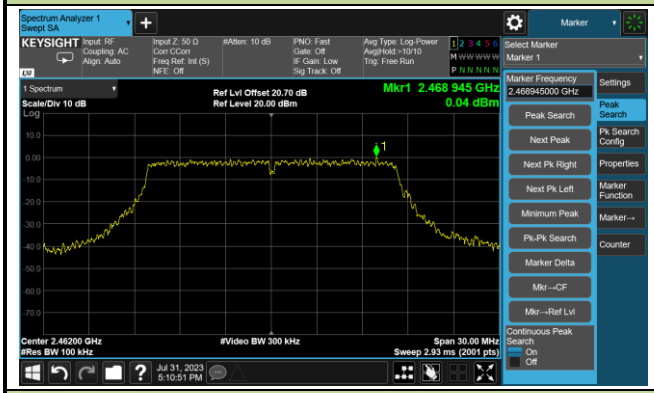
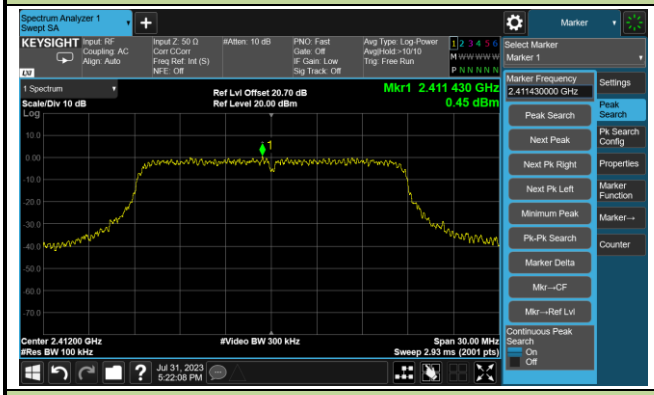
802.11g Out-of-Band Emissions	
Channel 11 (2462MHz)	
100kHz PSD Reference Level	High Band Edge
	
Spurious Emission	

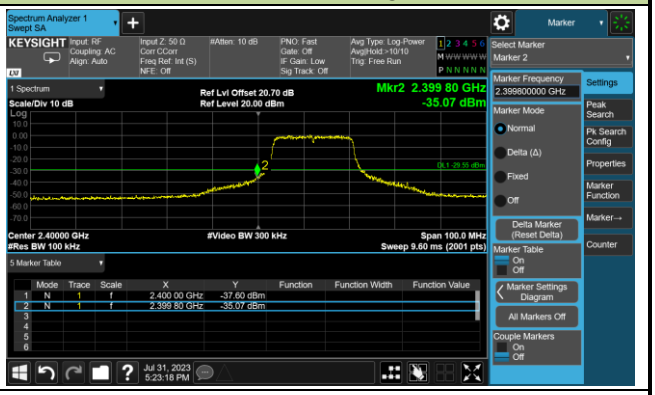
802.11n-HT20 Out-of-Band Emissions

Channel 01 (2412MHz)

100kHz PSD Reference Level



Low Band Edge

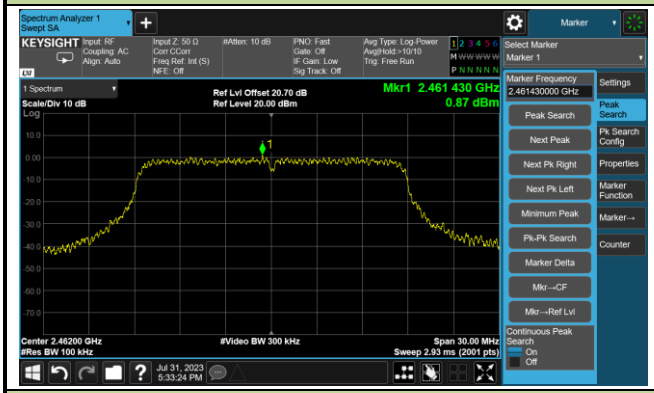


Spurious Emission

Channel 06 (2437MHz)

100kHz PSD Reference Level

Spurious Emission

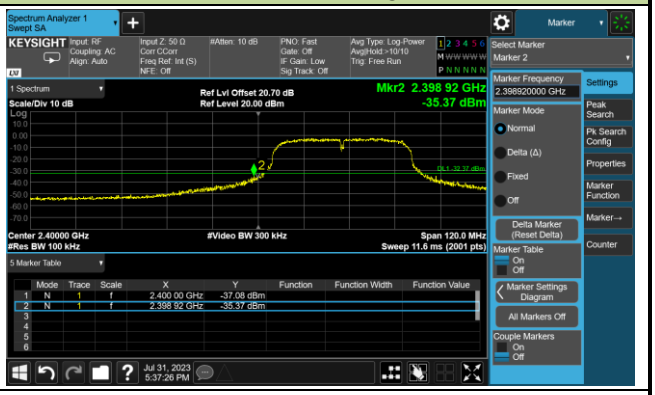
802.11n-HT20 Out-of-Band Emissions	
Channel 11 (2462MHz)	
100kHz PSD Reference Level	High Band Edge
	
Spurious Emission	

802.11n-HT40 Out-of-Band Emissions

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	
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	Arvin Ding
Test Date	2023-07-30	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	4017.5	48.2	-8.1	40.1	74.0	-33.9	Peak	Horizontal
	4825.0	60.7	-6.3	54.4	74.0	-19.6	Peak	Horizontal
	4825.0	57.2	-6.3	50.9	54.0	-3.1	Average	Horizontal
	10945.0	40.5	7.4	47.9	74.0	-26.1	Peak	Horizontal
	4017.5	50.9	-8.1	42.8	74.0	-31.2	Peak	Vertical
	4825.0	61.4	-6.3	55.1	74.0	-18.9	Peak	Vertical
	4825.0	58.4	-6.3	52.1	54.0	-1.9	Average	Vertical
	10868.5	40.8	7.5	48.3	74.0	-25.7	Peak	Vertical
06	4876.0	59.9	-6.1	53.8	74.0	-20.2	Peak	Horizontal
	4876.0	56.2	-6.1	50.1	54.0	-3.9	Average	Horizontal
	7315.5	59.4	1.5	60.9	74.0	-13.1	Peak	Horizontal
	7315.5	52.4	1.5	53.9	54.0	-0.1	Average	Horizontal
	10928.0	40.7	7.4	48.1	74.0	-25.9	Peak	Horizontal
	4876.0	59.4	-6.1	53.3	74.0	-20.7	Peak	Vertical
	4876.0	53.3	-6.1	47.2	54.0	-6.8	Average	Vertical
	7315.5	56.4	1.5	57.9	74.0	-16.1	Peak	Vertical
	7315.5	49.8	1.5	51.3	54.0	-2.7	Average	Vertical
	10775.0	41.9	7.0	48.9	74.0	-25.1	Peak	Vertical
11	4927.0	59.4	-6.0	53.4	74.0	-20.6	Peak	Horizontal
	4927.0	54.3	-6.0	48.3	54.0	-5.7	Average	Horizontal
	7383.5	58.6	1.8	60.4	74.0	-13.6	Peak	Horizontal
	7383.5	51.9	1.8	53.7	54.0	-0.3	Average	Horizontal
	10885.5	41.0	7.5	48.5	74.0	-25.5	Peak	Horizontal
	4927.0	59.2	-6.0	53.2	74.0	-20.8	Peak	Vertical
	4927.0	54.5	-6.0	48.5	54.0	-5.5	Average	Vertical
	7383.5	56.5	1.8	58.3	74.0	-15.7	Peak	Vertical
	7383.5	49.3	1.8	51.1	54.0	-2.9	Average	Vertical
	11489.0	40.4	8.0	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	Arvin Ding
Test Date	2023-07-30	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	4833.5	54.4	-6.1	48.3	74.0	-25.7	Peak	Horizontal
	8123.0	42.3	3.4	45.7	74.0	-28.3	Peak	Horizontal
	10783.5	41.5	7.1	48.6	74.0	-25.4	Peak	Horizontal
	4009.0	49.1	-8.1	41.0	74.0	-33.0	Peak	Vertical
	4816.5	57.5	-6.3	51.2	74.0	-22.8	Peak	Vertical
	4816.5	47.3	-6.3	41.0	54.0	-13.0	Average	Vertical
	10877.0	40.4	7.5	47.9	74.0	-26.1	Peak	Vertical
06	4876.0	57.5	-6.1	51.4	74.0	-22.6	Peak	Horizontal
	4876.0	50.9	-6.1	44.8	54.0	-9.2	Average	Horizontal
	7315.5	59.3	1.5	60.8	74.0	-13.2	Peak	Horizontal
	7315.5	51.8	1.5	53.3	54.0	-0.7	Average	Horizontal
	11081.0	41.5	7.4	48.9	74.0	-25.1	Peak	Horizontal
	4876.0	57.2	-6.1	51.1	74.0	-22.9	Peak	Vertical
	4876.0	49.9	-6.1	43.8	54.0	-10.2	Average	Vertical
	7315.5	56.8	1.5	58.3	74.0	-15.7	Peak	Vertical
	7315.5	50.3	1.5	51.8	54.0	-2.2	Average	Vertical
	10894.0	40.5	7.6	48.1	74.0	-25.9	Peak	Vertical
11	4927.0	58.7	-6.0	52.7	74.0	-21.3	Peak	Horizontal
	4927.0	49.7	-6.0	43.7	54.0	-10.3	Average	Horizontal
	7383.5	60.7	1.8	62.5	74.0	-11.5	Peak	Horizontal
	7383.5	51.4	1.8	53.2	54.0	-0.8	Average	Horizontal
	11608.0	39.7	8.1	47.8	74.0	-26.2	Peak	Horizontal
	4918.5	59.5	-6.0	53.5	74.0	-20.5	Peak	Vertical
	4918.5	49.9	-6.0	43.9	54.0	-10.1	Average	Vertical
	7392.0	59.5	1.9	61.4	74.0	-12.6	Peak	Vertical
	7392.0	49.9	1.9	51.8	54.0	-2.2	Average	Vertical
	11684.5	40.8	7.4	48.2	74.0	-25.8	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)

Test Site	SIP-AC2	Test Engineer	Arvin Ding
Test Date	2023-07-30	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	58.5	-6.3	52.2	74.0	-21.8	Peak	Horizontal
	4825.0	49.3	-6.3	43.0	54.0	-11.0	Average	Horizontal
	8148.5	41.5	3.1	44.6	74.0	-29.4	Peak	Horizontal
	10919.5	40.5	7.5	48.0	74.0	-26.0	Peak	Horizontal
	4017.5	51.2	-8.1	43.1	74.0	-30.9	Peak	Vertical
	4825.0	60.1	-6.3	53.8	74.0	-20.2	Peak	Vertical
	4825.0	50.0	-6.3	43.7	54.0	-10.3	Average	Vertical
	10945.0	40.2	7.4	47.6	74.0	-26.4	Peak	Vertical
06	4876.0	61.0	-6.1	54.9	74.0	-19.1	Peak	Horizontal
	4876.0	51.1	-6.1	45.0	54.0	-9.0	Average	Horizontal
	7315.5	62.7	1.5	64.2	74.0	-9.8	Peak	Horizontal
	7315.5	51.9	1.5	53.4	54.0	-0.6	Average	Horizontal
	10834.5	41.6	7.0	48.6	74.0	-25.4	Peak	Horizontal
	4876.0	59.7	-6.1	53.6	74.0	-20.4	Peak	Vertical
	4876.0	50.5	-6.1	44.4	54.0	-9.6	Average	Vertical
	7307.0	58.2	1.5	59.7	74.0	-14.3	Peak	Vertical
	7307.0	50.2	1.5	51.7	54.0	-2.3	Average	Vertical
	10885.5	40.8	7.5	48.3	74.0	-25.7	Peak	Vertical
11	4927.0	59.0	-6.0	53.0	74.0	-21.0	Peak	Horizontal
	4927.0	49.6	-6.0	43.6	54.0	-10.4	Average	Horizontal
	7383.5	63.0	1.8	64.8	74.0	-9.2	Peak	Horizontal
	7383.5	52.0	1.8	53.8	54.0	-0.2	Average	Horizontal
	10860.0	40.7	7.5	48.2	74.0	-25.8	Peak	Horizontal
	4927.0	59.1	-6.0	53.1	74.0	-20.9	Peak	Vertical
	4927.0	48.7	-6.0	42.7	54.0	-11.3	Average	Vertical
	7383.5	60.7	1.8	62.5	74.0	-11.5	Peak	Vertical
	7383.5	50.2	1.8	52.0	54.0	-2.0	Average	Vertical
	10970.5	40.3	7.4	47.7	74.0	-26.3	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)

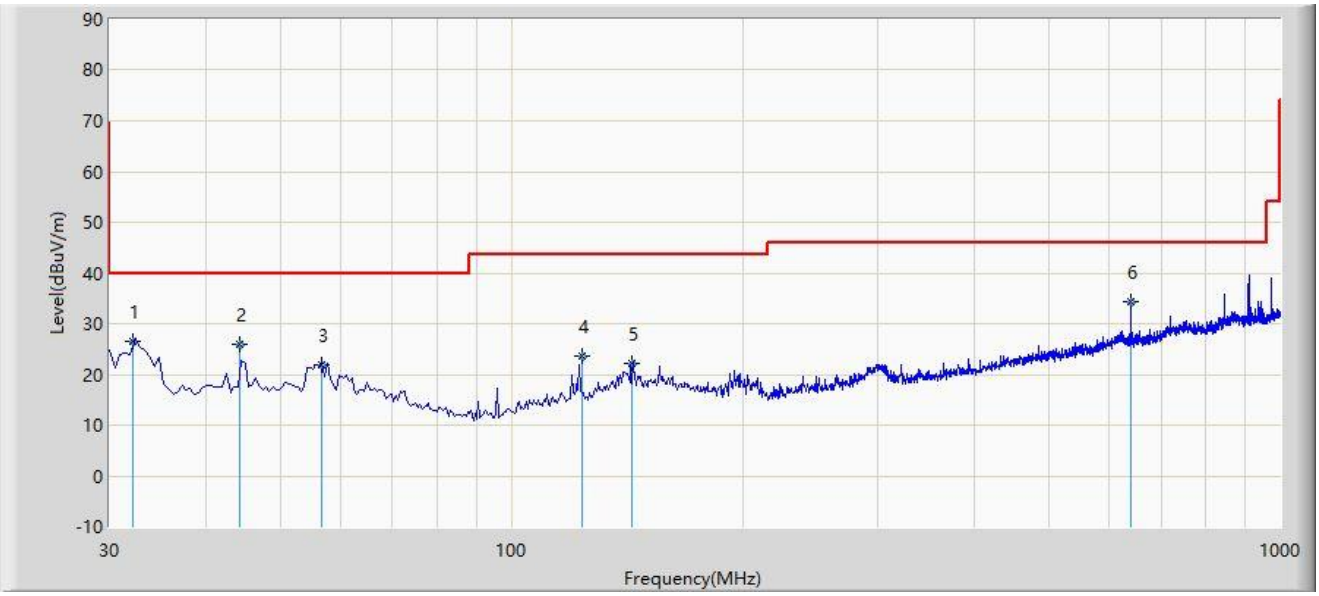
Test Site	SIP-AC2	Test Engineer	Arvin Ding
Test Date	2023-07-30	Test Mode:	802.11n-HT40
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
03	4850.5	56.5	-5.9	50.6	74.0	-23.4	Peak	Horizontal
	4850.5	50.1	-5.9	44.2	54.0	-9.8	Average	Horizontal
	7264.5	58.9	1.5	60.4	74.0	-13.6	Peak	Horizontal
	7264.5	51.5	1.5	53.0	54.0	-1.0	Average	Horizontal
	10860.0	40.8	7.5	48.3	74.0	-25.7	Peak	Horizontal
	4859.0	57.6	-5.7	51.9	74.0	-22.1	Peak	Vertical
	4859.0	49.5	-5.7	43.8	54.0	-10.2	Average	Vertical
	7273.0	58.6	1.6	60.2	74.0	-13.8	Peak	Vertical
	7273.0	50.4	1.6	52.0	54.0	-2.0	Average	Vertical
	10970.5	41.2	7.4	48.6	74.0	-25.4	Peak	Vertical
06	4867.5	58.0	-5.9	52.1	74.0	-21.9	Peak	Horizontal
	4867.5	50.8	-5.9	44.9	54.0	-9.1	Average	Horizontal
	7307.0	59.3	1.5	60.8	74.0	-13.2	Peak	Horizontal
	7307.0	51.7	1.5	53.2	54.0	-0.8	Average	Horizontal
	10877.0	40.8	7.5	48.3	74.0	-25.7	Peak	Horizontal
	4876.0	57.3	-6.1	51.2	74.0	-22.8	Peak	Vertical
	4876.0	49.7	-6.1	43.6	54.0	-10.4	Average	Vertical
	7315.5	58.9	1.5	60.4	74.0	-13.6	Peak	Vertical
	7315.5	50.1	1.5	51.6	54.0	-2.4	Average	Vertical
	10877.0	41.1	7.5	48.6	74.0	-25.4	Peak	Vertical
09	4893.0	57.9	-5.8	52.1	74.0	-21.9	Peak	Horizontal
	4893.0	50.1	-5.8	44.3	54.0	-9.7	Average	Horizontal
	7358.0	62.1	1.3	63.4	74.0	-10.6	Peak	Horizontal
	7358.0	52.0	1.3	53.3	54.0	-0.7	Average	Horizontal
	10936.5	41.6	7.4	49.0	74.0	-25.0	Peak	Horizontal
	4901.5	56.3	-5.9	50.4	74.0	-23.6	Peak	Vertical
	4901.5	49.7	-5.9	43.8	54.0	-10.2	Average	Vertical
	7366.5	58.6	1.5	60.1	74.0	-13.9	Peak	Vertical

	7366.5	50.3	1.5	51.8	54.0	-2.2	Average	Vertical
	10843.0	41.0	7.0	48.0	74.0	-26.0	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)								

The Result of Radiated Emission below 1GHz:

Site: SIP-AC2	Test Date: 2023-07-30
Temperature: 25.6°C	Humidity: 63%
Limit: FCC_Part15.209_RSE(3m)	Engineer: Arvin Ding
Probe: VULB 9168_00998_25-2000MHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT40 at 2452MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		32.157	26.506	9.600	-13.494	40.000	16.906	QP
2		44.250	25.856	7.600	-14.144	40.000	18.256	QP
3		56.560	21.982	3.900	-18.018	40.000	18.082	QP
4		123.500	23.747	7.500	-19.753	43.500	16.247	QP
5		143.560	22.179	4.200	-21.321	43.500	17.979	QP
6	*	640.520	34.275	7.800	-11.725	46.000	26.475	QP

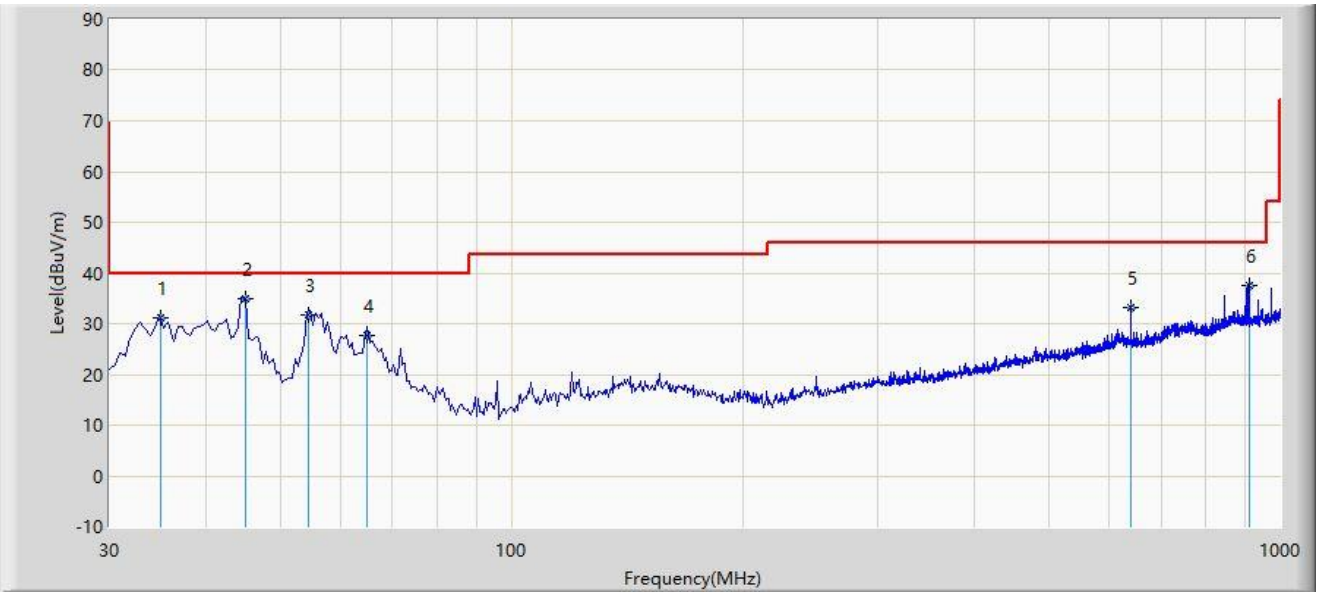
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: 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-AC2	Test Date: 2023-07-30
Temperature: 25.6°C	Humidity: 63%
Limit: FCC_Part15.209_RSE(3m)	Engineer: Arvin Ding
Probe: VULB 9168_00998_25-2000MHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Note: Transmit by 802.11n-HT40 at 2452MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		34.994	31.196	14.100	-8.804	40.000	17.096	QP
2	*	45.014	35.031	16.700	-4.969	40.000	18.331	QP
3		54.527	31.663	13.400	-8.337	40.000	18.262	QP
4		64.850	27.788	10.800	-12.212	40.000	16.988	QP
5		640.040	33.180	6.700	-12.820	46.000	26.480	QP
6		910.980	37.575	7.500	-8.425	46.000	30.075	QP

Note 1: " * ", means this data is the worst emission level.

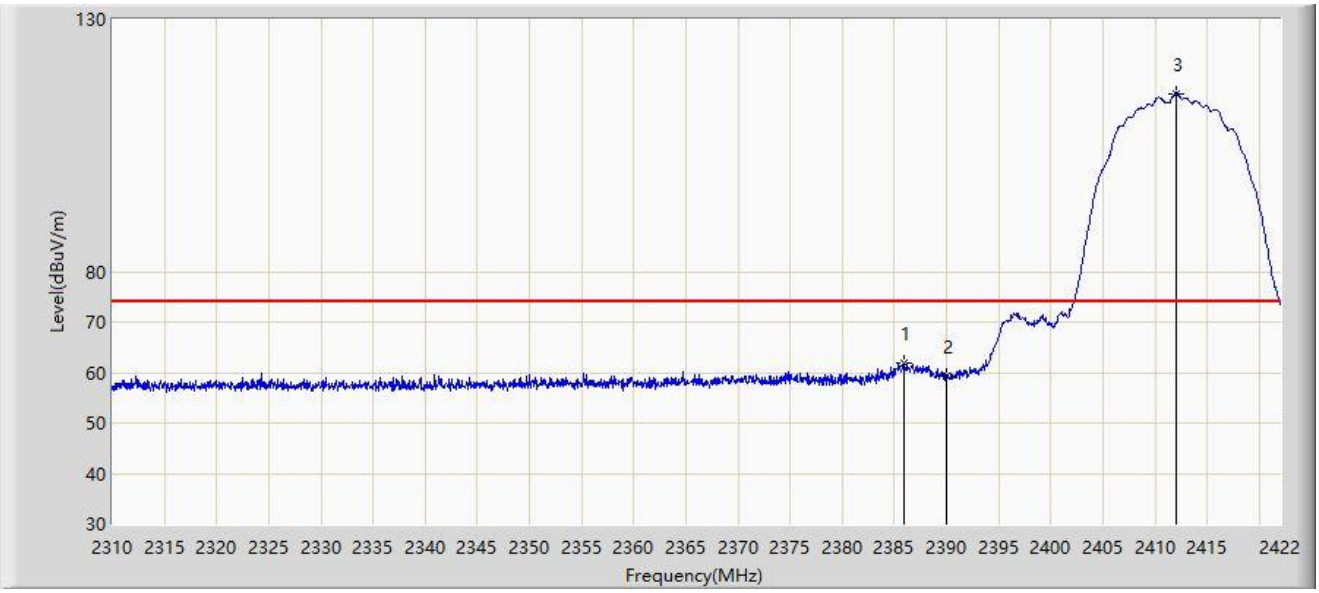
Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: 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	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11b at 2412MHz	



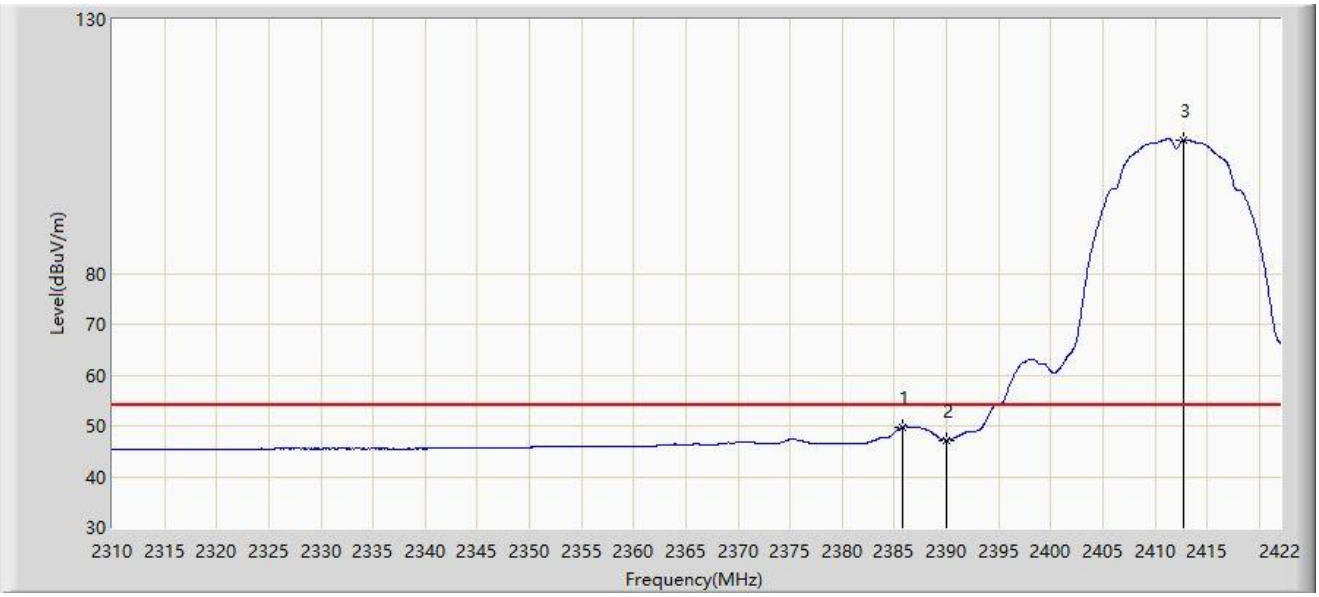
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2385.936	61.951	29.545	-12.049	74.000	32.405	PK
2		2390.000	59.221	26.838	-14.779	74.000	32.382	PK
3		2411.976	115.296	82.962	N/A	N/A	32.334	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11b at 2412MHz	



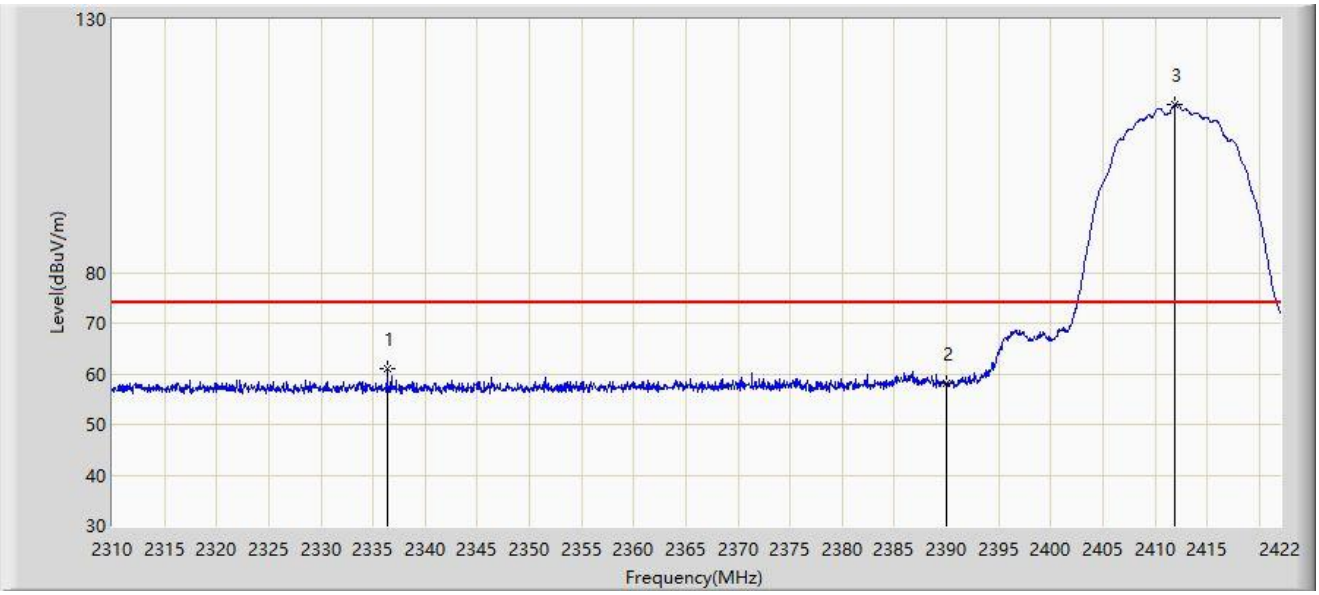
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2385.768	49.742	17.336	-4.258	54.000	32.407	AV
2		2390.000	47.197	14.814	-6.803	54.000	32.382	AV
3		2412.704	106.290	73.955	N/A	N/A	32.335	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11b at 2412MHz	



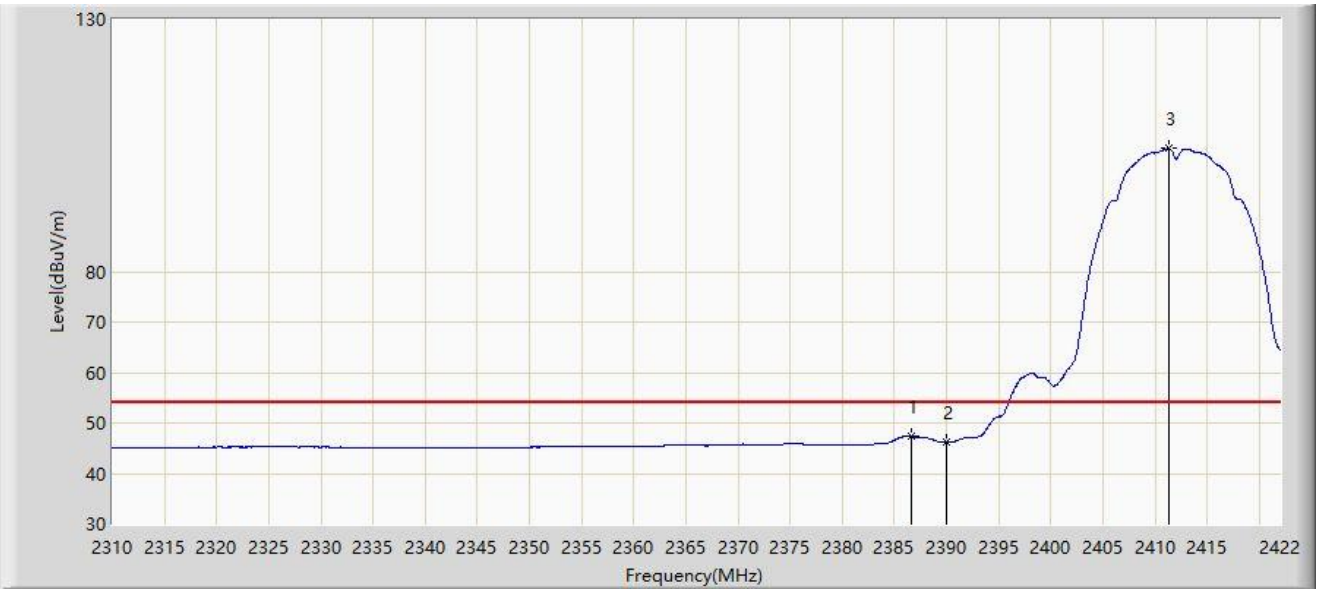
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2336.376	60.883	28.436	-13.117	74.000	32.447	PK
2		2390.000	58.172	25.789	-15.828	74.000	32.382	PK
3		2411.920	113.171	80.837	N/A	N/A	32.334	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11b at 2412MHz	



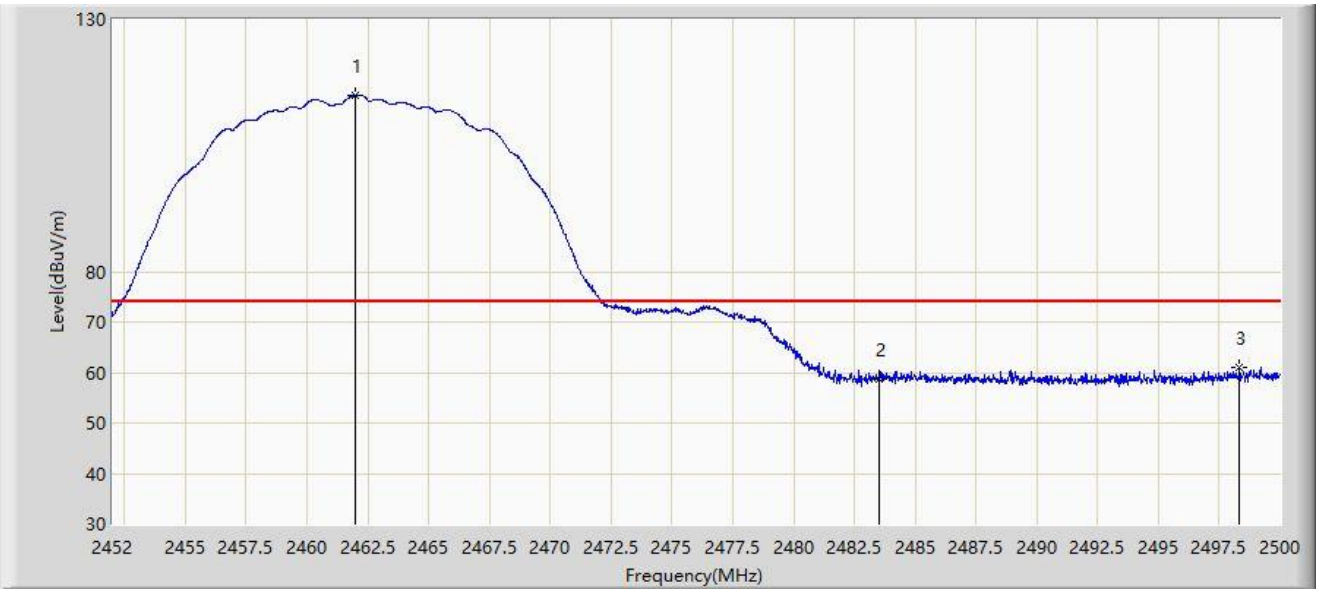
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2386.608	47.311	14.909	-6.689	54.000	32.402	AV
2		2390.000	46.108	13.725	-7.892	54.000	32.382	AV
3		2411.304	104.402	72.069	N/A	N/A	32.333	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11b at 2462MHz	



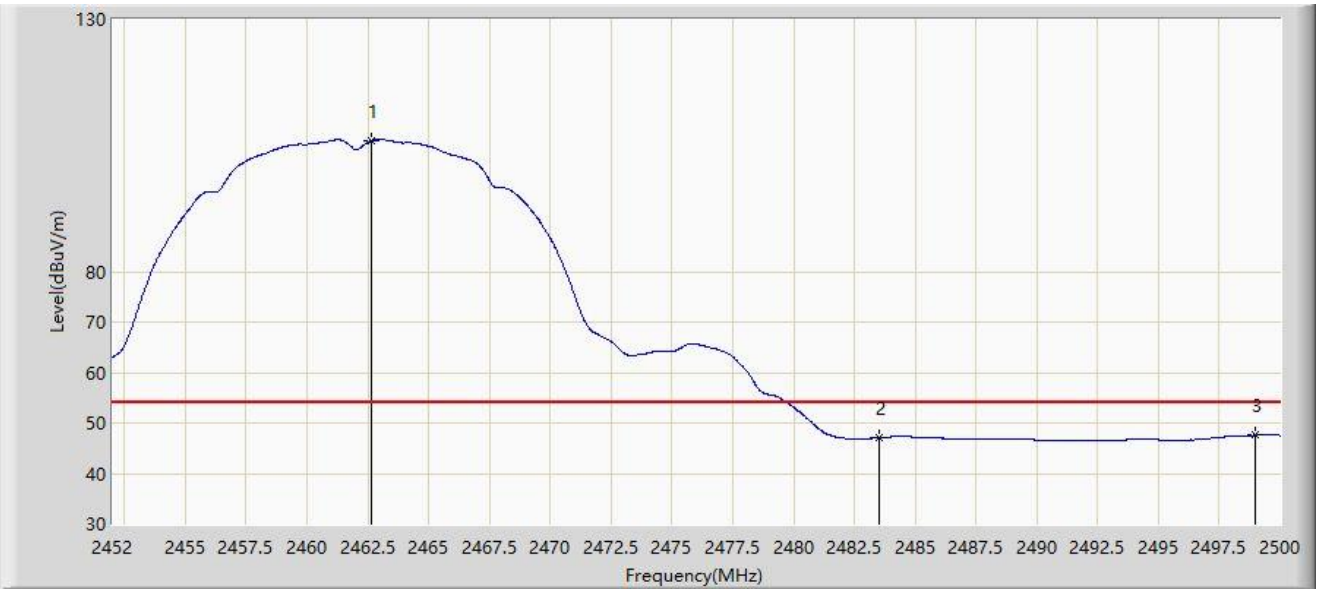
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2461.960	114.944	82.634	N/A	N/A	32.310	PK
2		2483.500	58.608	26.385	-15.392	74.000	32.222	PK
3	*	2498.344	60.966	28.698	-13.034	74.000	32.268	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11b at 2462MHz	



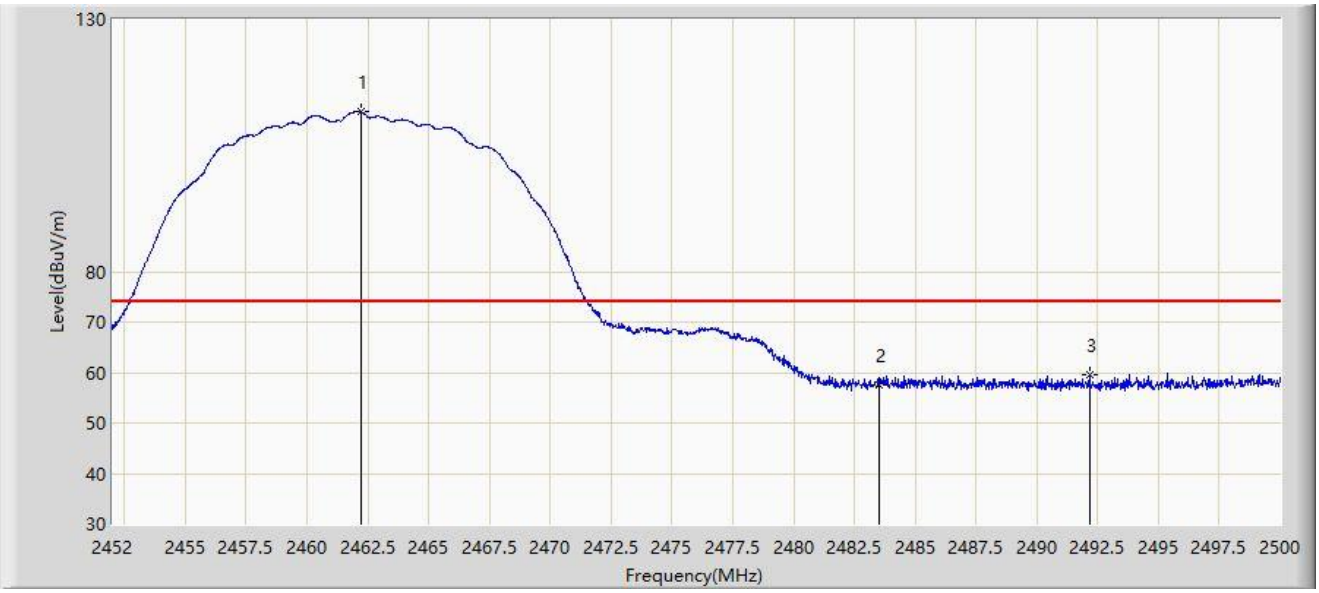
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2462.656	105.957	73.651	N/A	N/A	32.306	AV
2		2483.500	47.049	14.826	-6.951	54.000	32.222	AV
3	*	2498.968	47.559	15.290	-6.441	54.000	32.269	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11b at 2462MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2462.200	111.639	79.330	N/A	N/A	32.309	PK
2		2483.500	57.633	25.410	-16.367	74.000	32.222	PK
3	*	2492.152	59.694	27.443	-14.306	74.000	32.251	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11b at 2462MHz	

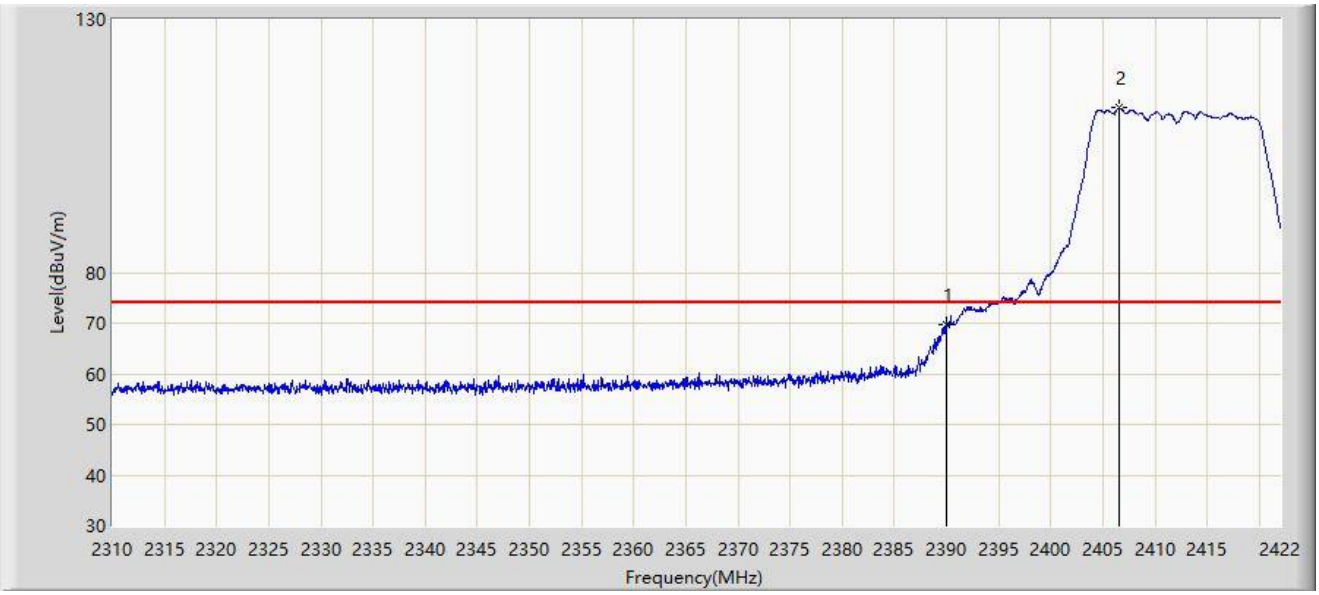
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2462.608	102.528	70.222	N/A	N/A	32.306	AV
2		2483.500	46.033	13.810	-7.967	54.000	32.222	AV
3	*	2499.376	46.348	14.078	-7.652	54.000	32.270	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11g at 2412MHz	



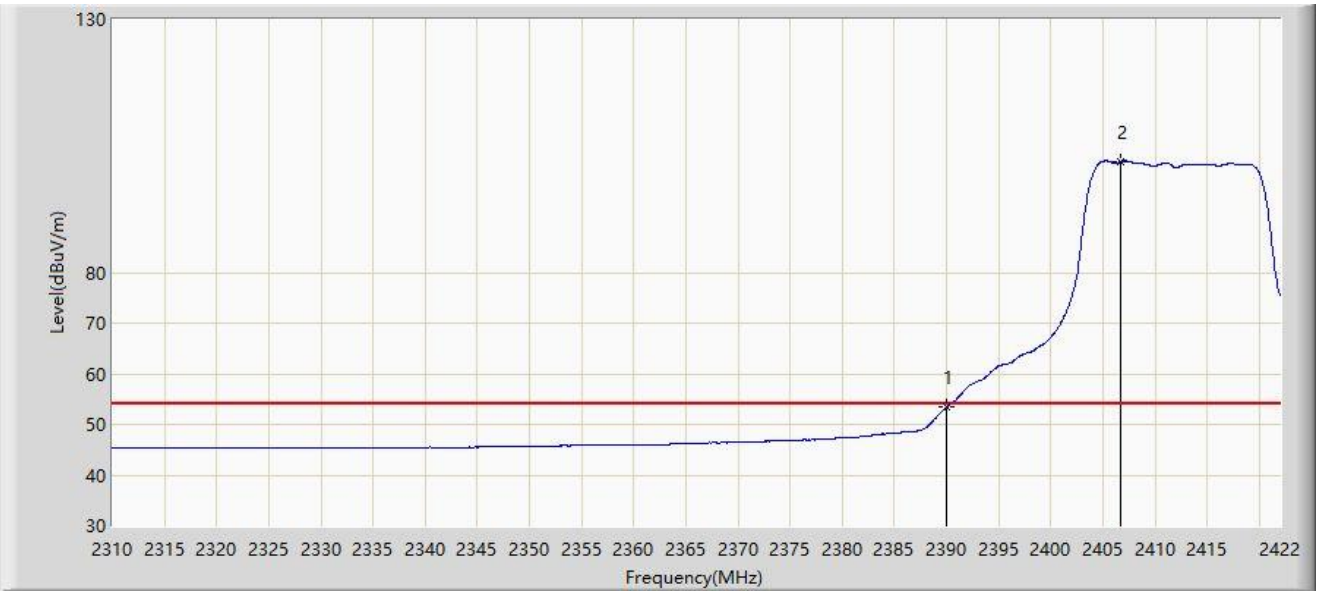
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2390.000	69.652	37.269	-4.348	74.000	32.382	PK
2		2406.600	112.469	80.129	N/A	N/A	32.340	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11g at 2412MHz	



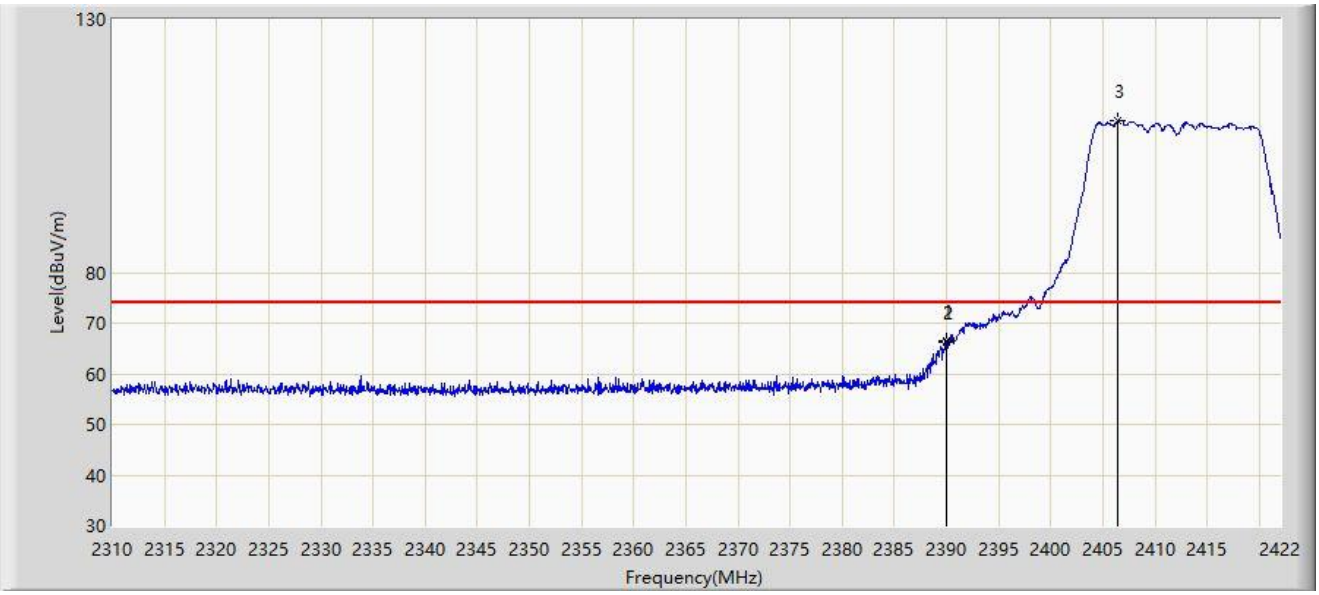
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	53.389	21.006	-0.611	54.000	32.382	AV
2		2406.768	101.929	69.589	N/A	N/A	32.339	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11g at 2412MHz	



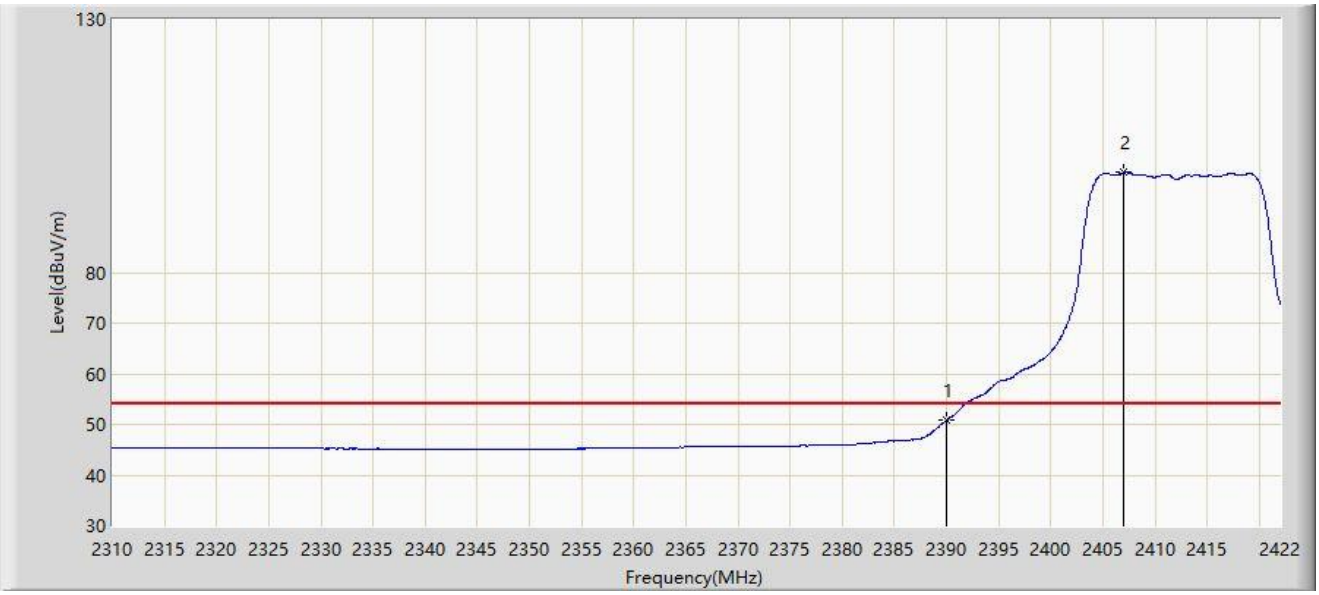
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2389.968	66.468	34.085	-7.532	74.000	32.383	PK
2		2390.000	66.183	33.800	-7.817	74.000	32.382	PK
3		2406.488	110.000	77.660	N/A	N/A	32.340	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11g at 2412MHz	



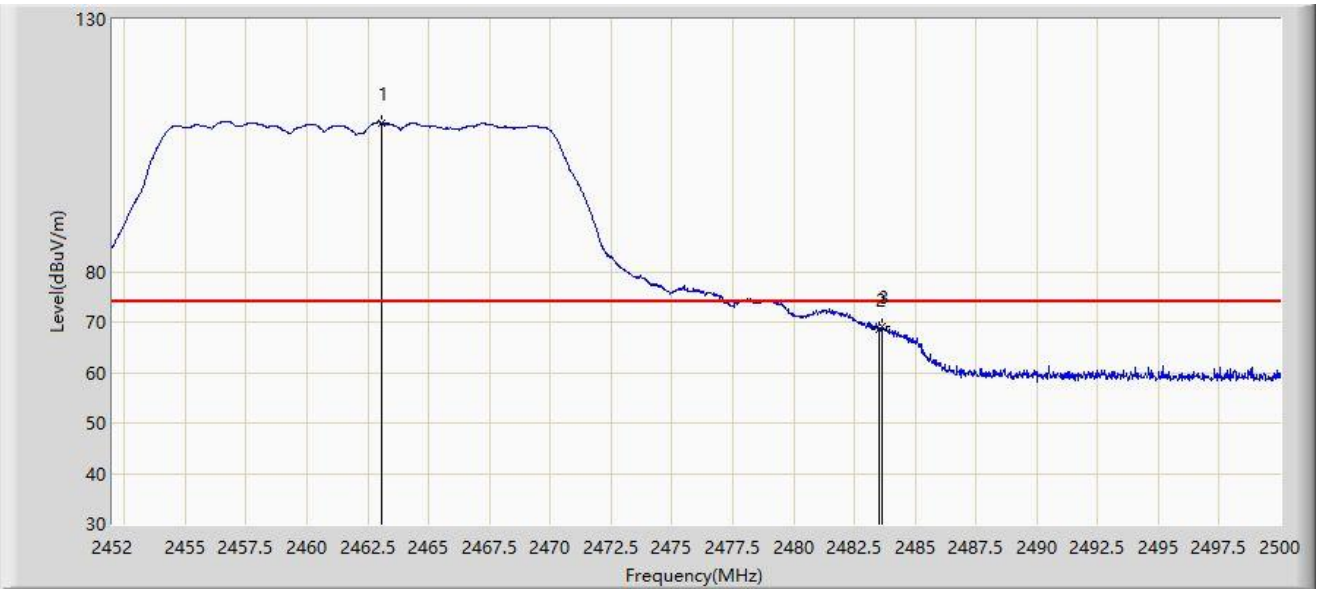
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2390.000	50.792	18.409	-3.208	54.000	32.382	AV
2		2407.048	99.731	67.392	N/A	N/A	32.339	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11g at 2462MHz	



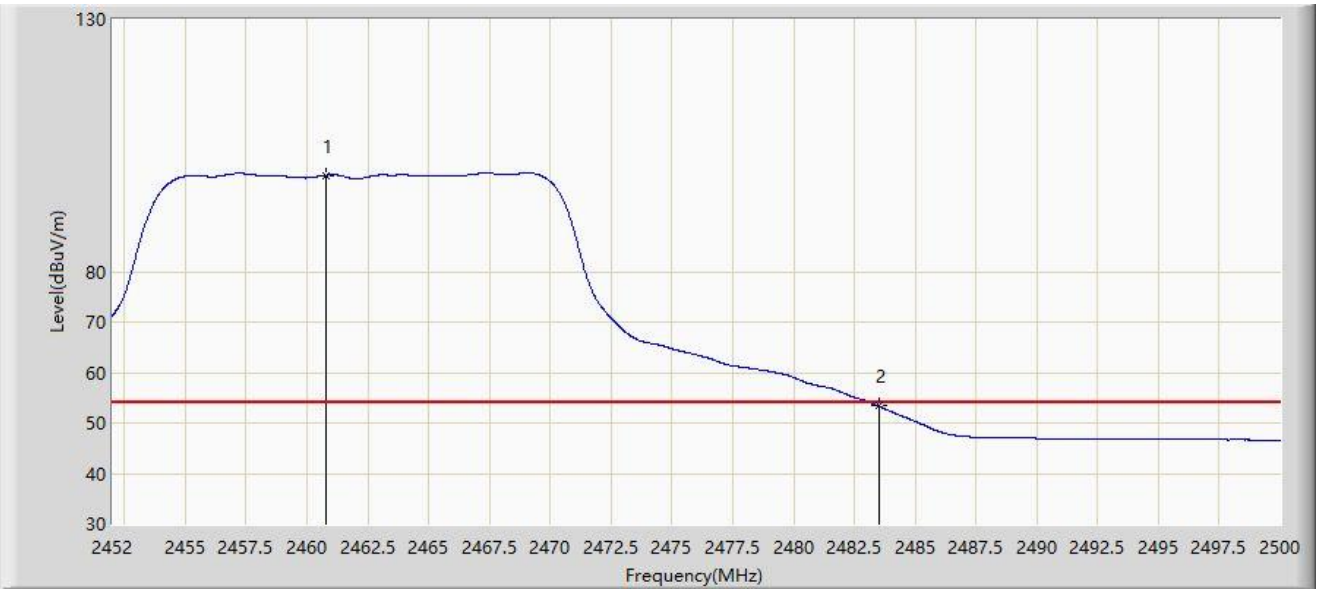
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2463.088	109.446	77.143	N/A	N/A	32.304	PK
2		2483.500	68.604	36.381	-5.396	74.000	32.222	PK
3	*	2483.656	69.112	36.889	-4.888	74.000	32.223	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11g at 2462MHz	



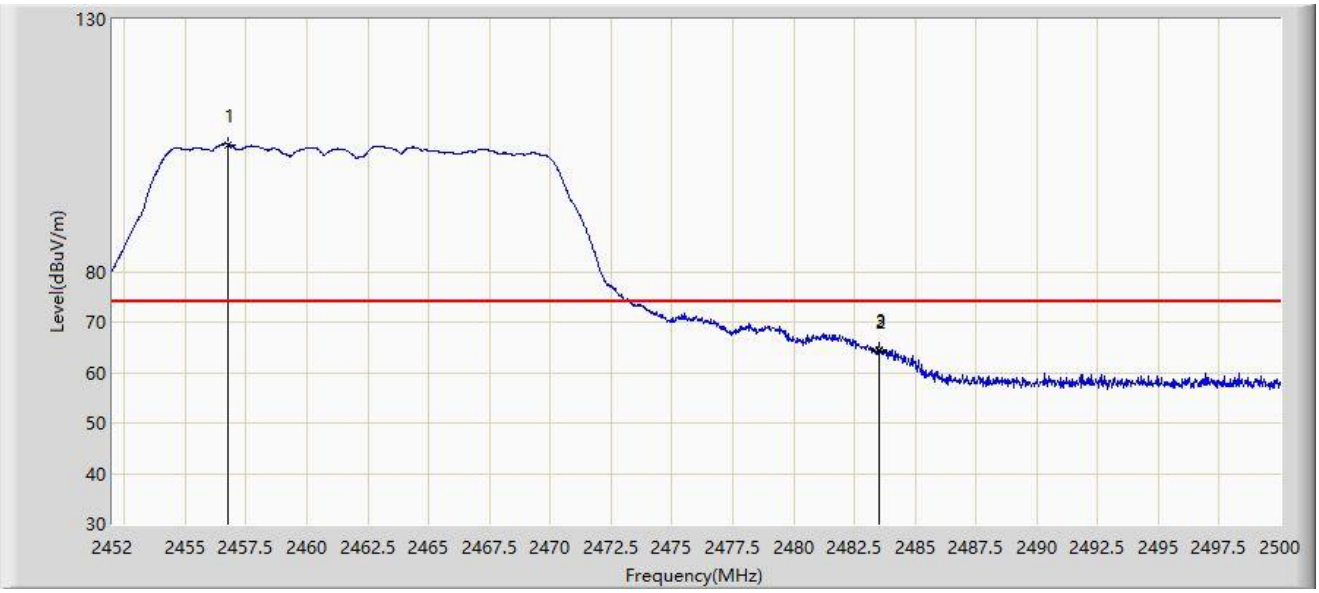
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2460.808	99.107	66.794	N/A	N/A	32.313	AV
2	*	2483.500	53.345	21.122	-0.655	54.000	32.222	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11g at 2462MHz	



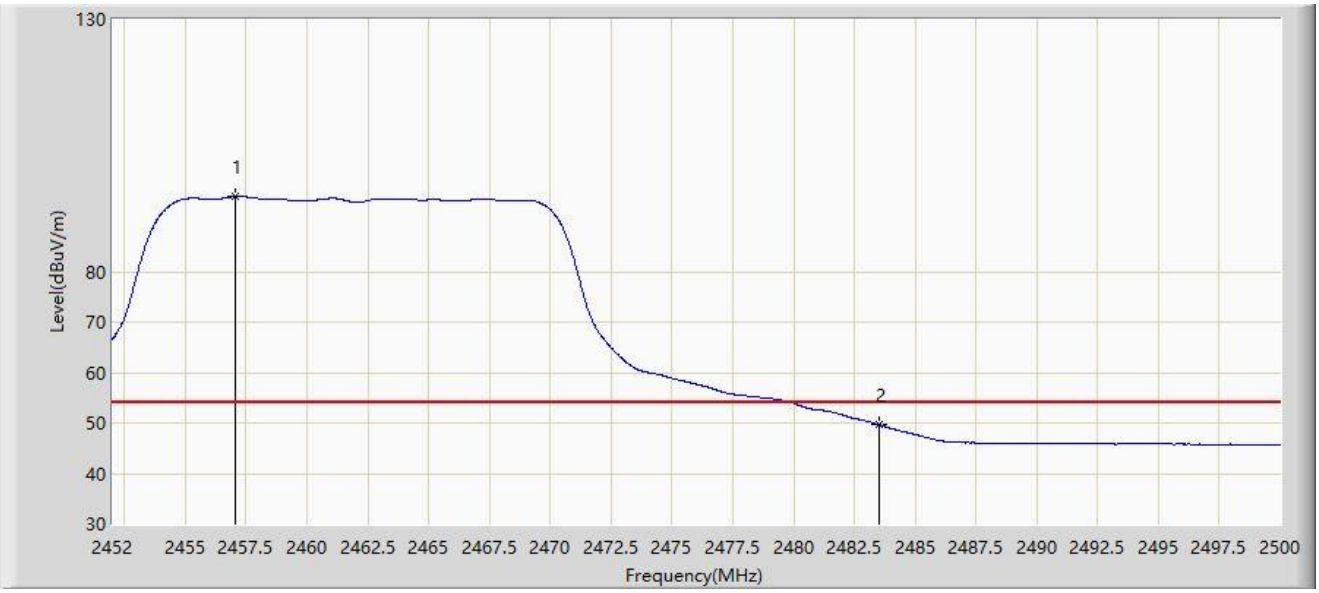
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2456.752	105.210	72.888	N/A	N/A	32.322	PK
2		2483.500	64.272	32.049	-9.728	74.000	32.222	PK
3	*	2483.536	64.575	32.352	-9.425	74.000	32.223	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11g at 2462MHz	



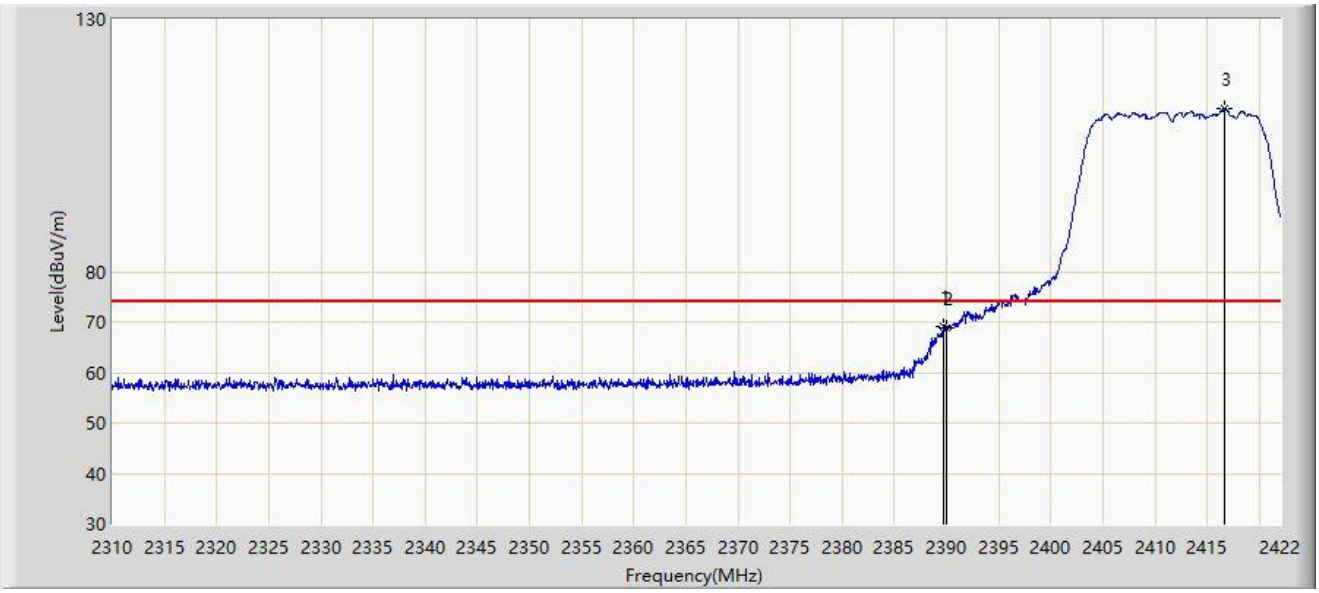
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2457.040	94.864	62.542	N/A	N/A	32.321	AV
2	*	2483.500	49.658	17.435	-4.342	54.000	32.222	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT20 at 2412MHz	



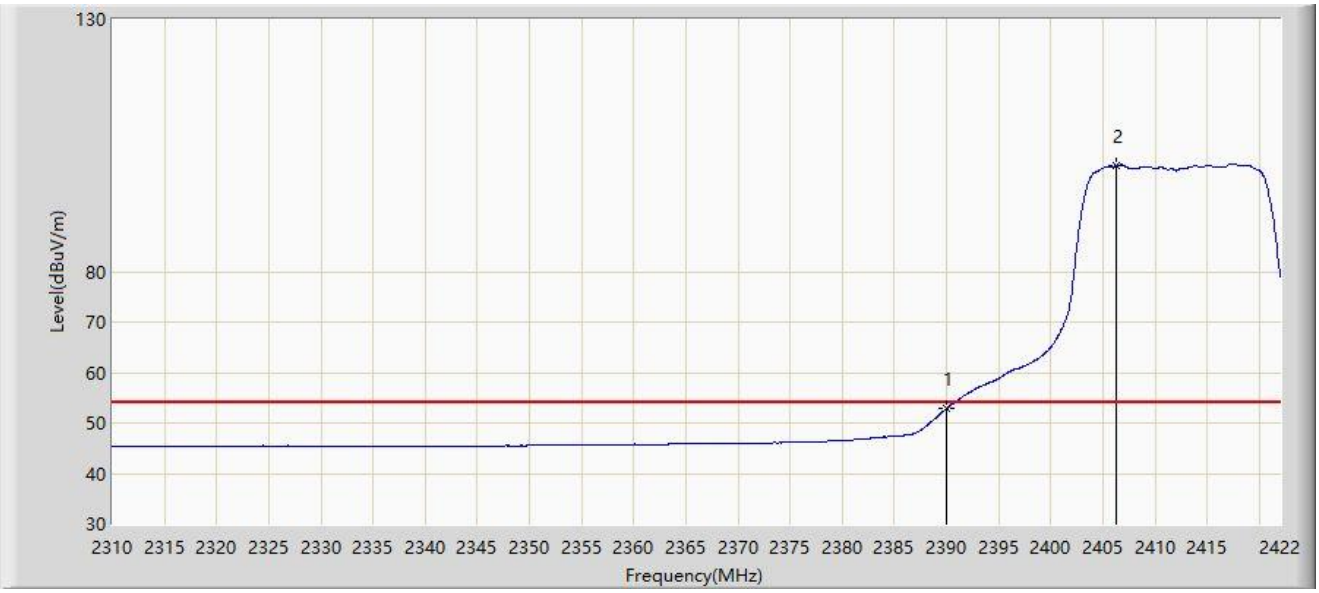
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2389.744	69.099	36.715	-4.901	74.000	32.384	PK
2		2390.000	68.810	36.427	-5.190	74.000	32.382	PK
3		2416.736	112.344	80.004	N/A	N/A	32.340	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT20 at 2412MHz	



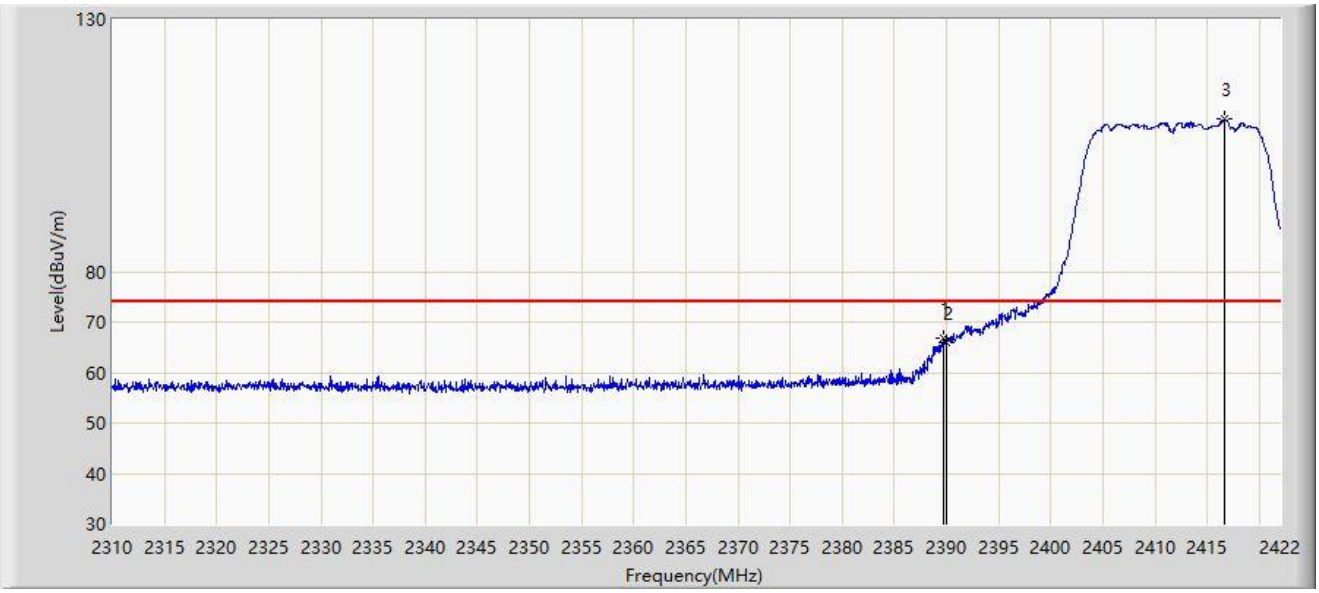
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	52.871	20.488	-1.129	54.000	32.382	AV
2		2406.320	100.967	68.627	N/A	N/A	32.340	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT20 at 2412MHz	



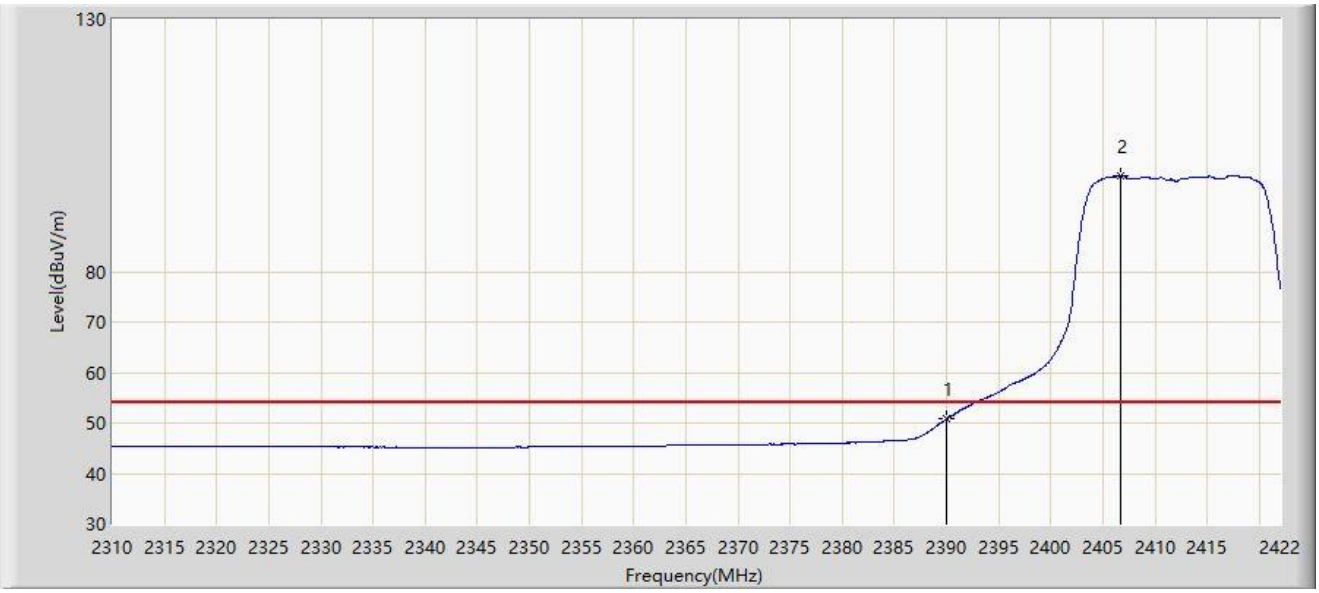
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2389.688	66.775	34.391	-7.225	74.000	32.384	PK
2		2390.000	65.826	33.443	-8.174	74.000	32.382	PK
3		2416.736	110.147	77.807	N/A	N/A	32.340	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT20 at 2412MHz	



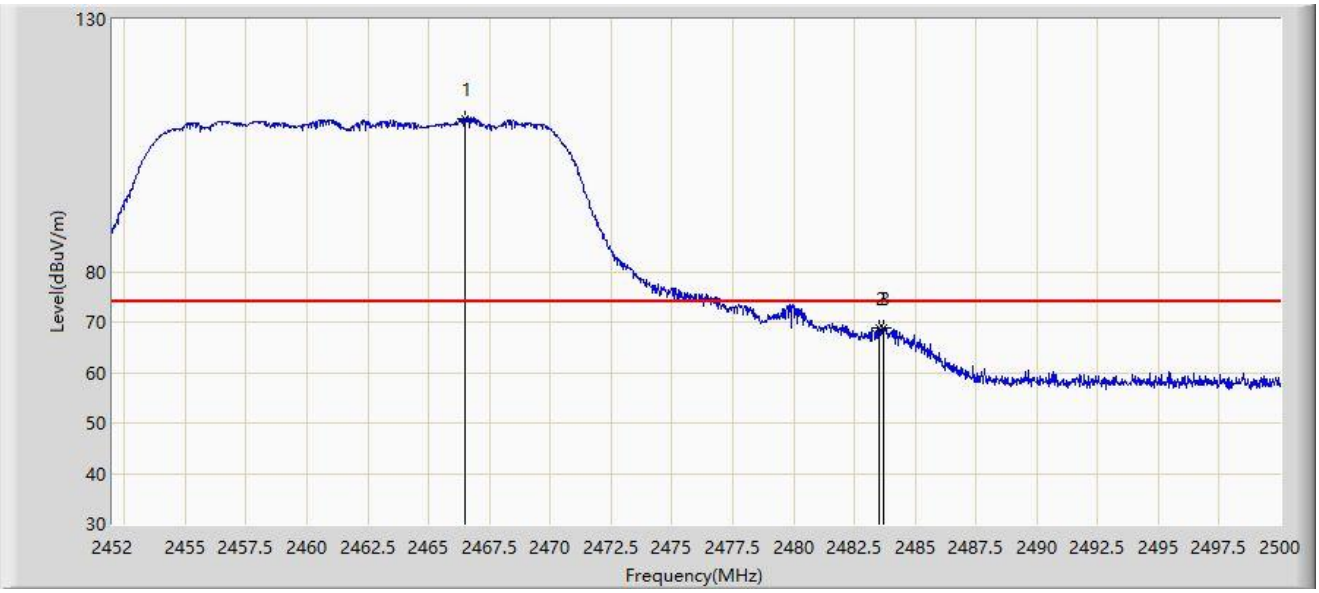
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	50.759	18.376	-3.241	54.000	32.382	AV
2		2406.712	99.102	66.762	N/A	N/A	32.340	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT20 at 2462MHz	



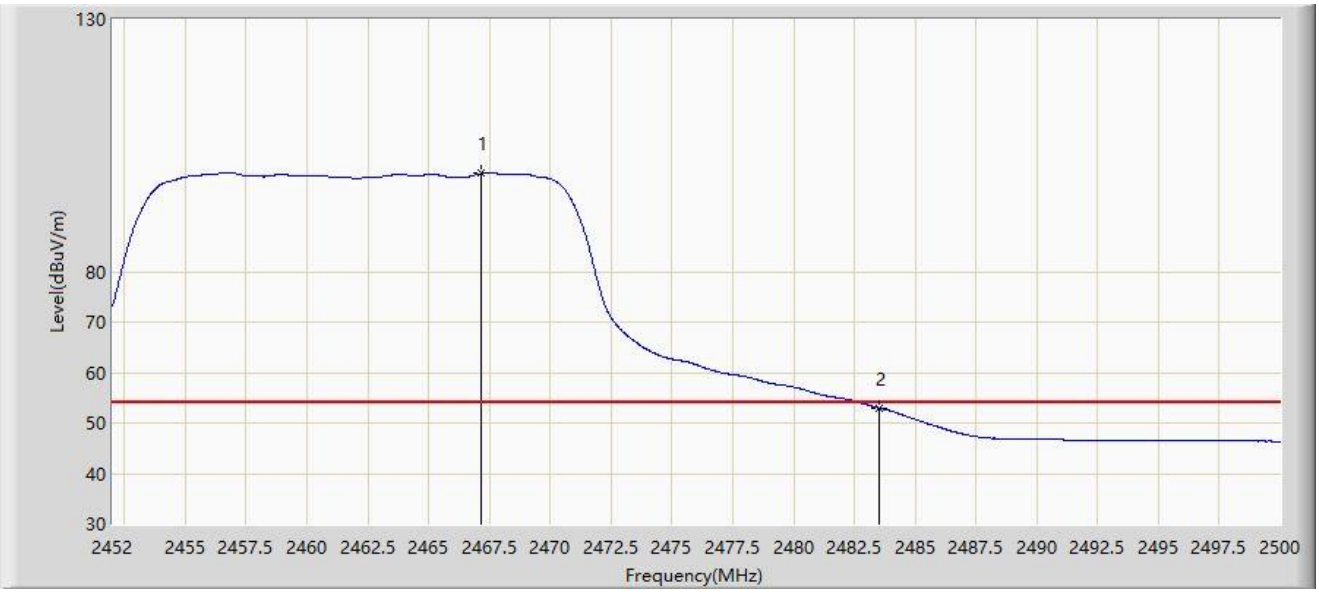
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2466.472	110.361	78.078	N/A	N/A	32.283	PK
2		2483.500	68.744	36.521	-5.256	74.000	32.222	PK
3	*	2483.728	68.857	36.634	-5.143	74.000	32.223	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT20 at 2462MHz	



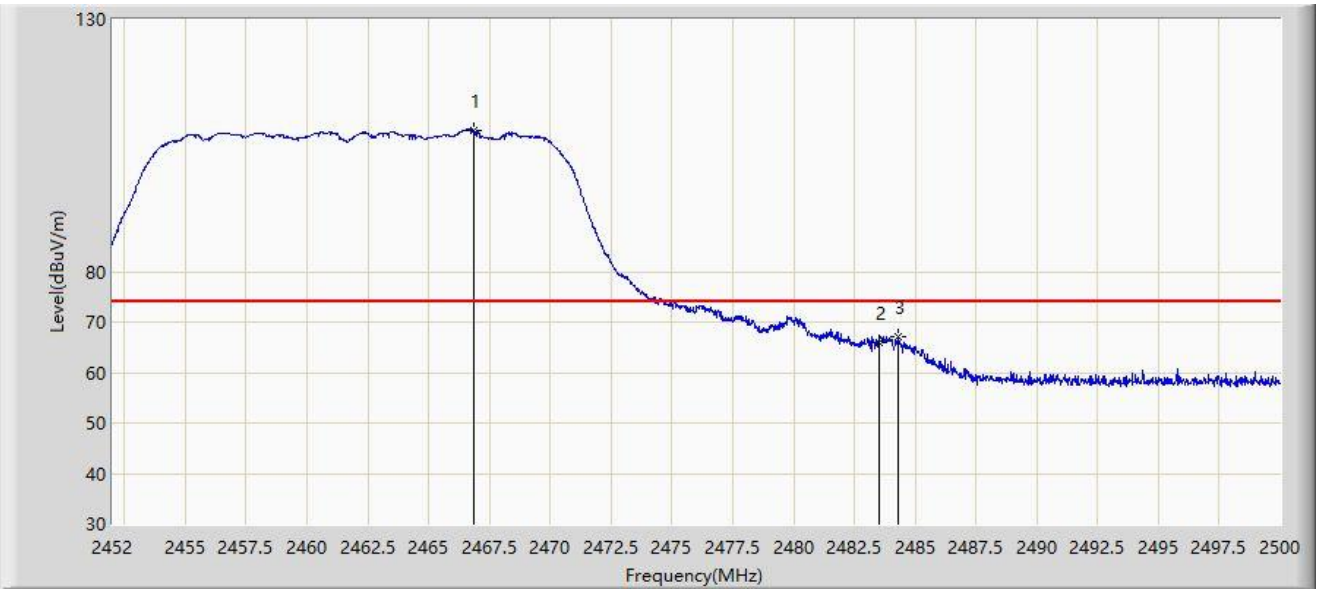
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2467.144	99.426	67.147	N/A	N/A	32.279	AV
2	*	2483.500	53.017	20.794	-0.983	54.000	32.222	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT20 at 2462MHz	



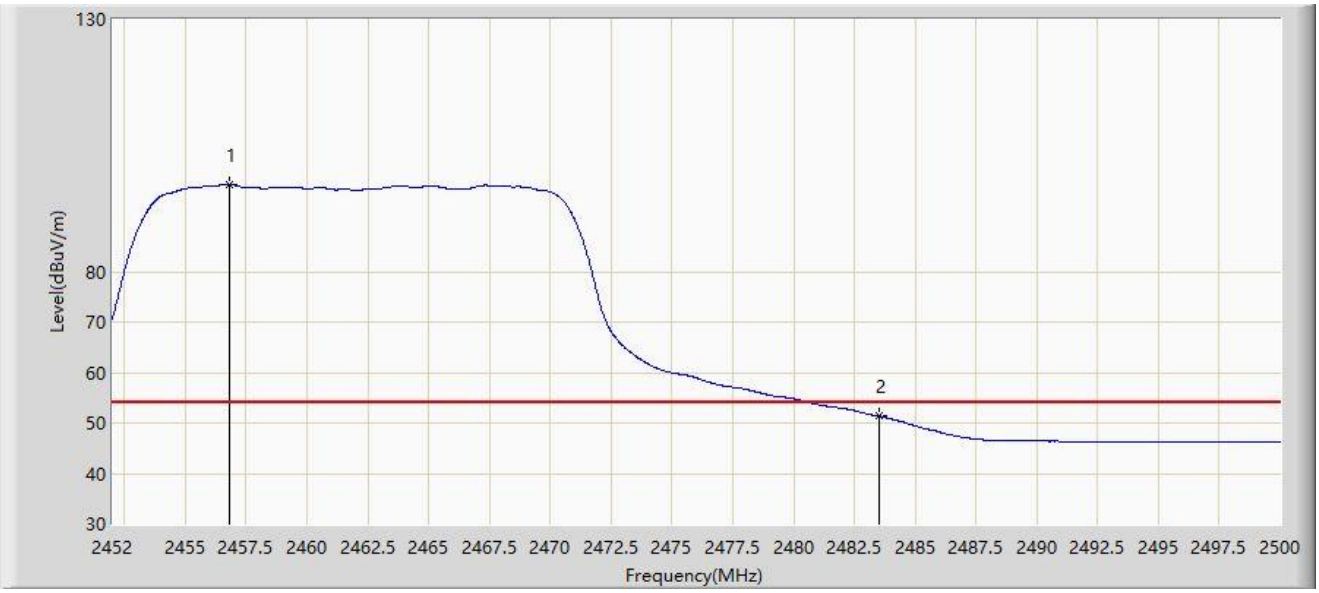
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2466.832	108.108	75.827	N/A	N/A	32.281	PK
2		2483.500	66.065	33.842	-7.935	74.000	32.222	PK
3	*	2484.280	67.142	34.917	-6.858	74.000	32.225	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT20 at 2462MHz	



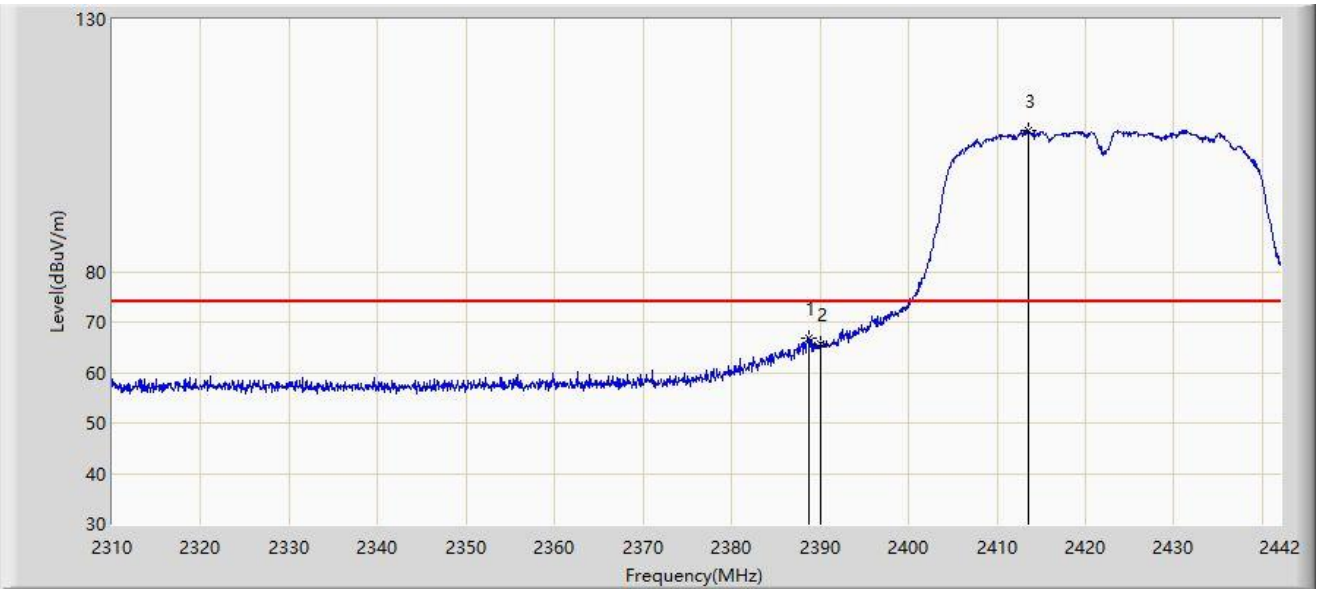
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2456.824	97.312	64.990	N/A	N/A	32.322	AV
2	*	2483.500	51.348	19.125	-2.652	54.000	32.222	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT40 at 2422MHz	



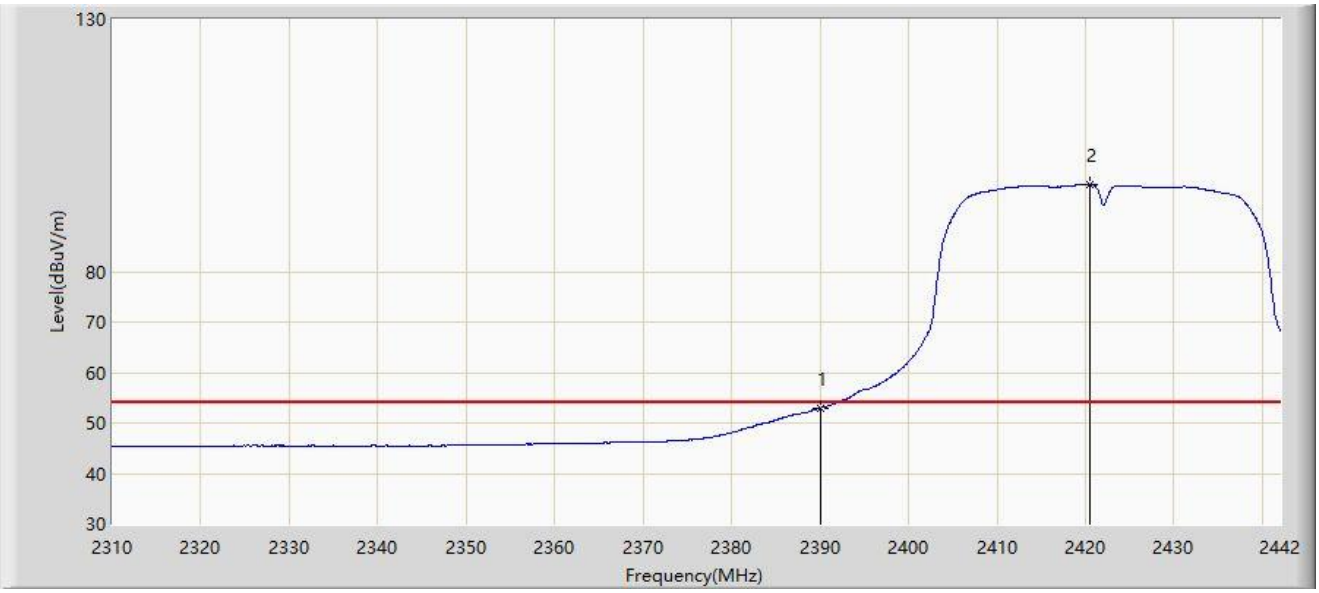
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2388.672	66.871	34.481	-7.129	74.000	32.390	PK
2		2390.000	65.578	33.195	-8.422	74.000	32.382	PK
3		2413.620	107.966	75.630	N/A	N/A	32.336	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT40 at 2422MHz	



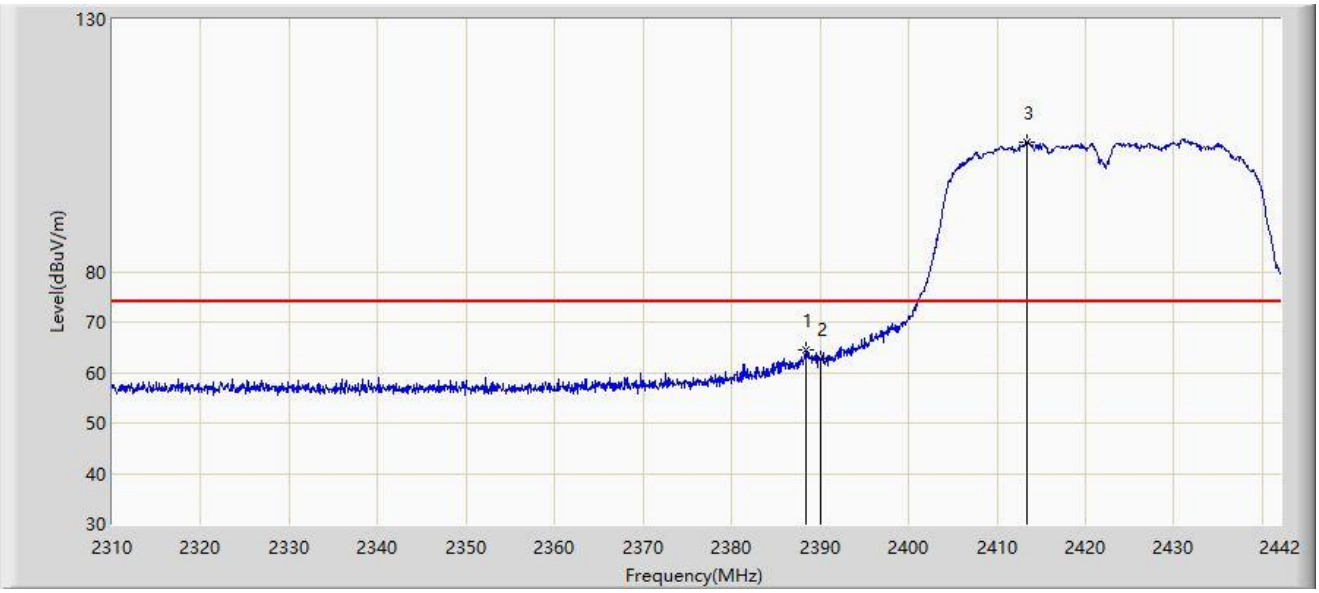
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	52.978	20.595	-1.022	54.000	32.382	AV
2		2420.550	97.348	65.004	N/A	N/A	32.344	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT40 at 2422MHz	



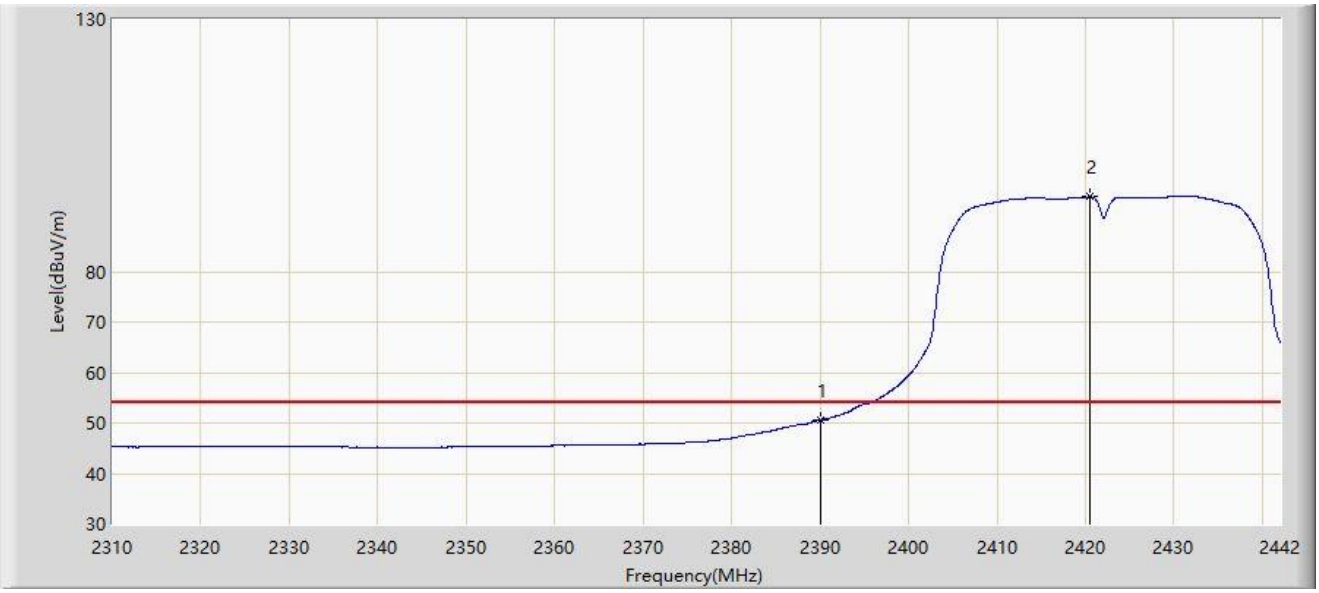
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2388.342	64.481	32.089	-9.519	74.000	32.392	PK
2		2390.000	62.703	30.320	-11.297	74.000	32.382	PK
3		2413.356	105.625	73.289	N/A	N/A	32.335	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT40 at 2422MHz	



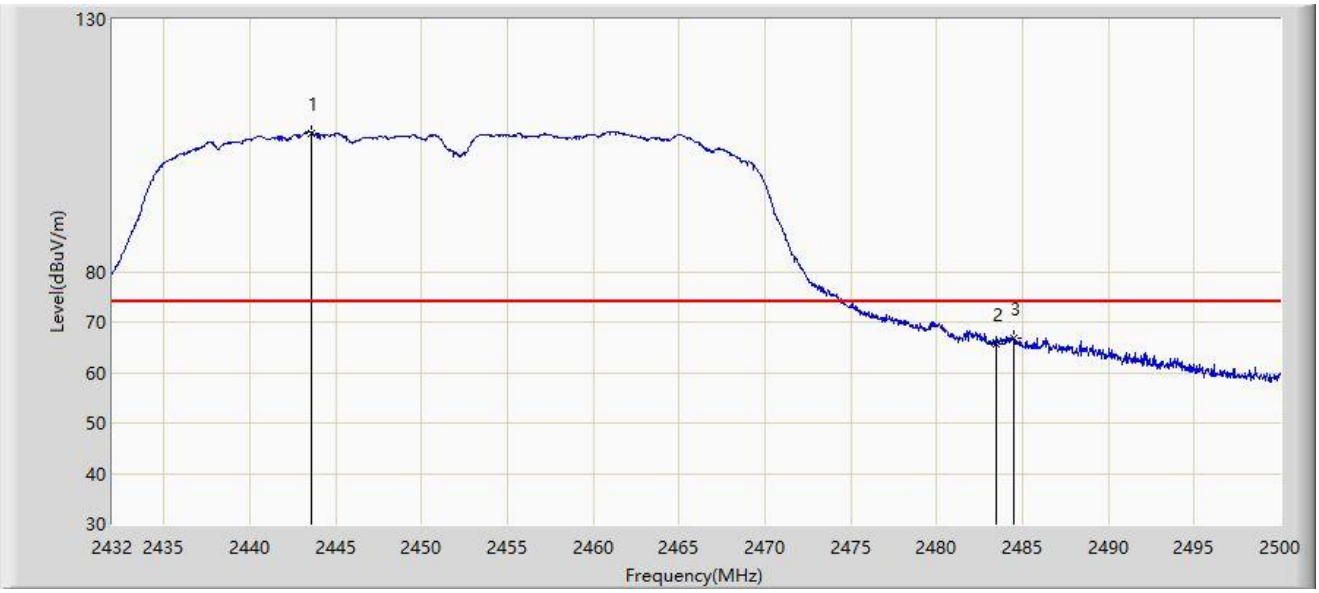
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	50.597	18.214	-3.403	54.000	32.382	AV
2		2420.550	94.821	62.477	N/A	N/A	32.344	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT40 at 2452MHz	



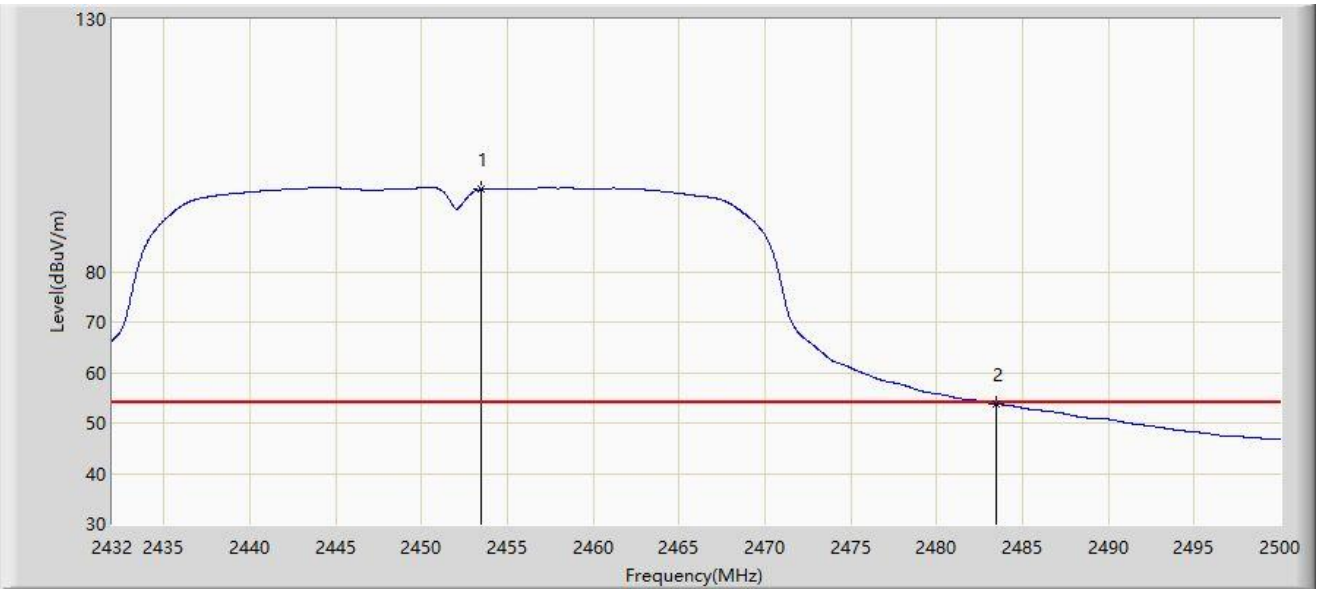
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2443.594	107.521	75.171	N/A	N/A	32.350	PK
2		2483.500	65.758	33.535	-8.242	74.000	32.222	PK
3	*	2484.530	66.887	34.661	-7.113	74.000	32.226	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Horizontal
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT40 at 2452MHz	



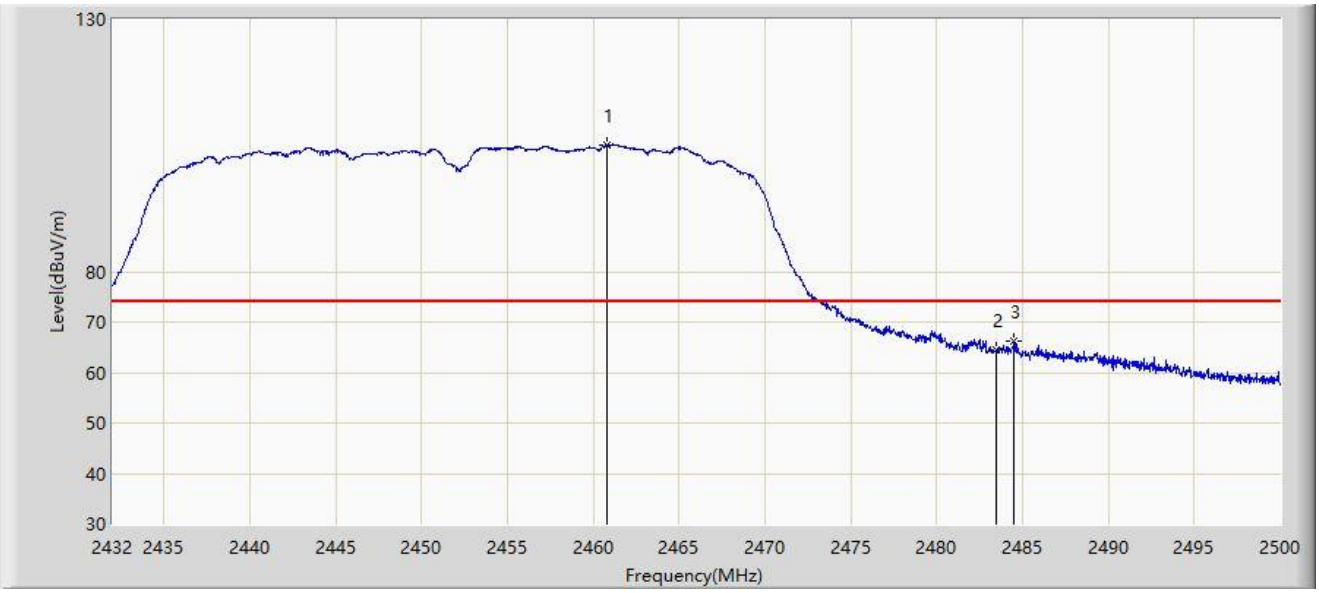
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2453.454	96.315	63.985	N/A	N/A	32.331	AV
2	*	2483.500	53.738	21.515	-0.262	54.000	32.222	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT40 at 2452MHz	



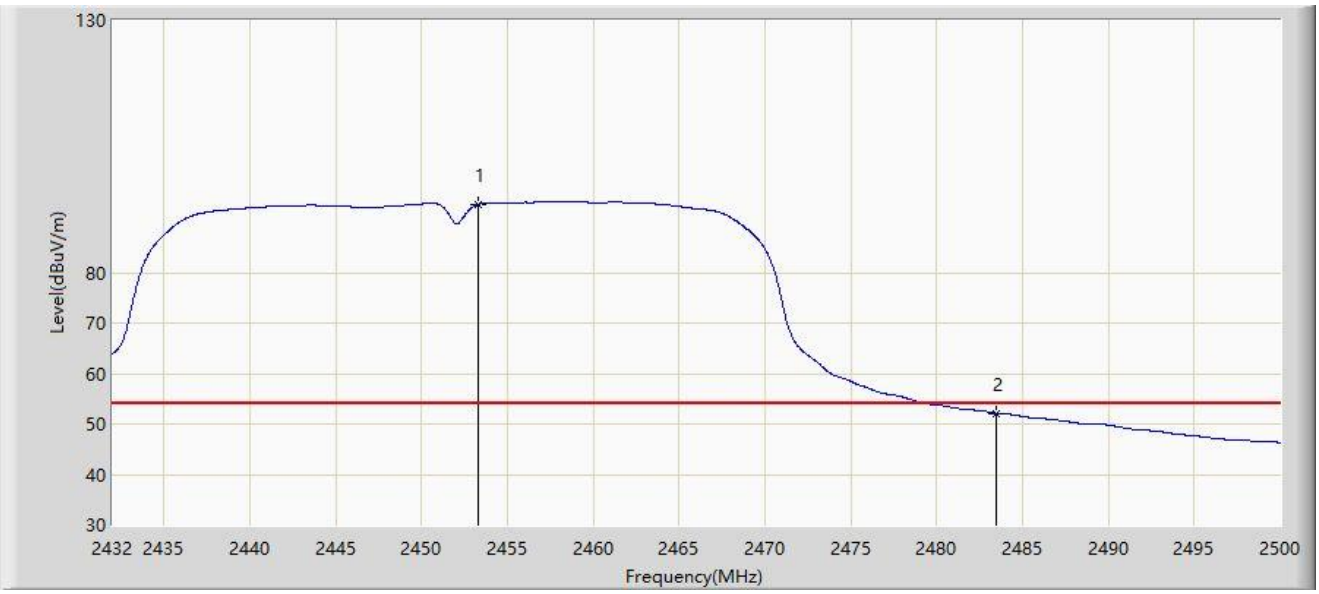
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2460.832	105.088	72.775	N/A	N/A	32.313	PK
2		2483.500	64.494	32.271	-9.506	74.000	32.222	PK
3	*	2484.496	66.324	34.098	-7.676	74.000	32.226	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC2	Test Date: 2023-07-28
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: BBHA 9120D_02042_1-18GHz	Polarity: Vertical
EUT: Senquip ORB	Power: DC 12V
Test Mode: Transmit by 802.11n-HT40 at 2452MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2453.284	93.536	61.205	N/A	N/A	32.331	AV
2	*	2483.500	52.103	19.880	-1.897	54.000	32.222	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Appendix B – Test Setup Photograph

Refer to “2305RSU054-UT” file.

Appendix C – EUT Photograph

Refer to “2305RSU054-UE” file.

The End