

FCC Measurement/Technical Report on

Industrial WLAN Access Point / Client

SCALANCE W700 / MSAX

MSAX-W1-RJ-E2

FCC ID: LYHMSAXV1
IC: 267AA-MSAXV1

Test Report Reference: MDE_SIEM_2207_FCC_05

Test Laboratory:

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Deutsche
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D-PL-12140-01-01
D-PL-12140-01-02
D-PL-12140-01-03

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 (Digital Device / Spread Spectrum).

Applicable FCC Rules

Prepared in accordance with the requirements of FCC Rules and Regulations as listed in 47 CFR Ch.1 Parts 2 (10-1-21 Edition) and 15 (10-1-21 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

Part 15, Subpart E – Unlicensed National Information Infrastructure Devices

§ 15.403 Definitions

§ 15.407 General technical requirements

Note:

The tests were selected and performed with reference to the FCC Public Notice “Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E, 789033 D02 General U-NII Test Procedures New Rules v02r01, 2017-12-14”.

ANSI C63.10-2013 is applied.

1.2 FCC-IC CORRELATION TABLE

Correlation of measurement requirements for UNII / LE-LAN (e.g. WLAN 5 GHz) equipment from FCC and IC

UNII equipment

Measurement	FCC reference	IC reference
Conducted emissions on AC Mains	§ 15.207	RSS-Gen Issue 5: 8.8
Occupied bandwidth	§ 15.403 (26 dB) / § 15.407 (e) (6 dB)	RSS-247 Issue 2: 6.2.1.1, 6.2.2.1, 6.2.3.1 (99%) RSS-247 Issue 2: 6.2.4.1 (6 dB)
Maximum conducted output power	§ 15.407 (a) (1) to (8), (11)	RSS-247 Issue 2: 6.2.1.1, 6.2.2.1, 6.2.3.1, 6.2.4.1
Maximum power spectral density	§ 15.407 (a) (1) to (8), (12)	RSS-247 Issue 2: 6.2.1.1, 6.2.2.1, 6.2.3.1, 6.2.4.1
Transmitter undesirable emissions; General Field Strength Limits, Restricted Bands	§ 15.407 (b) § 15.209 (a)	RSS-Gen Issue 5: 6.13/8.9/8.10; RSS-247 Issue 2: 3.3/6.2 6.2.1.2, 6.2.2.2, 6.2.3.2, 6.2.4.2
Frequency stability	§ 15.407 (g)	RSS-Gen Issue 5: 6.11/8.11
Transmit Power Control (TPC) and Dynamic Frequency Selection (DFS)	§ 15.407 (h)	RSS-247 Issue 2: 6.2.2.1, 6.2.3.1, 6.3
Antenna requirement	§ 15.203 / 15.204 § 15.407 (a) (9)	RSS-Gen Issue 5: 8.3
Receiver spurious emissions	-	-

1.3 MEASUREMENT SUMMARY

47 CFR CHAPTER I FCC PART 15 Subpart E §15.407

FCC §15.31, §15.403 (i)

26 dB Bandwidth

The measurement was performed according to ANSI C63.10,
chapter 12.4.1

Final Result

OP-Mode Radio Technology, Operating Frequency, Subband	Setup	Date	FCC	IC
WLAN a, high, U-NII-2A	S01_AD03	2023-01-09	Performed	N/A
WLAN a, high, U-NII-2C	S01_AD03	2023-01-09	Performed	N/A
WLAN a, low, U-NII-2A	S01_AD03	2023-01-09	Performed	N/A
WLAN a, low, U-NII-2C	S01_AD03	2023-01-09	Performed	N/A
WLAN a, mid, U-NII-2A	S01_AD03	2023-01-09	Performed	N/A
WLAN a, mid, U-NII-2C	S01_AD03	2023-01-09	Performed	N/A
WLAN a, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-09	Performed	N/A
WLAN ac 20 MHz, high, U-NII-2A	S01_AD03	2023-01-10	Performed	N/A
WLAN ac 20 MHz, high, U-NII-2C	S01_AD03	2023-01-10	Performed	N/A
WLAN ac 20 MHz, low, U-NII-2A	S01_AD03	2023-01-10	Performed	N/A
WLAN ac 20 MHz, low, U-NII-2C	S01_AD03	2023-01-10	Performed	N/A
WLAN ac 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-10	Performed	N/A
WLAN ac 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-10	Performed	N/A
WLAN ac 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-10	Performed	N/A
WLAN ac 40 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Performed	N/A
WLAN ac 40 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Performed	N/A
WLAN ac 40 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Performed	N/A
WLAN ac 40 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Performed	N/A
WLAN ac 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Performed	N/A
WLAN ac 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Performed	N/A
WLAN ax 20 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Performed	N/A
WLAN ax 20 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Performed	N/A
WLAN ax 20 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Performed	N/A
WLAN ax 20 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Performed	N/A
WLAN ax 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-11	Performed	N/A
WLAN ax 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Performed	N/A
WLAN ax 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Performed	N/A
WLAN ax 40 MHz, high, U-NII-2A	S01_AD03	2023-01-13	Performed	N/A
WLAN ax 40 MHz, high, U-NII-2C	S01_AD03	2023-01-13	Performed	N/A
WLAN ax 40 MHz, low, U-NII-2A	S01_AD03	2023-01-13	Performed	N/A
WLAN ax 40 MHz, low, U-NII-2C	S01_AD03	2023-01-13	Performed	N/A
WLAN ax 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-13	Performed	N/A
WLAN ax 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-13	Performed	N/A
WLAN n 20 MHz, high, U-NII-2A	S01_AD03	2023-01-10	Performed	N/A
WLAN n 20 MHz, high, U-NII-2C	S01_AD03	2023-01-10	Performed	N/A
WLAN n 20 MHz, low, U-NII-2A	S01_AD03	2023-01-10	Performed	N/A
WLAN n 20 MHz, low, U-NII-2C	S01_AD03	2023-01-10	Performed	N/A

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.403 (i)

26 dB Bandwidth

The measurement was performed according to ANSI C63.10,
chapter 12.4.1

Final Result

OP-Mode Radio Technology, Operating Frequency, Subband	Setup	Date	FCC	IC
WLAN n 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-10	Performed	N/A
WLAN n 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-10	Performed	N/A
WLAN n 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-10	Performed	N/A
WLAN n 40 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Performed	N/A
WLAN n 40 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Performed	N/A
WLAN n 40 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Performed	N/A
WLAN n 40 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Performed	N/A
WLAN n 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Performed	N/A
WLAN n 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Performed	N/A

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (e)

6 dB Bandwidth

The measurement was performed according to ANSI C63.10,
chapter 6.9.2

Final Result

OP-Mode Radio Technology, Operating Frequency, Subband	Setup	Date	FCC	IC
WLAN a, straddle, U-NII-3	S01_AD03	2023-01-09	Passed	Passed
WLAN ac 20 MHz, straddle, U-NII-3	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 40 MHz, straddle, U-NII-3	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, straddle, U-NII-3	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 40 MHz, straddle, U-NII-3	S01_AD03	2023-01-13	Passed	Passed
WLAN n 20 MHz, straddle, U-NII-3	S01_AD03	2023-01-10	Passed	Passed
WLAN n 40 MHz, straddle, U-NII-3	S01_AD03	2023-01-11	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, IC RSS 247 Ch. 6.2.x

99 % Bandwidth

The measurement was performed according to ANSI C63.10,
chapter 12.4.2 (6.9.3)

Final Result

OP-Mode Radio Technology, Operating Frequency, Subband	Setup	Date	FCC	IC
WLAN a, high, U-NII-2A	S01_AD03	2023-01-09	Performed	Performed
WLAN a, high, U-NII-2C	S01_AD03	2023-01-09	Performed	Performed
WLAN a, low, U-NII-2A	S01_AD03	2023-01-09	Performed	Performed
WLAN a, low, U-NII-2C	S01_AD03	2023-01-09	Performed	Performed
WLAN a, mid, U-NII-2A	S01_AD03	2023-01-09	Performed	Performed
WLAN a, mid, U-NII-2C	S01_AD03	2023-01-09	Performed	Performed
WLAN a, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-09	Performed	Performed
WLAN ac 20 MHz, high, U-NII-2A	S01_AD03	2023-01-10	Performed	Performed
WLAN ac 20 MHz, high, U-NII-2C	S01_AD03	2023-01-10	Performed	Performed
WLAN ac 20 MHz, low, U-NII-2A	S01_AD03	2023-01-10	Performed	Performed
WLAN ac 20 MHz, low, U-NII-2C	S01_AD03	2023-01-10	Performed	Performed
WLAN ac 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-10	Performed	Performed
WLAN ac 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-10	Performed	Performed
WLAN ac 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-10	Performed	Performed
WLAN ac 40 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Performed	Performed
WLAN ac 40 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Performed	Performed
WLAN ac 40 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Performed	Performed
WLAN ac 40 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Performed	Performed
WLAN ac 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Performed	Performed
WLAN ac 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Performed	Performed
WLAN ax 20 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Performed	Performed
WLAN ax 20 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Performed	Performed
WLAN ax 20 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Performed	Performed
WLAN ax 20 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Performed	Performed
WLAN ax 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-11	Performed	Performed
WLAN ax 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Performed	Performed
WLAN ax 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Performed	Performed
WLAN ax 40 MHz, high, U-NII-2A	S01_AD03	2023-01-13	Performed	Performed
WLAN ax 40 MHz, high, U-NII-2C	S01_AD03	2023-01-13	Performed	Performed
WLAN ax 40 MHz, low, U-NII-2A	S01_AD03	2023-01-13	Performed	Performed
WLAN ax 40 MHz, low, U-NII-2C	S01_AD03	2023-01-13	Performed	Performed
WLAN ax 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-13	Performed	Performed
WLAN ax 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-13	Performed	Performed
WLAN n 20 MHz, high, U-NII-2A	S01_AD03	2023-01-10	Performed	Performed
WLAN n 20 MHz, high, U-NII-2C	S01_AD03	2023-01-10	Performed	Performed
WLAN n 20 MHz, low, U-NII-2A	S01_AD03	2023-01-10	Performed	Performed
WLAN n 20 MHz, low, U-NII-2C	S01_AD03	2023-01-10	Performed	Performed
WLAN n 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-10	Performed	Performed
WLAN n 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-10	Performed	Performed
WLAN n 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-10	Performed	Performed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, IC RSS 247 Ch. 6.2.x

99 % Bandwidth

The measurement was performed according to ANSI C63.10,
chapter 12.4.2 (6.9.3)

Final Result

OP-Mode Radio Technology, Operating Frequency, Subband	Setup	Date	FCC	IC
WLAN n 40 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Performed	Performed
WLAN n 40 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Performed	Performed
WLAN n 40 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Performed	Performed
WLAN n 40 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Performed	Performed
WLAN n 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Performed	Performed
WLAN n 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Performed	Performed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a)(1)

Maximum Conducted Output Power

The measurement was performed according to ANSI C63.10,
chapter 12.3.3.2

Final Result

Power Setting ≤ 8 dBi Antenna

OP-Mode Radio Technology, Operating Frequency, Subband	Setup	Date	FCC	IC
WLAN a Diversity, high, U-NII-2A	S01_AD03	2023-01-16	Passed	Passed
WLAN a Diversity, high, U-NII-2C	S01_AD03	2023-01-16	Passed	Passed
WLAN a Diversity, low, U-NII-2A	S01_AD03	2023-01-16	Passed	Passed
WLAN a Diversity, low, U-NII-2C	S01_AD03	2023-01-16	Passed	Passed
WLAN a Diversity, mid, U-NII-2A	S01_AD03	2023-01-16	Passed	Passed
WLAN a Diversity, mid, U-NII-2C	S01_AD03	2023-01-16	Passed	Passed
WLAN a Diversity, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN a, high, U-NII-2A	S01_AD03	2023-01-09	Passed	Passed
WLAN a, high, U-NII-2C	S01_AD03	2023-01-09	Passed	Passed
WLAN a, low, U-NII-2A	S01_AD03	2023-01-09	Passed	Passed
WLAN a, low, U-NII-2C	S01_AD03	2023-01-09	Passed	Passed
WLAN a, mid, U-NII-2A	S01_AD03	2023-01-09	Passed	Passed
WLAN a, mid, U-NII-2C	S01_AD03	2023-01-09	Passed	Passed
WLAN a, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-09	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-17	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2C	S01_AD03	2023-01-17	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-17	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2C	S01_AD03	2023-01-17	Passed	Passed
WLAN ac 20 MHz MIMO, mid, U-NII-2A	S01_AD03	2023-01-17	Passed	Passed
WLAN ac 20 MHz MIMO, mid, U-NII-2C	S01_AD03	2023-01-17	Passed	Passed
WLAN ac 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, low, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed



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Subpart E §15.407**

FCC §15.31, §15.407 (a)(1)

Maximum Conducted Output Power

The measurement was performed according to ANSI C63.10,
chapter 12.3.3.2

Final Result

**Power Setting ≤ 8 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN ac 20 MHz, low, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2A	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2A	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 40 MHz MIMO, mid, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ac 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ac 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-18	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2C	S01_AD03	2023-01-18	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-18	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2C	S01_AD03	2023-01-18	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-2A	S01_AD03	2023-01-18	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-2C	S01_AD03	2023-01-18	Passed	Passed
WLAN ax 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2A	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2A	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 40 MHz MIMO, mid, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a)(1)

Maximum Conducted Output Power

The measurement was performed according to ANSI C63.10,
chapter 12.3.3.2

Final Result

**Power Setting ≤ 8 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN ax 40 MHz, high, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-13	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-17	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2C	S01_AD03	2023-01-17	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-17	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2C	S01_AD03	2023-01-17	Passed	Passed
WLAN n 20 MHz MIMO, mid, U-NII-2A	S01_AD03	2023-01-17	Passed	Passed
WLAN n 20 MHz MIMO, mid, U-NII-2C	S01_AD03	2023-01-17	Passed	Passed
WLAN n 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN n 20 MHz, high, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, high, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, low, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, low, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-10	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2A	S01_AD04	2023-04-21	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2A	S01_AD04	2023-04-21	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN n 40 MHz MIMO, mid, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN n 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN n 40 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN n 40 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN n 40 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN n 40 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN n 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN n 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a)(1)

Maximum Conducted Output Power

The measurement was performed according to ANSI C63.10,
chapter 12.3.3.2

Final Result

**Power Setting ≤ 9 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN a Diversity, high, U-NII-2A	S01_AD03	2023-01-19	Passed	Passed
WLAN a Diversity, high, U-NII-2C	S01_AD03	2023-01-19	Passed	Passed
WLAN a Diversity, low, U-NII-2A	S01_AD03	2023-01-19	Passed	Passed
WLAN a Diversity, low, U-NII-2C	S01_AD03	2023-01-19	Passed	Passed
WLAN a Diversity, mid, U-NII-2A	S01_AD03	2023-01-19	Passed	Passed
WLAN a Diversity, mid, U-NII-2C	S01_AD03	2023-01-19	Passed	Passed
WLAN a Diversity, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-23	Passed	Passed
WLAN a, high, U-NII-2A	S01_AD03	2023-01-09	Passed	Passed
WLAN a, high, U-NII-2C	S01_AD03	2023-01-09	Passed	Passed
WLAN a, low, U-NII-2A	S01_AD03	2023-01-09	Passed	Passed
WLAN a, low, U-NII-2C	S01_AD03	2023-01-09	Passed	Passed
WLAN a, mid, U-NII-2A	S01_AD03	2023-01-09	Passed	Passed
WLAN a, mid, U-NII-2C	S01_AD03	2023-01-09	Passed	Passed
WLAN a, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-09	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz MIMO, mid, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz MIMO, mid, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, low, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, low, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-24	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-24	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN ac 40 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN ac 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-07-20	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2C	S01_AF03	2023-07-18	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2C	S01_AF03	2023-07-18	Passed	Passed



**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a)(1)

Maximum Conducted Output Power

The measurement was performed according to ANSI C63.10,
chapter 12.3.3.2

Final Result

**Power Setting ≤ 9 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN ac 40 MHz, mid, U-NII-2C	S01_AF03	2023-07-18	Passed	Passed
WLAN ac 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-07-18	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-24	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-24	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN ax 40 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN ax 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-07-20	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2C	S01_AF03	2023-07-18	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2C	S01_AF03	2023-07-18	Passed	Passed
WLAN ax 40 MHz, mid, U-NII-2C	S01_AF03	2023-07-18	Passed	Passed
WLAN ax 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-07-18	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz MIMO, mid, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz MIMO, mid, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz, high, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, high, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a)(1)

Maximum Conducted Output Power

The measurement was performed according to ANSI C63.10,
chapter 12.3.3.2

Final Result

**Power Setting ≤ 9 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN n 20 MHz, low, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, low, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-10	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-25	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-25	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN n 40 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN n 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-07-20	Passed	Passed
WLAN n 40 MHz, high, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN n 40 MHz, high, U-NII-2C	S01_AF03	2023-07-18	Passed	Passed
WLAN n 40 MHz, low, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN n 40 MHz, low, U-NII-2C	S01_AF03	2023-07-18	Passed	Passed
WLAN n 40 MHz, mid, U-NII-2C	S01_AF03	2023-07-18	Passed	Passed
WLAN n 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-07-18	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a)(1)

Maximum Conducted Output Power

The measurement was performed according to ANSI C63.10,
chapter 12.3.3.2

Final Result

**Power Setting ≤ 16 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN a Diversity, high, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN a Diversity, high, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN a Diversity, low, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN a Diversity, low, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN a Diversity, mid, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN a Diversity, mid, U-NII-2C	S01_AC04	2023-06-27	Passed	Passed
WLAN a Diversity, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-27	Passed	Passed
WLAN a, high, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN a, high, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN a, low, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN a, low, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN a, mid, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed



**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a)(1)

Maximum Conducted Output Power

The measurement was performed according to ANSI C63.10,
chapter 12.3.3.2

Final Result

**Power Setting ≤ 16 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN a, mid, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN a, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-22	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2A	S01_AF03	2023-05-16	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2A	S01_AF03	2023-05-16	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN ac 20 MHz MIMO, mid, U-NII-2A	S01_AF03	2023-05-16	Passed	Passed
WLAN ac 20 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN ac 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-27	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN ac 20 MHz, low, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 20 MHz, low, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN ac 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-22	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN ac 40 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN ac 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-17	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 40 MHz, mid, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN ax 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-27	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a)(1)

Maximum Conducted Output Power

The measurement was performed according to ANSI C63.10,
chapter 12.3.3.2

Final Result

**Power Setting ≤ 16 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN ax 20 MHz, low, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 20 MHz, low, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN ax 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-22	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 40 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 40 MHz, mid, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-15	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN n 20 MHz MIMO, mid, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN n 20 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN n 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-27	Passed	Passed
WLAN n 20 MHz, high, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN n 20 MHz, high, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN n 20 MHz, low, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN n 20 MHz, low, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN n 20 MHz, mid, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN n 20 MHz, mid, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN n 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-22	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN n 40 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN n 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-17	Passed	Passed



**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a)(1)

Maximum Conducted Output Power

The measurement was performed according to ANSI C63.10,
chapter 12.3.3.2

Final Result

**Power Setting ≤ 16 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN n 40 MHz, high, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN n 40 MHz, high, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN n 40 MHz, low, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN n 40 MHz, low, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN n 40 MHz, mid, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN n 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-15	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a) (1),(5)

Peak Power Spectral Density

The measurement was performed according to ANSI C63.10,
chapter 12.5 (SA-3)

Final Result

**Power Setting ≤ 8 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN a Diversity, high, U-NII-2A	S01_AD03	2023-01-16	Passed	Passed
WLAN a Diversity, high, U-NII-2C	S01_AD03	2023-01-16	Passed	Passed
WLAN a Diversity, low, U-NII-2A	S01_AD03	2023-01-16	Passed	Passed
WLAN a Diversity, low, U-NII-2C	S01_AD03	2023-01-16	Passed	Passed
WLAN a Diversity, mid, U-NII-2A	S01_AD03	2023-01-16	Passed	Passed
WLAN a Diversity, mid, U-NII-2C	S01_AD03	2023-01-16	Passed	Passed
WLAN a Diversity, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN a, high, U-NII-2A	S01_AD03	2023-01-09	Passed	Passed
WLAN a, high, U-NII-2C	S01_AD03	2023-01-09	Passed	Passed
WLAN a, low, U-NII-2A	S01_AD03	2023-01-09	Passed	Passed
WLAN a, low, U-NII-2C	S01_AD03	2023-01-09	Passed	Passed
WLAN a, mid, U-NII-2A	S01_AD03	2023-01-09	Passed	Passed
WLAN a, mid, U-NII-2C	S01_AD03	2023-01-09	Passed	Passed
WLAN a, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-09	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-17	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2C	S01_AD03	2023-01-17	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-17	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2C	S01_AD03	2023-01-17	Passed	Passed
WLAN ac 20 MHz MIMO, mid, U-NII-2A	S01_AD03	2023-01-17	Passed	Passed
WLAN ac 20 MHz MIMO, mid, U-NII-2C	S01_AD03	2023-01-17	Passed	Passed
WLAN ac 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a) (1),(5)

Peak Power Spectral Density

The measurement was performed according to ANSI C63.10,
chapter 12.5 (SA-3)

Final Result

Power Setting ≤ 8 dBi Antenna

OP-Mode

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN ac 20 MHz, high, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, low, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, low, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2A	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2A	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 40 MHz MIMO, mid, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ac 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ac 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-18	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-18	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2C	S01_AD03	2023-01-18	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-2A	S01_AD03	2023-01-18	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-2C	S01_AD03	2023-01-18	Passed	Passed
WLAN ax 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2A	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2A	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 40 MHz MIMO, mid, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a) (1),(5)

Peak Power Spectral Density

The measurement was performed according to ANSI C63.10,
chapter 12.5 (SA-3)

Final Result

**Power Setting ≤ 8 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN ax 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-13	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-17	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2C	S01_AD03	2023-01-17	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-17	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2C	S01_AD03	2023-01-17	Passed	Passed
WLAN n 20 MHz MIMO, mid, U-NII-2A	S01_AD03	2023-01-17	Passed	Passed
WLAN n 20 MHz MIMO, mid, U-NII-2C	S01_AD03	2023-01-17	Passed	Passed
WLAN n 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN n 20 MHz, high, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, high, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, low, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, low, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-10	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2A	S01_AD04	2023-04-21	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2A	S01_AD04	2023-04-21	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN n 40 MHz MIMO, mid, U-NII-2C	S01_AD04	2023-04-21	Passed	Passed
WLAN n 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD04	2023-04-21	Passed	Passed
WLAN n 40 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN n 40 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN n 40 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN n 40 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN n 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN n 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a) (1),(5)

Peak Power Spectral Density

The measurement was performed according to ANSI C63.10,
chapter 12.5 (SA-3)

Final Result

**Power Setting ≤ 9 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN a Diversity, high, U-NII-2A	S01_AD03	2023-01-19	Passed	Passed
WLAN a Diversity, high, U-NII-2C	S01_AD03	2023-01-19	Passed	Passed
WLAN a Diversity, low, U-NII-2A	S01_AD03	2023-01-19	Passed	Passed
WLAN a Diversity, low, U-NII-2C	S01_AD03	2023-01-19	Passed	Passed
WLAN a Diversity, mid, U-NII-2A	S01_AD03	2023-01-19	Passed	Passed
WLAN a Diversity, mid, U-NII-2C	S01_AD03	2023-01-19	Passed	Passed
WLAN a Diversity, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-23	Passed	Passed
WLAN a, high, U-NII-2A	S01_AD03	2023-01-09	Passed	Passed
WLAN a, high, U-NII-2C	S01_AD03	2023-01-09	Passed	Passed
WLAN a, low, U-NII-2A	S01_AD03	2023-01-09	Passed	Passed
WLAN a, low, U-NII-2C	S01_AD03	2023-01-09	Passed	Passed
WLAN a, mid, U-NII-2A	S01_AD03	2023-01-09	Passed	Passed
WLAN a, mid, U-NII-2C	S01_AD03	2023-01-09	Passed	Passed
WLAN a, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-09	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz MIMO, mid, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz MIMO, mid, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-20	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, low, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, low, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-10	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-24	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-24	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN ac 40 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN ac 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-07-20	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a) (1),(5)

Peak Power Spectral Density

The measurement was performed according to ANSI C63.10,
chapter 12.5 (SA-3)

Final Result

**Power Setting ≤ 9 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN ac 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN ac 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-20	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, low, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, low, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-11	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-24	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-24	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN ax 40 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN ax 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-07-20	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN ax 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-13	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz MIMO, mid, U-NII-2A	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz MIMO, mid, U-NII-2C	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-20	Passed	Passed
WLAN n 20 MHz, high, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, high, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a) (1),(5)

Peak Power Spectral Density

The measurement was performed according to ANSI C63.10,
chapter 12.5 (SA-3)

Final Result

**Power Setting ≤ 9 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN n 20 MHz, low, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, low, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, mid, U-NII-2A	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, mid, U-NII-2C	S01_AD03	2023-01-10	Passed	Passed
WLAN n 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-10	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2A	S01_AD03	2023-01-25	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2A	S01_AD03	2023-01-25	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN n 40 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-07-20	Passed	Passed
WLAN n 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-07-20	Passed	Passed
WLAN n 40 MHz, high, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN n 40 MHz, high, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN n 40 MHz, low, U-NII-2A	S01_AD03	2023-01-13	Passed	Passed
WLAN n 40 MHz, low, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN n 40 MHz, mid, U-NII-2C	S01_AD03	2023-01-13	Passed	Passed
WLAN n 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AD03	2023-01-13	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a) (1),(5)

Peak Power Spectral Density

The measurement was performed according to ANSI C63.10,
chapter 12.5 (SA-3)

Final Result

**Power Setting ≤ 16 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN a Diversity, high, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN a Diversity, high, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN a Diversity, low, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN a Diversity, low, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN a Diversity, mid, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN a Diversity, mid, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN a Diversity, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-27	Passed	Passed
WLAN a, high, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN a, high, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN a, low, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN a, low, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a) (1),(5)

Peak Power Spectral Density

The measurement was performed according to ANSI C63.10,
chapter 12.5 (SA-3)

Final Result

**Power Setting ≤ 16 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN a, mid, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN a, mid, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN a, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-22	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2A	S01_AF03	2023-05-16	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2A	S01_AF03	2023-05-16	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN ac 20 MHz MIMO, mid, U-NII-2A	S01_AF03	2023-05-16	Passed	Passed
WLAN ac 20 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN ac 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-27	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN ac 20 MHz, low, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 20 MHz, low, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN ac 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-22	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN ac 40 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN ac 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-17	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 40 MHz, mid, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN ac 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN ax 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-27	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a) (1),(5)

Peak Power Spectral Density

The measurement was performed according to ANSI C63.10,
chapter 12.5 (SA-3)

Final Result

**Power Setting ≤ 16 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency,
Subband

	Setup	Date	FCC	IC
WLAN ax 20 MHz, high, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN ax 20 MHz, low, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 20 MHz, low, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-2C	S01_AF03	2023-06-22	Passed	Passed
WLAN ax 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-22	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 40 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-17	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 40 MHz, mid, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN ax 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-15	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN n 20 MHz MIMO, mid, U-NII-2A	S01_AF03	2023-05-11	Passed	Passed
WLAN n 20 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-06-27	Passed	Passed
WLAN n 20 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-06-27	Passed	Passed
WLAN n 20 MHz, high, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN n 20 MHz, high, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN n 20 MHz, low, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN n 20 MHz, low, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN n 20 MHz, mid, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN n 20 MHz, mid, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN n 20 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-15	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2A	S01_AF03	2023-05-17	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed
WLAN n 40 MHz MIMO, mid, U-NII-2C	S01_AF03	2023-05-17	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.31, §15.407 (a) (1),(5)

Peak Power Spectral Density

The measurement was performed according to ANSI C63.10, chapter 12.5 (SA-3)

Final Result

Power Setting ≤ 16 dBi Antenna

OP-Mode

Radio Technology, Operating Frequency, Subband

	Setup	Date	FCC	IC
WLAN n 40 MHz MIMO, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-17	Passed	Passed
WLAN n 40 MHz, high, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN n 40 MHz, high, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN n 40 MHz, low, U-NII-2A	S01_AF03	2023-05-15	Passed	Passed
WLAN n 40 MHz, low, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN n 40 MHz, mid, U-NII-2C	S01_AF03	2023-05-15	Passed	Passed
WLAN n 40 MHz, straddle, U-NII-2C + U-NII-3	S01_AF03	2023-05-15	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.407 (b), (1),(2),(3),(4); FCC §15.205, §15.209, §15.407 (b) (5),(6)

Undesirable Emissions; General Field Strength Limits

The measurement was performed according to ANSI C63.10, chapter 6.4, 6.5, 6.6.5

Final Result

Power Setting ≤ 8 dBi Antenna

OP-Mode

Radio Technology, Operating Frequency, Measurement range, Subband

	Setup	Date	FCC	IC
WLAN a Diversity, high, 1GHz - 26GHz, U-NII-2A	S02_AC02	2022-11-01	Passed	Passed
WLAN a Diversity, high, 1GHz - 26GHz, U-NII-2C	S02_AC02	2022-11-24	Passed	Passed
WLAN a Diversity, high, 9kHz - 30MHz, U-NII-2C	S02_AC02	2022-11-23	Passed	Passed
WLAN a Diversity, low, 1GHz - 26GHz, U-NII-2A	S02_AC02	2022-10-31	Passed	Passed
WLAN a Diversity, low, 1GHz - 26GHz, U-NII-2C	S02_AC02	2022-11-01	Passed	Passed
WLAN a Diversity, mid, 1GHz - 26GHz, U-NII-2A	S02_AC02	2022-10-31	Passed	Passed
WLAN a Diversity, mid, 1GHz - 26GHz, U-NII-2C	S02_AC02	2022-11-24	Passed	Passed
WLAN a Diversity, mid, 26GHz - 40GHz, U-NII-2A	S02_AC02	2022-11-22	Passed	Passed
WLAN a Diversity, mid, 26GHz - 40GHz, U-NII-2C	S02_AC02	2022-11-22	Passed	Passed
WLAN a Diversity, mid, 30MHz - 1GHz, U-NII-2A	S02_AC02	2022-11-23	Passed	Passed
WLAN a Diversity, mid, 30MHz - 1GHz, U-NII-2C	S02_AC02	2022-11-23	Passed	Passed
WLAN ac 20 MHz MIMO, high, 1GHz - 26GHz, U-NII-2A Remark: Harmonics tested only	S02_AC02	2022-11-24	Passed	Passed
WLAN ac 20 MHz MIMO, high, 1GHz - 26GHz, U-NII-2C Remark: Harmonics tested only	S02_AC02	2022-11-24	Passed	Passed
WLAN ac 20 MHz MIMO, low, 1GHz - 26GHz, U-NII-2A Remark: Harmonics tested only	S02_AC02	2022-11-24	Passed	Passed
WLAN ac 20 MHz MIMO, low, 1GHz - 26GHz, U-NII-2C Remark: Harmonics tested only	S02_AC02	2022-11-24	Passed	Passed
WLAN ac 20 MHz MIMO, mid, 1GHz - 26GHz, U-NII-2A Remark: Harmonics tested only	S02_AC02	2022-11-24	Passed	Passed
WLAN ac 20 MHz MIMO, mid, 1GHz - 26GHz, U-NII-2C Remark: Harmonics tested only	S02_AC02	2022-11-24	Passed	Passed



**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

**FCC §15.407 (b), (1),(2),(3),(4); FCC
§15.205, §15.209, §15.407 (b) (5),(6)**

Undesirable Emissions; General Field Strength Limits

The measurement was performed according to ANSI C63.10, chapter 6.4, 6.5, 6.6.5

Final Result

Power Setting ≤ 8 dBi Antenna

OP-Mode

Radio Technology, Operating Frequency, Measurement range, Subband

	Setup	Date	FCC	IC
WLAN ax 20 MHz MIMO, high, 1GHz - 26GHz, U-NII-2A Remark: Tested in range 1-18 GHz	S02_AC02	2022-11-12	Passed	Passed
WLAN ax 20 MHz MIMO, high, 1GHz - 26GHz, U-NII-2C Remark: Tested in range 1-18 GHz	S02_AC02	2022-11-24	Passed	Passed
WLAN ax 20 MHz MIMO, low, 1GHz - 26GHz, U-NII-2A Remark: Tested in range 1-18 GHz	S02_AC02	2022-11-11	Passed	Passed
WLAN ax 20 MHz MIMO, low, 1GHz - 26GHz, U-NII-2C Remark: Tested in range 1-18 GHz	S02_AC02	2022-11-12	Passed	Passed
WLAN ax 20 MHz MIMO, mid, 1GHz - 26GHz, U-NII-2A Remark: Tested in range 1-18 GHz	S02_AC02	2022-11-11	Passed	Passed
WLAN ax 20 MHz MIMO, mid, 1GHz - 26GHz, U-NII-2C Remark: Tested in range 1-18 GHz	S02_AC02	2022-11-12	Passed	Passed
WLAN n 20 MHz MIMO, high, 1GHz - 26GHz, U-NII-2A Remark: Harmonics tested only	S02_AC02	2022-11-24	Passed	Passed
WLAN n 20 MHz MIMO, high, 1GHz - 26GHz, U-NII-2C Remark: Harmonics tested only	S02_AC02	2022-11-18	Passed	Passed
WLAN n 20 MHz MIMO, low, 1GHz - 26GHz, U-NII-2A Remark: Harmonics tested only	S02_AC02	2022-11-24	Passed	Passed
WLAN n 20 MHz MIMO, low, 1GHz - 26GHz, U-NII-2C Remark: Harmonics tested only	S02_AC02	2022-11-18	Passed	Passed
WLAN n 20 MHz MIMO, mid, 1GHz - 26GHz, U-NII-2A Remark: Harmonics tested only	S02_AC02	2022-11-24	Passed	Passed
WLAN n 20 MHz MIMO, mid, 1GHz - 26GHz, U-NII-2C Remark: Harmonics tested only	S02_AC02	2022-11-25	Passed	Passed
WLAN n 40 MHz MIMO, high, 1GHz - 26GHz, U-NII-2A Remark: Harmonics tested only	S02_AC02	2022-11-24	Passed	Passed
WLAN n 40 MHz MIMO, high, 1GHz - 26GHz, U-NII-2C Remark: Harmonics tested only	S02_AC02	2022-11-01	Passed	Passed
WLAN n 40 MHz MIMO, high, 26GHz - 40GHz, U-NII-2A	S02_AC02	2022-11-22	Passed	Passed
WLAN n 40 MHz MIMO, low, 1GHz - 26GHz, U-NII-2A Remark: Harmonics tested only	S02_AC02	2022-11-30	Passed	Passed
WLAN n 40 MHz MIMO, low, 1GHz - 26GHz, U-NII-2C Remark: Harmonics tested only	S02_AC02	2022-11-01	Passed	Passed
WLAN n 40 MHz MIMO, mid, 1GHz - 26GHz, U-NII-2C Remark: Harmonics tested only	S02_AC02	2022-11-25	Passed	Passed
WLAN n 40 MHz MIMO, mid, 26GHz - 40GHz, U-NII-2C	S02_AC02	2022-11-22	Passed	Passed



**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

**FCC §15.407 (b), (1),(2),(3),(4); FCC
§15.205, §15.209, §15.407 (b) (5),(6)**

Undesirable Emissions; General Field Strength Limits

The measurement was performed according to ANSI C63.10, chapter 6.4, 6.5, 6.6.5

Final Result

**Power Setting ≤ 9 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency, Measurement range, Subband

WLAN a, high, 1GHz - 26GHz, U-NII-2A
Remark: Harmonics tested only

Setup

Date

FCC

IC

S03_AC02

2022-11-23

Passed

Passed

WLAN a, high, 1GHz - 26GHz, U-NII-2C
Remark: Harmonics tested only

S03_AC02

2022-11-23

Passed

Passed

WLAN a, low, 1GHz - 26GHz, U-NII-2A
Remark: Harmonics tested only

S03_AC02

2022-11-23

Passed

Passed

WLAN a, low, 1GHz - 26GHz, U-NII-2C
Remark: Harmonics tested only

S03_AC02

2022-11-23

Passed

Passed

WLAN a, mid, 1GHz - 26GHz, U-NII-2A
Remark: Harmonics tested only

S03_AC02

2022-11-23

Passed

Passed

WLAN a, mid, 1GHz - 26GHz, U-NII-2C
Remark: Harmonics tested only

S03_AC02

2022-11-23

Passed

Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

**FCC §15.407 (b), (1),(2),(3),(4); FCC
§15.205, §15.209, §15.407 (b) (5),(6)**

Undesirable Emissions; General Field Strength Limits

The measurement was performed according to ANSI C63.10, chapter 6.4, 6.5, 6.6.5

Final Result

**Power Setting ≤ 16 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency, Measurement range, Subband

WLAN a Diversity, high, 1GHz - 26GHz, U-NII-2A
Remark: Harmonics only

Setup

Date

FCC

IC

S05_AC02

2022-12-01

Passed

Passed

WLAN a Diversity, high, 1GHz - 26GHz, U-NII-2C
Remark: Harmonics only

S05_AC02

2022-12-01

Passed

Passed

WLAN a Diversity, low, 1GHz - 26GHz, U-NII-2A
Remark: Harmonics only

S05_AC02

2022-12-01

Passed

Passed

WLAN a Diversity, low, 1GHz - 26GHz, U-NII-2C
Remark: Harmonics only

S05_AC02

2022-12-01

Passed

Passed

WLAN a Diversity, mid, 1GHz - 26GHz, U-NII-2A
Remark: Harmonics only

S05_AC02

2022-12-01

Passed

Passed

WLAN a Diversity, mid, 1GHz - 26GHz, U-NII-2C
Remark: Harmonics only

S05_AC02

2022-12-01

Passed

Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.407 (b), (1),(2),(3),(4)

Band Edge

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

Final Result

**Power Setting ≤ 8 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency, Subband

	Setup	Date	FCC	IC
WLAN a Diversity, high, U-NII-2A	S02_AC02	2022-11-10	Passed	Passed
WLAN a Diversity, high, U-NII-2C	S02_AC02	2022-11-24	Passed	Passed
WLAN a Diversity, low, U-NII-2C	S02_AC02	2022-11-01	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2A	S02_AC02	2022-11-24	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2C	S02_AC02	2022-11-24	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2C	S02_AC02	2022-11-24	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2C	S02_AC02	2022-11-01	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2A	S02_AC02	2022-11-25	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2C	S02_AC02	2022-11-01	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2C	S02_AC02	2022-11-30	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2A	S02_AC02	2022-11-12	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2C	S02_AC02	2022-11-24	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2C	S02_AC02	2022-11-12	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2C	S02_AC02	2022-11-01	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2A	S02_AC02	2022-11-30	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2C	S02_AC02	2022-11-01	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2C	S02_AC02	2022-11-30	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2A	S02_AC02	2022-11-24	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2C	S02_AC02	2022-11-18	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2C	S02_AC02	2022-11-18	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2A	S02_AC02	2022-11-24	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2C	S02_AC02	2022-11-01	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2C	S02_AC02	2022-11-01	Passed	Passed
WLAN n 40 MHz, high, U-NII-2C	S02_AC02	2022-11-01	Passed	Passed

**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.407 (b), (1),(2),(3),(4)

Band Edge

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

Final Result

**Power Setting ≤ 9 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency, Subband

	Setup	Date	FCC	IC
WLAN a, high, U-NII-2A	S03_AC02	2022-11-23	Passed	Passed
WLAN a, high, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN a, low, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2A	S03_AC02	2022-11-23	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed



**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.407 (b), (1),(2),(3),(4)

Band Edge

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

Final Result

**Power Setting ≤ 9 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency, Subband

	Setup	Date	FCC	IC
WLAN ac 20 MHz MIMO, low, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2A	S03_AC02	2022-11-23	Passed	Passed
WLAN ac 20 MHz, high, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN ac 20 MHz, low, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2A	S03_AC02	2022-12-07	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2C	S03_AC02	2022-12-09	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2C	S03_AC02	2022-12-07	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2A	S03_AC03	2023-01-24	Passed	Passed
WLAN ac 40 MHz, high, U-NII-2C	S03_AC02	2022-12-08	Passed	Passed
WLAN ac 40 MHz, low, U-NII-2C	S03_AC02	2022-12-07	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2A	S03_AC02	2022-11-23	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2A	S03_AC02	2022-11-23	Passed	Passed
WLAN ax 20 MHz, high, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN ax 20 MHz, low, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2A	S03_AC02	2022-12-07	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2C	S03_AC02	2022-12-07	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2C	S03_AC02	2022-12-07	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2A	S03_AC02	2022-11-30	Passed	Passed
WLAN ax 40 MHz, high, U-NII-2C	S03_AC02	2022-12-08	Passed	Passed
WLAN ax 40 MHz, low, U-NII-2C	S03_AC02	2022-12-07	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2A	S03_AC02	2022-11-23	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN n 20 MHz, high, U-NII-2A	S03_AC02	2022-11-23	Passed	Passed
WLAN n 20 MHz, high, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN n 20 MHz, low, U-NII-2C	S03_AC02	2022-11-23	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2A	S03_AC02	2022-12-07	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2C	S03_AC02	2022-12-09	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2C	S03_AC02	2022-12-07	Passed	Passed
WLAN n 40 MHz, high, U-NII-2A	S03_AC02	2022-11-30	Passed	Passed
WLAN n 40 MHz, high, U-NII-2C	S03_AC02	2022-12-08	Passed	Passed
WLAN n 40 MHz, low, U-NII-2C	S03_AC02	2022-12-07	Passed	Passed



**47 CFR CHAPTER I FCC PART 15
Subpart E §15.407**

FCC §15.407 (b), (1),(2),(3),(4)

Band Edge

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

Final Result

**Power Setting ≤ 16 dBi Antenna
OP-Mode**

Radio Technology, Operating Frequency, Subband

	Setup	Date	FCC	IC
WLAN a Diversity, high, U-NII-2A	S05_AC02	2022-12-01	Passed	Passed
WLAN a Diversity, high, U-NII-2C	S05_AC02	2022-12-01	Passed	Passed
WLAN a Diversity, low, U-NII-2C	S05_AC02	2022-12-01	Passed	Passed
WLAN a, high, U-NII-2A	S05_AC02	2022-12-05	Passed	Passed
WLAN a, high, U-NII-2C	S05_AC02	2022-12-05	Passed	Passed
WLAN a, low, U-NII-2C	S05_AC02	2022-12-05	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2A	S05_AC02	2022-12-01	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-2C	S05_AC02	2022-12-01	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-2C	S05_AC02	2022-12-01	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2A	S05_AC02	2022-12-01	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-2C	S05_AC02	2022-12-05	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-2C	S05_AC02	2022-12-05	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2A	S05_AC02	2022-12-01	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-2C	S05_AC02	2022-12-01	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-2C	S05_AC02	2022-12-01	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2A	S05_AC02	2022-12-01	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-2C	S05_AC02	2022-12-05	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-2C	S05_AC02	2022-12-05	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2A	S05_AC02	2022-12-01	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-2C	S05_AC02	2022-12-01	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-2C	S05_AC02	2022-12-01	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2A	S05_AC02	2022-12-01	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-2C	S05_AC02	2022-12-05	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-2C	S05_AC02	2022-12-05	Passed	Passed

N/A: Not applicable

N/P: Not performed

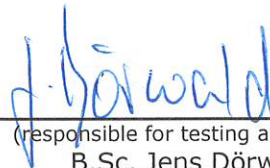
2 REVISION HISTORY / SIGNATURES

Report version control			
Version	Release date	Change Description	Version validity
initial	2023-07-27	--	valid
--	--	--	--

COMMENT: According to the applicant there exists a second variant of the EUT with type MSAX-W1-RJ-E2-NO without the DI/DO port. Tested for this report is the MSAX-W1-RJ-E2 variant since it is the fully equipped variant and thus assumed worst case. For results of U-NII sub bands 1 and 3 see report MDE_SIEM_2207_FCC_02.



(responsible for accreditation scope)
Dipl.-Ing. Daniel Gall



(responsible for testing and report)
B.Sc. Jens Dörwald



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-12140-01-01 | -02 | -03
FCC Designation Number: DE0015
FCC Test Firm Registration: 929146
ISED CAB Identifier DE0007; ISED#: 3699A

Responsible for accreditation scope: Dipl.-Ing. Daniel Gall

Report Template Version: 2022-05-25

3.2 PROJECT DATA

Responsible for testing and report: B.Sc. Jens Dörwald
Employees who performed the tests: documented internally at 7Layers
Date of Report: 2023-07-27
Testing Period: 2022-10-31 to 2023-07-20

3.3 APPLICANT DATA

Company Name: SIEMENS AG
Address: Östliche Rheinbrückenstr. 50
76187 Karlsruhe
Germany
Contact Person: Malgorzata Janson

3.4 MANUFACTURER DATA

Company Name: SIEMENS AG
Address: 76181 Karlsruhe
Germany
Contact Person: Kilian Löser

4 TEST OBJECT DATA

4.1 GENERAL EUT DESCRIPTION

Kind of Device product description	Industrial WLAN Access Point / Client
Product name	SCALANCE W700 / MSAX
Type	MSAX-W1-RJ-E2
Declared EUT data by the supplier	
Voltage Type	DC
Voltage Level	24 V
Tested Modulation Type	WLAN a (6 Mbit): OFDM WLAN n (MCS0): OFDM WLAN ac (MCS0): OFDM WLAN ax (MCS0): OFDM
Specific product description	<p>The MSAX-W1-RJ-E2 device is a wireless LAN access point / client for industrial applications supporting following WLAN modes and frequency bands:</p> <ul style="list-style-type: none"> • 802.11 ax/ac/a/h/n Mode: 5.15 - 5.35 GHz and 5.47 - 5.85 GHz • 802.11 ax/b/g/n Mode: 2400 - 2483.5 MHz <p>2 reverse SMA connectors are available for usage with external antennas. 2x2 MIMO operation is possible in both bands. Simultaneous operation of the device in both frequency bands is supported. Module may be used either as Master or as Client WLAN device.</p> <p>The device supports 10/100/1000 Mbit/s Ethernet on 4 RJ45 ports. Additionally, the device features one digital input and one digital output signalling line, a configuration/licensing plug and a sleep timer. Supply power is 24Vdc.</p> <p>OFDMA for ax mode is not supported in the current firmware.</p>
Ports of the device, used cable length for testing	<ul style="list-style-type: none"> • Enclosure • DC port: cable length appr. 1.0m • Digital I/O port: cable length 2.0m (terminated with DIDO box), only for radiated tests • LAN port: cable length (shielded), appr. 2.0m • USB C service port: cable length, appr. 2.0m, only for conducted tests <p>2 Antenna ports, Reverse SMA-connector, appr. 1.0 m & antenna</p>
Antenna Type	EUT has two permanent 50 Ohm antenna connectors. External antenna(s)

Antenna Gain	<p>For the radiated tests of this test report the EUT was tested with the following antennas:</p> <ul style="list-style-type: none"> • ANT795-6MN, effective gain = 9.2 dBi (in the 5 GHz Band) including 2m cable: 7.4 dBi • ANT795-6DC, effective gain = 10.1 dBi (in the 5 GHz Band) including 2m cable: 8.3 dBi • ANT792-8DN, effective gain = 24.6 dBi (U-NII Band 1) 24.8 dBi (U-NII Band 2A) 25.4 dBi (U-NII Band 2C) 25.2 dBi (U-NII Band 3) including 10m cable: 16 dBi (U-NII Band 1) 15.9 dBi (U-NII Band 2A) 16 dBi (U-NII Band 2C) 15.4 dBi (U-NII Band 3) <p>For details please see chapter 4.4 & 4.5 of this report.</p>
Number of Transmit Chains	2
Number of Receive Chains	2
Type of TX / RX Chains	symmetrical
Nominal Bandwidth	20 MHz, 40 MHz, 80 MHz (not supported in bands 2A + 2C)
Tested Datarates	<p>WLAN a: 6 Mbit/s WLAN n: MCS0 (SISO), MCS8 (MIMO) WLAN ac: MCS0 WLAN ax: MCS0</p>
Special software used for testing	Test commands in command line interface of EUT with connection by LAN Port of EUT

4.2 EUT MAIN COMPONENTS

Sample Name	Sample Code	Description
EUT ac02	DE1039038ac02	
Sample Parameter	Value	
Serial No.	VPP7205251	
HW Version	02	
SW Version	V02.00.00	
Comment		

Sample Name	Sample Code	Description
EUT ac03	DE1039038ac03	
Sample Parameter	Value	
Serial No.	VPP7205251	
HW Version	02	
SW Version	V02.00.00	
Comment		

Sample Name	Sample Code	Description
EUT ac04	DE1039038ac04	
Sample Parameter	Value	
Serial No.	VPP7205251	
HW Version	02	
SW Version	V03.00.00	
Comment		

Sample Name	Sample Code	Description
EUT ad03	DE1039038ad03	
Sample Parameter	Value	
Serial No.	VPP7205248	
HW Version	02	
SW Version	V02.00.00	
Comment		

Sample Name	Sample Code	Description
EUT ad04	DE1039038ad04	
Sample Parameter	Value	
Serial No.	VPP7205248	
HW Version	02	
SW Version	V03.00.00	
Comment		

Sample Name	Sample Code	Description
EUT af03	DE1039038af03	
Sample Parameter	Value	
Serial No.	VPP7205256	
HW Version	02	
SW Version	V02.00.00	
Comment		

NOTE: The Sample Name 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.

Device	Details (Manufacturer, Type Model, OUT Code)	Description
-	-	-

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
AUX100	Siemens, ANT795-6MN, -, -, -	Omni directional dipole antenna, linear polarisation, gain 6 dBi
AUX101	Siemens, ANT795-6MN, -, -, -	Omni directional dipole antenna, linear polarisation, gain 6 dBi
AUX102	Siemens, ANT795-6DC, -, -, -	Sector patch antenna, linear polarisation, gain 9 dBi
AUX103	Siemens, ANT795-6DC, -, -, -	Sector patch antenna, linear polarisation, gain 9 dBi
AUX106	Siemens, ANT793-8DK, -, -, -	23 dBi Antenna
AUX201	Siemens, -, -, -, -	RF-Cable (1m, reverse sma-connector)
AUX202	Siemens, -, -, -, -	RF-Cable (1m, reverse sma-connector)
AUX203	Siemens, -, -, -, -	RF-Cable (10m, reverse sma-connector)
AUX204	Siemens, -, -, -, -	RF-Cable (10m, reverse sma-connector)
AUX301	Siemens, -, -, -, -	DI/DO Test box with cable

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_AC04	EUT ac04,	Conducted Setup
S01_AD03	EUT ad03,	Conducted Setup
S01_AD04	EUT ad04,	Conducted Setup
S01_AF03	EUT af03,	Conducted Setup
S02_AC02	EUT ac02, AUX101, AUX100, AUX301, AUX201, AUX202,	Radiated Setup
S03_AC02	EUT ac02, AUX202, AUX103, AUX301, AUX102, AUX201,	Radiated Setup
S03_AC03	EUT ac03, AUX202, AUX103, AUX301, AUX102, AUX201,	Radiated Setup
S05_AC02	EUT ac02, AUX204, AUX106, AUX203, AUX301,	Radiated Setup

The setups S02 are antenna gain ≤ 8 dBi.

The setups S03 are antenna gain ≤ 9 dBi.

The setups S03 are antenna gain ≤ 16 dBi, which means 15.9 dBi in U-NII Band 2A and 16 dBi in Band 2C.

Note: The given gain represents the gain range that was used for power setting during testing, see next chapter for setting details. The same notation is also used in the respective test cases.

4.6 OPERATING MODES / TEST CHANNELS

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

For antenna gain ≤ 8 dBi:

U-NII-Subband 1 5150 - 5250 MHz			U-NII-Subband 2A 5250 - 5350 MHz			U-NII-Subband 2C 5470 - 5725 MHz			U-NII-Subband 3 5725 - 5850 MHz			Nom. BW
low	mid	high	low	mid	high	low	mid	high	low	mid	high	20 MHz
-	-	-	52	56/ 60	64	100	116	140 / 144 ¹⁾	-	-	-	Ch.-No.
-	-	-	5260	5280/ 5300	5320	5500	5580	5700 / 5720	-	-	-	MHz
-	-	-	20	20	20	20	20	20	-	-	-	Power SISO per chain
-	-	-	18	18	18	18	18	18	-	-	-	Power MIMO per chain

low	mid	high	low	mid	high	low	mid	high	low	mid	high	40 MHz
-	-	-	54	-	62	102	110	134 / 142 ¹⁾	-	-	-	Ch.-No.
-	-	-	5270	-	5310	5510	5550	5670 / 5710	-	-	-	MHz
-	-	-	20		20	20	20	20	-	-	-	Power SISO per chain
-	-	-	18		18	18	18	18	-	-	-	Power MIMO per chain

1) Channels 144 and 142 are straddle channels. Relevant high channels for upper Band Edge of band 2C are CH.140, CH. 134.

For antenna gain ≤ 9 dBi:

U-NII-Subband 1 5150 - 5250 MHz			U-NII-Subband 2A 5250 - 5350 MHz			U-NII-Subband 2C 5470 - 5725 MHz			U-NII-Subband 3 5725 - 5850 MHz			Nom. BW
low	mid	high	low	mid	high	low	mid	high	low	mid	high	20 MHz
-	-	-	52	56/ 60	64	100	116	140 / 144 ¹⁾	-	-	-	Ch.-No.
-	-	-	5260	5280/ 5300	5320	5500	5580	5700 / 5720	-	-	-	MHz
-	-	-	20	20	20	20	20	20	-	-	-	Power SISO per chain
-	-	-	17	17	17	17	17	17	-	-	-	Power MIMO per chain

low	mid	high	low	mid	high	low	mid	high	low	mid	high	40 MHz
-	-	-	54	-	62	102	110	134 / 142 ¹⁾	-	-	-	Ch.-No.
-	-	-	5270	-	5310	5510	5550	5670 / 5710	-	-	-	MHz
-	-	-	16	16	16	17	17	17	-	-	-	Power SISO per chain
-	-	-	14	14	14	14	14	14	-	-	-	Power MIMO per chain

1) Channels 144 and 142 are straddle channels. Relevant high channels for upper Band Edge of band 2C are CH.140, CH. 134.

For antenna gain \leq 15.9 dBi (U-NII 2A)/ 16 dBi (U-NII 2C):

U-NII-Subband 1 5150 - 5250 MHz			U-NII-Subband 2A 5250 - 5350 MHz			U-NII-Subband 2C 5470 - 5725 MHz			U-NII-Subband 3 5725 - 5850 MHz			Nom. BW
low	mid	high	low	mid	high	low	mid	high	low	mid	high	20 MHz
-	-	-	52	56/ 60	64	100	116	140 / 144 ¹⁾	-	-	-	Ch.-No.
-	-	-	5260	5280/ 5300	5320	5500	5580	5700 / 5720	-	-	-	MHz
-	-	-	13	13	13	12	12	12	-	-	-	Power SISO per chain
-	-	-	9	9	9	9	9	9	-	-	-	Power MIMO per chain

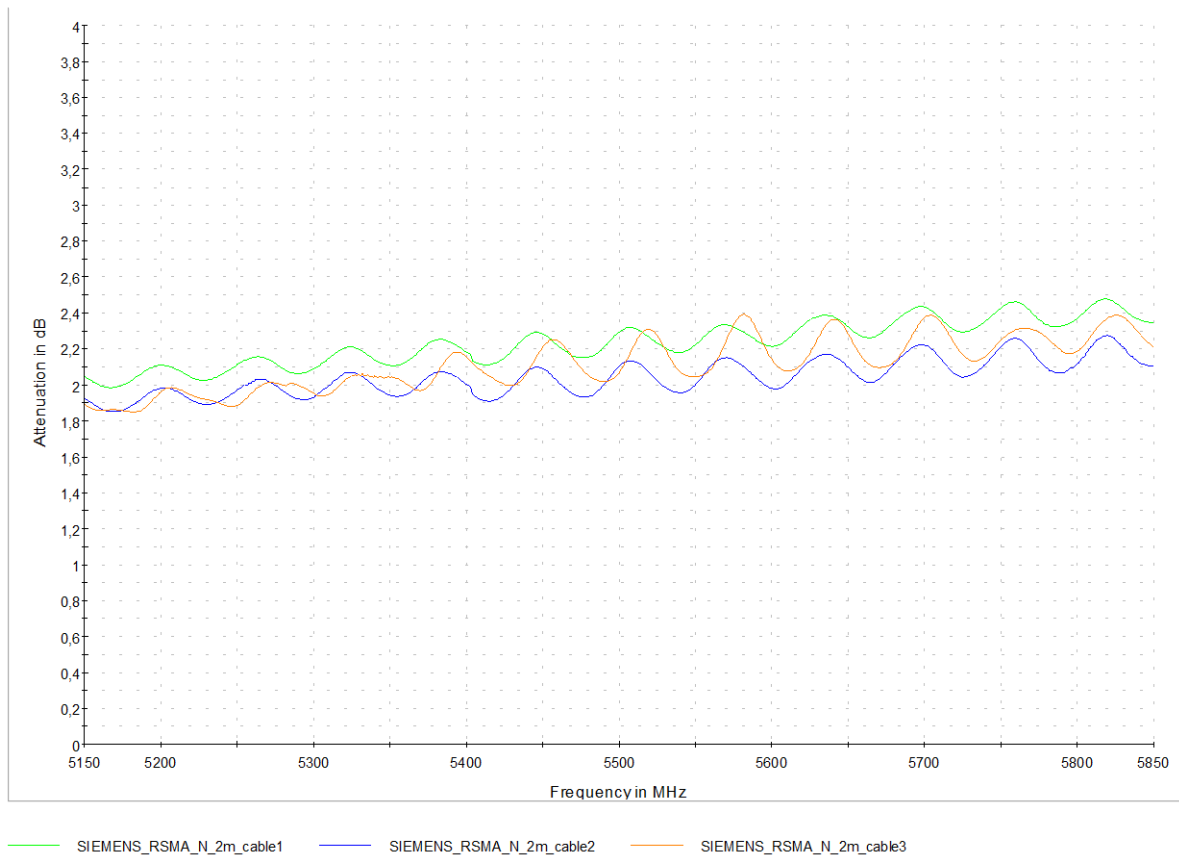
low	mid	high	low	mid	high	low	mid	high	low	mid	high	40 MHz
-	-	-	54	-	62	102	110	134 / 142 ¹⁾	-	-	-	Ch.-No.
-	-	-	5270	-	5310	5510	5550	5670 / 5710	-	-	-	MHz
-	-	-	10	10	10	9	9	9	-	-	-	Power SISO per chain
-	-	-	9	9	9	9	9	9	-	-	-	Power MIMO per chain

1) Channels 144 and 142 are straddle channels. Relevant high channels for upper Band Edge of band 2C are CH.140, CH. 134.

Note:

- All power values in dBm
- 5280 MHz was used as mid frequency for radiated measurements, 5300 MHz as mid frequency for conducted measurements.

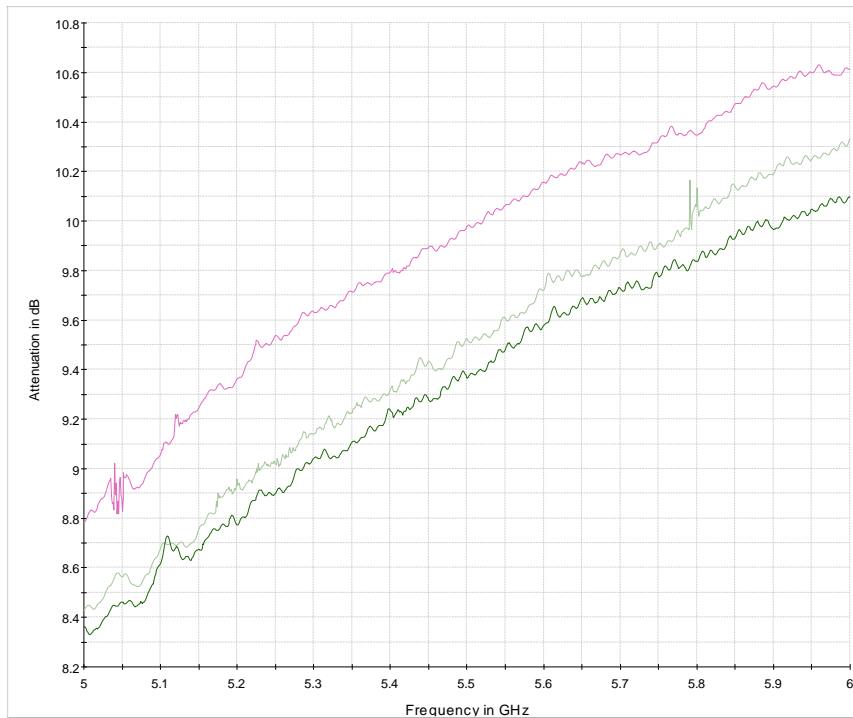
Attenuation of 2m cable (3 cables measured)



Resulting attenuation assumed for antenna gain calculation: 1.8 dB.

Note: The radiated measurements were performed with cables of 1m length, which is worse case compared to the 2m cable length, which is the minimum length to be used according to the applicant.

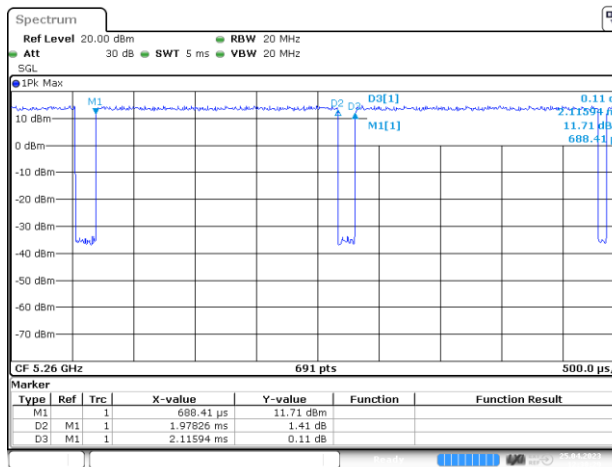
Attenuation of 10m cable (3 cables measured)



SIEMENS_RSMA_N_10m_cable1 SIEMENS_RSMA_N_10M_cable_2 SIEMENS_RSMA_N_10M_cable_3

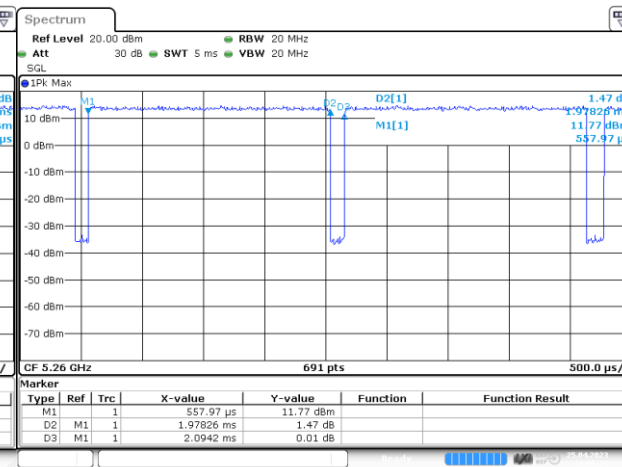
Resulting attenuation assumed for antenna gain calculation:
 U-NII 1 : 8.65 dB
 U-NII 2A: 8.9 dB
 U-NII 2C: 9.38 dB
 U-NII 3 : 9.78dB.

Duty Cycle						
Mode BW	SISO			MIMO		
	20 MHz	40 MHz	80 MHz	20 MHz	40 MHz	80 MHz
a	0.935	-	-	0.945	-	-
n	0.984	0.941	-	0.940	0.945	-
ac	0.920	0.908	-	0.949	0.944	-
ax	0.859	0.863	-	0.940	0.939	-



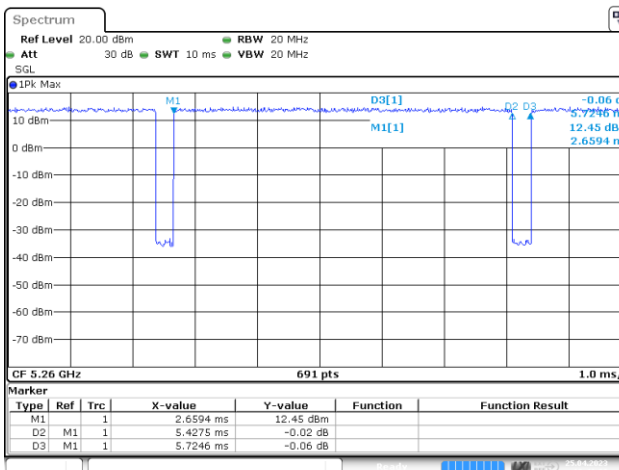
Date: 25 APR 2023 12:38:29

WLAN a 6 Mbps SISO



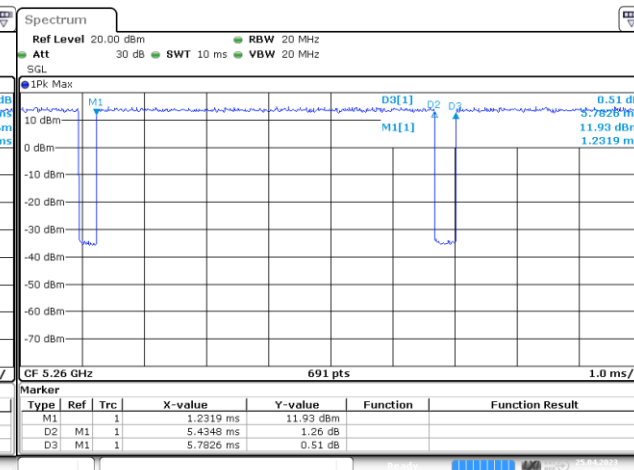
Date: 25 APR 2023 12:36:22

WLAN a 6 Mbps Diversity



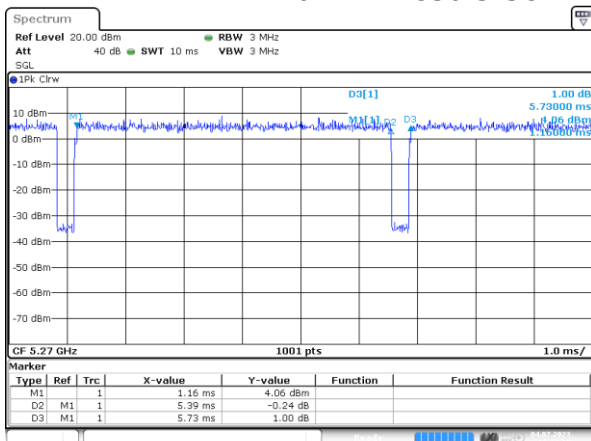
Date: 25 APR 2023 12:41:08

WLAN n 20 MHz MCS0 SISO



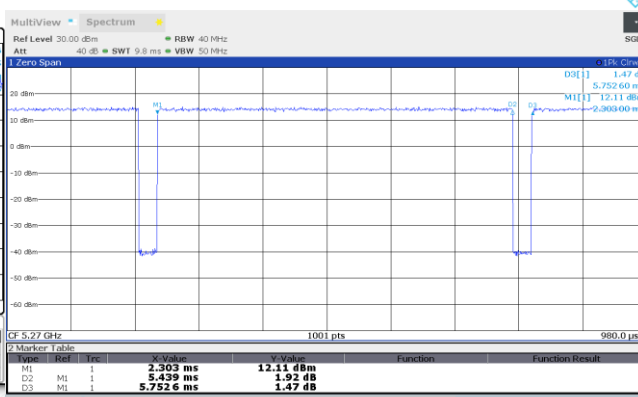
Date: 25 APR 2023 12:33:19

WLAN n 20 MHz MCS8 MIMO



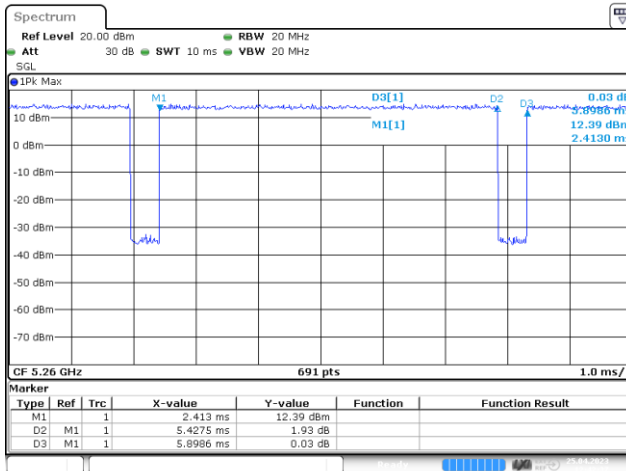
Date: 4 JUL 2023 18:04:30

WLAN n 40 MHz MCS0 SISO

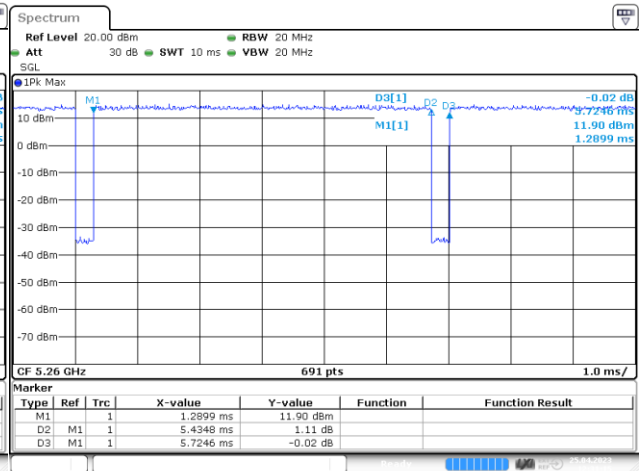


16:45:52 31.01.2023

WLAN n 40 MHz MCS8 MIMO



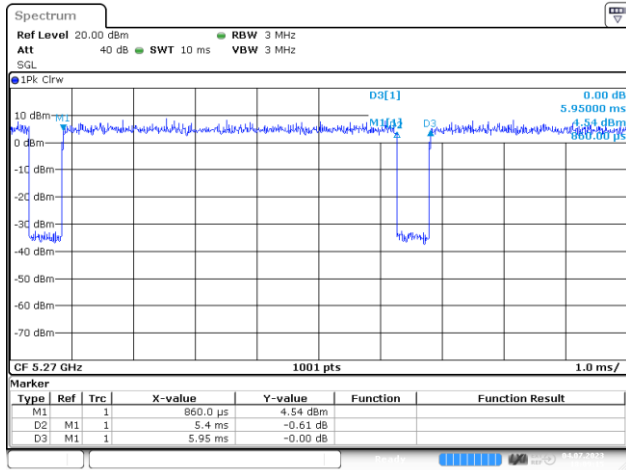
Date: 25 APR 2023 12:42:37



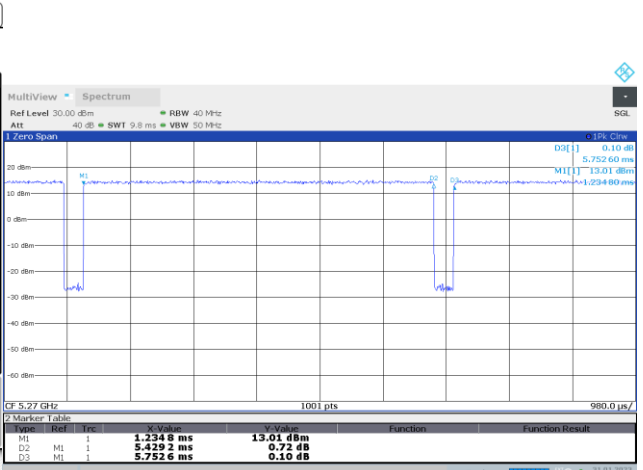
Date: 25 APR 2023 12:31:16

WLAN ac 20 MHz MCS0 SISO

WLAN ac 20 MHz MCS0 MIMO



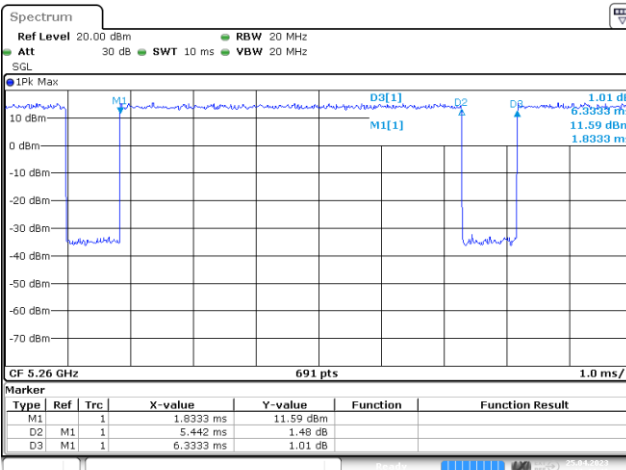
Date: 4 JUL 2023 18:09:15



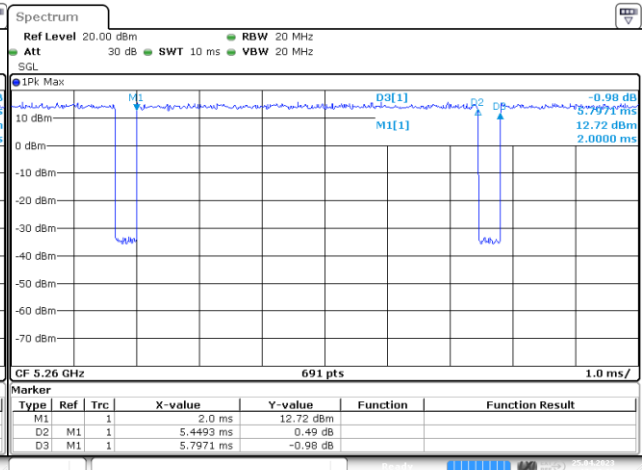
16:51:01 31.01.2023

WLAN ac 40 MHz MCS0 SISO

WLAN ac 40 MHz MCS0 MIMO



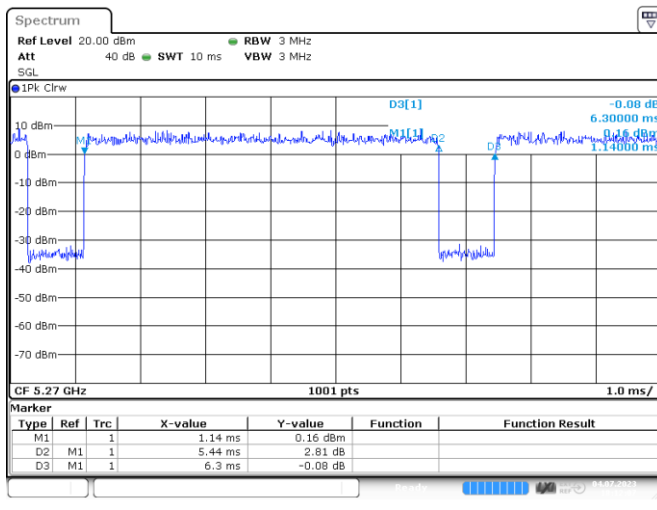
Date: 25 APR 2023 12:44:46



Date: 25 APR 2023 12:10:09

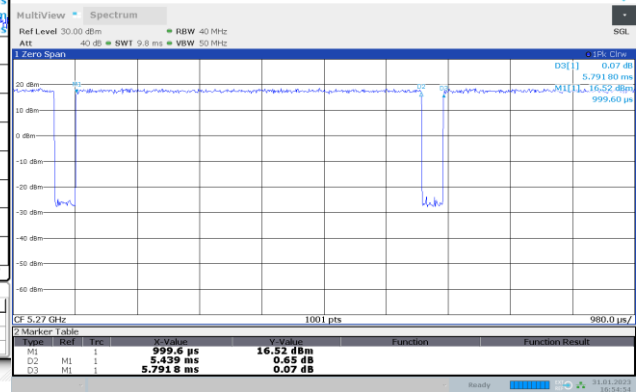
WLAN ax 20 MHz MCS0 SISO

WLAN ax 20 MHz MCS0 MIMO



Date: 4 JUL 2023 18:12:08

WLAN ax 40 MHz MCS0 SISO



16:04:55 31.01.2023

WLAN ax 40 MHz MCS0 MIMO

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 26 DB BANDWIDTH

Standard **FCC Part 15 Subpart E**

The test was performed according to:

ANSI C63.10, chapter 12.4.1

5.1.1 TEST DESCRIPTION

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

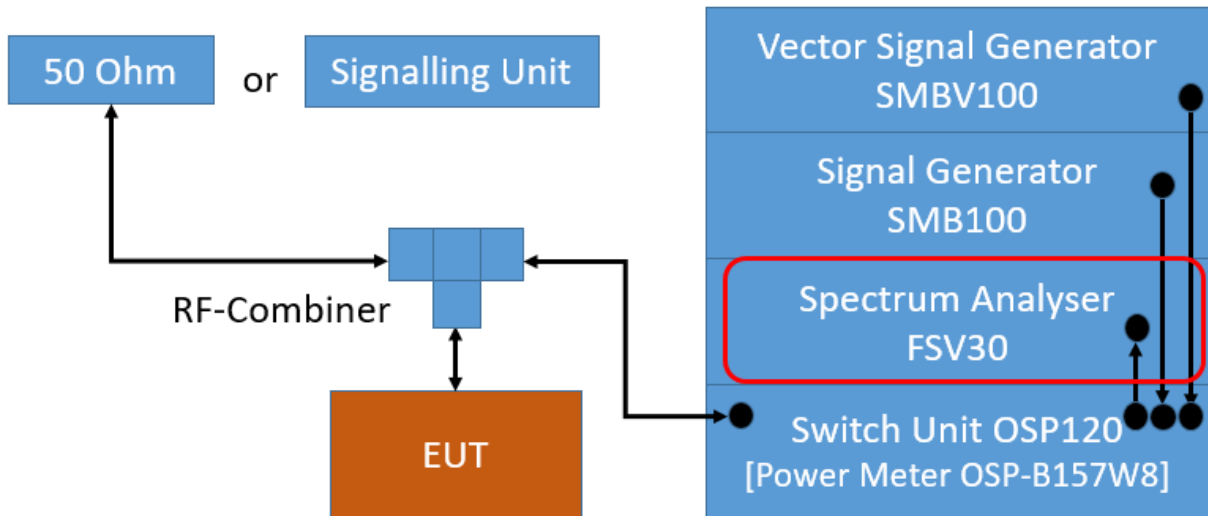
The reference level is the level of the highest amplitude signal observed from the transmitter at either the fundamental frequency or first-order modulation products in all typical modes of operation, including the unmodulated carrier, even if atypical.

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

Analyzer settings:

- Resolution Bandwidth (RBW): initially approx. 1 % of nominal emission bandwidth
- Video Bandwidth (VBW): > RBW
- Span: 40 / 80 / 160 / 320 MHz (for 20 / 40 / 80 / 160 MHz nominal bandwidth)
- Trace: Maxhold
- Sweeps: Until the trace is stable
- Sweeptime: Auto
- Detector: Peak



TS8997; Occupied Channel Bandwidth 6 dB / 26 dB / 99 %

5.1.2 TEST REQUIREMENTS / LIMITS

FCC Part 15, Subpart E

There exist no applicable limits. The test was performed to determine the limits for the "Maximum Conducted Output Power" and DFS test cases.

Therefore no result was applied.

5.1.3 TEST PROTOCOL

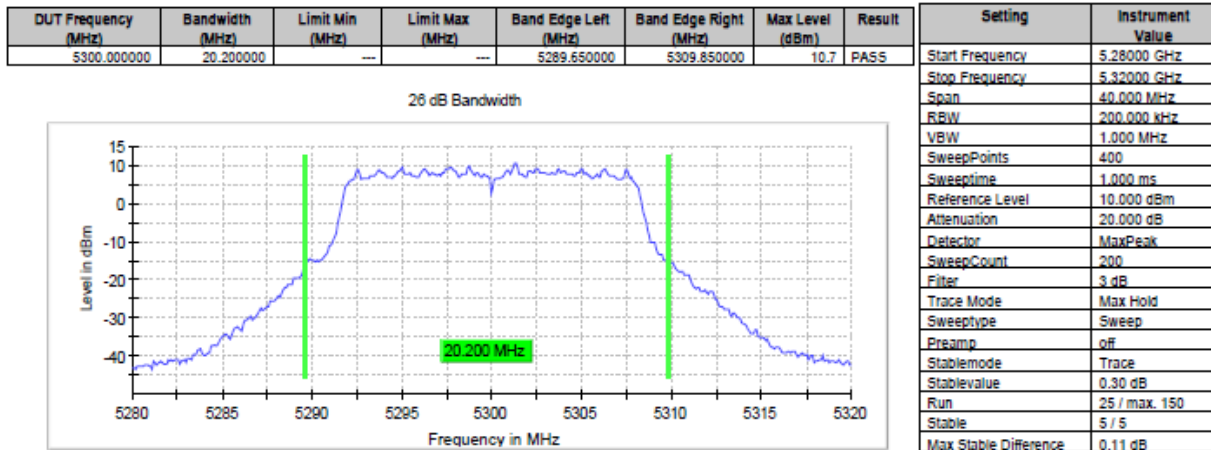
Ambient temperature: 23 - 26°C
 Air Pressure: 991-1023 hPa
 Humidity: 40 - 60%

Power Setting	Radio Technology	Subband	Operating Frequency	26 dB Bandwidth [MHz]
<= 8 dBi	WLAN a	U-NII-2A	low	20.5
<= 8 dBi	WLAN a	U-NII-2A	mid	20.2
<= 8 dBi	WLAN a	U-NII-2A	high	20.2
<= 8 dBi	WLAN a	U-NII-2C	low	20.3
<= 8 dBi	WLAN a	U-NII-2C	mid	20.2
<= 8 dBi	WLAN a	U-NII-2C	high	20.5
<= 8 dBi	WLAN a	U-NII-2C/3	straddle	20.5
<= 8 dBi	WLAN n 20 MHz	U-NII-2A	low	21.2
<= 8 dBi	WLAN n 20 MHz	U-NII-2A	mid	21.3
<= 8 dBi	WLAN n 20 MHz	U-NII-2A	high	21.3
<= 8 dBi	WLAN n 20 MHz	U-NII-2C	low	21.0
<= 8 dBi	WLAN n 20 MHz	U-NII-2C	mid	21.3
<= 8 dBi	WLAN n 20 MHz	U-NII-2C	high	21.3
<= 8 dBi	WLAN n 20 MHz	U-NII-2C/3	straddle	21.5
<= 8 dBi	WLAN n 40 MHz	U-NII-2A	low	41.4
<= 8 dBi	WLAN n 40 MHz	U-NII-2A	high	40.7
<= 8 dBi	WLAN n 40 MHz	U-NII-2C	low	41.0
<= 8 dBi	WLAN n 40 MHz	U-NII-2C	mid	41.1
<= 8 dBi	WLAN n 40 MHz	U-NII-2C	high	42.2
<= 8 dBi	WLAN n 40 MHz	U-NII-2C/3	straddle	42.5
<= 8 dBi	WLAN ac 20 MHz	U-NII-2A	low	21.6
<= 8 dBi	WLAN ac 20 MHz	U-NII-2A	mid	21.1
<= 8 dBi	WLAN ac 20 MHz	U-NII-2A	high	21.5
<= 8 dBi	WLAN ac 20 MHz	U-NII-2C	low	21.5
<= 8 dBi	WLAN ac 20 MHz	U-NII-2C	mid	21.3
<= 8 dBi	WLAN ac 20 MHz	U-NII-2C	high	21.7
<= 8 dBi	WLAN ac 20 MHz	U-NII-2C/3	straddle	21.5
<= 8 dBi	WLAN ac 40 MHz	U-NII-2A	low	41.4
<= 8 dBi	WLAN ac 40 MHz	U-NII-2A	high	41.3
<= 8 dBi	WLAN ac 40 MHz	U-NII-2C	low	41.1
<= 8 dBi	WLAN ac 40 MHz	U-NII-2C	mid	41.4
<= 8 dBi	WLAN ac 40 MHz	U-NII-2C	high	41.7
<= 8 dBi	WLAN ac 40 MHz	U-NII-2C/3	straddle	42.3
<= 8 dBi	WLAN ax 20 MHz	U-NII-2A	low	22.2
<= 8 dBi	WLAN ax 20 MHz	U-NII-2A	mid	21.8
<= 8 dBi	WLAN ax 20 MHz	U-NII-2A	high	22.4
<= 8 dBi	WLAN ax 20 MHz	U-NII-2C	low	22.1
<= 8 dBi	WLAN ax 20 MHz	U-NII-2C	mid	22.0
<= 8 dBi	WLAN ax 20 MHz	U-NII-2C	high	22.3
<= 8 dBi	WLAN ax 20 MHz	U-NII-2C/3	straddle	21.9
<= 8 dBi	WLAN ax 40 MHz	U-NII-2A	low	41.4
<= 8 dBi	WLAN ax 40 MHz	U-NII-2A	high	41.3
<= 8 dBi	WLAN ax 40 MHz	U-NII-2C	low	41.0
<= 8 dBi	WLAN ax 40 MHz	U-NII-2C	mid	41.3
<= 8 dBi	WLAN ax 40 MHz	U-NII-2C	high	42.0
<= 8 dBi	WLAN ax 40 MHz	U-NII-2C/3	straddle	42.0

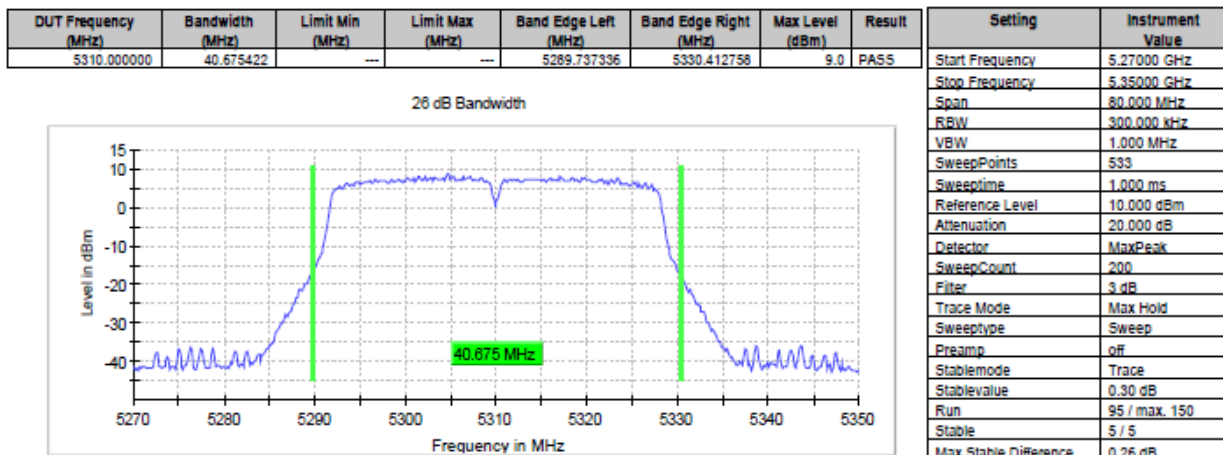
Remark: Please see next sub-clause for the measurement plot.

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

Radio Technology = WLAN a, Operating Frequency = mid, Subband = U-NII-2A (S01_AD03)



Radio Technology = WLAN n 40 MHz, Operating Frequency = high, Subband = U-NII-2A (S01_AD03)



5.1.5 TEST EQUIPMENT USED

- R&S TS8997

5.2 6 DB BANDWIDTH

Standard **FCC Part 15 Subpart E**

The test was performed according to:
ANSI C63.10, chapter 6.9.2

5.2.1 TEST DESCRIPTION

The Equipment Under Test (EUT) was setup in a shielded room to perform the occupied bandwidth measurements.

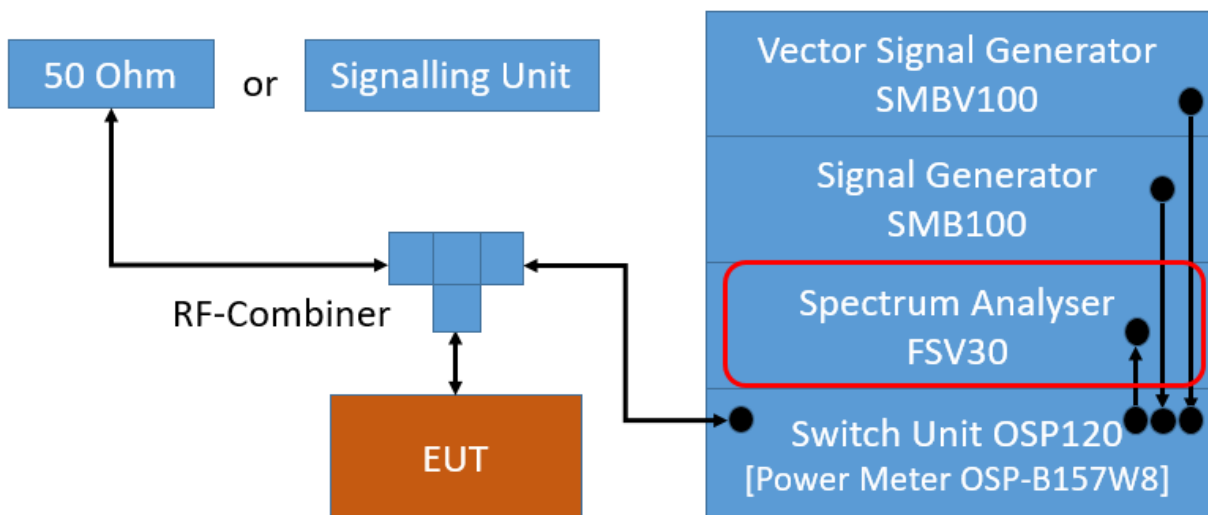
The reference level is the level of the highest amplitude signal observed from the transmitter at either the fundamental frequency or first-order modulation products in all typical modes of operation, including the unmodulated carrier, even if atypical.

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.

Analyzer settings:

- Resolution Bandwidth (RBW): 100 kHz
- Video Bandwidth (VBW): 300 kHz
- Span: 40 / 80 / 160 / 320 MHz (for 20 / 40 / 80 / 160 MHz nominal bandwidth))
- Trace: Maxhold
- Sweeps: Until the trace is stable
- Sweeptime: Auto
- Detector: Peak



TS8997; Occupied Channel Bandwidth 6 dB / 26 dB / 99 %

5.2.2 TEST REQUIREMENTS / LIMITS

FCC Part 15, Subpart E, §15.407 (e)

Within the 5.725-5.850 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

5.2.3 TEST PROTOCOL

Ambient temperature: 23 - 26°C
 Air Pressure: 991-1023 hPa
 Humidity: 40 - 60%

Radio Technology	Operating Frequency	6 dB Bandwidth [MHz]	Limit [MHz]	Margin [MHz]
WLAN a	straddle	2.9	0.5	2.40
WLAN n 20 MHz	straddle	3.4	0.5	2.93
WLAN n 40 MHz	straddle	3.2	0.5	2.70
WLAN ac 20 MHz	straddle	3.4	0.5	2.90
WLAN ac 40 MHz	straddle	3.2	0.5	2.70
WLAN ax 20 MHz	straddle	4.1	0.5	3.60
WLAN ax 40 MHz	straddle	4.0	0.5	3.50

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

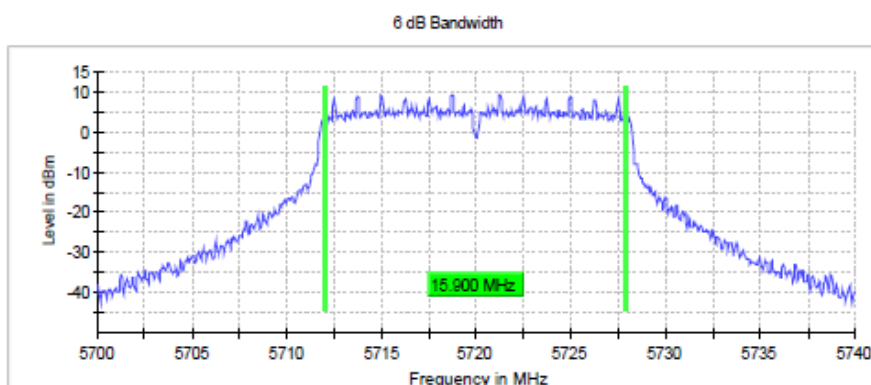
5.2.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

Radio Technology = WLAN a, Operating Frequency = straddle, Subband = U-NII-3 (S01_AD03)

DUT Frequency (MHz)	Bandwidth (MHz)	Bandwidth U-NII 2C (MHz)	Bandwidth U-NII 3 (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)
5720.000000	15.900000	12.975000	2.925000	---	---	5712.025000

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5720.000000	5727.925000	9.4	PASS



Setting	Instrument Value
Start Frequency	5.70000 GHz
Stop Frequency	5.74000 GHz
Span	40.000 MHz
RBW	100.000 kHz
VBW	300.000 kHz
SweepPoints	800
SweepTime	1.040 ms
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	110 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB

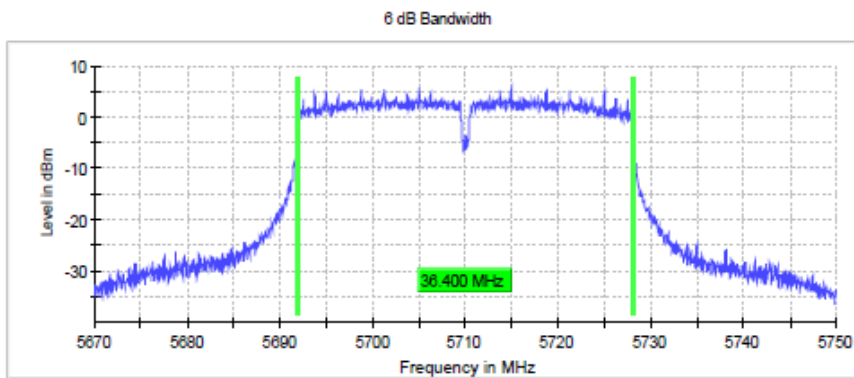
Radio Technology = WLAN n 40 MHz, Operating Frequency = straddle, Subband = U-NII-3 (S01_AD03)

DUT Frequency (MHz)	Bandwidth (MHz)	Bandwidth U-NII 2C (MHz)	Bandwidth U-NII 3 (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)
5710.000000	36.400000	33.225000	3.175000	---	---	5691.775000

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5710.000000	5728.175000	5.8	PASS

Setting	Instrument Value
Start Frequency	5.67000 GHz
Stop Frequency	5.75000 GHz
Span	80.000 MHz
RBW	100.000 kHz
VBW	300.000 kHz
SweepPoints	1600
SweepTime	1.600 ms
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	125 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB



5.2.5 TEST EQUIPMENT USED

- R&S TS8997

5.3 99 % BANDWIDTH

Standard **FCC Part 15 Subpart E**

The test was performed according to:
ANSI C63.10, chapter 12.4.2 (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.

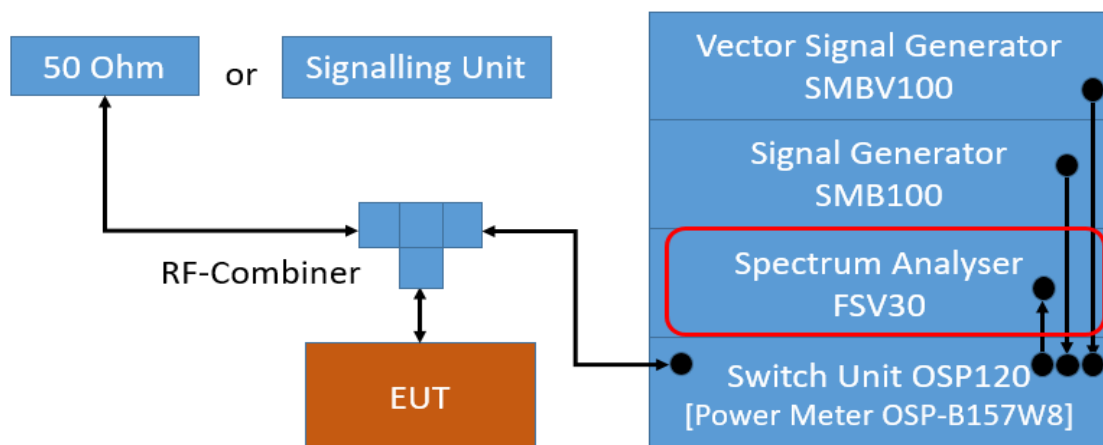
The results recorded were measured with the modulation which produce the worst-case (widest) emission bandwidth.

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.

Analyzer settings:

- Resolution Bandwidth (RBW): approx. $\geq 1\%$ of the span, but not below
- Video Bandwidth (VBW): ≥ 3 times the RBW
- Span: 40 / 80 / 160 / 320 MHz (for 20 / 40 / 80 / 160 MHz nominal bandwidth)
- Trace: Maxhold
- Sweeps: Until the trace is stable
- Sweeptime: Auto
- Detector: Peak

The 99 % measurement function of the spectrum analyser function was used to determine the 99 % bandwidth.



TS8997; Occupied Channel Bandwidth 6 dB / 26 dB / 99 %

5.3.2 TEST REQUIREMENTS / LIMITS

No applicable limit.

The test was performed to determine the limits for the “Maximum Conducted Output Power” and DFS test cases.

5.3.3 TEST PROTOCOL

Ambient temperature: 23 - 26°C
 Air Pressure: 991-1023 hPa
 Humidity: 40 - 60%

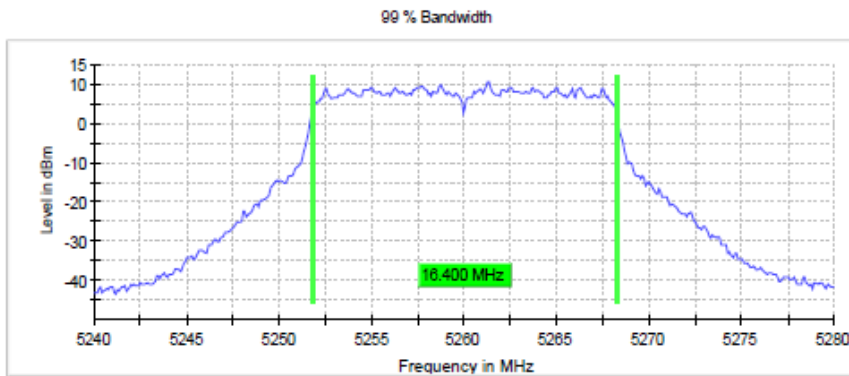
Power Setting	Radio Technology	Subband	Operating Frequency	99% Bandwidth [MHz]
<= 8 dBi	WLAN a	U-NII-2A	low	16.4
<= 8 dBi	WLAN a	U-NII-2A	mid	16.5
<= 8 dBi	WLAN a	U-NII-2A	high	16.4
<= 8 dBi	WLAN a	U-NII-2C	low	16.4
<= 8 dBi	WLAN a	U-NII-2C	mid	16.4
<= 8 dBi	WLAN a	U-NII-2C	high	16.5
<= 8 dBi	WLAN a	U-NII-2C/3	straddle	16.4
<= 8 dBi	WLAN n 20 MHz	U-NII-2A	low	17.6
<= 8 dBi	WLAN n 20 MHz	U-NII-2A	mid	17.6
<= 8 dBi	WLAN n 20 MHz	U-NII-2A	high	17.6
<= 8 dBi	WLAN n 20 MHz	U-NII-2C	low	17.6
<= 8 dBi	WLAN n 20 MHz	U-NII-2C	mid	17.6
<= 8 dBi	WLAN n 20 MHz	U-NII-2C	high	17.7
<= 8 dBi	WLAN n 20 MHz	U-NII-2C/3	straddle	17.6
<= 8 dBi	WLAN n 40 MHz	U-NII-2A	low	36.3
<= 8 dBi	WLAN n 40 MHz	U-NII-2A	high	36.3
<= 8 dBi	WLAN n 40 MHz	U-NII-2C	low	36.3
<= 8 dBi	WLAN n 40 MHz	U-NII-2C	mid	36.3
<= 8 dBi	WLAN n 40 MHz	U-NII-2C	high	36.3
<= 8 dBi	WLAN n 40 MHz	U-NII-2C/3	straddle	36.3
<= 8 dBi	WLAN ac 20 MHz	U-NII-2A	low	17.6
<= 8 dBi	WLAN ac 20 MHz	U-NII-2A	mid	17.6
<= 8 dBi	WLAN ac 20 MHz	U-NII-2A	high	17.6
<= 8 dBi	WLAN ac 20 MHz	U-NII-2C	low	17.6
<= 8 dBi	WLAN ac 20 MHz	U-NII-2C	mid	17.6
<= 8 dBi	WLAN ac 20 MHz	U-NII-2C	high	17.6
<= 8 dBi	WLAN ac 20 MHz	U-NII-2C/3	straddle	17.7
<= 8 dBi	WLAN ac 40 MHz	U-NII-2A	low	36.3
<= 8 dBi	WLAN ac 40 MHz	U-NII-2A	high	36.3
<= 8 dBi	WLAN ac 40 MHz	U-NII-2C	low	36.3
<= 8 dBi	WLAN ac 40 MHz	U-NII-2C	mid	36.3
<= 8 dBi	WLAN ac 40 MHz	U-NII-2C	high	36.3
<= 8 dBi	WLAN ac 40 MHz	U-NII-2C/3	straddle	36.3
<= 8 dBi	WLAN ax 20 MHz	U-NII-2A	low	18.9
<= 8 dBi	WLAN ax 20 MHz	U-NII-2A	mid	18.9
<= 8 dBi	WLAN ax 20 MHz	U-NII-2A	high	18.9
<= 8 dBi	WLAN ax 20 MHz	U-NII-2C	low	18.9
<= 8 dBi	WLAN ax 20 MHz	U-NII-2C	mid	18.9
<= 8 dBi	WLAN ax 20 MHz	U-NII-2C	high	19.0
<= 8 dBi	WLAN ax 20 MHz	U-NII-2C/3	straddle	19.0
<= 8 dBi	WLAN ax 40 MHz	U-NII-2A	low	37.8
<= 8 dBi	WLAN ax 40 MHz	U-NII-2A	high	37.8
<= 8 dBi	WLAN ax 40 MHz	U-NII-2C	low	37.8
<= 8 dBi	WLAN ax 40 MHz	U-NII-2C	mid	37.8
<= 8 dBi	WLAN ax 40 MHz	U-NII-2C	high	37.8
<= 8 dBi	WLAN ax 40 MHz	U-NII-2C/3	straddle	37.8

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 a, Operating Frequency = low, Subband = U-NII-2A (S01_AD03)

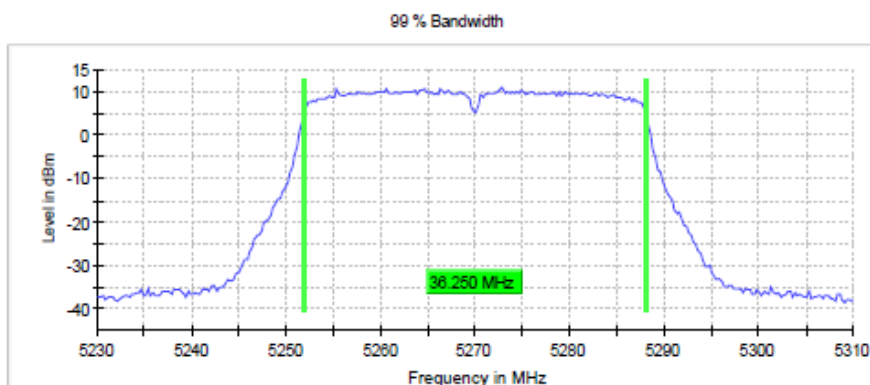
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Result
5260.000000	16.400000	---	---	5251.850000	5268.250000	PASS



Setting	Instrument Value
Start Frequency	5.24000 GHz
Stop Frequency	5.28000 GHz
Span	40.000 MHz
RBW	200.000 kHz
VBW	1.000 MHz
SweepPoints	400
SweepTime	1.000 ms
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	52 / max. 150
Stable	5 / 5
Max Stable Difference	0.03 dB

Radio Technology = WLAN n 40 MHz, Operating Frequency = low, Subband = U-NII-2A (S01_AD03)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Result
5270.000000	36.250000	---	---	5251.875000	5288.125000	PASS



Setting	Instrument Value
Start Frequency	5.23000 GHz
Stop Frequency	5.31000 GHz
Span	80.000 MHz
RBW	500.000 kHz
VBW	2.000 MHz
SweepPoints	320
SweepTime	1.000 ms
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	96 / max. 150
Stable	5 / 5
Max Stable Difference	0.23 dB

5.3.5 TEST EQUIPMENT USED

- R&S TS8997

5.4 MAXIMUM CONDUCTED OUTPUT POWER

Standard **FCC Part 15 Subpart E**

The test was performed according to:

ANSI C63.10, chapter 12.3.3.2

5.4.1 TEST DESCRIPTION

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

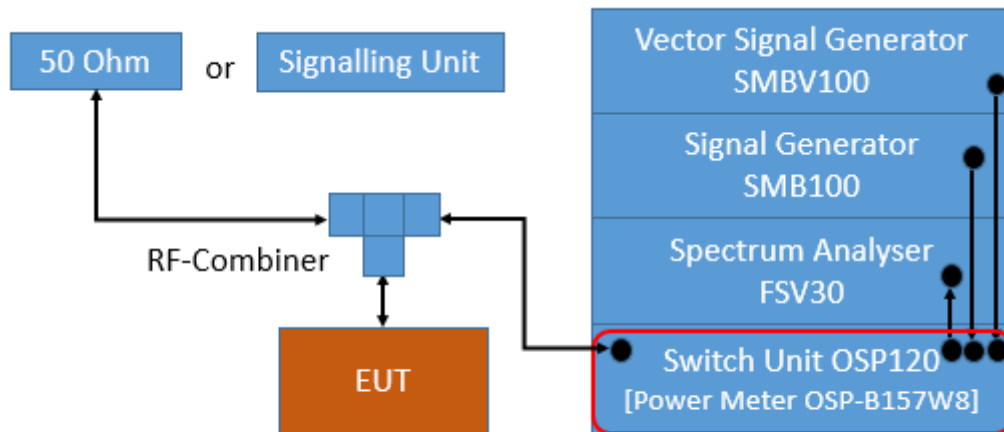
For U-NII bands 1, 2A, 2C, 3:

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.

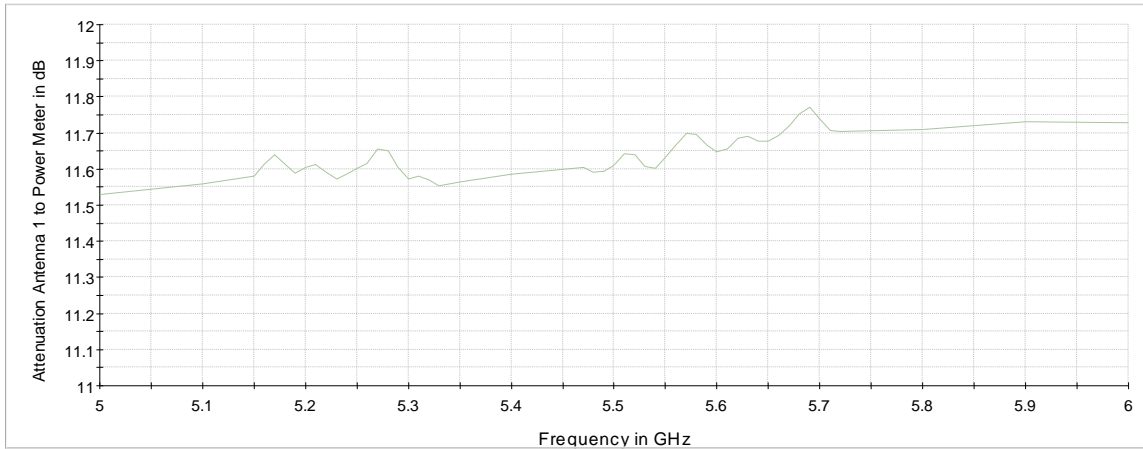
The OSP-B157W is a gated RF average power meter with a signal bandwidth > 300 MHz.

Note:

The measurement was performed according FCC Public Note "Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E, 789033 D02", method **PM-G**.



TS8997; Maximum Conducted Output Power



Attenuation of measurement path

For U-NII bands 5,6,7,8:

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.

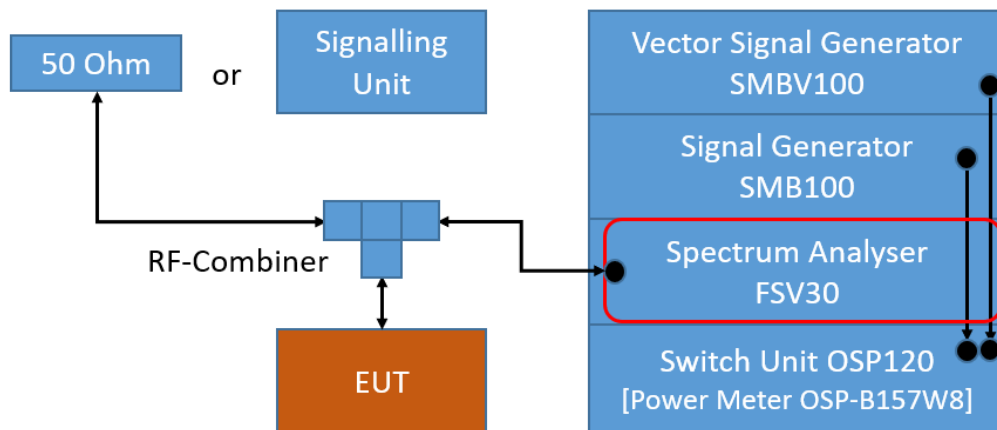
Analyzer settings:

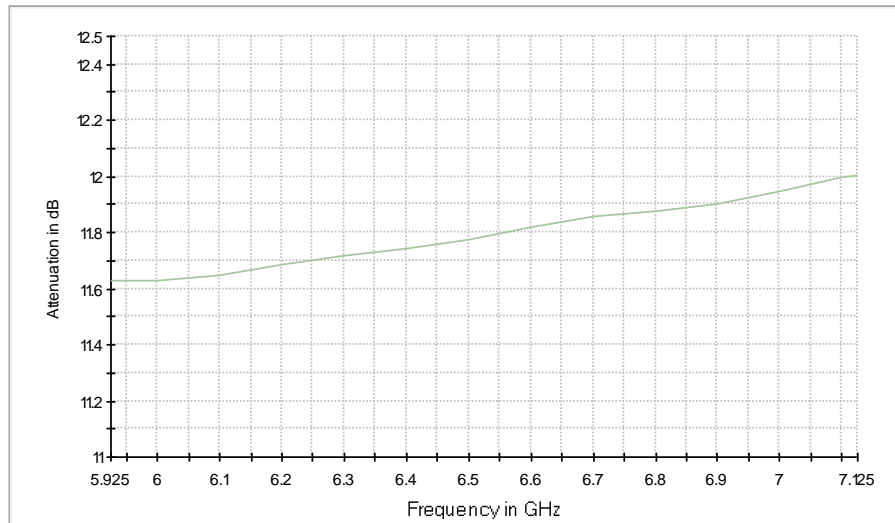
- Resolution Bandwidth (RBW): 1 MHz
- Video Bandwidth (VBW): 3 MHz
- Trace: Average, RMS power averaging mode
- Sweeps: at least 100
- Sweep time: Auto
- Detector: RMS
- Trigger: free run (DC > 98 %) or gated mode (DC < 98 %)

See worst case result plots for details

Note:

The measurement was performed according FCC Public Note "Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E, 789033 D02", method **SA-1**.





Attenuation of measurement path

5.4.2 TEST REQUIREMENTS / LIMITS

A) FCC

FCC Part 15, Subpart E, §15.407 (a) (1) (i): Outdoor access point:

For systems using digital modulation techniques in the 5.15 – 5.25 GHz bands:

Limit: 1 W (30 dBm) provided the maximum antenna gain does not exceed 6 dBi.

The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

§15.407 (a) (1) (ii): Indoor access point:

Limit: 1 W (30 dBm) provided the maximum antenna gain does not exceed 6 dBi.

§15.407 (a) (1) (iii): Fixed point-to-point access points:

Limit: 1 W (30 dBm) provided the maximum antenna gain does not exceed 23 dBi.

§15.407 (a) (1) (iv): Client devices:

Limit: 250 mW (24 dBm) provided the maximum antenna gain does not exceed 6 dBi.

FCC Part 15, Subpart E, §15.407 (a) (2)

For systems using digital modulation techniques in the 5.25 – 5.35 GHz and 5.47 – 5.725 GHz bands:

Limit: 250 mW (24 dBm) or $11 \text{ dBm} + 10 \log (26 \text{ dB bandwidth/MHz})$ whatever is the lesser.

FCC Part 15, Subpart E, §15.407 (a) (3):

For systems using digital modulation techniques in the 5.725 – 5.850 GHz bands:

Limit: 1 W (30 dBm) provided the maximum antenna gain does not exceed 6 dBi. The antenna gain limitation is not applicable for fixed point-to-point devices.

FCC Part 15, Subpart E, §15.407 (a) (4):

For a standard power access point and fixed client devices in the 5.925 – 6.425 GHz and 6.525 – 6.875 GHz bands:

Limit: 4 W (36 dBm) e.i.r.p.

For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

FCC Part 15, Subpart E, §15.407 (a) (5):

For an indoor access point in the 5.925 – 7.125 GHz bands:

Limit: 1 W (30 dBm)e.i.r.p.

FCC Part 15, Subpart E, §15.407 (a) (6):

For a subordinate device operating under an indoor access point in the 5.925 – 7.125 GHz bands:

Limit: 1 W (30 dBm)e.i.r.p.

FCC Part 15, Subpart E, §15.407 (a) (7):

For a client device, except for fixed client devices, operating under standard power access point in the 5.925-6.425 GHz and 6.525-6.875 GHz bands:

Limit: 1 W (30 dBm)e.i.r.p.

The client device must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power.

FCC Part 15, Subpart E, §15.407 (a) (8):

For client devices operating under the control of an indoor access point in the 5.925 – 7.125 GHz bands:

Limit: 250 mW (24 dBm)e.i.r.p.

FCC Part 15, Subpart E, §15.407 (a) (11):

The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

B) IC

Different frequency bands and limits apply, as compared to the FCC requirements.

All frequency bands: B is the 99% emission bandwidth in MHz.

RSS-247, 6.2.1.1, Band 5150-5250 MHz, indoor operation only, except for OEM devices installed by vehicle manufacturers:

Limits:

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or $1.76 + 10 \log_{10}B$, dBm, whichever is less. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW. (e.i.r.p.)

Other devices: 200 mW (23 dBm) or $10 + 10 \log_{10}B$ [dBm], whichever power is less.

RSS-247, 6.2.2.1, Band 5250-5350 MHz:

Limits:

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or $1.76 + 10 \log_{10}B$, dBm, whichever is less. Devices shall implement TPC in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

Devices, other devices than installed in vehicles:

Maximum conducted Power: 250 mW (24 dBm) or $11 + 10 \log_{10} B$ [dBm], whichever power is less.

e.i.r.p.: 1.0 W (30 dBm) or $17 + 10 \log_{10} B$ [dBm], whichever power is less.

Outdoor fixed devices with a maximum e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below:

- i. -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$
- ii. $-13 - 0.716 (\theta - 8)$ dBW/MHz for $8^\circ \leq \theta < 40^\circ$
- iii. $-35.9 - 1.22 (\theta - 40)$ dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$
- iv. -42 dBW/MHz for $\theta > 45^\circ$

RSS-247, 6.2.3.1, Bands 5470-5600 MHz and 5650-5725 MHz:

Limits:

Maximum conducted Power: 250 mW (24 dBm) or $11 + 10 \log_{10} B$ [dBm], whichever power is less.

e.i.r.p.: 1.0 W (30 dBm) or $17 + 10 \log_{10} B$ [dBm], whichever power is less.

Note: Devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

RSS-247, 6.2.4.1, Band 5725-5850 MHz:

Limits:

Maximum conducted Power: 1 W (30 dBm)

e.i.r.p.: 4 W (36 dBm)

5.4.3 TEST PROTOCOL

Ambient temperature: 23 - 26°C
 Air Pressure: 991-1023 hPa
 Humidity: 40 - 60%
 WLAN a-Mode; 20 MHz; 6 Mbit/s

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5260	19.4	27.4	22.0	2.6	30.0	2.6	23.1	3.7	29.1	1.7	2)
	<= 8 dBi	5280	19.5	27.5	22.0	2.5	30.0	2.5	23.2	3.7	29.2	1.7	2)
	<= 8 dBi	5320	19.3	27.3	22.0	2.7	30.0	2.7	23.1	3.9	29.1	1.9	2)
2C	<= 8 dBi	5500	18.6	26.6	22.0	3.4	30.0	3.4	23.1	4.5	29.1	2.5	
	<= 8 dBi	5580	19.3	27.3	22.0	2.7	30.0	2.7	23.1	3.8	29.1	1.8	
	<= 8 dBi	5700	19.7	27.7	22.0	2.3	30.0	2.3	23.2	3.4	29.2	1.4	
2C+3	<= 8 dBi	5720	19.6	27.6	22.0	2.4	30.0	2.4	23.1	3.5	29.1	1.5	

WLAN n-Mode; 20 MHz; MCS 0; SISO

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5260	19.0	27.0	22.0	3.0	30.0	3.0	23.5	4.4	29.5	2.4	2)
	<= 8 dBi	5280	19.1	27.1	22.0	2.9	30.0	2.9	23.5	4.4	29.5	2.4	2)
	<= 8 dBi	5320	18.8	26.8	22.0	3.2	30.0	3.2	23.5	4.6	29.5	2.6	2)
2C	<= 8 dBi	5500	18.2	26.2	22.0	3.8	30.0	3.8	23.5	5.3	29.5	3.3	
	<= 8 dBi	5580	18.9	26.9	22.0	3.1	30.0	3.1	23.5	4.6	29.5	2.6	
	<= 8 dBi	5700	19.3	27.3	22.0	2.7	30.0	2.7	23.5	4.2	29.5	2.2	
2C+3	<= 8 dBi	5720	19.2	27.2	22.0	2.8	30.0	2.8	23.5	4.3	29.5	2.3	

WLAN n-Mode; 40 MHz; MCS 0; SISO

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5270	19.3	27.3	22.0	2.7	30.0	2.7	24.0	4.7	30.0	2.7	2)
	<= 8 dBi	5310	19.4	27.4	22.0	2.6	30.0	2.6	24.0	4.6	30.0	2.6	2)
2C	<= 8 dBi	5510	19.5	27.5	22.0	2.5	30.0	2.5	24.0	4.5	30.0	2.5	
	<= 8 dBi	5550	19.7	27.7	22.0	2.3	30.0	2.3	24.0	4.3	30.0	2.3	
	<= 8 dBi	5670	19.8	27.8	22.0	2.2	30.0	2.2	24.0	4.2	30.0	2.2	
2C+3	<= 8 dBi	5710	19.8	27.8	22.0	2.2	30.0	2.2	24.0	4.2	30.0	2.2	

WLAN ac-Mode; 20 MHz; MCS 0; SISO

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5260	19.0	27.0	22.0	3.0	30.0	3.0	23.5	4.5	29.5	2.5	2)
	<= 8 dBi	5280	19.1	27.1	22.0	2.9	30.0	2.9	23.5	4.4	29.5	2.4	2)
	<= 8 dBi	5320	18.8	26.8	22.0	3.2	30.0	3.2	23.5	4.6	29.5	2.6	2)
2C	<= 8 dBi	5500	18.2	26.2	22.0	3.8	30.0	3.8	23.5	5.3	29.5	3.3	
	<= 8 dBi	5580	18.9	26.9	22.0	3.1	30.0	3.1	23.5	4.6	29.5	2.6	
	<= 8 dBi	5700	19.3	27.3	22.0	2.7	30.0	2.7	23.5	4.1	29.5	2.1	
2C+3	<= 8 dBi	5720	19.3	27.3	22.0	2.7	30.0	2.7	23.5	4.2	29.5	2.2	

WLAN ac-Mode; 40 MHz; MCS 0; SISO

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5270	19.3	27.3	22.0	2.7	30.0	2.7	24.0	4.7	30.0	2.7	2)
	<= 8 dBi	5310	19.4	27.4	22.0	2.6	30.0	2.6	24.0	4.6	30.0	2.6	2)
2C	<= 8 dBi	5510	19.4	27.4	22.0	2.6	30.0	2.6	24.0	4.6	30.0	2.6	
	<= 8 dBi	5550	19.7	27.7	22.0	2.3	30.0	2.3	24.0	4.3	30.0	2.3	
	<= 8 dBi	5670	19.8	27.8	22.0	2.2	30.0	2.2	24.0	4.2	30.0	2.2	
2C+3	<= 8 dBi	5710	19.9	27.9	22.0	2.1	30.0	2.1	24.0	4.1	30.0	2.1	

WLAN ax-Mode; 20 MHz; MCS 0; SISO

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5260	19.0	27.0	22.0	3.0	30.0	3.0	23.8	4.8	29.8	2.8	2)
	<= 8 dBi	5280	19.0	27.0	22.0	3.0	30.0	3.0	23.8	4.8	29.8	2.8	2)
	<= 8 dBi	5320	18.8	26.8	22.0	3.2	30.0	3.2	23.8	5.0	29.8	3.0	2)
2C	<= 8 dBi	5500	18.1	26.1	22.0	3.9	30.0	3.9	23.8	5.7	29.8	3.7	
	<= 8 dBi	5580	18.7	26.7	22.0	3.3	30.0	3.3	23.8	5.1	29.8	3.1	
	<= 8 dBi	5700	19.2	27.2	22.0	2.8	30.0	2.8	23.8	4.6	29.8	2.6	
2C+3	<= 8 dBi	5720	19.0	27.0	22.0	3.0	30.0	3.0	23.8	4.8	29.8	2.8	

WLAN ax-Mode; 40 MHz; MCS 0; SISO

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5270	18.9	26.9	22.0	3.1	30.0	3.1	24.0	5.1	30.0	3.1	2)
	<= 8 dBi	5310	19.0	27.0	22.0	3.0	30.0	3.0	24.0	5.0	30.0	3.0	2)
2C	<= 8 dBi	5510	19.1	27.1	22.0	2.9	30.0	2.9	24.0	4.9	30.0	2.9	
	<= 8 dBi	5550	19.2	27.2	22.0	2.8	30.0	2.8	24.0	4.8	30.0	2.8	
	<= 8 dBi	5670	19.2	27.2	22.0	2.8	30.0	2.8	24.0	4.8	30.0	2.8	
2C+3	<= 8 dBi	5710	19.2	27.2	22.0	2.8	30.0	2.8	24.0	4.8	30.0	2.8	

WLAN a-Mode; 20 MHz; 6 Mbit/s; Diversity

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5260	20.1	28.1	22.0	1.9	30.0	1.9	23.1	3.1	29.1	1.0	2)
	<= 8 dBi	5280	20.0	28.0	22.0	2.0	30.0	2.0	23.2	3.2	29.2	1.2	2)
	<= 8 dBi	5320	20.3	28.3	22.0	1.7	30.0	1.7	23.1	2.8	29.1	0.8	2)
2C	<= 8 dBi	5500	20.1	28.1	22.0	1.9	30.0	1.9	23.1	3.0	29.1	1.0	
	<= 8 dBi	5580	20.3	28.3	22.0	1.7	30.0	1.7	23.1	2.8	29.1	0.8	
	<= 8 dBi	5700	20.3	28.3	22.0	1.7	30.0	1.7	23.2	2.9	29.2	0.9	
2C+3	<= 8 dBi	5720	19.9	27.9	22.0	2.1	30.0	2.1	23.1	3.3	29.1	1.2	

WLAN n-Mode; 20 MHz; MCS 8; MIMO

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5260	19.8	27.8	22.0	2.2	30.0	2.2	23.5	3.7	29.5	1.7	2)
	<= 8 dBi	5280	19.7	27.7	22.0	2.3	30.0	2.3	23.5	3.8	29.5	1.8	2)
	<= 8 dBi	5320	19.6	27.6	22.0	2.4	30.0	2.4	23.5	3.8	29.5	1.9	2)
2C	<= 8 dBi	5500	19.7	27.7	22.0	2.3	30.0	2.3	23.5	3.8	29.5	1.8	
	<= 8 dBi	5580	20.0	28.0	22.0	2.0	30.0	2.0	23.5	3.4	29.5	1.5	
	<= 8 dBi	5700	19.8	27.8	22.0	2.2	30.0	2.2	23.5	3.7	29.5	1.7	
2C+3	<= 8 dBi	5720	19.4	27.4	22.0	2.6	30.0	2.6	23.5	4.1	29.5	2.1	

WLAN n-Mode; 40 MHz; MCS 8; MIMO

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5270	20.9	28.9	22.0	1.1	30.0	1.1	24.0	3.1	30.0	1.1	2)
	<= 8 dBi	5310	20.7	28.7	22.0	1.3	30.0	1.3	24.0	3.3	30.0	1.3	2)
2C	<= 8 dBi	5510	20.5	28.5	22.0	1.5	30.0	1.5	24.0	3.5	30.0	1.5	
	<= 8 dBi	5550	20.7	28.7	22.0	1.3	30.0	1.3	24.0	3.3	30.0	1.3	
	<= 8 dBi	5670	20.6	28.6	22.0	1.4	30.0	1.4	24.0	3.4	30.0	1.4	
2C+3	<= 8 dBi	5710	20.7	28.7	22.0	1.3	30.0	1.3	24.0	3.3	30.0	1.3	

WLAN ac-Mode; 20 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5260	19.7	27.7	22.0	2.3	30.0	2.3	23.5	3.8	29.5	1.8	2)
	<= 8 dBi	5280	19.7	27.7	22.0	2.3	30.0	2.3	23.5	3.8	29.5	1.8	2)
	<= 8 dBi	5320	19.7	27.7	22.0	2.3	30.0	2.3	23.5	3.8	29.5	1.8	2)
2C	<= 8 dBi	5500	19.8	27.8	22.0	2.2	30.0	2.2	23.5	3.7	29.5	1.7	
	<= 8 dBi	5580	20.0	28.0	22.0	2.0	30.0	2.0	23.5	3.5	29.5	1.5	
	<= 8 dBi	5700	19.8	27.8	22.0	2.2	30.0	2.2	23.5	3.6	29.5	1.7	
2C+3	<= 8 dBi	5720	19.4	27.4	22.0	2.6	30.0	2.6	23.5	4.1	29.5	2.1	

WLAN ac-Mode; 40 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5270	20.8	28.8	22.0	1.2	30.0	1.2	24.0	3.2	30.0	1.2	2)
	<= 8 dBi	5310	20.6	28.6	22.0	1.4	30.0	1.4	24.0	3.4	30.0	1.4	2)
2C	<= 8 dBi	5510	20.4	28.4	22.0	1.6	30.0	1.6	24.0	3.6	30.0	1.6	
	<= 8 dBi	5550	20.7	28.7	22.0	1.3	30.0	1.3	24.0	3.3	30.0	1.3	
	<= 8 dBi	5670	20.6	28.6	22.0	1.4	30.0	1.4	24.0	3.4	30.0	1.4	
2C+3	<= 8 dBi	5710	20.7	28.7	22.0	1.3	30.0	1.3	24.0	3.3	30.0	1.3	

WLAN ax-Mode; 20 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5260	19.5	27.5	22.0	2.5	30.0	2.5	23.8	4.3	29.8	2.3	2)
	<= 8 dBi	5280	19.5	27.5	22.0	2.5	30.0	2.5	23.8	4.3	29.8	2.3	2)
	<= 8 dBi	5320	19.5	27.5	22.0	2.5	30.0	2.5	23.8	4.3	29.8	2.3	2)
2C	<= 8 dBi	5500	19.6	27.6	22.0	2.4	30.0	2.4	23.8	4.2	29.8	2.2	
	<= 8 dBi	5580	19.7	27.7	22.0	2.3	30.0	2.3	23.8	4.0	29.8	2.1	
	<= 8 dBi	5700	19.6	27.6	22.0	2.4	30.0	2.4	23.8	4.1	29.8	2.2	
2C+3	<= 8 dBi	5720	19.3	27.3	22.0	2.7	30.0	2.7	23.8	4.5	29.8	2.5	

WLAN ax-Mode; 40 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 8 dBi	5270	20.4	28.4	22.0	1.6	30.0	1.6	24.0	3.6	30.0	1.6	2)
	<= 8 dBi	5310	20.1	28.1	22.0	1.9	30.0	1.9	24.0	3.9	30.0	1.9	2)
2C	<= 8 dBi	5510	20.0	28.0	22.0	2.0	30.0	2.0	24.0	4.0	30.0	2.0	
	<= 8 dBi	5550	20.3	28.3	22.0	1.7	30.0	1.7	24.0	3.7	30.0	1.7	
	<= 8 dBi	5670	20.1	28.1	22.0	1.9	30.0	1.9	24.0	3.9	30.0	1.9	
2C+3	<= 8 dBi	5710	20.2	28.2	22.0	1.8	30.0	1.8	24.0	3.8	30.0	1.8	

WLAN a-Mode; 20 MHz; 6 Mbit/s

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5260	19.4	28.4	21.0	1.6	30.0	1.6	23.1	3.7	29.1	0.7	2)
	<= 9 dBi	5280	19.5	28.5	21.0	1.5	30.0	1.5	23.2	3.7	29.2	0.7	2)
	<= 9 dBi	5320	19.3	28.3	21.0	1.7	30.0	1.7	23.1	3.9	29.1	0.9	2)
2C	<= 9 dBi	5500	18.6	27.6	21.0	2.4	30.0	2.4	23.1	4.5	29.1	1.5	
	<= 9 dBi	5580	19.3	28.3	21.0	1.7	30.0	1.7	23.1	3.8	29.1	0.8	
	<= 9 dBi	5700	19.7	28.7	21.0	1.3	30.0	1.3	23.2	3.4	29.2	0.4	
2C+3	<= 9 dBi	5720	19.6	28.6	21.0	1.4	30.0	1.4	23.1	3.5	29.1	0.5	

WLAN n-Mode; 20 MHz; MCS 0; SISO

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5260	19.0	28.0	21.0	2.0	30.0	2.0	23.5	4.4	29.5	1.4	2)
	<= 9 dBi	5280	19.1	28.1	21.0	1.9	30.0	1.9	23.5	4.4	29.5	1.4	2)
	<= 9 dBi	5320	18.8	27.8	21.0	2.2	30.0	2.2	23.5	4.6	29.5	1.6	2)
2C	<= 9 dBi	5500	18.2	27.2	21.0	2.8	30.0	2.8	23.5	5.3	29.5	2.3	
	<= 9 dBi	5580	18.9	27.9	21.0	2.1	30.0	2.1	23.5	4.6	29.5	1.6	
	<= 9 dBi	5700	19.3	28.3	21.0	1.7	30.0	1.7	23.5	4.2	29.5	1.2	
2C+3	<= 9 dBi	5720	19.2	28.2	21.0	1.8	30.0	1.8	23.5	4.3	29.5	1.3	

WLAN n-Mode; 40 MHz; MCS 0; SISO

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5270	15.3	24.3	21.0	5.7	30.0	5.7	24.0	8.7	30.0	5.7	2)
	<= 9 dBi	5310	15.4	24.4	21.0	5.6	30.0	5.6	24.0	8.6	30.0	5.6	2)
2C	<= 9 dBi	5510	16.6	25.6	21.0	4.4	30.0	4.4	24.0	7.4	30.0	4.4	
	<= 9 dBi	5550	16.6	25.6	21.0	4.4	30.0	4.4	24.0	7.4	30.0	4.4	
	<= 9 dBi	5670	17.3	26.3	21.0	3.7	30.0	3.7	24.0	6.7	30.0	3.7	
2C+3	<= 9 dBi	5710	17.3	26.3	21.0	3.7	30.0	3.7	24.0	6.7	30.0	3.7	

WLAN ac-Mode; 20 MHz; MCS 0; SISO

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5260	19.0	28.0	21.0	2.0	30.0	2.0	23.5	4.5	29.5	1.5	2)
	<= 9 dBi	5280	19.1	28.1	21.0	1.9	30.0	1.9	23.5	4.4	29.5	1.4	2)
	<= 9 dBi	5320	18.8	27.8	21.0	2.2	30.0	2.2	23.5	4.6	29.5	1.6	2)
2C	<= 9 dBi	5500	18.2	27.2	21.0	2.8	30.0	2.8	23.5	5.3	29.5	2.3	
	<= 9 dBi	5580	18.9	27.9	21.0	2.1	30.0	2.1	23.5	4.6	29.5	1.6	
	<= 9 dBi	5700	19.3	28.3	21.0	1.7	30.0	1.7	23.5	4.1	29.5	1.1	
2C+3	<= 9 dBi	5720	19.3	28.3	21.0	1.7	30.0	1.7	23.5	4.2	29.5	1.2	

WLAN ac-Mode; 40 MHz; MCS 0; SISO

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5270	15.2	24.2	21.0	5.8	30.0	5.8	24.0	8.8	30.0	5.8	2)
	<= 9 dBi	5310	15.4	24.4	21.0	5.6	30.0	5.6	24.0	8.6	30.0	5.6	2)
2C	<= 9 dBi	5510	16.6	25.6	21.0	4.4	30.0	4.4	24.0	7.4	30.0	4.4	
	<= 9 dBi	5550	16.5	25.5	21.0	4.5	30.0	4.5	24.0	7.5	30.0	4.5	
	<= 9 dBi	5670	17.3	26.3	21.0	3.7	30.0	3.7	24.0	6.7	30.0	3.7	
2C+3	<= 9 dBi	5710	17.2	26.2	21.0	3.8	30.0	3.8	24.0	6.8	30.0	3.8	

WLAN ax-Mode; 20 MHz; MCS 0; SISO

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5260	19.0	28.0	21.0	2.0	30.0	2.0	23.8	4.8	29.8	1.8	2)
	<= 9 dBi	5280	19.0	28.0	21.0	2.0	30.0	2.0	23.8	4.8	29.8	1.8	2)
	<= 9 dBi	5320	18.8	27.8	21.0	2.2	30.0	2.2	23.8	5.0	29.8	2.0	2)
2C	<= 9 dBi	5500	18.1	27.1	21.0	2.9	30.0	2.9	23.8	5.7	29.8	2.7	
	<= 9 dBi	5580	18.7	27.7	21.0	2.3	30.0	2.3	23.8	5.1	29.8	2.1	
	<= 9 dBi	5700	19.2	28.2	21.0	1.8	30.0	1.8	23.8	4.6	29.8	1.6	
2C+3	<= 9 dBi	5720	19.0	28.0	21.0	2.0	30.0	2.0	23.8	4.8	29.8	1.8	

WLAN ax-Mode; 40 MHz; MCS 0; SISO

U-NII band	Power Setting	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5270	14.9	23.9	21.0	6.1	30.0	6.1	24.0	9.1	30.0	6.1	2)
	<= 9 dBi	5310	15.0	24.0	21.0	6.0	30.0	6.0	24.0	9.0	30.0	6.0	2)
2C	<= 9 dBi	5510	16.1	25.1	21.0	4.9	30.0	4.9	24.0	7.9	30.0	4.9	
	<= 9 dBi	5550	16.1	25.1	21.0	4.9	30.0	4.9	24.0	7.9	30.0	4.9	
	<= 9 dBi	5670	16.9	25.9	21.0	4.1	30.0	4.1	24.0	7.1	30.0	4.1	
2C+3	<= 9 dBi	5710	16.8	25.8	21.0	4.2	30.0	4.2	24.0	7.2	30.0	4.2	

WLAN a-Mode; 20 MHz; 6 Mbit/s; Diversity

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5260	19.2	28.2	21.0	1.8	30.0	1.8	23.1	3.9	29.1	0.9	2)
	<= 9 dBi	5280	19.2	28.2	21.0	1.8	30.0	1.8	23.2	4.0	29.2	1.0	2)
	<= 9 dBi	5320	19.1	28.1	21.0	1.9	30.0	1.9	23.1	4.0	29.1	1.0	2)
2C	<= 9 dBi	5500	19.3	28.3	21.0	1.7	30.0	1.7	23.1	3.8	29.1	0.8	
	<= 9 dBi	5580	19.4	28.4	21.0	1.6	30.0	1.6	23.1	3.7	29.1	0.7	
	<= 9 dBi	5700	19.2	28.2	21.0	1.8	30.0	1.8	23.2	3.9	29.2	1.0	
2C+3	<= 9 dBi	5720	18.9	27.9	21.0	2.1	30.0	2.1	23.1	4.3	29.1	1.2	

WLAN n-Mode; 20 MHz; MCS 8; MIMO

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5260	18.9	27.9	21.0	2.1	30.0	2.1	23.5	4.5	29.5	1.6	2)
	<= 9 dBi	5280	18.7	27.7	21.0	2.3	30.0	2.3	23.5	4.8	29.5	1.8	2)
	<= 9 dBi	5320	18.7	27.7	21.0	2.3	30.0	2.3	23.5	4.8	29.5	1.8	2)
2C	<= 9 dBi	5500	18.9	27.9	21.0	2.1	30.0	2.1	23.5	4.5	29.5	1.6	
	<= 9 dBi	5580	19.0	28.0	21.0	2.0	30.0	2.0	23.5	4.5	29.5	1.5	
	<= 9 dBi	5700	18.8	27.8	21.0	2.2	30.0	2.2	23.5	4.6	29.5	1.7	
2C+3	<= 9 dBi	5720	18.5	27.5	21.0	2.5	30.0	2.5	23.5	4.9	29.5	2.0	

WLAN n-Mode; 40 MHz; MCS 8; MIMO

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5270	16.8	25.8	21.0	4.2	30.0	4.2	24.0	7.2	30.0	4.2	2)
	<= 9 dBi	5310	16.5	25.5	21.0	4.5	30.0	4.5	24.0	7.5	30.0	4.5	2)
2C	<= 9 dBi	5510	16.5	25.5	21.0	4.5	30.0	4.5	24.0	7.5	30.0	4.5	
	<= 9 dBi	5550	16.8	25.8	21.0	4.2	30.0	4.2	24.0	7.2	30.0	4.2	
	<= 9 dBi	5670	16.8	25.8	21.0	4.2	30.0	4.2	24.0	7.2	30.0	4.2	
2C+3	<= 9 dBi	5710	17.0	26.0	21.0	4.0	30.0	4.0	24.0	7.0	30.0	4.0	

WLAN ac-Mode; 20 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5260	18.9	27.9	21.0	2.1	30.0	2.1	23.5	4.5	29.5	1.6	2)
	<= 9 dBi	5280	18.6	27.6	21.0	2.4	30.0	2.4	23.5	4.9	29.5	1.9	2)
	<= 9 dBi	5320	18.8	27.8	21.0	2.2	30.0	2.2	23.5	4.7	29.5	1.7	2)
2C	<= 9 dBi	5500	18.9	27.9	21.0	2.1	30.0	2.1	23.5	4.5	29.5	1.6	
	<= 9 dBi	5580	19.0	28.0	21.0	2.0	30.0	2.0	23.5	4.5	29.5	1.5	
	<= 9 dBi	5700	18.8	27.8	21.0	2.2	30.0	2.2	23.5	4.6	29.5	1.7	
2C+3	<= 9 dBi	5720	18.5	27.5	21.0	2.5	30.0	2.5	23.5	5.0	29.5	2.0	

WLAN ac-Mode; 40 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5270	16.8	25.8	21.0	4.2	30.0	4.2	24.0	7.2	30.0	4.2	2)
	<= 9 dBi	5310	16.6	25.6	21.0	4.4	30.0	4.4	24.0	7.4	30.0	4.4	2)
2C	<= 9 dBi	5510	16.5	25.5	21.0	4.5	30.0	4.5	24.0	7.5	30.0	4.5	
	<= 9 dBi	5550	16.8	25.8	21.0	4.2	30.0	4.2	24.0	7.2	30.0	4.2	
	<= 9 dBi	5670	16.8	25.8	21.0	4.2	30.0	4.2	24.0	7.2	30.0	4.2	
2C+3	<= 9 dBi	5710	17.0	26.0	21.0	4.0	30.0	4.0	24.0	7.0	30.0	4.0	

WLAN ax-Mode; 20 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5260	18.7	27.7	21.0	2.3	30.0	2.3	23.8	5.1	29.8	2.1	2)
	<= 9 dBi	5280	18.5	27.5	21.0	2.5	30.0	2.5	23.8	5.3	29.8	2.3	2)
	<= 9 dBi	5320	18.5	27.5	21.0	2.5	30.0	2.5	23.8	5.3	29.8	2.3	2)
2C	<= 9 dBi	5500	18.8	27.8	21.0	2.2	30.0	2.2	23.8	5.0	29.8	2.0	
	<= 9 dBi	5580	18.8	27.8	21.0	2.2	30.0	2.2	23.8	5.0	29.8	2.0	
	<= 9 dBi	5700	18.7	27.7	21.0	2.3	30.0	2.3	23.8	5.1	29.8	2.1	
2C+3	<= 9 dBi	5720	18.4	27.4	21.0	2.6	30.0	2.6	23.8	5.4	29.8	2.4	

WLAN ax-Mode; 40 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 9 dBi	5270	16.5	25.5	21.0	4.5	30.0	4.5	24.0	7.5	30.0	4.5	2)
	<= 9 dBi	5310	16.2	25.2	21.0	4.8	30.0	4.8	24.0	7.8	30.0	4.8	2)
2C	<= 9 dBi	5510	16.1	25.1	21.0	4.9	30.0	4.9	24.0	7.9	30.0	4.9	
	<= 9 dBi	5550	16.4	25.4	21.0	4.6	30.0	4.6	24.0	7.6	30.0	4.6	
	<= 9 dBi	5670	16.4	25.4	21.0	4.6	30.0	4.6	24.0	7.6	30.0	4.6	
2C+3	<= 9 dBi	5710	16.7	25.7	21.0	4.3	30.0	4.3	24.0	7.3	30.0	4.3	

WLAN a-Mode; 20 MHz; 6 Mbit/s

U-NII-Band	Power	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 15.9 dBi	5260	12.4	28.3	14.1	1.7	30.0	1.7	23.1	10.7	29.1	0.8	2)
	<= 15.9 dBi	5300	12.1	28.0	14.1	2.0	30.0	2.0	23.2	11.0	29.2	1.1	2)
	<= 15.9 dBi	5320	11.8	27.7	14.1	2.3	30.0	2.3	23.1	11.3	29.1	1.4	2)
2C	<= 16.0 dBi	5500	11.2	27.2	14.0	2.8	30.0	2.8	23.1	11.9	29.1	1.9	
	<= 16.0 dBi	5580	11.8	27.8	14.0	2.2	30.0	2.2	23.1	11.3	29.1	1.3	
	<= 16.0 dBi	5700	12.0	28.0	14.0	2.0	30.0	2.0	23.2	11.2	29.2	1.2	
2C+3	<= 16.0 dBi	5720	11.9	27.9	14.0	2.1	30.0	2.1	20.6	8.7	29.1	1.3	

WLAN n-Mode; 20 MHz; MCS 0; SISO

U-NII-Band	Power	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 15.9 dBi	5260	12.3	28.2	14.1	1.8	30.0	1.8	23.5	11.2	29.5	1.3	2)
	<= 15.9 dBi	5300	12.3	28.2	14.1	1.8	30.0	1.8	23.5	11.2	29.5	1.3	2)
	<= 15.9 dBi	5320	12.0	27.9	14.1	2.1	30.0	2.1	23.5	11.5	29.5	1.6	2)
2C	<= 16.0 dBi	5500	10.8	26.8	14.0	3.2	30.0	3.2	23.5	12.7	29.5	2.7	
	<= 16.0 dBi	5580	11.5	27.5	14.0	2.5	30.0	2.5	23.5	12.0	29.5	2.0	
	<= 16.0 dBi	5700	11.6	27.6	14.0	2.4	30.0	2.4	23.5	11.9	29.5	1.9	
2C+3	<= 16.0 dBi	5720	11.5	27.5	14.0	2.5	30.0	2.5	20.6	9.1	29.5	1.9	

WLAN n-Mode; 40 MHz; MCS 0; SISO

U-NII-Band	Power	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 15.9 dBi	5270	9.1	25.0	14.1	5.0	30.0	5.0	24.0	14.9	30.0	5.0	2)
	<= 15.9 dBi	5310	9.1	25.0	14.1	5.0	30.0	5.0	24.0	14.9	30.0	5.0	2)
2C	<= 16.0 dBi	5510	8.6	24.6	14.0	5.4	30.0	5.4	24.0	15.4	30.0	5.4	
	<= 16.0 dBi	5550	8.9	24.9	14.0	5.1	30.0	5.1	24.0	15.1	30.0	5.1	
2C+3	<= 16.0 dBi	5670	9.4	25.4	14.0	4.6	30.0	4.6	24.0	14.6	30.0	4.6	
	<= 16.0 dBi	5710	9.3	25.3	14.0	4.7	30.0	4.7	20.6	11.3	30.0	4.7	

WLAN ac-Mode; 20 MHz; MCS 0; SISO

U-NII-Band	Power	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 15.9 dBi	5260	12.4	28.3	14.1	1.7	30.0	1.7	23.5	11.0	29.5	1.1	2)
	<= 15.9 dBi	5300	12.3	28.2	14.1	1.8	30.0	1.8	23.5	11.2	29.5	1.3	2)
	<= 15.9 dBi	5320	12.0	27.9	14.1	2.1	30.0	2.1	23.5	11.4	29.5	1.5	2)
2C	<= 16.0 dBi	5500	10.8	26.8	14.0	3.2	30.0	3.2	23.5	12.7	29.5	2.7	
	<= 16.0 dBi	5580	11.5	27.5	14.0	2.5	30.0	2.5	23.5	12.0	29.5	2.0	
	<= 16.0 dBi	5700	11.6	27.6	14.0	2.4	30.0	2.4	23.5	11.9	29.5	1.9	
2C+3	<= 16.0 dBi	5720	11.5	27.5	14.0	2.5	30.0	2.5	20.6	9.1	29.5	2.0	

WLAN ac-Mode; 40 MHz; MCS 0; SISO

U-NII-Band	Power	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 15.9 dBi	5270	9.1	25.0	14.1	5.0	30.0	5.0	24.0	14.9	30.0	5.0	2)
	<= 15.9 dBi	5310	9.0	24.9	14.1	5.1	30.0	5.1	24.0	15.0	30.0	5.1	2)
2C	<= 16.0 dBi	5510	8.6	24.6	14.0	5.4	30.0	5.4	24.0	15.4	30.0	5.4	
	<= 16.0 dBi	5550	8.7	24.7	14.0	5.3	30.0	5.3	24.0	15.3	30.0	5.3	
	<= 16.0 dBi	5670	9.3	25.3	14.0	4.7	30.0	4.7	24.0	14.7	30.0	4.7	
2C+3	<= 16.0 dBi	5710	9.3	25.3	14.0	4.7	30.0	4.7	20.6	11.3	30.0	4.7	

WLAN ax-Mode; 20 MHz; MCS 0; SISO

U-NII-Band	Power	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 15.9 dBi	5260	12.1	28.0	14.1	2.0	30.0	2.0	23.8	11.7	29.8	1.8	2)
	<= 15.9 dBi	5300	12.2	28.1	14.1	1.9	30.0	1.9	23.8	11.6	29.8	1.7	2)
	<= 15.9 dBi	5320	12.0	27.9	14.1	2.1	30.0	2.1	23.8	11.7	29.8	1.8	2)
2C	<= 16.0 dBi	5500	10.6	26.6	14.0	3.4	30.0	3.4	23.8	13.2	29.8	3.2	
	<= 16.0 dBi	5580	11.3	27.3	14.0	2.7	30.0	2.7	23.8	12.5	29.8	2.5	
	<= 16.0 dBi	5700	11.4	27.4	14.0	2.6	30.0	2.6	23.8	12.4	29.8	2.4	
2C+3	<= 16.0 dBi	5720	11.2	27.2	14.0	2.8	30.0	2.8	20.0	8.8	29.8	2.5	

WLAN ax-Mode; 40 MHz; MCS 0; SISO

U-NII-Band	Power	TX Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 15.9 dBi	5270	8.8	24.7	14.1	5.3	30.0	5.3	24.0	15.2	30.0	5.3	2)
	<= 15.9 dBi	5310	8.6	24.5	14.1	5.5	30.0	5.5	24.0	15.4	30.0	5.5	2)
2C	<= 16.0 dBi	5510	8.2	24.2	14.0	5.8	30.0	5.8	24.0	15.8	30.0	5.8	
	<= 16.0 dBi	5550	8.4	24.4	14.0	5.6	30.0	5.6	24.0	15.6	30.0	5.6	
	<= 16.0 dBi	5670	8.9	24.9	14.0	5.1	30.0	5.1	24.0	15.1	30.0	5.1	
2C+3	<= 16.0 dBi	5710	8.9	24.9	14.0	5.1	30.0	5.1	20.6	11.7	30.0	5.1	

WLAN a-Mode; 20 MHz; 6 Mbit/s; Diversity

U-NII-Band	Power	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 15.9 dBi	5260	12.5	28.4	14.1	1.6	30.0	1.6	23.1	10.6	29.1	0.7	2)
	<= 15.9 dBi	5300	12.2	28.1	14.1	1.9	30.0	1.9	23.2	11.0	29.2	1.1	2)
	<= 15.9 dBi	5320	12.1	28.0	14.1	2.0	30.0	2.0	23.1	11.0	29.1	1.1	2)
2C	<= 16.0 dBi	5500	11.4	27.4	14.0	2.6	30.0	2.6	23.1	11.8	29.1	1.7	
	<= 16.0 dBi	5580	11.7	27.7	14.0	2.3	30.0	2.3	23.1	11.4	29.1	1.4	
	<= 16.0 dBi	5700	12.0	28.0	14.0	2.0	30.0	2.0	23.2	11.1	29.2	1.2	
2C+3	<= 16.0 dBi	5720	11.6	27.6	14.0	2.4	30.0	2.4	20.6	9.0	29.1	1.5	

WLAN n-Mode; 20 MHz; MCS 8; MIMO

U-NII-Band	Power	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 15.9 dBi	5260	12.2	28.1	14.1	1.9	30.0	1.9	23.5	11.2	29.5	1.4	2)
	<= 15.9 dBi	5300	11.9	27.8	14.1	2.2	30.0	2.2	23.5	11.5	29.5	1.7	2)
	<= 15.9 dBi	5320	12.0	27.9	14.1	2.1	30.0	2.1	23.5	11.4	29.5	1.6	2)
2C	<= 16.0 dBi	5500	11.1	27.1	14.0	2.9	30.0	2.9	23.5	12.4	29.5	2.4	
	<= 16.0 dBi	5580	11.4	27.4	14.0	2.6	30.0	2.6	23.5	12.1	29.5	2.1	
	<= 16.0 dBi	5700	11.6	27.6	14.0	2.4	30.0	2.4	23.5	11.8	29.5	1.9	
2C+3	<= 16.0 dBi	5720	11.3	27.3	14.0	2.7	30.0	2.7	20.6	9.3	29.5	2.2	

WLAN n-Mode; 40 MHz; MCS 8; MIMO

U-NII-Band	Power	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]	
2A	<= 15.9 dBi	5270	12.1	28.0	14.1	2.0	30.0	2.0	24.0	11.9	30.0	2.0	2)
	<= 15.9 dBi	5310	11.9	27.8	14.1	2.2	30.0	2.2	24.0	12.1	30.0	2.2	2)
2C	<= 16.0 dBi	5510	11.6	27.6	14.0	2.4	30.0	2.4	24.0	12.4	30.0	2.4	
	<= 16.0 dBi	5550	11.8	27.8	14.0	2.2	30.0	2.2	24.0	12.2	30.0	2.2	
	<= 16.0 dBi	5670	11.9	27.9	14.0	2.1	30.0	2.1	24.0	12.1	30.0	2.1	
2C+3	<= 16.0 dBi	5710	12.2	28.2	14.0	1.8	30.0	1.8	20.6	8.4	30.0	1.8	

WLAN ac-Mode; 20 MHz; MCS 0; MIMO

U-NII-Band	Power	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]
2A	<= 15.9 dBi	5260	12.2	28.1	14.1	1.9	30.0	1.9	23.5	11.3	29.5	1.4
	<= 15.9 dBi	5300	11.9	27.8	14.1	2.2	30.0	2.2	23.5	11.6	29.5	1.7
	<= 15.9 dBi	5320	11.9	27.8	14.1	2.2	30.0	2.2	23.5	11.5	29.5	1.7
2C	<= 16.0 dBi	5500	11.1	27.1	14.0	2.9	30.0	2.9	23.5	12.4	29.5	2.4
	<= 16.0 dBi	5580	11.4	27.4	14.0	2.6	30.0	2.6	23.5	12.1	29.5	2.1
	<= 16.0 dBi	5700	11.7	27.7	14.0	2.3	30.0	2.3	23.5	11.8	29.5	1.8
2C+3	<= 16.0 dBi	5720	11.3	27.3	14.0	2.7	30.0	2.7	20.6	9.3	29.5	2.2

WLAN ac-Mode; 40 MHz; MCS 0; MIMO

U-NII-Band	Power	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]
2A	<= 15.9 dBi	5270	12.0	27.9	14.1	2.1	30.0	2.1	24.0	12.0	30.0	2.1
	<= 15.9 dBi	5310	12.0	27.9	14.1	2.1	30.0	2.1	24.0	12.0	30.0	2.1
2C	<= 16.0 dBi	5510	11.6	27.6	14.0	2.4	30.0	2.4	24.0	12.4	30.0	2.4
	<= 16.0 dBi	5550	11.8	27.8	14.0	2.2	30.0	2.2	24.0	12.2	30.0	2.2
	<= 16.0 dBi	5670	12.0	28.0	14.0	2.0	30.0	2.0	24.0	12.0	30.0	2.0
2C+3	<= 16.0 dBi	5710	12.0	28.0	14.0	2.0	30.0	2.0	20.6	8.6	30.0	2.0

WLAN ax-Mode; 20 MHz; MCS 0; MIMO

U-NII-Band	Power	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]
2A	<= 15.9 dBi	5260	12.2	28.1	14.1	1.9	30.0	1.9	23.8	11.6	29.8	1.7
	<= 15.9 dBi	5300	12.0	27.9	14.1	2.1	30.0	2.1	23.8	11.7	29.8	1.9
	<= 15.9 dBi	5320	12.1	28.0	14.1	2.0	30.0	2.0	23.8	11.6	29.8	1.8
2C	<= 16.0 dBi	5500	11.0	27.0	14.0	3.0	30.0	3.0	23.8	12.8	29.8	2.8
	<= 16.0 dBi	5580	11.2	27.2	14.0	2.8	30.0	2.8	23.8	12.6	29.8	2.6
	<= 16.0 dBi	5700	11.5	27.5	14.0	2.5	30.0	2.5	23.8	12.3	29.8	2.3
2C+3	<= 16.0 dBi	5720	11.2	27.2	14.0	2.8	30.0	2.8	20.0	8.8	29.8	2.6

WLAN ax-Mode; 40 MHz; MCS 0; MIMO

U-NII-Band	Power	Freq. [MHz]	Cond. Power [dBm]	EIRP [dBm]	FCC Cond. Limit [dBm]	Margin [dB]	FCC EIRP Limit [dBm]	Margin [dB]	ISED Cond. Limit [dBm]	Margin [dB]	ISED EIRP Limit [dBm]	Margin [dB]
2A	<= 15.9 dBi	5270	11.8	27.7	14.1	2.3	30.0	2.3	24.0	12.2	30.0	2.3
	<= 15.9 dBi	5310	11.6	27.5	14.1	2.5	30.0	2.5	24.0	12.4	30.0	2.5
2C	<= 16.0 dBi	5510	11.3	27.3	14.0	2.7	30.0	2.7	24.0	12.7	30.0	2.7
	<= 16.0 dBi	5550	11.5	27.5	14.0	2.5	30.0	2.5	24.0	12.5	30.0	2.5
	<= 16.0 dBi	5670	11.6	27.6	14.0	2.4	30.0	2.4	24.0	12.4	30.0	2.4
2C+3	<= 16.0 dBi	5710	11.7	27.7	14.0	2.3	30.0	2.3	20.6	8.9	30.0	2.3

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

- 1) No additional limit regarding the elevation applies.
- 2) Additional limit regarding the elevation applies.

5.4.4 MEASUREMENT PLOT

No plots provided due to power meter measurement.

5.4.5 TEST EQUIPMENT USED

- R&S TS8997

5.5 PEAK POWER SPECTRAL DENSITY

Standard **FCC Part 15 Subpart E**

The test was performed according to:

ANSI C63.10, chapter 12.5 (SA-3)

5.5.1 TEST DESCRIPTION

The Equipment Under Test (EUT) was set up in a shielded room to perform the Maximum Power Spectral Density measurements.

The results recorded were measured with the modulation which produces the worst-case (highest) output power.

For U-NII bands 1, 2A, 2C, 3:

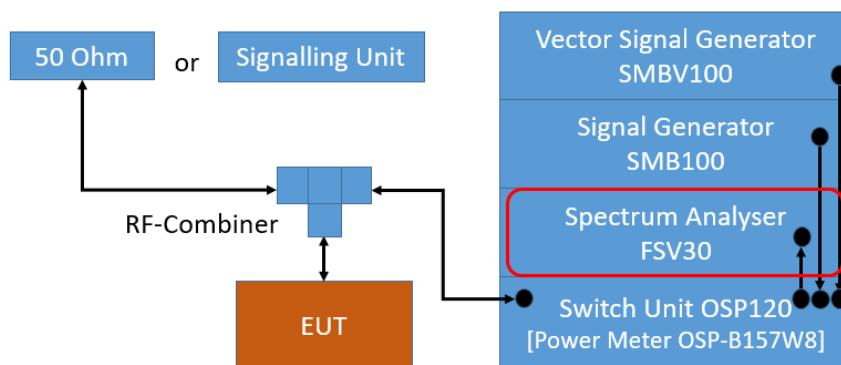
The EUT was connected to the test system as described in the block diagram below. The complete attenuation of the measurement path is known and considered.

Analyzer settings:

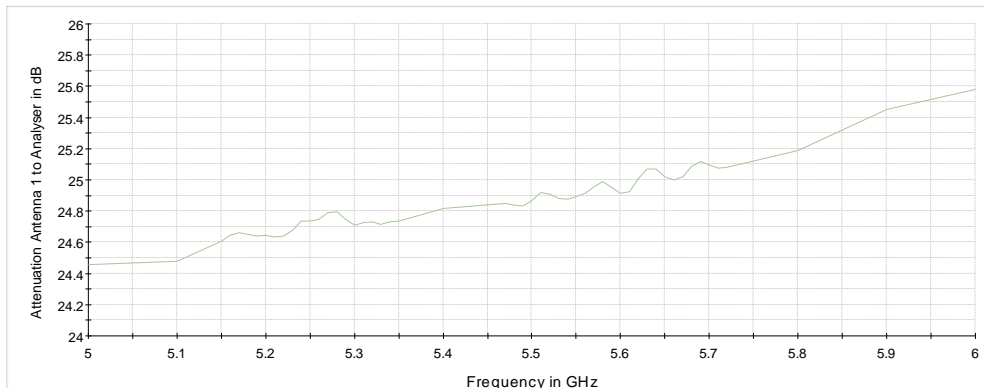
- Resolution Bandwidth (RBW): 1 MHz (for subband 3: 500 kHz)
- Video Bandwidth (VBW): 3 MHz (for subband 3: 2 MHz)
- Trace: Max Hold
- Sweeps: till stable (at least 180, max. 900)
- Sweep time: \leq Number of sweep points x Min. Transmitter on time
- Detector: RMS
- Trigger: free run

Note:

The analyser settings are according FCC Public Note "Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E, 789033 D02", method **SA-3**.



TS8997; Maximum Power Spectral Density



Attenuation of the measurement path

For U-NII bands 5, 6, 7, 8:

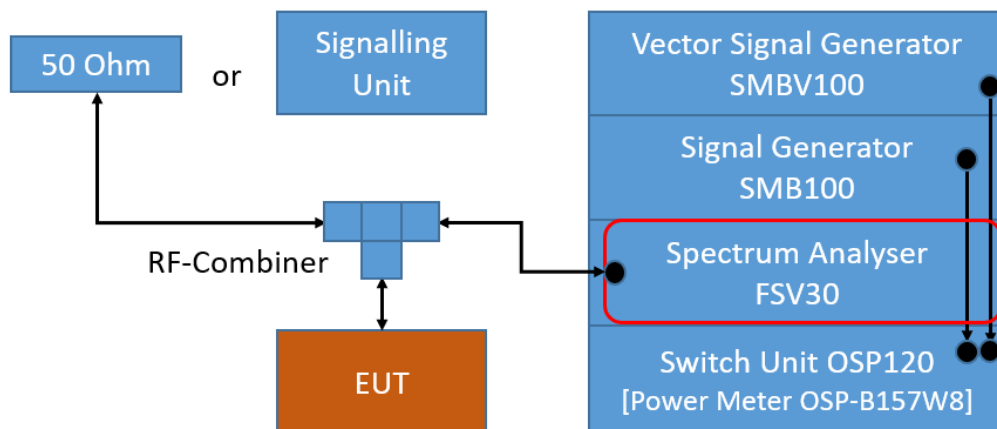
The EUT was connected to the test system as described in the block diagram below. The complete attenuation of the measurement path is known and considered.

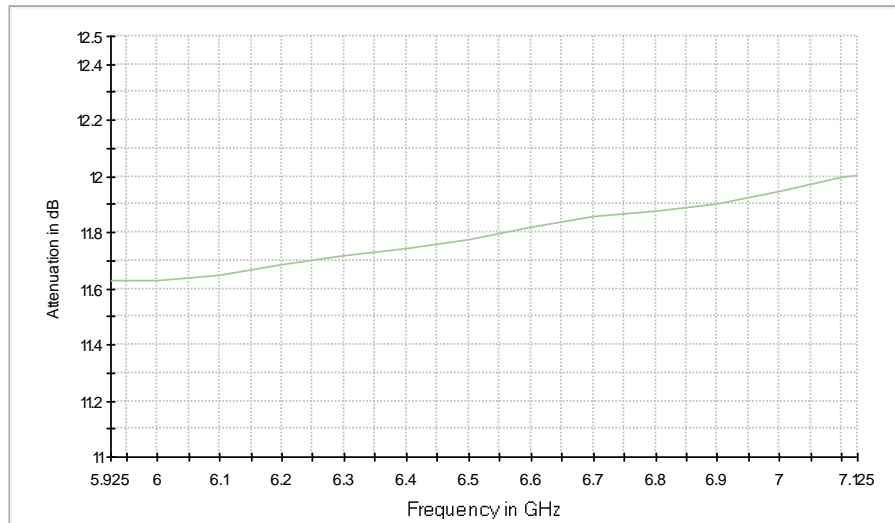
Analyzer settings:

- Resolution Bandwidth (RBW): 1 MHz
- Video Bandwidth (VBW): 3 MHz
- Trace: Average, RMS power averaging mode
- Sweeps: at least 100
- Sweptime: Auto
- Detector: RMS
- Trigger: free run (DC >98 %) or gated mode (DC < 98 %)

Note:

The analyser settings are according FCC Public Note "Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E, 789033 D02", method **SA-1**.





Attenuation of measurement path

5.5.2 TEST REQUIREMENTS / LIMITS

A) FCC

FCC Part 15, Subpart E, §15.407 (a) (1)

For systems using digital modulation techniques in the 5.15 – 5.25 GHz bands:

(i) and (ii), outdoor and indoor access points: Limit: 17 dBm/MHz.

(iv), mobile and portable client devices: Limit: 11 dBm/MHz.

FCC Part 15, Subpart E, §15.407 (a) (2)

For systems using digital modulation techniques in the 5.25 – 5.35 GHz and 5.47 – 5.725 GHz bands:

Limit: 11 dBm/MHz.

FCC Part 15, Subpart E, §15.407 (a) (3)

For systems using digital modulation techniques in the 5.725 – 5.850 GHz bands:

Limit: 30 dBm/500 kHz.

FCC Part 15, Subpart E, §15.407 (a) (4):

For a standard power access point and fixed client devices in the 5.925 – 6.425 GHz and 6.525 – 6.875 GHz bands:

Limit: 23 dBm/MHz e.i.r.p.

FCC Part 15, Subpart E, §15.407 (a) (5):

For an indoor access point in the 5.925 – 7.125 GHz bands:

Limit: 5 dBm/MHz e.i.r.p.

FCC Part 15, Subpart E, §15.407 (a) (6):

For a subordinate device operating under an indoor access point in the 5.925 – 7.125 GHz bands:

Limit: 5 dBm/MHz e.i.r.p.

FCC Part 15, Subpart E, §15.407 (a) (7):

For a client device, except for fixed client devices, operating under standard power access point in the 5.925-6.425 GHz and 6.525-6.875 GHz bands:
Limit: 17 dBm/MHz e.i.r.p.

FCC Part 15, Subpart E, §15.407 (a) (8):

For client devices operating under the control of an indoor access point in the 5.925 – 7.125 GHz bands:
Limit: -1 dBm/MHz e.i.r.p.

B) IC

Different frequency bands and limits apply, as compared to the FCC requirements.

RSS-247, 6.2.1 (1), Band 5150-5250 MHz, indoor operation only:
Limit (e.i.r.p.): 10 dBm/MHz.

RSS-247, 6.2.2 (1), Band 5250-5350 MHz:
Limit: 11 dBm/MHz.

RSS-247, 6.2.3 (1), Bands 5470-5600 MHz and 5650-5725 MHz:
Limit: 11 dBm/MHz.

RSS-247, 6.2.4 (1), Band 5725-5850 MHz:
Limit: 30 dBm/500 kHz.

5.5.3 TEST PROTOCOL

Ambient temperature: 23 - 26°C
 Air Pressure: 991-1023 hPa
 Humidity: 40 - 60%
 WLAN a-Mode; 20 MHz; 6 Mbit/s

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5260	7.6	15.6	9.0	1.4	11.0	3.4	N/A	-
	<= 8 dBi	5280	7.7	15.7	9.0	1.3	11.0	3.3	N/A	-
	<= 8 dBi	5320	7.4	15.4	9.0	1.6	11.0	3.6	N/A	-
2C	<= 8 dBi	5500	7.1	15.1	9.0	1.9	11.0	3.9	N/A	-
	<= 8 dBi	5580	7.8	15.8	9.0	1.2	11.0	3.2	N/A	-
	<= 8 dBi	5700	7.9	15.9	9.0	1.1	11.0	3.1	N/A	-
2C+3	<= 8 dBi	5720	7.7	15.7	9.0	1.3	11.0	3.3	N/A	-

WLAN n-Mode; 20 MHz; MCS 0; SISO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5260	7.0	15.0	9.0	2.0	11.0	4.0	N/A	-
	<= 8 dBi	5280	7.1	15.1	9.0	1.9	11.0	3.9	N/A	-
	<= 8 dBi	5320	6.7	14.7	9.0	2.3	11.0	4.3	N/A	-
2C	<= 8 dBi	5500	6.4	14.4	9.0	2.6	11.0	4.6	N/A	-
	<= 8 dBi	5580	7.1	15.1	9.0	1.9	11.0	3.9	N/A	-
	<= 8 dBi	5700	7.2	15.2	9.0	1.8	11.0	3.8	N/A	-
2C+3	<= 8 dBi	5720	7.1	15.1	9.0	1.9	11.0	3.9	N/A	-

WLAN n-Mode; 40 MHz; MCS 0; SISO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5270	4.3	12.3	9.0	4.7	11.0	6.7	N/A	-
	<= 8 dBi	5310	4.4	12.4	9.0	4.6	11.0	6.6	N/A	-
2C	<= 8 dBi	5510	4.6	12.6	9.0	4.4	11.0	6.4	N/A	-
	<= 8 dBi	5550	4.8	12.8	9.0	4.2	11.0	6.2	N/A	-
	<= 8 dBi	5670	4.8	12.8	9.0	4.2	11.0	6.2	N/A	-
2C+3	<= 8 dBi	5710	4.8	12.8	9.0	4.2	11.0	6.2	N/A	-

WLAN ac-Mode; 20 MHz; MCS 0; SISO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5260	7.0	15.0	9.0	2.0	11.0	4.0	N/A	-
	<= 8 dBi	5280	7.0	15.0	9.0	2.0	11.0	4.0	N/A	-
	<= 8 dBi	5320	6.7	14.7	9.0	2.3	11.0	4.3	N/A	-
2C	<= 8 dBi	5500	6.3	14.3	9.0	2.7	11.0	4.7	N/A	-
	<= 8 dBi	5580	7.1	15.1	9.0	1.9	11.0	3.9	N/A	-
	<= 8 dBi	5700	7.3	15.3	9.0	1.7	11.0	3.7	N/A	-
2C+3	<= 8 dBi	5720	7.2	15.2	9.0	1.8	11.0	3.8	N/A	-

WLAN ac-Mode; 40 MHz; MCS 0; SISO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5270	4.4	12.4	9.0	4.6	11.0	6.6	N/A	-
	<= 8 dBi	5310	4.5	12.5	9.0	4.5	11.0	6.5	N/A	-
2C	<= 8 dBi	5510	4.7	12.7	9.0	4.3	11.0	6.3	N/A	-
	<= 8 dBi	5550	4.8	12.8	9.0	4.2	11.0	6.2	N/A	-
2C+3	<= 8 dBi	5670	4.9	12.9	9.0	4.1	11.0	6.1	N/A	-
	<= 8 dBi	5710	4.9	12.9	9.0	4.1	11.0	6.1	N/A	-

WLAN ax-Mode; 20 MHz; MCS 0; SISO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5260	6.4	14.4	9.0	2.6	11.0	4.6	N/A	-
	<= 8 dBi	5280	6.4	14.4	9.0	2.6	11.0	4.6	N/A	-
	<= 8 dBi	5320	6.1	14.1	9.0	2.9	11.0	4.9	N/A	-
2C	<= 8 dBi	5500	5.7	13.7	9.0	3.3	11.0	5.3	N/A	-
	<= 8 dBi	5580	6.4	14.4	9.0	2.6	11.0	4.6	N/A	-
	<= 8 dBi	5700	6.5	14.5	9.0	2.5	11.0	4.5	N/A	-
2C+3	<= 8 dBi	5720	6.3	14.3	9.0	2.7	11.0	4.7	N/A	-

WLAN ax-Mode; 40 MHz; MCS 0; SISO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5270	3.5	11.5	9.0	5.5	11.0	7.5	N/A	-
	<= 8 dBi	5310	3.6	11.6	9.0	5.4	11.0	7.4	N/A	-
2C	<= 8 dBi	5510	3.9	11.9	9.0	5.1	11.0	7.1	N/A	-
	<= 8 dBi	5550	3.9	11.9	9.0	5.1	11.0	7.1	N/A	-
2C+3	<= 8 dBi	5670	3.7	11.7	9.0	5.3	11.0	7.3	N/A	-
	<= 8 dBi	5710	3.7	11.7	9.0	5.3	11.0	7.3	N/A	-

WLAN a-Mode; 20 MHz; 6 Mbit/s; Diversity

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5260	8.5	16.5	9.0	0.5	11.0	2.5	N/A	-
	<= 8 dBi	5280	8.3	16.3	9.0	0.7	11.0	2.7	N/A	-
	<= 8 dBi	5320	8.3	16.3	9.0	0.7	11.0	2.7	N/A	-
2C	<= 8 dBi	5500	8.5	16.5	9.0	0.5	11.0	2.5	N/A	-
	<= 8 dBi	5580	9.0	17.0	9.0	0.0	11.0	2.0	N/A	-
	<= 8 dBi	5700	8.7	16.7	9.0	0.3	11.0	2.3	N/A	-
2C+3	<= 8 dBi	5720	8.9	16.9	9.0	0.1	11.0	2.1	N/A	-

WLAN n-Mode; 20 MHz; MCS 8; MIMO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5260	7.9	15.9	9.0	1.1	11.0	3.1	N/A	-
	<= 8 dBi	5280	7.9	15.9	9.0	1.1	11.0	3.1	N/A	-
	<= 8 dBi	5320	7.8	15.8	9.0	1.2	11.0	3.2	N/A	-
2C	<= 8 dBi	5500	7.8	15.8	9.0	1.2	11.0	3.2	N/A	-
	<= 8 dBi	5580	8.5	16.5	9.0	0.5	11.0	2.5	N/A	-
	<= 8 dBi	5700	8.0	16.0	9.0	1.0	11.0	3.0	N/A	-
2C+3	<= 8 dBi	5720	8.9	16.9	9.0	0.1	11.0	2.1	N/A	-

WLAN n-Mode; 40 MHz; MCS 8; MIMO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5270	6.3	14.3	9.0	2.7	11.0	4.7	N/A	-
	<= 8 dBi	5310	5.7	13.7	9.0	3.3	11.0	5.3	N/A	-
2C	<= 8 dBi	5510	5.6	13.6	9.0	3.4	11.0	5.4	N/A	-
	<= 8 dBi	5550	6.3	14.3	9.0	2.7	11.0	4.7	N/A	-
	<= 8 dBi	5670	5.8	13.8	9.0	3.2	11.0	5.2	N/A	-
2C+3	<= 8 dBi	5710	6.2	14.2	9.0	2.8	11.0	4.8	N/A	-

WLAN ac-Mode; 20 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5260	7.8	15.8	9.0	1.2	11.0	3.2	N/A	-
	<= 8 dBi	5280	7.9	15.9	9.0	1.1	11.0	3.1	N/A	-
	<= 8 dBi	5320	7.9	15.9	9.0	1.1	11.0	3.1	N/A	-
2C	<= 8 dBi	5500	8.0	16.0	9.0	1.0	11.0	3.0	N/A	-
	<= 8 dBi	5580	8.5	16.5	9.0	0.5	11.0	2.5	N/A	-
	<= 8 dBi	5700	8.2	16.2	9.0	0.8	11.0	2.8	N/A	-
2C+3	<= 8 dBi	5720	8.0	16.0	9.0	1.0	11.0	3.0	N/A	-

WLAN ac-Mode; 40 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5270	5.9	13.9	9.0	3.1	11.0	5.1	N/A	-
	<= 8 dBi	5310	5.6	13.6	9.0	3.4	11.0	5.4	N/A	-
2C	<= 8 dBi	5510	5.5	13.5	9.0	3.5	11.0	5.5	N/A	-
	<= 8 dBi	5550	6.2	14.2	9.0	2.8	11.0	4.8	N/A	-
	<= 8 dBi	5670	5.7	13.7	9.0	3.3	11.0	5.3	N/A	-
2C+3	<= 8 dBi	5710	6.3	14.3	9.0	2.7	11.0	4.7	N/A	-

WLAN ax-Mode; 20 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5260	7.3	15.3	9.0	1.7	11.0	3.7	N/A	-
	<= 8 dBi	5280	7.4	15.4	9.0	1.6	11.0	3.6	N/A	-
	<= 8 dBi	5320	7.3	15.3	9.0	1.7	11.0	3.7	N/A	-
2C	<= 8 dBi	5500	7.5	15.5	9.0	1.5	11.0	3.5	N/A	-
	<= 8 dBi	5580	7.9	15.9	9.0	1.1	11.0	3.1	N/A	-
	<= 8 dBi	5700	7.6	15.6	9.0	1.4	11.0	3.4	N/A	-
2C+3	<= 8 dBi	5720	7.5	15.5	9.0	1.5	11.0	3.5	N/A	-

WLAN ax-Mode; 40 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 8 dBi	5270	5.5	13.5	9.0	3.5	11.0	5.5	N/A	-
	<= 8 dBi	5310	4.9	12.9	9.0	4.1	11.0	6.1	N/A	-
2C	<= 8 dBi	5510	4.9	12.9	9.0	4.1	11.0	6.1	N/A	-
	<= 8 dBi	5550	5.4	13.4	9.0	3.6	11.0	5.6	N/A	-
	<= 8 dBi	5670	5.2	13.2	9.0	3.8	11.0	5.8	N/A	-
2C+3	<= 8 dBi	5710	5.5	13.5	9.0	3.5	11.0	5.5	N/A	-

WLAN a-Mode; 20 MHz; 6 Mbit/s

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5260	7.6	16.6	8.0	0.4	11.0	3.4	N/A	-
	<= 9 dBi	5280	7.7	16.7	8.0	0.3	11.0	3.3	N/A	-
	<= 9 dBi	5320	7.4	16.4	8.0	0.6	11.0	3.6	N/A	-
2C	<= 9 dBi	5500	7.1	16.1	8.0	0.9	11.0	3.9	N/A	-
	<= 9 dBi	5580	7.8	16.8	8.0	0.2	11.0	3.2	N/A	-
	<= 9 dBi	5700	7.9	16.9	8.0	0.1	11.0	3.1	N/A	-
2C+3	<= 9 dBi	5720	7.7	16.7	8.0	0.3	11.0	3.3	N/A	-

WLAN n-Mode; 20 MHz; MCS 0; SISO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5260	7.0	16.0	8.0	1.0	11.0	4.0	N/A	-
	<= 9 dBi	5280	7.1	16.1	8.0	0.9	11.0	3.9	N/A	-
	<= 9 dBi	5320	6.7	15.7	8.0	1.3	11.0	4.3	N/A	-
2C	<= 9 dBi	5500	6.4	15.4	8.0	1.6	11.0	4.6	N/A	-
	<= 9 dBi	5580	7.1	16.1	8.0	0.9	11.0	3.9	N/A	-
	<= 9 dBi	5700	7.2	16.2	8.0	0.8	11.0	3.8	N/A	-
2C+3	<= 9 dBi	5720	7.1	16.1	8.0	0.9	11.0	3.9	N/A	-

WLAN n-Mode; 40 MHz; MCS 0; SISO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5270	0.4	9.4	8.0	7.6	11.0	10.6	N/A	-
	<= 9 dBi	5310	0.5	9.5	8.0	7.5	11.0	10.5	N/A	-
2C	<= 9 dBi	5510	2.0	11.0	8.0	6.0	11.0	9.0	N/A	-
	<= 9 dBi	5550	1.9	10.9	8.0	6.1	11.0	9.1	N/A	-
2C+3	<= 9 dBi	5670	2.5	11.5	8.0	5.5	11.0	8.5	N/A	-
	<= 9 dBi	5710	2.4	11.4	8.0	5.6	11.0	8.6	N/A	-

WLAN ac-Mode; 20 MHz; MCS 0; SISO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5260	7.0	16.0	8.0	1.0	11.0	4.0	N/A	-
	<= 9 dBi	5280	7.0	16.0	8.0	1.0	11.0	4.0	N/A	-
2C	<= 9 dBi	5320	6.7	15.7	8.0	1.3	11.0	4.3	N/A	-
	<= 9 dBi	5500	6.3	15.3	8.0	1.7	11.0	4.7	N/A	-
2C+3	<= 9 dBi	5580	7.1	16.1	8.0	0.9	11.0	3.9	N/A	-
	<= 9 dBi	5700	7.3	16.3	8.0	0.7	11.0	3.7	N/A	-

WLAN ac-Mode; 40 MHz; MCS 0; SISO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5270	0.2	9.2	8.0	7.8	11.0	10.8	N/A	-
	<= 9 dBi	5310	0.4	9.4	8.0	7.6	11.0	10.6	N/A	-
2C	<= 9 dBi	5510	1.9	10.9	8.0	6.1	11.0	9.1	N/A	-
	<= 9 dBi	5550	1.8	10.8	8.0	6.2	11.0	9.2	N/A	-
2C+3	<= 9 dBi	5670	2.4	11.4	8.0	5.6	11.0	8.6	N/A	-
	<= 9 dBi	5710	2.4	11.4	8.0	5.6	11.0	8.6	N/A	-

WLAN ax-Mode; 20 MHz; MCS 0; SISO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5260	6.4	15.4	8.0	1.6	11.0	4.6	N/A	-
	<= 9 dBi	5280	6.4	15.4	8.0	1.6	11.0	4.6	N/A	-
2C	<= 9 dBi	5320	6.1	15.1	8.0	1.9	11.0	4.9	N/A	-
	<= 9 dBi	5500	5.7	14.7	8.0	2.3	11.0	5.3	N/A	-
2C+3	<= 9 dBi	5580	6.4	15.4	8.0	1.6	11.0	4.6	N/A	-
	<= 9 dBi	5700	6.5	15.5	8.0	1.5	11.0	4.5	N/A	-

WLAN ax-Mode; 40 MHz; MCS 0; SISO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5270	-0.6	8.5	8.0	8.6	11.0	11.6	N/A	-
	<= 9 dBi	5310	-0.4	8.6	8.0	8.4	11.0	11.4	N/A	-
2C	<= 9 dBi	5510	1.0	10.0	8.0	7.0	11.0	10.0	N/A	-
	<= 9 dBi	5550	0.9	9.9	8.0	7.1	11.0	10.1	N/A	-
2C+3	<= 9 dBi	5670	1.6	10.6	8.0	6.4	11.0	9.4	N/A	-
	<= 9 dBi	5710	1.4	10.4	8.0	6.6	11.0	9.6	N/A	-

WLAN a-Mode; 20 MHz; 6 Mbit/s; Diversity

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5260	7.7	16.7	8.0	0.3	11.0	3.3	N/A	-
	<= 9 dBi	5280	7.5	16.5	8.0	0.5	11.0	3.5	N/A	-
	<= 9 dBi	5320	7.6	16.6	8.0	0.4	11.0	3.4	N/A	-
2C	<= 9 dBi	5500	7.8	16.8	8.0	0.2	11.0	3.2	N/A	-
	<= 9 dBi	5580	8.0	17.0	8.0	0.0	11.0	3.0	N/A	-
	<= 9 dBi	5700	7.7	16.7	8.0	0.3	11.0	3.3	N/A	-
2C+3	<= 9 dBi	5720	7.2	16.2	8.0	0.8	11.0	3.8	N/A	-

WLAN n-Mode; 20 MHz; MCS 8; MIMO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5260	7.1	16.1	8.0	0.9	11.0	3.9	N/A	-
	<= 9 dBi	5280	6.9	15.9	8.0	1.1	11.0	4.1	N/A	-
	<= 9 dBi	5320	7.0	16.0	8.0	1.0	11.0	4.0	N/A	-
2C	<= 9 dBi	5500	7.2	16.2	8.0	0.8	11.0	3.8	N/A	-
	<= 9 dBi	5580	7.5	16.5	8.0	0.5	11.0	3.5	N/A	-
	<= 9 dBi	5700	7.1	16.1	8.0	0.9	11.0	3.9	N/A	-
2C+3	<= 9 dBi	5720	6.9	15.9	8.0	1.1	11.0	4.1	N/A	-

WLAN n-Mode; 40 MHz; MCS 8; MIMO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5270	2.0	11.0	8.0	6.0	11.0	9.0	N/A	-
	<= 9 dBi	5310	1.5	10.5	8.0	6.5	11.0	9.5	N/A	-
2C	<= 9 dBi	5510	1.9	10.9	8.0	6.1	11.0	9.1	N/A	-
	<= 9 dBi	5550	2.3	11.3	8.0	5.7	11.0	8.7	N/A	-
	<= 9 dBi	5670	2.3	11.3	8.0	5.7	11.0	8.7	N/A	-
2C+3	<= 9 dBi	5710	2.7	11.7	8.0	5.3	11.0	8.3	N/A	-

WLAN ac-Mode; 20 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5260	7.2	16.2	8.0	0.8	11.0	3.8	N/A	-
	<= 9 dBi	5280	6.8	15.8	8.0	1.2	11.0	4.2	N/A	-
	<= 9 dBi	5320	6.7	15.7	8.0	1.3	11.0	4.3	N/A	-
2C	<= 9 dBi	5500	7.2	16.2	8.0	0.8	11.0	3.8	N/A	-
	<= 9 dBi	5580	7.4	16.4	8.0	0.6	11.0	3.6	N/A	-
	<= 9 dBi	5700	7.1	16.1	8.0	0.9	11.0	3.9	N/A	-
2C+3	<= 9 dBi	5720	6.8	15.8	8.0	1.2	11.0	4.2	N/A	-

WLAN ac-Mode; 40 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5270	2.1	11.1	8.0	5.9	11.0	8.9	N/A	-
	<= 9 dBi	5310	1.6	10.6	8.0	6.4	11.0	9.4	N/A	-
2C	<= 9 dBi	5510	1.9	10.9	8.0	6.1	11.0	9.1	N/A	-
	<= 9 dBi	5550	2.4	11.4	8.0	5.6	11.0	8.6	N/A	-
	<= 9 dBi	5670	2.3	11.3	8.0	5.7	11.0	8.7	N/A	-
2C+3	<= 9 dBi	5710	2.7	11.7	8.0	5.3	11.0	8.3	N/A	-

WLAN ax-Mode; 20 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5260	6.7	15.7	8.0	1.3	11.0	4.3	N/A	-
	<= 9 dBi	5280	6.4	15.4	8.0	1.6	11.0	4.6	N/A	-
	<= 9 dBi	5320	6.6	15.6	8.0	1.4	11.0	4.4	N/A	-
2C	<= 9 dBi	5500	6.7	15.7	8.0	1.3	11.0	4.3	N/A	-
	<= 9 dBi	5580	7.0	16.0	8.0	1.0	11.0	4.0	N/A	-
	<= 9 dBi	5700	6.8	15.8	8.0	1.2	11.0	4.2	N/A	-
2C+3	<= 9 dBi	5720	6.4	15.4	8.0	1.6	11.0	4.6	N/A	-

WLAN ax-Mode; 40 MHz; MCS 0; MIMO

U-NII band	Power Setting	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 9 dBi	5270	1.5	10.5	8.0	6.5	11.0	9.5	N/A	-
	<= 9 dBi	5310	0.9	9.9	8.0	7.1	11.0	10.1	N/A	-
2C	<= 9 dBi	5510	1.3	10.3	8.0	6.7	11.0	9.7	N/A	-
	<= 9 dBi	5550	1.7	10.7	8.0	6.3	11.0	9.3	N/A	-
	<= 9 dBi	5670	1.8	10.8	8.0	6.2	11.0	9.2	N/A	-
2C+3	<= 9 dBi	5710	2.0	11.0	8.0	6.0	11.0	9.0	N/A	-

WLAN a-Mode; 20 MHz; 6 Mbit/s

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5260	0.6	16.5	1.1	0.6	11.0	10.5	N/A	-
	<= 15.9 dBi	5300	0.2	16.1	1.1	0.9	11.0	10.8	N/A	-
	<= 15.9 dBi	5320	-0.3	15.6	1.1	1.4	11.0	11.3	N/A	-
2C	<= 16.0 dBi	5500	-0.7	15.3	1.0	1.7	11.0	11.7	N/A	-
	<= 16.0 dBi	5580	0.0	16.0	1.0	1.0	11.0	11.0	N/A	-
	<= 16.0 dBi	5700	-0.2	15.8	1.0	1.2	11.0	11.2	N/A	-
2C+3	<= 16.0 dBi	5720	-0.1	15.9	1.0	1.1	11.0	11.1	N/A	-

WLAN n-Mode; 20 MHz; MCS 0; SISO

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5260	0.1	16.0	1.1	1.0	11.0	10.9	N/A	-
	<= 15.9 dBi	5300	-0.1	15.8	1.1	1.2	11.0	11.1	N/A	-
	<= 15.9 dBi	5320	-0.4	15.5	1.1	1.5	11.0	11.4	N/A	-
2C	<= 16.0 dBi	5500	-1.1	14.9	1.0	2.1	11.0	12.1	N/A	-
	<= 16.0 dBi	5580	-0.3	15.7	1.0	1.3	11.0	11.3	N/A	-
	<= 16.0 dBi	5700	-0.5	15.5	1.0	1.5	11.0	11.5	N/A	-
2C+3	<= 16.0 dBi	5720	-0.5	15.5	1.0	1.5	11.0	11.5	N/A	-

WLAN n-Mode; 40 MHz; MCS 0; SISO

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5270	-5.9	10.0	1.1	7.0	11.0	16.9	N/A	-
	<= 15.9 dBi	5310	-6.1	9.8	1.1	7.2	11.0	17.1	N/A	-
2C	<= 16.0 dBi	5510	-6.3	9.7	1.0	7.3	11.0	17.3	N/A	-
	<= 16.0 dBi	5550	-6.1	9.9	1.0	7.1	11.0	17.1	N/A	-
2C+3	<= 16.0 dBi	5670	-5.7	10.3	1.0	6.7	11.0	16.7	N/A	-
	<= 16.0 dBi	5710	-5.9	10.1	1.0	6.9	11.0	16.9	N/A	-

WLAN ac-Mode; 20 MHz; MCS 0; SISO

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5260	0.2	16.1	1.1	0.9	11.0	10.8	N/A	-
	<= 15.9 dBi	5300	0.0	15.9	1.1	1.1	11.0	11.0	N/A	-
	<= 15.9 dBi	5320	-0.3	15.6	1.1	1.4	11.0	11.3	N/A	-
2C	<= 16.0 dBi	5500	-1.1	14.9	1.0	2.1	11.0	12.1	N/A	-
	<= 16.0 dBi	5580	-0.3	15.8	1.0	1.3	11.0	11.3	N/A	-
	<= 16.0 dBi	5700	-0.7	15.3	1.0	1.7	11.0	11.7	N/A	-
2C+3	<= 16.0 dBi	5720	-0.9	15.1	1.0	1.9	11.0	11.9	N/A	-

WLAN ac-Mode; 40 MHz; MCS 0; SISO

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5270	-6.0	9.9	1.1	7.1	11.0	17.0	N/A	-
	<= 15.9 dBi	5310	-6.2	9.7	1.1	7.3	11.0	17.2	N/A	-
2C	<= 16.0 dBi	5510	-6.4	9.6	1.0	7.4	11.0	17.4	N/A	-
	<= 16.0 dBi	5550	-6.3	9.7	1.0	7.3	11.0	17.3	N/A	-
2C+3	<= 16.0 dBi	5670	-5.7	10.3	1.0	6.7	11.0	16.7	N/A	-
	<= 16.0 dBi	5710	-5.8	10.2	1.0	6.8	11.0	16.8	N/A	-

WLAN ax-Mode; 20 MHz; MCS 0; SISO

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5260	-0.6	15.3	1.1	1.7	11.0	11.6	N/A	-
	<= 15.9 dBi	5300	-0.5	15.4	1.1	1.6	11.0	11.5	N/A	-
	<= 15.9 dBi	5320	-0.8	15.1	1.1	1.9	11.0	11.8	N/A	-
2C	<= 16.0 dBi	5500	-2.2	13.8	1.0	3.2	11.0	13.2	N/A	-
	<= 16.0 dBi	5580	-1.5	14.5	1.0	2.5	11.0	12.5	N/A	-
	<= 16.0 dBi	5700	-1.7	14.3	1.0	2.7	11.0	12.7	N/A	-
2C+3	<= 16.0 dBi	5720	-1.7	14.3	1.0	2.7	11.0	12.7	N/A	-

WLAN ax-Mode; 40 MHz; MCS 0; SISO

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5270	-6.7	9.2	1.1	7.8	11.0	17.7	N/A	-
	<= 15.9 dBi	5310	-7.0	8.9	1.1	8.1	11.0	18.0	N/A	-
2C	<= 16.0 dBi	5510	-7.2	8.8	1.0	8.2	11.0	18.2	N/A	-
	<= 16.0 dBi	5550	-7.1	8.9	1.0	8.1	11.0	18.1	N/A	-
	<= 16.0 dBi	5670	-6.6	9.4	1.0	7.6	11.0	17.6	N/A	-
2C+3	<= 16.0 dBi	5710	-6.7	9.3	1.0	7.7	11.0	17.7	N/A	-

WLAN a-Mode; 20 MHz; 6 Mbit/s; Diversity

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5260	0.8	16.7	1.1	0.3	11.0	10.2	N/A	-
	<= 15.9 dBi	5300	0.6	16.5	1.1	0.5	11.0	10.4	N/A	-
	<= 15.9 dBi	5320	0.6	16.5	1.1	0.5	11.0	10.4	N/A	-
2C	<= 16.0 dBi	5500	-0.1	15.9	1.0	1.1	11.0	11.1	N/A	-
	<= 16.0 dBi	5580	0.5	16.5	1.0	0.5	11.0	10.5	N/A	-
	<= 16.0 dBi	5700	0.8	16.8	1.0	0.2	11.0	10.2	N/A	-
2C+3	<= 16.0 dBi	5720	0.6	16.6	1.0	0.4	11.0	10.4	N/A	-

WLAN n-Mode; 20 MHz; MCS 8; MIMO

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5260	0.2	16.1	1.1	0.9	11.0	10.8	N/A	-
	<= 15.9 dBi	5300	0.1	16.0	1.1	1.0	11.0	10.9	N/A	-
	<= 15.9 dBi	5320	0.2	16.1	1.1	0.9	11.0	10.8	N/A	-
2C	<= 16.0 dBi	5500	-0.4	15.6	1.0	1.4	11.0	11.4	N/A	-
	<= 16.0 dBi	5580	0.3	16.3	1.0	0.7	11.0	10.7	N/A	-
	<= 16.0 dBi	5700	0.4	16.4	1.0	0.6	11.0	10.6	N/A	-
2C+3	<= 16.0 dBi	5720	0.1	16.1	1.0	0.9	11.0	10.9	N/A	-

WLAN n-Mode; 40 MHz; MCS 8; MIMO

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5270	-2.7	13.2	1.1	3.8	11.0	13.7	N/A	-
	<= 15.9 dBi	5310	-3.1	12.8	1.1	4.2	11.0	14.1	N/A	-
2C	<= 16.0 dBi	5510	-3.4	12.6	1.0	4.4	11.0	14.4	N/A	-
	<= 16.0 dBi	5550	-3.0	13.0	1.0	4.0	11.0	14.0	N/A	-
	<= 16.0 dBi	5670	-2.8	13.2	1.0	3.8	11.0	13.8	N/A	-
2C+3	<= 16.0 dBi	5710	-2.7	13.3	1.0	3.7	11.0	13.7	N/A	-

WLAN ac-Mode; 20 MHz; MCS 0; MIMO

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5260	0.1	16.0	1.1	1.0	11.0	10.9	N/A	-
	<= 15.9 dBi	5300	-0.1	15.8	1.1	1.2	11.0	11.1	N/A	-
	<= 15.9 dBi	5320	-0.3	15.6	1.1	1.4	11.0	11.3	N/A	-
2C	<= 16.0 dBi	5500	-0.4	15.6	1.0	1.4	11.0	11.4	N/A	-
	<= 16.0 dBi	5580	0.4	16.4	1.0	0.6	11.0	10.6	N/A	-
	<= 16.0 dBi	5700	0.5	16.5	1.0	0.5	11.0	10.5	N/A	-
2C+3	<= 16.0 dBi	5720	0.0	16.0	1.0	1.0	11.0	11.0	N/A	-

WLAN ac-Mode; 40 MHz; MCS 0; MIMO

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5270	-2.8	13.1	1.1	3.9	11.0	13.8	N/A	-
	<= 15.9 dBi	5310	-3.2	12.7	1.1	4.3	11.0	14.2	N/A	-
2C	<= 16.0 dBi	5510	-3.5	12.5	1.0	4.5	11.0	14.5	N/A	-
	<= 16.0 dBi	5550	-3.0	13.0	1.0	4.0	11.0	14.0	N/A	-
	<= 16.0 dBi	5670	-2.6	13.4	1.0	3.6	11.0	13.6	N/A	-
2C+3	<= 16.0 dBi	5710	0.5	16.5	1.0	0.5	11.0	10.5	N/A	-

WLAN ax-Mode; 20 MHz; MCS 0; MIMO

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5260	-0.1	15.8	1.1	1.2	11.0	11.1	N/A	-
	<= 15.9 dBi	5300	-0.2	15.7	1.1	1.3	11.0	11.2	N/A	-
	<= 15.9 dBi	5320	-0.3	15.6	1.1	1.4	11.0	11.3	N/A	-
2C	<= 16.0 dBi	5500	-0.8	15.2	1.0	1.8	11.0	11.8	N/A	-
	<= 16.0 dBi	5580	-0.1	15.9	1.0	1.1	11.0	11.1	N/A	-
	<= 16.0 dBi	5700	0.1	16.1	1.0	0.9	11.0	10.9	N/A	-
2C+3	<= 16.0 dBi	5720	-0.4	15.6	1.0	1.4	11.0	11.4	N/A	-

WLAN ax-Mode; 40 MHz; MCS 0; MIMO

U-NII-Band	Power	Freq. [MHz]	MPSD [dBm/MHz]	E.I.R.P MPSD [dBm/MHz]	FCC Limit [dBm/MHz]	Margin [dB]	ISED Limit [dBm/MHz]	Margin [dB]	ISED E.I.R.P limit [dBm/MHz]	Margin [dB]
2A	<= 15.9 dBi	5270	-3.2	12.7	1.1	4.3	11.0	14.2	N/A	-
	<= 15.9 dBi	5310	-3.7	12.2	1.1	4.8	11.0	14.7	N/A	-
2C	<= 16.0 dBi	5510	-4.0	12.0	1.0	5.0	11.0	15.0	N/A	-
	<= 16.0 dBi	5550	-3.6	12.4	1.0	4.6	11.0	14.6	N/A	-
	<= 16.0 dBi	5670	-3.4	12.6	1.0	4.4	11.0	14.4	N/A	-
2C+3	<= 16.0 dBi	5710	-3.1	12.9	1.0	4.1	11.0	14.1	N/A	-

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

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

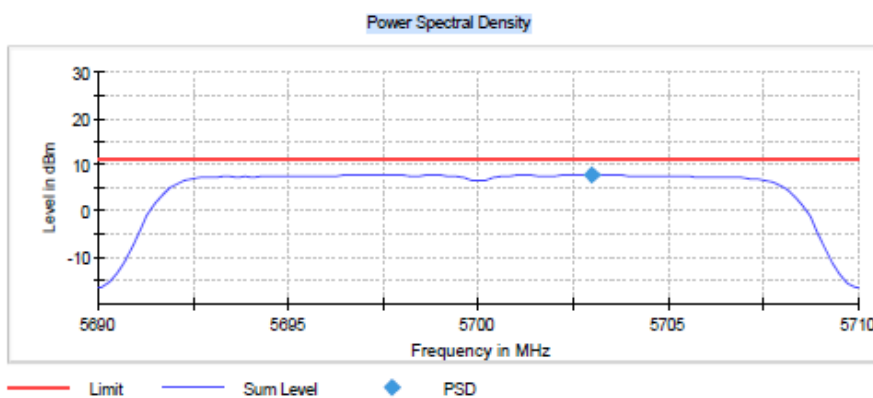
Power Setting ≤ 8 dBi

Radio Technology = WLAN a, Operating Frequency = high, Subband = U-NII-2C (S01_AD03)

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5700.000000	5702.970297	7.899	11.0	PASS

Ports

Port	State
1	used



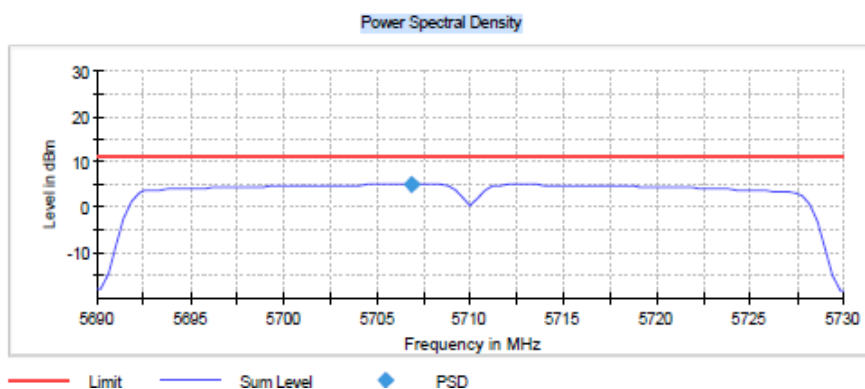
Setting	Instrument Value
Start Frequency	5.69000 GHz
Stop Frequency	5.71000 GHz
Span	20.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
SweepPoints	101
SweepTime	1.010 s
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	RMS
SweepCount	60
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamplifier	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	4 / max. 15
Stable	3 / 3
Max Stable Difference	0.02 dB

Radio Technology = WLAN ac 40 MHz, Operating Frequency = straddle, Subband = U-NII-2C + U-NII-3 (S01_AD03)

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5710.000000	5706.831683	4.936	11.0	PASS

Ports

Port	State
1	used



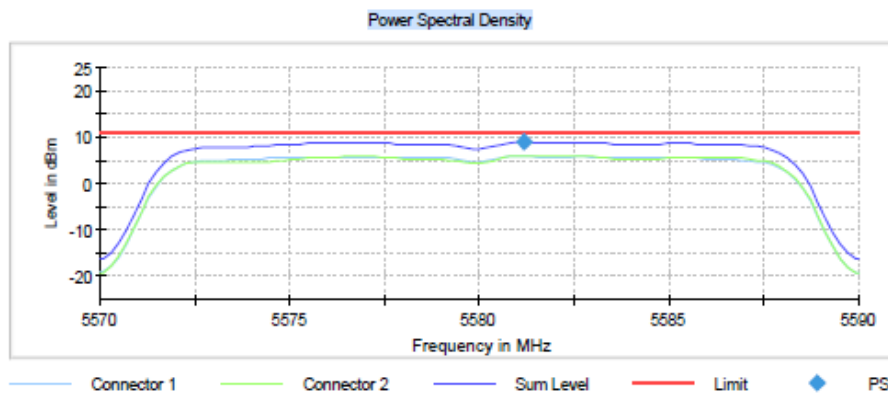
Setting	Instrument Value
Start Frequency	5.69000 GHz
Stop Frequency	5.73000 GHz
Span	40.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
SweepPoints	101
SweepTime	1.010 s
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	RMS
SweepCount	60
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamplifier	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	4 / max. 15
Stable	3 / 3
Max Stable Difference	0.04 dB

Radio Technology = WLAN a Diversity, Operating Frequency = mid, Subband = U-NII-2C (S01_AD03)

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5580.000000	5581.188119	8.959	11.0	PASS

Ports

Port	State
1	used
2	used



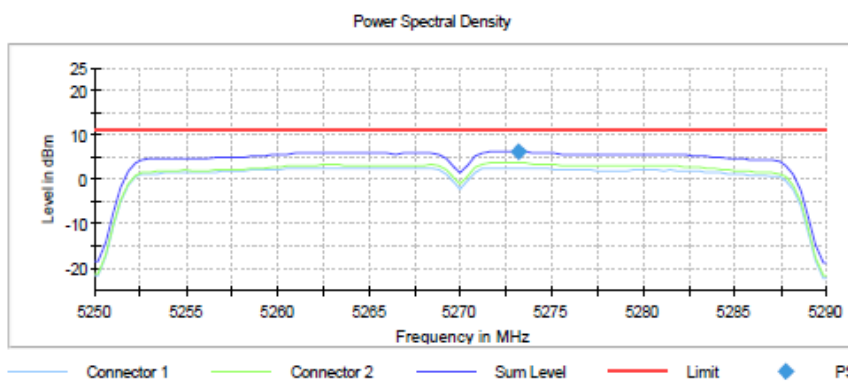
Setting	Instrument Value
Start Frequency	5.57000 GHz
Stop Frequency	5.59000 GHz
Span	20.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
SweepPoints	101
SweepTime	1.010 s
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	RMS
SweepCount	60
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	4 / max. 15
Stable	3 / 3
Max Stable Difference	0.01 dB

Radio Technology = WLAN n 40 MHz MIMO, Operating Frequency = low, Subband = U-NII-2A (S01_AD04)

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5270.000000	5273.168317	6.283	11.0	PASS

Ports

Port	State
1	used
2	used



Setting	Instrument Value
Start Frequency	5.25000 GHz
Stop Frequency	5.29000 GHz
Span	40.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
SweepPoints	101
SweepTime	1.010 s
Reference Level	10.000 dBm
Attenuation	30.000 dB
Detector	RMS
SweepCount	60
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	4 / max. 15
Stable	3 / 3
Max Stable Difference	0.16 dB

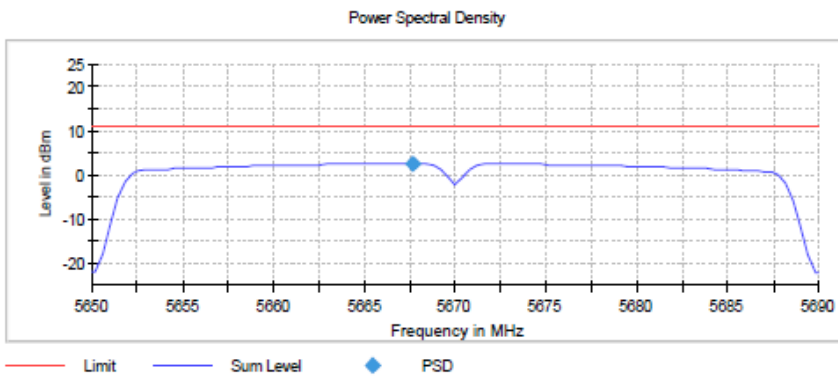
Power Setting ≤ 9 dBi

Radio Technology = WLAN n 40 MHz, Operating Frequency = high, Subband = U-NII-2C (S01_AF03)

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5670.000000	5667.623762	2.491	11.0	PASS

Ports

Port	State
1	used



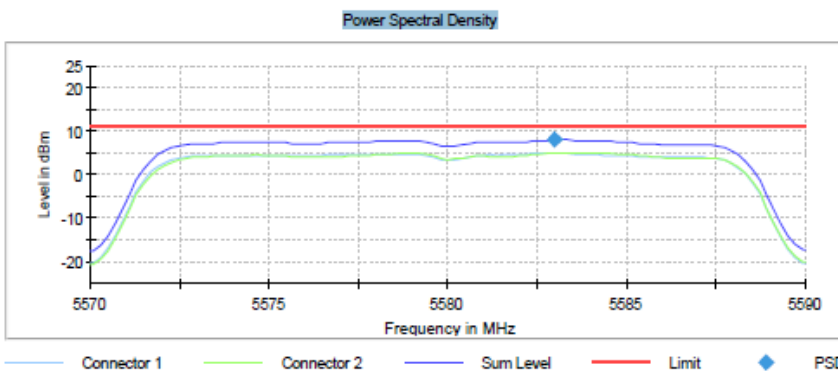
Setting	Instrument Value
Start Frequency	5.65000 GHz
Stop Frequency	5.69000 GHz
Span	40.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
SweepPoints	101
Sweptime	1.010 s
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	RMS
SweepCount	60
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	4 / max. 15
Stable	3 / 3
Max Stable Difference	0.00 dB

Radio Technology = WLAN a Diversity, Operating Frequency = mid, Subband = U-NII-2C (S01_AD03)

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5580.000000	5582.970297	8.025	11.0	PASS

Ports

Port	State
1	used
2	used



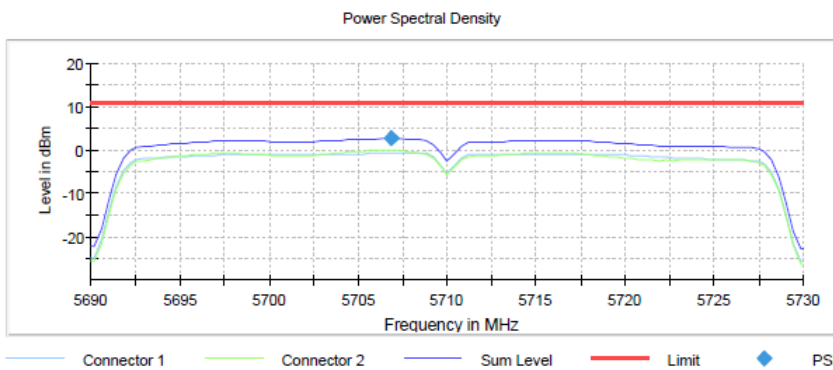
Setting	Instrument Value
Start Frequency	5.57000 GHz
Stop Frequency	5.59000 GHz
Span	20.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
SweepPoints	101
Sweptime	1.010 s
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	RMS
SweepCount	60
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	4 / max. 15
Stable	3 / 3
Max Stable Difference	0.00 dB

Radio Technology = WLAN ac 40 MHz MIMO, Operating Frequency = straddle, Subband = U-NII-2C + U-NII-3 (S01_AF03)

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5710.000000	5706.831683	2.703	11.0	PASS

Ports

Port	State
1	used
2	used



Setting	Instrument Value
Start Frequency	5.69000 GHz
Stop Frequency	5.73000 GHz
Span	40.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
SweepPoints	101
SweepTime	1.010 s
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	RMS
SweepCount	60
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	4 / max. 15
Stable	3 / 3
Max Stable Difference	0.06 dB

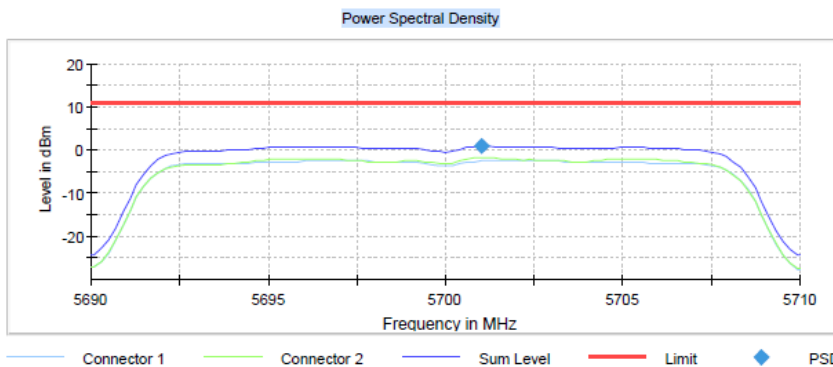
Power Setting ≤ 16 dBi

Radio Technology = WLAN a Diversity, Operating Frequency = high, Subband = U-NII-2C (S01_AF03)

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5700.000000	5700.990099	0.822	11.0	PASS

Ports

Port	State
1	used
2	used



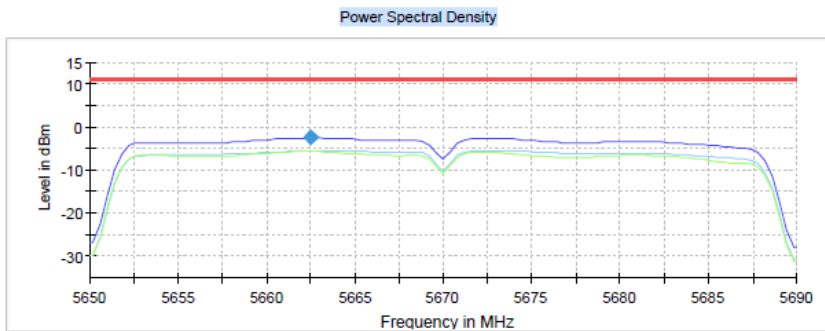
Setting	Instrument Value
Start Frequency	5.69000 GHz
Stop Frequency	5.71000 GHz
Span	20.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
SweepPoints	101
SweepTime	1.010 s
Reference Level	0.000 dBm
Attenuation	20.000 dB
Detector	RMS
SweepCount	60
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	4 / max. 15
Stable	3 / 3
Max Stable Difference	0.07 dB

Radio Technology = WLAN ac 40 MHz MIMO, Operating Frequency = high, Subband = U-NII-2C (S01_AF03)

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5670.000000	5662.475248	-2.636	11.0	PASS

Ports

Port	State
1	used
2	used



Setting	Instrument Value
Start Frequency	5.65000 GHz
Stop Frequency	5.69000 GHz
Span	40.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
SweepPoints	101
Sweptime	1.010 s
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	RMS
SweepCount	60
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	4 / max. 15
Stable	3 / 3
Max Stable Difference	0.02 dB

5.5.5 TEST EQUIPMENT USED

- R&S TS8997

5.6 UNDESIRABLE EMISSIONS; GENERAL FIELD STRENGTH LIMITS

Standard **FCC Part 15 Subpart E**

The test was performed according to:

ANSI C63.10, chapter 6.4, 6.5, 6.6.5

5.6.1 TEST DESCRIPTION

The test set-up was made in accordance to the general provisions of ANSI C63.10 in a typical installation configuration. The measurements were performed according the following sub-chapters of ANSI C63.10:

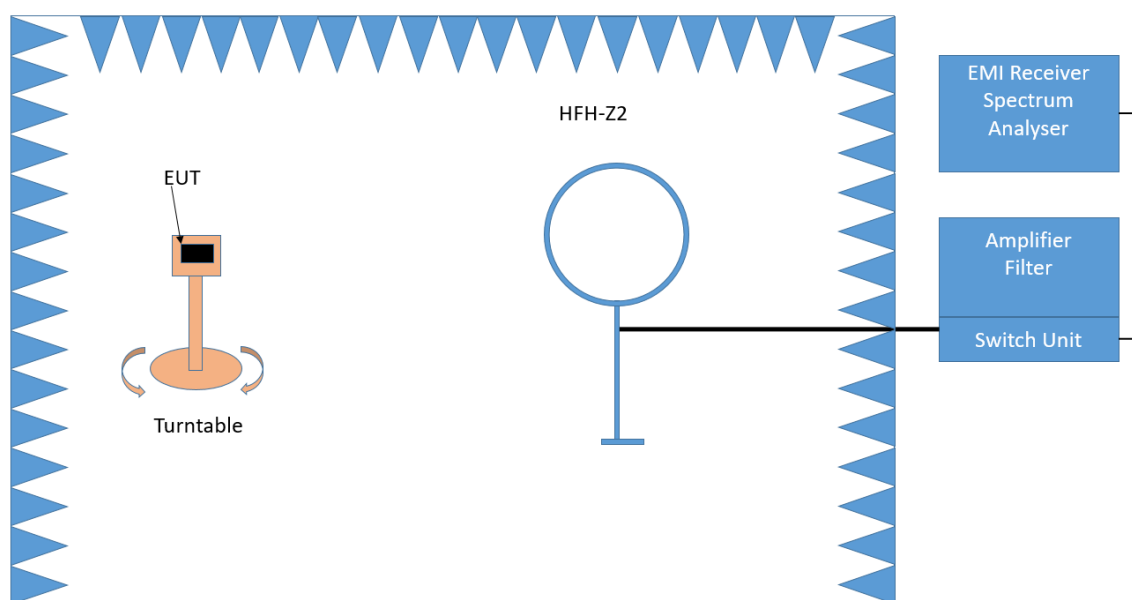
- < 30 MHz: Chapter 6.4
- 30 MHz – 1 GHz: Chapter 6.5
- > 1 GHz: Chapter 6.6 (procedure according 6.6.5 used)

The measurement procedure is implemented into the EMI test software EMC32 from R&S. Exploratory tests are performed at 3 orthogonal axes to determine the worst-case orientation of a body-worn or handheld EUT. The final test on all kind of EUTs is also performed at 3 axes. A pre-check is performed while the EUT is powered.

Below 1 GHz:

The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The influence of the EUT support table that is used between 30–1000 MHz was evaluated.

1. Measurement up to 30 MHz



Test Setup; Spurious Emission Radiated (SAC), 9 kHz – 30 MHz

The Loop antenna HFH2-Z2 is used.

Step 1: pre measurement

- Anechoic chamber

- Antenna distance: 3 m
- Detector: Peak-Maxhold
- Frequency range: 0.009 - 0.15 MHz and 0.15 - 30 MHz
- Frequency steps: 0.05 kHz and 2.25 kHz
- IF-Bandwidth: 0.2 kHz and 9 kHz
- Measuring time / Frequency step: 100 ms (FFT-based)

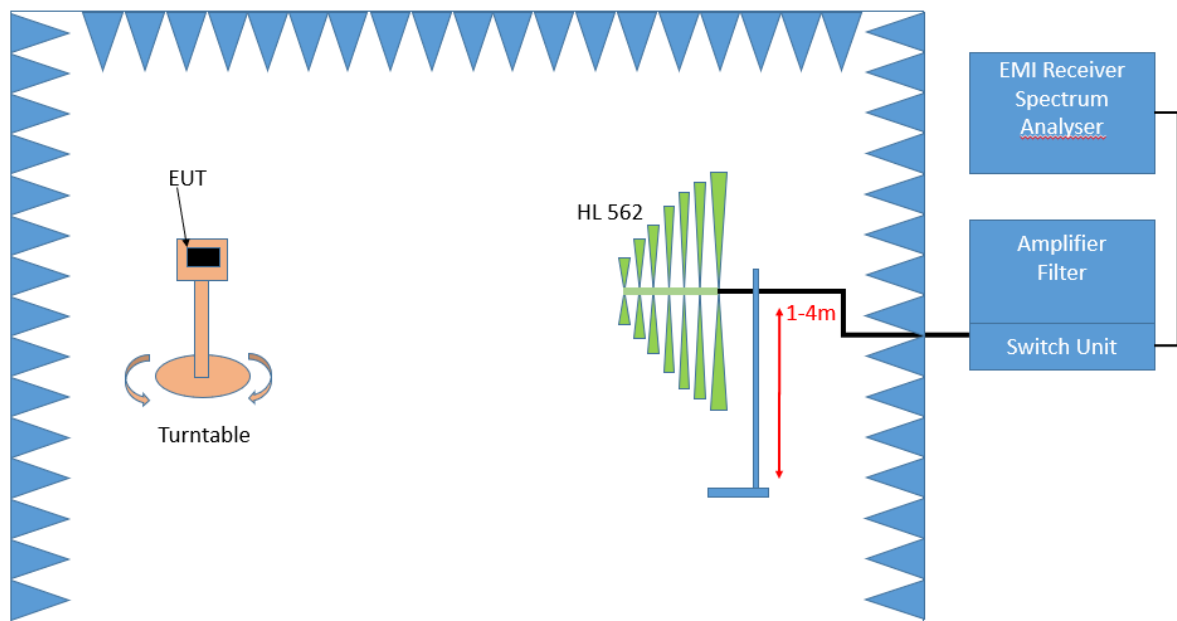
Intention of this step is, to determine the radiated EMI-profile of the EUT. Afterwards the relevant emissions for the final measurement are identified.

Step 2: final measurement

For the relevant emissions determined in step 1, an additional measurement with the following settings will be performed. Intention of this step is to find the maximum emission level.

- Open area test site
- Antenna distance: according to the Standard
- Detector: Quasi-Peak
- Frequency range: 0.009 - 30 MHz
- Frequency steps: measurement at frequencies detected in step 1
- IF-Bandwidth: 0.2 - 10 kHz
- Measuring time / Frequency step: 1 s

2. Measurement above 30 MHz and up to 1 GHz



Test Setup; Spurious Emission Radiated (SAC), 30 MHz- 1GHz

Step 1: Preliminary scan

This is a preliminary test to identify the highest amplitudes relative to the limit.

Settings for step 1:

- Antenna distance: 3 m
- Detector: Peak-Maxhold / Quasipeak (FFT-based)
- Frequency range: 30 - 1000 MHz
- Frequency steps: 30 kHz
- IF-Bandwidth: 120 kHz
- Measuring time / Frequency step: 100 ms
- Turntable angle range: -180° to 90°
- Turntable step size: 90°
- Height variation range: 1 - 4 m

- Height variation step size: 1.5 m
- Polarisation: Horizontal + Vertical

Intention of this step is, to determine the radiated EMI-profile of the EUT. Afterwards the relevant emissions for the final measurement are identified.

Step 2: Adjustment measurement

In this step the accuracy of the turntable azimuth and antenna height will be improved. This is necessary to find out the maximum value of every frequency.

For each frequency, which was determined the turntable azimuth and antenna height will be adjusted. The turntable azimuth will slowly vary by 360°. During this action, the value of emission is continuously measured. The turntable azimuth at the highest emission will be recorded and adjusted. In this position, the antenna height will also slowly vary by 1 – 4 meter. During this action, the value of emission is also continuously measured. The antenna height of the highest emission will also be recorded and adjusted.

- Detector: Peak – Maxhold
- Measured frequencies: in step 1 determined frequencies
- IF – Bandwidth: 120 kHz
- Measuring time: 100 ms
- Turntable angle range: 360 °
- Height variation range: 1 – 4 m
- Antenna Polarisation: max. value determined in step 1

Step 3: Final measurement with QP detector

With the settings determined in step 2, the final measurement will be performed:

EMI receiver settings for step 3:

- Detector: Quasi-Peak (< 1 GHz)
- Measured frequencies: in step 1 determined frequencies
- IF – Bandwidth: 120 kHz
- Measuring time: 1 s

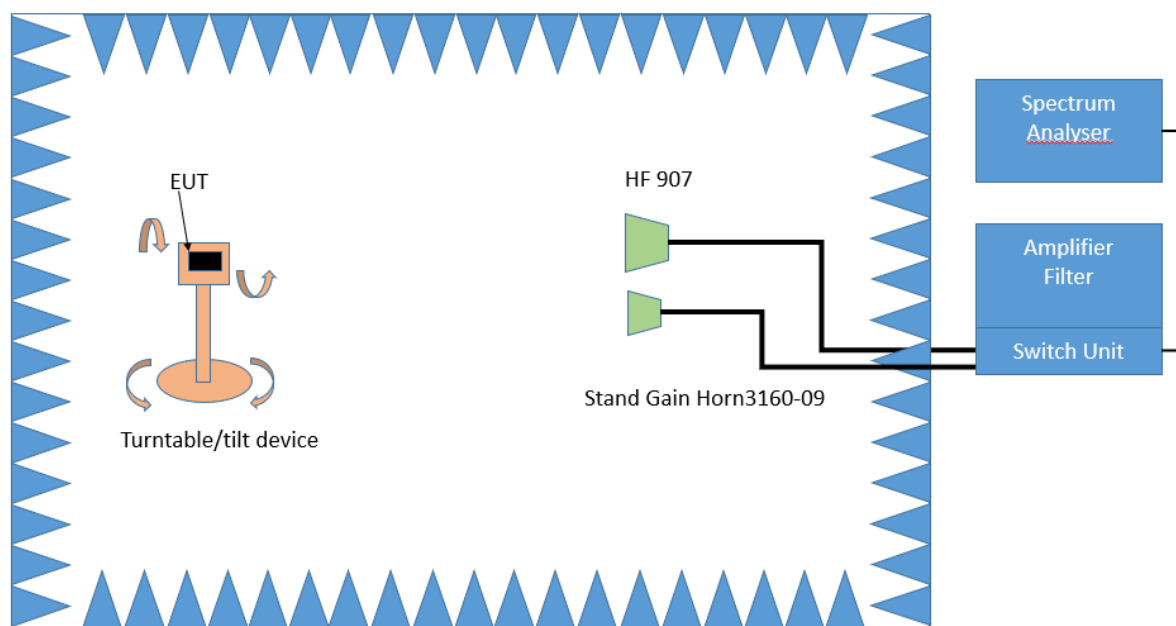
After the measurement a plot will be generated which contains a diagram with the results of the preliminary scan and a chart with the frequencies and values of the results of the final measurement.

Above 1 GHz:

The Equipment Under Test (EUT) was set up on a non-conductive support (tilt device) at 1.5 m height in the fully-anechoic chamber.

All steps were performed with one height (1.5 m) of the receiving antenna only.

3. Measurement 1 GHz up to 26.5 GHz



Test Setup; Spurious Emission Radiated (FAC), 1 GHz-26.5 GHz

Step 1:

The Equipment Under Test (EUT) was set up on a non-conductive support (tilt device) at 1.5 m height in the fully-anechoic chamber.

All steps were performed with one height (1.5 m) of the receiving antenna only.

The EUT is turned during the preliminary measurement across the elevation axis, with a step size of 90 °.

The turn table step size (azimuth angle) for the preliminary measurement is 45 °.

Step 2:

Due to the fact, that in this frequency range the test is performed in a fully anechoic room, the height scan of the receiving antenna instep 2 is omitted. Instead of this, a maximum search with a step size $\pm 45^\circ$ for the elevation axis is performed.

The turn table azimuth will slowly vary by $\pm 22.5^\circ$.

The elevation angle will slowly vary by $\pm 45^\circ$

EMI receiver settings (for all steps):

- Detector: Peak, Average
- IF Bandwidth = 1 MHz

Step 3:

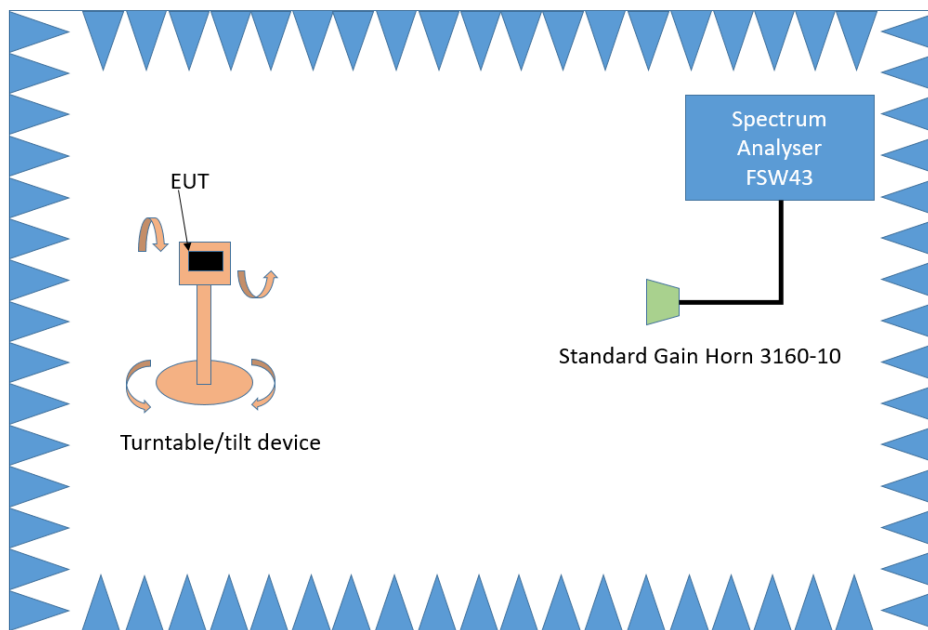
Spectrum analyser settings for step 3:

- Detector: Peak / Average
- Measured frequencies: in step 1 determined frequencies
- IF – Bandwidth: 1 MHz
- Measuring time: 1 s

4. Measurement above 26.5 GHz up to 40 GHz

The following modifications, compared to the frequency range 1 GHz – 26.5 GHz, apply to the measurement procedure for the frequency range above 26.5 GHz:

- Measurement distance: 1m



Test Setup; Spurious Emission Radiated (FAC), 26.5 – 40 GHz

5.6.2 TEST REQUIREMENTS / LIMITS

A) FCC

FCC Part 15 Subpart E, §15.407 (b)(1)

For transmitters operating in the 5150–5250 MHz band:

Limit: –27 dBm/MHz EIRP outside of the band 5150–5350 MHz.

FCC Part 15 Subpart E, §15.407 (b)(2)

For transmitters operating in the 5250–5350 MHz band:

Limit: –27 dBm/MHz EIRP outside of the band 5150–5350 MHz.

FCC Part 15 Subpart E, §15.407 (b)(3)

For transmitters operating in the 5470–5725 MHz band:

Limit: –27 dBm/MHz EIRP outside of the band 5470–5725 MHz.

FCC Part 15 Subpart E, §15.407 (b)(4)

For transmitters operating in the 5725–5850 MHz band:

Limit: –27 dBm/MHz at 75 MHz or more above or below the band edge
 increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge
 increasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edge
 increasing linearly to 27 dBm/MHz at the band edge.

FCC Part 15 Subpart E, §15.407 (b) (5)

For transmitters operating within the 5.925-7.125 GHz band:
Limit: -27 dBm/MHz EIRP outside of the band 5.925-7.125 GHz.

FCC Part 15 Subpart E, §15.407 (b) (6)

For transmitters operating within the 5.925-7.125 GHz bands:

Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

B) IC

Different frequency bands and limits apply, as compared to the FCC requirements.

RSS-247, 6.2.1.2, Emissions outside the band 5150-5250 MHz, indoor operation only:
Limit: -27 dBm/MHz EIRP outside of the band 5150-5250 MHz.

RSS-247, 6.2.2.2, Emissions outside the band 5250-5350 MHz:
Limit: -27 dBm/MHz EIRP outside of the band 5250-5350 MHz.

RSS-247, 6.2.3.2, Emissions outside the bands 5470-5600 MHz and 5650-5725 MHz:
Limit: -27 dBm/MHz EIRP outside of the band 5470-5725 MHz.
However, devices with bandwidth overlapping the band edge of 5725 MHz can meet the emission limit of -27 dBm/MHz e.i.r.p. at 5850 MHz instead of 5725 MHz.
Note: No operation is permitted for the frequency range 5600-5650 MHz.

RSS-247, 6.2.4.2, Emissions outside the band 5725-5850 MHz:

- a. 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 Bm/MHz at 5 MHz above or below the band edges;
- b. 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;
- c. 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and
- d. -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

C) FCC & IC

FCC Part 15 Subpart E, §15.405

The provisions of §§ 15.203 and 15.205 are included.

§15.407 (b)(6)

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209.

§15.407 (b)(7)

The provisions of §15.205 apply to intentional radiators operating under this section

FCC Part 15, Subpart C, §15.209, Radiated Emission Limits

Frequency in MHz	Limit ($\mu\text{V}/\text{m}$)	Measurement distance (m)	Limits ($\text{dB}\mu\text{V}/\text{m}$)
0.009 – 0.49	2400/F(kHz)@300m	3	(48.5 – 13.8)@300m
0.49 – 1.705	24000/F(kHz)@30m	3	(33.8 – 23.0)@30m
1.705 – 30	30@30m	3	29.5@30m

The measured values are corrected with an inverse linear distance extrapolation factor (40 dB/decade) according FCC 15.31 (2).

Frequency in MHz	Limit ($\mu\text{V}/\text{m}$)	Measurement distance (m)	Limits ($\text{dB}\mu\text{V}/\text{m}$)
30 – 88	100@3m	3	40.0@3m
88 – 216	150@3m	3	43.5@3m
216 – 960	200@3m	3	46.0@3m
960 – 26000	500@3m	3	54.0@3m
26000 – 40000	500@3m	1	54.0@3m

The measured values above 26 GHz are corrected with an inverse linear distance extrapolation factor (20 dB/decade).

§15.35(b) ..., there is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit....

Used conversion factor:

- Limit ($\text{dB}\mu\text{V}/\text{m}$) = $20 \log (\text{Limit } (\mu\text{V}/\text{m})/1\mu\text{V}/\text{m})$
- Limit ($\text{dB}\mu\text{V}/\text{m}$) = $\text{EIRP} [\text{dBm}] - 20 \log (d [\text{m}]) + 104.8$

Limit types (in result tables):

RB – Emissions falls into a "Restricted Band" according FCC §§15.205 and 15.209 *)

UE – "Undesirable Emission Limit" according FCC §15.407

BE-RB – Band Edge Limit basing on "Restricted Band Limits"

BE-UE – Band Edge Limit basing on "Undesirable Emission Limit"

*) Below 1 GHz the limits of §15.209 are applied for all frequencies.

5.6.3 TEST PROTOCOL

Ambient temperature: 22–26 °C
 Air Pressure: 991–1023 hPa
 Humidity: 37–57 %
 WLAN a-Mode; 20 MHz; 6 Mbit/s; Diversity
 Applied duty cycle correction (AV): 0.5 dB

Power Setting	Ch. Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBµV/m]	Detector	RBW [kHz]	Limit [dBµV/m]	Margin [dB]	Limit Type	RSE Level uncorrect. [dBµV/m]
<= 8 dBi	5260	1071.2	62.1	PEAK	1000	74.0	11.9	RB	62.1
<= 8 dBi	5260	1071.2	36.0	AV	1000	54.0	18.0	RB	35.5
<= 8 dBi	5280	885.6	33.5	QP	120	46.0	12.6	RB	33.45
<= 8 dBi	5280	1070.8	59.3	PEAK	1000	74.0	14.7	RB	59.3
<= 8 dBi	5280	1070.8	34.4	AV	1000	54.0	19.6	RB	33.9
<= 8 dBi	5320	1071.2	62.2	PEAK	1000	74.0	11.8	RB	62.2
<= 8 dBi	5320	1071.2	36.5	AV	1000	54.0	17.5	RB	36
<= 8 dBi	5500	1070.9	63.4	PEAK	1000	74.0	10.6	RB	63.4
<= 8 dBi	5500	1070.9	37.5	AV	1000	54.0	16.5	RB	37
<= 8 dBi	5500	1071.0	60.3	PEAK	1000	74.0	13.7	RB	60.3
<= 8 dBi	5500	1071.0	35.3	AV	1000	54.0	18.7	RB	34.8
<= 8 dBi	5580	855.7	29.3	QP	120	46.0	16.7	RB	29.3
<= 8 dBi	5580	990.3	40.4	QP	120	54.0	13.6	RB	40.4
<= 8 dBi	5580	1070.9	61.6	PEAK	1000	74.0	12.4	RB	61.6
<= 8 dBi	5580	1070.9	36.3	AV	1000	54.0	17.7	RB	35.8
<= 8 dBi	5580	1071.0	62.8	PEAK	1000	74.0	11.2	RB	62.8
<= 8 dBi	5580	1071.0	37.2	AV	1000	54.0	16.8	RB	36.7
<= 8 dBi	5580	1151.9	54.1	PEAK	1000	74.0	19.9	RB	54.1
<= 8 dBi	5580	1151.9	30.5	AV	1000	54.0	23.5	RB	30
<= 8 dBi	5580	12500.4	51.8	PEAK	1000	74.0	22.2	RB	51.8
<= 8 dBi	5580	12500.4	44.7	AV	1000	54.0	9.3	RB	44.2
<= 8 dBi	5580	12500.6	52.8	PEAK	1000	74.0	21.2	RB	52.8
<= 8 dBi	5580	12500.6	47.4	AV	1000	54.0	6.6	RB	46.9
<= 8 dBi	5700	1071.2	65.7	PEAK	1000	74.0	8.3	RB	65.7
<= 8 dBi	5700	1071.2	39.1	AV	1000	54.0	14.9	RB	38.6

WLAN n-Mode; 20 MHz; MCS 8; MIMO
 Applied duty cycle correction (AV): 0.5 dB

Power Setting	Ch. Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBµV/m]	Detector	RBW [kHz]	Limit [dBµV/m]	Margin [dB]	Limit Type	RSE Level uncorrect. [dBµV/m]
<= 8 dBi	5260	-	-	-	1000	-	-	-	-
<= 8 dBi	5280	-	-	-	1000	-	-	-	-
<= 8 dBi	5320	-	-	-	1000	-	-	-	-
<= 8 dBi	5500	-	-	-	1000	-	-	-	-
<= 8 dBi	5580	-	-	-	1000	-	-	-	-
<= 8 dBi	5700	-	-	-	1000	-	-	-	-

WLAN n-Mode; 40 MHz; MCS 8; MIMO
 Applied duty cycle correction (AV): 0.5 dB

Power Setting	Ch. Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBµV/m]	Detector	RBW [kHz]	Limit [dBµV/m]	Margin [dB]	Limit Type	RSE Level uncorrect. [dBµV/m]
<= 8 dBi	5270	-	-	-	1000	-	-	-	-
<= 8 dBi	5310	-	-	-	1000	-	-	-	-
<= 8 dBi	5510	-	-	-	1000	-	-	-	-
<= 8 dBi	5550	-	-	-	1000	-	-	-	-
<= 8 dBi	5670	-	-	-	1000	-	-	-	-

WLAN ac-Mode; 20 MHz; MCS 0; MIMO
Applied duty cycle correction (AV): 0.5 dB

Power Setting	Ch. Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBµV/m]	Detector	RBW [kHz]	Limit [dBµV/m]	Margin [dB]	Limit Type	RSE Level uncorrect. [dBµV/m]
<= 8 dBi	5260	-	-	-	1000	-	-	-	-
<= 8 dBi	5280	-	-	-	1000	-	-	-	-
<= 8 dBi	5320	-	-	-	1000	-	-	-	-
<= 8 dBi	5500	-	-	-	1000	-	-	-	-
<= 8 dBi	5580	-	-	-	1000	-	-	-	-
<= 8 dBi	5700	-	-	-	1000	-	-	-	-

WLAN ax-Mode; 20 MHz; MCS 0; MIMO
Applied duty cycle correction (AV): 0.5 dB

Power Setting	Ch. Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBµV/m]	Detector	RBW [kHz]	Limit [dBµV/m]	Margin [dB]	Limit Type	RSE Level uncorrect. [dBµV/m]
<= 8 dBi	5260	1070.7	50.8	PEAK	1000	74.0	23.2	RB	50.8
<= 8 dBi	5260	1070.7	26.9	AV	1000	54.0	27.1	RB	26.4
<= 8 dBi	5280	1069.8	53.5	PEAK	1000	74.0	20.5	RB	53.5
<= 8 dBi	5280	1069.8	30.9	AV	1000	54.0	23.1	RB	30.4
<= 8 dBi	5280	1963.3	51.9	PEAK	1000	68.2	16.3	UE	51.9
<= 8 dBi	5320	1070.6	52.9	PEAK	1000	74.0	21.1	RB	52.9
<= 8 dBi	5320	1070.6	29.8	AV	1000	54.0	24.2	RB	29.3
<= 8 dBi	5320	1964.7	21.8	PEAK	1000	68.2	46.4	UE	21.8
<= 8 dBi	5500	1070.9	54.3	PEAK	1000	74.0	19.7	RB	54.3
<= 8 dBi	5500	1070.9	32.4	AV	1000	54.0	21.6	RB	31.9
<= 8 dBi	5500	1963.8	51.3	PEAK	1000	68.2	16.9	UE	51.3
<= 8 dBi	5580	1070.9	57.7	PEAK	1000	74.0	16.3	RB	57.7
<= 8 dBi	5580	1070.9	33.9	AV	1000	54.0	20.1	RB	33.4
<= 8 dBi	5700	1071.2	65.0	PEAK	1000	74.0	9.0	RB	65
<= 8 dBi	5700	1071.2	38.7	AV	1000	54.0	15.3	RB	38.2

WLAN a-Mode; 20 MHz; 6 Mbit/s
Applied duty cycle correction (AV): 0.6 dB

Power Setting	Ch. Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBµV/m]	Detector	RBW [kHz]	Limit [dBµV/m]	Margin [dB]	Limit Type	RSE Level uncorrect. [dBµV/m]
<= 9 dBi	5260	-	-	-	-	-	-	-	-
<= 9 dBi	5280	-	-	-	-	-	-	-	-
<= 9 dBi	5320	-	-	-	-	-	-	-	-
<= 9 dBi	5500	-	-	-	-	-	-	-	-
<= 9 dBi	5580	-	-	-	-	-	-	-	-
<= 9 dBi	5700	-	-	-	-	-	-	-	-

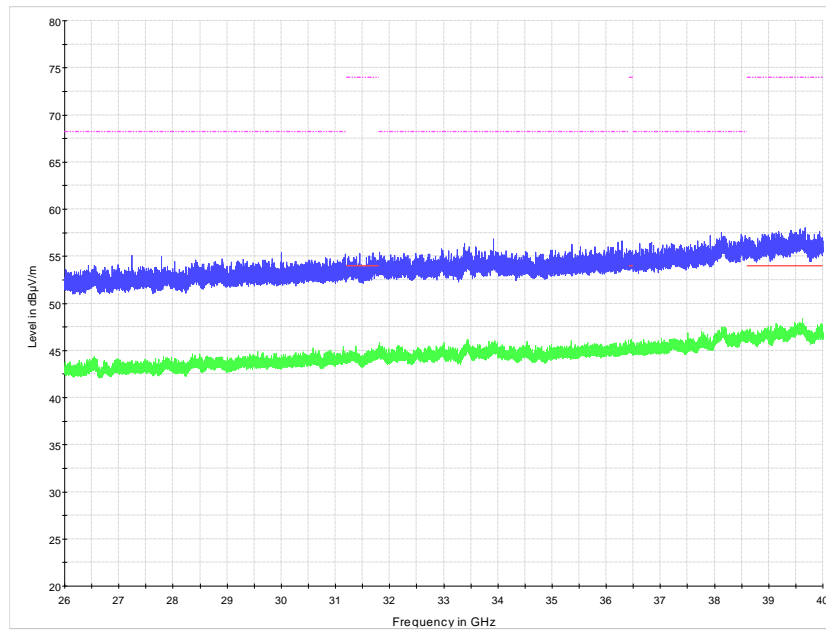
WLAN a-Mode; 20 MHz; 6 Mbit/s; Diversity
Applied duty cycle correction (AV): 0.5 dB

Power Setting	Ch. Center Freq. [MHz]	Spurious Freq. [MHz]	Spurious Level [dBµV/m]	Detector	RBW [kHz]	Limit [dBµV/m]	Margin [dB]	Limit Type	RSE Level uncorrect. [dBµV/m]
<= 15.9 dBi + 3 dB	5260	-	-	-	-	-	-	-	-
<= 15.9 dBi + 3 dB	5280	-	-	-	-	-	-	-	-
<= 15.9 dBi + 3 dB	5320	-	-	-	-	-	-	-	-
<= 16 dBi + 3 dB	5500	-	-	-	-	-	-	-	-
<= 16 dBi + 3 dB	5580	-	-	-	-	-	-	-	-
<= 16 dBi + 3 dB	5700	-	-	-	-	-	-	-	-

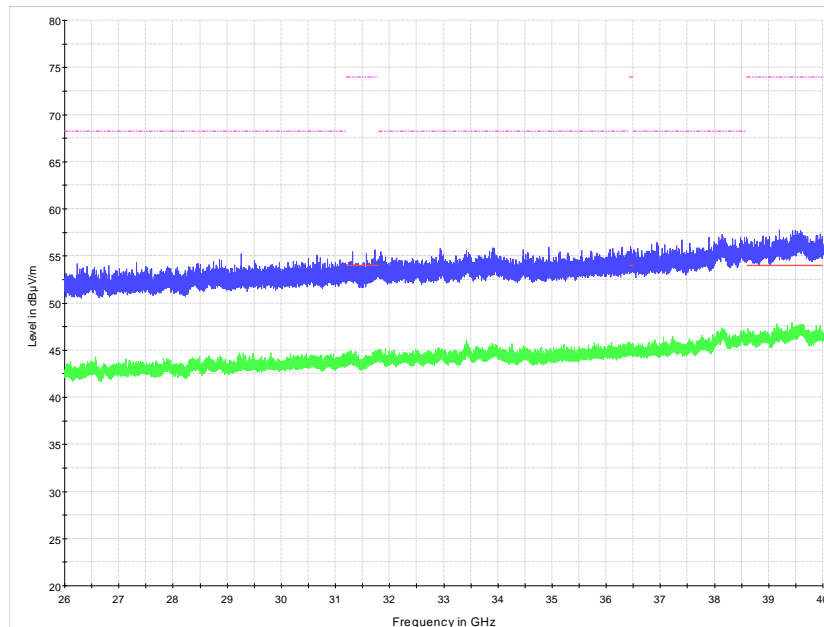
Remark: Some power settings were lowered during the test time span. Tests performed at higher than final output power were not repeated since they are worse case. See Column "Power Setting" for used power. Please see next sub-clause for the measurement plot.

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

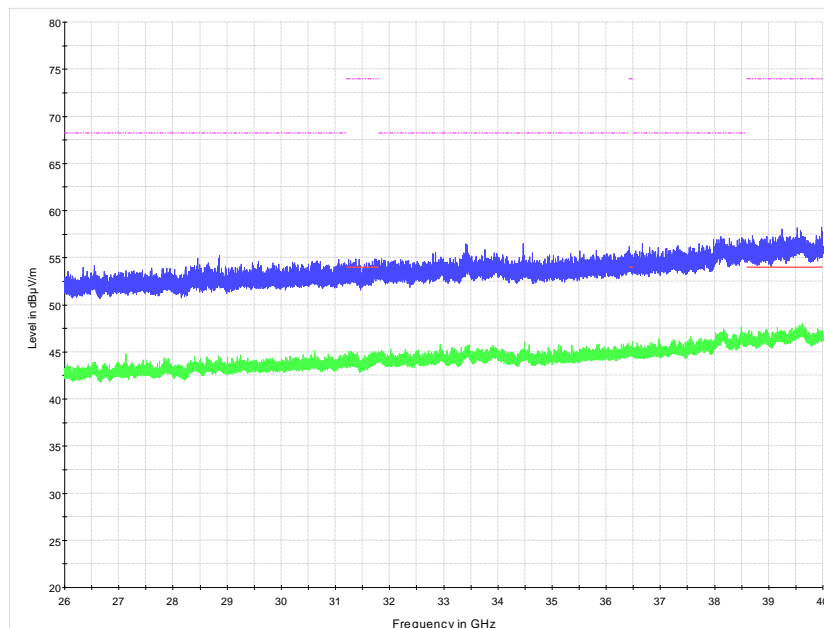
Radio Technology = WLAN a Diversity, Operating Frequency = mid, Measurement range = 26GHz - 40GHz, Subband = U-NII-2A (S02_AC02)



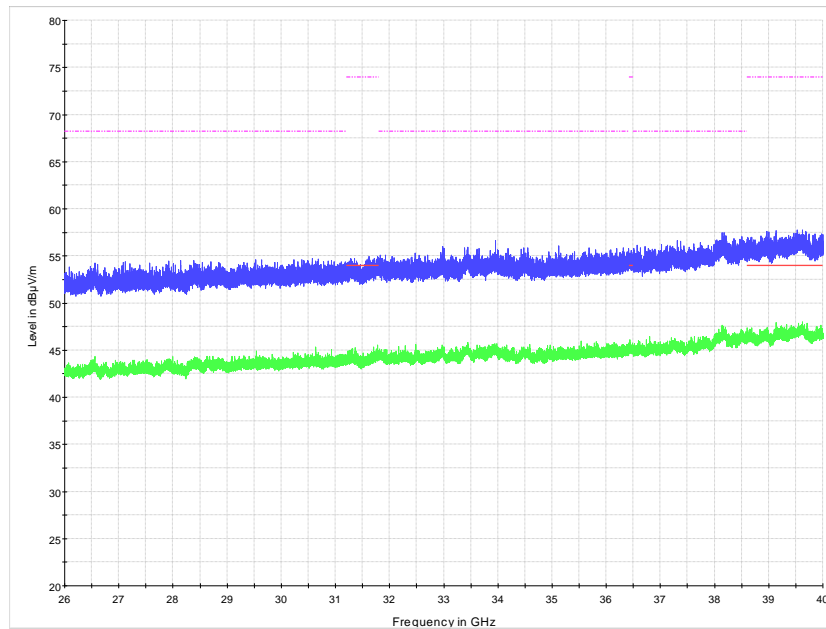
Radio Technology = WLAN a Diversity, Operating Frequency = mid, Measurement range =
26GHz - 40GHz, Subband = U-NII-2C
(S02_AC02)



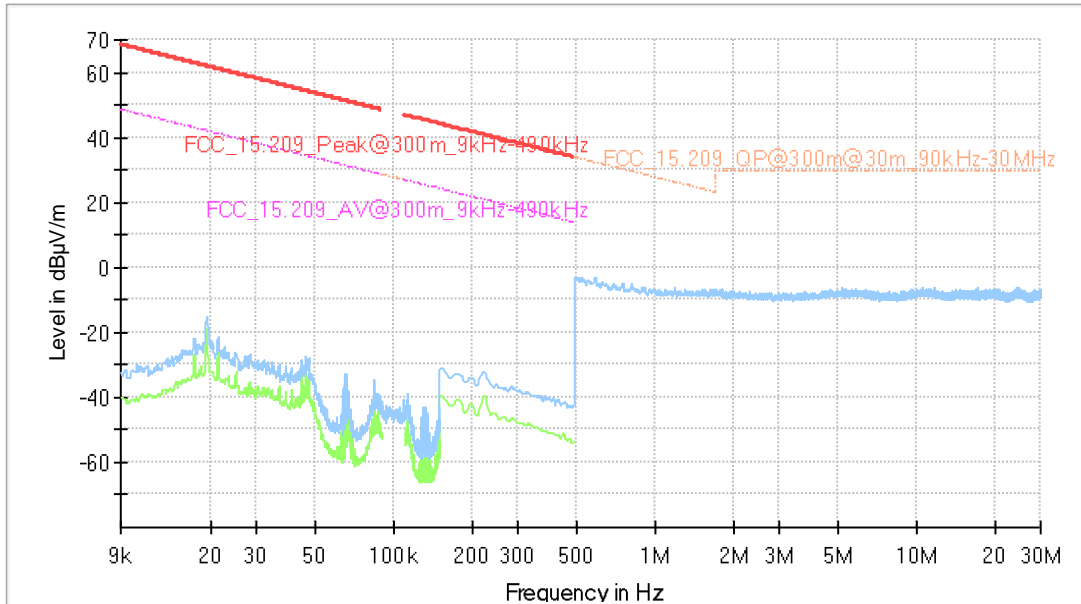
Radio Technology = WLAN n 40 MHz MIMO, Operating Frequency = high, Measurement range =
26GHz - 40GHz, Subband = U-NII-2A
(S02_AC02)



Radio Technology = WLAN n 40 MHz MIMO, Operating Frequency = mid, Measurement range = 26GHz - 40GHz, Subband = U-NII-2C (S02_AC02)



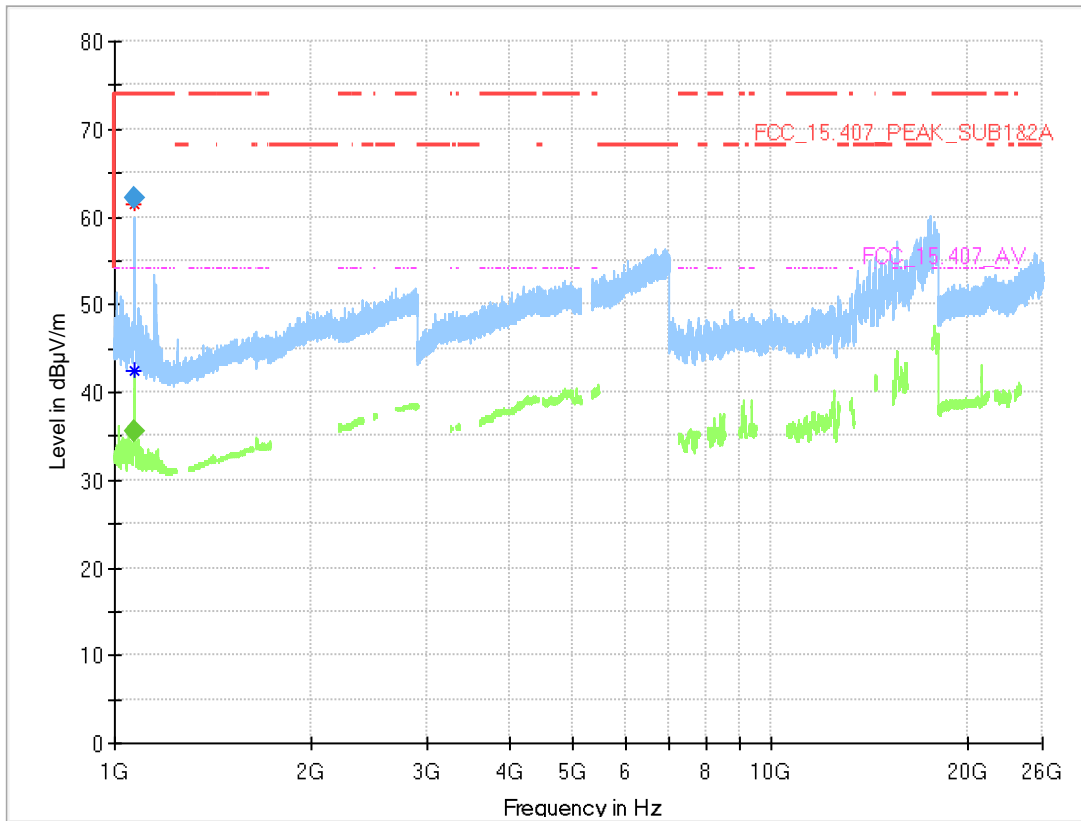
Radio Technology = WLAN a Diversity, Operating Frequency = high, Measurement range = 9kHz - 30MHz, Subband = U-NII-2C (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---	---	---

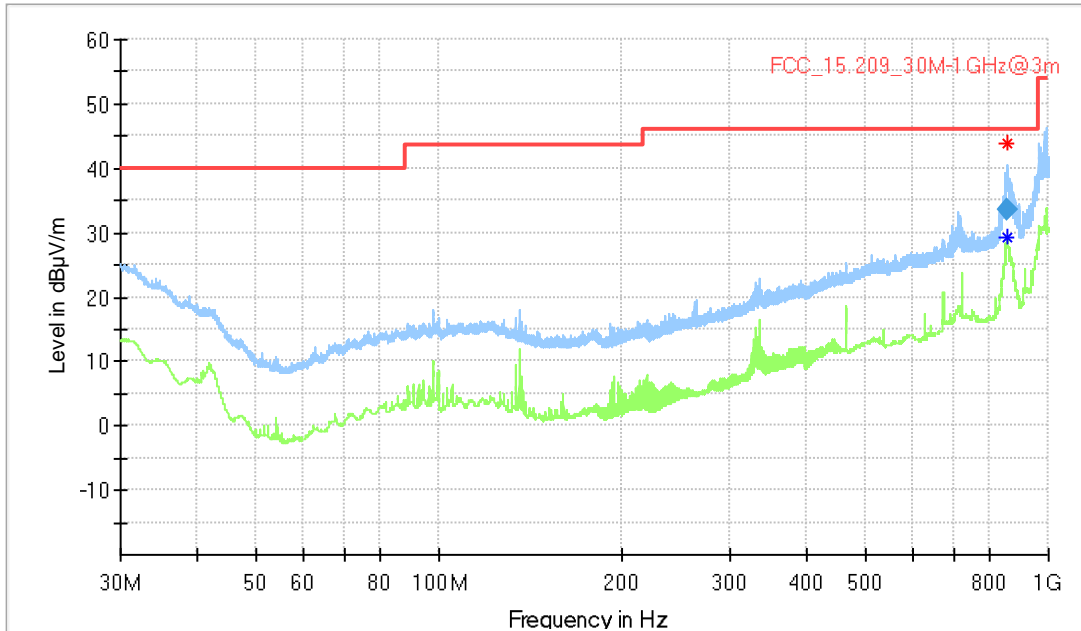
Radio Technology = WLAN a Diversity, Operating Frequency = low, Measurement range = 1GHz - 26GHz, Subband = U-NII-2A (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
1071.160	---	35.5	54.00	18.55	1000.0	1000.000	150.0	V	9.0	-11.0	-1.4
1071.160	62.1	---	74.00	11.94	1000.0	1000.000	150.0	V	9.0	-11.0	-1.4

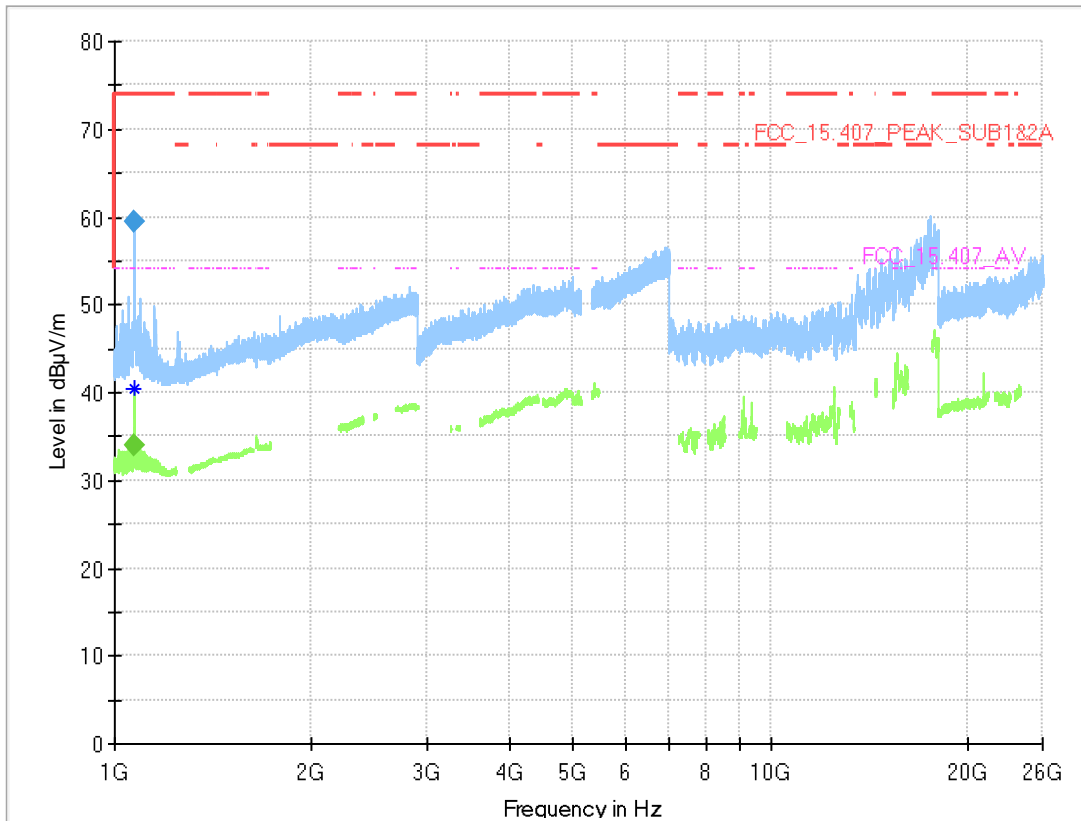
Radio Technology = WLAN a Diversity, Operating Frequency = mid, Measurement range = 30MHz - 1GHz, Subband = U-NII-2A (S02_AC02)



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
855.570000	33.45	46.00	12.55	1000.0	120.000	135.0	V	-56.0	25.0

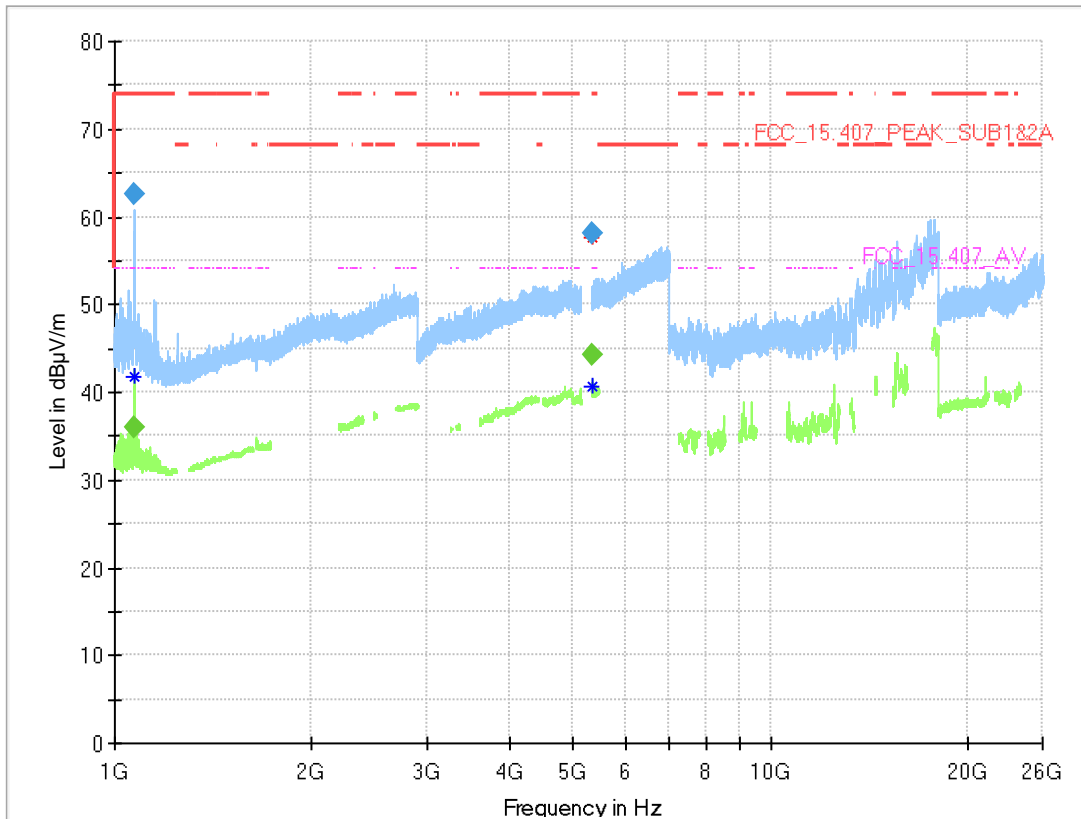
Radio Technology = WLAN a Diversity, Operating Frequency = mid, Measurement range = 1GHz - 26GHz, Subband = U-NII-2A (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
1070.800	---	33.9	54.00	20.13	1000.0	1000.000	150.0	V	-181.0	-15.0	-1.4
1070.800	59.3	---	74.00	14.66	1000.0	1000.000	150.0	V	-181.0	-15.0	-1.4

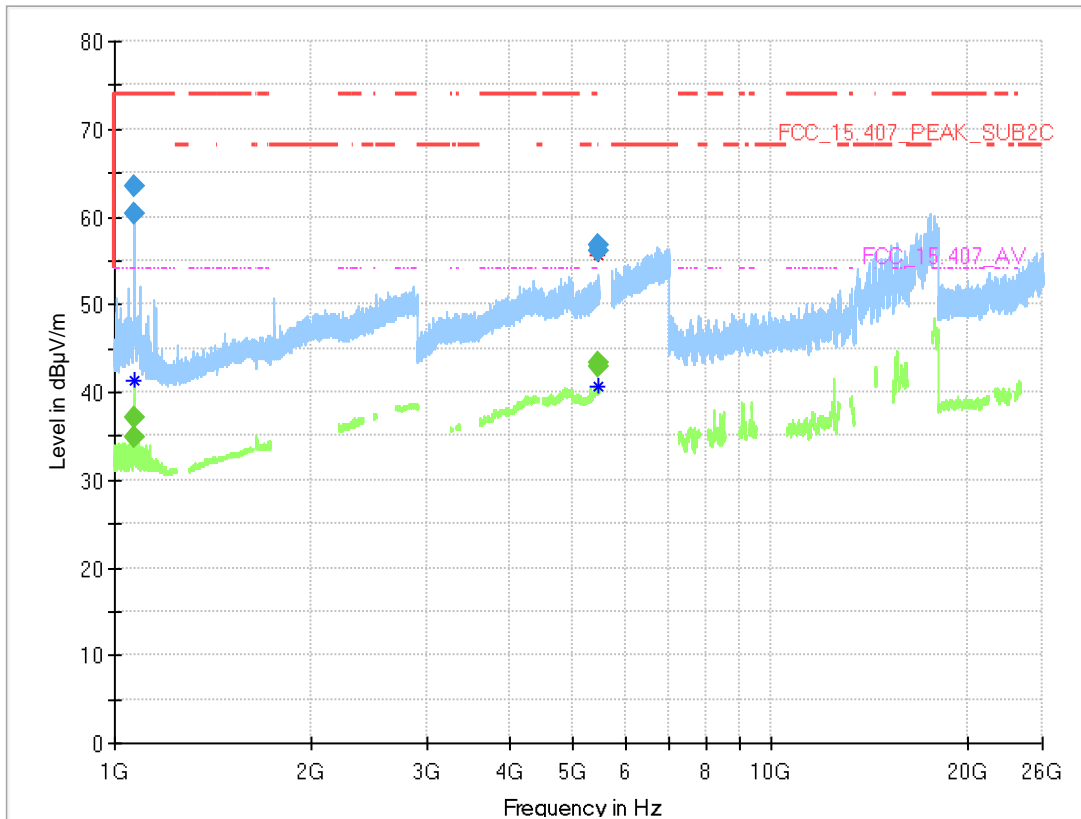
Radio Technology = WLAN a Diversity, Operating Frequency = high, Measurement range = 1GHz - 26GHz, Subband = U-NII-2A (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
1071.160	---	36.0	54.00	18.04	1000.0	1000.000	150.0	V	11.0	-5.0	-1.4
1071.160	62.6	---	74.00	11.36	1000.0	1000.000	150.0	V	11.0	-5.0	-1.4

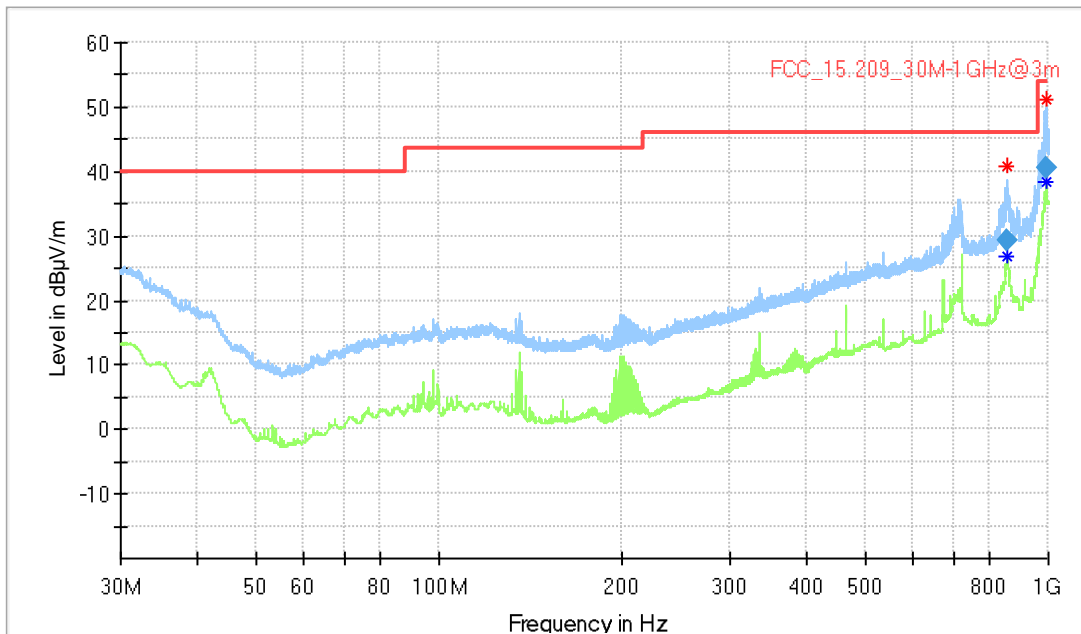
Radio Technology = WLAN a Diversity, Operating Frequency = low, Measurement range = 1GHz - 26GHz, Subband = U-NII-2C (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
1070.920	63.4	---	74.00	10.59	1000.0	1000.000	150.0	V	11.0	-7.0	-1.4
1070.920	---	37.0	54.00	16.98	1000.0	1000.000	150.0	V	11.0	-7.0	-1.4
1071.040	60.3	---	74.00	13.68	1000.0	1000.000	150.0	H	-124.0	11.0	-1.4
1071.040	---	34.8	54.00	19.19	1000.0	1000.000	150.0	H	-124.0	11.0	-1.4

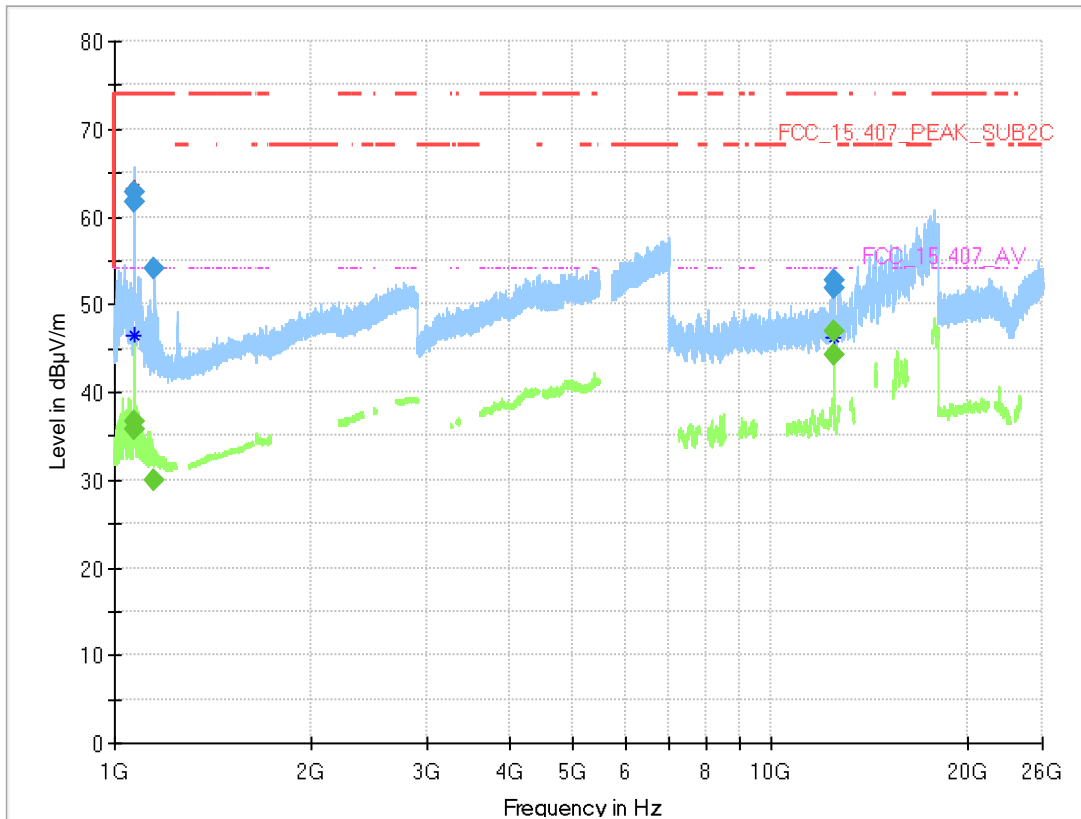
Radio Technology = WLAN a Diversity, Operating Frequency = mid, Measurement range = 30MHz - 1GHz, Subband = U-NII-2C (S02_AC02)



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
855.690000	29.27	46.00	16.73	1000.0	120.000	147.0	V	-54.0	25.0
990.330000	40.40	54.00	13.60	1000.0	120.000	100.0	H	-70.0	26.7

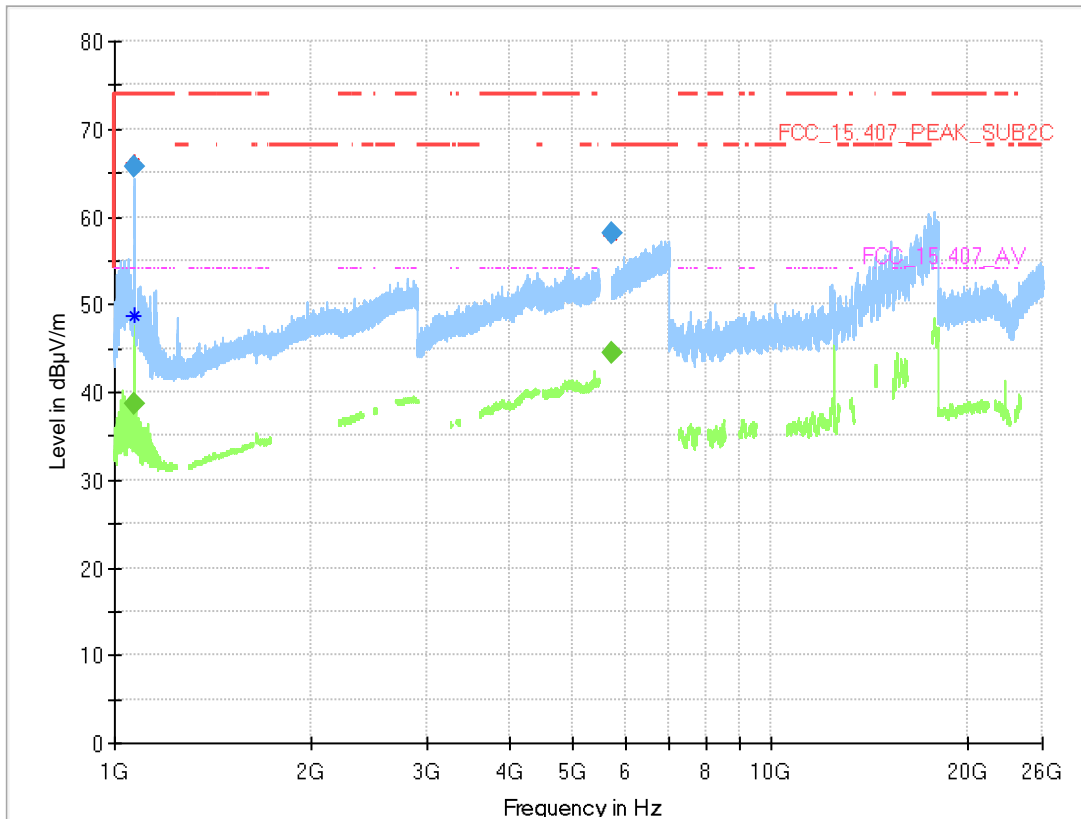
Radio Technology = WLAN a Diversity, Operating Frequency = mid, Measurement range = 1GHz - 26GHz, Subband = U-NII-2C (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
1070.920	---	35.8	54.00	18.18	1000.0	1000.000	150.0	V	-85.0	105.0	-1.4
1070.920	61.6	---	74.00	12.35	1000.0	1000.000	150.0	V	-85.0	105.0	-1.4
1071.040	---	36.7	54.00	17.30	1000.0	1000.000	150.0	V	-90.0	103.0	-1.4
1071.040	62.8	---	74.00	11.23	1000.0	1000.000	150.0	V	-90.0	103.0	-1.4
1151.920	---	30.0	54.00	24.02	1000.0	1000.000	150.0	H	-46.0	-15.0	-1.0
1151.920	54.1	---	74.00	19.87	1000.0	1000.000	150.0	H	-46.0	-15.0	-1.0
12500.395	---	44.2	54.00	9.81	1000.0	1000.000	150.0	H	-142.0	90.0	-6.7
12500.395	51.8	---	74.00	22.17	1000.0	1000.000	150.0	H	-142.0	90.0	-6.7
12500.605	---	46.9	54.00	7.15	1000.0	1000.000	150.0	H	-39.0	93.0	-6.7
12500.605	52.8	---	74.00	21.16	1000.0	1000.000	150.0	H	-39.0	93.0	-6.7

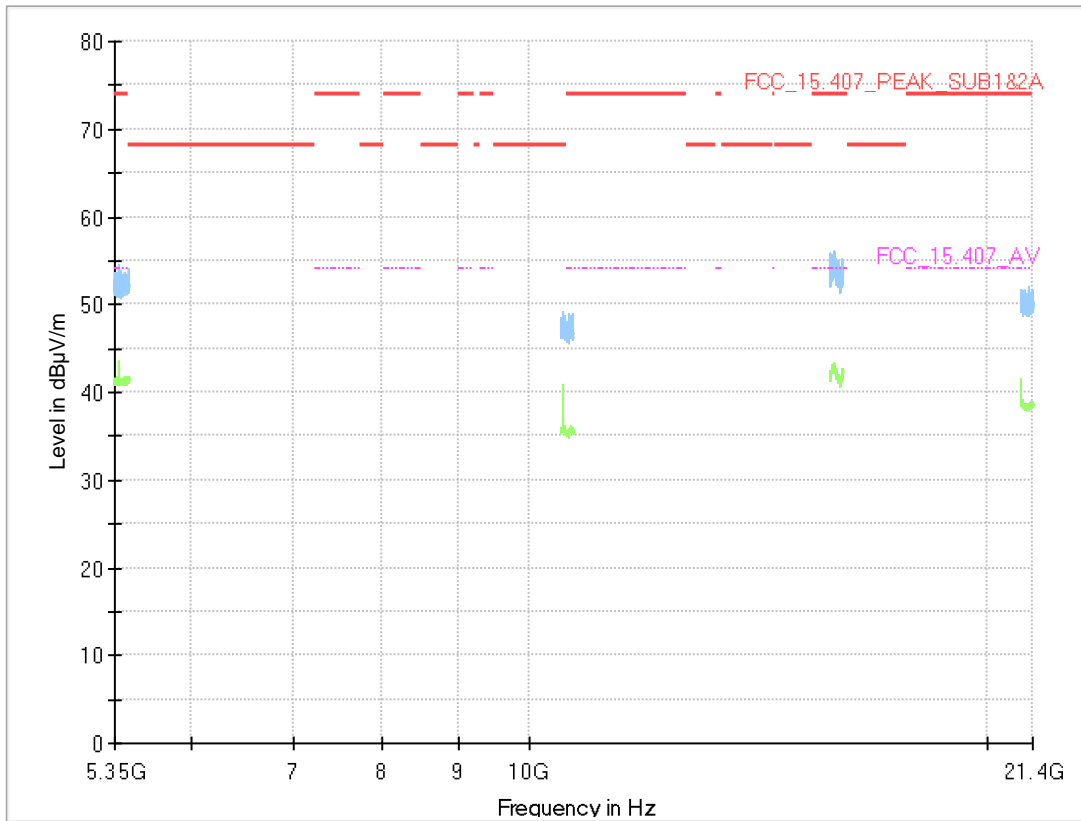
Radio Technology = WLAN a Diversity, Operating Frequency = high, Measurement range = 1GHz - 26GHz, Subband = U-NII-2C (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
1071.160	---	38.6	54.00	15.43	1000.0	1000.000	150.0	V	56.0	15.0	-1.4
1071.160	65.7	---	74.00	8.30	1000.0	1000.000	150.0	V	56.0	15.0	-1.4

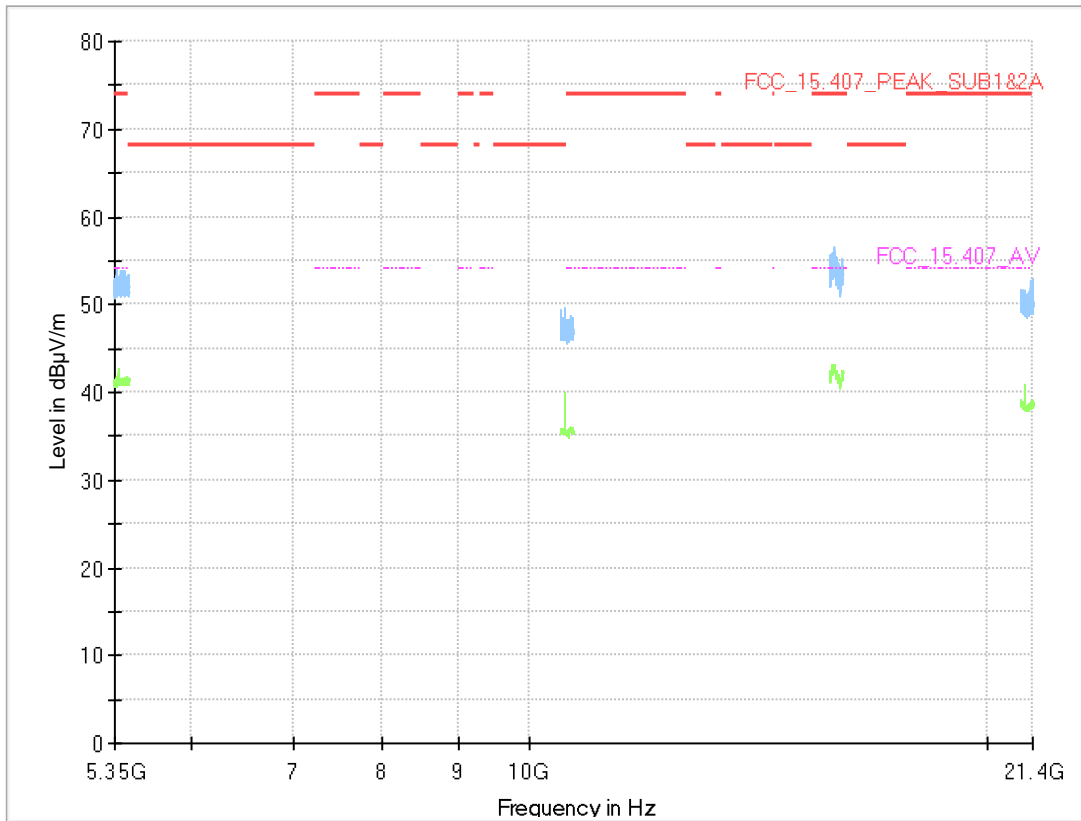
Radio Technology = WLAN n 20 MHz MIMO, Operating Frequency = low, Measurement range = 1GHz - 26GHz, Subband = U-NII-2A (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---	---	---	---	---

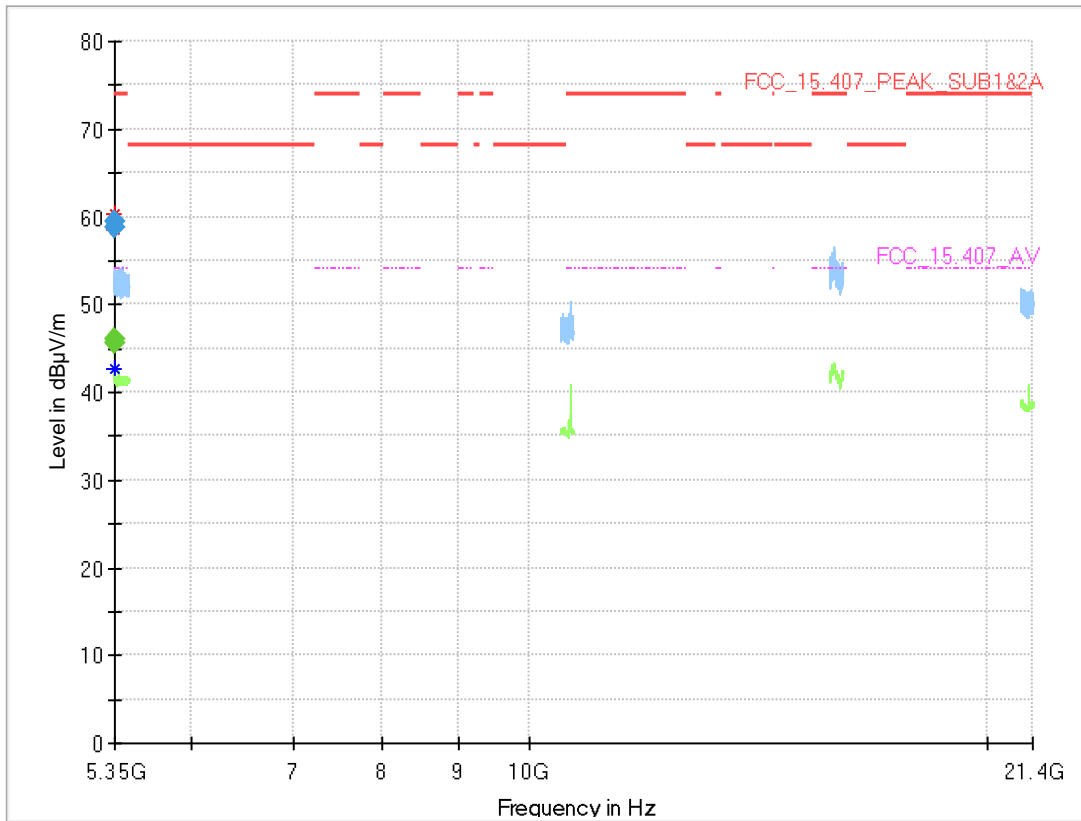
Radio Technology = WLAN n 20 MHz MIMO, Operating Frequency = mid, Measurement range = 1GHz - 26GHz, Subband = U-NII-2A (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---	---	---	---	---

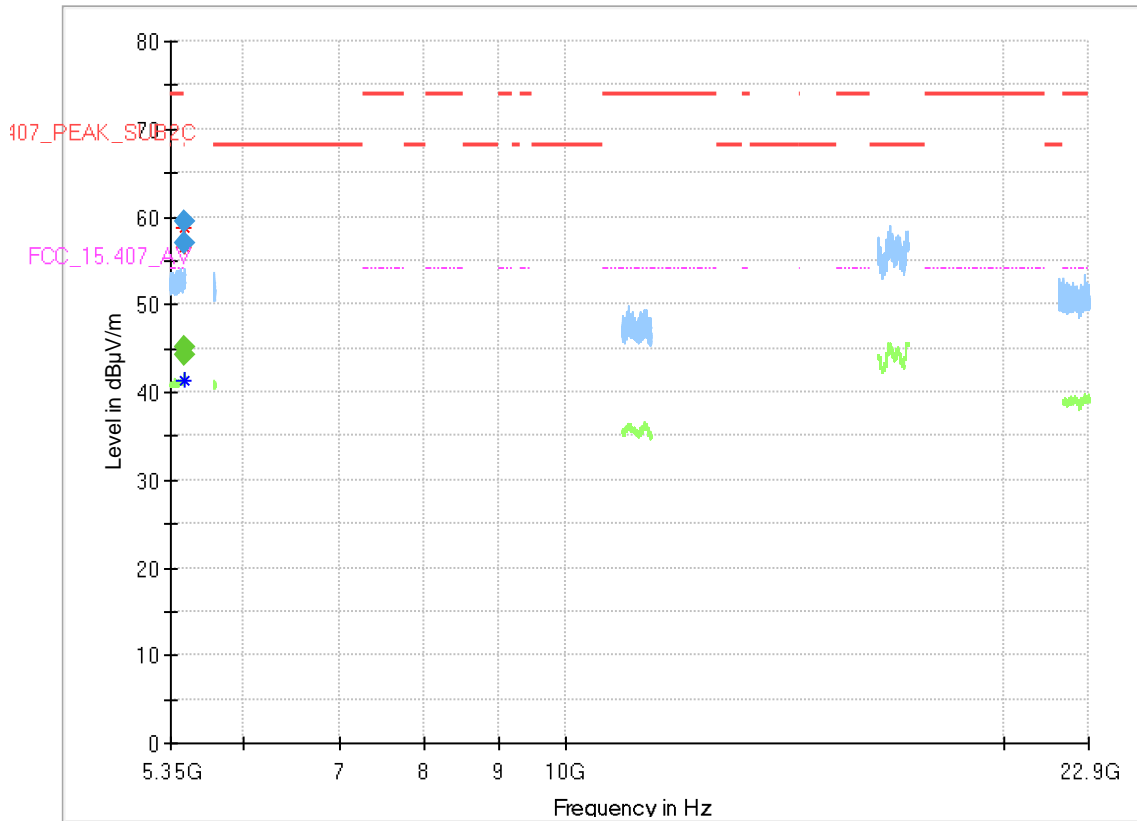
Radio Technology = WLAN n 20 MHz MIMO, Operating Frequency = high, Measurement range = 1GHz - 26GHz, Subband = U-NII-2A (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
5350.000	---	46.0	54.00	8.01	1000.0	1000.000	150.0	H	-40.0	99.0	14.1
5350.000	59.4	---	74.00	14.64	1000.0	1000.000	150.0	H	-40.0	99.0	14.1
5350.990	---	45.5	54.00	8.49	1000.0	1000.000	150.0	V	-34.0	7.0	14.1
5350.990	58.8	---	74.00	15.24	1000.0	1000.000	150.0	V	-34.0	7.0	14.1

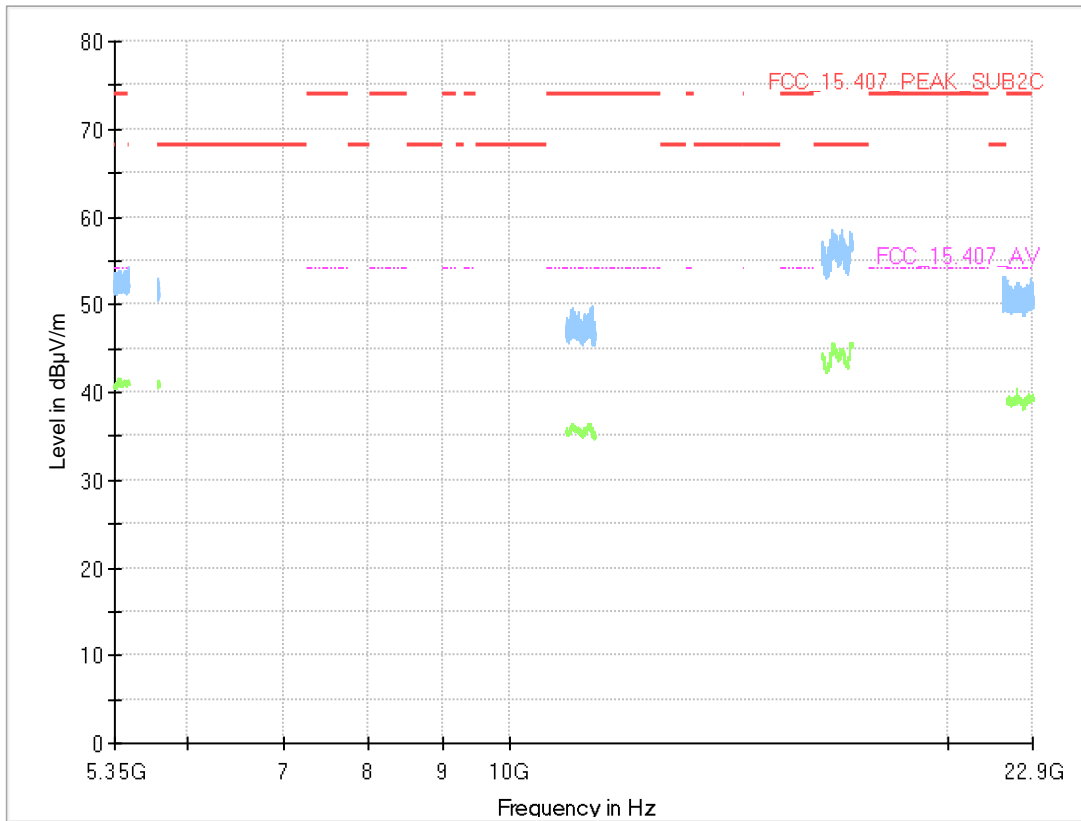
Radio Technology = WLAN n 20 MHz MIMO, Operating Frequency = low, Measurement range = 1GHz - 26GHz, Subband = U-NII-2C (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
5459.800	---	44.2	54.00	9.78	1000.0	1000.000	150.0	V	44.0	-15.0	14.5
5459.800	56.9	---	74.00	17.06	1000.0	1000.000	150.0	V	44.0	-15.0	14.5
5470.000	---	45.0	---	---	1000.0	1000.000	150.0	V	130.0	12.0	14.4
5470.000	59.4	---	68.20	8.83	1000.0	1000.000	150.0	V	130.0	12.0	14.4

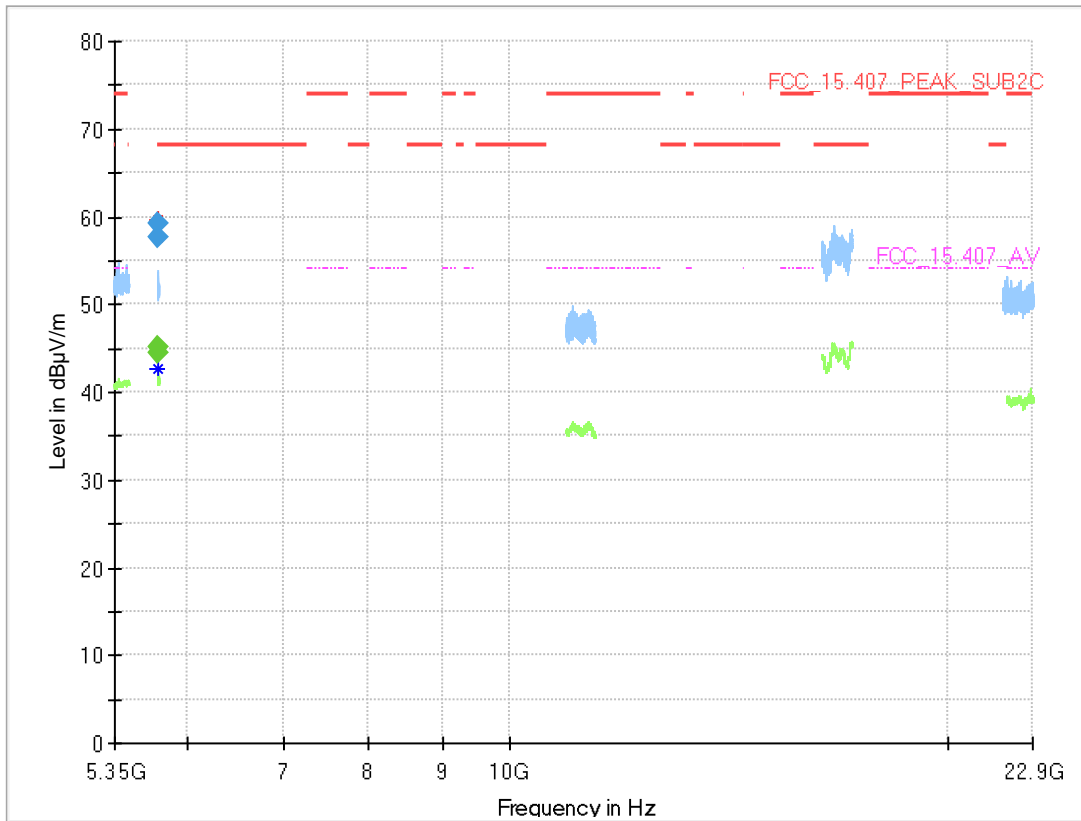
Radio Technology = WLAN n 20 MHz MIMO, Operating Frequency = mid, Measurement range = 1GHz - 26GHz, Subband = U-NII-2C (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---	---	---	---	---

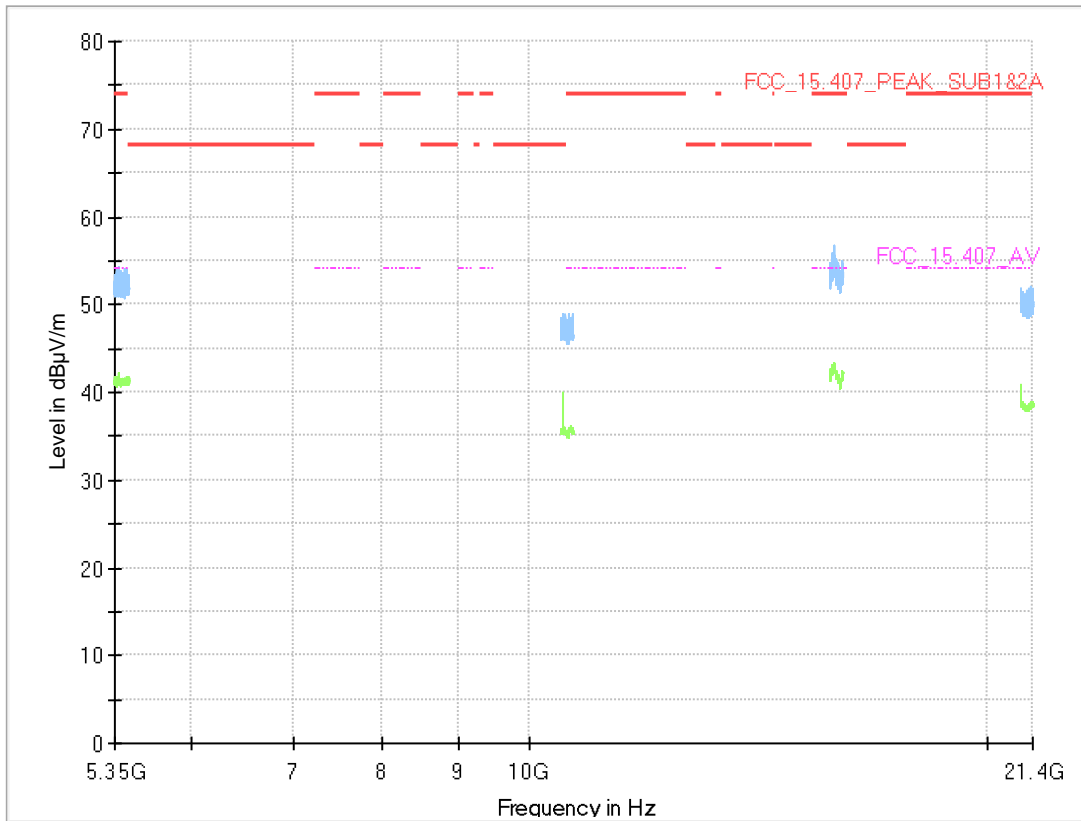
Radio Technology = WLAN n 20 MHz MIMO, Operating Frequency = high, Measurement range = 1GHz - 26GHz, Subband = U-NII-2C (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
5725.100	---	45.1	---	---	1000.0	1000.000	150.0	H	34.0	79.0	14.2
5725.100	59.2	---	68.20	9.04	1000.0	1000.000	150.0	H	34.0	79.0	14.2
5725.300	---	44.4	---	---	1000.0	1000.000	150.0	H	-11.0	105.0	14.2
5725.300	57.6	---	68.20	10.61	1000.0	1000.000	150.0	H	-11.0	105.0	14.2

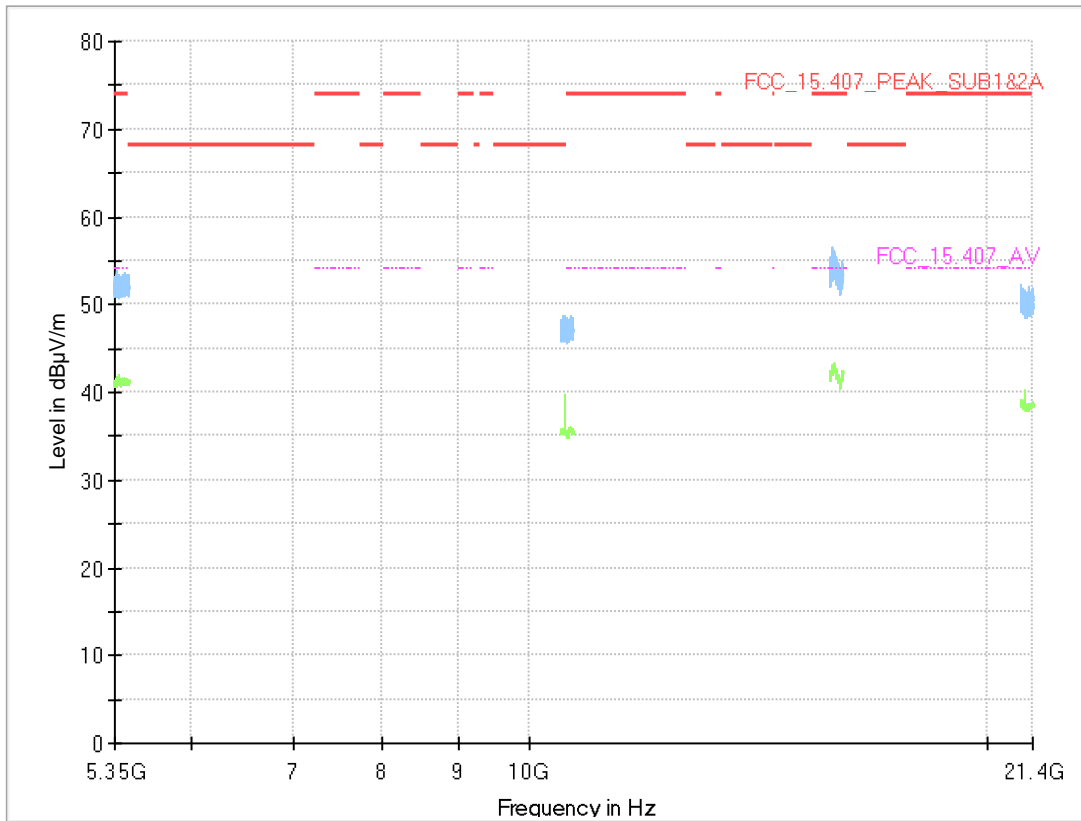
Radio Technology = WLAN ac 20 MHz MIMO, Operating Frequency = low, Measurement range = 1GHz - 26GHz, Subband = U-NII-2A (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---	---	---	---	---

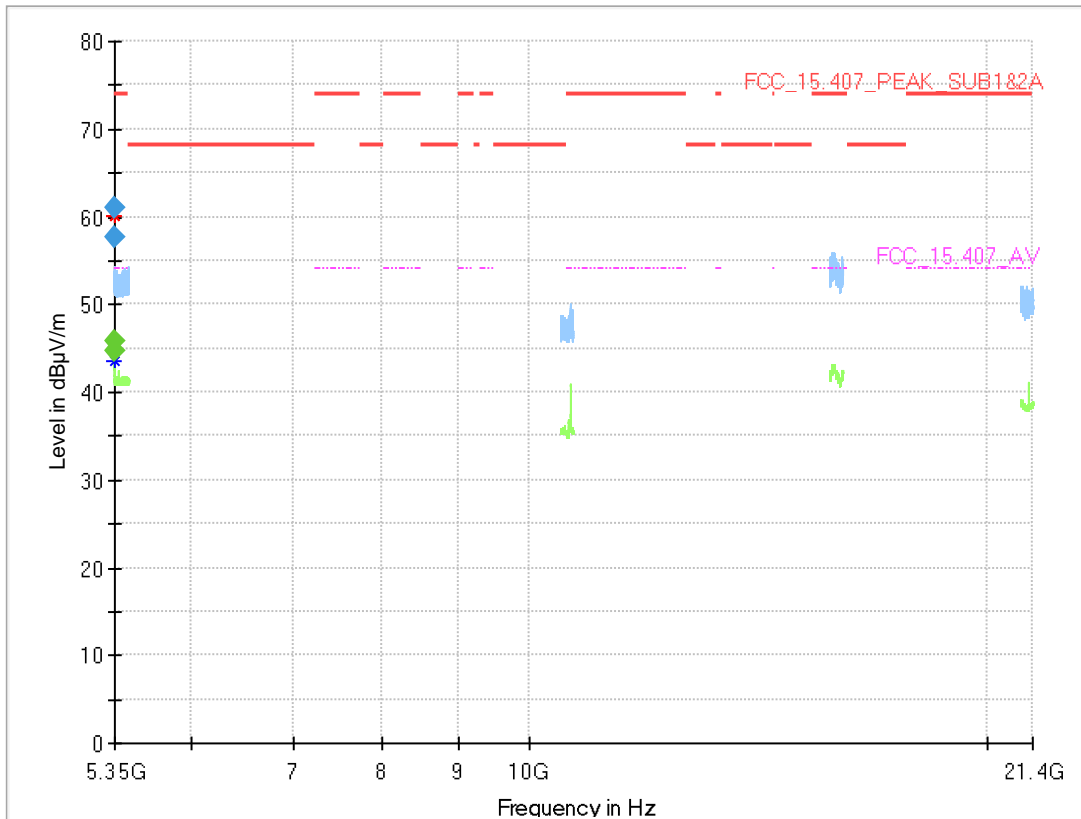
Radio Technology = WLAN ac 20 MHz MIMO, Operating Frequency = mid, Measurement range = 1GHz - 26GHz, Subband = U-NII-2A (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
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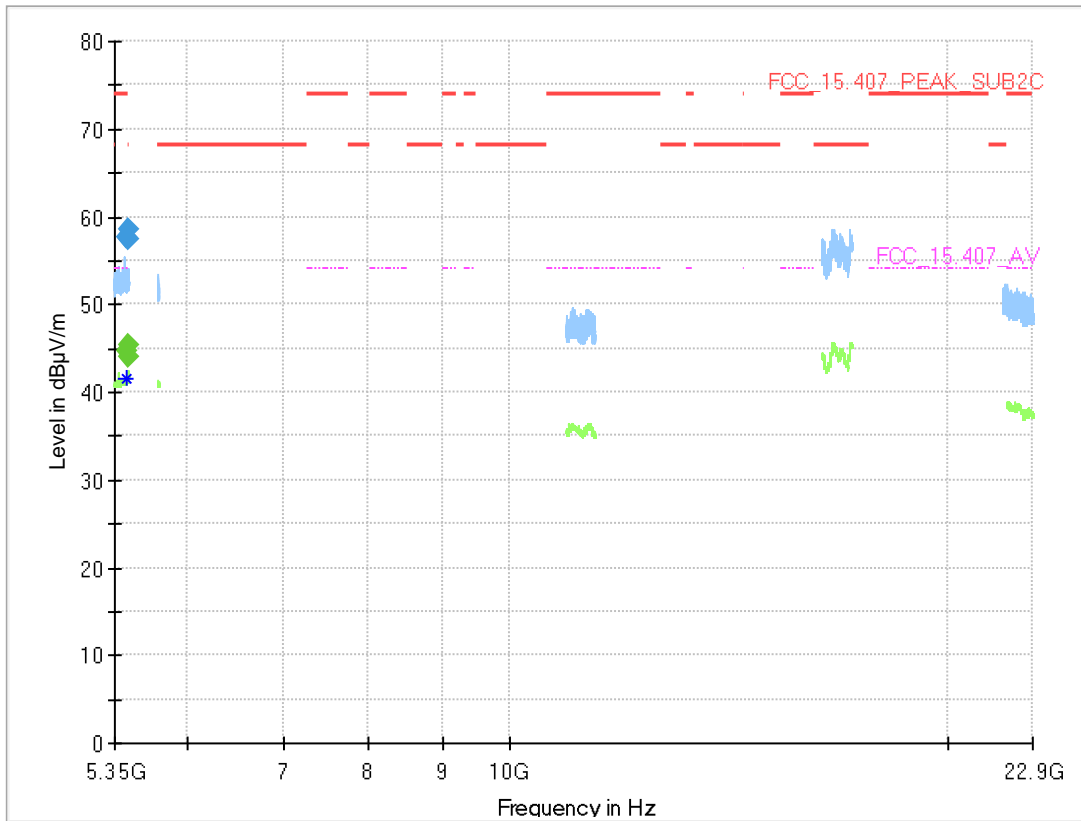
Radio Technology = WLAN ac 20 MHz MIMO, Operating Frequency = high, Measurement range = 1GHz - 26GHz, Subband = U-NII-2A (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
5350.220	---	44.7	54.00	9.29	1000.0	1000.000	150.0	V	-1.0	100.0	14.1
5350.220	57.6	---	74.00	16.38	1000.0	1000.000	150.0	V	-1.0	100.0	14.1
5351.540	---	45.9	54.00	8.13	1000.0	1000.000	150.0	H	-40.0	105.0	14.1
5351.540	61.0	---	74.00	13.01	1000.0	1000.000	150.0	H	-40.0	105.0	14.1

Radio Technology = WLAN ac 20 MHz MIMO, Operating Frequency = low, Measurement range = 1GHz - 26GHz, Subband = U-NII-2C (S02_AC02)



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
5459.320	---	44.8	54.00	9.21	1000.0	1000.000	150.0	H	-36.0	78.0	14.5
5459.320	57.7	---	74.00	16.33	1000.0	1000.000	150.0	H	-36.0	78.0	14.5
5459.440	---	44.0	54.00	9.98	1000.0	1000.000	150.0	H	56.0	6.0	14.5
5459.440	57.4	---	74.00	16.56	1000.0	1000.000	150.0	H	56.0	6.0	14.5
5468.440	---	45.3	---	---	1000.0	1000.000	150.0	H	-49.0	80.0	14.5
5468.440	58.5	---	68.20	9.67	1000.0	1000.000	150.0	H	-49.0	80.0	14.5