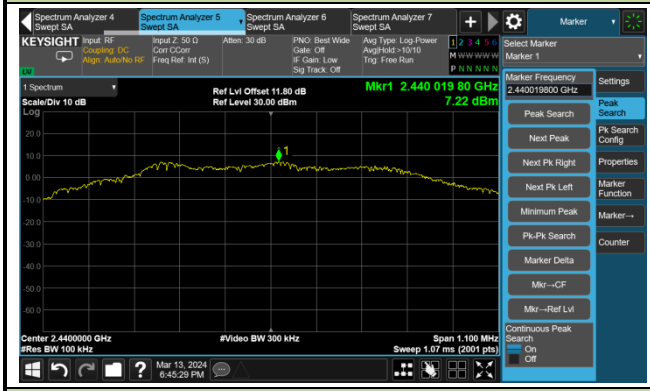
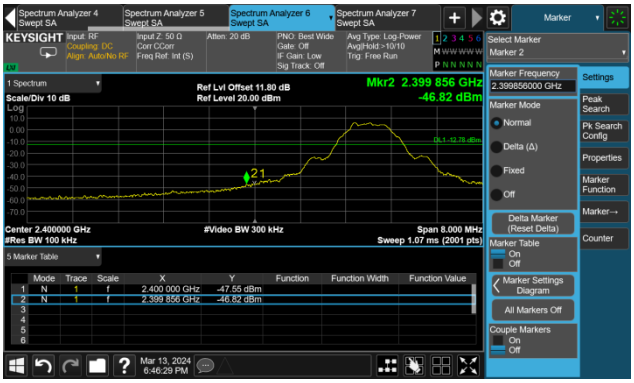
BLE-500kbps Out-of-Band Emissions

Channel 00 (2402MHz)

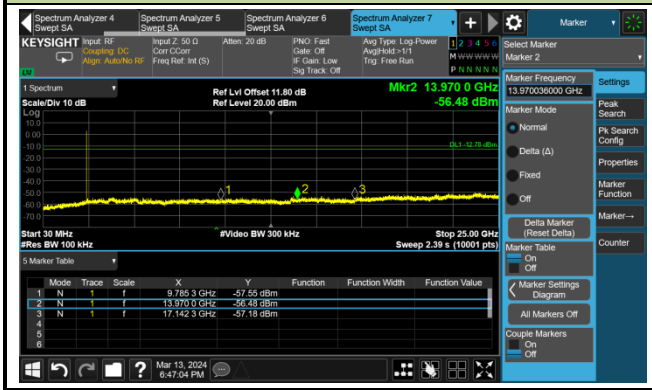
100kHz PSD Reference Level



Low Band Edge

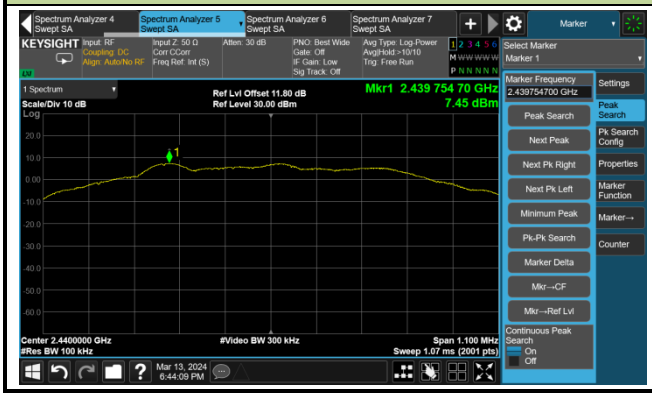


Spurious Emission 30MHz ~ 25GHz

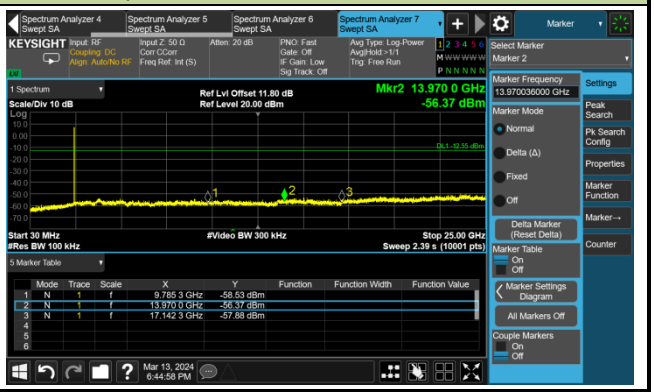


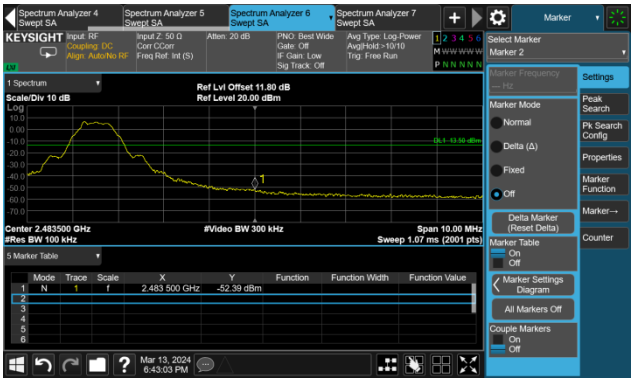
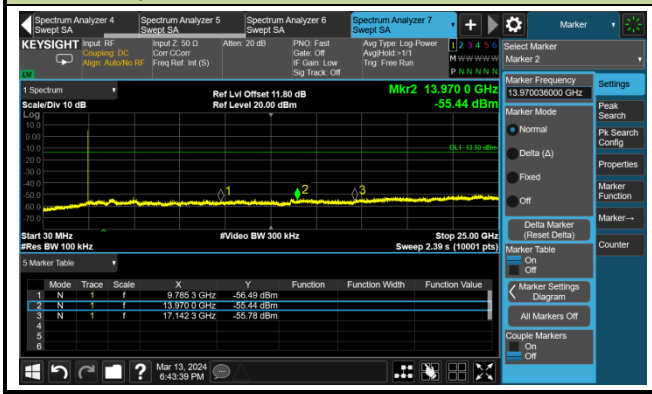
Channel 19 (2440MHz)

100kHz PSD Reference Level



Spurious Emission 30MHz ~ 25GHz



Channel 39 (2480MHz)	
100kHz PSD Reference Level	High Band Edge
	
Spurious Emission 30MHz ~ 25GHz	
	

A.6 Radiated Spurious Emission Test Result

Test Site	WZ-AC1	Test Engineer	Bob Zhang
Test Date	2024-03-15	Test Mode	BLE-1Mbps
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
00	4017.5	40.0	0.9	40.9	74.0	-33.1	Peak	Horizontal
	4740.0	39.0	2.9	41.9	74.0	-32.1	Peak	Horizontal
	7477.0	38.1	8.6	46.7	74.0	-27.3	Peak	Horizontal
	3881.5	40.0	0.7	40.7	74.0	-33.3	Peak	Vertical
	4808.0	41.8	3.0	44.8	74.0	-29.2	Peak	Vertical
	7434.5	39.0	8.5	47.5	74.0	-26.5	Peak	Vertical
19	3847.5	40.0	0.4	40.4	74.0	-33.6	Peak	Horizontal
	4876.0	40.0	3.1	43.1	74.0	-30.9	Peak	Horizontal
	7460.0	37.9	8.6	46.5	74.0	-27.5	Peak	Horizontal
	4247.0	44.7	1.3	46.0	74.0	-28.0	Peak	Vertical
	4876.0	41.8	3.1	44.9	74.0	-29.1	Peak	Vertical
	8327.0	39.2	8.7	47.9	74.0	-26.1	Peak	Vertical
39	3737.0	40.2	0.1	40.3	74.0	-33.7	Peak	Horizontal
	4961.0	40.5	3.4	43.9	74.0	-30.1	Peak	Horizontal
	7638.5	38.6	8.3	46.9	74.0	-27.1	Peak	Horizontal
	4264.0	42.1	1.5	43.6	74.0	-30.4	Peak	Vertical
	4961.0	44.4	3.4	47.8	74.0	-26.2	Peak	Vertical
	7281.5	38.3	8.4	46.7	74.0	-27.3	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	WZ-AC1	Test Engineer	Bob Zhang
Test Date	2024-03-15	Test Mode:	BLE-2Mbps
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
00	3983.5	39.8	0.9	40.7	74.0	-33.3	Peak	Horizontal
	4867.5	39.0	3.0	42.0	74.0	-32.0	Peak	Horizontal
	7664.0	39.0	8.0	47.0	74.0	-27.0	Peak	Horizontal
	4264.0	43.7	1.5	45.2	74.0	-28.8	Peak	Vertical
	4791.0	42.5	3.2	45.7	74.0	-28.3	Peak	Vertical
	7400.5	38.2	8.5	46.7	74.0	-27.3	Peak	Vertical
19	3839.0	39.2	0.4	39.6	74.0	-34.4	Peak	Horizontal
	4723.0	38.6	3.0	41.6	74.0	-32.4	Peak	Horizontal
	7664.0	38.7	8.0	46.7	74.0	-27.3	Peak	Horizontal
	3881.5	39.9	0.7	40.6	74.0	-33.4	Peak	Vertical
	4876.0	41.8	3.1	44.9	74.0	-29.1	Peak	Vertical
	7545.0	38.9	8.6	47.5	74.0	-26.5	Peak	Vertical
39	3813.5	39.2	0.4	39.6	74.0	-34.4	Peak	Horizontal
	4961.0	41.1	3.4	44.5	74.0	-29.5	Peak	Horizontal
	7545.0	37.6	8.6	46.2	74.0	-27.8	Peak	Horizontal
	3754.0	40.1	0.1	40.2	74.0	-33.8	Peak	Vertical
	4961.0	44.0	3.4	47.4	74.0	-26.6	Peak	Vertical
	7400.5	38.6	8.5	47.1	74.0	-26.9	Peak	Vertical

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

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

Test Site	WZ-AC1	Test Engineer	Bob Zhang
Test Date	2024-03-15	Test Mode:	BLE-125kbps
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
00	3813.5	39.8	0.4	40.2	74.0	-33.8	Peak	Horizontal
	4799.5	38.6	3.1	41.7	74.0	-32.3	Peak	Horizontal
	7613.0	38.2	8.3	46.5	74.0	-27.5	Peak	Horizontal
	4247.0	42.4	1.3	43.7	74.0	-30.3	Peak	Vertical
	4791.0	45.0	3.2	48.2	74.0	-25.8	Peak	Vertical
	7434.5	38.0	8.5	46.5	74.0	-27.5	Peak	Vertical
19	3881.5	39.7	0.7	40.4	74.0	-33.6	Peak	Horizontal
	4876.0	39.7	3.1	42.8	74.0	-31.2	Peak	Horizontal
	7579.0	38.2	8.3	46.5	74.0	-27.5	Peak	Horizontal
	4264.0	41.9	1.5	43.4	74.0	-30.6	Peak	Vertical
	4799.5	45.6	3.1	48.7	74.0	-25.3	Peak	Vertical
	7324.0	39.4	8.2	47.6	74.0	-26.4	Peak	Vertical
39	3890.0	39.1	0.7	39.8	74.0	-34.2	Peak	Horizontal
	4961.0	40.5	3.4	43.9	74.0	-30.1	Peak	Horizontal
	7647.0	38.3	8.2	46.5	74.0	-27.5	Peak	Horizontal
	4255.5	41.5	1.4	42.9	74.0	-31.1	Peak	Vertical
	4799.5	43.0	3.1	46.1	74.0	-27.9	Peak	Vertical
	4961.0	44.5	3.4	47.9	74.0	-26.1	Peak	Vertical

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

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

Test Site	WZ-AC1	Test Engineer	Bob Zhang
Test Date	2024-03-15	Test Mode:	BLE-500kbps
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.		

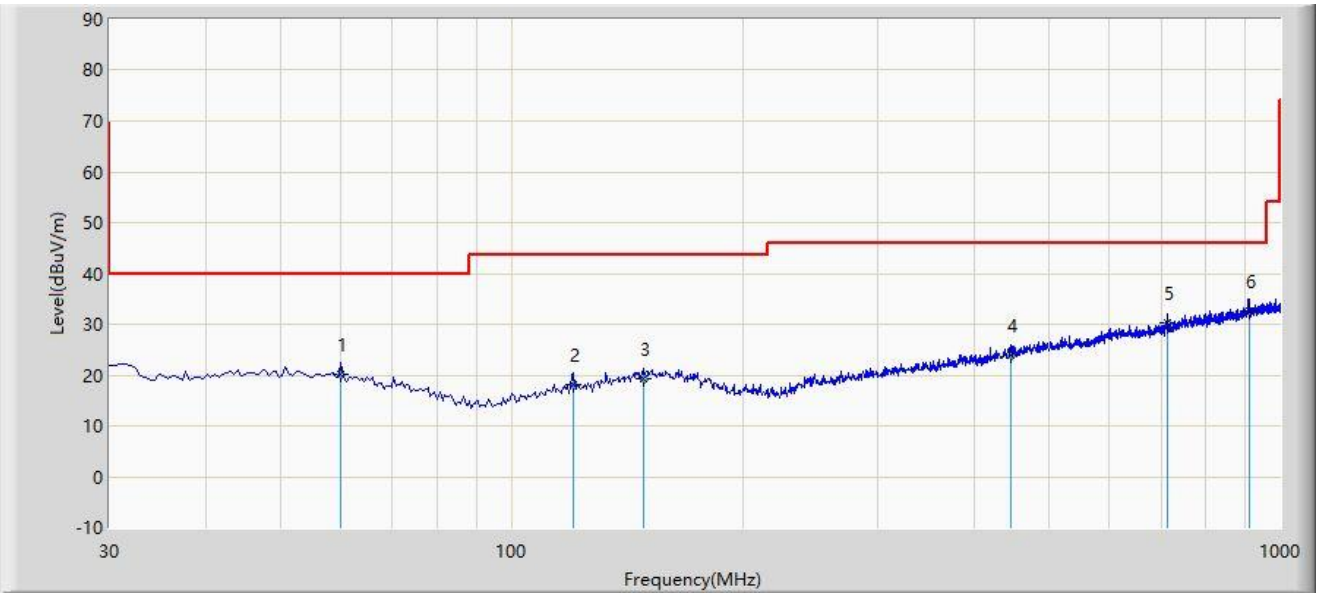
Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
00	4255.5	39.4	1.4	40.8	74.0	-33.2	Peak	Horizontal
	7485.5	38.0	8.6	46.6	74.0	-27.4	Peak	Horizontal
	11761.0	38.0	12.5	50.5	74.0	-23.5	Peak	Horizontal
	4247.0	46.1	1.3	47.4	74.0	-26.6	Peak	Vertical
	4791.0	42.7	3.2	45.9	74.0	-28.1	Peak	Vertical
	7443.0	37.5	8.6	46.1	74.0	-27.9	Peak	Vertical
19	3839.0	39.5	0.4	39.9	74.0	-34.1	Peak	Horizontal
	4884.5	39.2	3.2	42.4	74.0	-31.6	Peak	Horizontal
	7477.0	38.2	8.6	46.8	74.0	-27.2	Peak	Horizontal
	4247.0	41.2	1.3	42.5	74.0	-31.5	Peak	Vertical
	4782.5	43.5	3.0	46.5	74.0	-27.5	Peak	Vertical
	7315.5	38.6	8.3	46.9	74.0	-27.1	Peak	Vertical
39	4255.5	41.2	1.4	42.6	74.0	-31.4	Peak	Horizontal
	4961.0	40.3	3.4	43.7	74.0	-30.3	Peak	Horizontal
	7613.0	38.8	8.3	47.1	74.0	-26.9	Peak	Horizontal
	4799.5	45.6	3.1	48.7	74.0	-25.3	Peak	Vertical
	4961.0	44.0	3.4	47.4	74.0	-26.6	Peak	Vertical
	7443.0	38.5	8.6	47.1	74.0	-26.9	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: WZ-AC1	Test Date: 2024-03-16
Limit: FCC_Part15.209_RSE(3m)	Engineer: Bob Zhang
Probe: VULB 9168_25-2000MHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-2M at 2440MHz	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		60.070	20.163	2.210	-19.837	40.000	17.952	QP
2		120.210	18.047	2.120	-25.453	43.500	15.928	QP
3		148.340	19.364	1.310	-24.136	43.500	18.055	QP
4		445.645	24.031	1.680	-21.969	46.000	22.350	QP
5		712.880	30.249	3.210	-15.751	46.000	27.039	QP
6	*	910.275	32.711	3.210	-13.289	46.000	29.501	QP

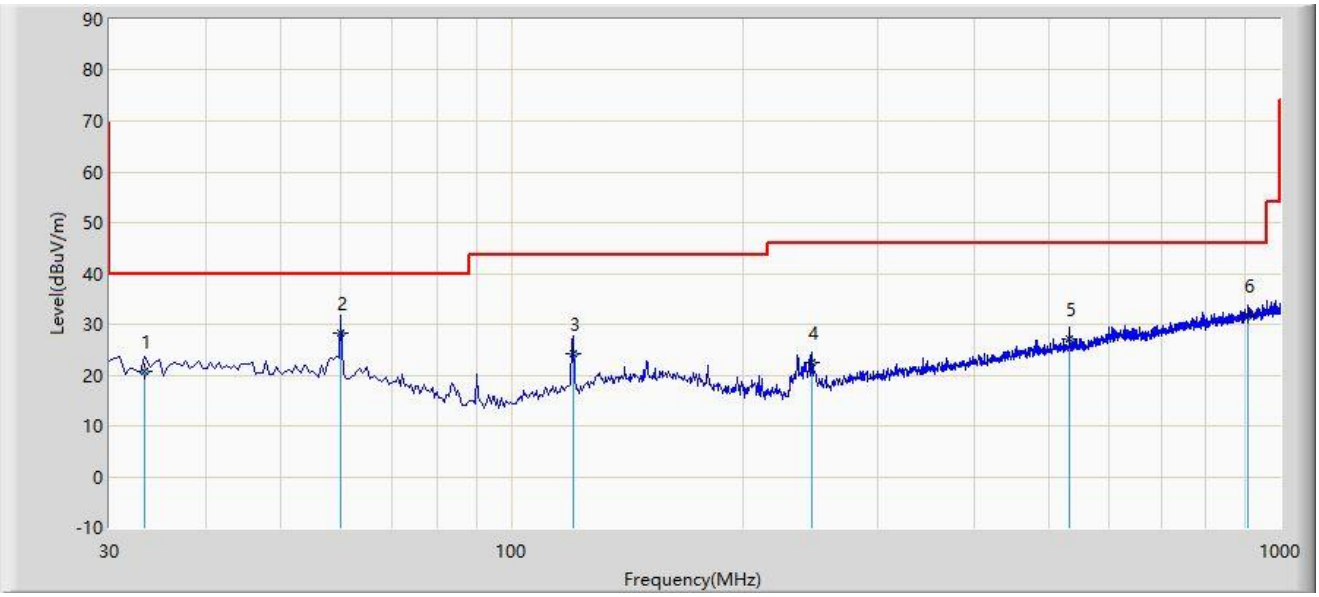
Note 1: " * ", means this data is the worst emission level.

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: WZ-AC1	Test Date: 2024-03-16
Limit: FCC_Part15.209_RSE(3m)	Engineer: Bob Zhang
Probe: VULB 9168_25-2000MHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-2M at 2440MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		33.395	20.704	3.320	-19.296	40.000	17.384	QP
2	*	60.070	28.163	10.210	-11.837	40.000	17.952	QP
3		120.210	24.137	8.210	-19.363	43.500	15.928	QP
4		246.310	22.477	5.810	-23.523	46.000	16.667	QP
5		531.490	27.143	3.250	-18.857	46.000	23.893	QP
6		908.820	31.688	2.210	-14.312	46.000	29.477	QP

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

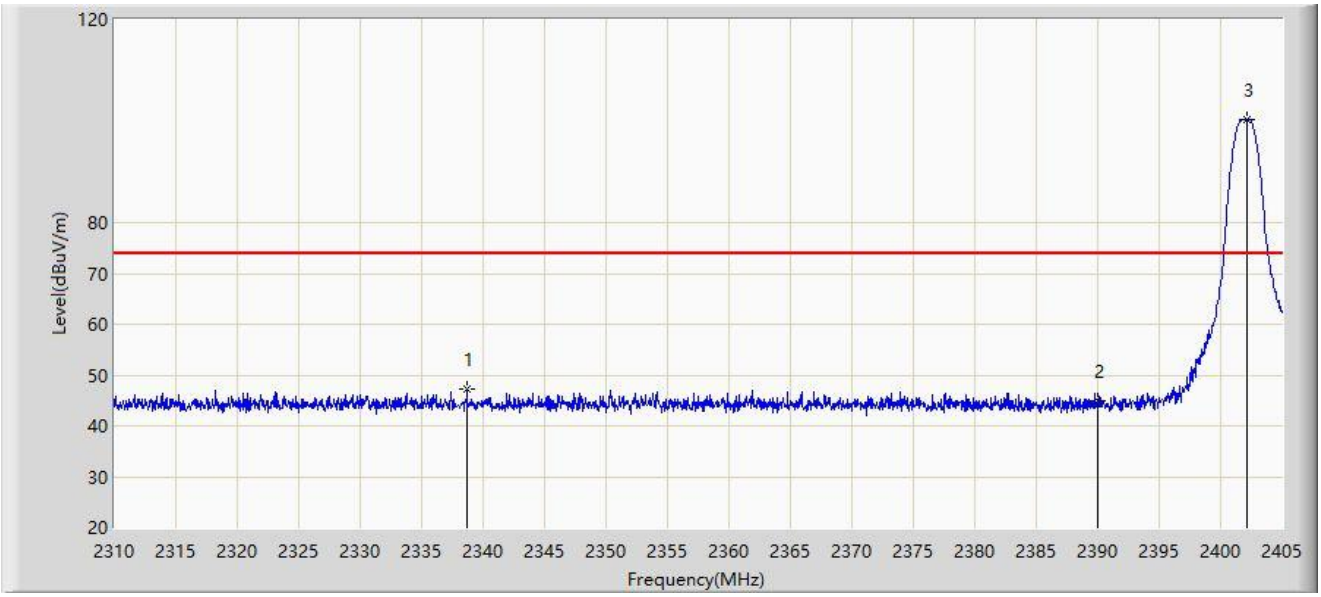
Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-1M at 2402MHz	



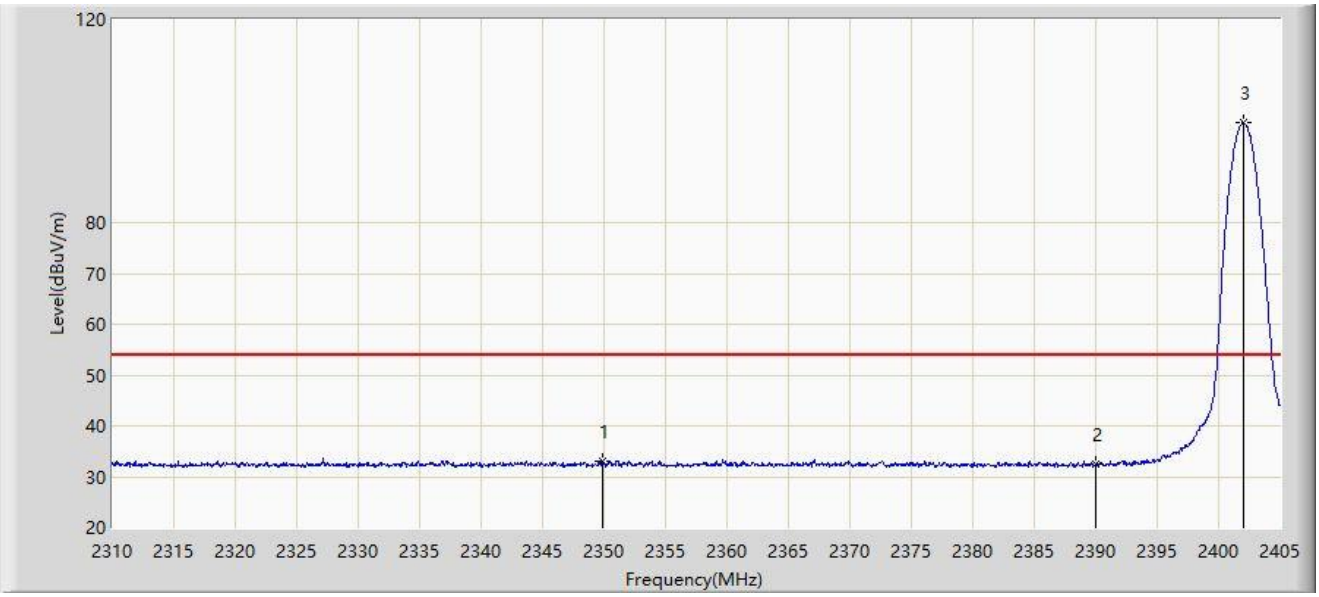
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2338.690	47.120	15.716	-26.880	74.000	31.404	PK
2		2390.000	44.990	13.736	-29.010	74.000	31.254	PK
3		2402.150	100.377	69.119	N/A	N/A	31.258	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-1M at 2402MHz	



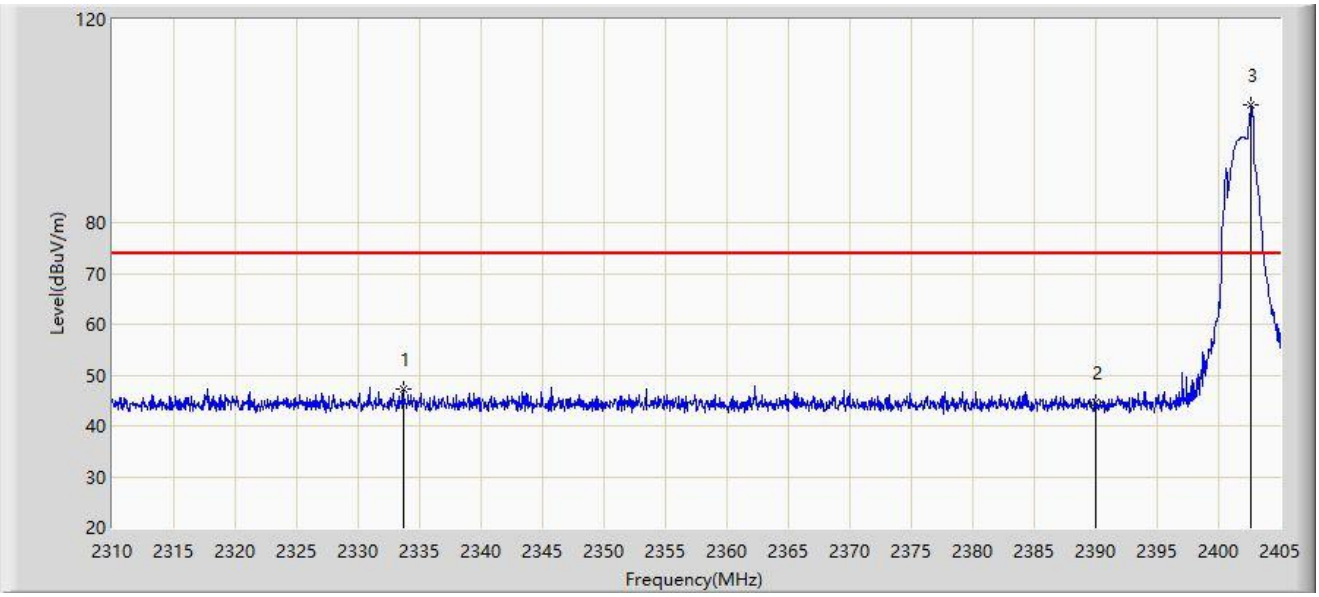
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2349.853	33.063	1.695	-20.937	54.000	31.369	AV
2		2390.000	32.394	1.140	-21.606	54.000	31.254	AV
3		2402.055	99.664	68.406	N/A	N/A	31.258	AV

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-1M at 2402MHz	



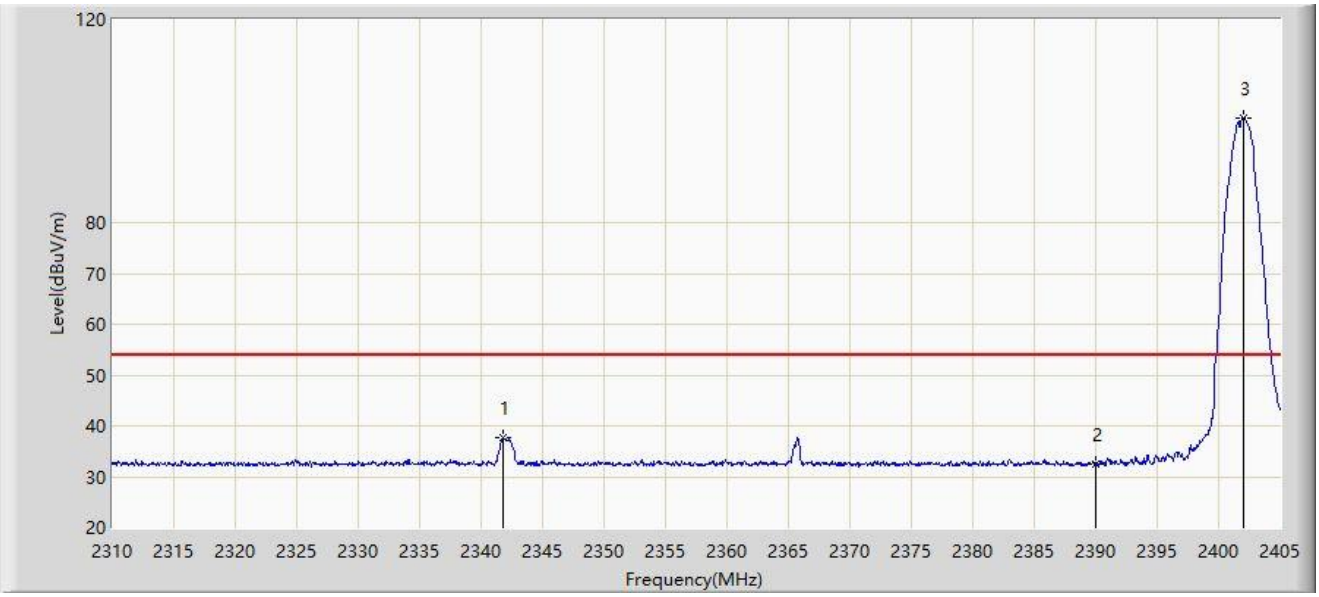
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2333.655	47.280	15.862	-26.720	74.000	31.418	PK
2		2390.000	44.496	13.242	-29.504	74.000	31.254	PK
3		2402.625	103.132	71.874	N/A	N/A	31.257	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-1M at 2402MHz	



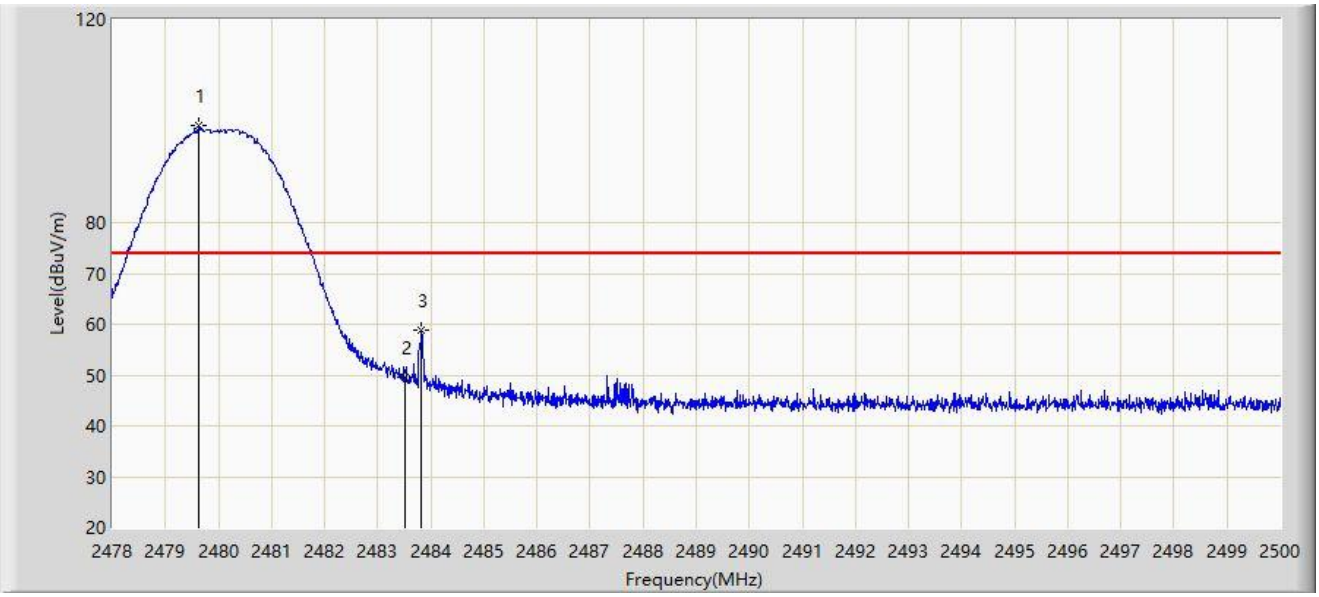
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2341.730	37.572	6.176	-16.428	54.000	31.396	AV
2		2390.000	32.536	1.282	-21.464	54.000	31.254	AV
3		2402.008	100.700	69.442	N/A	N/A	31.258	AV

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-1M at 2480MHz	



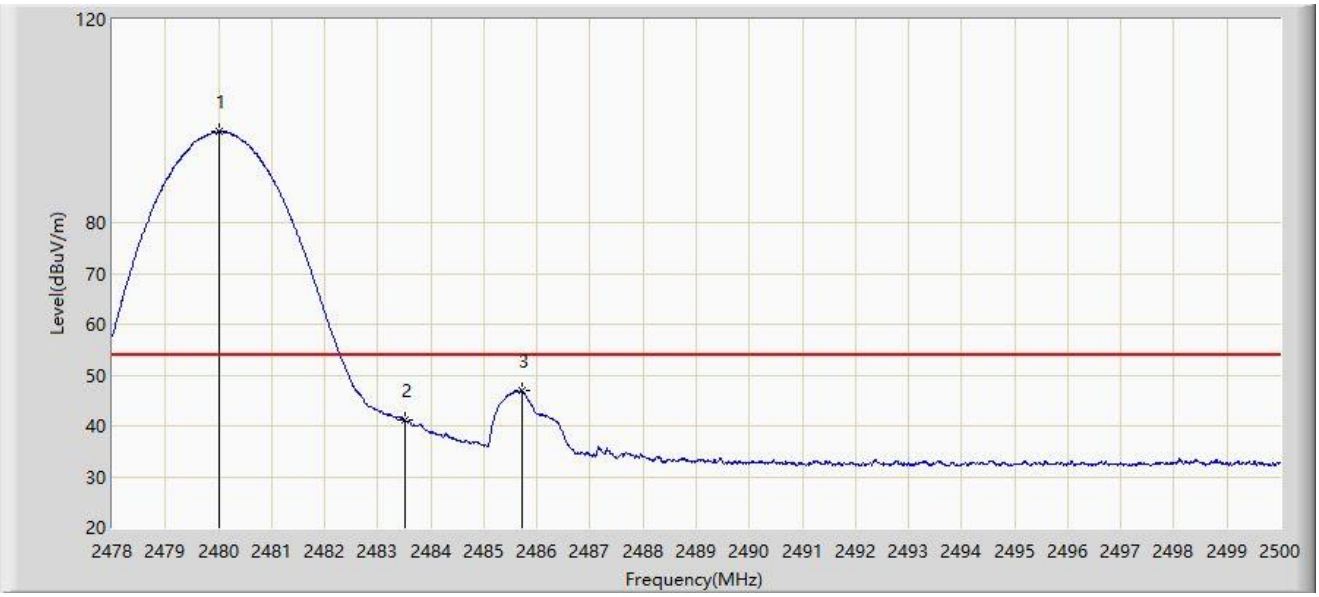
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.628	99.082	67.859	N/A	N/A	31.223	PK
2		2483.500	49.588	18.362	-24.412	74.000	31.226	PK
3	*	2483.830	58.894	27.668	-15.106	74.000	31.226	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-1M at 2480MHz	



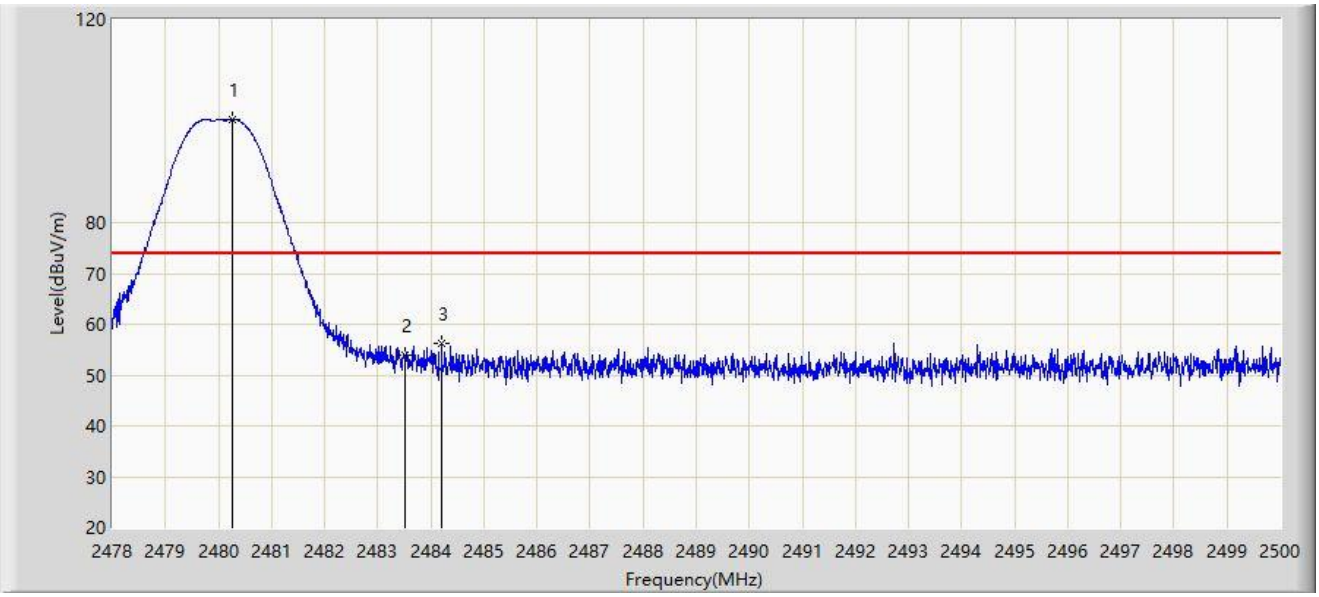
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.002	97.842	66.618	N/A	N/A	31.224	AV
2		2483.500	41.128	9.902	-12.872	54.000	31.226	AV
3	*	2485.722	46.952	15.724	-7.048	54.000	31.228	AV

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: WZ-AC1	Test Date: 2024-03-18
Limit: FCC_2.4G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-1M at 2480MHz	



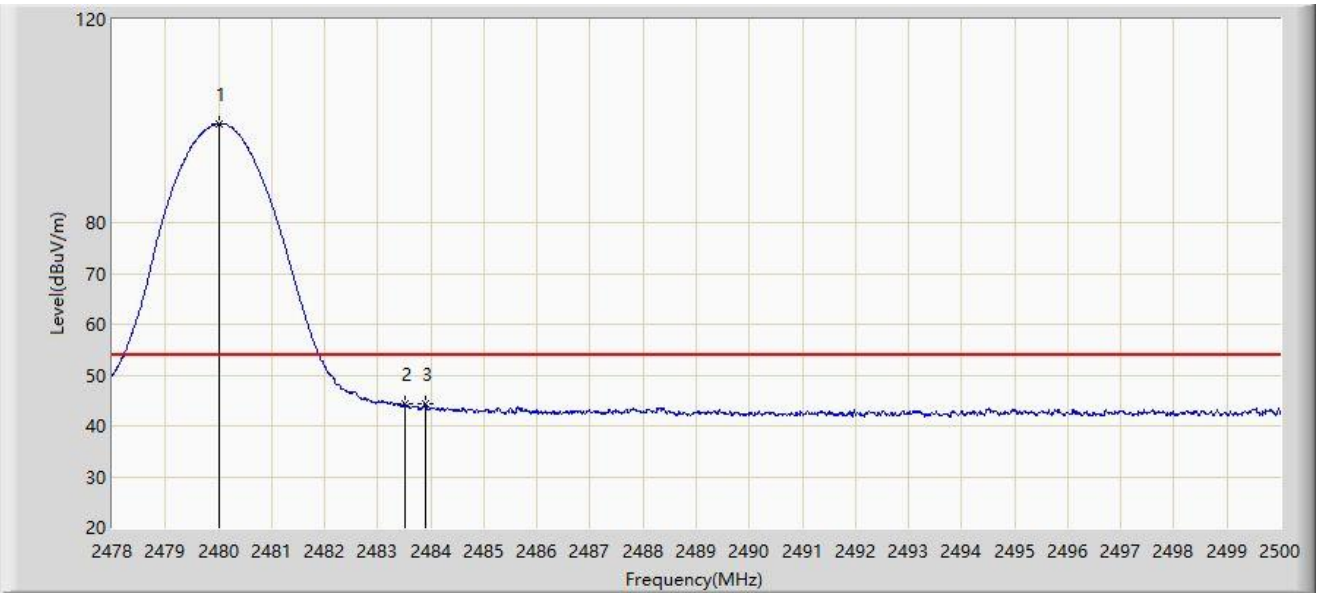
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.266	100.287	69.063	N/A	N/A	31.224	PK
2		2483.500	53.774	22.548	-20.226	74.000	31.226	PK
3	*	2484.204	56.332	25.105	-17.668	74.000	31.227	PK

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: WZ-AC1	Test Date: 2024-03-18
Limit: FCC_2.4G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-1M at 2480MHz	



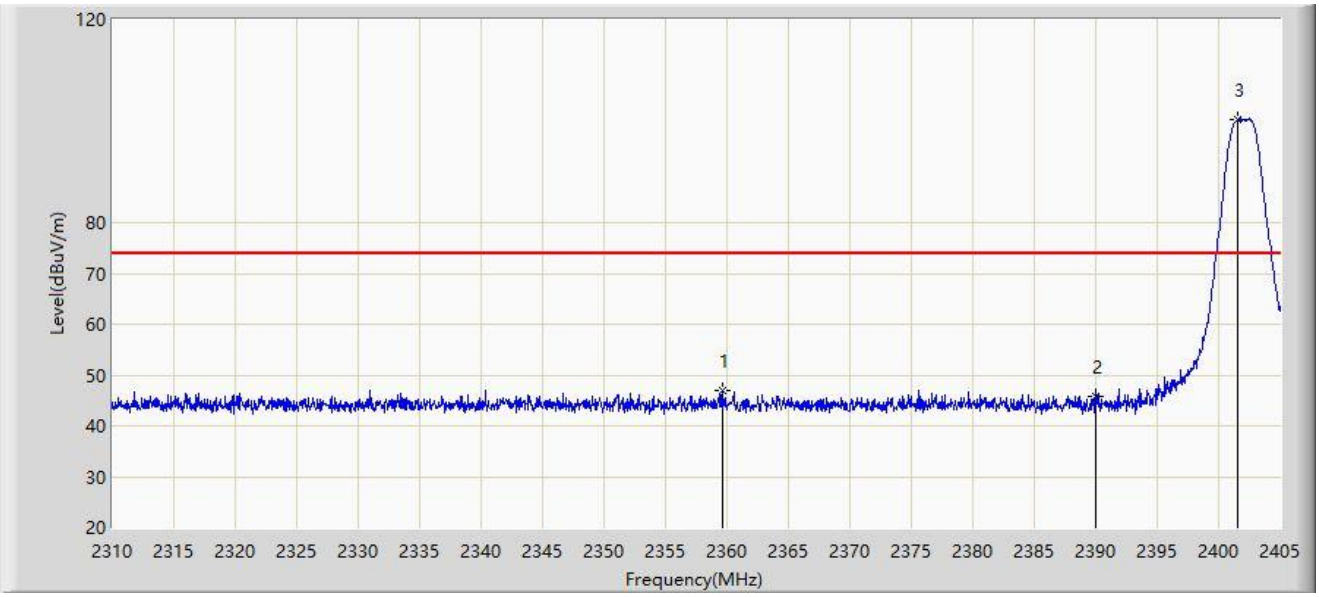
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.002	99.528	68.304	N/A	N/A	31.224	AV
2		2483.500	44.322	13.096	-9.678	54.000	31.226	AV
3	*	2483.896	44.414	13.187	-9.586	54.000	31.227	AV

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-2M at 2402MHz	



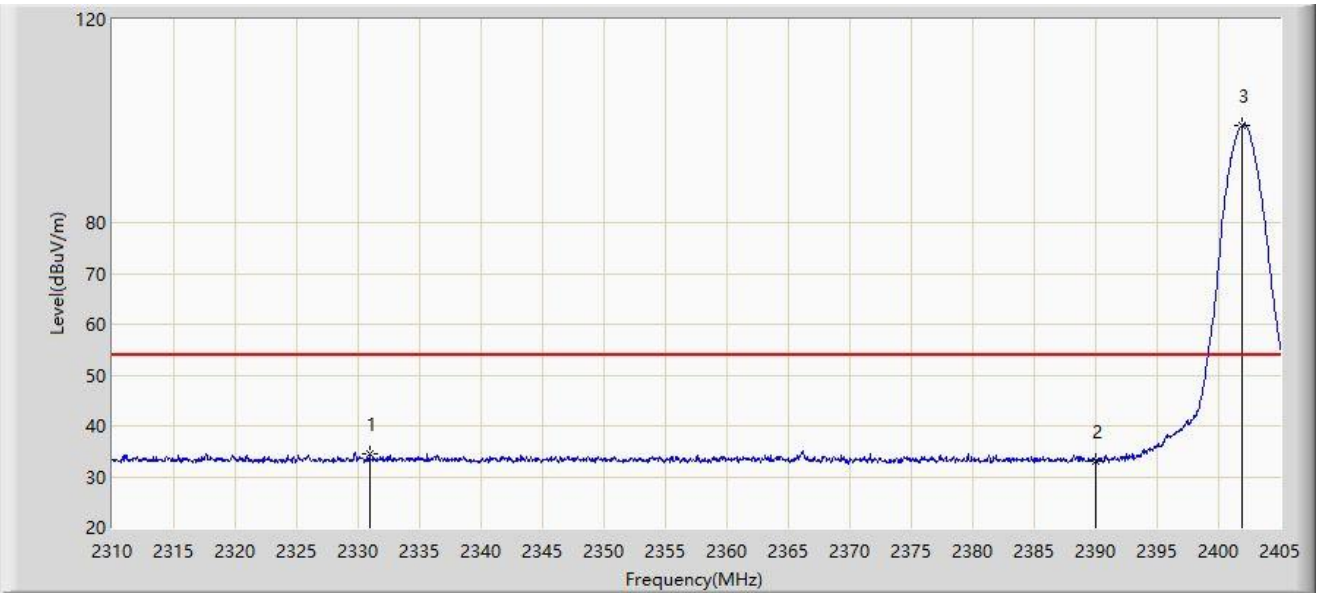
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2359.590	46.889	15.553	-27.111	74.000	31.336	PK
2		2390.000	45.891	14.637	-28.109	74.000	31.254	PK
3		2401.580	100.290	69.032	N/A	N/A	31.258	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-2M at 2402MHz	



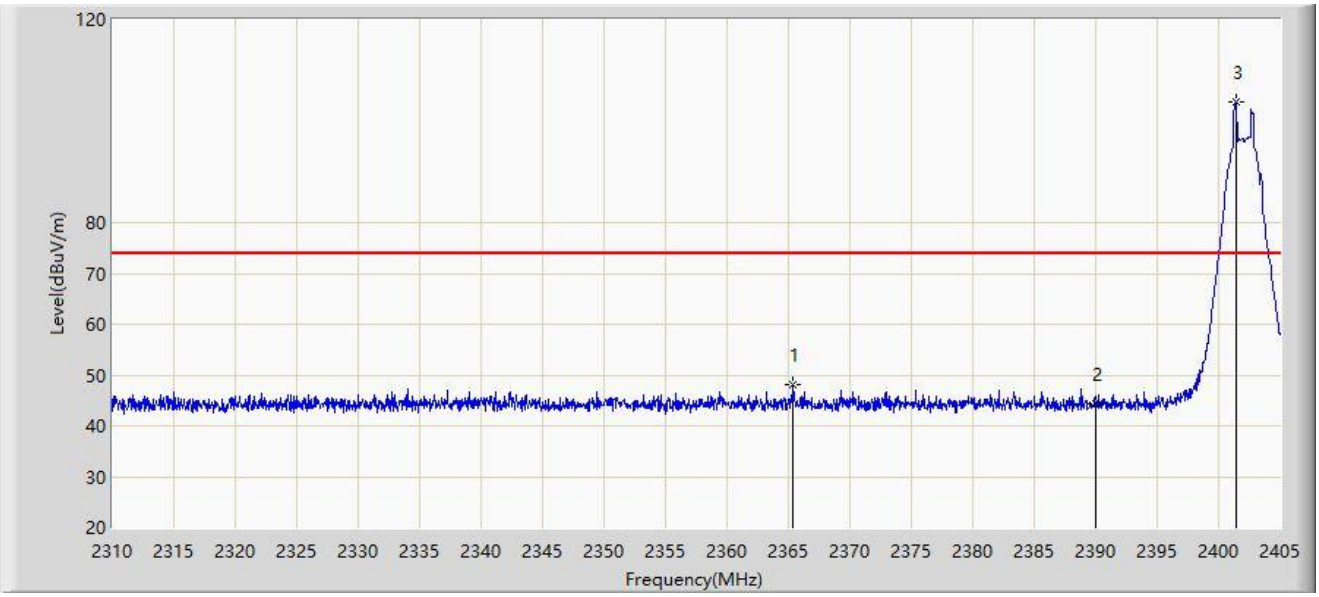
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2330.948	34.587	3.162	-19.413	54.000	31.425	AV
2		2390.000	33.182	1.928	-20.818	54.000	31.254	AV
3		2401.913	99.130	67.872	N/A	N/A	31.258	AV

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-2M at 2402MHz	



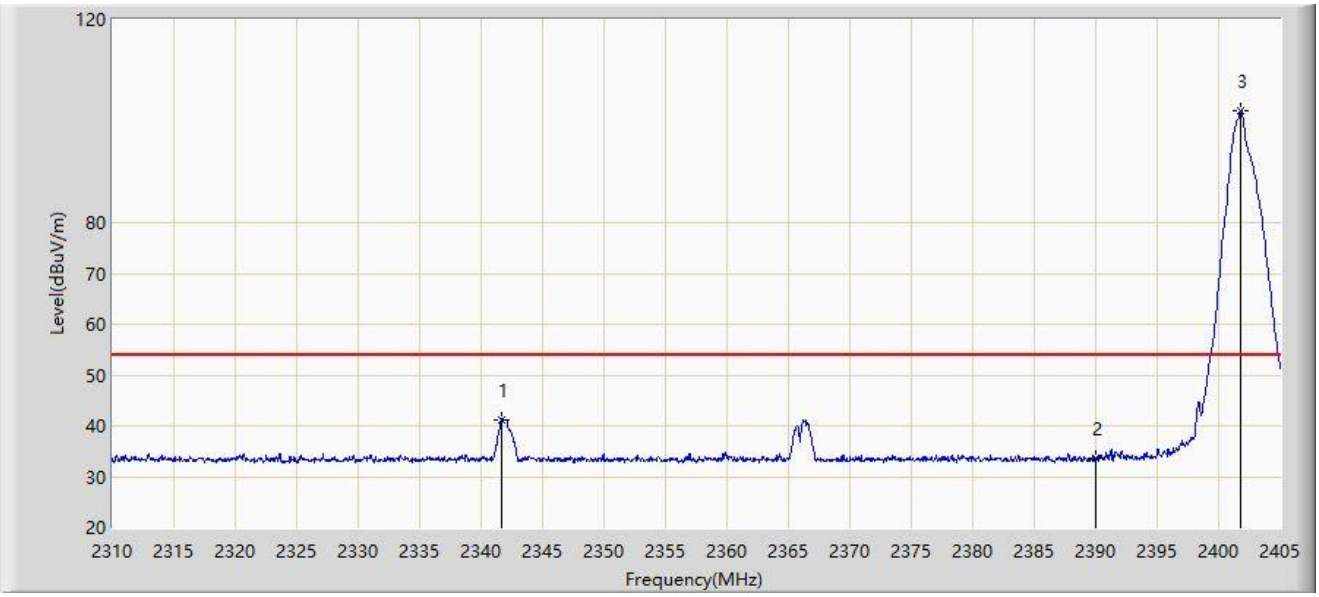
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2365.385	48.046	16.722	-25.954	74.000	31.324	PK
2		2390.000	44.347	13.093	-29.653	74.000	31.254	PK
3		2401.390	103.649	72.392	N/A	N/A	31.257	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-2M at 2402MHz	



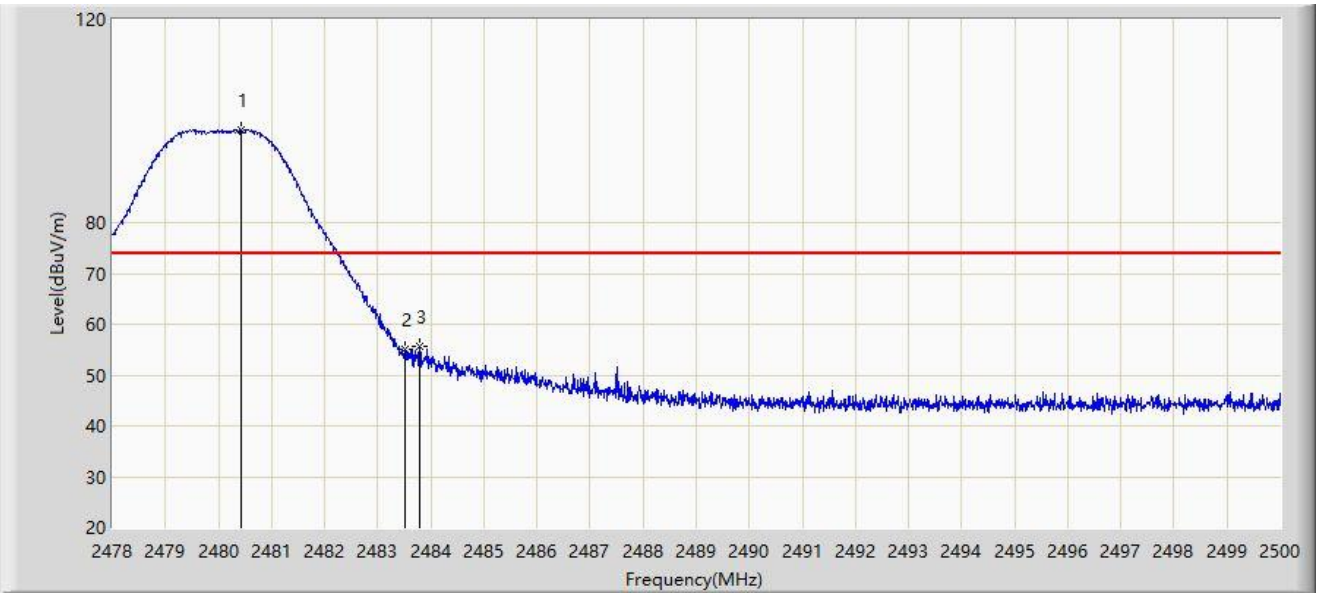
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2341.635	41.289	9.893	-12.711	54.000	31.396	AV
2		2390.000	33.572	2.318	-20.428	54.000	31.254	AV
3		2401.817	101.986	70.728	N/A	N/A	31.257	AV

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-2M at 2480MHz	



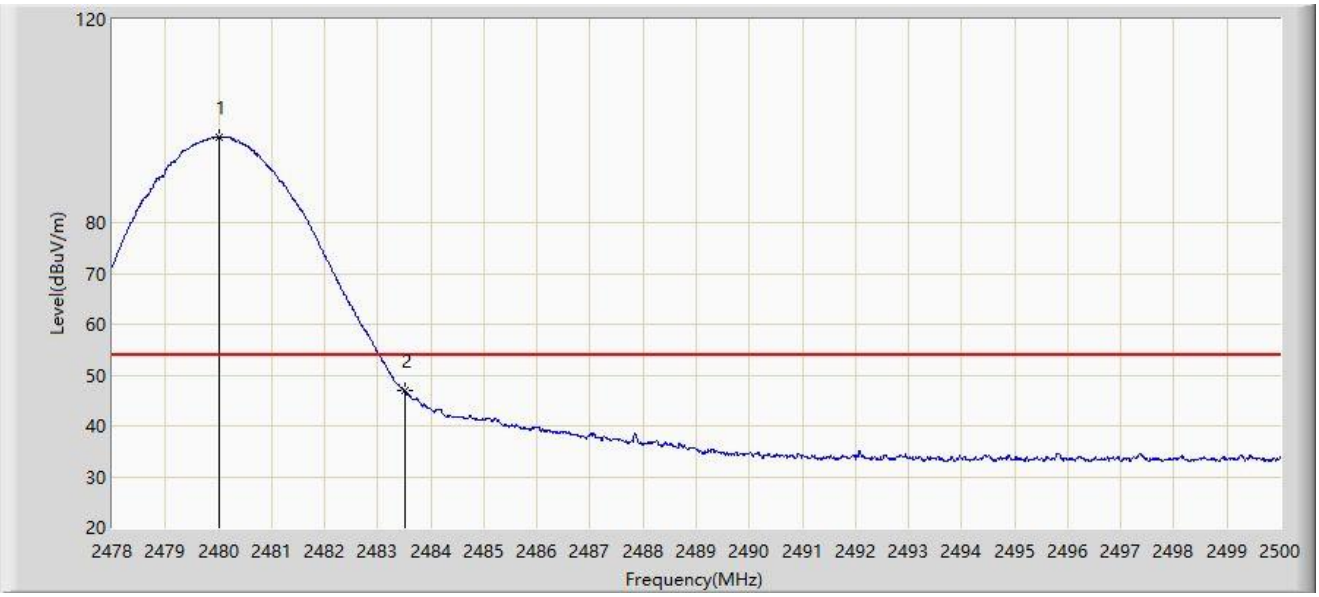
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.420	98.138	66.914	N/A	N/A	31.224	PK
2		2483.500	55.052	23.826	-18.948	74.000	31.226	PK
3	*	2483.786	55.662	24.436	-18.338	74.000	31.226	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-2M at 2480MHz	



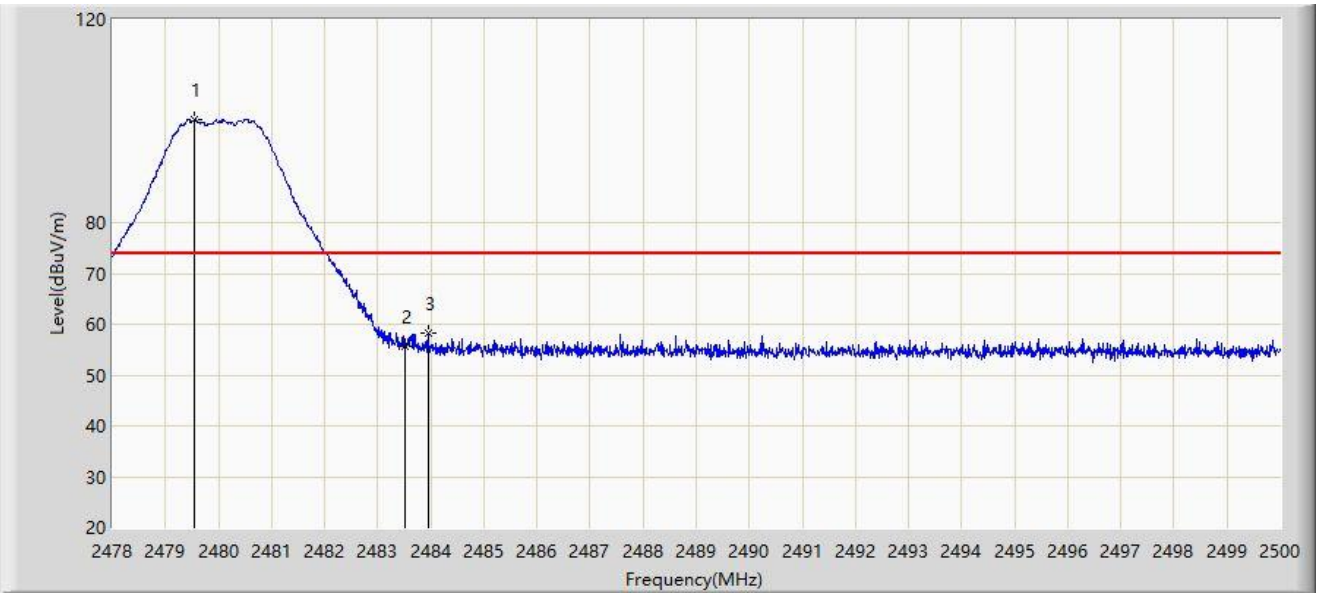
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.002	96.868	65.644	N/A	N/A	31.224	AV
2	*	2483.500	46.965	15.739	-7.035	54.000	31.226	AV

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: WZ-AC1	Test Date: 2024-03-18
Limit: FCC_2.4G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-2M at 2480MHz	



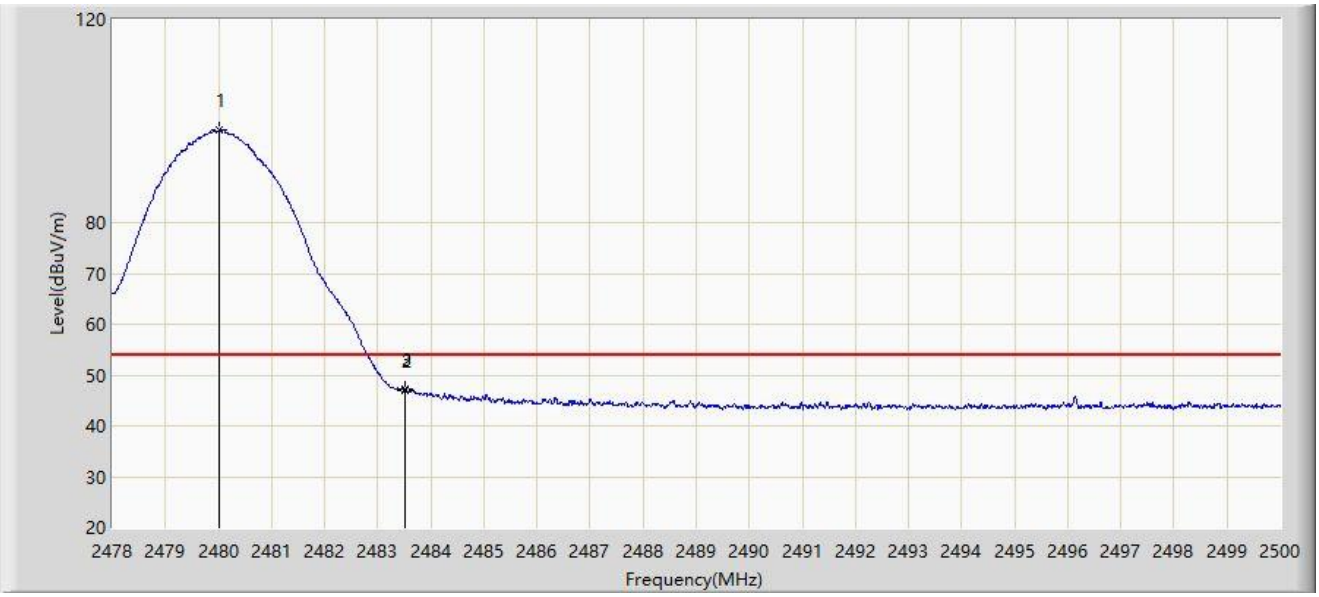
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.540	100.319	69.096	N/A	N/A	31.223	PK
2		2483.500	55.795	24.569	-18.205	74.000	31.226	PK
3	*	2483.951	58.358	27.131	-15.642	74.000	31.227	PK

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: WZ-AC1	Test Date: 2024-03-18
Limit: FCC_2.4G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-2M at 2480MHz	



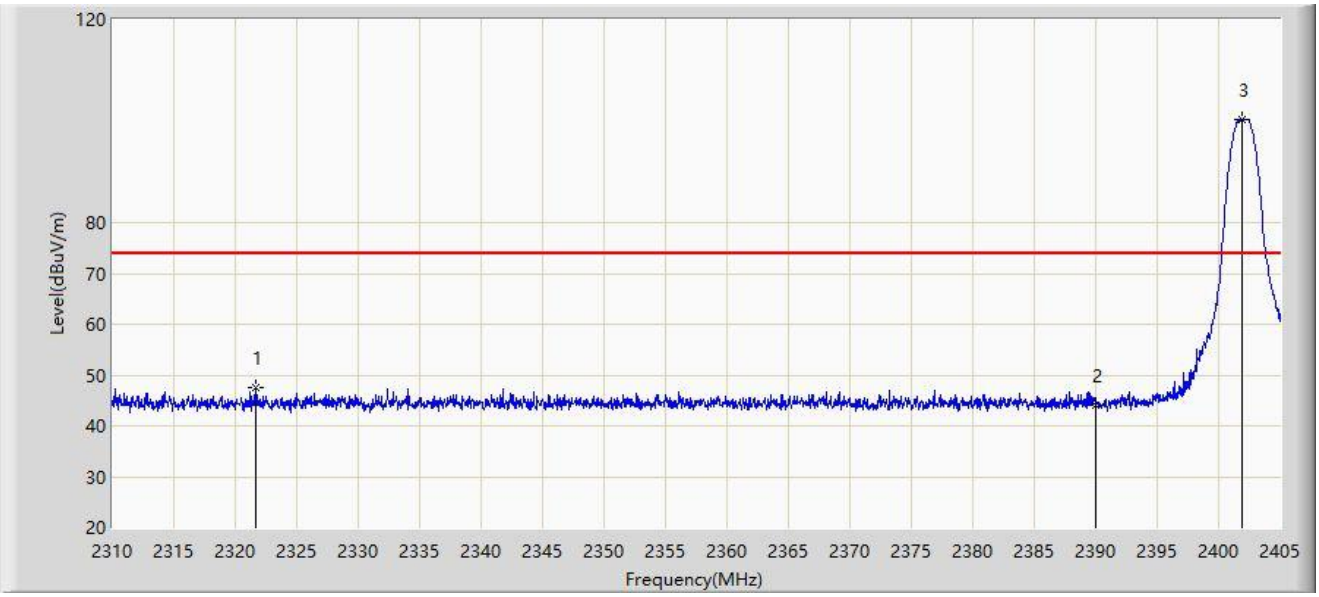
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.002	98.119	66.895	N/A	N/A	31.224	AV
2		2483.500	47.037	15.811	-6.963	54.000	31.226	AV
3	*	2483.522	47.254	16.028	-6.746	54.000	31.226	AV

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-125k at 2402MHz	



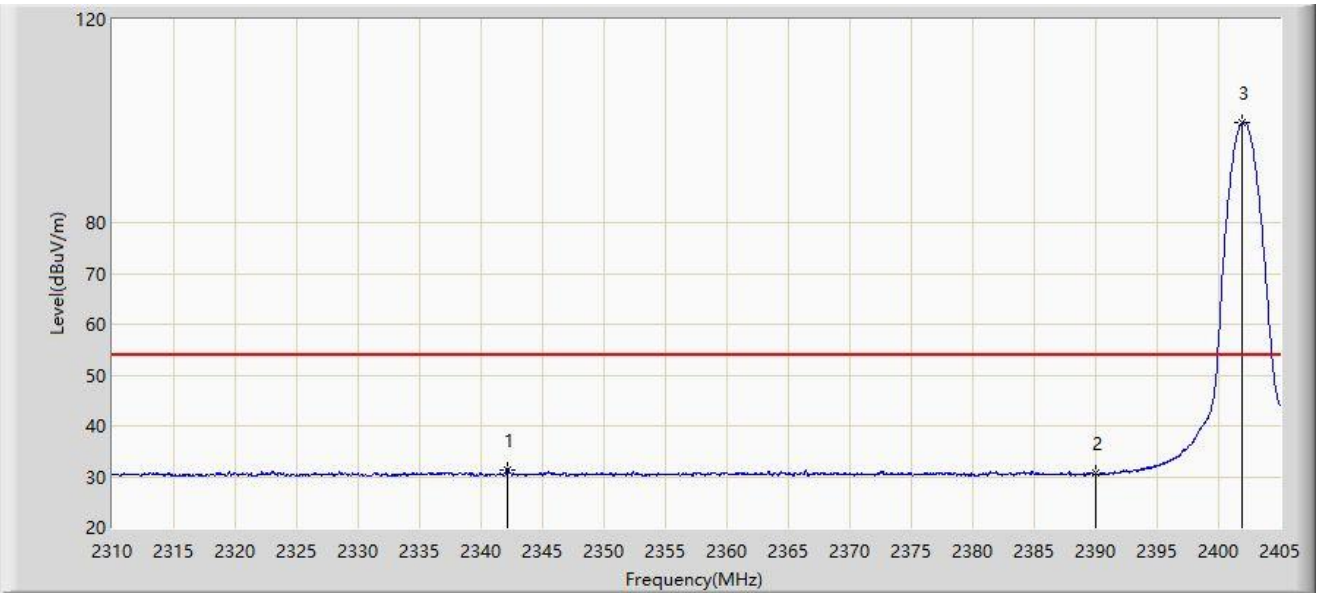
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2321.685	47.680	16.229	-26.320	74.000	31.451	PK
2		2390.000	43.934	12.680	-30.066	74.000	31.254	PK
3		2401.865	100.282	69.024	N/A	N/A	31.258	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-125k at 2402MHz	



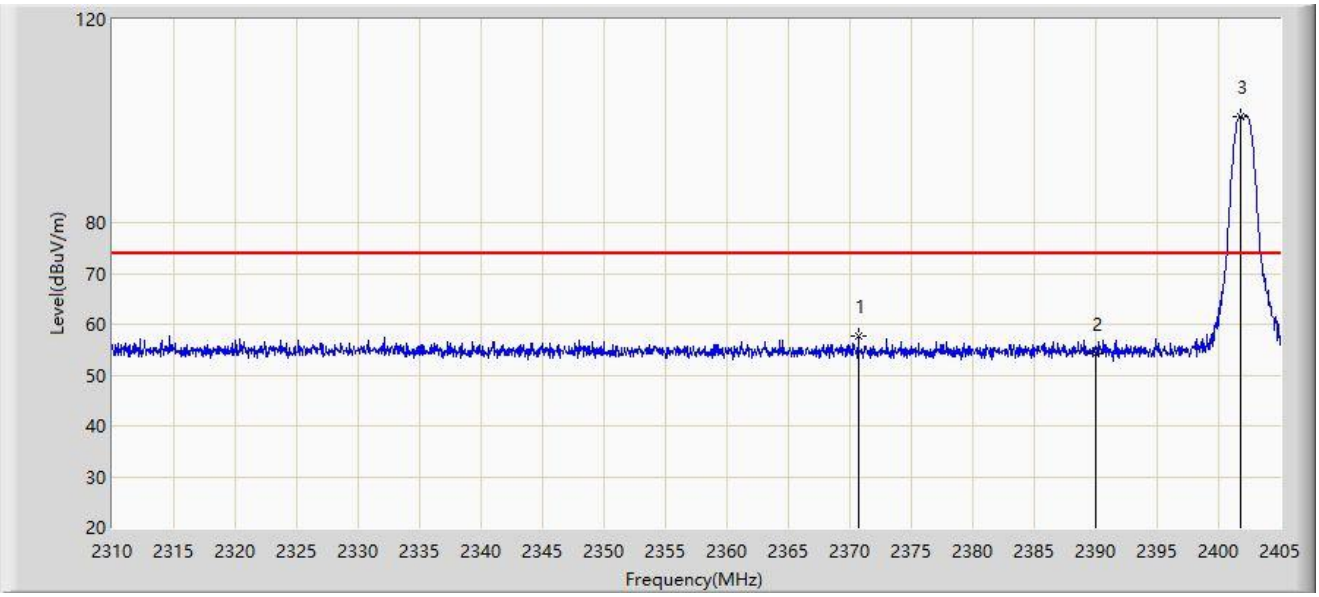
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2342.157	31.407	0.013	-22.593	54.000	31.395	AV
2		2390.000	30.598	-0.656	-23.402	54.000	31.254	AV
3		2401.913	99.710	68.452	N/A	N/A	31.258	AV

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: WZ-AC1	Test Date: 2024-03-18
Limit: FCC_2.4G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-125k at 2402MHz	



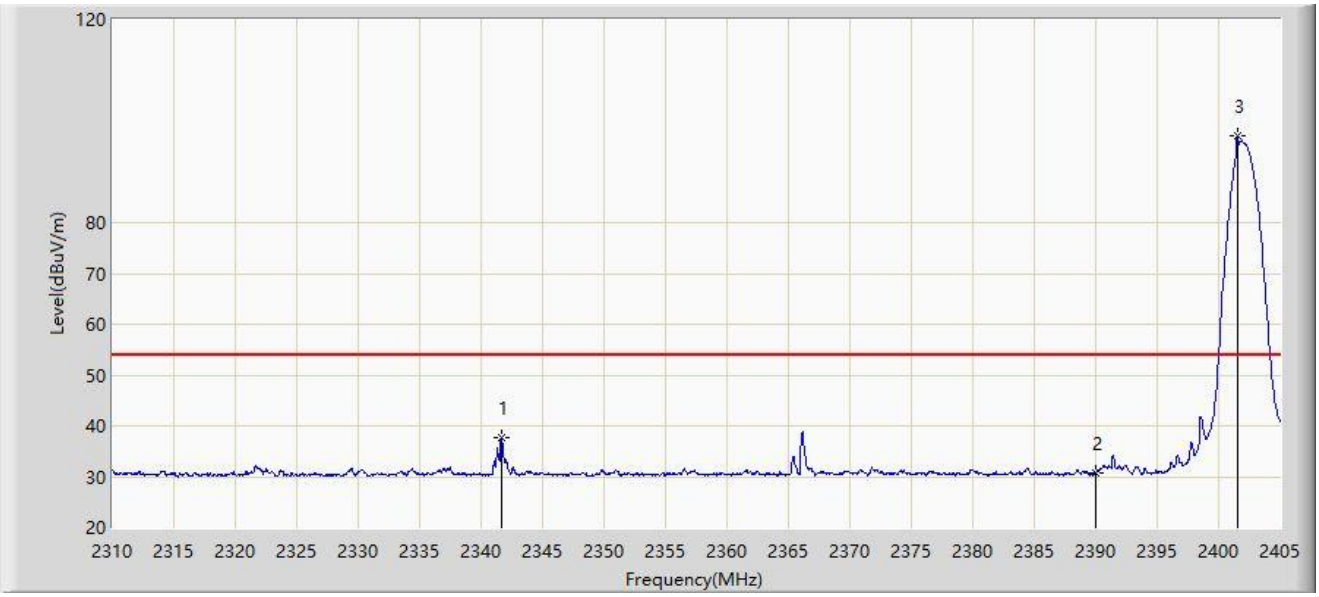
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2370.657	57.545	26.237	-16.455	74.000	31.307	PK
2		2390.000	54.266	23.012	-19.734	74.000	31.254	PK
3		2401.770	100.912	69.654	N/A	N/A	31.257	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-125k at 2402MHz	



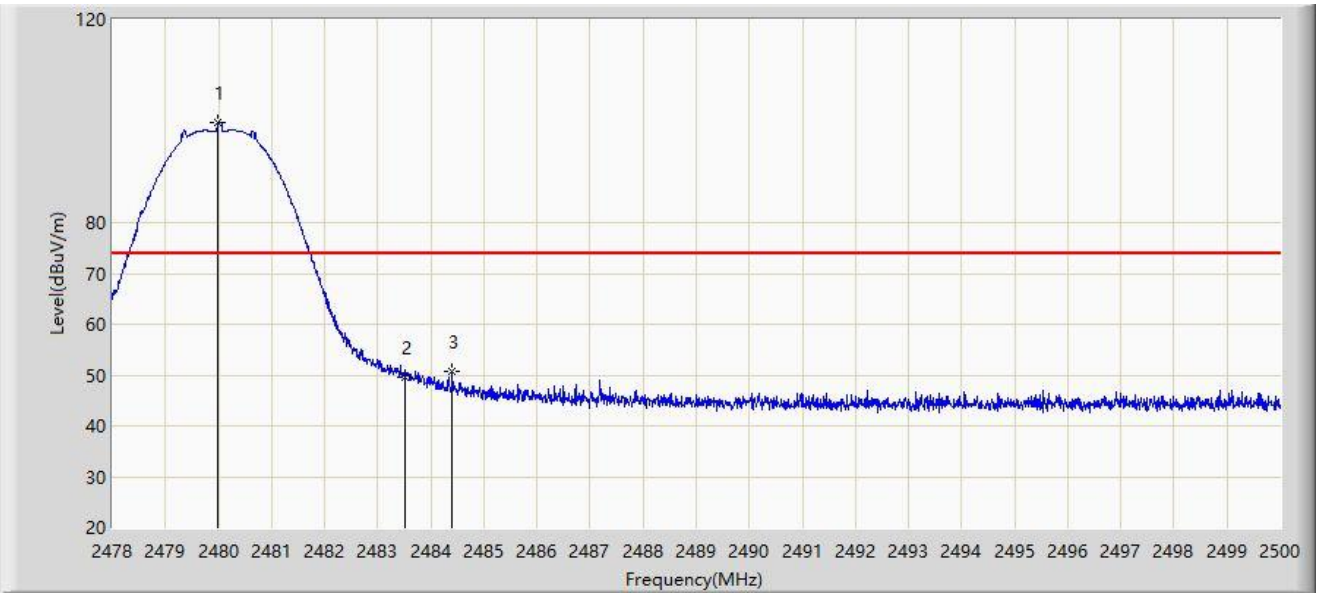
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2341.635	37.608	6.212	-16.392	54.000	31.396	AV
2		2390.000	30.818	-0.436	-23.182	54.000	31.254	AV
3		2401.532	97.128	65.870	N/A	N/A	31.258	AV

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-125k at 2480MHz	



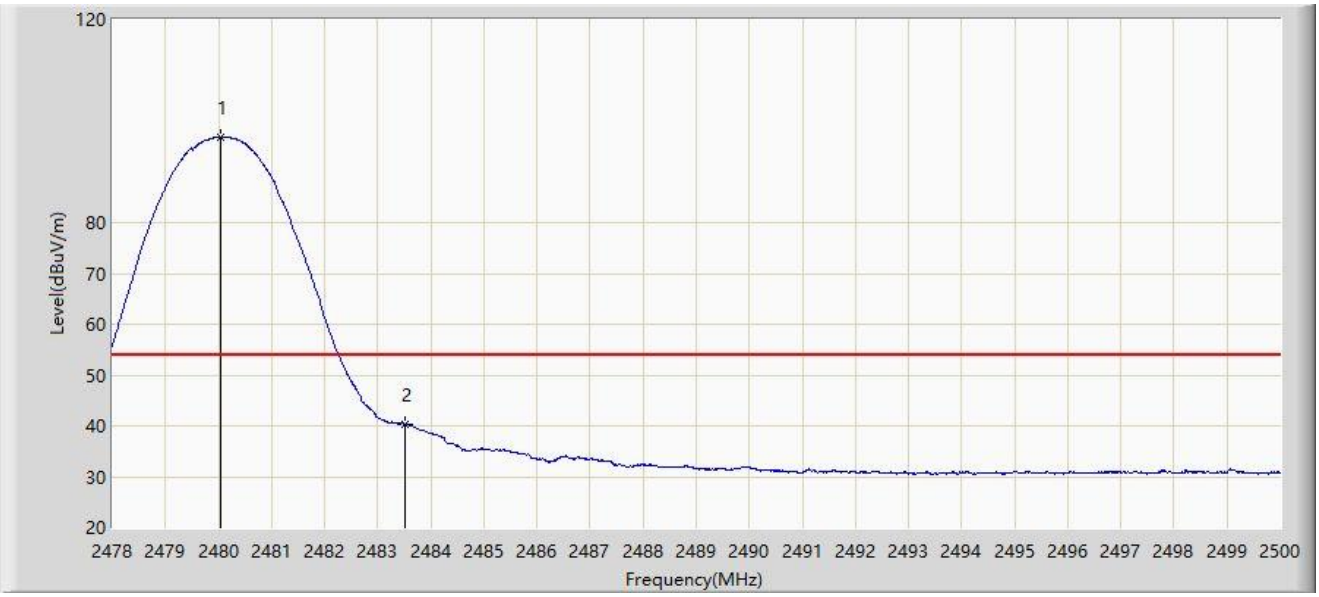
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.991	99.700	68.476	N/A	N/A	31.224	PK
2		2483.500	49.598	18.372	-24.402	74.000	31.226	PK
3	*	2484.402	50.864	19.637	-23.136	74.000	31.227	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-125k at 2480MHz	



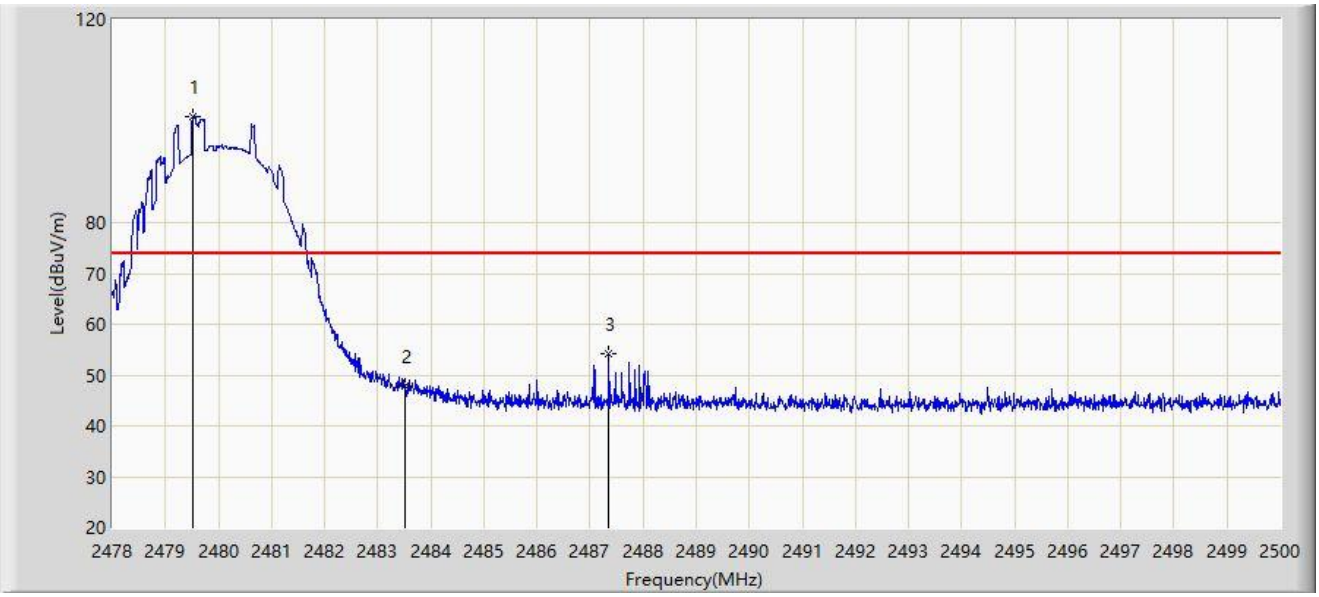
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.046	96.857	65.633	N/A	N/A	31.224	AV
2	*	2483.500	40.405	9.179	-13.595	54.000	31.226	AV

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-125k at 2480MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.529	100.967	69.744	N/A	N/A	31.223	PK
2		2483.500	47.808	16.582	-26.192	74.000	31.226	PK
3	*	2487.350	54.172	22.943	-19.828	74.000	31.229	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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-125k at 2480MHz	

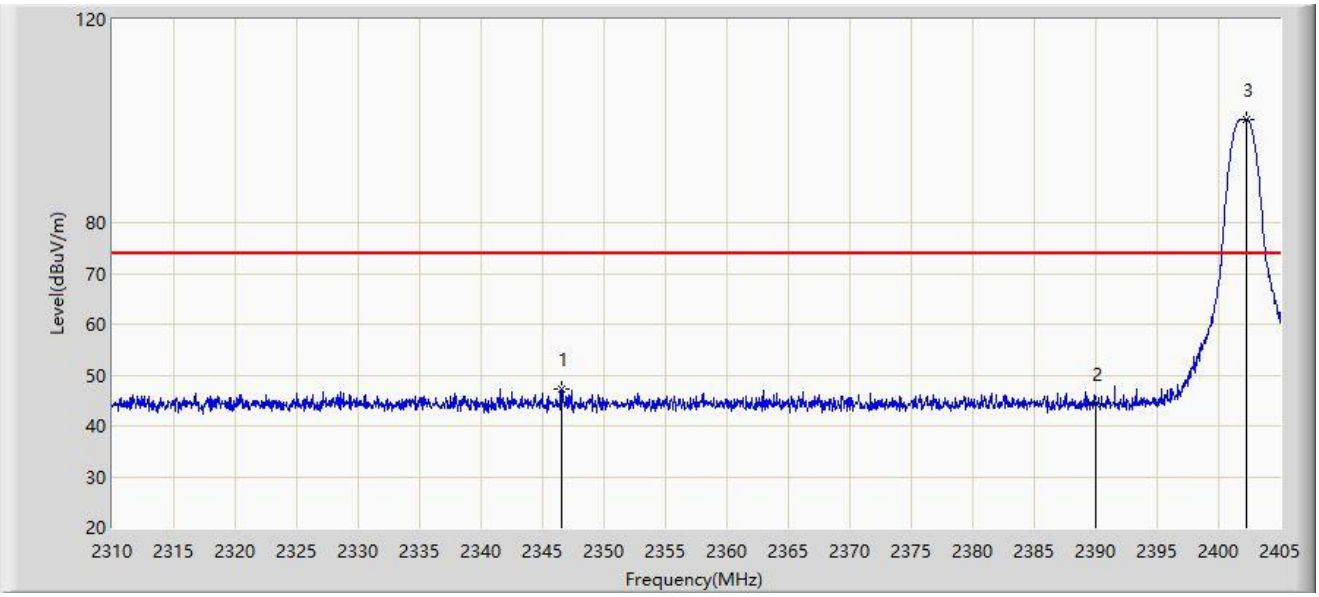
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.848	97.603	66.379	N/A	N/A	31.224	AV
2		2483.500	38.214	6.988	-15.786	54.000	31.226	AV
3	*	2483.731	41.856	10.630	-12.144	54.000	31.226	AV

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-500k at 2402MHz	



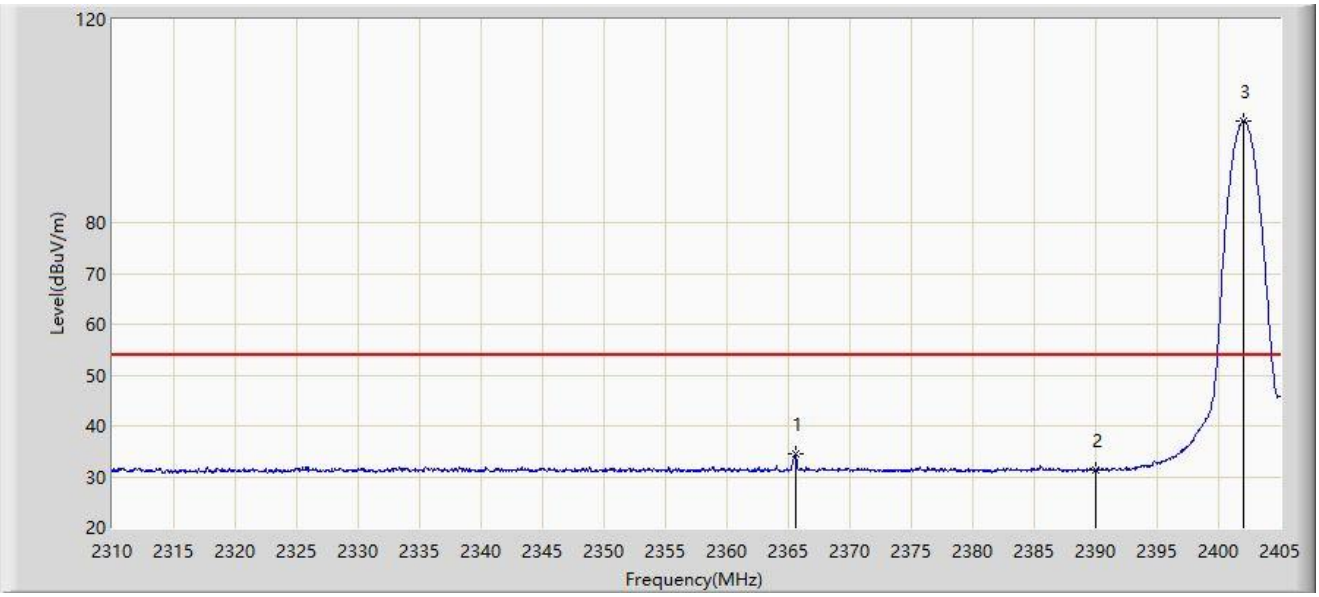
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2346.528	47.251	15.871	-26.749	74.000	31.380	PK
2		2390.000	44.273	13.019	-29.727	74.000	31.254	PK
3		2402.292	100.342	69.084	N/A	N/A	31.258	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-500k at 2402MHz	



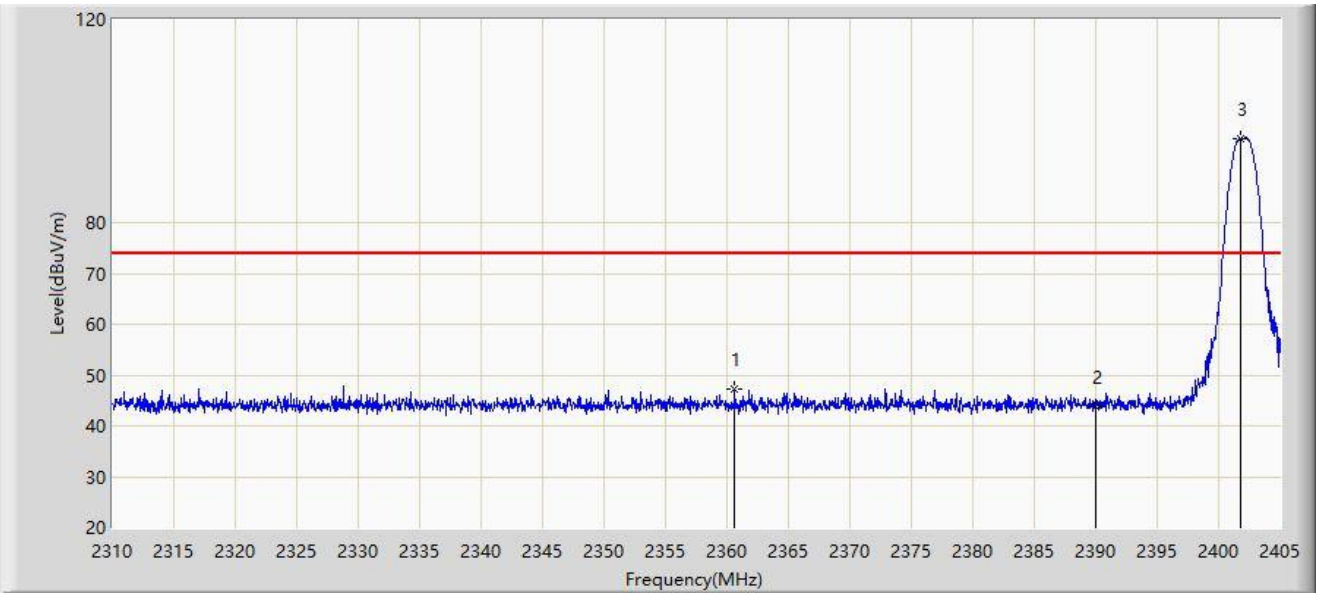
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2365.575	34.350	3.026	-19.650	54.000	31.324	AV
2		2390.000	31.221	-0.033	-22.779	54.000	31.254	AV
3		2402.055	100.006	68.748	N/A	N/A	31.258	AV

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-500k at 2402MHz	



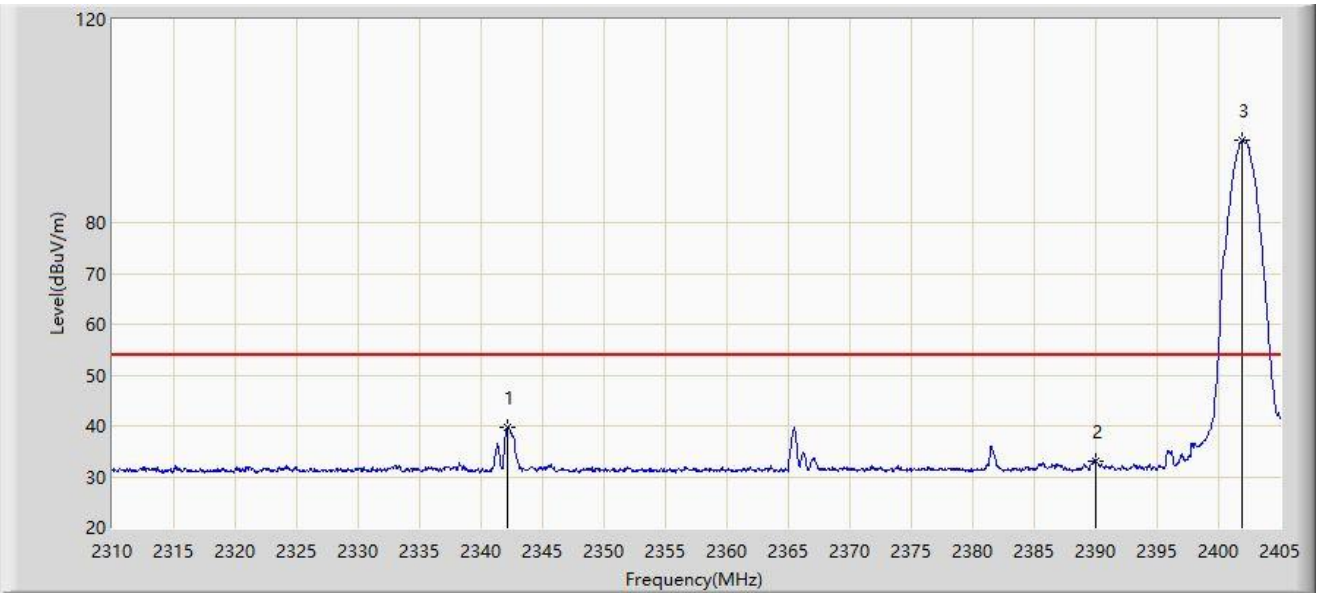
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2360.635	47.235	15.902	-26.765	74.000	31.333	PK
2		2390.000	43.663	12.409	-30.337	74.000	31.254	PK
3		2401.770	96.557	65.299	N/A	N/A	31.257	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-500k at 2402MHz	



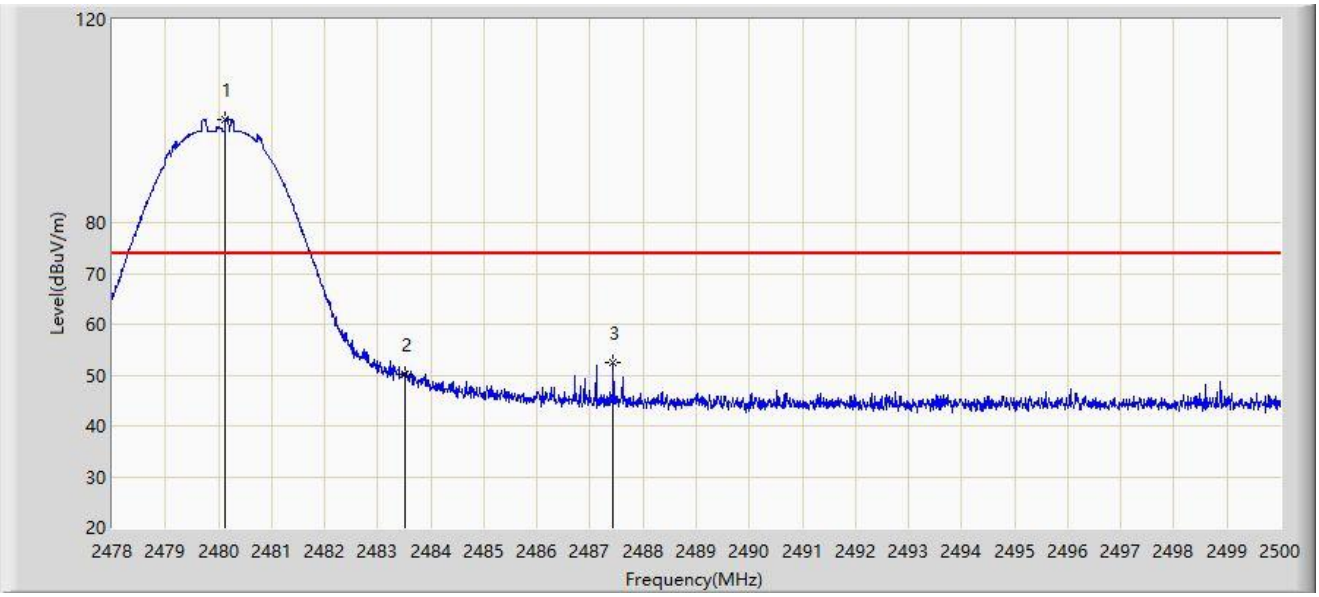
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2342.157	39.756	8.362	-14.244	54.000	31.395	AV
2		2390.000	33.003	1.749	-20.997	54.000	31.254	AV
3		2401.960	96.278	65.020	N/A	N/A	31.258	AV

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-500k at 2480MHz	



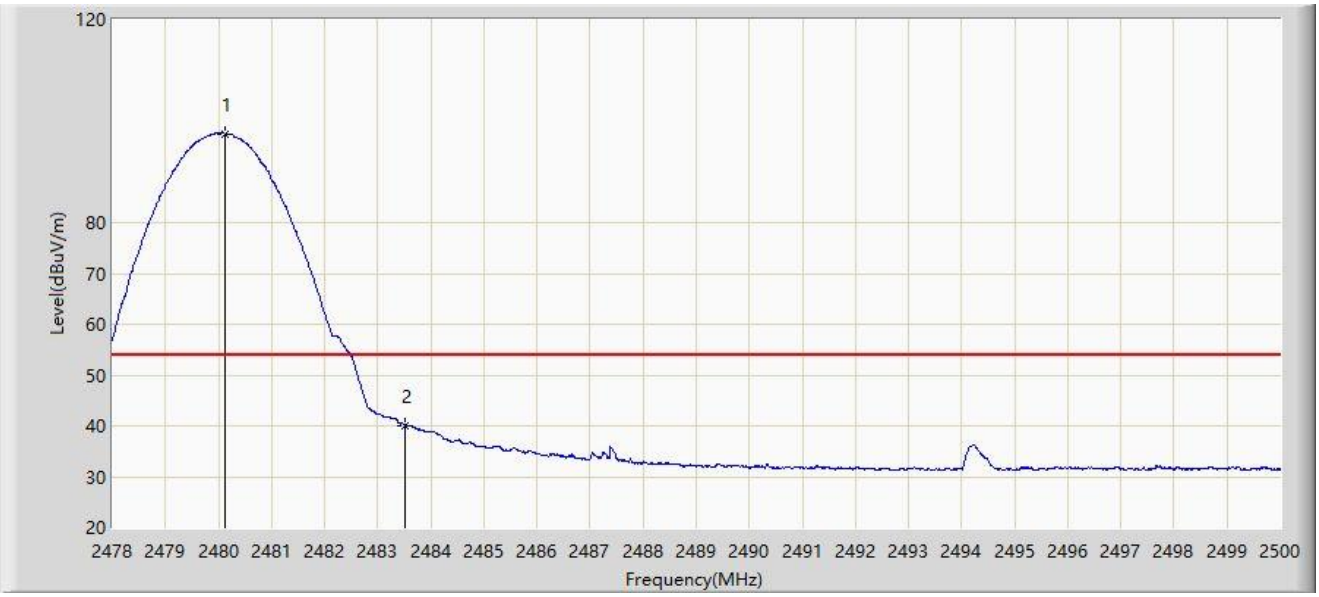
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.134	100.381	69.157	N/A	N/A	31.224	PK
2		2483.500	50.015	18.789	-23.985	74.000	31.226	PK
3	*	2487.438	52.334	21.105	-21.666	74.000	31.229	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-500k at 2480MHz	



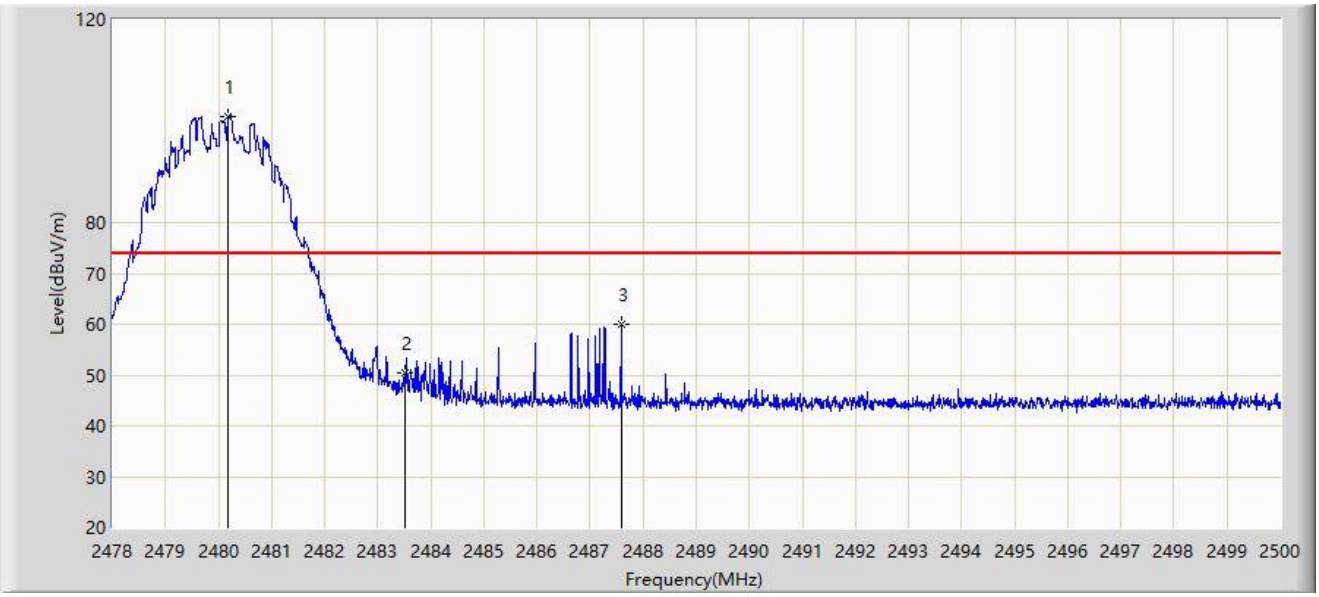
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.112	97.521	66.297	N/A	N/A	31.224	AV
2	*	2483.500	40.122	8.896	-13.878	54.000	31.226	AV

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-500k at 2480MHz	



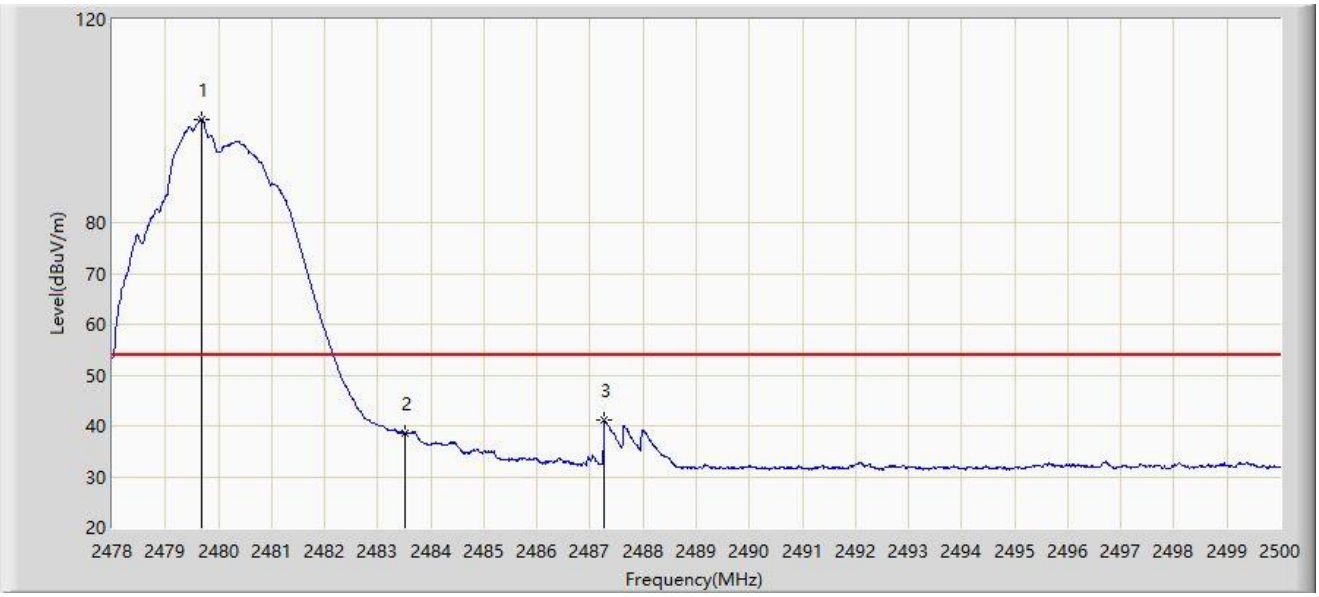
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.178	101.007	69.783	N/A	N/A	31.224	PK
2		2483.500	50.486	19.260	-23.514	74.000	31.226	PK
3	*	2487.592	59.893	28.664	-14.107	74.000	31.229	PK

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: WZ-AC1	Test Date: 2024-03-15
Limit: FCC_2.4G_RE(3m)	Engineer: Bob Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Plug5	Power: By Computer
Test Mode: Transmit by BLE-500k at 2480MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.694	100.362	69.139	N/A	N/A	31.223	AV
2		2483.500	38.650	7.424	-15.350	54.000	31.226	AV
3	*	2487.262	41.025	9.796	-12.975	54.000	31.229	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 “2403RSU012-UT” file.

Appendix C - EUT Photograph

Refer to “2403RSU012-UE” file.

The End