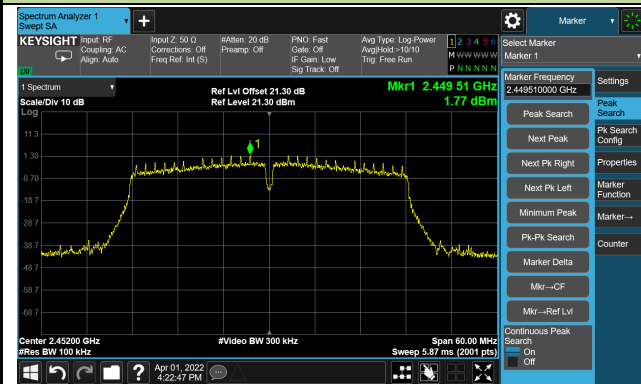


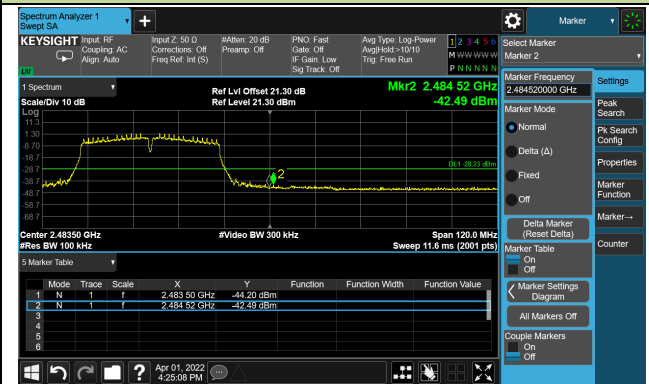
802.11n-HT40 Out-of-Band Emissions –Ant 0

Channel 09 (2452MHz)

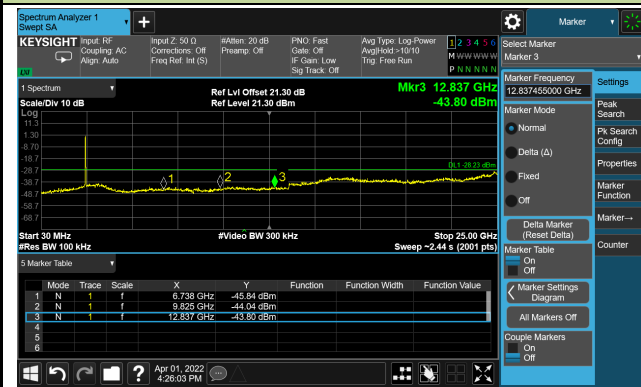
100kHz PSD Reference Level



High Band Edge



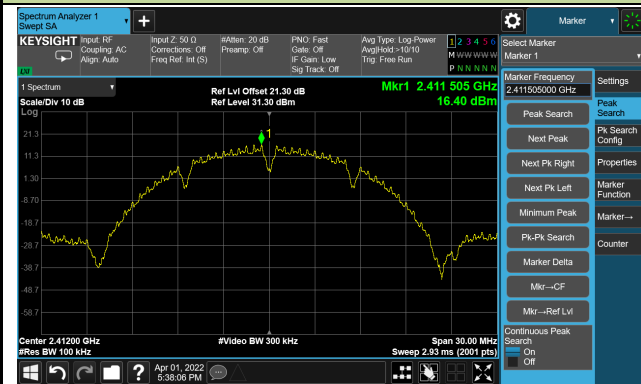
Spurious Emission



802.11b Out-of-Band Emissions –Ant 1

Channel 01 (2412MHz)

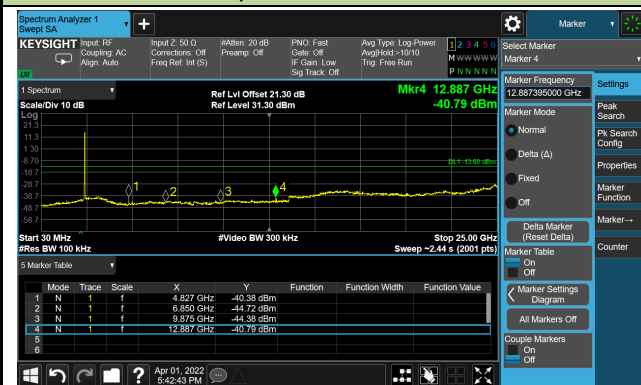
100kHz PSD Reference Level



Low Band Edge



Spurious Emission

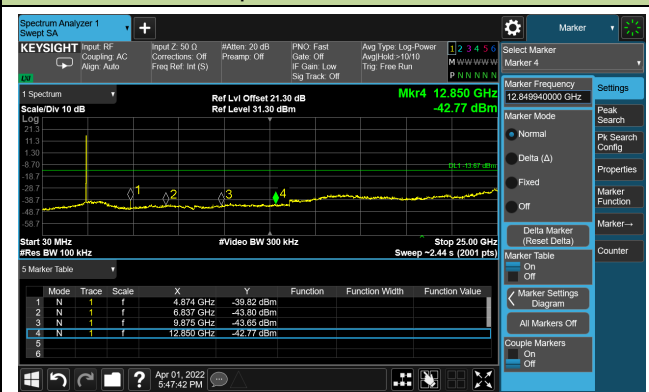


Channel 06 (2437MHz)

100kHz PSD Reference Level



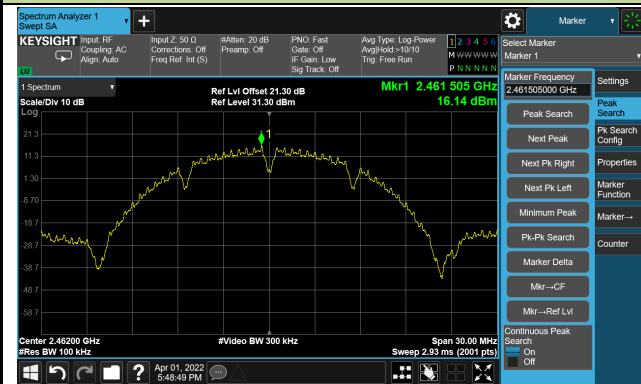
Spurious Emission



802.11b Out-of-Band Emissions –Ant 1

Channel 11 (2462MHz)

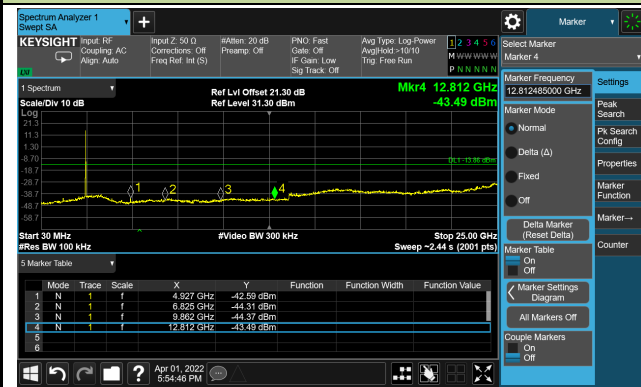
100kHz PSD Reference Level



High Band Edge



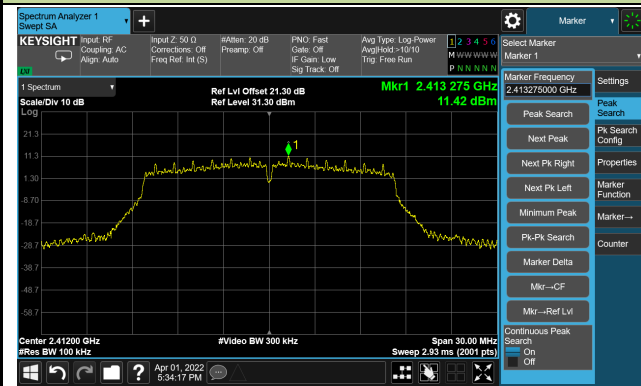
Spurious Emission



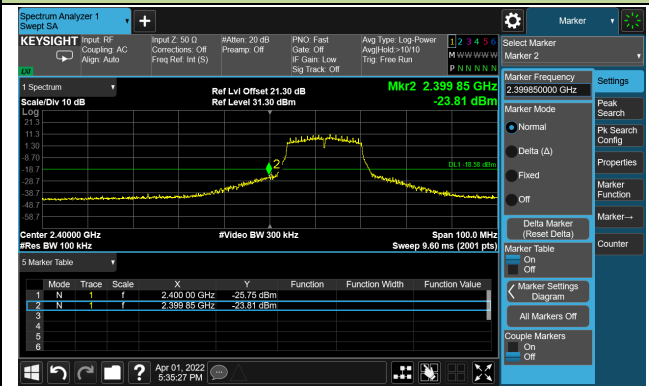
802.11g Out-of-Band Emissions –Ant 1

Channel 01 (2412MHz)

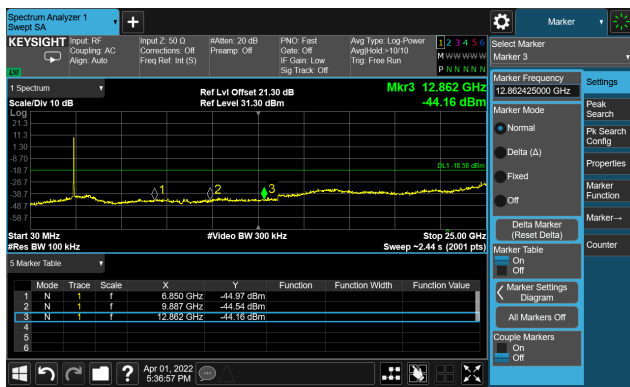
100kHz PSD Reference Level



Low Band Edge

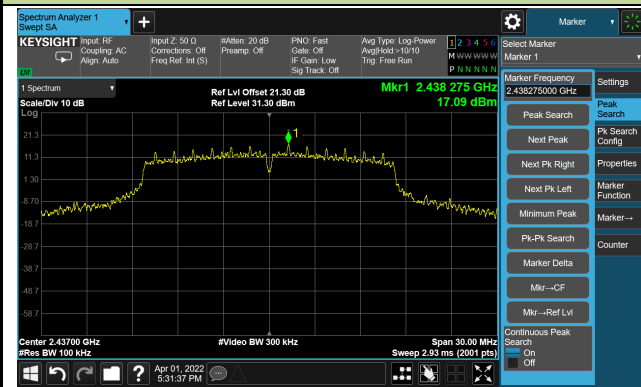


Spurious Emission



Channel 06 (2437MHz)

100kHz PSD Reference Level

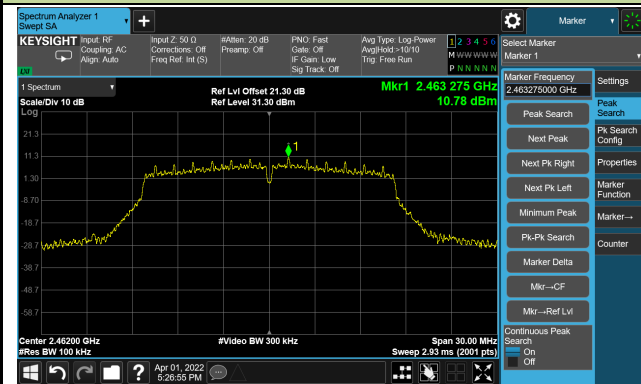


Spurious Emission

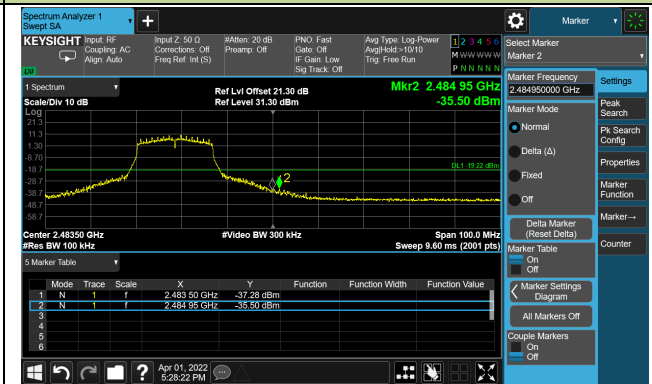


802.11g Out-of-Band Emissions –Ant 1
Channel 11 (2462MHz)

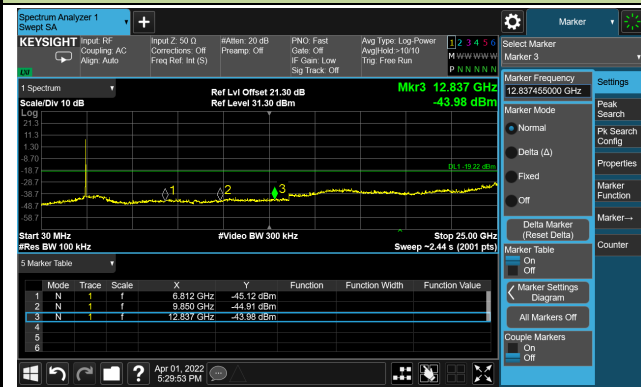
100kHz PSD Reference Level



High Band Edge



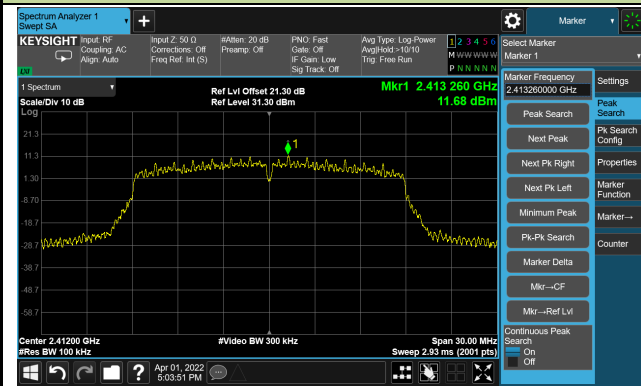
Spurious Emission



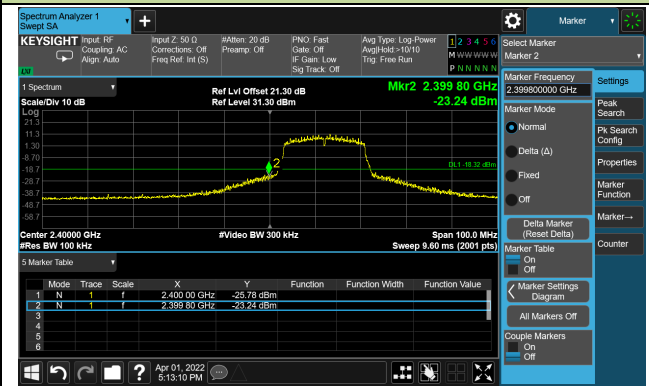
802.11n-HT20 Out-of-Band Emissions –Ant 1

Channel 01 (2412MHz)

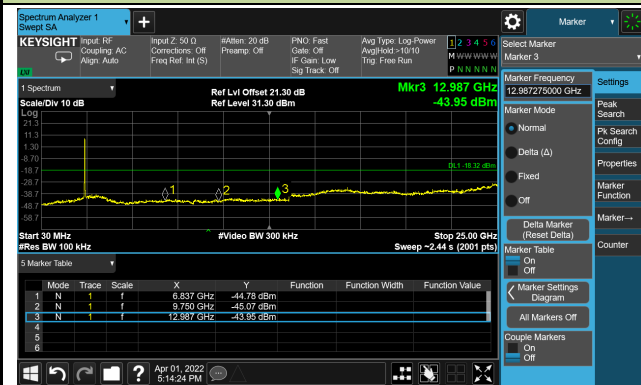
100kHz PSD Reference Level



Low Band Edge



Spurious Emission



Channel 06 (2437MHz)

100kHz PSD Reference Level

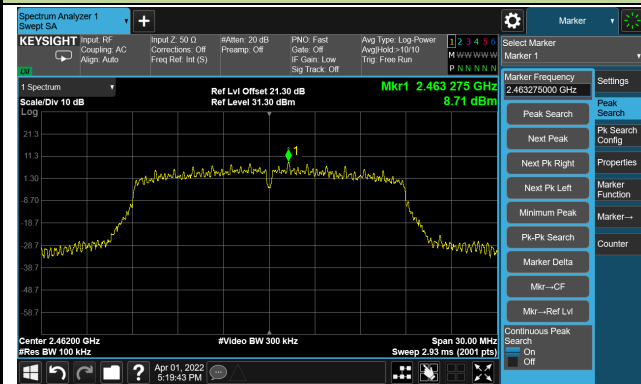


Spurious Emission



802.11n-HT20 Out-of-Band Emissions –Ant 1
Channel 11 (2462MHz)

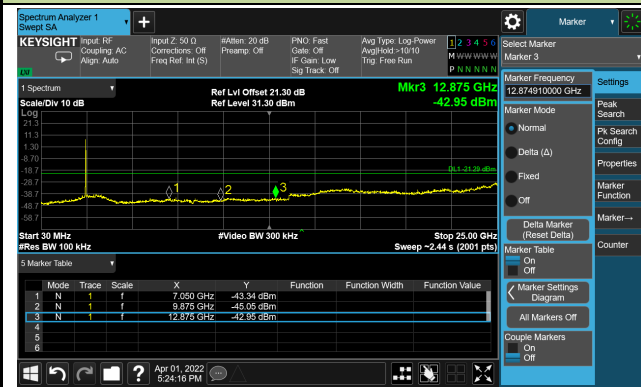
100kHz PSD Reference Level



High Band Edge



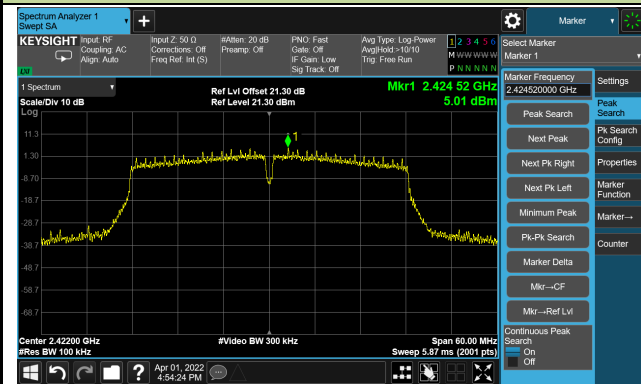
Spurious Emission



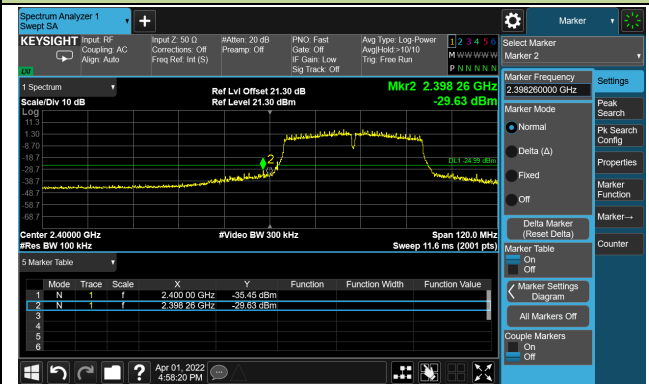
802.11n-HT40 Out-of-Band Emissions –Ant 1

Channel 03 (2422MHz)

100kHz PSD Reference Level



Low Band Edge



Spurious Emission



Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission



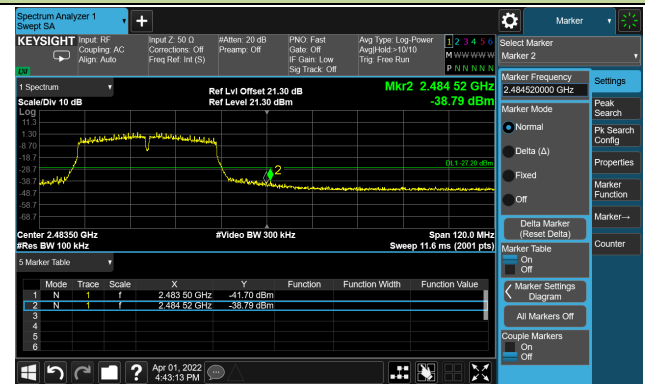
802.11n-HT40 Out-of-Band Emissions –Ant 1

Channel 09 (2452MHz)

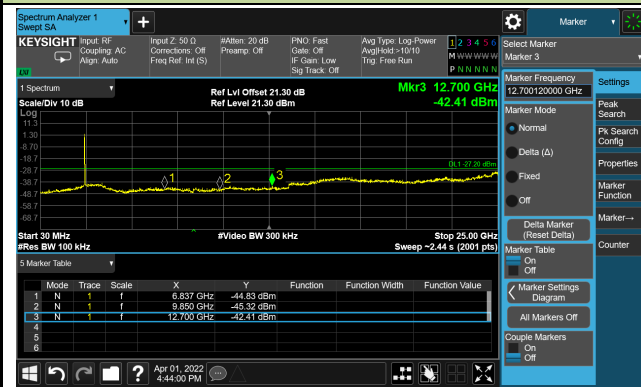
100kHz PSD Reference Level



High Band Edge



Spurious Emission



A.6 Radiated Spurious Emission Test Result

Test Site	SIP-AC2	Test Engineer	Allen Zou
Test Date	2021/12/15	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	56.1	-5.9	50.2	74.0	-23.8	Peak	Horizontal
	11642.0	40.8	7.8	48.6	74.0	-25.4	Peak	Horizontal
	15543.5	36.7	10.9	47.6	74.0	-26.4	Peak	Horizontal
	4825.0	58.3	-5.9	52.4	74.0	-21.6	Peak	Vertical
	4825.0	57.4	-5.9	51.5	54.0	-2.5	Average	Vertical
	11574.0	39.9	8.7	48.6	74.0	-25.4	Peak	Vertical
	15713.5	37.0	9.7	46.7	74.0	-27.3	Peak	Vertical
06	4876.0	58.5	-5.6	52.9	74.0	-21.1	Peak	Horizontal
	4876.0	56.7	-5.6	51.1	54.0	-2.9	Average	Horizontal
	7307.0	45.3	1.5	46.8	74.0	-27.2	Peak	Horizontal
	10860.0	41.8	7.6	49.4	74.0	-24.6	Peak	Horizontal
	4876.0	60.2	-5.6	54.6	74.0	-19.4	Peak	Vertical
	4876.0	59.1	-5.6	53.5	54.0	-0.5	Average	Vertical
	7315.5	48.6	1.7	50.3	74.0	-23.7	Peak	Vertical
	11565.5	40.6	8.5	49.1	74.0	-24.9	Peak	Vertical
11	4927.0	54.4	-5.5	48.9	74.0	-25.1	Peak	Horizontal
	7383.5	43.7	1.9	45.6	74.0	-28.4	Peak	Horizontal
	11565.5	39.6	8.5	48.1	74.0	-25.9	Peak	Horizontal
	4927.0	57.0	-5.5	51.5	74.0	-22.5	Peak	Vertical
	4927.0	56.1	-5.5	50.6	54.0	-3.4	Average	Vertical
	7383.5	46.8	1.9	48.7	74.0	-25.3	Peak	Vertical
	11514.5	40.3	8.7	49.0	74.0	-25.0	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	SIP-AC2	Test Engineer	Allen Zou
Test Date	2021/12/15	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	4825.0	48.8	-5.9	42.9	74.0	-31.1	Peak	Horizontal
	7375.0	42.2	1.8	44.0	74.0	-30.0	Peak	Horizontal
	11047.0	40.8	7.9	48.7	74.0	-25.3	Peak	Horizontal
	4825.0	50.8	-5.9	44.9	74.0	-29.1	Peak	Vertical
	8148.5	42.0	3.2	45.2	74.0	-28.8	Peak	Vertical
	11582.5	39.4	8.5	47.9	74.0	-26.1	Peak	Vertical
06	4876.0	56.3	-5.6	50.7	74.0	-23.3	Peak	Horizontal
	7307.0	49.8	1.5	51.3	74.0	-22.7	Peak	Horizontal
	7307.0	41.1	1.5	42.6	54.0	-11.4	Average	Horizontal
	11633.5	40.3	8.0	48.3	74.0	-25.7	Peak	Horizontal
	4867.5	58.2	-5.5	52.7	74.0	-21.3	Peak	Vertical
	4867.5	49.6	-5.5	44.1	54.0	-9.9	Average	Vertical
	7315.5	51.9	1.7	53.6	74.0	-20.4	Peak	Vertical
	7315.5	41.6	1.7	43.3	54.0	-10.7	Average	Vertical
11064.0	41.2	7.7	48.9	74.0	-25.1	Peak	Vertical	
11	4927.0	49.2	-5.5	43.7	74.0	-30.3	Peak	Horizontal
	7417.5	42.2	2.2	44.4	74.0	-29.6	Peak	Horizontal
	11574.0	39.9	8.7	48.6	74.0	-25.4	Peak	Horizontal
	4918.5	50.8	-5.5	45.3	74.0	-28.7	Peak	Vertical
	7400.5	43.4	2.1	45.5	74.0	-28.5	Peak	Vertical
	11574.0	40.7	8.7	49.4	74.0	-24.6	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	SIP-AC2	Test Engineer	Allen Zou
Test Date	2021/12/15	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	4816.5	47.2	-5.7	41.5	74.0	-32.5	Peak	Horizontal
	7332.5	43.0	1.7	44.7	74.0	-29.3	Peak	Horizontal
	11021.5	41.1	7.5	48.6	74.0	-25.4	Peak	Horizontal
	4816.5	52.1	-5.7	46.4	74.0	-27.6	Peak	Vertical
	8148.5	41.7	3.2	44.9	74.0	-29.1	Peak	Vertical
	11149.0	41.3	7.5	48.8	74.0	-25.2	Peak	Vertical
06	4876.0	54.8	-5.6	49.2	74.0	-24.8	Peak	Horizontal
	7307.0	47.2	1.5	48.7	74.0	-25.3	Peak	Horizontal
	11497.5	39.6	8.8	48.4	74.0	-25.6	Peak	Horizontal
	4867.5	58.5	-5.5	53.0	74.0	-21.0	Peak	Vertical
	4867.5	48.8	-5.5	43.3	54.0	-10.7	Average	Vertical
	7315.5	52.3	1.7	54.0	74.0	-20.0	Peak	Vertical
	7315.5	42.5	1.7	44.2	54.0	-9.8	Average	Vertical
11523.0	40.2	8.6	48.8	74.0	-25.2	Peak	Vertical	
11	4927.0	46.4	-5.5	40.9	74.0	-33.1	Peak	Horizontal
	7460.0	42.5	2.5	45.0	74.0	-29.0	Peak	Horizontal
	11531.5	40.4	8.4	48.8	74.0	-25.2	Peak	Horizontal
	4927.0	47.8	-5.5	42.3	74.0	-31.7	Peak	Vertical
	7392.0	43.0	2.1	45.1	74.0	-28.9	Peak	Vertical
	11506.0	39.5	8.9	48.4	74.0	-25.6	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	SIP-AC2	Test Engineer	Allen Zou
Test Date	2021/12/15	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.		

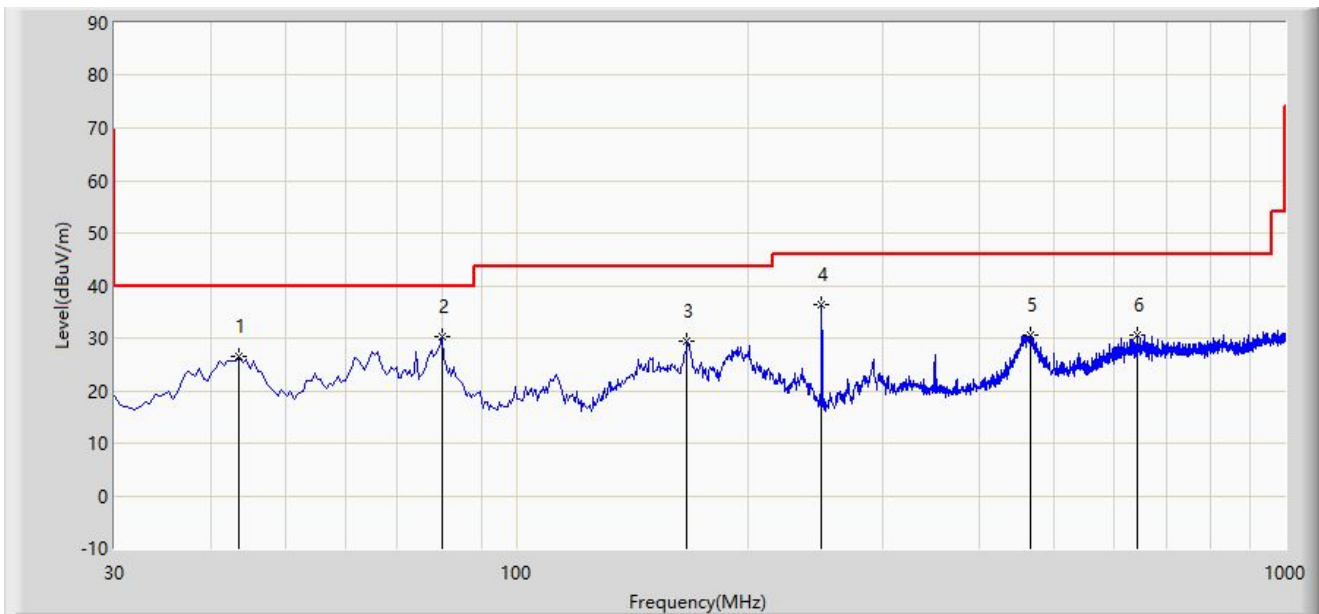
Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
03	4017.5	45.4	-7.5	37.9	74.0	-36.1	Peak	Horizontal
	7528.0	42.6	1.6	44.2	74.0	-29.8	Peak	Horizontal
	11429.5	40.6	8.4	49.0	74.0	-25.0	Peak	Horizontal
	4978.0	46.3	-5.1	41.2	74.0	-32.8	Peak	Vertical
	8276.0	43.0	2.6	45.6	74.0	-28.4	Peak	Vertical
	11438.0	40.6	8.3	48.9	74.0	-25.1	Peak	Vertical
06	4876.0	52.6	-5.6	47.0	74.0	-27.0	Peak	Horizontal
	7307.0	46.1	1.5	47.6	74.0	-26.4	Peak	Horizontal
	11489.0	40.2	8.7	48.9	74.0	-25.1	Peak	Horizontal
	4876.0	56.0	-5.6	50.4	74.0	-23.6	Peak	Vertical
	7324.0	48.6	1.8	50.4	74.0	-23.6	Peak	Vertical
	11582.5	40.1	8.5	48.6	74.0	-25.4	Peak	Vertical
09	4323.5	46.0	-7.7	38.3	74.0	-35.7	Peak	Horizontal
	7468.5	42.7	2.4	45.1	74.0	-28.9	Peak	Horizontal
	11463.5	40.9	8.5	49.4	74.0	-24.6	Peak	Horizontal
	4995.0	46.4	-5.2	41.2	74.0	-32.8	Peak	Vertical
	7460.0	43.0	2.5	45.5	74.0	-28.5	Peak	Vertical
	12101.0	40.8	8.4	49.2	74.0	-24.8	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)

Worst Radiated Spurious Emission for below 1GHz:

Site: SIP-AC1	Time: 2021/12/21 - 00:04
Limit: FCC_Part15.209_RSE(3m)	Engineer: Allen Zou
Probe: SIP-AC1_VULB 9168 _30-1000MHz	Polarity: Horizontal
EUT: Dual Band WiFi Mesh	Power: AC 120V/60Hz
Note: Transmit at 2412MHz by 802.11b	



No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Margin (dB)	Limit (dB μ V/m)	Factor (dB/m)	Type
1			43.580	26.626	9.008	-13.374	40.000	17.618	PK
2		*	79.955	30.359	16.881	-9.641	40.000	13.478	PK
3			166.770	29.359	11.926	-14.141	43.500	17.433	PK
4			249.705	36.333	19.906	-9.667	46.000	16.428	PK
5			466.985	30.703	8.359	-15.297	46.000	22.344	PK
6			643.525	30.567	4.940	-15.433	46.000	25.627	PK

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

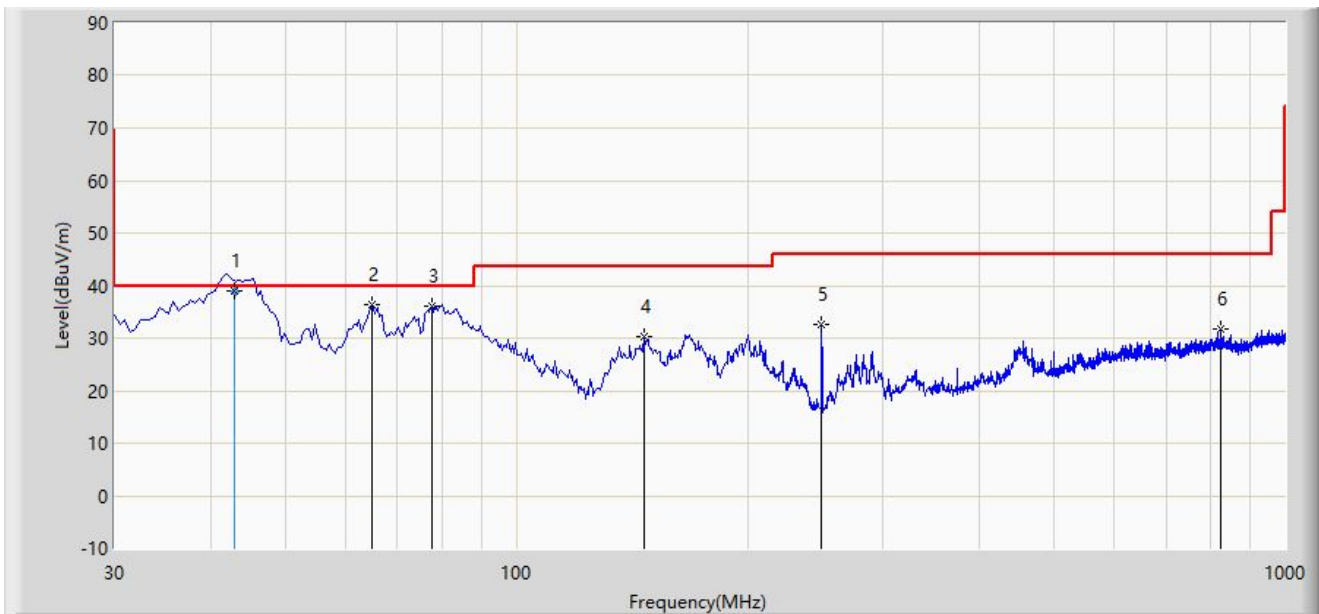
Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

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 to 30MHz and 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: SIP-AC1	Time: 2021/12/21 - 00:05
Limit: FCC_Part15.209_RSE(3m)	Engineer: Allen Zou
Probe: SIP-AC1_VULB 9168 _30-1000MHz	Polarity: Vertical
EUT: Dual Band WiFi Mesh	Power: AC 120V/60Hz
Note: Transmit at 2412MHz by 802.11b	



No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Margin (dB)	Limit (dB μ V/m)	Factor (dB/m)	Type
1		*	42.890	38.907	21.300	-1.093	40.000	17.607	QP
2			64.920	36.395	19.637	-3.605	40.000	16.758	PK
3			77.530	36.188	22.113	-3.812	40.000	14.075	PK
4			146.400	30.187	12.134	-13.313	43.500	18.053	PK
5			249.705	32.618	16.191	-13.382	46.000	16.428	PK
6			823.460	31.656	2.763	-14.344	46.000	28.893	PK

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

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

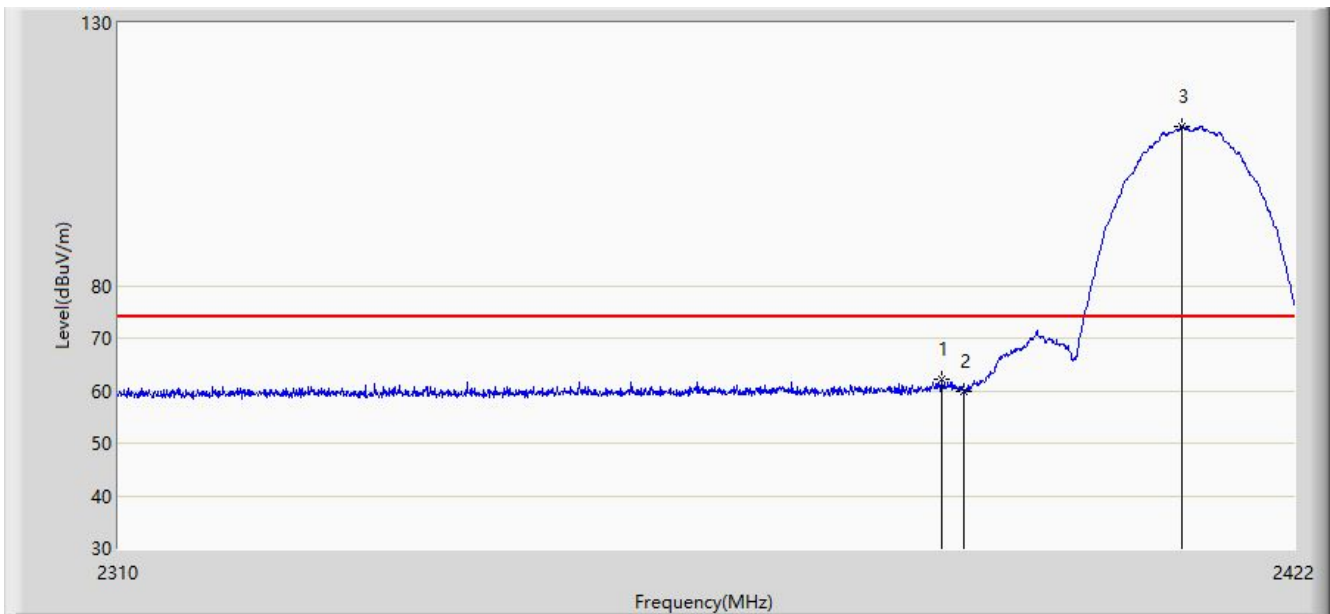
Note 2: QP measurement was not performed when peak measure level was lower than the QP limit.

Note 3: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 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: SIP-AC2	Time: 2021/12/15 - 19:40
Limit: FCC_Part15_Band Edge(3m)	Engineer: Allen Zou
Probe: SIP-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Dual Band WiFi Mesh	Power: AC 120V/60Hz
Note: Transmit at 2412MHz by 802.11b	



No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Margin (dB)	Limit (dB μ V/m)	Factor (dB/m)	Type
1			2387.896	62.288	29.870	-11.712	74.000	32.418	PK
2			2390.000	59.931	27.527	-14.069	74.000	32.404	PK
3		*	2411.080	110.312	77.960	N/A	N/A	32.352	PK

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

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