

TEST REPORT

Applicant: Datalogic S.r.l.
EUT Description: MOBILE COMPUTER/BARCODE READER
Model: CMFSWF
Brand: DATALOGIC
FCC ID: U4G-CMFSWF
Standards: FCC 47 CFR Part 15 Subpart E
Date of Receipt: 2026/01/20
Date of Test: 2026/01/20 to 2026/06/23
Date of Issue: 2026/06/23

TOWE. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

the results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of the model are manufactured with identical electrical and mechanical components. All sample tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. without written approval of TOWE, the test report shall not be reproduced except in full.



Jim Huang
Approved By:



Carey Chen
Reviewed By:

Revision History

Rev.	Issue Date	Description	Revised by
01	2026/03/13	Original	Carey Chen
02	2026/04/30	Modify the description of "Directional gain calculations" on page 13 of the report	Carey Chen
03	2026/05/08	Updated WiFi mode description	Carey Chen
04	2026/06/23	Updated In-Band Emissions 20M/40M data	Carey Chen

Summary of Test Results

Clause	FCC Part	Test Items	Result
4.1	§15.203	Antenna Requirement	PASS
4.2	§15.407g	Frequency Stability	---
4.3	§15.207	AC Power Line Conducted Emission	PASS
4.4	§15.407a(8)	Maximum e.i.r.p. Output Power	PASS
4.5	§15.407a(8)	Maximum Power Spectral Density	PASS
4.6	§15.407a(10)	Emission Bandwidth	PASS
4.7	§2.1049	99% Occupied Bandwidth	Reporting purposes only
4.8	§15.407b(7)	In-Band Emissions (Channel Mask)	PASS
4.9	§15.407d(6)	Contention Based Protocol	PASS
4.10	§15.407a(7)	Dual Client Test, Demonstration of Proper Power Adjustment based on Associated AP	PASS
4.11	§15.407a(7)	Proper Power Adjustment, Client Devices Connected to a Standard Power Access Point	PASS
4.12	§15.407b(6) §15.205 §15.209	Unwanted Emissions	PASS

Test Method:

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

KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

KDB 987594 D01 U-NII 6GHz General Requirements v01r02.

KDB 987594 D02 U-NII 6GHz EMC Measurement v02r01.

Remark: Pass is EUT meets standard requirements.

Table of Contents

1	General Description	5
1.1	Lab Information	5
1.1.1	Testing Location	5
1.1.2	Test Facility / Accreditations	5
1.2	Client Information.....	5
1.2.1	Applicant	5
1.2.2	Manufacturer	5
1.3	Product Information	6
2	Test Configuration	7
2.1	Test Channel.....	7
2.2	Worst-case configuration and Mode.....	9
2.3	Support Unit used in test.....	10
2.4	Test Environment	10
2.5	Test RF Cable	10
2.6	Modifications	10
2.7	Test Setup Diagram.....	11
2.7.1	Conducted Configuration	11
2.7.2	Radiated Configuration	12
3	Equipment and Measurement Uncertainty	14
3.1	Test Equipment List	14
3.2	Measurement Uncertainty.....	16
4	Test Results.....	17
4.1	Antenna Requirement	17
4.2	Frequency Stability	17
4.3	AC Power Line Conducted Emissions.....	18
4.4	Maximum e.i.r.p. Output Power	21
4.5	Maximum Power Spectral Density	22
4.6	Emission Bandwidth	23
4.7	Occupied Bandwidth.....	24
4.8	In-Band Emissions (Channel Mask).....	25
4.9	Contention Based Protocol	26
4.10	Dual Client Test, Demonstration of Proper Power Adjustment based on Associated AP	28
4.11	Proper Power Adjustment, Client Devices Connected to a Standard Power Access Point.....	30
4.12	Unwanted Emissions	31
5	Test Setup Photos.....	33
	Appendix	34

1 General Description

1.1 Lab Information

1.1.1 Testing Location

These measurements tests were conducted at the Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. facility located at F401 and F101, Building E, Hongwei Industrial Zone, Liuxian 3rd Road, Bao'an District, Shenzhen, China. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014
Tel.: +86-755-27212361

Contact Email: info@towewireless.com

1.1.2 Test Facility / Accreditations

A2LA (Certificate Number: 7088.01)

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

FCC Designation No.: CN1353

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized as an accredited testing laboratory.
Test Firm Registration Number: 684095
Designation Number: CN1353.

ISED CAB identifier: CN0152

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized by ISED as an accredited testing laboratory.
CAB identifier: CN0152
Company Number: 31000

1.2 Client Information

1.2.1 Applicant

Applicant:	Datalogic S.r.l.
Address:	Via San Vitalino, 13 40012 Lippo di Calderara di Reno (BO) - Italy

1.2.2 Manufacturer

Manufacturer:	Datalogic S.r.l.
Address:	Via San Vitalino, 13 40012 Lippo di Calderara di Reno (BO) - Italy

1.3 Product Information

EUT Description:	MOBILE COMPUTER/BARCODE READER		
Model:	CMFSWF		
Brand:	DATALOGIC		
Hardware Version:	V3		
Software Version:	3.23.005.20260209 release-keys		
SN.:	RF Conducted	ffa67711	
	RSE & AC power line	72b58277	
Modulation Type:	802.11a:	OFDM-BPSK, QPSK, 16QAM, 64QAM	
	802.11ax:	OFDM/OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM	
Smart System:	☒ SISO	802.11a/ax	/
	☒ MIMO	802.11a/ax	(2)TX(2)RX
Partial RU:	☒ Support	☐ No Support	
Classification:	☐ Low power Indoor Client(6XD) ☐ Low power Indoor Access points(6ID) ☐ Subordinate device(6PP) ☒ Low power Dual Client(6CD)		
Frequency Range:	U-NII-5:	5925 ~ 6425 MHz	
	U-NII-6:	6425 ~ 6525 MHz	
	U-NII-7:	6525 ~ 6875 MHz	
	U-NII-8:	6875 ~ 7125 MHz	
Antenna Type:	☐ External, ☒ Integrated		
Antenna Gain:	Ant2 (dBi)	Ant3 (dBi)	
	1.4	-1.3	
Remark: The above EUT's information was declared by applicant, please refer to the specifications or user's manual for more detailed description.			

2 Test Configuration

2.1 Test Channel

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Note:

For Indoor Client: Supports bands U-NII-5, U-NII-6, U-NII-7, U-NII-8

For Standard Power Client: Supports bands U-NII-5, U-NII-7

Frequency Channels for U-NII-5		
Modulation Type	Test Channel	Test Frequency
802.11a/ax20	The Lowest channel (CH1)	5955MHz
	The Middle channel (CH45)	6175MHz
	The Highest channel (CH93)	6415MHz
Modulation Type	Test Channel	Test Frequency
802.11ax40	The Lowest channel (CH3)	5965MHz
	The Middle channel (CH43)	6165MHz
	The Highest channel (CH91)	6405MHz
Modulation Type	Test Channel	Test Frequency
802.11ax80	The Lowest channel (CH7)	5985MHz
	The Middle channel (CH39)	6145MHz
	The Highest channel (CH87)	6385MHz
Modulation Type	Test Channel	Test Frequency
802.11ax160	The Lowest channel (CH15)	6025MHz
	The Middle channel (CH47)	6185MHz
	The Highest channel (CH79)	6345MHz

Frequency Channels for U-NII-6		
Modulation Type	Test Channel	Test Frequency
802.11a/ax20	The Lowest channel (CH97)	6435MHz
	The Middle channel (CH105)	6475MHz
	The Highest channel (CH113)	6515MHz
Modulation Type	Test Channel	Test Frequency
802.11ax40	The Lowest channel (CH99)	6445MHz
	The Middle channel (CH107)	6485MHz
	The Highest channel (CH115)	6525MHz
Modulation Type	Test Channel	Test Frequency
802.11ax80	The Middle channel (CH103)	6465MHz
Modulation Type	Test Channel	Test Frequency
802.11ax160	The Middle channel (CH111)	6505MHz

Frequency Channels for U-NII-7		
Modulation Type	Test Channel	Test Frequency
802.11a/ax20	The Lowest channel (CH117)	6535MHz
	The Middle channel (CH149)	6695MHz
	The Highest channel (CH185)	6875MHz
Modulation Type	Test Channel	Test Frequency
802.11ax40	The Lowest channel (CH123)	6565MHz
	The Middle channel (CH147)	6685MHz
	The Highest channel (CH179)	6845MHz
Modulation Type	Test Channel	Test Frequency
802.11ax80	The Lowest channel (CH119)	6545MHz
	The Middle channel (CH151)	6705MHz
	The Highest channel (CH183)	6865MHz
Modulation Type	Test Channel	Test Frequency
802.11ax160	The Lowest channel (CH143)	6665MHz
	The Highest channel (CH175)	6825MHz

Frequency Channels for U-NII-8		
Modulation Type	Test Channel	Test Frequency
802.11a/ax20	The Lowest channel (CH189)	6895MHz
	The Middle channel (CH209)	6995MHz
	The Highest channel (CH233)	7115MHz
Modulation Type	Test Channel	Test Frequency
802.11ax40	The Lowest channel (CH187)	6885MHz
	The Middle channel (CH203)	6965MHz
	The Highest channel (CH227)	7085MHz
Modulation Type	Test Channel	Test Frequency
802.11ax80	The Lowest channel (CH199)	6945MHz
	The Highest channel (CH215)	7025MHz
Modulation Type	Test Channel	Test Frequency
802.11ax160	The Middle channel (CH207)	6985MHz

2.2 Worst-case configuration and Mode

Modulation Type	SISO - Data Rate	MIMO(2)TX(2)RX Data Rate
802.11a	N/A	12 Mbps
802.11ax20	N/A	MCS0 (17.2 Mbps)
802.11ax40	N/A	MCS0 (34.4 Mbps)
802.11ax80	N/A	MCS0 (72.1 Mbps)
802.11ax160	N/A	MCS0 (144.1 Mbps)
Transmitting mode:	Keep the EUT was programmed to be in continuously transmitting mode.	
Normal Link:	Keep the EUT operation to normal function.	

Test RU Types & Channel Bandwidth:

RU Types	ax20	ax40	ax80	ax160
26-tone RU	26 tone_0 26 tone_8	/	/	/
52-tone RU	52 tone_37 52 tone_40	/	/	/
106-tone RU	106 tone_53 106 tone_54	/	/	/
242-tone RU	/	242 tone 61 242 tone 62	/	/
484-tone RU	/	/	484 tone 65 484 tone 66	/
996-tone RU	/	/	/	996 tone 67 996 tone 68

2.3 Support Unit used in test

Description	Manufacturer	Model	Serial Number
Router	MSI	RadiX AXE6600	3028ZD00UU00010231000818
Coupler	Qotana	DBPD0200001800C	22122900036
Variable Att	Tonscend	JS0806-2	23C80620671

2.4 Test Environment

Temperature:	Normal: 15°C ~ 35°C
Humidity:	45 ~ 56 % RH Ambient
Voltage:	DC 3.8V
AC Voltage:	AC 120V/60Hz for Conducted Emissions
Remark: The testing environment is within the scope of the EUT user manual and meets the requirements of the standard testing environment.	

2.5 Test RF Cable

For all conducted test items: The offset level is set spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

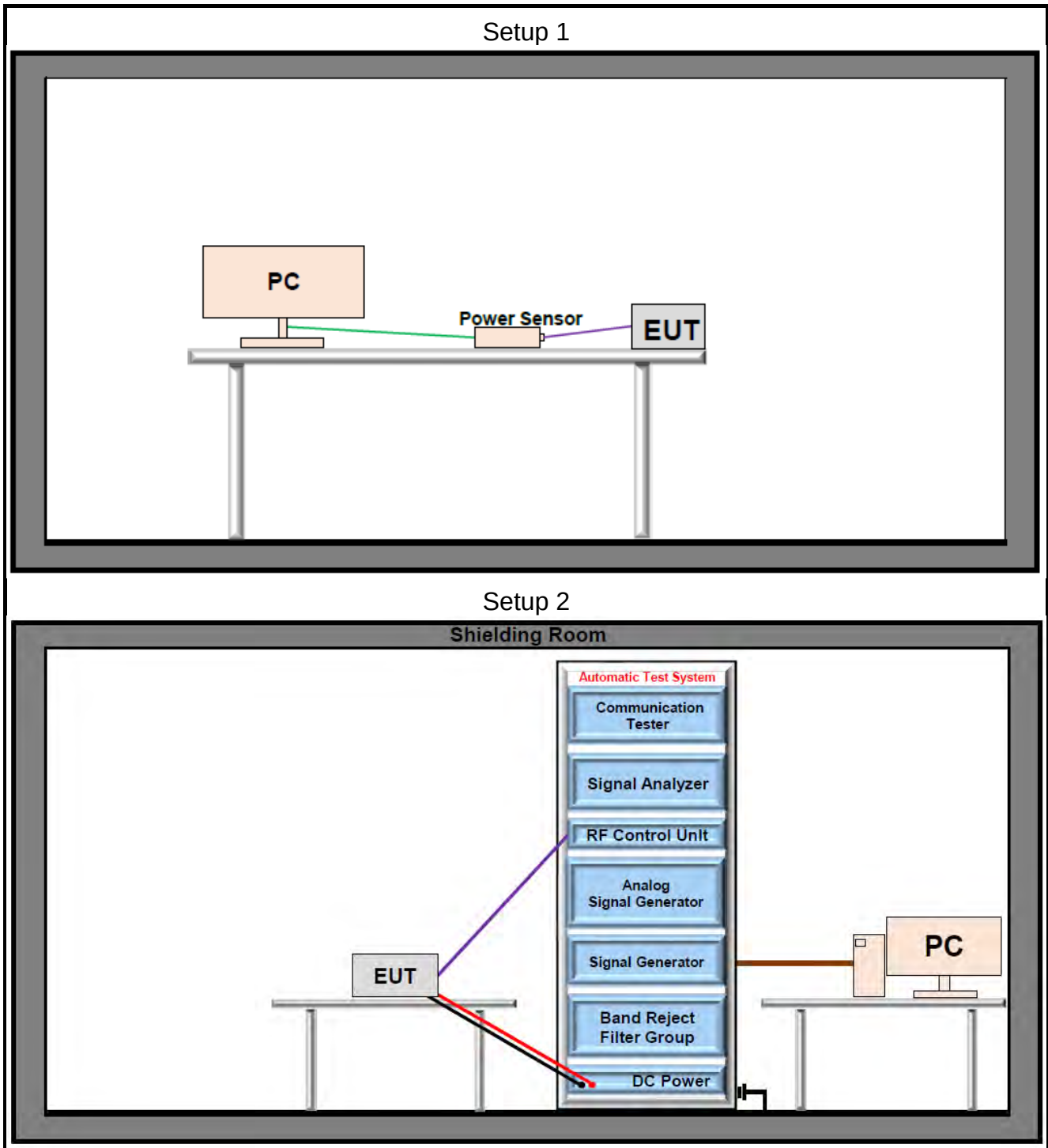
Offset = RF cable loss + attenuator factor.

2.6 Modifications

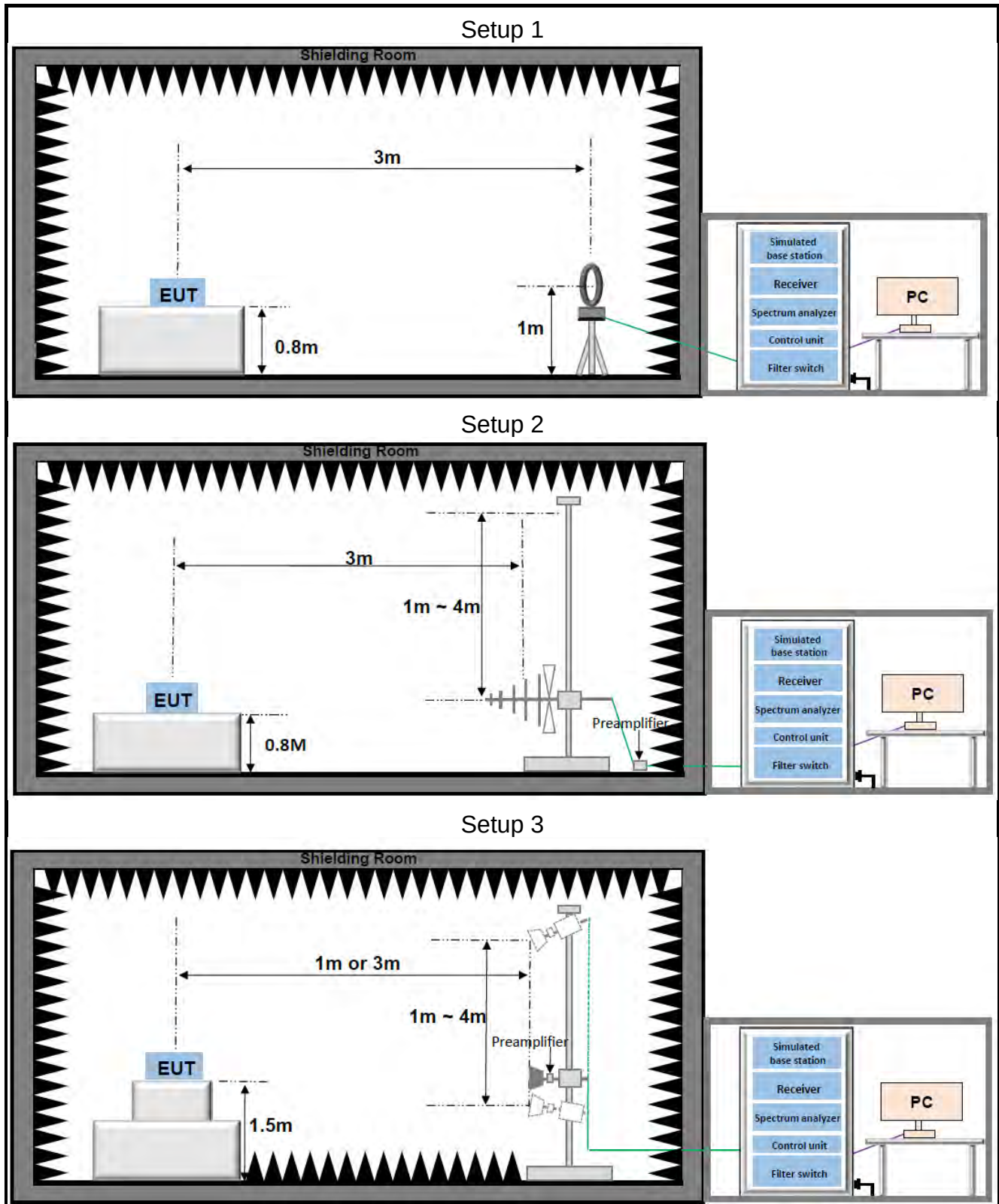
No modifications were made during testing.

2.7 Test Setup Diagram

2.7.1 Conducted Configuration



2.7.2 Radiated Configuration



Directional gain calculations:

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

Unequal antenna gains, with equal transmit powers. For antenna gains given by $G_1, G_2, \dots, G_N$ dBi

- If transmit signals are correlated, then

$Directional\ gain = 10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

- If all transmit signals are completely uncorrelated, then

$Directional\ gain = 10 \log[(10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_N/10}) / N_{ANT}]$ dBi

The EUT supports Space Time Block Codes (STBC) mode.

MIMO output power port and MIMO PSD port summing were performed in accordance with KDB 662911 D01.

For the STBC results the Directional Gain was calculated in accordance with the following month.

Transmit signals are completely uncorrelated			
Operation Band	ANT Gain2 (dBi)	ANT Gain3 (dBi)	Directional gain (dBi)
5925 ~ 6425 MHz	1.4	-1.3	0.26
6425 ~ 6525 MHz	1.4	-1.3	0.26
6525 ~ 6875 MHz	1.4	-1.3	0.26
6875 ~ 7125 MHz	1.4	-1.3	0.26

3 Equipment and Measurement Uncertainty

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, whichever is less, and where applicable is traceable to recognized national standards.

3.1 Test Equipment List

RF Conducted					
Description	Manufacturer	Model	S.N.	Last Due	Cal Due
Signal Analyzer	Keysight	N9020A	US46470429	2025/03/14	2026/03/13
				2026/03/05	2027/03/04
Signal Generator	R&S	SMR20	101027	2025/03/11	2026/03/10
				2026/03/05	2027/03/04
Vector Signal Generator	R&S	SMM100A	549353	2025/05/29	2026/05/28
				2026/05/29	2027/05/28
Power Sensor	Anritsu	MA24408A	12520	2025/05/29	2026/05/28
				2026/05/29	2027/05/28
RF Control Unit	Tonscend	JS0806-2	23C80620671	2025/05/29	2026/05/28
				2026/05/29	2027/05/28
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY63440541	2025/05/29	2026/05/28
				2026/05/29	2027/05/28
Attenuator	Yin Saige	SMA-10dBm	N/A	N/A	N/A
Measurement Software	Tonscend	TS1120-3	10659	N/A	N/A

Radiated Emission					
Description	Manufacturer	Model	S.N.	Last Due	Cal Due
Biconic Logarithmic Periodic Antennas	Schwarzbeck	VULB9163	1643	2023/06/25	2026/06/24
Double-Ridged Horn Antennas	Schwarzbeck	BBHA 9120D	2809	2023/06/25	2026/06/24
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	1290	2023/06/25	2026/06/24
Loop Antenna	Schwarzbeck	FMZB 1519C	1519C-028	2023/06/29	2026/06/28
Signal Analyzer*	Keysight	N9020A	MY49100252	2025/03/11	2026/03/10
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY63440541	2025/05/29	2026/05/28
				2026/05/29	2027/05/28
Wideband Radio Communication Tester*	R&S	CMW500	150645	2025/03/11	2026/03/10
Low Noise Amplifier	Tonscend	TAP9K3G40	AP23A8060273	2025/03/11	2027/03/10
Low Noise Amplifier	Tonscend	TAP01018050	AP22G806258	2025/03/11	2027/03/10
Low Noise Amplifier	Tonscend	TAP18040048	AP22G806247	2025/03/11	2027/03/10
Hygrometer	BINGYU	HTC-1	N/A	2025/07/25	2026/07/24
Band Reject Filter Group	Townshend	JS0806-F	23A806F0652	N/A	N/A
Test Software	Tonscend	TS+	Version: 5.0.0	N/A	N/A
Remark: *There were no test after 2026/03/10.					

Conducted Emission					
Description	Manufacturer	Model	S.N.	Last Due	Cal Due
EMI Tester Receiver	Rohde & Schwarz	ESR3	103108	2025/05/29	2026/05/28
				2026/05/28	2027/05/27
LISN	Rohde & Schwarz	ENV 216	102836	2026/01/19	2027/01/18
Test software	Rohde & Schwarz	ELEKTRA V4.61	N/A	N/A	N/A

3.2 Measurement Uncertainty

Parameter	U _{lab}
Frequency Error	679.98Hz
Output Power	0.76dB
Conducted Spurious Emissions	2.22dB
Conducted Emissions(150kHz~30MHz)	2.43dB
Radiated Emissions(9kHz~30MHz)	2.40dB
Radiated Emissions(30MHz~1000MHz)	4.66dB
Radiated Emissions(1GHz~18GHz)	5.42dB
Radiated Emissions(18GHz~40GHz)	5.46dB

Uncertainty figures are valid to a confidence level of 95%

4 Test Results

4.1 Antenna Requirement

Standard Applicable:	47 CFR Part 15E Section 15.203
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
The antenna gain and type as provided by the manufacturer are as follows: The antenna Type is Integrated. With Antenna gain is 1.4dBi(Ant2); -1.3dBi(Ant3); Antenna Anti-Replacement Construction: An embedded-in antenna design is used.	

4.2 Frequency Stability

Standard Applicable:	47 CFR Part 15E Section 15.407(g)
Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.	

4.3 AC Power Line Conducted Emissions

Limits

Frequency range (MHz)	Limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

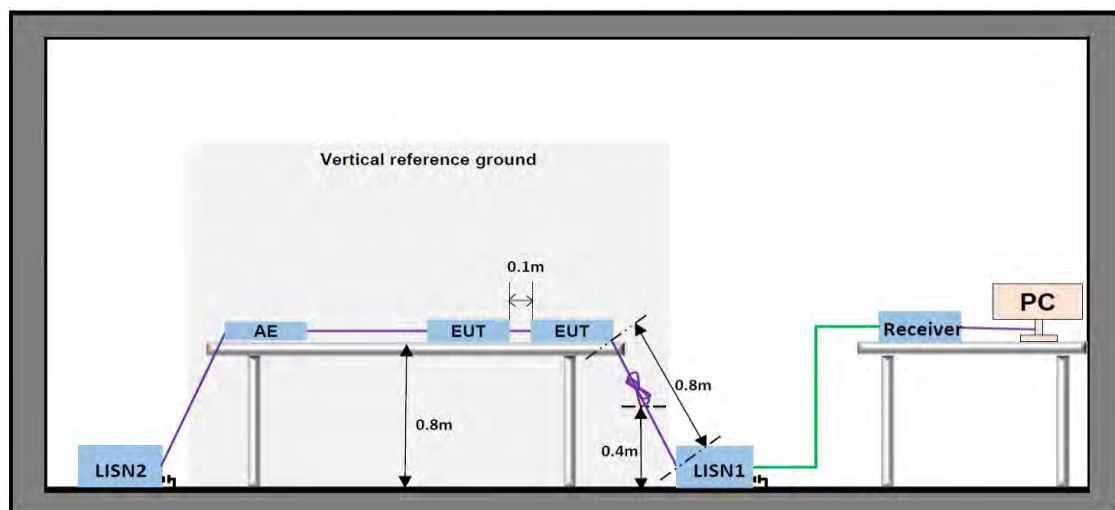
Test Procedure

ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024, Section 6.2.

Test Settings

1. The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
2. The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.
3. The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
4. Set the test-receiver system to Peak detect function and specified bandwidth (if bandwidth =9kHz) with maximum hold mode. Then measurement is also conducted by average detector and Quasi-Peak detector function respectively.
5. Both sides of AC line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

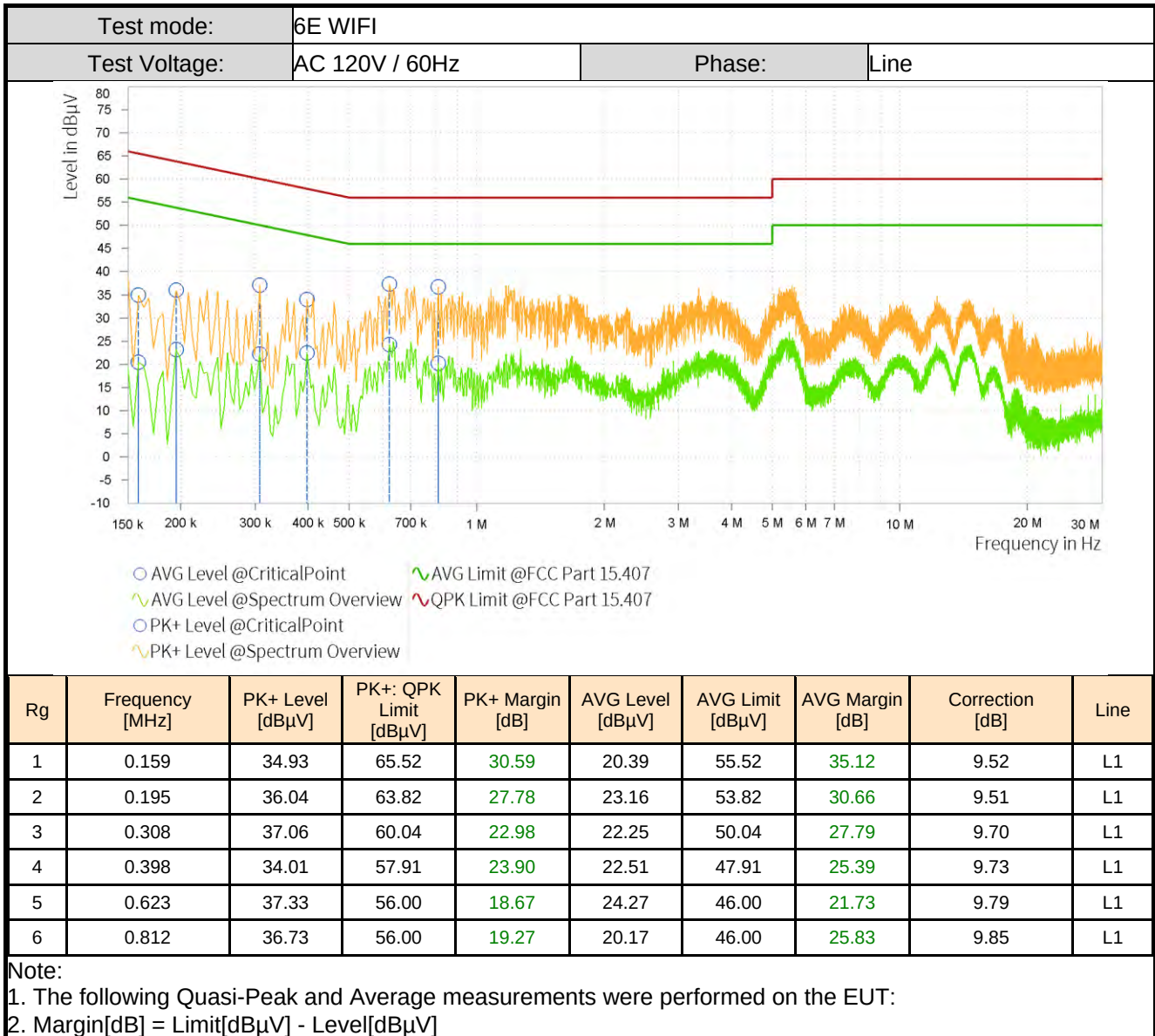
Test Setup

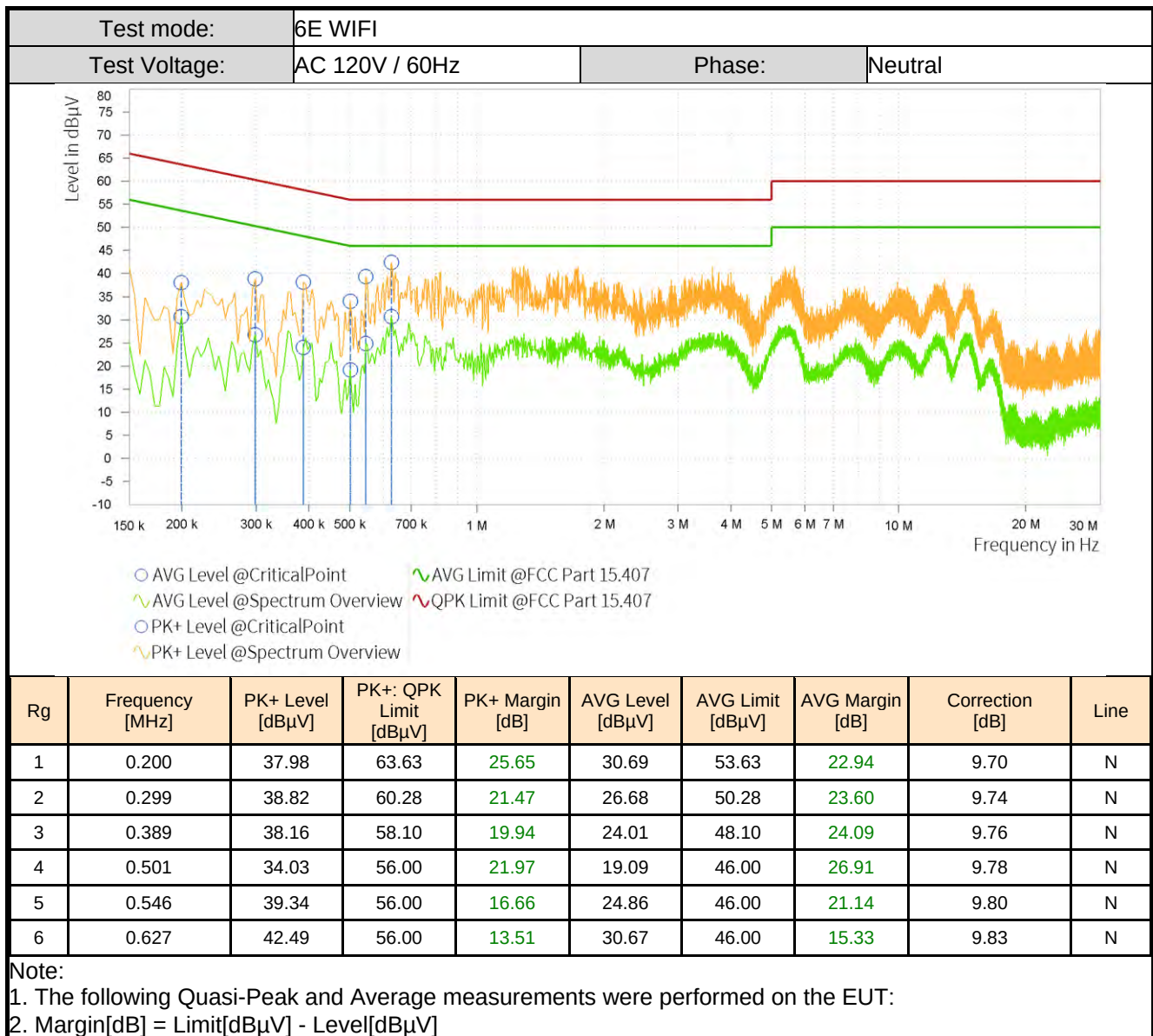


Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result:





4.4 Maximum e.i.r.p. Output Power

Limits

For Indoor Client:

For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum power spectral density must not exceed -1 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

For Standard Power Client:

For client devices operating under the control of a Standard Power Access Point in the 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm and the device must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power.

Test Procedure

ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 Section 12.4.3.2

Test Settings

PM-G:

Set to the maximum power setting and enable the EUT transmit continuously.

The power output was measured on the EUT antenna port using RF Cable with an attenuator connected to a power sensor. Output power was read directly from the power sensor.

Measure and record the results in the test report.

Test Setup

Refer to section 2.7.1- Setup 1 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.5 Maximum Power Spectral Density

Limits

For Indoor Client:

For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum power spectral density must not exceed -1 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

For Standard Power Client:

For client devices operating under the control of a Standard Power Access Point in the 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed 17 dBm e.i.r.p. in any 1-megahertz band.

Test Procedure

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II.F

Test Settings

1. Set to the maximum power setting and enable the EUT transmit continuously
2. The transmitter output is connected to a spectrum analyzer
3. RBW = 1MHz
4. VBW $\geq$ 3 times RBW
5. Sweep = Auto
6. Detector = RMS
7. Trace = Max hold
8. The trace was allowed to stabilize
9. Measure and record the results in the test report.

Test Setup

Refer to section 2.7.1- Setup 2 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.6 Emission Bandwidth

Limits

The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.

Test Procedure

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II.C.1.

Test Settings

1. Set to the maximum power setting and enable the EUT transmit continuously.
2. The transmitter output is connected to a spectrum analyzer:
3. RBW = 1% - 5%(99%BW)
4. VBW = 3 times the RBW
5. Sweep = Auto
6. Detector = Peak
7. Trace = Max hold
8. The trace was allowed to stabilize
9. Measure and record the results in the test report.

Test Notes

The signal analyzers' automatic bandwidth measurement capability of the spectrum analyzer was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to X= 26. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.

Test Setup

Refer to section 2.7.1- Setup 2 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.7 Occupied Bandwidth

Limits

None, for reporting purposes only.

Test Procedure

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II.D.

Test Settings

1. Set to the maximum power setting and enable the EUT transmit continuously.
2. The transmitter output is connected to a spectrum analyzer:
3. RBW = 1% - 5%(99%BW)
4. VBW = 3 times the RBW
5. Sweep = Auto
6. Detector = Peak
7. Trace = Max hold
8. The trace was allowed to stabilize
9. Measure and record the results in the test report.

Test Setup

Refer to section 2.7.1- Setup 2 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.8 In-Band Emissions (Channel Mask)

Limits

For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

Test Procedure

KDB 987594 D02 U-NII 6GHz EMC Measurement v02r01 Section J.

Test Settings

1. Set to the maximum power setting and enable the EUT transmit continuously.
2. The transmitter output is connected to a spectrum analyzer:
3. Span = To encompass the entire 26 dB EBW of the signal.
4. RBW = Same RBW used for 26 dB EBW measurement.
5. VBW $\geq$ 3 times RBW.
6. Detector = RMS.
7. Sweep = Auto.
8. Point sweep $\geq$ 2 Span / RBW.
9. Trace = Max hold.
10. Trace average at least 100 traces in power averaging (rms) mode.
11. Use the peak search function on the instrument to find the peak of the spectrum.
12. Measure and record the results in the test report.

Test Setup

Refer to section 2.7.1- Setup 2 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.9 Contention Based Protocol

Limits

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band must employ a contention-based protocol.

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band (herein referred to as unlicensed devices) are required to use technologies that include a contention-based protocol to avoid co-channel interference with incumbent devices sharing the band. To ensure incumbent co-channel operations are detected in a technology-agnostic manner, unlicensed devices are required to detect co-channel radio frequency energy (energy detect) and avoid simultaneous transmission.

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel (in which incumbent signal is transmitted) and stay off the incumbent channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm)¹. The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.

To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

Criteria to determine number of times detection threshold test may be performed

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Tune incumbent and EUT transmissions ($f_{c1} = f_{c2}$)
$BW_{Inc} < BW_{EUT} \leq 2BW_{Inc}$	Once	Incumbent transmission is contained within BW_{EUT}
$2BW_{Inc} < BW_{EUT} \leq 4BW_{Inc}$	Twice. Incumbent transmission is contained within BW_{EUT}	Incumbent transmission is located as closely as possible to the lower edge and upper edge, respectively, of the EUT channel
$BW_{EUT} > 4BW_{Inc}$	Three times	Incumbent transmission is located as closely as possible to the lower edge of the EUT channel, in the middle of EUT channel, and as closely as possible to the upper edge of the EUT channel

BW_{EUT} : Transmission bandwidth of EUT signal.

BW_{Inc} : Transmission bandwidth of the simulated incumbent signal (10 MHz wide AWGN signal).

f_{c1} : Center frequency of EUT transmission.

f_{c2} : Center frequency of simulated incumbent signal.

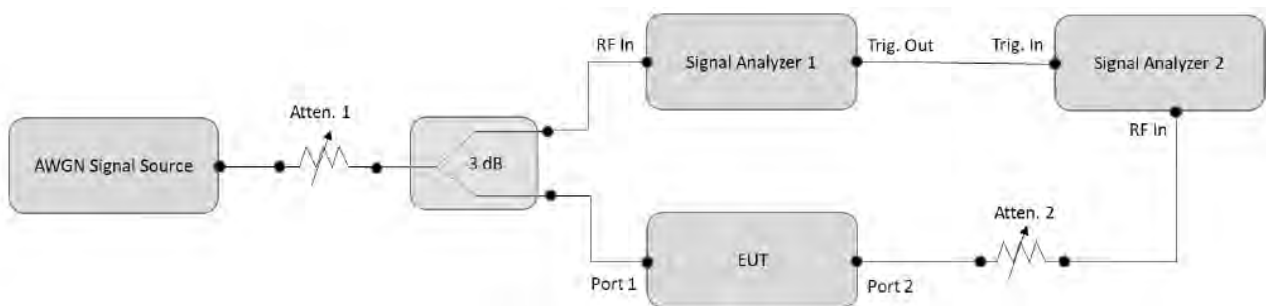
Test Procedure

KDB 987594 D02 U-NII 6GHz EMC Measurement v02r01 Section I.

Test Settings

1. Configure the EUT to transmit with a constant duty cycle.
2. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
3. Set the signal analyzer center frequency to the nominal EEUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2, as shown in Figure 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
4. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two.
5. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
6. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in Figure 2.
7. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
8. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
9. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
10. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.

Test Setup



Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.10 Dual Client Test, Demonstration of Proper Power Adjustment based on Associated AP

Limits

For client devices, except for fixed client devices as defined in this subpart, operating under the control of a standard power access point in 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed 17 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm and the device must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power

A client device may connect to a Standard Power AP with a maximum power level of 30 dBm EIRP. A client may also connect to a Low Power indoor AP, but the power level is limited to a maximum of 24 dBm EIRP. If a client has the flexibility to connect to both APs, verification is needed to show that it can distinguish between the two configurations, and then control the power levels accordingly.

Test Procedure

KDB 987594 D02 U-NII 6GHz EMC Measurement v02r01 Section K.

Test Settings

1. Connect equipment as shown in Figure 6 below.
2. Adjust Atten 2 to Std Power AP so as to facilitate error free communication with the Client (Atten 1 should be set to High on the RF path to the Low Power AP).
3. Configure the Client and APs so that they associate and start sending data (stream data). It is important that the client is configured to transmit at its highest power level. Initially, because the attenuation on Atten 1 is set high, the Client will only associate with the Std Power AP.
4. Verify transmission between Client and Std Power AP. Additional attenuators may be required to protect measurement equipment. Measure the Client RF power using any of the methods in C63.10 for NII devices.
5. Gradually increase Atten 2 while at the same time decreasing Atten 1. This simulates the Client moving from outdoors to indoors. At some level of attenuation the Client should associate with the Low Power indoor AP. Verify transmission between Client and Low Power AP.
6. Measure the RF power of the Client device using the same method as in step 4. Verify the power is no more than 24 dBm EIRP.

Note – measuring Client RF power reliably from a directional coupler measurement port may be tricky. Due to coupling, some energy from the AP will show up on the measurement port. Signal isolation techniques on the measurement analyzer will need to be used.

Test Setup

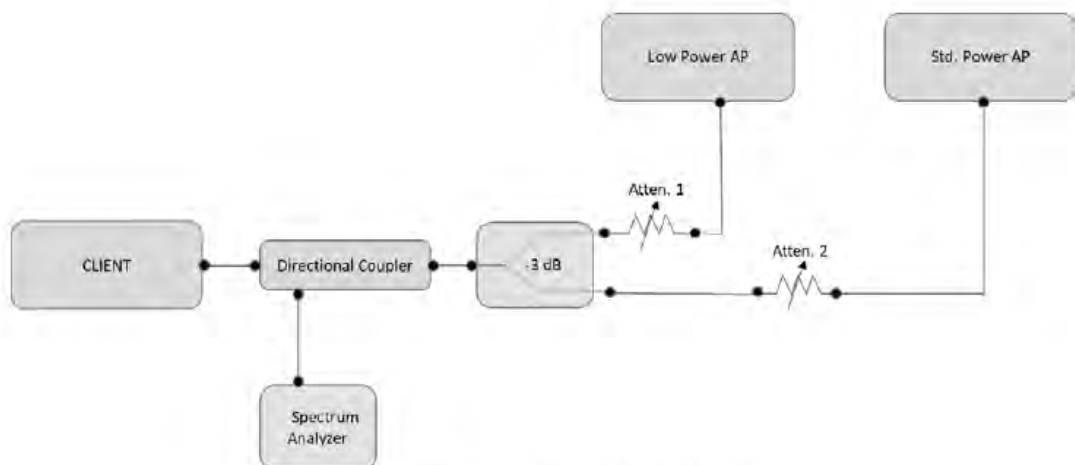


Figure 6. Test setup for conducted testing

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.11 Proper Power Adjustment, Client Devices Connected to a Standard Power Access Point

Limits

For client devices, except for fixed client devices as defined in this subpart, operating under the control of a standard power access point in 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed 17 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm and the device must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power

A client device that connects to a Standard Power AP must limit its power to a minimum of 6 dB lower than its associated Standard Power access point's authorized transmit power. The term "authorized" means the AFC-approved power level for the AP to use on a particular channel.

Test Procedure

KDB 987594 D02 U-NII 6GHz EMC Measurement v02r01 Section L.

Test Settings

1. Connect equipment as shown in Figure 7 below.
2. Adjust Atten 1 to Std Power AP so as to facilitate error free communication with the Client but protect the Client receiver from overload or damage.
3. Configure the Client and AP so that they associate and start sending data (stream data). The AP should be configured such that its registered power is 36 dBm EIRP.
4. Verify transmission between Client and Std Power AP. Additional attenuators may be required to protect measurement equipment. Measure the Client RF power using any of the methods in C63.10 for NII devices. Use this power, along with its antenna gain, to calculate the Client EIRP.
5. The Client EIRP should be minimally 6 dB lower than that of the AP.
Repeat Steps 2 through 5 at two other selected measurement points – the first at the midpoint and the second at the lowest rated power of the client as declared by the manufacturer.

Test Setup

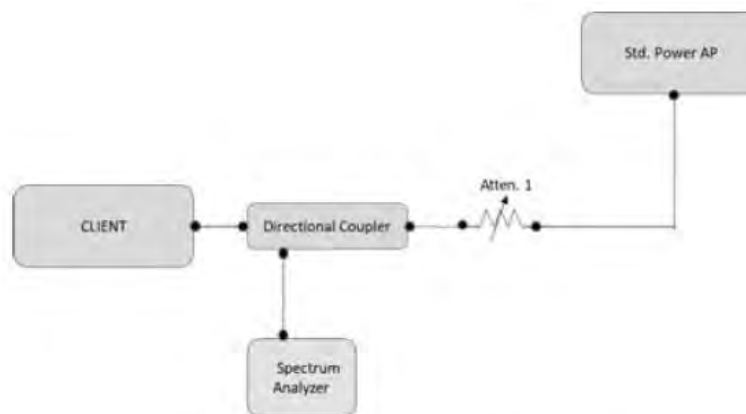


Figure 7. Test setup for conducted testing

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.12 Unwanted Emissions

Limits

For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz.

Spurious emissions are permitted in an of the frequency bands:

MHz	MHz	MHz	MHz	GHz	GHz
0.090 - 0.110	12.29 - 12.293	149.9 - 150.05	1660 - 1710	4.5 - 5.15	14.47 - 14.5
0.495 - 0.505	12.51975 - 12.52025	156.52475 - 156.52525	1718.8 - 1722.2	5.35 - 5.46	15.35 - 16.2
2.1735 - 2.1905	12.5767 - 12.57725	156.7 - 156.9	2200 - 2300	7.25 - 7.75	17.7 - 21.4
4.125 - 128	13.36 - 13.41	162.0125 - 167.17	2310 - 2390	8.025 - 8.5	22.01 - 23.12
4.17725 - 4.17775	16.42 - 16.423	167.72 - 173.2	2483.5 - 2500	9.0 - 9.2	23.6 - 24.0
4.20725 - 4.20775	16.69475 - 16.69525	240 - 285	2655 - 2900	9.3 - 9.5	31.2 - 31.8
6.215 - 6.218	1680425 - 1680475	322 - 335.4	3260 - 3267	10.6 - 12.7	36.43 - 36.5
6.26775 - 6.26825	25.5 - 25.67	399.9 - 410	3332 - 3339	13.25 - 13.4	
6.31175 - 6.31225	37.5 - 38.25	608 - 614	3345.8 - 3358		
8.291 - 8.294	73 - 74.6	960 - 1240	3600 - 4400		
8.362 - 8.366	74.8 - 75.2	1300 - 1427			
8.37625 - 8.38675	108 - 121.94	1435 - 1626.5			
8.41425 - 8.41475	123 - 138	1645.5 - 1646.5			

Radiated disturbance of an intentional radiator:

Frequency	Field strength ($\mu\text{V/m}$)	Limit (dB $\mu\text{V/m}$)	Remark	Measurement distance (m)
0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
1.705MHz-30MHz	30	-	-	30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	74.0	Peak	3
		54.0	Average	

Measurement methods

ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 Section 6.4 & 6.5 & 6.6.
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II.G.3 ~ 6.

Test Settings

1. For radiated emissions measurements performed at frequencies less than or equal to 1GHz, the EUT shall be placed on a RF-transparent table or support at a nominal height of 80cm above the reference ground plane.
2. For radiated emissions measurements performed at frequencies above 1GHz, the EUT shall be placed on a RF-transparent table or support at a nominal height of 80cm above the ground plane.
3. Radiated measurements shall be made with the measurement antenna positioned in both horizontal and vertical polarization. The measurement antenna shall be varied from 1m to 4m in height above the reference ground in a search for the relative positioning that produces the maximum radiated signal level (i.e, field strength or received power), when orienting the measurement antenna in vertical polarization, the minimum height of the lowest element of the antenna shall clear the site reference ground plane by at least 25cm.
4. For each suspected emission, the EUT was ranged its worst case and then tune the antenna tower(from 1~4m) and turntable(from 0~360°) find the maximum reading. Preamplifier and a high pass filter are used for the test in order get better signal level comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
7. spectrum analyzer setting:
Measurements Below 1000MHz: RBW = 120 kHz; VBW ≥ 300 kHz; Detector = Peak
Measurements Above 1000MHz: RBW = 1 MHz; VBW ≥ 3 MHz; Detector = Peak
Average Measurements Above 1000MHz:
RBW = 1 MHz, VBW ≥ 1/T, with peak detector for average measurements.
8. The field strength is calculated by adding the Antenna Factor, Cable Factor. The basic equation with a sample calculation is as follows:
Level = Reading(dBμV) + Factor(dB):
Factor = Cable Factor(dB) + AF(dB/m) - Preamplifier gain(dB)
AF = Antenna Factor(dB/m)
Margin = Limit(dBμV/m) – Level(dBμV/m)
9. Repeat above procedures until all frequencies measured was complete.
10. Measure and record the results in the test report.

Test Notes

1. Emissions below 18GHz were measured at a 3-meter test distance while emissions above 18GHz were measured at a 1-meter test distance with the application of a distance correction factor.
2. Radiated spurious emissions were investigated from 9kHz to 30MHz, 30MHz-1GHz and above 1GHz. the disturbance between 9kHz to 30MHz and 18GHz to 40GHz was very low. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be recorded, so only the harmonics had been displayed.
3. These frequencies which near "-" should be ignored because they are Fundamental frequency.

Test Setup

Refer to section 2.7.2 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

5 Test Setup Photos

The detailed test data see: **Appendix A - BTWIFI Setup Photos**

Appendix

For Indoor Client Emission Bandwidth Test Result

TestMode	Antenna	Frequency[MHz]	26dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11a-MIMO	Ant2	5955	18.880	5945.880	5964.760	≤320	PASS
11a-MIMO	Ant3	5955	18.720	5945.760	5964.480	≤320	PASS
11a-MIMO	Ant2	6175	18.640	6165.600	6184.240	≤320	PASS
11a-MIMO	Ant3	6175	18.920	6165.600	6184.520	≤320	PASS
11a-MIMO	Ant2	6415	18.960	6405.680	6424.640	≤320	PASS
11a-MIMO	Ant3	6415	18.520	6405.800	6424.320	≤320	PASS
11a-MIMO	Ant2	6435	18.520	6425.880	6444.400	≤320	PASS
11a-MIMO	Ant3	6435	19.000	6425.440	6444.440	≤320	PASS
11a-MIMO	Ant2	6475	18.640	6465.680	6484.320	≤320	PASS
11a-MIMO	Ant3	6475	19.240	6465.120	6484.360	≤320	PASS
11a-MIMO	Ant2	6515	19.040	6505.600	6524.640	≤320	PASS
11a-MIMO	Ant3	6515	18.720	6505.800	6524.520	≤320	PASS
11a-MIMO	Ant2	6535	18.480	6525.920	6544.400	≤320	PASS
11a-MIMO	Ant3	6535	18.640	6525.560	6544.200	≤320	PASS
11a-MIMO	Ant2	6695	18.400	6685.680	6704.080	≤320	PASS
11a-MIMO	Ant3	6695	18.640	6685.920	6704.560	≤320	PASS
11a-MIMO	Ant2	6855	18.840	6845.520	6864.360	≤320	PASS
11a-MIMO	Ant3	6855	19.080	6845.160	6864.240	≤320	PASS
11a-MIMO	Ant2	6875	18.720	6865.640	6884.360	≤320	PASS
11a-MIMO	Ant3	6875	18.920	6865.400	6884.320	≤320	PASS
11a-MIMO	Ant2	6895	18.680	6885.680	6904.360	≤320	PASS
11a-MIMO	Ant3	6895	19.120	6885.360	6904.480	≤320	PASS
11a-MIMO	Ant2	6995	18.680	6985.800	7004.480	≤320	PASS
11a-MIMO	Ant3	6995	19.000	6985.800	7004.800	≤320	PASS
11a-MIMO	Ant2	7095	19.200	7085.440	7104.640	≤320	PASS
11a-MIMO	Ant3	7095	18.880	7085.480	7104.360	≤320	PASS
11a-MIMO	Ant2	7115	18.400	7105.800	7124.200	≤320	PASS
11a-MIMO	Ant3	7115	18.920	7105.480	7124.400	≤320	PASS
11ax20MIMO	Ant2	5955	20.520	5944.840	5965.360	≤320	PASS
11ax20MIMO	Ant3	5955	20.520	5944.560	5965.080	≤320	PASS
11ax20MIMO	Ant2	6175	20.280	6164.720	6185.000	≤320	PASS
11ax20MIMO	Ant3	6175	20.360	6164.880	6185.240	≤320	PASS
11ax20MIMO	Ant2	6415	20.680	6404.640	6425.320	≤320	PASS
11ax20MIMO	Ant3	6415	20.760	6404.720	6425.480	≤320	PASS
11ax20MIMO	Ant2	6435	20.400	6424.800	6445.200	≤320	PASS
11ax20MIMO	Ant3	6435	20.560	6424.880	6445.440	≤320	PASS
11ax20MIMO	Ant2	6475	20.680	6464.440	6485.120	≤320	PASS
11ax20MIMO	Ant3	6475	20.800	6464.920	6485.720	≤320	PASS
11ax20MIMO	Ant2	6515	20.320	6504.840	6525.160	≤320	PASS
11ax20MIMO	Ant3	6515	20.160	6504.920	6525.080	≤320	PASS
11ax20MIMO	Ant2	6535	20.280	6525.000	6545.280	≤320	PASS
11ax20MIMO	Ant3	6535	20.720	6524.720	6545.440	≤320	PASS
11ax20MIMO	Ant2	6695	20.120	6685.000	6705.120	≤320	PASS
11ax20MIMO	Ant3	6695	20.680	6684.560	6705.240	≤320	PASS
11ax20MIMO	Ant2	6855	20.520	6844.600	6865.120	≤320	PASS
11ax20MIMO	Ant3	6855	20.160	6844.880	6865.040	≤320	PASS
11ax20MIMO	Ant3	6875	20.360	6864.960	6885.320	≤320	PASS
11ax20MIMO	Ant2	6875	20.320	6864.720	6885.040	≤320	PASS
11ax20MIMO	Ant2	6895	20.040	6884.960	6905.000	≤320	PASS
11ax20MIMO	Ant3	6895	20.000	6885.040	6905.040	≤320	PASS
11ax20MIMO	Ant2	6995	20.440	6984.600	7005.040	≤320	PASS
11ax20MIMO	Ant3	6995	20.640	6984.560	7005.200	≤320	PASS
11ax20MIMO	Ant2	7095	20.360	7084.800	7105.160	≤320	PASS
11ax20MIMO	Ant3	7095	20.200	7084.920	7105.120	≤320	PASS
11ax20MIMO	Ant2	7115	19.800	7105.080	7124.880	≤320	PASS

11ax20MIMO	Ant3	7115	20.240	7104.800	7125.040	≤320	PASS
11ax40MIMO	Ant2	5965	39.520	5945.400	5984.920	≤320	PASS
11ax40MIMO	Ant3	5965	39.760	5945.000	5984.760	≤320	PASS
11ax40MIMO	Ant2	6165	39.520	6145.240	6184.760	≤320	PASS
11ax40MIMO	Ant3	6165	39.680	6145.240	6184.920	≤320	PASS
11ax40MIMO	Ant2	6405	40.080	6385.160	6425.240	≤320	PASS
11ax40MIMO	Ant3	6405	39.520	6385.320	6424.840	≤320	PASS
11ax40MIMO	Ant2	6445	39.600	6425.320	6464.920	≤320	PASS
11ax40MIMO	Ant3	6445	39.920	6425.160	6465.080	≤320	PASS
11ax40MIMO	Ant2	6485	39.760	6465.160	6504.920	≤320	PASS
11ax40MIMO	Ant3	6485	39.600	6465.160	6504.760	≤320	PASS
11ax40MIMO	Ant2	6525	39.760	6505.160	6544.920	≤320	PASS
11ax40MIMO	Ant3	6525	39.520	6505.320	6544.840	≤320	PASS
11ax40MIMO	Ant2	6565	39.440	6545.320	6584.760	≤320	PASS
11ax40MIMO	Ant3	6565	40.160	6544.760	6584.920	≤320	PASS
11ax40MIMO	Ant2	6685	39.760	6665.000	6704.760	≤320	PASS
11ax40MIMO	Ant3	6685	39.680	6665.240	6704.920	≤320	PASS
11ax40MIMO	Ant2	6845	39.680	6825.240	6864.920	≤320	PASS
11ax40MIMO	Ant3	6845	39.440	6825.240	6864.680	≤320	PASS
11ax40MIMO	Ant2	6885	39.440	6865.400	6904.840	≤320	PASS
11ax40MIMO	Ant3	6885	39.840	6865.080	6904.920	≤320	PASS
11ax40MIMO	Ant2	6925	39.680	6905.160	6944.840	≤320	PASS
11ax40MIMO	Ant3	6925	39.680	6905.320	6945.000	≤320	PASS
11ax40MIMO	Ant2	7005	40.080	6984.840	7024.920	≤320	PASS
11ax40MIMO	Ant3	7005	39.440	6985.320	7024.760	≤320	PASS
11ax40MIMO	Ant2	7085	39.920	7064.920	7104.840	≤320	PASS
11ax40MIMO	Ant3	7085	39.440	7065.240	7104.680	≤320	PASS
11ax80MIMO	Ant2	5985	80.320	5944.680	6025.000	≤320	PASS
11ax80MIMO	Ant3	5985	80.640	5945.000	6025.640	≤320	PASS
11ax80MIMO	Ant2	6145	80.320	6104.840	6185.160	≤320	PASS
11ax80MIMO	Ant3	6145	79.840	6105.160	6185.000	≤320	PASS
11ax80MIMO	Ant2	6385	80.480	6345.000	6425.480	≤320	PASS
11ax80MIMO	Ant3	6385	80.160	6344.840	6425.000	≤320	PASS
11ax80MIMO	Ant2	6465	81.280	6424.680	6505.960	≤320	PASS
11ax80MIMO	Ant3	6465	80.960	6424.360	6505.320	≤320	PASS
11ax80MIMO	Ant2	6545	80.800	6504.360	6585.160	≤320	PASS
11ax80MIMO	Ant3	6545	81.280	6504.360	6585.640	≤320	PASS
11ax80MIMO	Ant2	6625	80.160	6584.840	6665.000	≤320	PASS
11ax80MIMO	Ant3	6625	80.000	6585.000	6665.000	≤320	PASS
11ax80MIMO	Ant2	6705	80.160	6665.000	6745.160	≤320	PASS
11ax80MIMO	Ant3	6705	80.960	6664.680	6745.640	≤320	PASS
11ax80MIMO	Ant2	6785	80.640	6745.000	6825.640	≤320	PASS
11ax80MIMO	Ant3	6785	80.320	6744.840	6825.160	≤320	PASS
11ax80MIMO	Ant2	6865	80.640	6824.520	6905.160	≤320	PASS
11ax80MIMO	Ant3	6865	80.640	6825.160	6905.800	≤320	PASS
11ax80MIMO	Ant2	6945	80.480	6904.680	6985.160	≤320	PASS
11ax80MIMO	Ant3	6945	80.480	6905.000	6985.480	≤320	PASS
11ax80MIMO	Ant2	7025	80.480	6984.520	7065.000	≤320	PASS
11ax80MIMO	Ant3	7025	80.000	6985.000	7065.000	≤320	PASS
11ax160MIMO	Ant3	6025	161.920	5944.360	6106.280	≤320	PASS
11ax160MIMO	Ant2	6025	162.560	5943.400	6105.960	≤320	PASS
11ax160MIMO	Ant2	6185	162.880	6103.080	6265.960	≤320	PASS
11ax160MIMO	Ant3	6185	162.560	6104.040	6266.600	≤320	PASS
11ax160MIMO	Ant2	6345	162.880	6264.360	6427.240	≤320	PASS
11ax160MIMO	Ant3	6345	162.880	6264.040	6426.920	≤320	PASS
11ax160MIMO	Ant2	6505	161.600	6424.360	6585.960	≤320	PASS
11ax160MIMO	Ant3	6505	163.840	6423.720	6587.560	≤320	PASS
11ax160MIMO	Ant2	6665	161.280	6584.680	6745.960	≤320	PASS
11ax160MIMO	Ant3	6665	162.560	6584.360	6746.920	≤320	PASS
11ax160MIMO	Ant2	6825	162.560	6744.040	6906.600	≤320	PASS
11ax160MIMO	Ant3	6825	161.920	6744.040	6905.960	≤320	PASS
11ax160MIMO	Ant2	6985	161.920	6904.360	7066.280	≤320	PASS
11ax160MIMO	Ant3	6985	164.160	6902.440	7066.600	≤320	PASS

Test Graphs



11a-MIMO-Ant2-5955



11a-MIMO-Ant3-5955



11a-MIMO-Ant2-6175



11a-MIMO-Ant3-6175



11a-MIMO-Ant2-6415



11a-MIMO-Ant3-6415



11a-MIMO-Ant2-6435



11a-MIMO-Ant3-6435



11a-MIMO-Ant2-6475



11a-MIMO-Ant3-6475



11a-MIMO-Ant2-6515



11a-MIMO-Ant3-6515



11a-MIMO-Ant2-6535



11a-MIMO-Ant3-6535



11a-MIMO-Ant2-6695



11a-MIMO-Ant3-6695



11a-MIMO-Ant2-6855



11a-MIMO-Ant3-6855



11a-MIMO-Ant2-6875



11a-MIMO-Ant3-6875



11a-MIMO-Ant2-6895



11a-MIMO-Ant3-6895



11a-MIMO-Ant2-6995



11a-MIMO-Ant3-6995



11a-MIMO-Ant2-7095



11a-MIMO-Ant3-7095



11a-MIMO-Ant2-7115



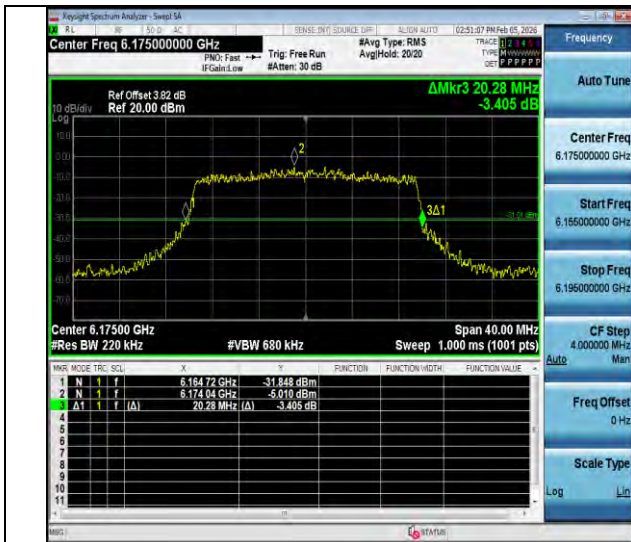
11a-MIMO-Ant3-7115



11ax20MIMO-Ant2-5955



11ax20MIMO-Ant3-5955



11ax20MIMO-Ant2-6175



11ax20MIMO-Ant3-6175



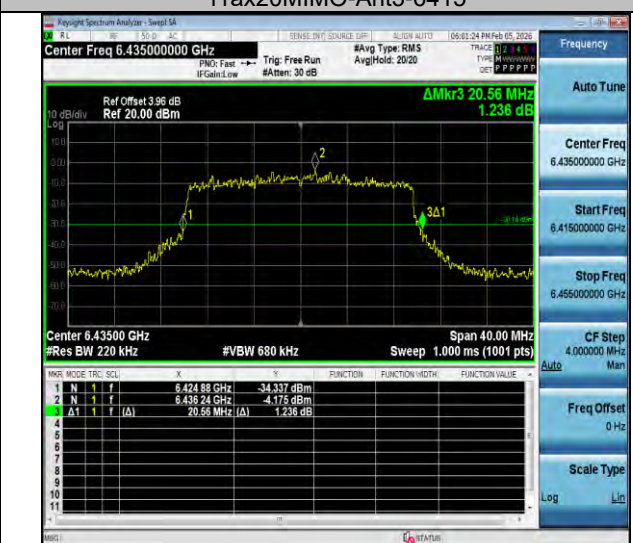
11ax20MIMO-Ant2-6415



11ax20MIMO-Ant3-6415



11ax20MIMO-Ant2-6435



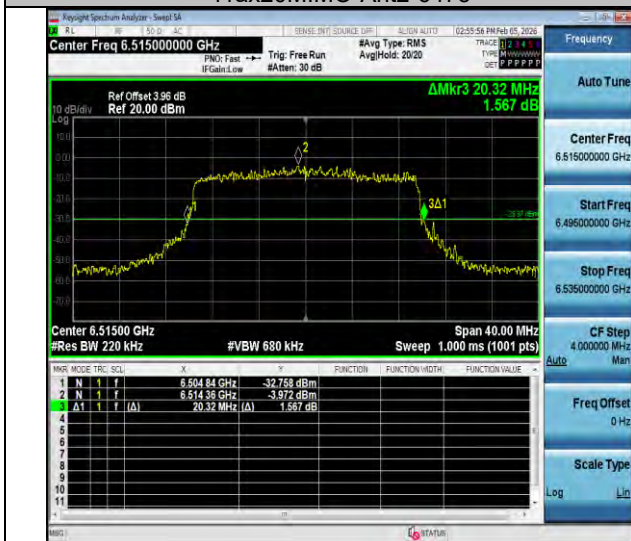
11ax20MIMO-Ant3-6435



11ax20MIMO-Ant2-6475



11ax20MIMO-Ant3-6475



11ax20MIMO-Ant2-6515



11ax20MIMO-Ant3-6515



11ax20MIMO-Ant2-6535



11ax20MIMO-Ant3-6535



11ax20MIMO-Ant2-6695



11ax20MIMO-Ant3-6695



11ax20MIMO-Ant2-6855



11ax20MIMO-Ant3-6855



11ax20MIMO-Ant3-6875



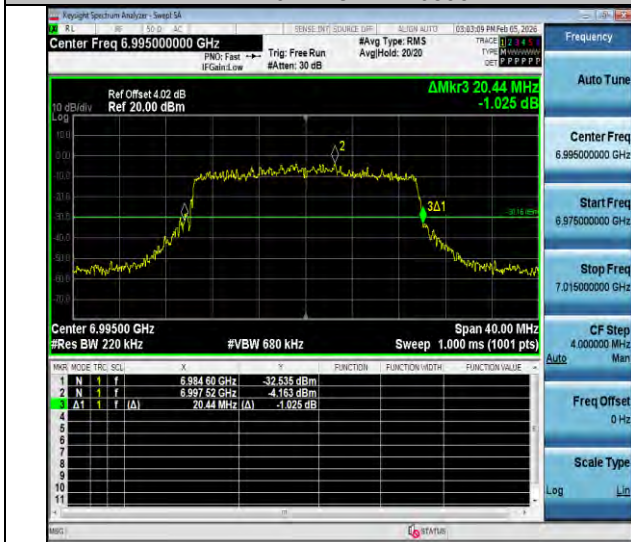
11ax20MIMO-Ant2-6875



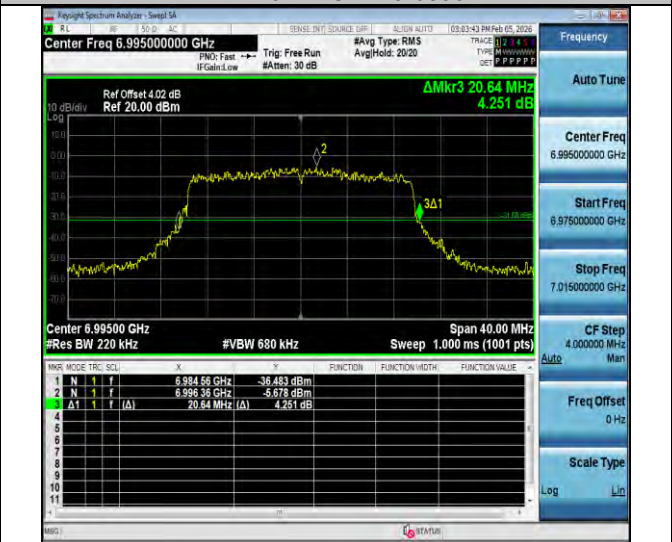
11ax20MIMO-Ant2-6895



11ax20MIMO-Ant3-6895



11ax20MIMO-Ant2-6995



11ax20MIMO-Ant3-6995



11ax20MIMO-Ant2-7095



11ax20MIMO-Ant3-7095



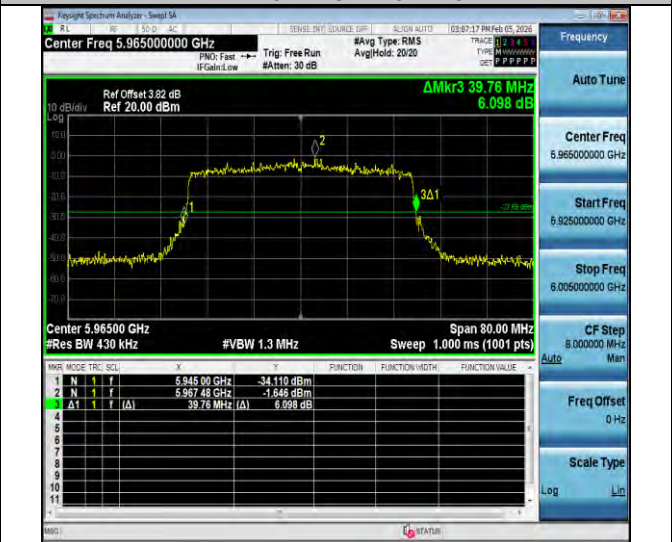
11ax20MIMO-Ant2-7115



11ax20MIMO-Ant3-7115



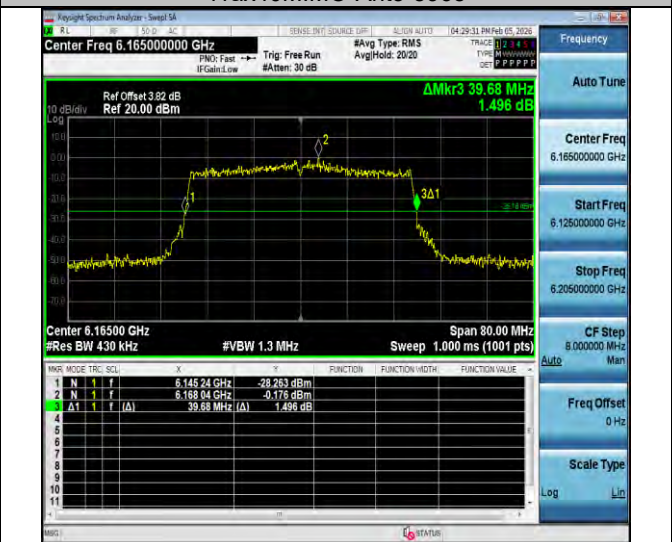
11ax40MIMO-Ant2-5965



11ax40MIMO-Ant3-5965



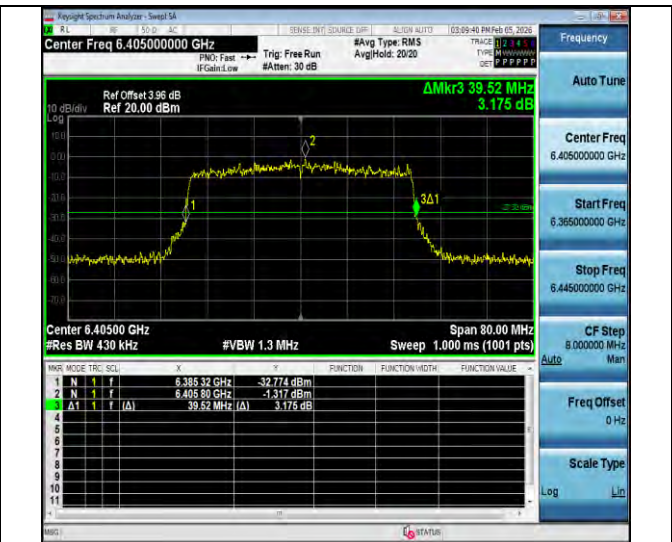
11ax40MIMO-Ant2-6165



11ax40MIMO-Ant3-6165



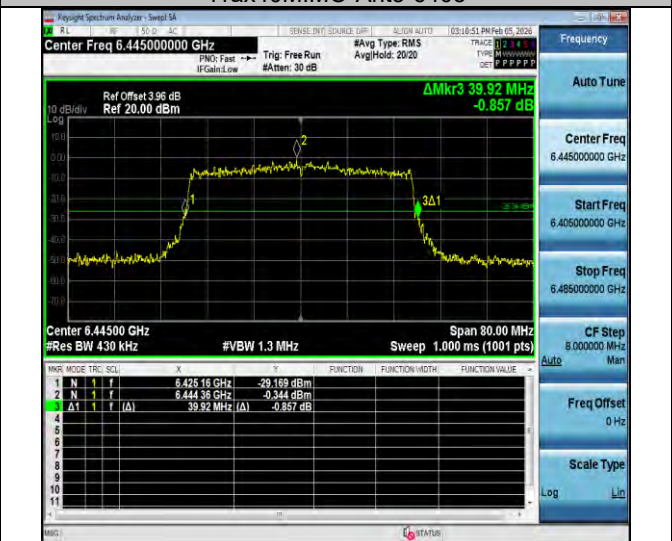
11ax40MIMO-Ant2-6405



11ax40MIMO-Ant3-6405



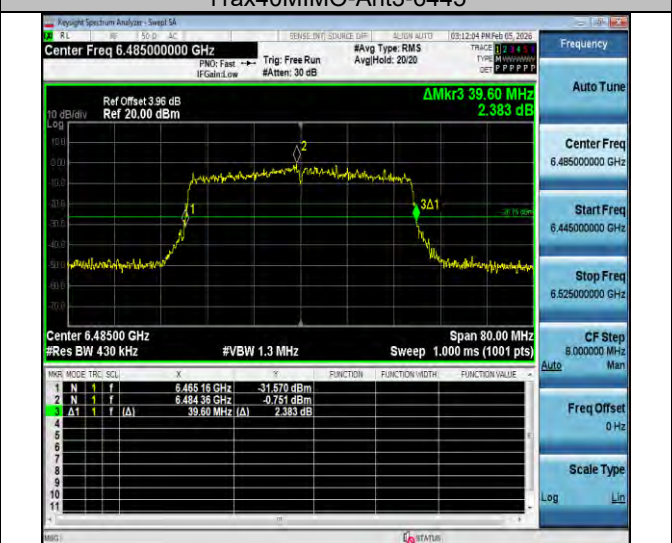
11ax40MIMO-Ant2-6445



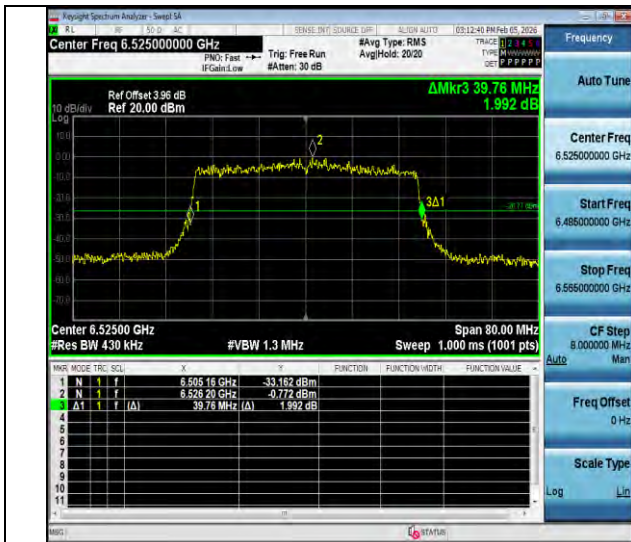
11ax40MIMO-Ant3-6445



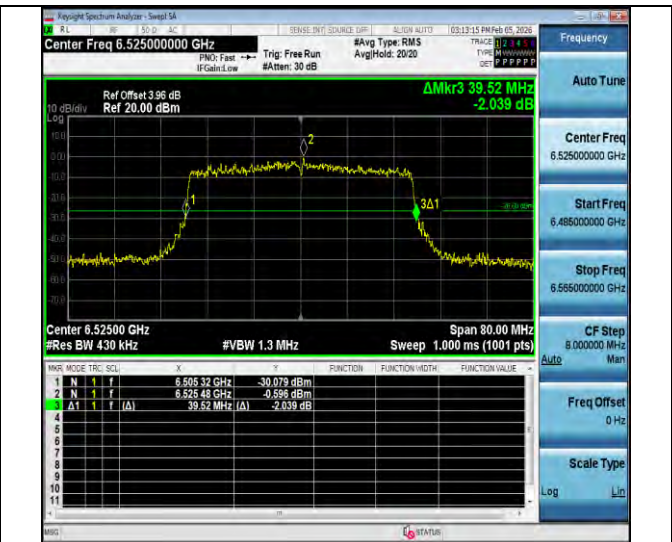
11ax40MIMO-Ant2-6485



11ax40MIMO-Ant3-6485



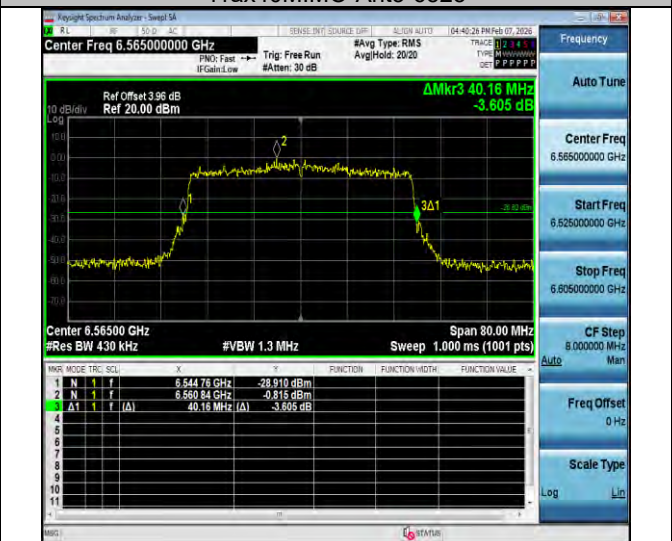
11ax40MIMO-Ant2-6525



11ax40MIMO-Ant3-6525



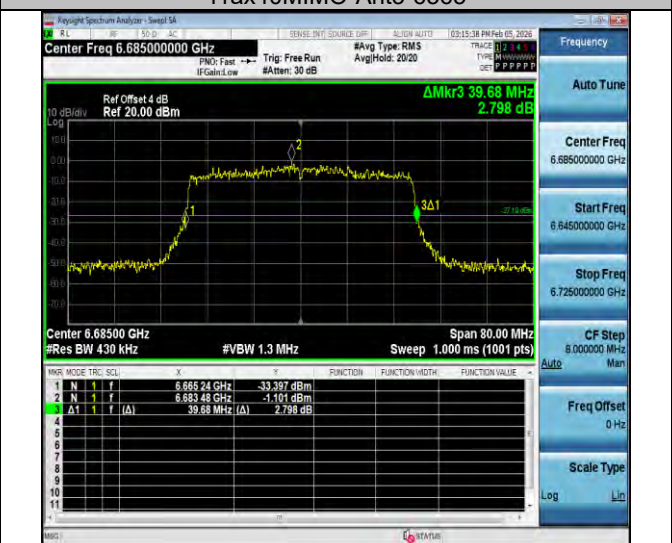
11ax40MIMO-Ant2-6565



11ax40MIMO-Ant3-6565



11ax40MIMO-Ant2-6685



11ax40MIMO-Ant3-6685



11ax40MIMO-Ant2-6845



11ax40MIMO-Ant3-6845



11ax40MIMO-Ant2-6885



11ax40MIMO-Ant3-6885



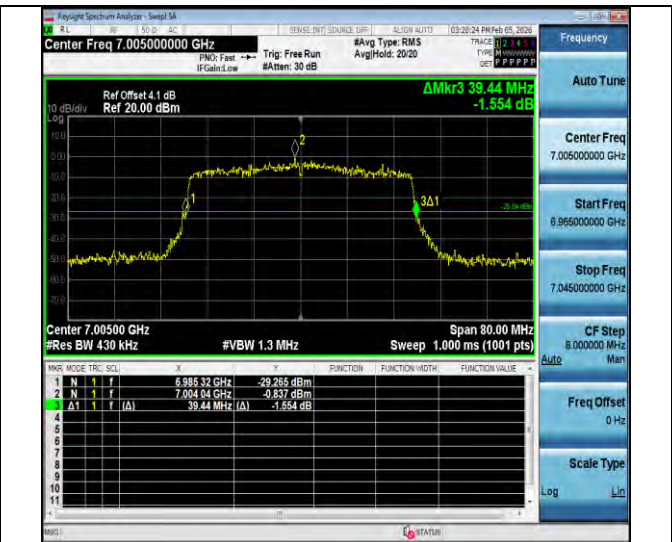
11ax40MIMO-Ant2-6925



11ax40MIMO-Ant3-6925



11ax40MIMO-Ant2-7005



11ax40MIMO-Ant3-7005



11ax40MIMO-Ant2-7085



11ax40MIMO-Ant3-7085



11ax80MIMO-Ant2-5985



11ax80MIMO-Ant3-5985



11ax80MIMO-Ant2-6145



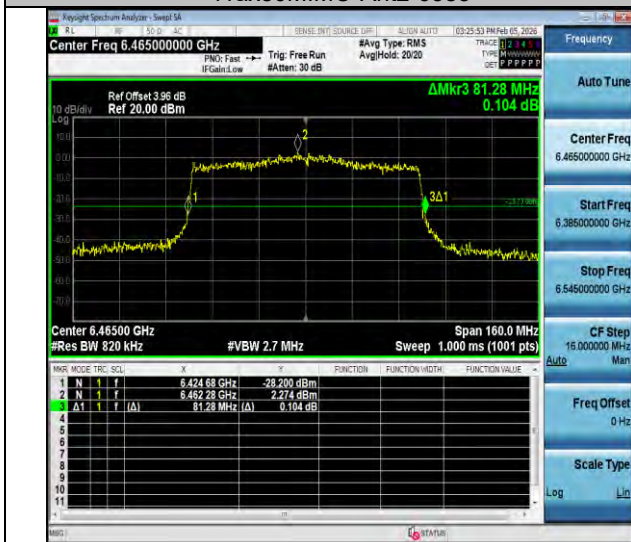
11ax80MIMO-Ant3-6145



11ax80MIMO-Ant2-6385



11ax80MIMO-Ant3-6385



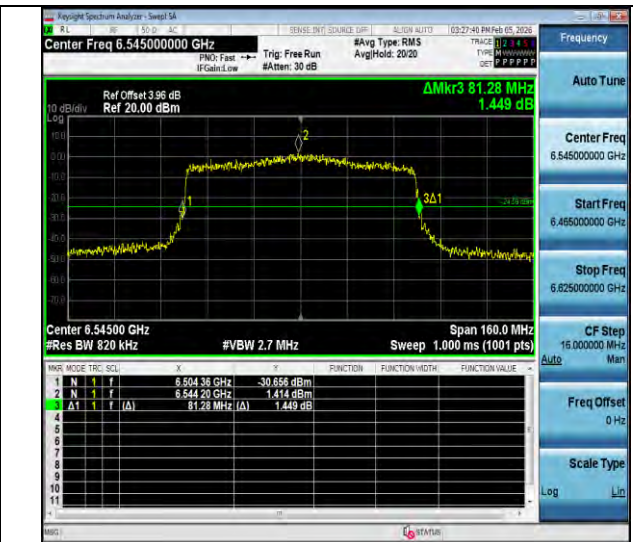
11ax80MIMO-Ant2-6465



11ax80MIMO-Ant3-6465



11ax80MIMO-Ant2-6545



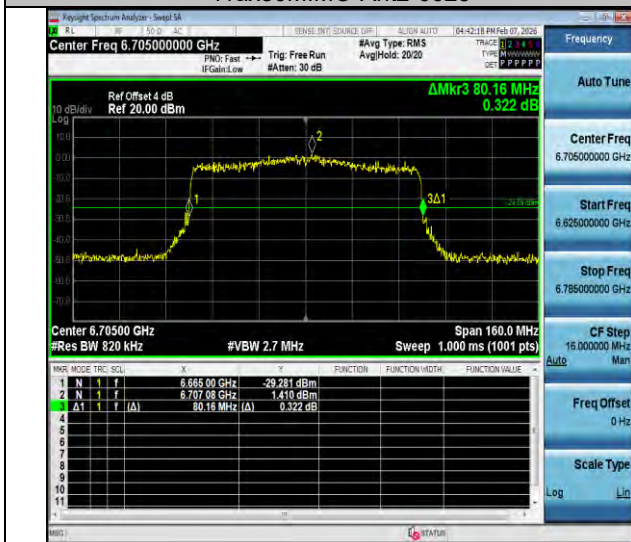
11ax80MIMO-Ant3-6545



11ax80MIMO-Ant2-6625



11ax80MIMO-Ant3-6625



11ax80MIMO-Ant2-6705



11ax80MIMO-Ant3-6705



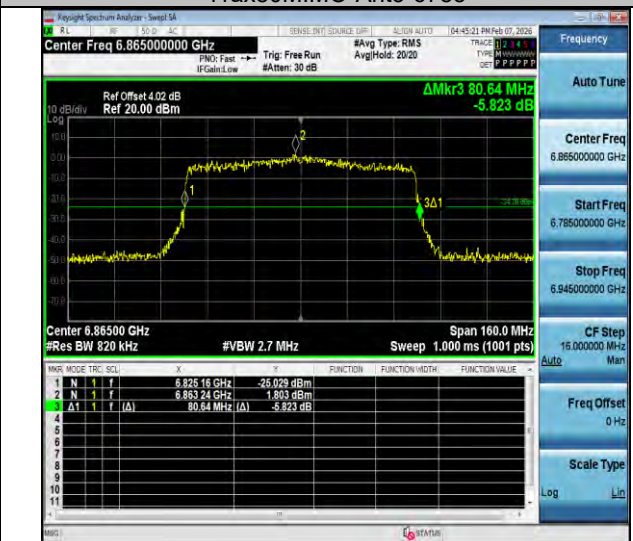
11ax80MIMO-Ant2-6785



11ax80MIMO-Ant3-6785



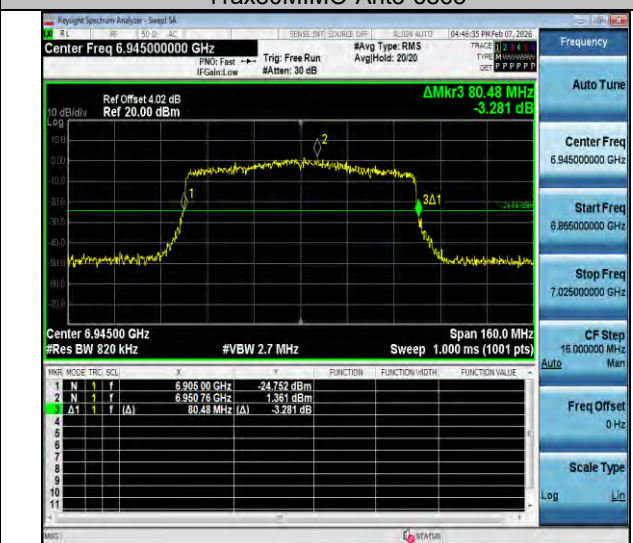
11ax80MIMO-Ant2-6865



11ax80MIMO-Ant3-6865



11ax80MIMO-Ant2-6945



11ax80MIMO-Ant3-6945



11ax80MIMO-Ant2-7025



11ax80MIMO-Ant3-7025



11ax160MIMO-Ant3-6025



11ax160MIMO-Ant2-6025



11ax160MIMO-Ant2-6185



11ax160MIMO-Ant3-6185



11ax160MIMO-Ant2-6345



11ax160MIMO-Ant3-6345



11ax160MIMO-Ant2-6505



11ax160MIMO-Ant3-6505



11ax160MIMO-Ant2-6665



11ax160MIMO-Ant3-6665