

7.2.5. Test Result

Environment: 18.7°C/33%RH/102.5kPa

Voltage: DC 3V

Tested By: Stone Zhang

Date: 2025-02-14

BLE_1M

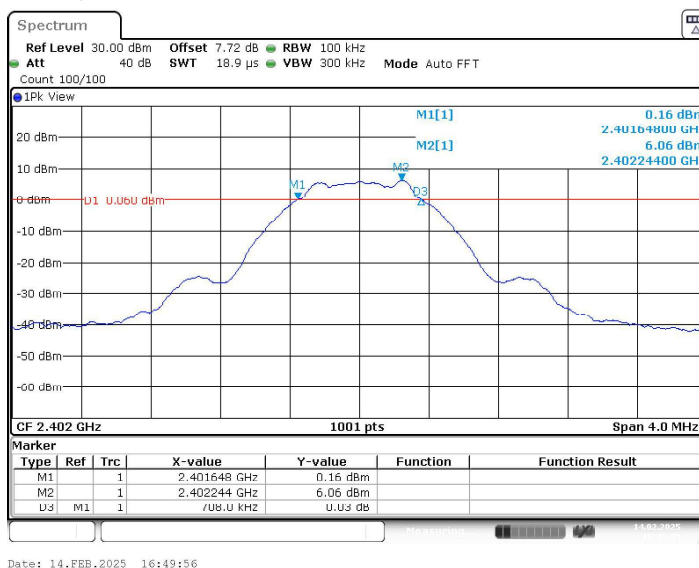
Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Lowest	2402	708	≥500	PASS
Middle	2440	708		PASS
Highest	2480	708		PASS

BLE_2M

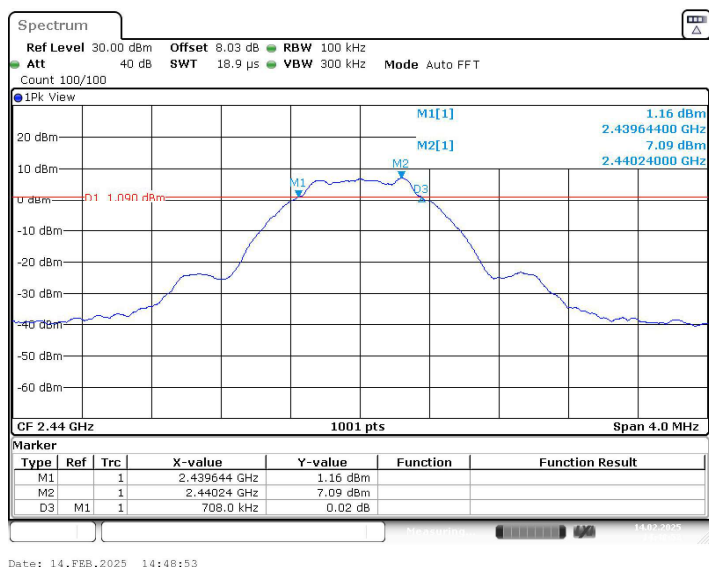
Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Lowest	2402	1340	≥500	PASS
Middle	2440	1336		PASS
Highest	2480	1336		PASS

BLE_1M

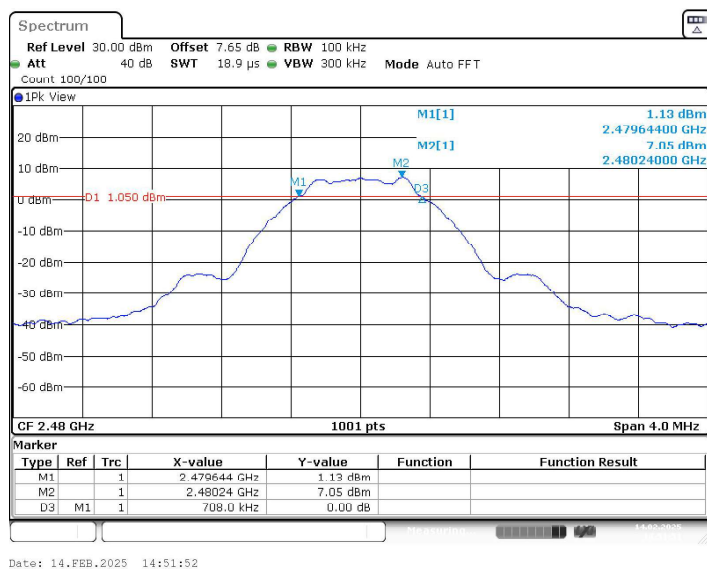
Lowest Frequency (2402MHz)



Middle Frequency (2440 MHz)

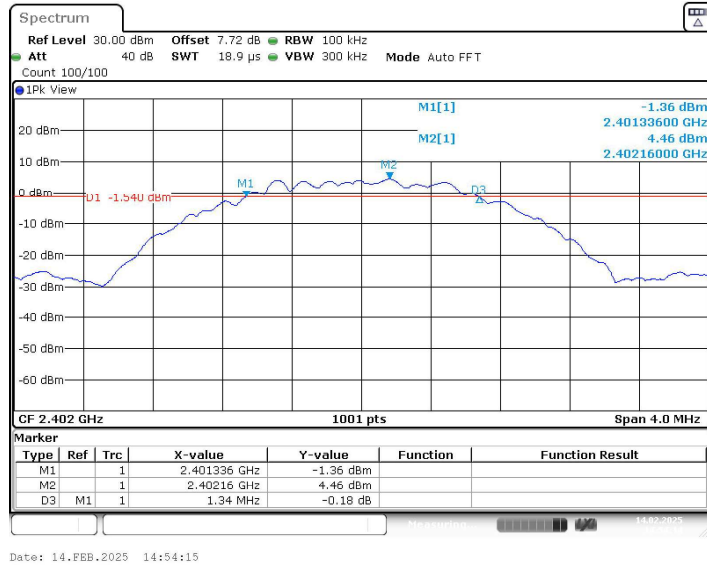


Highest Frequency (2480MHz)

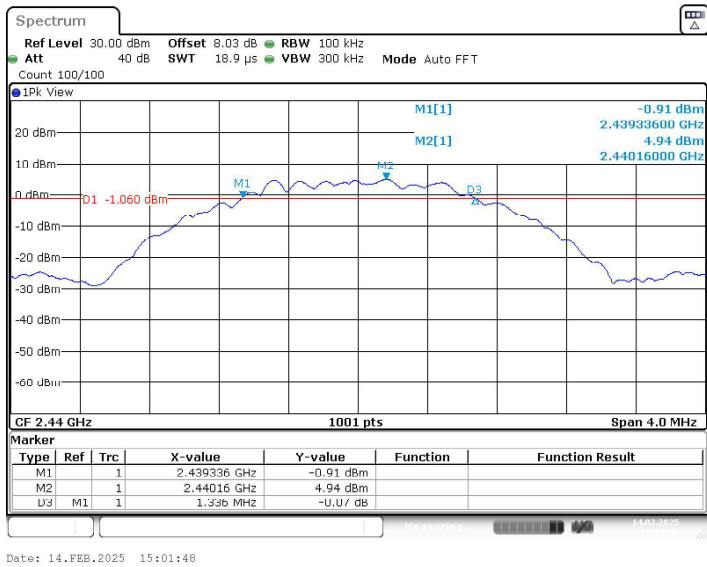


BLE_2M

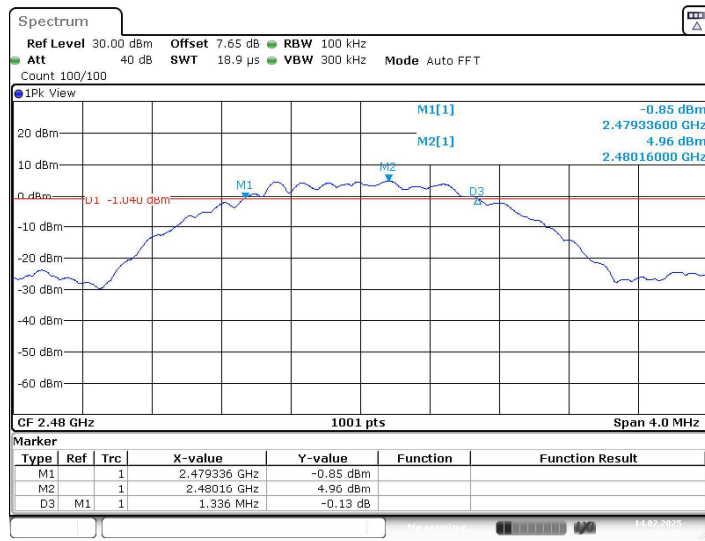
Lowest Frequency (2402MHz)



Middle Frequency (2440 MHz)



Highest Frequency (2480MHz)



Date: 14.FEB.2025 15:04:00

7.3. Output Power Measurement

7.3.1. Test Limit

The maximum permissible conducted output power is 1 Watt (30dBm). And for antenna gain greater than 6dBi the limit shall reduce by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

7.3.2. Test Procedure Used

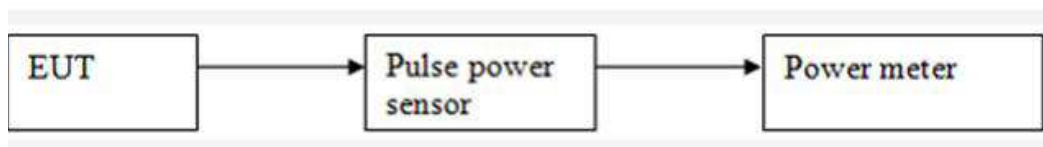
ANSI C63.10-2013 – Section 11.9.1.1

KDB 558074 D01 v05r02 – Section 8.3.1.2

7.3.3. Test Setting

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the power meter and enable the EUT transmit continuously.
2. Keep the EUT in transmitting at lowest, middle and highest channel individually. Record the max value.

7.3.4. Test Setup



7.3.5. Test Result

Environment: 18.7°C/33%RH/102.5kPa

Voltage: DC 3V

Tested By: Stone Zhang

Date: 2025-02-14

BLE_1M

Channel	Frequency (MHz)	Maximum Power (dBm)	Limit	Peak/ Average	Result
Lowest	2402	7.36	1W (30dBm)	Peak	Pass
Middle	2440	8.20			Pass
Highest	2480	8.17			Pass

BLE_2M

Channel	Frequency (MHz)	Maximum Power (dBm)	Limit	Peak/ Average	Result
Lowest	2402	7.35	1W (30dBm)	Peak	Pass
Middle	2440	8.20			Pass
Highest	2480	8.17			Pass

7.4. Power Spectral Density Measurement

7.4.1. Test Limit

The maximum permissible power spectral density is 8dBm in any 3 kHz band. And for antenna gain greater than 6dBi the limit shall reduce by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

7.4.2. Test Procedure Used

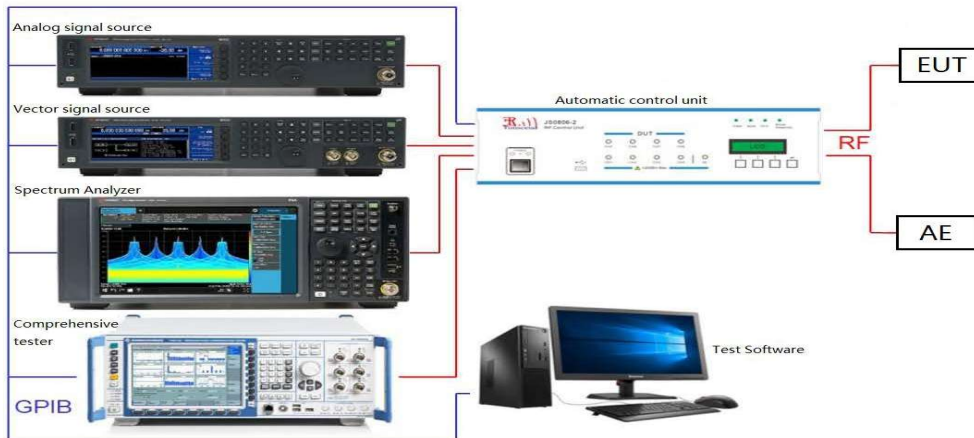
KDB 558074 D01 v05r02 - Section 8.4

ANSI C63.10 – Section 11.10.2

7.4.3. Test Setting

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
4. Set the VBW $\geq [3 \times \text{RBW}]$.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.

7.4.4. Test Setup



7.4.5. Test Result

Environment: 18.7°C/33%RH/102.5kPa

Voltage: DC 3V

Tested By: Stone Zhang

Date: 2025-02-14

BLE_1M

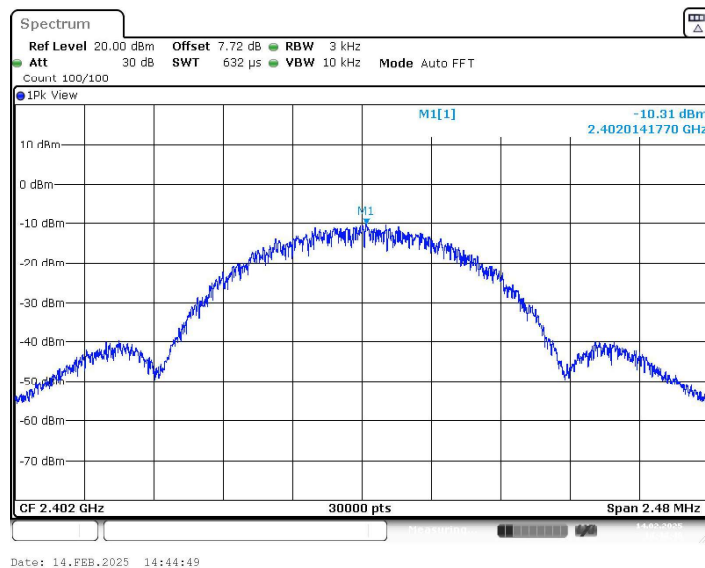
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Test Result
Lowest	2402	-10.31	8.00	PASS
Middle	2440	-8.97		PASS
Highest	2480	-9.07		PASS

BLE_2M

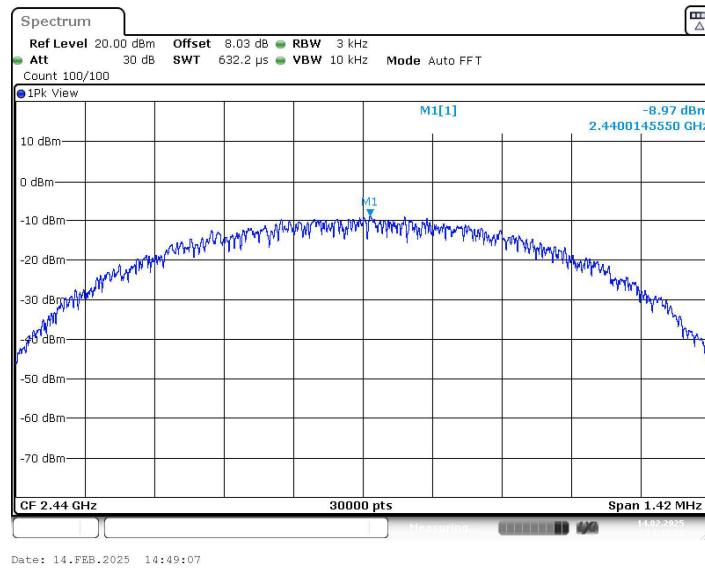
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Test Result
Lowest	2402	-11.15	8.00	PASS
Middle	2440	-9.73		PASS
Highest	2480	-9.79		PASS

BLE_1M

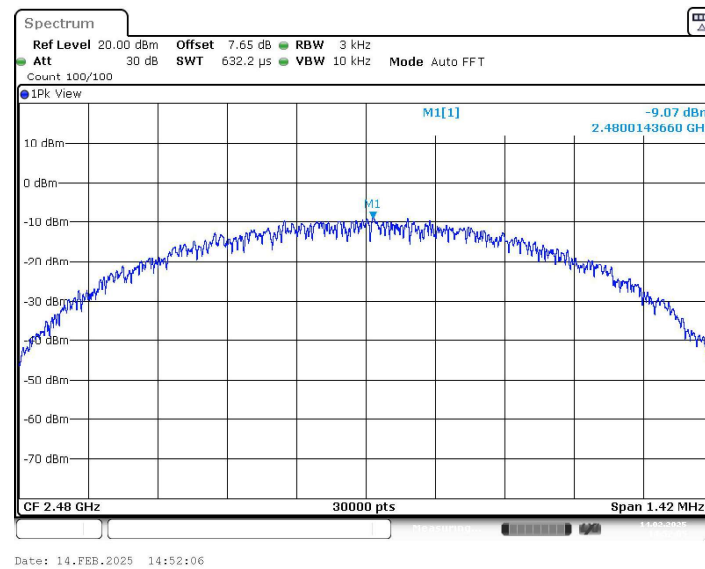
Lowest Frequency (2402MHz)



Middle Frequency (2440 MHz)

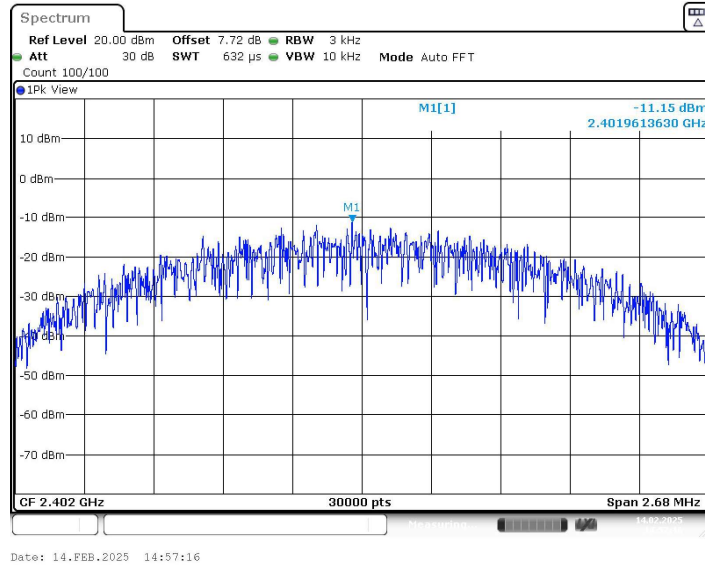


Highest Frequency (2480MHz)

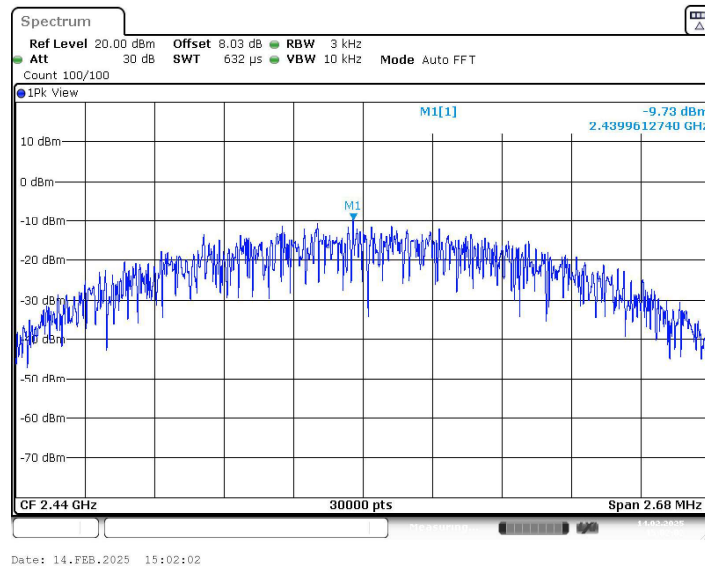


BLE_2M

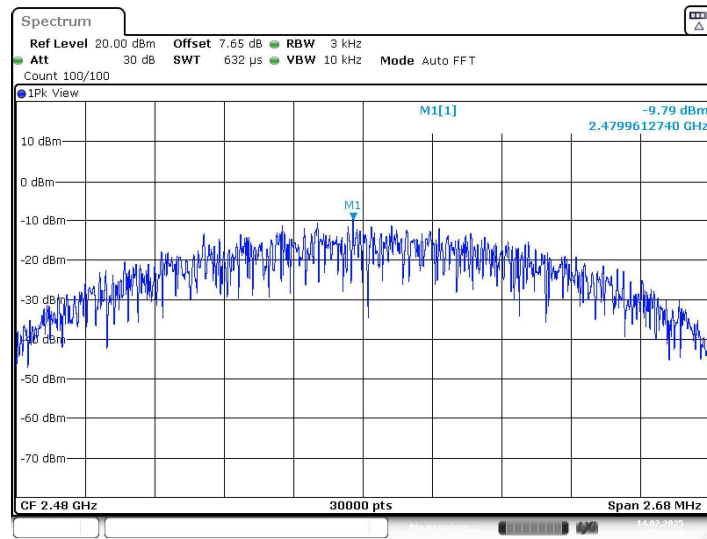
Lowest Frequency (2402MHz)



Middle Frequency (2440 MHz)



Highest Frequency (2480MHz)



Date: 14.FEB.2025 15:04:14

7.5. Conducted Band Edge and Out-of-Band Emissions

7.5.1. Test Limit

The limit for out-of-band spurious emissions at the band edge is 20dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100 kHz bandwidth per the PSD procedure.

7.5.2. Test Procedure Used

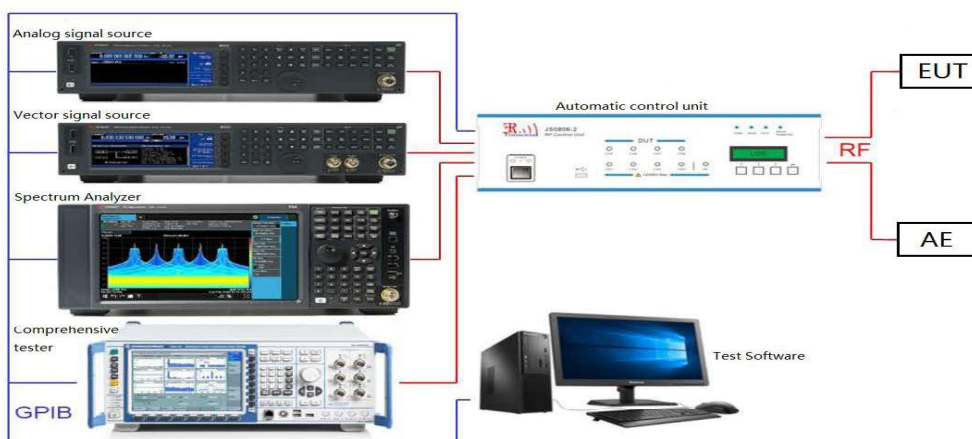
KDB 558074 D01 v05r02 - Section 8.5 & Section 8.6

ANSI C63.10 – Section 11.11&11.12

7.5.3. Test Setting

- (a) Set the center frequency and span to encompass frequency range to be measured
- (b) RBW = 100kHz
- (c) VBW = 300kHz
- (d) Detector = Peak
- (e) Trace mode = max hold
- (f) Sweep time = auto couple
- (g) The trace was allowed to stabilize

7.5.4. Test Setup



7.5.5. Test Result

Environment: 18.7°C/33%RH/102.5kPa

Voltage: DC 3V

Tested By: Stone Zhang

Date: 2025-02-14

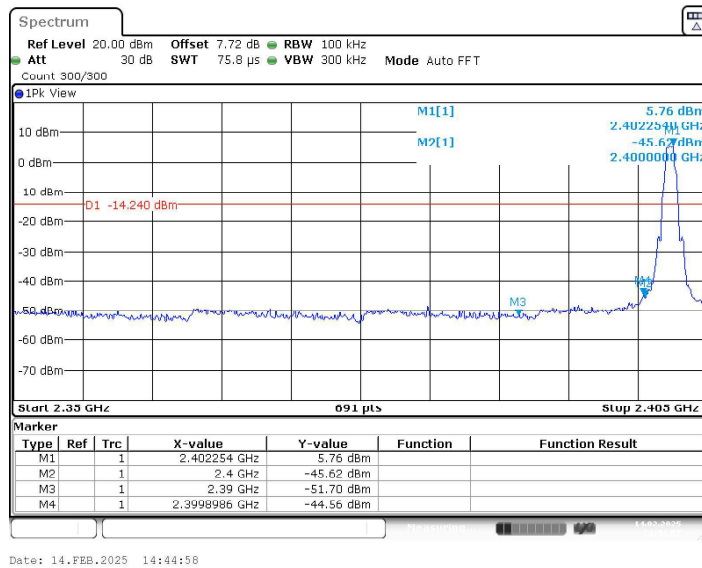
Band edge measurements

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	5.76	-44.56	≤-14.24	PASS
		High	2480	7.06	-48.03	≤-12.94	PASS
BLE_2M	Ant1	Low	2402	3.79	-28.18	≤-16.21	PASS
		High	2480	4.96	-45.61	≤-15.04	PASS

BLE_1M

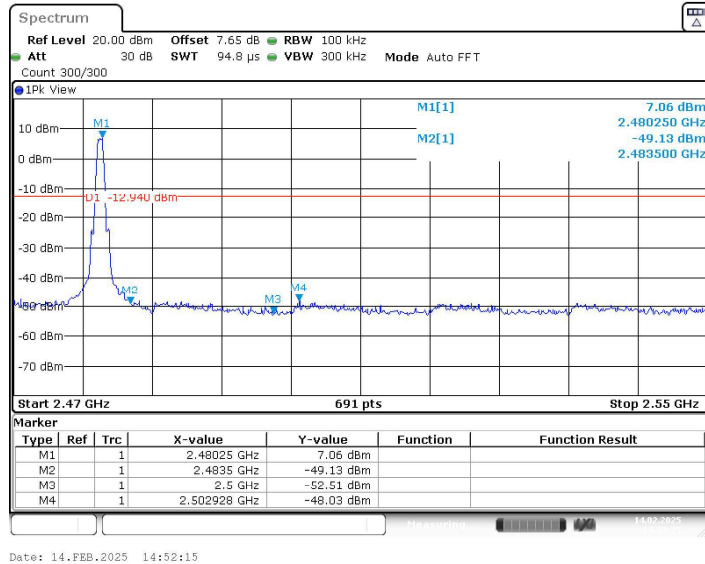
Lowest Frequency (2402MHz)

2.35GHz-2.405GHz



Highest Frequency (2480MHz)

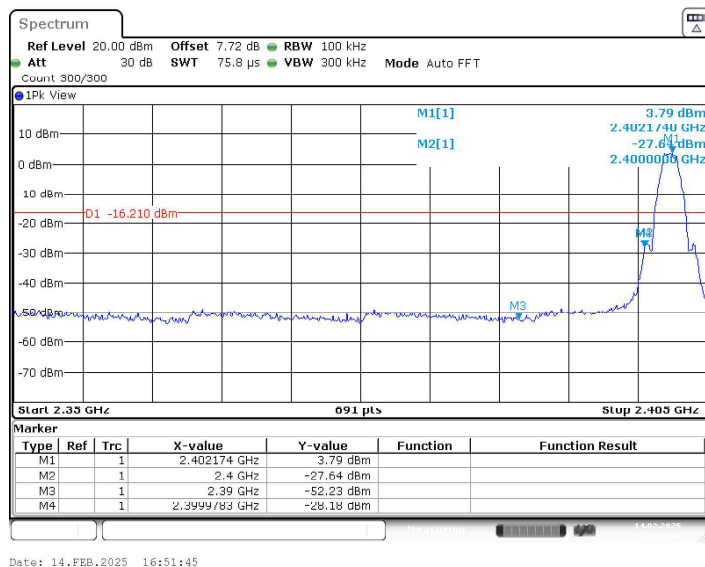
2.47GHz-2.55GHz



BLE_2M

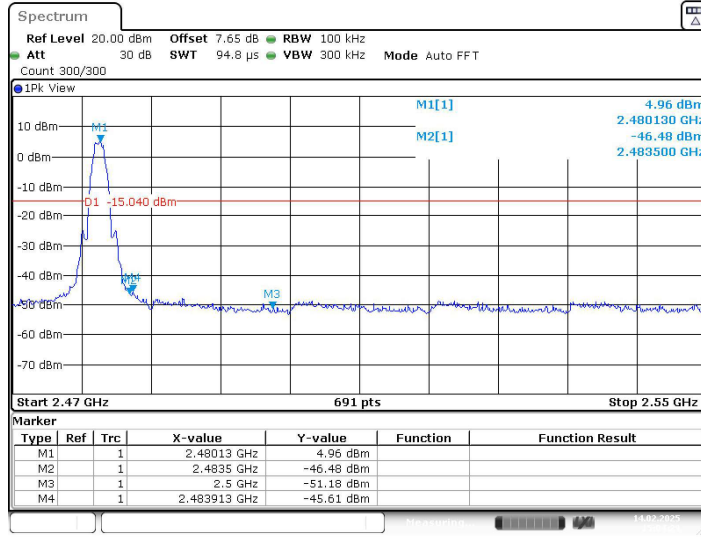
Lowest Frequency (2402MHz)

2.35GHz-2.405GHz



Highest Frequency (2480MHz)

2.47GHz-2.55GHz



Conducted Spurious Emission

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	5.86	5.86	---	PASS
			30~1000	5.86	-59.27	≤ -14.14	PASS
			1000~26500	5.86	-44.74	≤ -14.14	PASS
		2440	Reference	7.08	7.08	---	PASS
			30~1000	7.08	-58.27	≤ -12.92	PASS
			1000~26500	7.08	-44.9	≤ -12.92	PASS
		2480	Reference	7.04	7.04	---	PASS
			30~1000	7.04	-58.66	≤ -12.96	PASS
			1000~26500	7.04	-45.14	≤ -12.96	PASS
BLE_2M	Ant1	2402	Reference	3.62	3.62	---	PASS
			30~1000	3.62	-57.98	≤ -16.38	PASS
			1000~26500	3.62	-45.27	≤ -16.38	PASS
		2440	Reference	4.92	4.92	---	PASS
			30~1000	4.92	-57.31	≤ -15.08	PASS
			1000~26500	4.92	-45.24	≤ -15.08	PASS
		2480	Reference	4.91	4.91	---	PASS
			30~1000	4.91	-58.95	≤ -15.09	PASS
			1000~26500	4.91	-44.95	≤ -15.09	PASS

BLE_1M

Lowest Frequency (2402MHz)

