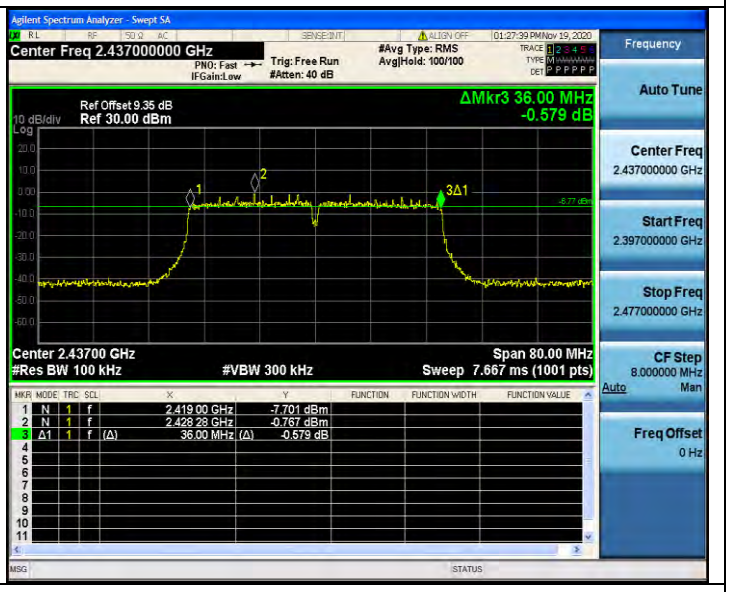
CH11

802.11n HT40

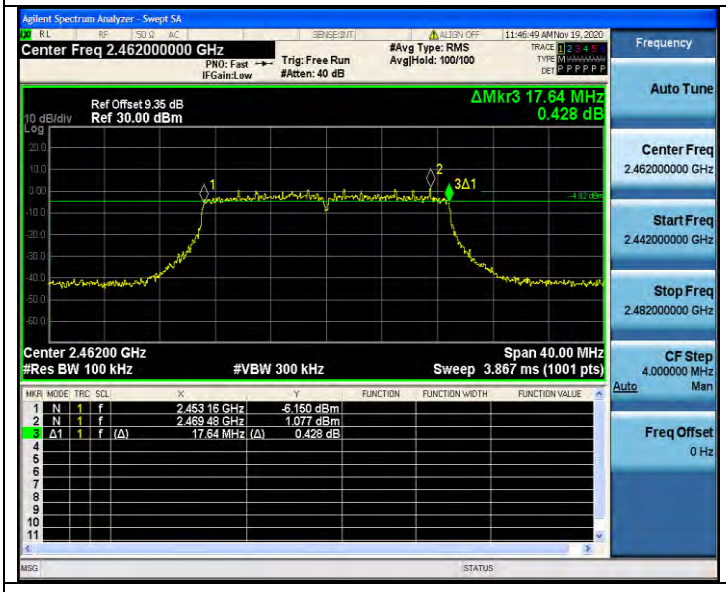


CH01

CH03



CH06



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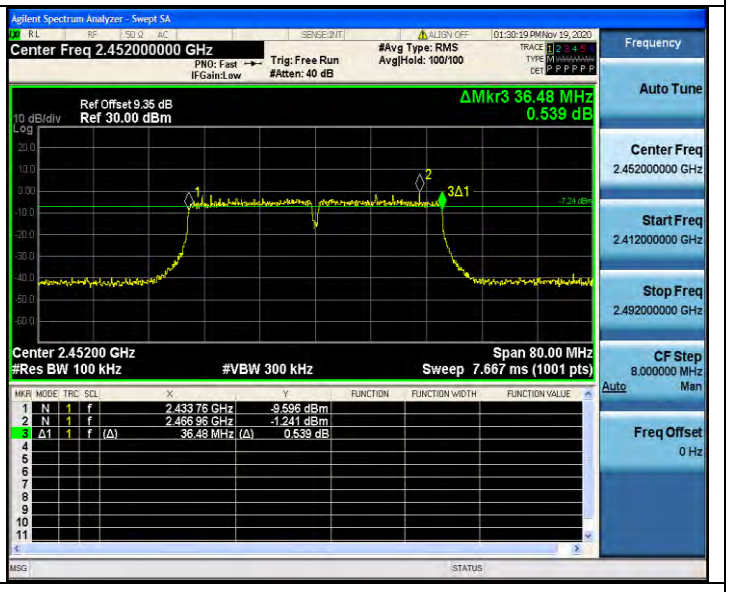
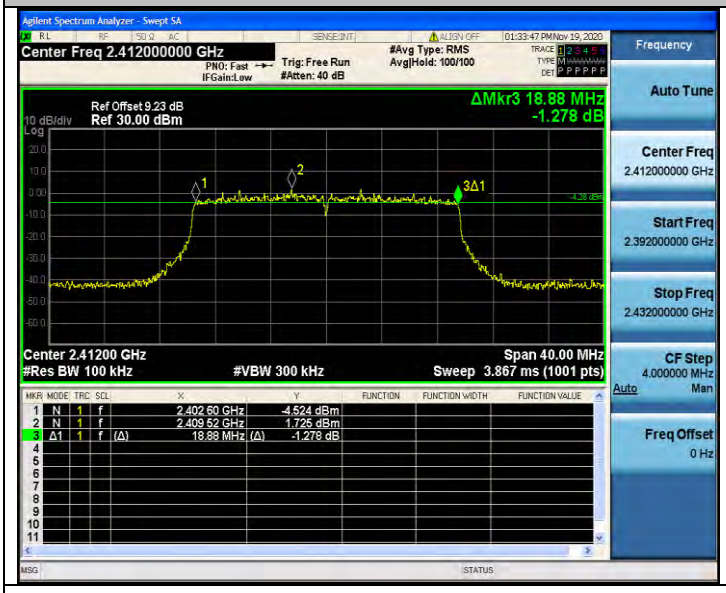


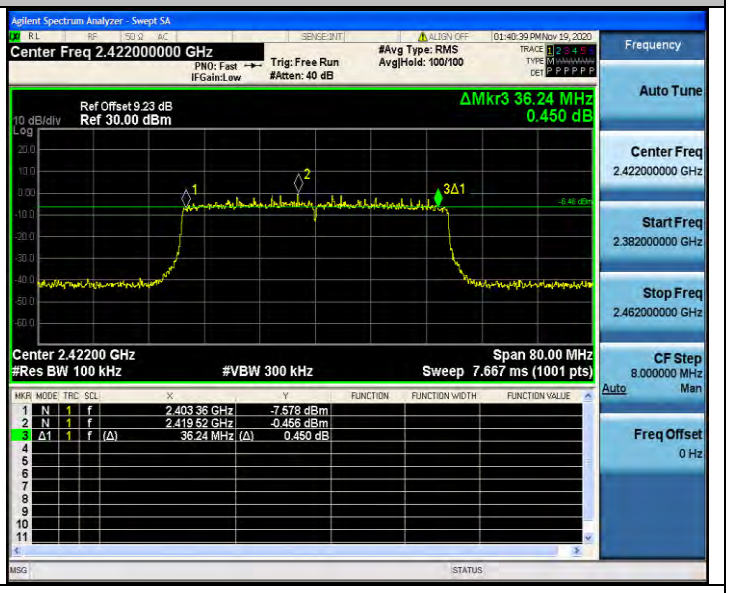
CH11

CH09

802.11ax HT20

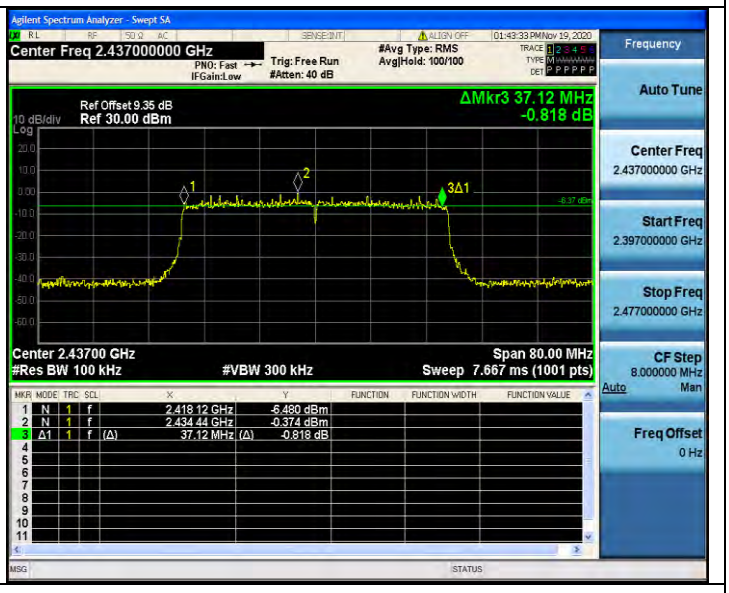


802.11ax HT40

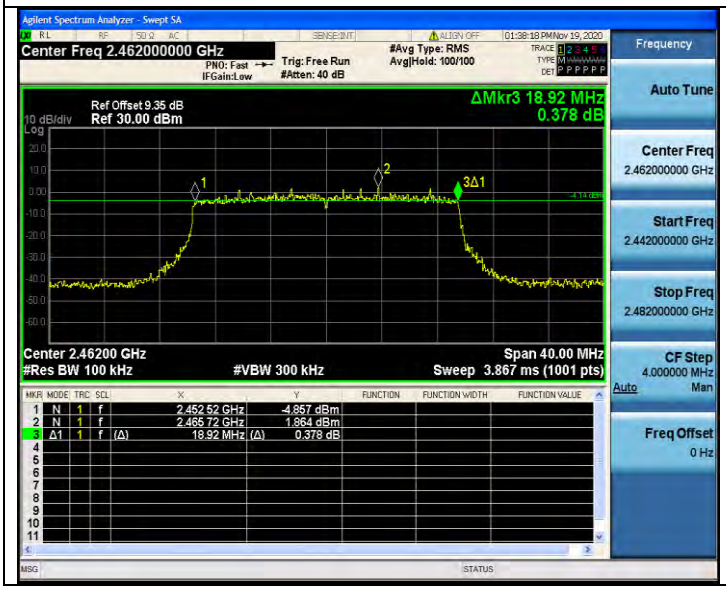


CH01

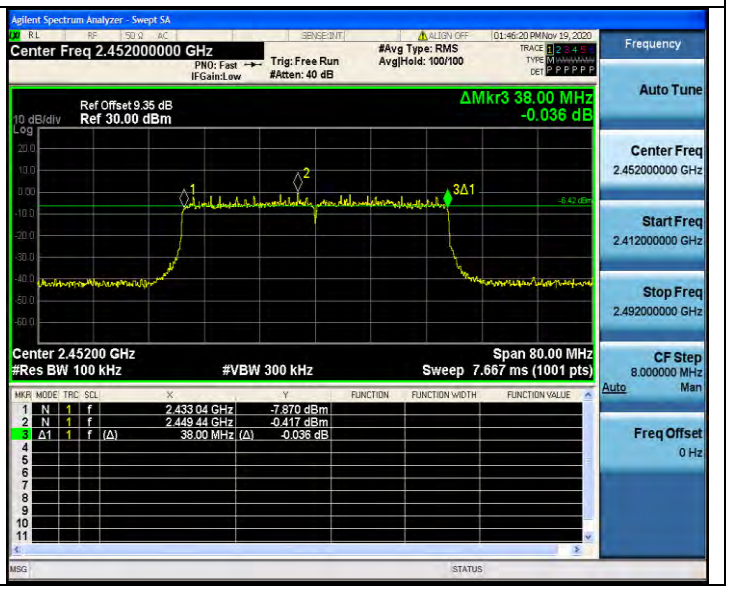
CH03



CH06



CH06



CH11	CH09

4.6. Band Edge Compliance of RF Emission

TEST REQUIREMENT

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 20 dB. 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)).

TEST PROCEDURE

According to KDB 558074 D01 for Antenna-port conducted measurement. Antenna-port conducted measurements may also be used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case spurious emissions is required.

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Remove the antenna from the EUT and then connect to a low loss RF cable from the antenna port to a EMI test receiver, then turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
3. Set both RBW and VBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100kHz bandwidth from band edge, for Radiated emissions restricted band RBW=1MHz, VBW=3MHz for peak detector and RBW=1MHz, VBW=10Hz for average detector.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.
6. Measure the conducted output power (in dBm) using the detector specified by the appropriate regulatory agency (see 12.2.2, 12.2.3, and 12.2.4 for guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
7. Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see 12.2.5 for guidance on determining the applicable antenna gain)
8. Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).
9. For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).
10. Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:
    E = EIRP – 20log D + 104.8

where:
E = electric field strength in dBμV/m,
EIRP = equivalent isotropic radiated power in dBm
D = specified measurement distance in meters.

11. Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.
12. Compare the resultant electric field strength level to the applicable regulatory limit.
13. Perform radiated spurious emission test dures until all measured frequencies were complete.

LIMIT

Below -20dB of the highest emission level in operating band.
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).

TEST RESULTS

4.6.1 For Radiated Bandedge Measurement

Temperature	23.8℃	Humidity	53.7%
Test Engineer	Moon Tan	Configurations	IEEE 802.11b/g/n

802.11b

Frequency(MHz):			**2412**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	46.13	PK	74.00	-27.87	1	125	51.44	27.49	3.32	36.12	-5.31
2390.00	33.78	AV	54.00	-20.22	1	125	39.09	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2412**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	46.56	PK	74.00	-27.44	1	136	51.87	27.49	3.32	36.12	-5.31
2390.00	33.94	AV	54.00	-20.06	1	136	39.25	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2462**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	49.78	PK	74.00	-24.22	1	108	55.50	27.45	3.38	36.55	-5.72
2483.50	35.24	AV	54.00	-18.76	1	108	40.96	27.45	3.38	36.55	-5.72
Frequency(MHz):			**2462**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	48.85	PK	74.00	-25.15	1	55	54.57	27.45	3.38	36.55	-5.72
2483.50	35.74	AV	54.00	-18.26	1	55	41.46	27.45	3.38	36.55	-5.72

802.11g

Frequency(MHz):			**2412**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	47.06	PK	74.00	-26.94	1	278	52.37	27.49	3.32	36.12	-5.31
2390.00	35.19	AV	54.00	-18.81	1	278	40.50	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2412**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	47.12	PK	74.00	-26.88	1	193	52.43	27.49	3.32	36.12	-5.31
2390.00	35.22	AV	54.00	-18.78	1	193	40.53	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2462**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	49.97	PK	74.00	-24.03	1	171	55.69	27.45	3.38	36.55	-5.72
2483.50	35.11	AV	54.00	-18.89	1	171	40.83	27.45	3.38	36.55	-5.72
Frequency(MHz):			**2462**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	49.92	PK	74.00	-24.08	1	201	55.64	27.45	3.38	36.55	-5.72
2483.50	35.69	AV	54.00	-18.31	1	201	41.41	27.45	3.38	36.55	-5.72

802.11n HT20

Frequency(MHz):			2412			Polarity:			HORIZONTAL		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	45.36	PK	74.00	-28.64	1	39	50.67	27.49	3.32	36.12	-5.31
2390.00	34.14	AV	54.00	-19.86	1	39	39.45	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2412**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	45.88	PK	74.00	-28.12	1	152	51.19	27.49	3.32	36.12	-5.31
2390.00	35.25	AV	54.00	-18.75	1	152	40.56	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2462**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	49.76	PK	74.00	-24.24	1	228	55.48	27.45	3.38	36.55	-5.72
2483.50	36.32	AV	54.00	-17.68	1	228	42.04	27.45	3.38	36.55	-5.72
Frequency(MHz):			**2462**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	49.75	PK	74.00	-24.25	1	133	55.47	27.45	3.38	36.55	-5.72
2483.50	36.54	AV	54.00	-17.46	1	133	42.26	27.45	3.38	36.55	-5.72

802.11n HT40

Frequency(MHz):			2422			Polarity:			HORIZONTAL		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	46.84	PK	74.00	-27.16	1	105	52.15	27.49	3.32	36.12	-5.31
2390.00	35.19	AV	54.00	-18.81	1	105	40.50	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2422**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	46.20	PK	74.00	-27.80	1	144	51.51	27.49	3.32	36.12	-5.31
2390.00	35.27	AV	54.00	-18.73	1	144	40.58	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2452**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	48.79	PK	74.00	-25.21	1	169	54.51	27.45	3.38	36.55	-5.72
2483.50	35.14	AV	54.00	-18.86	1	169	40.86	27.45	3.38	36.55	-5.72
Frequency(MHz):			**2452**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	48.90	PK	74.00	-25.10	1	54	54.62	27.45	3.38	36.55	-5.72
2483.50	36.26	AV	54.00	-17.74	1	54	41.98	27.45	3.38	36.55	-5.72

802.11ax HT20

Frequency(MHz):			2412			Polarity:			HORIZONTAL		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	45.55	PK	74.00	-28.45	1	89	50.86	27.49	3.32	36.12	-5.31
2390.00	33.75	AV	54.00	-20.25	1	89	39.06	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2412**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	45.35	PK	74.00	-28.65	1	179	50.66	27.49	3.32	36.12	-5.31
2390.00	34.52	AV	54.00	-19.48	1	179	39.83	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2462**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	49.92	PK	74.00	-24.08	1	233	55.64	27.45	3.38	36.55	-5.72
2483.50	35.39	AV	54.00	-18.61	1	233	41.11	27.45	3.38	36.55	-5.72
Frequency(MHz):			**2462**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	48.67	PK	74.00	-25.33	1	94	54.39	27.45	3.38	36.55	-5.72
2483.50	35.55	AV	54.00	-18.45	1	94	41.27	27.45	3.38	36.55	-5.72

802.11ax HT40

Frequency(MHz):			2422			Polarity:			HORIZONTAL		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	45.19	PK	74.00	-28.81	1	224	50.50	27.49	3.32	36.12	-5.31
2390.00	33.70	AV	54.00	-20.30	1	224	39.01	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2422**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	46.83	PK	74.00	-27.17	1	88	52.14	27.49	3.32	36.12	-5.31
2390.00	33.81	AV	54.00	-20.19	1	88	39.12	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2452**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	49.83	PK	74.00	-24.17	1	106	55.55	27.45	3.38	36.55	-5.72
2483.50	35.43	AV	54.00	-18.57	1	106	41.15	27.45	3.38	36.55	-5.72
Frequency(MHz):			**2452**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	49.69	PK	74.00	-24.31	1	72	55.41	27.45	3.38	36.55	-5.72
2483.50	35.09	AV	54.00	-18.91	1	72	40.81	27.45	3.38	36.55	-5.72

NOTE: We measured Radiated Emission at Antenna 9 & Antenna 10& Antenna 11& Antenna 12 mode from 1GHz to 25GHz and the worst case was recorded.

4*4MIMO:

802.11b

Frequency(MHz):			2412			Polarity:			HORIZONTAL		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	46.99	PK	74.00	-27.01	1	112	52.30	27.49	3.32	36.12	-5.31
2390.00	35.07	AV	54.00	-18.93	1	112	40.38	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2412**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	46.96	PK	74.00	-27.04	1	187	52.27	27.49	3.32	36.12	-5.31
2390.00	35.53	AV	54.00	-18.47	1	187	40.84	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2462**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	48.88	PK	74.00	-25.12	1	253	54.60	27.45	3.38	36.55	-5.72
2483.50	35.09	AV	54.00	-18.91	1	253	40.81	27.45	3.38	36.55	-5.72
Frequency(MHz):			**2462**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	49.12	PK	74.00	-24.88	1	89	54.84	27.45	3.38	36.55	-5.72
2483.50	34.91	AV	54.00	-19.09	1	89	40.63	27.45	3.38	36.55	-5.72

802.11g

Frequency(MHz):			2412			Polarity:			HORIZONTAL		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	46.56	PK	74.00	-27.44	1	104	51.87	27.49	3.32	36.12	-5.31
2390.00	35.43	AV	54.00	-18.57	1	104	40.74	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2412**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	46.89	PK	74.00	-27.11	1	93	52.20	27.49	3.32	36.12	-5.31
2390.00	34.95	AV	54.00	-19.05	1	93	40.26	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2462**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	49.80	PK	74.00	-24.20	1	314	55.52	27.45	3.38	36.55	-5.72
2483.50	35.82	AV	54.00	-18.18	1	314	41.54	27.45	3.38	36.55	-5.72
Frequency(MHz):			**2462**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	48.15	PK	74.00	-25.85	1	288	53.87	27.45	3.38	36.55	-5.72
2483.50	36.45	AV	54.00	-17.55	1	288	42.17	27.45	3.38	36.55	-5.72

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Frequency(MHz):			2412			Polarity:			HORIZONTAL		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	45.80	PK	74.00	-28.20	1	177	51.11	27.49	3.32	36.12	-5.31
2390.00	35.50	AV	54.00	-18.50	1	177	40.81	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2412**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	46.71	PK	74.00	-27.29	1	55	52.02	27.49	3.32	36.12	-5.31
2390.00	35.15	AV	54.00	-18.85	1	55	40.46	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2462**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	49.25	PK	74.00	-24.75	1	38	54.97	27.45	3.38	36.55	-5.72
2483.50	36.31	AV	54.00	-17.69	1	38	42.03	27.45	3.38	36.55	-5.72
Frequency(MHz):			**2462**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	48.48	PK	74.00	-25.52	1	156	54.20	27.45	3.38	36.55	-5.72
2483.50	35.78	AV	54.00	-18.22	1	156	41.50	27.45	3.38	36.55	-5.72

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Frequency(MHz):			2422			Polarity:			HORIZONTAL		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	45.27	PK	74.00	-28.73	1	82	50.58	27.49	3.32	36.12	-5.31
2390.00	33.64	AV	54.00	-20.36	1	82	38.95	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2422**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	45.77	PK	74.00	-28.23	1	177	51.08	27.49	3.32	36.12	-5.31
2390.00	34.05	AV	54.00	-19.95	1	177	39.36	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2452**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	48.22	PK	74.00	-25.78	1	232	53.94	27.45	3.38	36.55	-5.72
2483.50	36.64	AV	54.00	-17.36	1	232	42.36	27.45	3.38	36.55	-5.72
Frequency(MHz):			**2452**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	50.08	PK	74.00	-23.92	1	116	55.80	27.45	3.38	36.55	-5.72
2483.50	35.31	AV	54.00	-18.69	1	116	41.03	27.45	3.38	36.55	-5.72

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Frequency(MHz):			2412			Polarity:			HORIZONTAL		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	47.07	PK	74.00	-26.93	1	321	52.38	27.49	3.32	36.12	-5.31
2390.00	35.03	AV	54.00	-18.97	1	321	40.34	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2412**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	45.15	PK	74.00	-28.85	1	178	50.46	27.49	3.32	36.12	-5.31
2390.00	35.13	AV	54.00	-18.87	1	178	40.44	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2462**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	48.99	PK	74.00	-25.01	1	59	54.71	27.45	3.38	36.55	-5.72
2483.50	35.27	AV	54.00	-18.73	1	59	40.99	27.45	3.38	36.55	-5.72
Frequency(MHz):			**2462**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	48.12	PK	74.00	-25.88	1	151	53.84	27.45	3.38	36.55	-5.72
2483.50	36.27	AV	54.00	-17.73	1	151	41.99	27.45	3.38	36.55	-5.72

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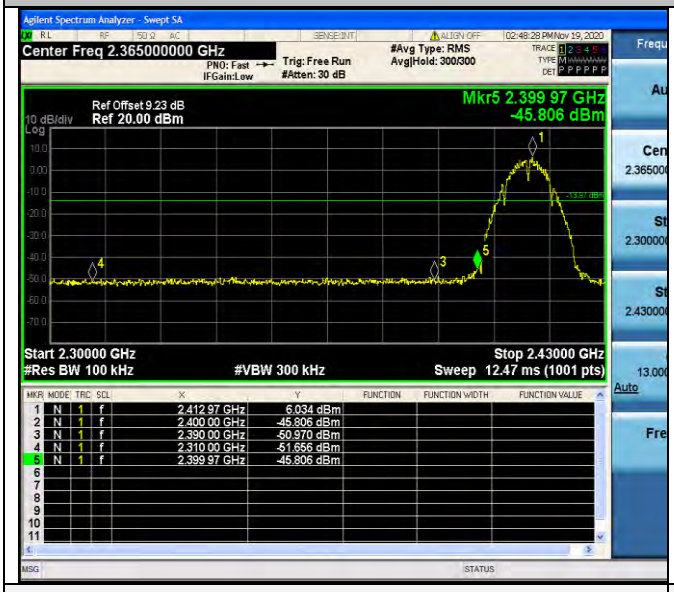
Frequency(MHz):			2422			Polarity:			HORIZONTAL		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	47.01	PK	74.00	-26.99	1	207	52.32	27.49	3.32	36.12	-5.31
2390.00	35.15	AV	54.00	-18.85	1	207	40.46	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2422**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2390.00	45.98	PK	74.00	-28.02	1	235	51.29	27.49	3.32	36.12	-5.31
2390.00	35.11	AV	54.00	-18.89	1	235	40.42	27.49	3.32	36.12	-5.31
Frequency(MHz):			**2452**			**Polarity:**			**HORIZONTAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	48.24	PK	74.00	-25.76	1	222	53.96	27.45	3.38	36.55	-5.72
2483.50	35.87	AV	54.00	-18.13	1	222	41.59	27.45	3.38	36.55	-5.72
Frequency(MHz):			**2452**			**Polarity:**			**VERTICAL**		
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier	Correction Factor (dB/m)
2483.50	49.12	PK	74.00	-24.88	1	39	54.84	27.45	3.38	36.55	-5.72
2483.50	36.31	AV	54.00	-17.69	1	39	42.03	27.45	3.38	36.55	-5.72

4.6.2 For Conducted Bandedge Measurement

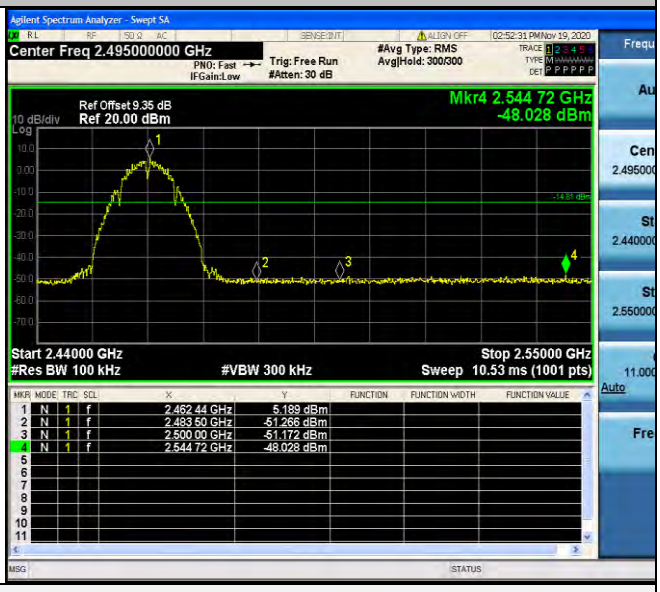
Temperature	24.2℃	Humidity	54.9%
Test Engineer	Moon Tan	Configurations	IEEE 802.11b/g/n

Antenna 9:

802.11b

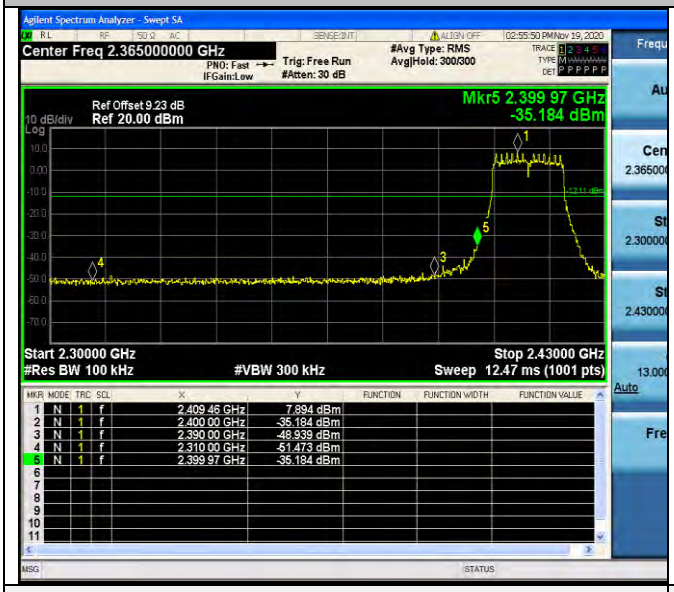


2412 MHz

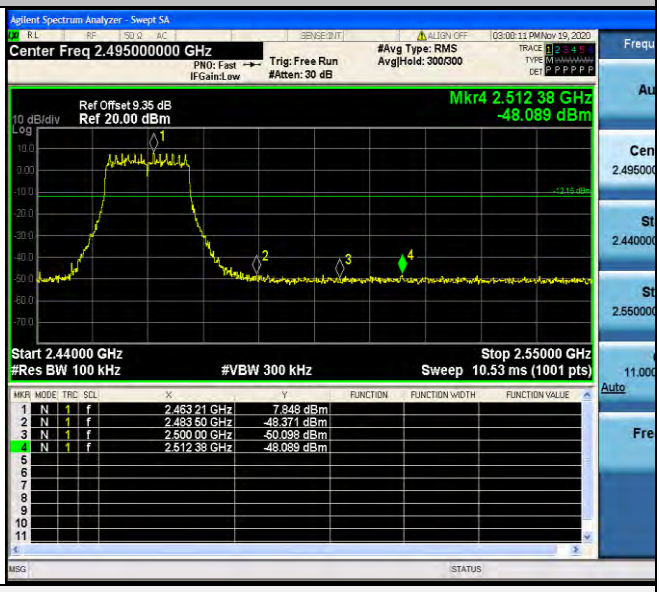


2462 MHz

802.11g

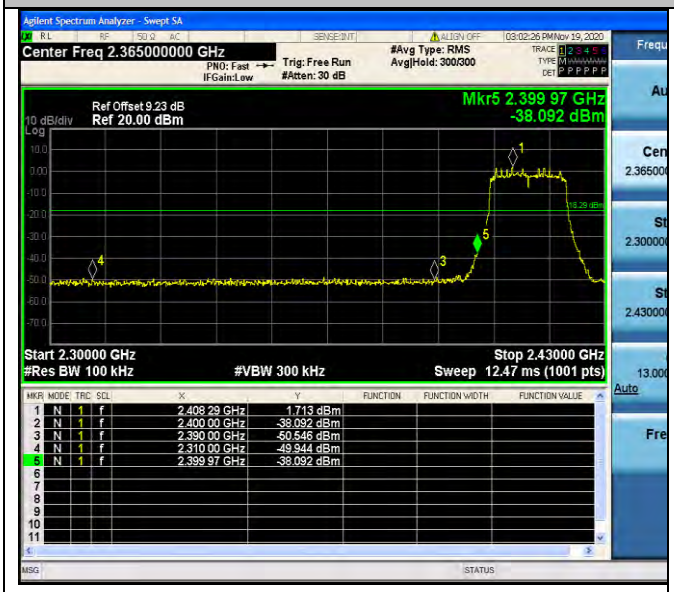


2412 MHz

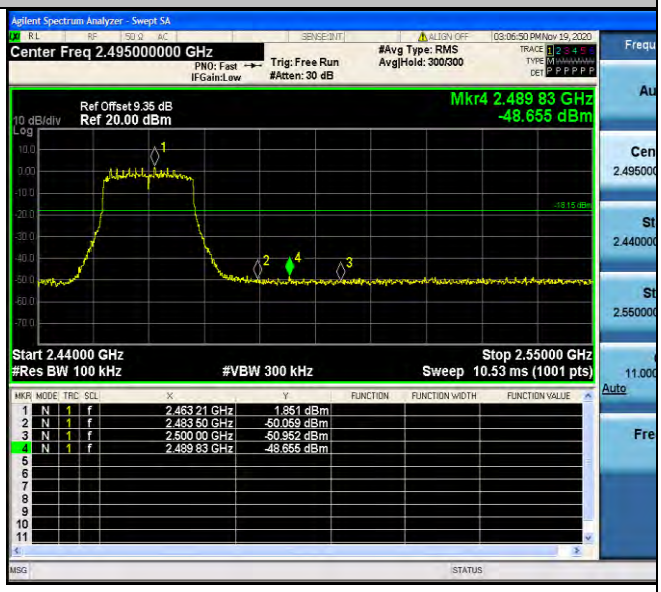


2462 MHz

802.11n HT20

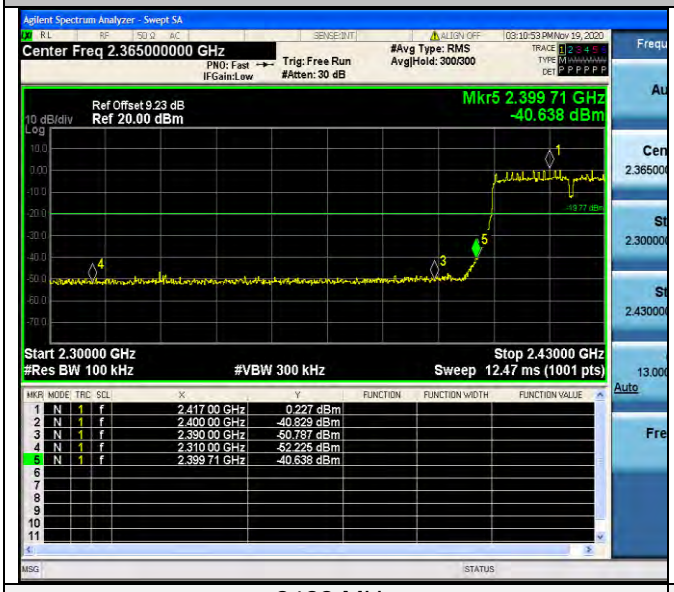


2412 MHz

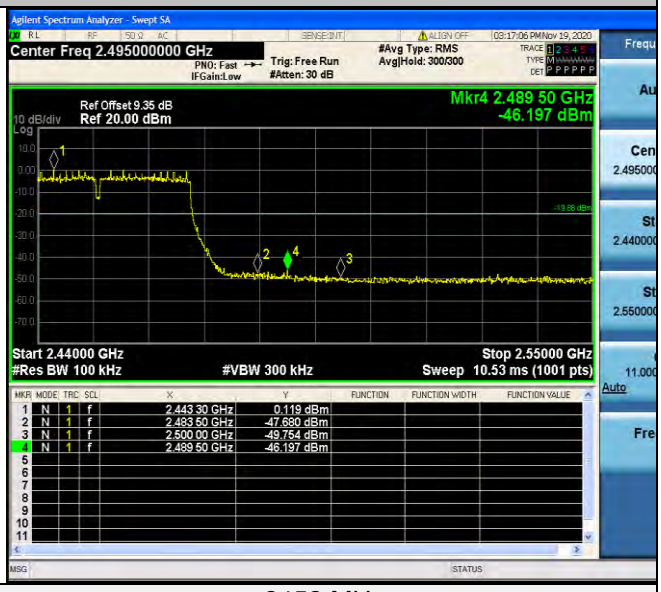


2462 MHz

802.11n HT40



2422 MHz



2452 MHz