

# FCC Measurement/Technical Report on

## Industrial WLAN Access Point / Client

### SCALANCE W700 / MSAX

### MSAX65-W1-M12-E2

FCC ID: LYHMSAX65V1  
IC: 267AA-MSAX65V1

**Test Report Reference:** MDE\_SIEM\_1911\_FCC\_02

**Test Laboratory:**

7layers GmbH  
Borsigstrasse 11  
40880 Ratingen  
Germany



Deutsche  
Akkreditierungsstelle  
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.

**7layers GmbH**  
Borsigstraße 11  
40880 Ratingen, Germany  
T +49 (0) 2102 749 0  
F +49 (0) 2102 749 350

Geschäftsführer/  
Managing Directors:  
Frank Spiller  
Bernhard Retka  
Alexandre Norré-Oudard

Registergericht/registered:  
Düsseldorf HRB 75554  
USt-Id.-Nr./VAT-No. DE203159652  
Steuer-Nr./TAX-No. 147/5869/0385

*a Bureau Veritas  
Group Company*

*www.7layers.com*

## Table of Contents

<b>1</b>	<b>Applied Standards and Test Summary</b>	<b>3</b>
1.1	Applied Standards	3
1.2	FCC-IC Correlation Table	4
1.3	Measurement Summary	5
<b>2</b>	<b>Revision History / Signatures</b>	<b>29</b>
<b>3</b>	<b>Administrative Data</b>	<b>30</b>
3.1	Testing Laboratory	30
3.2	Project Data	30
3.3	Applicant Data	30
3.4	Manufacturer Data	30
<b>4</b>	<b>Test object Data</b>	<b>31</b>
4.1	General EUT Description	31
4.2	EUT Main components	32
4.3	Ancillary Equipment	33
4.4	Auxiliary Equipment	33
4.5	EUT Setups	34
4.6	Test Channels / Output Power / Duty Cycle	35
4.7	Product labelling	39
<b>5</b>	<b>Test Results</b>	<b>40</b>
5.1	26 dB Bandwidth	40
5.2	6 dB Bandwidth	45
5.3	99 % Bandwidth	50
5.4	Maximum Conducted Output Power	53
5.5	Peak Power Spectral Density	74
5.6	Undesirable Emissions; General Field Strength Limits	100
5.7	Band Edge	172
<b>6</b>	<b>Test Equipment</b>	<b>263</b>
<b>7</b>	<b>Antenna Factors, Cable Loss and Sample Calculations</b>	<b>266</b>
7.1	LISN R&S ESH3-Z5 (150 kHz – 30 MHz)	266
7.2	Antenna R&S HFH2-Z2 (9 kHz – 30 MHz)	267
7.3	Antenna R&S HL562 (30 MHz – 1 GHz)	268
7.4	Antenna R&S HF907 (1 GHz – 18 GHz)	269
7.5	Antenna EMCO 3160-09 (18 GHz – 26.5 GHz)	270
7.6	Antenna EMCO 3160-10 (26.5 GHz – 40 GHz)	271
<b>8</b>	<b>Measurement Uncertainties</b>	<b>272</b>
<b>9</b>	<b>Photo Report</b>	<b>273</b>

## 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 (10-1-20 Edition) and 15 (10-1-20 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 (i) (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), (2), (3), (4)	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), (2), (3), (5)	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	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

**Final Result**

<b>OP-Mode</b> Radio Technology, Operating Frequency, Subband	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
WLAN a, high, U-NII-1	S01_AH01	2021-08-27	Performed	N/A
WLAN a, low, U-NII-1	S01_AH01	2021-08-27	Performed	N/A
WLAN a, mid, U-NII-1	S01_AH01	2021-08-27	Performed	N/A
WLAN ac 20 MHz, high, U-NII-1	S01_AH01	2021-08-31	Performed	N/A
WLAN ac 20 MHz, low, U-NII-1	S01_AH01	2021-08-31	Performed	N/A
WLAN ac 20 MHz, mid, U-NII-1	S01_AH01	2021-08-31	Performed	N/A
WLAN ac 40 MHz, high, U-NII-1	S01_AH01	2021-09-02	Performed	N/A
WLAN ac 40 MHz, low, U-NII-1	S01_AH01	2021-09-02	Performed	N/A
WLAN ac 80 MHz, mid, U-NII-1	S01_AH01	2021-09-06	Performed	N/A
WLAN n 20 MHz, high, U-NII-1	S01_AH01	2021-08-27	Performed	N/A
WLAN n 20 MHz, low, U-NII-1	S01_AH01	2021-08-27	Performed	N/A
WLAN n 20 MHz, mid, U-NII-1	S01_AH01	2021-08-27	Performed	N/A
WLAN n 40 MHz, high, U-NII-1	S01_AH01	2021-09-02	Performed	N/A
WLAN n 40 MHz, low, U-NII-1	S01_AH01	2021-09-02	Performed	N/A
WLAN ax 20 MHz, high, U-NII-1	S01_AH01	2021-09-02	Performed	N/A
WLAN ax 20 MHz, low, U-NII-1	S01_AH01	2021-09-02	Performed	N/A
WLAN ax 20 MHz, mid, U-NII-1	S01_AH01	2021-09-02	Performed	N/A
WLAN ax 40 MHz, high, U-NII-1	S01_AH01	2021-09-06	Performed	N/A
WLAN ax 40 MHz, low, U-NII-1	S01_AH01	2021-09-06	Performed	N/A
WLAN ax 80 MHz, mid, U-NII-1	S01_AH01	2021-09-06	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

OP-Mode Radio Technology, Operating Frequency, Subband	Setup	Date	Final Result	
			FCC	IC
WLAN a, high, U-NII-3	S01_AH01	2021-08-27	Passed	Passed
WLAN a, low, U-NII-3	S01_AH01	2021-08-27	Passed	Passed
WLAN a, mid, U-NII-3	S01_AH01	2021-08-27	Passed	Passed
WLAN ac 20 MHz, high, U-NII-3	S01_AH01	2021-08-31	Passed	Passed
WLAN ac 20 MHz, low, U-NII-3	S01_AH01	2021-08-31	Passed	Passed
WLAN ac 20 MHz, mid, U-NII-3	S01_AH01	2021-08-31	Passed	Passed
WLAN ac 40 MHz, high, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ac 40 MHz, low, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ac 80 MHz, mid, U-NII-3	S01_AH01	2021-09-06	Passed	Passed
WLAN n 20 MHz, high, U-NII-3	S01_AH01	2021-08-27	Passed	Passed
WLAN n 20 MHz, low, U-NII-3	S01_AH01	2021-08-27	Passed	Passed
WLAN n 20 MHz, mid, U-NII-3	S01_AH01	2021-08-27	Passed	Passed
WLAN n 40 MHz, high, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN n 40 MHz, low, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ax 20 MHz, high, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ax 20 MHz, low, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ax 40 MHz, high, U-NII-3	S01_AH01	2021-09-06	Passed	Passed
WLAN ax 40 MHz, low, U-NII-3	S01_AH01	2021-09-06	Passed	Passed
WLAN ax 80 MHz, mid, U-NII-3	S01_AH01	2021-09-06	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

**Final Result**

<b>OP-Mode</b> Radio Technology, Operating Frequency, Subband	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
WLAN a, high, U-NII-1	S01_AH01	2021-08-27	N/A	Performed
WLAN a, high, U-NII-3	S01_AH01	2021-08-27	N/A	Performed
WLAN a, low, U-NII-1	S01_AH01	2021-08-27	N/A	Performed
WLAN a, low, U-NII-3	S01_AH01	2021-08-27	N/A	Performed
WLAN a, mid, U-NII-1	S01_AH01	2021-08-27	N/A	Performed
WLAN a, mid, U-NII-3	S01_AH01	2021-08-27	N/A	Performed
WLAN ac 20 MHz, high, U-NII-1	S01_AH01	2021-08-31	N/A	Performed
WLAN ac 20 MHz, high, U-NII-3	S01_AH01	2021-08-31	N/A	Performed
WLAN ac 20 MHz, low, U-NII-1	S01_AH01	2021-08-31	N/A	Performed
WLAN ac 20 MHz, low, U-NII-3	S01_AH01	2021-08-31	N/A	Performed
WLAN ac 20 MHz, mid, U-NII-1	S01_AH01	2021-08-31	N/A	Performed
WLAN ac 20 MHz, mid, U-NII-3	S01_AH01	2021-08-31	N/A	Performed
WLAN ac 40 MHz, high, U-NII-1	S01_AH01	2021-09-02	N/A	Performed
WLAN ac 40 MHz, high, U-NII-3	S01_AH01	2021-09-02	N/A	Performed
WLAN ac 40 MHz, low, U-NII-1	S01_AH01	2021-09-02	N/A	Performed
WLAN ac 40 MHz, low, U-NII-3	S01_AH01	2021-09-02	N/A	Performed
WLAN ac 80 MHz, mid, U-NII-1	S01_AH01	2021-09-06	N/A	Performed
WLAN ac 80 MHz, mid, U-NII-3	S01_AH01	2021-09-06	N/A	Performed
WLAN n 20 MHz, high, U-NII-1	S01_AH01	2021-08-27	N/A	Performed
WLAN n 20 MHz, high, U-NII-3	S01_AH01	2021-08-27	N/A	Performed
WLAN n 20 MHz, low, U-NII-1	S01_AH01	2021-08-27	N/A	Performed
WLAN n 20 MHz, low, U-NII-3	S01_AH01	2021-08-27	N/A	Performed
WLAN n 20 MHz, mid, U-NII-1	S01_AH01	2021-08-27	N/A	Performed
WLAN n 20 MHz, mid, U-NII-3	S01_AH01	2021-08-27	N/A	Performed
WLAN n 40 MHz, high, U-NII-1	S01_AH01	2021-08-27	N/A	Performed
WLAN n 40 MHz, high, U-NII-3	S01_AH01	2021-09-02	N/A	Performed
WLAN n 40 MHz, low, U-NII-1	S01_AH01	2021-08-27	N/A	Performed
WLAN n 40 MHz, low, U-NII-3	S01_AH01	2021-09-02	N/A	Performed
WLAN ax 20 MHz, high, U-NII-1	S01_AH01	2021-08-31	N/A	Performed
WLAN ax 20 MHz, high, U-NII-3	S01_AH01	2021-08-31	N/A	Performed
WLAN ax 20 MHz, low, U-NII-1	S01_AH01	2021-08-31	N/A	Performed
WLAN ax 20 MHz, low, U-NII-3	S01_AH01	2021-08-31	N/A	Performed
WLAN ax 20 MHz, mid, U-NII-1	S01_AH01	2021-08-31	N/A	Performed
WLAN ax 20 MHz, mid, U-NII-3	S01_AH01	2021-08-31	N/A	Performed
WLAN ax 40 MHz, high, U-NII-1	S01_AH01	2021-09-02	N/A	Performed
WLAN ax 40 MHz, high, U-NII-3	S01_AH01	2021-09-02	N/A	Performed
WLAN ax 40 MHz, low, U-NII-1	S01_AH01	2021-09-02	N/A	Performed
WLAN ax 40 MHz, low, U-NII-3	S01_AH01	2021-09-02	N/A	Performed
WLAN ax 80 MHz, mid, U-NII-1	S01_AH01	2021-09-06	N/A	Performed
WLAN ax 80 MHz, mid, U-NII-3	S01_AH01	2021-09-06	N/A	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

**Conducted power settings for antenna gain ≤ 8.0 dBi  
(see chapter 4.6)**

**OP-Mode**

Radio Technology, Operating Frequency,  
Subband

	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>	<b>Final Result</b>
WLAN a, high, U-NII-1	S01_AH01	2021-08-27	Passed	N/A	
WLAN a, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN a, high, U-NII-3	S01_AH01	2021-08-27	Passed	Passed	
WLAN a, low, U-NII-1	S01_AH01	2021-08-27	Passed	N/A	
WLAN a, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN a, low, U-NII-3	S01_AH01	2021-08-27	Passed	Passed	
WLAN a, mid, U-NII-1	S01_AH01	2021-08-27	Passed	N/A	
WLAN a, mid, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN a, mid, U-NII-3	S01_AH01	2021-08-27	Passed	Passed	
WLAN a, DIVERSITY, high, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN a, DIVERSITY, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN a, DIVERSITY, high, U-NII-3	S01_AH01	2021-09-10	Passed	Passed	
WLAN a, DIVERSITY, low, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN a, DIVERSITY, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN a, DIVERSITY, low, U-NII-3	S01_AH01	2021-09-10	Passed	Passed	
WLAN a, DIVERSITY, mid, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN a, DIVERSITY, mid, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN a, DIVERSITY, mid, U-NII-3	S01_AH01	2021-09-10	Passed	Passed	
WLAN ac 20 MHz MIMO, high, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN ac 20 MHz MIMO, high, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 20 MHz MIMO, high, U-NII-3	S01_AH01	2021-09-08	Passed	Passed	
WLAN ac 20 MHz MIMO, low, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN ac 20 MHz MIMO, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 20 MHz MIMO, low, U-NII-3	S01_AH01	2021-09-08	Passed	Passed	
WLAN ac 20 MHz MIMO, mid, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN ac 20 MHz MIMO, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 20 MHz MIMO, mid, U-NII-3	S01_AH01	2021-09-08	Passed	Passed	
WLAN ac 20 MHz, high, U-NII-1	S01_AH01	2021-08-31	Passed	N/A	
WLAN ac 20 MHz, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN ac 20 MHz, high, U-NII-3	S01_AH01	2021-08-31	Passed	Passed	
WLAN ac 20 MHz, low, U-NII-1	S01_AH01	2021-08-31	Passed	N/A	
WLAN ac 20 MHz, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN ac 20 MHz, low, U-NII-3	S01_AH01	2021-08-31	Passed	Passed	
WLAN ac 20 MHz, mid, U-NII-1	S01_AH01	2021-08-31	Passed	N/A	
WLAN ac 20 MHz, mid, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN ac 20 MHz, mid, U-NII-3	S01_AH01	2021-08-31	Passed	Passed	
WLAN ac 40 MHz MIMO, high, U-NII-1	S01_AH01	2021-09-16	Passed	N/A	
WLAN ac 40 MHz MIMO, high, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 40 MHz MIMO, high, U-NII-3	S01_AH01	2021-09-16	Passed	Passed	
WLAN ac 40 MHz MIMO, low, U-NII-1	S01_AH01	2021-09-16	Passed	N/A	
WLAN ac 40 MHz MIMO, low, U-NII-1	S01_AH02	2021-11-23	N/A	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

**Conducted power settings for antenna gain ≤ 8.0 dBi  
(see chapter 4.6)**

**OP-Mode**

Radio Technology, Operating Frequency,  
Subband

	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>	<b>Final Result</b>
WLAN ac 40 MHz MIMO, low, U-NII-3	S01_AH01	2021-09-16	Passed	Passed	
WLAN ac 40 MHz, high, U-NII-1	S01_AH01	2021-09-02	Passed	N/A	
WLAN ac 40 MHz, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN ac 40 MHz, high, U-NII-3	S01_AH01	2021-09-02	Passed	Passed	
WLAN ac 40 MHz, low, U-NII-1	S01_AH01	2021-09-02	Passed	N/A	
WLAN ac 40 MHz, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN ac 40 MHz, low, U-NII-3	S01_AH01	2021-09-02	Passed	Passed	
WLAN ac 80 MHz MIMO, mid, U-NII-1	S01_AH01	2021-09-22	Passed	N/A	
WLAN ac 80 MHz MIMO, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 80 MHz MIMO, mid, U-NII-3	S01_AH01	2021-09-22	Passed	Passed	
WLAN ac 80 MHz, mid, U-NII-1	S01_AH01	2021-09-06	Passed	N/A	
WLAN ac 80 MHz, mid, U-NII-1	S01_AH02	2021-11-19	N/A	Passed	
WLAN ac 80 MHz, mid, U-NII-3	S01_AH01	2021-09-06	Passed	Passed	
WLAN n 20 MHz MIMO, high, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN n 20 MHz MIMO, high, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN n 20 MHz MIMO, high, U-NII-3	S01_AH01	2021-09-08	Passed	Passed	
WLAN n 20 MHz MIMO, low, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN n 20 MHz MIMO, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN n 20 MHz MIMO, low, U-NII-3	S01_AH01	2021-09-08	Passed	Passed	
WLAN n 20 MHz MIMO, mid, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN n 20 MHz MIMO, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN n 20 MHz MIMO, mid, U-NII-3	S01_AH01	2021-09-08	Passed	Passed	
WLAN n 20 MHz, high, U-NII-1	S01_AH01	2021-08-27	Passed	N/A	
WLAN n 20 MHz, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN n 20 MHz, high, U-NII-3	S01_AH01	2021-08-27	Passed	Passed	
WLAN n 20 MHz, low, U-NII-1	S01_AH01	2021-08-27	Passed	N/A	
WLAN n 20 MHz, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN n 20 MHz, low, U-NII-3	S01_AH01	2021-08-27	Passed	Passed	
WLAN n 20 MHz, mid, U-NII-1	S01_AH01	2021-08-27	Passed	N/A	
WLAN n 20 MHz, mid, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN n 20 MHz, mid, U-NII-3	S01_AH01	2021-08-27	Passed	Passed	
WLAN n 40 MHz MIMO, high, U-NII-1	S01_AH01	2021-09-16	Passed	N/A	
WLAN n 40 MHz MIMO, high, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN n 40 MHz MIMO, high, U-NII-3	S01_AH01	2021-09-16	Passed	Passed	
WLAN n 40 MHz MIMO, low, U-NII-1	S01_AH01	2021-09-16	Passed	N/A	
WLAN n 40 MHz MIMO, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN n 40 MHz MIMO, low, U-NII-3	S01_AH01	2021-09-16	Passed	Passed	
WLAN n 40 MHz, high, U-NII-1	S01_AH01	2021-09-02	Passed	N/A	
WLAN n 40 MHz, high, U-NII-	S01_AH02	2021-11-17	N/A	Passed	
WLAN n 40 MHz, high, U-NII-3	S01_AH01	2021-09-02	Passed	Passed	
WLAN n 40 MHz, low, U-NII-1	S01_AH01	2021-09-02	Passed	N/A	

**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

**Conducted power settings for antenna gain ≤ 8.0 dBi  
(see chapter 4.6)**

**Final Result**

<b>OP-Mode</b> Radio Technology, Operating Frequency, Subband	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
WLAN n 40 MHz, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN n 40 MHz, low, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-1	S01_AH01	2021-09-10	Passed	N/A
WLAN ax 20 MHz MIMO, high, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 20 MHz MIMO, high, U-NII-3	S01_AH01	2021-09-10	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-1	S01_AH01	2021-09-10	Passed	N/A
WLAN ax 20 MHz MIMO, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 20 MHz MIMO, low, U-NII-3	S01_AH01	2021-09-10	Passed	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-1	S01_AH01	2021-09-10	Passed	N/A
WLAN ax 20 MHz MIMO, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 20 MHz MIMO, mid, U-NII-3	S01_AH01	2021-09-10	Passed	Passed
WLAN ax 20 MHz, high, U-NII-1	S01_AH01	2021-09-02	Passed	N/A
WLAN ax 20 MHz, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN ax 20 MHz, high, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ax 20 MHz, low, U-NII-1	S01_AH01	2021-09-02	Passed	N/A
WLAN ax 20 MHz, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN ax 20 MHz, low, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-1	S01_AH01	2021-09-02	Passed	N/A
WLAN ax 20 MHz, mid, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN ax 20 MHz, mid, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-1	S01_AH01	2021-09-22	Passed	N/A
WLAN ax 40 MHz MIMO, high, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 40 MHz MIMO, high, U-NII-3	S01_AH01	2021-09-22	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-1	S01_AH01	2021-09-22	Passed	N/A
WLAN ax 40 MHz MIMO, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 40 MHz MIMO, low, U-NII-3	S01_AH01	2021-09-22	Passed	Passed
WLAN ax 40 MHz, high, U-NII-1	S01_AH01	2021-09-06	Passed	N/A
WLAN ax 40 MHz, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN ax 40 MHz, high, U-NII-3	S01_AH01	2021-09-06	Passed	Passed
WLAN ax 40 MHz, low, U-NII-1	S01_AH01	2021-09-06	Passed	N/A
WLAN ax 40 MHz, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN ax 40 MHz, low, U-NII-3	S01_AH01	2021-09-06	Passed	Passed
WLAN ax 80 MHz MIMO, mid, U-NII-1	S01_AH01	2021-09-24	Passed	N/A
WLAN ax 80 MHz MIMO, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 80 MHz MIMO, mid, U-NII-3	S01_AH01	2021-09-24	Passed	Passed
WLAN ax 80 MHz, mid, U-NII-1	S01_AH01	2021-09-06	Passed	N/A
WLAN ax 80 MHz, mid, U-NII-1	S01_AH02	2021-11-19	N/A	Passed
WLAN ax 80 MHz, mid, U-NII-3	S01_AH01	2021-09-06	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

**Conducted power settings for antenna gain ≤ 9.0 dBi  
(see chapter 4.6)**

**Final Result**

<b>OP-Mode</b>	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
Radio Technology, Operating Frequency, Subband				
WLAN a, DIVERSITY, high, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN a, DIVERSITY, high, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN a, DIVERSITY, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN a, DIVERSITY, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN a, DIVERSITY, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN a, DIVERSITY, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN n 20 MHz, MIMO, high, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN n 20 MHz, MIMO, high, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN n 20 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN n 20 MHz, MIMO, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN n 20 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN n 20 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN n 40 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN n 40 MHz, MIMO, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN n 40 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN n 40 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN n 40 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN n 40 MHz, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ac 20 MHz, MIMO, high, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ac 20 MHz, MIMO, high, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ac 20 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ac 20 MHz, MIMO, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ac 20 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ac 20 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ac 40 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ac 40 MHz, MIMO, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ac 40 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ac 40 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ac 80 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ac 80 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ac 80 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-29	Passed	Passed
WLAN ac 40 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 40 MHz, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ac 80 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 80 MHz, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ac 80 MHz, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ax 20 MHz, MIMO, high, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ax 20 MHz, MIMO, high, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ax 20 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ax 20 MHz, MIMO, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ax 20 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A

**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

**Conducted power settings for antenna gain ≤ 9.0 dBi  
(see chapter 4.6)**

**Final Result**

<b>OP-Mode</b>	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
Radio Technology, Operating Frequency, Subband				
WLAN ax 20 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ax 40 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ax 40 MHz, MIMO, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ax 40 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ax 40 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ax 80 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ax 80 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ax 80 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-29	Passed	Passed
WLAN ax 40 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 40 MHz, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 80 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 80 MHz, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 80 MHz, mid, U-NII-3	S01_AH01	2021-09-28	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

**Conducted power settings for antenna gain ≤ 14.2 dBi  
(see chapter 4.6)**

**OP-Mode**

Radio Technology, Operating Frequency,  
Subband

	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>	<b>Final Result</b>
WLAN a, DIVERSITY, high, U-NII-1	S01_AH01	2021-09-24	Passed	N/A	
WLAN a, DIVERSITY, high, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN a, DIVERSITY low, U-NII-1	S01_AH01	2021-09-24	Passed	N/A	
WLAN a, DIVERSITY low, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN a, DIVERSITY mid, U-NII-1	S01_AH01	2021-09-24	Passed	N/A	
WLAN a, DIVERSITY mid, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN a, DIVERSITY, high, U-NII-3	S01_AH01	2021-09-24	Passed	Passed	
WLAN a, DIVERSITY low, U-NII-3	S01_AH01	2021-09-24	Passed	Passed	
WLAN a, DIVERSITY mid, U-NII-3	S01_AH01	2021-09-24	Passed	Passed	
WLAN a, high, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN a, high, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN a, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN a, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN a, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN a, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN n 20 MHz, MIMO, high, U-NII-1	S01_AH01	2021-09-24	Passed	N/A	
WLAN n 20 MHz, MIMO, high, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN n 20 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-24	Passed	N/A	
WLAN n 20 MHz, MIMO, low, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN n 20 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-24	Passed	N/A	
WLAN n 20 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN n 20 MHz, MIMO, high, U-NII-3	S01_AH01	2021-09-24	Passed	Passed	
WLAN n 20 MHz, MIMO, low, U-NII-3	S01_AH01	2021-09-24	Passed	Passed	
WLAN n 20 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-24	Passed	Passed	
WLAN n 20 MHz, high, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN n 20 MHz, high, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN n 20 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN n 20 MHz, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN n 20 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN n 20 MHz, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN n 40 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN n 40 MHz, MIMO, low, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN n 40 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN n 40 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN n 40 MHz, MIMO, low, U-NII-3	S01_AH01	2021-09-28	Passed	Passed	
WLAN n 40 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed	
WLAN n 40 MHz, high, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN n 40 MHz, high, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN n 40 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN n 40 MHz, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN ac 20 MHz, MIMO, high, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	

**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

**Conducted power settings for antenna gain ≤ 14.2 dBi  
(see chapter 4.6)**

**OP-Mode**

Radio Technology, Operating Frequency,  
Subband

	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>	<b>Final Result</b>
WLAN ac 20 MHz, MIMO, high, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN ac 20 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ac 20 MHz, MIMO, low, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN ac 20 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ac 20 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN ac 20 MHz, MIMO, high, U-NII-3	S01_AH01	2021-09-28	Passed	Passed	
WLAN ac 20 MHz, MIMO, low, U-NII-3	S01_AH01	2021-09-28	Passed	Passed	
WLAN ac 20 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed	
WLAN ac 20 MHz, high, U-NII-1	S01_AH01	2021-08-28	Passed	N/A	
WLAN ac 20 MHz, high, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN ac 20 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ac 20 MHz, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN ac 20 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ac 20 MHz, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN ac 40 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ac 40 MHz, MIMO, low, U-NII-1	S01_AH02	2021-12-03	N/A	Passed	
WLAN ac 40 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ac 40 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-03	N/A	Passed	
WLAN ac 40 MHz, MIMO, low, U-NII-3	S01_AH01	2021-09-28	Passed	Passed	
WLAN ac 40 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed	
WLAN ac 40 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ac 40 MHz, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN ac 40 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ac 40 MHz, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN ac 80 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ac 80 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-03	N/A	Passed	
WLAN ac 80 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed	
WLAN ac 80 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ac 80 MHz, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN ax 20 MHz, MIMO, high, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ax 20 MHz, MIMO, high, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN ax 20 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ax 20 MHz, MIMO, low, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN ax 20 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ax 20 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-01	N/A	Passed	
WLAN ax 20 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed	
WLAN ax 20 MHz, MIMO, high, U-NII-3	S01_AH01	2021-09-28	Passed	Passed	
WLAN ax 20 MHz, MIMO, low, U-NII-3	S01_AH01	2021-09-28	Passed	Passed	
WLAN ax 20 MHz, high, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ax 20 MHz, high, U-NII-1	S01_AH02	2021-11-29	N/A	Passed	
WLAN ax 20 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	

**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  
**Conducted power settings for antenna gain ≤ 14.2 dBi  
(see chapter 4.6)**

**Final Result**

<b>OP-Mode</b> Radio Technology, Operating Frequency, Subband	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
WLAN ax 20 MHz, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ax 20 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 40 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 40 MHz, MIMO, low, U-NII-1	S01_AH02	2021-12-03	N/A	Passed
WLAN ax 40 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 40 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-03	N/A	Passed
WLAN ax 40 MHz, MIMO, low, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ax 40 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ax 40 MHz, low, U-NII-1	S01_AH01	2021-08-28	Passed	N/A
WLAN ax 40 MHz, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ax 40 MHz, mid, U-NII-1	S01_AH01	2021-08-28	Passed	N/A
WLAN ax 40 MHz, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ax 80 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-08-28	Passed	N/A
WLAN ax 80 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-03	N/A	Passed
WLAN ax 80 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-08-28	Passed	Passed
WLAN ax 80 MHz, mid, U-NII-1	S01_AH01	2021-08-28	Passed	N/A
WLAN ax 80 MHz, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ax 80 MHz, mid, U-NII-3	S01_AH01	2021-08-28	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  
**Conducted power settings for antenna gain ≤ 8.0 dBi  
(see chapter 4.6)**

**Final Result**

<b>OP-Mode</b> Radio Technology, Operating Frequency, Subband	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
WLAN a, high, U-NII-1	S01_AH01	2021-08-27	Passed	N/A
WLAN a, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN a, high, U-NII-3	S01_AH01	2021-08-27	Passed	Passed
WLAN a, low, U-NII-1	S01_AH01	2021-08-27	Passed	N/A
WLAN a, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN a, low, U-NII-3	S01_AH01	2021-08-27	Passed	Passed
WLAN a, mid, U-NII-1	S01_AH01	2021-08-27	Passed	N/A
WLAN a, mid, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN a, mid, U-NII-3	S01_AH01	2021-08-27	Passed	Passed
WLAN a, DIVERSITY, high, U-NII-1	S01_AH01	2021-09-10	Passed	N/A
WLAN a, DIVERSITY, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN a, DIVERSITY, high, U-NII-3	S01_AH01	2021-09-10	Passed	Passed
WLAN a, DIVERSITY, low, U-NII-1	S01_AH01	2021-09-10	Passed	N/A

**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

**Conducted power settings for antenna gain ≤ 8.0 dBi  
(see chapter 4.6)**

**OP-Mode**

Radio Technology, Operating Frequency,  
Subband

	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>	<b>Final Result</b>
WLAN a, DIVERSITY, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN a, DIVERSITY, low, U-NII-3	S01_AH01	2021-09-10	Passed	Passed	
WLAN a, DIVERSITY, mid, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN a, DIVERSITY, mid, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN a, DIVERSITY, mid, U-NII-3	S01_AH01	2021-09-10	Passed	Passed	
WLAN ac 20 MHz MIMO, high, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN ac 20 MHz MIMO, high, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 20 MHz MIMO, high, U-NII-3	S01_AH01	2021-09-08	Passed	Passed	
WLAN ac 20 MHz MIMO, low, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN ac 20 MHz MIMO, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 20 MHz MIMO, low, U-NII-3	S01_AH01	2021-09-08	Passed	Passed	
WLAN ac 20 MHz MIMO, mid, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN ac 20 MHz MIMO, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 20 MHz MIMO, mid, U-NII-3	S01_AH01	2021-09-08	Passed	Passed	
WLAN ac 20 MHz, high, U-NII-1	S01_AH01	2021-08-31	Passed	N/A	
WLAN ac 20 MHz, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN ac 20 MHz, high, U-NII-3	S01_AH01	2021-08-31	Passed	Passed	
WLAN ac 20 MHz, low, U-NII-1	S01_AH01	2021-08-31	Passed	N/A	
WLAN ac 20 MHz, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN ac 20 MHz, low, U-NII-3	S01_AH01	2021-08-31	Passed	Passed	
WLAN ac 20 MHz, mid, U-NII-1	S01_AH01	2021-08-31	Passed	N/A	
WLAN ac 20 MHz, mid, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN ac 20 MHz, mid, U-NII-3	S01_AH01	2021-08-31	Passed	Passed	
WLAN ac 40 MHz MIMO, high, U-NII-1	S01_AH01	2021-09-22	Passed	N/A	
WLAN ac 40 MHz MIMO, high, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 40 MHz MIMO, high, U-NII-3	S01_AH01	2021-09-22	Passed	Passed	
WLAN ac 40 MHz MIMO, low, U-NII-1	S01_AH01	2021-09-22	Passed	N/A	
WLAN ac 40 MHz MIMO, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 40 MHz MIMO, low, U-NII-3	S01_AH01	2021-09-22	Passed	Passed	
WLAN ac 40 MHz, high, U-NII-1	S01_AH01	2021-09-02	Passed	N/A	
WLAN ac 40 MHz, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN ac 40 MHz, high, U-NII-3	S01_AH01	2021-09-02	Passed	Passed	
WLAN ac 40 MHz, low, U-NII-1	S01_AH01	2021-09-02	Passed	N/A	
WLAN ac 40 MHz, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN ac 40 MHz, low, U-NII-3	S01_AH01	2021-09-02	Passed	Passed	
WLAN ac 80 MHz MIMO, mid, U-NII-1	S01_AH01	2021-09-22	Passed	N/A	
WLAN ac 80 MHz MIMO, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 80 MHz MIMO, mid, U-NII-3	S01_AH01	2021-09-22	Passed	Passed	
WLAN ac 80 MHz, mid, U-NII-1	S01_AH01	2021-09-06	Passed	N/A	
WLAN ac 80 MHz, mid, U-NII-1	S01_AH02	2021-11-19	N/A	Passed	
WLAN ac 80 MHz, mid, U-NII-3	S01_AH01	2021-09-06	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

**Conducted power settings for antenna gain ≤ 8.0 dBi  
(see chapter 4.6)**

**OP-Mode**

Radio Technology, Operating Frequency,  
Subband

	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>	<b>Final Result</b>
WLAN n 20 MHz MIMO, high, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN n 20 MHz MIMO, high, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN n 20 MHz MIMO, high, U-NII-3	S01_AH01	2021-09-08	Passed	Passed	
WLAN n 20 MHz MIMO, low, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN n 20 MHz MIMO, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN n 20 MHz MIMO, low, U-NII-3	S01_AH01	2021-09-08	Passed	Passed	
WLAN n 20 MHz MIMO, mid, U-NII-1	S01_AH01	2021-09-10	Passed	N/A	
WLAN n 20 MHz MIMO, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN n 20 MHz MIMO, mid, U-NII-3	S01_AH01	2021-09-08	Passed	Passed	
WLAN n 20 MHz, high, U-NII-1	S01_AH01	2021-08-27	Passed	N/A	
WLAN n 20 MHz, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN n 20 MHz, high, U-NII-3	S01_AH01	2021-08-27	Passed	Passed	
WLAN n 20 MHz, low, U-NII-1	S01_AH01	2021-08-27	Passed	N/A	
WLAN n 20 MHz, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN n 20 MHz, low, U-NII-3	S01_AH01	2021-08-27	Passed	Passed	
WLAN n 20 MHz, mid, U-NII-1	S01_AH01	2021-08-27	Passed	N/A	
WLAN n 20 MHz, mid, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN n 20 MHz, mid, U-NII-3	S01_AH01	2021-08-27	Passed	Passed	
WLAN n 40 MHz MIMO, high, U-NII-1	S01_AH01	2021-09-16	Passed	N/A	
WLAN n 40 MHz MIMO, high, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN n 40 MHz MIMO, high, U-NII-3	S01_AH01	2021-09-16	Passed	Passed	
WLAN n 40 MHz MIMO, low, U-NII-1	S01_AH01	2021-09-16	Passed	N/A	
WLAN n 40 MHz MIMO, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN n 40 MHz MIMO, low, U-NII-3	S01_AH01	2021-09-16	Passed	Passed	
WLAN n 40 MHz, high, U-NII-1	S01_AH01	2021-09-02	Passed	N/A	
WLAN n 40 MHz, high, U-NII-	S01_AH02	2021-11-17	N/A	Passed	
WLAN n 40 MHz, high, U-NII-3	S01_AH01	2021-09-02	Passed	Passed	
WLAN n 40 MHz, low, U-NII-1	S01_AH01	2021-09-02	Passed	N/A	
WLAN n 40 MHz, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed	
WLAN n 40 MHz, low, U-NII-3	S01_AH01	2021-09-02	Passed	Passed	
WLAN ax 20 MHz MIMO, high, U-NII-1	S01_AH01	2021-09-08	Passed	N/A	
WLAN ax 20 MHz MIMO, high, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ax 20 MHz MIMO, high, U-NII-3	S01_AH01	2021-09-10	Passed	Passed	
WLAN ax 20 MHz MIMO, low, U-NII-1	S01_AH01	2021-09-08	Passed	N/A	
WLAN ax 20 MHz MIMO, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ax 20 MHz MIMO, low, U-NII-3	S01_AH01	2021-09-10	Passed	Passed	
WLAN ax 20 MHz MIMO, mid, U-NII-1	S01_AH01	2021-09-08	Passed	N/A	
WLAN ax 20 MHz MIMO, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ax 20 MHz MIMO, mid, U-NII-3	S01_AH01	2021-09-10	Passed	Passed	
WLAN ax 20 MHz, high, U-NII-1	S01_AH01	2021-09-02	Passed	N/A	
WLAN ax 20 MHz, high, U-NII-1	S01_AH02	2021-11-17	N/A	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

**Conducted power settings for antenna gain ≤ 8.0 dBi  
(see chapter 4.6)**

**Final Result**

<b>OP-Mode</b>	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
Radio Technology, Operating Frequency, Subband				
WLAN ax 20 MHz, high, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ax 20 MHz, low, U-NII-1	S01_AH01	2021-09-02	Passed	N/A
WLAN ax 20 MHz, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN ax 20 MHz, low, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ax 20 MHz, mid, U-NII-1	S01_AH01	2021-09-02	Passed	N/A
WLAN ax 20 MHz, mid, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN ax 20 MHz, mid, U-NII-3	S01_AH01	2021-09-02	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-1	S01_AH01	2021-09-22	Passed	N/A
WLAN ax 40 MHz MIMO, high, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 40 MHz MIMO, high, U-NII-3	S01_AH01	2021-09-22	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-1	S01_AH01	2021-09-22	Passed	N/A
WLAN ax 40 MHz MIMO, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 40 MHz MIMO, low, U-NII-3	S01_AH01	2021-09-22	Passed	Passed
WLAN ax 40 MHz, high, U-NII-1	S01_AH01	2021-09-06	Passed	N/A
WLAN ax 40 MHz, high, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN ax 40 MHz, high, U-NII-3	S01_AH01	2021-09-06	Passed	Passed
WLAN ax 40 MHz, low, U-NII-1	S01_AH01	2021-09-06	Passed	N/A
WLAN ax 40 MHz, low, U-NII-1	S01_AH02	2021-11-17	N/A	Passed
WLAN ax 40 MHz, low, U-NII-3	S01_AH01	2021-09-06	Passed	Passed
WLAN ax 80 MHz MIMO, mid, U-NII-1	S01_AH01	2021-09-24	Passed	N/A
WLAN ax 80 MHz MIMO, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 80 MHz MIMO, mid, U-NII-3	S01_AH01	2021-09-24	Passed	Passed
WLAN ax 80 MHz, mid, U-NII-1	S01_AH01	2021-09-06	Passed	N/A
WLAN ax 80 MHz, mid, U-NII-1	S01_AH02	2021-11-19	N/A	Passed
WLAN ax 80 MHz, mid, U-NII-3	S01_AH01	2021-09-06	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

**Conducted power settings for antenna gain ≤ 9.0 dBi  
(see chapter 4.6)**

**OP-Mode**

Radio Technology, Operating Frequency,  
Subband

	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>	<b>Final Result</b>
WLAN a, DIVERSITY, high, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN a, DIVERSITY, high, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN a, DIVERSITY, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN a, DIVERSITY, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN a, DIVERSITY, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN a, DIVERSITY, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN n 20 MHz, MIMO, high, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN n 20 MHz, MIMO, high, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN n 20 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN n 20 MHz, MIMO, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN n 20 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN n 20 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN n 40 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN n 40 MHz, MIMO, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN n 40 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN n 40 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN n 40 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN n 40 MHz, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 20 MHz, MIMO, high, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN ac 20 MHz, MIMO, high, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN ac 20 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN ac 20 MHz, MIMO, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN ac 20 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN ac 20 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN ac 40 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN ac 40 MHz, MIMO, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN ac 40 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN ac 40 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN ac 80 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN ac 80 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN ac 80 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-29	Passed	Passed	
WLAN ac 40 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ac 40 MHz, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 80 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A	
WLAN ac 80 MHz, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed	
WLAN ac 80 MHz, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed	
WLAN ax 20 MHz, MIMO, high, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN ax 20 MHz, MIMO, high, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN ax 20 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	
WLAN ax 20 MHz, MIMO, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed	
WLAN ax 20 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A	

**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

**Conducted power settings for antenna gain ≤ 9.0 dBi  
(see chapter 4.6)**

**Final Result**

<b>OP-Mode</b>	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
Radio Technology, Operating Frequency, Subband				
WLAN ax 20 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ax 40 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ax 40 MHz, MIMO, low, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ax 40 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ax 40 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ax 80 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-29	Passed	N/A
WLAN ax 80 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-11-25	N/A	Passed
WLAN ax 80 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-29	Passed	Passed
WLAN ax 40 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 40 MHz, low, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 80 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 80 MHz, mid, U-NII-1	S01_AH02	2021-11-23	N/A	Passed
WLAN ax 80 MHz, mid, U-NII-3	S01_AH01	2021-09-28	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

**Conducted power settings for antenna gain ≤ 14.2 dBi  
(see chapter 4.6)**

**Final Result**

<b>OP-Mode</b>	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
Radio Technology, Operating Frequency, Subband				
WLAN a, DIVERSITY, high, U-NII-1	S01_AH01	2021-09-24	Passed	N/A
WLAN a, DIVERSITY, high, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN a, DIVERSITY low, U-NII-1	S01_AH01	2021-09-24	Passed	N/A
WLAN a, DIVERSITY low, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN a, DIVERSITY mid, U-NII-1	S01_AH01	2021-09-24	Passed	N/A
WLAN a, DIVERSITY mid, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN a, DIVERSITY, high, U-NII-3	S01_AH01	2021-09-24	Passed	Passed
WLAN a, DIVERSITY low, U-NII-3	S01_AH01	2021-09-24	Passed	Passed
WLAN a, DIVERSITY mid, U-NII-3	S01_AH01	2021-09-24	Passed	Passed
WLAN a, high, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN a, high, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN a, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN a, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN a, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN a, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN n 20 MHz, MIMO, high, U-NII-1	S01_AH01	2021-09-24	Passed	N/A
WLAN n 20 MHz, MIMO, high, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN n 20 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-24	Passed	N/A

**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  
**Conducted power settings for antenna gain ≤ 14.2 dBi  
(see chapter 4.6)**

**Final Result**

<b>OP-Mode</b>	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
Radio Technology, Operating Frequency, Subband				
WLAN n 20 MHz, MIMO, low, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN n 20 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-24	Passed	N/A
WLAN n 20 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN n 20 MHz, MIMO, high, U-NII-3	S01_AH01	2021-09-24	Passed	Passed
WLAN n 20 MHz, MIMO, low, U-NII-3	S01_AH01	2021-09-24	Passed	Passed
WLAN n 20 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-24	Passed	Passed
WLAN n 20 MHz, high, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN n 20 MHz, high, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN n 20 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN n 20 MHz, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN n 20 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN n 20 MHz, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN n 40 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN n 40 MHz, MIMO, low, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN n 40 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN n 40 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN n 40 MHz, MIMO, low, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN n 40 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN n 40 MHz, high, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN n 40 MHz, high, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN n 40 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN n 40 MHz, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ac 20 MHz, MIMO, high, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 20 MHz, MIMO, high, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN ac 20 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 20 MHz, MIMO, low, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN ac 20 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 20 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN ac 20 MHz, MIMO, high, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ac 20 MHz, MIMO, low, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ac 20 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ac 20 MHz, high, U-NII-1	S01_AH01	2021-08-28	Passed	N/A
WLAN ac 20 MHz, high, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ac 20 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 20 MHz, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ac 20 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 20 MHz, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ac 40 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 40 MHz, MIMO, low, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN ac 40 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 40 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-01	N/A	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  
**Conducted power settings for antenna gain ≤ 14.2 dBi  
(see chapter 4.6)**

**Final Result**

<b>OP-Mode</b>	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
Radio Technology, Operating Frequency, Subband				
WLAN ac 40 MHz, MIMO, low, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ac 40 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ac 40 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 40 MHz, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ac 40 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 40 MHz, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ac 80 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 80 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-03	N/A	Passed
WLAN ac 80 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ac 80 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ac 80 MHz, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ax 20 MHz, MIMO, high, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 20 MHz, MIMO, high, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN ax 20 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 20 MHz, MIMO, low, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN ax 20 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 20 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN ax 20 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ax 20 MHz, MIMO, high, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ax 20 MHz, MIMO, low, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ax 20 MHz, high, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 20 MHz, high, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ax 20 MHz, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 20 MHz, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ax 20 MHz, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 40 MHz, MIMO, low, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 40 MHz, MIMO, low, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN ax 40 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-09-28	Passed	N/A
WLAN ax 40 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-01	N/A	Passed
WLAN ax 40 MHz, MIMO, low, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ax 40 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-09-28	Passed	Passed
WLAN ax 40 MHz, low, U-NII-1	S01_AH01	2021-08-28	Passed	N/A
WLAN ax 40 MHz, low, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ax 40 MHz, mid, U-NII-1	S01_AH01	2021-08-28	Passed	N/A
WLAN ax 40 MHz, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ax 80 MHz, MIMO, mid, U-NII-1	S01_AH01	2021-08-28	Passed	N/A
WLAN ax 80 MHz, MIMO, mid, U-NII-1	S01_AH02	2021-12-03	N/A	Passed
WLAN ax 80 MHz, MIMO, mid, U-NII-3	S01_AH01	2021-08-28	Passed	Passed
WLAN ax 80 MHz, mid, U-NII-1	S01_AH01	2021-08-28	Passed	N/A
WLAN ax 80 MHz, mid, U-NII-1	S01_AH02	2021-11-29	N/A	Passed
WLAN ax 80 MHz, mid, U-NII-3	S01_AH01	2021-08-28	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

**Conducted power settings for antenna gain ≤ 8.0 dBi  
(see chapter 4.6)**

**Final Result**

<b>OP-Mode</b>	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
Radio Technology, Operating Frequency, Subband				
WLAN a, DIVERSITY, high, U-NII-3	S04_AJ01	2021-08-27	Passed	Passed
WLAN a, DIVERSITY, low, U-NII-1	S04_AJ01	2021-07-20	Passed	Passed
WLAN a, DIVERSITY: low, U-NII-3	S04_AJ01	2021-07-20	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-1	S04_AJ01	2021-07-20	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-3	S04_AJ01	2021-07-20	Passed	Passed
WLAN ac 20 MHz, high, U-NII-3	S04_AJ01	2021-09-13	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-3	S04_AJ01	2021-08-31	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-1	S04_AJ01	2021-07-27	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-3	S04_AJ01	2021-07-29	Passed	Passed
WLAN ac 40 MHz, low, U-NII-1	S04_AJ02	2021-11-25	Passed	Passed
WLAN ac 40 MHz, low, U-NII-3	S04_AJ02	2021-11-25	Passed	Passed
WLAN ac 80 MHz MIMO, mid, U-NII-1	S04_AJ01	2021-07-27	Passed	Passed
WLAN ac 80 MHz MIMO, mid, U-NII-3	S04_AJ01	2021-07-29	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-1	S04_AJ01	2021-07-29	Passed	Passed
WLAN ax 20 MHz, high, U-NII-3	S04_AJ01	2021-09-13	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-3	S04_AJ01	2021-07-29	Passed	Passed
WLAN ax 40 MHz, high, U-NII-3	S04_AJ01	2021-09-13	Passed	Passed
WLAN ax 40 MHz, low, U-NII-1	S04_AJ01	2021-08-09	Passed	Passed
WLAN ax 40 MHz, low, U-NII-3	S04_AJ01	2021-09-13	Passed	Passed
WLAN ax 80 MHz MIMO, mid, U-NII-1	S04_AJ01	2021-07-28	Passed	Passed
WLAN ax 80 MHz MIMO, mid, U-NII-3	S04_AJ01	2021-09-13	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-3	S04_AJ01	2021-08-29	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-1	S04_AJ01	2021-07-20	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-3	S04_AJ01	2021-07-20	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-3	S04_AJ01	2021-07-29	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-1	S04_AJ01	2021-07-27	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-3	S04_AJ01	2021-07-29	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

**Final Result**

**Conducted power settings for antenna gain ≤ 9.0 dBi  
(see chapter 4.6)**

**OP-Mode**

Radio Technology, Operating Frequency,  
Subband

**Setup**

**Date**

**FCC**

**IC**

WLAN a, high, U-NII-3	S03_AJ01	2021-09-12	Passed	Passed
WLAN a, low, U-NII-1	S03_AJ02	2021-11-25	Passed	Passed
WLAN a, low, U-NII-3	S03_AJ01	2021-09-11	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-1	S03_AJ02	2021-08-02	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-3	S03_AJ01	2021-09-12	Passed	Passed
WLAN ac 20 MHz, low, U-NII-1	S03_AJ02	2021-08-02	Passed	Passed
WLAN ac 20 MHz, low, U-NII-3	S03_AJ01	2021-09-12	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-1	S03_AJ01	2021-08-02	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-3	S03_AJ01	2021-09-12	Passed	Passed
WLAN ac 40 MHz, low, U-NII-1	S03_AJ01	2021-08-02	Passed	Passed
WLAN ac 40 MHz, low, U-NII-3	S03_AJ01	2021-09-12	Passed	Passed
WLAN ac 80 MHz MIMO, mid, U-NII-1	S03_AJ01	2021-08-02	Passed	Passed
WLAN ac 80 MHz MIMO, mid, U-NII-3	S03_AJ01	2021-08-02	Passed	Passed
Remark: lower band edge only				
WLAN ac 80 MHz, mid, U-NII-1	S03_AJ01	2021-08-02	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-1	S03_AJ02	2021-08-02	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-3	S03_AJ01	2021-09-12	Passed	Passed
WLAN ax 20 MHz, low, U-NII-1	S03_AJ02	2021-08-02	Passed	Passed
WLAN ax 20 MHz, low, U-NII-3	S03_AJ01	2021-09-12	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-1	S03_AJ01	2021-08-02	Passed	Passed
WLAN ax 40 MHz, low, U-NII-1	S03_AJ01	2021-08-02	Passed	Passed
WLAN ax 80 MHz MIMO, mid, U-NII-1	S03_AJ01	2021-08-02	Passed	Passed
WLAN ax 80 MHz MIMO, mid, U-NII-3	S03_AJ01	2021-08-02	Passed	Passed
Remark: lower band edge only				
WLAN ax 80 MHz, mid, U-NII-1	S03_AJ01	2021-08-02	Passed	Passed
WLAN ax 80 MHz, mid, U-NII-3	S03_AJ01	2021-08-02	Passed	Passed
Remark: lower BE only				
WLAN n 20 MHz MIMO, low, U-NII-1	S03_AJ02	2021-08-02	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-3	S03_AJ01	2021-09-12	Passed	Passed
WLAN n 20 MHz, low, U-NII-1	S03_AJ02	2021-08-02	Passed	Passed
WLAN n 20 MHz, low, U-NII-3	S03_AJ01	2021-09-12	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-1	S03_AJ01	2021-08-02	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-3	S03_AJ01	2021-09-12	Passed	Passed
WLAN n 40 MHz, low, U-NII-1	S03_AJ01	2021-08-02	Passed	Passed
WLAN n 40 MHz, low, U-NII-3	S03_AJ01	2021-09-12	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

**Conducted power settings for antenna gain ≤ 8.0 dBi  
(see chapter 4.6)**

**OP-Mode**

Radio Technology, Operating Frequency, Measurement range, Subband

	<b>Setup</b>	<b>Date</b>	<b>Final Result</b>	
			<b>FCC</b>	<b>IC</b>
WLAN a, DIVERSITY, low, 9kHz - 30MHz, U-NII-1	S04_AJ01	2021-10-01	Passed	Passed
WLAN a, DIVERSITY, low, 30MHz - 1GHz, U-NII-1	S04_AJ01	2021-09-30	Passed	Passed
WLAN a, DIVERSITY, mid, 30MHz - 1GHz, U-NII-3	S04_AJ01	2021-09-30	Passed	Passed
WLAN a, DIVERSITY, high, 1GHz - 26GHz, U-NII-1	S04_AJ01	2021-08-29	Passed	Passed
WLAN a, DIVERSITY, high, 1GHz - 26GHz, U-NII-3	S04_AJ01	2021-08-27	Passed	Passed
WLAN a, DIVERSITY, low, 1GHz - 26GHz, U-NII-1	S04_AJ01	2021-08-27	Passed	Passed
WLAN a, DIVERSITY, low, 1GHz - 26GHz, U-NII-3	S04_AJ01	2021-08-28	Passed	Passed
WLAN a, DIVERSITY, mid, 1GHz - 26GHz, U-NII-1	S04_AJ01	2021-08-27	Passed	Passed
WLAN a, DIVERSITY, mid, 1GHz - 26GHz, U-NII-3	S04_AJ01	2021-08-29	Passed	Passed
WLAN a, DIVERSITY, mid, 26GHz - 40GHz, U-NII-1	S04_AJ01	2021-09-22	Passed	Passed
WLAN a, DIVERSITY, mid, 26GHz - 40GHz, U-NII-3	S04_AJ01	2021-09-22	Passed	Passed
WLAN n 20 MIMO MHz, high, 1GHz - 26GHz, U-NII-1 Remark: 1-18GHz	S04_AJ01	2021-08-29	Passed	Passed
WLAN n 20 MHz MIMO, high, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz	S04_AJ01	2021-08-29	Passed	Passed
WLAN n 20 MHz MIMO, low, 1GHz - 26GHz, U-NII-1 Remark: 1-18GHz	S04_AJ01	2021-08-29	Passed	Passed
WLAN n 20 MHz MIMO, low, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz	S04_AJ01	2021-08-29	Passed	Passed
WLAN n 20 MHz MIMO, mid, 1GHz - 26GHz, U-NII-1 Remark: 1-18GHz	S04_AJ01	2021-08-28	Passed	Passed
WLAN n 20 MHz MIMO, mid, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz	S04_AJ01	2021-08-29	Passed	Passed
WLAN n 20 MHz MIMO, mid, 26GHz - 40GHz, U-NII-1	S04_AJ01	2021-09-22	Passed	Passed
WLAN n 20 MHz MIMO, mid, 26GHz - 40GHz, U-NII-3	S04_AJ01	2021-09-22	Passed	Passed
WLAN n 40 MHz MIMO, low, 9kHz - 30MHz, U-NII-1	S04_AJ01	2021-10-01	Passed	Passed
WLAN n 40 MHz MIMO, low, 30MHz - 1GHz, U-NII-1	S04_AJ01	2021-09-30	Passed	Passed
WLAN n 40 MHz MIMO, high, 30MHz - 1GHz, U-NII-3	S04_AJ01	2021-09-30	Passed	Passed
WLAN n 40 MHz, high, 1GHz - 26GHz, U-NII-1	S04_AJ01	2021-08-30	Passed	Passed
WLAN n 40 MHz, high, 1GHz - 26GHz, U-NII-3	S04_AJ01	2021-08-31	Passed	Passed
WLAN n 40 MHz, low, 1GHz - 26GHz, U-NII-1	S04_AJ01	2021-08-30	Passed	Passed
WLAN n 40 MHz, low, 1GHz - 26GHz, U-NII-3	S04_AJ01	2021-08-31	Passed	Passed
WLAN n 20 MHz MIMO, low, 26GHz - 40GHz, U-NII-1	S04_AJ01	2021-09-22	Passed	Passed
WLAN n 20 MHz MIMO, high, 26GHz - 40GHz, U-NII-3	S04_AJ01	2021-09-22	Passed	Passed
WLAN ac 40 MHz, high, 1GHz - 26GHz, U-NII-1 Remark: 1-18GHz, Harmonics	S04_AJ01	2021-09-13	Passed	Passed
WLAN ac 40 MHz, high, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz	S04_AJ01	2021-08-31	Passed	Passed
WLAN ac 40 MHz, low, 1GHz - 26GHz, U-NII-1 Remark: 1-18GHz, Harmonics	S04_AJ01	2021-09-13	Passed	Passed
WLAN ac 40 MHz, low, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz, Harmonics	S04_AJ01	2021-09-13	Passed	Passed
WLAN ax 40 MHz, high, 1GHz - 26GHz, U-NII-1 Remark: 1-18GHz, Harmonics	S04_AJ01	2021-09-13	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

**Final Result**

**Conducted power settings for antenna gain ≤ 8.0 dBi (see chapter 4.6)**

**OP-Mode**

Radio Technology, Operating Frequency, Measurement range, Subband

**Setup**

**Date**

**FCC**

**IC**

WLAN ax 40 MHz, high, 1GHz - 26GHz, U-NII-3  
Remark: 1-18GHz, Harmonics

S04\_AJ01

2021-09-13

Passed

Passed

WLAN ax 40 MHz, low, 1GHz - 26GHz, U-NII-1  
Remark: 1-18GHz

S04\_AJ01

2021-09-13

Passed

Passed

WLAN ax 40 MHz, low, 1GHz - 26GHz, U-NII-3  
Remark: 1-18GHz, Harmonics

S04\_AJ01

2021-09-13

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

**Final Result**

**Conducted power settings for antenna gain ≤ 9.0 dBi (see chapter 4.6)**

**OP-Mode**

Radio Technology, Operating Frequency, Measurement range, Subband

**Setup**

**Date**

**FCC**

**IC**

WLAN a, high, 1GHz - 26GHz, U-NII-1  
Remark: Harmonics

S03\_AJ01

2021-09-11

Passed

Passed

WLAN a, high, 1GHz - 26GHz, U-NII-3  
Remark: Harmonics

S03\_AJ01

2021-09-12

Passed

Passed

WLAN a, low, 1GHz - 26GHz, U-NII-1  
Remark: Harmonics

S03\_AJ01

2021-09-11

Passed

Passed

WLAN a, low, 1GHz - 26GHz, U-NII-3  
Remark: Harmonics

S03\_AJ01

2021-09-11

Passed

Passed

WLAN a, mid, 1GHz - 26GHz, U-NII-1  
Remark: Harmonics

S03\_AJ01

2021-09-11

Passed

Passed

WLAN a, mid, 1GHz - 26GHz, U-NII-3  
Remark: Harmonics

S03\_AJ01

2021-09-11

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

**Conducted power settings for antenna gain ≤ 14.2 dBi (see chapter 4.6)**

**OP-Mode**

Radio Technology, Operating Frequency, Measurement range, Subband

	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>	<b>Final Result</b>
WLAN a, DIVERSITY, high, 1GHz - 26GHz, U-NII-1 Remark: Harmonics	S05_AJ01	2021-09-05	Passed	Passed	
WLAN a, DIVERSITY, high, 1GHz - 26GHz, U-NII-3	S05_AJ01	2021-09-01	Passed	Passed	
WLAN a, DIVERSITY, low, 1GHz - 26GHz, U-NII-1 Remark: Harmonics	S05_AJ01	2021-09-05	Passed	Passed	
WLAN a, DIVERSITY, low, 1GHz - 26GHz, U-NII-3 Remark: Harmonics	S05_AJ01	2021-09-05	Passed	Passed	
WLAN a, DIVERSITY, mid, 1GHz - 26GHz, U-NII-1 Remark: Harmonics	S05_AJ01	2021-09-05	Passed	Passed	
WLAN a, DIVERSITY, mid, 1GHz - 26GHz, U-NII-3	S05_AJ01	2021-09-01	Passed	Passed	
WLAN n 20 MHz MIMO, high, 1GHz - 26GHz, U-NII-1 Remark: Harmonics	S05_AJ01	2021-08-31	Passed	Passed	
WLAN n 20 MHz MIMO, high, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz	S05_AJ01	2021-08-31	Passed	Passed	
WLAN n 20 MHz MIMO, low, 1GHz - 26GHz, U-NII-1	S05_AJ01	2021-08-06	Passed	Passed	
WLAN n 20 MHz MIMO, low, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz	S05_AJ01	2021-08-31	Passed	Passed	
WLAN n 20 MIMO, mid, 1GHz - 26GHz, U-NII-1	S05_AJ01	2021-08-06	Passed	Passed	
WLAN n 20 MIMO, mid, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz	S05_AJ01	2021-08-31	Passed	Passed	
WLAN n 40 MHz MIMO, high, 1GHz - 26GHz, U-NII-1 Remark: Harmonics	S05_AJ01	2021-08-31	Passed	Passed	
WLAN n 40 MHz MIMO, high, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz, Harmonics	S05_AJ02	2021-12-16	Passed	Passed	
WLAN n 40 MHz MIMO, low, 1GHz - 26GHz, U-NII-1 Remark: Harmonics	S05_AJ01	2021-08-31	Passed	Passed	
WLAN n 40 MHz MIMO, low, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz, Harmonics	S05_AJ02	2021-12-16	Passed	Passed	
WLAN ac 40 MHz MIMO, high, 1GHz - 26GHz, U-NII-1 Remark: Harmonics	S05_AJ01	2021-09-06	Passed	Passed	
WLAN ac 40 MHz MIMO, high, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz, Harmonics	S05_AJ02	2021-12-17	Passed	Passed	
WLAN ac 40 MHz MIMO, low, 1GHz - 26GHz, U-NII-1 Remark: Harmonics	S05_AJ01	2021-09-06	Passed	Passed	
WLAN ac 40 MHz MIMO, low, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz, Harmonics	S05_AJ02	2021-12-17	Passed	Passed	
WLAN ax 40 MHz MIMO, high, 1GHz - 26GHz, U-NII-1 Remark: Harmonics	S05_AJ01	2021-09-06	Passed	Passed	
WLAN ax 40 MHz MIMO, high, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz, Harmonics	S05_AJ02	2021-12-17	Passed	Passed	
WLAN ax 40 MHz MIMO, low, 1GHz - 26GHz, U-NII-1 Remark: 1-18GHz	S05_AJ01	2021-09-06	Passed	Passed	
WLAN ax 40 MHz MIMO, low, 1GHz - 26GHz, U-NII-3 Remark: 1-18GHz, Harmonics	S05_AJ02	2021-12-17	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  
**Conducted power settings for antenna gain ≤ 14.2 dBi  
(see chapter 4.6)**

**Final Result**

<b>OP-Mode</b>	<b>Setup</b>	<b>Date</b>	<b>FCC</b>	<b>IC</b>
Radio Technology, Operating Frequency, Subband				
WLAN a, high, U-NII-3	S05_AJ01	2021-09-01	Passed	Passed
WLAN a, low, U-NII-1	S05_AJ01	2021-09-05	Passed	Passed
WLAN a, low, U-NII-3	S05_AJ01	2021-09-05	Passed	Passed
WLAN ac 20 MHz MIMO, high, U-NII-3	S05_AJ02	2021-09-06	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-1	S05_AJ01	2021-07-29	Passed	Passed
WLAN ac 20 MHz MIMO, low, U-NII-3	S05_AJ02	2021-09-06	Passed	Passed
WLAN ac 40 MHz MIMO, high, U-NII-3	S05_AJ02	2021-09-06	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-1	S05_AJ01	2021-07-29	Passed	Passed
WLAN ac 40 MHz MIMO, low, U-NII-3	S05_AJ02	2021-09-06	Passed	Passed
WLAN ac 80 MHz MIMO, mid, U-NII-1	S05_AJ01	2021-07-29	Passed	Passed
WLAN ac 80 MHz, mid, U-NII-3	S05_AJ01	2021-09-06	Passed	Passed
WLAN ax 20 MHz MIMO, high, U-NII-3	S05_AJ02	2021-09-06	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-1	S05_AJ01	2021-07-29	Passed	Passed
WLAN ax 20 MHz MIMO, low, U-NII-3	S05_AJ02	2021-09-06	Passed	Passed
WLAN ax 40 MHz MIMO, high, U-NII-3	S05_AJ02	2021-09-06	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-1	S05_AJ01	2021-07-29	Passed	Passed
WLAN ax 40 MHz MIMO, low, U-NII-3	S05_AJ02	2021-11-25	Passed	Passed
WLAN ax 80 MHz MIMO, mid, U-NII-1	S05_AJ01	2021-07-29	Passed	Passed
WLAN n 20 MHz MIMO, high, U-NII-3	S05_AJ01	2021-08-31	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-1	S05_AJ01	2021-07-29	Passed	Passed
WLAN n 20 MHz MIMO, low, U-NII-3	S05_AJ01	2021-08-31	Passed	Passed
WLAN n 40 MHz MIMO, high, U-NII-3	S05_AJ02	2021-09-05	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-1	S05_AJ01	2021-09-06	Passed	Passed
WLAN n 40 MHz MIMO, low, U-NII-3	S05_AJ02	2021-09-05	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	2022-01-03	--	valid
--	--	--	--

COMMENT: This report covers only the 5 GHz WLAN bands UNII-1 and U-NII 3



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



(responsible for testing and report)  
Dipl.-Ing. Marco Kullik



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: 2021-09-09

#### 3.2 PROJECT DATA

Responsible for testing and report: Dipl.-Ing. Marco Kullik  
Employees who performed the tests: documented internally at 7Layers  
Date of Report: 2022-01-03  
Testing Period: 2021-08-27 to 2021-12-01

#### 3.3 APPLICANT DATA

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

#### 3.4 MANUFACTURER DATA

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

## 4 TEST OBJECT DATA

### 4.1 GENERAL EUT DESCRIPTION

Kind of Device product description	Industrial Access Point / Client
Product name	SCALANCE W700 / MSAX
Type	MSAX65-W1-M12-E2
<b>Declared EUT data by the supplier</b>	
Specific product description for the EUT	<p>The MSAX65-W1-M12-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"> <li>• 802.11 ax/ac/a/h/n Mode: 5.15 - 5.35 GHz and 5.47 - 5.85 GHz</li> <li>• 802.11 ax/b/g/n Mode: 2400 - 2483.5 MHz</li> </ul> <p>2 N 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. 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, also PoE on the ethernet interface is available.</p>
Voltage Type	DC
Voltage Level	24.0 V
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"> <li>• ANT795-6MN, effective gain = 8.0 dBi (in the 5 GHz Band)</li> <li>• ANT795-6DC, effective gain = 9.0 dBi (in the 5 GHz Band)</li> <li>• ANT792-8DN, effective gain = 14.2 dBi (in the 5 GHz Band)</li> </ul> <p>For details please see chapter 4.4 &amp; 4.5 of this report.</p>
Tested Modulation Type	<p>WLAN a (6 Mbit): OFDM  WLAN n (MCS0): OFDM  WLAN ac (MCS0): OFDM  WLAN ax (MCS0): OFDM</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

EUT ports (connected cables during testing):	<ul style="list-style-type: none"> <li>• Enclosure</li> <li>• DC port: cable length appr. 1.0m</li> <li>• Digital I/O port: cable length 2.0m (terminated with DIDO box), only for radiated tests</li> <li>• LAN port: cable length (shielded), appr. 3.0m, only for radiated tests</li> <li>• USB C service port: cable length, appr. 2.0m, only for conducted tests</li> <li>• 2 Antenna ports, N-connector, appr. 1.0 / 10 m (depending on the antenna, please see chapter 4.4 &amp; 4.5) &amp; antenna</li> </ul>
Tested data rates	WLAN a: 6 Mbit/s WLAN n: MCS0 WLAN ac: MCS0 WLAN ax: MCS0
Special software used for testing	Test commands in command line interface of EUT with connection by USB C or LAN Port of EUT

#### 4.2 EUT MAIN COMPONENTS

Sample Name	Sample Code	Description
EUT ah01	DE1039028ah01	
<b>Sample Parameter</b>	<b>Value</b>	
Serial No.	VPN4200423	
HW Version	02	
SW Version	V01.01.00	
Comment		

Sample Name	Sample Code	Description
EUT ah02	DE1039028ah02	
<b>Sample Parameter</b>	<b>Value</b>	
Serial No.	VPN4200423	
HW Version	02	
SW Version	V01.01.00	
Comment	Re-installation of software, ax-mode 2.4 GHz unlocked	

Sample Name	Sample Code	Description
EUT aj01	DE1039028aj01	
<b>Sample Parameter</b>	<b>Value</b>	
Serial No.	VPN4200421	
HW Version	02	
SW Version	V01.01.00	
Comment		

Sample Name	Sample Code	Description
EUT aj02	DE1039028aj02	
<b>Sample Parameter</b>	<b>Value</b>	
Serial No.	VPN4200421	
HW Version	02	
SW Version	V01.01.00	
Comment	Re-installation of software, ax-mode 2.4 GHz unlocked	

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



### 4.3 ANCILLARY EQUIPMENT

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

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
AC Adapter 65W RE05	Fujitsu Ltd., AC Adapter 65W RE05:A13-065N3A, -, -, 186907LS04	A13-065N3A
AUX55	Siemens, -, -, -, -	DEBUG BOX CLP
Laptop RE05	Fujitsu Ltd., Laptop RE05: Lifebook U758, -, -, DSAL009811	Lifebook U758
AUX102	Siemens, ANT795-6DC, -, - ,	9 dBi Antenna
AUX103	Siemens, ANT795-6DC, -, - ,	9 dBi Antenna
AUX104	Siemens, ANT795-6MN, -, - ,	8 dBi Antenna
AUX105	Siemens, ANT795-6MN, -, - ,	8 dBi Antenna
AUX106	Siemens, ANT793-8DK, -, - ,	23 dBi Antenna
AUX14	, , -, - ,	RF-Cable (1m, n-connector)
AUX15	, , -, - ,	RF-Cable (1m, n-connector)
AUX16	, , -, - ,	RF-Cable (10m, n-connector), 8.8 dB attenuation
AUX17	, , -, - ,	RF-Cable (10m, n-connector), 8.8 dB attenuation

## 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_AH01	EUT ah01, AUX55, AC Adapter 65W RE05, Laptop RE05	Setup for Conducted Tests
S01_AH02	EUT ah02, AUX55, AC Adapter 65W RE05, Laptop RE05	Setup for Conducted Tests (only for UNII-1 band, ISED power settings)
S04_AJ01	EUT aj01, AUX14, AUX104, AUX105, AUX15,	Setup for Radiated Tests
S05_AJ02	EUT aj02, AUX16, AUX17, AUX106,	Setup for Radiated Tests
S03_AJ02	EUT aj02, AUX14, AUX103, AUX102, AUX15,	Setup for Radiated Tests
S03_AJ01	EUT aj01, AUX14, AUX103, AUX102, AUX15,	Setup for Radiated Tests
S04_AJ02	EUT aj02, AUX14, AUX104, AUX105, AUX15,	Setup for Radiated Tests
S05_AJ01	EUT aj01, AUX16, AUX17, AUX106,	Setup for Radiated Tests

- The setups S03\_AJ01 and S03\_AJ02 have an effective gain of 9 dBi
- The setups S04\_AJ01 and S04\_AJ02 have an effective gain of 8 dBi
- The setups S05\_AJ01 and S05\_AJ02 have an effective gain of 14.2 dBi

#### 4.6 TEST CHANNELS / OUTPUT POWER / DUTY CYCLE

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

**For antenna gain  $\leq 8$  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
36	44	48	-	-	-	-	-	-	149	157	165	Ch.-No.
5180	5220	5240	-	-	-	-	-	-	5745	5785	5825	MHz
20 US	20 US	20 US	-	-	-	-	-	-	20	20	20	Power SISO per chain
13 CA	13 CA	13 CA										
18 US	18 US	18 US	-	-	-	-	-	-	20	20	20	Power MIMO per chain
10 CA	10 CA	10 CA										

low	mid	high							low	mid	high	40 MHz
38	-	46	-	-	-	-	-	-	151	-	159	Ch.-No.
5190	-	5230	-	-	-	-	-	-	5755	-	5795	MHz
20 US		20 US	-	-	-	-	-	-	20		20	Power SISO per chain
13 CA		13 CA										
19 US		19 US	-	-	-	-	-	-	20		20	Power MIMO per chain
10 CA		10 CA										

low	mid	high							low	mid	high	80 MHz
-	42	-	-	-	-	-	-	-	-	155	-	Ch.-No.
-	5210	-	-	-	-	-	-	-	-	5775	-	MHz
-	18 US		-	-	-	-	-	-	-	20	-	Power SISO per chain
-	13 CA											
-	18 US		-	-	-	-	-	-	-	20	-	Power MIMO per chain
-	10 CA											

Note:

- All power values in dBm
- "US" power values are applicable for the FCC application
- "CA" power values are applicable for the ISED application

**For antenna gain > 8 dBi - ≤ 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
36	44	48	-	-	-	-	-	-	149	157	165	Ch.-No.
5180	5220	5240	-	-	-	-	-	-	5745	5785	5825	MHz
20 US	20 US	20 US	-	-	-	-	-	-	20	20	20	Power SISO per chain
12 CA	12 CA	12 CA										
17 US	17 US	17 US	-	-	-	-	-	-	20	20	20	Power MIMO per chain
9 CA	9 CA	9 CA										

low	mid	high							low	mid	high	40 MHz
38	-	46	-	-	-	-	-	-	151	-	159	Ch.-No.
5190	-	5230	-	-	-	-	-	-	5755	-	5795	MHz
17 US		20 US	-	-	-	-	-	-	20		20	Power SISO per chain
12 CA		12 CA										
14 US		18 US	-	-	-	-	-	-	20		20	Power MIMO per chain
9 CA		9 CA										

low	mid	high							low	mid	high	80 MHz
-	42	-	-	-	-	-	-	-	-	155	-	Ch.-No.
-	5210	-	-	-	-	-	-	-	-	5775	-	MHz
-	17 US		-	-	-	-	-	-	-	18	-	Power SISO per chain
-	12 CA											
-	14 US		-	-	-	-	-	-	-	18	-	Power MIMO per chain
-	9 CA											

**Note:**

- All power values in dBm
- "US" power values are applicable for the FCC application
- "CA" power values are applicable for the ISED application

**For antenna gain > 9 dBi - ≤ 14 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
36	44	48	-	-	-	-	-	-	149	157	165	Ch.-No.
5180	5220	5240	-	-	-	-	-	-	5745	5785	5825	MHz
15 US	15 US	15	-	-	-	-	-	-	20	20	20	Power SISO per chain
6 CA	6 CA	6 CA										
12 US	12 US	12 US	-	-	-	-	-	-	18	18	18	Power MIMO per chain
3 CA	3 CA	3 CA										

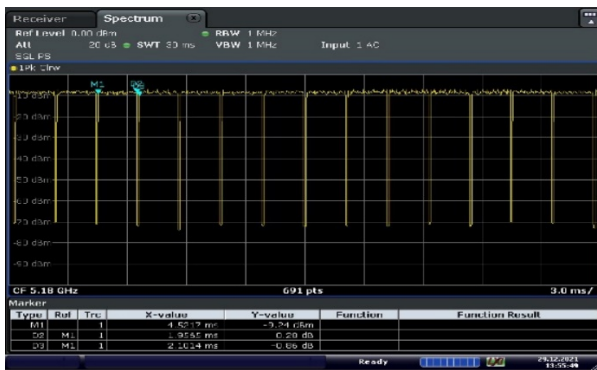
low	mid	high							low	mid	high	40 MHz
38	-	46	-	-	-	-	-	-	151	-	159	Ch.-No.
5190	-	5230	-	-	-	-	-	-	5755	-	5795	MHz
15 US		15 US	-	-	-	-	-	-	20		20	Power SISO per chain
6 CA		6 CA										
12 US		12 US	-	-	-	-	-	-	18		18	Power MIMO per chain
3 CA		3 CA										

low	mid	high							low	mid	high	80 MHz
-	42	-	-	-	-	-	-	-	-	155	-	Ch.-No.
-	5210	-	-	-	-	-	-	-	-	5775	-	MHz
-	12 US		-	-	-	-	-	-	-	18	-	Power SISO per chain
-	6 CA											
-	12 US		-	-	-	-	-	-	-	18	-	Power MIMO per chain
-	3 CA											

**Note:**

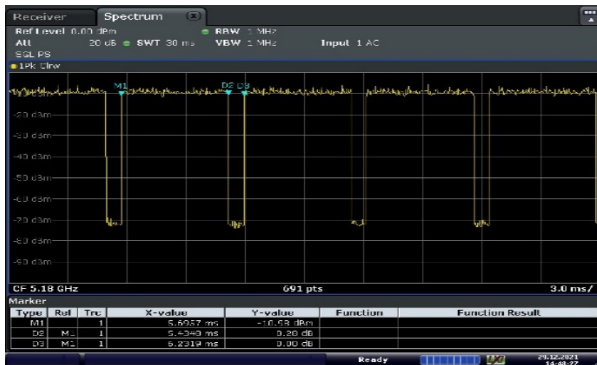
- All power values in dBm
- "US" power values are applicable for the FCC application
- "CA" power values are applicable for the ISED application

Duty Cycle			
Mode	BW		
	20 [MHz]	40 [MHz]	80 [MHz]
a	0.931	-	-
n	0.872	0.859	-
ac	0.872	0.859	0.860
ax	0.872	0.872	0.867



Date: 25.10.2021 10:55:48

a-mode 6 Mbit



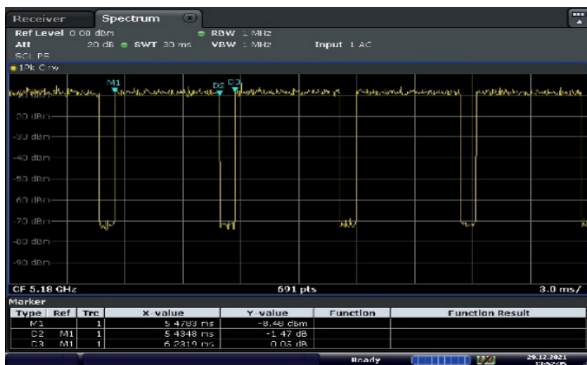
Date: 25.10.2021 14:48:23

n-mode 20 MHz



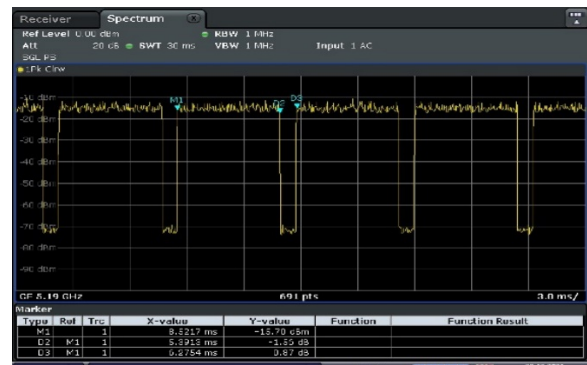
Date: 25.10.2021 15:11:56

n-mode 40 MHz



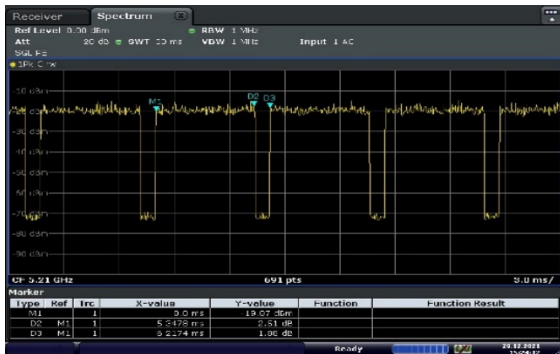
Date: 25.10.2021 10:55:58

ac-mode 20 MHz



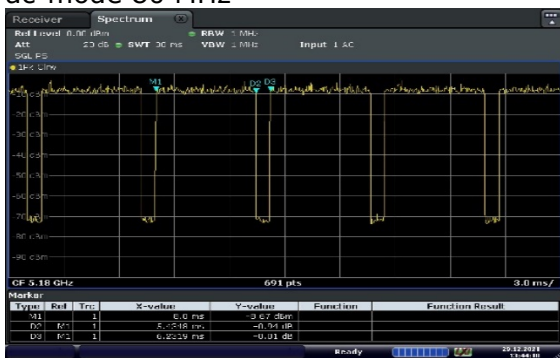
Date: 25.10.2021 13:14:30

ac-mode 40 MHz



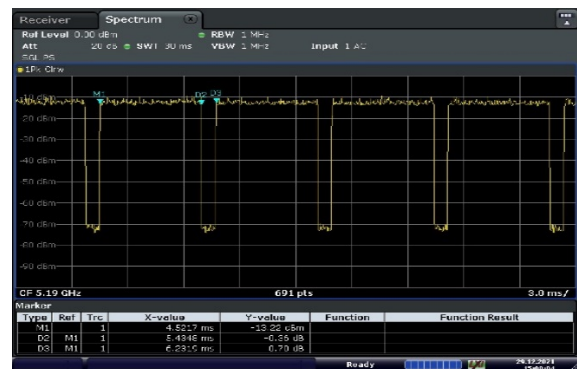
Date: 23.06.2021 15:20:12

### ac-mode 80 MHz



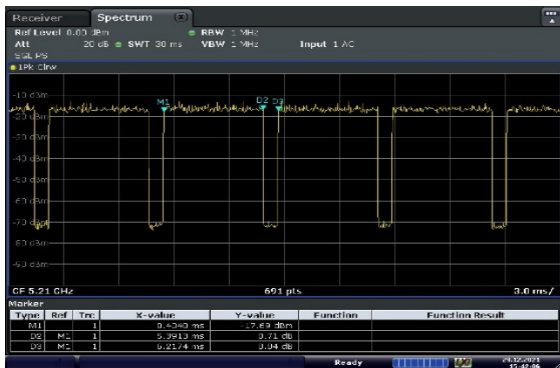
Date: 23.06.2021 15:41:00

### ax-mode 20 MHz



Date: 23.06.2021 15:29:04

### ax-mode 40 MHz



Date: 23.06.2021 15:48:06

### ax-mode 80 MHz

The duty cycles for the different WLAN mode are for SISO and DIVERSITY/MIMO identical.

## 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

#### 5.1.1 TEST DESCRIPTION

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

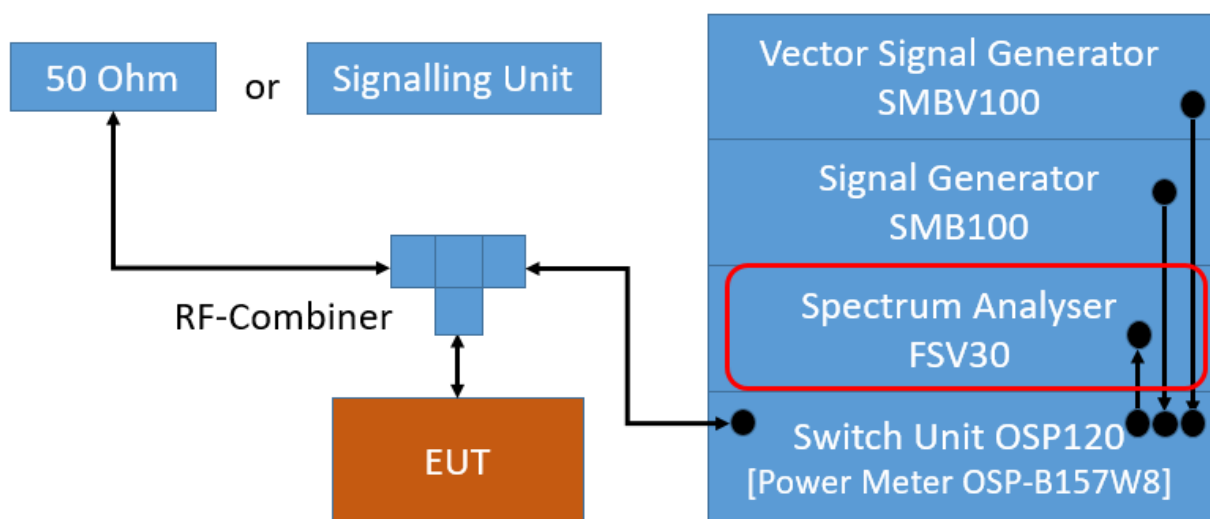
The reference level is the level of the highest amplitude signal observed from the transmitter at either the fundamental frequency or first-order modulation products in all typical modes of operation, including the unmodulated carrier, even if atypical.

The results recorded were measured with the modulation which produce the worst-case 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
- Sweep time: Auto
- Detector: Peak



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



### 5.1.2 TEST REQUIREMENTS / LIMITS

FCC Part 15, Subpart E, §15.403 (i)

There exist no applicable limits for the U-NII subbands 1, 2A and 2C. The test was performed to determine the limits for the "Maximum Conducted Output Power" test case. Therefore no result was applied.

### 5.1.3 TEST PROTOCOL

Ambient temperature: 25 °C  
 Air Pressure: 999 hPa  
 Humidity: 45 %

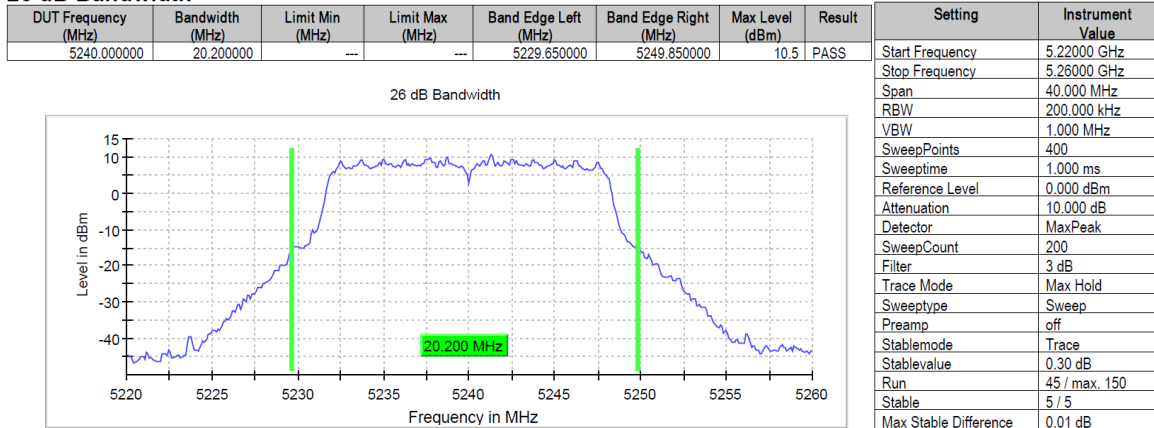
Radio Technology	Operating Frequency	Subband	26 dB Bandwidth [MHz]
WLAN a	low	U-NII-1	20.8
WLAN a	mid	U-NII-1	20.3
WLAN a	high	U-NII-1	20.2
WLAN n 20 MHz	low	U-NII-1	21.5
WLAN n 20 MHz	mid	U-NII-1	21.3
WLAN n 20 MHz	high	U-NII-1	21.1
WLAN n 40 MHz	low	U-NII-1	41.0
WLAN n 40 MHz	high	U-NII-1	41.0
WLAN ac 20 MHz	low	U-NII-1	21.4
WLAN ac 20 MHz	mid	U-NII-1	21.4
WLAN ac 20 MHz	high	U-NII-1	21.3
WLAN ac 40 MHz	low	U-NII-1	41.1
WLAN ac 40 MHz	high	U-NII-1	40.7
WLAN ac 80 MHz	mid	U-NII-1	83.5
WLAN ax 20 MHz	low	U-NII-1	22.2
WLAN ax 20 MHz	mid	U-NII-1	22.1
WLAN ax 20 MHz	high	U-NII-1	22.1
WLAN ax 40 MHz	low	U-NII-1	41.7
WLAN ax 40 MHz	high	U-NII-1	41.0
WLAN ax 80 MHz	mid	U-NII-1	83.5

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

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

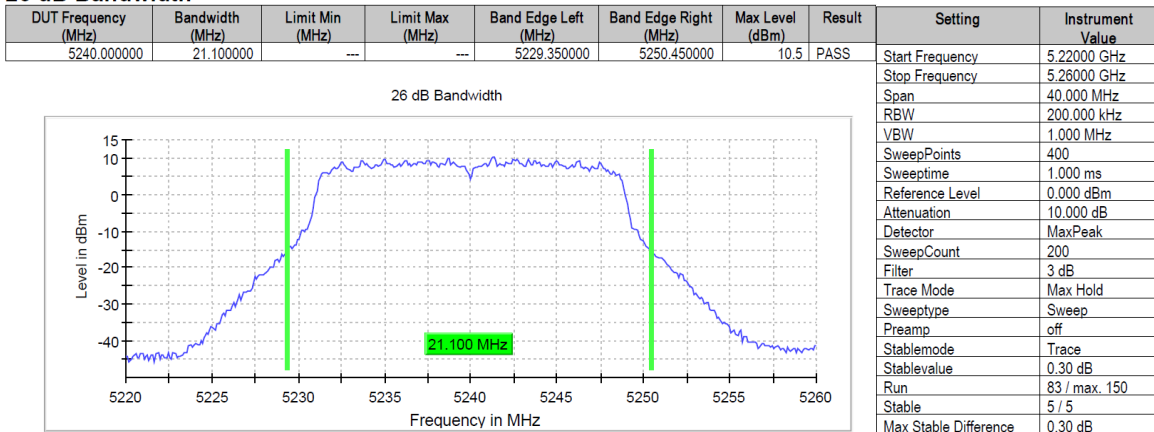
Radio Technology = WLAN a, UNII- 1, Operating Frequency = high  
(S01\_AH01)

#### 26 dB Bandwidth



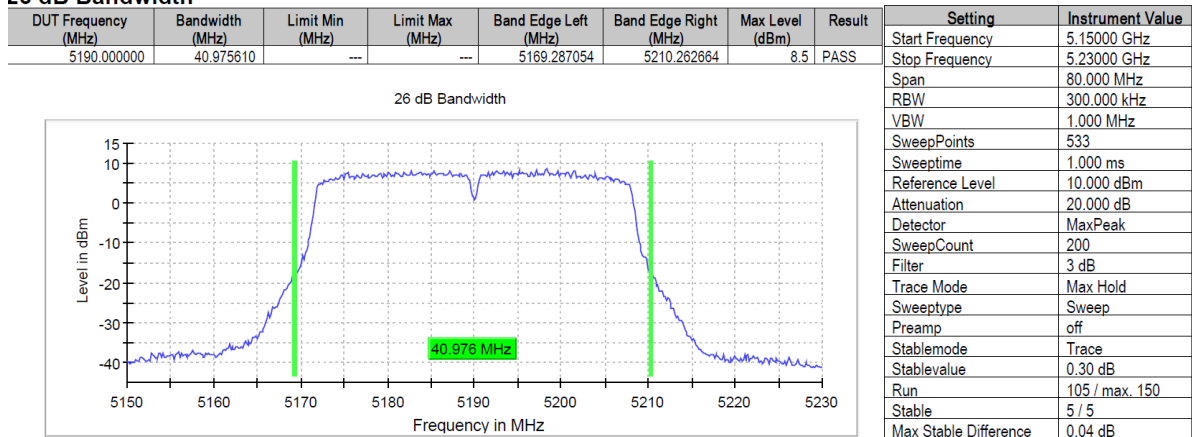
Radio Technology = WLAN n 20 MHz, UNII- 1, Operating Frequency = high  
(S01\_AH01)

#### 26 dB Bandwidth



Radio Technology = WLAN n 40 MHz, UNII- 1, Operating Frequency = low  
(S01\_AH01)

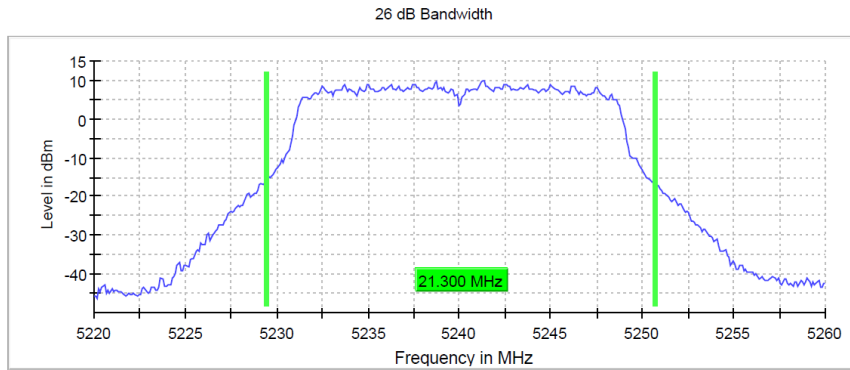
#### 26 dB Bandwidth



Radio Technology = WLAN ac 20 MHz, UNII- 1, Operating Frequency = high  
(S01\_AH01)

**26 dB Bandwidth**

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5240.000000	21.300000	---	---	5229.450000	5250.750000	10.1	PASS

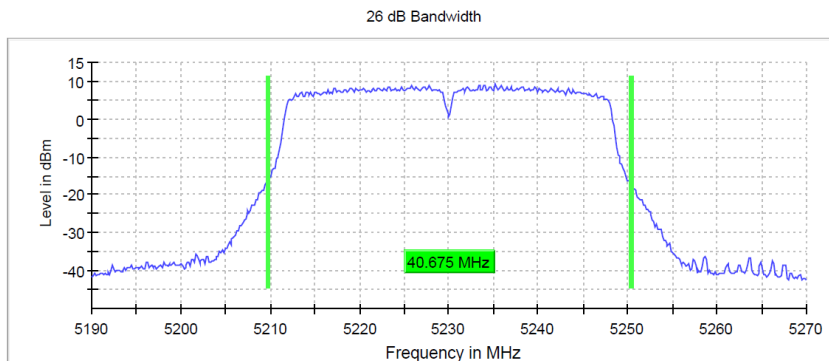


Setting	Instrument Value
Start Frequency	5.22000 GHz
Stop Frequency	5.28000 GHz
Span	40.000 MHz
RBW	200.000 kHz
VBW	1.000 MHz
SweepPoints	400
Sweeptime	1.000 ms
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	101 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB

Radio Technology = WLAN ac 40 MHz, UNII- 1, Operating Frequency = high  
(S01\_AH01)

**26 dB Bandwidth**

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5230.000000	40.675422	---	---	5209.737336	5250.412758	9.4	PASS

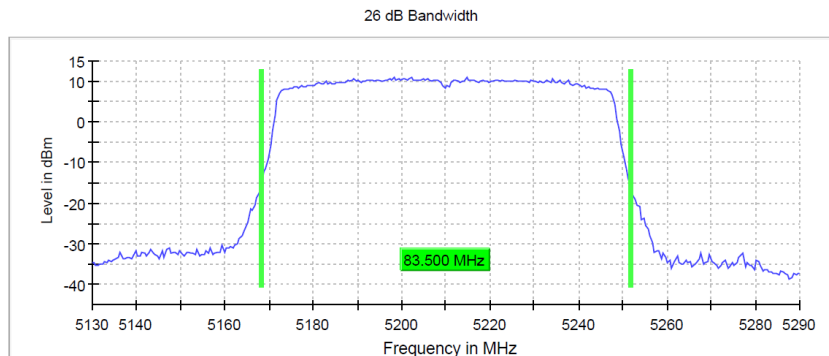


Setting	Instrument Value
Start Frequency	5.19000 GHz
Stop Frequency	5.27000 GHz
Span	80.000 MHz
RBW	300.000 kHz
VBW	1.000 MHz
SweepPoints	533
Sweeptime	1.000 ms
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	96 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB

Radio Technology = WLAN ac 80 MHz, UNII- 1, Operating Frequency = mid  
(S01\_AH01)

**26 dB Bandwidth**

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5210.000000	83.500000	---	---	5168.250000	5251.750000	11.0	PASS

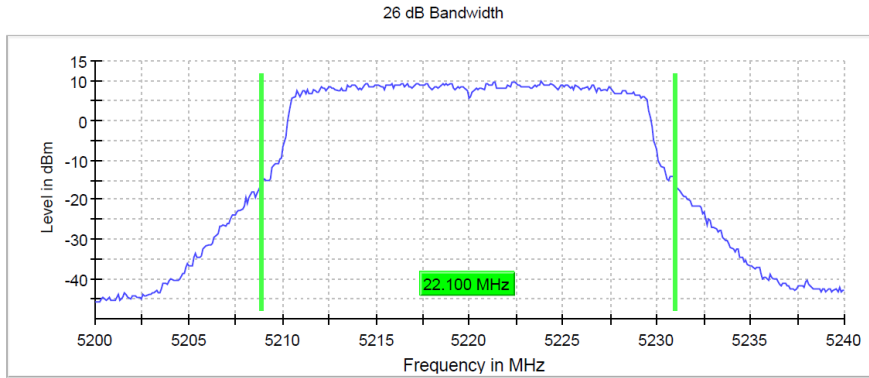


Setting	Instrument Value
Start Frequency	5.13000 GHz
Stop Frequency	5.29000 GHz
Span	160.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
SweepPoints	320
Sweeptime	1.000 ms
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	51 / max. 150
Stable	5 / 5
Max Stable Difference	0.20 dB

Radio Technology = WLAN ax 20 MHz, UNII- 1, Operating Frequency = mid  
(S01\_AH01)

**26 dB Bandwidth**

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5220.000000	22.100000	---	---	5208.850000	5230.950000	9.9	PASS

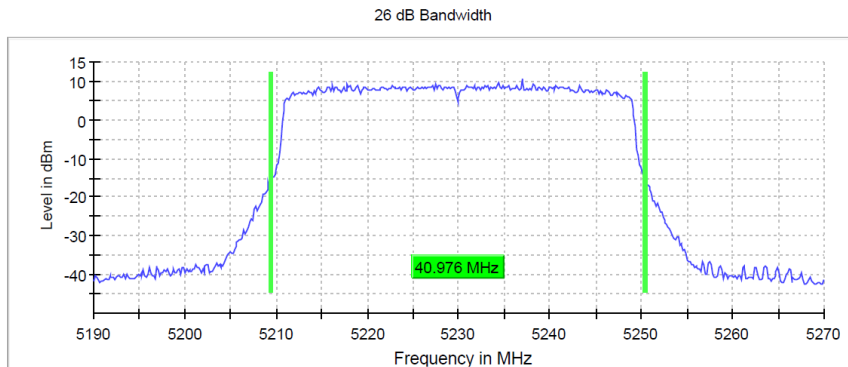


Setting	Instrument Value
Start Frequency	5.20000 GHz
Stop Frequency	5.24000 GHz
Span	40.000 MHz
RBW	200.000 kHz
VBW	1.000 MHz
SweepPoints	400
SweepTime	1.000 ms
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	140 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB

Radio Technology = WLAN ax 40 MHz, UNII- 1, Operating Frequency = high  
(S01\_AH01)

**26 dB Bandwidth**

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5230.000000	40.975610	---	---	5209.437148	5250.412758	10.5	PASS

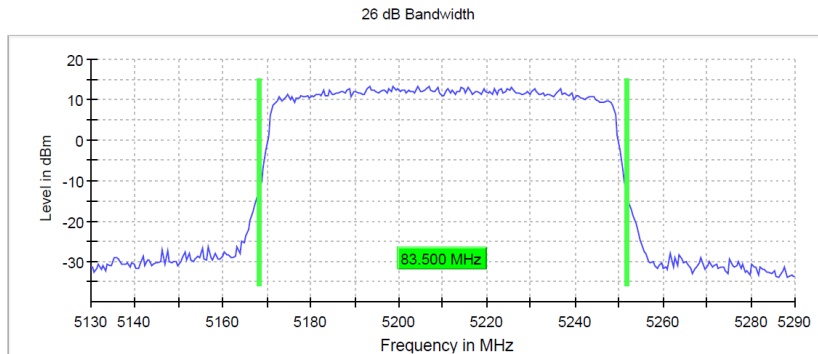


Setting	Instrument Value
Start Frequency	5.19000 GHz
Stop Frequency	5.27000 GHz
Span	80.000 MHz
RBW	300.000 kHz
VBW	1.000 MHz
SweepPoints	533
SweepTime	1.000 ms
Reference Level	10.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	108 / max. 150
Stable	5 / 5
Max Stable Difference	0.18 dB

Radio Technology = WLAN ac 80 MHz, UNII- 1, Operating Frequency = mid  
(S01\_AH01)

**26 dB Bandwidth**

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5210.000000	83.500000	---	---	5168.250000	5251.750000	13.3	PASS



Setting	Instrument Value
Start Frequency	5.13000 GHz
Stop Frequency	5.29000 GHz
Span	160.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
SweepPoints	320
SweepTime	1.000 ms
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
SweepType	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	141 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB

**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

### 5.2.1 TEST DESCRIPTION

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

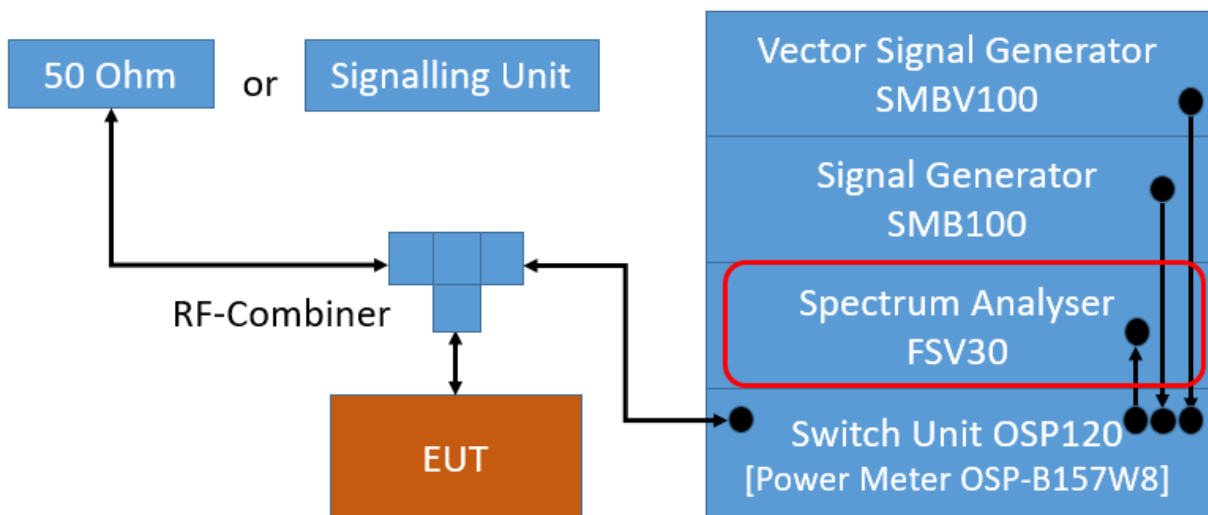
The reference level is the level of the highest amplitude signal observed from the transmitter at either the fundamental frequency or first-order modulation products in all typical modes of operation, including the unmodulated carrier, even if atypical.

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: 25 °C  
 Air Pressure: 999 hPa  
 Humidity: 45 %

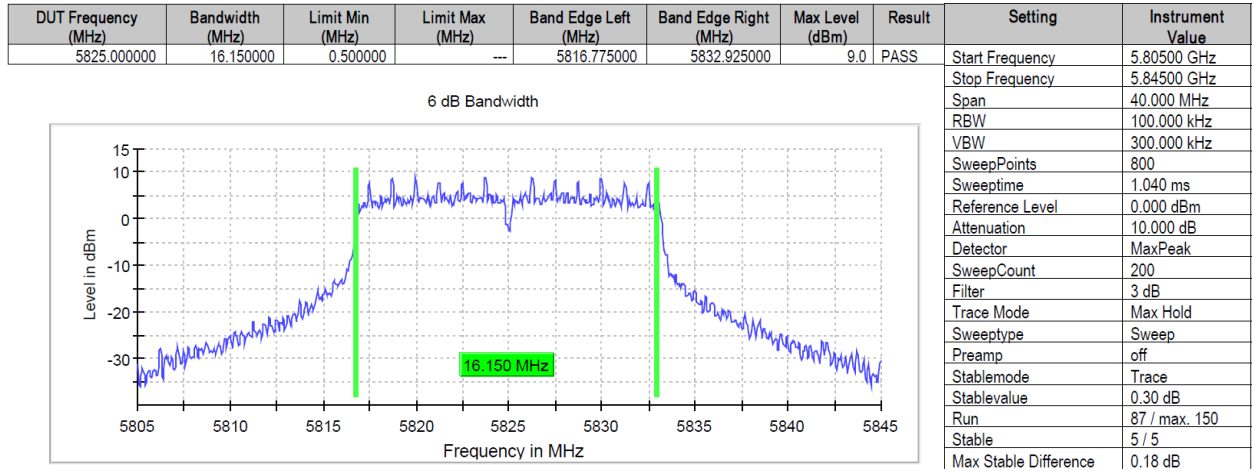
Radio Technology	Operating Frequency	6 dB Bandwidth [MHz]	Limit [MHz]	Margin [MHz]	Min. 6 dB Frequency [MHz]	Max. 6 dB Frequency [MHz]
WLAN a	low	16.15	0.5	15.65	5736.78	5752.93
WLAN a	mid	16.15	0.5	15.65	5776.78	5792.93
WLAN a	high	16.15	0.5	15.65	5816.78	5832.93
WLAN n 20 MHz	low	16.95	0.5	16.45	5736.43	5753.38
WLAN n 20 MHz	mid	17.10	0.5	16.60	5776.43	5793.53
WLAN n 20 MHz	high	16.90	0.5	16.40	5816.53	5833.43
WLAN n 40 MHz	low	36.35	0.5	35.85	5736.78	5773.13
WLAN n 40 MHz	high	36.40	0.5	35.90	5776.73	5813.13
WLAN ac 20 MHz	low	17.25	0.5	16.75	5736.53	5753.78
WLAN ac 20 MHz	mid	16.90	0.5	16.40	5776.53	5793.43
WLAN ac 20 MHz	high	16.85	0.5	16.35	5816.58	5833.43
WLAN ac 40 MHz	low	36.40	0.5	35.90	5736.73	5773.13
WLAN ac 40 MHz	high	36.35	0.5	35.85	5776.78	5813.13
WLAN ac 80 MHz	mid	75.20	0.5	74.70	5737.38	5812.58
WLAN ax 20 MHz	low	18.30	0.5	17.80	5735.83	5754.13
WLAN ax 20 MHz	mid	18.40	0.5	17.90	5775.68	5794.08
WLAN ax 20 MHz	high	18.50	0.5	18.00	5815.73	5834.23
WLAN ax 40 MHz	low	38.05	0.5	37.55	5735.93	5773.98
WLAN ax 40 MHz	high	38.10	0.5	37.60	5775.88	5813.98
WLAN ax 80 MHz	mid	75.45	0.5	74.95	5737.38	5812.83

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

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

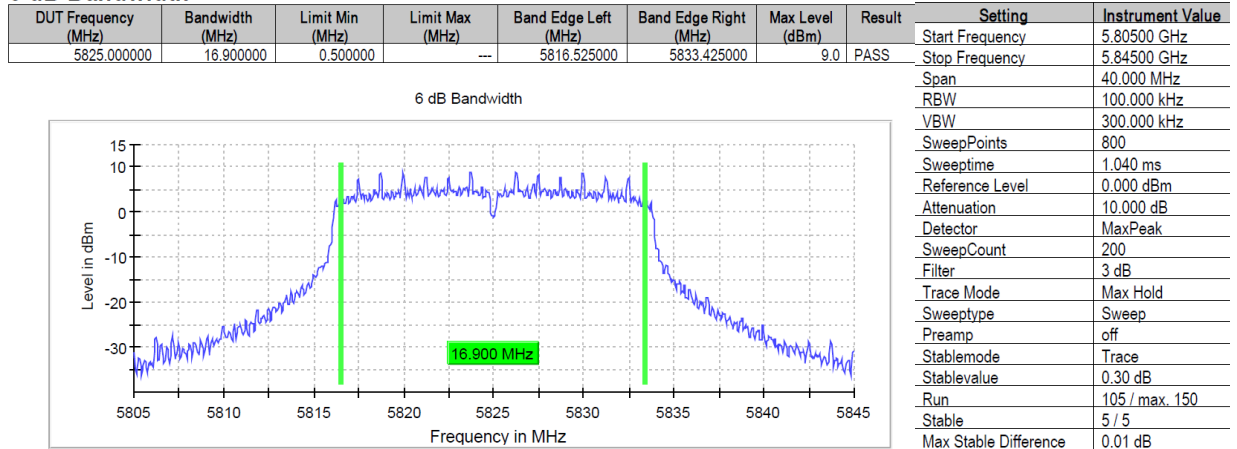
Radio Technology = WLAN a, UNII- 3, Operating Frequency = high (S01\_AH01)

#### 6 dB Bandwidth



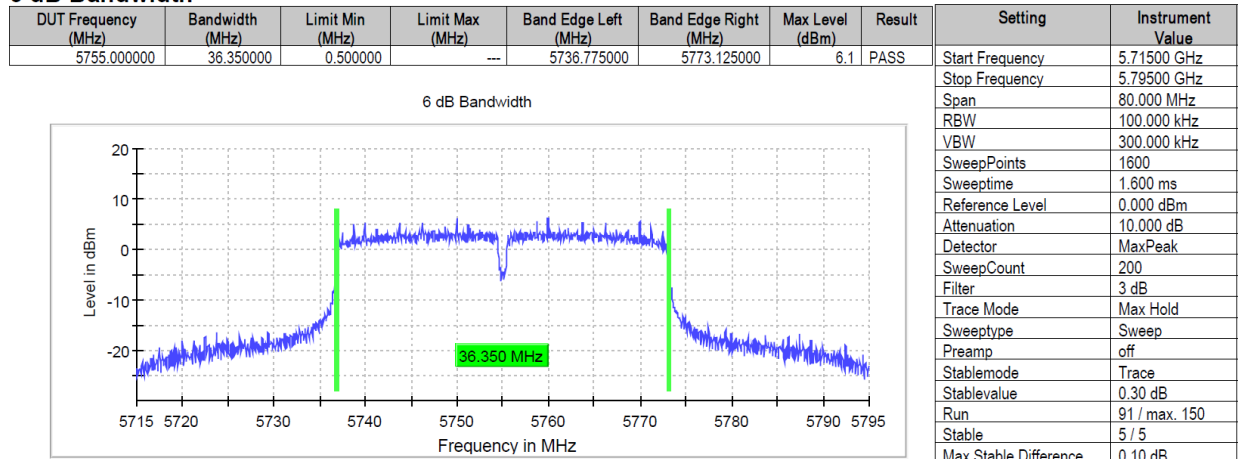
Radio Technology = WLAN n 20 MHz, UNII- 3, Operating Frequency = high (S01\_AH01)

#### 6 dB Bandwidth



Radio Technology = WLAN n 40 MHz, UNII- 3, Operating Frequency = low (S01\_AH01)

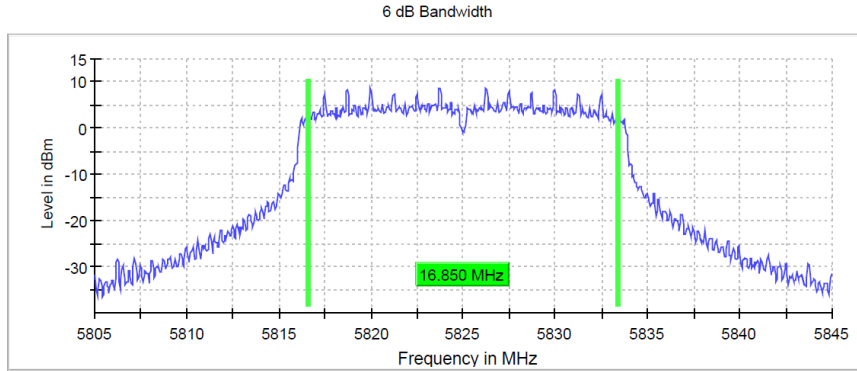
#### 6 dB Bandwidth



Radio Technology = WLAN ac 20 MHz, UNII- 3, Operating Frequency = high  
(S01\_AH01)

**6 dB Bandwidth**

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5825.000000	16.850000	0.500000	---	5816.575000	5833.425000	8.7	PASS

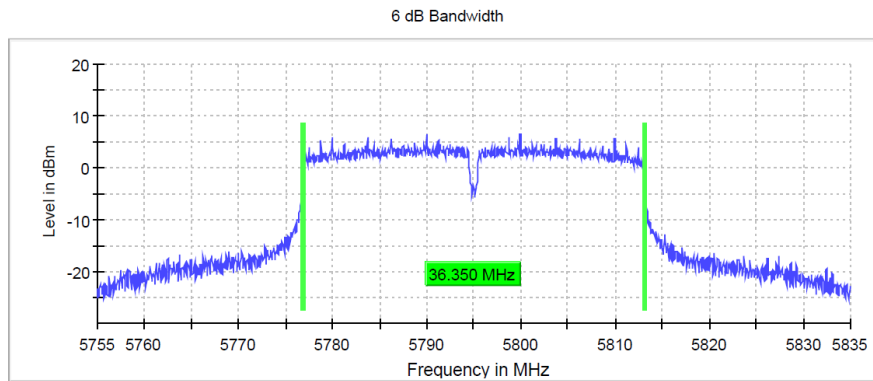


Setting	Instrument Value
Start Frequency	5.80500 GHz
Stop Frequency	5.84500 GHz
Span	40.000 MHz
RBW	100.000 kHz
VBW	300.000 kHz
SweepPoints	800
Sweeptime	1.040 ms
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	117 / max. 150
Stable	5 / 5
Max Stable Difference	0.03 dB

Radio Technology = WLAN ac 40 MHz, UNII- 3, Operating Frequency = high  
(S01\_AH01)

**6 dB Bandwidth**

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5795.000000	36.350000	0.500000	---	5776.775000	5813.125000	6.6	PASS

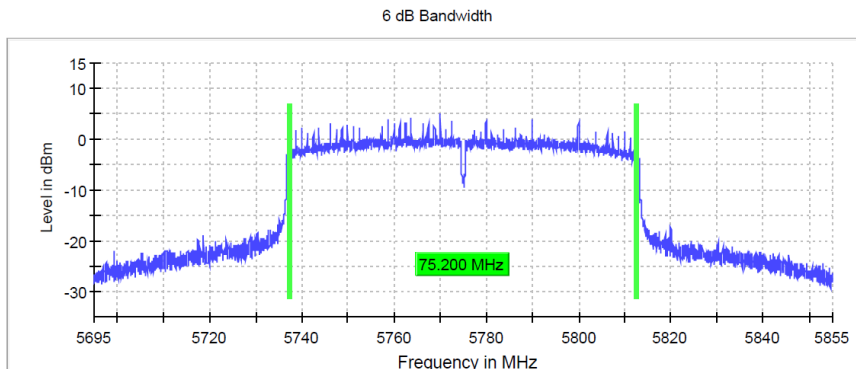


Setting	Instrument Value
Start Frequency	5.75500 GHz
Stop Frequency	5.83500 GHz
Span	80.000 MHz
RBW	100.000 kHz
VBW	300.000 kHz
SweepPoints	1600
Sweeptime	1.600 ms
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	98 / max. 150
Stable	5 / 5
Max Stable Difference	0.29 dB

Radio Technology = WLAN ac 80 MHz, UNII- 3, Operating Frequency = mid  
(S01\_AH01)

**6 dB Bandwidth**

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5775.000000	75.200000	0.500000	---	5737.375000	5812.575000	4.9	PASS



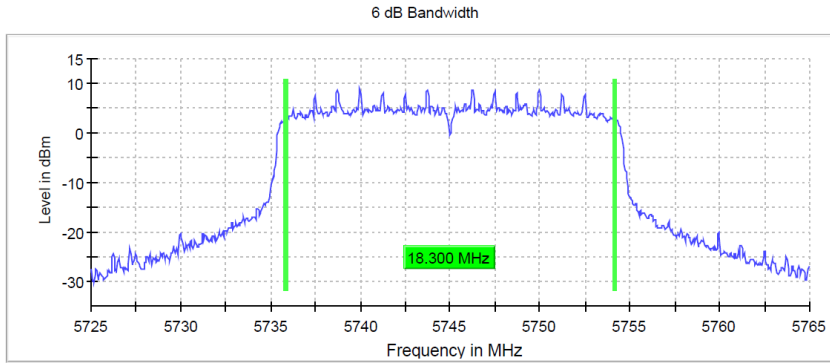
Setting	Instrument Value
Start Frequency	5.69500 GHz
Stop Frequency	5.85500 GHz
Span	160.000 MHz
RBW	100.000 kHz
VBW	300.000 kHz
SweepPoints	3200
Sweeptime	3.200 ms
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	75 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB



Radio Technology = WLAN ax 20 MHz, UNII- 3, Operating Frequency = low  
(S01\_AH01)

**6 dB Bandwidth**

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5745.000000	18.300000	0.500000	---	5735.825000	5754.125000	8.8	PASS

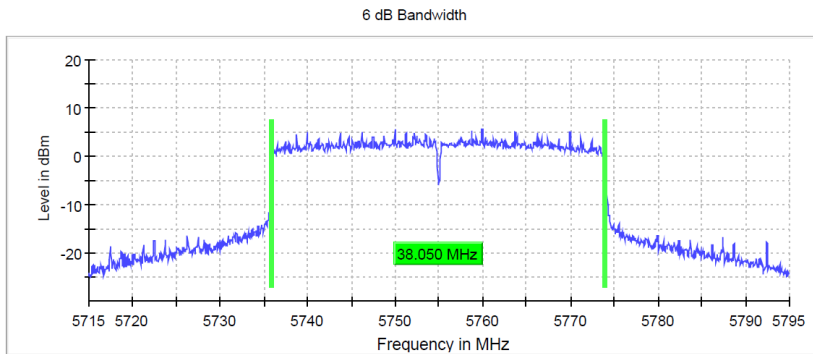


Setting	Instrument Value
Start Frequency	5.72500 GHz
Stop Frequency	5.76500 GHz
Span	40.000 MHz
RBW	100.000 kHz
VBW	300.000 kHz
SweepPoints	800
Sweeptime	1.040 ms
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	93 / max. 150
Stable	5 / 5
Max Stable Difference	0.02 dB

Radio Technology = WLAN ax 40 MHz, UNII- 3, Operating Frequency = low  
(S01\_AH01)

**6 dB Bandwidth**

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5755.000000	38.050000	0.500000	---	5735.925000	5773.975000	5.7	PASS

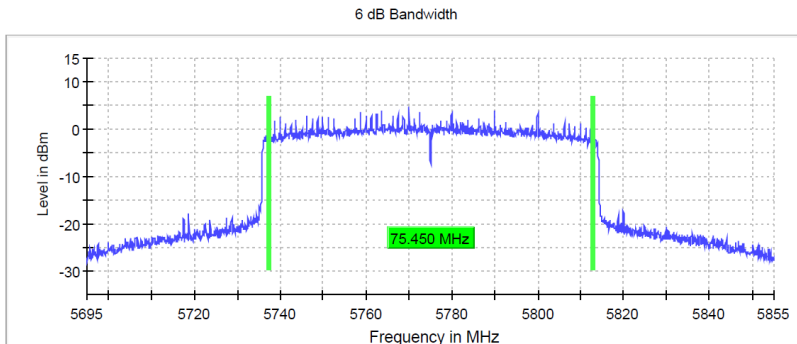


Setting	Instrument Value
Start Frequency	5.71500 GHz
Stop Frequency	5.79500 GHz
Span	80.000 MHz
RBW	100.000 kHz
VBW	300.000 kHz
SweepPoints	1600
Sweeptime	1.600 ms
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	105 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB

Radio Technology = WLAN ax 80 MHz, UNII- 3, Operating Frequency = mid  
(S01\_AH01)

**6 dB Bandwidth**

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
5775.000000	75.450000	0.500000	---	5737.375000	5812.825000	4.9	PASS



Setting	Instrument Value
Start Frequency	5.69500 GHz
Stop Frequency	5.85500 GHz
Span	160.000 MHz
RBW	100.000 kHz
VBW	300.000 kHz
SweepPoints	3200
Sweeptime	3.200 ms
Reference Level	0.000 dBm
Attenuation	10.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	Sweep
Preamp	off
Stablemode	Trace
Stablevalue	0.30 dB
Run	82 / 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

#### 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.

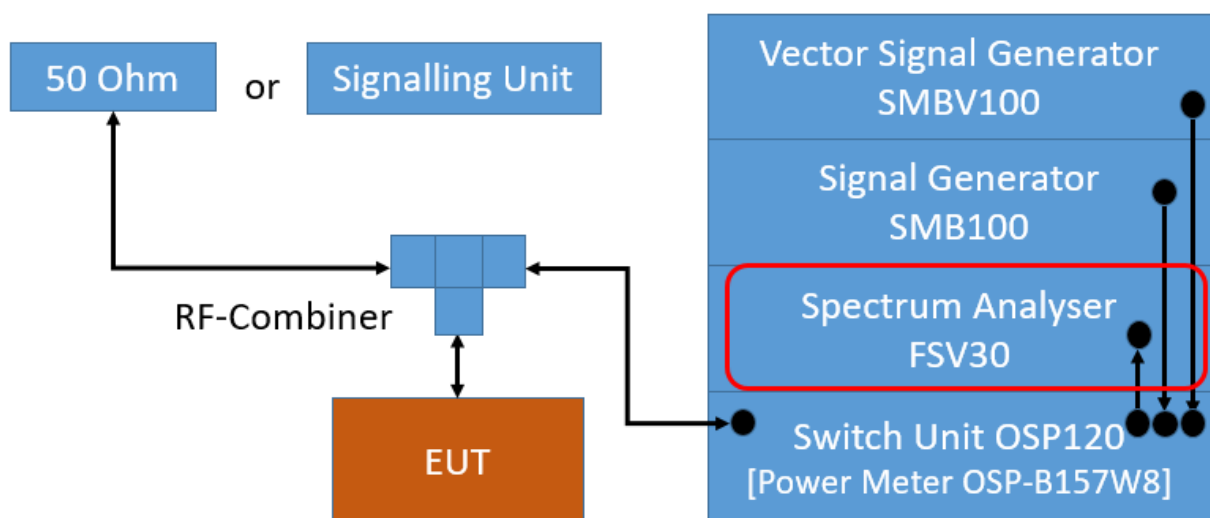
The results recorded were measured with the modulation which produce the worst-case (widest) emission bandwidth.

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):  $\geq 3$  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:

### 5.3.3 TEST PROTOCOL

Ambient temperature: 23 - 25 °C  
 Air Pressure: 999 – 1005 hPa  
 Humidity: 35 – 55 %

Radio Technology	Operating Frequency	Subband	99% Bandwidth [MHz]
WLAN a	low	U-NII-1	16.4
WLAN a	mid	U-NII-1	16.4
WLAN a	high	U-NII-1	16.4
WLAN a	low	U-NII-3	16.6
WLAN a	mid	U-NII-3	16.7
WLAN a	high	U-NII-3	16.6
WLAN n 20 MHz	low	U-NII-1	17.6
WLAN n 20 MHz	mid	U-NII-1	17.6
WLAN n 20 MHz	high	U-NII-1	17.6
WLAN n 20 MHz	low	U-NII-3	17.8
WLAN n 20 MHz	mid	U-NII-3	17.8
WLAN n 20 MHz	high	U-NII-3	17.7
WLAN n 40 MHz	low	U-NII-1	36.3
WLAN n 40 MHz	high	U-NII-1	36.3
WLAN n 40 MHz	low	U-NII-3	37.8
WLAN n 40 MHz	high	U-NII-3	37.5
WLAN ac 20 MHz	low	U-NII-1	17.6
WLAN ac 20 MHz	mid	U-NII-1	17.6
WLAN ac 20 MHz	high	U-NII-1	17.6
WLAN ac 20 MHz	low	U-NII-3	17.8
WLAN ac 20 MHz	mid	U-NII-3	17.8
WLAN ac 20 MHz	high	U-NII-3	17.7
WLAN ac 40 MHz	low	U-NII-1	36.3
WLAN ac 40 MHz	high	U-NII-1	36.3
WLAN ac 40 MHz	low	U-NII-3	37.8
WLAN ac 40 MHz	high	U-NII-3	37.5
WLAN ac 80 MHz	mid	U-NII-1	75.5
WLAN ac 80 MHz	mid	U-NII-3	77.5
WLAN ax 20 MHz	low	U-NII-1	19.0
WLAN ax 20 MHz	mid	U-NII-1	19.0
WLAN ax 20 MHz	high	U-NII-1	19.0
WLAN ax 20 MHz	low	U-NII-3	19.0
WLAN ax 20 MHz	mid	U-NII-3	19.0
WLAN ax 20 MHz	high	U-NII-3	19.0
WLAN ax 40 MHz	low	U-NII-1	37.8
WLAN ax 40 MHz	high	U-NII-1	37.8
WLAN ax 40 MHz	low	U-NII-3	38.5
WLAN ax 40 MHz	high	U-NII-3	38.3
WLAN ax 80 MHz	mid	U-NII-1	77.5
WLAN ax 80 MHz	mid	U-NII-3	78.5

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