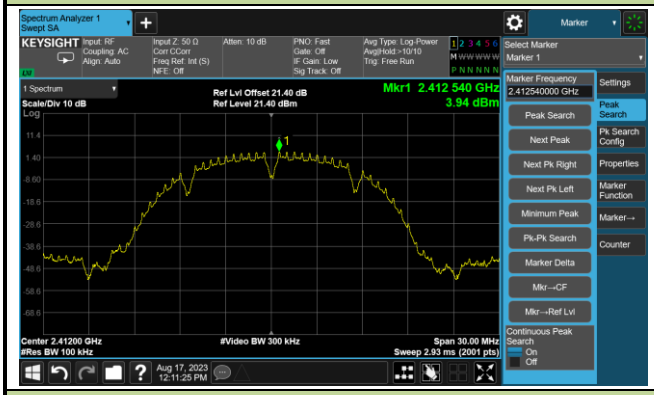
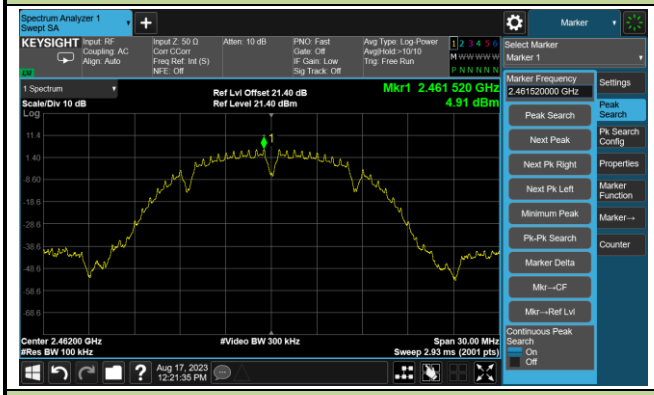
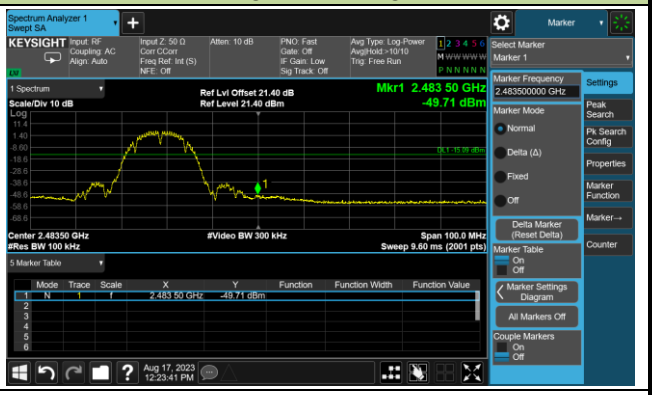
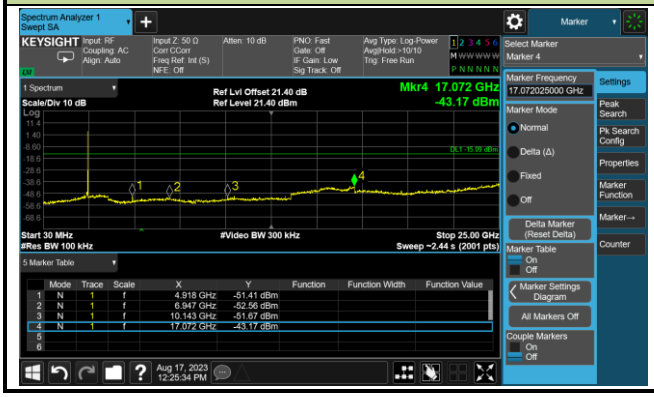
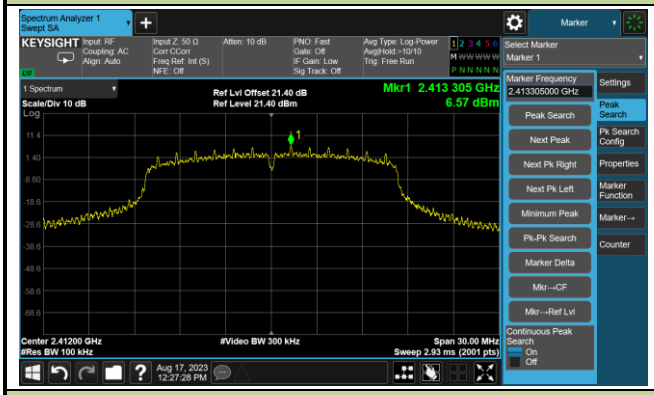
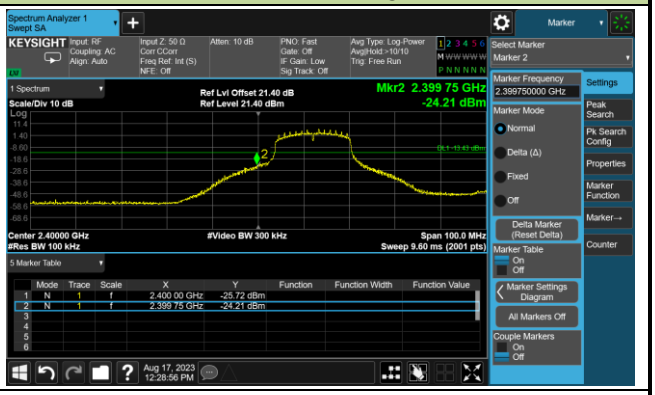
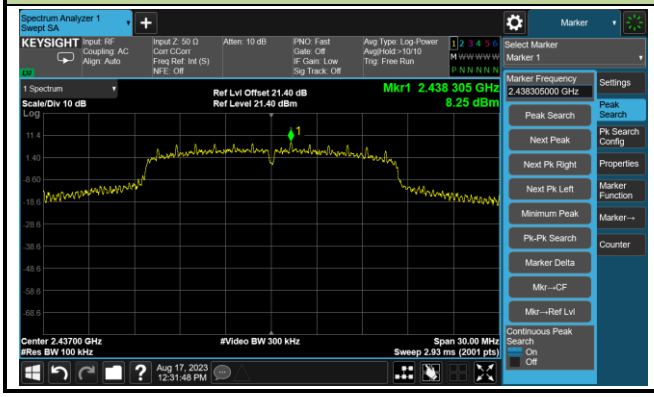
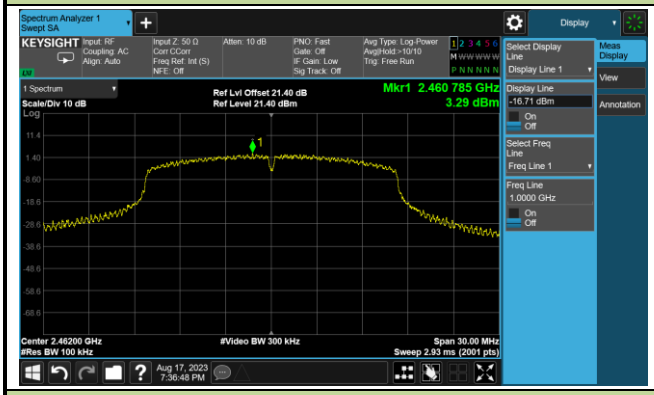
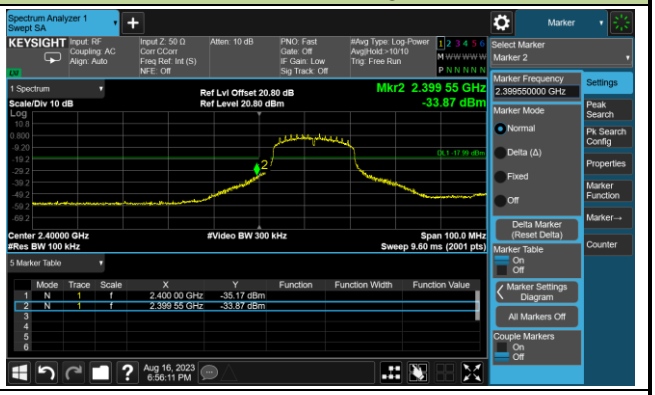
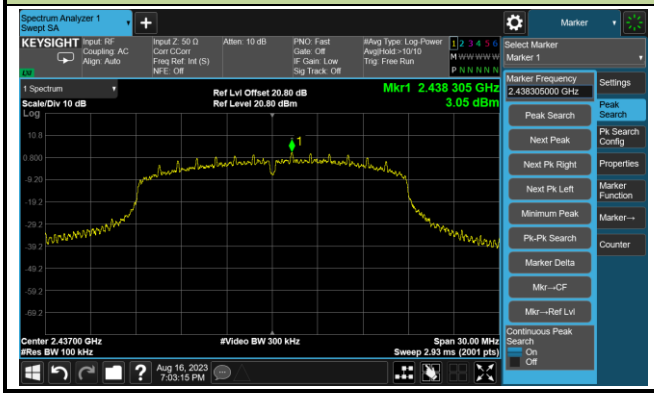
802.11g Out-of-Band Emissions - SISO Mode Ant 0	
Channel 11 (2462MHz)	
100kHz PSD Reference Level	High Band Edge
	
Spurious Emission	
	

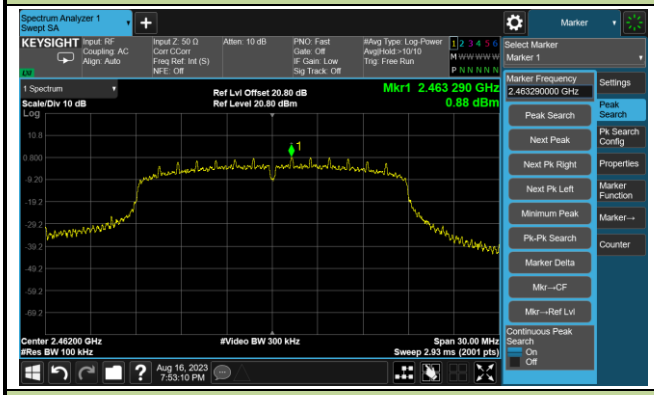
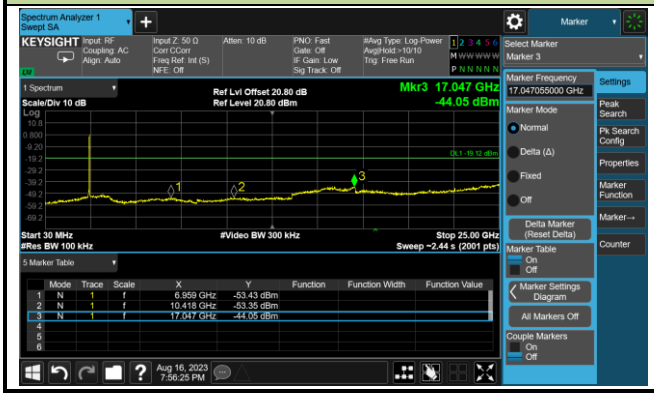
802.11b Out-of-Band Emissions - SISO Mode Ant 1	
Channel 01 (2412MHz)	
100kHz PSD Reference Level	Low Band Edge
	
Spurious Emission	
	
Channel 06 (2437MHz)	
100kHz PSD Reference Level	Spurious Emission
	

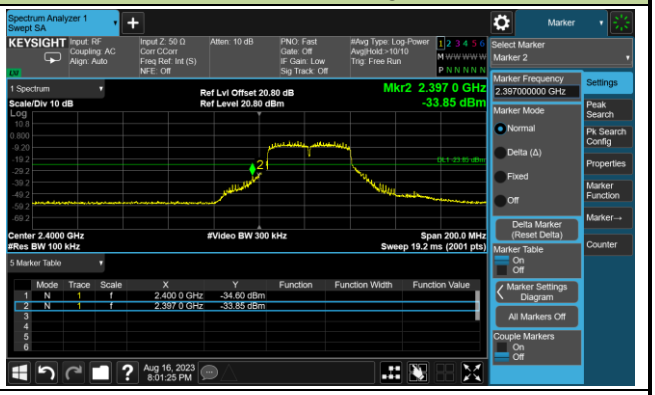
802.11b Out-of-Band Emissions - SISO Mode Ant 1	
Channel 11 (2462MHz)	
100kHz PSD Reference Level	High Band Edge
	
Spurious Emission	
	

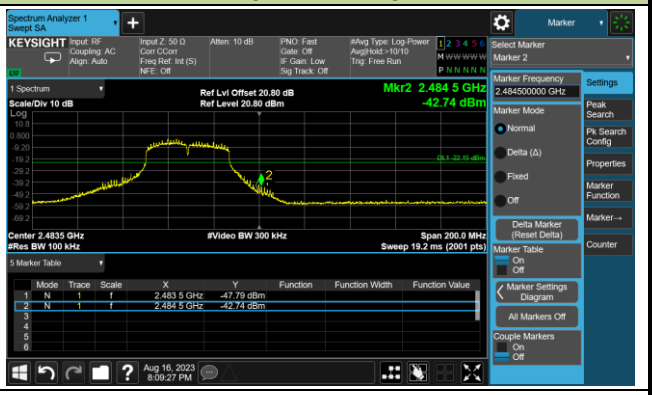
802.11g Out-of-Band Emissions - SISO Mode Ant 1	
Channel 01 (2412MHz)	
100kHz PSD Reference Level	Low Band Edge
	
Spurious Emission	
	
Channel 06 (2437MHz)	
100kHz PSD Reference Level	Spurious Emission
	

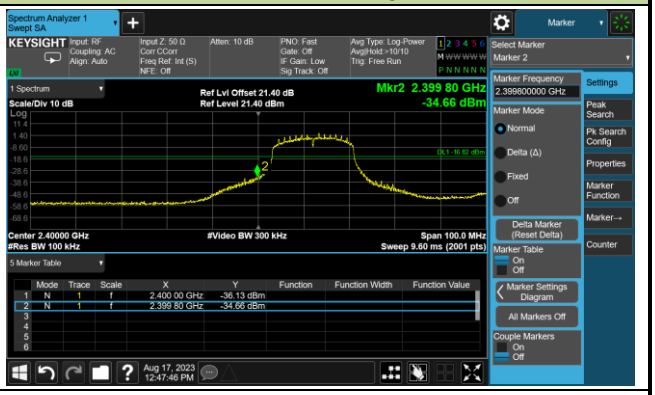
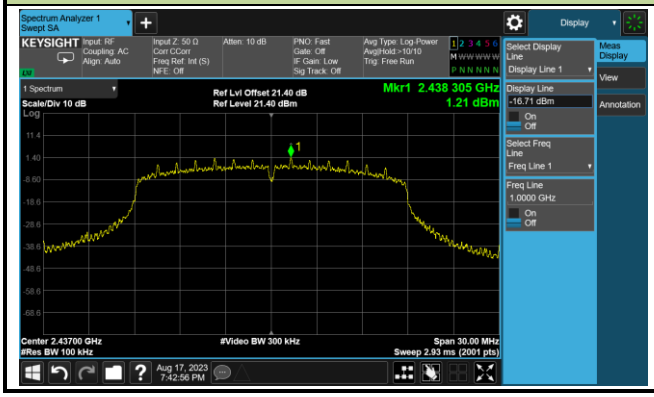
802.11g Out-of-Band Emissions - SISO Mode Ant 1	
Channel 11 (2462MHz)	
100kHz PSD Reference Level	High Band Edge
	
Spurious Emission	
	

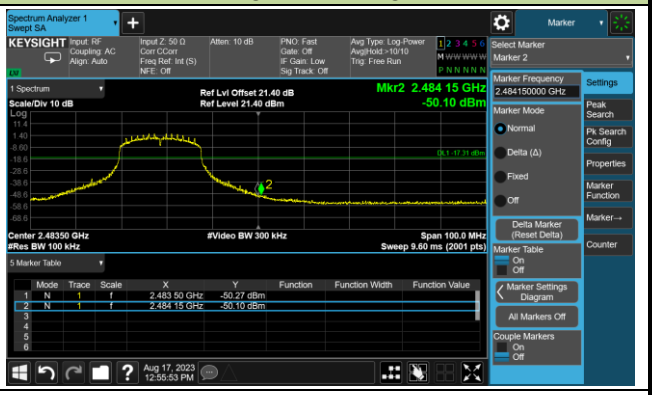
802.11n-HT20 Out-of-Band Emissions - MIMO Mode Ant 0	
Channel 01 (2412MHz)	
100kHz PSD Reference Level	Low Band Edge
	
Spurious Emission	
	
Channel 06 (2437MHz)	
100kHz PSD Reference Level	Spurious Emission
	

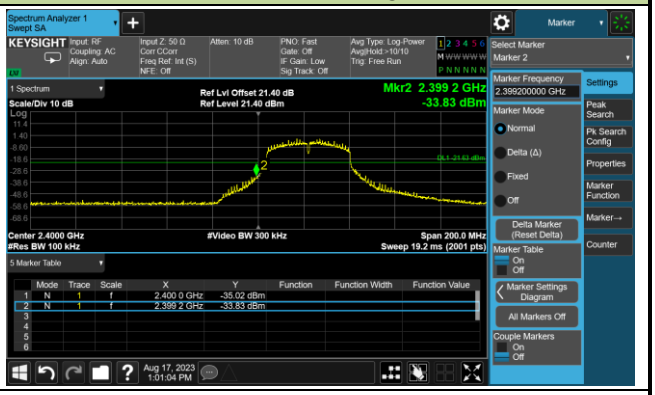
802.11n-HT20 Out-of-Band Emissions - MIMO Mode Ant 0	
Channel 11 (2462MHz)	
100kHz PSD Reference Level	High Band Edge
	
Spurious Emission	
	

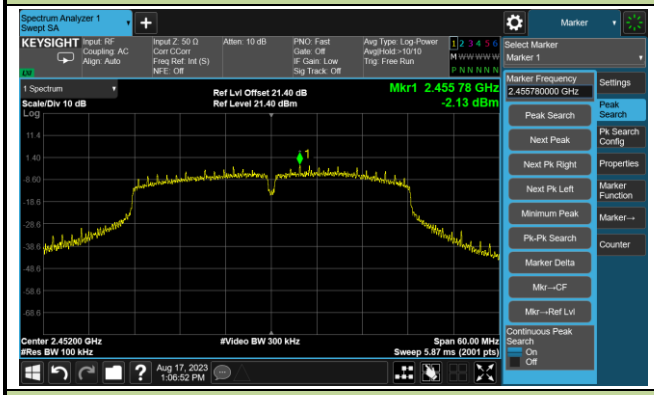
802.11n-HT40 Out-of-Band Emissions - MIMO Mode Ant 0	
Channel 03 (2422MHz)	
100kHz PSD Reference Level	Low Band Edge
	
Spurious Emission	
	
Channel 06 (2437MHz)	
100kHz PSD Reference Level	Spurious Emission
	

802.11n-HT40 Out-of-Band Emissions - MIMO Mode Ant 0	
Channel 09 (2452MHz)	
100kHz PSD Reference Level	High Band Edge
	
Spurious Emission	
	

802.11n-HT20 Out-of-Band Emissions - MIMO Mode 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 - MIMO Mode Ant 1	
Channel 11 (2462MHz)	
100kHz PSD Reference Level	High Band Edge
	
Spurious Emission	
	

802.11n-HT40 Out-of-Band Emissions - MIMO Mode 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 - MIMO Mode Ant 1	
Channel 09 (2452MHz)	
100kHz PSD Reference Level	High Band Edge
	
Spurious Emission	
	

A.6 Radiated Spurious Emission Test Result

Test Site	SIP-AC1	Test Engineer	Arvin Ding
Test Date	2023-08-15 ~ 2023-08-16	Test Mode	802.11b - SISO Mode Ant 0
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	64.2	-9.8	54.4	74.0	-19.6	Peak	Horizontal
	4825.0	63.3	-9.8	53.5	54.0	-0.5	Average	Horizontal
	7570.5	46.7	-5.9	40.8	74.0	-33.2	Peak	Horizontal
	11285.0	46.1	-3.4	42.7	74.0	-31.3	Peak	Horizontal
	4825.0	63.5	-9.8	53.7	74.0	-20.3	Peak	Vertical
	4825.0	62.0	-9.8	52.2	54.0	-1.8	Average	Vertical
	7715.0	47.8	-6.1	41.7	74.0	-32.3	Peak	Vertical
	10996.0	47.3	-4.1	43.2	74.0	-30.8	Peak	Vertical
06	4876.0	62.5	-9.8	52.7	74.0	-21.3	Peak	Horizontal
	4876.0	61.6	-9.8	51.8	54.0	-2.2	Average	Horizontal
	7579.0	46.6	-5.8	40.8	74.0	-33.2	Peak	Horizontal
	11897.0	45.9	-2.9	43.0	74.0	-31.0	Peak	Horizontal
	4876.0	64.1	-9.8	54.3	74.0	-19.7	Peak	Vertical
	4876.0	62.8	-9.8	53.0	54.0	-1.0	Average	Vertical
	7698.0	47.9	-5.9	42.0	74.0	-32.0	Peak	Vertical
	10758.0	47.1	-4.3	42.8	74.0	-31.2	Peak	Vertical
11	4927.0	63.7	-9.6	54.1	74.0	-19.9	Peak	Horizontal
	4927.0	62.9	-9.6	53.3	54.0	-0.7	Average	Horizontal
	8471.5	46.3	-5.5	40.8	74.0	-33.2	Peak	Horizontal
	12279.5	44.7	-2.8	41.9	74.0	-32.1	Peak	Horizontal
	4927.0	63.9	-9.6	54.3	74.0	-19.7	Peak	Vertical
	4927.0	62.6	-9.6	53.0	54.0	-1.0	Average	Vertical
	7383.5	48.3	-6.5	41.8	74.0	-32.2	Peak	Vertical
	10860.0	46.5	-3.9	42.6	74.0	-31.4	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-AC1	Test Engineer	Arvin Ding
Test Date	2023-08-15 ~ 2023-08-16	Test Mode:	802.11g - SISO Mode Ant 0
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	64.9	-9.7	55.2	74.0	-18.8	Peak	Horizontal
	4833.5	54.3	-9.7	44.6	54.0	-9.4	Average	Horizontal
	7570.5	46.9	-5.9	41.0	74.0	-33.0	Peak	Horizontal
	11540.0	45.2	-3.4	41.8	74.0	-32.2	Peak	Horizontal
	4825.0	64.3	-9.8	54.5	74.0	-19.5	Peak	Vertical
	4825.0	53.3	-9.8	43.5	54.0	-10.5	Average	Vertical
	8420.5	46.9	-5.6	41.3	74.0	-32.7	Peak	Vertical
	11353.0	45.2	-2.9	42.3	74.0	-31.7	Peak	Vertical
06	4876.0	62.2	-9.8	52.4	74.0	-21.6	Peak	Horizontal
	4876.0	53.2	-9.8	43.4	54.0	-10.6	Average	Horizontal
	8123.0	47.1	-6.0	41.1	74.0	-32.9	Peak	Horizontal
	10860.0	46.8	-3.9	42.9	74.0	-31.1	Peak	Horizontal
	4876.0	61.7	-9.8	51.9	74.0	-22.1	Peak	Vertical
	4876.0	52.7	-9.8	42.9	54.0	-11.1	Average	Vertical
	8216.5	47.8	-5.4	42.4	74.0	-31.6	Peak	Vertical
	11421.0	46.3	-3.3	43.0	74.0	-31.0	Peak	Vertical
11	4927.0	61.8	-9.6	52.2	74.0	-21.8	Peak	Horizontal
	4927.0	51.9	-9.6	42.3	54.0	-11.7	Average	Horizontal
	7400.5	47.8	-6.6	41.2	74.0	-32.8	Peak	Horizontal
	10800.5	46.5	-4.0	42.5	74.0	-31.5	Peak	Horizontal
	4927.0	59.7	-9.6	50.1	74.0	-23.9	Peak	Vertical
	4927.0	51.8	-9.6	42.2	54.0	-11.8	Average	Vertical
	7392.0	50.8	-6.6	44.2	74.0	-29.8	Peak	Vertical
	11667.5	46.3	-3.6	42.7	74.0	-31.3	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-AC1	Test Engineer	Arvin Ding
Test Date	2023-08-15 ~ 2023-08-16	Test Mode	802.11b - SISO Mode Ant 1
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	61.9	-9.8	52.1	74.0	-21.9	Peak	Horizontal
	4825.0	60.9	-9.8	51.1	54.0	-2.9	Average	Horizontal
	7655.5	48.2	-6.3	41.9	74.0	-32.1	Peak	Horizontal
	11353.0	45.0	-2.9	42.1	74.0	-31.9	Peak	Horizontal
	4825.0	63.6	-9.8	53.8	74.0	-20.2	Peak	Vertical
	4825.0	62.7	-9.8	52.9	54.0	-1.1	Average	Vertical
	7579.0	47.4	-5.8	41.6	74.0	-32.4	Peak	Vertical
	11863.0	46.5	-3.3	43.2	74.0	-30.8	Peak	Vertical
06	4876.0	64.4	-9.8	54.6	74.0	-19.4	Peak	Horizontal
	4876.0	63.6	-9.8	53.8	54.0	-0.2	Average	Horizontal
	7689.5	47.0	-6.0	41.0	74.0	-33.0	Peak	Horizontal
	11370.0	45.5	-3.0	42.5	74.0	-31.5	Peak	Horizontal
	4876.0	64.5	-9.8	54.7	74.0	-19.3	Peak	Vertical
	4876.0	63.5	-9.8	53.7	54.0	-0.3	Average	Vertical
	7732.0	47.0	-6.0	41.0	74.0	-33.0	Peak	Vertical
	11769.5	46.5	-3.4	43.1	74.0	-30.9	Peak	Vertical
11	4927.0	64.1	-9.6	54.5	74.0	-19.5	Peak	Horizontal
	4927.0	63.3	-9.6	53.7	54.0	-0.3	Average	Horizontal
	7307.0	48.0	-6.9	41.1	74.0	-32.9	Peak	Horizontal
	11140.5	45.7	-3.8	41.9	74.0	-32.1	Peak	Horizontal
	4927.0	64.1	-9.6	54.5	74.0	-19.5	Peak	Vertical
	4927.0	63.3	-9.6	53.7	54.0	-0.3	Average	Vertical
	8165.5	46.9	-5.5	41.4	74.0	-32.6	Peak	Vertical
	11820.5	45.5	-3.0	42.5	74.0	-31.5	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-AC1	Test Engineer	Arvin Ding
Test Date	2023-08-15 ~ 2023-08-16	Test Mode:	802.11g - SISO Mode Ant 1
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	64.5	-9.8	54.7	74.0	-19.3	Peak	Horizontal
	4825.0	54.6	-9.8	44.8	54.0	-9.2	Average	Horizontal
	7723.5	47.3	-6.0	41.3	74.0	-32.7	Peak	Horizontal
	12186.0	45.4	-2.8	42.6	74.0	-31.4	Peak	Horizontal
	4816.5	61.3	-9.9	51.4	74.0	-22.6	Peak	Vertical
	4816.5	54.6	-9.9	44.7	54.0	-9.3	Average	Vertical
	8165.5	48.6	-5.5	43.1	74.0	-30.9	Peak	Vertical
	11693.0	46.4	-3.3	43.1	74.0	-30.9	Peak	Vertical
06	4876.0	69.3	-9.8	59.5	74.0	-14.5	Peak	Horizontal
	4876.0	60.9	-9.8	51.1	54.0	-2.9	Average	Horizontal
	7689.5	47.7	-6.0	41.7	74.0	-32.3	Peak	Horizontal
	10936.5	46.6	-4.0	42.6	74.0	-31.4	Peak	Horizontal
	4876.0	68.1	-9.8	58.3	74.0	-15.7	Peak	Vertical
	4876.0	60.8	-9.8	51.0	54.0	-3.0	Average	Vertical
	7604.5	48.8	-6.2	42.6	74.0	-31.4	Peak	Vertical
	11234.0	46.1	-3.6	42.5	74.0	-31.5	Peak	Vertical
11	4927.0	62.8	-9.6	53.2	74.0	-20.8	Peak	Horizontal
	4927.0	53.7	-9.6	44.1	54.0	-9.9	Average	Horizontal
	7681.0	47.5	-6.0	41.5	74.0	-32.5	Peak	Horizontal
	12135.0	47.3	-3.1	44.2	74.0	-29.8	Peak	Horizontal
	4918.5	61.9	-9.6	52.3	74.0	-21.7	Peak	Vertical
	4918.5	53.4	-9.6	43.8	54.0	-10.2	Average	Vertical
	7587.5	47.7	-6.0	41.7	74.0	-32.3	Peak	Vertical
	10834.5	47.4	-4.2	43.2	74.0	-30.8	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	2023-08-06 ~ 2023-08-15	Test Mode:	802.11n-HT20 - MIMO Mode
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	56.8	-6.3	50.5	74.0	-23.5	Peak	Horizontal
	8106.0	41.4	3.4	44.8	74.0	-29.2	Peak	Horizontal
	11506.0	41.0	8.1	49.1	74.0	-24.9	Peak	Horizontal
	4825.0	60.7	-6.3	54.4	74.0	-19.6	Peak	Vertical
	4825.0	49.1	-6.3	42.8	54.0	-11.2	Average	Vertical
	8114.5	41.7	3.4	45.1	74.0	-28.9	Peak	Vertical
	10783.5	41.7	7.1	48.8	74.0	-25.2	Peak	Vertical
06	4876.0	58.6	-6.1	52.5	74.0	-21.5	Peak	Horizontal
	4876.0	47.7	-6.1	41.6	54.0	-12.4	Average	Horizontal
	7477.0	42.2	2.2	44.4	74.0	-29.6	Peak	Horizontal
	10775.0	41.1	7.0	48.1	74.0	-25.9	Peak	Horizontal
	4876.0	59.4	-6.1	53.3	74.0	-20.7	Peak	Vertical
	4876.0	48.4	-6.1	42.3	54.0	-11.7	Average	Vertical
	8174.0	41.8	2.9	44.7	74.0	-29.3	Peak	Vertical
	11183.0	41.2	7.1	48.3	74.0	-25.7	Peak	Vertical
11	4927.0	57.5	-6.0	51.5	74.0	-22.5	Peak	Horizontal
	4927.0	48.4	-6.0	42.4	54.0	-11.6	Average	Horizontal
	8106.0	41.5	3.4	44.9	74.0	-29.1	Peak	Horizontal
	11497.5	40.9	8.1	49.0	74.0	-25.0	Peak	Horizontal
	4927.0	59.6	-6.0	53.6	74.0	-20.4	Peak	Vertical
	4927.0	48.2	-6.0	42.2	54.0	-11.8	Average	Vertical
	7383.5	43.6	1.8	45.4	74.0	-28.6	Peak	Vertical
	10911.0	41.0	7.6	48.6	74.0	-25.4	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	2023-08-06 ~ 2023-08-15	Test Mode:	802.11n-HT40 - MIMO Mode
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.		

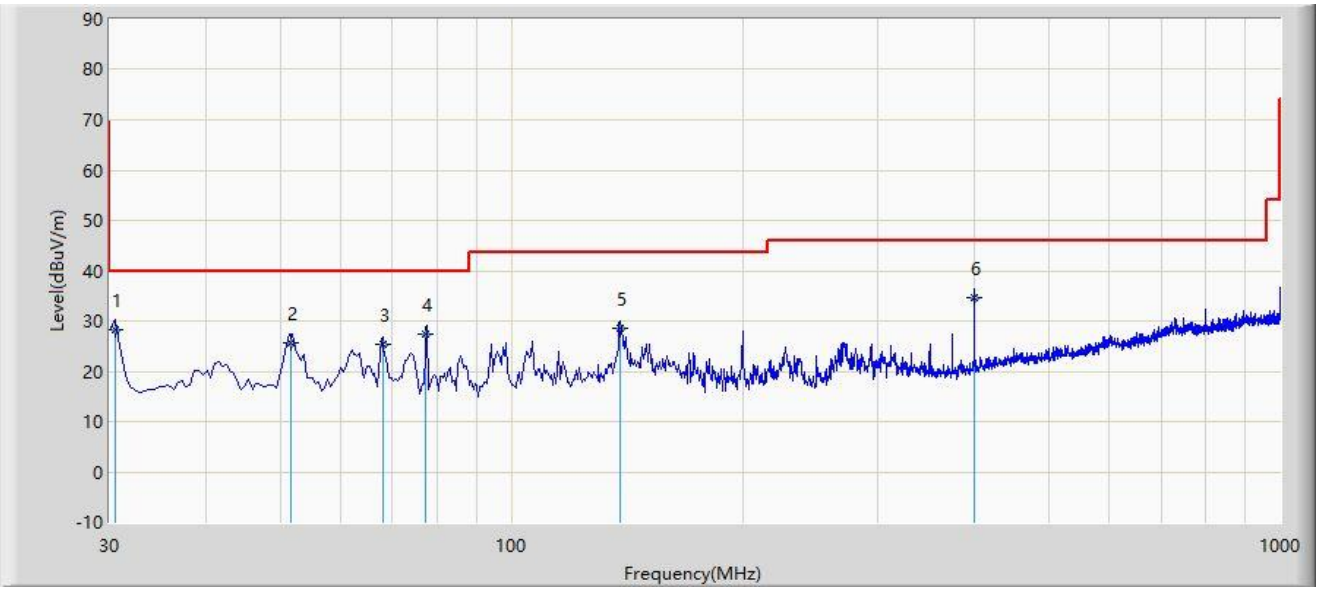
Test Channel	Frequency (MHz)	Reading Level (dBµV)	Factor (dB/m)	Measure Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
03	4842.0	56.1	-9.6	46.5	74.0	-27.5	Peak	Horizontal
	8369.5	47.0	-5.2	41.8	74.0	-32.2	Peak	Horizontal
	11820.5	47.0	-3.0	44.0	74.0	-30.0	Peak	Horizontal
	4842.0	57.4	-9.6	47.8	74.0	-26.2	Peak	Vertical
	8199.5	47.7	-5.3	42.4	74.0	-31.6	Peak	Vertical
	12135.0	46.7	-3.1	43.6	74.0	-30.4	Peak	Vertical
06	4876.0	54.0	-6.1	47.9	74.0	-26.1	Peak	Horizontal
	7613.0	42.7	1.7	44.4	74.0	-29.6	Peak	Horizontal
	11472.0	41.3	7.7	49.0	74.0	-25.0	Peak	Horizontal
	4876.0	56.5	-6.1	50.4	74.0	-23.6	Peak	Vertical
	8140.0	41.5	3.0	44.5	74.0	-29.5	Peak	Vertical
	10885.5	41.5	7.5	49.0	74.0	-25.0	Peak	Vertical
09	4901.5	55.5	-5.9	49.6	74.0	-24.4	Peak	Horizontal
	8114.5	41.5	3.4	44.9	74.0	-29.1	Peak	Horizontal
	10945.0	41.7	7.4	49.1	74.0	-24.9	Peak	Horizontal
	4901.5	56.7	-5.9	50.8	74.0	-23.2	Peak	Vertical
	8106.0	41.8	3.4	45.2	74.0	-28.8	Peak	Vertical
	11565.5	41.5	7.8	49.3	74.0	-24.7	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)

The Result of Radiated Emission below 1GHz:

Site: SIP-AC1	Test Date: 2023-08-04
Limit: FCC_Part15.209_RSE(3m)	Engineer: Arvin Ding
Probe: VULB 9168_00998_25-2000MHz	Polarity: Horizontal
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2437MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		30.560	28.288	11.550	-11.712	40.000	16.739	QP
2		51.770	25.778	7.900	-14.222	40.000	17.878	QP
3		67.960	25.438	9.400	-14.562	40.000	16.038	QP
4		77.410	27.484	13.420	-12.516	40.000	14.064	QP
5		138.330	28.412	10.700	-15.088	43.500	17.712	QP
6	*	400.000	34.516	13.770	-11.484	46.000	20.745	QP

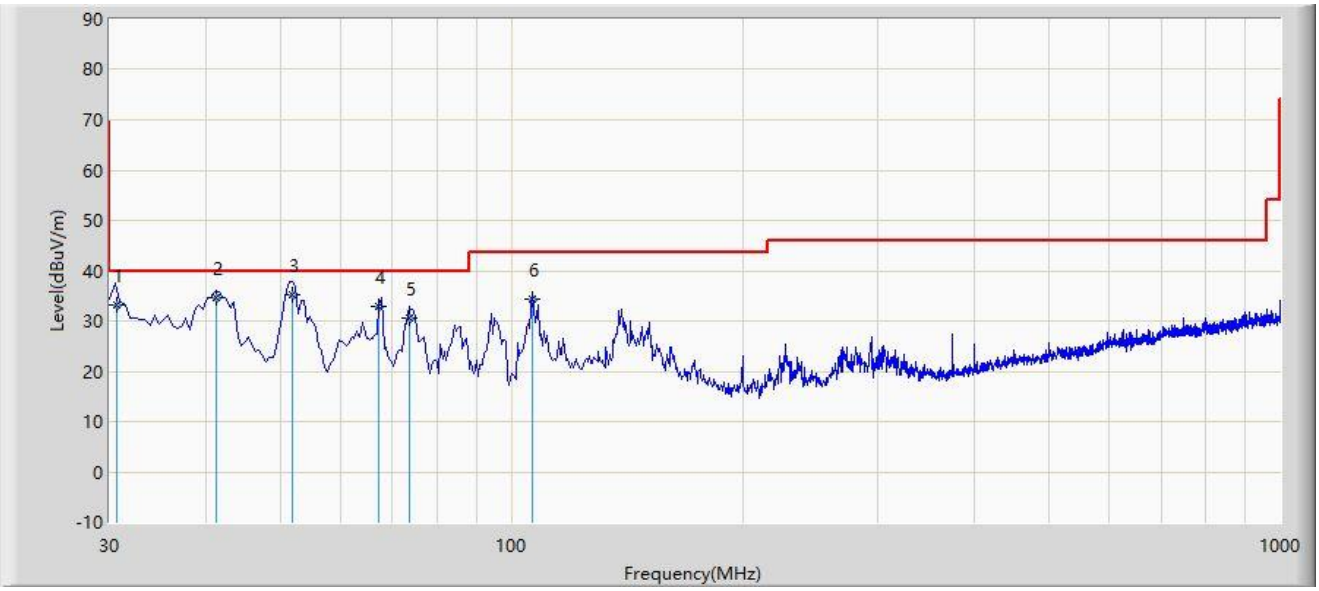
Note 1: " * ", means this data is the worst emission level.

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-AC1	Test Date: 2023-08-04
Limit: FCC_Part15.209_RSE(3m)	Engineer: Arvin Ding
Probe: VULB 9168_00998_25-2000MHz	Polarity: Vertical
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2437MHz	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		30.658	33.249	16.500	-6.751	40.000	16.749	QP
2		41.330	34.765	17.100	-5.235	40.000	17.665	QP
3	*	51.790	35.278	17.400	-4.722	40.000	17.878	QP
4		67.325	32.975	16.800	-7.025	40.000	16.175	QP
5		73.790	30.514	15.600	-9.486	40.000	14.914	QP
6		106.370	34.456	20.140	-9.044	43.500	14.316	QP

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

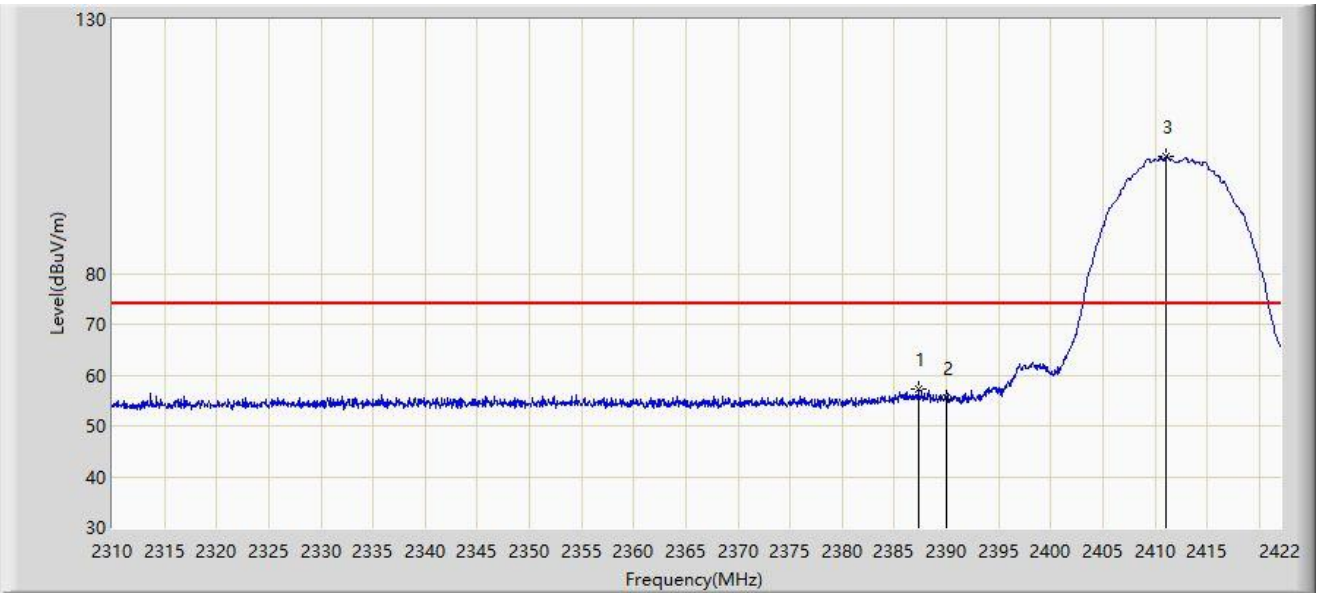
Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Horizontal
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz with Ant 0	



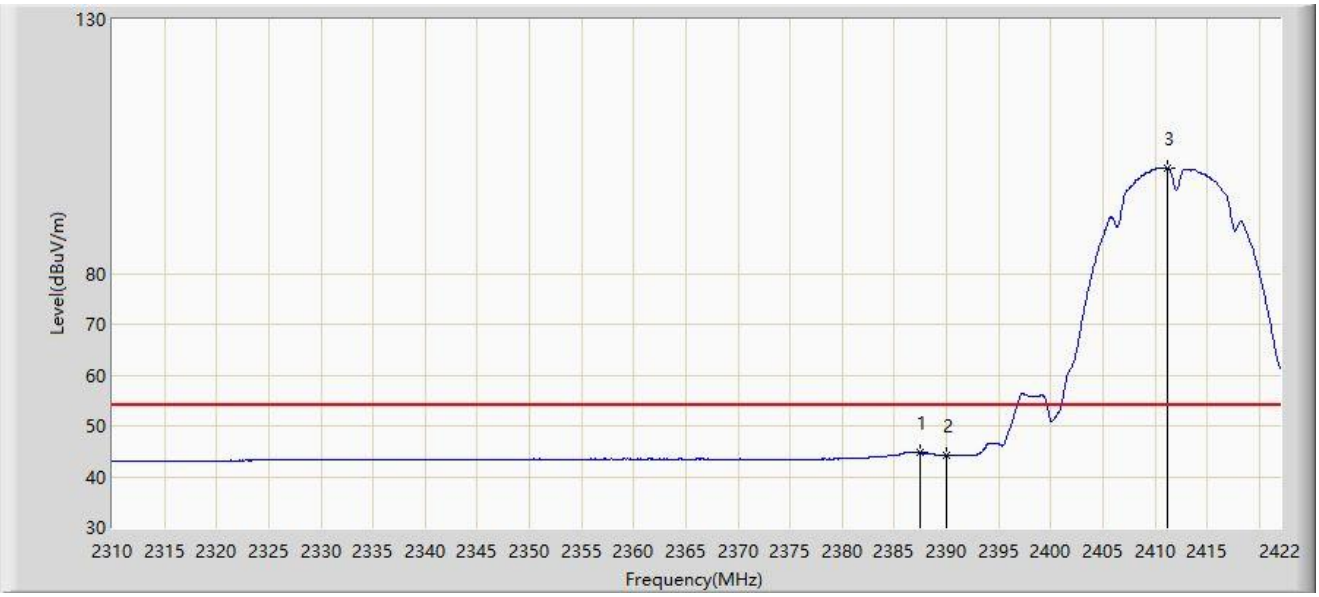
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2387.280	57.116	25.450	-16.884	74.000	31.666	PK
2		2390.000	55.592	23.877	-18.408	74.000	31.715	PK
3		2411.080	102.933	71.130	N/A	N/A	31.803	PK

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Horizontal
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz with Ant 0	



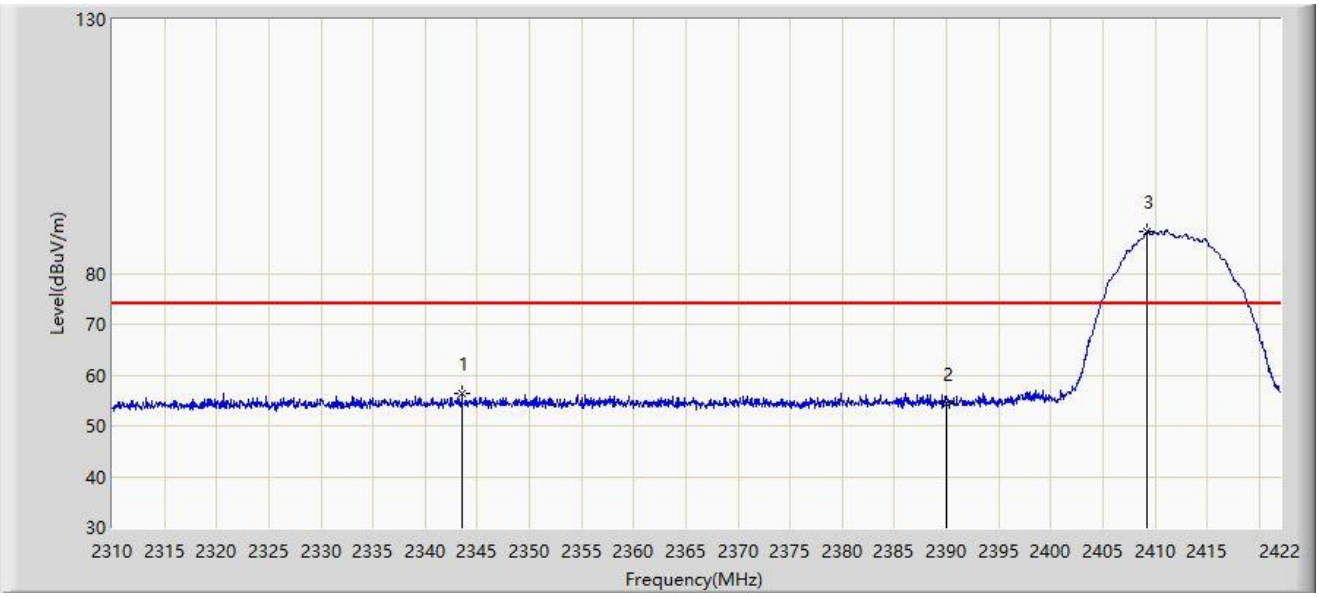
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2387.448	44.677	13.008	-9.323	54.000	31.669	AV
2		2390.000	44.191	12.476	-9.809	54.000	31.715	AV
3		2411.136	100.806	69.002	N/A	N/A	31.803	AV

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Vertical
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz with Ant 0	



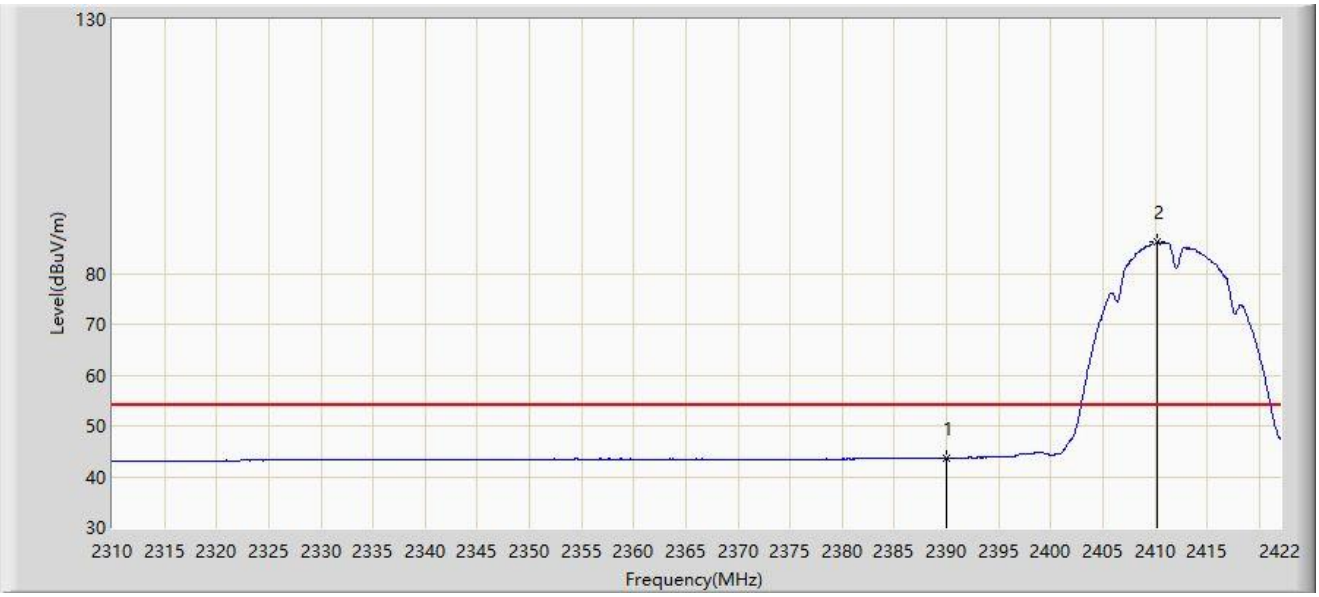
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2343.544	56.441	24.891	-17.559	74.000	31.550	PK
2		2390.000	54.438	22.723	-19.562	74.000	31.715	PK
3		2409.176	88.236	56.434	N/A	N/A	31.802	PK

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Vertical
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz with Ant 0	



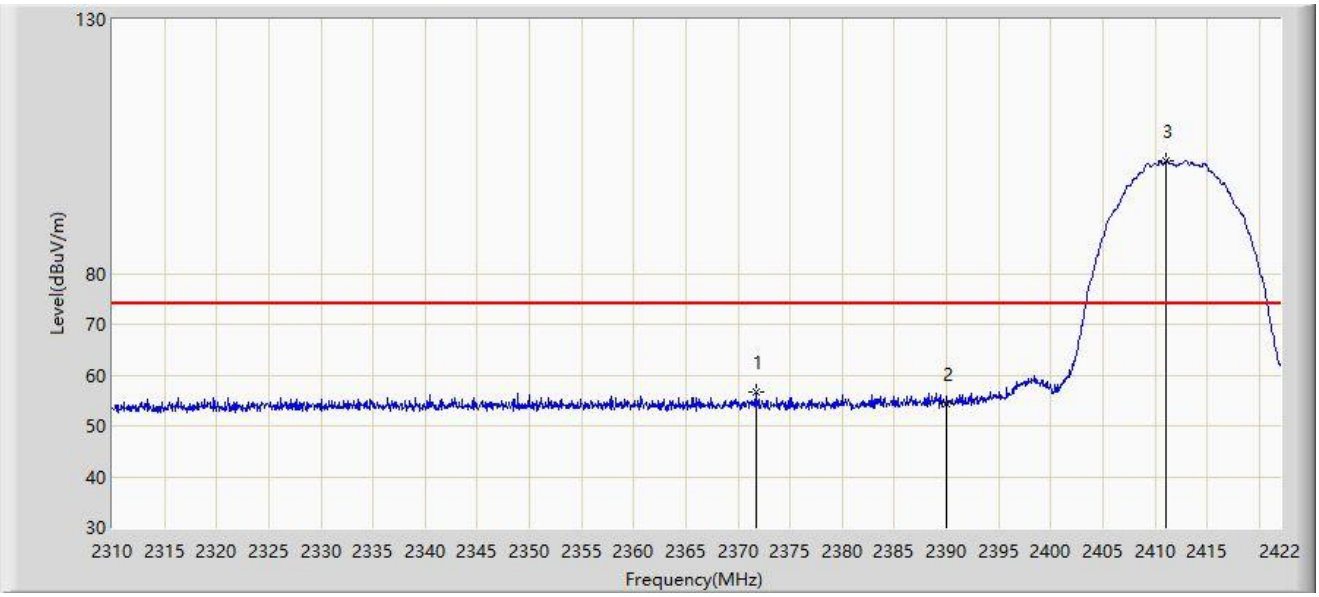
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2390.000	43.754	12.039	-10.246	54.000	31.715	AV
2		2410.184	86.127	54.324	N/A	N/A	31.803	AV

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Horizontal
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz with Ant 1	



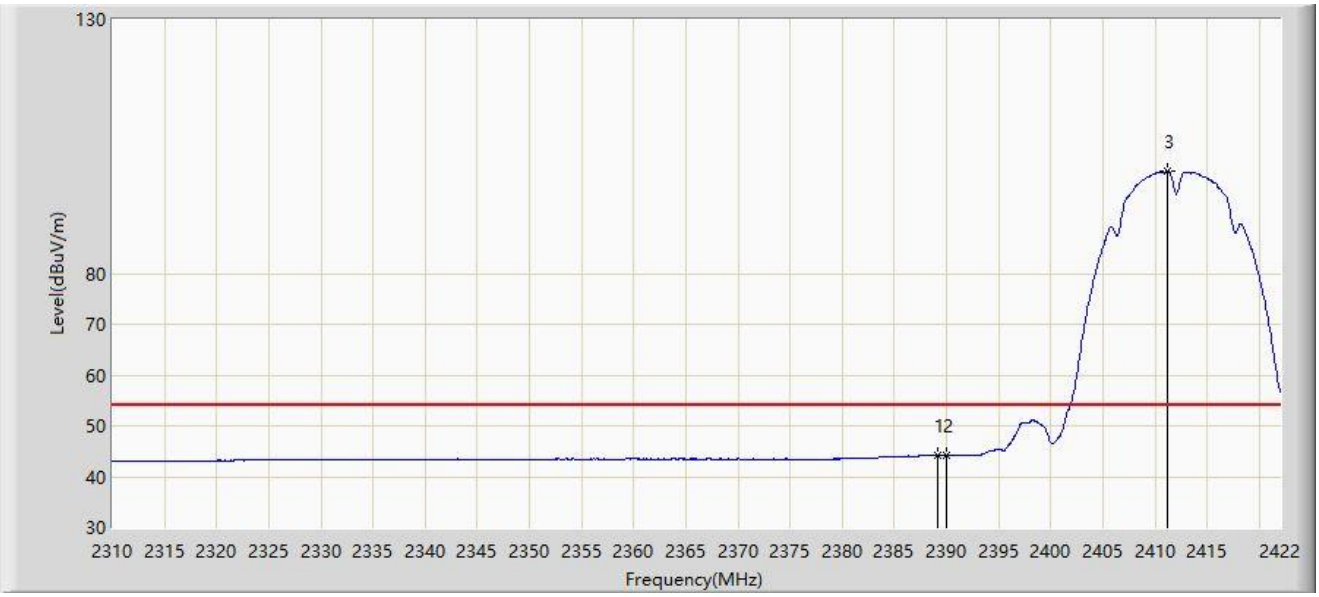
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2371.768	56.768	25.263	-17.232	74.000	31.505	PK
2		2390.000	54.489	22.774	-19.511	74.000	31.715	PK
3		2411.080	102.234	70.431	N/A	N/A	31.803	PK

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Horizontal
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz with Ant 1	



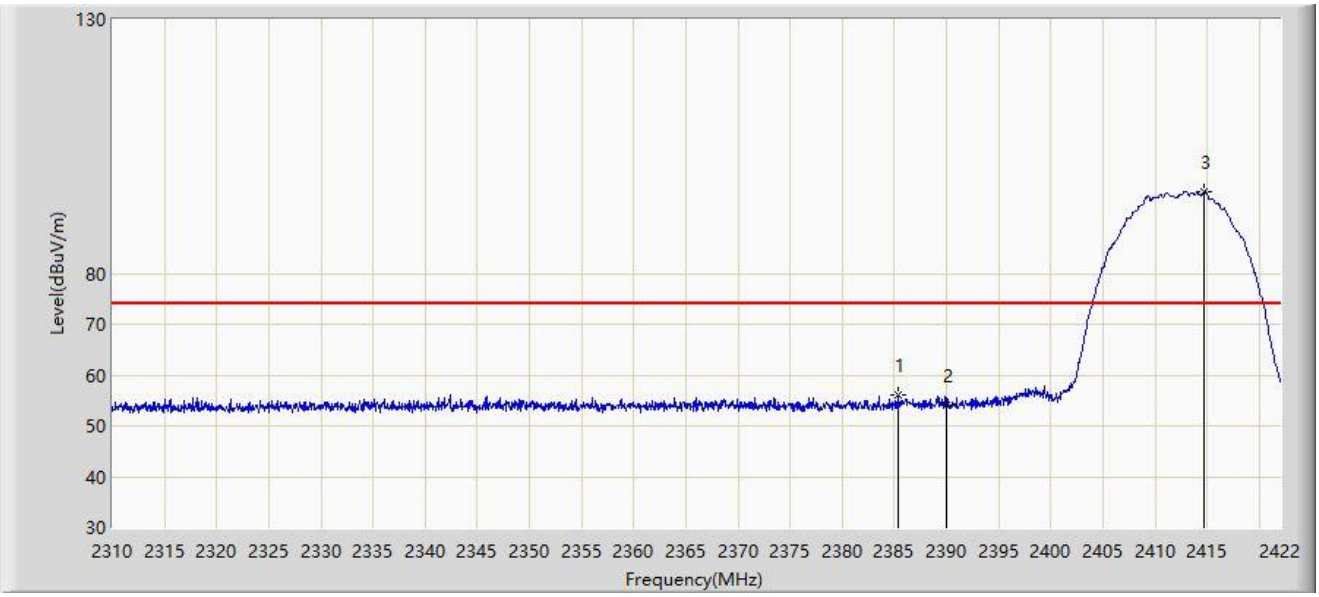
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2389.184	44.204	12.503	-9.796	54.000	31.701	AV
2		2390.000	44.183	12.468	-9.817	54.000	31.715	AV
3		2411.136	100.084	68.280	N/A	N/A	31.803	AV

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Vertical
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz with Ant 1	



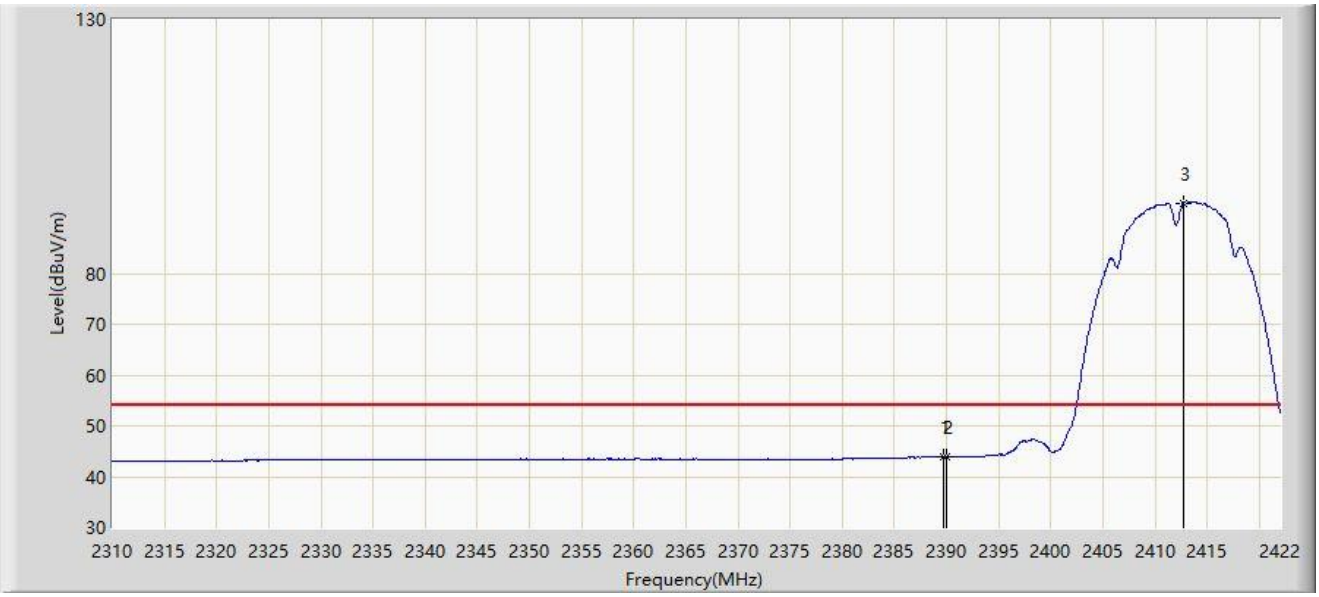
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2385.320	56.012	24.382	-17.988	74.000	31.630	PK
2		2390.000	54.062	22.347	-19.938	74.000	31.715	PK
3		2414.664	96.023	64.211	N/A	N/A	31.812	PK

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Vertical
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz with Ant 1	



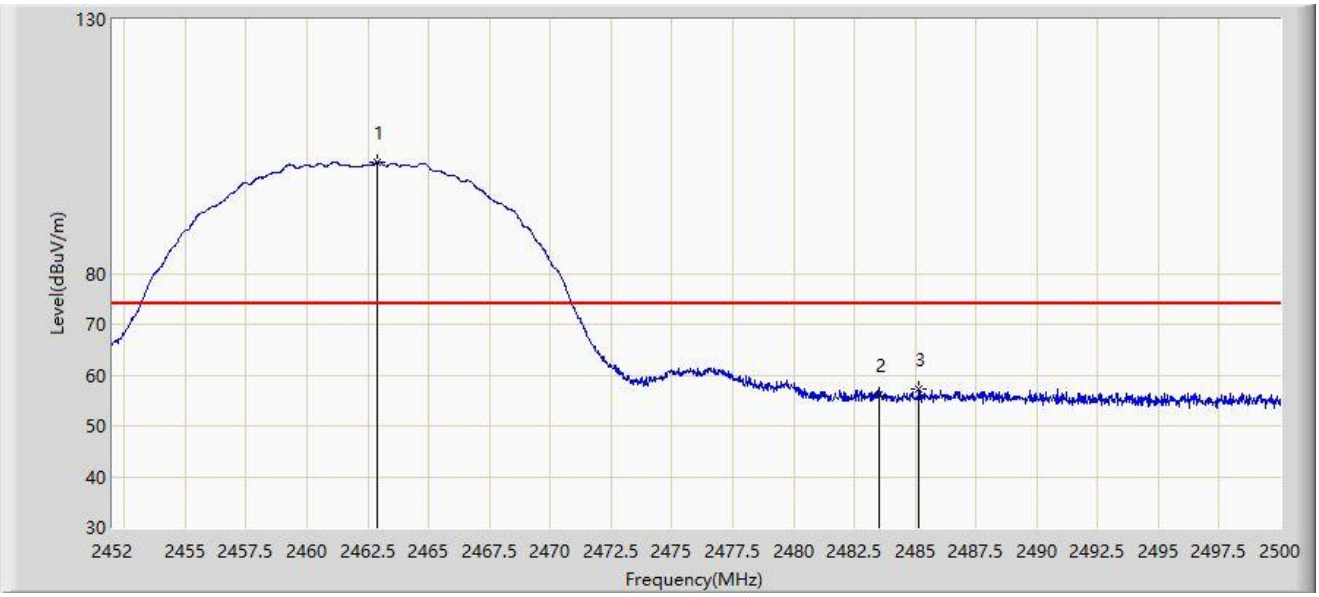
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2389.688	43.918	12.208	-10.082	54.000	31.710	AV
2		2390.000	43.884	12.169	-10.116	54.000	31.715	AV
3		2412.704	93.862	62.055	N/A	N/A	31.807	AV

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Horizontal
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2462MHz with Ant 0	



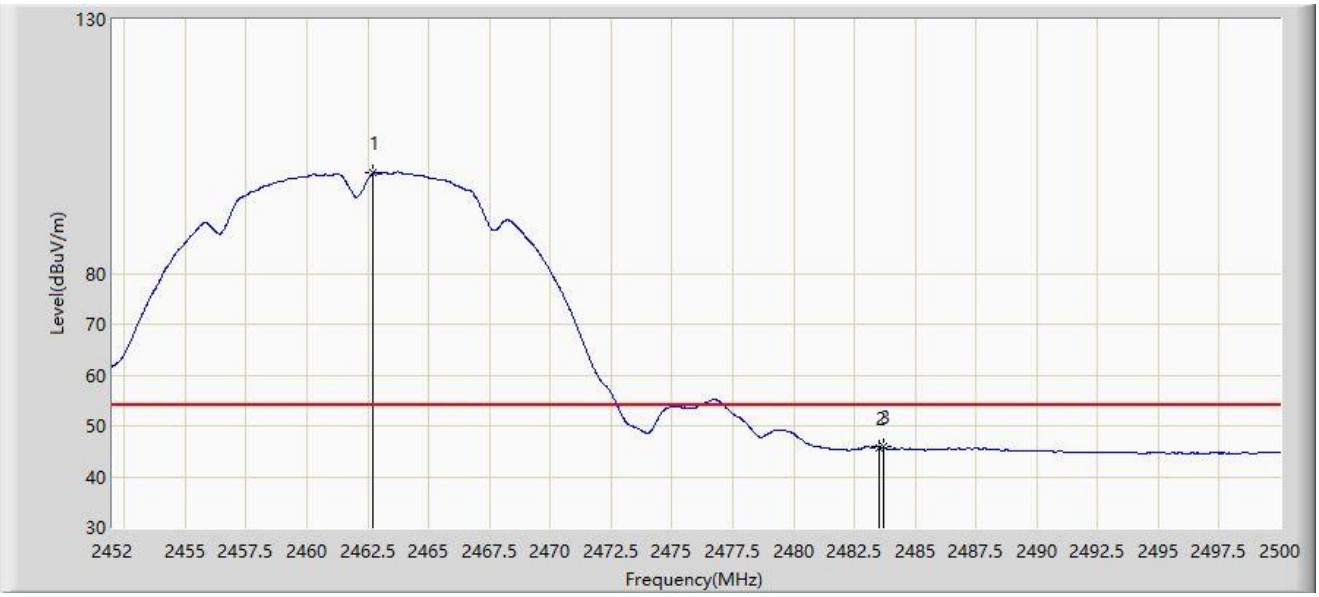
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2462.872	101.922	69.879	N/A	N/A	32.043	PK
2		2483.500	56.079	23.989	-17.921	74.000	32.090	PK
3	*	2485.168	57.182	25.090	-16.818	74.000	32.092	PK

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Horizontal
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2462MHz with Ant 0	



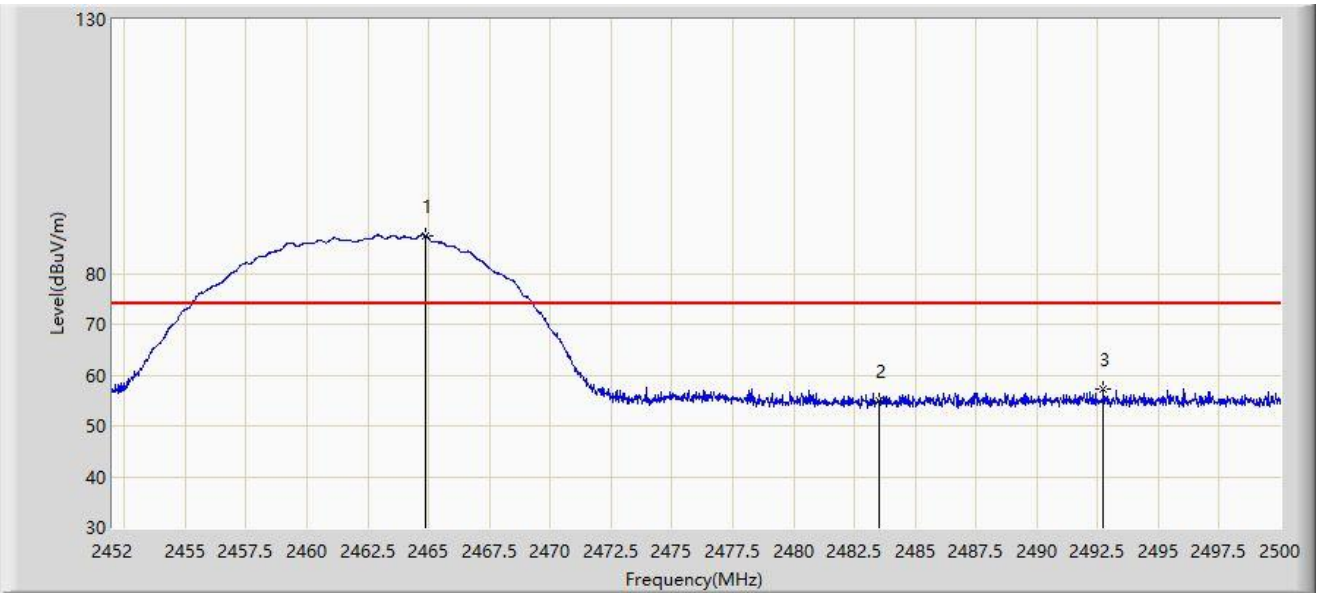
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2462.728	99.767	67.724	N/A	N/A	32.043	AV
2		2483.500	45.790	13.700	-8.210	54.000	32.090	AV
3	*	2483.728	45.821	13.731	-8.179	54.000	32.090	AV

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Vertical
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2462MHz with Ant 0	



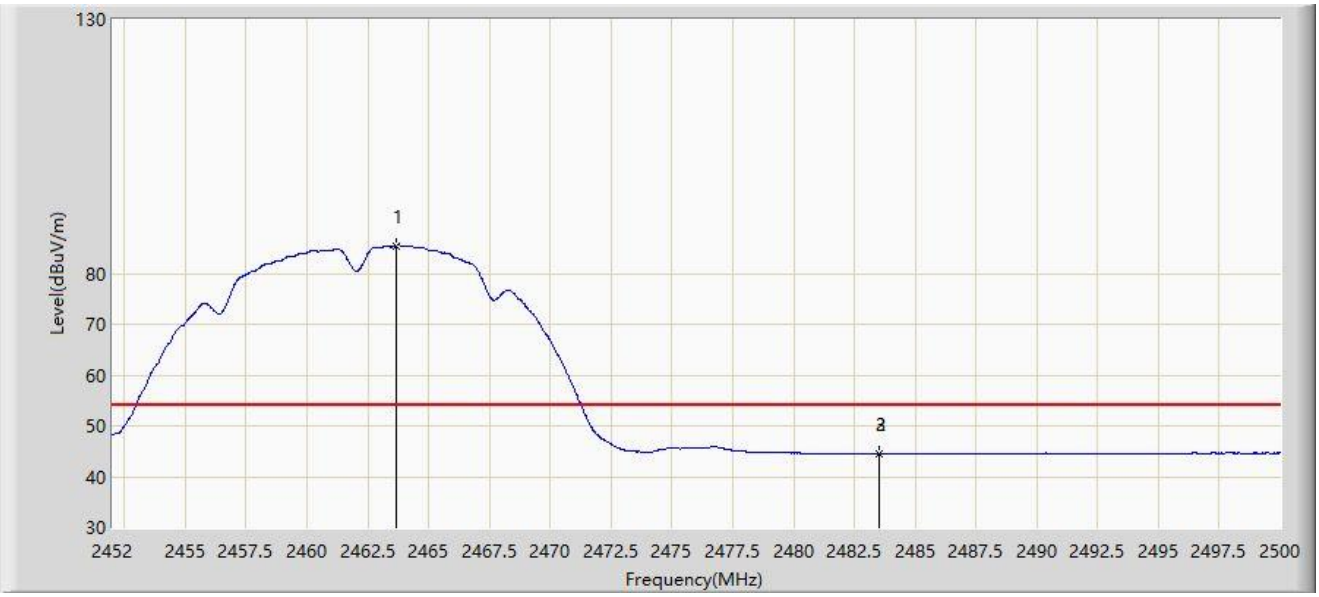
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2464.888	87.390	55.342	N/A	N/A	32.048	PK
2		2483.500	54.996	22.906	-19.004	74.000	32.090	PK
3	*	2492.728	57.220	25.118	-16.780	74.000	32.102	PK

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Vertical
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2462MHz with Ant 0	



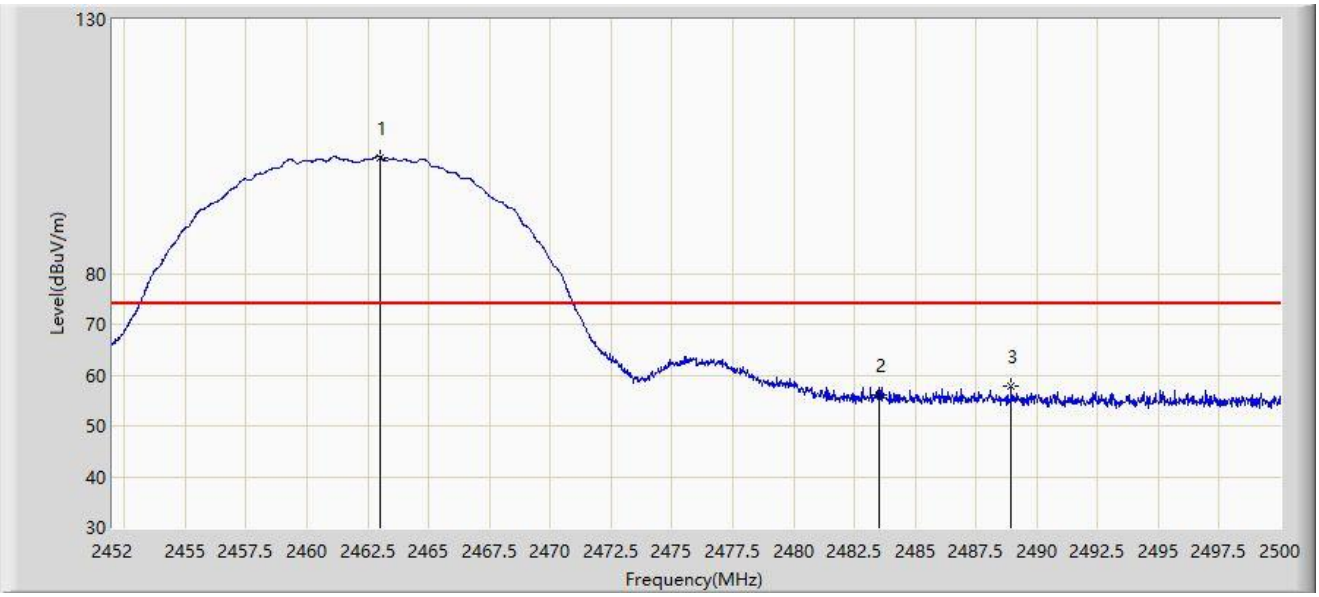
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2463.664	85.468	53.423	N/A	N/A	32.045	AV
2		2483.500	44.562	12.472	-9.438	54.000	32.090	AV
3	*	2483.536	44.579	12.489	-9.421	54.000	32.090	AV

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Horizontal
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2462MHz with Ant 1	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2463.016	102.856	70.812	N/A	N/A	32.044	PK
2		2483.500	56.151	24.061	-17.849	74.000	32.090	PK
3	*	2488.960	57.922	25.825	-16.078	74.000	32.097	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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Horizontal
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2462MHz with Ant 1	

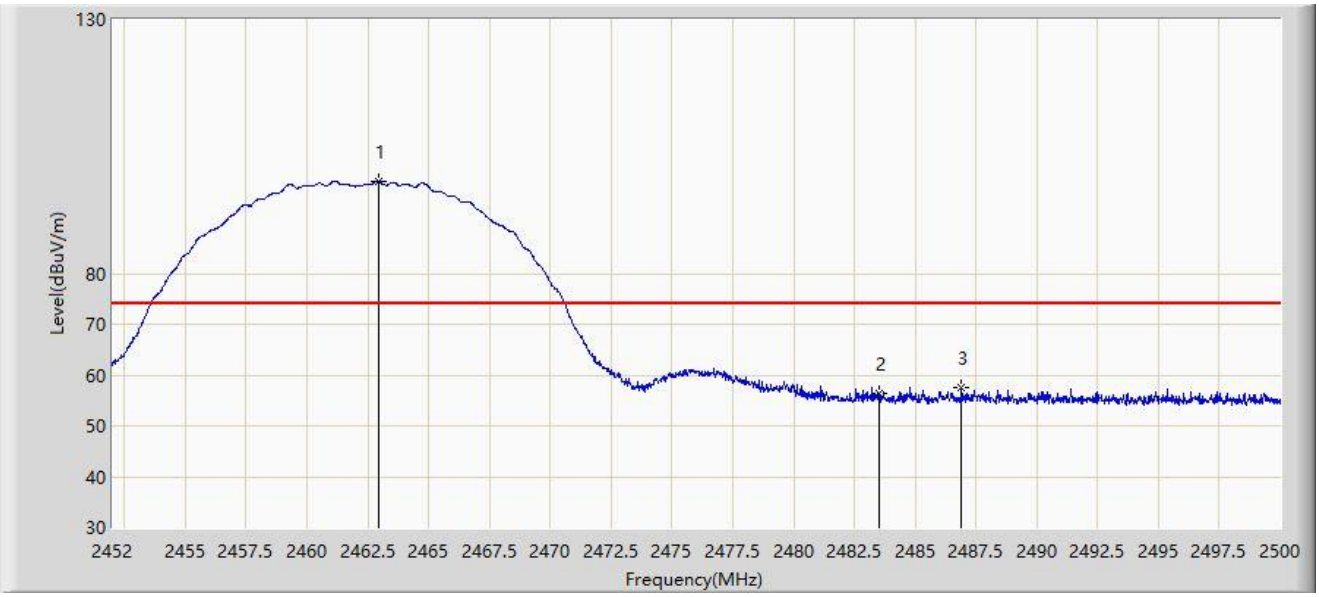
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2461.072	100.755	68.721	N/A	N/A	32.034	AV
2		2483.500	45.719	13.629	-8.281	54.000	32.090	AV
3	*	2483.608	45.868	13.778	-8.132	54.000	32.090	AV

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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Vertical
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2462MHz with Ant 1	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2462.944	98.185	66.141	N/A	N/A	32.043	PK
2		2483.500	56.264	24.174	-17.736	74.000	32.090	PK
3	*	2486.896	57.553	25.459	-16.447	74.000	32.094	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-AC1	Test Date: 2023-08-18
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Vertical
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2462MHz with Ant 1	

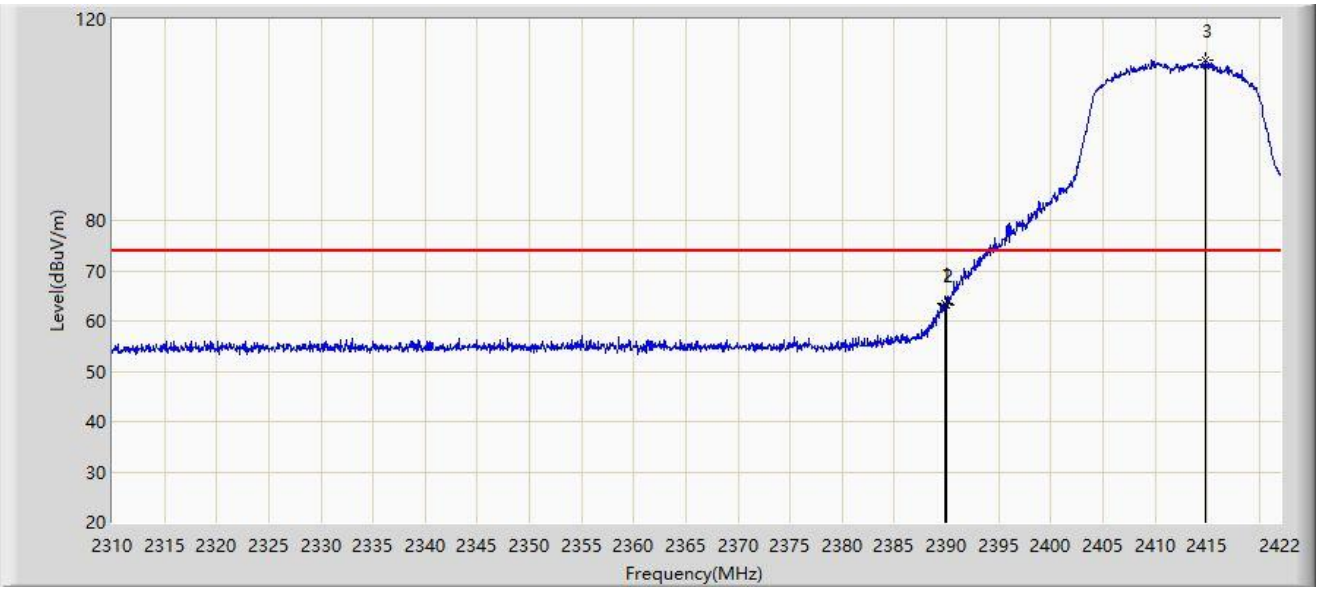
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2461.312	96.033	63.997	N/A	N/A	32.037	AV
2	*	2483.500	45.263	13.173	-8.737	54.000	32.090	AV

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-AC1	Test Date: 2023-08-15
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Horizontal
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at 2412MHz with Ant 0	



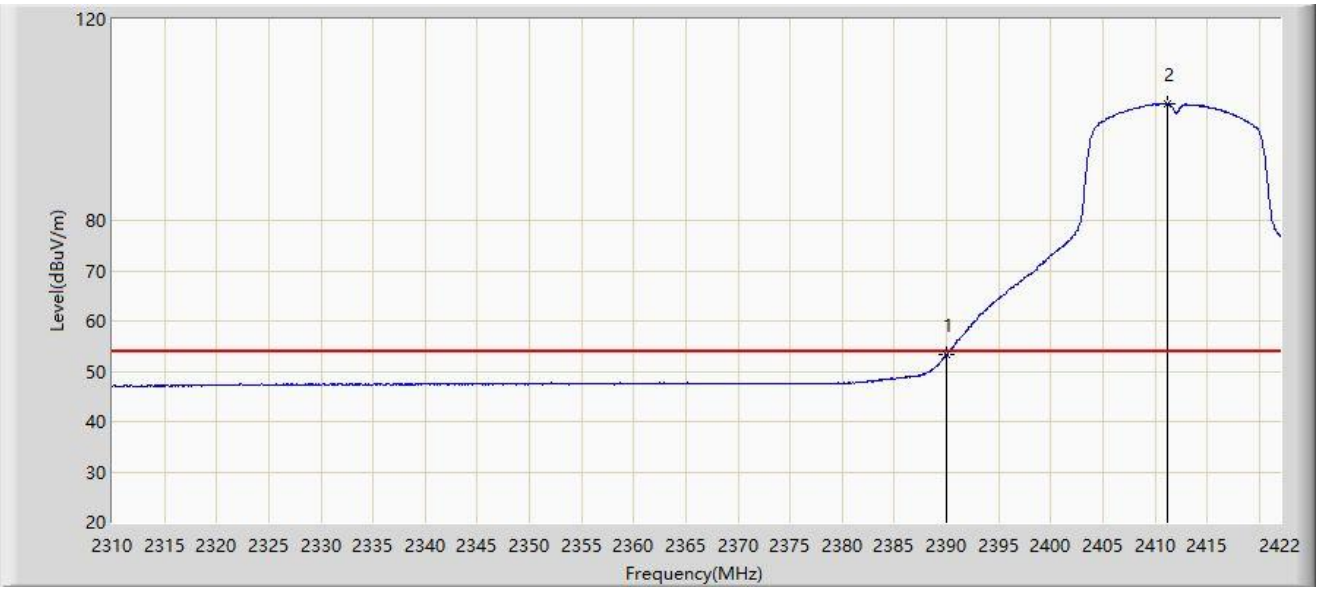
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2389.800	63.453	31.741	-10.547	74.000	31.711	PK
2		2390.000	63.095	31.380	-10.905	74.000	31.715	PK
3		2414.776	111.855	80.043	N/A	N/A	31.812	PK

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-AC1	Test Date: 2023-08-15
Limit: FCC_2.4G_RE(3m)	Engineer: Arvin Ding
Probe: HF907_102862_1-18GHz	Polarity: Horizontal
EUT: Industrial Cellular VPN Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at 2412MHz with Ant 0	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2390.000	53.342	21.627	-0.658	54.000	31.715	AV
2		2411.136	103.087	71.283	N/A	N/A	31.803	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).