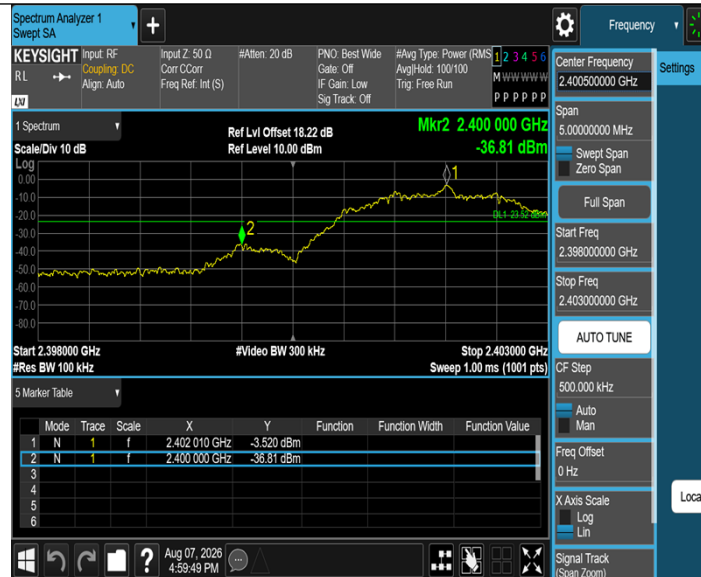




BLE 2M Ant1 High 2480

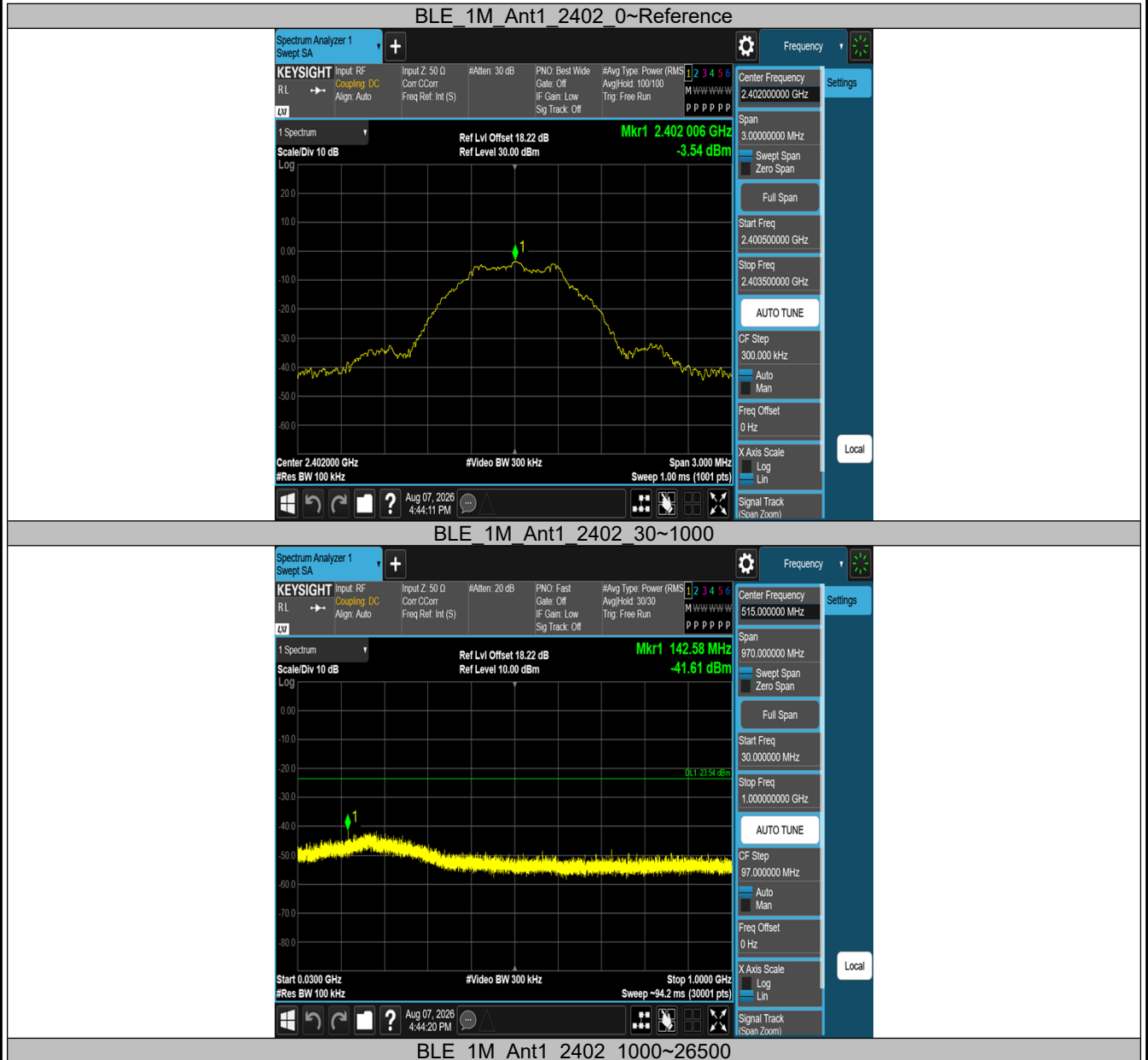


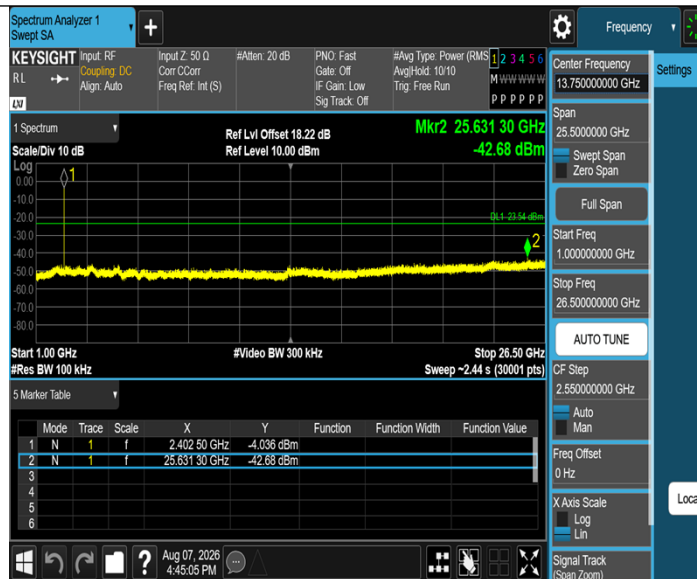
Appendix A.5: Test Results of Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.54	-3.54	---	PASS
			30~1000	-3.54	-41.62	≤-23.54	PASS
			1000~26500	-3.54	-42.68	≤-23.54	PASS
		2440	Reference	-4.14	-4.14	---	PASS
			30~1000	-4.14	-40.47	≤-24.14	PASS
			1000~26500	-4.14	-43.16	≤-24.14	PASS
		2480	Reference	-4.19	-4.19	---	PASS
			30~1000	-4.19	-41	≤-24.19	PASS
			1000~26500	-4.19	-43.61	≤-24.19	PASS
BLE_2M	Ant1	2402	Reference	-3.59	-3.59	---	PASS
			30~1000	-3.59	-41.23	≤-23.59	PASS
			1000~26500	-3.59	-43.23	≤-23.59	PASS
		2440	Reference	-3.95	-3.95	---	PASS
			30~1000	-3.95	-41.65	≤-23.95	PASS
			1000~26500	-3.95	-42.39	≤-23.95	PASS
		2480	Reference	-4.36	-4.36	---	PASS
			30~1000	-4.36	-41.8	≤-24.36	PASS
			1000~26500	-4.36	-43.13	≤-24.36	PASS

Test Graphs

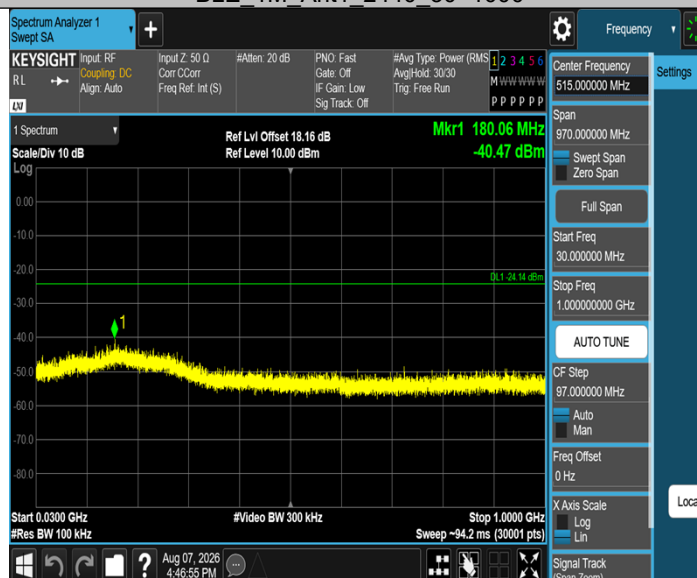




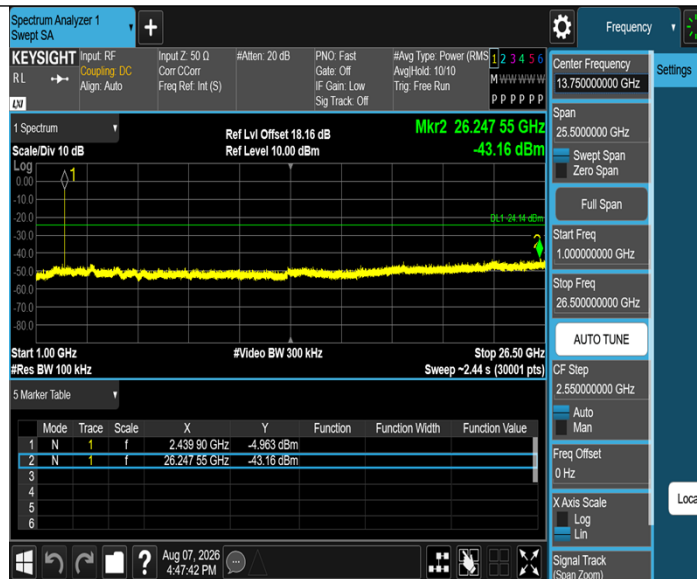
BLE 1M Ant1 2440 0~Reference



BLE 1M Ant1 2440 30~1000



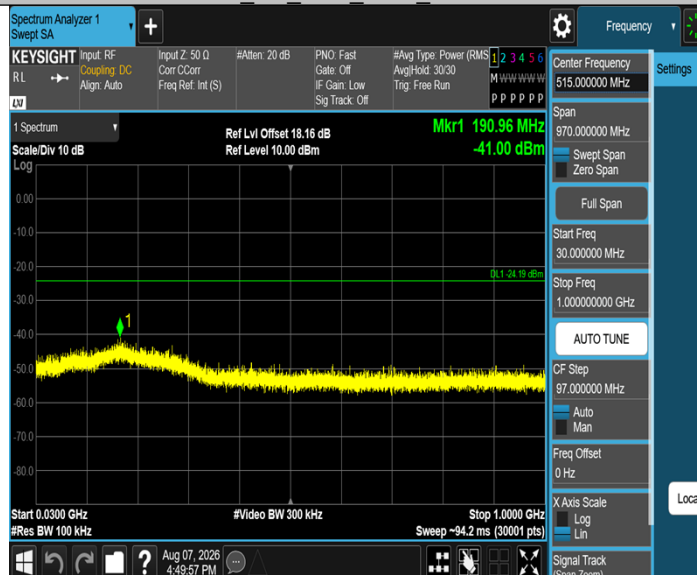
BLE 1M Ant1 2440 1000~26500



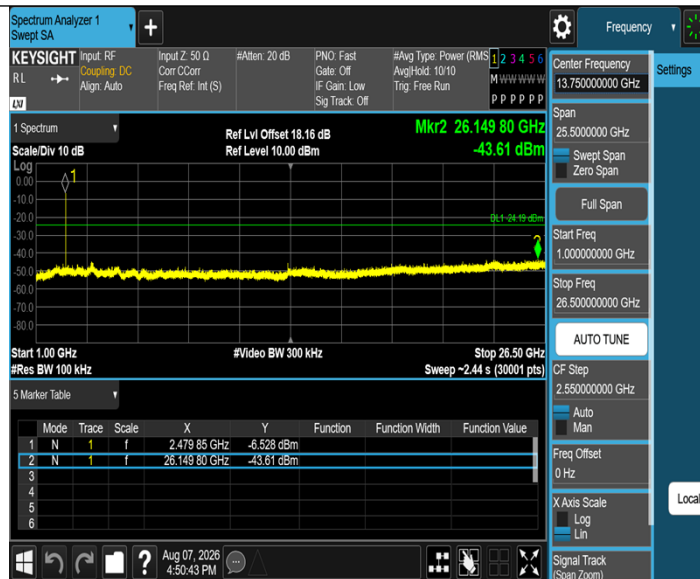
BLE 1M_Ant1_2480_0~Reference



BLE 1M_Ant1_2480_30~1000



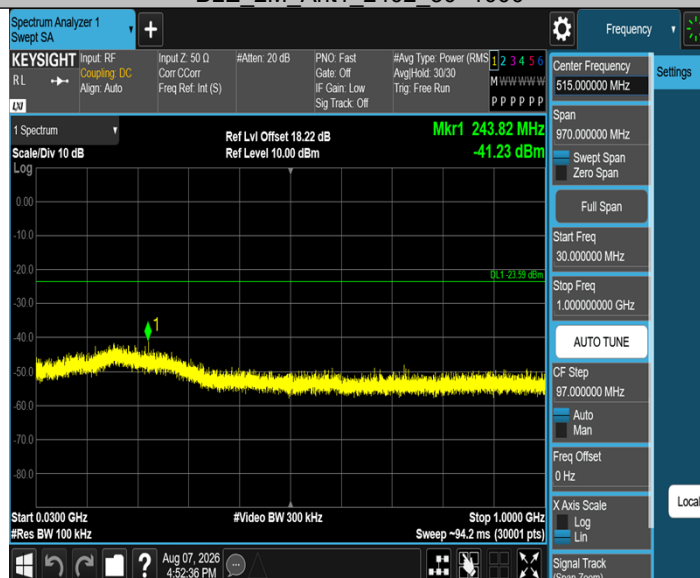
BLE 1M_Ant1_2480_1000~26500



BLE 2M_Ant1_2402_0~Reference



BLE 2M_Ant1_2402_30~1000



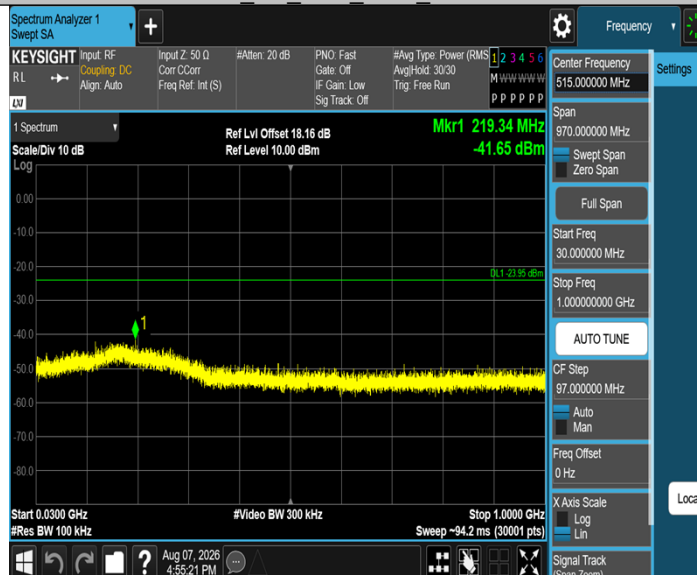
BLE 2M_Ant1_2402_1000~26500



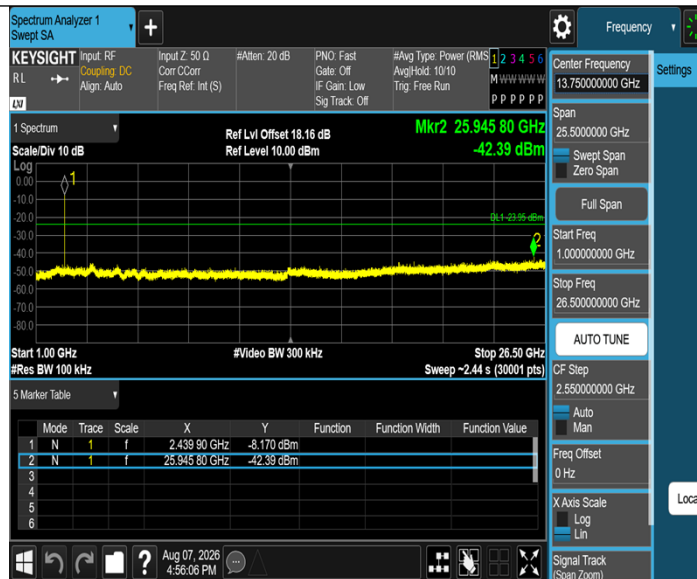
BLE 2M Ant1 2440 0~Reference



BLE 2M Ant1 2440 30~1000



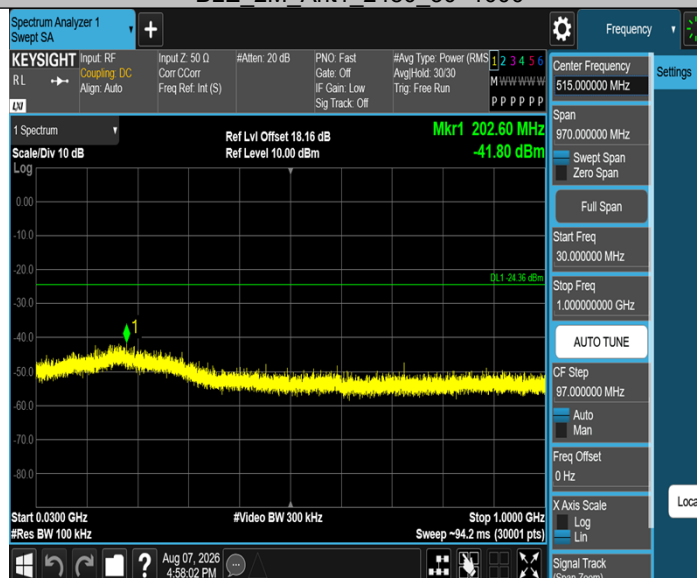
BLE 2M Ant1 2440 1000~26500



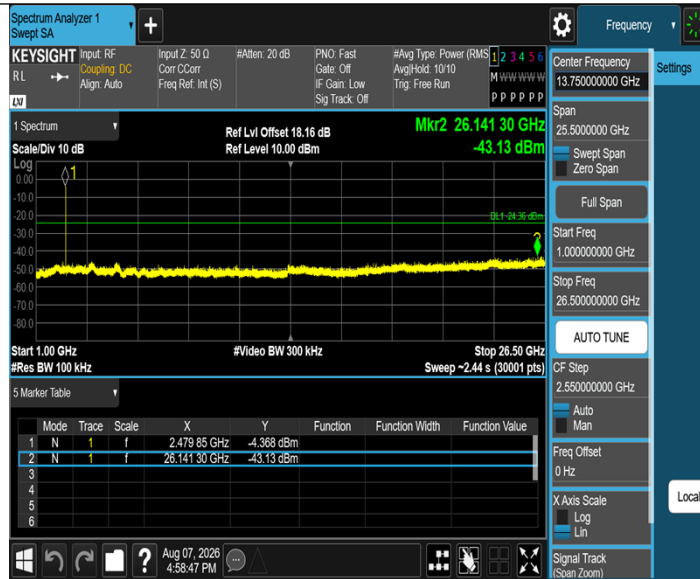
BLE 2M_Ant1_2480_0~Reference



BLE 2M_Ant1_2480_30~1000



BLE 2M_Ant1_2480_1000~26500



Appendix A.6: Test Results of Radiated Spurious Emissions

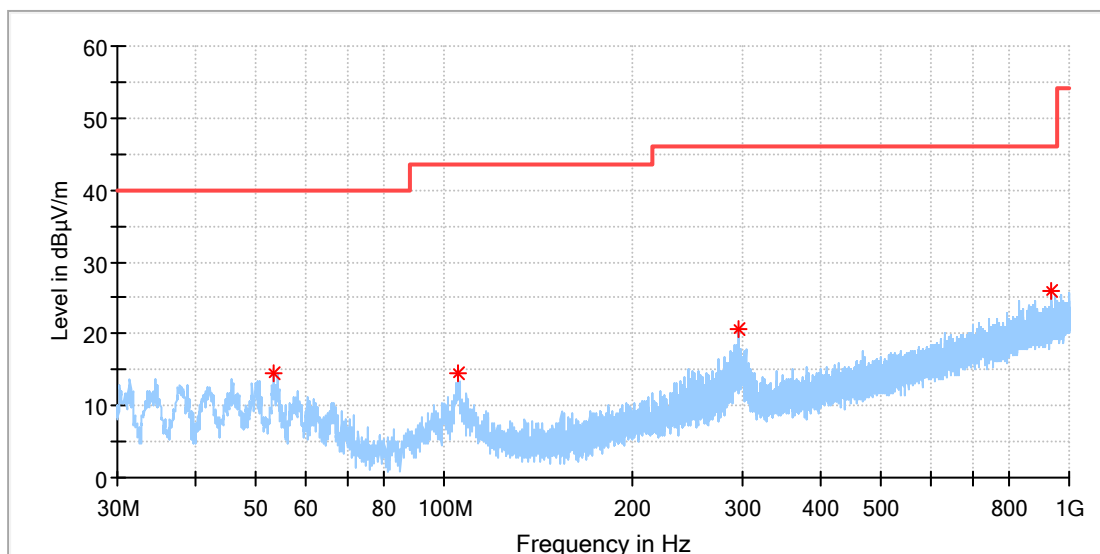
Note:

- 1) This testing was carried out on different modulations, but only the worst case was presented in this report.
- 2) Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

30MHz - 1GHz

EUT Information

EUT Name:	Smart combustion analyzer
Model:	NMA1
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	27227256/A004319300-003
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

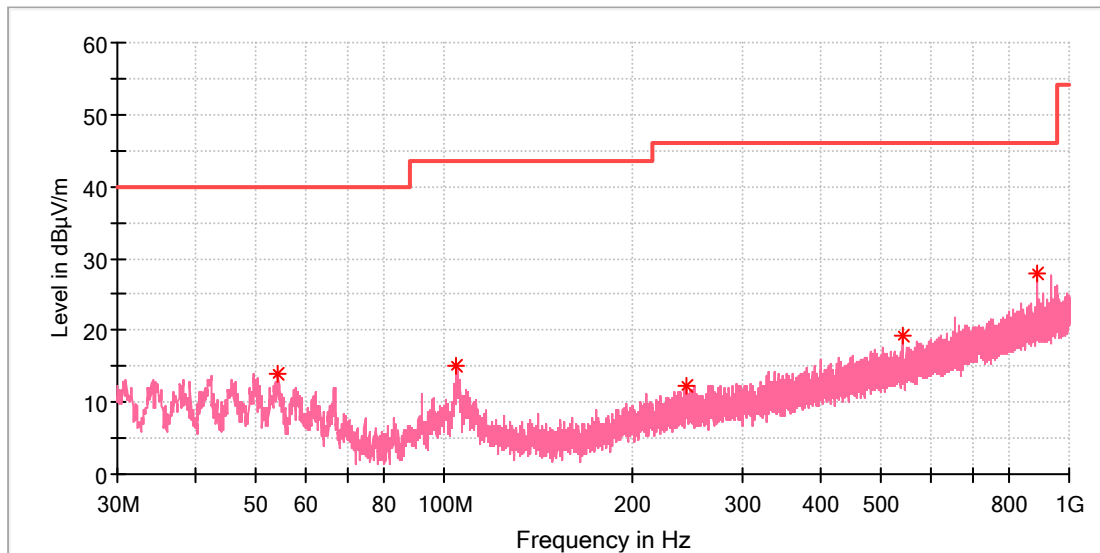
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
53.333889	14.53	40.00	25.47	100.0	H	135.0	-18.5
105.282778	14.54	43.50	28.96	100.0	H	325.0	-18.9
296.157222	20.57	46.00	25.43	100.0	H	341.0	-16.4
938.458889	25.87	46.00	20.13	100.0	H	25.0	-4.4

Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Smart combustion analyzer
Model: NMA1
Test Mode: BLE 1M_Mid channel
Order No/Sample No: 27227256/A004319300-003
Test Voltage: Battery
Remark: Temp 21.8°C Humi:49%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

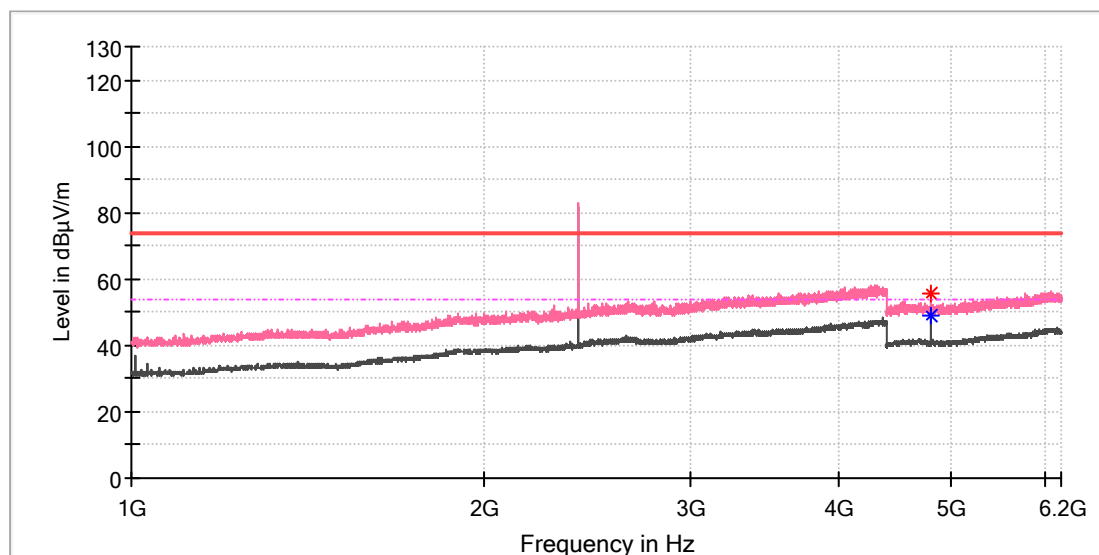
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
54.142222	13.97	40.00	26.03	100.0	V	254.0	-18.5
104.743889	15.01	43.50	28.49	100.0	V	87.0	-18.9
244.316111	12.33	46.00	33.67	100.0	V	327.0	-17.6
543.399444	19.36	46.00	26.64	100.0	V	284.0	-10.9
890.982778	28.03	46.00	17.97	100.0	V	356.0	-4.9

Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	Smart combustion analyzer
Model:	NMA1
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	27227256/A004319300-003
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

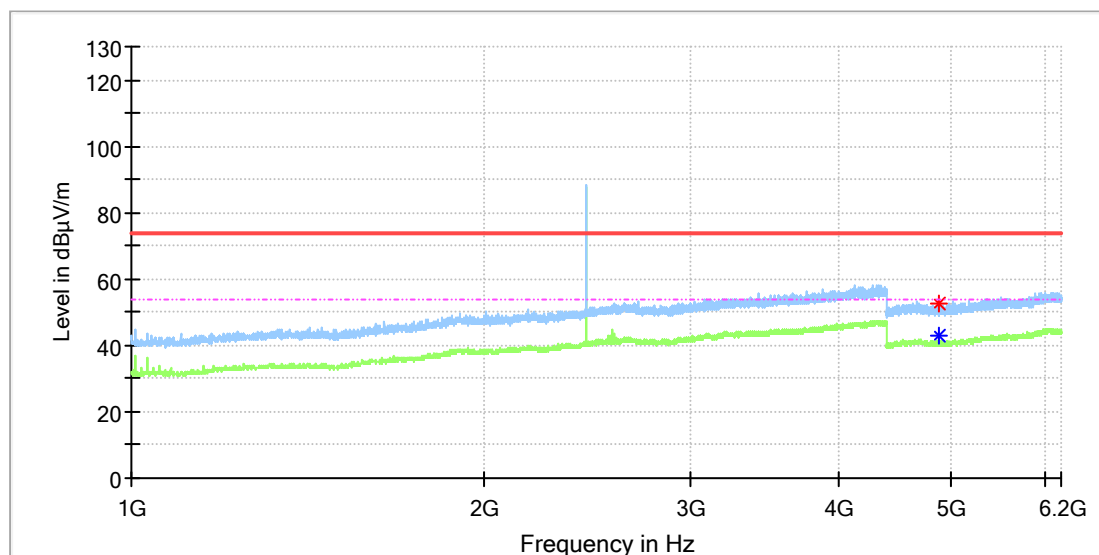
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4804.000000	55.66	---	74.00	18.34	150.0	V	338.0	13.3
4804.000000	---	49.13	54.00	4.87	150.0	V	338.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	Smart combustion analyzer
Model:	NMA1
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	27227256/A004319300-003
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

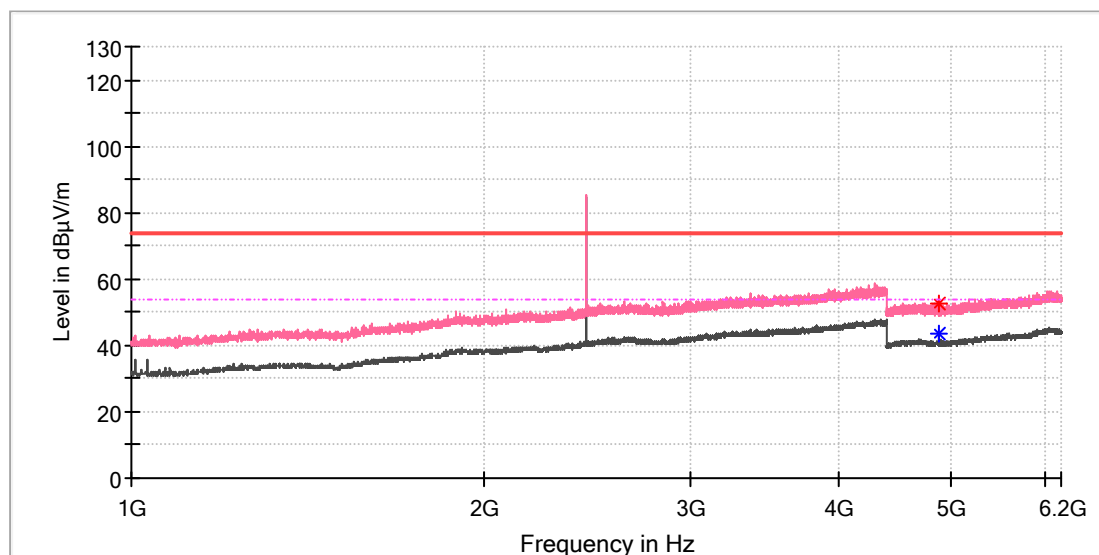
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4880.000000	---	42.72	54.00	11.28	150.0	H	253.0	13.3
4880.500000	52.35	---	74.00	21.65	150.0	H	247.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	Smart combustion analyzer
Model:	NMA1
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	27227256/A004319300-003
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

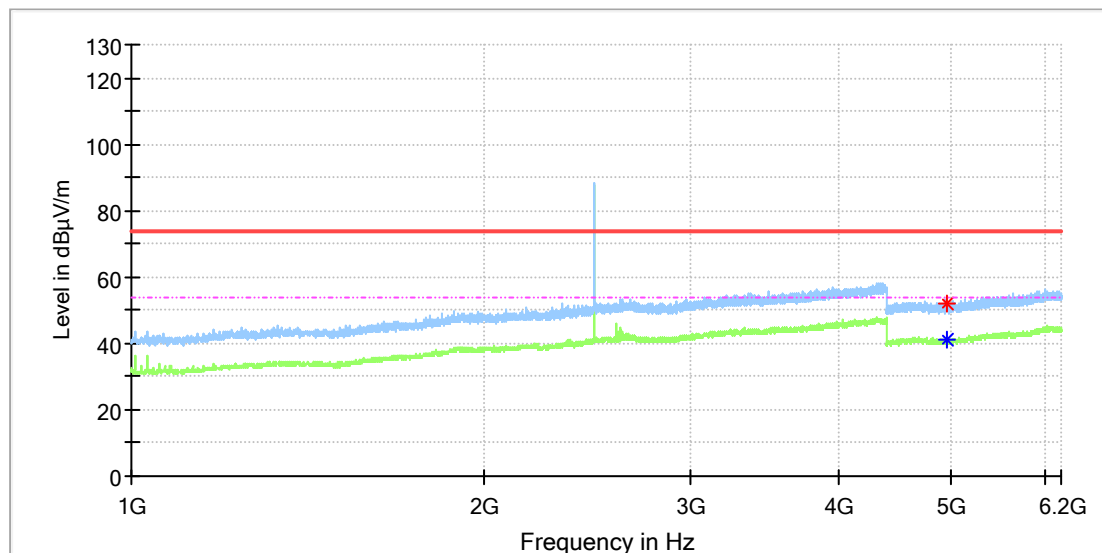
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4880.000000	---	43.78	54.00	10.22	150.0	V	173.0	13.3
4880.500000	52.35	---	74.00	21.65	150.0	V	97.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	Smart combustion analyzer
Model:	NMA1
Test Mode:	BLE 1M_High channel
Order No/Sample No:	27227256/A004319300-003
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4959.500000	---	41.18	54.00	12.82	150.0	H	349.0	13.3
4964.000000	51.99	---	74.00	22.01	150.0	H	209.0	13.3

Final Result

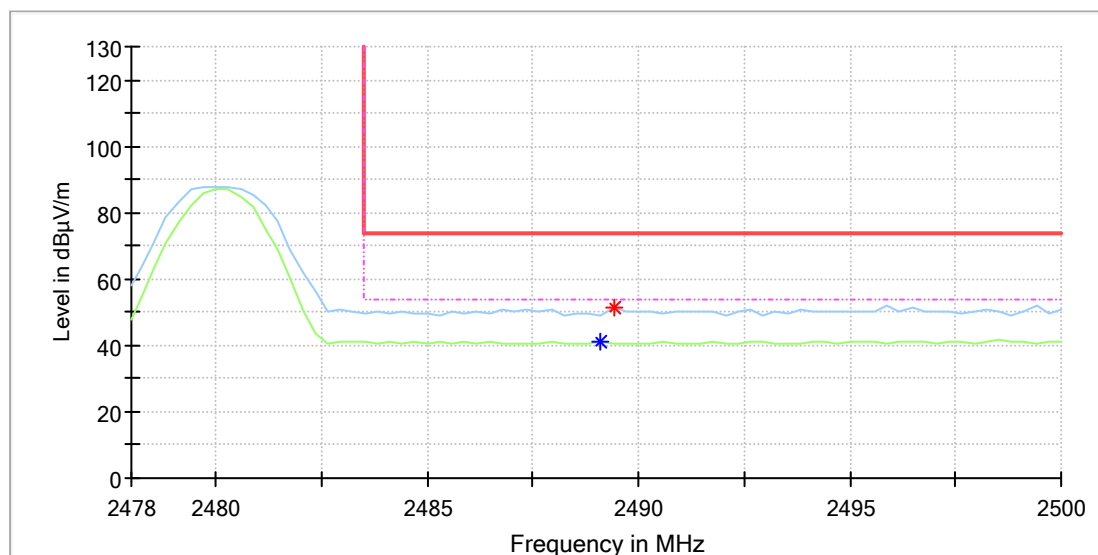
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.0	100.0	100.0	100.0	100.0	100.0		100.0	

EUT Information

EUT Name:	Smart combustion analyzer
Model:	NMA1
Test Mode:	BLE 1M_High channel
Order No/Sample No:	27227256/A004319300-003
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2489.117647	---	41.03	54.00	12.97	150.0	H	354.0	9.0
2489.411765	51.68	---	74.00	22.32	150.0	H	308.0	9.0

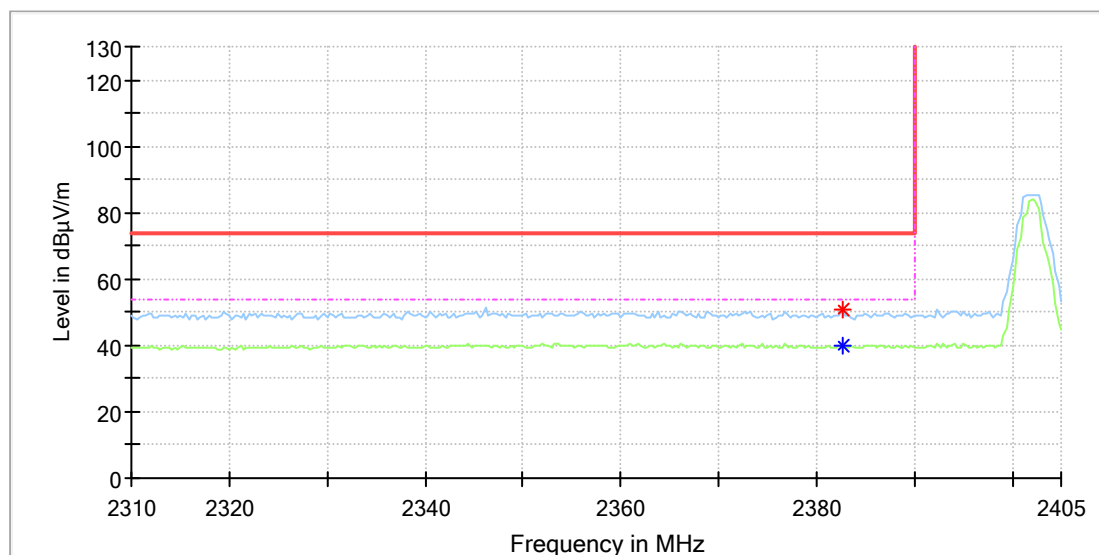
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	Smart combustion analyzer
Model:	NMA1
Test Mode:	BLE 2M_Low channel
Order No/Sample No:	27227256/A004319300-003
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2382.647059	---	39.73	54.00	14.27	150.0	H	165.0	8.5
2382.647059	50.65	---	74.00	23.35	150.0	H	165.0	8.5

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

