

FCC Measurement/Technical Report on

WLAN and Bluetooth module

JODY W683-21A

FCC ID: XPYJODYW6A
IC: 8595A-JODYW6A

Test Report Reference: MDE_UBLOX_2411_FCC_01_rev01

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D-PL-12140-01-00

Note:

The following test results relate only to the devices specified in this document. This report shall not be reproduced in parts without the written approval of the test laboratory.

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1 APPLIED STANDARDS AND TEST SUMMARY

1.1 APPLIED STANDARDS

Type of Authorization

Certification for an Intentional Radiator.

Applicable FCC Rules

Prepared in accordance with the requirements of FCC Rules and Regulations as listed in 47 CFR Ch.1 Parts 2 and 15 (10-1-24 Edition). The following subparts are applicable to the results in this test report.

Part 2, Subpart J - Equipment Authorization Procedures, Certification

Part 15, Subpart C – Intentional Radiators

§ 15.201 Equipment authorization requirement

§ 15.207 Conducted limits

§ 15.209 Radiated emission limits; general requirements

§ 15.247 Operation within the bands 902-928 MHz, 2400-2483.5 MHz

Note:

The tests were selected and performed with reference to the FCC Public Notice "Guidance for Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating under Section 15.247 of the FCC Rules, 558074 D01 15.247 Meas Guidance v05r02, 2019-04-02".

ANSI C63.10-2020 + Cor. 1-2023 + C63.10a-2024 + Errata to C63.10a-2024 is applied.

1.2 FCC-IC CORRELATION TABLE

Correlation of measurement requirements for DTS (e.g. WLAN 2.4 GHz, BT LE) equipment from FCC and IC

DTS equipment

Measurement	FCC reference	IC reference
Conducted emissions on AC Mains	§ 15.207	RSS-Gen Issue 5 & AMD 1 & AMD 2: 8.8
Occupied bandwidth	§ 15.247 (a) (2)	RSS-247 Issue 4: 6.3.1 (a)
Peak conducted output power	§ 15.247 (b) (3), (4)	RSS-247 Issue 4: 6.3.2 / 6.5
Transmitter spurious RF conducted emissions	§ 15.247 (d)	RSS-Gen Issue 5 & AMD 1 & AMD 2: 6.13 / 8.9/8.10; RSS-247 Issue 4: 6.6
Transmitter spurious radiated emissions	§ 15.247 (d); § 15.209 (a)	RSS-Gen Issue 5 & AMD 1 & AMD 2: 6.13 / 8.9/8.10; RSS-247 Issue 4: 6.6
Band edge compliance	§ 15.247 (d)	RSS-247 Issue 4: 6.6
Power density	§ 15.247 (e)	RSS-247 Issue 4: 6.3.1 (b)
Antenna requirement	§ 15.203 / 15.204	RSS-Gen Issue 5 & AMD 1 & AMD 2: 8.3
Receiver spurious emissions	–	–

1.3 MEASUREMENT SUMMARY

47 CFR CHAPTER I FCC PART 15 § 15.207 **Subpart C §15.247**

Conducted Emissions at AC Mains

The measurement was performed according to ANSI C63.10, chapter 6.2

Final Result

OP-Mode	Setup	Date	FCC	IC
Operating mode, Connection to AC mains worst case, via ancillary/auxiliary equipment	S04_AG01	2025-07-22	Passed	Passed

47 CFR CHAPTER I FCC PART 15 § 15.247 (a) (2) **Subpart C §15.247**

Occupied Bandwidth (6 dB)

The measurement was performed according to ANSI C63.10, chapter 11.8.1

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
Bluetooth BDR, high	S01_AC01	2025-02-07	Passed	Passed
Bluetooth BDR, low	S01_AC01	2025-02-07	Passed	Passed
Bluetooth BDR, mid	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 2, high	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 2, low	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 2, mid	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 3, high	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 3, low	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 3, mid	S01_AC01	2025-02-07	Passed	Passed
Bluetooth LE 1 Mbps, high	S01_AC01	2024-12-02	Passed	Passed
Bluetooth LE 1 Mbps, low	S01_AC01	2024-12-02	Passed	Passed
Bluetooth LE 1 Mbps, mid	S01_AC01	2024-12-02	Passed	Passed
Bluetooth LE 2 Mbps, high	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, low	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, mid	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 20 MHz, high Remark: Path C	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, high Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, high Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, low Remark: Path C	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, low Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, low Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, mid Remark: Path C	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, mid Remark: Path A	S01_AC01	2025-03-18	Passed	Passed

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Subpart C §15.247

§ 15.247 (a) (2)

Occupied Bandwidth (6 dB)

The measurement was performed according to ANSI C63.10, chapter 11.8.1

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
WLAN ax 20 MHz, mid Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 40 MHz, high Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 40 MHz, high Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, low Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, low Remark: Path B	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, mid Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, mid Remark: Path B	S01_AC01	2025-03-24	Passed	Passed
WLAN b, high Remark: Path A	S01_AC01	2024-12-04	Passed	Passed
WLAN b, high Remark: Path C	S01_AC01	2024-12-04	Passed	Passed
WLAN b, high Remark: Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low Remark: Path A	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low Remark: Path C	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low Remark: Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN b, mid Remark: Path A	S01_AC01	2024-12-04	Passed	Passed
WLAN b, mid Remark: Path C	S01_AC01	2024-12-04	Passed	Passed
WLAN b, mid Remark: Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN g, high Remark: Path C	S01_AC01	2025-02-17	Passed	Passed
WLAN g, high Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN g, high Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN g, low Remark: Path C	S01_AC01	2025-02-17	Passed	Passed
WLAN g, low Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN g, low Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN g, mid Remark: Path C	S01_AC01	2025-02-17	Passed	Passed
WLAN g, mid Remark: Path A	S01_AC01	2025-03-18	Passed	Passed

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§ 15.247 (a) (2)
Subpart C §15.247

Occupied Bandwidth (6 dB)

The measurement was performed according to ANSI C63.10, chapter 11.8.1

Final Result
OP-Mode

Radio Technology, Operating Frequency

WLAN g, mid

Remark: Path B

Setup

S01_AC01

Date

2025-03-18

FCC

Passed

IC

Passed

WLAN n 20 MHz, high

Remark: Path C

S01_AC01

2025-03-17

Passed

Passed

WLAN n 20 MHz, high

Remark: Path A

S01_AC01

2025-03-18

Passed

Passed

WLAN n 20 MHz, high

Remark: Path B

S01_AC01

2025-03-18

Passed

Passed

WLAN n 20 MHz, low

Remark: Path C

S01_AC01

2025-02-18

Passed

Passed

WLAN n 20 MHz, low

Remark: Path A

S01_AC01

2025-03-18

Passed

Passed

WLAN n 20 MHz, low

Remark: Path B

S01_AC01

2025-03-18

Passed

Passed

WLAN n 20 MHz, mid

Remark: Path C

S01_AC01

2025-02-18

Passed

Passed

WLAN n 20 MHz, mid

Remark: Path A

S01_AC01

2025-03-18

Passed

Passed

WLAN n 20 MHz, mid

Remark: Path B

S01_AC01

2025-03-18

Passed

Passed

WLAN n 40 MHz, high

Remark: Path A

S01_AC01

2025-03-18

Passed

Passed

WLAN n 40 MHz, high

Remark: Path B

S01_AC01

2025-03-18

Passed

Passed

WLAN n 40 MHz, low

Remark: Path A

S01_AC01

2025-03-18

Passed

Passed

WLAN n 40 MHz, low

Remark: Path B

S01_AC01

2025-03-18

Passed

Passed

WLAN n 40 MHz, mid

Remark: Path A

S01_AC01

2025-03-24

Passed

Passed

WLAN n 40 MHz, mid

Remark: Path B

S01_AC01

2025-03-24

Passed

Passed

OFDMA MU

WLAN ax 20 MHz RU 5, high

Remark: Path C

S01_AC01

2025-08-13

Passed

Passed

WLAN ax 20 MHz RU 5, high

Remark: Path A

S01_AC01

2025-08-13

Passed

Passed

WLAN ax 20 MHz RU 5, high

Remark: Path B

S01_AC01

2025-08-14

Passed

Passed

WLAN ax 20 MHz RU 5, low

Remark: Path C

S01_AC01

2025-08-13

Passed

Passed

WLAN ax 20 MHz RU 5, low

Remark: Path A

S01_AC01

2025-08-13

Passed

Passed

WLAN ax 20 MHz RU 5, low

Remark: Path B

S01_AC01

2025-08-14

Passed

Passed

WLAN ax 20 MHz RU 5, mid

Remark: Path C

S01_AC01

2025-08-13

Passed

Passed

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Subpart C §15.247

§ 15.247 (a) (2)

Occupied Bandwidth (6 dB)

The measurement was performed according to ANSI C63.10, chapter 11.8.1

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
WLAN ax 20 MHz RU 5, mid Remark: Path A	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, mid Remark: Path B	S01_AC01	2025-08-14	Passed	Passed
WLAN ax 40 MHz RU 6, high Remark: Path B	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, high Remark: Path A	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, low Remark: Path A	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, low Remark: Path B	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, mid Remark: Path A	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, mid Remark: Path B	S01_AC01	2025-08-19	Passed	Passed

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Subpart C §15.247
IC RSS-Gen & IC TRC-43; Ch. 6.7 & Ch. 8

Occupied Bandwidth (99%)

 The measurement was performed according to ANSI C63.10, chapter 6.9.3 **Final Result**

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
Bluetooth BDR, high	S01_AC01	2025-02-07	N/A	Performed
Bluetooth BDR, low	S01_AC01	2025-02-07	N/A	Performed
Bluetooth BDR, mid	S01_AC01	2025-02-07	N/A	Performed
Bluetooth EDR 2, high	S01_AC01	2025-02-07	N/A	Performed
Bluetooth EDR 2, low	S01_AC01	2025-02-07	N/A	Performed
Bluetooth EDR 2, mid	S01_AC01	2025-02-07	N/A	Performed
Bluetooth EDR 3, high	S01_AC01	2025-02-07	N/A	Performed
Bluetooth EDR 3, low	S01_AC01	2025-02-07	N/A	Performed
Bluetooth EDR 3, mid	S01_AC01	2025-02-07	N/A	Performed
Bluetooth LE 1 Mbps, high	S01_AC01	2024-12-02	N/A	Performed
Bluetooth LE 1 Mbps, low	S01_AC01	2024-12-02	N/A	Performed
Bluetooth LE 1 Mbps, mid	S01_AC01	2024-12-02	N/A	Performed
Bluetooth LE 2 Mbps, high	S01_AC01	2025-03-25	N/A	Performed
Bluetooth LE 2 Mbps, low	S01_AC01	2025-03-25	N/A	Performed
Bluetooth LE 2 Mbps, mid	S01_AC01	2025-03-25	N/A	Performed
WLAN ax 20 MHz, high Remark: Path C	S01_AC01	2025-03-18	N/A	Performed
WLAN ax 20 MHz, high Remark: Path A	S01_AC01	2025-03-18	N/A	Performed
WLAN ax 20 MHz, high Remark: Path B	S01_AC01	2025-03-18	N/A	Performed
WLAN ax 20 MHz, low Remark: Path C	S01_AC01	2025-03-18	N/A	Performed
WLAN ax 20 MHz, low Remark: Path A	S01_AC01	2025-03-18	N/A	Performed
WLAN ax 20 MHz, low Remark: Path B	S01_AC01	2025-03-18	N/A	Performed
WLAN ax 20 MHz, mid Remark: Path C	S01_AC01	2025-03-18	N/A	Performed
WLAN ax 20 MHz, mid Remark: Path A	S01_AC01	2025-03-18	N/A	Performed
WLAN ax 20 MHz, mid Remark: Path B	S01_AC01	2025-03-18	N/A	Performed
WLAN ax 40 MHz, high Remark: Path B	S01_AC01	2025-03-18	N/A	Performed
WLAN ax 40 MHz, high Remark: Path A	S01_AC01	2025-03-24	N/A	Performed
WLAN ax 40 MHz, low Remark: Path A	S01_AC01	2025-03-24	N/A	Performed
WLAN ax 40 MHz, low Remark: Path B	S01_AC01	2025-03-24	N/A	Performed
WLAN ax 40 MHz, mid Remark: Path A	S01_AC01	2025-03-24	N/A	Performed
WLAN ax 40 MHz, mid Remark: Path B	S01_AC01	2025-03-24	N/A	Performed

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IC RSS-Gen & IC TRC-43; Ch. 6.7 & Ch. 8

Occupied Bandwidth (99%)

 The measurement was performed according to ANSI C63.10, chapter 6.9.3 **Final Result**

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
WLAN b, high Remark: Path C	S01_AC01	2025-03-18	N/A	Performed
WLAN b, high Remark: Path A	S01_AC01	2025-03-24	N/A	Performed
WLAN b, high Remark: Path B	S01_AC01	2025-03-24	N/A	Performed
WLAN b, low Remark: Path C	S01_AC01	2025-03-18	N/A	Performed
WLAN b, low Remark: Path A	S01_AC01	2025-03-24	N/A	Performed
WLAN b, low Remark: Path B	S01_AC01	2025-03-24	N/A	Performed
WLAN b, mid Remark: Path C	S01_AC01	2025-03-18	N/A	Performed
WLAN b, mid Remark: Path A	S01_AC01	2025-03-24	N/A	Performed
WLAN b, mid Remark: Path B	S01_AC01	2025-03-24	N/A	Performed
WLAN g, high Remark: Path C	S01_AC01	2025-02-17	N/A	Performed
WLAN g, high Remark: Path A	S01_AC01	2025-03-18	N/A	Performed
WLAN g, high Remark: Path B	S01_AC01	2025-03-18	N/A	Performed
WLAN g, low Remark: Path C	S01_AC01	2025-02-17	N/A	Performed
WLAN g, low Remark: Path A	S01_AC01	2025-03-18	N/A	Performed
WLAN g, low Remark: Path B	S01_AC01	2025-03-18	N/A	Performed
WLAN g, mid Remark: Path C	S01_AC01	2025-02-17	N/A	Performed
WLAN g, mid Remark: Path A	S01_AC01	2025-03-18	N/A	Performed
WLAN g, mid Remark: Path B	S01_AC01	2025-03-18	N/A	Performed
WLAN n 20 MHz, high Remark: Path C	S01_AC01	2025-03-17	N/A	Performed
WLAN n 20 MHz, high Remark: Path A	S01_AC01	2025-03-18	N/A	Performed
WLAN n 20 MHz, high Remark: Path B	S01_AC01	2025-03-18	N/A	Performed
WLAN n 20 MHz, low Remark: Path C	S01_AC01	2025-02-18	N/A	Performed
WLAN n 20 MHz, low Remark: Path A	S01_AC01	2025-03-18	N/A	Performed
WLAN n 20 MHz, low Remark: Path B	S01_AC01	2025-03-18	N/A	Performed

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IC RSS-Gen & IC TRC-43; Ch. 6.7 & Ch. 8

Occupied Bandwidth (99%)

The measurement was performed according to ANSI C63.10, chapter 6.9.3 **Final Result**

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
WLAN n 20 MHz, mid Remark: Path C	S01_AC01	2025-02-18	N/A	Performed
WLAN n 20 MHz, mid Remark: Path A	S01_AC01	2025-03-18	N/A	Performed
WLAN n 20 MHz, mid Remark: Path B	S01_AC01	2025-03-18	N/A	Performed
WLAN n 40 MHz, high Remark: Path A	S01_AC01	2025-03-18	N/A	Performed
WLAN n 40 MHz, high Remark: Path B	S01_AC01	2025-03-18	N/A	Performed
WLAN n 40 MHz, low Remark: Path A	S01_AC01	2025-03-18	N/A	Performed
WLAN n 40 MHz, low Remark: Path B	S01_AC01	2025-03-18	N/A	Performed
WLAN n 40 MHz, mid Remark: Path A	S01_AC01	2025-03-24	N/A	Performed
WLAN n 40 MHz, mid Remark: Path B	S01_AC01	2025-03-24	N/A	Performed

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Subpart C §15.247

§ 15.247 (b) (3)

Peak Power Output

The measurement was performed according to ANSI C63.10, chapter 11.9.1.1/11.9.2.3.2

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency, Measurement method				
Bluetooth BDR, high, conducted	S01_AC01	2025-02-07	Passed	Passed
Bluetooth BDR, low, conducted	S01_AC01	2025-02-07	Passed	Passed
Bluetooth BDR, mid, conducted	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 2, high, conducted	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 2, low, conducted	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 2, mid, conducted	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 3, high, conducted	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 3, low, conducted	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 3, mid, conducted	S01_AC01	2025-02-07	Passed	Passed
Bluetooth LE 1 Mbps, high, conducted	S01_AC01	2024-12-02	Passed	Passed
Bluetooth LE 1 Mbps, low, conducted	S01_AC01	2024-12-02	Passed	Passed
Bluetooth LE 1 Mbps, mid, conducted	S01_AC01	2024-12-02	Passed	Passed
Bluetooth LE 2 Mbps, high, conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, low, conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, mid, conducted	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 20 MHz, high, conducted Remark: Path C	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, high, conducted Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, high, conducted Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, low, conducted Remark: Path C	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, low, conducted Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, low, conducted Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, mid, conducted Remark: Path C	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, mid, conducted Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, mid, conducted Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 40 MHz, high, conducted Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 40 MHz, high, conducted Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, low, conducted Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, low, conducted Remark: Path B	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, mid, conducted Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, mid, conducted Remark: Path B	S01_AC01	2025-03-24	Passed	Passed

47 CFR CHAPTER I FCC PART 15
§ 15.247 (b) (3)
Subpart C §15.247
Peak Power Output

The measurement was performed according to ANSI C63.10, chapter 11.9.1.1/11.9.2.3.2

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency, Measurement method				
WLAN b, high, conducted Remark: Path A	S01_AC01	2024-12-04	Passed	Passed
WLAN b, high, conducted Remark: Path C	S01_AC01	2024-12-04	Passed	Passed
WLAN b, high, conducted Remark: Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low, conducted Remark: Path A	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low, conducted Remark: Path C	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low, conducted Remark: Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN b, mid, conducted Remark: Path A	S01_AC01	2024-12-04	Passed	Passed
WLAN b, mid, conducted Remark: Path C	S01_AC01	2024-12-04	Passed	Passed
WLAN b, mid, conducted Remark: Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN g, high, conducted Remark: Path C	S01_AC01	2025-02-17	Passed	Passed
WLAN g, high, conducted Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN g, high, conducted Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN g, low, conducted Remark: Path C	S01_AC01	2025-02-17	Passed	Passed
WLAN g, low, conducted Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN g, low, conducted Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN g, mid, conducted Remark: Path C	S01_AC01	2025-02-17	Passed	Passed
WLAN g, mid, conducted Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN g, mid, conducted Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, high, conducted Remark: Path C	S01_AC01	2025-03-17	Passed	Passed
WLAN n 20 MHz, high, conducted Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, high, conducted Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, low, conducted Remark: Path C	S01_AC01	2025-02-18	Passed	Passed
WLAN n 20 MHz, low, conducted Remark: Path A	S01_AC01	2025-03-18	Passed	Passed

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§ 15.247 (b) (3)
Subpart C §15.247
Peak Power Output

The measurement was performed according to ANSI C63.10, chapter 11.9.1.1/11.9.2.3.2

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency, Measurement method				
WLAN n 20 MHz, low, conducted Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, mid, conducted Remark: Path C	S01_AC01	2025-02-18	Passed	Passed
WLAN n 20 MHz, mid, conducted Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, mid, conducted Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, high, conducted Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, high, conducted Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, low, conducted Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, low, conducted Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, mid, conducted Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 40 MHz, mid, conducted Remark: Path B	S01_AC01	2025-03-24	Passed	Passed
OFDMA MU				
WLAN ax 20 MHz RU 5, high, conducted Remark: Path C	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, high, conducted Remark: Path A	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, high, conducted Remark: Path B	S01_AC01	2025-08-14	Passed	Passed
WLAN ax 20 MHz RU 5, low, conducted Remark: Path C	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, low, conducted Remark: Path A	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, low, conducted Remark: Path B	S01_AC01	2025-08-14	Passed	Passed
WLAN ax 20 MHz RU 5, mid, conducted Remark: Path C	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, mid, conducted Remark: Path A	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, mid, conducted Remark: Path B	S01_AC01	2025-08-14	Passed	Passed
WLAN ax 40 MHz RU 6, high, conducted Remark: Path B	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, high, conducted Remark: Path A	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, low, conducted Remark: Path A	S01_AC01	2025-08-19	Passed	Passed

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§ 15.247 (b) (3)
Subpart C §15.247

Peak Power Output

 The measurement was performed according to ANSI C63.10, chapter
 11.9.1.1/11.9.2.3.2

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency, Measurement method				
WLAN ax 40 MHz RU 6, low, conducted Remark: Path B	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, mid, conducted Remark: Path A	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, mid, conducted Remark: Path B	S01_AC01	2025-08-19	Passed	Passed

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Subpart C §15.247
§ 15.247 (d)

Spurious RF Conducted Emissions

The measurement was performed according to ANSI C63.10, chapter 11.11

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
Bluetooth BDR, high	S01_AC01	2025-03-25	Passed	Passed
Bluetooth BDR, low	S01_AC01	2025-03-25	Passed	Passed
Bluetooth BDR, mid	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 2, high	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 2, low	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 2, mid	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 3, high	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 3, low	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 3, mid	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, high	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, low	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, mid	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, high	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, low	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, mid	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 20 MHz, high Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 20 MHz, high Remark: Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 20 MHz, high Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 20 MHz, low Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 20 MHz, low Remark: Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 20 MHz, low Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 20 MHz, mid Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 20 MHz, mid Remark: Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 20 MHz, mid Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 40 MHz, high Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, high Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 40 MHz, low Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, low Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 40 MHz, mid Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, mid Remark: Path B	S01_AC01	2025-03-25	Passed	Passed

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§ 15.247 (d)

Spurious RF Conducted Emissions

The measurement was performed according to ANSI C63.10, chapter 11.11

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
WLAN b, high Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN b, high Remark: Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN b, high Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN b, low Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN b, low Remark: Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN b, low Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN b, mid Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN b, mid Remark: Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN b, mid Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN g, high Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN g, high Remark: Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN g, high Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN g, low Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN g, low Remark: Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN g, low Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN g, mid Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN g, mid Remark: Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN g, mid Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN n 20 MHz, high Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 20 MHz, high Remark: Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN n 20 MHz, high Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN n 20 MHz, low Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 20 MHz, low Remark: Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN n 20 MHz, low Remark: Path B	S01_AC01	2025-03-25	Passed	Passed

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§ 15.247 (d)

Spurious RF Conducted Emissions

The measurement was performed according to ANSI C63.10, chapter 11.11

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
WLAN n 20 MHz, mid Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 20 MHz, mid Remark: Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN n 20 MHz, mid Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN n 40 MHz, high Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 40 MHz, high Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN n 40 MHz, low Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 40 MHz, low Remark: Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN n 40 MHz, mid Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 40 MHz, mid Remark: Path B	S01_AC01	2025-03-25	Passed	Passed

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§ 15.247 (d)

Transmitter Spurious Emissions in Restricted Bands

The measurement was performed according to ANSI C63.10, chapter 6.4, 6.5, 6.6.5 (radiated method), 11.12.2.5.2.1 (conducted method)

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency, Measurement range				
Bluetooth BDR, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth BDR, high, 1 GHz - 26 GHz Remark: Measurement Method Radiated with 50 Ohm termination at antenna port	S02_AH02	2025-07-09	Passed	Passed
Bluetooth BDR, high, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth BDR, high, 30 MHz - 1 GHz Remark: Measurement Method Radiated with 50 Ohm termination at antenna port	S02_AH02	2025-07-16	Passed	Passed
Bluetooth BDR, high, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth BDR, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth BDR, low, 1 GHz - 26 GHz Remark: Measurement Method Radiated with 50 Ohm termination at antenna port	S02_AH02	2025-07-09	Passed	Passed
Bluetooth BDR, low, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed

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Transmitter Spurious Emissions in Restricted Bands

The measurement was performed according to ANSI C63.10, chapter 6.4, 6.5, 6.6.5 (radiated method), 11.12.2.5.2.1 (conducted method)

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency, Measurement range				
Bluetooth BDR, low, 30 MHz - 1 GHz Remark: Measurement Method Radiated with 50 Ohm termination at antenna port	S02_AH02	2025-07-16	Passed	Passed
Bluetooth BDR, low, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth BDR, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth BDR, mid, 1 GHz - 26 GHz Remark: Measurement Method Radiated with 50 Ohm termination at antenna port	S02_AH02	2025-07-09	Passed	Passed
Bluetooth BDR, mid, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth BDR, mid, 30 MHz - 1 GHz Remark: Measurement Method Radiated with 50 Ohm termination at antenna port	S02_AH02	2025-07-16	Passed	Passed
Bluetooth BDR, mid, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth BDR, mid, 9 kHz - 30 MHz Remark: Measurement Method Radiated with 50 Ohm termination at antenna port	S02_AH02	2025-07-11	Passed	Passed
Bluetooth EDR 2, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 2, high, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 2, high, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 2, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 2, low, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 2, low, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 2, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 2, mid, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 2, mid, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 3, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 3, high, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 3, high, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 3, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 3, low, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed

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Transmitter Spurious Emissions in Restricted Bands

The measurement was performed according to ANSI C63.10, chapter 6.4, 6.5, 6.6.5 (radiated method), 11.12.2.5.2.1 (conducted method)

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency, Measurement range				
Bluetooth EDR 3, low, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 3, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 3, mid, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 3, mid, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, high, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, high, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, low, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, low, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, mid, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, mid, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, high, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, high, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, low, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, low, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, mid, 30 MHz - 1 GHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, mid, 9 kHz - 30 MHz Remark: Measurement Method Conducted	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 20 MHz, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed

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§ 15.247 (d)
Subpart C §15.247
Transmitter Spurious Emissions in Restricted Bands

The measurement was performed according to ANSI C63.10, chapter 6.4, 6.5, 6.6.5 (radiated method), 11.12.2.5.2.1 (conducted method)

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency, Measurement range				
WLAN ax 20 MHz, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 20 MHz, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 20 MHz, high, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, high, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, high, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, high, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, high, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, high, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 20 MHz, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 20 MHz, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 20 MHz, low, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, low, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, low, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, low, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, low, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, low, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 20 MHz, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 20 MHz, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 20 MHz, mid, 1 GHz - 26 GHz Remark: Measurement Method Radiated Path A with 50 Ohm termination at antenna port	S02_AH02	2025-08-08	Passed	Passed
WLAN ax 20 MHz, mid, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, mid, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-01-22	Passed	Passed

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Transmitter Spurious Emissions in Restricted Bands

The measurement was performed according to ANSI C63.10, chapter 6.4, 6.5, 6.6.5 (radiated method), 11.12.2.5.2.1 (conducted method)

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency, Measurement range				
WLAN ax 20 MHz, mid, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, mid, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, mid, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 20 MHz, mid, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-01-22	Passed	Passed
WLAN ax 40 MHz, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 40 MHz, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 40 MHz, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 40 MHz, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN b, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN b, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN b, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN b, high, 1 GHz - 26 GHz Remark: Measurement Method Radiated Path C with 50 Ohm termination at antenna port	S02_AH02	2025-07-08	Passed	Passed
WLAN b, high, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-01-22	Passed	Passed
WLAN b, high, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-01-22	Passed	Passed
WLAN b, high, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-01-22	Passed	Passed
WLAN b, high, 30 MHz - 1 GHz Remark: Measurement Method Radiated Path C with 50 Ohm termination at antenna port	S02_AH02	2025-07-16	Passed	Passed
WLAN b, high, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-01-22	Passed	Passed
WLAN b, high, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-01-22	Passed	Passed
WLAN b, high, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-01-22	Passed	Passed
WLAN b, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN b, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-03-24	Passed	Passed

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The measurement was performed according to ANSI C63.10, chapter 6.4, 6.5, 6.6.5 (radiated method), 11.12.2.5.2.1 (conducted method)

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency, Measurement range				
WLAN b, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN b, low, 1 GHz - 26 GHz Remark: Measurement Method Radiated Path A with 50 Ohm termination at antenna port	S02_AH02	2025-06-20	Passed	Passed
WLAN b, low, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-01-22	Passed	Passed
WLAN b, low, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-01-22	Passed	Passed
WLAN b, low, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-01-22	Passed	Passed
WLAN b, low, 30 MHz - 1 GHz Remark: Measurement Method Radiated Path A with 50 Ohm termination at antenna port	S02_AH02	2025-07-16	Passed	Passed
WLAN b, low, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-01-22	Passed	Passed
WLAN b, low, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-01-22	Passed	Passed
WLAN b, low, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-01-22	Passed	Passed
WLAN b, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN b, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN b, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN b, mid, 1 GHz - 26 GHz Remark: Measurement Method Radiated Path B with 50 Ohm termination at antenna port	S02_AH02	2025-06-20	Passed	Passed
WLAN b, mid, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-01-22	Passed	Passed
WLAN b, mid, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-01-22	Passed	Passed
WLAN b, mid, 30 MHz - 1 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-01-22	Passed	Passed
WLAN b, mid, 30 MHz - 1 GHz Remark: Measurement Method Radiated Path B with 50 Ohm termination at antenna port	S02_AH02	2025-07-16	Passed	Passed
WLAN b, mid, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-01-22	Passed	Passed
WLAN b, mid, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-01-22	Passed	Passed
WLAN b, mid, 9 kHz - 30 MHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-01-22	Passed	Passed
WLAN b, mid, 9 kHz - 30 MHz Remark: Measurement Method Radiated Path B with 50 Ohm termination at antenna port	S02_AH02	2025-07-11	Passed	Passed

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The measurement was performed according to ANSI C63.10, chapter 6.4, 6.5, 6.6.5 (radiated method), 11.12.2.5.2.1 (conducted method)

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency, Measurement range				
WLAN g, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN g, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN g, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN g, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN g, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN g, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN g, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN g, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN g, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN n 20 MHz, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 20 MHz, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN n 20 MHz, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN n 20 MHz, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 20 MHz, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN n 20 MHz, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN n 20 MHz, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 20 MHz, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path C	S01_AC01	2025-03-24	Passed	Passed
WLAN n 20 MHz, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN n 40 MHz, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 40 MHz, high, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN n 40 MHz, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 40 MHz, low, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path B	S01_AC01	2025-03-25	Passed	Passed
WLAN n 40 MHz, mid, 1 GHz - 26 GHz Remark: Measurement Method Conducted Path A	S01_AC01	2025-03-24	Passed	Passed

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Transmitter Spurious Emissions in Restricted Bands

The measurement was performed according to ANSI C63.10, chapter 6.4, 6.5, 6.6.5 (radiated method), 11.12.2.5.2.1 (conducted method)

Final Result
OP-Mode

 Radio Technology, Operating Frequency,
Measurement range

Setup
Date
FCC
IC

 WLAN n 40 MHz, mid, 1 GHz - 26 GHz
Remark: Measurement Method Conducted Path B

S01_AC01

2025-03-25

Passed

Passed

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Band Edge Compliance Conducted

The measurement was performed according to ANSI C63.10, chapter 11.11

Final Result
OP-Mode

 Radio Technology, Operating Frequency,
Band Edge

Setup
Date
FCC
IC

Bluetooth BDR, high, high

S01_AC01

2025-02-07

Passed

Passed

Bluetooth BDR, low, low

S01_AC01

2025-02-07

Passed

Passed

Bluetooth EDR 2, high, high

S01_AC01

2025-02-07

Passed

Passed

Bluetooth EDR 2, low, low

S01_AC01

2025-02-07

Passed

Passed

Bluetooth EDR 3, high, high

S01_AC01

2025-02-07

Passed

Passed

Bluetooth EDR 3, low, low

S01_AC01

2025-02-07

Passed

Passed

Bluetooth LE 1 Mbps, high, high

S01_AC01

2024-12-02

Passed

Passed

Bluetooth LE 1 Mbps, low, low

S01_AC01

2024-12-02

Passed

Passed

Bluetooth LE 2 Mbps, high, high

S01_AC01

2025-03-25

Passed

Passed

Bluetooth LE 2 Mbps, low, low

S01_AC01

2025-03-25

Passed

Passed

WLAN ax 20 MHz, high, high

S01_AC01

2025-03-18

Passed

Passed

Remark: Path A

WLAN ax 20 MHz, high, high

S01_AC01

2025-03-18

Passed

Passed

Remark: Path B

WLAN ax 20 MHz, high, high

S01_AC01

2025-03-24

Passed

Passed

Remark: Path C

WLAN ax 20 MHz, low, low

S01_AC01

2025-03-18

Passed

Passed

Remark: Path C

WLAN ax 20 MHz, low, low

S01_AC01

2025-03-18

Passed

Passed

Remark: Path A

WLAN ax 20 MHz, low, low

S01_AC01

2025-03-18

Passed

Passed

Remark: Path B

WLAN ax 40 MHz, high, high

S01_AC01

2025-03-18

Passed

Passed

Remark: Path B

WLAN ax 40 MHz, high, high

S01_AC01

2025-03-24

Passed

Passed

Remark: Path A

WLAN ax 40 MHz, low, low

S01_AC01

2025-03-24

Passed

Passed

Remark: Path A

WLAN ax 40 MHz, low, low

S01_AC01

2025-03-24

Passed

Passed

Remark: Path B

WLAN b, high, high

S01_AC01

2024-12-04

Passed

Passed

Remark: Path A

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Band Edge Compliance Conducted

The measurement was performed according to ANSI C63.10, chapter 11.11

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency, Band Edge				
WLAN b, high, high Remark: Path C	S01_AC01	2024-12-04	Passed	Passed
WLAN b, high, high Remark: Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low, low Remark: Path A	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low, low Remark: Path C	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low, low Remark: Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN g, high, high Remark: Path C	S01_AC01	2025-02-17	Passed	Passed
WLAN g, high, high Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN g, high, high Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN g, low, low Remark: Path C	S01_AC01	2025-02-17	Passed	Passed
WLAN g, low, low Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN g, low, low Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, high, high Remark: Path C	S01_AC01	2025-03-17	Passed	Passed
WLAN n 20 MHz, high, high Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, high, high Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, low, low Remark: Path C	S01_AC01	2025-02-18	Passed	Passed
WLAN n 20 MHz, low, low Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, low, low Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, high, high Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, high, high Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, low, low Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, low, low Remark: Path B	S01_AC01	2025-03-18	Passed	Passed

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Band Edge Compliance Conducted

The measurement was performed according to ANSI C63.10, chapter 11.11

Final Result

OP-Mode Radio Technology, Operating Frequency, Band Edge	Setup	Date	FCC	IC
OFDMA MU				
WLAN ax 20 MHz RU 5, high, high Remark: Path A	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, high, high Remark: Path B	S01_AC01	2025-08-14	Passed	Passed
WLAN ax 20 MHz RU 5, high, high Remark: Path C	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, low, low Remark: Path C	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, low, low Remark: Path A	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, low, low Remark: Path B	S01_AC01	2025-08-14	Passed	Passed
WLAN ax 40 MHz RU 6, high, high Remark: Path B	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, high, high Remark: Path A	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, low, low Remark: Path A	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, low, low Remark: Path B	S01_AC01	2025-08-19	Passed	Passed

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Band Edge Compliance Restricted Bands

The measurement was performed according to ANSI C63.10, chapter 6.6.5, 11.12.2.5.2.1

Final Result

OP-Mode Radio Technology, Operating Frequency	Setup	Date	FCC	IC
Bluetooth BDR, low Remark: low BE conducted measurement	S01_AC01	2025-03-25	Passed	Passed
Bluetooth BDR, high Remark: high BE conducted measurement	S01_AC01	2025-03-25	Passed	Passed
Bluetooth BDR, low Remark: low BE radiated measurement	S02_AH02	2025-07-09	Passed	Passed
Bluetooth BDR, high Remark: high BE radiated measurement	S02_AH02	2025-07-09	Passed	Passed
Bluetooth EDR 2, low Remark: low BE conducted measurement	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 2, high Remark: high BE conducted measurement	S01_AC01	2025-03-25	Passed	Passed
Bluetooth EDR 3, low Remark: low BE conducted measurement	S01_AC01	2025-03-25	Passed	Passed

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Band Edge Compliance Restricted Bands

The measurement was performed according to ANSI C63.10, chapter 6.6.5, 11.12.2.5.2.1

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
Bluetooth EDR 3, high Remark: high BE conducted measurement	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, low Remark: low BE conducted measurement	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 1 Mbps, high Remark: high BE conducted measurement	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, low Remark: low BE conducted measurement	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, high Remark: high BE conducted measurement	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 20 MHz, low Remark: low BE conducted measurement Path C	S01_AC01	2025-03-17	Passed	Passed
WLAN ax 20 MHz, high Remark: high BE conducted measurement Path C	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, low Remark: low BE conducted measurement Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, high Remark: high BE conducted measurement Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, low Remark: low BE conducted measurement Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, high Remark: high BE conducted measurement Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 40 MHz, high Remark: high BE conducted measurement Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 40 MHz, low Remark: low BE conducted measurement Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, high Remark: high BE conducted measurement Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, low Remark: low BE conducted measurement Path B	S01_AC01	2025-03-24	Passed	Passed
WLAN b, low Remark: low BE conducted measurement Path C	S01_AC01	2024-12-02	Passed	Passed
WLAN b, high Remark: high BE conducted measurement Path C	S01_AC01	2024-12-03	Passed	Passed
WLAN b, low Remark: low BE conducted measurement Path A	S01_AC01	2024-12-04	Passed	Passed
WLAN b, high Remark: high BE conducted measurement Path A	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low Remark: low BE conducted measurement Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN b, high Remark: high BE conducted measurement Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low Remark: low BE radiated measurement Path A	S02_AH02	2025-06-20	Passed	Passed
WLAN b, high Remark: high BE radiated measurement Path C	S02_AH02	2025-07-08	Passed	Passed
WLAN g, low Remark: low BE conducted measurement Path C	S01_AC01	2025-02-17	Passed	Passed

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Band Edge Compliance Restricted Bands

The measurement was performed according to ANSI C63.10, chapter 6.6.5, 11.12.2.5.2.1

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
WLAN g, high Remark: high BE conducted measurement Path C	S01_AC01	2025-02-17	Passed	Passed
WLAN g, low Remark: low BE conducted measurement Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN g, high Remark: high BE conducted measurement Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN g, low Remark: low BE conducted measurement Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN g, high Remark: high BE conducted measurement Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, low Remark: low BE conducted measurement Path C	S01_AC01	2025-02-18	Passed	Passed
WLAN n 20 MHz, high Remark: high BE conducted measurement Path C	S01_AC01	2025-03-17	Passed	Passed
WLAN n 20 MHz, low Remark: low BE conducted measurement Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, high Remark: high BE conducted measurement Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, low Remark: low BE conducted measurement Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, high Remark: high BE conducted measurement Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, low Remark: low BE conducted measurement Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, high Remark: high BE conducted measurement Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, low Remark: low BE conducted measurement Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, high Remark: high BE conducted measurement Path B	S01_AC01	2025-03-18	Passed	Passed
OFDMA MU				
WLAN ax 20 MHz, low, RU 0, 53, 61 Remark: low BE conducted measurement Path C	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz, high, RU 8, 61 Remark: high BE conducted measurement Path C	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz, low, RU 0, 53, 61 Remark: low BE conducted measurement Path A	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz, high, RU 8, 61 Remark: high BE conducted measurement Path A	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz, low, RU 0, 53, 61 Remark: low BE conducted measurement Path B	S01_AC01	2025-08-14	Passed	Passed
WLAN ax 20 MHz, high, RU 8, 61 Remark: high BE conducted measurement Path B	S01_AC01	2025-08-14	Passed	Passed
WLAN ax 40 MHz, low, RU 1, 16, 65 Remark: high BE conducted measurement Path B	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz, high, RU 1, 16, 65 Remark: low BE conducted measurement Path A	S01_AC01	2025-08-19	Passed	Passed

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Power Density

The measurement was performed according to ANSI C63.10, chapter 11.10.2/11.10.3

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
Bluetooth BDR, high	S01_AC01	2025-02-07	Passed	Passed
Bluetooth BDR, low	S01_AC01	2025-02-07	Passed	Passed
Bluetooth BDR, mid	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 2, high	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 2, low	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 2, mid	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 3, high	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 3, low	S01_AC01	2025-02-07	Passed	Passed
Bluetooth EDR 3, mid	S01_AC01	2025-02-07	Passed	Passed
Bluetooth LE 1 Mbps, high	S01_AC01	2024-12-02	Passed	Passed
Bluetooth LE 1 Mbps, low	S01_AC01	2024-12-02	Passed	Passed
Bluetooth LE 1 Mbps, mid	S01_AC01	2024-12-02	Passed	Passed
Bluetooth LE 2 Mbps, high	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, low	S01_AC01	2025-03-25	Passed	Passed
Bluetooth LE 2 Mbps, mid	S01_AC01	2025-03-25	Passed	Passed
WLAN ax 20 MHz, high Remark: Path C	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, high Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, high Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, low Remark: Path C	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, low Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, low Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, mid Remark: Path C	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, mid Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 20 MHz, mid Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 40 MHz, high Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN ax 40 MHz, high Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, low Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, low Remark: Path B	S01_AC01	2025-03-24	Passed	Passed
WLAN ax 40 MHz, mid Remark: Path A	S01_AC01	2025-03-24	Passed	Passed

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§ 15.247 (e)

Power Density

The measurement was performed according to ANSI C63.10, chapter 11.10.2/11.10.3

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
WLAN ax 40 MHz, mid Remark: Path B	S01_AC01	2025-03-24	Passed	Passed
WLAN b, high Remark: Path A	S01_AC01	2024-12-04	Passed	Passed
WLAN b, high Remark: Path C	S01_AC01	2024-12-04	Passed	Passed
WLAN b, high Remark: Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low Remark: Path A	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low Remark: Path C	S01_AC01	2024-12-04	Passed	Passed
WLAN b, low Remark: Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN b, mid Remark: Path A	S01_AC01	2024-12-04	Passed	Passed
WLAN b, mid Remark: Path C	S01_AC01	2024-12-04	Passed	Passed
WLAN b, mid Remark: Path B	S01_AC01	2024-12-04	Passed	Passed
WLAN g, high Remark: Path C	S01_AC01	2025-02-17	Passed	Passed
WLAN g, high Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN g, high Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN g, low Remark: Path C	S01_AC01	2025-02-17	Passed	Passed
WLAN g, low Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN g, low Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN g, mid Remark: Path C	S01_AC01	2025-02-17	Passed	Passed
WLAN g, mid Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN g, mid Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, high Remark: Path C	S01_AC01	2025-03-17	Passed	Passed
WLAN n 20 MHz, high Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, high Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, low Remark: Path C	S01_AC01	2025-02-18	Passed	Passed
WLAN n 20 MHz, low Remark: Path A	S01_AC01	2025-03-18	Passed	Passed

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Subpart C §15.247
§ 15.247 (e)

Power Density

The measurement was performed according to ANSI C63.10, chapter 11.10.2/11.10.3

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
WLAN n 20 MHz, low Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, mid Remark: Path C	S01_AC01	2025-02-18	Passed	Passed
WLAN n 20 MHz, mid Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 20 MHz, mid Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, high Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, high Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, low Remark: Path A	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, low Remark: Path B	S01_AC01	2025-03-18	Passed	Passed
WLAN n 40 MHz, mid Remark: Path A	S01_AC01	2025-03-24	Passed	Passed
WLAN n 40 MHz, mid Remark: Path B	S01_AC01	2025-03-24	Passed	Passed
OFDMA MU				
WLAN ax 20 MHz RU 5, high Remark: Path C	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, high Remark: Path A	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, high Remark: Path B	S01_AC01	2025-08-14	Passed	Passed
WLAN ax 20 MHz RU 5, low Remark: Path C	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, low Remark: Path A	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, low Remark: Path B	S01_AC01	2025-08-14	Passed	Passed
WLAN ax 20 MHz RU 5, mid Remark: Path C	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, mid Remark: Path A	S01_AC01	2025-08-13	Passed	Passed
WLAN ax 20 MHz RU 5, mid Remark: Path B	S01_AC01	2025-08-14	Passed	Passed
WLAN ax 40 MHz RU 6, high Remark: Path B	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, high Remark: Path A	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, low Remark: Path A	S01_AC01	2025-08-19	Passed	Passed

47 CFR CHAPTER I FCC PART 15
Subpart C §15.247

§ 15.247 (e)

Power Density

The measurement was performed according to ANSI C63.10, chapter
 11.10.2/11.10.3

Final Result

OP-Mode	Setup	Date	FCC	IC
Radio Technology, Operating Frequency				
WLAN ax 40 MHz RU 6, low Remark: Path B	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, mid Remark: Path A	S01_AC01	2025-08-19	Passed	Passed
WLAN ax 40 MHz RU 6, mid Remark: Path B	S01_AC01	2025-08-19	Passed	Passed

N/A: Not applicable

N/P: Not performed

2 REVISION HISTORY / SIGNATURES

Report version control			
Version	Release date	Change Description	Version validity
initial	2025-10-01	--	valid
rev01	2026-01-05	Corrected SW version in chapter 4.2 EUT Main components	valid

COMMENT: -



(responsible for accreditation scope)
Dipl.-Ing. Marco Kullik



(responsible for testing and report)
Dipl.-Ing. Daniel Gall



7 layers GmbH, Borsigstr. 11
40880 Ratingen, Germany
Phone +49 (0)2102 749 0

3 ADMINISTRATIVE DATA

3.1 TESTING LABORATORY

Company Name: 7layers GmbH
Address: Borsigstr. 11
40880 Ratingen
Germany

The test facility is accredited by the following accreditation organisation:

Laboratory accreditation no: DAKKS D-PL-12140-01-00
FCC Designation Number: DE0015
FCC Test Firm Registration: 929146
ISED CAB Identifier DE0007; ISED#: 3699A

Responsible for accreditation scope: Dipl.-Ing. Marco Kullik
Report Template Version: 2025-02-28

3.2 PROJECT DATA

Responsible for testing and report: Dipl.-Ing. Daniel Gall
Employees who performed the tests: documented internally at 7Layers
Date of Report: 2026-01-05
Testing Period: 2024-12-02 to 2025-08-08

3.3 APPLICANT DATA

Company Name: u-blox AG
Address: Zürcherstrasse 68
8800 Thalwil
Switzerland
Contact Person: Filip Kruzela

3.4 MANUFACTURER DATA

Company Name: See Applicant

Address:

Contact Person:

4 TEST OBJECT DATA

4.1 GENERAL EUT DESCRIPTION

Kind of Device product description	WLAN and Bluetooth Module
Product name	JODY-W6
Type	JODY-W683-21A
Declared EUT data by the supplier	
Voltage Type	DC
Voltage Level	1.8 / 3.3 V
Antenna / Gain	External antenna / 4.1 dBi gain (Radiated measurements were performed with 50 Ohm termination) The EUT has three antenna ports. One is for Bluetooth and two are for WLAN. For WLAN there are three cores, two cores support 20 and 40 MHz BW, belong to MAC one and are routed to the two antenna ports (referred to in the report as Path A and Path B), while a third one (Path C) supports 20 MHz only and shares the antenna port with Path A. 
Tested Modulation Type	BT Classic: GFSK (BDR), Pi/4 DQPSK (EDR 2), 8DPSK (EDR 3) BT LE: GFSK WLANb: DSSS WLANg/n/ax: OFDM
Specific product description for the EUT	The EUT is a Bluetooth and WLAN module. Supported technologies are Bluetooth Classic, Bluetooth Low Energy and WLAN b, g, n, ax 20 and 40 MHz bandwidth.
EUT ports (connected cables during testing):	Enclosure Data DC Antenna The EUT is a module with solder pads for surface mounting, so no cables were connected to the EUT itself.
Tested datarates	BT Classic: 1 (BDR), 2 (EDR 2) and 3 Mbps (EDR 3) BT LE: 1 and 2 Mbps WLAN b: 1 Mbps, g: 24 Mbps, n: MCS 7 SISO, ax: MSC 10
Special software used for testing	Labtool V2.0.0.26.3 on computer board provided by applicant.

Used output power setting in test software

BT Classic: 9

BT Low Energy: 8 (1 Mbit), 6 (2 Mbit)

WLAN:

2.4 GHz												
Mode	Ch.1	Ch.2	Ch.3	Ch.4	Ch.5	Ch.6	Ch.7	Ch.8	Ch.9	Ch.10	Ch.11	
b	19	21				22			21		18	17
g	13	14	16		18			17	16	14	11	
n20	13	14	15	16	17	18	17	16	15	14	10	
n40	N/A	N/A	14					12	11	N/A	N/A	
ax20	12	13	15		16	17		16	14	12	9	
ax40	N/A	N/A	13		14			12	11	N/A	N/A	

OFDMA ax mode 20 MHz: 9, ax mode 40 MHz: 8

4.2 EUT MAIN COMPONENTS

Sample Name	Sample Code	Description
EUT 21A AC01	DE1015194ac01	
Sample Parameter	Value	
Serial No.	HB8B8F44F95D1E00410	
HW Version	PCB: 03, BOM: 05	
SW Version	18.99.2.p145.298	
Comment		

Sample Name	Sample Code	Description
EUT 21A AG01	DE1015194ag01	
Sample Parameter	Value	
Serial No.	HB9B8F44FB8E3E40410	
HW Version	PCB: 03, BOM: 05	
SW Version	18.99.2.p145.298	
Comment		

Sample Name	Sample Code	Description
EUT 21A AH02	DE1015194ah02	
Sample Parameter	Value	
Serial No.	DB880A1973011100501	
HW Version	PCB: 03, BOM: 05	
SW Version	18.99.2.p145.298	
Comment		

NOTE: The short description is used to simplify the identification of the EUT in this test report.

4.3 ANCILLARY EQUIPMENT

For the purposes of this test report, ancillary equipment is defined as equipment which is used in conjunction with the EUT to provide operational and control features to the EUT. It is necessary to configure the system in a typical fashion, as a customer would normally use it. But nevertheless Ancillary Equipment can influence the test results.

-	-	-
---	---	---

4.4 AUXILIARY EQUIPMENT

For the purposes of this test report, auxiliary equipment is defined as equipment which is used temporarily to enable operational and control features especially used for the tests of the EUT which is not used during normal operation or equipment that is used during the tests in combination with the EUT but is not subject of this test report. It is necessary to configure the system in a typical fashion, as a customer would normally use it. But nevertheless Auxiliary Equipment can influence the test results.

Device	Details (Manufacturer, Type Model, HW, SW, S/N)	Description
AC/DC supply	Agilent, E3631A, -, -, MY40018563	Laboratory Power Supply 120 V 60 Hz
Carrier Board	UBLOX, JODY-Carrier Board, Rev. E, -, -	Board providing ports
M2-card adapter	UBLOX, JODY Carrier Board M.2 Adapter, REV. B, -, -	M2-card adapter
Okdo ROCK #5	Okdo ROCK, ROCK 5 Model B 8GB Single Board Computer, -, -, #5	Computer for controlling device

4.5 EUT SETUPS

This chapter describes the combination of EUTs and equipment used for testing. The rationale for selecting the EUTs, ancillary and auxiliary equipment and interconnecting cables, is to test a representative configuration meeting the requirements of the referenced standards.

Setup	Combination of EUTs	Description and Rationale
S01_AC01	EUT 21A AC01, M2-card adapter, Carrier Board, Okdo ROCK #5,	Conducted Setup
S02_AH02	EUT 21A AH02, M2-card adapter, Carrier Board,	Radiated Setup
S04_AG01	EUT 21A AG01, M2-card adapter, Carrier Board, AC/DC supply,	AC conducted setup

4.6 OPERATING MODES / TEST CHANNELS

This chapter describes the operating modes of the EUTs used for testing.

WLAN

20 MHz Test Channels:

Channel:

Frequency [MHz]

2.4 GHz ISM

2400 - 2483.5 MHz

low	mid	high
1	6	11
2412	2437	2462

40 MHz Test Channels:

Channel:

Frequency [MHz]

low	mid	high
3	6	9
2422	2437	2452

BT Test Channels:

Channel:

Frequency [MHz]

2.4 GHz ISM

2400 - 2483.5 MHz

low	mid	high
0	39	78
2402	2441	2480

BT LE Test Channels:

Channel:

Frequency [MHz]

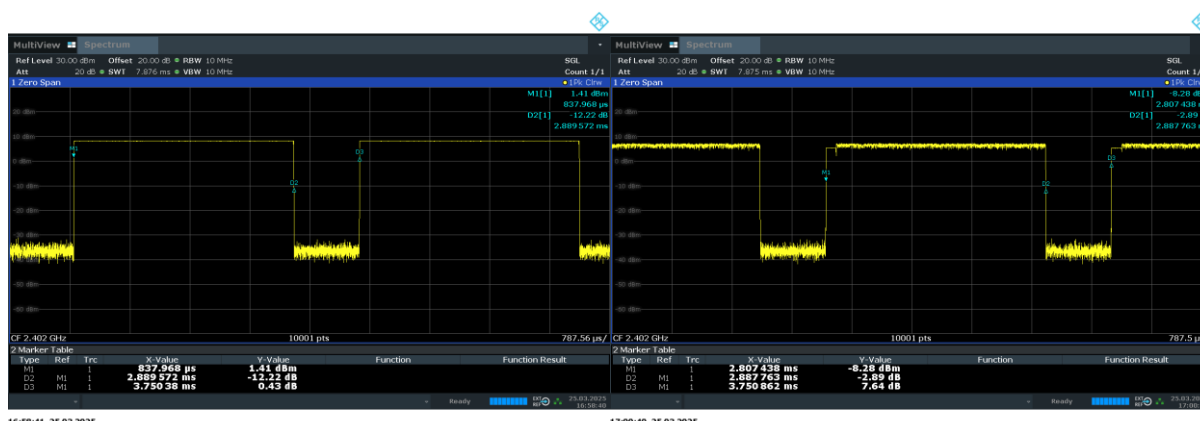
2.4 GHz ISM

2400 - 2483.5 MHz

low	mid	high
0	19	39
2402	2440	2480

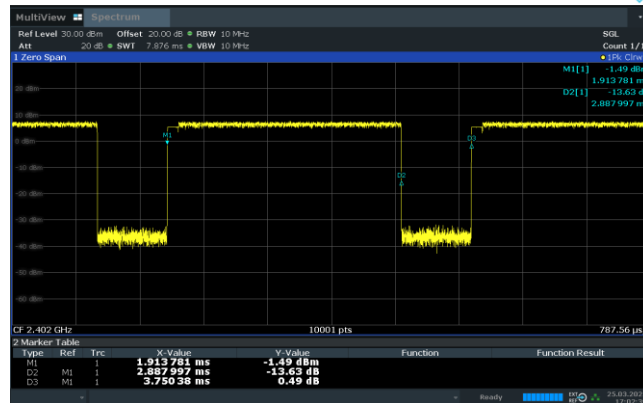
For defining the worst case data rate, spot checks of band edge and power density were performed at each data rate setting on low channel.

Duty Cycle



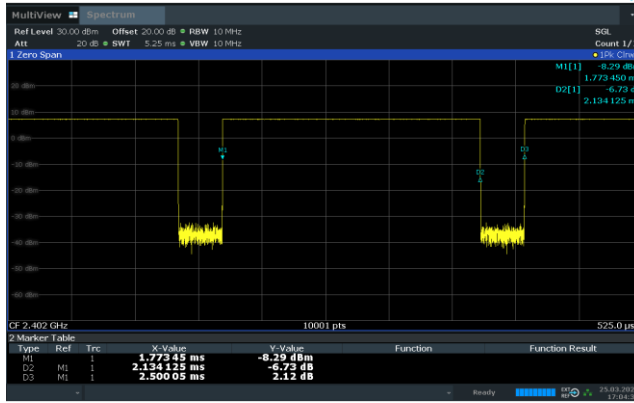
BT DH5

BT 2-DH5



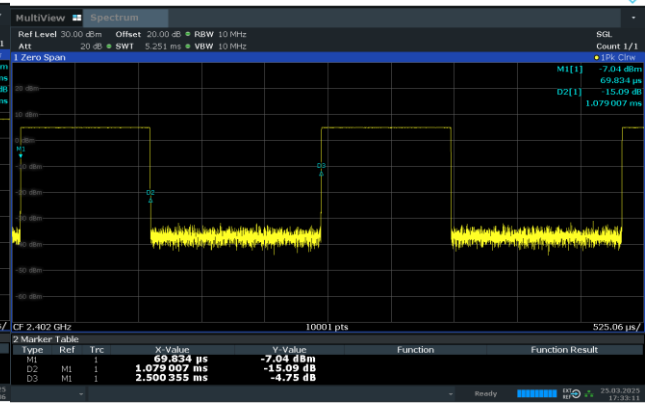
17:02:39 25.03.2025

BT 3-DH5



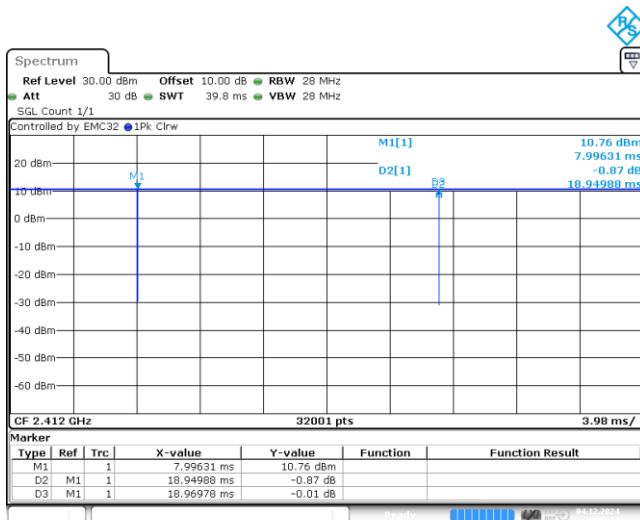
17:04:37 25.03.2025

BT LE 1 Mbps



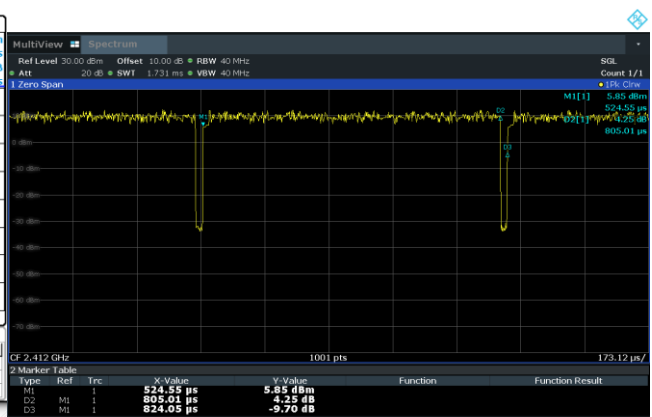
17:33:11 25.03.2025

BT LE 2 Mbps



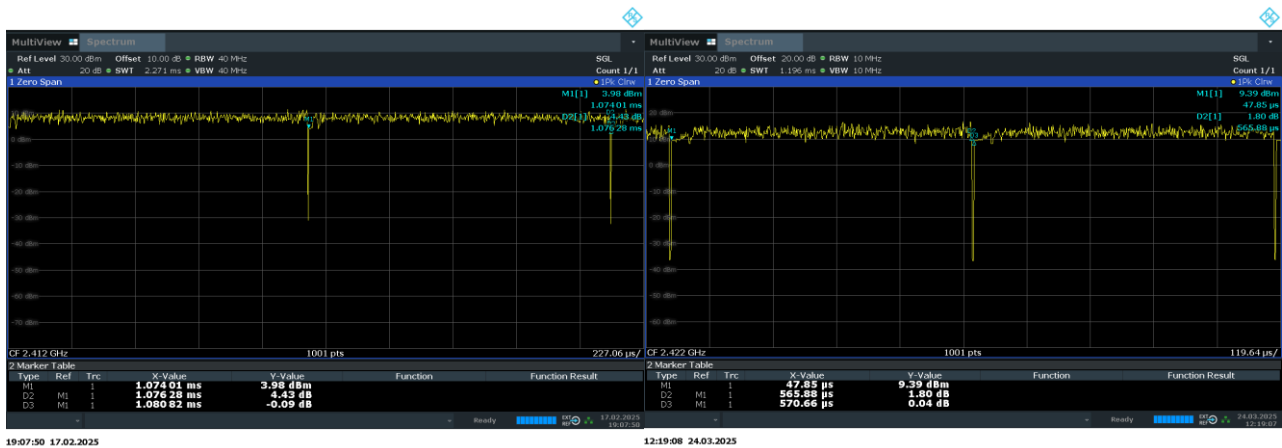
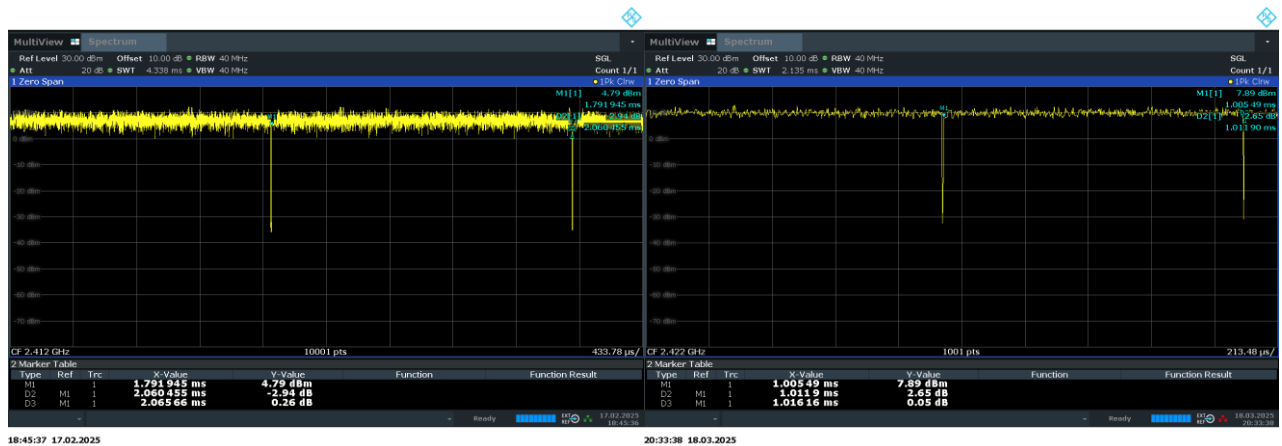
Date: 4 DEC 2024 20:19:24

WLAN b mode



18:28:22 17.02.2025

WLAN g mode

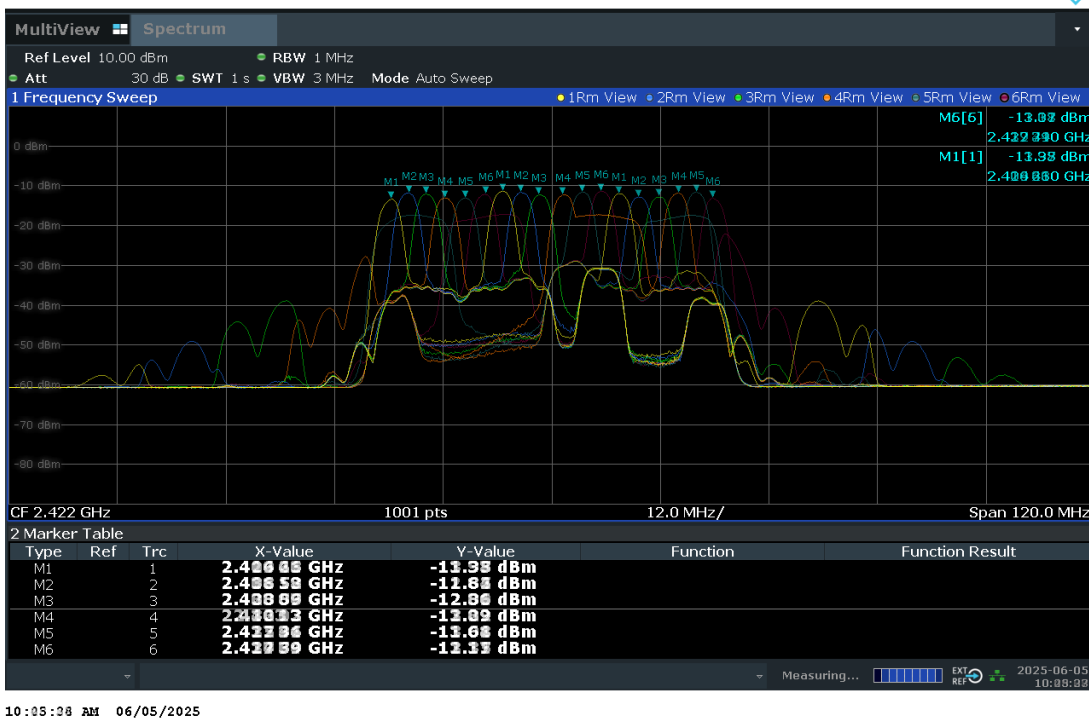


Resulting Duty Cycle						
Mode	BT DH5	BT 2-DH5	BT 3-DH5	BT LE 1 Mbps	BT LE 2 Mbps	
Duty Cycle [%]	77	77	77	85	43	
Corr. [dB]	2.3	2.3	2.3	1.4	7.3	
Mode	WLAN b	WLAN g	WLAN n20	WLAN n40	WLAN ax 20	WLAN ax 40
Duty Cycle [%]	99	98	99	99	99	99
Corr. [dB]	0.0	0.2	0.0	0.0	0.0	0.1

For OFDMA each Resource Unit of Path A was checked for power density at 1 MHz RBW and the highest one was used for testing of Power Density, Output Power and 6 dB BW.



Resource Unit check 20MHz



Resource Unit check 40 MHz

For Band Edge all RUs were spot checked on Path A and the highest for PK and AV were used for final measurement.

4.7 PRODUCT LABELLING

4.7.1 FCC ID LABEL

Please refer to the documentation of the applicant.

4.7.2 LOCATION OF THE LABEL ON THE EUT

Please refer to the documentation of the applicant.

5 TEST RESULTS

5.1 CONDUCTED EMISSIONS AT AC MAINS

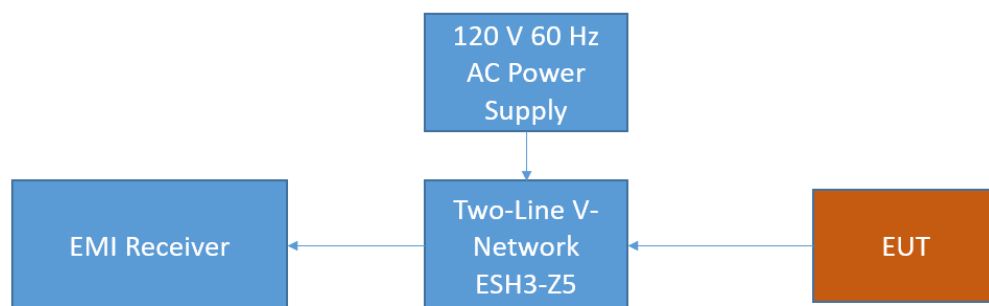
Standard **FCC Part 15 Subpart C**

The test was performed according to:

ANSI C63.10, chapter 6.2

5.1.1 TEST DESCRIPTION

The test set-up was made in accordance to the general provisions of ANSI C 63.10. The Equipment Under Test (EUT) was setup in a shielded room to perform the conducted emissions measurements in a typical installation configuration. The EUT was powered from 50 μ H || 50 Ohm Line Impedance Stabilization Network (LISN). The LISN's unused connections were terminated with 50 Ohm loads.



FCC Conducted Emissions on AC

The measurement procedure consists of two steps. It is implemented into the EMI test software EMC-32 from R&S.

Step 1: Preliminary scan

Intention of this step is, to determine the conducted EMI-profile of the EUT.

EMI receiver settings:

- Detector: Peak – Maxhold & Average
- Frequency range: 150 kHz – 30 MHz
- Frequency steps: 2.5 kHz
- IF-Bandwidth: 9 kHz
- Measuring time / Frequency step: 100 ms (FFT-based)
- Measurement on phase + neutral lines of the power cords

On basis of this preliminary scan the highest amplitudes and the corresponding frequencies relative to the limit are identified. Emissions above the limit and emissions which are in the 10 dB range below the limit are considered.

Step 2: Final measurement

Intention of this step is, to determine the highest emissions with the settings defined in the test specification for the frequencies identified in step 1.

EMI receiver settings:

- Detector: Quasi-Peak & (CISPR) Average
- IF Bandwidth: 9 kHz
- Measuring time: 1 s / frequency

At each frequency determined in step 1, four measurements are performed in the following combinations:

- 1) Neutral lead - reference ground (PE grounded)
- 2) Phase lead - reference ground (PE grounded)
- 3) Neutral lead - reference ground (PE floating)
- 4) Phase lead - reference ground (PE floating)

The highest value is reported.

5.1.2 TEST REQUIREMENTS / LIMITS

FCC Part 15, Subpart C, §15.207

Frequency (MHz)	QP Limits (dBμV)	AV Limits (dBμV)
0.15 – 0.5	66 - 56	56 - 46
0.5 – 5	56	46
5 – 30	60	50

Used conversion factor: Limit (dBμV) = 20 log (Limit (μV)/1μV).

5.1.3 TEST PROTOCOL

Temperature: 22 °C
 Air Pressure: 1003 hPa
 Humidity: 44 %

Power line	PE	Frequency [MHz]	Measured value QP [dBμV]	Measured value AV [dBμV]	Limit [dBμV]	Margin [dB]
N	FLO	0.731	---	40.4	46.0	5.6
N	FLO	0.758	44.3	---	56.0	11.7
L1	FLO	0.758	---	40.1	46.0	5.9
N	FLO	0.843	46.8	---	56.0	9.2
N	FLO	0.843	---	42.7	46.0	3.3
N	FLO	0.870	49.6	---	56.0	6.4
N	FLO	0.870	---	45.5	46.0	0.5
L1	FLO	0.897	49.2	---	56.0	6.8
N	FLO	0.899	---	44.8	46.0	1.2
L1	FLO	0.924	44.6	---	56.0	11.4
N	GND	12.005	46.3	---	60.0	13.8
N	GND	12.005	---	42.4	50.0	7.6
N	FLO	24.009	---	44.7	50.0	5.3
N	FLO	24.009	49.0	---	60.0	11.0

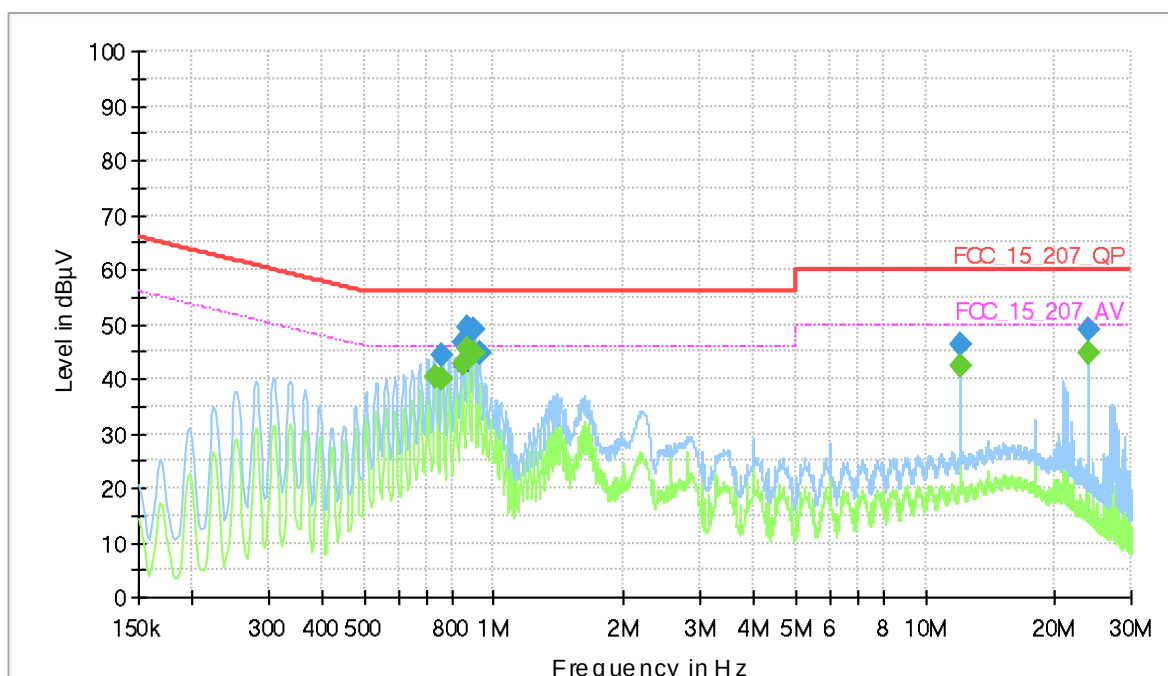
Remark: Please see next sub-clause for the measurement plot.

5.1.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

Operating mode = worst case, Connection to AC mains = via ancillary/auxiliary equipment (S04_AG01)

Common Information

Test Description:	Conducted Emissions
Test Standard:	FCC §15.207, ANSI C63.10
EUT / Setup Code:	DE1015194ag01
Operating Conditions:	120 V 60 Hz, BT BDR Ch.78, WLANb 1M Ch.1, WLANA 6M Ch.36
Operator Name:	GAL
Comment:	
Legend:	Trace: blue = QP, green = CISPR AV; Star: red or blue = critical frequency; Rhombus: blue = final QP, green = final CISPR AV
Tested Port / used LISN:	AC mains => 1st LISN ESH3-Z5
Termination of other ports:	AC of AUX => 2nd LISN ESH3-Z5 +50 Ohm



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Line	PE	Corr. (dB)
0.730500	---	40.41	46.00	5.59	1000.0	9.000	N	FLO	10.1
0.757500	44.34	---	56.00	11.66	1000.0	9.000	N	FLO	10.1
0.757500	---	40.06	46.00	5.94	1000.0	9.000	L1	FLO	10.1
0.843000	46.78	---	56.00	9.22	1000.0	9.000	N	FLO	10.1
0.843000	---	42.71	46.00	3.29	1000.0	9.000	N	FLO	10.1
0.870000	49.60	---	56.00	6.40	1000.0	9.000	N	FLO	10.1
0.870000	---	45.53	46.00	0.47	1000.0	9.000	N	FLO	10.1
0.897000	49.16	---	56.00	6.84	1000.0	9.000	L1	FLO	10.1
0.899250	---	44.76	46.00	1.24	1000.0	9.000	N	FLO	10.1
0.924000	44.62	---	56.00	11.38	1000.0	9.000	L1	FLO	10.1
12.005250	46.25	---	60.00	13.75	1000.0	9.000	N	GND	10.7
12.005250	---	42.44	50.00	7.56	1000.0	9.000	N	GND	10.7
24.009000	---	44.67	50.00	5.33	1000.0	9.000	N	FLO	11.2
24.009000	49.00	---	60.00	11.00	1000.0	9.000	N	FLO	11.2

5.1.5 TEST EQUIPMENT USED

- Conducted Emissions FCC

5.2 OCCUPIED BANDWIDTH (6 DB)

Standard **FCC Part 15 Subpart C**

The test was performed according to:

ANSI C63.10, chapter 11.8.1

5.2.1 TEST DESCRIPTION

The Equipment Under Test (EUT) was set up to perform the occupied bandwidth measurements.

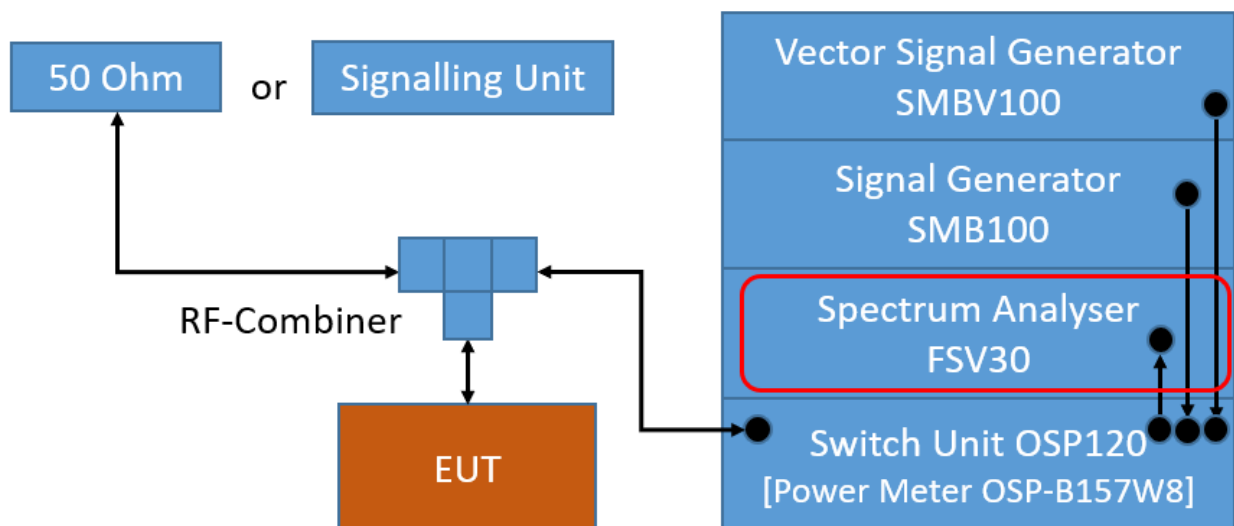
The reference level is the level of the highest amplitude signal observed from the transmitter at either the fundamental frequency or first-order modulation products in all typical modes of operation, including the unmodulated carrier, even if atypical.

The results recorded were measured with the modulation which produce the worst-case (smallest) emission bandwidth.

The EUT was connected to the test system as described in the block diagram below. The complete attenuation of the measurement path is known and considered.

Analyser settings:

- Resolution Bandwidth (RBW): 1-5 % of OBW, at least 100 kHz
- Video Bandwidth (VBW): $\geq 3 \times \text{RBW}$
- Span: see plots
- Trace: Maxhold
- Sweeps: see plots
- Sweep time: Auto
- Detector: Peak



TS8997; Channel Bandwidth

5.2.2 TEST REQUIREMENTS / LIMITS

FCC Part 15, Subpart C, §15.247 (a) (2)

Systems using digital modulation techniques may operate in the 902-928 MHz and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

5.2.3 TEST PROTOCOL

Ambient temperature: 20 - 24 °C
 Air Pressure: 999 - 1021 hPa
 Humidity: 30 - 50 %
 BT GFSK (DH5)

Band / Mode	Channel No.	Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	0	2402	0.55	0.5	0.05
	19	2440	0.57	0.5	0.07
	39	2480	0.55	0.5	0.05

BT DQPSK (2-DH5)

Band / Mode	Channel No.	Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	0	2402	1.12	0.5	0.62
	19	2440	1.14	0.5	0.64
	39	2480	1.12	0.5	0.62

BT 8-DPSK (3-DH5)

Band / Mode	Channel No.	Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	0	2402	1.12	0.5	0.62
	19	2440	1.10	0.5	0.60
	39	2480	1.12	0.5	0.62

BT LE 1 Mbit/s

Band / Mode	Channel No.	Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	0	2402	0.73	0.5	0.23
	19	2440	0.73	0.5	0.23
	39	2480	0.73	0.5	0.23

BT LE 2 Mbit/s

Band / Mode	Channel No.	Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	0	2402	1.40	0.5	0.90
	19	2440	1.39	0.5	0.89
	39	2480	1.47	0.5	0.97

WLAN b-Mode; 20 MHz; 1 Mbit/s

Band	Channel No.	Frequency [MHz]	6 dB Bandwidth Path A [MHz]	6 dB Bandwidth Path B [MHz]	6 dB Bandwidth Path C [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	1	2412	9.1	9.1	9.1	0.5	8.6
	6	2437	9.1	9.1	9.1	0.5	8.6
	11	2462	9.1	9.1	9.1	0.5	8.6

WLAN g-Mode; 20 MHz; 24 Mbit/s

Band	Channel No.	Frequency [MHz]	6 dB Bandwidth Path A [MHz]	6 dB Bandwidth Path B [MHz]	6 dB Bandwidth Path C [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	1	2412	16.7	16.7	16.7	0.5	16.2
	6	2437	16.7	16.7	16.7	0.5	16.2
	11	2462	16.7	16.7	16.7	0.5	16.2

WLAN n-Mode; 20 MHz; MCS7

Band	Channel No.	Frequency [MHz]	6 dB Bandwidth Path A [MHz]	6 dB Bandwidth Path B [MHz]	6 dB Bandwidth Path C [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	1	2412	17.8	17.9	17.8	0.5	17.3
	6	2437	17.8	17.9	17.8	0.5	17.3
	11	2462	17.8	17.8	17.8	0.5	17.3

WLAN n-Mode; 40 MHz; MCS7

Band	Channel No.	Frequency [MHz]	6 dB Bandwidth Path A [MHz]	6 dB Bandwidth Path B [MHz]	6 dB Bandwidth Path C [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	3	2422	36.5	36.3	-	0.5	35.8
	6	2437	36.5	36.3	-	0.5	35.8
	9	2452	36.3	36.3	-	0.5	35.8

WLAN ax-Mode; 20 MHz; MCS10

Band	Channel No.	Frequency [MHz]	6 dB Bandwidth Path A [MHz]	6 dB Bandwidth Path B [MHz]	6 dB Bandwidth Path C [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	1	2412	19.0	18.9	19.0	0.5	18.4
	6	2437	18.8	19.0	19.0	0.5	18.3
	11	2462	19.0	18.8	18.9	0.5	18.3

WLAN ax-Mode; 40 MHz; MCS10

Band	Channel No.	Frequency [MHz]	6 dB Bandwidth Path A [MHz]	6 dB Bandwidth Path B [MHz]	6 dB Bandwidth Path C [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	3	2422	37.8	37.7	-	0.5	37.3
	6	2437	37.7	37.7	-	0.5	37.2
	9	2452	37.7	37.5	-	0.5	37.2

OFDMA MU

WLAN ax-Mode; 20 MHz; MCS10, RU 5

Band	Channel No.	Frequency [MHz]	6 dB Bandwidth Path A [MHz]	6 dB Bandwidth Path B [MHz]	6 dB Bandwidth Path C [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	1	2412	2.1	2.1	2.1	0.5	1.6
	6	2437	2.1	2.1	2.1	0.5	1.6
	11	2462	2.1	2.1	2.1	0.5	1.6

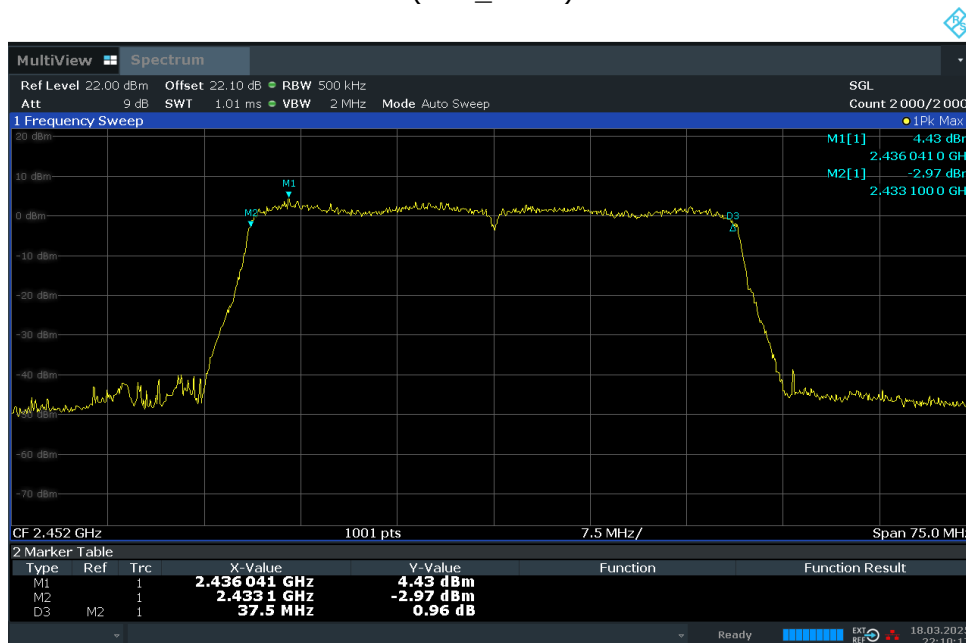
WLAN ax-Mode; 40 MHz; MCS10 RU 6

Band	Channel No.	Frequency [MHz]	6 dB Bandwidth Path A [MHz]	6 dB Bandwidth Path B [MHz]	6 dB Bandwidth Path C [MHz]	Limit [MHz]	Margin to Limit [MHz]
2.4 GHz ISM	3	2422	2.2	2.2	-	0.5	1.7
	6	2437	2.2	2.2	-	0.5	1.7
	9	2452	2.2	2.2	-	0.5	1.7

Remark: Please see next sub-clause for the measurement plot.

5.2.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

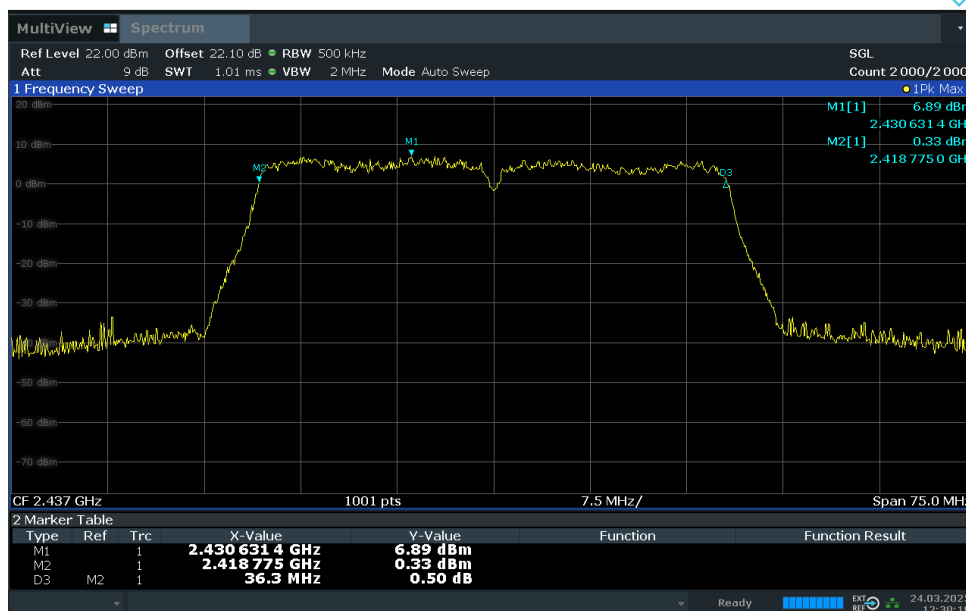
Radio Technology = WLAN ax 40 MHz, Operating Frequency = high (S01_AC01)



22:10:17 18.03.2025

Path B

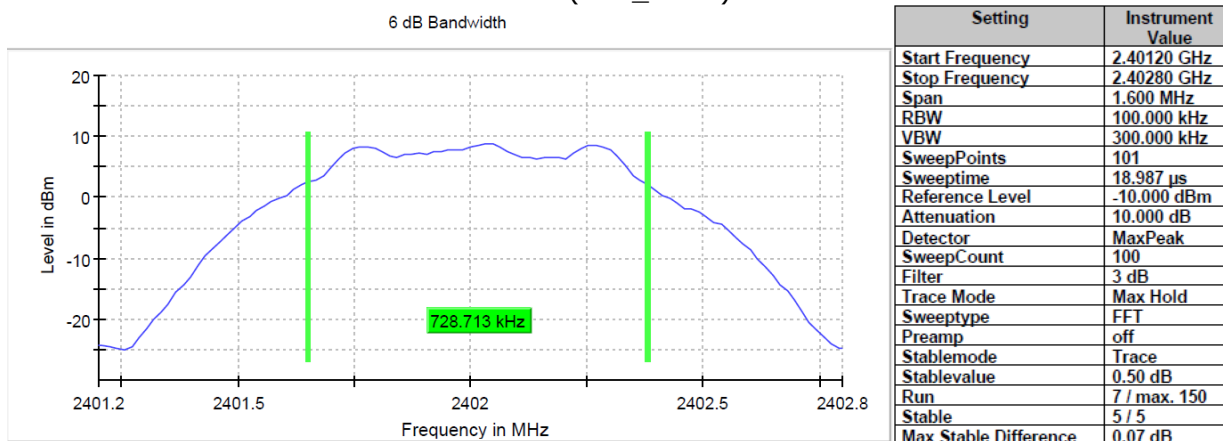
Radio Technology = WLAN n 40 MHz, Operating Frequency = mid
(S01_AC01)



12:30:20 24.03.2025

Path B

Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = low
(S01_AC01)

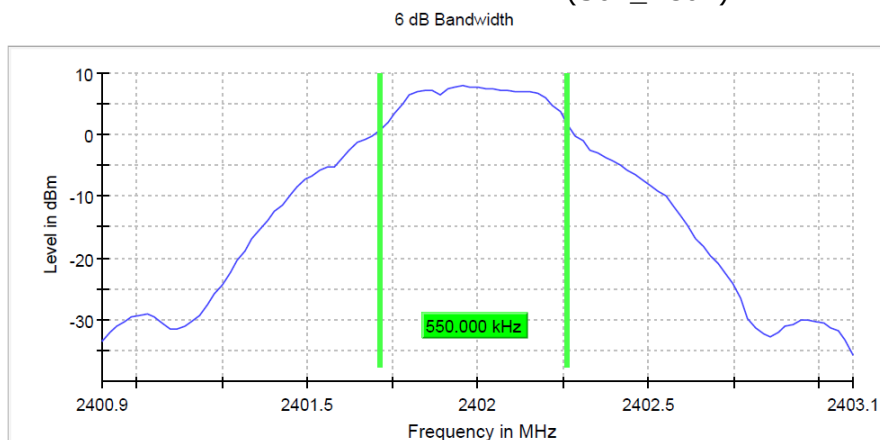


Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = mid
(S01_AC01)



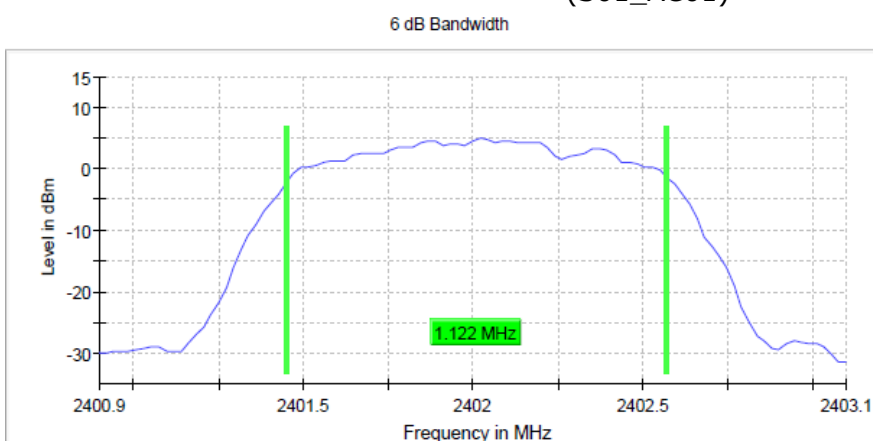
17:35:52 25.03.2025

Radio Technology = Bluetooth BDR, Operating Frequency = low
(S01_AC01)



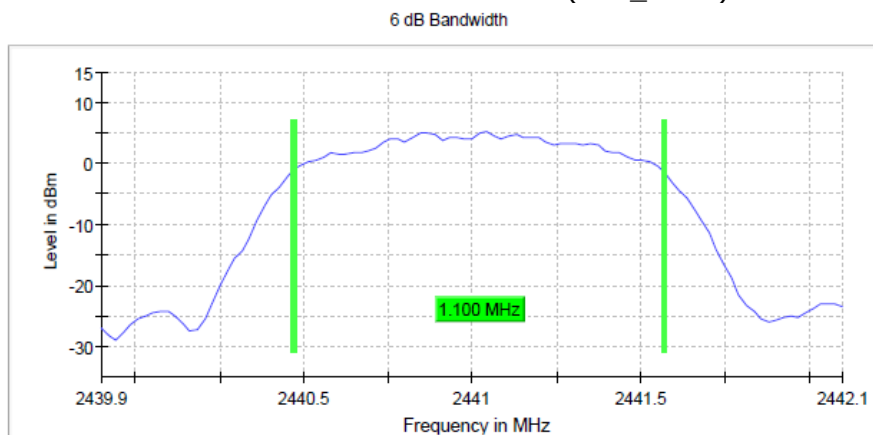
Setting	Instrument Value
Start Frequency	2.40090 GHz
Stop Frequency	2.40310 GHz
Span	2.200 MHz
RBW	100.000 kHz
VBW	300.000 kHz
SweepPoints	101
SweepTime	41.970 μ s
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	100
Filter	3 dB
Trace Mode	Max Hold
SweepType	FFT
Preamp	off
Stablemode	Trace
Stablevalue	0.50 dB
Run	15 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB

Radio Technology = Bluetooth EDR 2, Operating Frequency = low
(S01_AC01)



Setting	Instrument Value
Start Frequency	2.40090 GHz
Stop Frequency	2.40310 GHz
Span	2.200 MHz
RBW	100.000 kHz
VBW	300.000 kHz
SweepPoints	101
SweepTime	41.970 μ s
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	100
Filter	3 dB
Trace Mode	Max Hold
SweepType	FFT
Preamp	off
Stablemode	Trace
Stablevalue	0.50 dB
Run	23 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB

Radio Technology = Bluetooth EDR 3, Operating Frequency = mid
(S01_AC01)



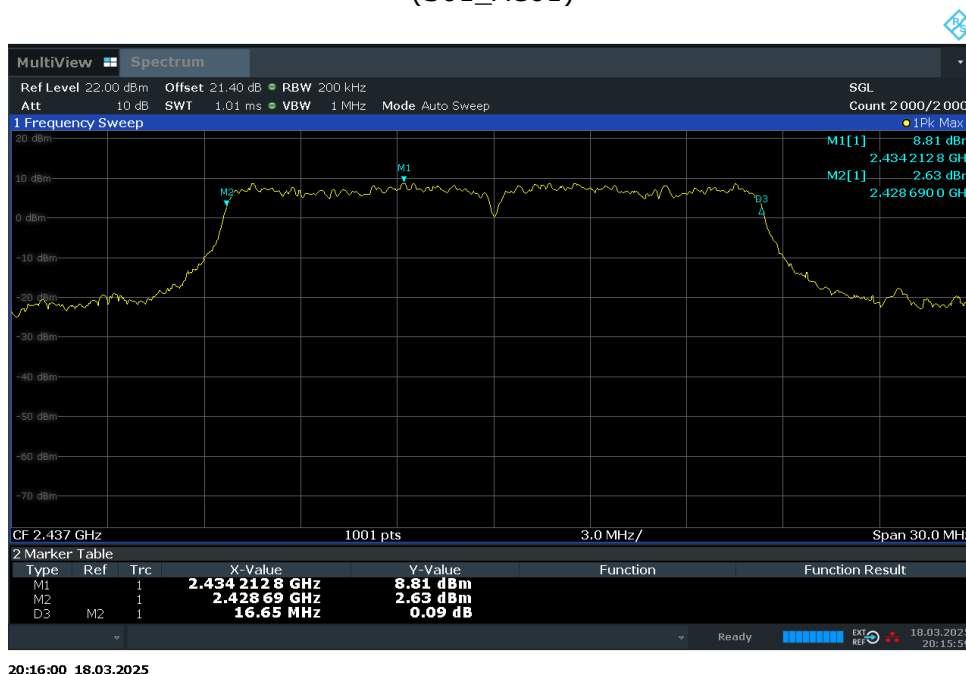
Setting	Instrument Value
Start Frequency	2.43990 GHz
Stop Frequency	2.44210 GHz
Span	2.200 MHz
RBW	100.000 kHz
VBW	300.000 kHz
SweepPoints	101
SweepTime	41.970 μ s
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	100
Filter	3 dB
Trace Mode	Max Hold
SweepType	FFT
Preamp	off
Stablemode	Trace
Stablevalue	0.50 dB
Run	17 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB

Radio Technology = WLAN b, Operating Frequency = mid
(S01_AC01)



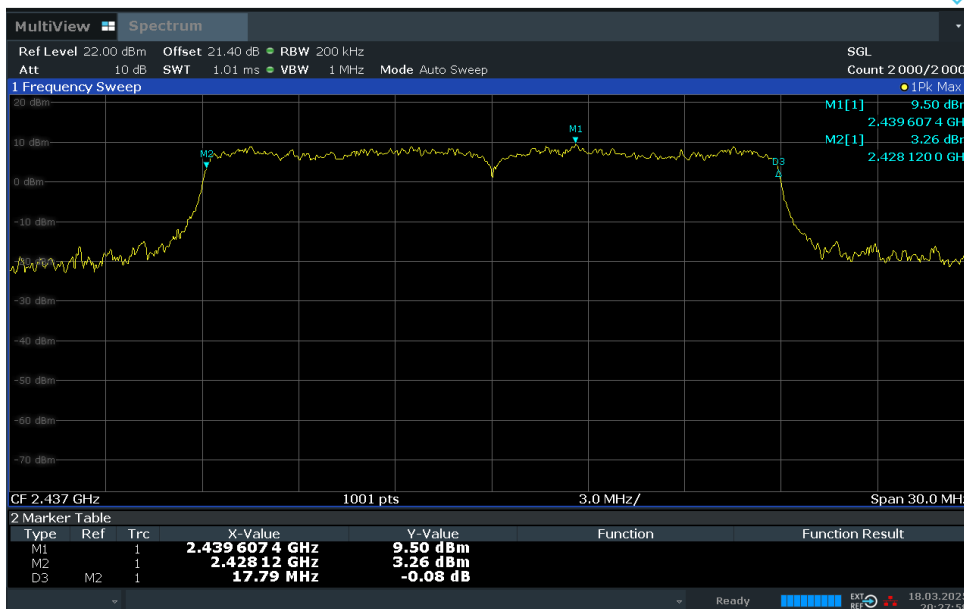
Path A

Radio Technology = WLAN g, Operating Frequency = mid
(S01_AC01)



Path A

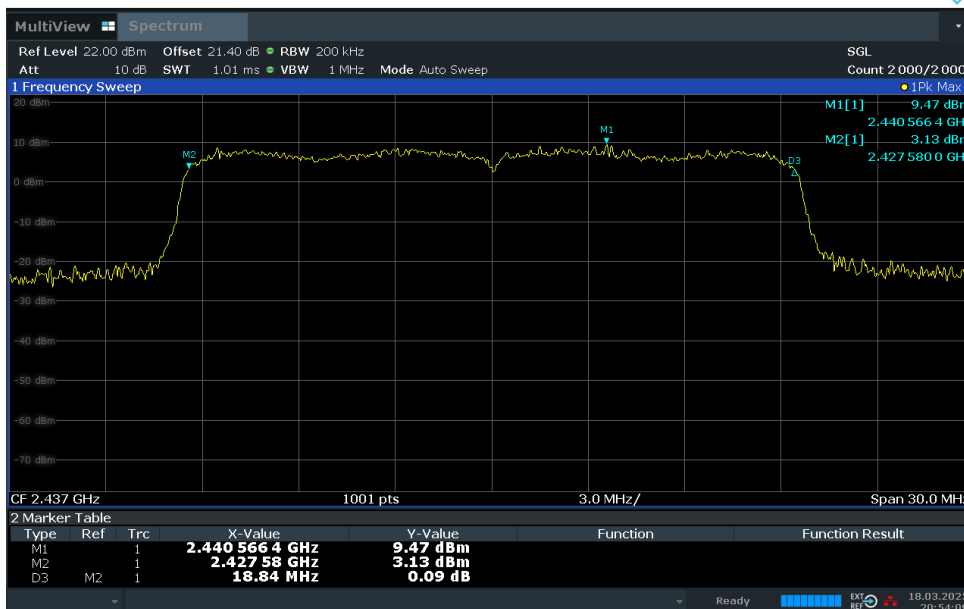
Radio Technology = WLAN n 20 MHz, Operating Frequency = mid
(S01_AC01)



20:27:58 18.03.2025

Path A

Radio Technology = WLAN ax 20 MHz, Operating Frequency = mid
(S01_AC01)

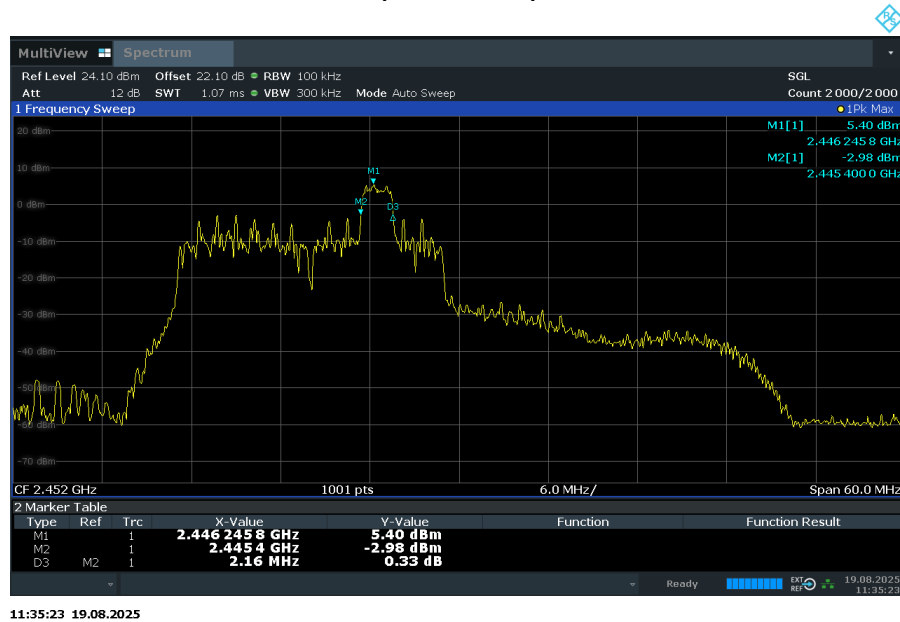


20:54:09 18.03.2025

Path A

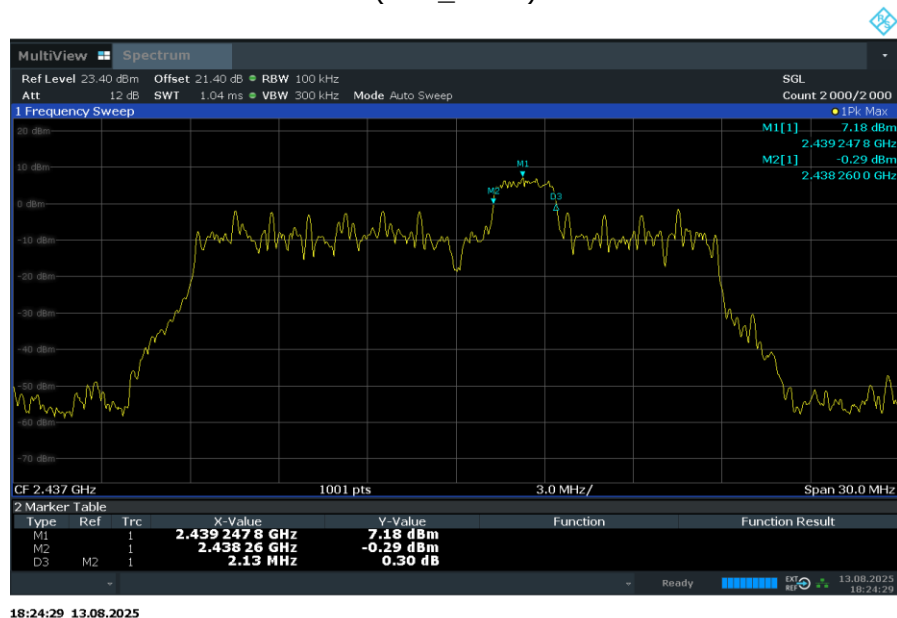
OFDMA MU

Radio Technology = WLAN ax 40 MHz RU 6, Operating Frequency = high (S01_AC01)



Path B

Radio Technology = WLAN ax 20 MHz RU 5, Operating Frequency = mid (S01_AC01)



Path A

5.2.5 TEST EQUIPMENT USED

- R&S TS8997

5.3 OCCUPIED BANDWIDTH (99%)

Standard **FCC Part 15 Subpart C**

The test was performed according to:

ANSI C63.10, chapter 6.9.3

5.3.1 TEST DESCRIPTION

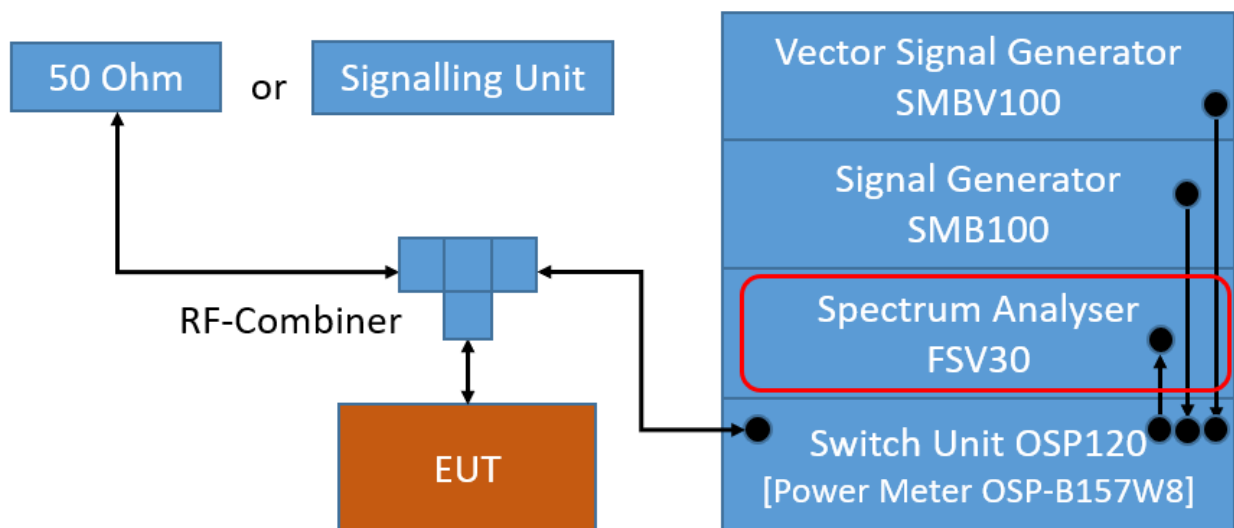
The Equipment Under Test (EUT) was set up to perform the occupied bandwidth measurements.

The reference level is the level of the highest amplitude signal observed from the transmitter at either the fundamental frequency or first-order modulation products in all typical modes of operation, including the unmodulated carrier, even if atypical.

The EUT was connected to the test system as described in the block diagram below. The complete attenuation of the measurement path is known and considered.

Analyser settings:

- Resolution Bandwidth (RBW): 1 to 5 % of the OBW
- Video Bandwidth (VBW): ≥ 3 times the RBW
- Span: 1.5 to 5 times the OBW
- Trace: Maxhold
- Sweeps: see plots
- Sweptime: Auto
- Detector: Peak



TS8997; Channel Bandwidth

5.3.2 TEST REQUIREMENTS / LIMITS

No applicable limit:

5.3.3 TEST PROTOCOL

Ambient temperature: 20 - 24 °C
 Air Pressure: 999 - 1021 hPa
 Humidity: 30 - 50 %
 BT GFSK (DH5)

Band	Channel No.	Frequency [MHz]	99 % Bandwidth [MHz]
2.4 GHz ISM	0	2402	0.87
	39	2441	0.87
	78	2480	0.88

BT DQPSK (2-DH5)

Band	Channel No.	Frequency [MHz]	99 % Bandwidth [MHz]
2.4 GHz ISM	0	2402	1.18
	39	2441	1.18
	78	2480	1.19

BT 8-DPSK (3-DH5)

Band	Channel No.	Frequency [MHz]	99 % Bandwidth [MHz]
2.4 GHz ISM	0	2402	1.17
	39	2441	1.17
	78	2480	1.17

BT LE 1 Mbit/s

Band	Channel No.	Frequency [MHz]	99 % Bandwidth [MHz]
2.4 GHz ISM	0	2402	1.03
	19	2440	1.03
	39	2480	1.03

BT LE 2 Mbit/s

Band	Channel No.	Frequency [MHz]	99 % Bandwidth [MHz]
2.4 GHz ISM	0	2402	2.09
	19	2440	2.07
	39	2480	2.09

WLAN b-Mode; 20 MHz; 1 Mbit/s

Band	Channel No.	Frequency [MHz]	99 % Bandwidth Path A [MHz]	99 % Bandwidth Path B [MHz]	99 % Bandwidth Path C [MHz]
2.4 GHz ISM	1	2412	11.7	11.7	11.8
	6	2437	11.9	11.9	12.4
	11	2462	11.7	11.7	11.8

WLAN g-Mode; 20 MHz; 24 Mbit/s

Band	Channel No.	Frequency [MHz]	99 % Bandwidth Path A [MHz]	99 % Bandwidth Path B [MHz]	99 % Bandwidth Path C [MHz]
2.4 GHz ISM	1	2412	16.5	16.6	16.5
	6	2437	16.6	16.6	16.8
	11	2462	16.5	16.5	16.5

WLAN n-Mode; 20 MHz; MCS7

Band	Channel No.	Frequency [MHz]	99 % Bandwidth Path A [MHz]	99 % Bandwidth Path B [MHz]	99 % Bandwidth Path C [MHz]
2.4 GHz ISM	1	2412	17.7	17.6	17.7
	6	2437	17.7	17.7	17.8
	11	2462	17.6	17.7	17.7

WLAN n-Mode; 40 MHz; MCS7

Band	Channel No.	Frequency [MHz]	99 % Bandwidth Path A [MHz]	99 % Bandwidth Path B [MHz]	99 % Bandwidth Path C [MHz]
2.4 GHz ISM	3	2422	36.2	36.2	-
	6	2437	36.2	36.1	-
	9	2452	36.2	36.2	-

WLAN ax-Mode; 20 MHz; MCS10

Band	Channel No.	Frequency [MHz]	99 % Bandwidth Path A [MHz]	99 % Bandwidth Path B [MHz]	99 % Bandwidth Path C [MHz]
2.4 GHz ISM	1	2412	18.8	18.8	18.8
	6	2437	18.8	18.8	18.9
	11	2462	18.8	18.8	18.8

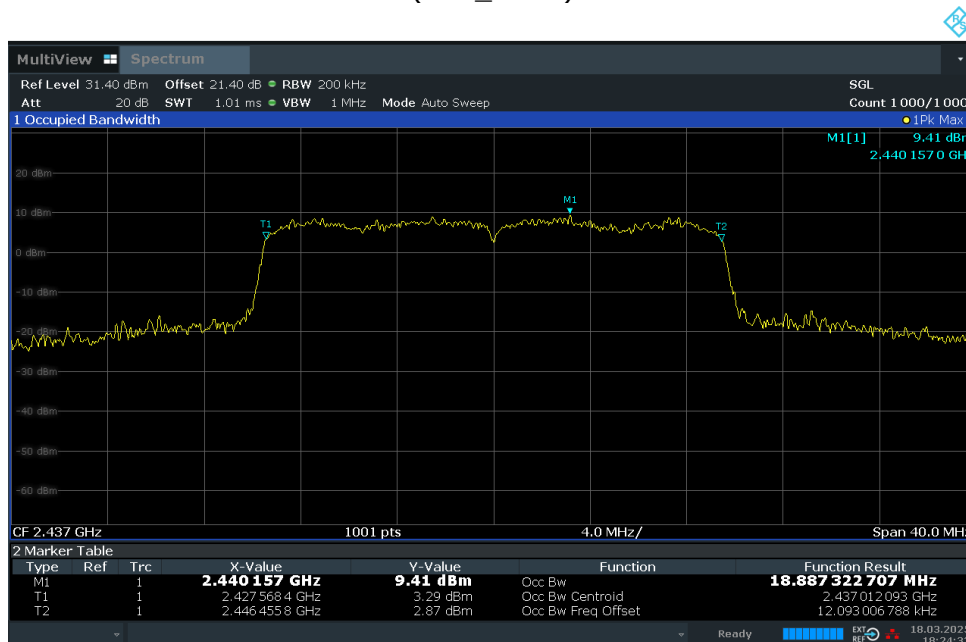
WLAN ax-Mode; 40 MHz; MCS10

Band	Channel No.	Frequency [MHz]	99 % Bandwidth Path A [MHz]	99 % Bandwidth Path B [MHz]	99 % Bandwidth Path C [MHz]
2.4 GHz ISM	3	2422	37.5	37.5	-
	6	2437	37.6	37.5	-
	9	2452	37.5	37.6	-

Remark: Please see next sub-clause for the measurement plot.

5.3.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

Radio Technology = WLAN ax 20 MHz, Operating Frequency = mid
(S01_AC01)



18:24:32 18.03.2025

Path C

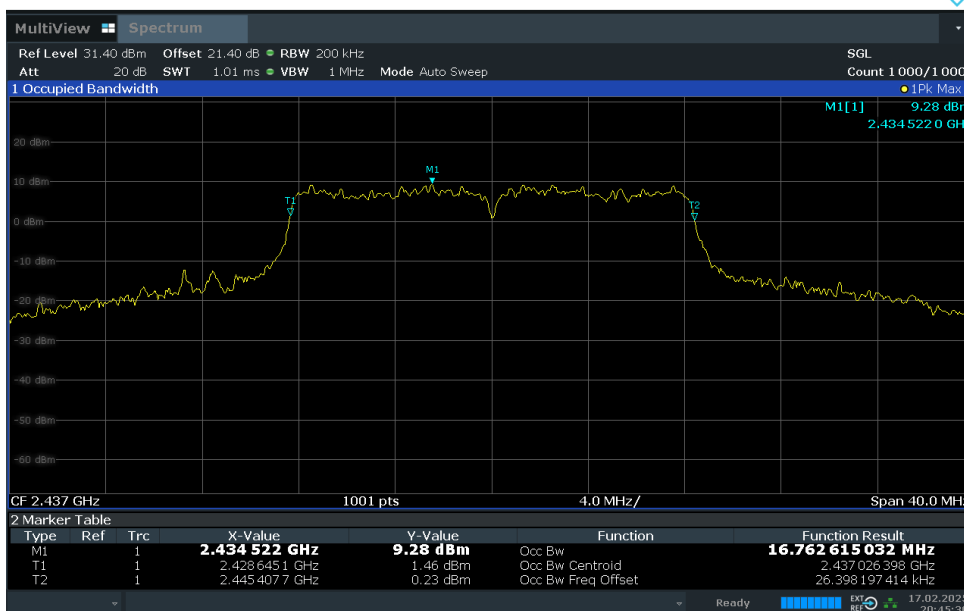
Radio Technology = WLAN b, Operating Frequency = mid
(S01_AC01)



21:12:12 18.03.2025

Path C

Radio Technology = WLAN g, Operating Frequency = mid
(S01_AC01)



20:45:30 17.02.2025

Path C

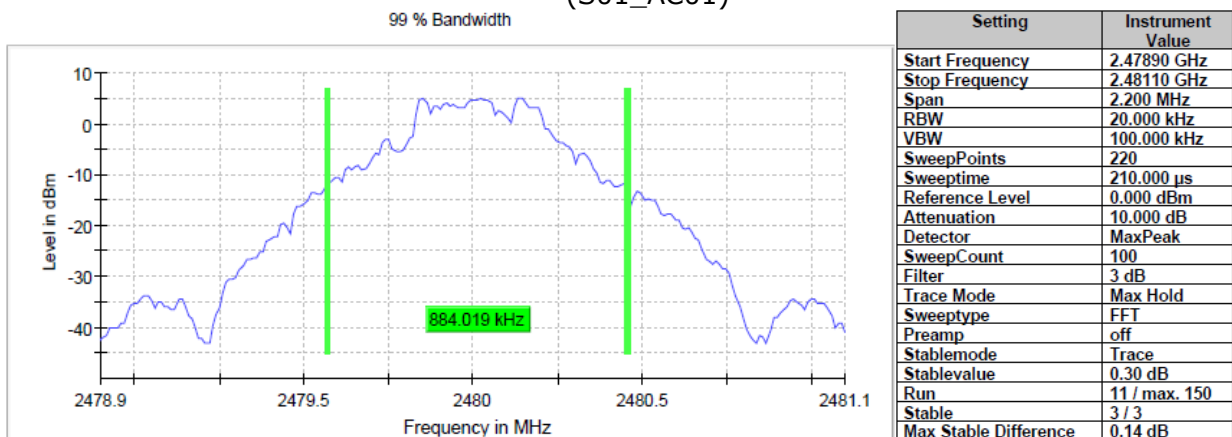
Radio Technology = WLAN n 20 MHz, Operating Frequency = mid
(S01_AC01)



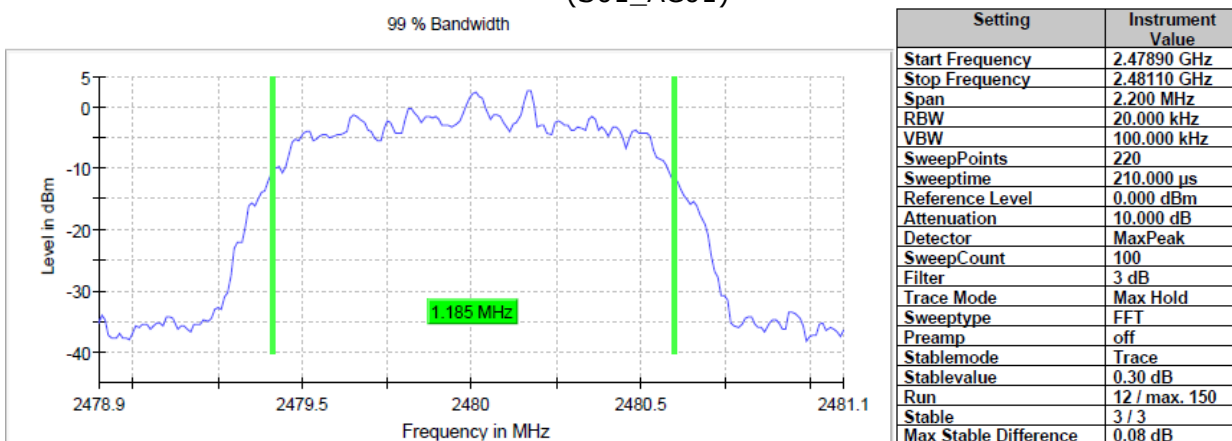
21:00:28 18.02.2025

Path C

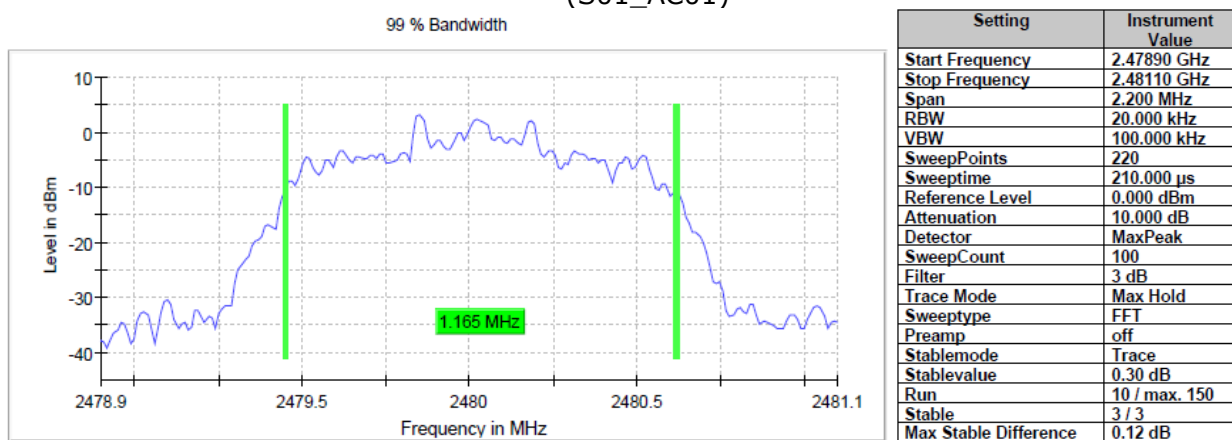
Radio Technology = Bluetooth BDR, Operating Frequency = high
(S01_AC01)



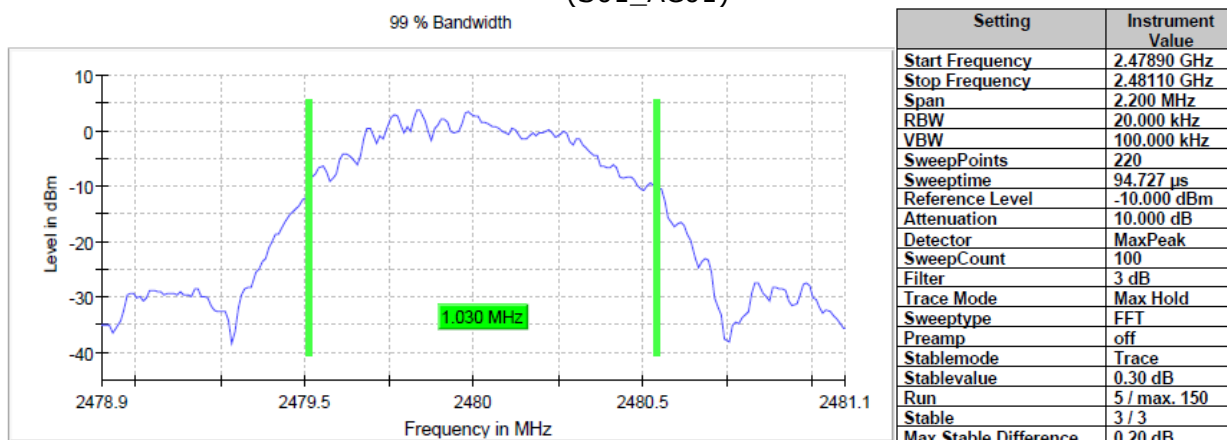
Radio Technology = Bluetooth EDR 2, Operating Frequency = high
(S01_AC01)



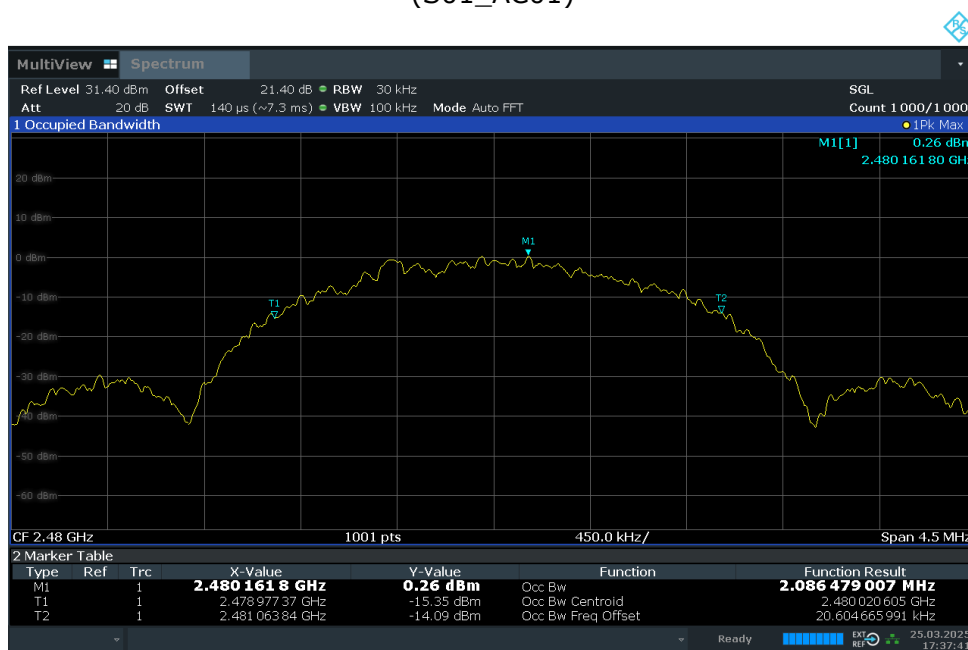
Radio Technology = Bluetooth EDR 3, Operating Frequency = high
(S01_AC01)



Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = high
(S01_AC01)



Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = high
(S01_AC01)



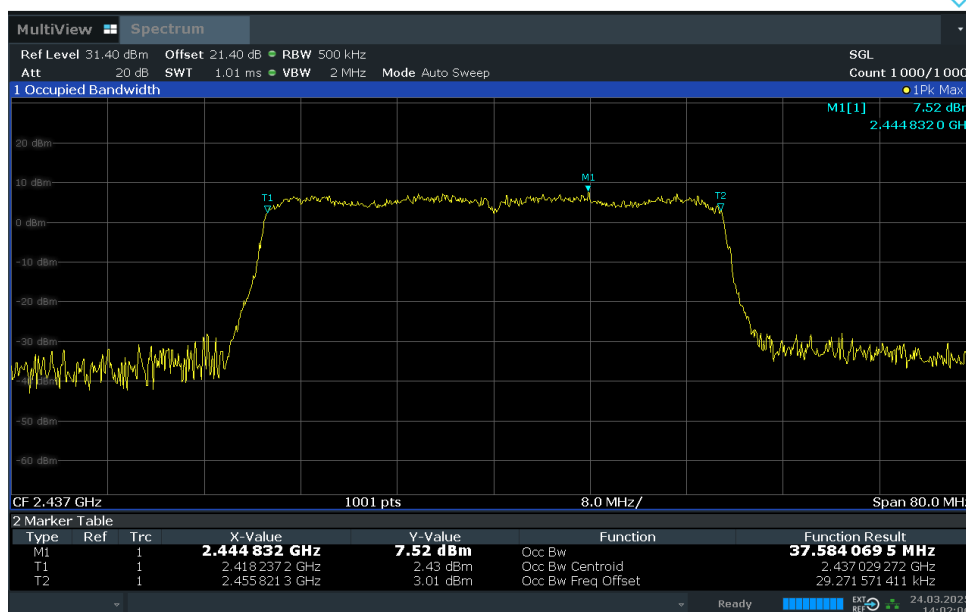
Radio Technology = WLAN n 40 MHz, Operating Frequency = mid (S01_AC01)



12:16:55 24.03.2025

Path A

Radio Technology = WLAN ax 40 MHz, Operating Frequency = mid (S01_AC01)



14:02:07 24.03.2025

Path A

5.3.5 TEST EQUIPMENT USED

- R&S TS8997

5.4 PEAK POWER OUTPUT

Standard **FCC Part 15 Subpart C**

The test was performed according to:

ANSI C63.10, chapter 11.9.1.1/11.9.2.3.2

5.4.1 TEST DESCRIPTION

DTS EQUIPMENT:

The Equipment Under Test (EUT) was set up to perform the output power measurements. The results recorded were measured with the modulation which produces the worst-case (highest) output power.

Maximum peak conducted output power (e.g. Bluetooth Low Energy):

The EUT was connected to the test system as described in the block diagram below. The complete attenuation of the measurement path is known and considered.

The reference level of the spectrum analyser was set higher than the output power of the EUT.

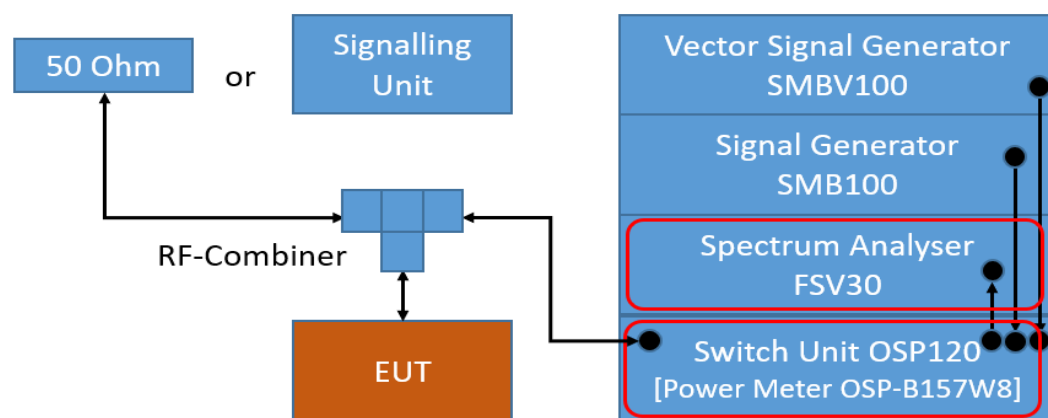
Analyser settings:

- Resolution Bandwidth (RBW): $\geq$ DTS bandwidth
- Video Bandwidth (VBW): $\geq$ 3 times RBW or maximum of analyzer
- Span: $\geq$ 3 times RBW
- Trace: Maxhold
- Sweeps: see plots
- Sweep time: Auto
- Detector: Peak

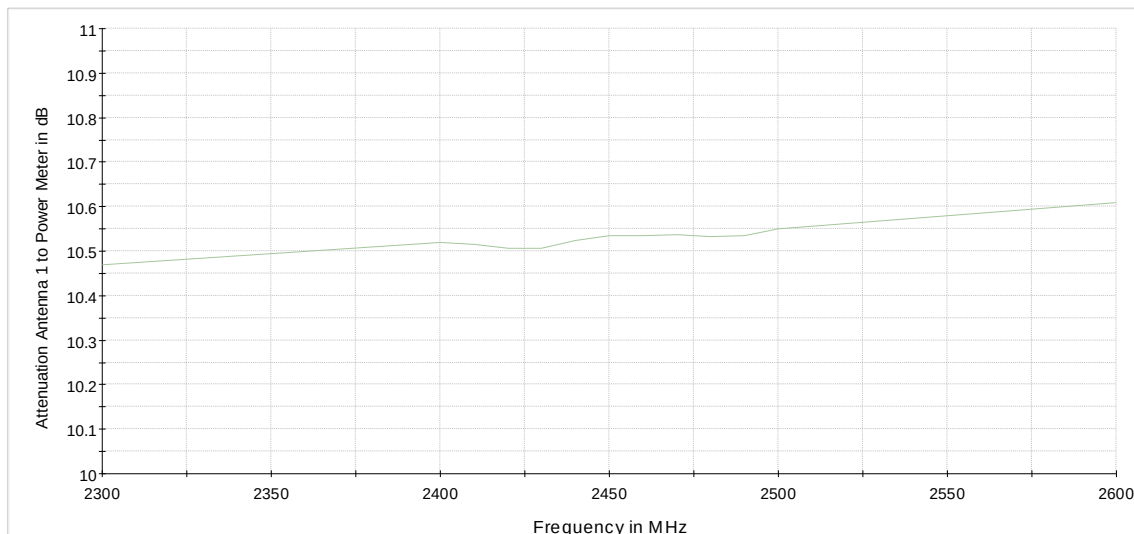
Maximum conducted average output power (e.g. WLAN):

The EUT was connected to the test system as described in the block diagram below. The complete attenuation of the measurement path is known and considered.

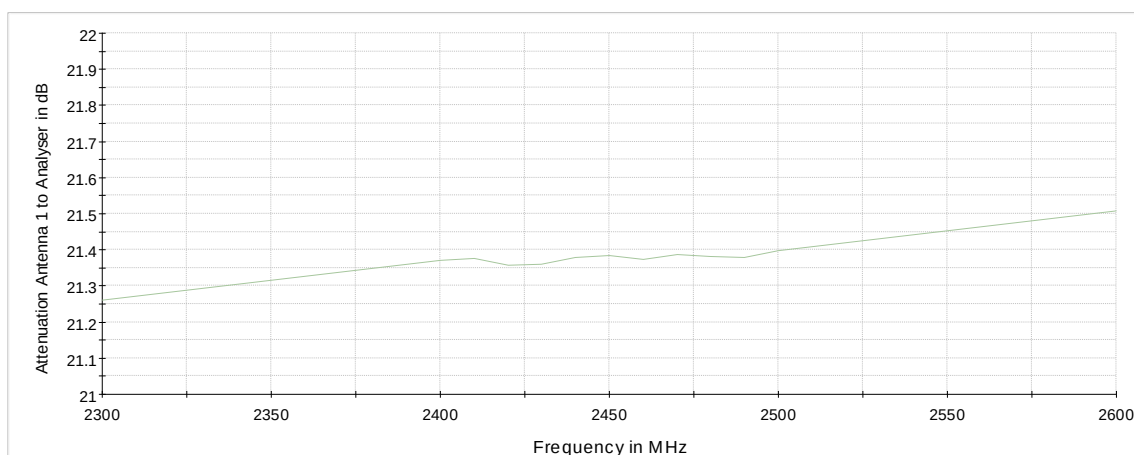
Measurement is performed using the gated RF average power meter integrated in the OSP 120 module OSP-B157W8 with signal bandwidth > 300 MHz.



TS8997; Output Power



Attenuation of the measurement path to Power Meter



Attenuation of the measurement path to Analyser

5.4.2 TEST REQUIREMENTS / LIMITS

DTS devices:

FCC Part 15, Subpart C, §15.247 (b) (3)

For systems using digital modulation techniques in the 902-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz bands: 1 watt.

==> Maximum conducted peak output power: 30 dBm (excluding antenna gain, if antennas with directional gains that do not exceed 6 dBi are used).

Frequency Hopping Systems:

FCC Part 15, Subpart C, §15.247 (b) (1)

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

FCC Part 15, Subpart C, §15.247 (b) (2)

For frequency hopping systems operating in the 902-928 MHz band: 1 watt for systems employing at least 50 hopping channels; and, 0.25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels, as permitted under paragraph (a)(1)(i) of this section.

Used conversion factor: $\text{Limit (dBm)} = 10 \log (\text{Limit (W)}/1\text{mW})$

5.4.3 TEST PROTOCOL

Ambient temperature: 20 - 24 °C
 Air Pressure: 999 - 1021 hPa
 Humidity: 30 - 50 %
 BT GFSK (DH5)

Band	Channel No.	Frequency [MHz]	Peak Power [dBm]	Limit [dBm]	Margin to Limit [dB]	E.I.R.P [dBm]
2.4 GHz ISM	0	2402	9.7	30.0	20.3	13.8
	39	2441	10.1	30.0	19.9	14.2
	78	2480	10.4	30.0	19.6	14.5

BT DQPSK (2-DH5)

Band	Channel No.	Frequency [MHz]	Peak Power [dBm]	Limit [dBm]	Margin to Limit [dB]	E.I.R.P [dBm]
2.4 GHz ISM	0	2402	8.8	30.0	21.2	12.9
	39	2441	9.1	30.0	20.9	13.2
	78	2480	9.4	30.0	20.6	13.5

BT 8-DPSK (3-DH5)

Band	Channel No.	Frequency [MHz]	Peak Power [dBm]	Limit [dBm]	Margin to Limit [dB]	E.I.R.P [dBm]
2.4 GHz ISM	0	2402	9.1	30.0	20.9	13.2
	39	2441	9.3	30.0	20.7	13.4
	78	2480	9.6	30.0	20.4	13.7

BT LE 1 Mbit/s

Band	Channel No.	Frequency [MHz]	Peak Power [dBm]	Limit [dBm]	Margin to Limit [dB]	E.I.R.P [dBm]
2.4 GHz ISM	0	2402	9.2	30.0	20.8	13.3
	19	2440	9.6	30.0	20.4	13.7
	39	2480	10.0	30.0	20.0	14.1

BT LE 2 Mbit/s

Band	Channel No.	Frequency [MHz]	Peak Power [dBm]	Limit [dBm]	Margin to Limit [dB]	E.I.R.P [dBm]
2.4 GHz ISM	0	2402	6.4	30.0	23.6	10.5
	19	2440	6.7	30.0	23.3	10.8
	39	2480	7.0	30.0	23.0	11.1

WLAN b-Mode; 20 MHz; 1 Mbit/s

Band	Channel No.	Frequency [MHz]	Maximum Average Power Path A [dBm]	Maximum Average Power Path B [dBm]	Maximum Average Power Path C [dBm]	Limit	Min. Margin to Limit	Max. E.I.R.P [dBm]
2.4 GHz ISM	1	2412	19.7	18.7	19.0	30.0	10.3	23.8
	6	2437	22.2	20.8	21.5	30.0	7.8	26.3
	11	2462	17.9	16.7	17.3	30.0	12.1	22.0

WLAN g-Mode; 20 MHz; 24 Mbit/s

Band	Channel No.	Frequency [MHz]	Maximum Average Power Path A [dBm]	Maximum Average Power Path B [dBm]	Maximum Average Power Path C [dBm]	Limit	Min. Margin to Limit	Max. E.I.R.P [dBm]
2.4 GHz ISM	1	2412	14.6	13.7	14.3	30.0	15.4	18.7
	6	2437	19.2	18.5	19.2	30.0	10.8	23.3
	11	2462	12.8	11.6	12.7	30.0	17.2	16.9

WLAN n-Mode; 20 MHz; MCS7

Band	Channel No.	Frequency [MHz]	Maximum Average Power Path A [dBm]	Maximum Average Power Path B [dBm]	Maximum Average Power Path C [dBm]	Limit	Min. Margin to Limit	Max. E.I.R.P [dBm]
2.4 GHz ISM	1	2412	14.5	13.7	14.2	30.0	15.5	18.6
	6	2437	19.1	18.4	19.2	30.0	10.8	23.3
	11	2462	11.7	10.5	11.4	30.0	18.3	15.8

WLAN n-Mode; 40 MHz; MCS7

Band	Channel No.	Frequency [MHz]	Maximum Average Power Path A [dBm]	Maximum Average Power Path B [dBm]	Maximum Average Power Path C [dBm]	Limit	Min. Margin to Limit	Max. E.I.R.P [dBm]
2.4 GHz ISM	3	2422	15.2	14.4	-	30.0	14.8	19.3
	6	2437	15.2	14.2	-	30.0	14.8	19.3
	9	2452	12.2	10.5	-	30.0	17.8	16.3

WLAN ax-Mode; 20 MHz; MCS10

Band	Channel No.	Frequency [MHz]	Maximum Average Power Path A [dBm]	Maximum Average Power Path B [dBm]	Maximum Average Power Path C [dBm]	Limit	Min. Margin to Limit	Max. E.I.R.P [dBm]
2.4 GHz ISM	1	2412	13.6	12.7	13.5	30.0	16.4	17.7
	6	2437	18.2	17.5	18.6	30.0	11.4	22.7
	11	2462	10.7	9.6	10.9	30.0	19.1	15.0

WLAN ax-Mode; 40 MHz; MCS10

Band	Channel No.	Frequency [MHz]	Maximum Average Power Path A [dBm]	Maximum Average Power Path B [dBm]	Maximum Average Power Path C [dBm]	Limit	Min. Margin to Limit	Max. E.I.R.P [dBm]
2.4 GHz ISM	3	2422	14.5	13.7	-	30.0	15.5	18.6
	6	2437	15.4	14.3	-	30.0	14.6	19.5
	9	2452	12.3	10.6	-	30.0	17.7	16.4

OFDMA MU

WLAN ax-Mode; 20 MHz; MCS10; RU 5

Band	Channel No.	Frequency [MHz]	Maximum Average Power Path A [dBm]	Maximum Average Power Path B [dBm]	Maximum Average Power Path C [dBm]	Limit	Min. Margin to Limit	Max. E.I.R.P [dBm]
2.4 GHz ISM	1	2412	11.8	11.2	11.6	30.0	18.2	15.9
	6	2437	11.6	10.5	11.8	30.0	18.2	15.9
	11	2462	11.9	10.7	12.0	30.0	18.0	16.1

WLAN ax-Mode; 40 MHz; MCS10; RU 6

Band	Channel No.	Frequency [MHz]	Maximum Average Power Path A [dBm]	Maximum Average Power Path B [dBm]	Maximum Average Power Path C [dBm]	Limit	Min. Margin to Limit	Max. E.I.R.P [dBm]
2.4 GHz ISM	3	2422	10.8	10.2	-	30.0	19.2	14.9
	6	2437	10.5	9.5	-	30.0	19.5	14.6
	9	2452	10.4	9.2	-	30.0	19.6	14.5

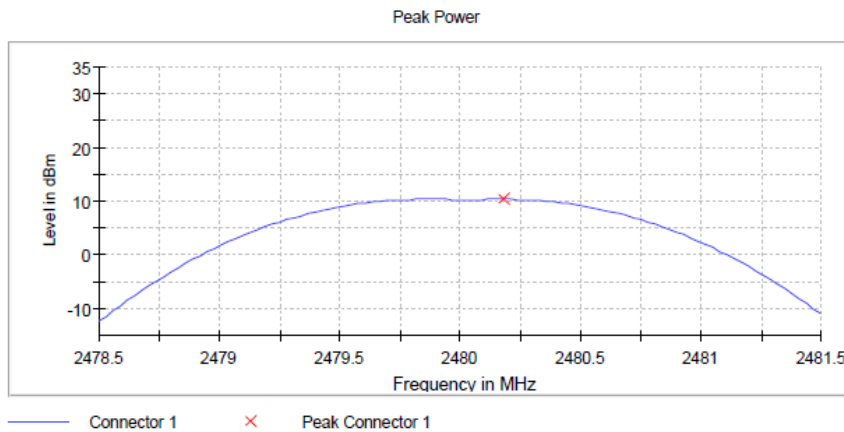
Remark: Please see next sub-clause for the measurement plot.

Since power meter measurement was used for WLAN, plots are provided for Bluetooth only.

5.4.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

Radio Technology = Bluetooth BDR, Operating Frequency = high, Measurement method = conducted
(S01_AC01)

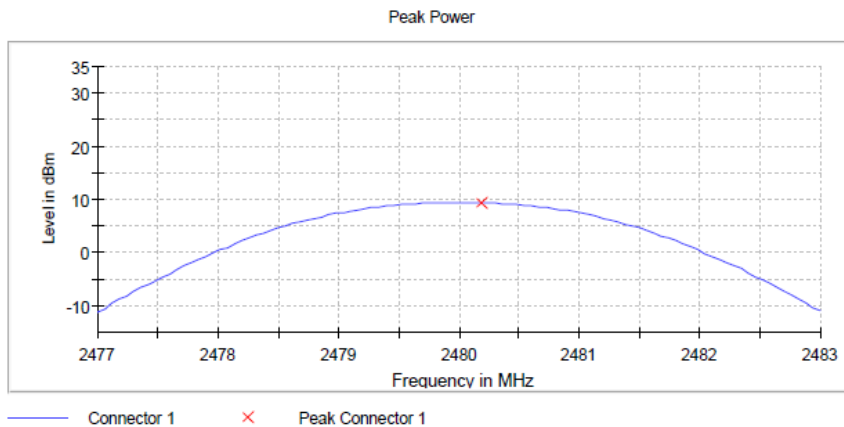
DUT Frequency (MHz)	Peak Power (dBm)	Limit Max (dBm)	Result
2480.000000	10.4	30.0	PASS



Setting	Instrument Value
Start Frequency	2.47850 GHz
Stop Frequency	2.48150 GHz
Span	3.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
SweepPoints	101
SweepTime	4.210 µs
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	100
Filter	3 dB
Trace Mode	Max Hold
SweepType	FFT
Preamp	off
Stablemode	Trace
Stablevalue	0.50 dB
Run	4 / max. 150
Stable	3 / 3
Max Stable Difference	0.01 dB

Radio Technology = Bluetooth EDR 2, Operating Frequency = high, Measurement method = conducted
(S01_AC01)

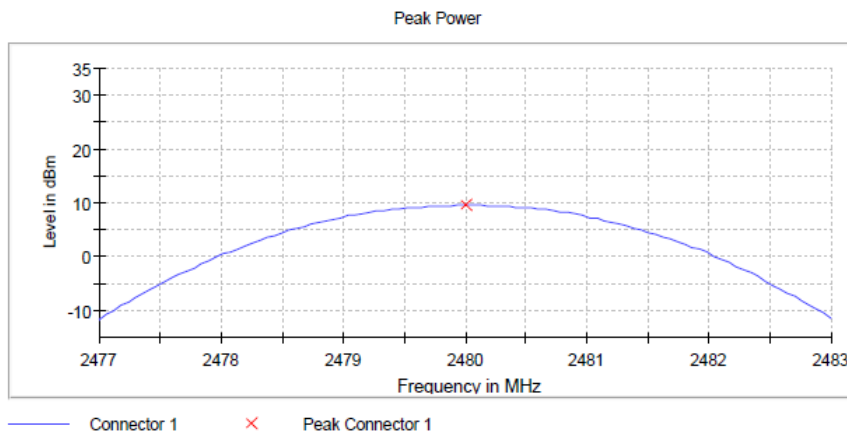
DUT Frequency (MHz)	Peak Power (dBm)	Limit Max (dBm)	Result
2480.000000	9.4	30.0	PASS



Setting	Instrument Value
Start Frequency	2.47700 GHz
Stop Frequency	2.48300 GHz
Span	6.000 MHz
RBW	2.000 MHz
VBW	10.000 MHz
SweepPoints	101
SweepTime	1.000 ms
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	100
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.50 dB
Run	4 / max. 150
Stable	3 / 3
Max Stable Difference	0.06 dB

Radio Technology = Bluetooth EDR 3, Operating Frequency = high, Measurement method = conducted (S01_AC01)

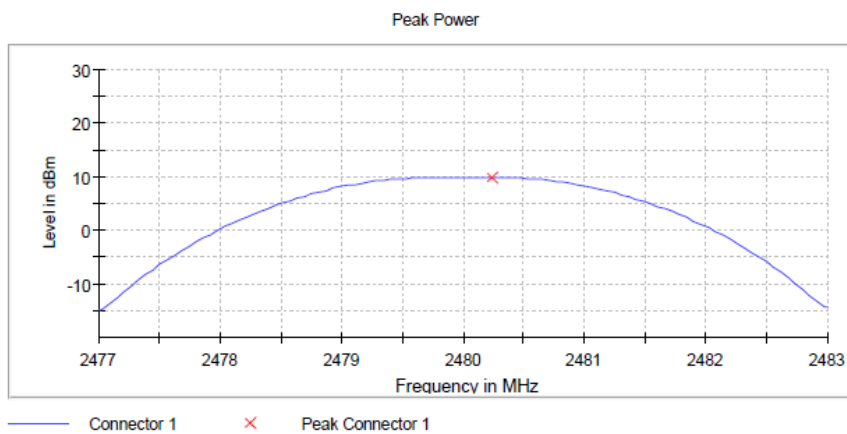
DUT Frequency (MHz)	Peak Power (dBm)	Limit Max (dBm)	Result
2480.000000	9.6	30.0	PASS



Setting	Instrument Value
Start Frequency	2.47700 GHz
Stop Frequency	2.48300 GHz
Span	6.000 MHz
RBW	2.000 MHz
VBW	10.000 MHz
SweepPoints	101
Sweptime	1.000 ms
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	100
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.50 dB
Run	4 / max. 150
Stable	3 / 3
Max Stable Difference	0.13 dB

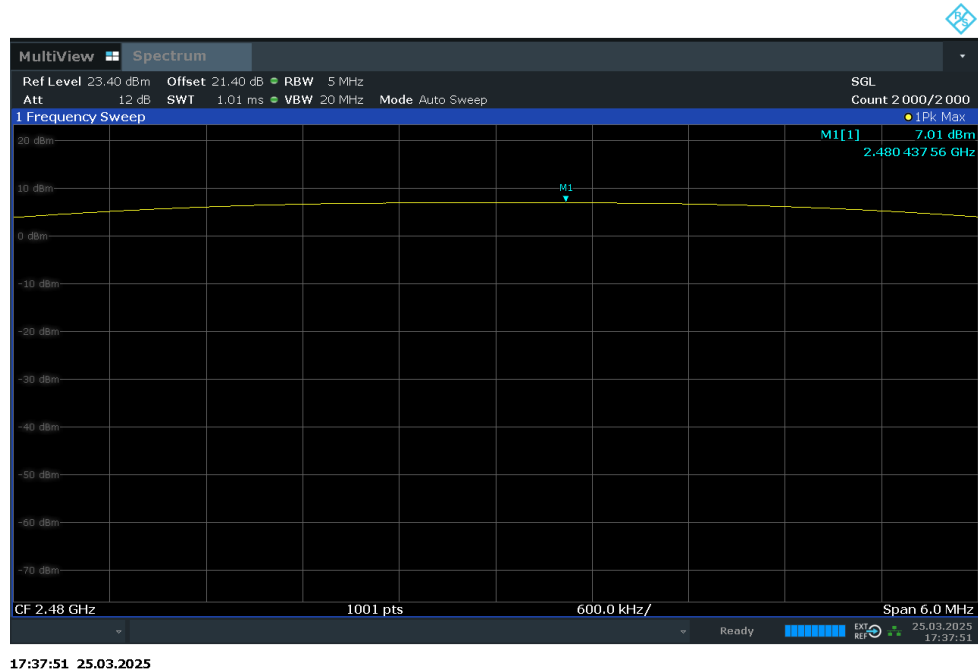
Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = high, Measurement method = conducted (S01_AC01)

DUT Frequency (MHz)	Peak Power (dBm)	Limit Max (dBm)	Result
2480.000000	10.0	30.0	PASS



Setting	Instrument Value
Start Frequency	2.47700 GHz
Stop Frequency	2.48300 GHz
Span	6.000 MHz
RBW	2.000 MHz
VBW	10.000 MHz
SweepPoints	101
Sweptime	953.450 ns
Reference Level	0.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	100
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	FFT
Preamp	off
Stablemode	Trace
Stablevalue	0.50 dB
Run	4 / max. 150
Stable	3 / 3
Max Stable Difference	0.02 dB

Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = high, Measurement method = conducted (S01_AC01)



5.4.5 TEST EQUIPMENT USED

- R&S TS8997

5.5 SPURIOUS RF CONDUCTED EMISSIONS

Standard **FCC Part 15 Subpart C**

The test was performed according to:

ANSI C63.10, chapter 11.11

5.5.1 TEST DESCRIPTION

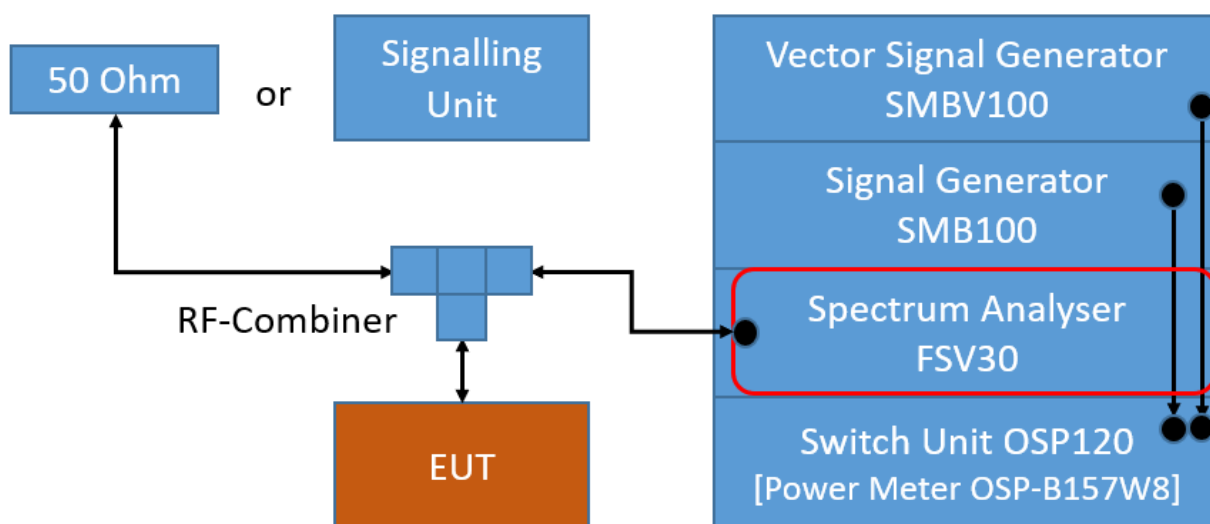
The Equipment Under Test (EUT) was set up to perform the spurious emissions measurements.

The EUT was connected to the test system as described in the block diagram below. The complete attenuation of the measurement path is known and considered.

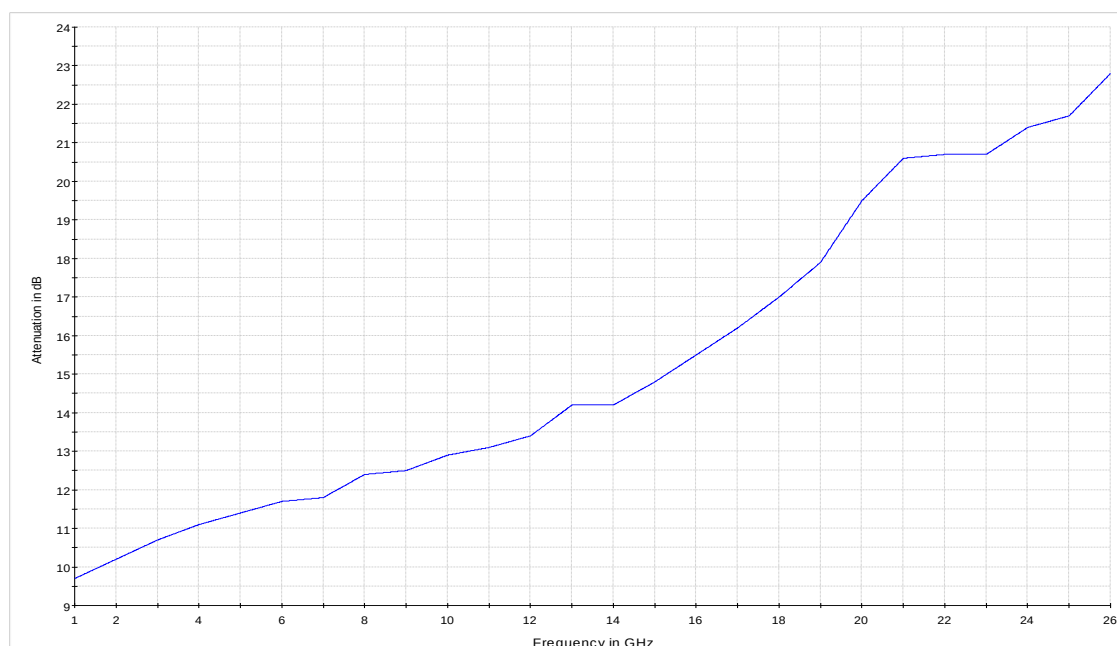
Analyser settings:

- Frequency range: 30 – 26000 MHz
- Resolution Bandwidth (RBW): 100 kHz
- Video Bandwidth (VBW): 300 kHz
- Trace: Maxhold
- Sweeps: See plots
- Sweep Time: Auto
- Detector: Peak

The reference value for the measurement of the spurious RF conducted emissions is determined during the test "band edge compliance conducted". This value is used to calculate the 20 dBc or 30 dBc limit.



TS8997; Spurious RF Conducted Emissions



Attenuation of the measurement path

5.5.2 TEST REQUIREMENTS / LIMITS

FCC Part 15, Subpart C, §15.247 (c)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

5.5.3 TEST PROTOCOL

Ambient temperature: 20 - 24 °C
 Air Pressure: 999 - 1021 hPa
 Humidity: 30 - 50 %
 BT GFSK (DH5)

Channel No	Channel Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Ref. Level [dBm]	Limit [dBm]	Margin to Limit [dB]
0	2402	25673.8	-39.6	PEAK	100	9.1	-10.9	28.7
39	2441	25991.9	-39.5	PEAK	100	9.4	-10.6	28.9
78	2480	25761.4	-38.8	PEAK	100	10.1	-9.9	28.9

BT DQPSK (2-DH5)

Channel No	Channel Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Ref. Level [dBm]	Limit [dBm]	Margin to Limit [dB]
0	2402	25803.6	-38.8	PEAK	100	6.3	-13.7	25.1
39	2441	25819.8	-38.9	PEAK	100	6.7	-13.3	25.6
78	2480	25905.0	-39.2	PEAK	100	6.4	-13.6	25.6

BT 8-DPSK (3-DH5)

Channel No	Channel Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Ref. Level [dBm]	Limit [dBm]	Margin to Limit [dB]
0	2402	25838.5	-39.5	PEAK	100	5.9	-14.1	25.5
39	2441	25715.1	-38.9	PEAK	100	6.5	-13.5	25.4
78	2480	25849.0	-39.1	PEAK	100	7.5	-12.5	26.5

BT LE 1 Mbit/s

Channel No	Channel Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Ref. Level [dBm]	Limit [dBm]	Margin to Limit [dB]
0	2402	25995.9	-38.6	PEAK	100	8.1	-11.9	26.7
19	2440	25889.6	-39.5	PEAK	100	8.1	-11.9	27.6
39	2480	25421.4	-39.7	PEAK	100	9.2	-10.8	28.9

BT LE 2 Mbit/s

Channel No	Channel Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Ref. Level [dBm]	Limit [dBm]	Margin to Limit [dB]
0	2402	25900.2	-39.7	PEAK	100	5.9	-14.1	25.6
19	2440	25737.1	-38.7	PEAK	100	5.9	-14.1	24.6
39	2480	25990.3	-39.2	PEAK	100	6.7	-13.3	26.0

WLAN b-Mode; 20 MHz; 1 Mbit/s

Tested Path	Channel Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Ref. Level [dBm]	Limit [dBm]	Margin to Limit [dB]
A	2412	25963.5	-39.7	PEAK	100	10.0	-20.0	19.7
A	2437	25970.8	-40.0	PEAK	100	12.5	-17.5	22.5
A	2462	25912.4	-38.9	PEAK	100	8.6	-21.4	17.5
B	2412	25777.6	-39.7	PEAK	100	9.0	-21.0	18.6
B	2437	25995.1	-38.3	PEAK	100	11.8	-18.2	20.0
B	2462	25925.3	-38.7	PEAK	100	7.1	-22.9	15.8
C	2412	25804.4	-39.3	PEAK	100	9.4	-20.6	18.7
C	2437	25712.7	-39.7	PEAK	100	11.6	-18.4	21.3
C	2462	25554.5	-39.6	PEAK	100	7.8	-22.2	17.3

WLAN g-Mode; 20 MHz; 24 Mbit/s

Tested Path	Channel Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Ref. Level [dBm]	Limit [dBm]	Margin to Limit [dB]
A	2412	25763.0	-38.3	PEAK	100	3.4	-26.6	11.8
A	2437	25789.0	-39.5	PEAK	100	7.9	-22.1	17.4
A	2462	25997.6	-39.1	PEAK	100	1.2	-28.8	10.3
B	2412	25998.4	-39.5	PEAK	100	3.0	-27.0	12.5
B	2437	25861.2	-39.5	PEAK	100	8.1	-21.9	17.5
B	2462	25979.7	-39.0	PEAK	100	0.9	-29.1	9.9
C	2412	25856.4	-39.3	PEAK	100	3.0	-27.0	12.3
C	2437	25857.2	-39.5	PEAK	100	8.0	-22.0	17.4
C	2462	25797.1	-39.8	PEAK	100	1.4	-28.6	11.1

WLAN n-Mode; 20 MHz; MCS7

Tested Path	Channel Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Ref. Level [dBm]	Limit [dBm]	Margin to Limit [dB]
A	2412	25991.1	-39.6	PEAK	100	3.3	-26.7	12.9
A	2437	25987.8	-39.1	PEAK	100	7.6	-22.4	16.6
A	2462	25841.7	-38.6	PEAK	100	0.1	-29.9	8.7
B	2412	25862.0	-38.7	PEAK	100	1.3	-28.7	10.1
B	2437	25948.1	-39.1	PEAK	100	7.9	-22.1	16.9
B	2462	25922.9	-40.0	PEAK	100	-0.7	-30.7	9.3
C	2412	25998.4	-38.9	PEAK	100	2.9	-27.1	11.8
C	2437	25914.8	-39.2	PEAK	100	7.6	-22.4	16.8
C	2462	25914.0	-38.8	PEAK	100	-0.1	-30.1	8.7

WLAN n-Mode; 40 MHz; MCS7

Tested Path	Channel Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Ref. Level [dBm]	Limit [dBm]	Margin to Limit [dB]
A	2422	25992.7	-39.4	PEAK	100	1.2	-28.8	10.6
A	2437	25948.1	-39.8	PEAK	100	1.3	-28.7	11.2
A	2452	25969.2	-39.1	PEAK	100	-1.6	-31.6	7.5
B	2422	25830.4	-39.6	PEAK	100	1.4	-28.6	11.0
B	2437	25991.9	-39.1	PEAK	100	0.4	-29.6	9.5
B	2452	25871.8	-39.2	PEAK	100	-2.6	-32.6	6.5

WLAN ax-Mode; 20 MHz; MCS10

Tested Path	Channel Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Ref. Level [dBm]	Limit [dBm]	Margin to Limit [dB]
A	2412	25987.0	-39.3	PEAK	100	1.0	-29.0	10.3
A	2437	25849.0	-39.4	PEAK	100	7.1	-22.9	16.5
A	2462	25858.0	-39.1	PEAK	100	-0.8	-30.8	8.3
B	2412	25824.7	-39.5	PEAK	100	1.7	-28.3	11.1
B	2437	25870.2	-39.2	PEAK	100	5.8	-24.2	15.1
B	2462	25863.7	-39.8	PEAK	100	-2.0	-32.0	7.7
C	2412	25998.4	-39.5	PEAK	100	2.3	-27.7	11.7
C	2437	25952.1	-38.9	PEAK	100	6.9	-23.1	15.7
C	2462	25799.5	-39.4	PEAK	100	-1.0	-31.0	8.4

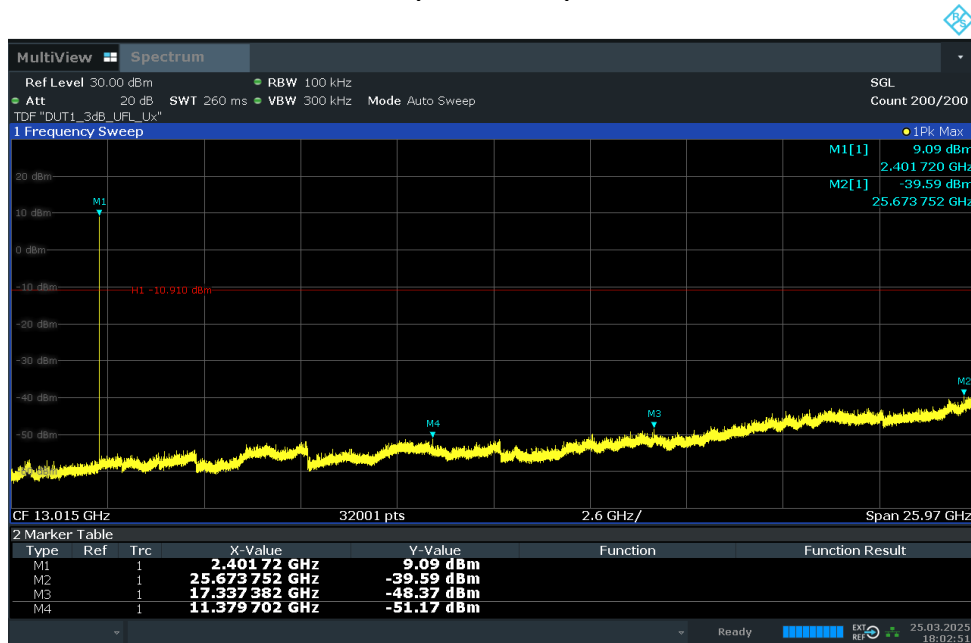
WLAN ax-Mode; 40 MHz; MCS10

Tested Path	Channel Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Ref. Level [dBm]	Limit [dBm]	Margin to Limit [dB]
A	2422	25810.9	-39.7	PEAK	100	0.0	-30.0	9.7
A	2437	25980.5	-39.0	PEAK	100	1.2	-28.8	10.2
A	2452	25756.5	-39.0	PEAK	100	-2.0	-32.0	7.0
B	2422	25871.0	-39.1	PEAK	100	-0.1	-30.1	9.0
B	2437	25956.2	-39.1	PEAK	100	0.6	-29.4	9.7
B	2452	25945.6	-39.7	PEAK	100	-2.8	-32.8	7.0

Remark: Please see next sub-clause for the measurement plot.

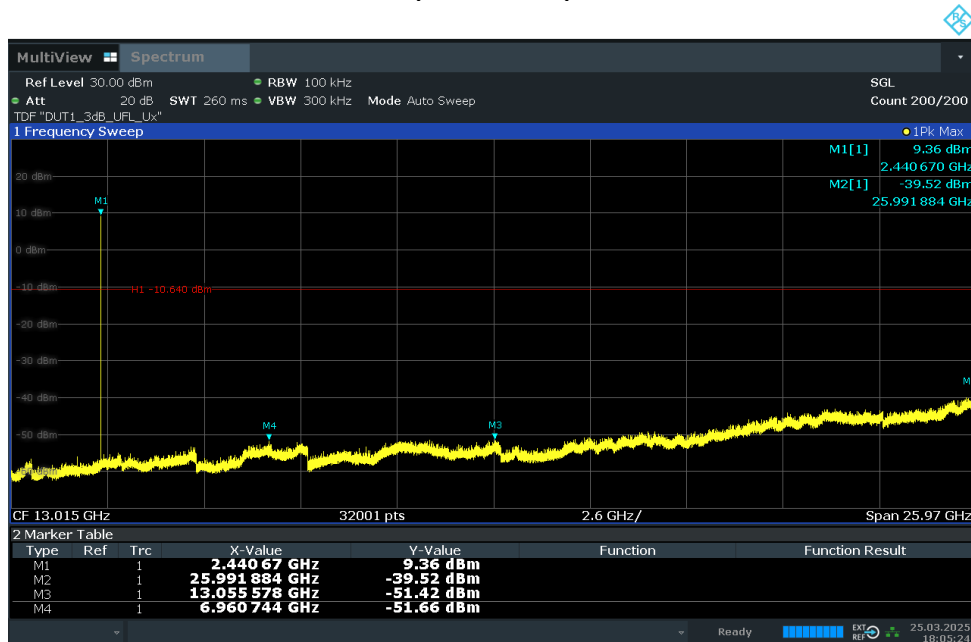
5.5.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

Radio Technology = Bluetooth BDR, Operating Frequency = low
(S01_AC01)



18:02:52 25.03.2025

Radio Technology = Bluetooth BDR, Operating Frequency = mid
(S01_AC01)



18:05:24 25.03.2025

Radio Technology = Bluetooth BDR, Operating Frequency = high
(S01_AC01)



18:07:56 25.03.2025

Radio Technology = Bluetooth EDR 2, Operating Frequency = low
(S01_AC01)



18:10:28 25.03.2025

Radio Technology = Bluetooth EDR 2, Operating Frequency = mid
(S01_AC01)



18:13:01 25.03.2025

Radio Technology = Bluetooth EDR 2, Operating Frequency = high
(S01_AC01)



18:15:34 25.03.2025

Radio Technology = Bluetooth EDR 3, Operating Frequency = low
(S01_AC01)



18:18:06 25.03.2025

Radio Technology = Bluetooth EDR 3, Operating Frequency = mid
(S01_AC01)



18:20:39 25.03.2025

Radio Technology = Bluetooth EDR 3, Operating Frequency = high
(S01_AC01)



18:23:11 25.03.2025

Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = low
(S01_AC01)



18:25:45 25.03.2025

Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = mid
(S01_AC01)



18:28:16 25.03.2025

Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = high
(S01_AC01)



18:30:48 25.03.2025

Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = low
(S01_AC01)



18:33:20 25.03.2025

Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = mid
(S01_AC01)



18:35:52 25.03.2025

Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = high
(S01_AC01)



18:38:25 25.03.2025

Radio Technology = WLAN b, Operating Frequency = low
(S01_AC01)



19:21:36 24.03.2025

Path A

Radio Technology = WLAN b, Operating Frequency = mid
(S01_AC01)



19:24:14 24.03.2025

Path A

Radio Technology = WLAN b, Operating Frequency = high
(S01_AC01)



19:26:50 24.03.2025

Path A

Radio Technology = WLAN b, Operating Frequency = low
(S01_AC01)



10:38:26 25.03.2025

Path B

Radio Technology = WLAN b, Operating Frequency = mid
(S01_AC01)



10:41:05 25.03.2025

Path B

Radio Technology = WLAN b, Operating Frequency = high
(S01_AC01)



10:43:45 25.03.2025

Path B

Radio Technology = WLAN b, Operating Frequency = low
(S01_AC01)



20:40:03 24.03.2025

Path C

Radio Technology = WLAN b, Operating Frequency = mid
(S01_AC01)



20:42:40 24.03.2025

Path C

Radio Technology = WLAN b, Operating Frequency = high
(S01_AC01)



20:45:16 24.03.2025

Path C

Radio Technology = WLAN g, Operating Frequency = low
(S01_AC01)



19:29:27 24.03.2025

Path A

Radio Technology = WLAN g, Operating Frequency = mid
(S01_AC01)



19:32:04 24.03.2025

Path A