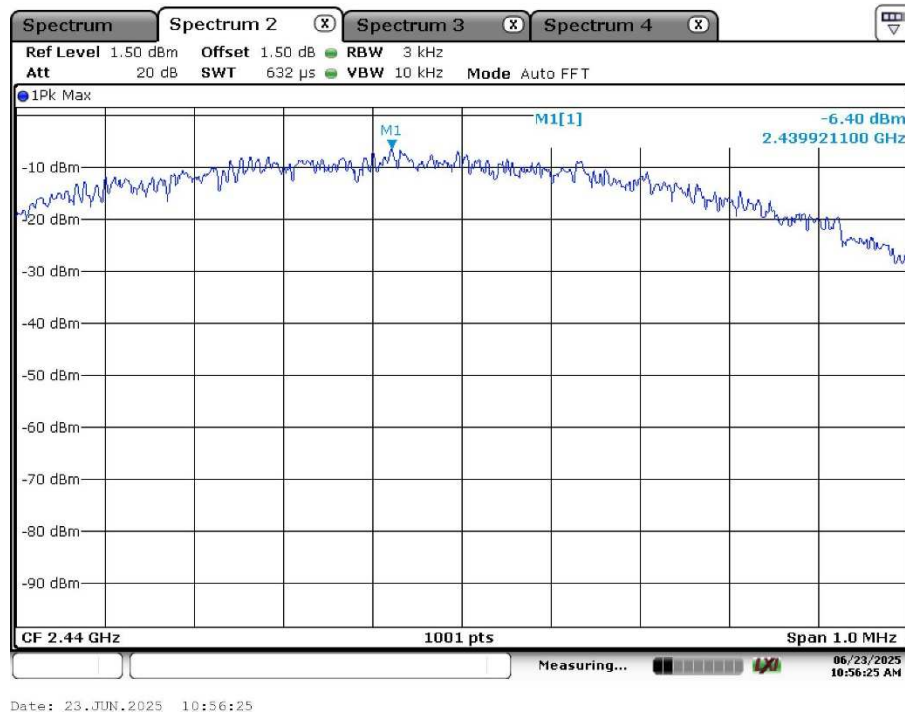
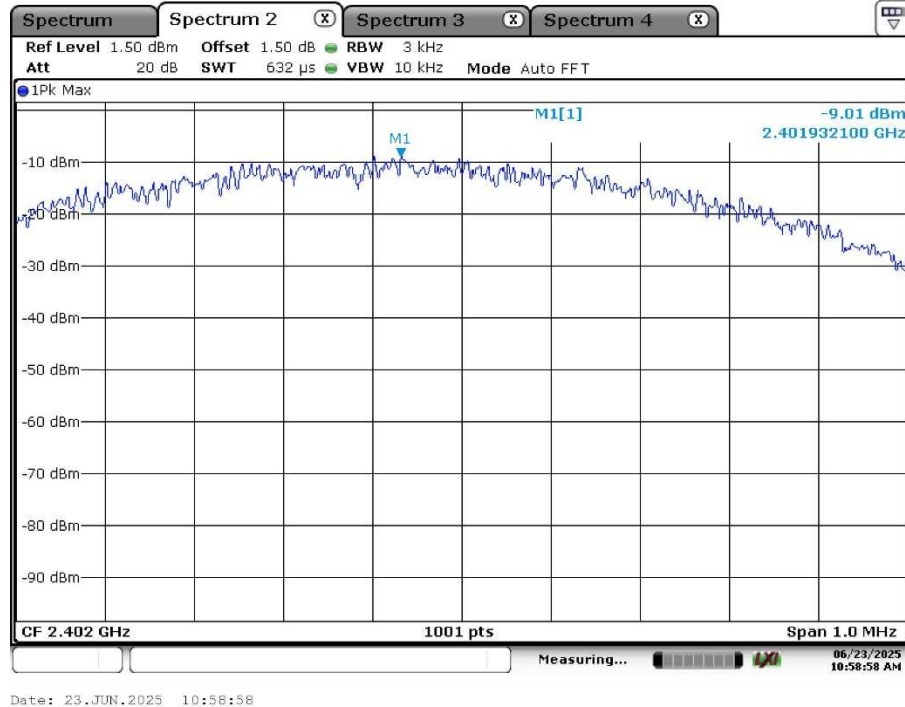
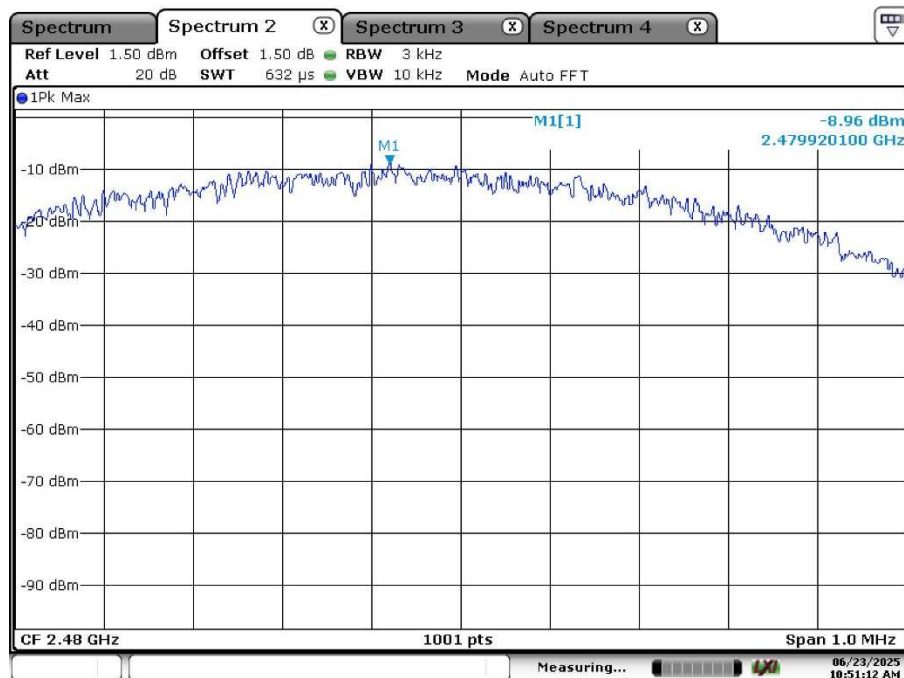


Appendix B: Test Results of Bluetooth LE

APPENDIX B: TEST RESULTS OF BLUETOOTH LE	1
APPENDIX B.1: TEST RESULTS OF CONDUCTED POWER SPECTRAL DENSITY	2
APPENDIX B.2: TEST RESULTS OF 6dB BANDWIDTH	4
APPENDIX B.3: TEST RESULTS OF 99% BANDWIDTH	7
APPENDIX B.4: TEST RESULTS OF CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 kHz BANDWIDTH	10
<i>Band Edge</i>	10
<i>Conducted Spurious Emission</i>	11
APPENDIX B.5: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS	14
<i>30 MHz to 1GHz</i>	14
<i>1GHz-18GHz</i>	16
APPENDIX B.6: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS	28

Appendix B.1: Test Results of Conducted Power Spectral Density





Date: 23.JUN.2025 10:51:12

Appendix B.2: Test Results of 6dB Bandwidth

Minimum Emission Bandwidth 6 dB (2402 MHz; 20.000 dBm; 1 MHz)

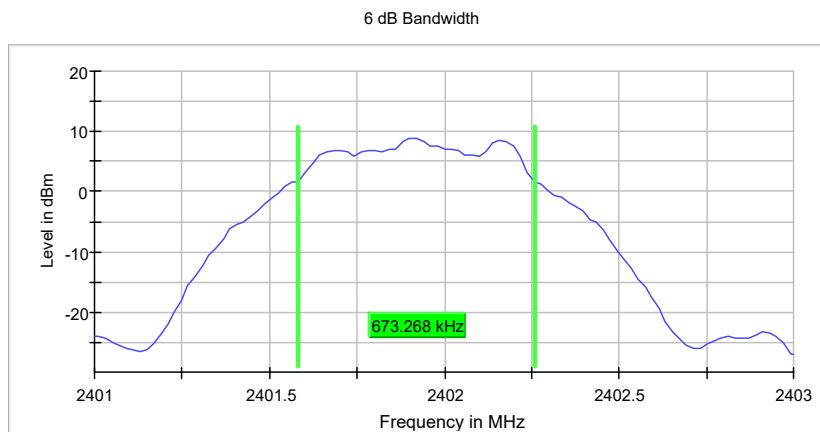
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	0.673268	0.500000	---	2401.584158	2402.257426

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	8.9	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweptime	18.938 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	9 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.07 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2440 MHz; 20.000 dBm; 1 MHz)

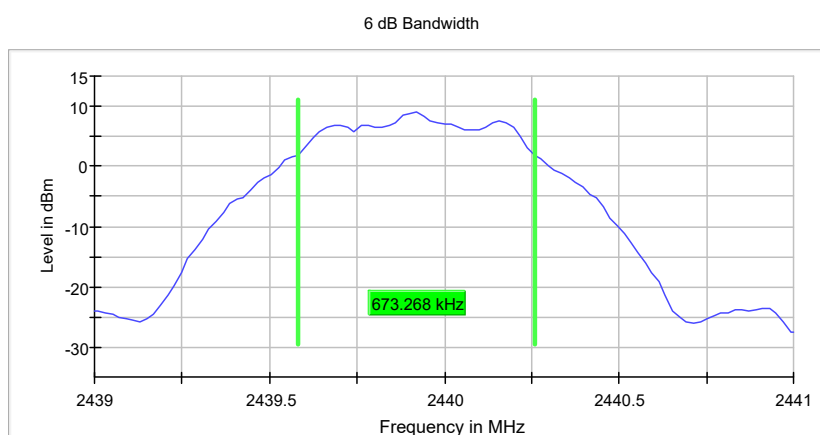
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2440.000000	0.673268	0.500000	---	2439.584158	2440.257426

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2440.000000	8.9	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz
Stop Frequency	2.44100 GHz	2.44100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweptime	18.938 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	10 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.47 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2480 MHz; 20.000 dBm; 1 MHz)

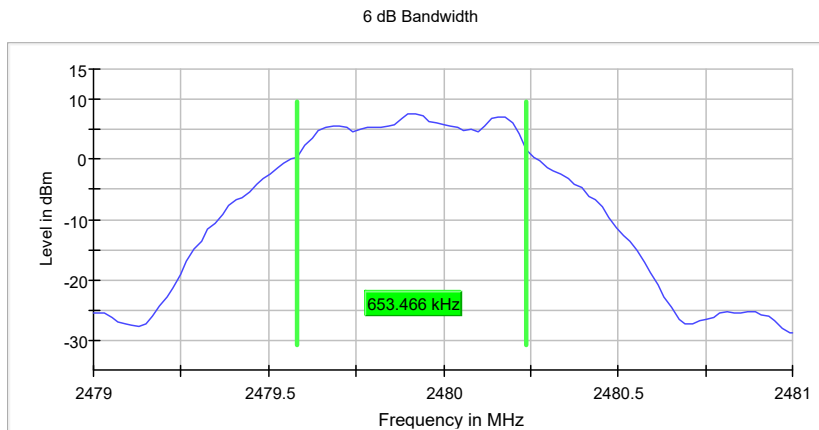
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	0.653466	0.500000	---	2479.584158	2480.237624

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	7.6	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweptime	18.938 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweptype	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	9 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.08 dB	0.50 dB

Appendix B.3: Test Results of 99% Bandwidth

Occupied Channel Bandwidth 99% (2402 MHz; 20.000 dBm; 1 MHz)

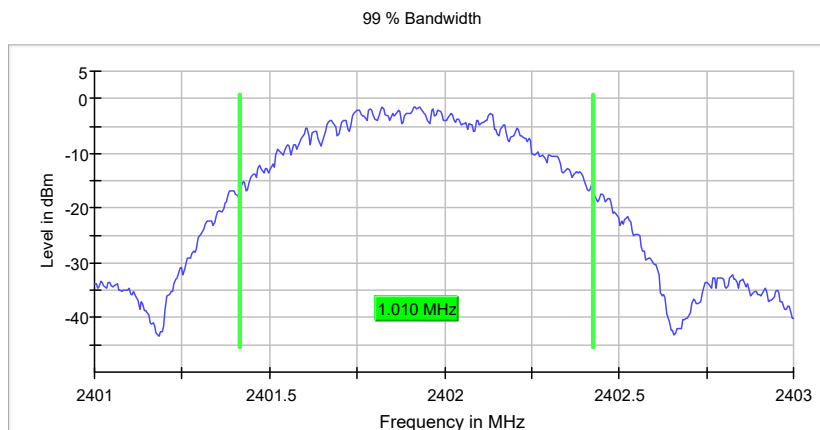
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.010000	---	---	2401.417500	2402.427500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweeptime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.15 dB	0.30 dB

Occupied Channel Bandwidth 99% (2440 MHz; 20.000 dBm; 1 MHz)

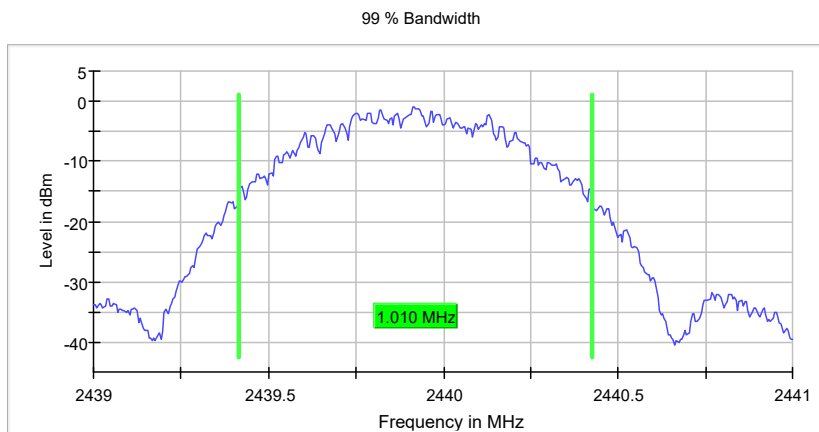
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2440.000000	1.010000	---	---	2439.417500	2440.427500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2440.000000	PASS

**Measurement**

Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz
Stop Frequency	2.44100 GHz	2.44100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweptime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	9 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.21 dB	0.30 dB

Occupied Channel Bandwidth 99% (2480 MHz; 20.000 dBm; 1 MHz)

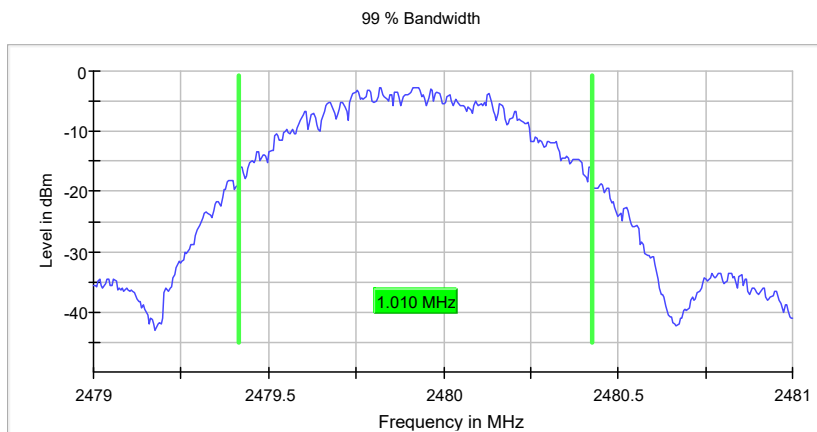
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.010000	---	---	2479.417500	2480.427500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS



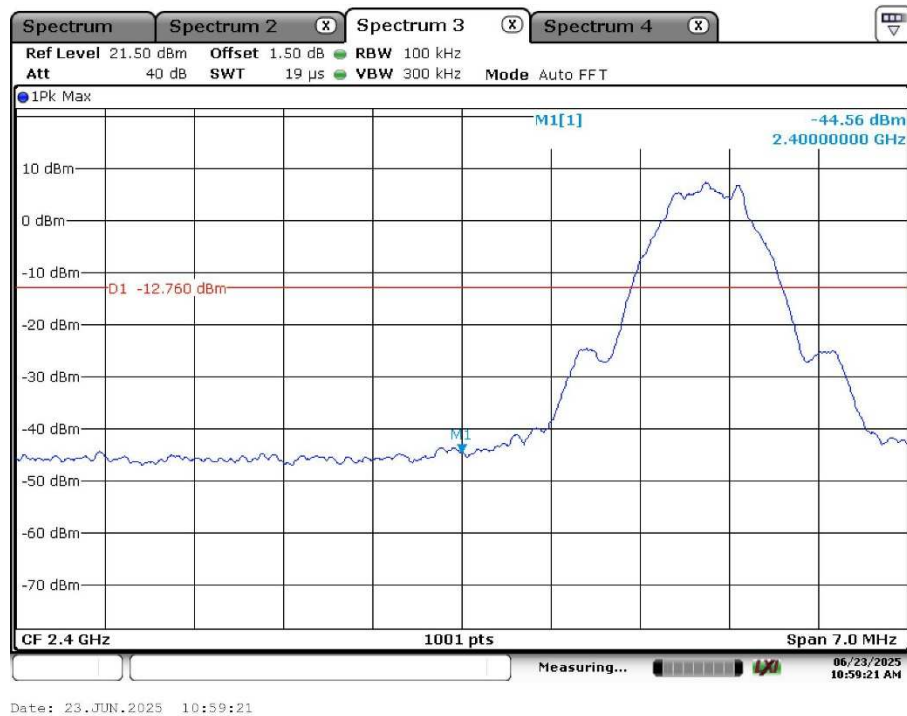
Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweptime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	10 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.11 dB	0.30 dB

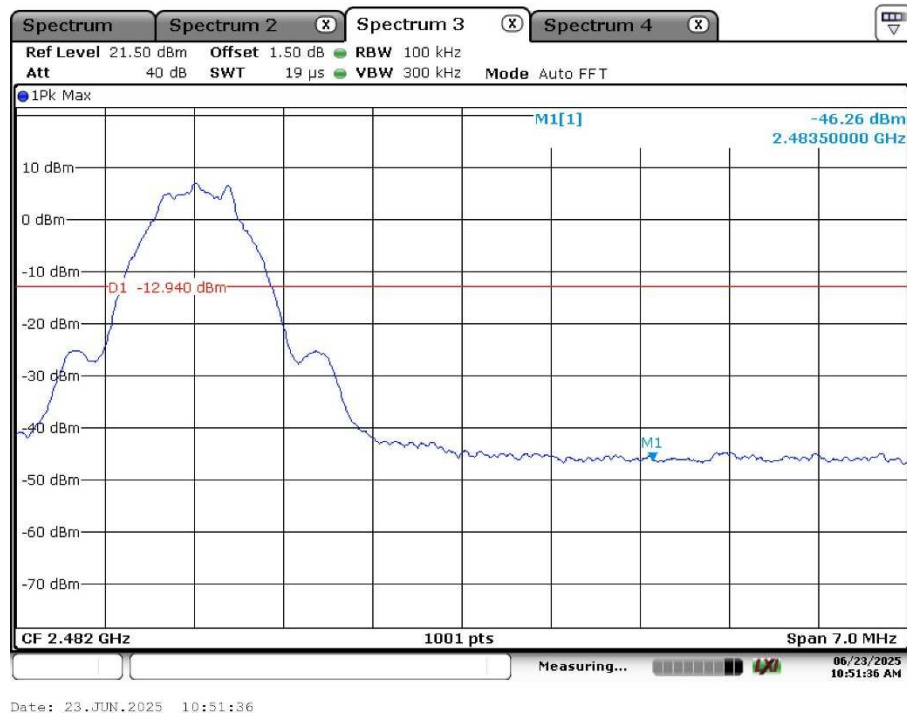
Appendix B.4: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

Band Edge

Low Channel:

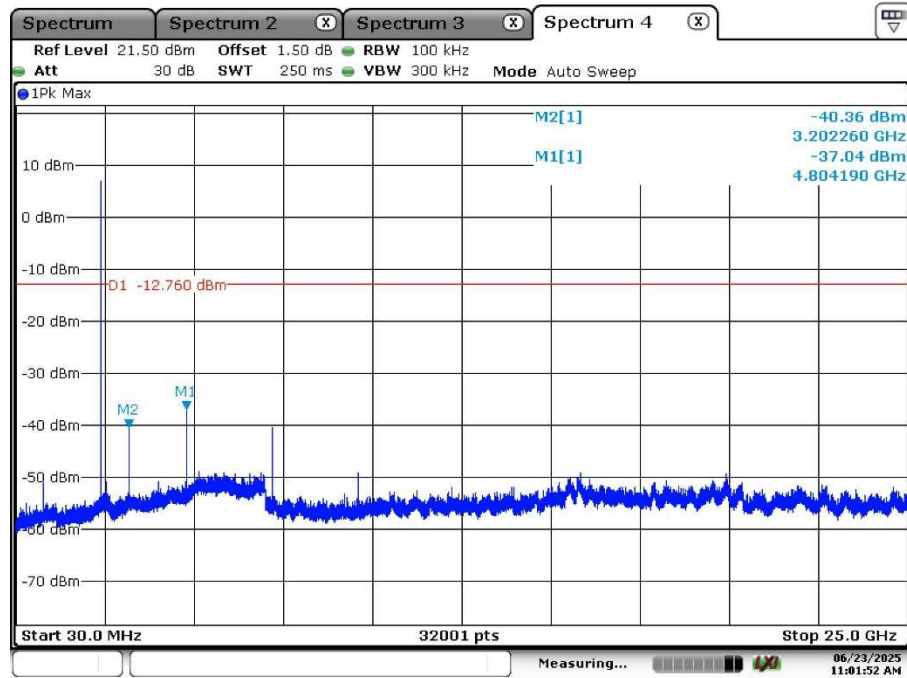
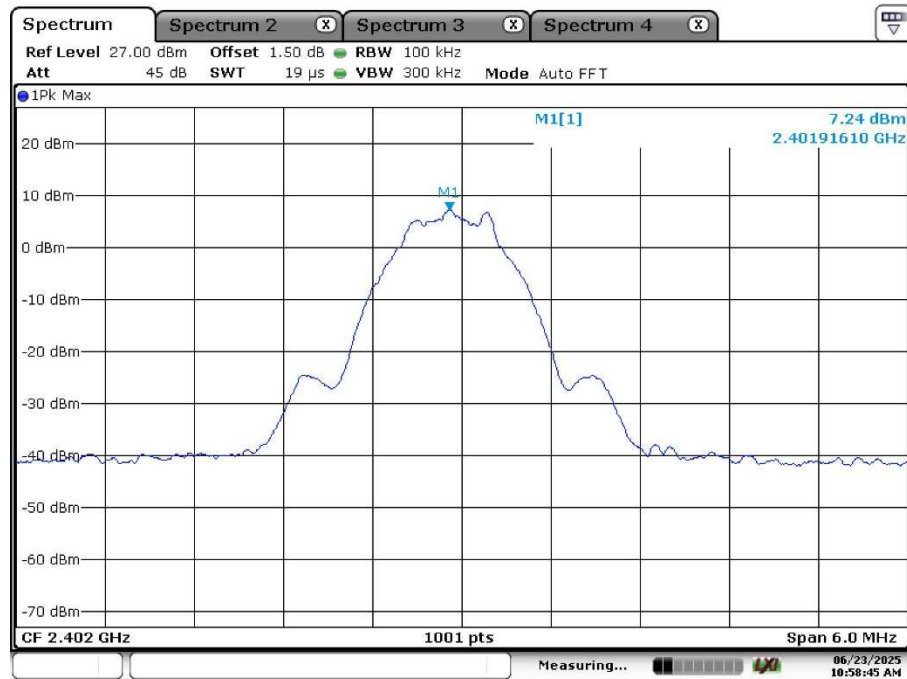


High Channel:

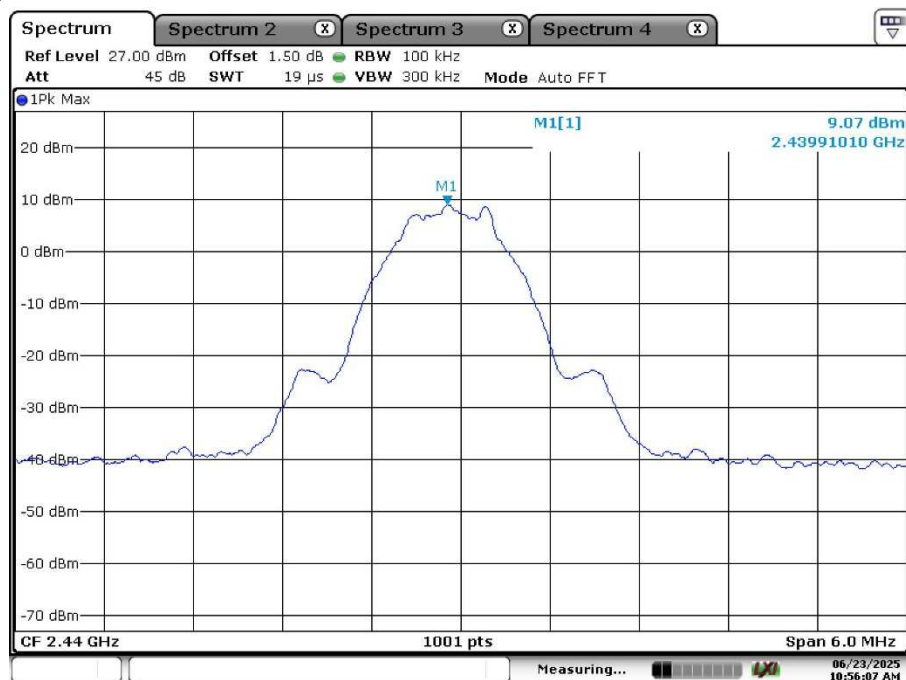


Conducted Spurious Emission

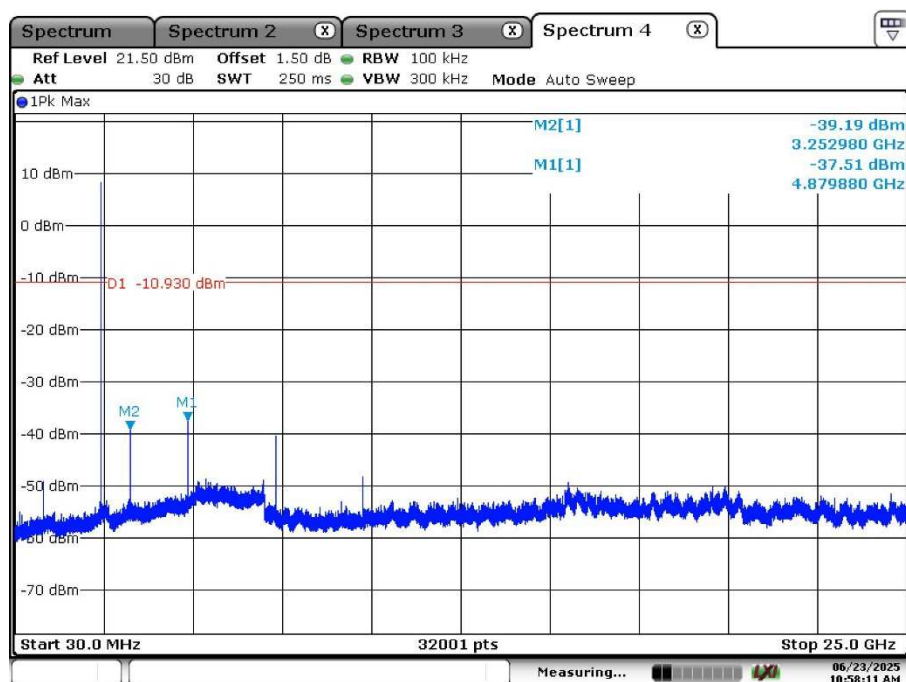
Low Channel:



Middle Channel:

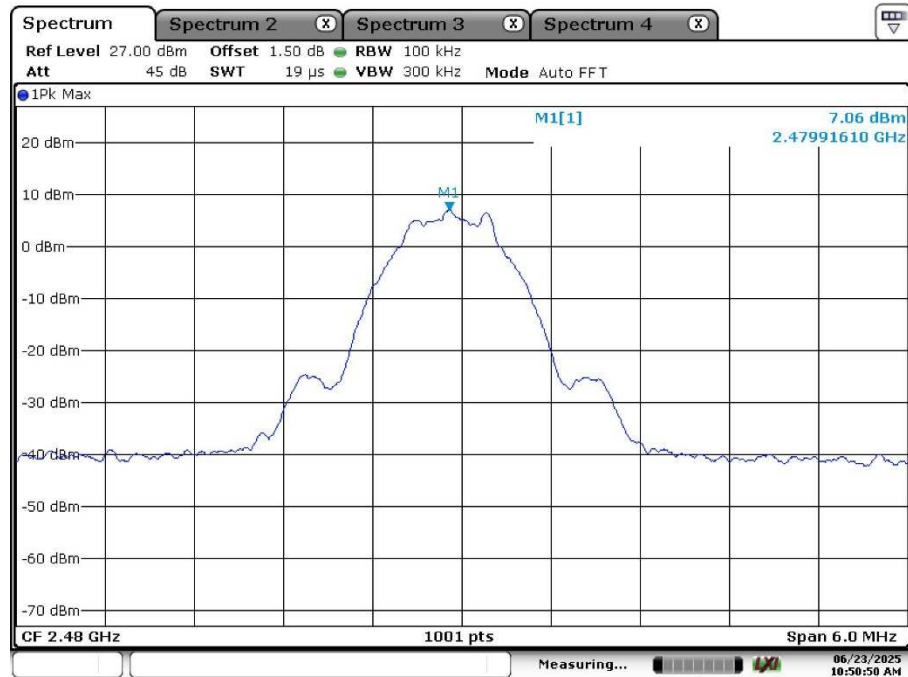


Date: 23.JUN.2025 10:56:07

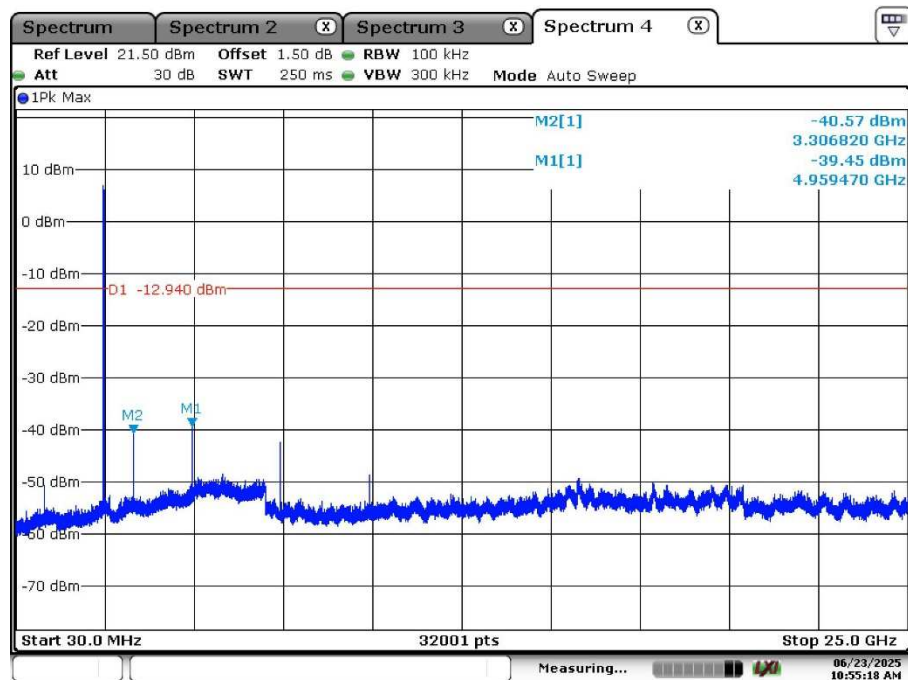


Date: 23.JUN.2025 10:58:11

High Channel:



Date: 23.JUN.2025 10:50:50



Date: 23.JUN.2025 10:55:18

Appendix B.5: Test Results of Radiated Spurious Emissions

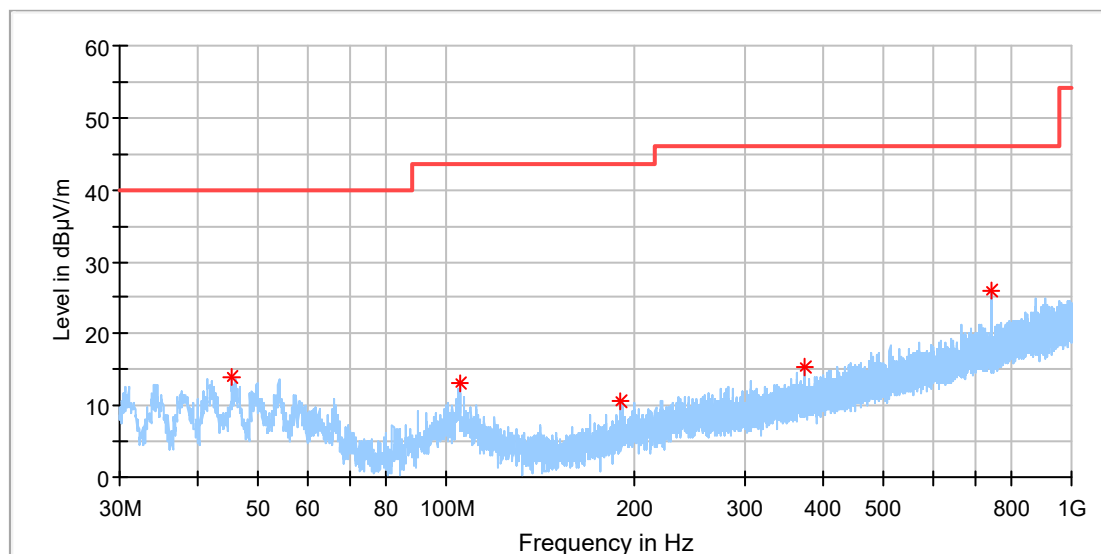
Note:

- 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.

30 MHz to 1GHz

EUT Information

EUT Name: Dogness Smart GPS Tracker
Model: C9
Test Mode: BLE 1M_Mid channel
Order No/Sample No: 168543097/A004015294-002
Test Voltage: Battery
Remark: Temp 24 Humi:50%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

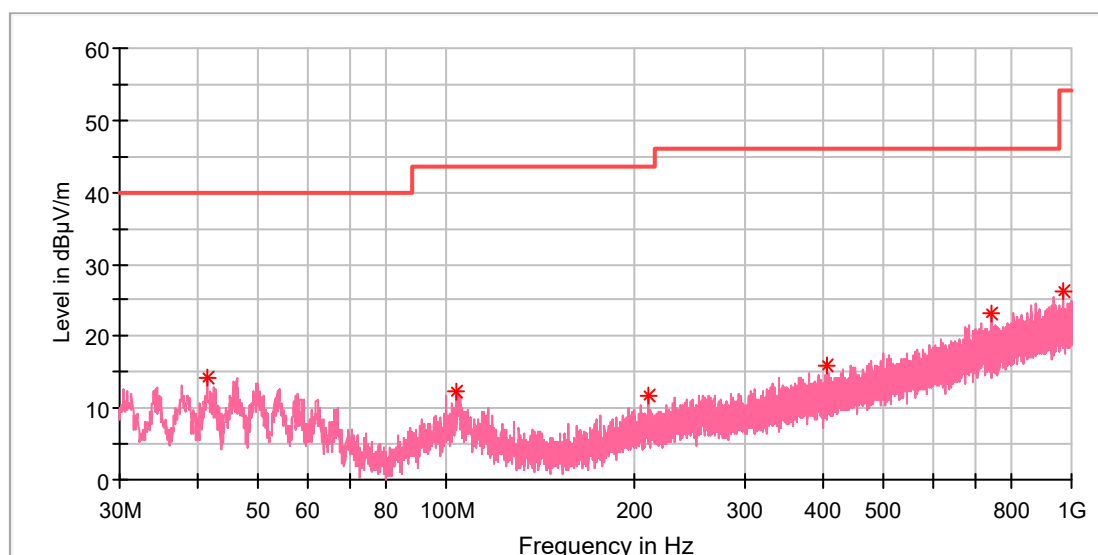
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
45.482692	13.92	40.00	26.08	100.0	H	306.0	-18.9
105.025769	13.08	43.50	30.42	100.0	H	164.0	-18.9
189.639615	10.67	43.50	32.83	100.0	H	231.0	-19.7
375.805000	15.34	46.00	30.66	100.0	H	208.0	-14.3
742.502308	25.90	46.00	20.10	100.0	H	92.0	-7.2

Final_Result

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

EUT Information

EUT Name:	Dogness Smart GPS Tracker
Model:	C9
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168543097/A004015294-002
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
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)
41.528077	14.24	40.00	25.76	100.0	V	14.0	-19.8
103.831923	12.31	43.50	31.19	100.0	V	136.0	-18.9
211.016923	11.64	43.50	31.86	100.0	V	251.0	-18.8
406.434615	15.94	46.00	30.06	100.0	V	5.0	-13.6
742.539615	23.29	46.00	22.71	100.0	V	214.0	-7.2
967.579615	26.13	54.00	27.87	100.0	V	175.0	-4.0

Final_Result

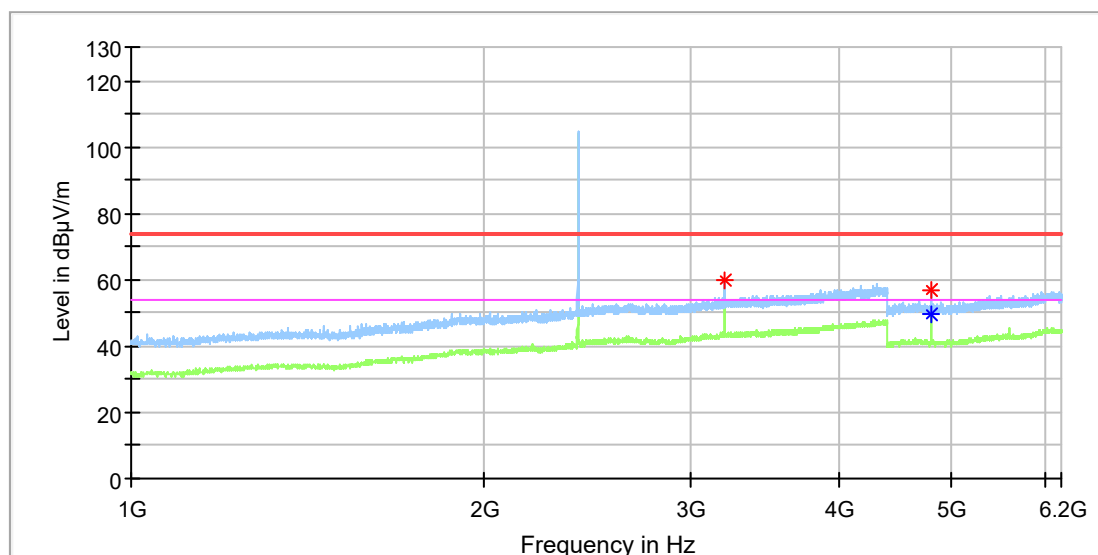
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz-18GHz

Note: The highest waveform in the figure is Bluetooth Fundamental.

EUT Information

EUT Name:	Dogness Smart GPS Tracker
Model:	C9
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168543097/A004015294-002
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

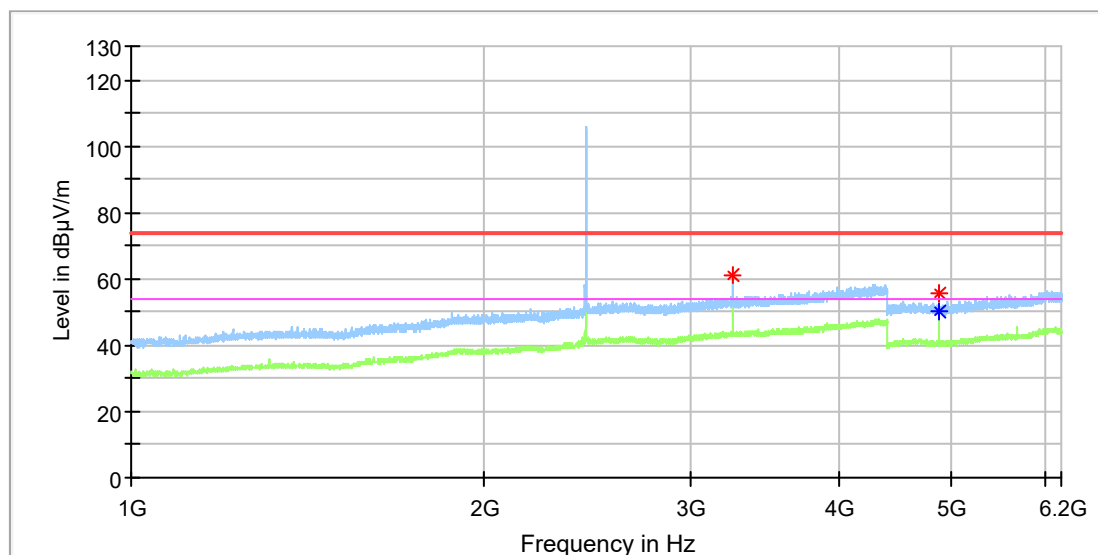
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3202.500000	59.89	---	74.00	14.11	150.0	H	70.0	10.8
4803.500000	56.70	---	74.00	17.30	150.0	H	1.0	13.3
4804.000000	---	49.38	54.00	4.62	150.0	H	155.0	13.3

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:	Dogness Smart GPS Tracker
Model:	C9
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168543097/A004015294-002
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

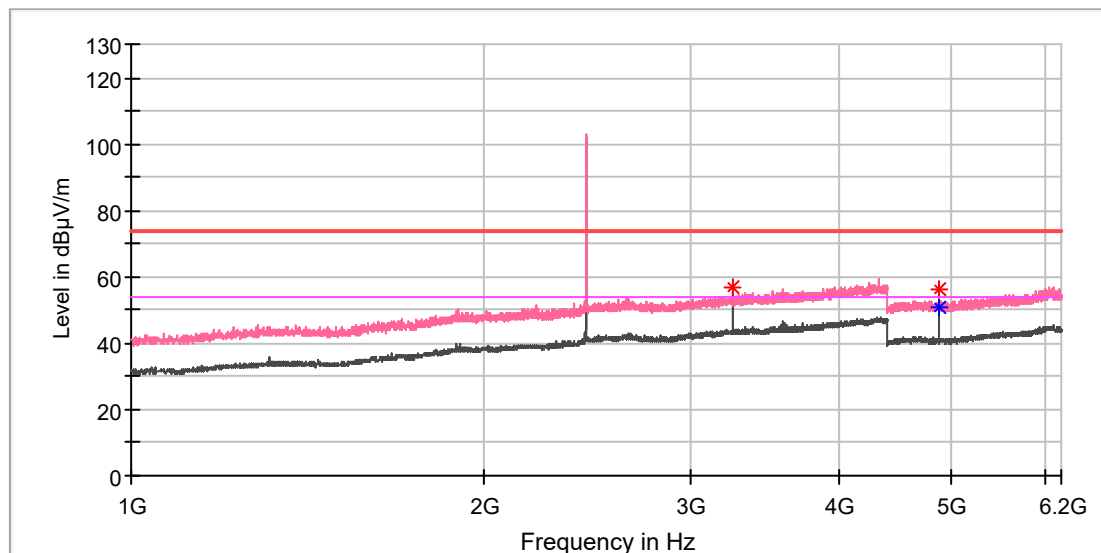
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3253.000000	60.88	---	74.00	13.12	150.0	H	57.0	10.8
4880.000000	---	50.18	54.00	3.82	150.0	H	330.0	13.3
4880.000000	55.46	---	74.00	18.54	150.0	H	330.0	13.3

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:	Dogness Smart GPS Tracker
Model:	C9
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168543097/A004015294-002
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

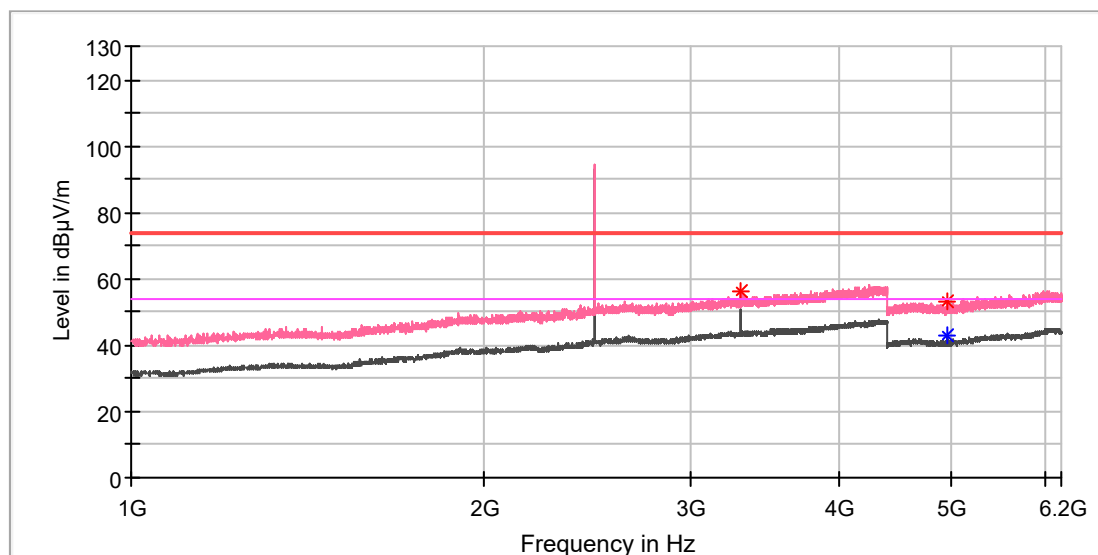
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3253.000000	56.81	---	74.00	17.19	150.0	V	236.0	10.8
4879.000000	55.98	---	74.00	18.02	150.0	V	320.0	13.3
4879.500000	---	50.83	54.00	3.17	150.0	V	324.0	13.3

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:	Dogness Smart GPS Tracker
Model:	C9
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168543097/A004015294-002
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
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)
3306.500000	56.27	---	74.00	17.73	150.0	V	235.0	10.9
4959.000000	53.10	---	74.00	20.90	150.0	V	237.0	13.3
4959.500000	---	42.77	54.00	11.23	150.0	V	255.0	13.3

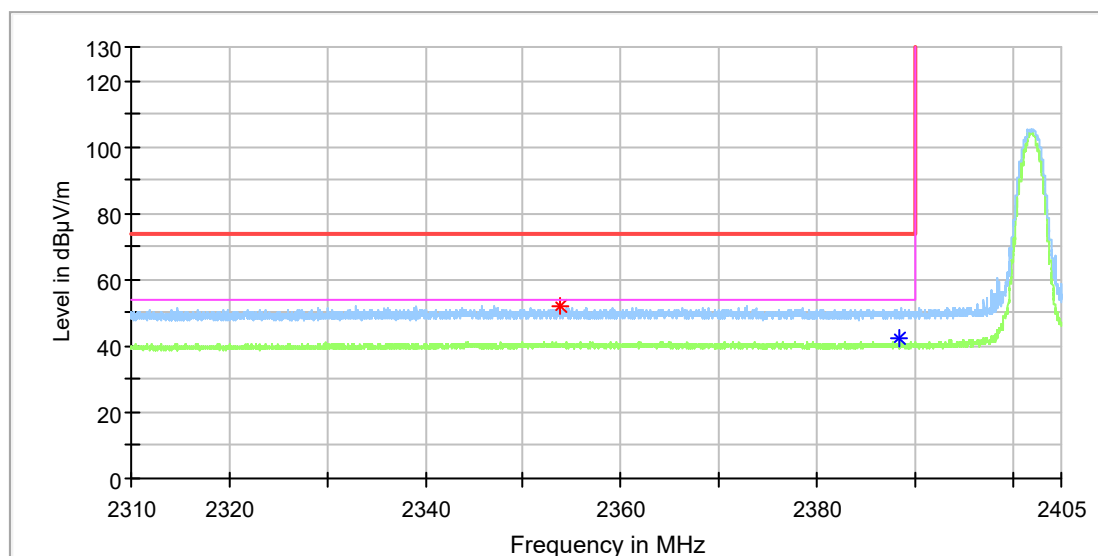
Final Result

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

Appendix B.6: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	Dogness Smart GPS Tracker
Model:	C9
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168543097/A004015294-002
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

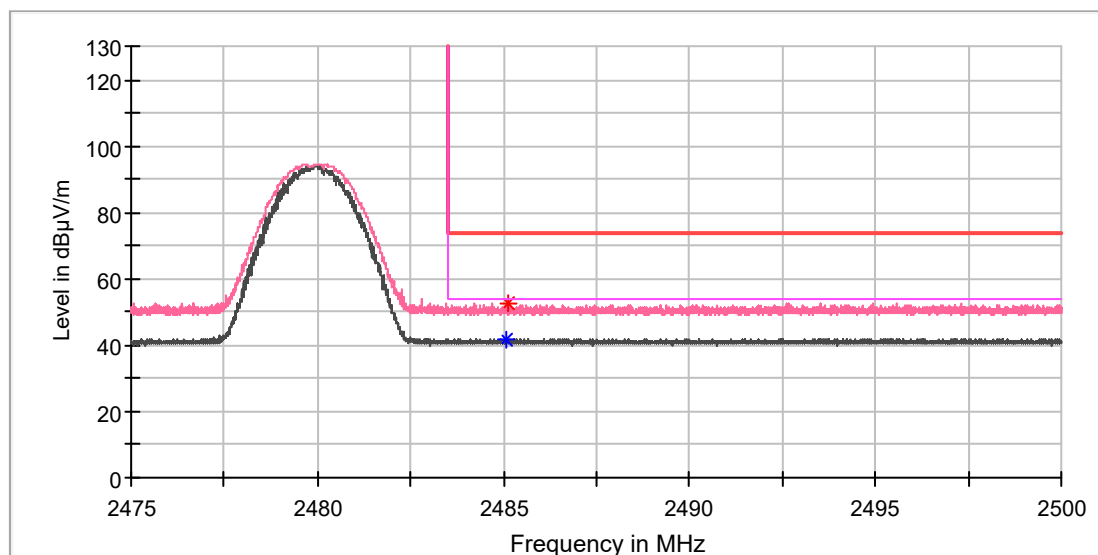
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2353.713971	52.09	---	74.00	21.91	150.0	H	253.0	8.5
2388.514706	---	42.03	54.00	11.97	150.0	H	315.0	8.5

Final Result

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

EUT Information

EUT Name:	Dogness Smart GPS Tracker
Model:	C9
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168543097/A004015294-002
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
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)
2485.091912	---	41.79	54.00	12.21	150.0	V	264.0	9.0
2485.147059	52.70	---	74.00	21.30	150.0	V	178.0	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)
---	---	---	---	---	---		---	---