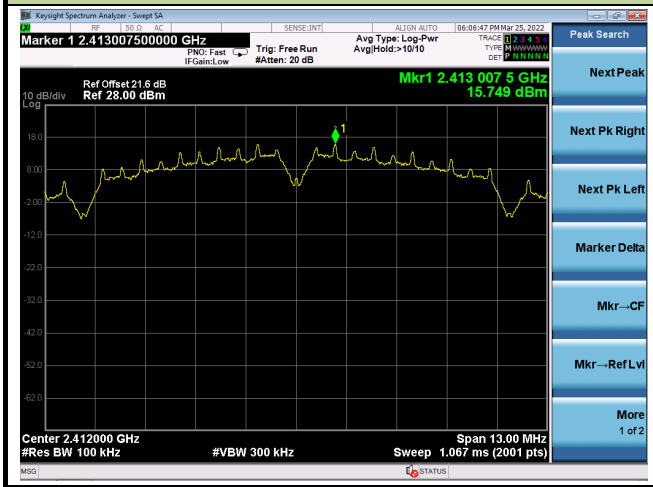
802.11b Out-of-Band Emissions – Ant 0

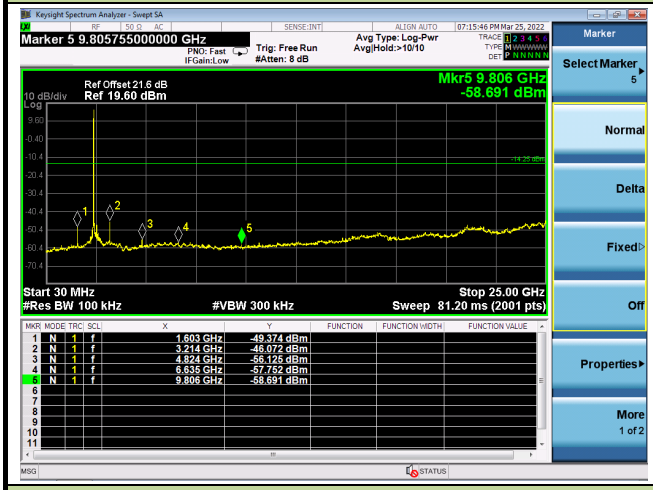
Channel 01 (2412MHz)

Reference Level



Low Band Edge

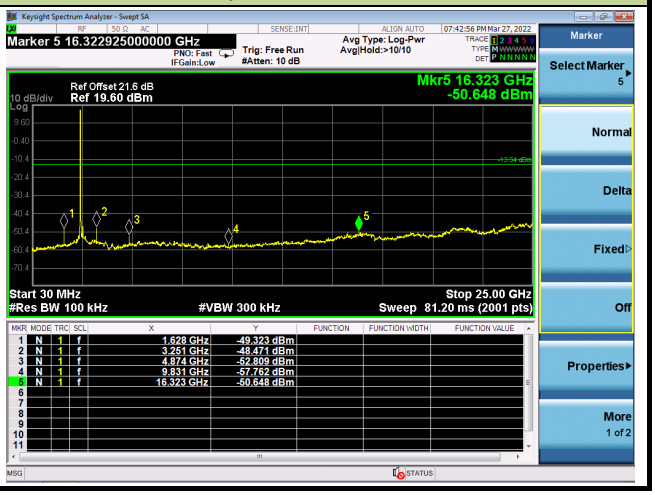
Spurious Emission



Channel 06 (2437MHz)

Reference Level

Spurious Emission

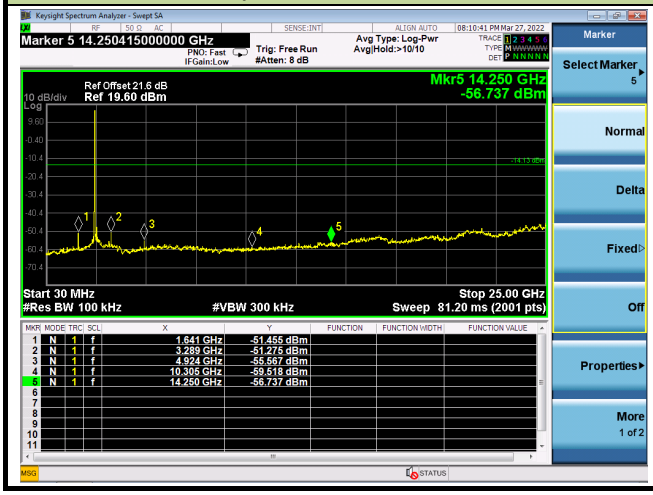


Channel 11 (2462MHz)

Reference Level

High Band Edge

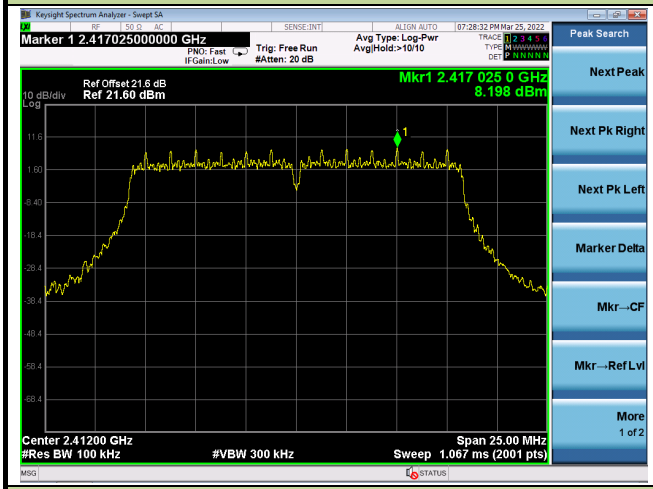
Spurious Emission



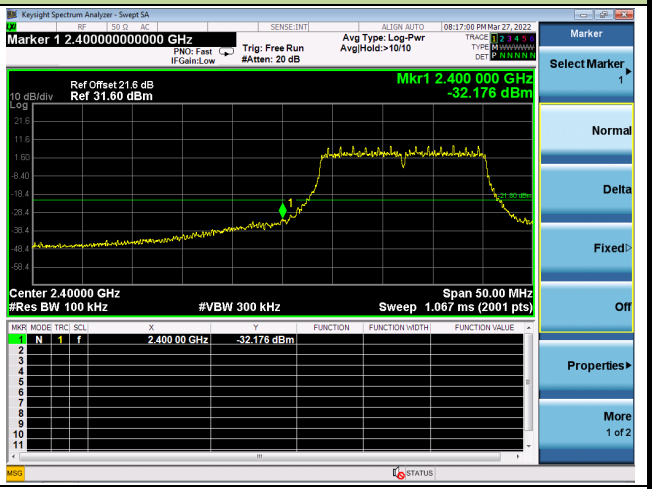
802.11g Out-of-Band Emissions – Ant 0

Channel 01 (2412MHz)

Reference Level



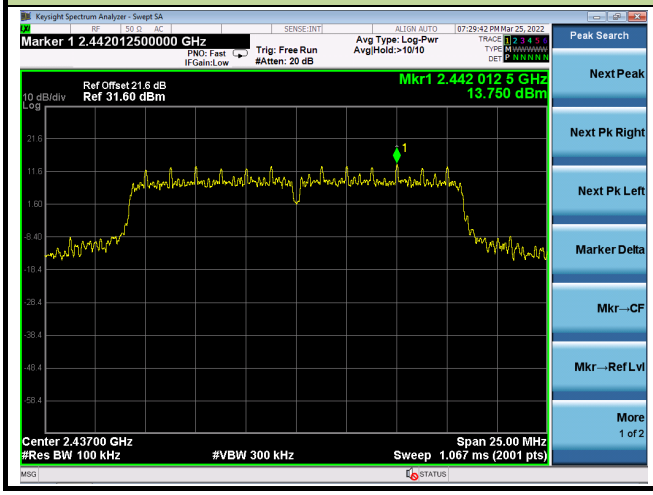
Low Band Edge



Spurious Emission

Channel 06 (2437MHz)

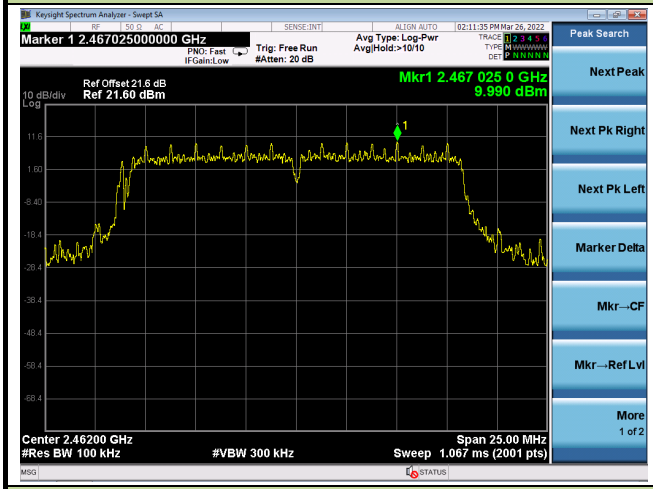
Reference Level



Spurious Emission

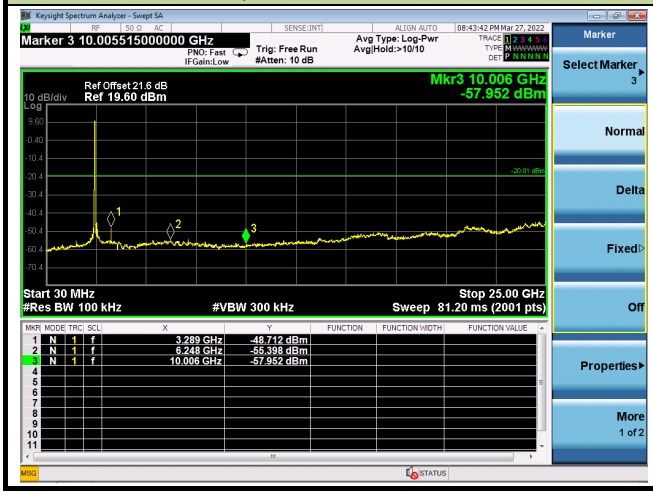
Channel 11 (2462MHz)

Reference Level



High Band Edge

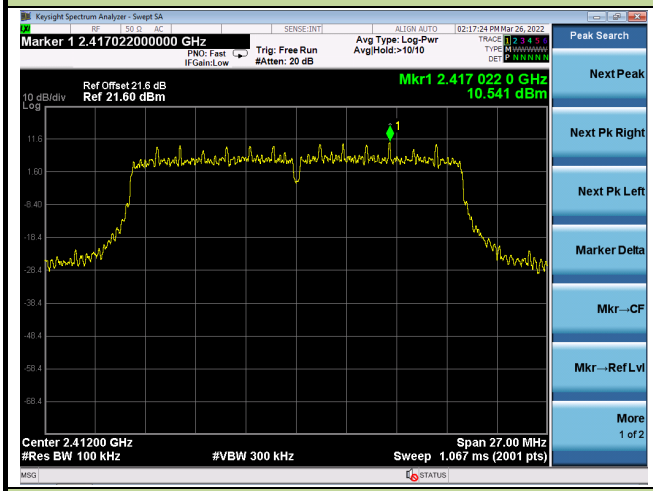
Spurious Emission



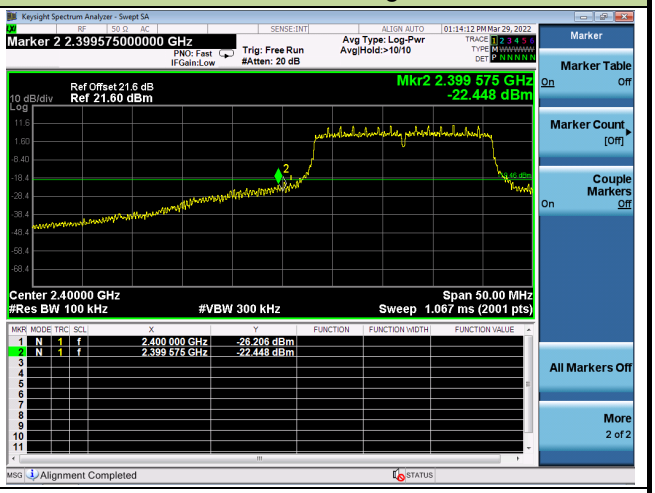
802.11n-HT20 Out-of-Band Emissions – Ant 0

Channel 01 (2412MHz)

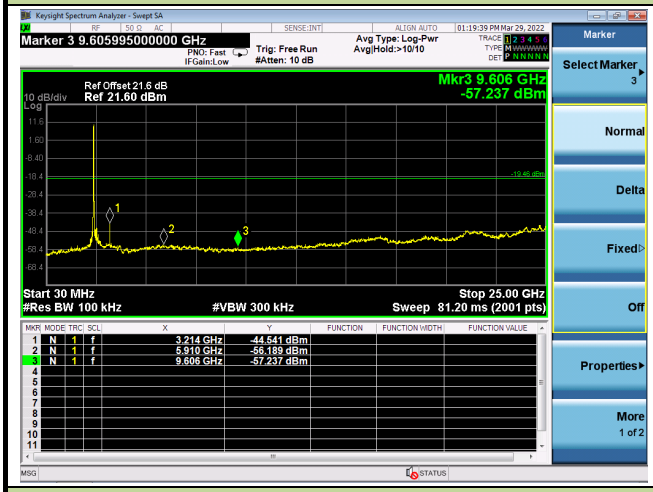
Reference Level



Low Band Edge

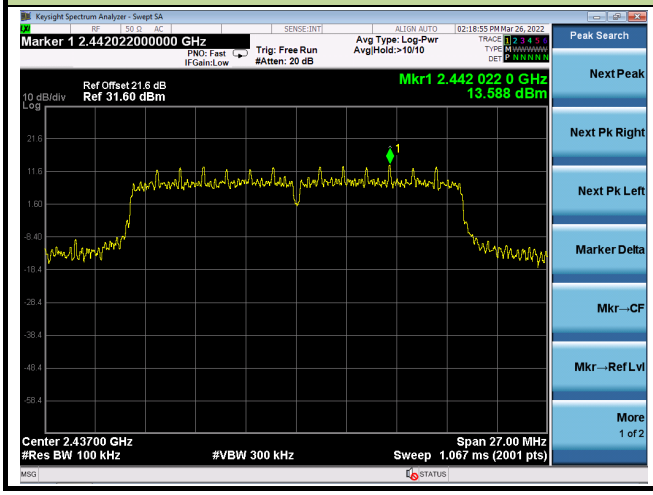


Spurious Emission

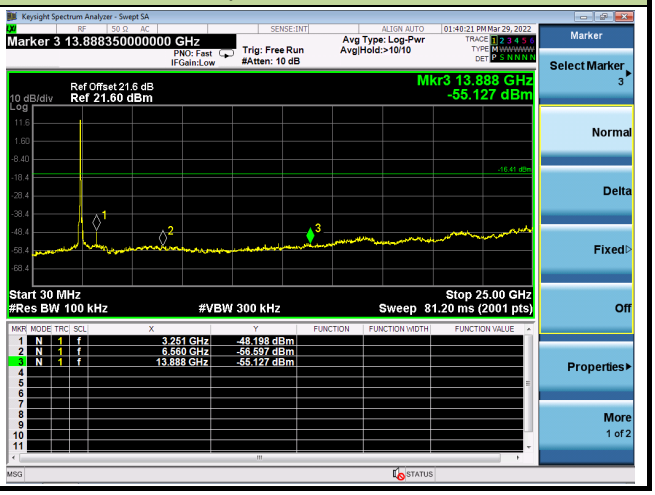


Channel 06 (2437MHz)

Reference Level



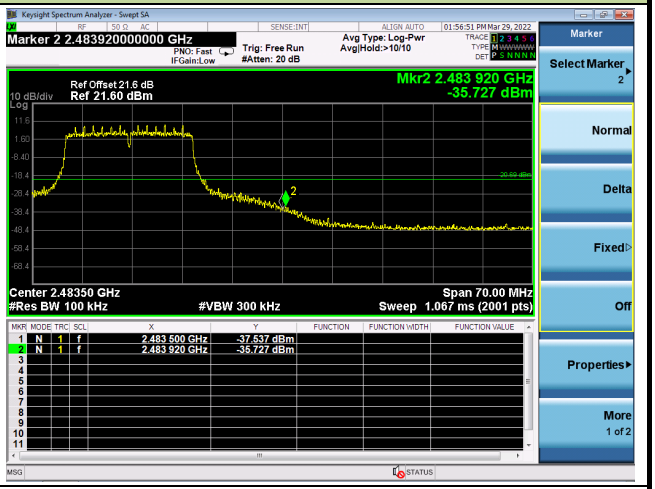
Spurious Emission



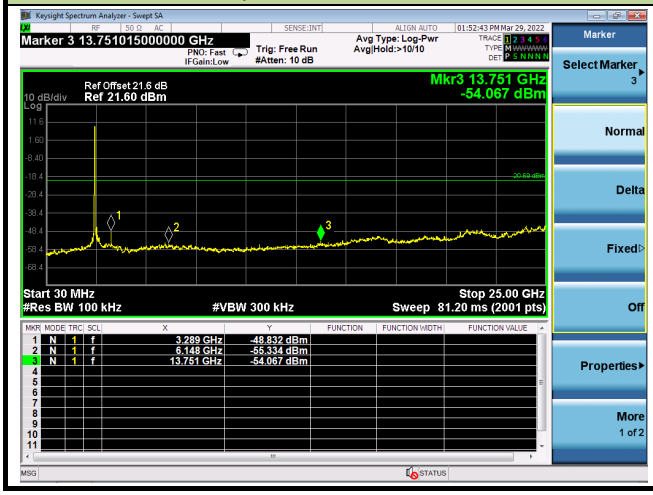
Channel 11 (2462MHz)

Reference Level

High Band Edge



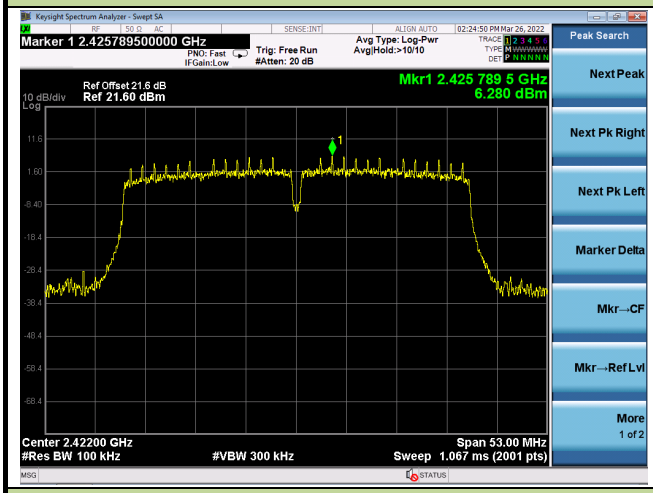
Spurious Emission



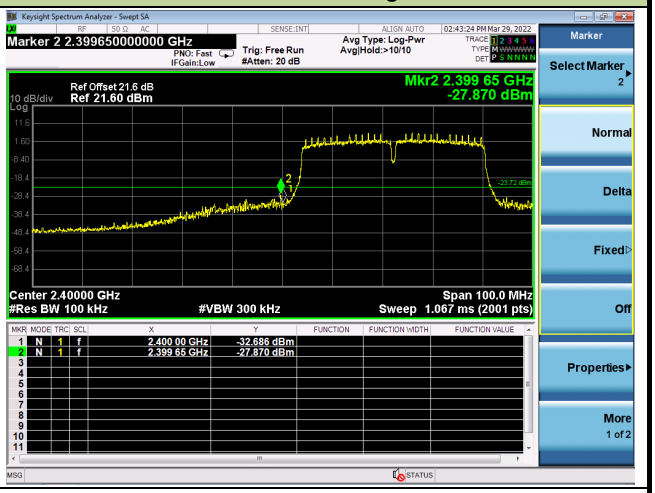
802.11n-HT40 Out-of-Band Emissions – Ant 0

Channel 03 (2422MHz)

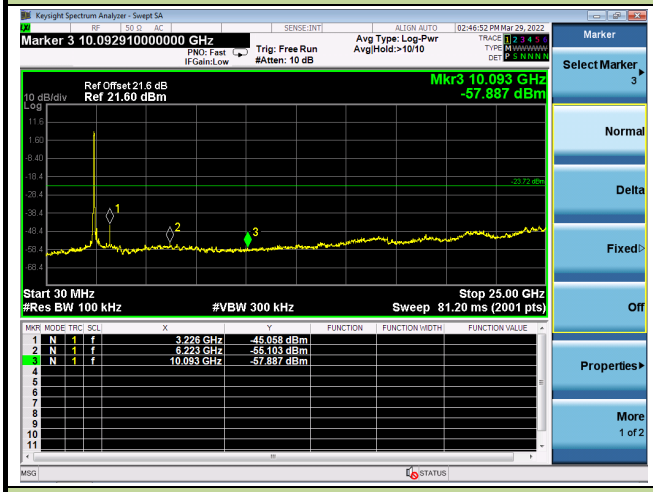
Reference Level



Low Band Edge

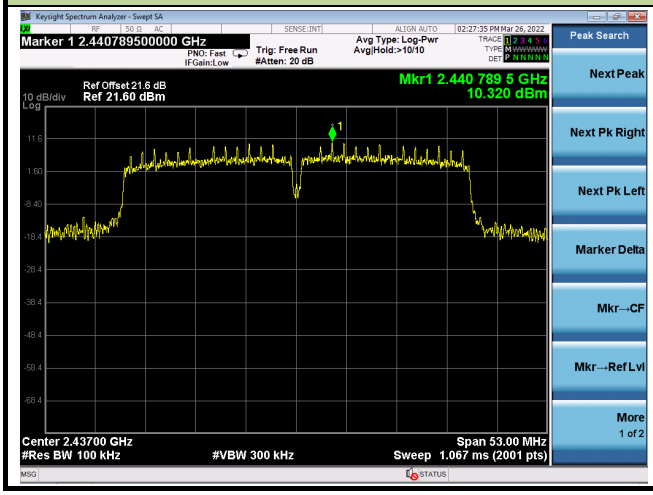


Spurious Emission

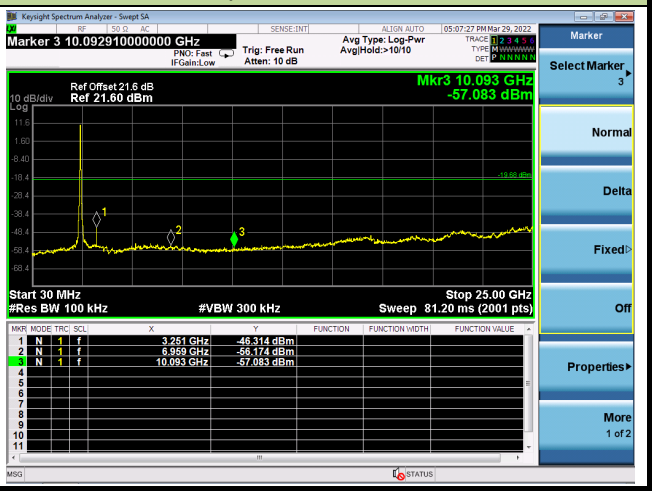


Channel 06 (2437MHz)

Reference Level

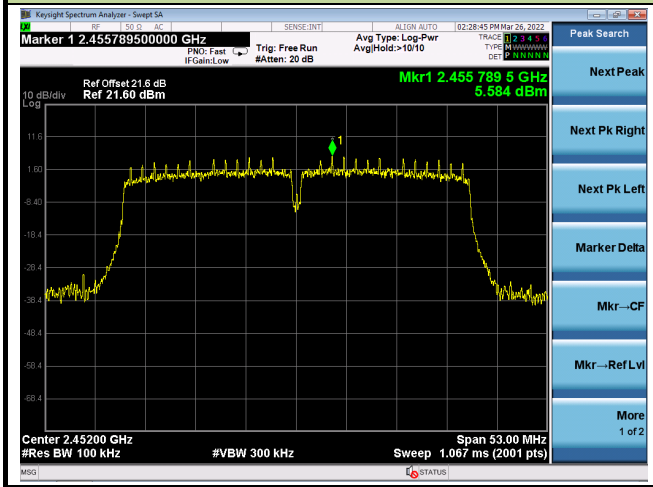


Spurious Emission

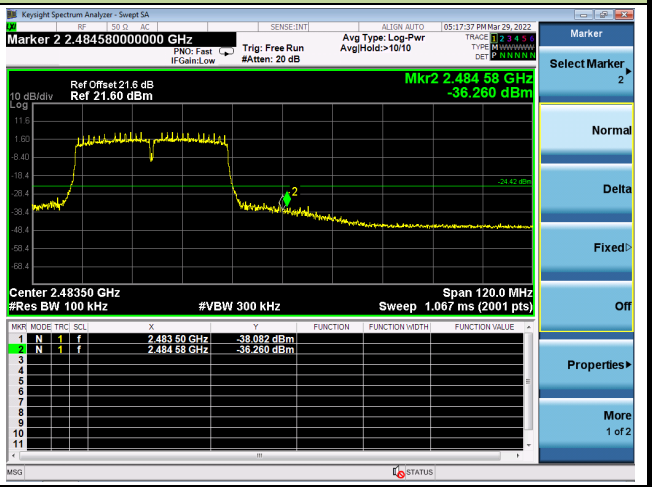


Channel 09 (2452MHz)

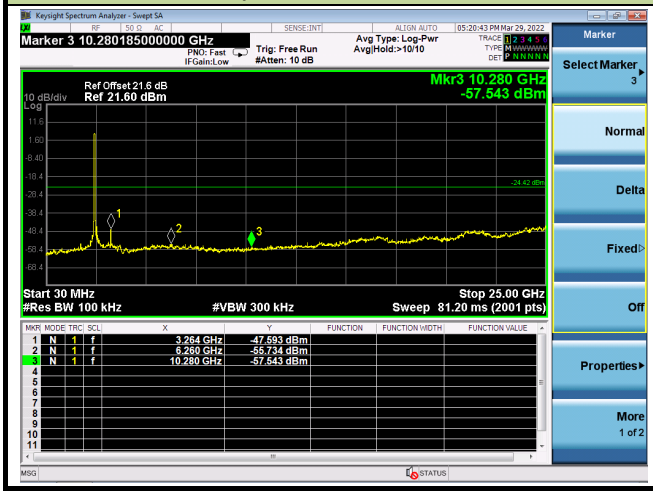
Reference Level



High Band Edge



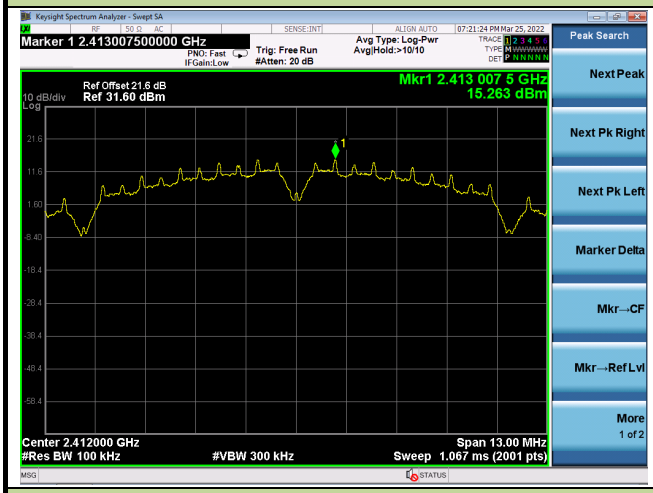
Spurious Emission



802.11b Out-of-Band Emissions – Ant 1

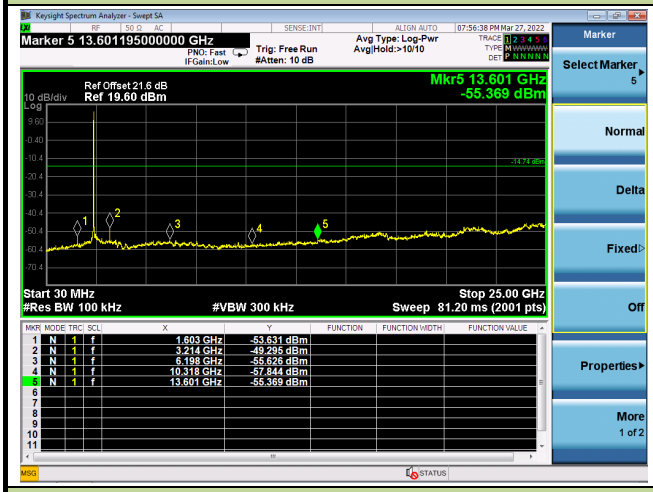
Channel 01 (2412MHz)

Reference Level



Low Band Edge

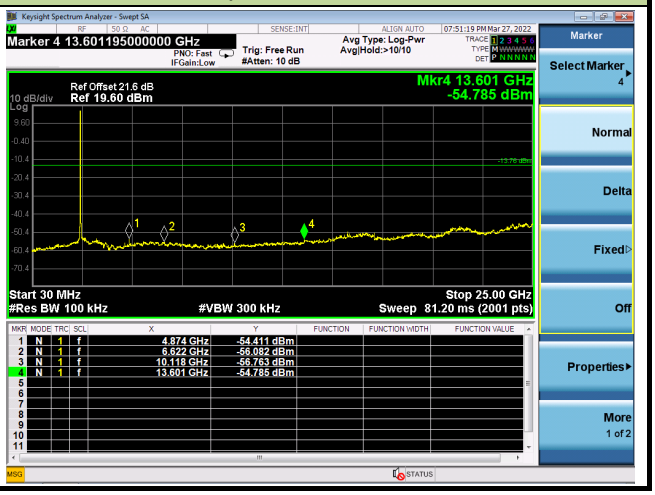
Spurious Emission



Channel 06 (2437MHz)

Reference Level

Spurious Emission

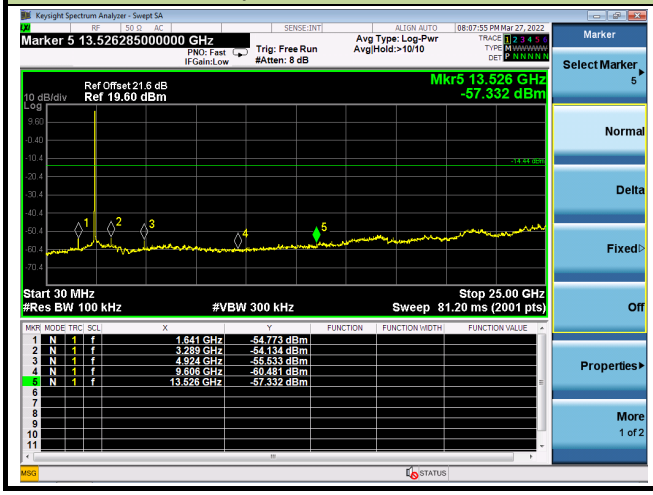


Channel 11 (2462MHz)

Reference Level

High Band Edge

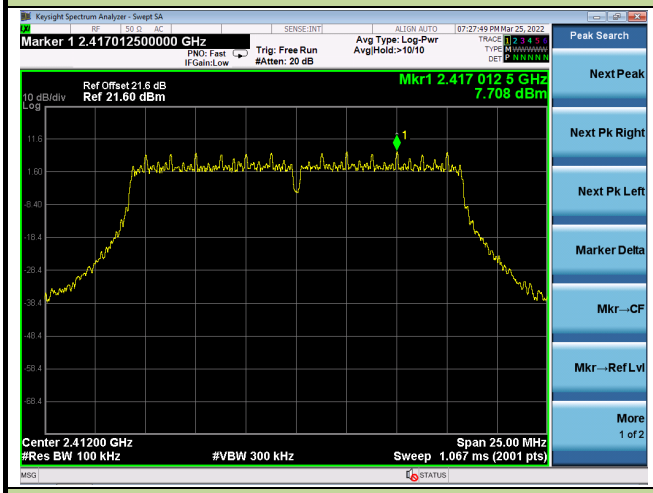
Spurious Emission



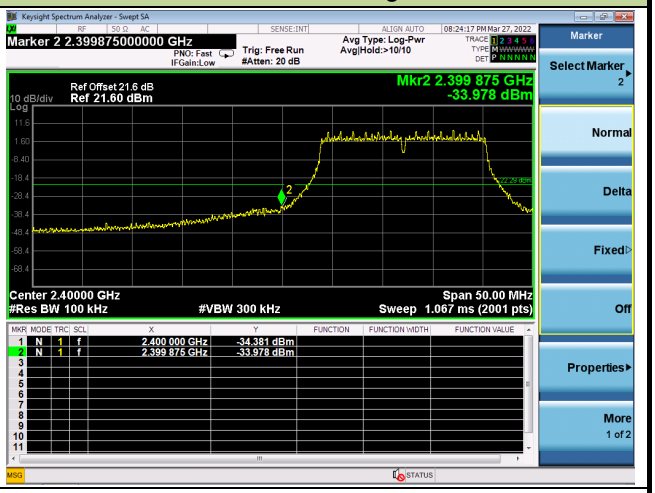
802.11g Out-of-Band Emissions – Ant 1

Channel 01 (2412MHz)

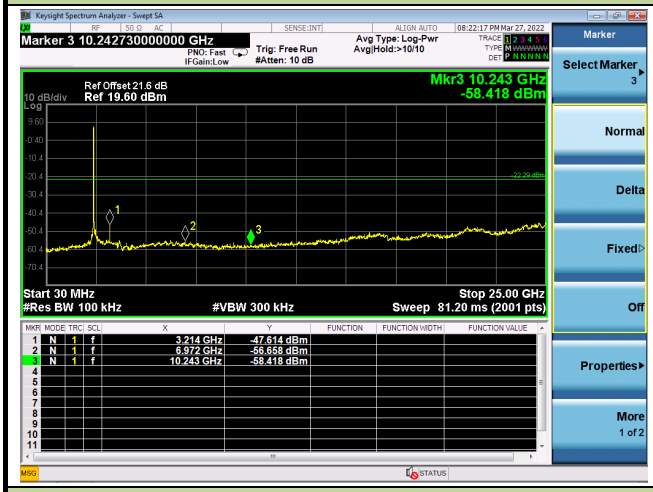
Reference Level



Low Band Edge

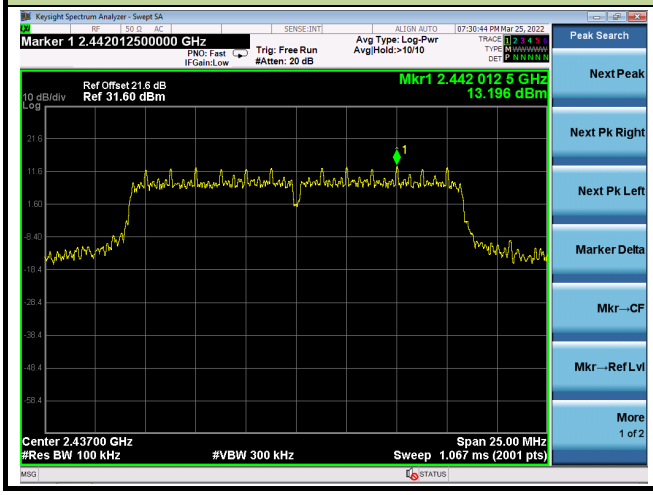


Spurious Emission



Channel 06 (2437MHz)

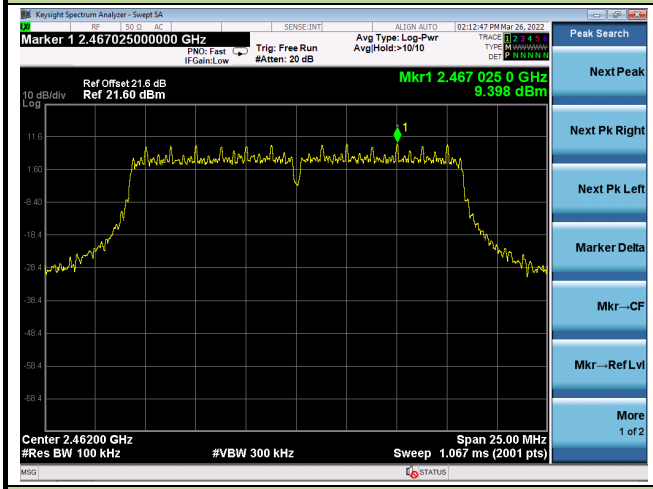
Reference Level



Spurious Emission

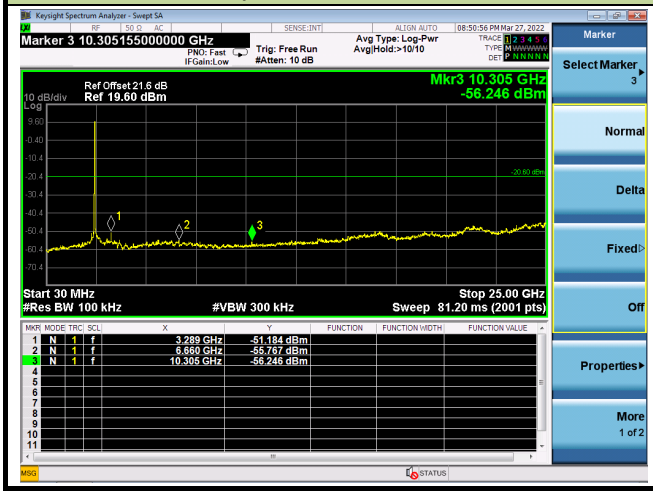
Channel 11 (2462MHz)

Reference Level



High Band Edge

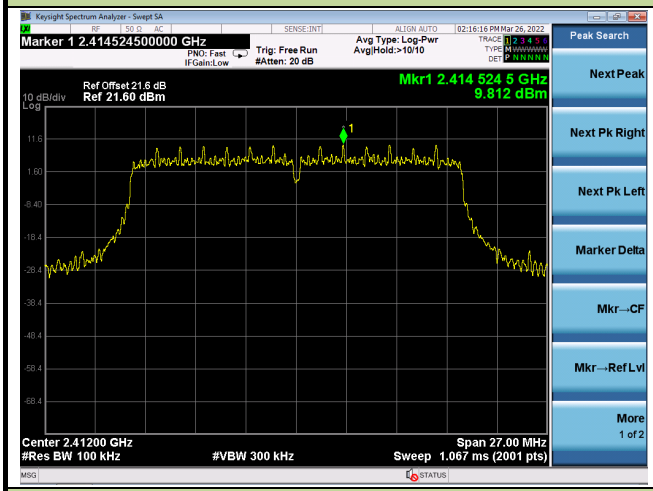
Spurious Emission



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

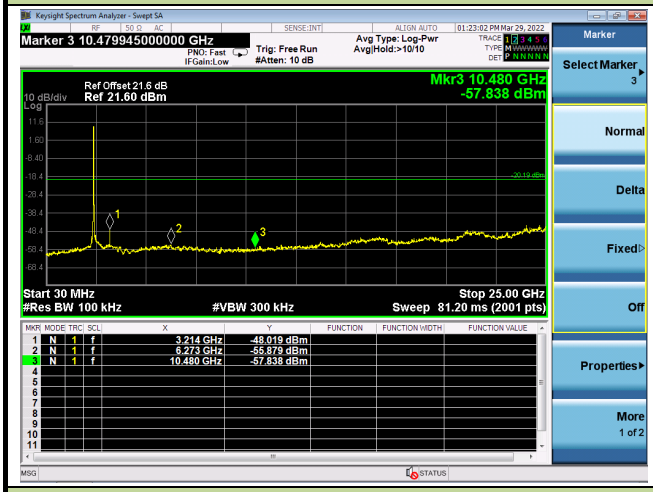
Channel 01 (2412MHz)

Reference Level



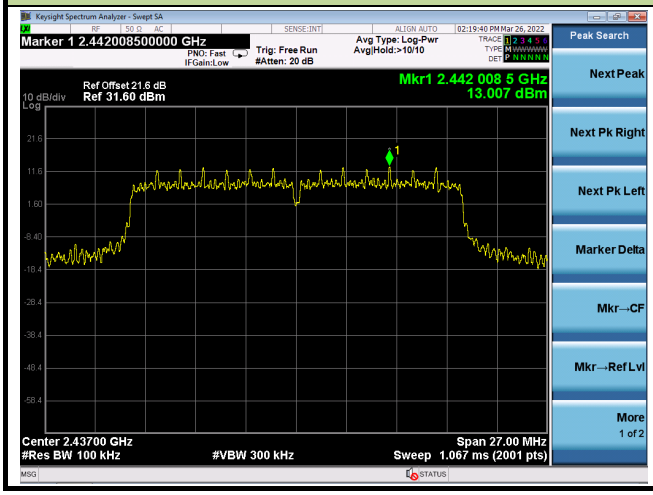
Low Band Edge

Spurious Emission

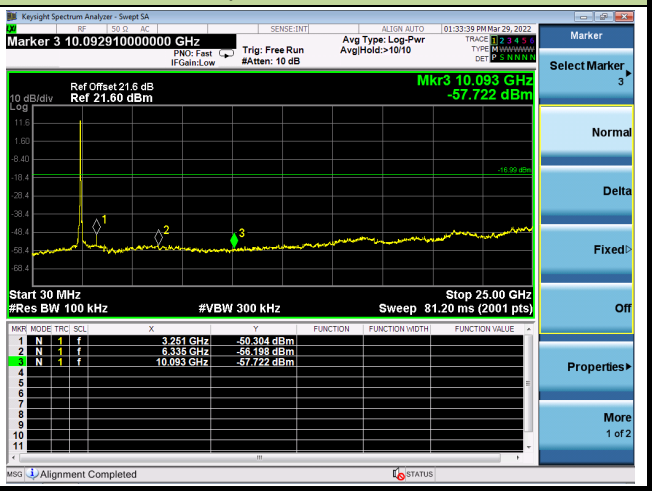


Channel 06 (2437MHz)

Reference Level

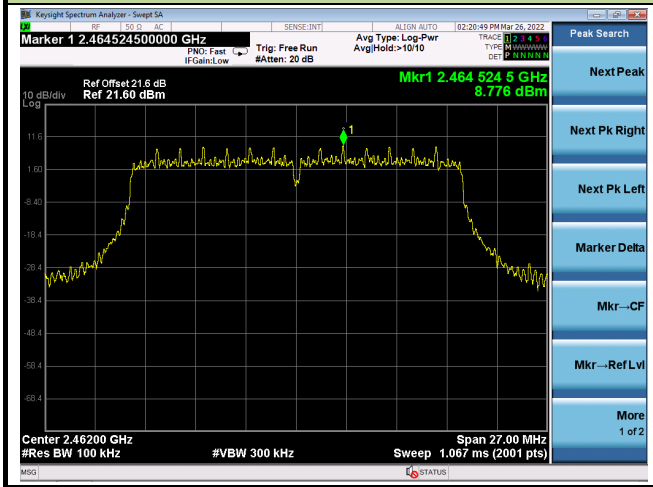


Spurious Emission

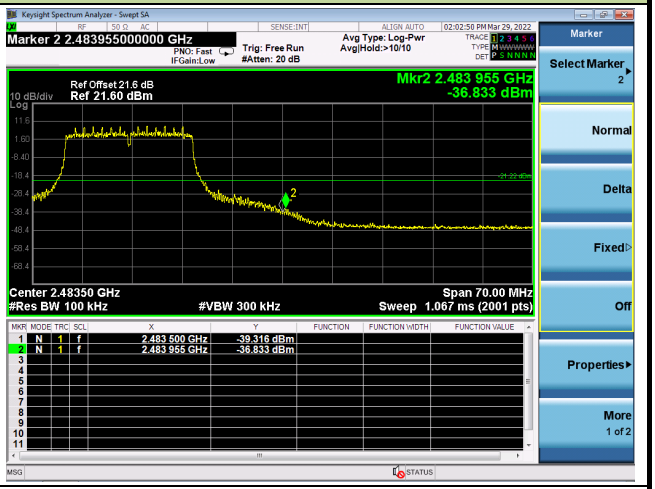


Channel 11 (2462MHz)

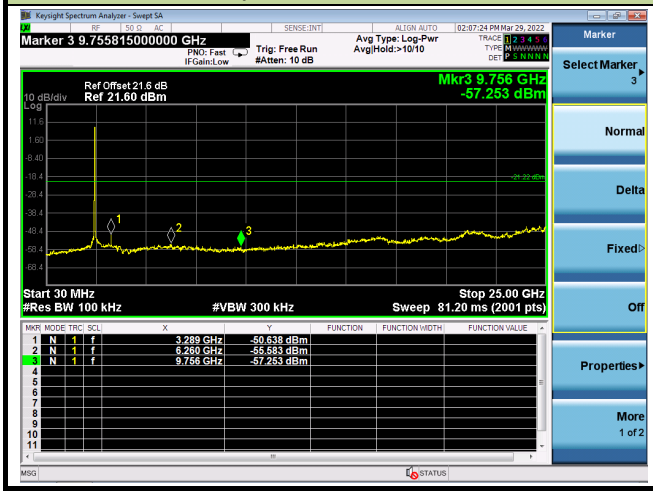
Reference Level



High Band Edge



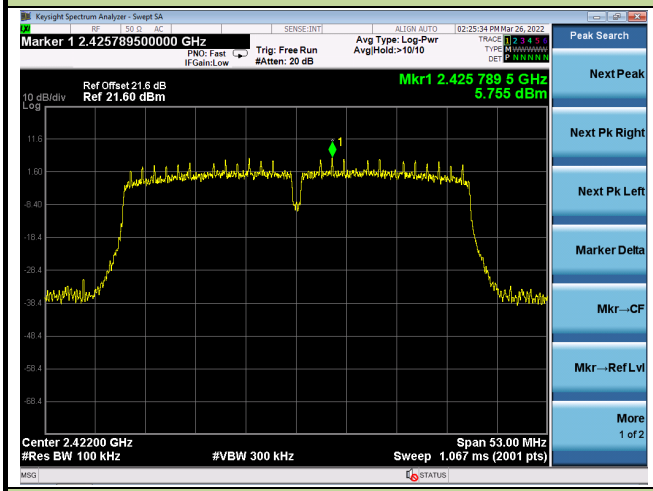
Spurious Emission



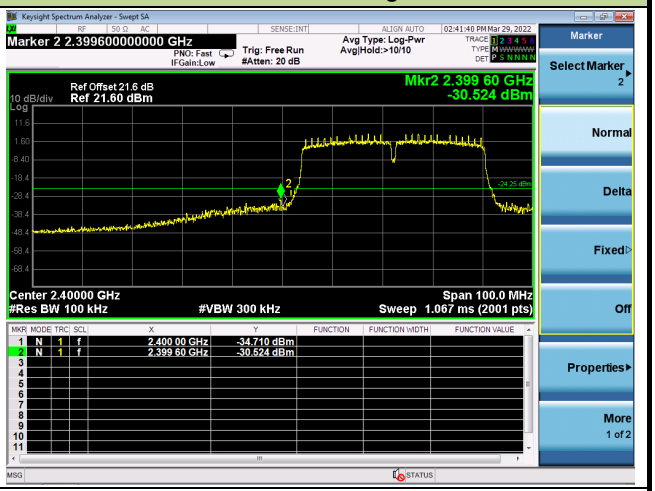
802.11n-HT40 Out-of-Band Emissions – Ant 1

Channel 03 (2422MHz)

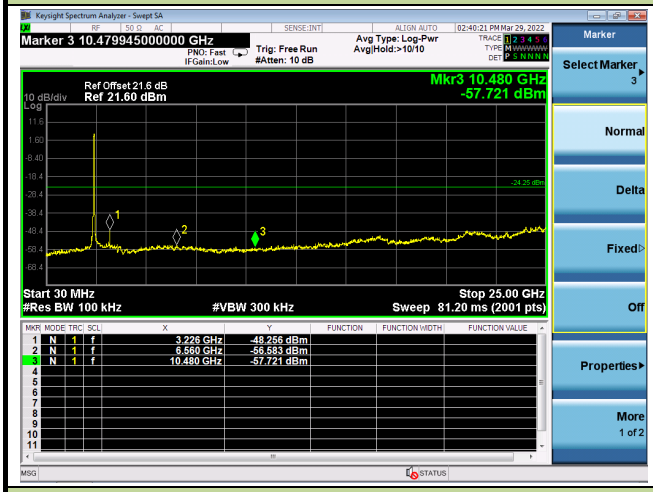
Reference Level



Low Band Edge

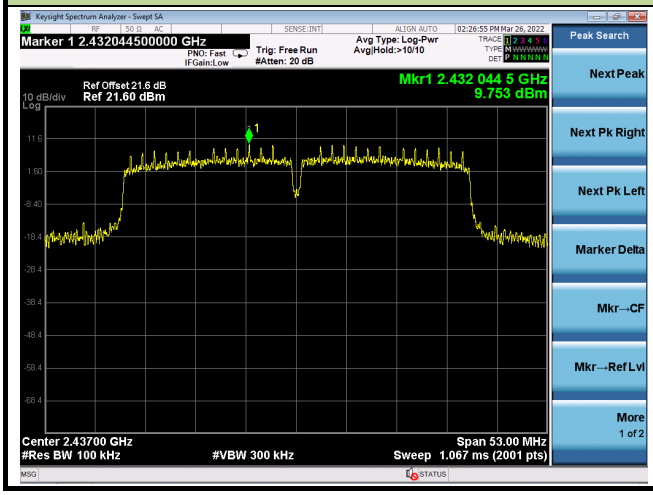


Spurious Emission

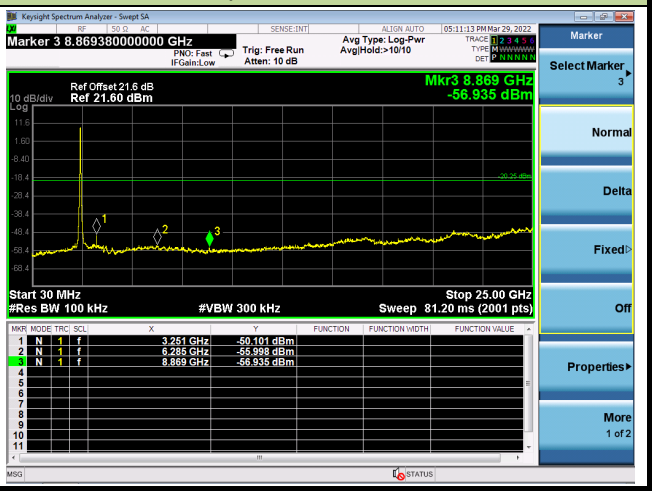


Channel 06 (2437MHz)

Reference Level

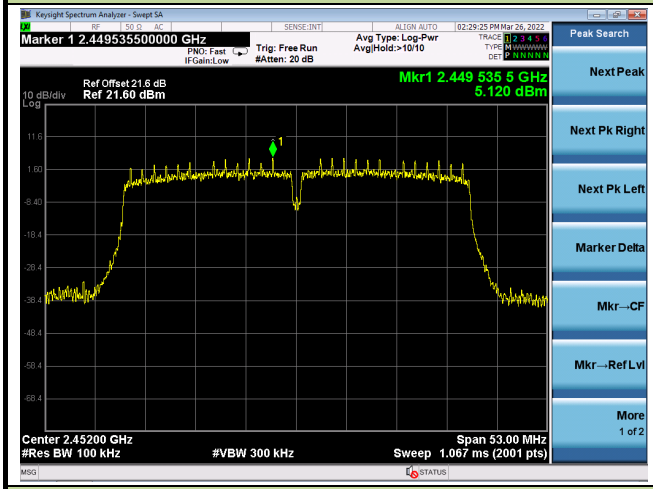


Spurious Emission



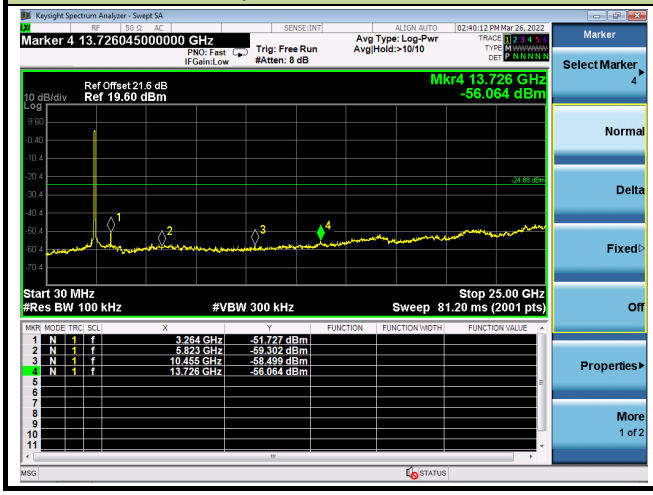
Channel 09 (2452MHz)

Reference Level



High Band Edge

Spurious Emission



A.6 Radiated Spurious Emission Test Result

Test Site	WZ-AC1	Test Engineer	Charles Zhang
Test Date	2022/03/27	Test Mode:	802.11b
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
01	4825.0	48.3	3.7	52.0	74.0	-22.0	Peak	Horizontal
	4825.0	46.2	3.7	49.9	54.0	-4.1	Average	Horizontal
	10996.0	37.8	13.6	51.4	74.0	-22.6	Peak	Horizontal
	12058.5	40.5	12.7	53.2	74.0	-20.8	Peak	Horizontal
	12058.5	34.2	12.7	46.9	54.0	-7.1	Average	Horizontal
	4825.0	50.1	3.7	53.8	74.0	-20.2	Peak	Vertical
	4825.0	49.6	3.7	53.3	54.0	-0.7	Average	Vertical
	11123.5	37.7	13.2	50.9	74.0	-23.1	Peak	Vertical
	12220.0	38.9	12.8	51.7	74.0	-22.3	Peak	Vertical
06	4876.0	49.4	3.9	53.3	74.0	-20.7	Peak	Horizontal
	4876.0	46.7	3.9	50.6	54.0	-3.4	Average	Horizontal
	10877.0	37.7	13.7	51.4	74.0	-22.6	Peak	Horizontal
	12186.0	39.4	13.0	52.4	74.0	-21.6	Peak	Horizontal
	12186.0	34.8	13.0	47.8	54.0	-6.2	Average	Horizontal
	4876.0	52.1	3.9	56.0	74.0	-18.0	Peak	Vertical
	4876.0	50.0	3.9	53.9	54.0	-0.1	Average	Vertical
	7536.5	39.1	8.7	47.8	74.0	-26.2	Peak	Vertical
	11072.5	38.2	13.5	51.7	74.0	-22.3	Peak	Vertical
11	4927.0	49.4	4.0	53.4	74.0	-20.6	Peak	Horizontal
	4927.0	45.2	4.0	49.2	54.0	-4.8	Average	Horizontal
	10800.5	37.2	13.7	50.9	74.0	-23.1	Peak	Horizontal
	12305.0	39.2	12.8	52.0	74.0	-22.0	Peak	Horizontal
	4026.0	40.2	1.5	41.7	74.0	-32.3	Peak	Vertical
	4927.0	50.0	4.0	54.0	74.0	-20.0	Peak	Vertical
	4927.0	49.1	4.0	53.1	54.0	-0.9	Average	Vertical
	11013.0	37.8	13.5	51.3	74.0	-22.7	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	WZ-AC1	Test Engineer	Charles Zhang
Test Date	2022/03/27	Test Mode	802.11g
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
01	4816.5	48.3	3.8	52.1	74.0	-21.9	Peak	Horizontal
	4816.5	37.5	3.8	41.3	54.0	-12.7	Average	Horizontal
	10817.5	38.3	13.8	52.1	74.0	-21.9	Peak	Horizontal
	12041.5	43.3	12.7	56.0	74.0	-18.0	Peak	Horizontal
	12041.5	32.8	12.7	45.5	54.0	-8.5	Average	Horizontal
	4825.0	49.3	3.7	53.0	74.0	-21.0	Peak	Vertical
	4825.0	40.4	3.7	44.1	54.0	-9.9	Average	Vertical
	11157.5	38.4	13.2	51.6	74.0	-22.4	Peak	Vertical
	12041.5	38.1	12.7	50.8	74.0	-23.2	Peak	Vertical
06	4876.0	51.5	3.9	55.4	74.0	-18.6	Peak	Horizontal
	4876.0	40.2	3.9	44.1	54.0	-9.9	Average	Horizontal
	7298.5	38.5	9.1	47.6	74.0	-26.4	Peak	Horizontal
	12169.0	44.9	12.8	57.7	74.0	-16.3	Peak	Horizontal
	12169.0	34.5	12.8	47.3	54.0	-6.7	Average	Horizontal
	4876.0	53.2	3.9	57.1	74.0	-16.9	Peak	Vertical
	4876.0	43.6	3.9	47.5	54.0	-6.5	Average	Vertical
	10885.5	38.0	13.7	51.7	74.0	-22.3	Peak	Vertical
	12364.5	39.5	12.6	52.1	74.0	-21.9	Peak	Vertical
11	4927.0	47.2	4.0	51.2	74.0	-22.8	Peak	Horizontal
	4927.0	35.9	4.0	39.9	54.0	-14.1	Average	Horizontal
	8352.5	36.3	9.4	45.7	74.0	-28.3	Peak	Horizontal
	12500.5	39.1	12.7	51.8	74.0	-22.2	Peak	Horizontal
	4927.0	48.2	4.0	52.2	74.0	-21.8	Peak	Vertical
	10690.0	38.1	13.6	51.7	74.0	-22.3	Peak	Vertical
	12500.5	39.6	12.7	52.3	74.0	-21.7	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	WZ-AC1	Test Engineer	Charles Zhang
Test Date	2022/03/27	Test Mode	802.11n-HT20
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
01	4825.0	52.4	3.7	56.1	74.0	-17.9	Peak	Horizontal
	4825.0	40.8	3.7	44.5	54.0	-9.5	Average	Horizontal
	8199.5	38.6	9.5	48.1	74.0	-25.9	Peak	Horizontal
	12050.7	46.4	12.7	59.1	74.0	-14.9	Peak	Horizontal
	12050.7	35.1	12.7	47.8	54.0	-6.2	Average	Horizontal
	4825.0	54.0	3.7	57.7	74.0	-16.3	Peak	Vertical
	4825.0	43.2	3.7	46.9	54.0	-7.1	Average	Vertical
	8429.0	38.2	9.7	47.9	74.0	-26.1	Peak	Vertical
	10877.0	37.2	13.7	50.9	74.0	-23.1	Peak	Vertical
06	4876.0	52.7	3.9	56.6	74.0	-17.4	Peak	Horizontal
	4876.0	40.2	3.9	44.1	54.0	-9.9	Average	Horizontal
	10775.0	37.4	13.7	51.1	74.0	-22.9	Peak	Horizontal
	12177.0	47.3	12.8	60.1	74.0	-13.9	Peak	Horizontal
	12177.0	35.3	12.8	48.1	54.0	-5.9	Average	Horizontal
	4876.0	54.1	3.9	58.0	74.0	-16.0	Peak	Vertical
	4876.0	43.6	3.9	47.5	54.0	-6.5	Average	Vertical
	8369.5	37.8	9.6	47.4	74.0	-26.6	Peak	Vertical
	11489.0	37.6	13.3	50.9	74.0	-23.1	Peak	Vertical
11	4927.0	47.5	4.0	51.5	74.0	-22.5	Peak	Horizontal
	4927.0	35.9	4.0	39.9	54.0	-14.1	Average	Horizontal
	11038.5	37.4	13.6	51.0	74.0	-23.0	Peak	Horizontal
	12313.5	39.9	12.7	52.6	74.0	-21.4	Peak	Horizontal
	4927.0	50.0	4.0	54.0	74.0	-20.0	Peak	Vertical
	4927.0	38.2	4.0	42.2	54.0	-11.8	Average	Vertical
	10698.5	37.3	13.6	50.9	74.0	-23.1	Peak	Vertical
	12152.0	38.3	12.7	51.0	74.0	-23.0	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	WZ-AC1	Test Engineer	Charles Zhang
Test Date	2022/03/27	Test Mode:	802.11n-HT40
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

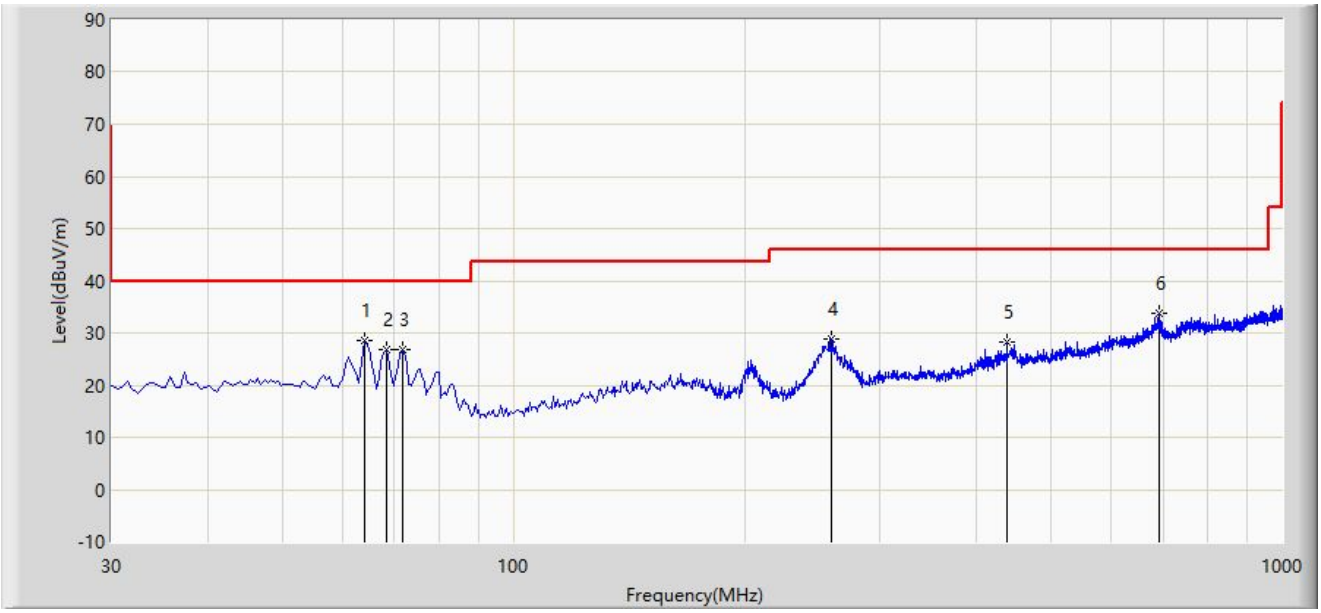
Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
03	4842.0	46.1	3.7	49.8	74.0	-24.2	Peak	Horizontal
	10970.5	37.7	13.6	51.3	74.0	-22.7	Peak	Horizontal
	12101.0	40.7	12.8	53.5	74.0	-20.5	Peak	Horizontal
	12101.0	28.1	12.8	40.9	54.0	-13.1	Average	Horizontal
	4850.0	48.8	3.8	52.6	74.0	-21.4	Peak	Vertical
	4850.0	38.7	3.8	42.5	54.0	-11.5	Average	Vertical
	7332.5	38.0	8.9	46.9	74.0	-27.1	Peak	Vertical
	10877.0	37.5	13.7	51.2	74.0	-22.8	Peak	Vertical
06	4876.0	50.6	3.9	54.5	74.0	-19.5	Peak	Horizontal
	4876.0	38.6	3.9	42.5	54.0	-11.5	Average	Horizontal
	7332.5	38.5	8.9	47.4	74.0	-26.6	Peak	Horizontal
	12160.0	43.1	12.7	55.8	74.0	-18.2	Peak	Horizontal
	12160.0	32.8	12.7	45.5	54.0	-8.5	Average	Horizontal
	4876.0	51.4	3.9	55.3	74.0	-18.7	Peak	Vertical
	4876.0	41.4	3.9	45.3	54.0	-8.7	Average	Vertical
	10902.5	38.0	13.6	51.6	74.0	-22.4	Peak	Vertical
	12143.5	38.0	12.8	50.8	74.0	-23.2	Peak	Vertical
09	4910.0	43.0	4.1	47.1	74.0	-26.9	Peak	Horizontal
	7332.5	38.5	8.9	47.4	74.0	-26.6	Peak	Horizontal
	10630.5	38.3	13.6	51.9	74.0	-22.1	Peak	Horizontal
	4910.0	45.2	4.1	49.3	74.0	-24.7	Peak	Vertical
	7307.0	38.3	9.0	47.3	74.0	-26.7	Peak	Vertical
	11055.5	38.1	13.6	51.7	74.0	-22.3	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Radiated Emission for below 1GHz:

Site: WZ-AC1	Time: 2022/03/31 - 23:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Charles Zhang
Probe: WZ-AC1_VULB 9168 _30-1000MHz	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2437MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		*	63.950	28.476	11.374	-11.524	40.000	17.102	PK
2			68.315	26.753	10.501	-13.247	40.000	16.252	PK
3			71.710	26.827	11.277	-13.173	40.000	15.550	PK
4			259.405	28.773	12.175	-17.227	46.000	16.598	PK
5			438.370	28.152	6.144	-17.848	46.000	22.008	PK
6			693.480	33.699	6.872	-12.301	46.000	26.827	PK

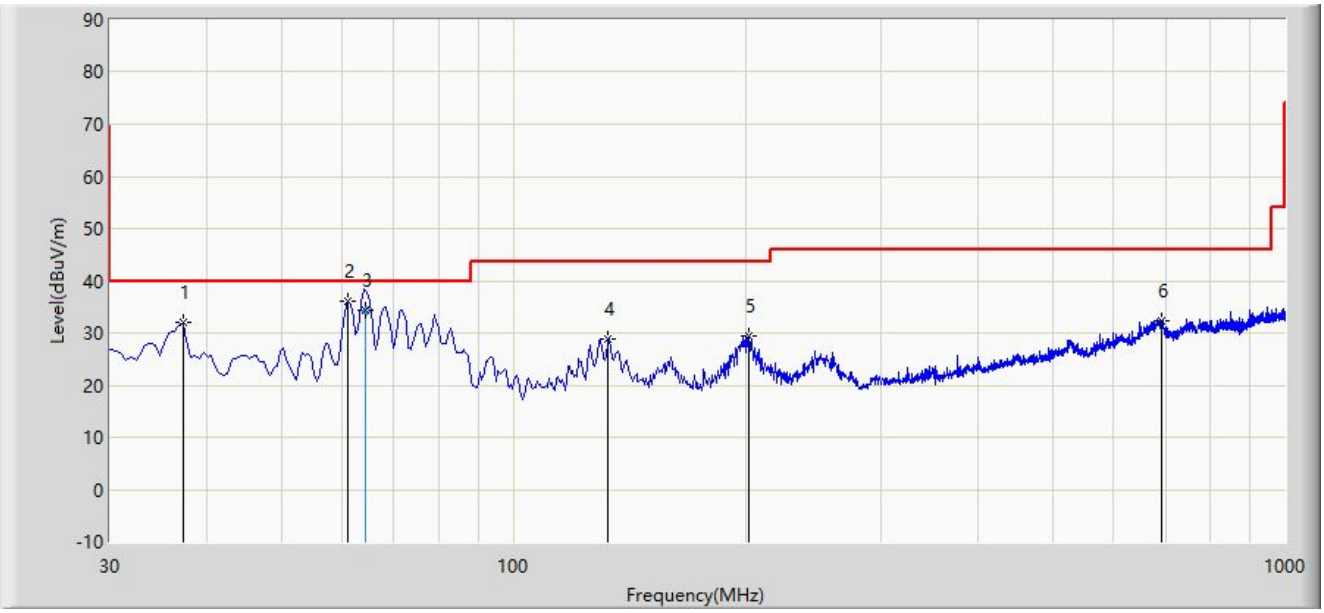
Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 2: QP measurement was not performed when peak measure level was lower than the QP limit.

Note 3: The amplitude of radiated emissions (frequency range from 9kHz ~ 30MHz, 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site: WZ-AC1	Time: 2022/03/31 - 23:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Charles Zhang
Probe: WZ-AC1_VULB 9168 _30-1000MHz	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2437MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1			37.275	32.034	14.683	-7.966	40.000	17.351	PK
2		*	61.040	35.949	18.385	-4.051	40.000	17.564	PK
3			64.330	34.412	17.380	-5.588	40.000	17.032	QP
4			132.820	28.791	12.138	-14.709	43.500	16.653	PK
5			202.175	29.334	15.042	-14.166	43.500	14.292	PK
6			692.995	32.403	5.588	-13.597	46.000	26.815	PK

Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

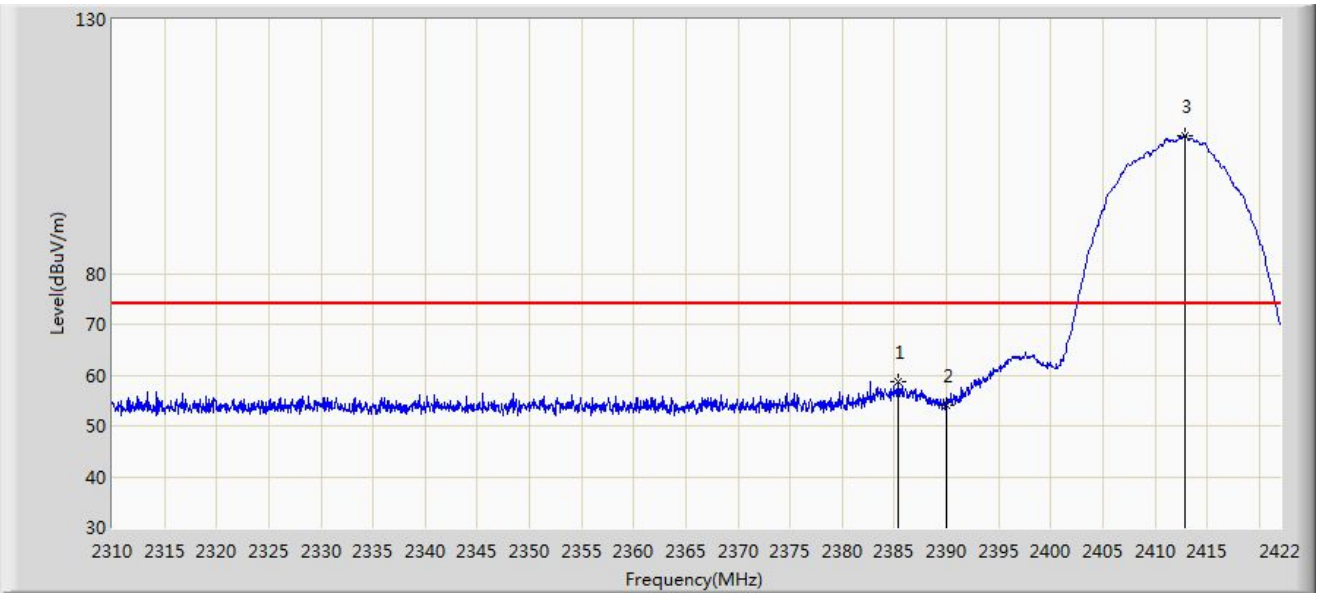
Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 2: QP measurement was not performed when peak measure level was lower than the QP limit.

Note 3: The amplitude of radiated emissions (frequency range from 9kHz ~ 30MHz, 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

A.7 Radiated Restricted Band Edge Test Result

Site: WZ-AC1	Time: 2021/12/14 - 17:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Kin Xia
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Wireless Access Point	Power: 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1			2385.320	58.588	27.777	-15.412	74.000	30.811	PK
2			2390.000	54.121	23.305	-19.879	74.000	30.816	PK
3		*	2412.816	107.189	76.354	N/A	N/A	30.835	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)