



Test Report

For:
Rivian Automotive, LLC

Marketing Name:
Radio Farm (RFM)

Model Name:
RFM1.0

Product Description:
Radio Farm (RFM)

FCC ID: contains 2AW3A-MRN932N & 2AW3A-MRW962B
ISED: contains 26958-MRN932N & 26958-MRW962B

Applied Rules and Standards:
47 CFR Parts 22, 24, 27 and 90R
RSS-GEN Issue 5 RSS: 130 Issue 2, 132 Issue 4, 133 Issue 7, 139 Issue 4, 140 Issue 1, 199 Issue 4

REPORT #: EMC_RIVIA_100_25001_FCC22_24_27_90

DATE: 2025-12-02



IC recognized #
3462B

CETECOM Inc.

411 Dixon Landing Road ♦ Milpitas, CA 95035 ♦ U.S.A.

Phone: + 1 (408) 586 6200 ♦ Fax: + 1 (408) 586 6299 ♦ E-mail: contact@cetecom.com ♦ <http://www.cetecom.com>

CETECOM Inc. is a Delaware Corporation with Corporation number: 2905571

TABLE OF CONTENTS

1	ASSESSMENT.....	3
2	ADMINISTRATIVE DATA	4
2.1	IDENTIFICATION OF THE TESTING LABORATORY ISSUING THE EMC TEST REPORT	4
2.2	IDENTIFICATION OF THE CLIENT	4
2.3	IDENTIFICATION OF THE MANUFACTURER.....	4
3	EQUIPMENT UNDER TEST (EUT).....	5
3.1	EUT SPECIFICATIONS	5
3.2	RADIO SPECIFICATIONS	5
3.3	EUT SAMPLE DETAILS	6
3.4	ACCESSORY EQUIPMENT (AE) DETAILS.....	6
3.5	TEST SAMPLE CONFIGURATION	6
3.6	JUSTIFICATION FOR WORST CASE MODE OF OPERATION.....	6
3.7	EUT POWER SETTING.....	6
4	SUBJECT OF INVESTIGATION	8
5	MEASUREMENT UNCERTAINTY.....	8
5.1	ENVIRONMENTAL CONDITIONS DURING TESTING:.....	8
5.2	DATES OF TESTING:	8
5.3	DECISION RULE:.....	8
6	MEASUREMENT PROCEDURES	9
6.1	RADIATED MEASUREMENT.....	9
6.2	SAMPLE CALCULATIONS FOR FIELD STRENGTH MEASUREMENTS	11
7	MEASUREMENT RESULTS SUMMARY	12
7.1	PART 22 / RSS-132	12
7.2	PART 24 / RSS-133	12
7.3	FCC 27 //RSS-130/ RSS-139 / RSS-199	13
8	TEST RESULT DATA	15
8.1	RADIATED SPURIOUS EMISSIONS.....	15
9	TEST EQUIPMENT AND ANCILLARIES USED FOR TESTING	51
10	TEST SETUP PHOTOS.....	52
11	REVISION HISTORY	52
12	ANNEX 1.....	53

1 Assessment

The following device was evaluated against the applicable criteria specified in

- FCC rule Part 22, 24, 27 of Title 47 of the Code of Federal Regulations
- ISED Canada standard RSS-GEN Issue 5 RSS: 130 Issue 2, 132 Issue 4, 133 Issue 7, 139 Issue 4, 140 Issue 1, 199 Issue 4

There were no additions, deviations, or exclusions made from the test method.

Company	Description	Model #
Rivian Automotive, LLC	Radio Farm (RFM)	RFM1.0

Report Authorized by:

Responsible for testing Laboratory:

2025-12-02	Compliance	Alvin Ilarina (Director of EMC Services)	Alvin ILARINA  Digitally signed by Alvin ILARINA Date: 2025.12.11 11:33:38 -08'00'
Date	Section	Name	Signature

Responsible for the Report:

2025-12-02	Compliance	Guangcheng Huang (Senior EMC Engineer)	
Date	Section	Name	Signature

The test results of this test report relate exclusively to the test item specified in Section 3.

CETECOM Inc. USA does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of CETECOM Inc. USA.

2 Administrative Data

2.1 Identification of the Testing Laboratory Issuing the EMC Test Report

Company Name:	CETECOM Inc.
Department:	Compliance
Street Address:	411 Dixon Landing
City/Zip Code	Milpitas, 95035 CA
Country	USA
Telephone:	+ 1 (408) 586 6200
Fax:	+ 1 (408) 586 6299
EMC Lab Manager:	Alvin Ilarina
Project Manager:	Ruby Hall

2.2 Identification of the Client

Client's Name:	Rivian Automotive, LLC
Street Address:	14600 Myford Road
City/Zip Code	Irvine CA 92606
Country	USA

2.3 Identification of the Manufacturer

Manufacturer's Name:	same as client
Manufacturers Address:	same as client
City/Zip Code	same as client
Country	same as client

3 Equipment Under Test (EUT)

3.1 EUT Specifications

Model No:	RFM1.0
Marketing Name:	Radio Farm (RFM)
HW Version:	Rev.C
SW Version:	Not applicable
FCC ID:	contains 2AW3A-MRN932N & 2AW3A-MRW962B
ISED:	contains 26958-MRN932N & 26958-MRW962B
FWIN:	Not Applicable
HVIN:	RN932N, RW962B
PMN:	Radio Farm (RFM)
Product Description:	Radio Farm (RFM)
Power Supply / Rated operating Voltage Range:	9.6V (Low) 16V (High) 13.5V (Nominal)
Operating Temperature Range	-40c to 85c
Sample Revision	pre-production
EUT Dimensions	47.2x8x4.04 cm
Note: All information provided by the client.	

3.2 Radio Specifications

Embedded Radio Technologies	3G,4G,5G,Wi-Fi6 (Cellular & Wi-Fi)
Frequency Range / number of channels:	please refer to Freq_Band_info tab (Annex 1)
Antenna Type / Gain	Stamped Metal/4.89, 5.16,4.16, 5.14, Wi-Fi-1: 4.609 [2.4GHz], 7.85[5GHz], Wi-Fi-2: 4.15{2.4GHz}, 6.9[5GHz]
Modes of Operation	Always on
Note: All information provided by the client.	

3.3 EUT Sample details

EUT #	Serial Number	HW Version	SW Version	Notes/Comments
1	0	Rev.C	Not applicable	0

3.4 Accessory Equipment (AE) details

AE #	Type	Model	Manufacturer	Serial Number
NA	0	0	0	0
NA	0	0	0	0

3.5 Test Sample Configuration

EUT Set-up #	Combination of AE used for test set up	Comments
1	EUT#1	For radiated test

3.6 Justification for Worst Case Mode of Operation

During the testing process, the EUT was tested with transmitter set on fixed channels and max. duty cycle allowed either by test software from applicant or by communication tester.

For radiated measurements, all data in this report shows the worst case between horizontal and vertical antenna polarizations and for all orientations of the EUT.

Worst case analysis also includes intermodulation when multiple transmitters work simultaneously. Band and channel combinations are chosen where they are most adjacent to each other.

3.7 EUT Power Setting

Cellular LTE & NR

Cellular transmission is governed by the communication tester which is set to max output power.

WLAN 2.4 & 5 GHz

Applicant provided test software (screenshot down below), operational instruction "DRAFT_Ver_H_Non-signaling_RFM_Operational Instructions_31oct2025.pdf" and commands "RFM WI-FI COMMANDS.txt" used for testing.

Power level setting 15. Test mode setup via following exemplary command:

WLAN 5 GHz

```
myftm -J -l 0 -f 5180 -p 15 -a 3 -X 11:12:13:14:15:16 -Y 21:22:23:24:25:26 -N 31:32:33:34:35:36 -t 3
```

WLAN 2.4GHz:

myftm -J -I 1 -f 2442 -p 15 -a 3 -X 51:52:53:56:55:56 -Y 61:62:63:64:65:66 -N 71:72:73:74:75:76 -t 3

```
C:\Windows\System32\cmd.exe
Response status 0
qca6174SetDBS() success = 0
root@sa525m:/# myftm -J -I 1 -r 15 -f2442 -c 0 -p 20 -a 3 -t 3
Version Flags: 1.0
using TLV2.0
WlanATSetPhyid using athtestcmdlib
WlanATSetRate using athtestcmdlib
WlanATSetWifiFreq using athtestcmdlib
WlanATSetWifiTPC using athtestcmdlib
WlanATSetWifiTxPower using athtestcmdlib
WlanATSetWifiAntenna using athtestcmdlib

-----qca6174SetAntenna() gCmd.chain = 3
WlanATSetWifiTX using athtestcmdlib
-----qca6174TxCommand():3143 gCmd.chain = 3
Wrong wlanMode 0 valuerateIndexToArrayMapping() 0 1 Mb Is11AcRate 0
dataRate 0 rateIndex 0
qca6174TxCommand - input pwr 20.00 output pwr 40
qca6174TxCommand() TLV2 CMD_TX 3
qca6174TxCommand() TLV2 CMD_TX DPD flag is not Enabled PARM_FLAGS 24
qca6174TxCommand() TLV2 CMD_TX add OFDMA PPDU TYPE 0
qca6174TxCommand() TLV2 CMD_TX add OFDMA LINKDIR 0
qca6174TxCommand() TLV2 CMD_TX add PARM_FLAGS 24
qca6174TxCommand() TLV2 CMD_TX add DUTYCYCLE 0
qca6174TxCommand() TLV2 CMD_TX add WiFiStandard 0 with rateBw 22

qca6174TxCommand() TLV2 CMD_TX/CMD_TXSTATUS 3
05 00 00 00 02 00 00 00 00 00 00 00 cc 01 00 00
73 60 00 00 00 00 00 00 00 00 00 00 0e 00 00 00
```

4 **Subject of Investigation**

The objective of the measurements done by CETECOM Inc. was to evaluate the compliance of the EUT against the relevant requirements specified in the section 1.

5 **Measurement Uncertainty**

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus, with 95% confidence interval (in dB delta to result), based on a coverage factor k=2.

Radiated measurement

Measurement System		EMC-1	EMC-2
Conducted emissions (mains port)	150 kHz – 30 MHz	2.45 dB	N/A
Radiated emissions	9 kHz – 30 MHz	2.68 dB	2.53 dB
	30 – 100 MHz	4.39 dB	3.85 dB
	100 MHz – 1 GHz	5.65 dB	5.24 dB
	1 – 6 GHz	5.0 dB	4.88 dB
	6 – 18 GHz	4.76 dB	4.58 dB
	18 – 40 GHz	4.65 dB	4.61 dB

RF conducted measurement ± 0.5 dB

According to TR 102 273 a multiplicative propagation of error is assumed for RF measurement systems. For this reason the RMS method is applied to dB values and not to linear values as appropriate for additive propagation of error. Also used: <http://physics.nist.gov/cuu/Uncertainty/typeb.html>. The above calculated uncertainties apply to direct application of the Substitution method. The Substitution method is always used when the EUT comes closer than 3dB to the limit.

5.1 **Environmental Conditions During Testing:**

The following environmental conditions were maintained during the course of testing:

- Ambient Temperature: 20-25°C
- Relative humidity: 40-60%

5.2 **Dates of Testing:**

10/20/2025 - 11/19/2025

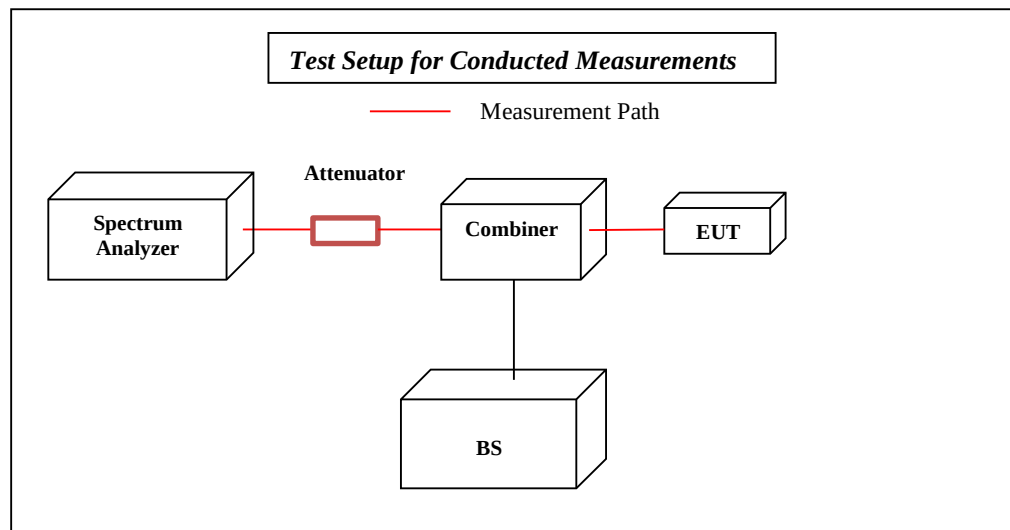
5.3 **Decision Rule:**

Cetecom Inc follows ILAC G8:09/2019 chapter 4.2.1 (Simple Acceptance Rule).

Only the measured values related to their corresponding limits will be used to decide whether the equipment under test meets the requirements of the test standards listed in chapter 3. The measurement uncertainty is mentioned in this test report, See chapter 9, but is not taken into account – neither to the limits nor to the measurement results. Measurement results with a smaller margin to the corresponding limits than the measurement uncertainty have a potential risk of more than 5% that the decision might be wrong.

6 Measurement Procedures

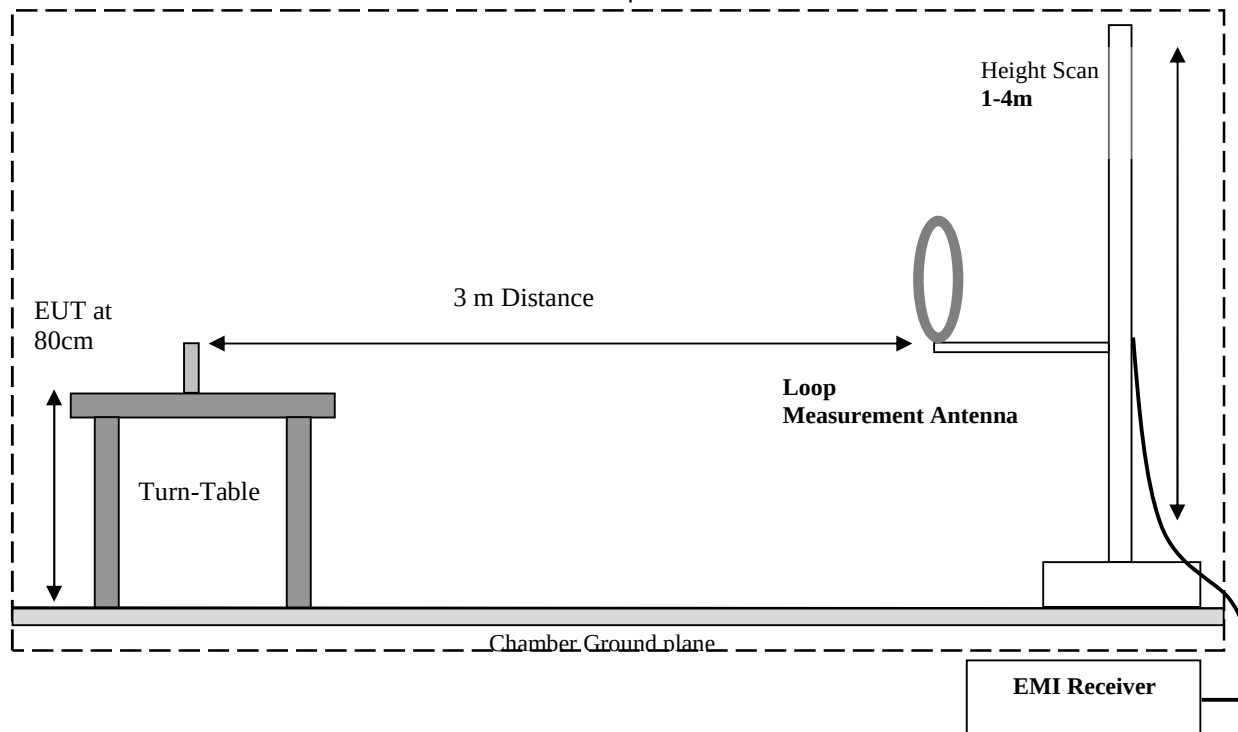
Testing is performed according to the guidelines provided in FCC publication (KDB) 971168 D01 v03r01 – “Measurement Guidance for Certification of Licensed Digital Transmitters” and according to relevant parts of ANSI/TIA-603-D-2010 as detailed below.



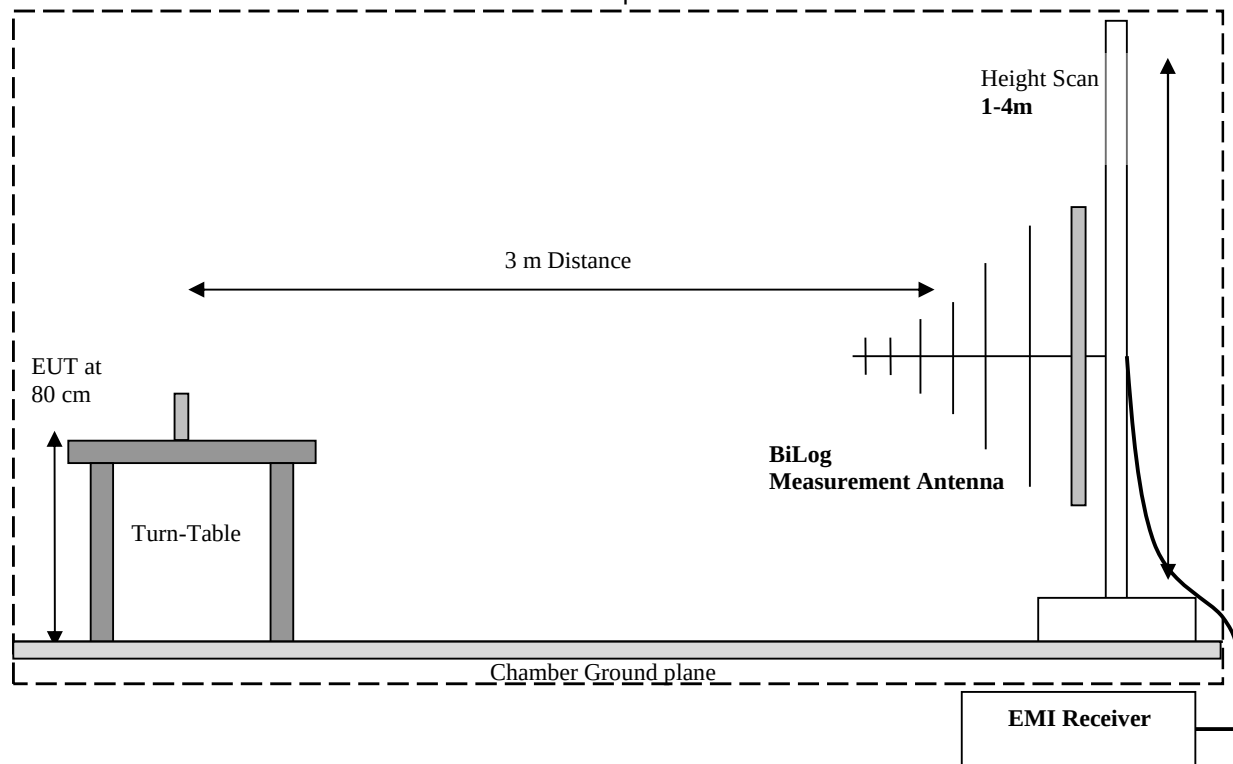
6.1 Radiated Measurement

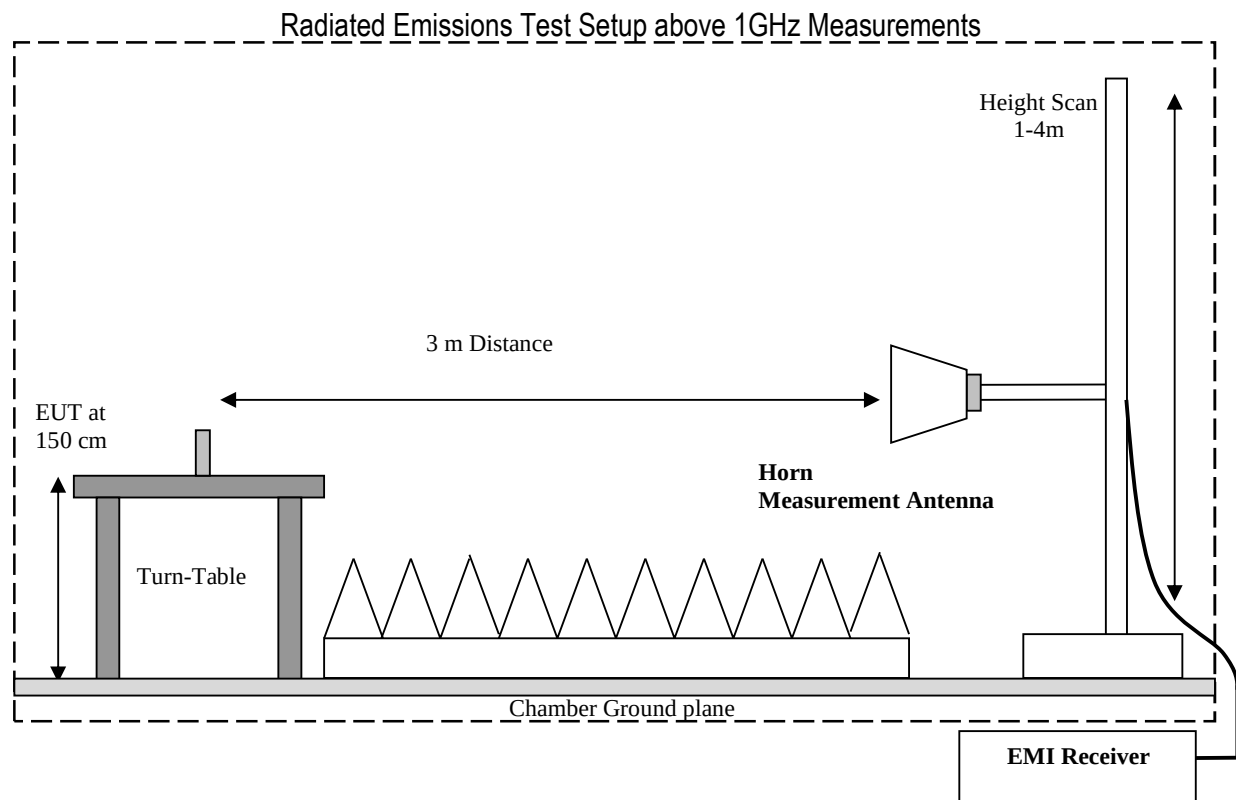
- The exploratory measurement is accomplished by running a matrix of 16 sweeps over the required frequency range with R&S Test-SW EMC32 for 4 positions of the turntable, two orthogonal positions of the EUT and both antenna polarizations. This procedure exceeds the requirement of the above standards to cover the 3 orthogonal axis of the EUT. A max peak detector is utilized during the exploratory measurement. The Test-SW creates an overall maximum trace for all 12 sweeps and saves the settings for each point of this trace. The maximum trace is part of the test report.
- The 10 highest emissions are selected with an automatic algorithm of EMC32 searching for peaks in the noise floor and ensuring that broadband signals are not selected multiple times.
- The maxima are then put through the final measurement and again maximized in a 90deg range of the turntable, fine search in frequency domain and height scan between 1m and 4m.
- The above procedure is repeated for all possible ways of power supply to EUT and for all supported modulations.
- In case there are no emissions above noise floor level only the maximum trace is reported as described above.
- The results are split up into up to 4 frequency ranges due to antenna bandwidth restrictions. A magnetic loop is used from 9 kHz to 30 MHz, a Biconilog antenna is used from 30 MHz to 1 GHz, and two different horn antennas are used to cover frequencies up to 40 GHz.

Radiated Emissions Test Setup below 30MHz Measurements



Radiated Emissions Test Setup 30MHz-1GHz Measurements





6.2 Sample Calculations for Field Strength Measurements

Field Strength is calculated from the Spectrum Analyzer/ Receiver readings, taking into account the following parameters:

- Measured reading in dB μ V
- Cable Loss between the receiving antenna and SA in dB and
- Antenna Factor in dB/m

All radiated measurement plots in this report are taken from a test SW that calculates the Field Strength based on the following equation:

$$FS \text{ (dB}\mu\text{V/m)} = \text{Measured Value on SA (dB}\mu\text{V)} + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$$

Example:

Frequency (MHz)	Measured SA (dB μ V)	Cable Loss (dB)	Antenna Factor Correction (dB)	Field Strength Result (dB μ V/m)
1000	80.5	3.5	14	98.0

7 Measurement Results Summary

7.1 Part 22 / RSS-132

Test Specification	Test Case	Temperature and Voltage Conditions	Mode	Pass	Fail	NA	NP	Result
§2.1046; §22.913 (a) RSS-132 Clause 5.4	RF Output Power	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1047 §22.913 (a) RSS-132 Clause 5.2	Modulation Characteristics	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1055; §22.355 RSS-132 Clause 5.3	Frequency stability	Extreme Temperature and Voltage	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1049; §22.917 RSS-132 Clause 5.1	Occupied Bandwidth	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1051; §22.917 RSS-132 Clause 5.5	Band Edge Compliance	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1051; §22.917 RSS-132 Clause 5.5	Conducted Spurious Emissions	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1053; §22.917 RSS-132 Clause 5.5	Radiated Spurious Emissions	Nominal	Op. 1	☒	☐	☐	☐	Complies

Note 1: NA= Not Applicable; NP= Not Performed.

Note 2: Leveraged from module certification Rolling Wireless RN932N (FCC ID: 2AW3A-MRN932N, IC ID: 26958-MRW962B)

7.2 Part 24 / RSS-133

Test Specification	Test Case	Temperature and Voltage Conditions	Mode	Pass	Fail	NA	NP	Result
§2.1046; §24.232 (a) RSS-133 Clause 5.5	RF Output Power	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1047, RSS-133 Clause 6.2	Modulation Characteristics	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1055; §24.235 RSS-133 Clause 5.4	Frequency Stability	Extreme Temperature and Voltage	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1049; §24.238 RSS-133 Clause 2.3	Occupied Bandwidth	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1051; §24.238 RSS-133 Clause 5.5	Band Edge Compliance	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1051; §24.238 RSS-133 Clause 3.4	Conducted Spurious Emissions	Nominal	-	☐	☐	☐	☒	Complies Note 1

								5Note 2
§2.1053; §24.238 RSS-133 Clause 5.6	Radiated Spurious Emissions	Nominal	Op. 1	☒	☐	☐	☐	Complies

Note 1: NA= Not Applicable; NP= Not Performed.

Note 2: Leveraged from module certification Rolling Wireless RN932N (FCC ID: 2AW3A-MRN932N, IC ID: 26958-MRW962B)

7.3 FCC 27 / RSS-130/ RSS-139 / RSS-199

Test Specification	Test Case	Temperature and Voltage Conditions	Mode	Pass	Fail	NA	NP	Result
§ 2.1046; §27.50 RSS-199 Clause 4.4 /RSS-130 Clause 4.6/ RSS-139 Clause 6.5	RF Output Power	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1047; §27.50, RSS-199 Clause 4.1 /RSS-130 Clause 4.2/ RSS-Clause 6.2	Modulation Characteristics	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1055; §27.54 RSS-199 Clause 4.3 /RSS-130 Clause 4.5 /RSS-Clause 6.4	Frequency Stability	Extreme Temperature and Voltage	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1049; §27.53 RSS-199 Clause 4.2	Occupied Bandwidth	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1051; §27.53 RSS-199 Clause 4.5 /RSS-130 Clause 4.7/ RSS-Clause 6.6	Band Edge Compliance	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1051; §27.53 RSS-199 Clause 4.5 /RSS-130 Clause 4.7/ RSS-Clause 6.6	Conducted Spurious Emissions	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1053; §27.53 RSS-199 Clause 4.5 /RSS-130 Clause 4.7/ RSS-Clause 6.6	Radiated Spurious Emissions	Nominal	Op. 1	☒	☐	☐	☐	Complies

Note 1: NA= Not Applicable; NP= Not Performed.

Note 2: Leveraged from module certification Rolling Wireless RN932N (FCC ID: 2AW3A-MRN932N, IC ID: 26958-MRW962B)

7.4 FCC 90 / RSS-140

Test Specification	Test Case	Temperature and Voltage Conditions	Mode	Pass	Fail	NA	NP	Result
§90.542(a)(7) §2.1046 RSS-140 Clause 4.3	RF Output Power ERP	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§90.535 RSS-140 Clause 4.1	Modulation Characteristics	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1055 §90.539(e) RSS-140 Clause 4.2	Frequency Stability	Extreme Temperature and Voltage	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1049 RSS-Gen Cl.6.7	Occupied Bandwidth	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1053 §90.543(e)(2)(3)	Band Edge Compliance	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1051 §90.210(n)	Emission Mask	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1053 §90.543(e)(3)	Conducted Spurious Emissions	Nominal	-	☐	☐	☐	☒	Complies Note 1 Note 2
§2.1053 §90.543(e)(3) §90.543(f) RSS-140 Clause 4.4	Radiated Spurious Emissions	Nominal	Op. 1	☒	☐	☐	☐	Complies

Note 1: NA= Not Applicable; NP= Not Performed.**Note 2:** Leveraged from module certification Rolling Wireless RN932N (FCC ID: 2AW3A-MRN932N, IC ID: 26958-MRW962B)

8 Test Result Data

8.1 Radiated Spurious Emissions

8.1.1 Measurement utilizing KDB 971168 D01 Power Meas License Digital Systems v03r01, and according to ANSI/TIA-603-E-2016

Spectrum Analyzer Settings for FCC 22

Frequency Range	30MHz – 1 GHz	1 – 1.58 GHz	1.58 – 9 GHz
Resolution Bandwidth	100 kHz	1 MHz	1 MHz
Video Bandwidth	100 kHz	1 MHz	1 MHz
Detector	Peak	Peak	Peak
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep Time	Auto	Auto	Auto

Spectrum Analyzer Settings for FCC 24

Frequency Range	30MHz – 1 GHz	1 – 2.7 GHz	2.7 – 18 GHz	18 – 19.1 GHz
Resolution Bandwidth	100 kHz	1 MHz	1 MHz	1 MHz
Video Bandwidth	100 kHz	1 MHz	1 MHz	1 MHz
Detector	Peak	Peak	Peak	Peak
Trace Mode	Max Hold	Max Hold	Max Hold	Max Hold
Sweep Time	Auto	Auto	Auto	Auto

8.1.2 Limits:

8.1.2.1 FCC Part 22.917 (a); 24.238 (a); 27.53 (h)

Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

8.1.2.2 FCC Part 90.543(e)

Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) according to the following

(1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than $76 + 10 \log(P)$ dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least $43 + 10 \log(P)$ dB.

(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

8.1.2.3 RSS-132 Class 5.5; RSS-133 Class 6.5; RSS-139 Class 5.6, RSS-199 Class 5.6 Transmitter Unwanted Emissions

Mobile and base station equipment shall comply with the limits in (i) and (ii) below.

i. In the first 1.0 MHz band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1% of the occupied bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts).

ii. After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts). If the measurement is performed using 1% of the occupied bandwidth, power integration over 100 kHz is required.

8.1.2.4 RSS-140 Clause 4.4; Transmitter Unwanted Emissions

The power of any unwanted emission outside the bands 758-768 MHz and 788-798 MHz shall be attenuated below the transmitter output power P in dBW as follows, where p is the transmitter output power in watts:

- a. For any frequency between 769-775 MHz and 799-806 MHz:
 - i. $76 + 10 \log(p)$, dB in a 6.25 kHz band for fixed and base station equipment
 - ii. $65 + 10 \log(p)$, dB in a 6.25 kHz band for mobile and portable/hand-held equipment
- b. For any frequency between 775-788 MHz, above 806 MHz, and below 758 MHz: $43 + 10 \log(p)$, dB in a bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency bands 758-768 MHz and 788-798 MHz, a resolution bandwidth of 30 kHz may be employed.

In addition, the equivalent isotropically radiated power (e.i.r.p.) of all emissions, including harmonics in the band 1559-1610 MHz, shall not exceed -70 dBW/MHz for wideband emissions, and -80 dBW/kHz for discrete emissions of less than 700 Hz bandwidth.

Note: The limit calculation result is a constant of -13 dBm.

Note: For LTE Band 7 and 41, the limit calculation result is a constant of -25 dBm

8.1.3 Test conditions and setup:

Ambient Temperature (C)	EUT Set-Up #	EUT operating mode	Power Input
22	1	1	Nominal

8.1.4 Measurement result:

Plot #	Channel	EUT operating mode	Scan Frequency	Limit (dBm)	Result
1-3	Mid	LTE 12 + WLAN 2.4 GHz	30 MHz – 9 GHz	-13	Pass
4-6	Mid	LTE 13 + WLAN 2.4 GHz	30 MHz – 9 GHz	-13	Pass
7-9	Mid	LTE 14 + WLAN 2.4 GHz	30 MHz – 9 GHz	-13	Pass
10-12	Mid	LTE 17 + WLAN 2.4 GHz	30 MHz – 9 GHz	-13	Pass
13-16	Mid	NR n2 + WLAN 2.4 GHz	30 MHz – 22 GHz	-13	Pass
17-19	Mid	NR n5 + WLAN 2.4 GHz	30 MHz – 18 GHz	-13	Pass
20-22	Mid	NR n66 + WLAN 2.4 GHz	30 MHz – 18 GHz	-13	Pass
23-25	Mid	NR n71 + WLAN 2.4 GHz	30 MHz – 30 GHz	-13	Pass
26-29	Mid	NR n77 + WLAN 2.4 GHz + 5 GHz	30 MHz – 30 GHz	-13	Pass
30-33	Mid	LTE 41 + WLAN 2.4 GHz + 5 GHz	30 MHz – 30 GHz	-13	Pass

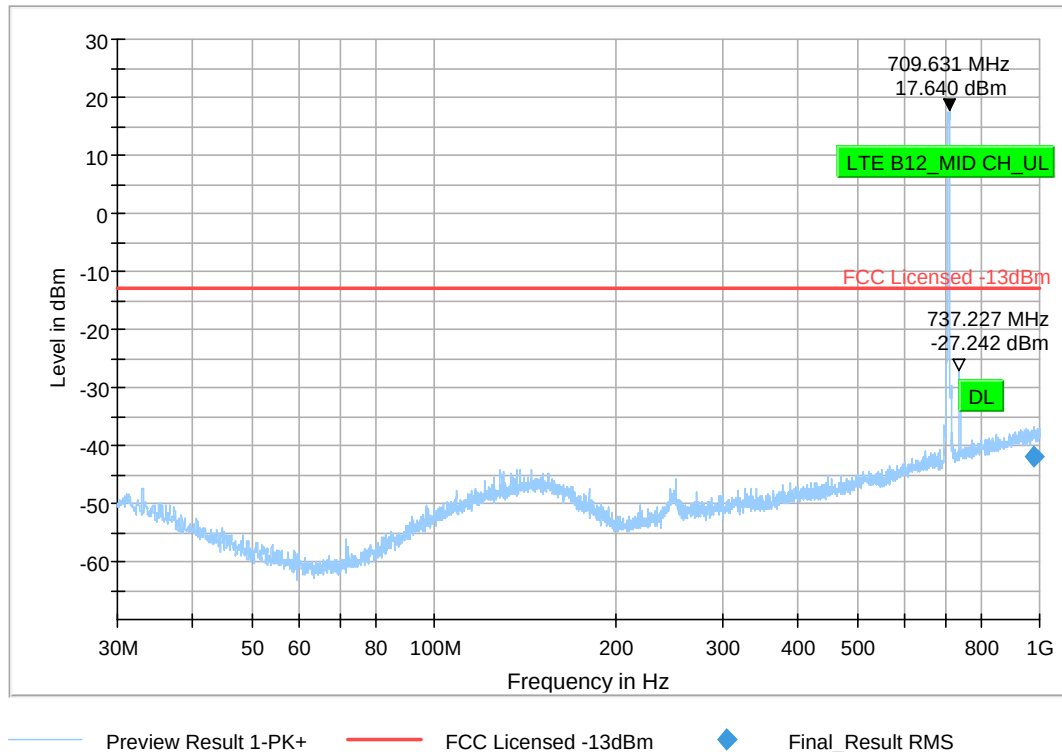
8.1.5 Measurement Plots:

8.1.6 LTE 12 mid channel + WLAN 2.4 GHz low channel

Plot 1: Radiated Emissions 30 MHz – 1GHz

Final Result

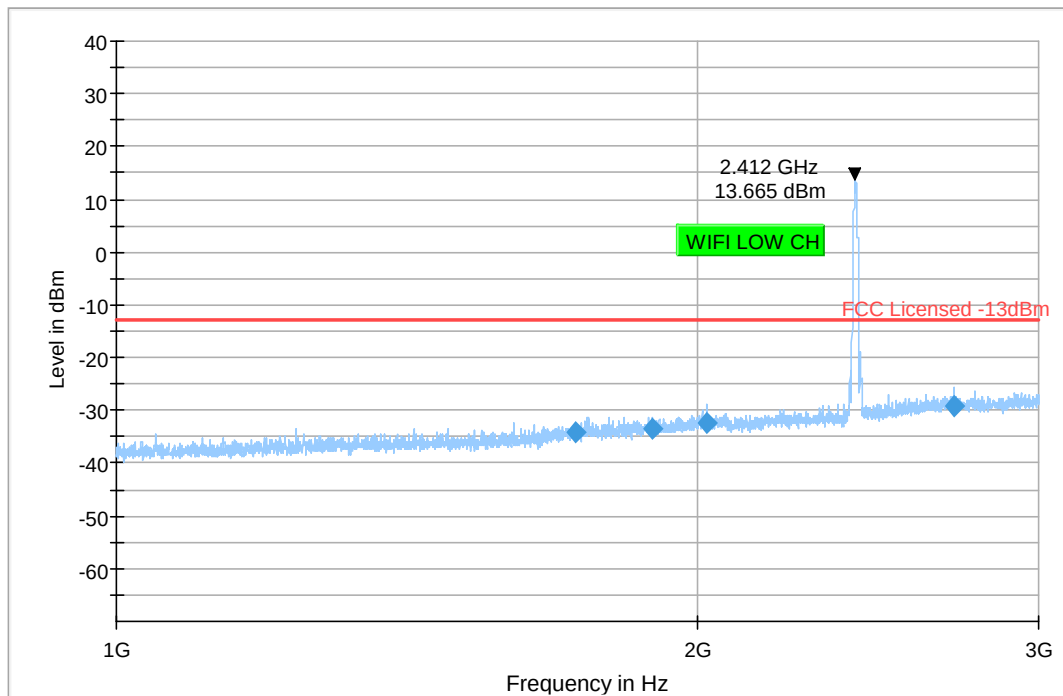
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
979.940	-41.798	-13.00	28.80	500.0	100.0	248.0	H	43.0	-64.5	3.0	0.0	-67.5	22.7



Plot 2: Radiated Emissions 1GHz – 3 GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preampl (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
1727.201	-34.315	-13.00	21.31	500.0	1000.0	347.0	V	298.0	-64.8	4.1	0.0	-68.9	30.5
1895.139	-33.335	-13.00	20.33	500.0	1000.0	332.0	H	41.0	-63.6	4.5	0.0	-68.0	30.3
2021.154	-32.546	-13.00	19.55	500.0	1000.0	331.0	V	202.0	-63.4	4.6	0.0	-68.0	30.8
2713.867	-29.137	-13.00	16.14	500.0	1000.0	226.0	H	335.0	-61.4	5.0	0.0	-66.4	32.2

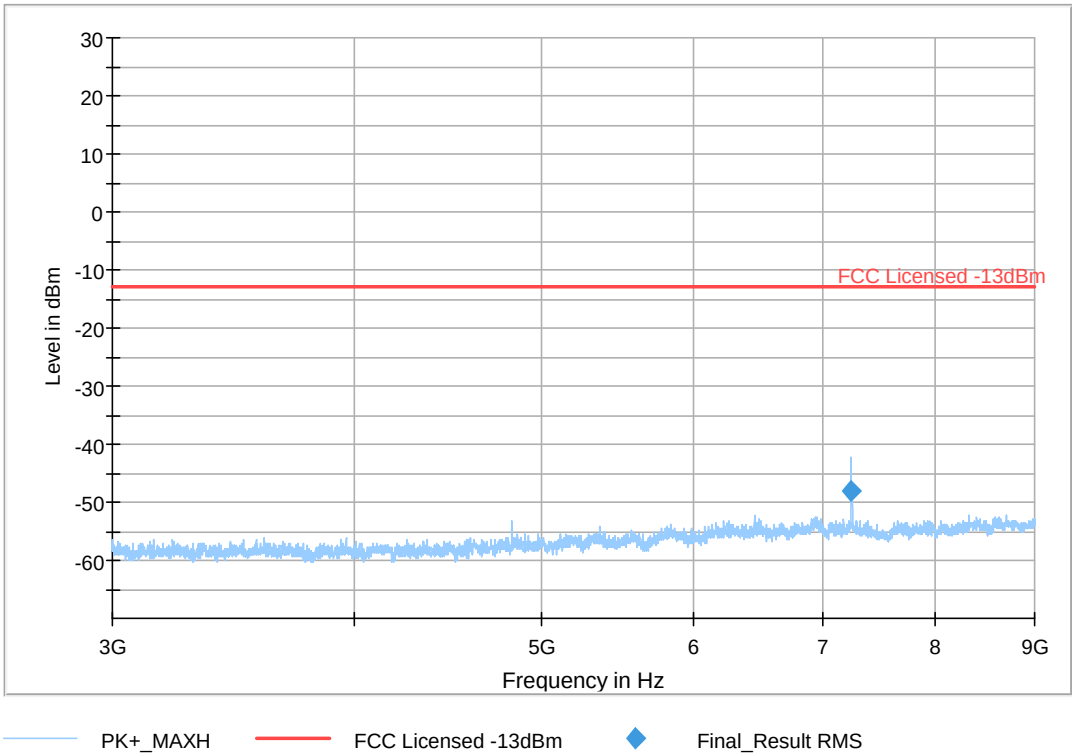


Preview Result 1-PK+ FCC Licensed -13dBm Final_Result RMS

Plot 3: Radiated Emissions 3 GHz – 9GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
7234.601	-48.012	-13.00	35.01	500.0	1000.0	100.0	V	114.0	-98.1	8.9	-47.6	-59.4	50.1

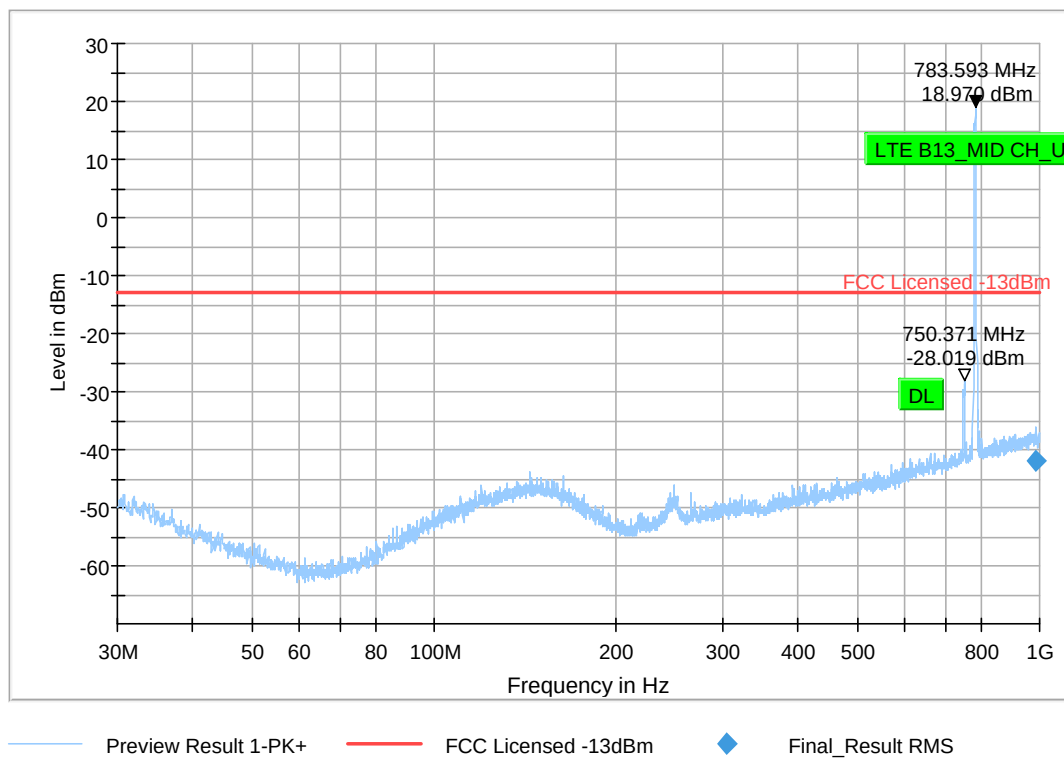


8.1.7 LTE 13 mid channel + WLAN 2.4 GHz low channel

Plot 4: Radiated Emissions 30 MHz – 1GHz

Final_Result

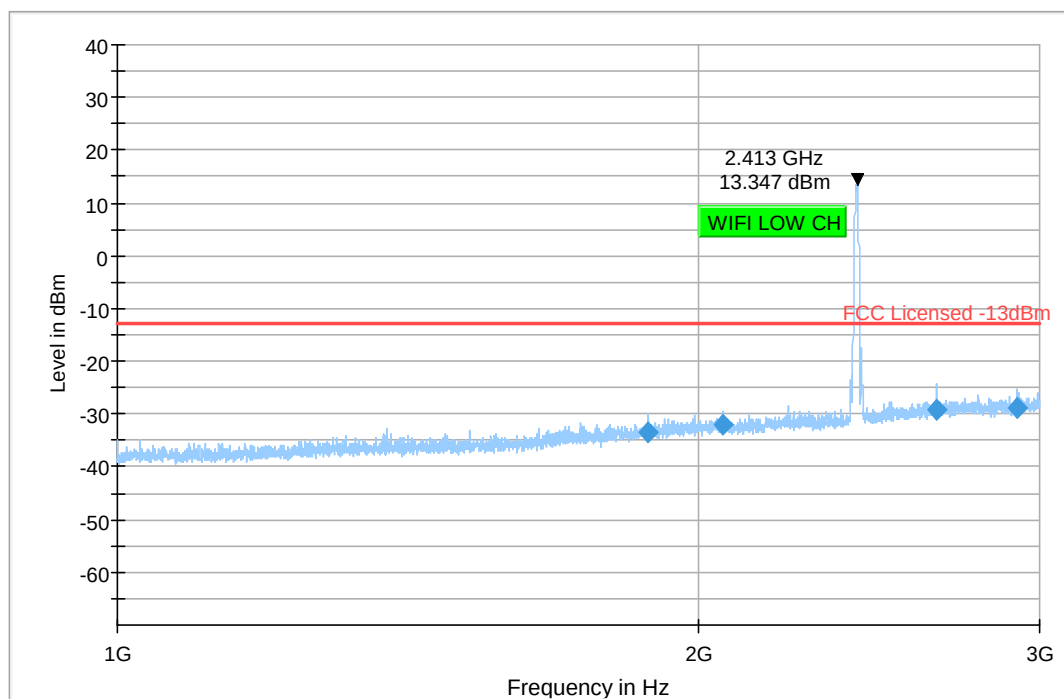
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
984.427	-42.077	-13.00	29.08	500.0	100.0	183.0	V	338.0	-64.9	3.0	0.0	-67.9	22.8



Plot 5: Radiated Emissions 1GHz – 3 GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preampl (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
1883.092	-33.401	-13.00	20.40	500.0	1000.0	364.0	V	320.0	-63.7	4.4	0.0	-68.1	30.3
2056.469	-32.205	-13.00	19.20	500.0	1000.0	130.0	V	309.0	-63.2	4.6	0.0	-67.8	31.0
2651.459	-29.346	-13.00	16.35	500.0	1000.0	383.0	H	18.0	-61.4	5.0	0.0	-66.4	32.1
2920.734	-28.804	-13.00	15.80	500.0	1000.0	400.0	H	142.0	-60.3	5.3	0.0	-65.6	31.5

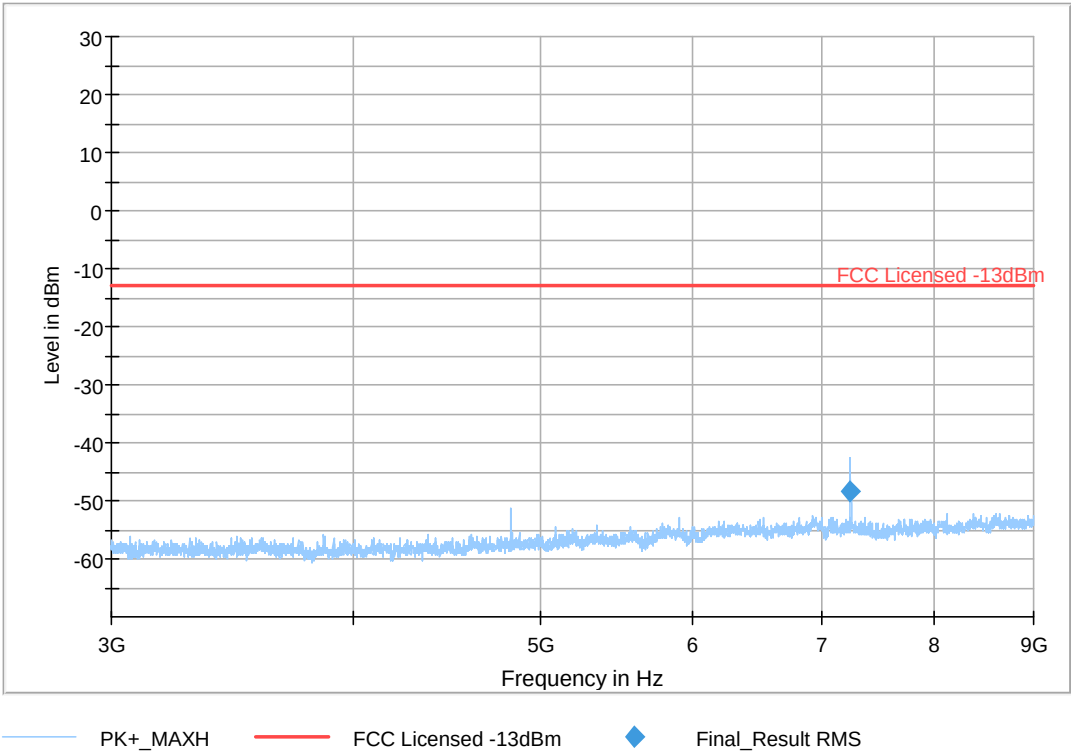


Preview Result 1-PK+ FCC Licensed -13dBm Final_Result RMS

Plot 6: Radiated Emissions 3 GHz – 9GHz

Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
7234.593	-48.548	-13.00	35.55	500.0	1000.0	100.0	V	112.0	-98.1	8.9	-47.6	-59.4	49.5

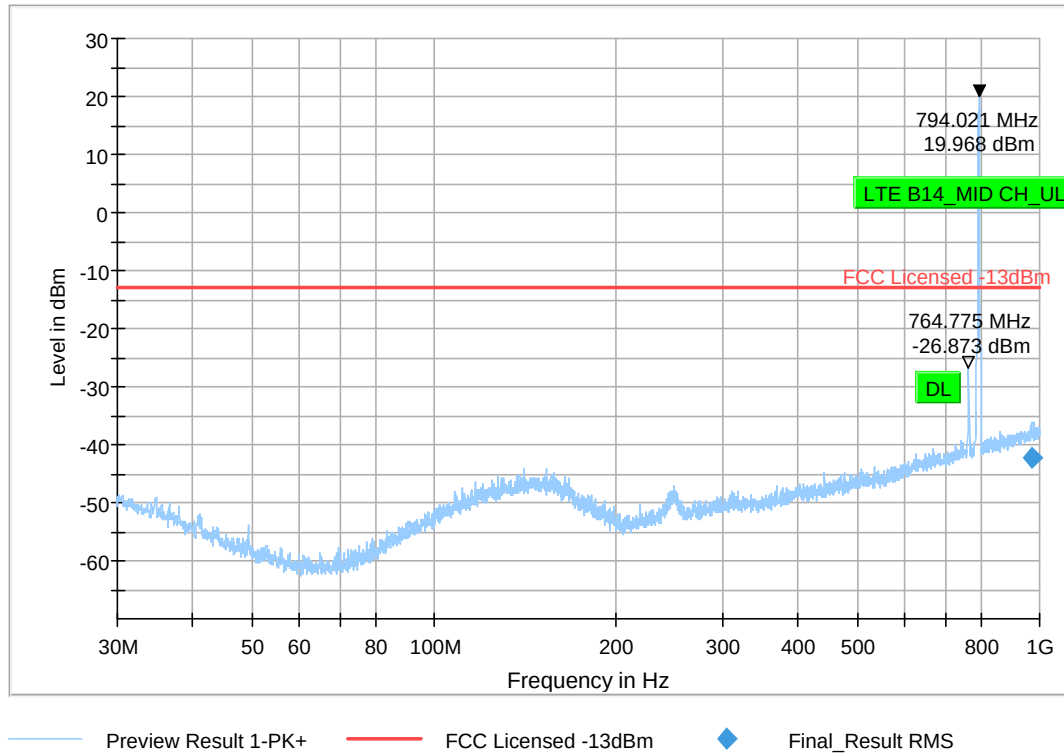


8.1.8 LTE 14 mid channel + WLAN 2.4 GHz low channel

Plot 7: Radiated Emissions 30 MHz – 1GHz

Final_Result

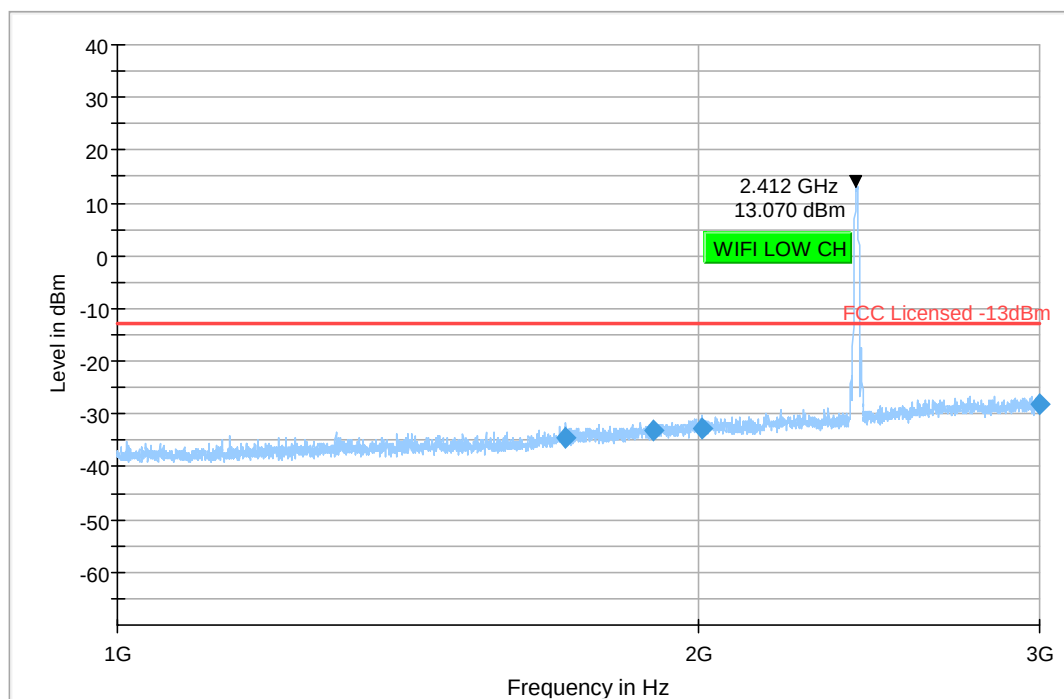
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
968.748	-42.281	-13.00	29.28	500.0	100.0	217.0	V	130.0	-65.2	2.9	0.0	-68.1	22.9



Plot 8: Radiated Emissions 1GHz – 3 GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
1706.888	-34.538	-13.00	21.54	500.0	1000.0	228.0	V	192.0	-65.0	4.0	0.0	-69.0	30.5
1892.093	-33.230	-13.00	20.23	500.0	1000.0	382.0	H	45.0	-63.6	4.5	0.0	-68.1	30.4
2006.825	-32.567	-13.00	19.57	500.0	1000.0	177.0	V	6.0	-63.4	4.6	0.0	-68.0	30.8
2999.849	-28.212	-13.00	15.21	500.0	1000.0	366.0	H	14.0	-59.9	5.3	0.0	-65.2	31.7

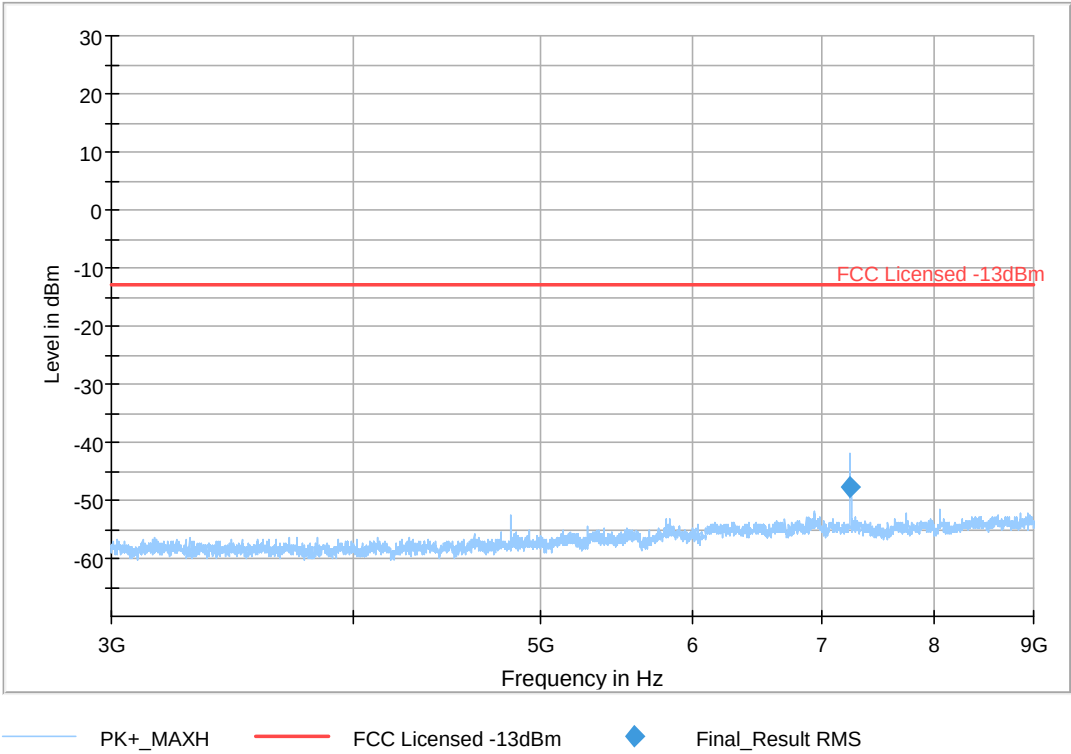


Preview Result 1-PK+ FCC Licensed -13dBm Final_Result RMS

Plot 9: Radiated Emissions 3 GHz – 9GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
7237.441	-47.740	-13.00	34.74	500.0	1000.0	100.0	V	323.0	-98.1	8.9	-47.6	-59.4	50.3

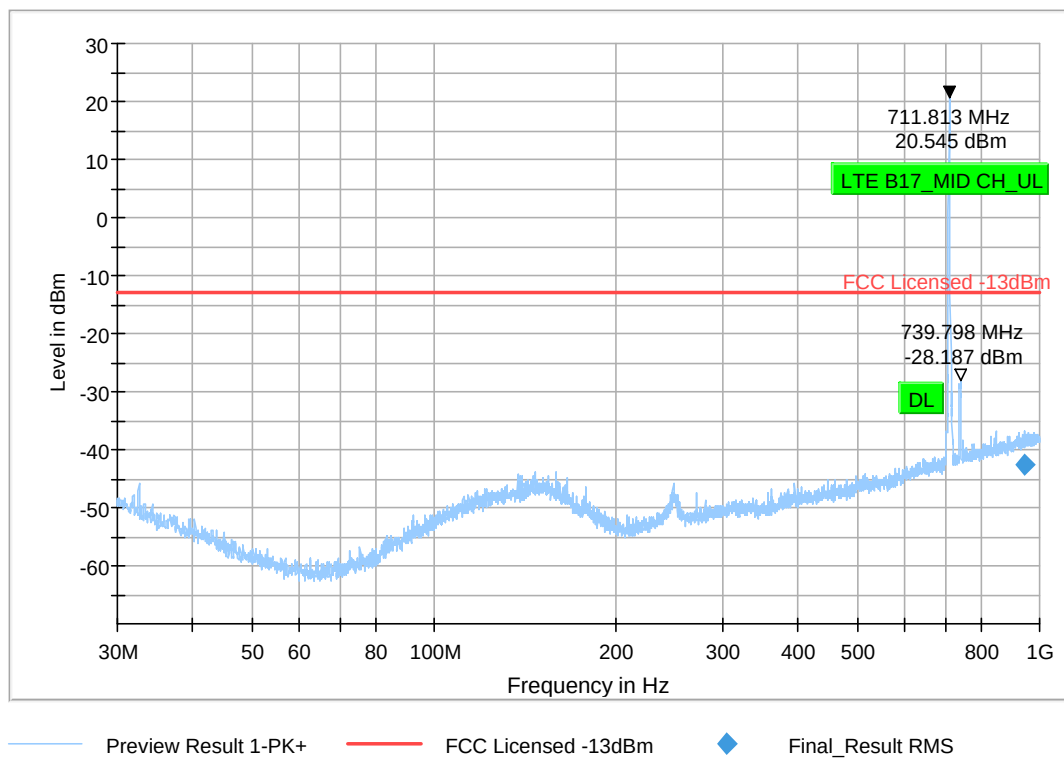


8.1.9 LTE 17 mid channel + WLAN 2.4 GHz low channel

Plot 10: Radiated Emissions 30 MHz – 1GHz

Final_Result

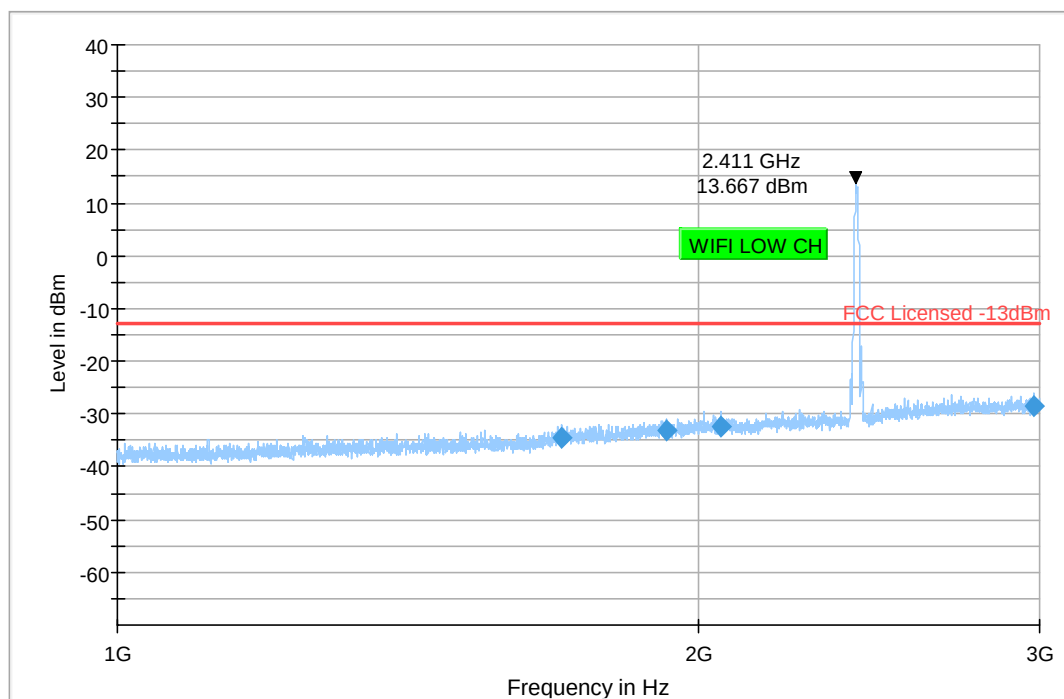
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
947.317	-42.655	-13.00	29.66	500.0	100.0	233.0	V	331.0	-65.4	2.9	0.0	-68.2	22.7



Plot 11: Radiated Emissions 1GHz – 3 GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
1699.142	-34.693	-13.00	21.69	500.0	1000.0	130.0	V	10.0	-65.1	4.0	0.0	-69.1	30.4
1922.269	-33.021	-13.00	20.02	500.0	1000.0	387.0	H	90.0	-63.5	4.5	0.0	-67.9	30.4
2054.002	-32.345	-13.00	19.34	500.0	1000.0	364.0	H	84.0	-63.3	4.6	0.0	-67.9	31.0
2983.227	-28.316	-13.00	15.32	500.0	1000.0	352.0	H	345.0	-59.9	5.4	0.0	-65.3	31.6

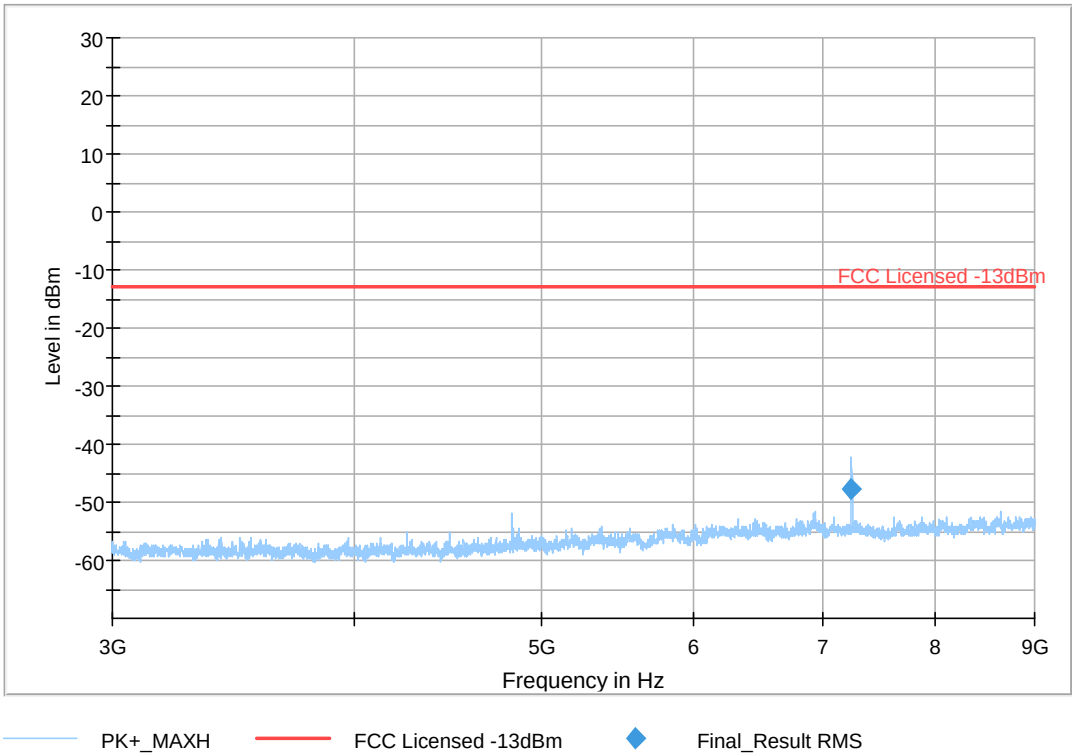


Preview Result 1-PK+ FCC Licensed -13dBm Final_Result RMS

Plot 12: Radiated Emissions 3 GHz – 9GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
7234.879	-47.585	-13.00	34.58	500.0	1000.0	100.0	V	320.0	-98.1	8.9	-47.6	-59.4	50.5

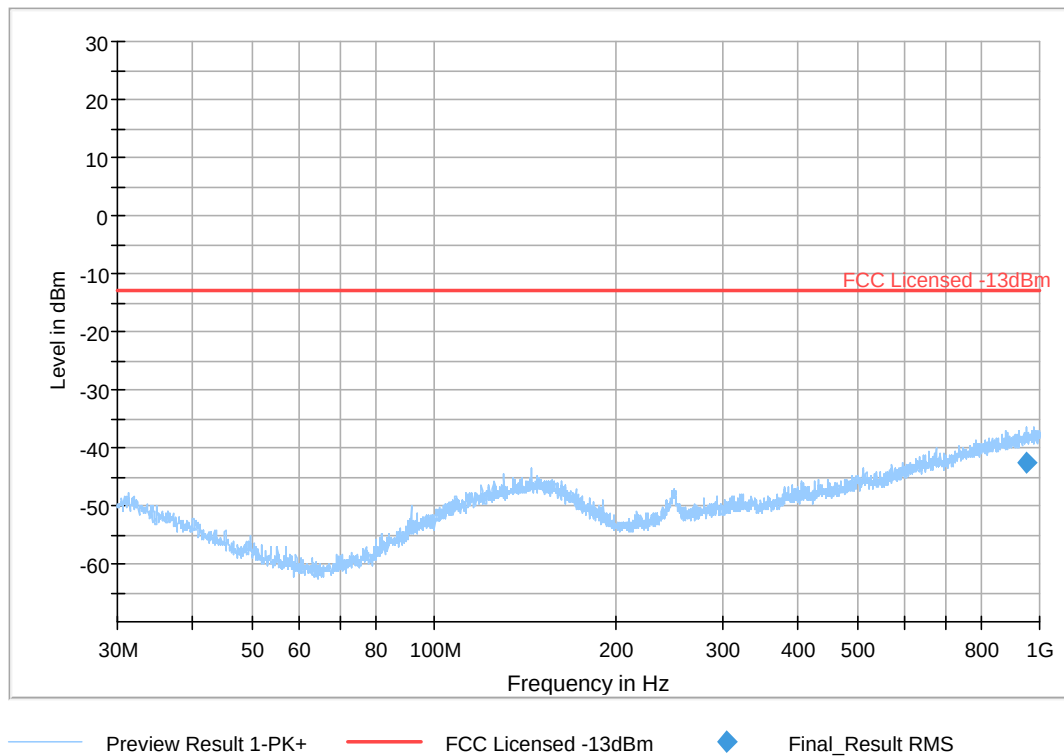


8.1.10 NR n2 mid channel + WLAN 2.4 GHz low channel

Plot 13: Radiated Emissions 30 MHz – 1GHz

Final_Result

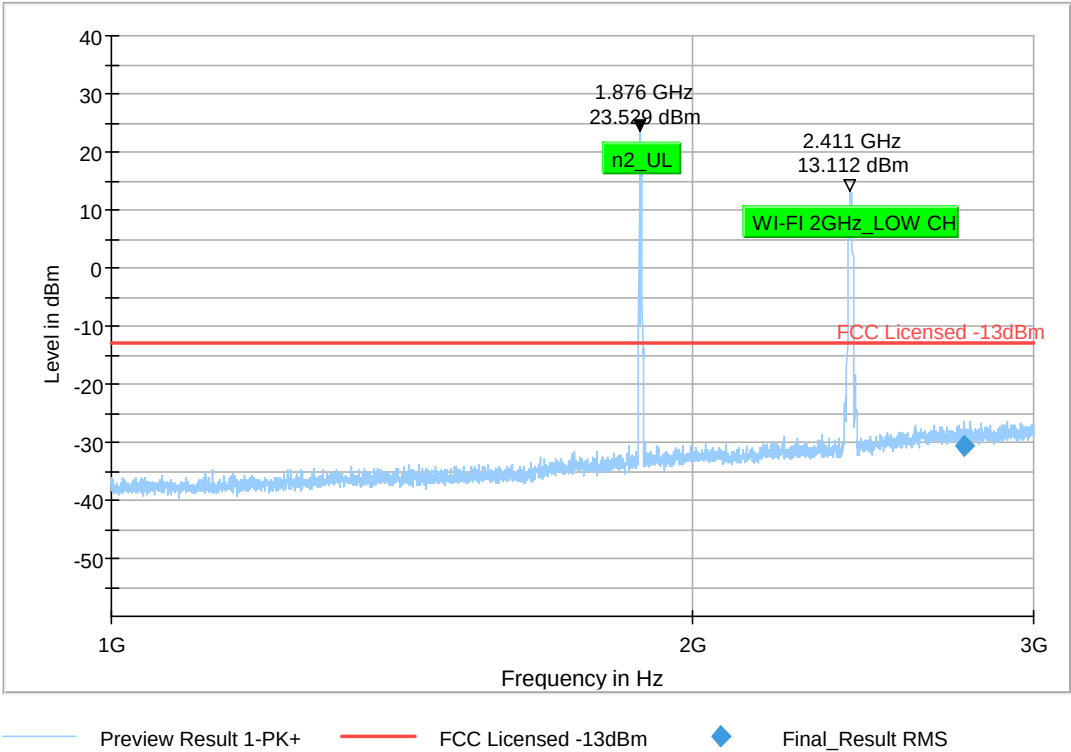
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
948.391	-42.715	-13.00	29.72	500.0	120.0	307.0	H	76.0	-64.7	2.9	0.0	-67.6	22.0



Plot 14: Radiated Emissions 1GHz – 3 GHz

Final_Result

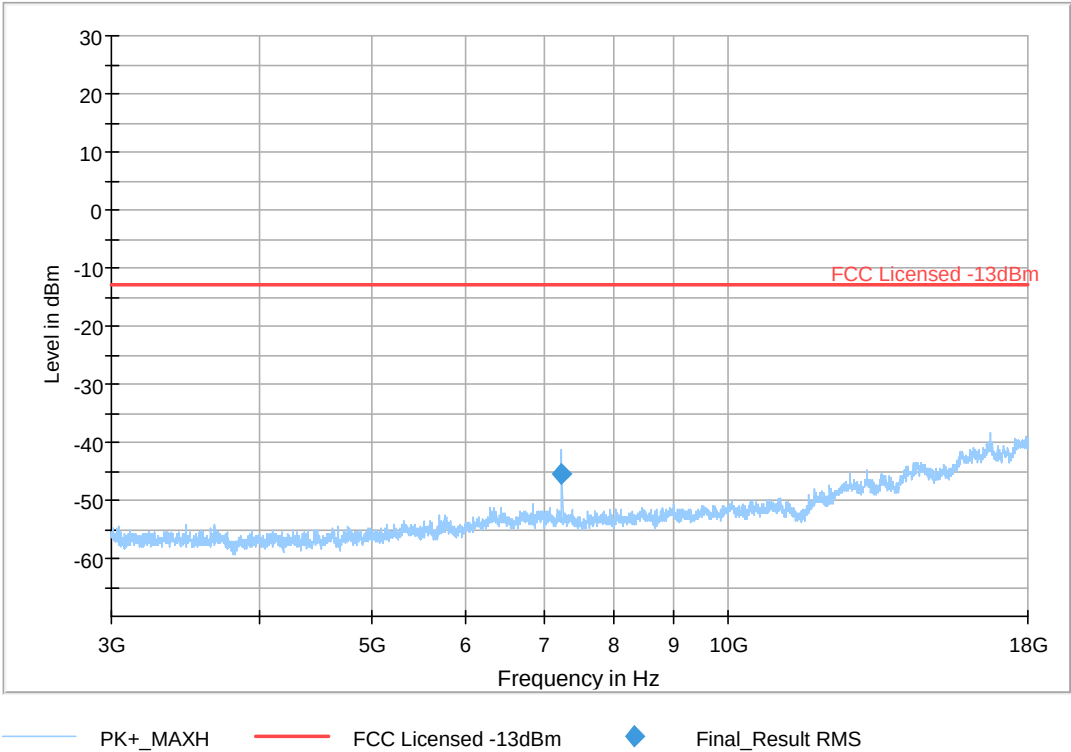
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
2759.326	-30.558	-13.00	17.56	500.0	1000.0	207.0	H	236.0	-61.2	5.2	0.0	-66.3	30.6



Plot 15: Radiated Emissions 3 GHz – 18GHz

Final_Result

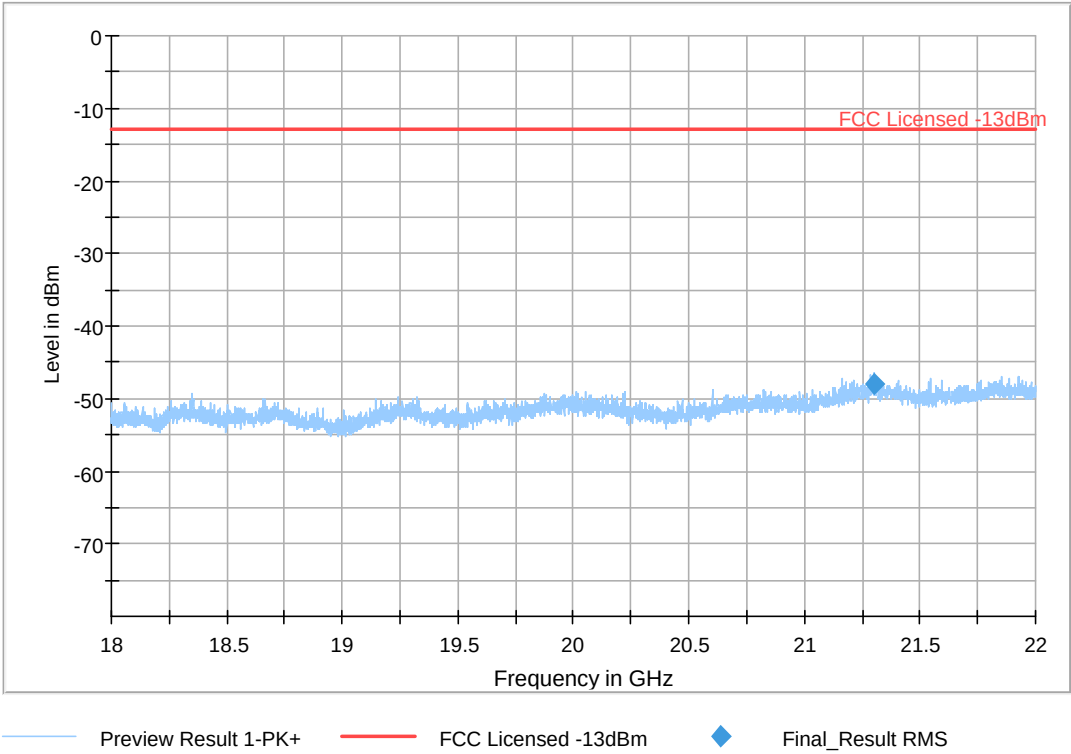
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
7234.955	-45.457	-13.00	32.46	500.0	1000.0	100.0	V	325.0	-97.4	8.9	-46.9	-59.4	51.9



Plot 16: Radiated Emissions 18 GHz – 22GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
21303.000	-47.970	-13.00	34.97	500.0	1000.0	150.0	V	76.0	-85.8	9.3	0.0	-95.1	37.9

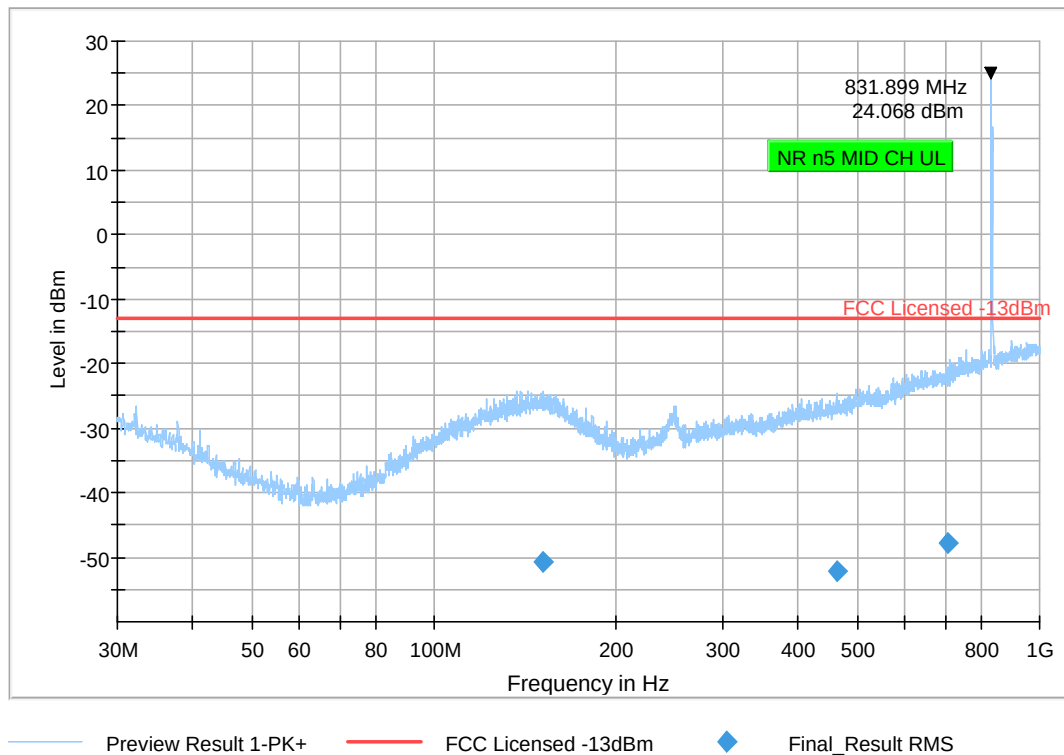


8.1.11 NR n5 mid channel + WLAN 2.4 GHz low channel

Plot 17: Radiated Emissions 30 MHz – 1GHz

Final_Result

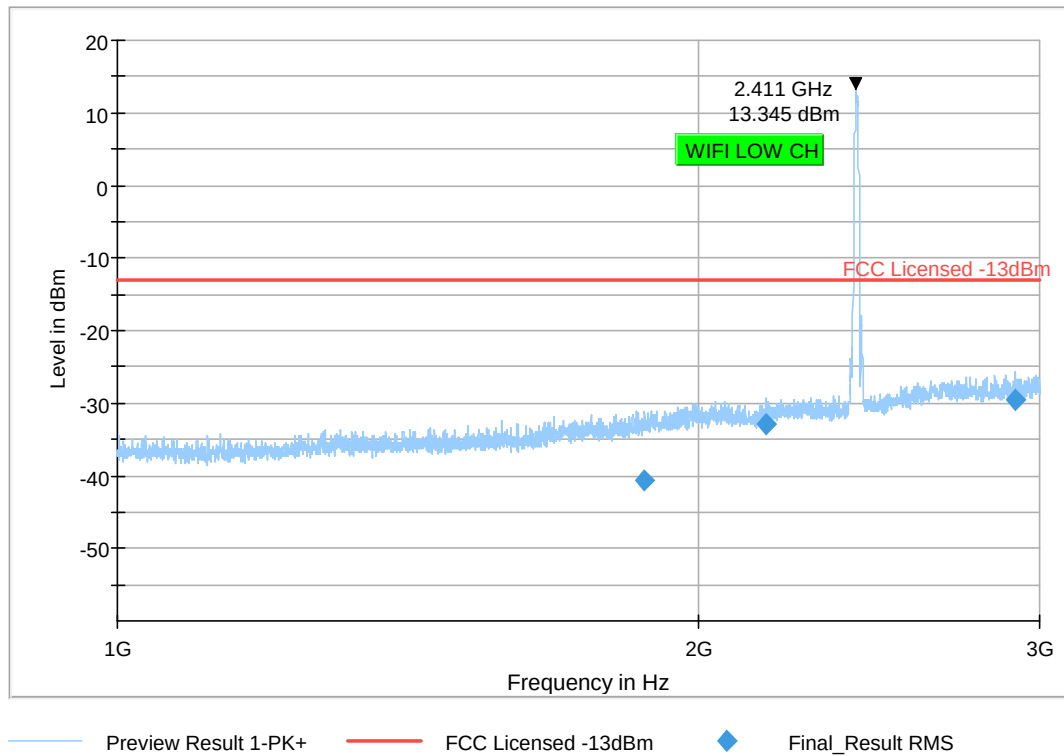
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
32.291	-60.986	-13.00	47.99	500.0	100.0	183.0	H	153.0	-73.2	0.5	0.0	-73.7	12.2
151.792	-50.724	-13.00	37.72	500.0	100.0	270.0	V	348.0	-70.5	1.2	0.0	-71.6	19.7
461.662	-52.154	-13.00	39.15	500.0	100.0	141.0	H	20.0	-72.2	2.0	0.0	-74.2	20.1
703.089	-47.868	-13.00	34.87	500.0	100.0	141.0	V	23.0	-68.6	2.5	0.0	-71.1	20.7



Plot 18: Radiated Emissions 1GHz – 3 GHz

Final_Result

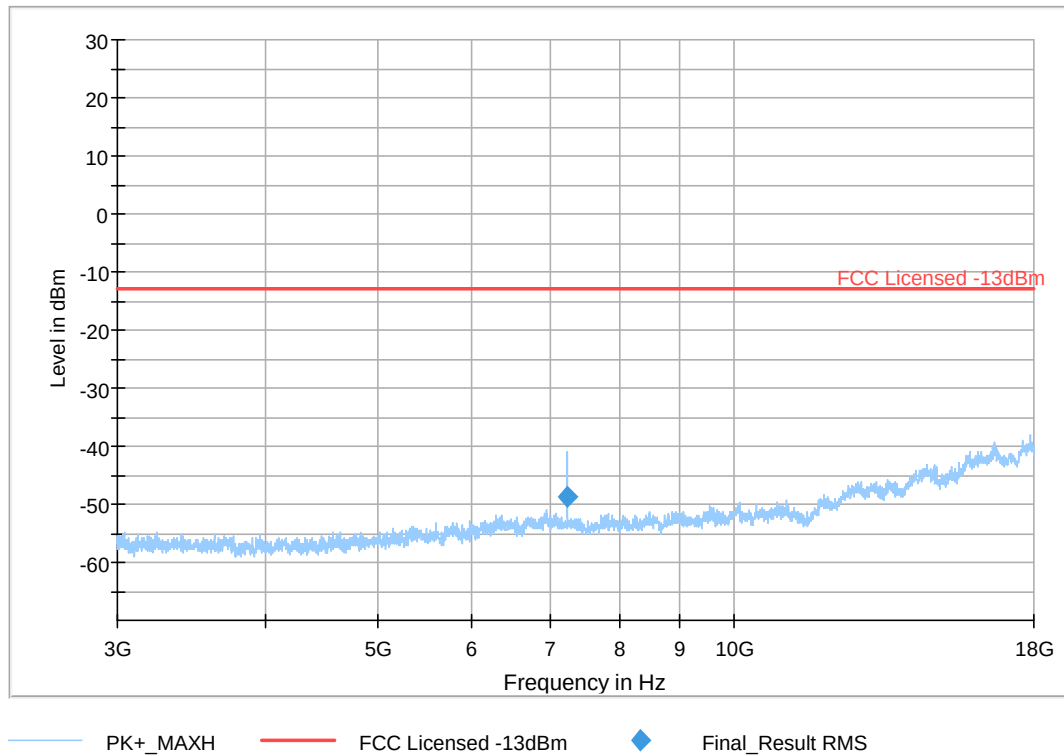
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
1874.857	-40.771	-13.00	27.77	500.0	1000.0	285.0	H	136.0	-63.4	4.8	0.0	-68.2	22.6
2164.172	-32.990	-13.00	19.99	500.0	1000.0	148.0	H	328.0	-62.4	5.3	0.0	-67.7	29.4
2912.446	-29.616	-13.00	16.62	500.0	1000.0	109.0	V	-24.0	-59.7	6.0	0.0	-65.7	30.1



Plot 19: Radiated Emissions 3 GHz – 18 GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
7235.928	-48.674	-13.00	35.67	500.0	1000.0	100.0	V	324.0	-97.4	8.9	-46.9	-59.4	48.7

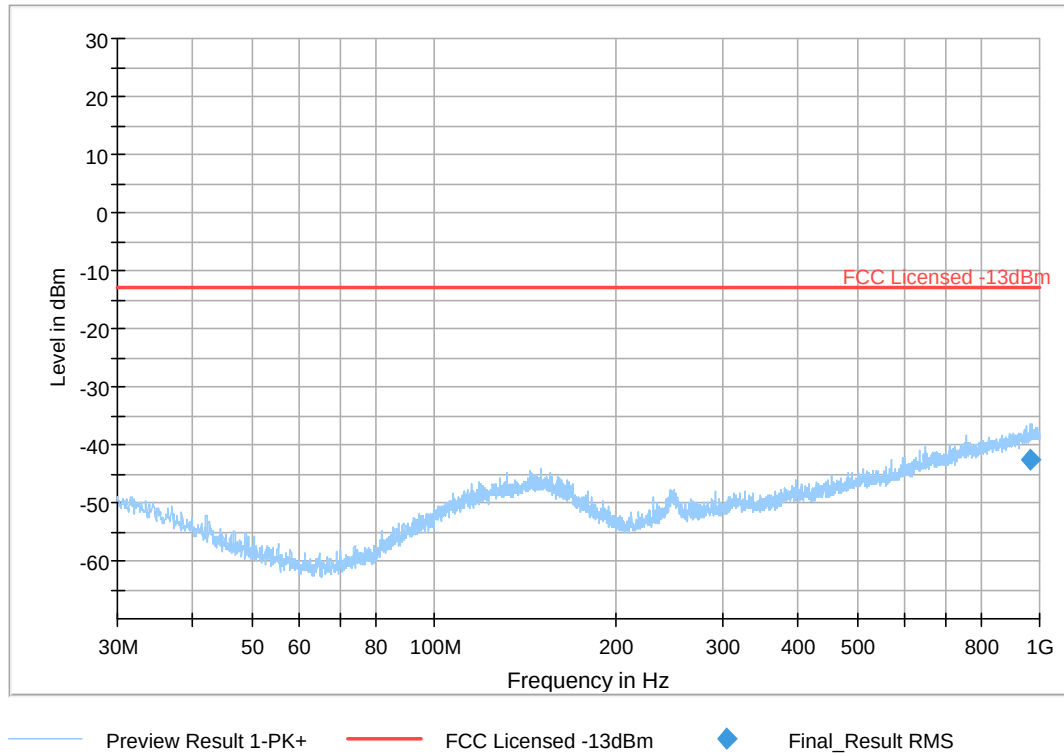


8.1.12 NR n66 mid channel + WLAN 2.4 GHz low channel

Plot 20: Radiated Emissions 30 MHz – 1GHz

Final_Result

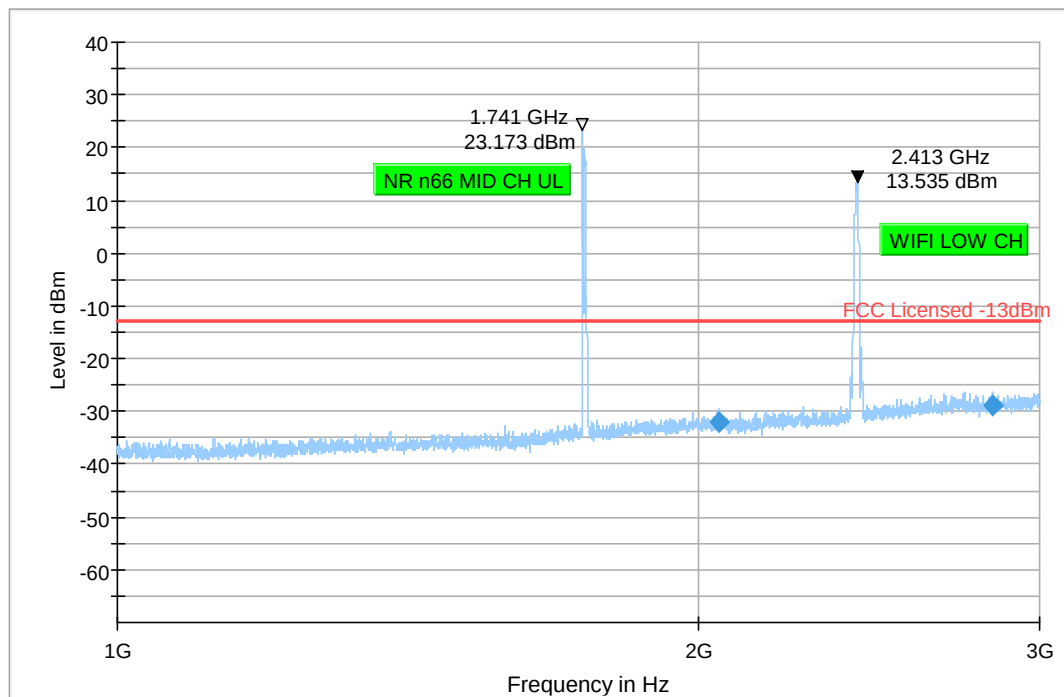
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
962.687	-42.461	-13.00	29.46	500.0	100.0	293.0	V	318.0	-65.3	2.9	0.0	-68.2	22.8



Plot 21: Radiated Emissions 1GHz – 3 GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
2049.675	-32.167	-13.00	19.17	500.0	1000.0	344.0	V	354.0	-63.3	4.6	0.0	-67.9	31.1
2836.325	-29.001	-13.00	16.00	500.0	1000.0	151.0	H	243.0	-60.8	5.3	0.0	-66.1	31.8

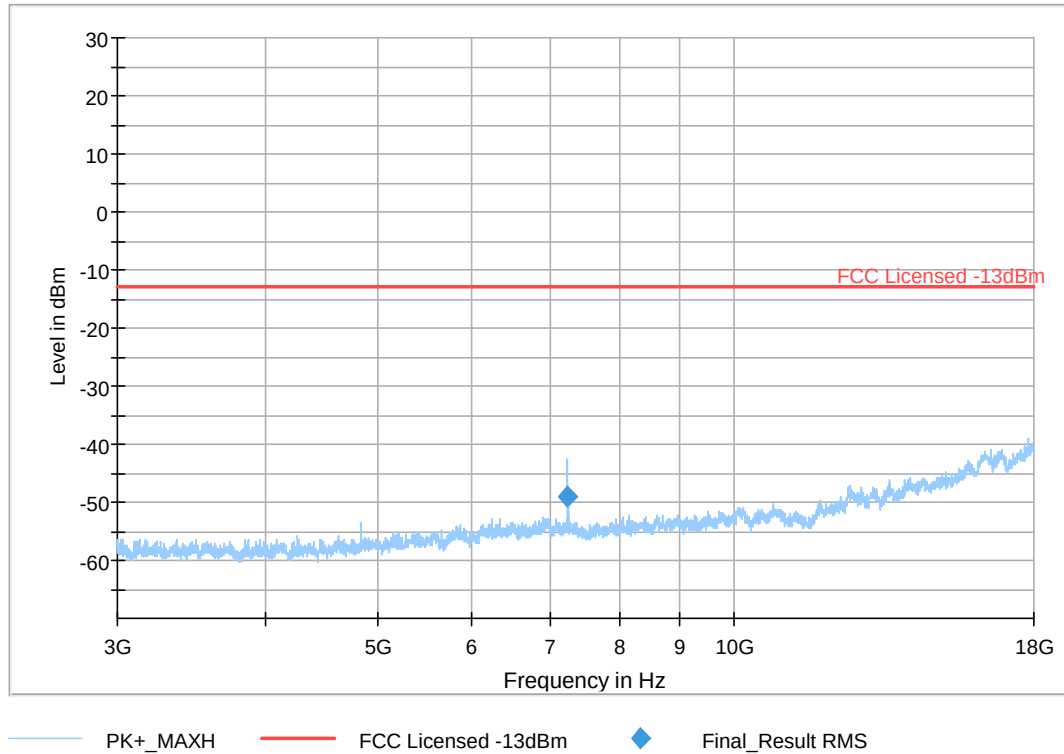


Preview Result 1-PK+ FCC Licensed -13dBm Final_Result RMS

Plot 22: Radiated Emissions 3 GHz – 18 GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
7234.543	-48.963	-13.00	35.96	500.0	1000.0	109.0	V	112.0	-98.1	8.9	-47.6	-59.4	49.1

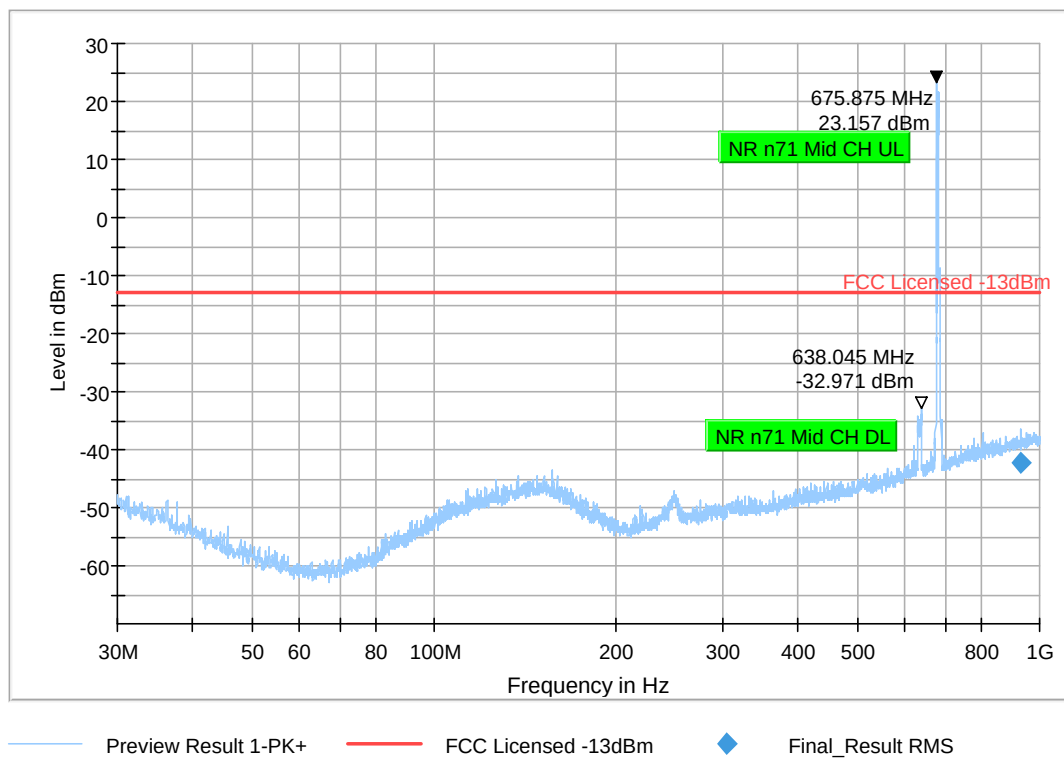


8.1.13 NR n71 mid channel + WLAN 2.4 GHz low channel

Plot 23: Radiated Emissions 30 MHz – 1GHz

Final_Result

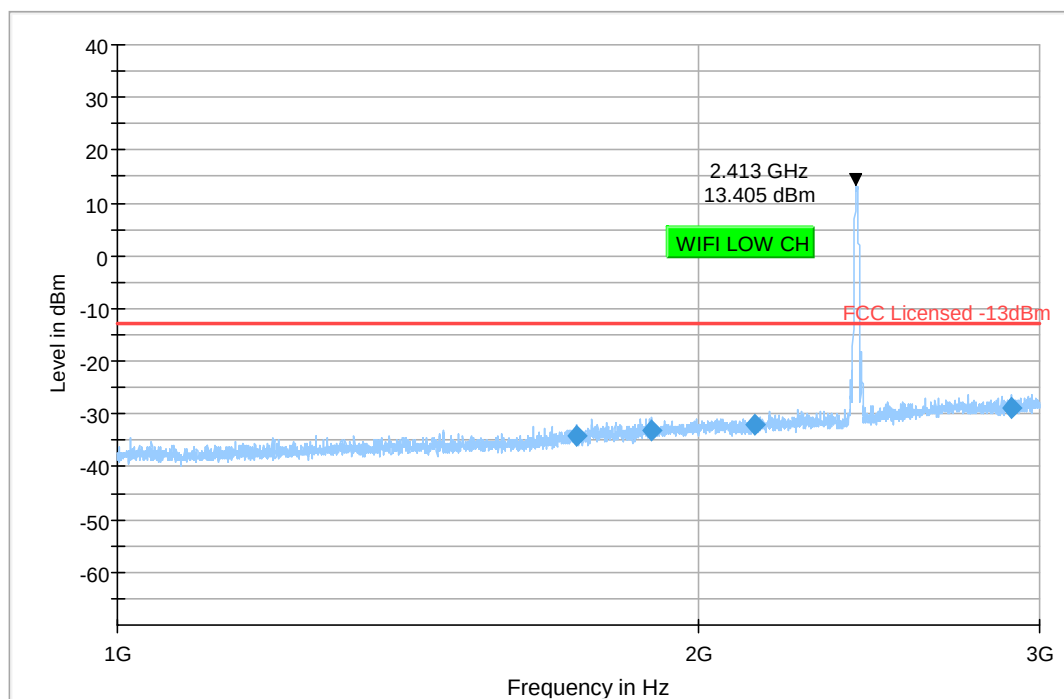
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
930.290	-42.125	-13.00	29.13	500.0	100.0	332.0	H	356.0	-65.0	2.9	0.0	-67.9	22.9



Plot 24: Radiated Emissions 1GHz – 3 GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
1727.254	-34.331	-13.00	21.33	500.0	1000.0	400.0	V	11.0	-64.8	4.1	0.0	-68.9	30.5
1891.455	-33.271	-13.00	20.27	500.0	1000.0	206.0	H	120.0	-63.6	4.5	0.0	-68.1	30.4
2136.168	-32.074	-13.00	19.07	500.0	1000.0	400.0	V	252.0	-63.0	4.7	0.0	-67.7	30.9
2903.802	-28.838	-13.00	15.84	500.0	1000.0	386.0	H	7.0	-60.4	5.4	0.0	-65.7	31.6

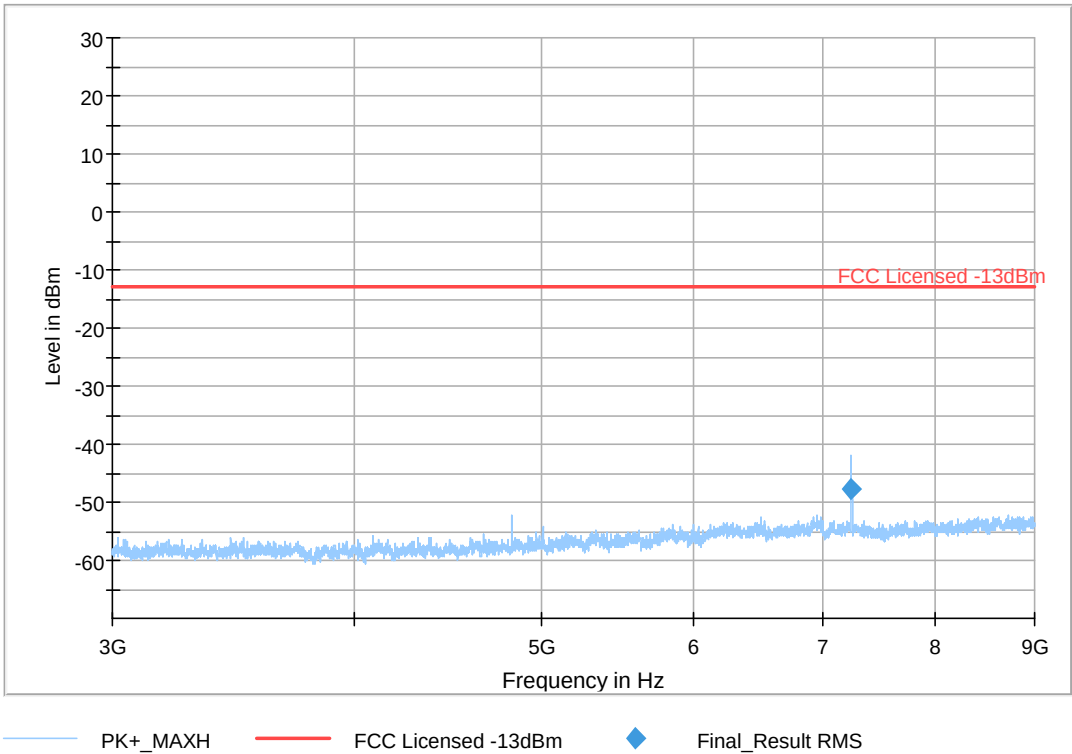


Preview Result 1-PK+ FCC Licensed -13dBm Final_Result RMS

Plot 25: Radiated Emissions 3 GHz – 9 GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
7234.830	-47.889	-13.00	34.89	500.0	1000.0	109.0	V	114.0	-98.1	8.9	-47.6	-59.4	50.2

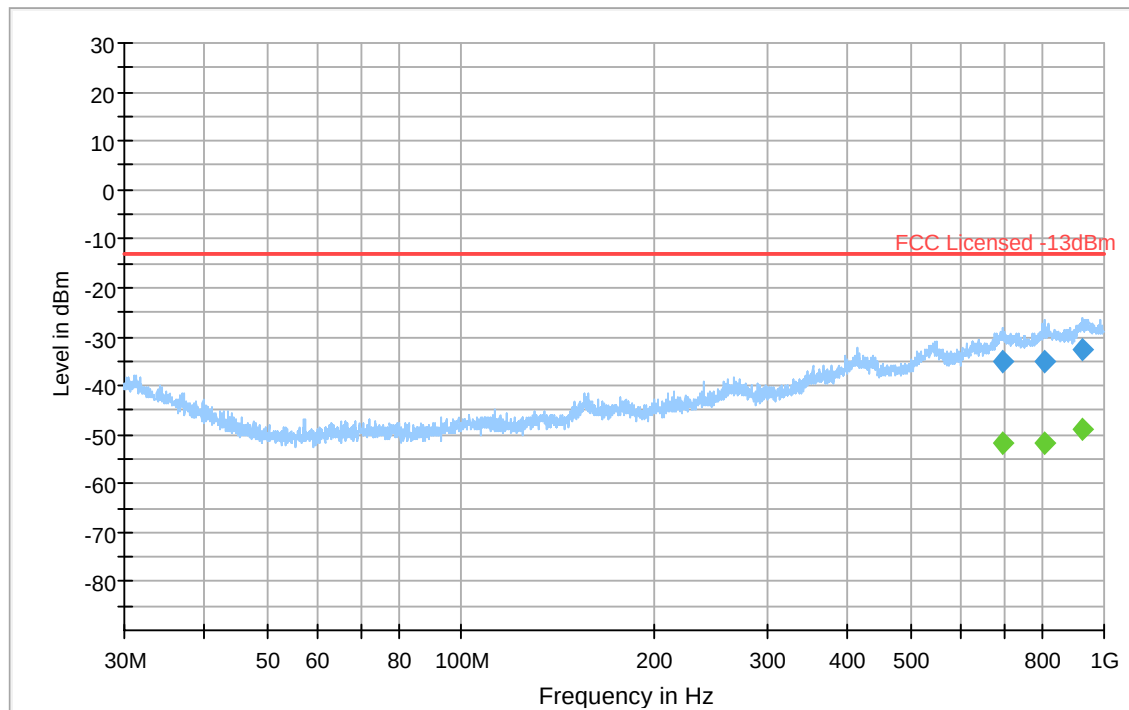


8.1.14 NR n77 MID CH + WLAN 2.4 GHz MID CH + 5GHz LOW CH

Plot 26: Radiated Emissions 30 MHz – 1GHz

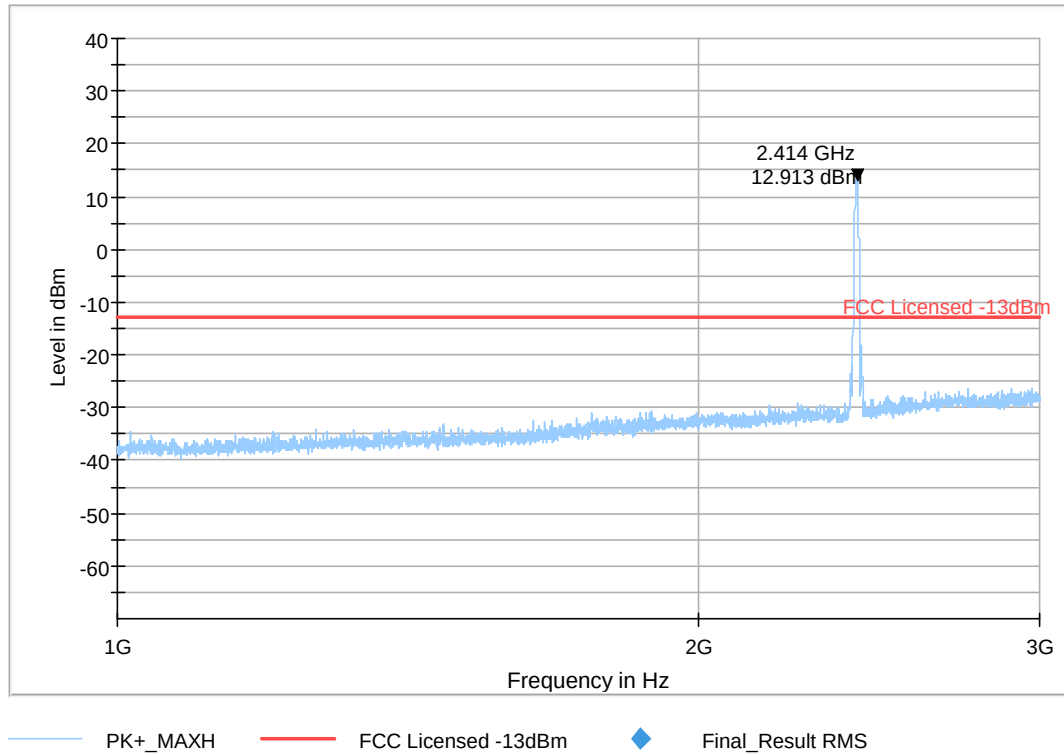
Final Result

Frequency (MHz)	MaxPeak (dBm)	RMS (dBm)	Limit (dBm)	Margin	Meas. Time (ms)	Bandwidth	Height	Pol	Azimuth	Corr. (dB)	Comment
696.75	---	-51.69	---	---	500.0	100.0	140.0	H	335.0	-44.8	
696.75	-35.18	---	-13.00	22.18	500.0	100.0	140.0	H	335.0	-44.8	
809.49	---	-51.67	---	---	500.0	100.0	275.0	V	131.0	-44.7	
809.49	-35.04	---	-13.00	22.04	500.0	100.0	275.0	V	131.0	-44.7	
924.92	---	-48.79	---	---	500.0	100.0	315.0	V	212.0	-43.4	
924.92	-32.61	---	-13.00	19.61	500.0	100.0	315.0	V	212.0	-43.4	



◆ RMS_MAXH Final_Result PK+ ◆ PK+_MAXH Final_Result RMS — FCC Licensed -13dBm

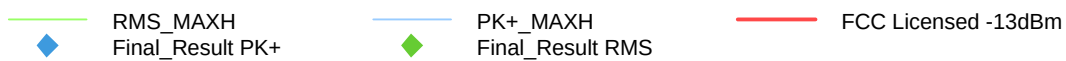
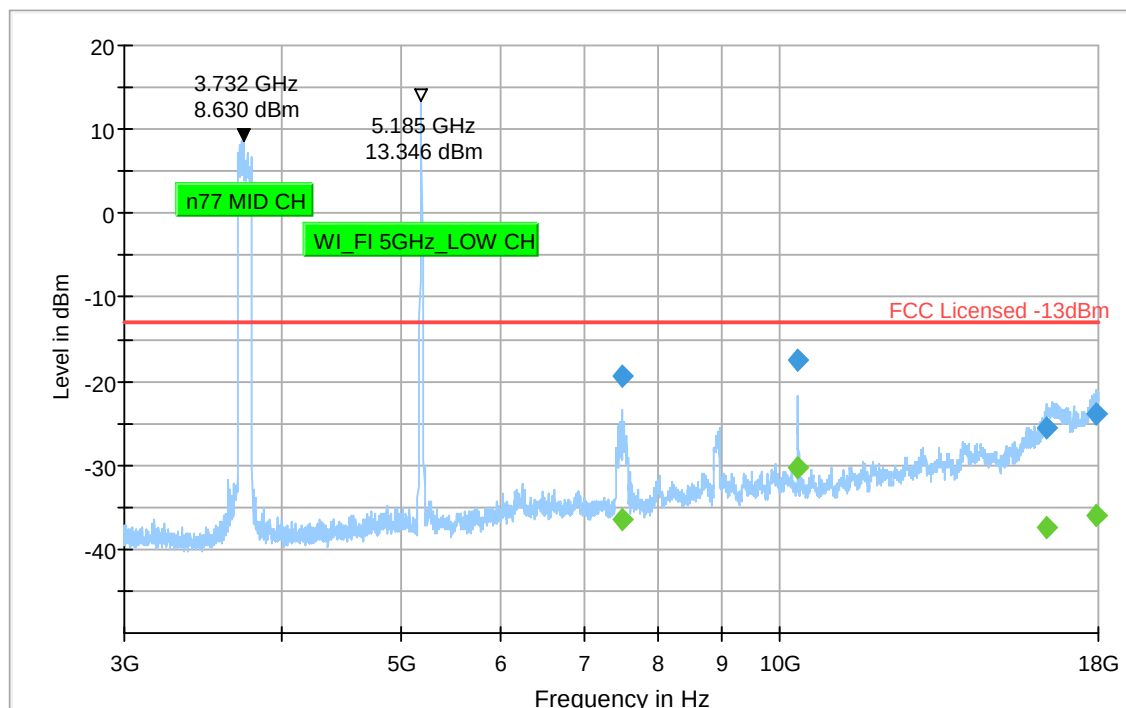
Plot 27: Radiated Emissions 1GHz – 3 GHz



Plot 28: Radiated Emissions 3 GHz – 18 GHz

Final Result

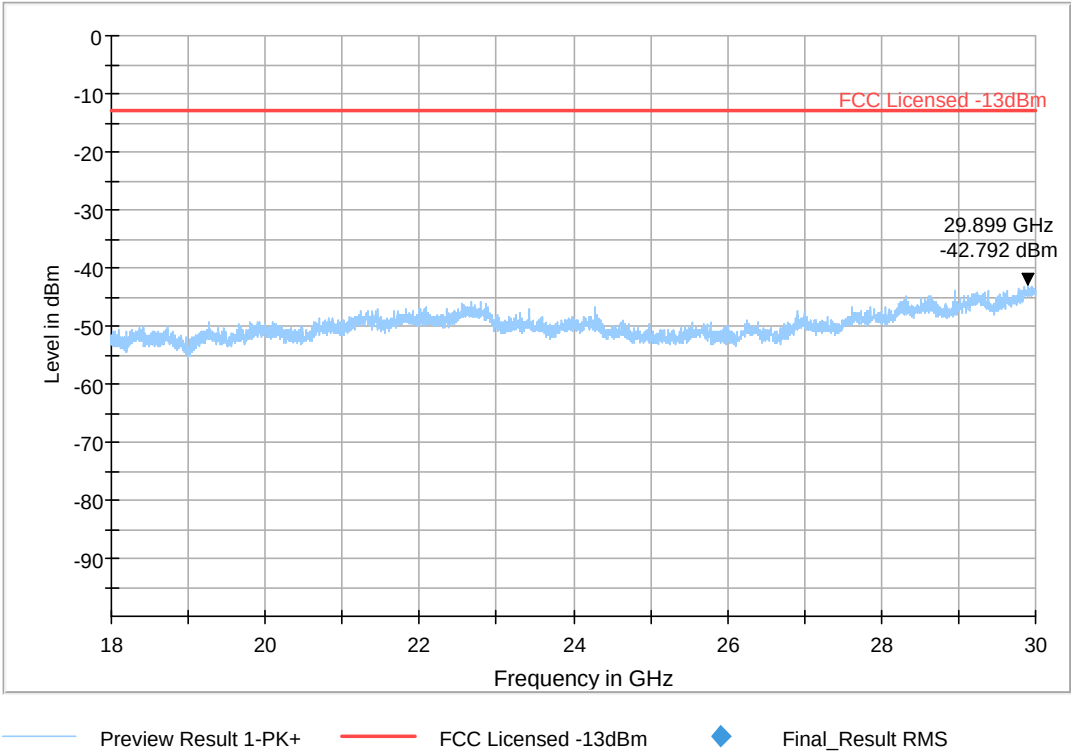
Frequency (MHz)	MaxPeak (dBm)	RMS (dBm)	Limit (dBm)	Margin	Meas. Time (ms)	Bandwidth	Height	Pol	Azimuth	Corr. (dB)	Comment
7490.50	-19.44	---	-13.00	6.44	500.0	1000.0	130.0	V	120.0	-73.5	
7490.50	---	-36.58	---	---	500.0	1000.0	130.0	V	120.0	-73.5	
10364.00	---	-30.36	---	---	500.0	1000.0	100.0	V	21.0	-70.9	
10364.00	-17.51	---	-13.00	4.51	500.0	1000.0	100.0	V	21.0	-70.9	
16358.50	-25.57	---	-13.00	12.57	500.0	1000.0	271.0	V	175.0	-62.0	
16358.50	---	-37.32	---	---	500.0	1000.0	271.0	V	175.0	-62.0	
17939.50	---	-36.08	---	---	500.0	1000.0	271.0	V	-20.0	-57.5	
17939.50	-23.86	---	-13.00	10.86	500.0	1000.0	271.0	V	-20.0	-57.5	



Plot 29: Radiated Emissions 18 GHz – 30 GHz

Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
---	---	---	---	---	---	---			---	---	---	---	---

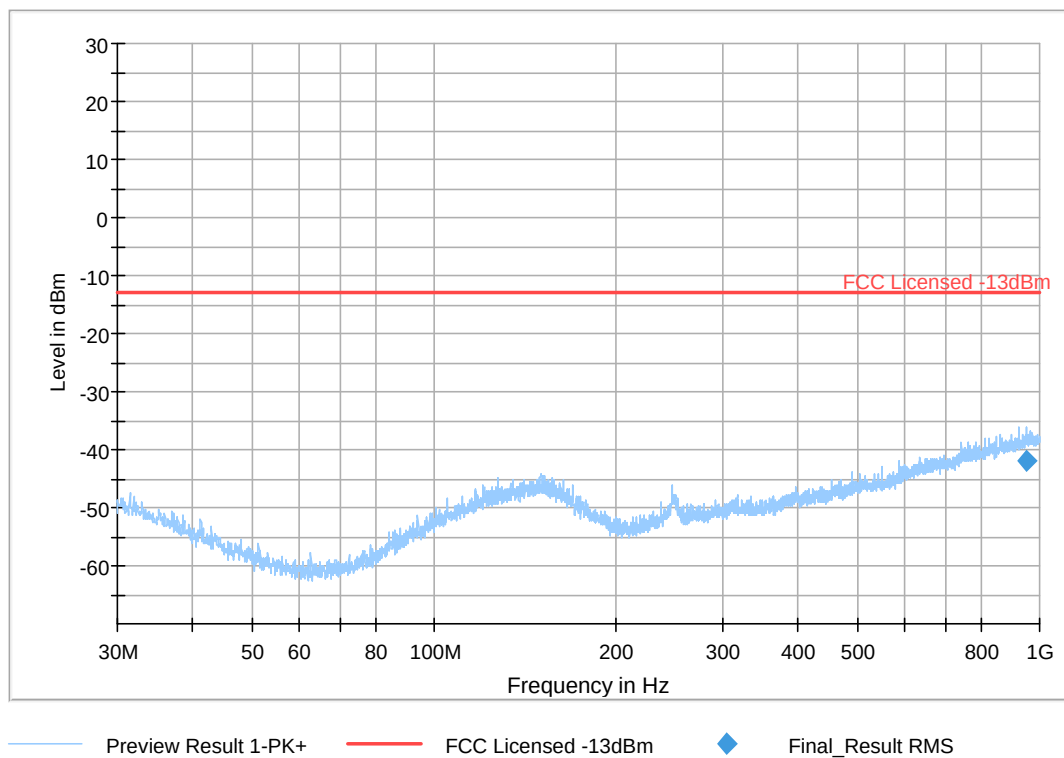


8.1.15 LTE 41 MID CH + WLAN 2.4 GHz MID CH + 5GHz LOW CH

Plot 30: Radiated Emissions 30 MHz – 1GHz

Final_Result

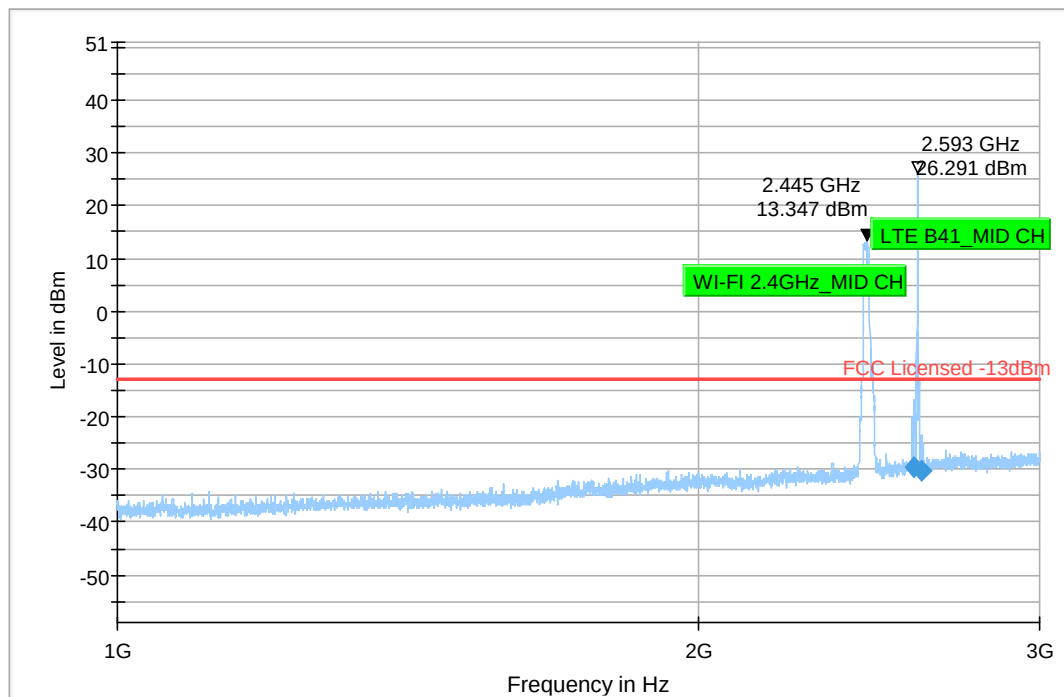
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
953.561	-41.853	-13.00	28.85	500.0	100.0	400.0	H	15.0	-64.6	2.9	0.0	-67.5	22.8



Plot 31: Radiated Emissions 1GHz – 3 GHz

Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
2580.856	-29.706	-13.00	16.71	500.0	1000.0	100.0	H	254.0	-61.5	5.1	0.0	-66.6	31.8
2607.819	-30.141	-13.00	17.14	500.0	1000.0	100.0	V	85.0	-61.4	5.0	0.0	-66.5	31.3

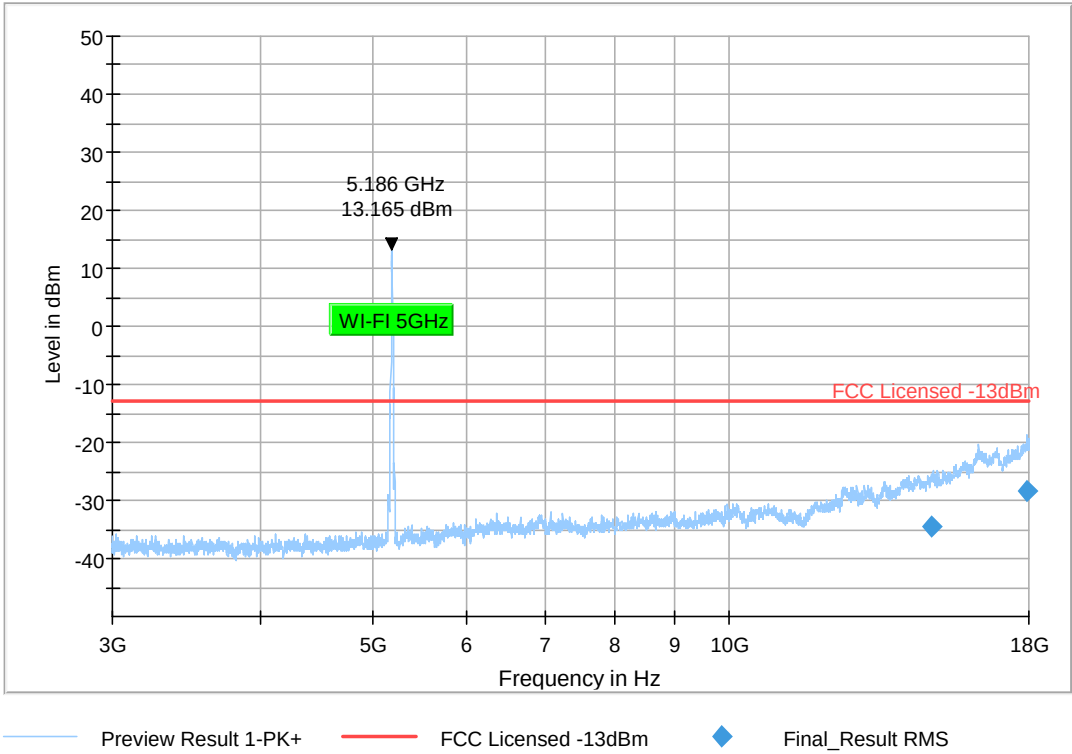


Preview Result 1-PK+ FCC Licensed -13dBm Final_Result RMS

Plot 32: Radiated Emissions 3 GHz – 18 GHz

Final_Result

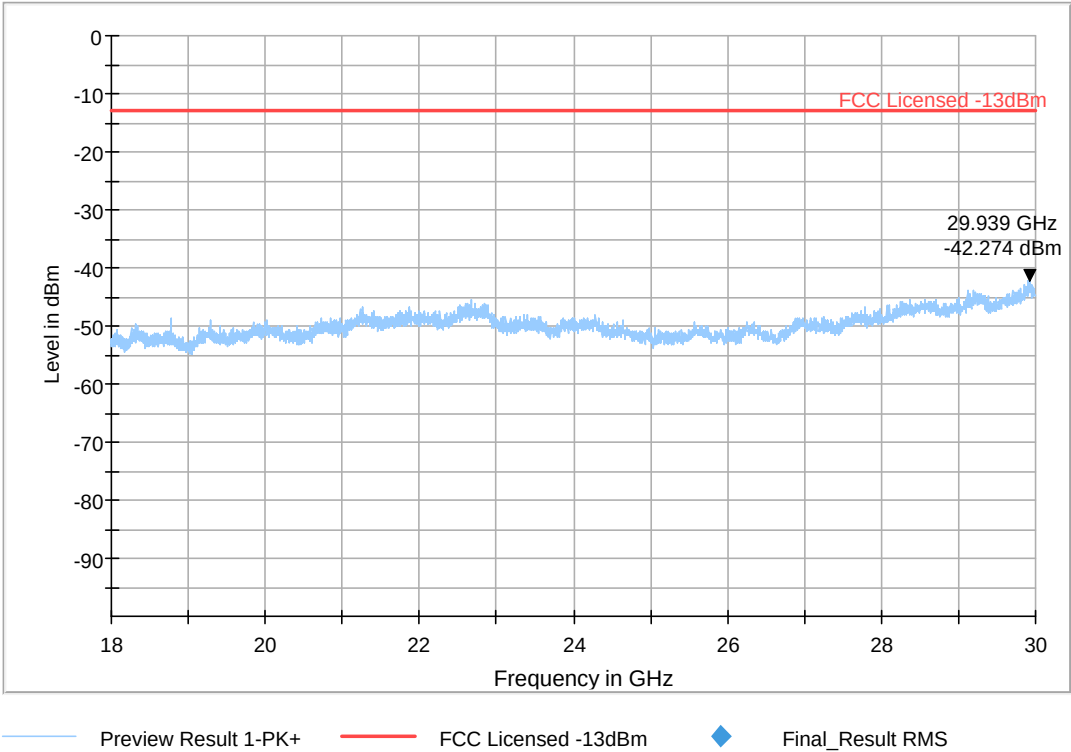
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
14904.563	-34.435	-13.00	21.43	500.0	1000.0	161.0	V	22.0	-67.7	33.2	-47.1	-53.8	33.3
17915.488	-28.444	-13.00	15.44	500.0	1000.0	193.0	H	-14.0	-60.8	35.5	-42.7	-53.6	32.4



Plot 33: Radiated Emissions 18 GHz – 26 GHz

Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
---	---	---	---	---	---	---	---	---	---	---	---	---	---



9 Test Equipment And Ancillaries Used For Testing

Equipment Type	Manufacturer	Model	Serial #	Calibration Cycle	Last Calibration Date
Active Monopole	Com-Power Corp.	AM-741R	10200112	3 Years	11/09/2023
PASSIVE LOOP ANTENNA	ETS LINDGREN	6512	00049838	3 Years	09/18/2025
AVTIVE LOOP ANTENNA (	ETS LINDGREN	6507	00161344	3 Years	08/13/2024
BILOG ANTENNA	ETS.LINDGREN	3142E	00166067	3 Years	08/01/2024
HORN ANTENNA	EMCO	3115	00035114	3 Years	09/17/2025
HORN ANTENNA	ETS.LINDGREN	3117	00215984	3 Years	09/22/2025
HORN ANTENNA	ETS LINDGREN	3116C-PA	00166821	3 Years	09/04/2025
TEST RECEIVER	R&S	ESW44	103143	2 Years	09/12/2024
Signal Analyzer	R&S	FSV40	101022	3 Years	09/30/2025
DIGITAL THERMOMETER	CONTROL COMPANY	4410,90080-03	230713059	3 Years	10/18/2023
PULSE LIMITER	R&S	ESH3-Z2	102473	3 Years	09/08/2025
LISN	FCC	FCC-LISN-50-25-2-08	08014	2 Years	09/08/2025
V-Network LISN	R&S	ESH3-Z6	102221	3 Years	09/08/2025
V-Network LISN	R&S	ESH3-Z6	836154/011	3 Years	09/08/2025
Multimeter	Fluke	115	56090717MV	3 Years	09/25/2025
Software	EMC32	Version 11.40.00	-	-	-
Equipment Type	Manufacturer	Model	Serial #	Calibration Cycle	Last Calibration Date
PASSIVE LOOP ANTENNA	ETS LINDGREN	6512	000164698	3 Years	09/05/2025
BILOG ANTENNA	A.H. SYSTEMS	BiLA2G	569	3 Years	09/08/2025
HORN ANTENNA	EMCO	3115	00035111	3 Years	09/04/2025
HORN ANTENNA	ETS LINDGREN	3117-PA	00167061	3 Years	09/04/2025
HORN ANTENNA	ETS LINDGREN	3116C-PA	00166821	3 Years	09/04/2025
ESW.EMI TEST RECEIVER	ROHDE & SCHWARZ	ESW44	101715	3 Years	04/17/2024
DIGITAL THERMOMETER	Control Company	4410,90080-03	230712972	3 Years	10/18/2023
Signal Analyzer	R&S	FSV40	101022	3 Years	09/30/2025
Multimeter	Fluke	115	56090717MV	3 Years	09/25/2025
Software	EMC32	Version 10.50.40	-	-	-
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	1201.002K50-127068-mX	3 Years	10/02/2024
Notch Filter	MICRO-TRONICS	BRC50722	G051	-	-

Note: Equipment used meets the measurement uncertainty requirements as required per applicable standards for 95% confidence levels.

Calibration due dates, unless defined specifically, falls on the last day of the month. Items indicated "N/A" for cal status either do not specifically require calibration or is internally characterized before use.

10 Test setup photos

Setup photos are included in supporting file name:

"EMC_RIVIA_100_25001_FCC22_24_27_Setup_Photos.pdf"

11 Revision History

Date	Report name	Changes to report	Prepared by
2025-12-02	EMC_RIVIA_100_25001_FCC22_24_27	Initial version	Guangcheng Huang

[illegible]

LTE	B2	1930	1960	1990	1850	1880	1910	1.4,3,5,10,15,20		3	23	yes
	B4	2110	2132	2155	1710	1732	1755	1.4,3,5,10,15,20		3	23	yes
	B5	869	881	894	824	836.5	849	1.4,3,5,10		3	23	
	B12	729	737	746	699	707	716	1.4,3,5,10		3	23	
	B13	746	751	756	777	782	787	5,10		3	23	
	B14	758	763	768	788	793	798	5,10		3	23	
	B17	734	740	746	704	710	716	5,10		3	23	
	B41	2496	2593	2690	2496	2593	2690	5,10,15,20		2 (standalone mode only)	25	yes
	B66	2110	2155	2200	1710	1745	1780	1.4,3,5,10,15,20		3	23	yes
	B71	617	634	652	663	680	698	5,10,15,20		3	23	
5G	n2	1930	1960	1990	1850	1880	1910	5,10,15,20,25,30,40	15	3	23	yes
	n5	869	881	894	824	836.5	849	5,10,15,20	15	3	23	
	n41	2496	2593	2690	2496	2593	2690	20, 30, 40, 50, 60, 70, 80, 90, 100	30	3	23	yes
	n66	2110	2155	2200	1710	1745	1780	5,10,15,20,25,30,40	15	3	23	yes
	n71	617	634	652	663	680	698	5,10,15,20	15	3	23	
	n77	3300	3750	4200	3300	3750	4200	30, 40, 50, 60, 70, 80, 90, 100	30	2 (for EN-DC)	26	yes
	n78	3300	3550	3800	3300	3550	3800	30, 40, 50, 60, 70, 80, 90, 100	30	2 (for EN-DC)	26	yes

<<< The End >>>