FCC PART 15.407
ISEDC RSS-247, ISSUE 4, July 2025

TEST REPORT

For

ChargePoint, Inc.

253 E. Hacienda Ave.,
Campbell, CA, 95008, USA

FCC ID: W38-LB2AE
IC: 8854A-LB2AE

Report Type:	**Product Type:**
Class II Permissive Change	WLAN + Bluetooth Module

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Report Number:	R2603312-407
Report Date:	2026-06-19
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ACCREDITED
CERTIFICATE #3297.02

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. This report **must not** be used by the customer to claim product certification, approval, or endorsement by A2LA*, NIST, or any agency of the Federal Government.
* This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "*"

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	R2603312-407	Class II Permissive Change	2026-06-19

1 General Description

1.1 Product Description for Equipment Under Test (EUT)

This test report is prepared on behalf of *ChargePoint, Inc.*, and their product model: LB2AE, FCC ID: W38-LB2AE, IC: 8854A-LB2AE, the "EUT" as referred to in this report. The EUT is a radio module with Bluetooth and 2.4/5 GHz Wi-Fi capabilities.

Note: EUT module was installed within a larged enclosure that also contains other radio modules. For this application, these other radios are not activated.

BACL assigned serial number: R2603312-01.

Model Number	LB2AE
FCC ID	W38-LB2AE
IC	8854A-LB2AE
HVIN	LB2AE
Wireless technology	802.11a/n20/n40/ac80
Channel Spacing	20/40/80 MHz
Antenna Gain	3.3 dBi

1.2 Objective

This report is prepared on behalf of *ChargePoint, Inc.* in accordance with FCC CFR47 §15.407 and ISEDC RSS-247 Issue 4, July 2025.

The objective is to determine compliance with FCC Part 15.407 and ISEDC RSS-247 for Antenna Requirement, RF Exposure, and Radiated Spurious Emissions.

In order to determine compliance, the manufacturer or a contracted laboratory makes measurements and takes the necessary steps to ensure that the equipment complies with the appropriate technical standards.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product maybe which result in lowering the immunity should be checked to ensure compliance has been maintained (i.e., printed circuit board layout changes, different line filter, different power supply, harnessing and/or I/O cable changes, etc.).

1.3 Related Submittal(s)/Grant(s)

FCC Part 15, Subpart C, Equipment Class: DSS with FCC ID: W38-LB2AE, IC: 8854A-LB2AE.
FCC Part 15, Subpart C, Equipment Class: DTS with FCC ID: W38-LB2AE IC: 8854A-LB2AE.

1.4 Test Methodology

All measurements contained in this report were conducted in accordance with ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz, and FCC KDB 789033 D02 General UNII Test Procedure New Rules v02r01.

1.5 Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in the field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Parameter	Measurement uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.57 dB
Power Spectral Density, conducted	±1.48dB
Unwanted Emissions, conducted	±1.57dB
All emissions, radiated	±4.0 dB
AC power line Conducted Emission	±2.0 dB
Temperature	±2 ^{o} C
Humidity	±5 %
DC and low frequency voltages	±1.0 %
Time	±2 %
Duty Cycle	±3 %

1.6 Test Facility Registrations

BACLs test facilities that are used to perform Radiated and Conducted Emissions tests are currently recognized by the Federal Communications Commission as Accredited with NIST Designation Number US1129.

BACL's test facilities that are used to perform Radiated and Conducted Emissions tests are currently registered with Industry Canada under Registration Numbers: 3062A.

BACL is a Chinese Taipei Bureau of Standards Metrology and Inspection (BSMI) validated Conformity Assessment Body (CAB), under Appendix B, Phase I Procedures of the APEC Mutual Recognition Arrangement (MRA). BACL's BSMI Lab Code Number is: SL2-IN-E-1002R

BACL's test facilities that are used to perform AC Line Conducted Emissions, Telecommunications Line Conducted Emissions, Radiated Emissions from 30 MHz to 1 GHz, and Radiated Emissions from 1 GHz to 6 GHz are currently recognized as Accredited in accordance with the Voluntary Control Council for Interference [VCCI] Article 15 procedures under Registration Number A-0428.

1.7 Test Facility Accreditations

Bay Area Compliance Laboratories Corp. (BACL) is:

A- ***An independent, 3rd-Party, Commercial Test Laboratory accredited to ISO/IEC 17025:2017 by A2LA (Test Laboratory Accreditation Certificate Number 3297.02),*** in the fields of: Electromagnetic Compatibility and Telecommunications. Unless noted by an Asterisk (*) in the Compliance Matrix (See Section 3 of this Test Report), BACL's ISO/IEC 17025:2017 Scope of Accreditation includes all of the Test Method Standards and/or the Product Family Standards detailed in this Test Report..

BACL's ISO/IEC 17025:2017 Scope of Accreditation includes a comprehensive suite of EMC Emissions, EMC Immunity, Radio/Wireless, RF Exposure, Safety, and Wireline Telecommunications test methods applicable to a wide range of product categories. These product categories include, but are not limited to: Central Office Telecommunications Equipment [including NEBS – Network Equipment Building Systems], Information Technology Equipment (ITE); Telecommunications Terminal Equipment (TTE); Medical Electrical Equipment; Industrial, Scientific and Medical Test Equipment; Professional Audio and Video Equipment; Industrial Equipment, Scientific Instruments and Laboratory Apparatus; Cable Distribution Systems, Railway Equipment, Marine Equipment, and Energy Efficient Lighting. Additionally, BACL offers comprehensive test capabilities for both Unlicensed and Licensed Wireless and RF Devices, per the requirements of the FCC (USA), ISED Canada (Canada), the EU/EEA/EFTA Nations (per the ETSI Standards applicable under the Radio Equipment Directive), Singapore, MIC (Japan), South Korea, Vietnam, and Taiwan ROC.

B- ***A Product Certification Body accredited to ISO/IEC 17065:2012 by A2LA (Product Certification Body Accreditation Certificate Number 3297.03)*** to certify

- For the USA (Federal Communications Commission):
  - 1- All Unlicensed radio frequency devices within FCC Scopes A1, A2, A3, and A4;
  - 2- All Licensed radio frequency devices within FCC Scopes B1, B2, B3, and B4;
  - 3- All Telephone Terminal Equipment within FCC Scope C.
- For the Canada (Innovation, Science and Economic Development Canada):
  - 1 All Scope 1-Licence-Exempt Radio Frequency Devices;
  - 2 All Scope 2-Licensed Personal Mobile Radio Services;
  - 3 All Scope 3-Licensed General Mobile & Fixed Radio Services;
  - 4 All Scope 4-Licensed Maritime & Aviation Radio Services;
  - 5 All Scope 5-Licensed Fixed Microwave Radio Services
  - 6 All Broadcasting Equipment Technical Standards (BETS) in the Category I Equipment Standards List.
  - 7. RSS-HAC Radio Scope 6 Hearing Aid Compatibility and Volume Control
- For Singapore (Info-Comm Media Development Authority (IMDA)):
  - 1 All Line Terminal Equipment: All Technical Specifications for Line Terminal Equipment – Table 1 of IDA MRA Recognition Scheme: 2011, Annex 2 IMDA Phase I
  - 2. All Radio-Communication Equipment: All Technical Specifications for Radio-Communication Equipment – Table 2 of IDA MRA Recognition Scheme: 2011, Annex 2 IMDA Phase II
- For the Hong Kong Special Administrative Region & (Office of the Communications Authority-OFCA) – APEC Tel MRA- Phase I and Phase II:
  - 1 Radio Equipment, per KHCA 10XX-series Specifications; HKCA 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1010, 1015, 1016, 1019, 1020, 1022, 1026, 1033, 1034, 1035, 1036, 1037, 1039, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1052, 1053, 1054, 1056, 1057, 1061, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1080, 1081

2 GMDSS Marine Radio Equipment, per HKCA 12XX-series Specifications; HKCA 1218, 1223, 1224, 1225, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1277, 1281, 1282, 1283

3 Fixed Network Equipment, per HKCA 20XX-series Specifications; HKCA 2001, 2011, 2014, 2015, 2017, 2026, 2027, 2028, 2029, 2030, 2031

- For Japan:

1 MIC Telecommunication Business Law (Terminal Equipment):
- All Scope A1 - Terminal Equipment for the Purpose of Calls;
- All Scope A2 - Other Terminal Equipment

2 Radio Law (Radio Equipment):
- All Scope B1 - Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 1 of the Radio Law
- All Scope B2 - Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 2 of the Radio Law
- All Scope B3 - Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 3 of the Radio Law

C- ***A Product Certification Body accredited to ISO/IEC 17065:2012 by A2LA (Product Certification Body Accreditation Certificate Number 3297.01)*** to certify Products to USA's Environmental Protection Agency (EPA) ENERGY STAR Product Specifications for:

1 Appliances:
- for Clothes Washers (ver. 8.1)
- for Residential Dishwashers (ver. 6.0)
- for Residential Refrigerators and/or Freezers (ver. 5.0)

2 Commercial Food Service Equipment:
- for Commercial Dishwashers (ver. 3.0)
- for Commercial Ice Machines (ver. 3.0)

3 Data Center Equipment:
- for Large Network Equipment (ver. 1.1)

4 Electronics and Office Equipment:
- for Audio/Video Equipment (ver. 3.0)
- for Computers (ver. 8.0)
- for Data Center Storage (ver. 2.1)
- for Displays (ver. 8.0)
- for Enterprise Servers (ver. 4.0)
- for Imaging Equipment (ver. 3.1)
- for Set-top Boxes & Cable Boxes (ver. 5.1)
- for Small Network Equipment (ver. 1.0)
- for Telephony (ver. 3.0)
- for Televisions (ver. 9.0), Title 10 Chapter II CFR Part 430 Subpart B –Appendix BB, Title 10 Chapter II CFR Part 430 Subpart B –Appendix DD

3 Lighting and Fans
- for Decorative Light Strings (ver. 1.5)
- for Downlights (ver. 1.0)
- for Lamps (Light Bulbs)(ver. 2.1)
- for Luminaires (including sub-components) (ver. 2.2)
- for Residential Ceiling Fans (ver. 4.0)
- for Residential Ventilating Fans (ver. 4.1)

4 Other
- for Residential Ceiling Fans (ver. 4.0)
- for Electric Vehicle Supply Equipment (ver. 1.2)(Electric Vehicle Supply Equipment Final Test Method for DC-output EVSE Rev March 2021)
- for Water Coolers (ver. 3.0)
- for Smart Home Energy Management Systems (ver. 1.1)

D- ***A NIST Designated Phase-I and Phase-II Conformity Assessment Body (CAB) for the following economies and regulatory authorities under the terms of the stated MRAs/Treaties:***

1. For the USA (Federal Communications Commission), as a Telecommunications Certification Body (TCB):
   - All Unlicensed radio frequency devices within FCC Scopes A1, A2, A3, and A4;
   - All Licensed radio frequency devices within FCC Scopes B1, B2, B3, and B4;
   - All Telephone Terminal Equipment within FCC Scope C.

2. Canada (ISED Canada) Foreign Certification Body – FCB – APEC Tel MRA -Phase I & Phase II:
   - Phase I Designation Letter
   - Phase II ISED Canada recognition as a Product Certification Body for unlicensed wireless devices, licensed radios, radars, etc.:

3. For Singapore (InfoComm Media Development Authority (IMDA)) APEC Tel MRA -Phase I & Phase II:
   - All Line Terminal Equipment: All Technical Specifications for Line Terminal Equipment – Table 1 of IDA MRA Recognition Scheme: 2011, Annex 2 IMDA Phase I
   - All Radio-Communication Equipment: All Technical Specifications for Radio-Communication Equipment – Table 2 of IDA MRA Recognition Scheme: 2011, Annex 2 IMDA Phase II

4. For the Hong Kong Special Administrative Region & (Office of the Communications Authority – OFCA) – APEC Tel MRA -Phase I & Phase II:
   - NIST Phase I Scope Recognition Letter from OFCA for BACL –US0057
   - OFCA Phase II Designation Letter

5. For Japan (Ministry of Communications):
   - NIST Japan Recognition
   - MIC Telecommunication Business Law (Terminal Equipment):
     1. All Scope A1 – Terminal Equipment for the Purpose of Calls;
     2. All Scope A2 – Other Terminal Equipment
   - Radio Law (Radio Equipment):
     1. All Scope B1 – Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 1 of the Radio Law
     2. All Scope B2 – Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 2 of the Radio Law
     3. All Scope B3 – Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 3 of the Radio Law

   - Japan VCCI – Voluntary Control Council for Interference US-Japan Telecom Treaty (VCCI Side Letter)
     1. VCCI Certificate
   - Japan Registered Certification Body
     1. RCB Recognition Letter

6. European Union:
   - Radio Equipment Directive [RED] 2014/53/EU US-EU EMC & Telecom MRA CAB (NB)
   - EMC Directive [EMCD] 2014/30/EU US-EU EMC & Telecom MRA CAB (NB):

7. Australia ACMA (Australian Communication and Media Authority) – APEC Tel MRA -Phase I:
   - Phase I Designation Letter

8. Chinese Taipei (Republic of China – Taiwan):
   - NCC (National Communications Commission) APEC Tel MRA -Phase I

9. Republic of Korea (Ministry of Communications – Radio Research Laboratory) APEC Tel MRA - Phase I:
   - NIST Phase I Scope Update Notification Letter from Korea for BACL

10. Vietnam APEC Tel MRA -Phase I (page 13)
    - Vietnam (MIC) NIST Phase I Scope

11. Indonesia SDPPI (page 6)
    - Phase I Listing

12. Israel Phase I
    - NIST Phase I Scope Update Recognition Letter from Israel for BACL –US0057

13. UK Radio and EMC NIST Designation Letters
    - UK website: https://www.gov.uk/uk-market-conformity-assessment-bodies/bay-area-compliance-laboratories-corp-bacl

      1. Electromagnetic Compatibility Regulations (SI 2016/1091)
      https://assets.publishing.service.gov.uk/media/5fe1e344e90e07452fce4e5a/AB_1313_BACL_UK_EMC_Regs_NIST_Designation_Extended.pdf

      2. Radio Equipment Regulations 2017 (SI 2017/1206)
      https://assets.publishing.service.gov.uk/media/5fe1e351e90e074525bf7be6/AB_1313_BACL_UK_Radio_Regs_NIST_Designation_Extended.pdf

14. IFT Mexico Phase I
    - NIST Phase I New Recognition Letter from Mexico for BACL – US0057

15. Taiwan (BSMI) Phase 1 Designation Letter and designation form.
    - NIST Phase I Scope Update Designation Letter to BSMI for BACL – US0057
    - NIST Phase I Scope Update Designation Form to BSMI for BACL – US0057

2 System Test Configuration

2.1 Justification

The EUT was configured for testing according to ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 and FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

The EUT was tested in a testing mode to represent worst-case results during the final qualification test.

2.2 EUT Exercise Software

The exercising software used during testing was "Tera Term". The software is compliant with the standard requirements being tested against.

Mode	Band	Channel	Frequency (MHz)	Power Setting
802.11a	U-NII-1	36	5180	12
		44	5220	12
		48	5240	12
	U-NII-3	149	5745	12
		157	5785	12
		165	5825	12
802.11n20	U-NII-1	36	5180	12
		44	5220	12
		48	5240	12
	U-NII-3	149	5745	12
		157	5785	12
		165	5825	12
802.11n40	U-NII-1	38	5190	10
		46	5230	10
	U-NII-3	151	5755	10
		159	5795	10
802.11ac80	U-NII-1	42	5210	10
	U-NII-3	155	5775	10

Data rates used:
802.11a: 6 Mbps
802.11n/ac: MCS0

2.3 Equipment Modification

No modifications were made to the EUT during testing.

2.4 Local Support Equipment

Manufacturer	Description	Model	Serial Number
Dell	Laptop	Latitude E7440	GCP3P

2.5 Remote Support Equipment

Manufacturer	Description	Model	Serial Number
ChargePoint, Inc.	Universal Controller Board	-	-

2.6 Power Supply and Line Filters

Manufacturer	Description	Model	Serial Number
OpenPeak	5VDC 4A Wall Adapter Switching Power Supply	LFS054000D-A8S	EPS050400H-PSRP-FL

2.7 Interface Ports and Cabling

Cable Description	Length (m)	From	To
USB-A to USB Micro B	1.5	Universal Controller Board	Laptop
USB-C to USB-C	< 1	Universal Controller Board	EUT

3 Summary of Test Results

FCC & ISEDC Rules	Description of Test	Results
FCC §15.203 ISEDC RSS-Gen §6.8	Antenna Requirements	Compliant
FCC §2.1091, §15.407(f) ISEDC RSS-102	RF Exposure	Compliant
FCC §2.1053, §15.35(b), §15.205, §15.209, §15.407(b) ISEDC RSS-247 §7.3.1.3, §7.3.2.3, §7.3.3.3, §7.3.4.4 ISEDC RSS-Gen §8.9, §8.10	Radiated Spurious Emissions	Compliant

BACL is responsible for all the information provided in this report, except when information is provided by the customer as identified in this report. Information provided by the customer, e.g., antenna gain, can affect the validity of results.

4 FCC §15.203 & ISEDC RSS-Gen §6.8 – Antenna Requirements

4.1 Applicable Standards

According to FCC §15.203:

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 shall be considered sufficient to comply with the provisions of this Section. 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.

According to ISEDC RSS-Gen §6.8: Transmitter Antenna

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).

When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer.

The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.

For license-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:

This radio transmitter has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

4.2 Antenna Description

External/Internal/ Integral	Part Number	Antenna Type	Frequency Range (MHz)	Maximum Antenna Gain (dBi)
Integral	12-004201-03	PIFA	5150-5850	3.3

5 FCC §2.1091, FCC §15.407(f) & ISEDC RSS-102 – RF Exposure

5.1 Applicable Standards

According to KDB 447 498 Section (7.2), "simultaneous transmission of MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on calculated or measured field strengths or power density, is ≤ 1.0. The MPE ratio of each antenna is determined at the minimum *test separation distance* required by the operating configurations and exposure conditions of the host device, according to the ratio of field strengths or power density to MPE limit, at the test frequency.

Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Averaging Time (minutes)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	* (100)	30
1.34-30	824/f	2.19/f	* ($180/f^2$)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

Where: f = frequency in MHz
* = Plane-wave equivalent power density

Before equipment certification is granted, the procedure of IC RSS-102 must be followed concerning the exposure of humans to RF field.

According to ISED RSS-102 Issue 6:

> **6.6 Field reference level exposure exemption limits**
>
> Field reference level (FRL) exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm (i.e. mobile devices), except when the device operates as follows:
>
> - below 20 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 1 W (adjusted for tune-up tolerance)
> - at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than $4.49/f^{0.5} W$ (adjusted for tune-up tolerance), where f is in MHz
> - at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance)
> - at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834} W$ (adjusted for tune-up tolerance), where f is in MHz
> - at or above 6 GHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 5 W (adjusted for tune-up tolerance)
>
> In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the EIRP was derived.

5.2 MPE Prediction

Predication of MPE limit at a given distance, Equation from OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

Where: S = power density
P = power input to antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna

5.3 MPE Results

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (mW)	Power Density at 20cm (mW/cm^2)	Limit (mW/cm^2)
5 GHz Wi-Fi	5180	3.3	18.5	21.8	151.36	0.03011	1.0

5.4 IC Exemption

5 GHz Wi-Fi

The EIRP of this device is 21.8 dBm (151.36 mW) which is less than the exemption threshold, i.e., 1.31*10^(-2) * f^(0.6834)=4.55W. Therefore, the RF exposure evaluation is exempt.

Therefore, RF exposure is not required.

6 FCC §2.1053, §15.35(b), §15.205, §15.209, §15.407(b) & ISEDC RSS-247 §7.3.1.3, §7.3.2.3, §7.3.3.3, §7.3.4.4, RSS-Gen §8.9, §8.10 –Radiated Spurious Emissions

6.1 Applicable Standard

As per FCC §15.35(b): Unless otherwise specified, on any frequency or frequencies above 1000 MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000 MHz shall be performed using a minimum resolution bandwidth of 1 MHz.

As Per FCC §15.205(a) except as show in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 – 0.110	16.42 – 16.423	960 – 1240	4. 5 – 5. 15
0.495 – 0.505	16.69475 – 16.69525	1300 – 1427	5. 35 – 5. 46
2.1735 – 2.1905	25.5 – 25.67	1435 – 1626.5	7.25 – 7.75
4.125 – 4.128	37.5 – 38.25	1645.5 – 1646.5	8.025 – 8.5
4.17725 – 4.17775	73 – 74.6	1660 – 1710	9.0 – 9.2
4.20725 – 4.20775	74.8 – 75.2	1718.8 – 1722.2	9.3 – 9.5
6.215 – 6.218	108 – 121.94	2200 – 2300	10.6 – 12.7
6.26775 – 6.26825	123 – 138	2310 – 2390	13.25 – 13.4
6.31175 – 6.31225	149.9 – 150.05	2483.5 – 2500	14.47 – 14.5
8.291 – 8.294	156.52475 – 156.52525	2690 – 2900	15.35 – 16.2
8.362 – 8.366	156.7 – 156.9	3260 – 3267	17.7 – 21.4
8.37625 – 8.38675	162.0125 –167.17	3.332 – 3.339	22.01 – 23.12
8.41425 – 8.41475	167.72 – 173.2	3 3458 – 3 358	23.6 – 24.0
12.29 – 12.293	240 – 285	3.600 – 4.400	31.2 – 31.8
12.51975 – 12.52025	322 – 335.4		36.43 – 36.5
12.57675 – 12.57725	399.9 – 410		Above 38.6
13.36 – 13.41	608 – 614		

As per FCC §15.209: The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table

Frequency (MHz)	Field Strength (micro volts/meter)	Measurement Distance (meters)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100**	3
88 - 216	150**	3
216 - 960	200**	3
Above 960	500	3

Note 1: Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

As per FCC §15.407 (b),

1) For transmitters operating in the 5.15–5.25 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
2) For transmitters operating in the 5.25–5.35 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
3) For transmitters operating in the 5.47–5.725 GHz band: All emissions outside of the 5.47–5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
4) For transmitters operating solely in the 5.725–5.850 GHz band:
    i. All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
    ii. Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.
8) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
9) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.
10) The provisions of §15.205 apply to intentional radiators operating under this section.

According to ISEDC RSS-247 §7.3.1.3, For transmitters with operating frequencies in the band 5150-5250 MHz:
all emissions outside the 5150-5350 MHz band shall not exceed -27 dBm/MHz peak e.i.r.p. spectral density;
any unwanted emissions that falls between the upper edge of the 26 dB bandwidth and 5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth.
if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing DFS (see section 7.3.6) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

According to ISEDC RSS-247 §7.3.2.3, Devices shall comply with the following:
all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz peak e.i.r.p spectral density.
all emissions inside the band 5150-5250 MHz shall either:
not exceed -27 dBm/MHz peak e.i.r.p spectral density, or
comply with the power spectral density for operation in section 7.3.1.2.

According to ISEDC RSS-247 §7.3.3.3, Equipment operating in the bands 5470-5725 MHz shall comply with the following unwanted emission limits:
for devices with fundamental emissions fully contained within the 5470-5725 MHz band, all unwanted emissions outside the band 5470-5725 MHz shall not exceed -27 dBm/MHz peak e.i.r.p. spectral density.
for devices with bandwidth overlapping the band edge of 5725 MHz, all unwanted emissions shall not exceed -27 dBm/MHz peak e.i.r.p. spectral density at 5850 MHz instead of 5725 MHz.

According to ISEDC RSS-247 §7.3.4.4, Devices shall comply with the following:
Equipment operating in the band 5725-5850 MHz shall comply with the following peak e.i.r.p. spectral density limits:
27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edges;
15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;
10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and
-27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

As per ISEDC RSS-Gen §8.9,

Except where otherwise indicated in the applicable RSS, radiated emissions shall comply with the field strength limits shown in table 5 and table 6. Additionally, the level of any transmitter unwanted emission shall not exceed the level of the transmitter's fundamental emission.

Table 5 – General field strength limits at frequencies above 30 MHz

Frequency (MHz)	Field Strength (µV/m at 3 m)
30 – 88	100
88 – 216	150
216 – 960	200
Above 960	500

Table 6 – General field strength limits at frequencies below 30 MHz

Frequency	Field Strength (micro volts/meter)	Measurement Distance (meters)
9 – 490 kHz[Note 1]	6.37/F (F in kHz)	300
490 – 1705 kHz	63.7/F (F in kHz)	30
1.705 – 30 MHz	0.08	30

Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

As per ISEDC RSS-Gen §8.10(c),

Unwanted emissions that do not fall within the restricted frequency bands listed in table 7 shall comply either with the limits specified in the applicable RSS or with those specified in table 5 and table 6.

Table 7 – Restricted frequency bands[Note 1]

MHz	MHz	GHz
0.090 – 0.110	149.9 – 150.05	9.0 – 9.2
0.495 – 0.505	156.52475 – 156.52525	9.3 – 9.5
2.1735 – 2.1905	156.7 – 156.9	10.6 – 12.7
3.020 – 3.026	162.0125 –167.17	13.25 – 13.4
4.125 – 4.128	167.72 – 173.2	14.47 – 14.5
4.17725 – 4.17775	240 – 285	15.35 – 16.2
4.20725 – 4.20775	322 – 335.4	17.7 – 21.4
5.677 – 5.683	399.9 – 410	22.01 – 23.12
6.215 – 6.218	608 – 614	23.6 – 24.0
6.26775 – 6.26825	960 – 1427	31.2 – 31.8
6.31175 – 6.31225	1435 – 1626.5	36.43 – 36.5
8.291 – 8.294	1645.5 – 1646.5	Above 38.6
8.362 – 8.366	1660 – 1710	
8.37625 – 8.38675	1718.8 – 1722.2	
8.41425 – 8.41475	2200 – 2300	
12.29 – 12.293	2310 – 2390	
12.51975 – 12.52025	2483.5 – 2500	
12.57675 – 12.57725	2655 – 2900	
13.36 – 13.41	3260 – 3267	
16.42 – 16.423	3332 – 3339	
16.69475 – 16.69525	3345.8 – 3358	
16.80425 – 16.80475	3500 – 4400	
25.5 – 25.67	4500 – 5150	
37.5 – 38.25	5350 – 5460	
73 – 74.6	7250 – 7750	
74.8 – 75.2	8025 – 8500	
108 – 138		

Note 1: Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

6.2 Test Setup

The radiated emissions tests were performed in the 5-meter Chamber, using the setup in accordance with ANSI C63.10. The specification used was the FCC §15.407 and ISEDC RSS-247 limits.

The spacing between the peripherals was 10 centimeters.

External I/O cables were draped along the edge of the test table and bundle when necessary.

6.3 Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

The EUT is set 3 meter away from the testing antenna, which is varied from 1-4 meter, and the EUT is placed on a turntable, which is 0.8 meter or 1.5 meter above ground plane, the table shall be rotated for 360 degrees to find out the highest emission. The receiving antenna should be changed the polarization both of horizontal and vertical.

The spectrum analyzer or receiver is set as:

9kHz to 150kHz:

RBW = 200 Hz / VBW = 1 kHz / Sweep = Auto

150kHz to 30MHz:

RBW = 9 kHz / VBW = 30 kHz / Sweep = Auto

30MHz to 1000 MHz:

RBW = 100 kHz / VBW = 300 kHz / Sweep = Auto

Above 1000 MHz:

(1) Peak: RBW = 1MHz / VBW = 3MHz / Sweep = 100ms
(2) Average: RBW = 1MHz / VBW = 10Hz or 1/T / Sweep = Auto

6.4 Corrected Amplitude and Margin Calculation

For emissions below 1 GHz,

The Corrected Amplitude (CA) is calculated by adding the Correction Factor to the S.A. Reading. The basic equation is as follows:

CA = S.A. Reading + Correction Factor

For example, a corrected amplitude of 40.3 dBµV/m = S.A. Reading (32.5 dBµV) + Correction Factor (7.8 dB/m)

The Correction Factor is calculated by adding the Antenna Factor (AF), the Cable Loss (CL), the Attenuator Factor (Atten) and subtracting the Amplifier Gain (Ga) together. This calculation is done in the measurement software, and reported in the test result section. The basic equation is as follows:

Correction Factor = AF + CL + Atten – Ga

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of -7 dB means the emission is 7 dB below the maximum limit. The equation for margin calculation is as follows:

Margin = Corrected Amplitude – Limit

For emission above 1 GHz,

The Corrected Amplitude (CA) is calculated by adding the Antenna Factor (AF), the Cable Loss (CL), the Attenuator Factor (Atten) and subtracting the Amplifier Gain (Ga) to indicated Amplitude (Ai) reading. The basic equation is as follows:

CA = Ai + AF + CL + Atten – Ga

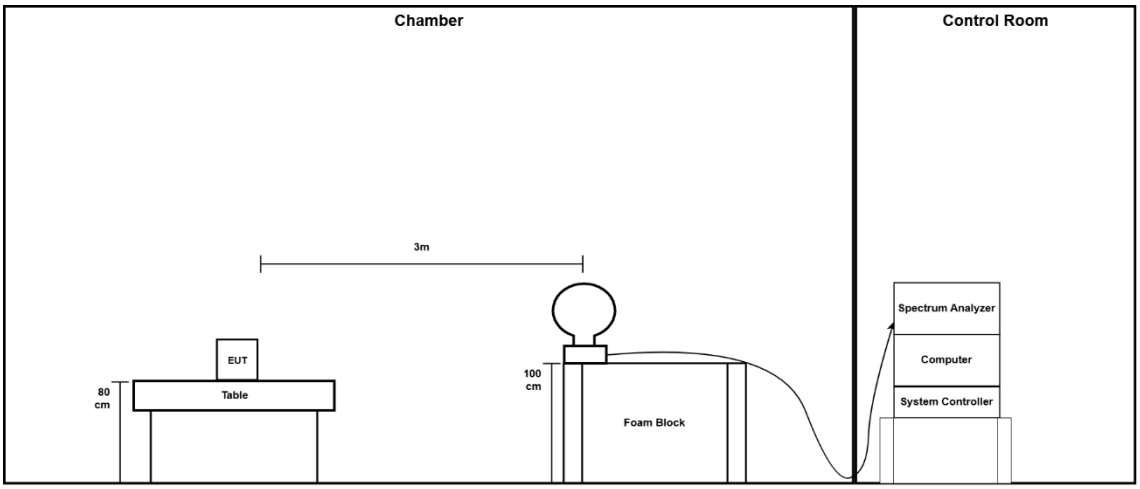
For example, a corrected amplitude of 40.3 dBµV/m = Indicated Reading (32.5 dBµV) + Antenna Factor (+23.5dB) + Cable Loss (3.7 dB) + Attenuator (10 dB) - Amplifier Gain (29.4 dB)

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of -7 dB means the emission is 7 dB below the maximum limit. The equation for margin calculation is as follows:

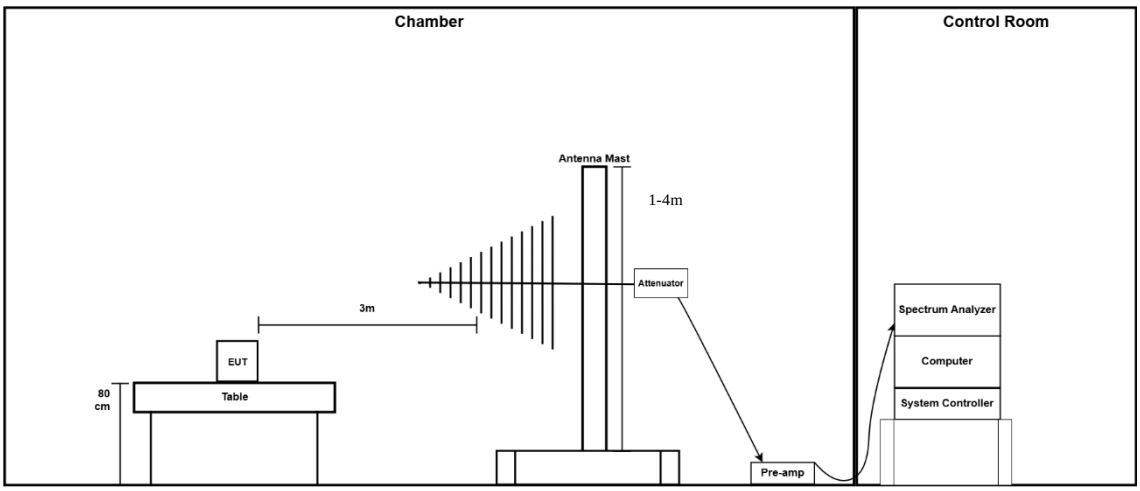
Margin = Corrected Amplitude – Limit

6.5 Test Setup Block Diagram

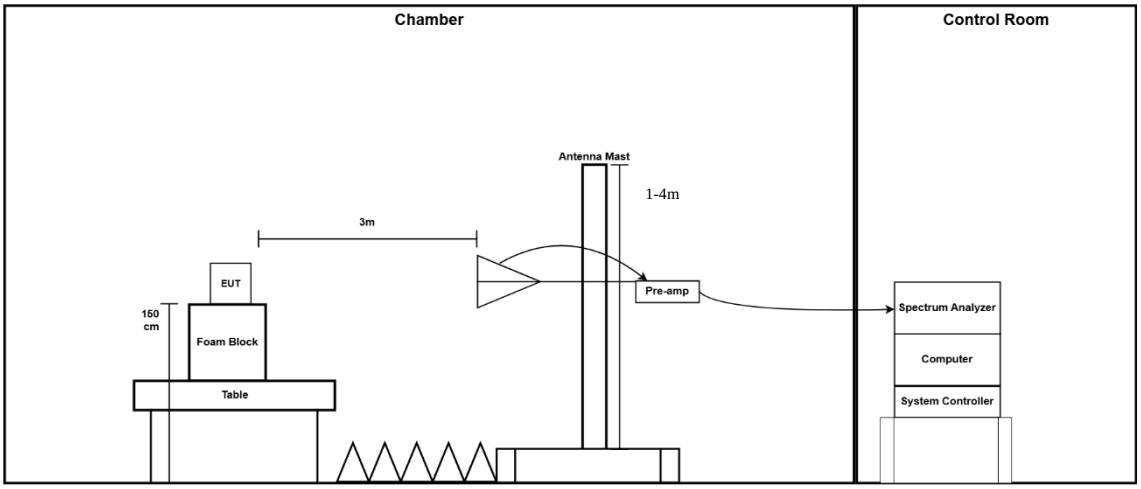
9 kHz to 30 MHz



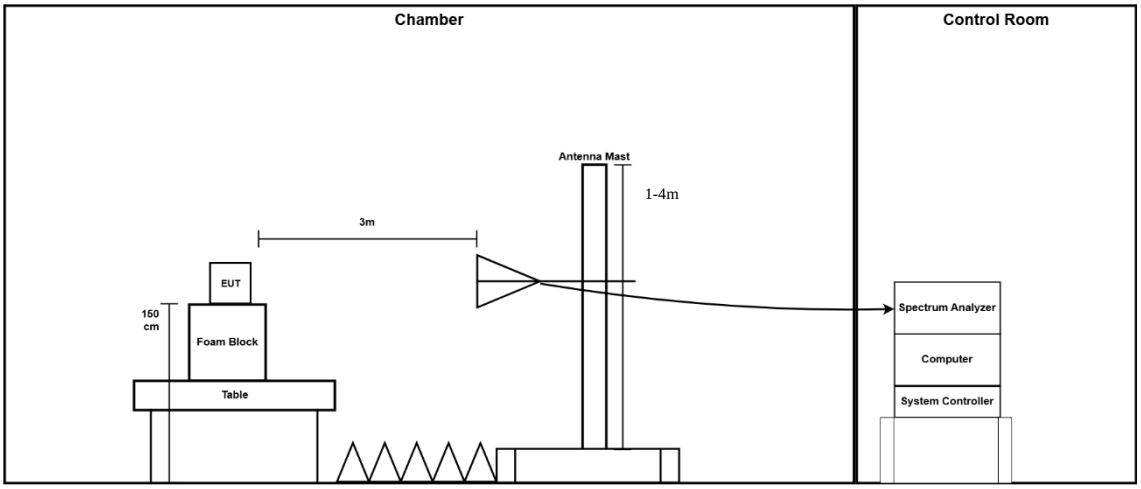
30 MHz to 1 GHz



Above 1 GHz, with external preamplifier



Above 1 GHz, without external preamplifier



6.6 Test Equipment List and Details

BACL No	Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
327	Sunol Sciences	System Controller	SC110V	122303-1	N/R	N/R
1075	Sunol Sciences	Boresight Antenna Tower	TLT3	050119-7	N/R	N/R
1388	Sunol Sciences	Flush Mount Turntable	FM	112005-2	N/R	N/R
1432	Keysight Technologies	MXE EMI Receiver, Multi-touch	N9038B	MY60180008	2026-01-22	1 year
393	Com-Power	Loop Antenna, Active	AL-130	17043	2025-05-06	2 years
321	Sunol Sciences	Biconilog Antenna	JB3	A020106-2	2025-12-16	2 years
1245	Pasternack	Attenuator	PE7390-6	01182018A	2025-12-16	2 years
316	Sonoma Instruments	Preamplifier	317	260406	2025-11-12	6 months
1210	Pasternack	N-type Coax Cable, 50ft RG213	PE3496-0600	2103161	2025-11-12	6 months
1248	Pasternack	RG214 COAX Cable	PE3062	BACL01248A	2025-10-03	1 year
1246	Hewlet Packard	RF Limiter	11867A	01734	2026-03-05	6 months
1192	ETS Lindgren	Horn Antenna	3117	00218973	2024-10-23	2 years
1545	Megaphase	K-type coax cable	TM40-K1K3-12	20869601 001	2026-02-17	6 months
1449	BACL	Preamplifier	BACL-1313-A100M18G	4052472	2026-02-17	6 months
1295	CarlisleIT	10m Coaxial Cable	UFB142A-1-3937-200200	64639890912-001	2025-10-16	6 months
387	Micro-Tronics	Notch Filter 5.15 - 5.35 GHz	BRC50703	006	2026-03-05	1 year
1331	Micro-Tronics	Notch Filter 5.15 – 5.85 GHz	BRM50716	G262	2025-12-17	1 year
91	Wisewave	Horn Antenna	ARH-4223-02	10555-02	2026-03-12	2 years
92	Wisewave	Horn Antenna	ARH-2823-02	10555-01	2024-06-26	2 years
1546	Megaphase	SMA coax cable	TM26-S1S3-12	20869602 001	2026-02-27	6 months
1451	BACL	Preamplifier	BACL-1313-A1840	4052432	2026-02-17	6 months

Statement of Traceability: BACL Corp. *attests that all of the calibrations on the equipment items listed above were traceable to NIST or to another internationally recognized National Metrology Institute (NMI), and were compliant with the latest version of A2LA policy P102 "A2LA Policy on Metrological Traceability".*

6.7 Test Environmental Conditions

Temperature:	21 to 23 ºC
Relative Humidity:	41 to 50 %
ATM Pressure:	101.2 kPa

The testing was performed by Arturo Reyes from 2026-04-01 to 2026-04-06 in 5m chamber 3.

6.8 Summary of Test Results

According to the data hereinafter, the EUT complied with the FCC Part 15.407 and ISEDC RSS-247 standards' radiated emissions limits, and had the worst margin of:

Worst Case – Mode: Transmitting			
Margin (dB)	**Frequency (MHz)**	**Polarization (Horizontal/Vertical)**	**Configuration**
-0.59	16193.75	Vertical	5 GHz Wi-Fi, 802.11a, U-NII-1, High Channel, 5240 MHz

Please refer to the tables and plots in the next section for detailed test results.

Please refer to Annex A for U-NII-1 Band Edges & -27dBm results.

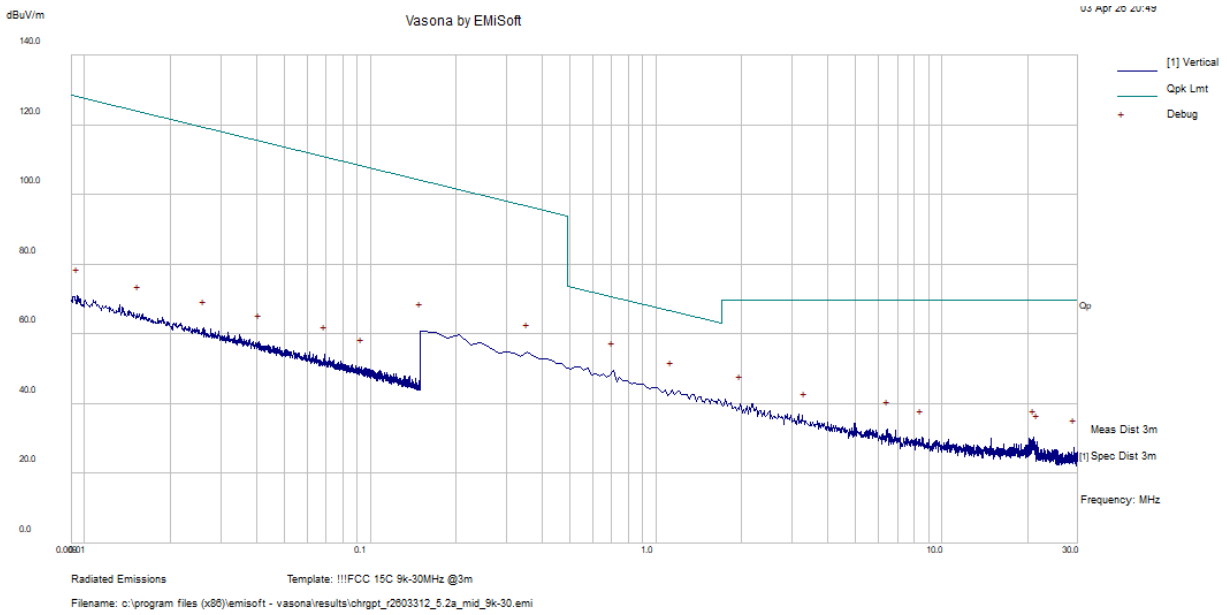
Please refer to Annex B for U-NII-3 Emission Mask results.

6.9 Radiated Emissions Test Result Data

Note 1: Pre-scan was performed in order to determine worst-case orientation of device with respect to measurement antenna in the X/Y/Z axis. Plots/data shown represent measurements made in worst-case orientation.

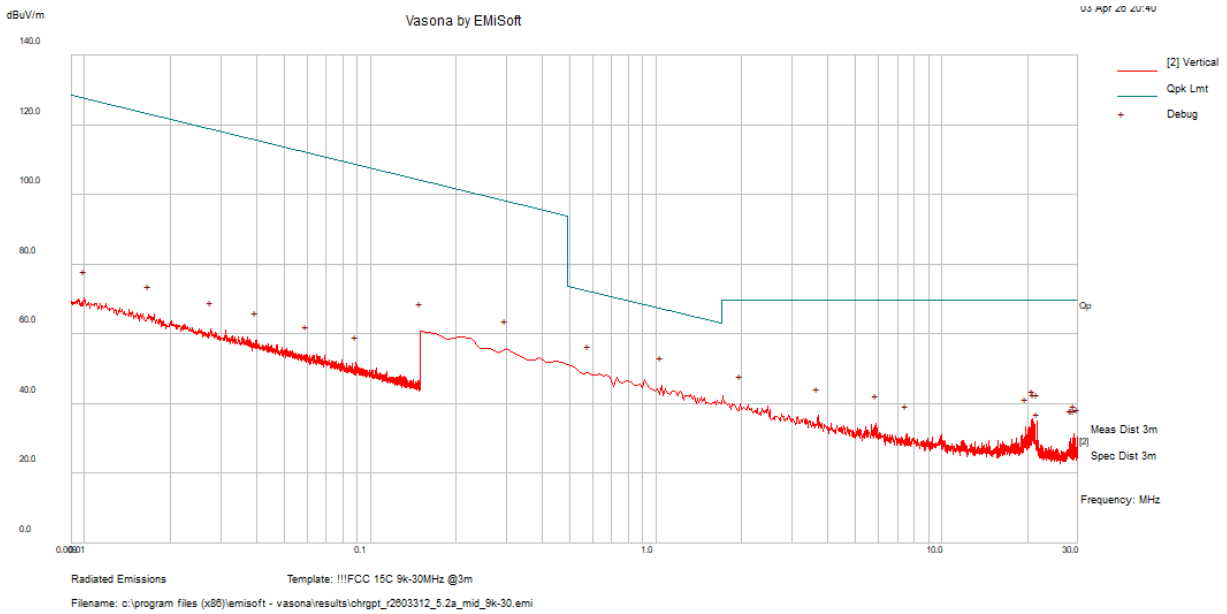
1) 9 kHz – 30 MHz, Measured at 3 meters

5 GHz Wi-Fi, 802.11a, U-NII-1, Middle Channel, 5220 MHz, Parallel



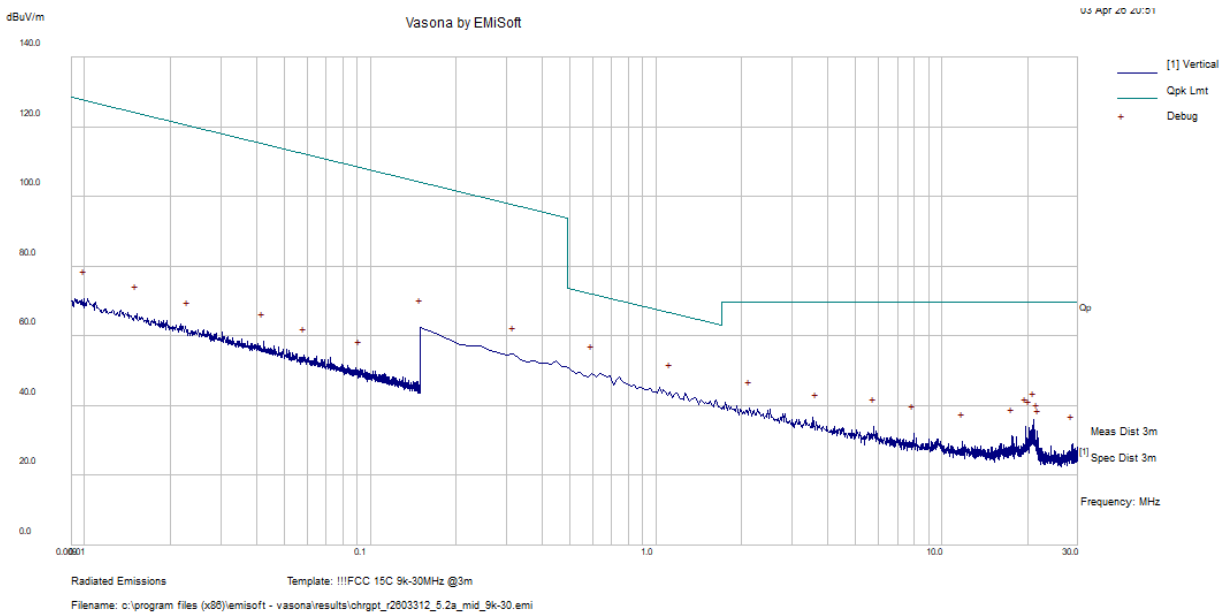
Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
0.709688	39.57	10.09	49.66	100	Parallel	360	70.58	-20.92	Peak

5 GHz Wi-Fi, 802.11a, U-NII-1, Middle Channel, 5220 MHz, Perpendicular



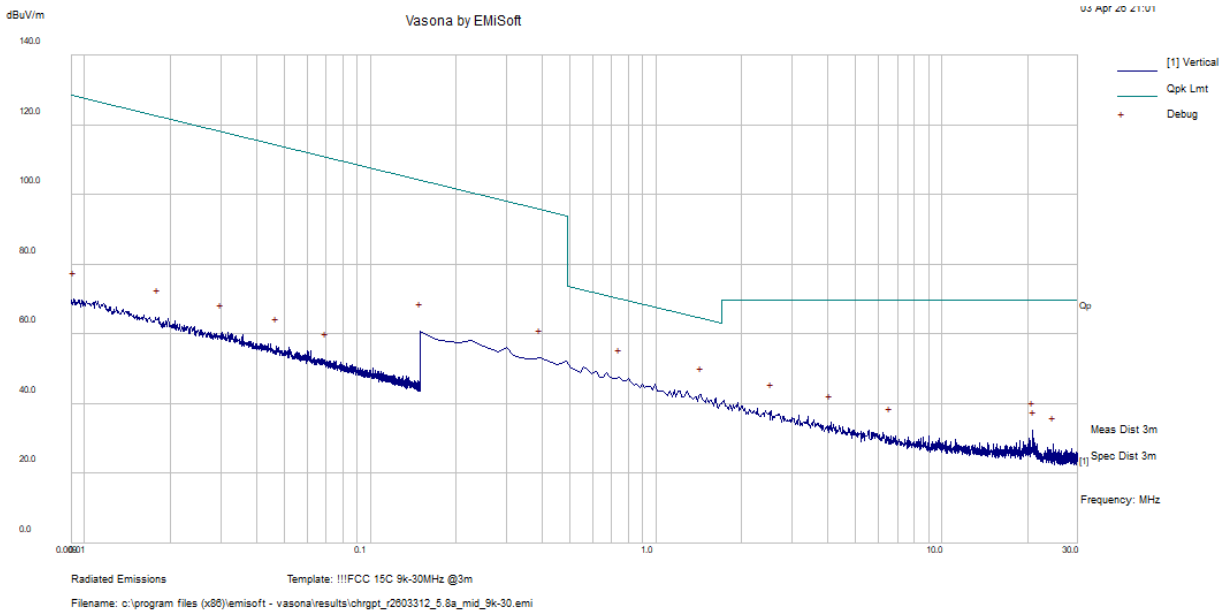
Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
1.0455	35.28	10.02	45.3	100	Perpindicular	360	67.22	-21.92	Peak

5 GHz Wi-Fi, 802.11a, U-NII-1, Middle Channel, 5220 MHz, Ground Parallel



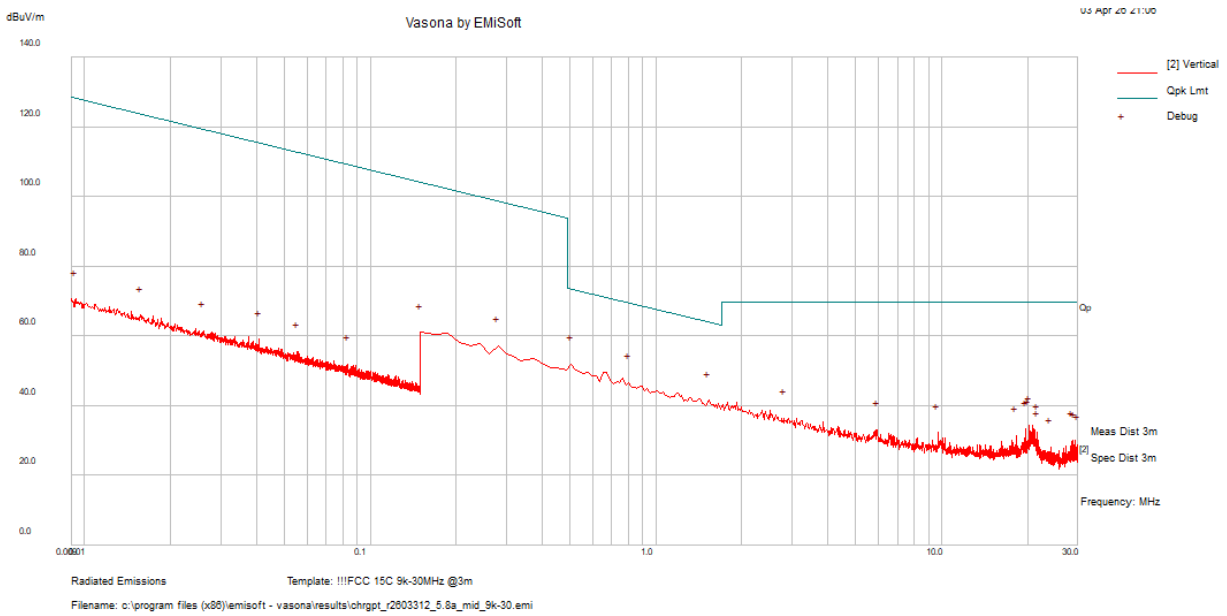
Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
1.120125	33.91	10.05	43.96	100	Ground Parallel	360	66.62	-22.66	Peak

5 GHz Wi-Fi, 802.11a, U-NII-3, Middle Channel, 5785 MHz, Parallel



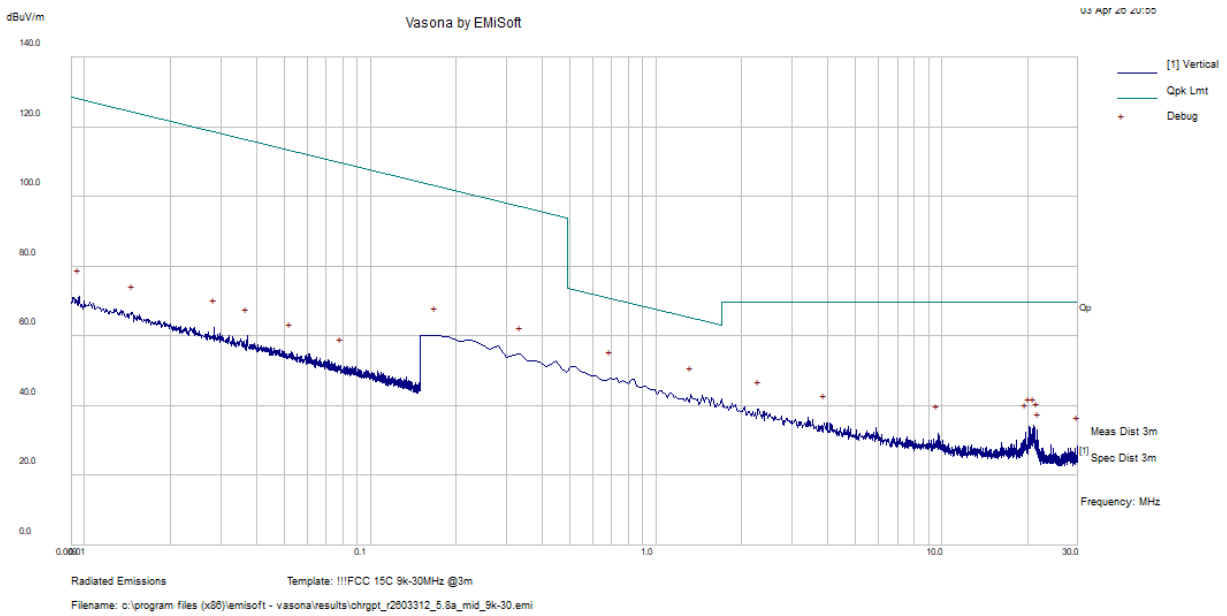
Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
1.437281	32.31	10.16	42.47	100	Parallel	360	64.45	-21.98	Peak

5 GHz Wi-Fi, 802.11a, U-NII-3, Middle Channel, 5785 MHz, Perpendicular



Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
0.504469	41.7	10.15	51.85	100	Perpindicular	360	73.55	-21.7	Peak

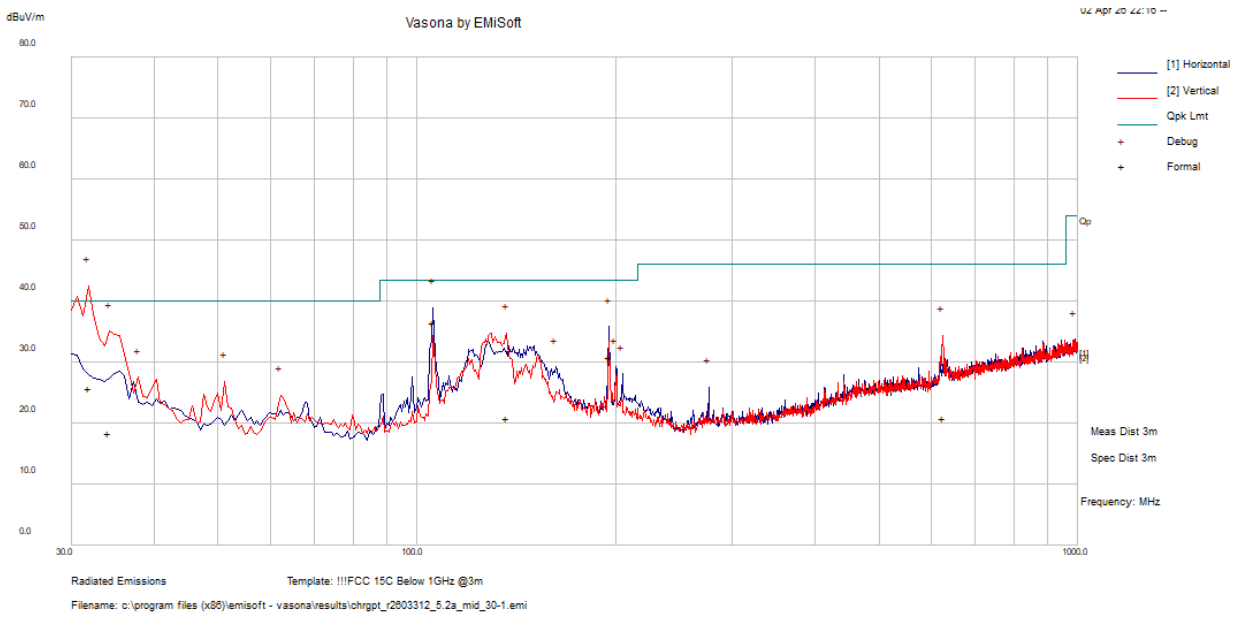
5 GHz Wi-Fi, 802.11a, U-NII-3, Middle Channel, 5785 MHz, Ground Parallel



Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
1.325344	33.03	10.12	43.15	100	Ground Parallel	360	65.16	-22.01	Peak

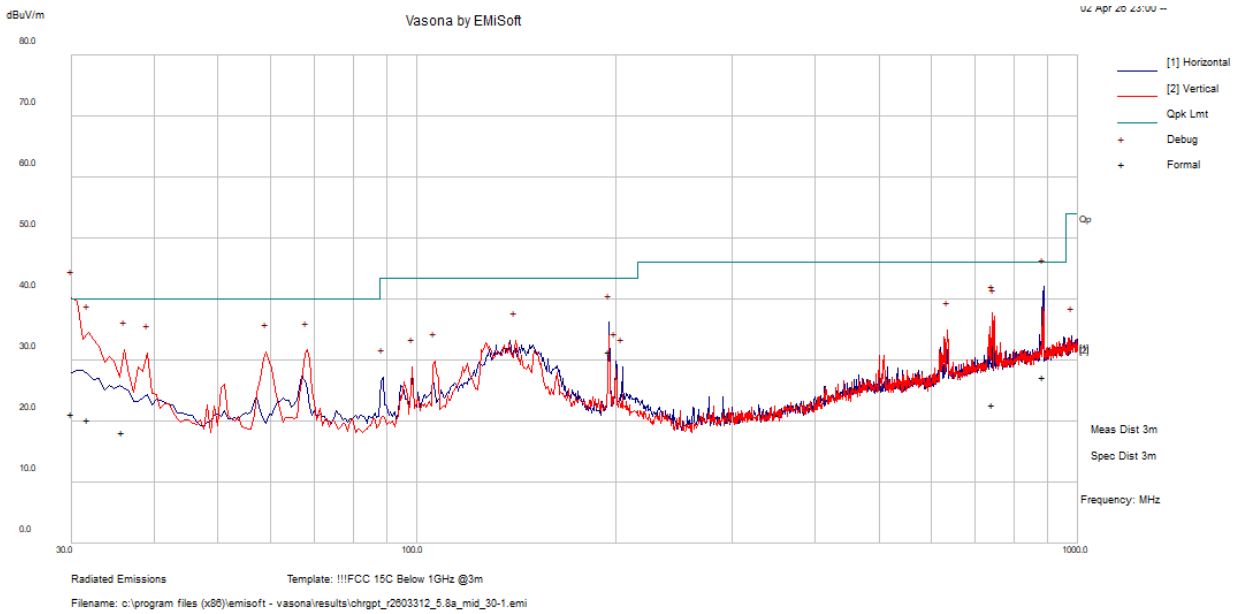
2) 30 MHz – 1 GHz, Measured at 3 meters

5 GHz Wi-Fi, 802.11a, U-NII-1, Middle Channel, 5220 MHz



Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
30.954154	33.17	-10.01	23.16	120	V	40	40	-16.84	QP
31.923125	37.11	-11.31	25.8	111	V	154	40	-14.2	QP
105.77656	54.62	-18.14	36.48	222	H	233	43.5	-7.02	QP
34.088125	31.33	-12.93	18.4	112	V	286	40	-21.6	QP
195.28875	48.13	-17.4	30.73	152	H	239	43.5	-12.77	QP
136.91938	37.38	-16.65	20.73	131	V	141	43.5	-22.77	QP
624.25313	28.94	-8.16	20.78	116	V	144	46	-25.22	QP

5 GHz Wi-Fi, 802.11a, U-NII-3, Middle Channel, 5785 MHz



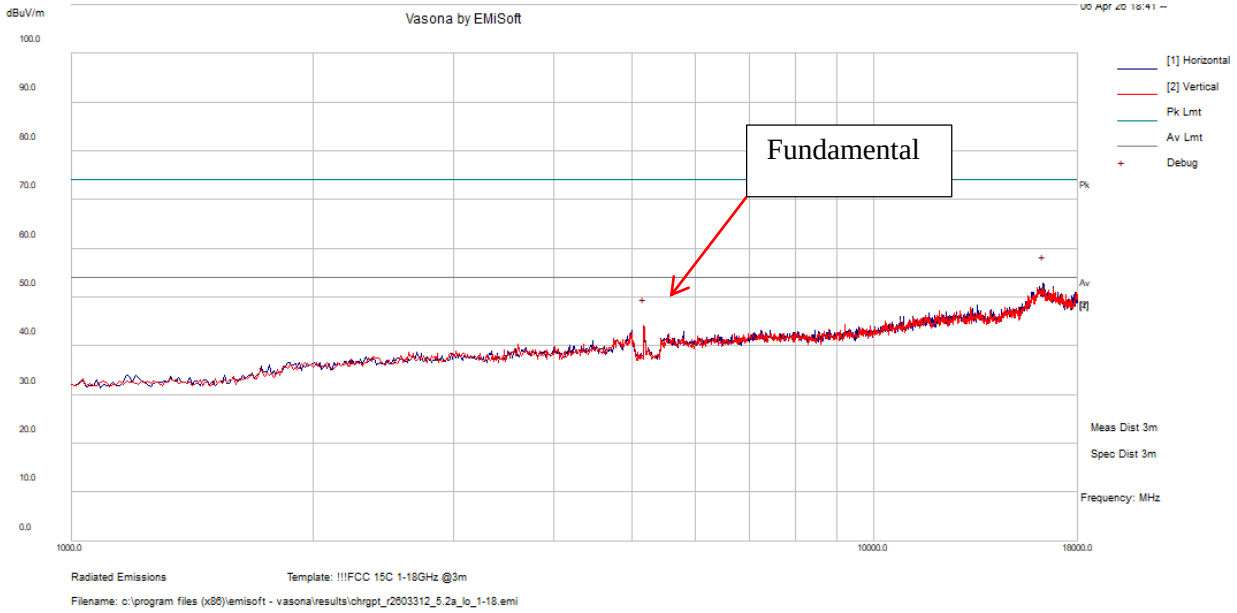
Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
30	31.14	-10.01	21.13	117	V	42	40	-18.87	QP
887.18625	31.85	-4.71	27.14	254	H	161	46	-18.86	QP
31.723125	31.41	-11.18	20.23	135	V	128	40	-19.77	QP
195.27656	48.83	-17.4	31.43	237	H	232	43.5	-12.07	QP
35.889375	32.38	-14.28	18.1	152	V	155	40	-21.9	QP
742.83313	29.15	-6.52	22.63	160	V	237	46	-23.37	QP

FCC/IC Limits for 1 GHz to 40 GHz			
Applicability	**(dBm)**	**(µV/m at 3meters)**	**(dBµV/m at 3meters)**
Restricted Band Average Limit	-	500	54[2]
Restricted Band Peak Limit[1]	-	-	74
FCC §15.407(b)/ ISEDC RSS-247 §6.2 Defined Unwanted Emissions Limit	-27	-	68.2

Note 1: Restricted Band Peak Limit is defined to be 20dB higher than Average Limit.
Note 2: Above 1GHz limit calculation:
dBµV/m = 20*log(V/m) + 120 = 20*log((500 [µV/m]/1000000)) + 120 = 54 [dBµV/m]
dBµV/m = dBm + 20*log(distance[m]) + 104.77 = -27[dBm] + 20*log(3[m]) + 104.77 = 68.2 [dBµV/m]

3) 1 GHz – 18 GHz, Measured at 3 meters

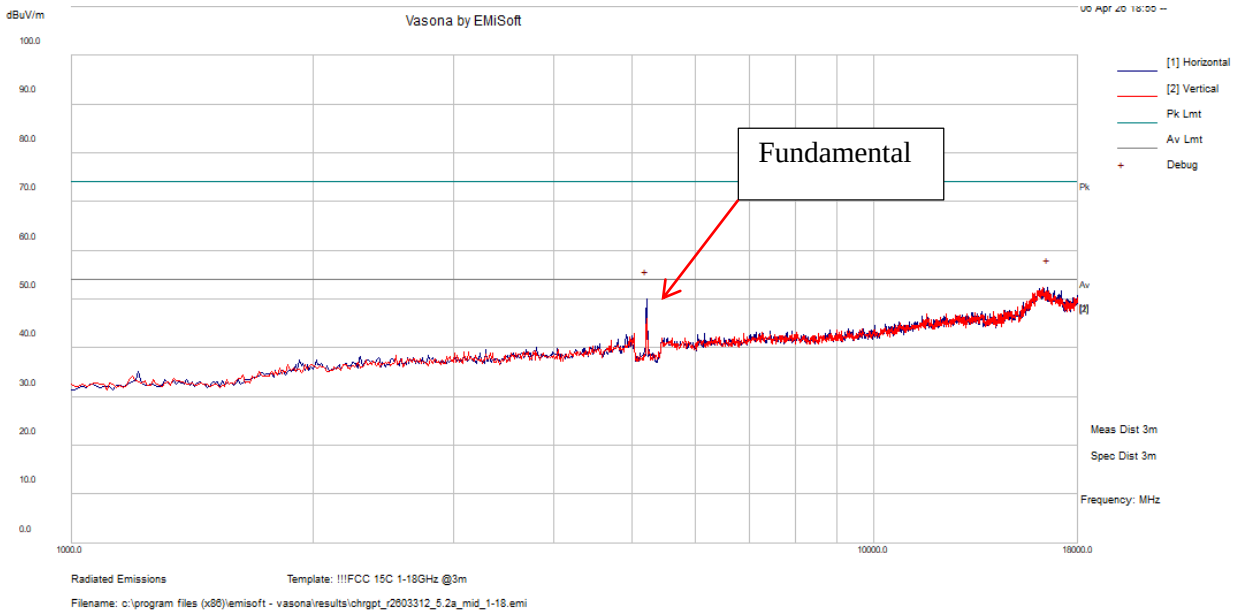
5 GHz Wi-Fi, 802.11a, U-NII-1, Low Channel, 5180 MHz



Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
16300	33.38	19.43	52.81	300	H	360	54	-1.19	Peak

Note: The plot above shows that there were no emissions above the Average Limit at 1-18 GHz frequency range. Hence evaluating by using the Peak Measurement against the Average Limit.

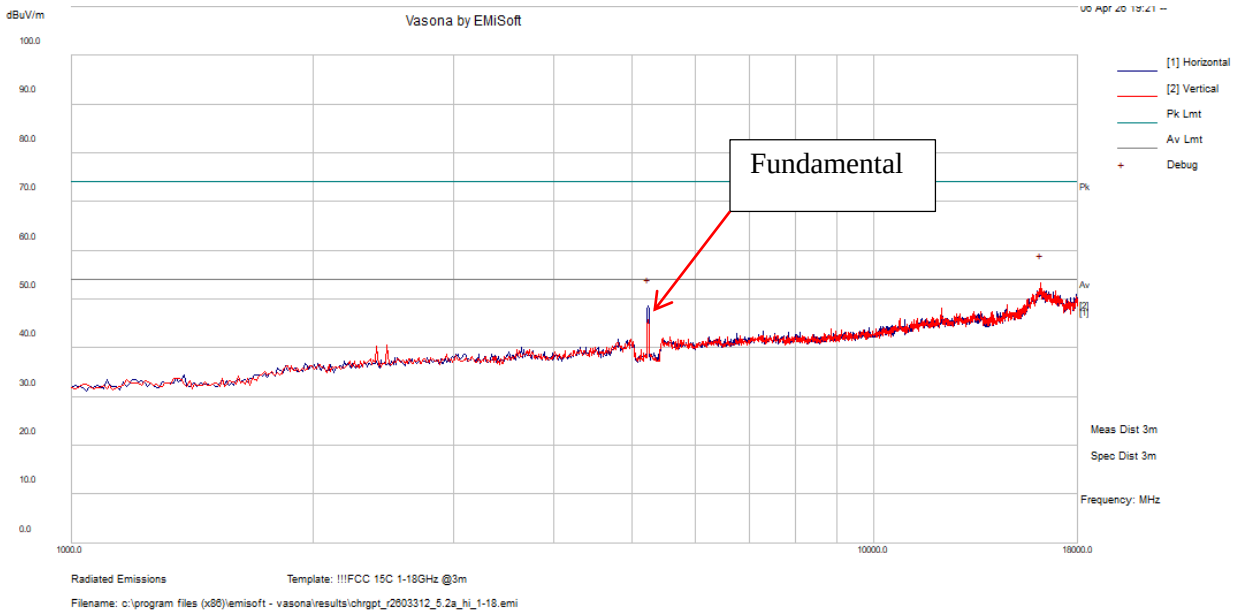
5 GHz Wi-Fi, 802.11a, U-NII-1, Middle Channel, 5220 MHz



Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
16501.875	33.68	18.79	52.47	200	H	360	54	-1.53	Peak

Note: The plot above shows that there were no emissions above the Average Limit at 1-18 GHz frequency range. Hence evaluating by using the Peak Measurement against the Average Limit.

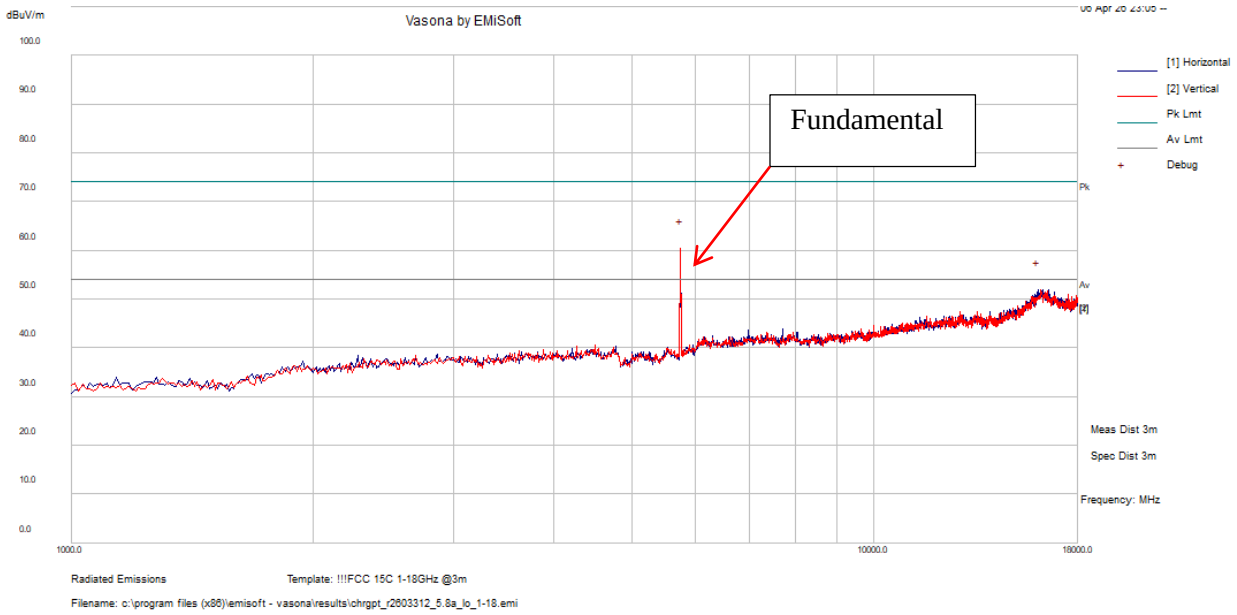
5 GHz Wi-Fi, 802.11a, U-NII-1, High Channel, 5240 MHz



Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
16193.75	33.71	19.7	53.41	100	V	360	54	-0.59	Peak

Note: The plot above shows that there were no emissions above the Average Limit at 1-18 GHz frequency range. Hence evaluating by using the Peak Measurement against the Average Limit.

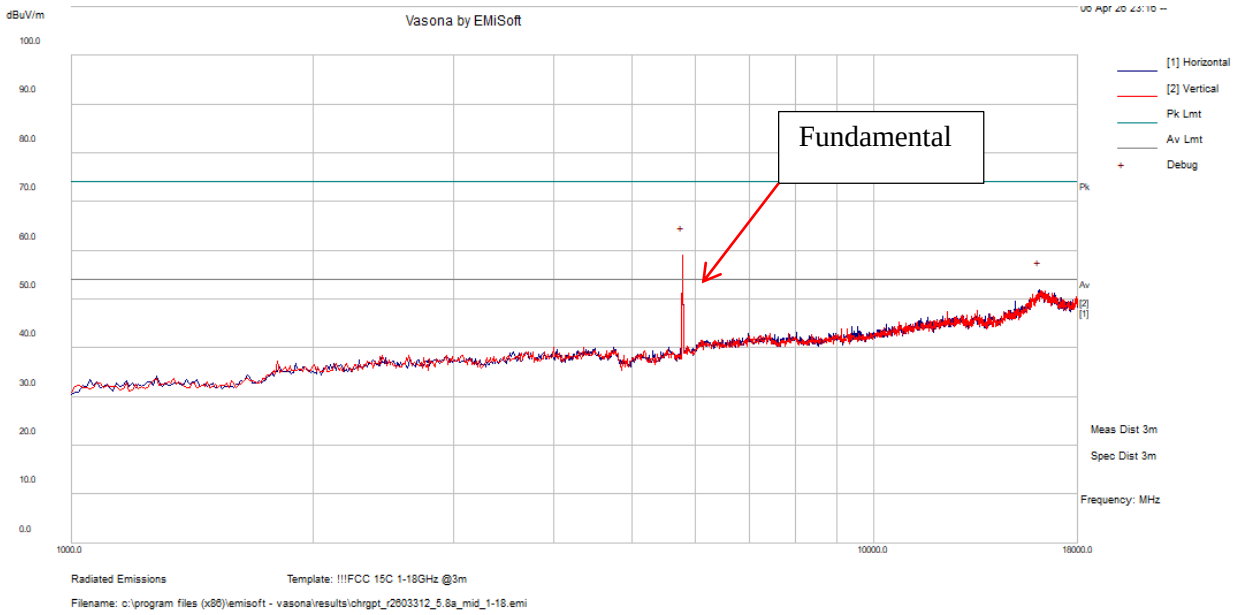
5 GHz Wi-Fi, 802.11a, U-NII-3, Low Channel, 5745 MHz



Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
16045	33	18.98	51.98	300	H	360	54	-2.02	Peak

Note: The plot above shows that there were no emissions above the Average Limit at 1-18 GHz frequency range. Hence evaluating by using the Peak Measurement against the Average Limit.

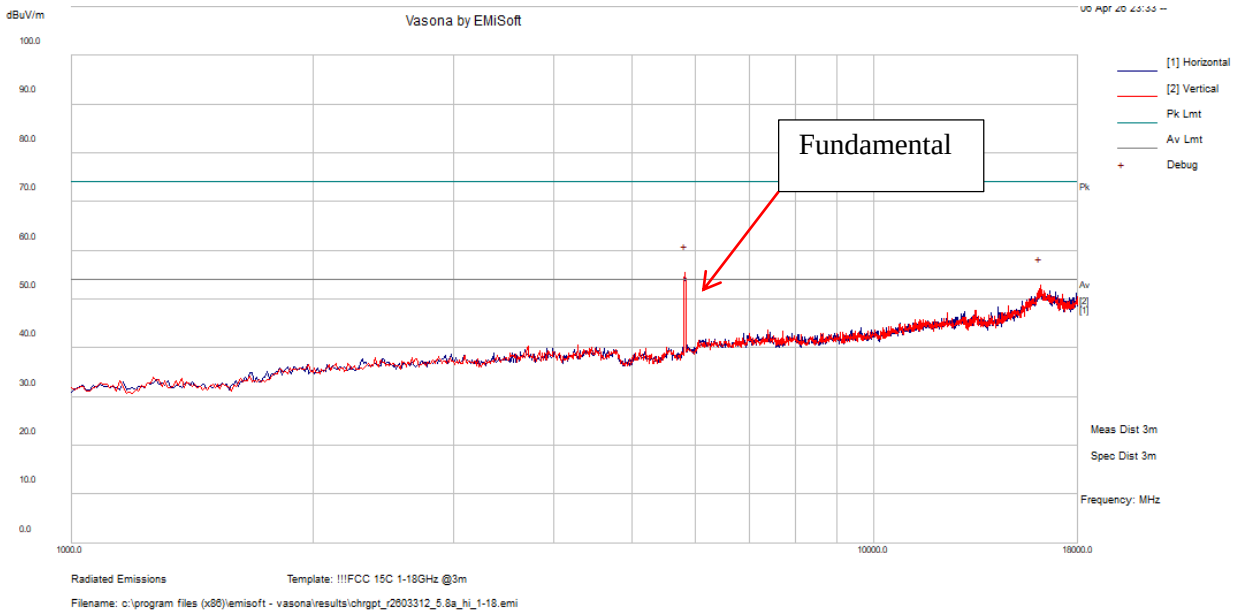
5 GHz Wi-Fi, 802.11a, U-NII-3, Middle Channel, 5785 MHz



Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
16098.125	32.54	19.35	51.89	300	H	360	54	-2.11	Peak

Note: The plot above shows that there were no emissions above the Average Limit at 1-18 GHz frequency range. Hence evaluating by using the Peak Measurement against the Average Limit.

5 GHz Wi-Fi, 802.11a, U-NII-3, High Channel, 5825 MHz

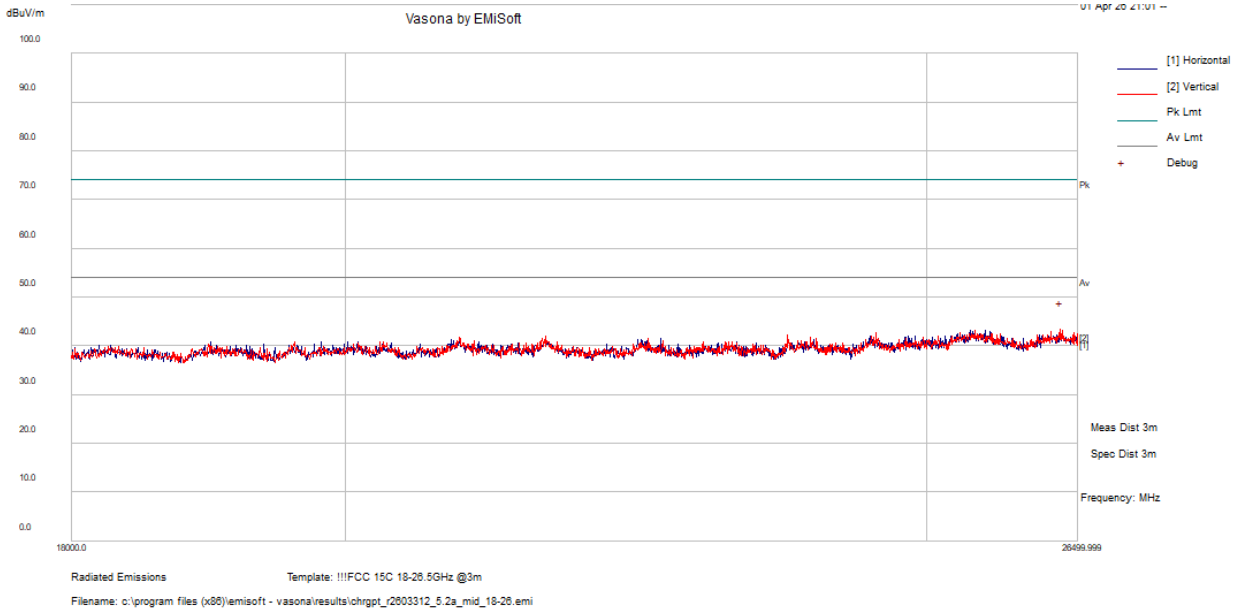


Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
16151.25	33.2	19.58	52.78	300	V	360	54	-1.22	Peak

Note: The plot above shows that there were no emissions above the Average Limit at 1-18 GHz frequency range. Hence evaluating by using the Peak Measurement against the Average Limit.

4) 18 GHz – 26.5 GHz, Measured at 3 meter

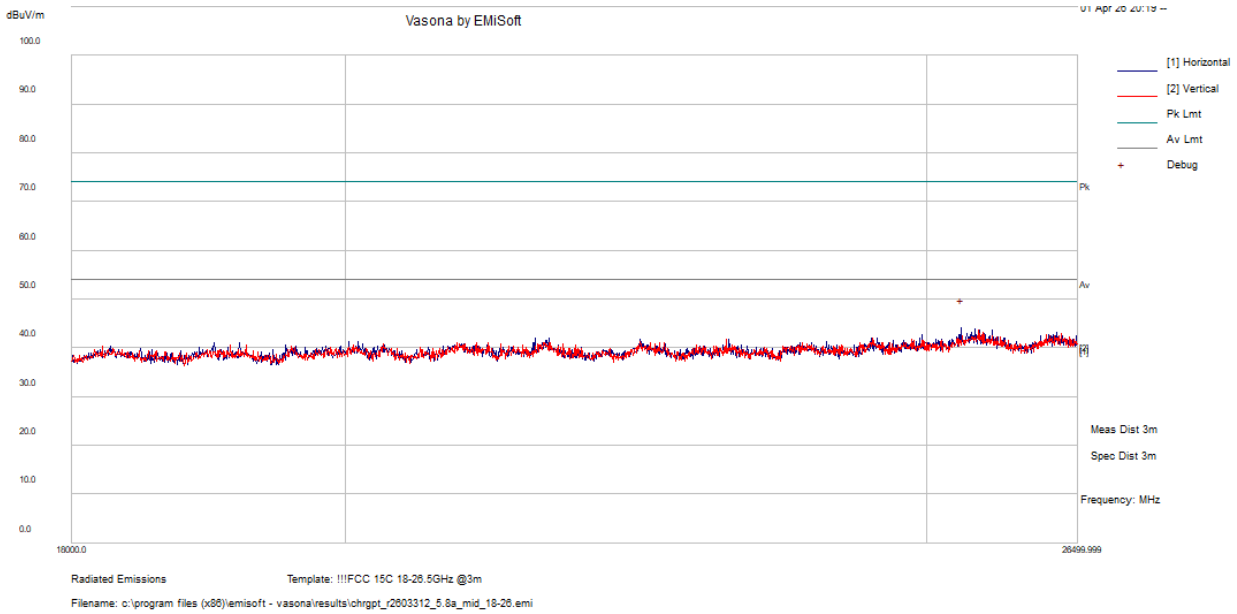
5 GHz Wi-Fi, 802.11a, U-NII-1, Middle Channel, 5220 MHz



Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
26324.988	48.56	-5.3	43.26	200	V	360	54	-10.74	Peak

Note: The plot above shows that there were no emissions above the noise floor at 18-26.5 GHz frequency range. Hence evaluating by using the Peak Measurement against the Average Limit.

5 GHz Wi-Fi, 802.11a, U-NII-3, Middle Channel, 5785 MHz

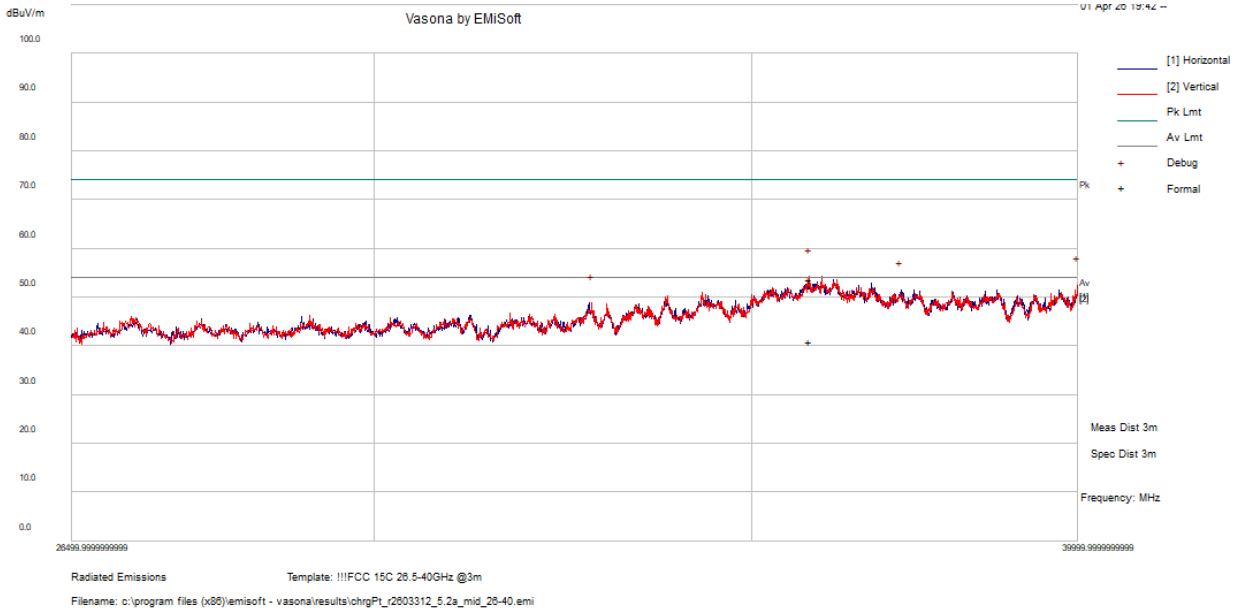


Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
25336.562	49.2	-5.09	44.11	200	H	0	54	-9.89	Peak

Note: The plot above shows that there were no emissions above the noise floor at 18-26.5 GHz frequency range. Hence evaluating by using the Peak Measurement against the Average Limit.

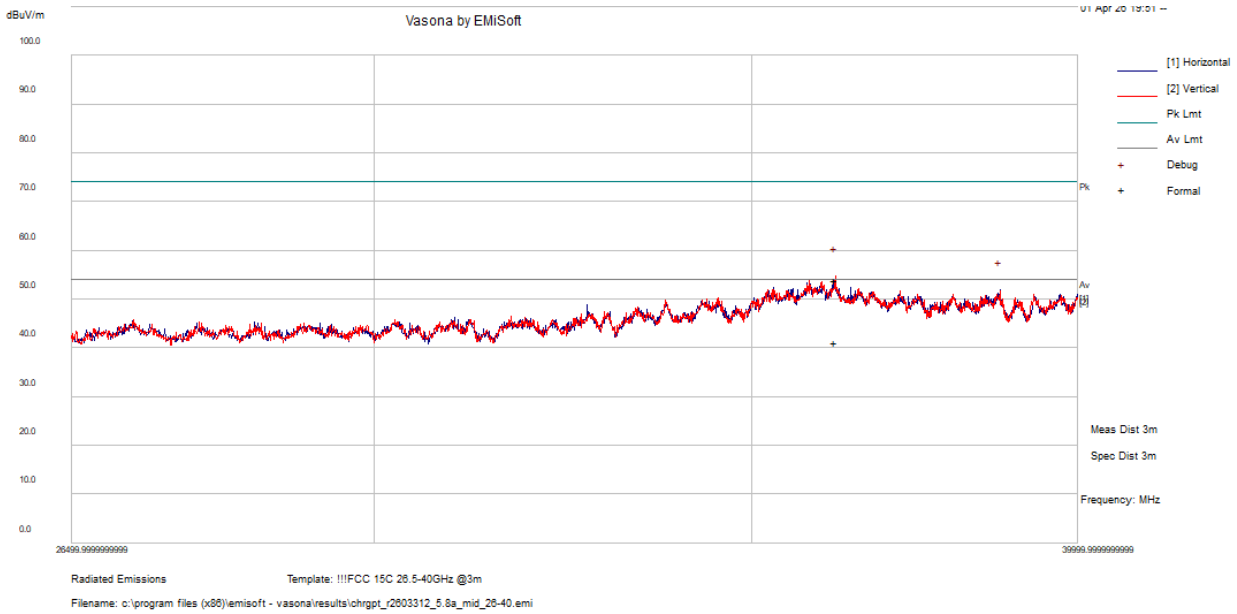
5) 26.5 GHz – 40 GHz, Measured at 3 meters

5 GHz Wi-Fi, 802.11a, U-NII-1, Middle Channel, 5220 MHz



Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
35842.043	49.44	4.26	53.7	185	V	342	74	-20.3	Peak
35842.043	36.58	4.26	40.84	185	V	342	54	-13.16	Avg.

5 GHz Wi-Fi, 802.11a, U-NII-1, Middle Channel, 5220 MHz

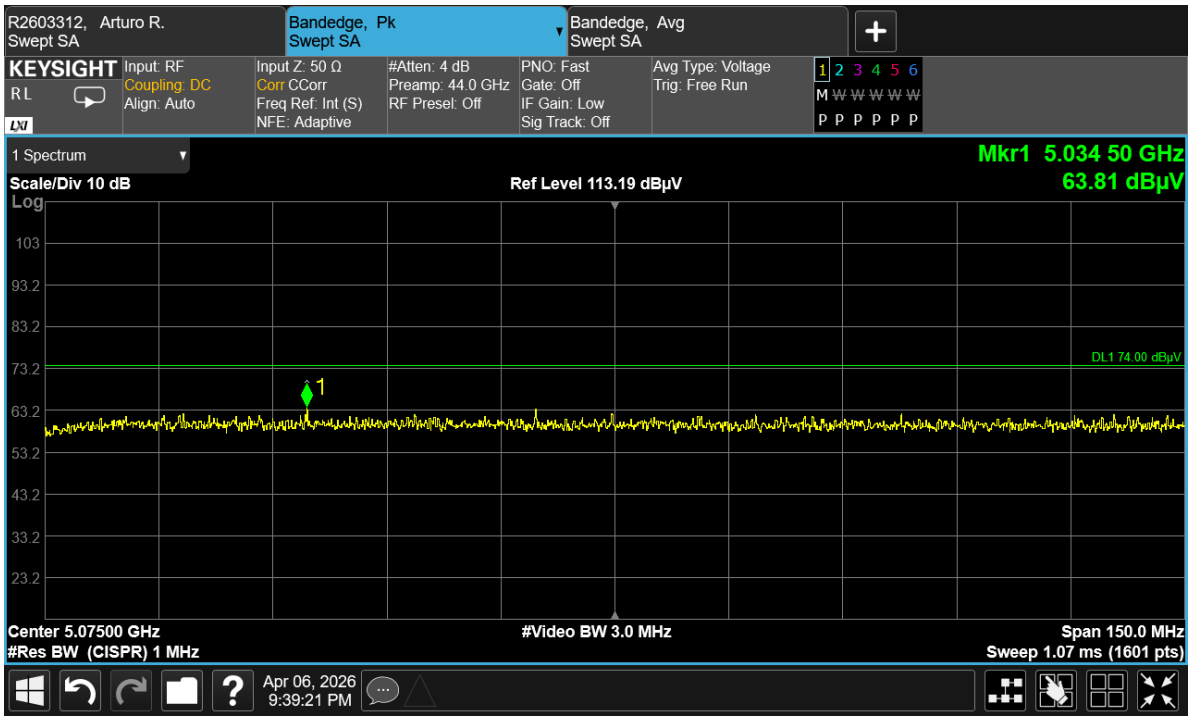


Frequency (MHz)	S.A. Reading (dBµV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
36221.305	49.35	4.58	53.93	178	V	254	74	-20.07	Peak
36221.305	36.63	4.58	41.21	178	V	254	54	-12.79	Avg.

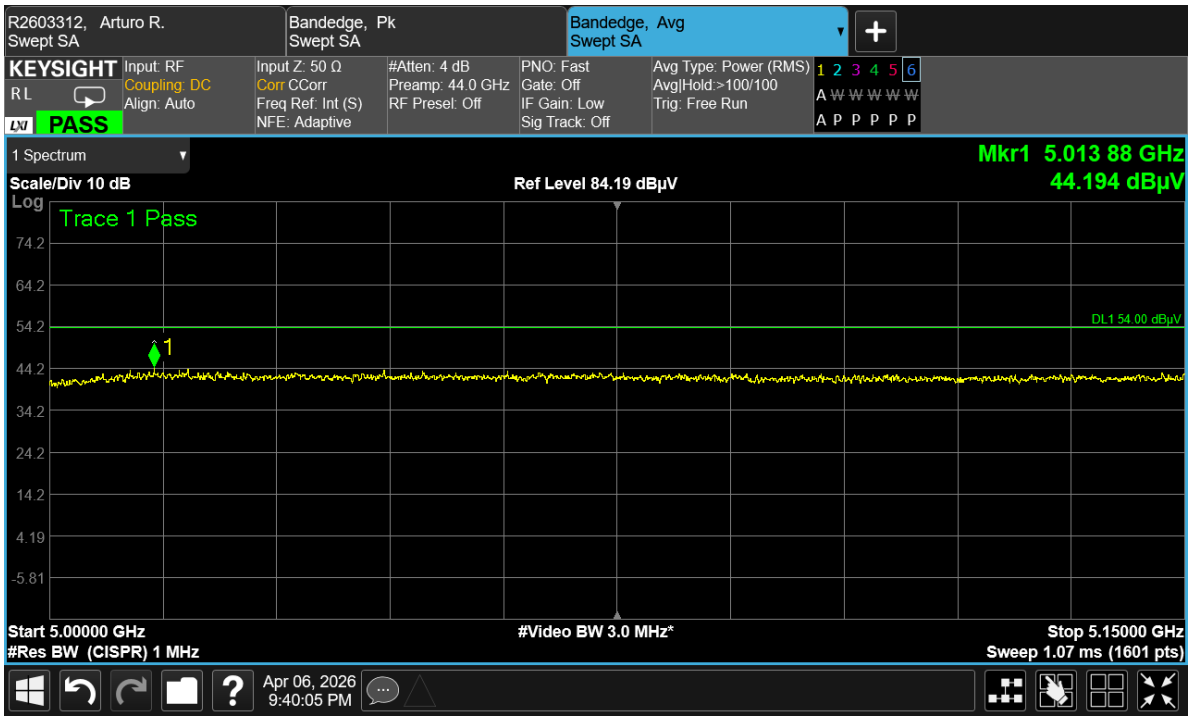
7 Annex A – Radiated Spurious Emissions: U-NII-1, -27 dBm & Band Edges

5 GHz Wi-Fi, 802.11a, U-NII-1

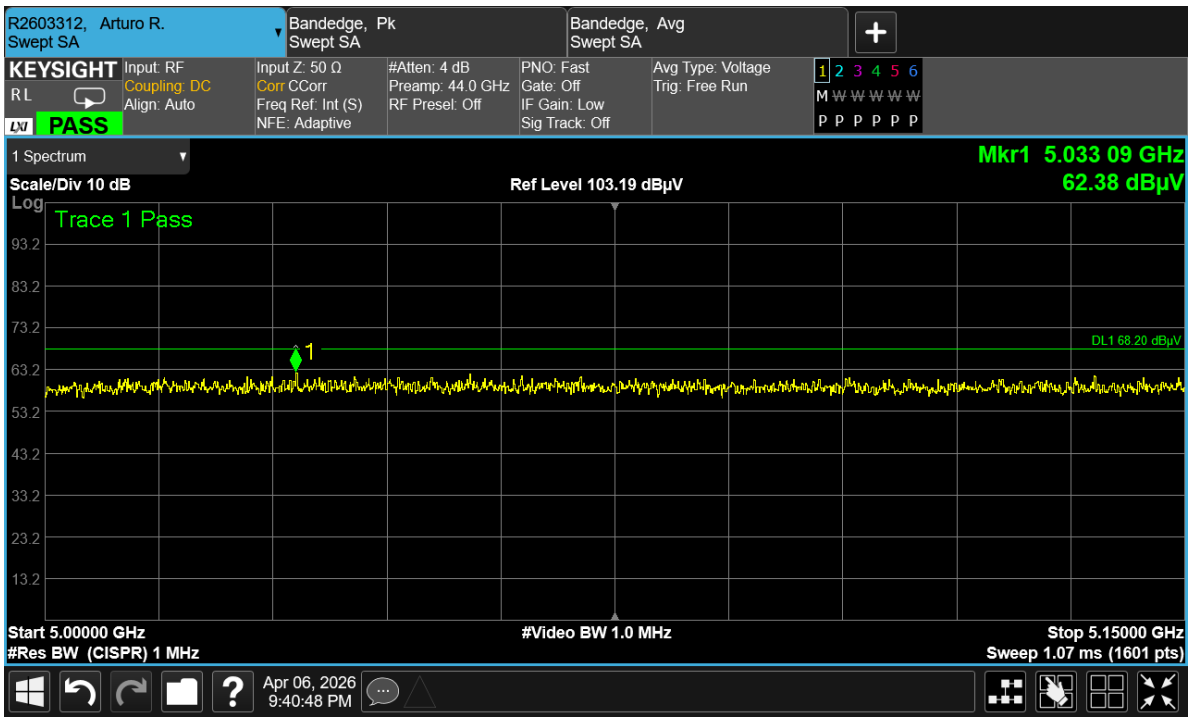
Low Channel, 5180 MHz, Lower Band Edge, Peak Measurement



Low Channel, 5180 MHz, Lower Band Edge, Average Measurement

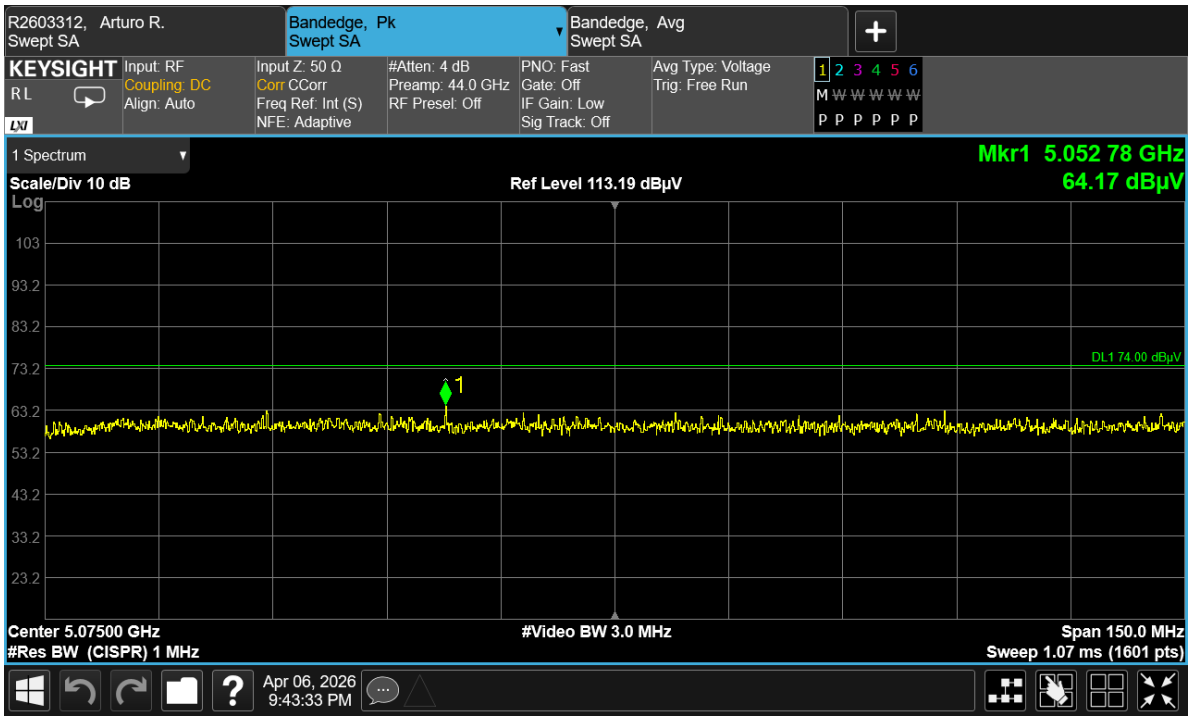


Low Channel, 5180 MHz, Lower Band Edge, -27 dBm

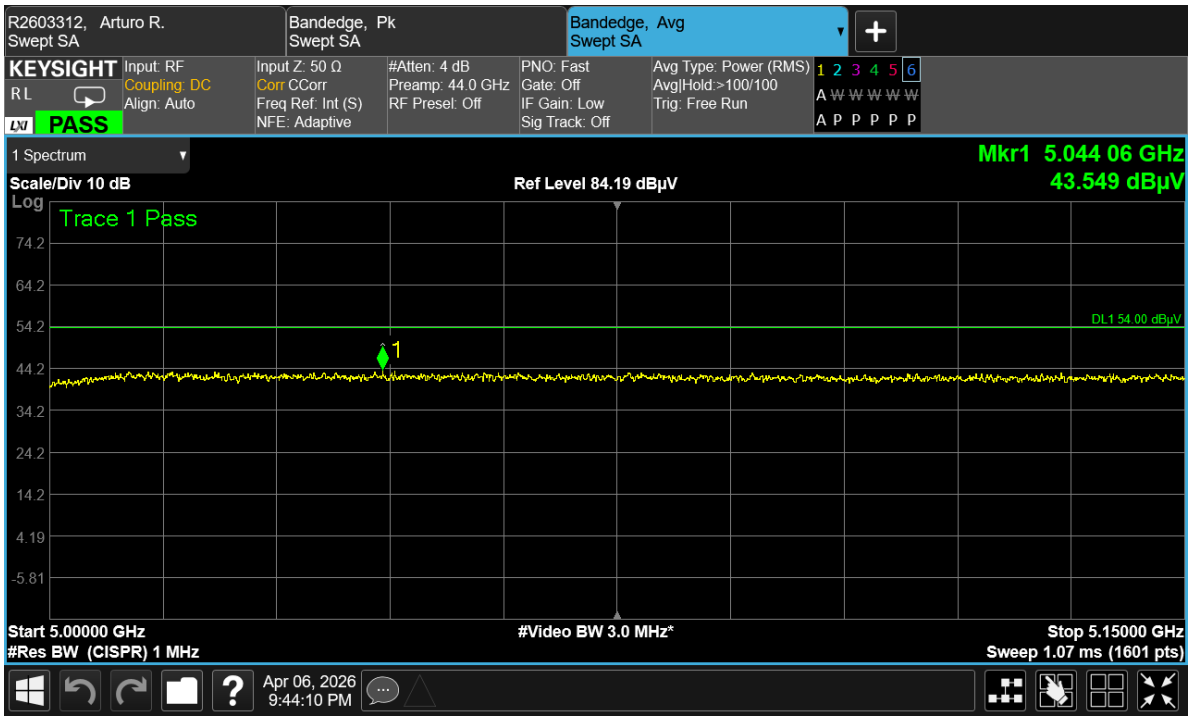


5 GHz Wi-Fi, 802.11n20, U-NII-1

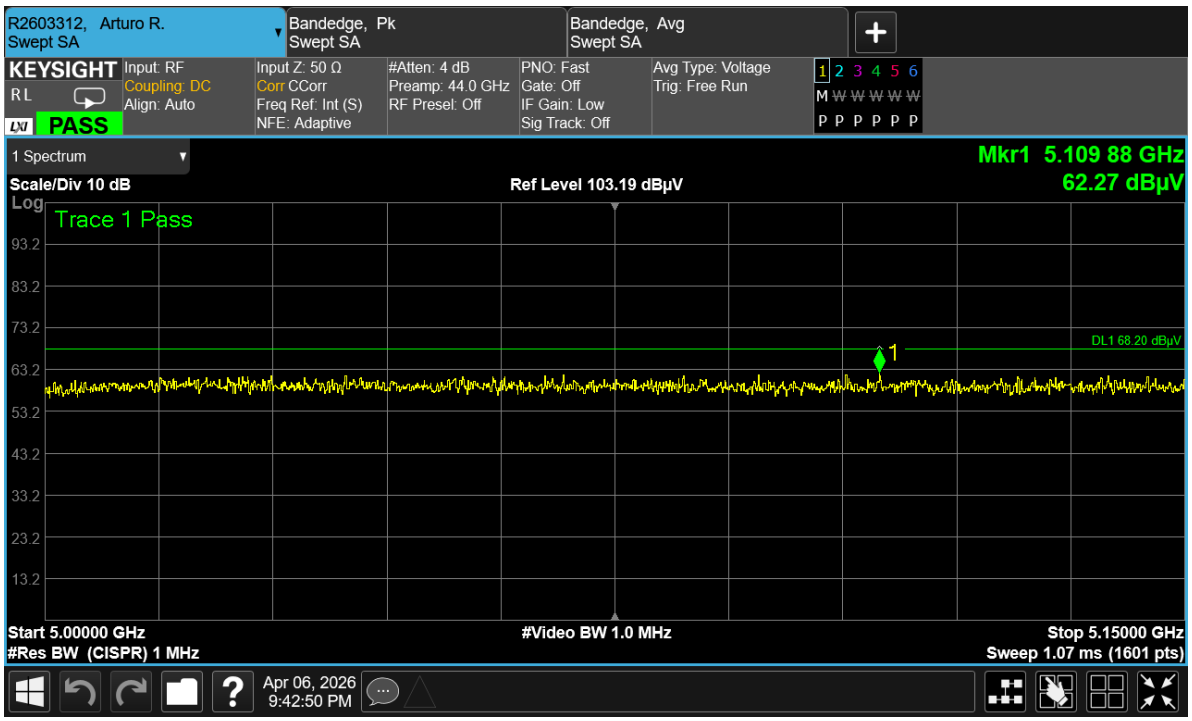
Low Channel, 5180 MHz, Lower Band Edge, Peak Measurement



Low Channel, 5180 MHz, Lower Band Edge, Average Measurement

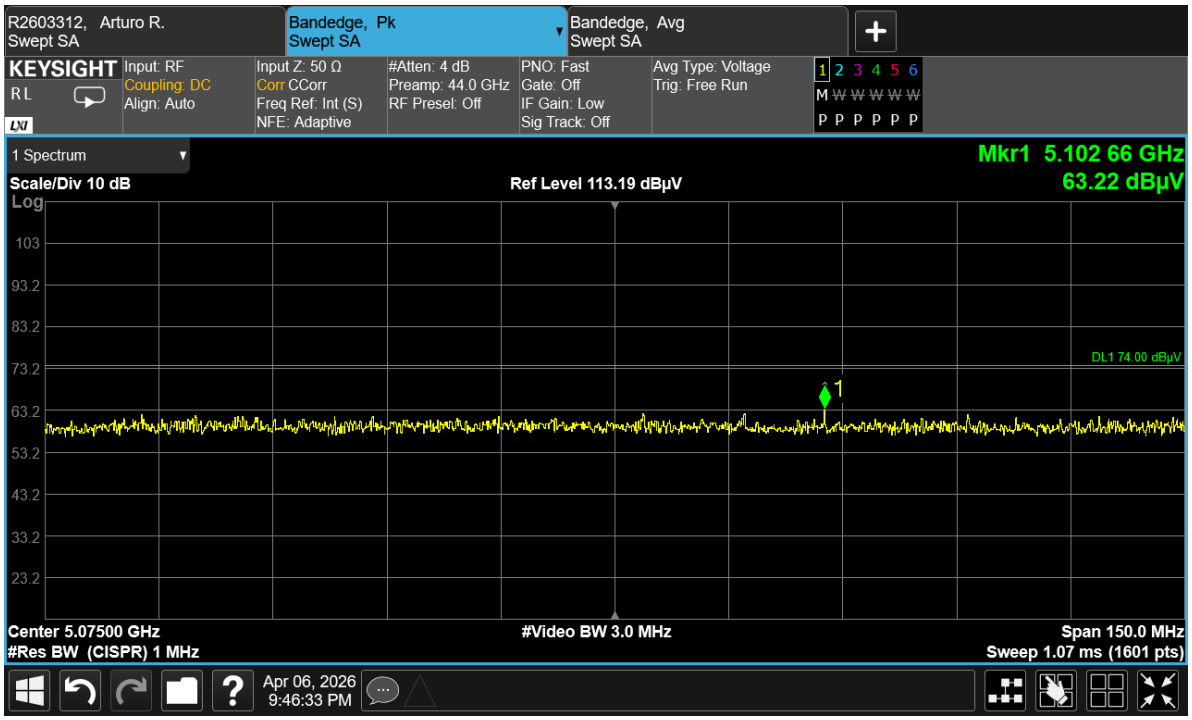


Low Channel, 5180 MHz, Lower Band Edge, -27 dBm

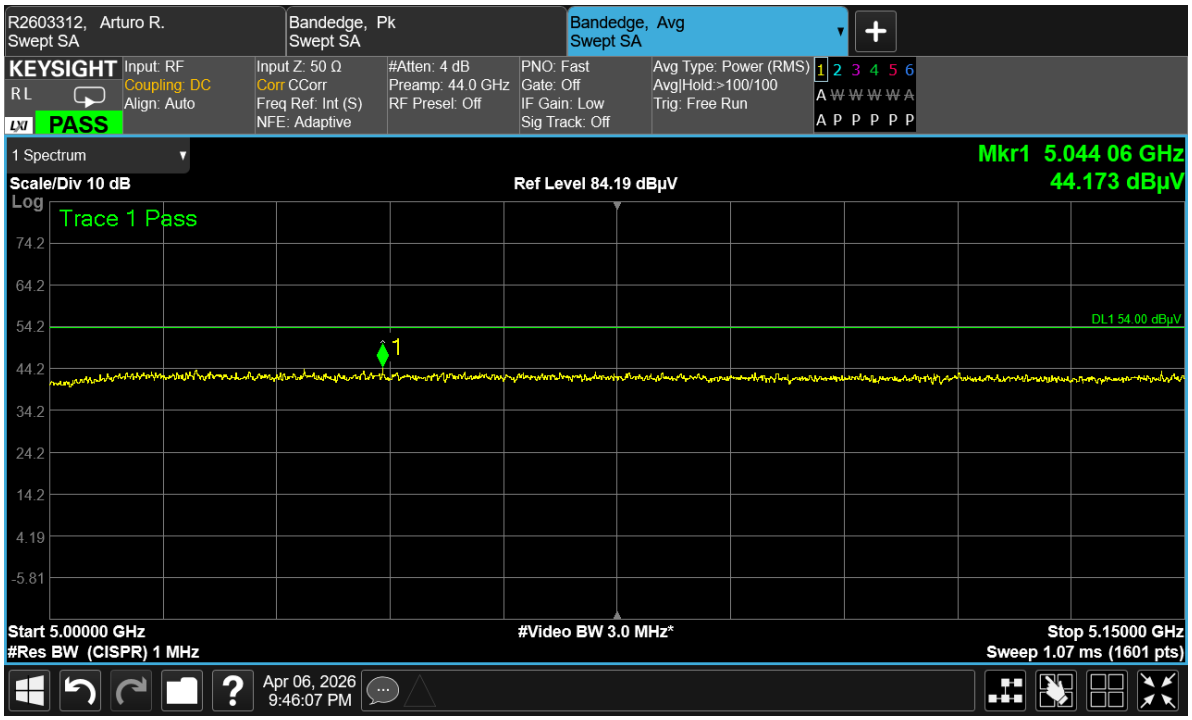


5 GHz Wi-Fi, 802.11n40, U-NII-1

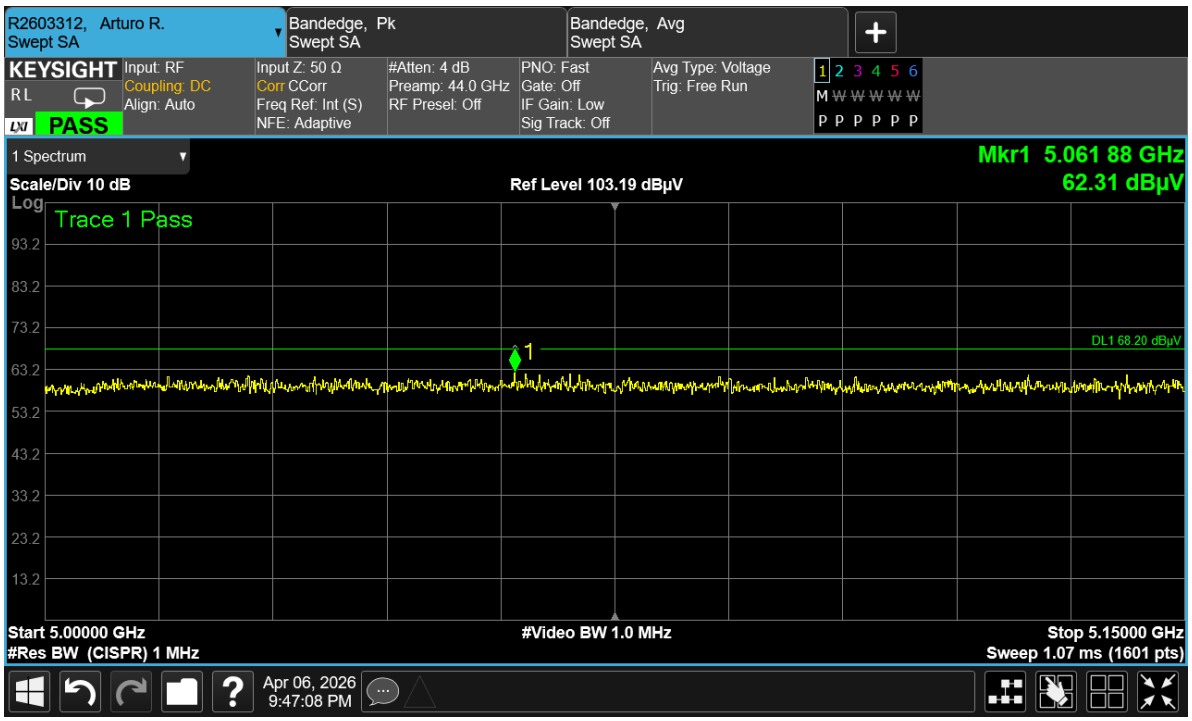
Low Channel, 5190 MHz, Lower Band Edge, Peak Measurement



Low Channel, 5190 MHz, Lower Band Edge, Average Measurement

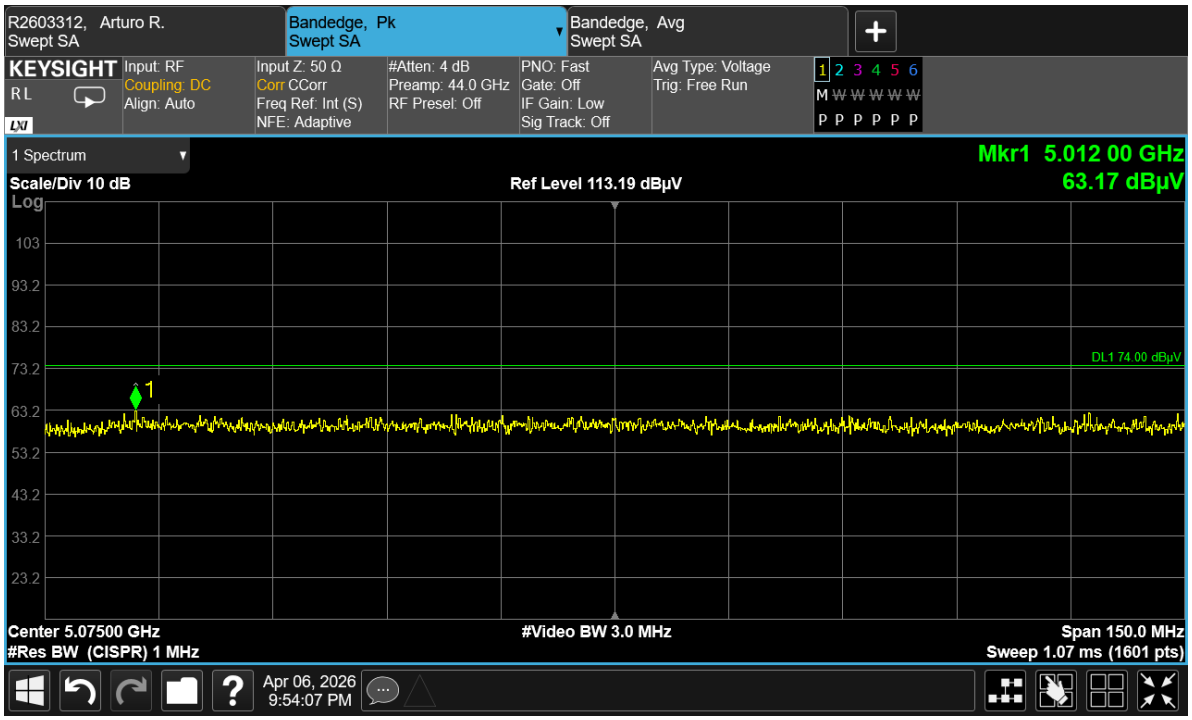


Low Channel, 5190 MHz, Lower Band Edge, -27 dBm

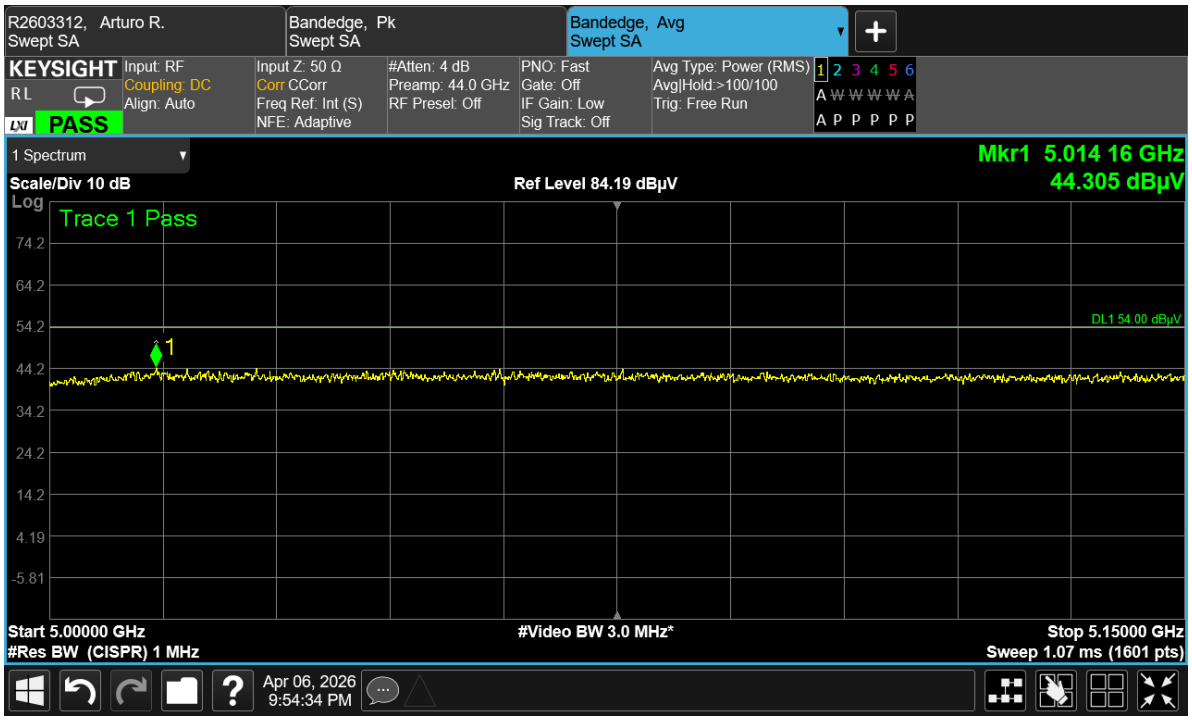


5 GHz Wi-Fi, 802.11ac80, U-NII-1

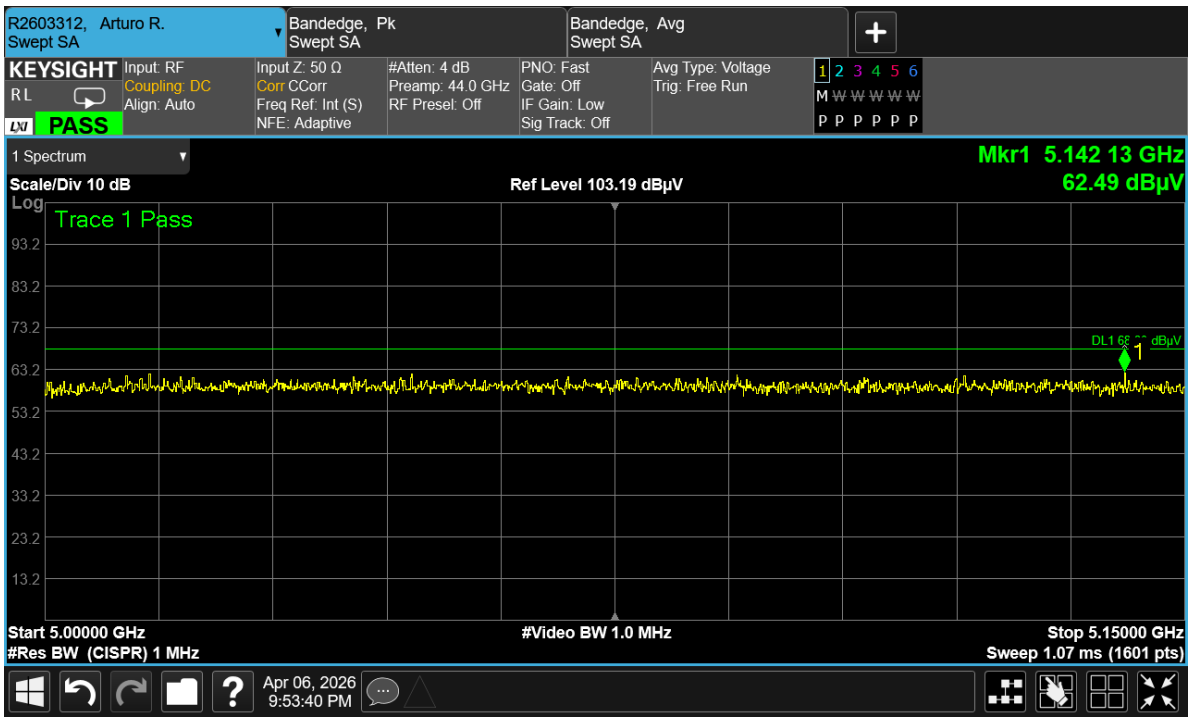
Low Channel, 5210 MHz, Lower Band Edge, Peak Measurement



Low Channel, 5210 MHz, Lower Band Edge, Average Measurement



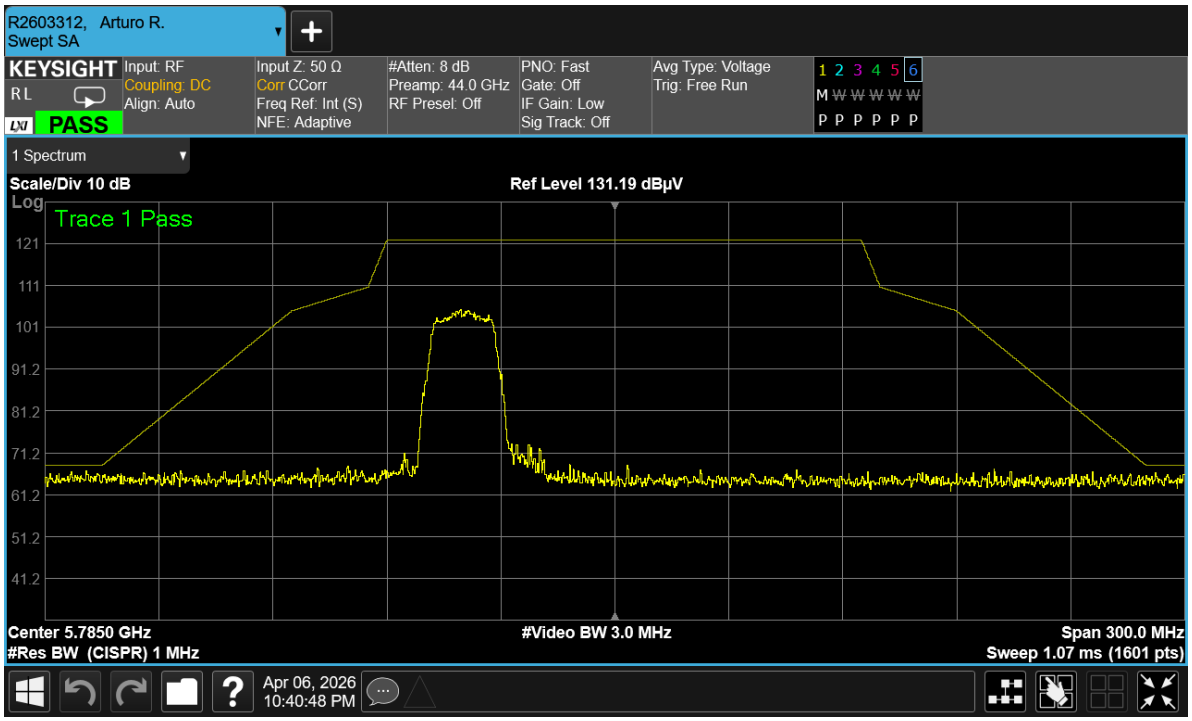
Low Channel, 5210 MHz, Lower Band Edge, -27 dBm



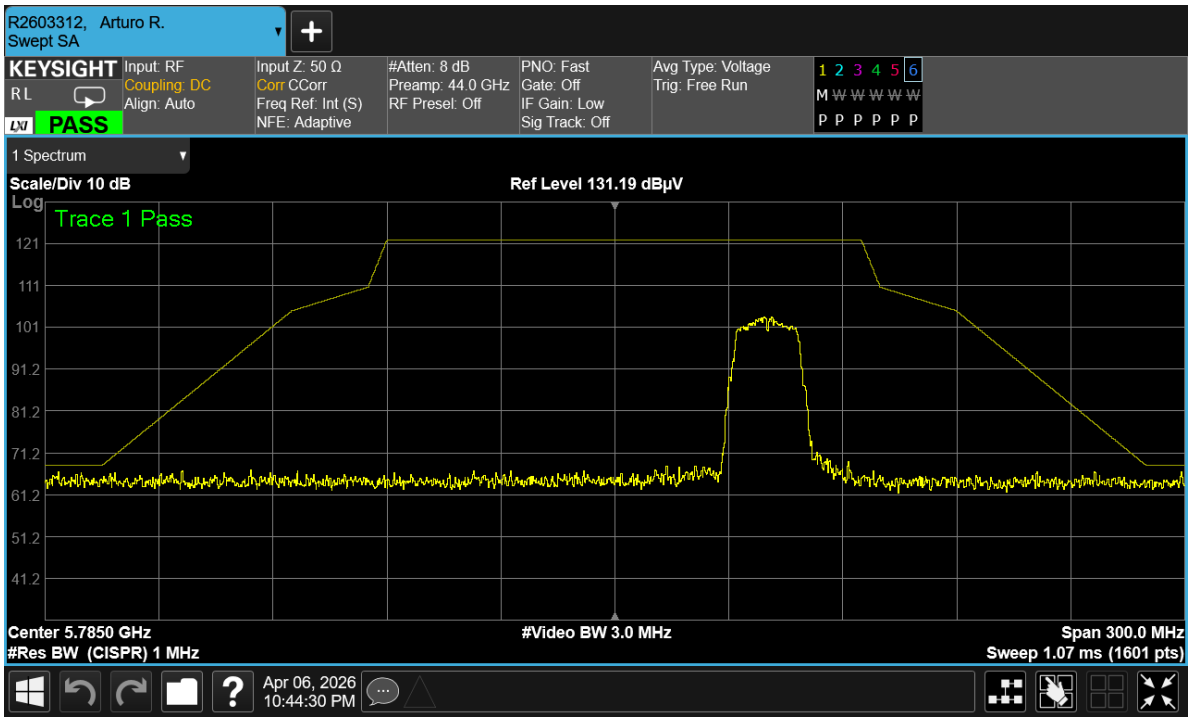
8 Annex B – Radiated Spurious Emissions: U-NII-3, Emission Mask

5 GHz Wi-Fi, 802.11a, U-NII-3

Low Channel, 5745 MHz, Emission Mask

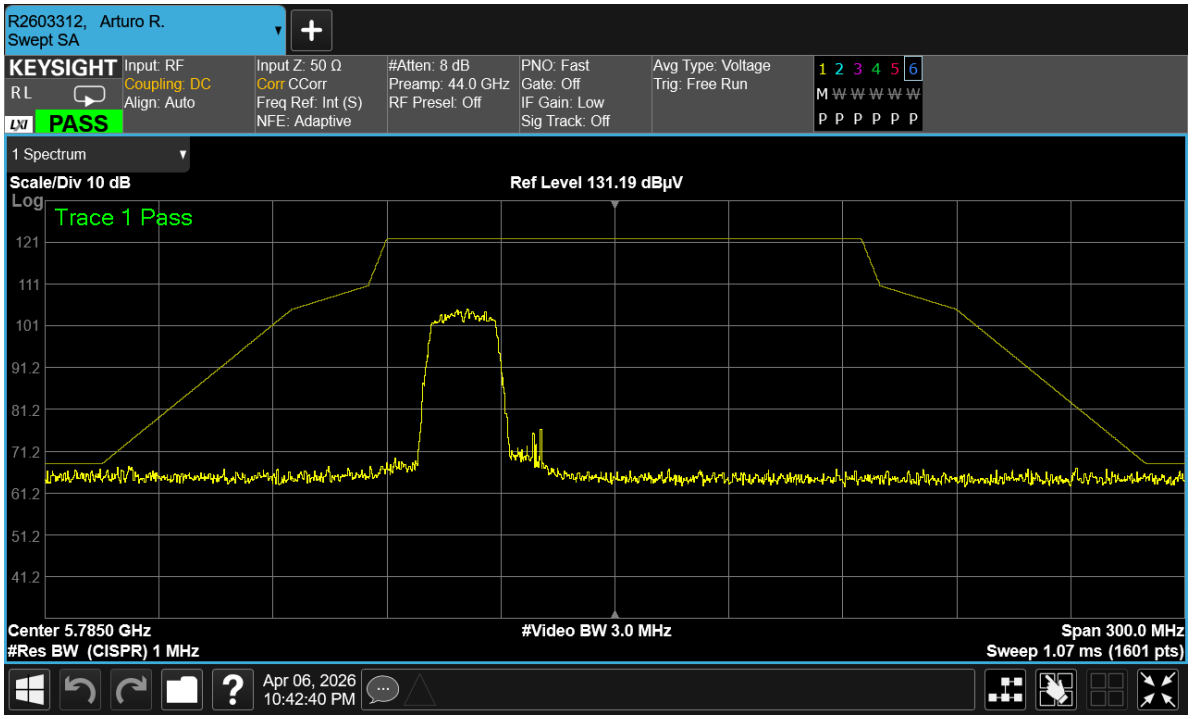


High Channel, 5825 MHz, Emission Mask

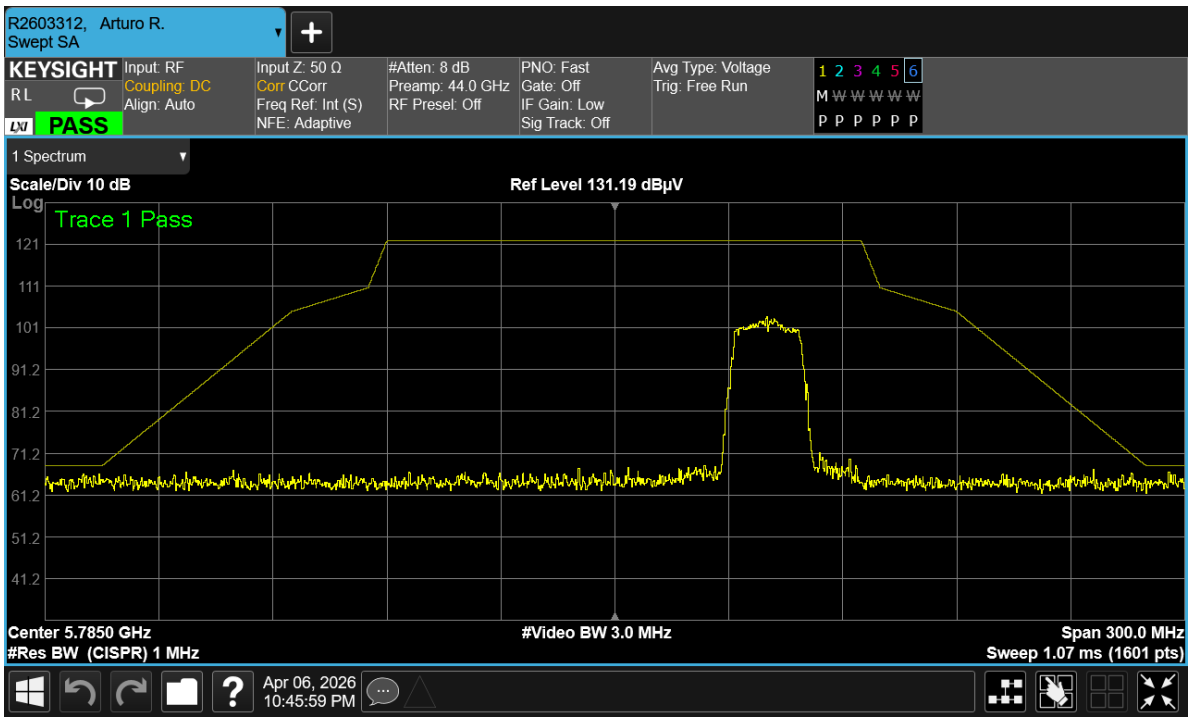


5 GHz Wi-Fi, 802.11n20, U-NII-3

Low Channel, 5745 MHz, Emission Mask

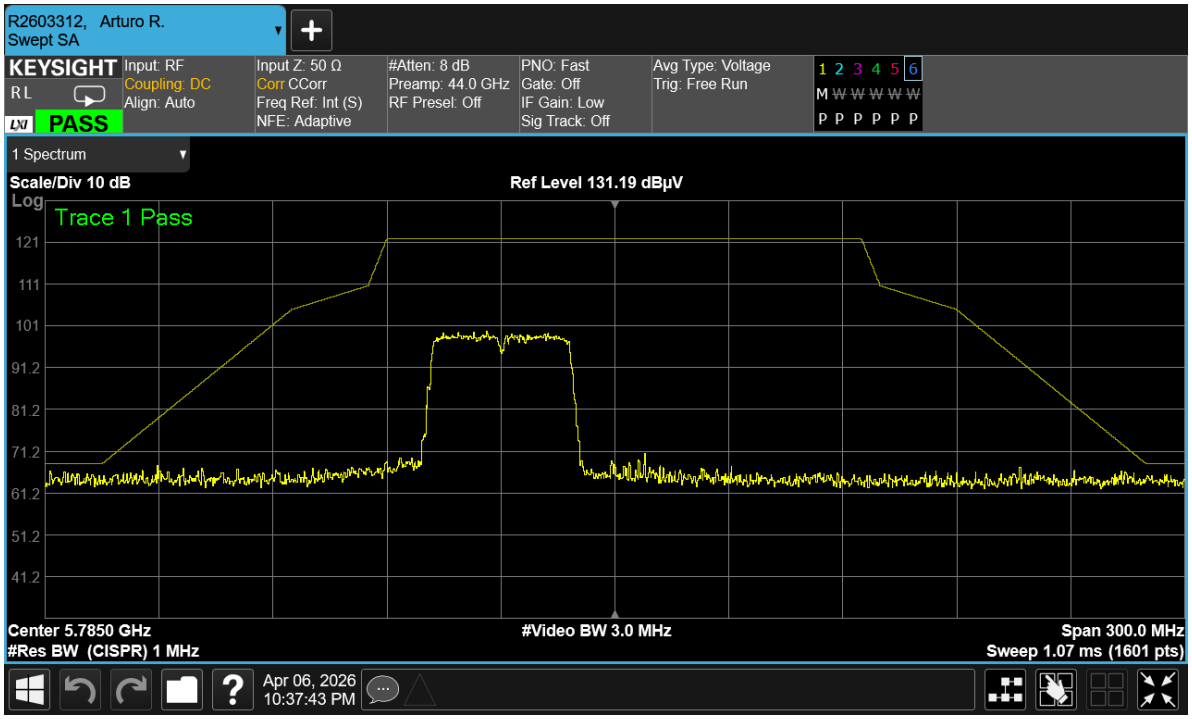


High Channel, 5825 MHz, Emission Mask

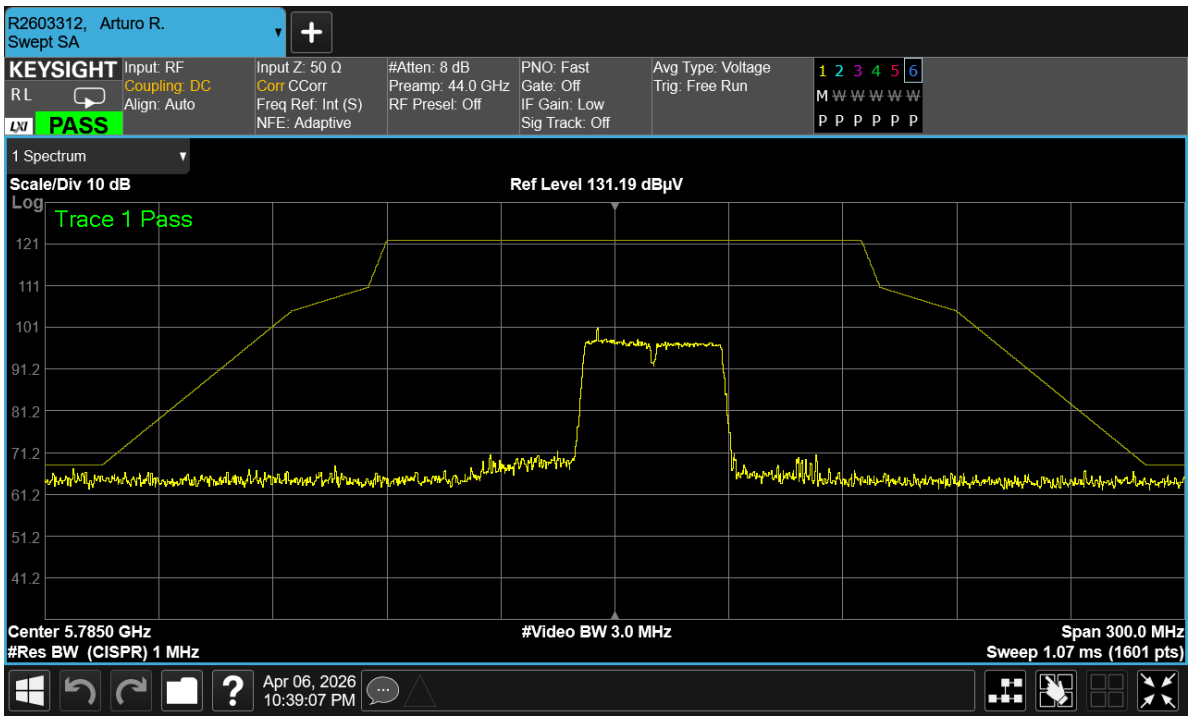


5 GHz Wi-Fi, 802.11n40, U-NII-3

Low Channel, 5755 MHz, Emission Mask

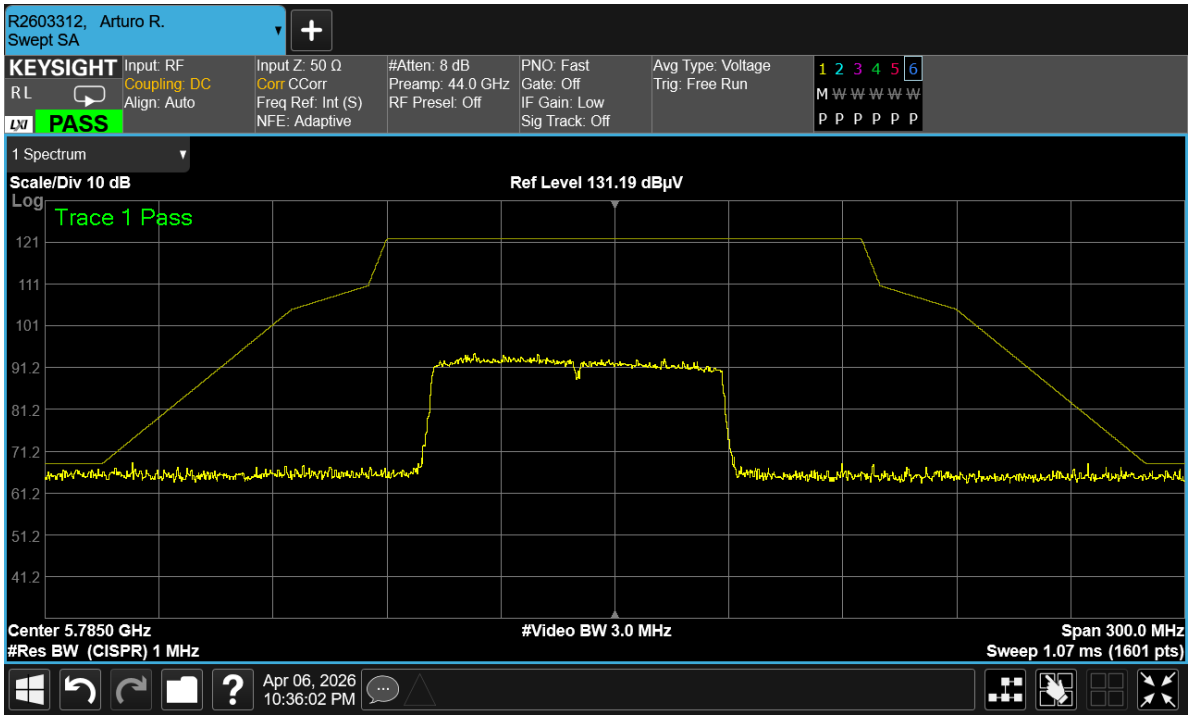


High Channel, 5795 MHz, Emission Mask



5 GHz Wi-Fi, 802.11ac80, U-NII-3

Low Channel, 5775 MHz, Emission Mask



9 Appendix A (Normative) – EUT Test Setup Photographs

Please refer to the attachment.

10 Appendix B (Normative) – EUT Photographs

Please refer to the attachment.

11 Appendix C (Normative) – A2LA Electrical Testing Certificate

Accredited Laboratory

A2LA has accredited

BAY AREA COMPLIANCE LABORATORIES CORP.

Sunnyvale, CA

for technical competence in the field of

Electrical Testing

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 laboratory also meets A2LA R222 - Specific Requirements EPA ENERGY STAR Accreditation Program. 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*).

Presented this 13th day of September 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3297.02
Valid to September 30, 2026

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

Please follow the web link below for a full ISO 17025 scope

https://www.a2la.org/scopepdf/3297-02.pdf

--- END OF REPORT ---