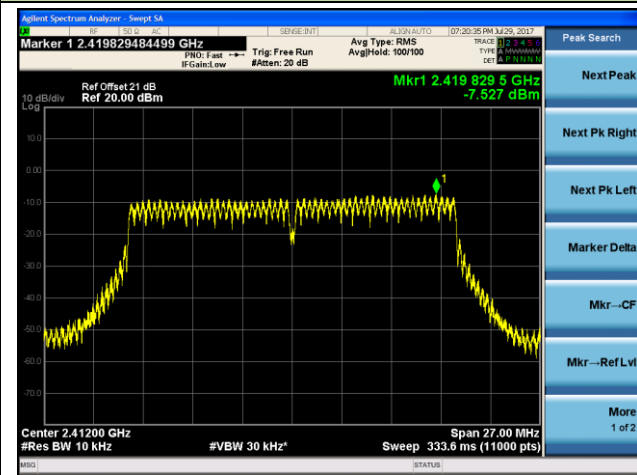
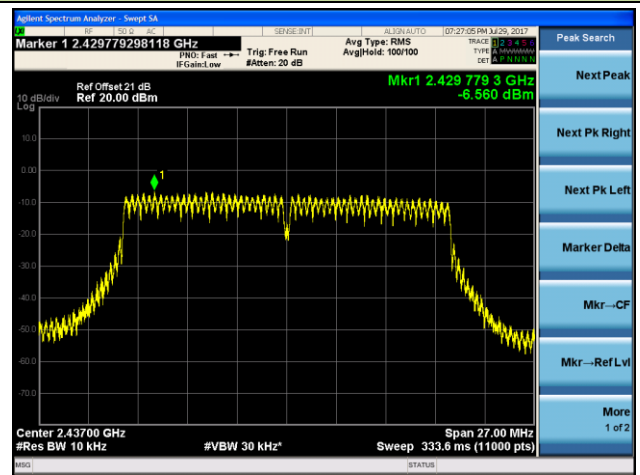


802.11n-HT20 AVGPSPD - Ant 2 / Ant 1 + 2 (CDD Mode)

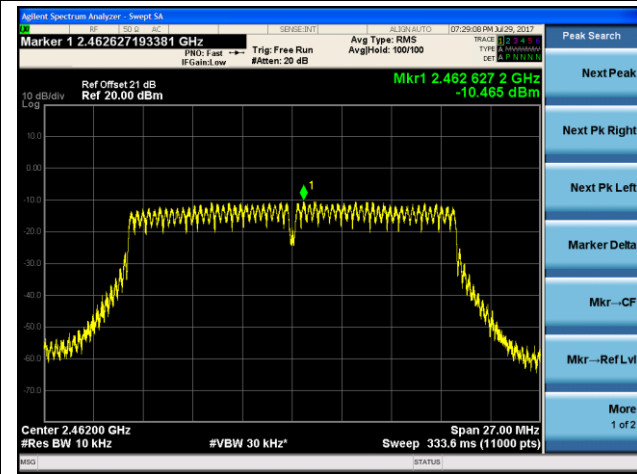
Channel 01 (2412MHz)



Channel 06 (2437MHz)

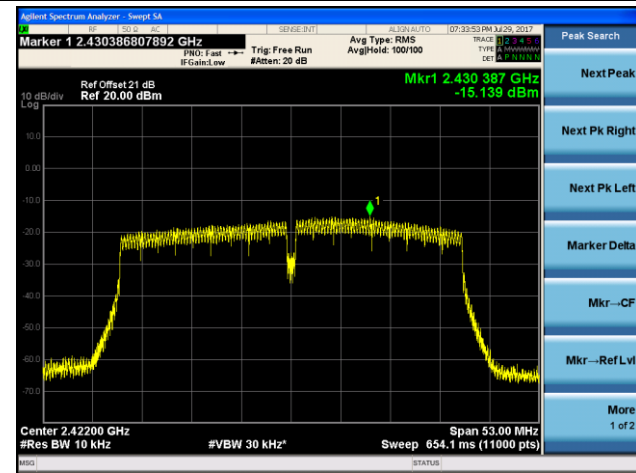


Channel 11 (2462MHz)

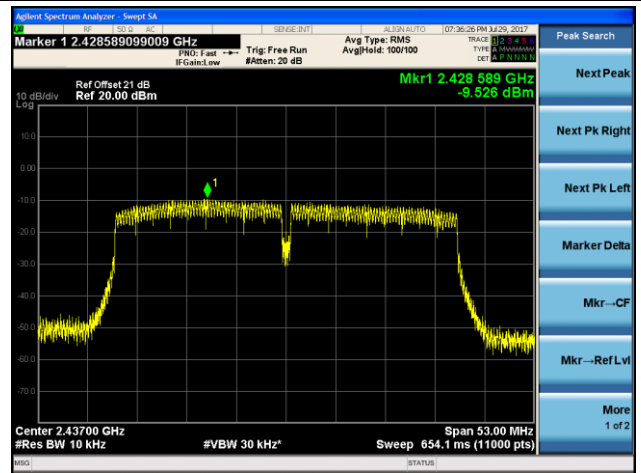


802.11n-HT40 AVGPSD - Ant 2 / Ant 1 + 2 (CDD Mode)

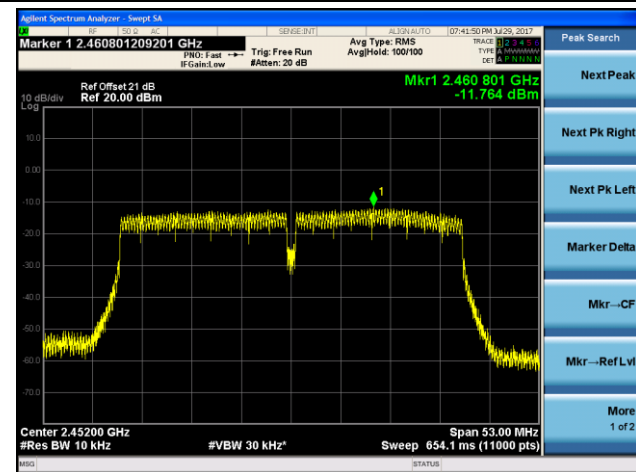
Channel 03 (2422MHz)



Channel 06 (2437MHz)

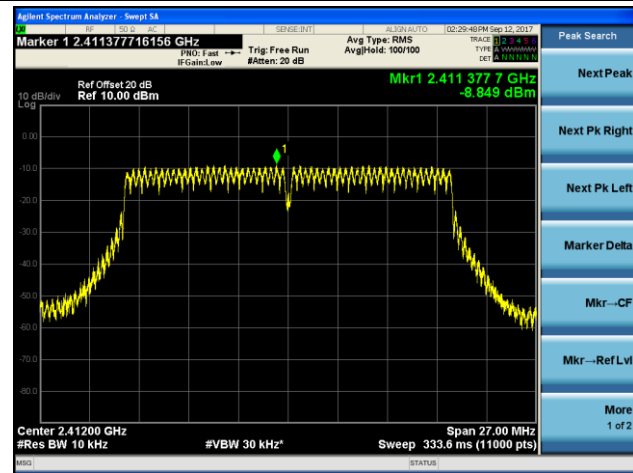


Channel 09 (2452MHz)

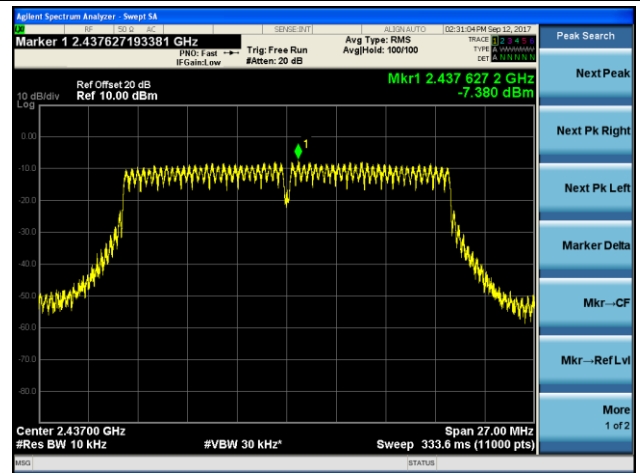


802.11n-HT20 AVGPSD - Ant 1 / Ant 1 + 2 (Beam-Forming Mode)

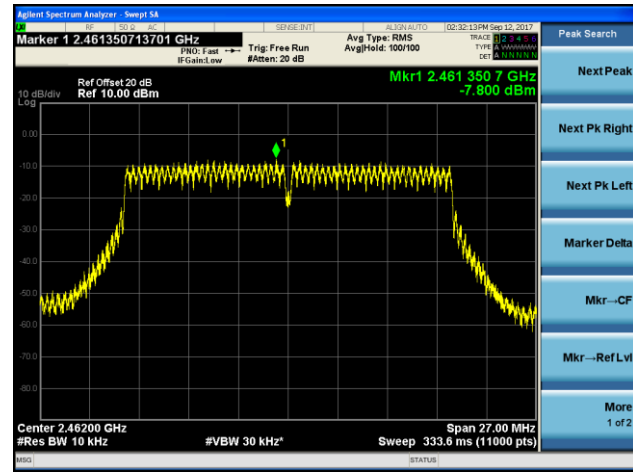
Channel 01 (2412MHz)



Channel 06 (2437MHz)

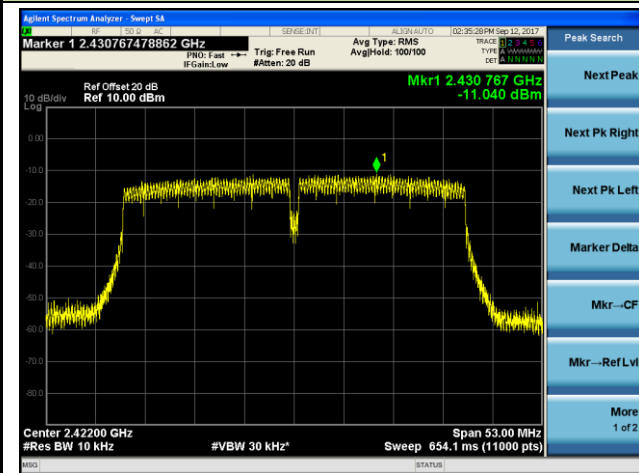


Channel 11 (2462MHz)

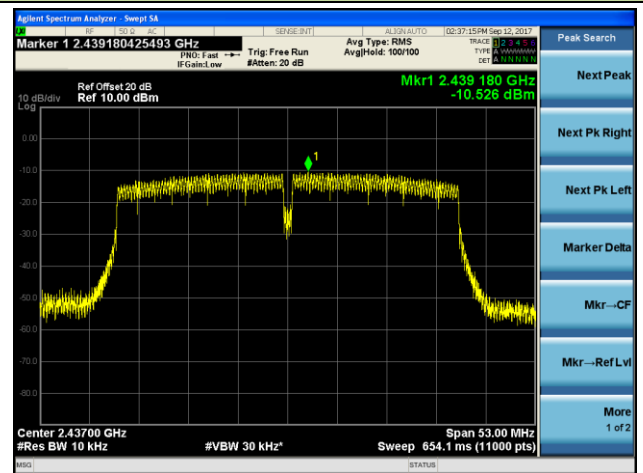


802.11n-HT40 AVGPSD - Ant 1 / Ant 1 + 2 (Beam-Forming Mode)

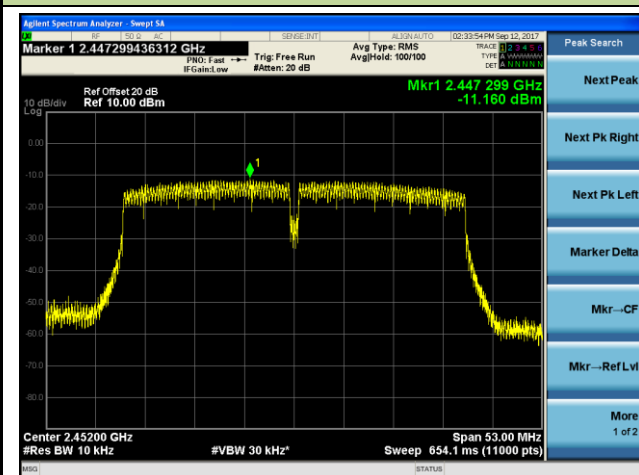
Channel 03 (2422MHz)



Channel 06 (2437MHz)

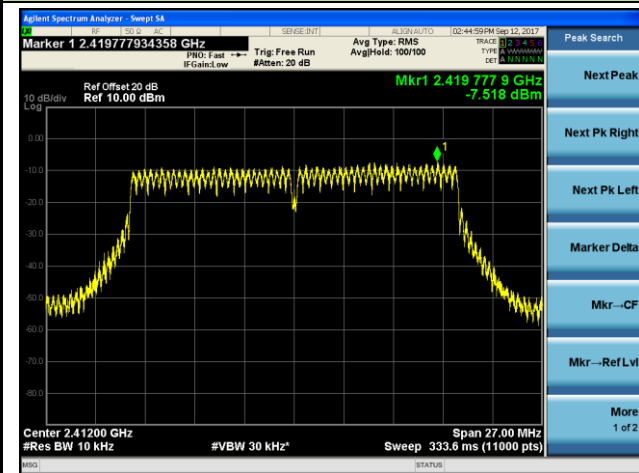


Channel 09 (2452MHz)

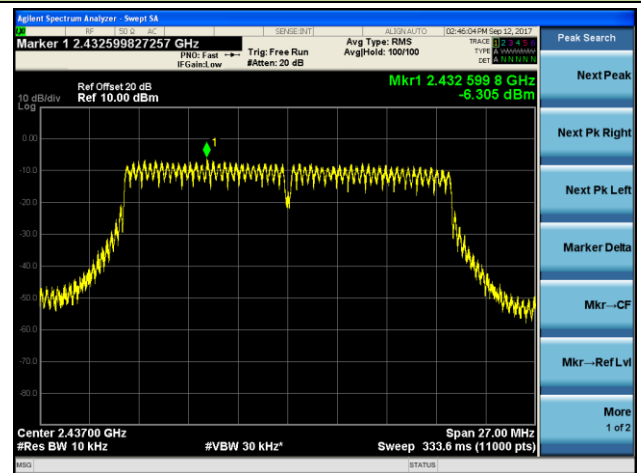


802.11n-HT20 AVGPSD - Ant 2 / Ant 1 + 2 (Beam-Forming Mode)

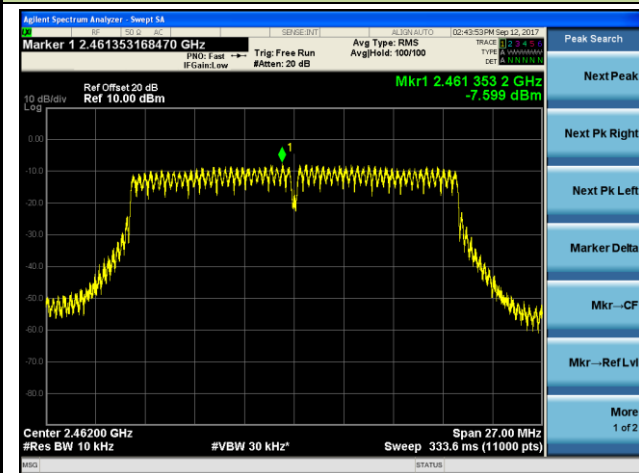
Channel 01 (2412MHz)



Channel 06 (2437MHz)

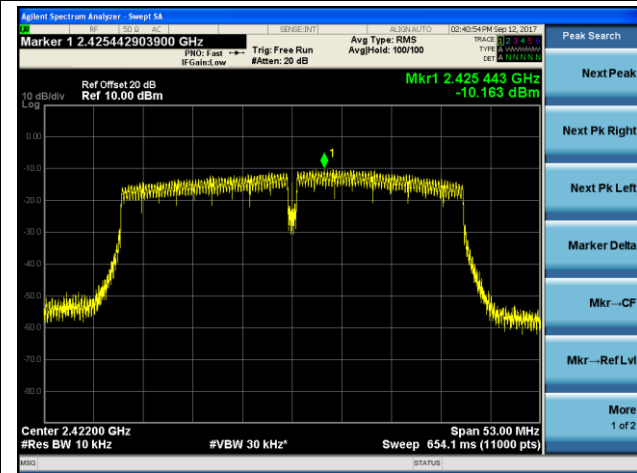


Channel 11 (2462MHz)

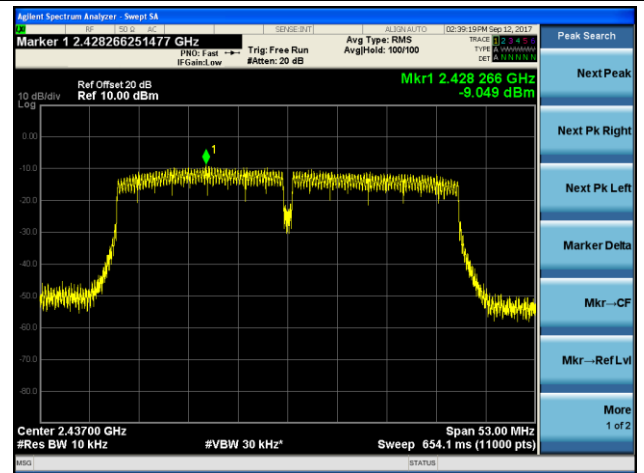


802.11n-HT40 AVGPSD - Ant 2 / Ant 1 + 2 (Beam-Forming Mode)

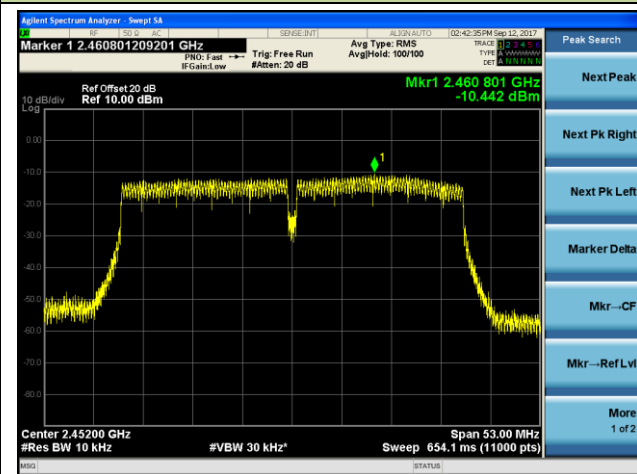
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



7.5. Conducted Band Edge and Out-of-Band Emissions

7.5.1. Test Limit

The limit for out-of-band spurious emissions at the band edge is 30dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100 kHz bandwidth per the PSD procedure.

7.5.2. Test Procedure Used

KDB 558074 D01v04 - Section 11.2 & Section 11.3

7.5.3. Test Setting

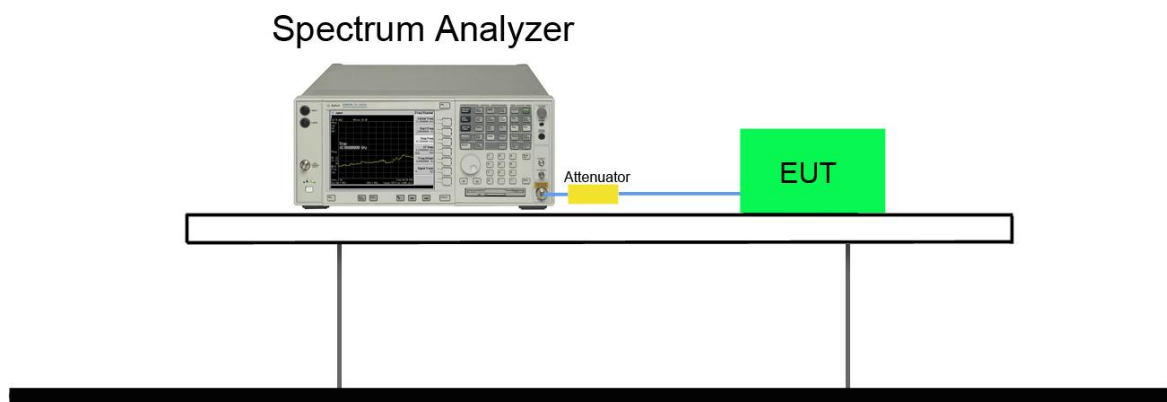
Reference level measurement

1. Set instrument center frequency to DTS channel center frequency
2. Set the span to ≥ 1.5 times the DTS bandwidth
3. Set the RBW = 100 kHz
4. Set the VBW $\geq 3 \times$ RBW
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Allow trace to fully stabilize

Emission level measurement

1. Set the center frequency and span to encompass frequency range to be measured
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = Peak
5. Trace mode = max hold
6. Sweep time = auto couple
7. The trace was allowed to stabilize

7.5.4. Test Setup



7.5.5.Test Result

Product	AC220 Wi-Fi AP OD external antenna US	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2017/07/23
Test Item	Conducted Band Edge and Out-of-Band Emissions		

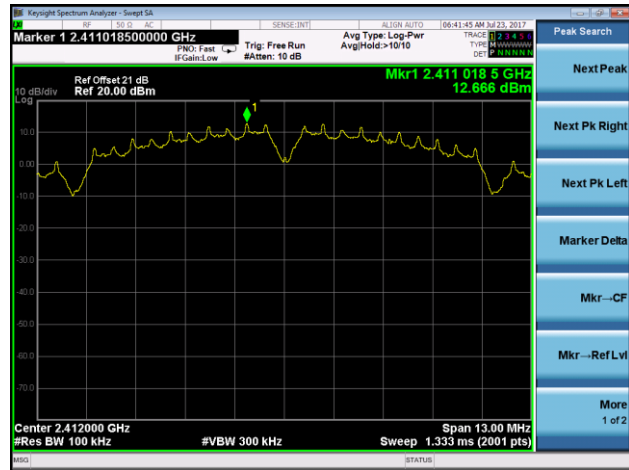
Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	Limit (dBc)	Limit (dBc to dBm)	Result
Ant 1						
802.11b	1Mbps	01	2412	30	-17.33	Pass
802.11b	1Mbps	06	2437	30	-17.32	Pass
802.11b	1Mbps	11	2462	30	-17.20	Pass
802.11g	6Mbps	01	2412	30	-21.27	Pass
802.11g	6Mbps	06	2437	30	-20.24	Pass
802.11g	6Mbps	11	2462	30	-21.50	Pass
802.11n-HT20	MCS0	01	2412	30	-21.89	Pass
802.11n-HT20	MCS0	06	2437	30	-20.32	Pass
802.11n-HT20	MCS0	11	2462	30	-21.57	Pass
802.11n-HT40	MCS0	03	2422	30	-25.49	Pass
802.11n-HT40	MCS0	06	2437	30	-22.46	Pass
802.11n-HT40	MCS0	09	2452	30	-23.88	Pass
Ant 2						
802.11b	1Mbps	01	2412	30	-16.64	Pass
802.11b	1Mbps	06	2437	30	-16.66	Pass
802.11b	1Mbps	11	2462	30	-16.58	Pass
802.11g	6Mbps	01	2412	30	-20.03	Pass
802.11g	6Mbps	06	2437	30	-19.26	Pass
802.11g	6Mbps	11	2462	30	-20.27	Pass
802.11n-HT20	MCS0	01	2412	30	-21.05	Pass
802.11n-HT20	MCS0	06	2437	30	-19.28	Pass
802.11n-HT20	MCS0	11	2462	30	-20.77	Pass
802.11n-HT40	MCS0	03	2422	30	-24.88	Pass
802.11n-HT40	MCS0	06	2437	30	-21.04	Pass
802.11n-HT40	MCS0	09	2452	30	-24.20	Pass

Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	Limit (dBc)	Limit (dBc to dBm)	Result
Ant 1 / Ant 1 + 2						
802.11b	1Mbps	01	2412	30	-16.65	Pass
802.11b	1Mbps	06	2437	30	-16.73	Pass
802.11b	1Mbps	11	2462	30	-16.44	Pass
802.11g	6Mbps	01	2412	30	-21.04	Pass
802.11g	6Mbps	06	2437	30	-19.21	Pass
802.11g	6Mbps	11	2462	30	-21.74	Pass
802.11n-HT20	MCS0	01	2412	30	-20.35	Pass
802.11n-HT20	MCS0	06	2437	30	-19.15	Pass
802.11n-HT20	MCS0	11	2462	30	-22.70	Pass
802.11n-HT40	MCS0	03	2422	30	-27.04	Pass
802.11n-HT40	MCS0	06	2437	30	-21.05	Pass
802.11n-HT40	MCS0	09	2452	30	-23.85	Pass

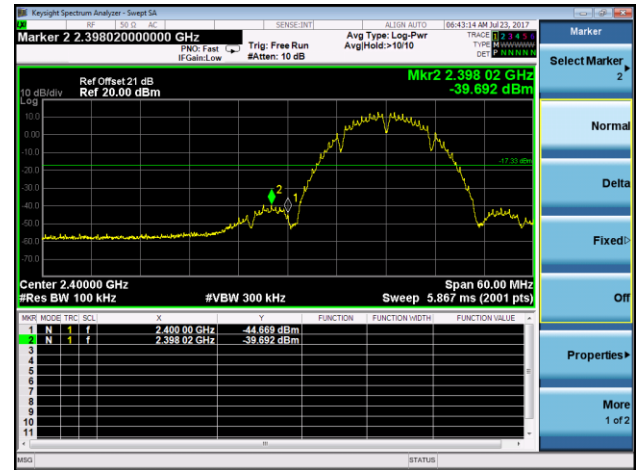
802.11b Out-of-Band Emissions - Ant 1

Channel 01 (2412MHz)

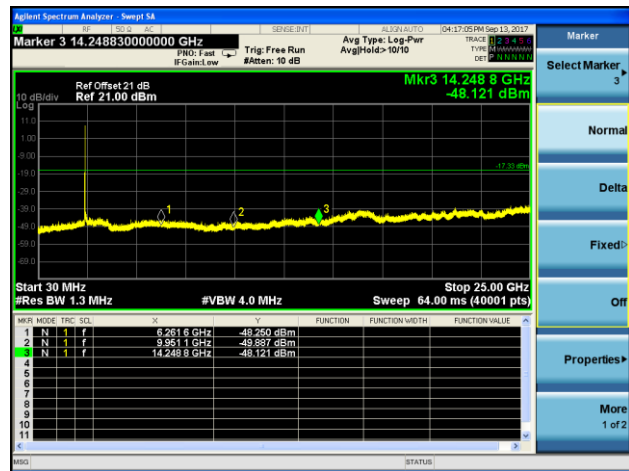
100kHz PSD reference Level



Low Band Edge

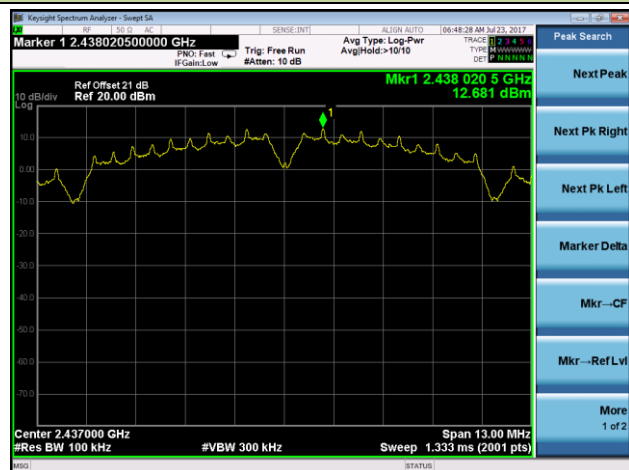


Spurious Emission

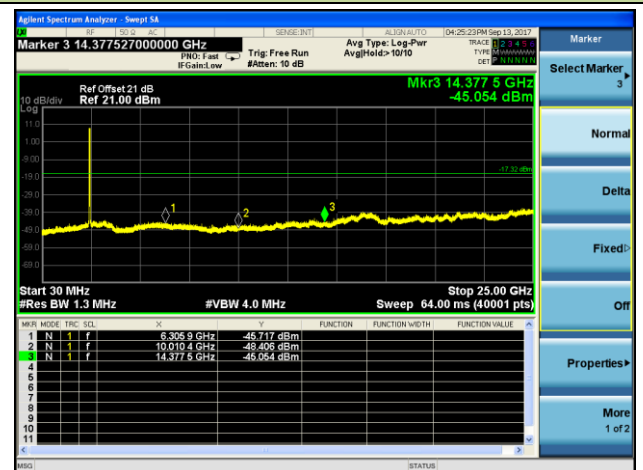


Channel 06 (2437MHz)

100kHz PSD reference Level

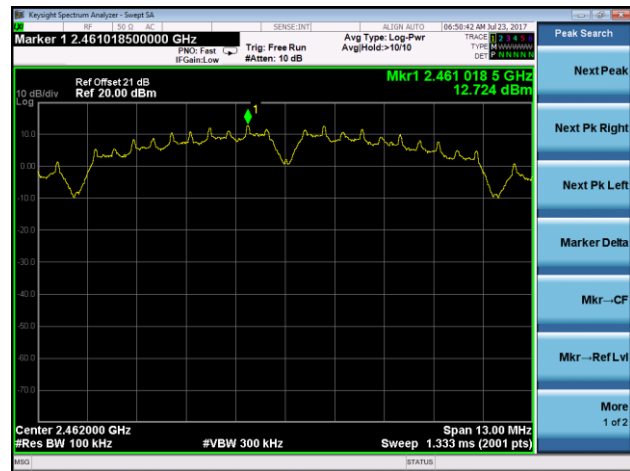


Spurious Emission

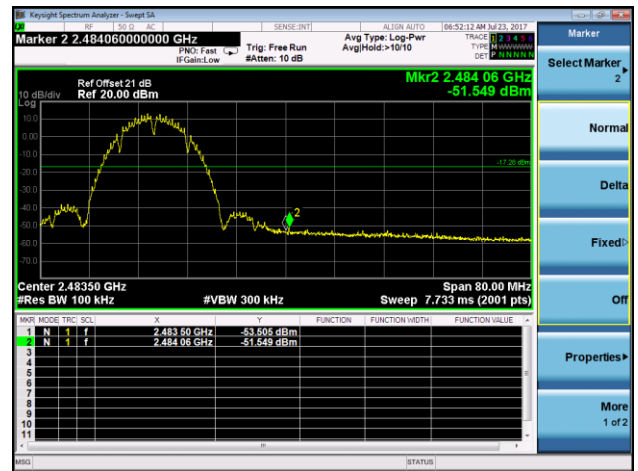


Channel 11 (2462MHz)

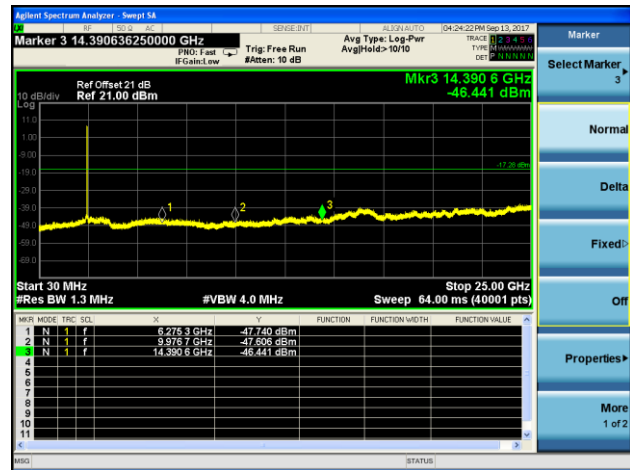
100kHz PSD reference Level



High Band Edge



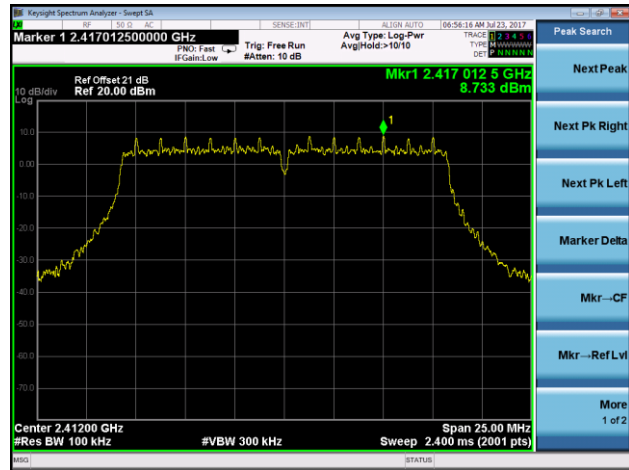
Spurious Emission



802.11g Out-of-Band Emissions - Ant 1

Channel 01 (2412MHz)

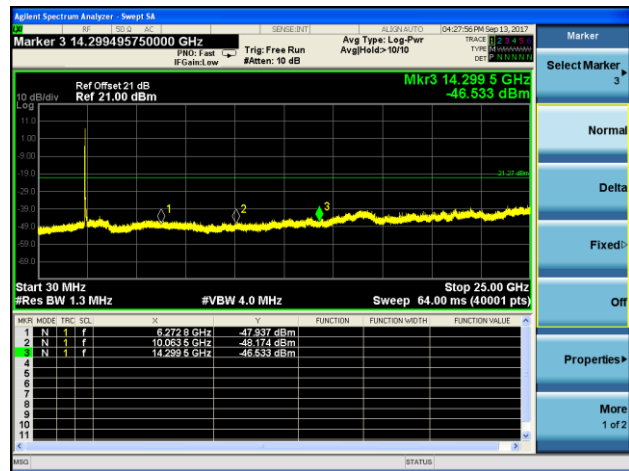
100kHz PSD reference Level



Low Band Edge

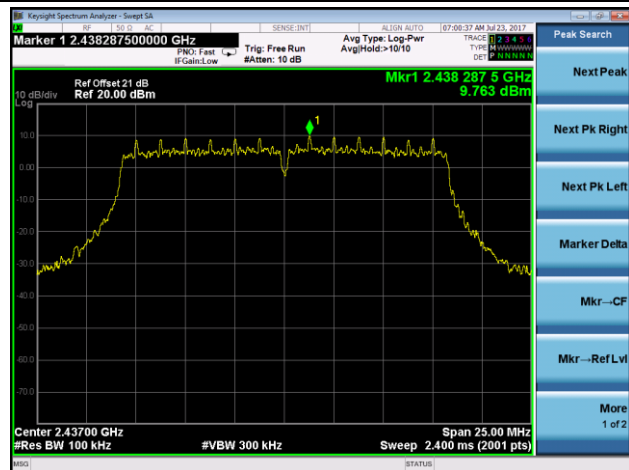


Spurious Emission

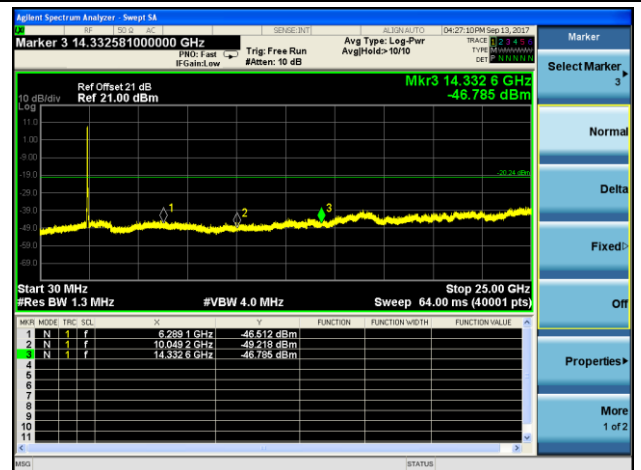


Channel 06 (2437MHz)

100kHz PSD reference Level

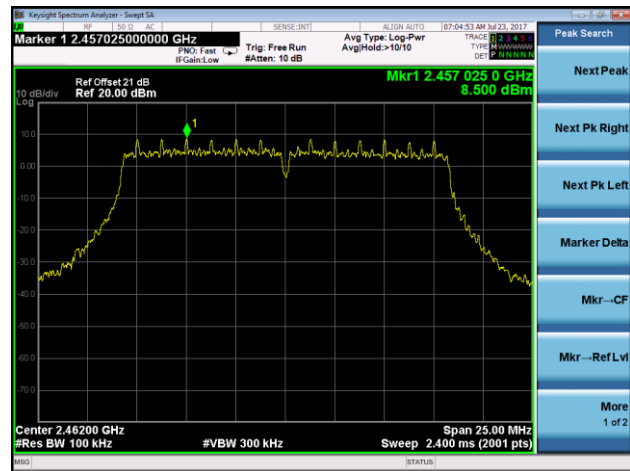


Spurious Emission

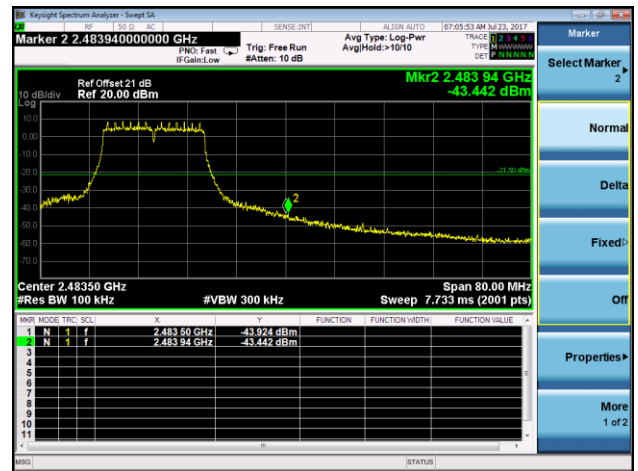


Channel 11 (2462MHz)

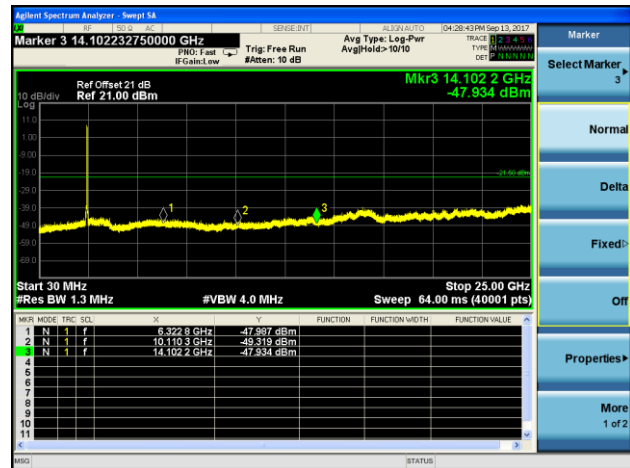
100kHz PSD reference Level



High Band Edge



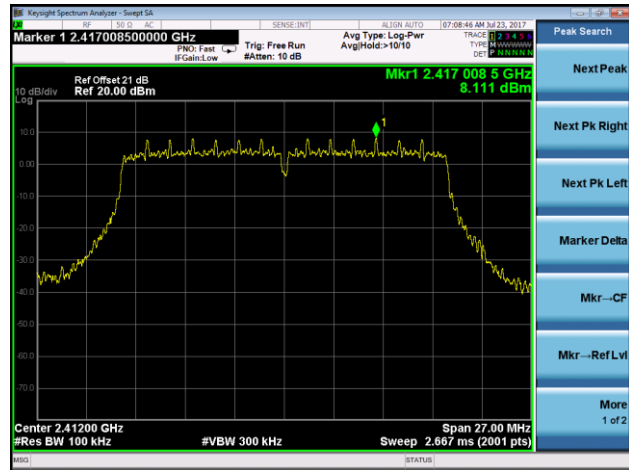
Spurious Emission



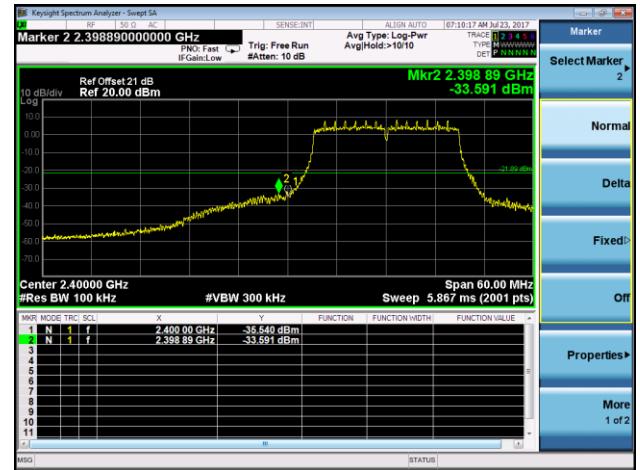
802.11n-HT20 Out-of-Band Emissions - Ant 1

Channel 01 (2412MHz)

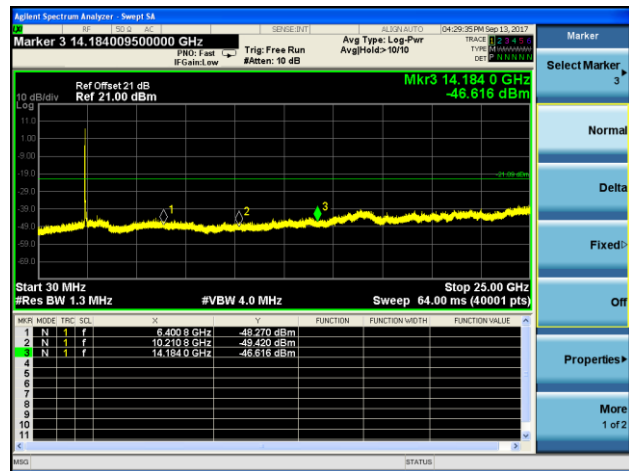
100kHz PSD reference Level



Low Band Edge

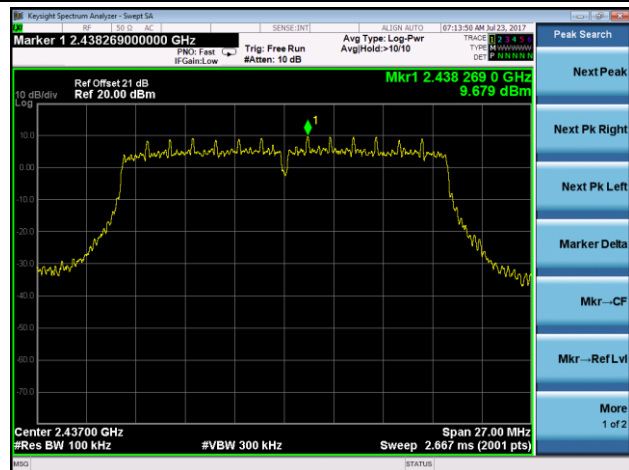


Spurious Emission

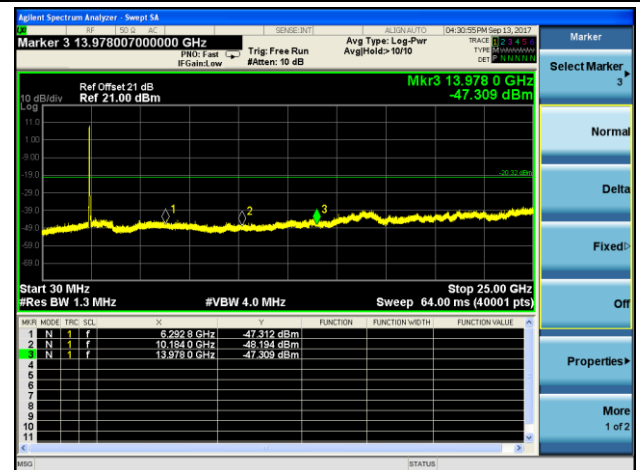


Channel 06 (2437MHz)

100kHz PSD reference Level

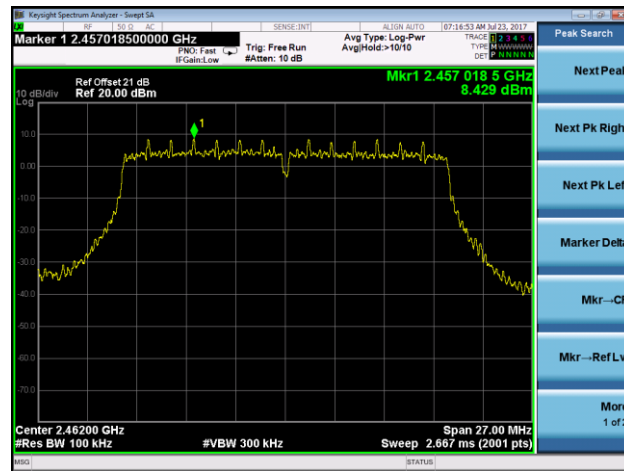


Spurious Emission

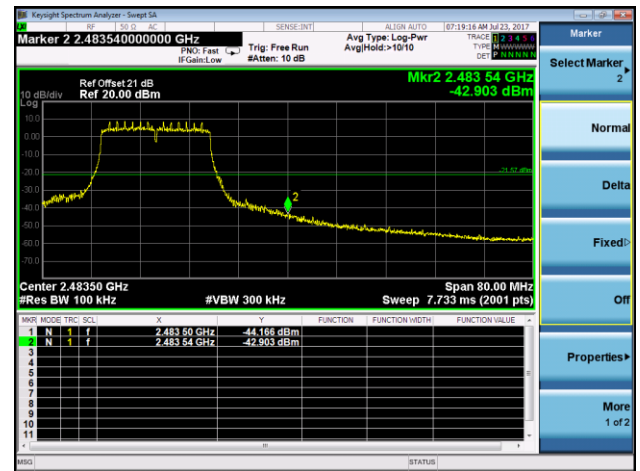


Channel 11 (2462MHz)

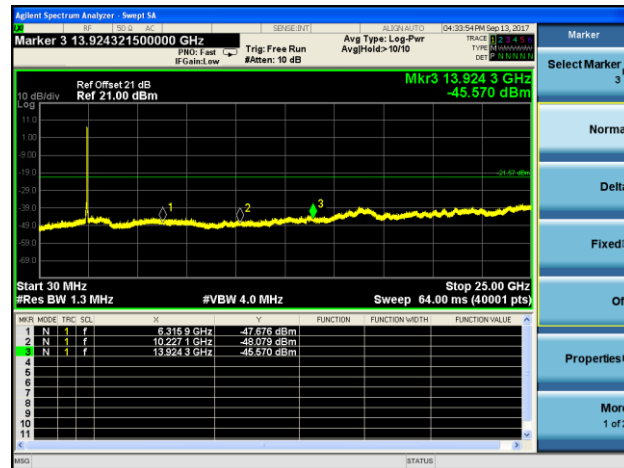
100kHz PSD reference Level



High Band Edge



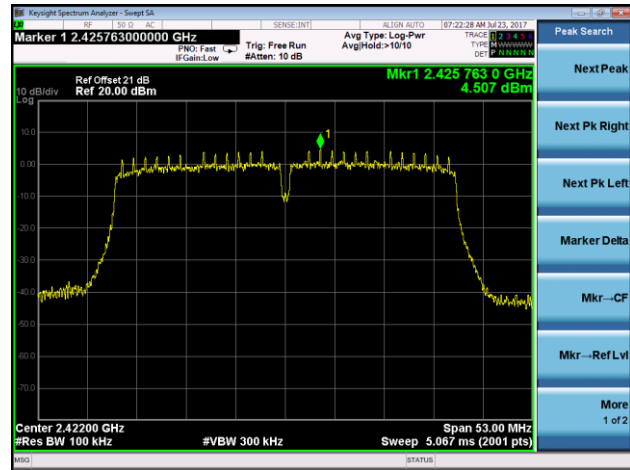
Spurious Emission



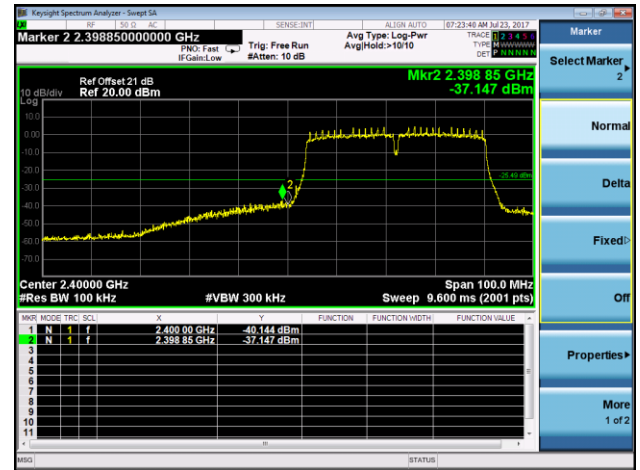
802.11n-HT40 Out-of-Band Emissions - Ant 1

Channel 03 (2422MHz)

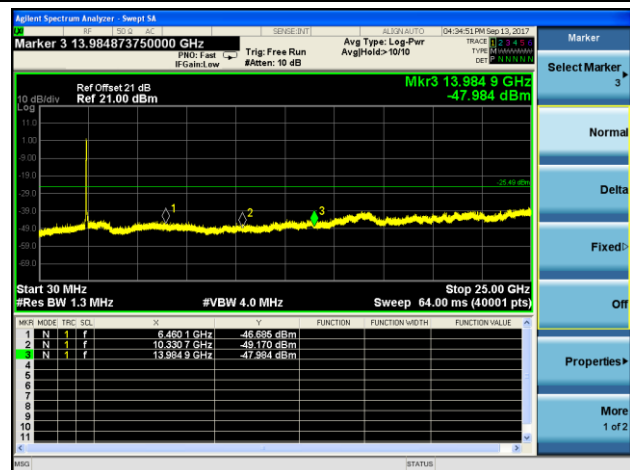
100kHz PSD reference Level



Low Band Edge

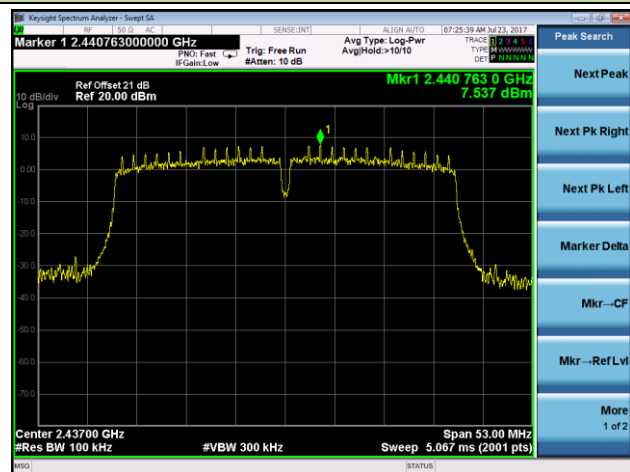


Spurious Emission

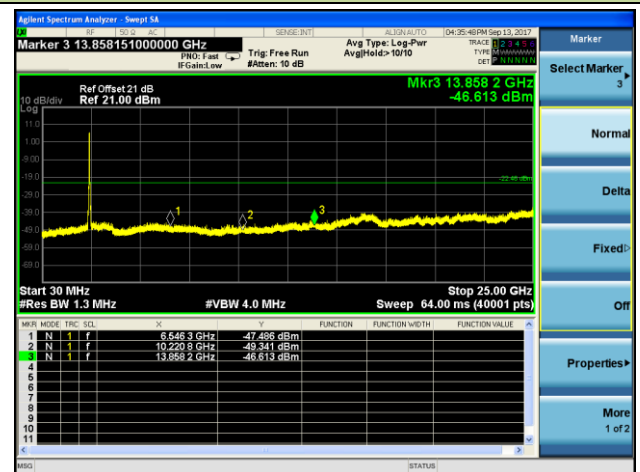


Channel 06 (2437MHz)

100kHz PSD reference Level

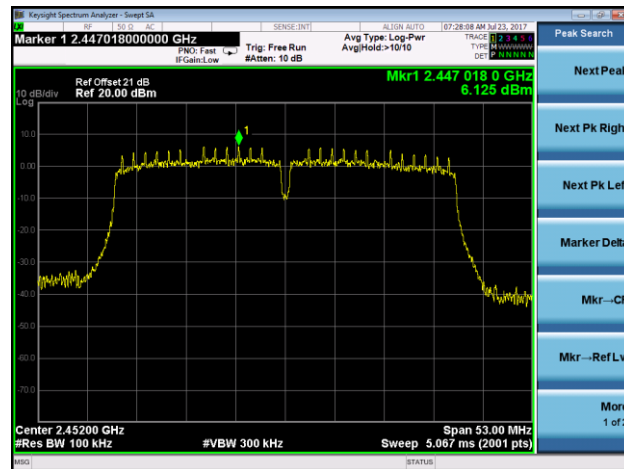


Spurious Emission

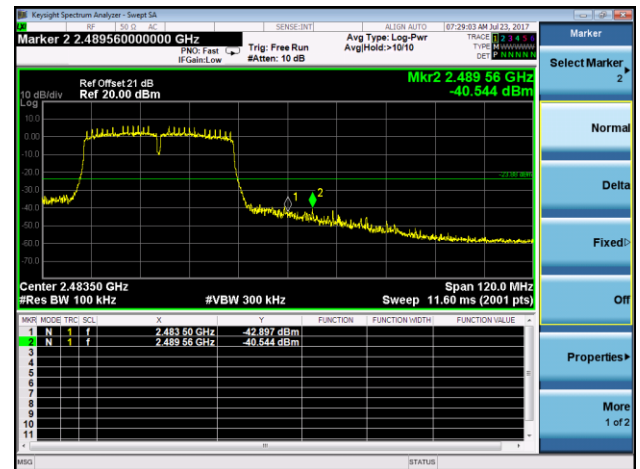


Channel 09 (2452MHz)

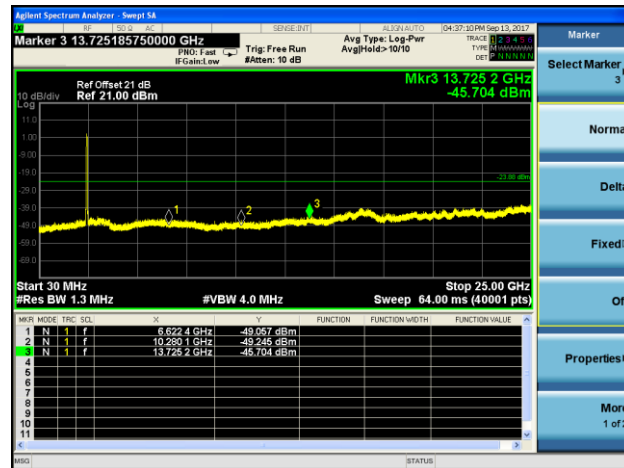
100kHz PSD reference Level



High Band Edge



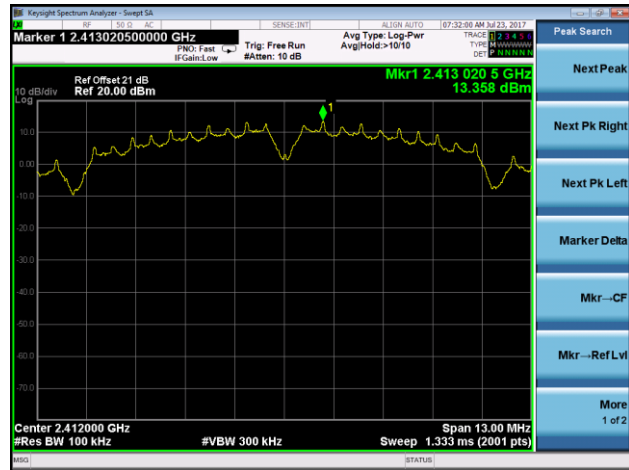
Spurious Emission



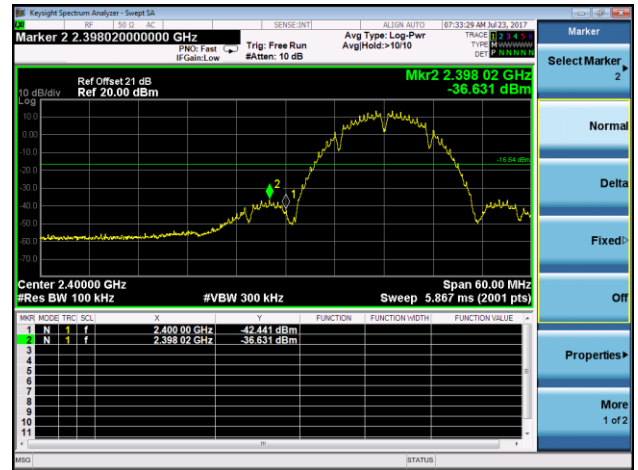
802.11b Out-of-Band Emissions - Ant 2

Channel 01 (2412MHz)

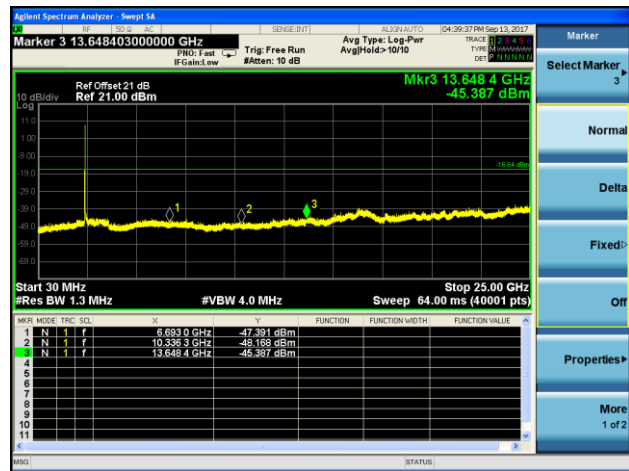
100kHz PSD reference Level



Low Band Edge

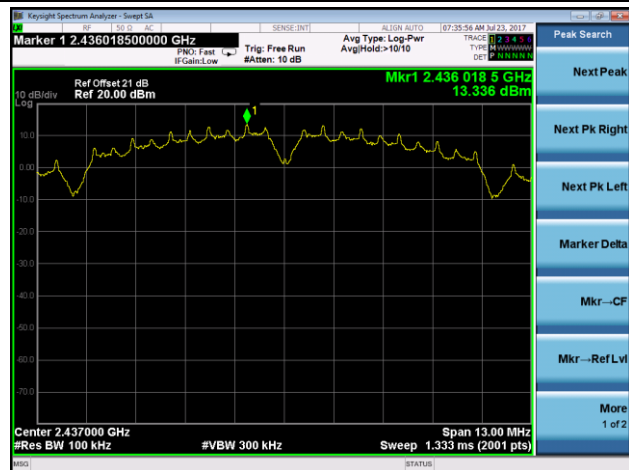


Spurious Emission

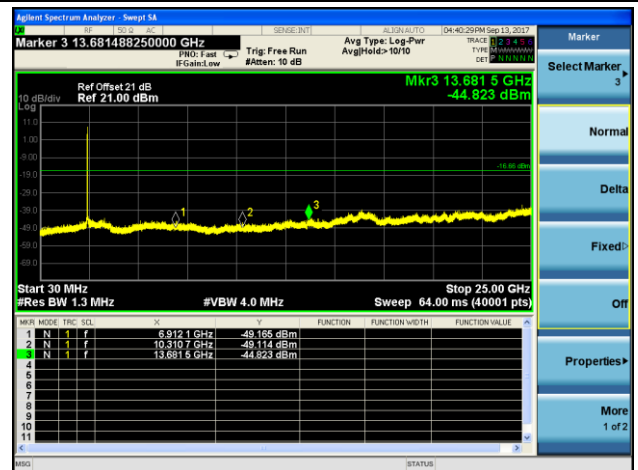


Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

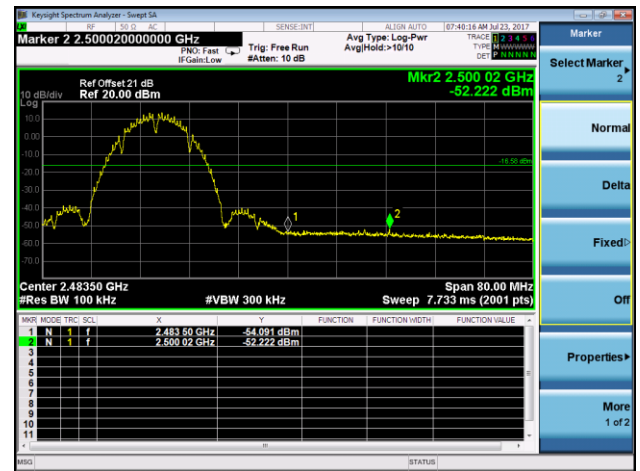


Channel 11 (2462MHz)

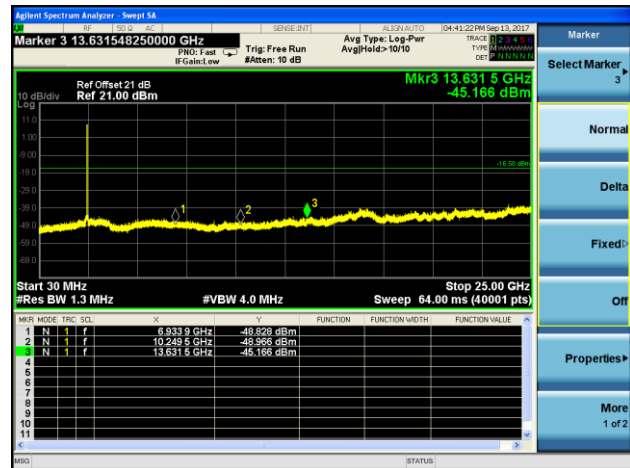
100kHz PSD reference Level



High Band Edge



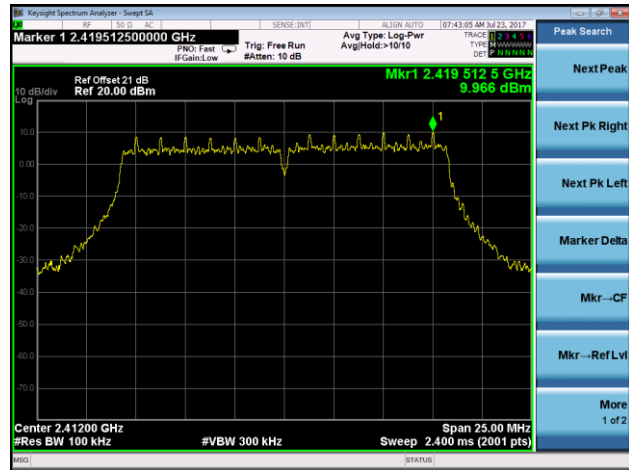
Spurious Emission



802.11g Out-of-Band Emissions - Ant 2

Channel 01 (2412MHz)

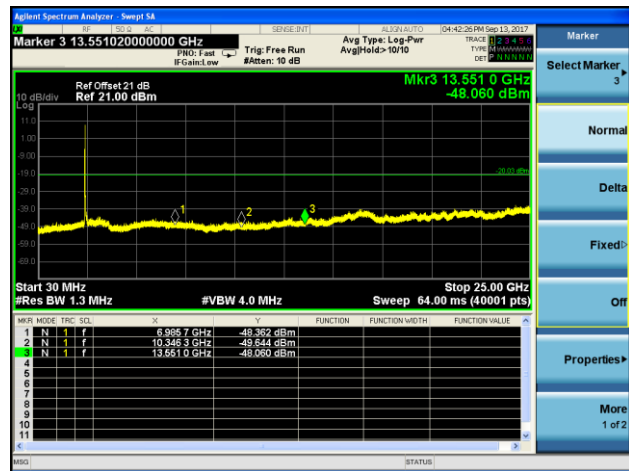
100kHz PSD reference Level



Low Band Edge

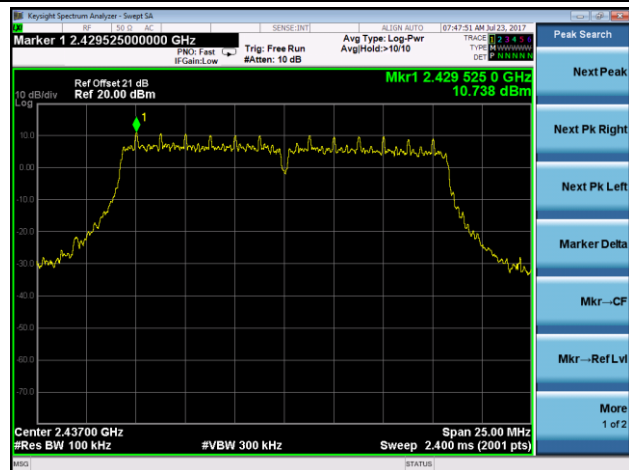


Spurious Emission

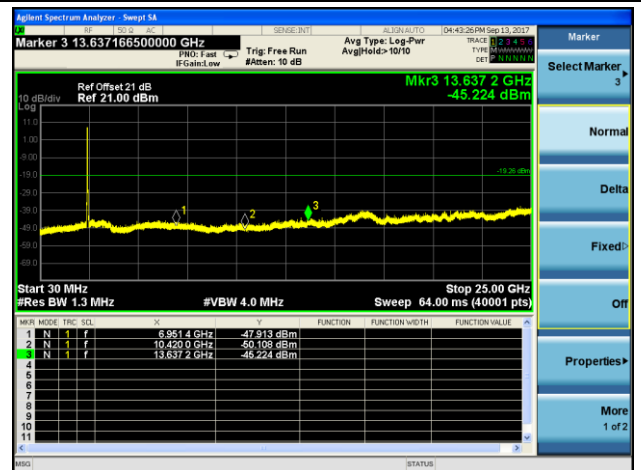


Channel 06 (2437MHz)

100kHz PSD reference Level

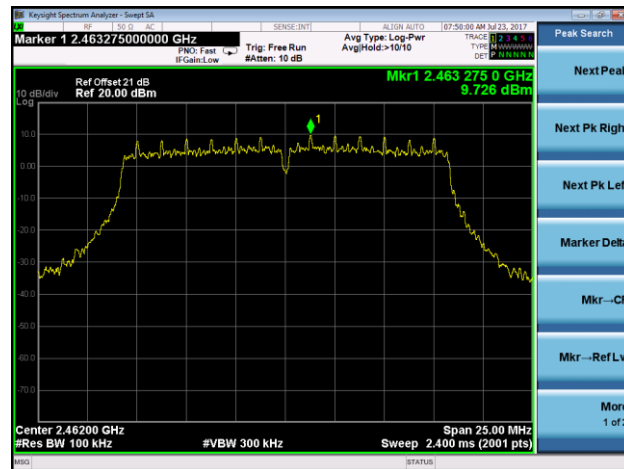


Spurious Emission

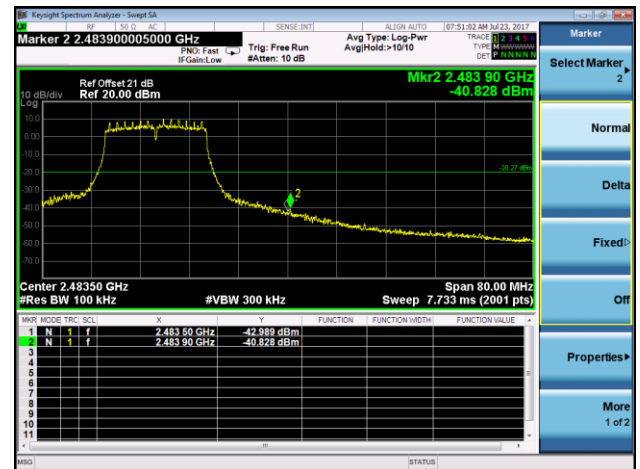


Channel 11 (2462MHz)

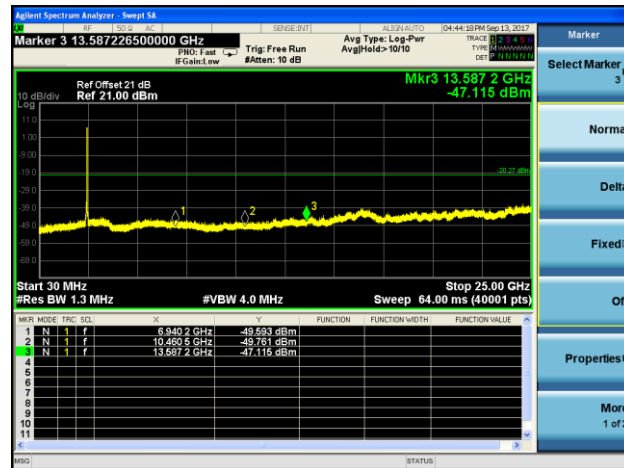
100kHz PSD reference Level



High Band Edge



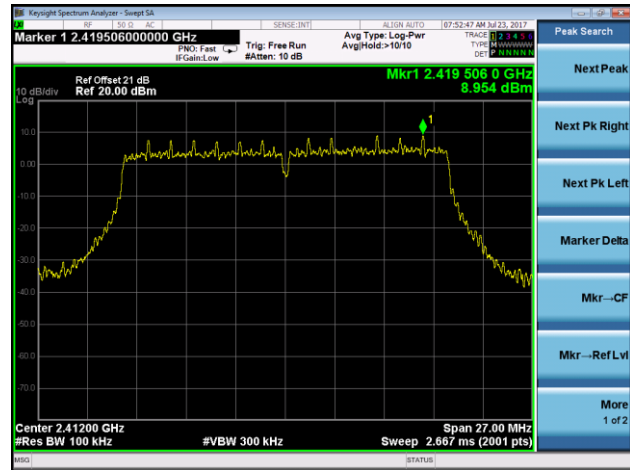
Spurious Emission



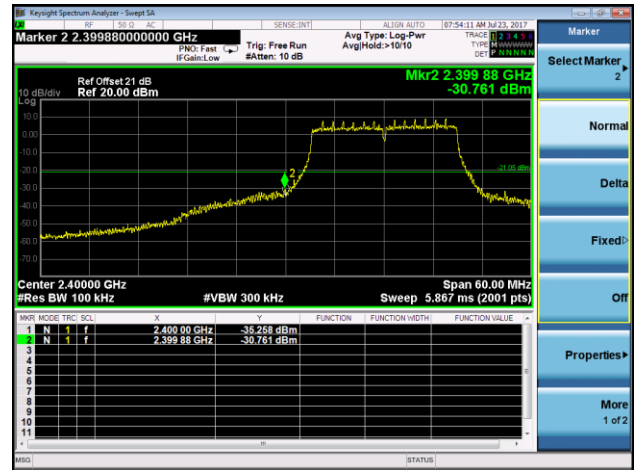
802.11n-HT20 Out-of-Band Emissions - Ant 2

Channel 01 (2412MHz)

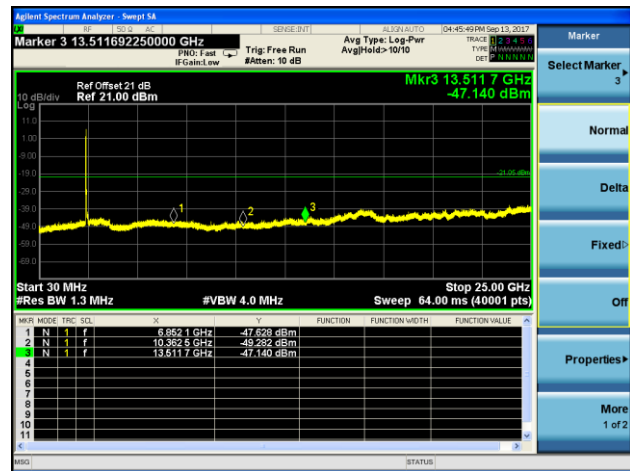
100kHz PSD reference Level



Low Band Edge

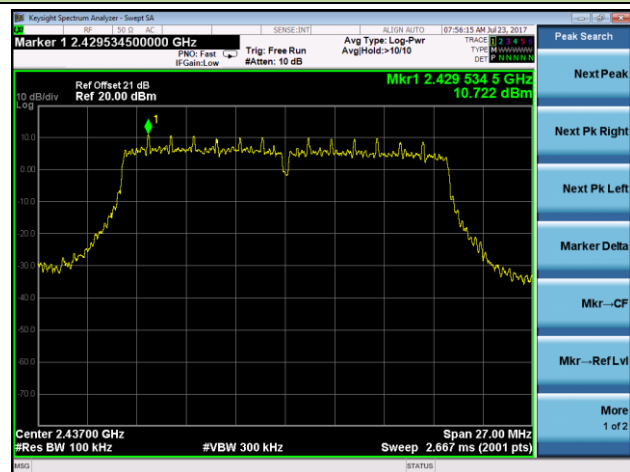


Spurious Emission

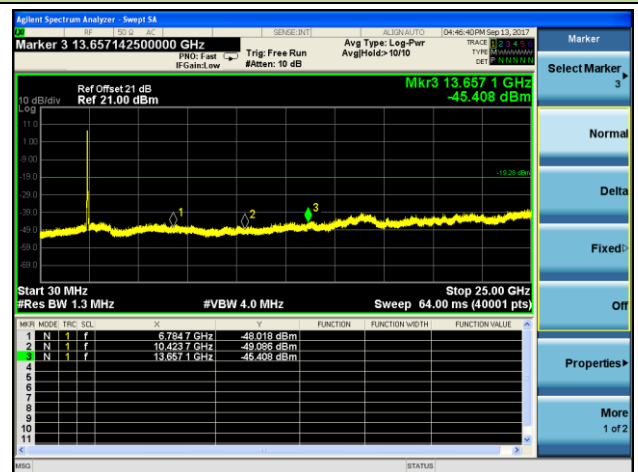


Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

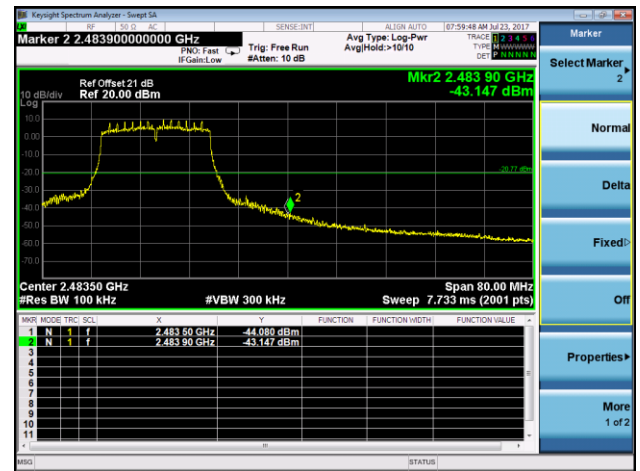


Channel 11 (2462MHz)

100kHz PSD reference Level



High Band Edge



Spurious Emission

