



FCC / ISED & Test Report

For: Astronautics Corporation of America

Brand: Astronautics Corporation of America

Marketing Name: ACA-WPEQ-256ACNRBI

Model Number: ACA-WPEQ-256ACNRBI

Product Description: AGCS structure included ACS, GCS and ACCT; Connectivity Module (CM)

FCC ID: 2AVRR-WPEQ256ACN

ISED: 25923-WPEQ256ACN

Applied Rules and Standards:

47 CFR Parts 22, 24, 27, 90

RSS: 130 Issue 2, 132 Issue 4, 133 Issue 7, 139 Issue 4, 199 Issue 4

REPORT #: EMC_ASTRO_072_25001_FCC_22_24_27_90

DATE: 10/30/2025



IC recognized #
3462B

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1 Assessment

The following device as further described in section 3 of this report was evaluated against the applicable criteria specified in the Code of Federal Regulations Title 47 parts 22, 24, 27, 90 and Industry Canada Standards RSS-GEN issue 5, RSS-130 issue 2, RSS-132 issue 4, RSS-133 issue 7, RSS-139 issue 4 and RSS-199 issue 4.

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

Company Name	Product Description	Model No.
Astronautics Corporation of America	AGCS structure included ACS, GCS and ACCT; Connectivity Module (CM)	ACA-WPEQ-256ACNRBI

Report Authorized by:

Responsible for testing Laboratory:

2025-10-30	Compliance	Alvin, Ilarina (Director of EMC Services)	Alvin ILARINA Digitally signed by Alvin ILARINA Date: 2025.10.31 14:32:50 -07'00'
Date	Section	Name	Signature

Responsible for the Report:

2025-10-30	Compliance	Art Thammanavarat (Lead Engineer)	Art Thammanavarat Digitally signed by: Art Thammanavarat DN: CN = Art Thammanavarat email = art.thammanavarat@cetecom.com C = AD Date: 2025.10.30 18:24:02 -07'00'
Date	Section	Name	Signature

The test results of this test report relate exclusively to the test item specified in Section3.

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 Road
City/Zip Code	Milpitas, CA 95035
Country	USA
Telephone:	+1 (408) 586 6200
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EMC Lab Manager:	Alvin, Ilarina
Responsible Project Leader:	Jayalakshmi, Sekar

2.2 Identification of the Client

Applicant's Name:	Astronautics Corporation of America
Street Address:	135 W Forest Hill Ave
City/Zip Code	Oak Creek, WI 53154-2901
Country	USA

2.3 Identification of the Manufacturer

Manufacturer's Name:	Same as Client
Manufacturers Address:	
City/Zip Code	
Country	

3 Equipment Under Test (EUT)

3.1 EUT Specifications

Model No	ACA-WPEQ-256ACNRBI
HW Version	ACA-WPEQ-256ACNRBI
SW Version	N/A
FCC-ID	2AVRR-WPEQ256ACN
ISED:	25923-WPEQ256ACN
HVIN:	ACA-WPEQ-256ACNRBI
PMN:	ACA-WPEQ-256ACNRBI
Product Description	AGCS structure included ACS, GCS and ACCT; Connectivity Module (CM)
Transceiver Technology / Type(s) of Modulation	Cellular Modules Company Name: Sierra Wireless Inc Model Number: EM75S FCC: N7NEM7455 ISED: 2417C-EM7455 Wireless Technologies W-CDMA (UMTS) FDD: II, IV, V LTE FDD/TDD Band: 2,4,5,7,12,26,29,30,41
Frequency Range	FCC BANDS UMTS Band II: 1852.4 – 1907.6 MHz UMTS Band IV: 1712.4 – 1752.6 MHz UMTS Band V: 826.4 – 846.6 MHz LTE Band 2: 1850 – 1910 MHz LTE Band 4: 1710 – 1755 MHz LTE Band 5: 824 – 849 MHz LTE Band 12: 699 – 716 MHz LTE Band 13: 777 – 787 MHz LTE Band 26: 814 – 849 MHz LTE Band 41: 2496 – 2690 MHz
Max. declared antenna gain	Name: TAOGLAS Type: Flexible Wide Band 5G/4G Antenna 600 – 6000MHz Part No: FXUB66.07.0150C Peak Gain: • LTE Band 2 / UMTS Band II: 2.0 dBi • LTE Band 4 / UMTS Band IV: 2.0 dBi • LTE Band 5 / UMTS Band V: 0.2 dBi • LTE Band 12 / 13: 0.2 dBi • LTE Band 7 / 14: 2.6 dBi
Other Radios included in the device:	WLAN, WI-FI 2.4 GHz & WI-FI 5GHz
Power Supply/ Rated Operating Voltage Range	3.135V (Low) / 3.3V (Nominal) / 3.465V (Max)

Operating Temperature Range	-40°C to +85°C
Sample Revision	☒ Production ☐ Pre-Production
Note: The information of the EUT specifications in the table above is provided by the client.	

3.2 EUT Sample details

EUT #	IMEI	HW Version	SW Version	Notes/Comments
1	359073069901902	ACA-WPEQ-256ACNRBI	N/A	Radiated and AC Conducted Emissions

3.3 Accessory Equipment (AE) details

AE #	Type	Model	Manufacturer	Serial Number	Comments
1	Laptop	P135G	Dell	12243628947	Support laptop provided by Cetecom to exercise device.

3.4 Test Sample Configuration

EUT Set-up #	Combination of AE used for test set up	Comments
1	EUT#1 + AE#1	The radio of the EUT was configured to a fixed channel transmission with highest possible duty cycle using software that is not available to the end user. The internal antenna was connected.

3.5 Mode of Operation details

Mode of Operation	Description of Operating modes	Additional Information
Op. 1	Cellular and WiFi 802.11b Co-Transmission	Cellular was tested on Low, Mid, High Channels at maximum power in a co-transmission mode WiFi radio was configured to 802.11b using special commands through command window provided by the client that will not be available to the end user

3.6 Justification for Worst Case Mode of Operation

During the testing process the EUT was tested with transmitter sets on low, mid and high channels at the maximum power simultaneous transmission with WiFi radio 802.11b mode, which is the worst case of the radios supported, based on the maximum average conducted output power from the reports.

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.

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 Code of Federal Regulations Title 47 parts 22, 24, 27 and ISED Standards RSS-132 issue 3, RSS-133 issue 7, RSS-139 issue 4 and RSS-199 Issue 4.

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 Lab 1	EMC Lab 2
Conducted emissions (mains port)	150 kHz – 30 MHz	2.47 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:

9/18/2025 - 9/30/2025

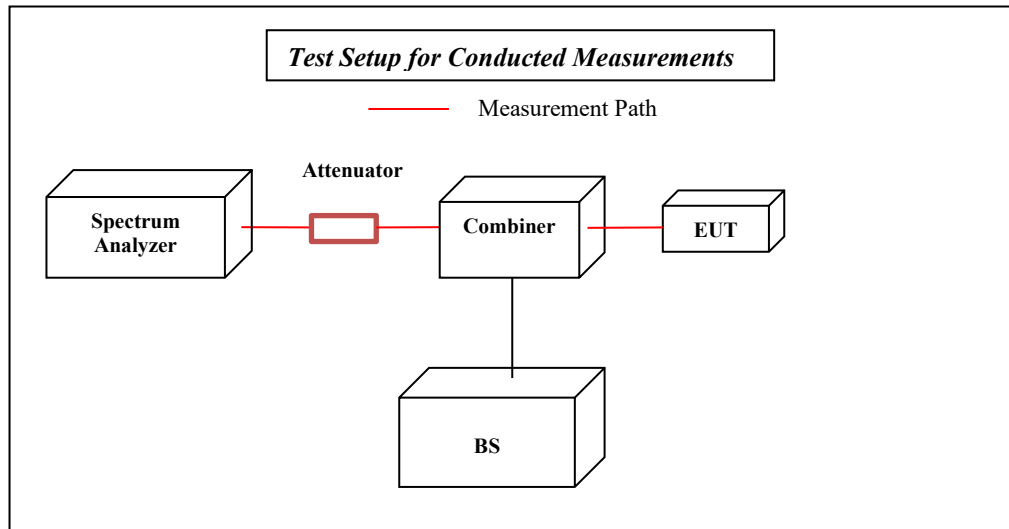
5.3 Decision Rule:

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

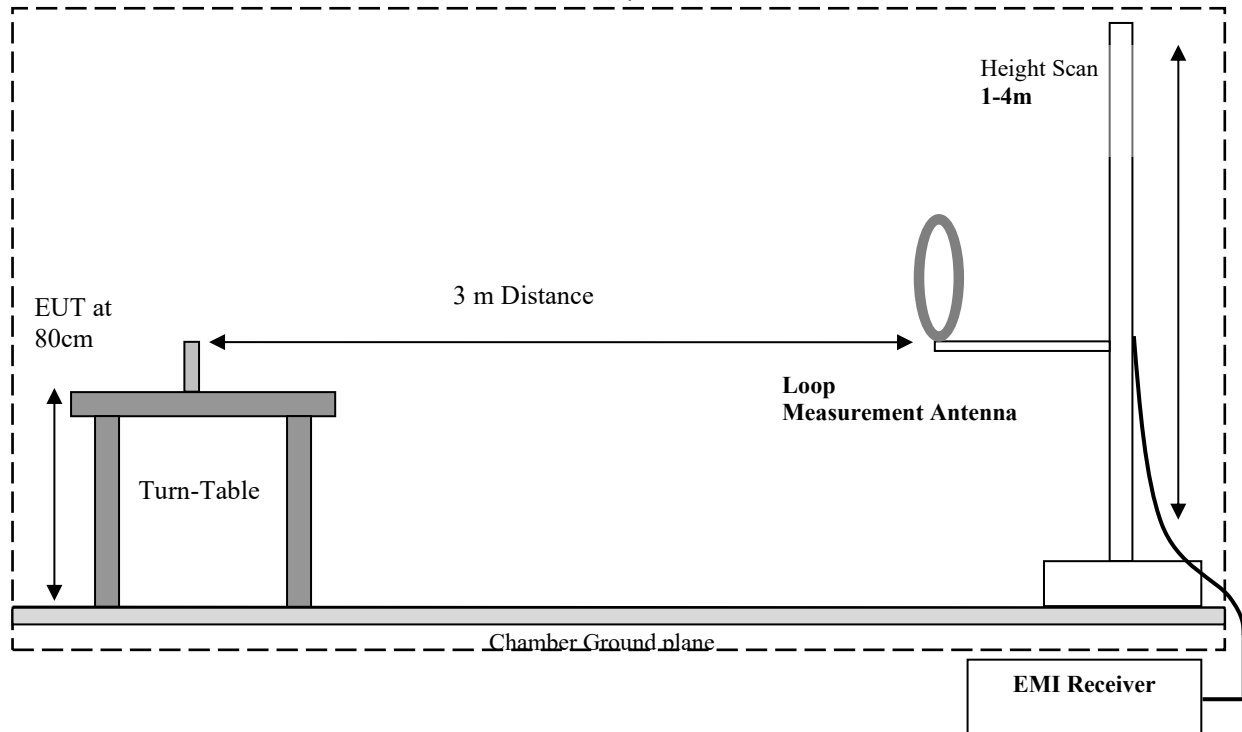
Testing is performed according to the guidelines provided in FCC publication (KDB) 971168 D01 v03r01 – “Measurement Guidance for Certification of Licensed Digital Transmitters” and according to relevant parts of ANSI/TIA-603-D-2010 as detailed below.



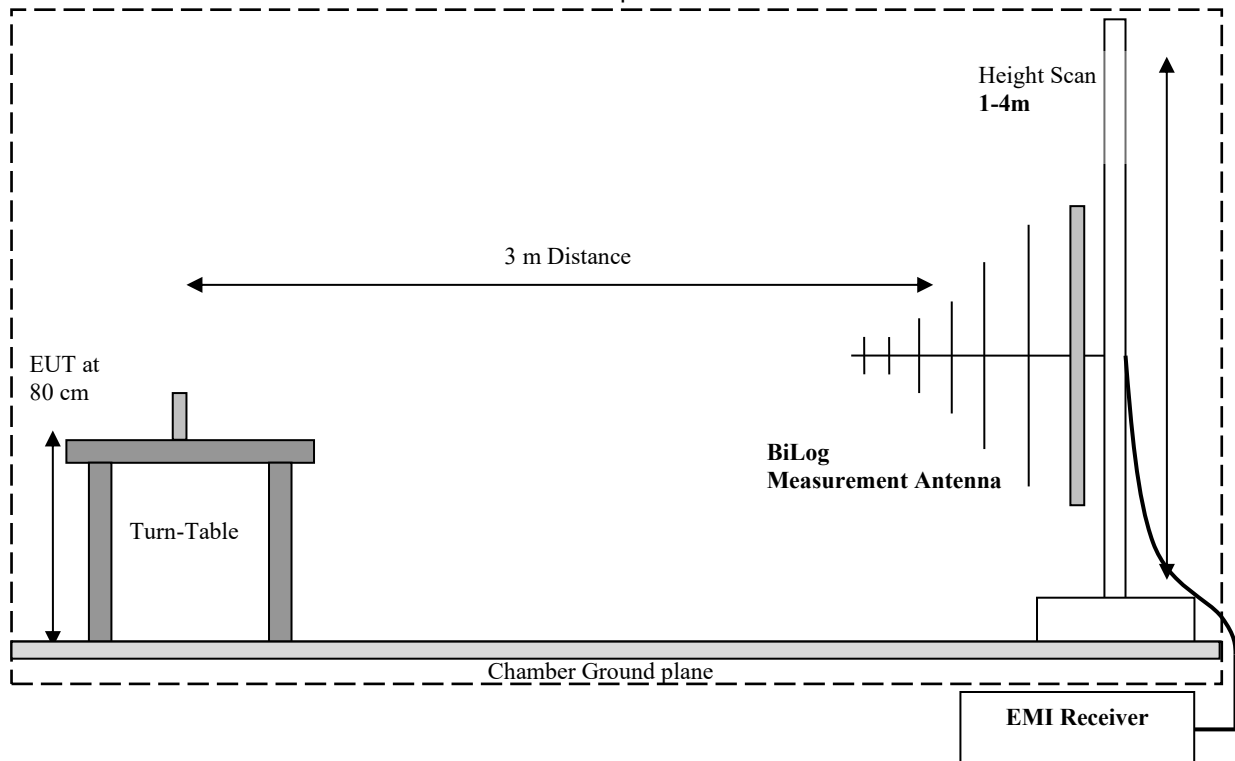
6.1 Radiated Measurement

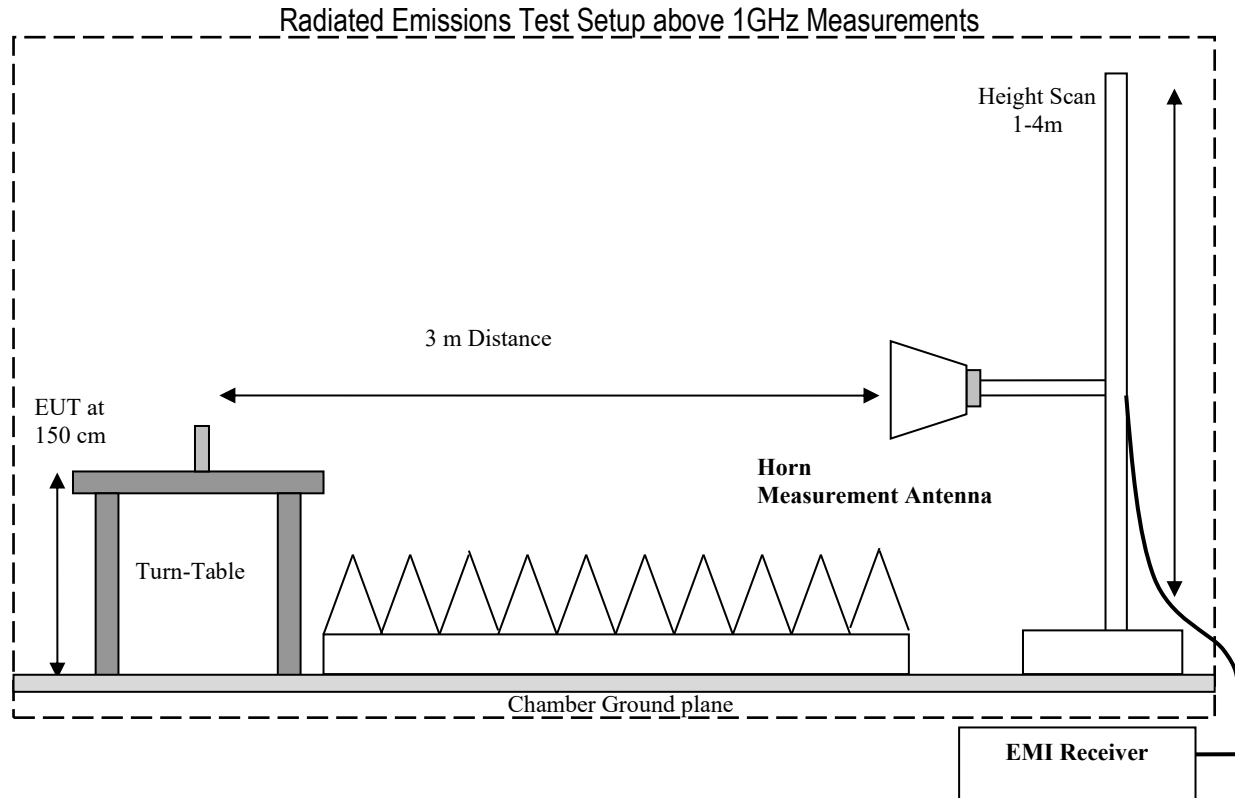
- The exploratory measurement is accomplished by running a matrix of 16 sweeps over the required frequency range with R&S Test-SW EMC32 for 4 positions of the turntable, two orthogonal positions of the EUT and both antenna polarizations. This procedure exceeds the requirement of the above standards to 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 Sierra Wireless Inc. EM7455 (FCC ID: N7NEM7455, ISED: 2417C-EM7455)

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 Sierra Wireless Inc. EM7455 (FCC ID: N7NEM7455, ISED: 2417C-EM7455)

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 Sierra Wireless Inc. EM7455 (FCC ID: N7NEM7455, ISED: 2417C-EM7455)

8 Test Result Data

8.1 ERP/EIRP

FCC Rule Parts	Band	Frequency Range	Power Conducted Note 1	Power Conducted	Gain	EIRP Note 2	ERP Note 2	Limit EIRP	Limit ERP
		(MHz)	(dBm)	(W)	(dBi)	(W)	(W)	(W)	(W)
22H	LTE 5	824 – 849	23.98	0.250	0.20	0.262	0.160	-	7
22H	LTE 26	814 – 849	23.98	0.250	0.20	0.262	0.160	-	7
22H	UMTS V	824 - 849	23.51	0.224	0.20	0.235	0.143	-	7
24E	LTE 2	1850 – 1910	23.99	0.251	2.00	0.397	0.242	2	-
24E	UMTS II	1850 – 1910	23.64	0.231	2.00	0.366	0.223	2	-
27	LTE 4	1710 – 1755	23.99	0.251	2.00	0.397	0.242	1	-
27	UMTS IV	1710 – 1755	23.45	0.221	2.00	0.351	0.214	1	-
27	LTE 7	2500 – 2570	22.93	0.196	2.60	0.357	0.218	1	-
27	LTE 12	699 – 716	23.95	0.248	0.20	0.260	0.159	-	3
27	LTE 13	777 – 787	23.72	0.236	0.20	0.247	0.150	-	3
27	LTE 41	2496 – 2690	22.95	0.197	2.60	0.359	0.219	1	-
90	LTE 26	814 – 849	23.98	0.250	0.20	0.262	0.160	-	7

Note 1: Power Conducted (dBm) leveraged from test report "B15W50341-FCC-RF_Rev1" prepared by China Telecommunication Technology Labs. of cellular module Sierra Wireless Inc. EM7455 (FCC ID: N7NEM7455, ISED: 2417C-EM7455)

Note 2: ERP/EIRP are based on calculations from Power Conducted by adding the declared maximum gain of the utilized cellular antenna per operational description.

8.2 Radiated Spurious Emissions

8.2.1 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 and 27

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

8.2.2 Limits:

- 8.2.2.1 FCC Part 22.917 (a); FCC Part 24.238 (a); FCC Part 27.53 (h) FCC Part 27.53 (a); FCC Part 90.699(a)
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.

For Band 7 & 41, the minimum permissible attenuation level of any spurious emission is at least $55 + \log_{10}(P)$ [Watts] on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section.

- 8.2.2.2 RSS-132 Part 5.5; RSS-133 Part 5.6; RSS-139 Part 5.6; RSS-199 Part 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.

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

8.2.3 Test conditions and setup:

Ambient Temperature (°C)	EUT Set-Up #	EUT operating mode	Power Input
22.0	1	Op. 1	120 Vac

8.2.4 Measurement result:

Plot #	Cellular Uplink Channel	EUT Operating Mode	Scan Frequency	Lowest Margin Emission (dBm)	Limit (dBm)	Result
1-4	Low	LTE B2 + Wi-Fi 802.11b	30 MHz – 22 GHz	-30.505	-13	Pass
5-8	Mid		30 MHz – 22 GHz		-13	Pass
9-12	High		30 MHz – 22 GHz		-13	Pass
13-15	Low	LTE B4 + Wi-Fi 802.11b	30 MHz – 18 GHz	-50.727	-13	Pass
16-18	Mid		30 MHz – 18 GHz		-13	Pass
19-21	High		30 MHz – 18 GHz		-13	Pass
22-24	Low	LTE B5 + Wi-Fi 802.11b	30 MHz – 9 GHz	-30.197	-13	Pass
25-27	Mid		30 MHz – 9 GHz		-13	Pass
28-30	High		30 MHz – 9 GHz		-13	Pass
31-34	Low	LTE B7 + Wi-Fi 802.11b	30 MHz – 26 GHz	-50.718	-25	Pass
35-38	Mid		30 MHz – 26 GHz		-25	Pass
39-42	High		30 MHz – 26 GHz		-25	Pass
43-45	Low	LTE B12 + Wi-Fi 802.11b	30 MHz – 18 GHz	-50.590	-13	Pass
46-48	Mid		30 MHz – 18 GHz		-13	Pass
49-51	High		30 MHz – 18 GHz		-13	Pass
52-54	Low	LTE B13 + Wi-Fi 802.11b	30 MHz – 18 GHz	-32.870	-13	Pass
55-57	Mid		30 MHz – 18 GHz		-13	Pass
58-60	High		30 MHz – 18 GHz		-13	Pass
61-63	Low	LTE B26 + Wi-Fi 802.11b	30 MHz – 9 GHz	-30.526	-13	Pass
64-66	Mid		30 MHz – 9 GHz		-13	Pass
67-69	High		30 MHz – 9 GHz		-13	Pass
70-72	Low	LTE B26 + Wi-Fi 802.11b	30 MHz – 18 GHz	-30.352	-13	Pass
73-75	Mid		30 MHz – 18 GHz		-13	Pass
76-78	High		30 MHz – 18 GHz		-13	Pass
79-82	Low	LTE B41 + Wi-Fi 802.11b	30 MHz – 26 GHz	-45.405	-25	Pass
83-86	Mid		30 MHz – 26 GHz		-25	Pass
87-90	High		30 MHz – 26 GHz		-25	Pass
91-94	Low	W-CDMA Band II + Wi-Fi 802.11b	30 MHz – 22 GHz	-51.275	-13	Pass
95-98	Mid		30 MHz – 22 GHz		-13	Pass
99-102	High		30 MHz – 22 GHz		-13	Pass
103-105	Low	W-CDMA Band IV + Wi-Fi 802.11b	30 MHz – 18 GHz	-50.270	-13	Pass
106-108	Mid		30 MHz – 18 GHz		-13	Pass
109-111	High		30 MHz – 18 GHz		-13	Pass
112-114	Low	W-CDMA Band V + Wi-Fi 802.11b	30 MHz – 9 GHz	-27.498	-13	Pass
115-117	Mid		30 MHz – 9 GHz		-13	Pass
118-120	High		30 MHz – 9 GHz		-13	Pass

Note: Co-transmission was used in the worst-case scenario, based on the frequency occupancy of the two radios closest adjacent.

8.2.5 Measurement plots:

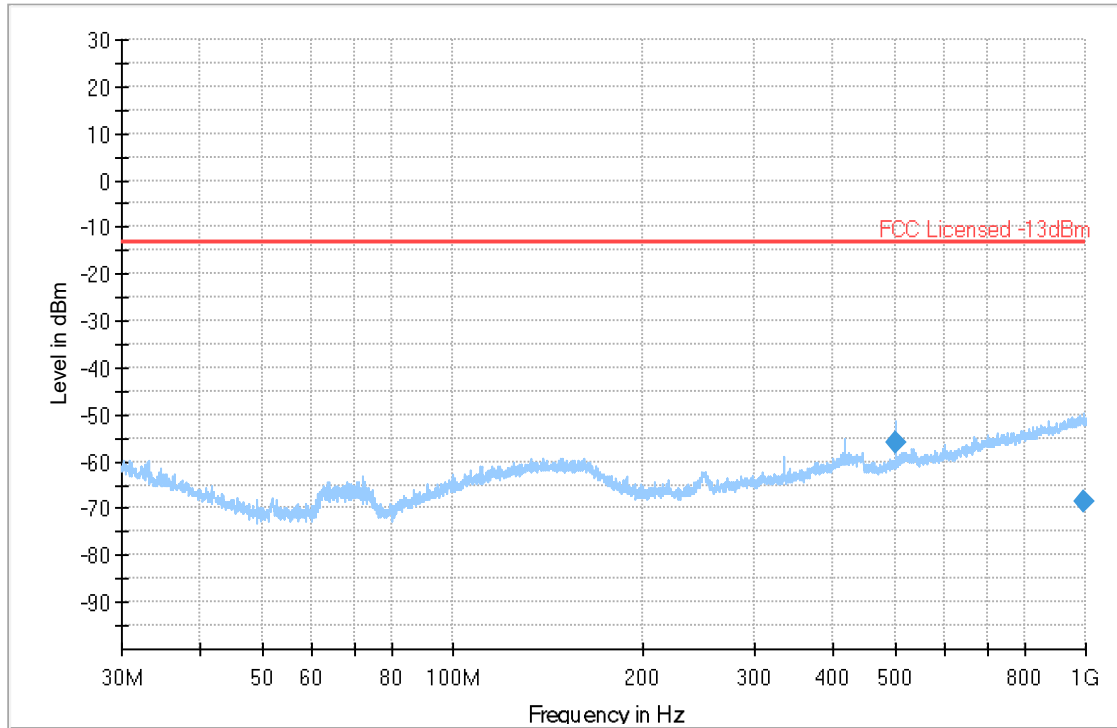
8.2.5.1 LTE Band 2

Plot # 1 Radiated Emissions: 30 MHz – 1GHz

Channel: Low

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)
500.000	-55.947	-13.00	42.95	500.0	120.0	143.0	H	29.0	-71.4	2.1	0.0	-73.5	15.4
995.458	-68.567	-13.00	55.57	500.0	120.0	168.0	V	73.0	-64.9	2.9	0.0	-67.8	-3.7



Preview Result 1-PK+

FCC Licensed -13dBm



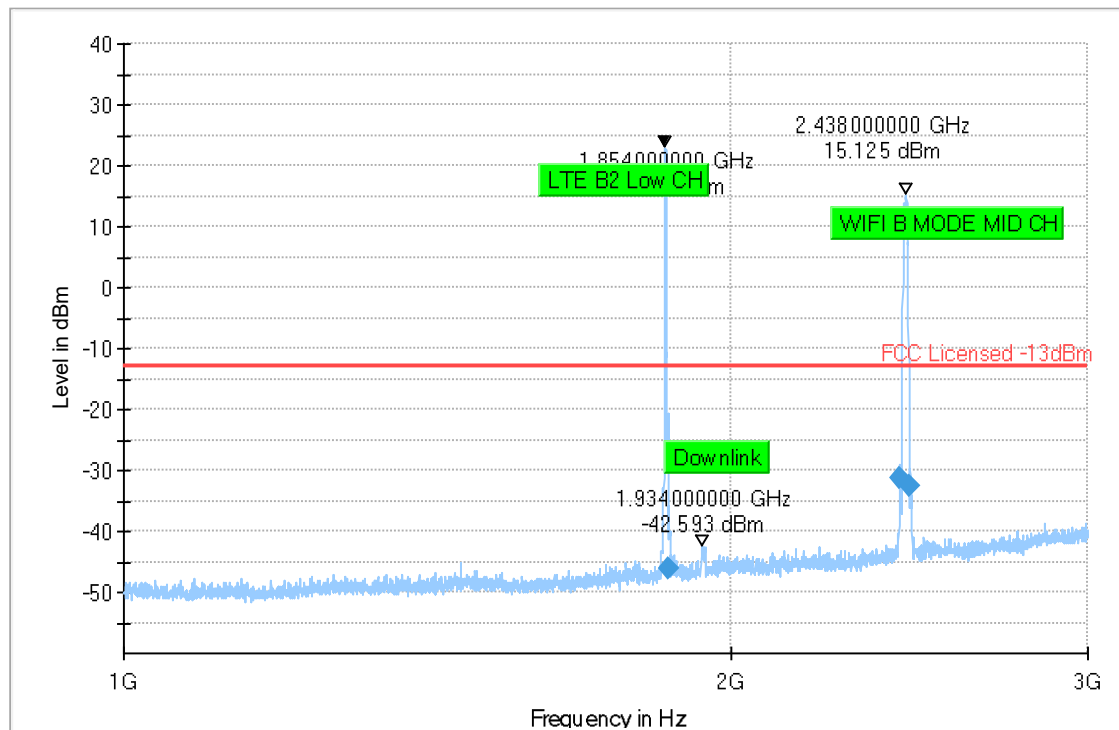
Final_Result RMS

Plot # 2 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low

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)
1858.750	-46.097	-13.00	33.10	500.0	1000.0	213.0	H	29.0	-64.0	4.4	0.0	-68.4	17.9
2422.250	-31.181	-13.00	18.18	500.0	1000.0	249.0	H	6.0	-62.3	4.8	0.0	-67.1	31.1
2450.865	-32.422	-13.00	19.42	500.0	1000.0	265.0	H	24.0	-62.0	5.0	0.0	-67.0	29.6



Preview Result 1-PK+

FCC Licensed -13dBm

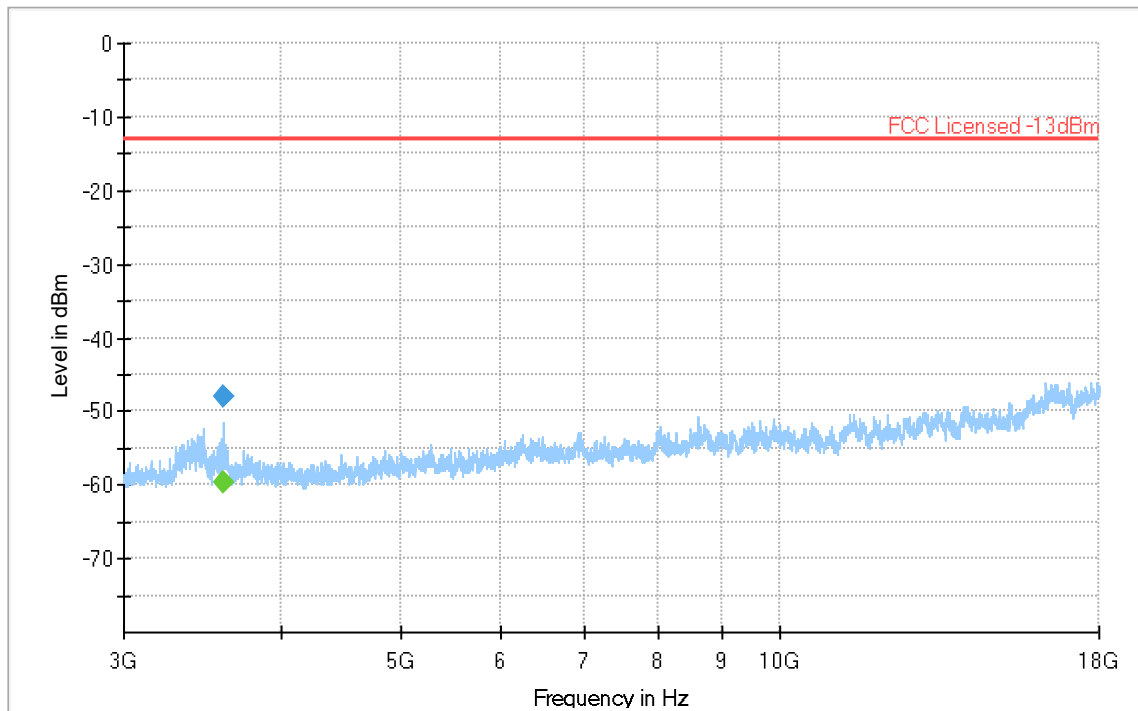
Final_Result RMS

Plot # 3 Radiated Emissions: 3 GHz – 18 GHz

Channel: Low

Final Result

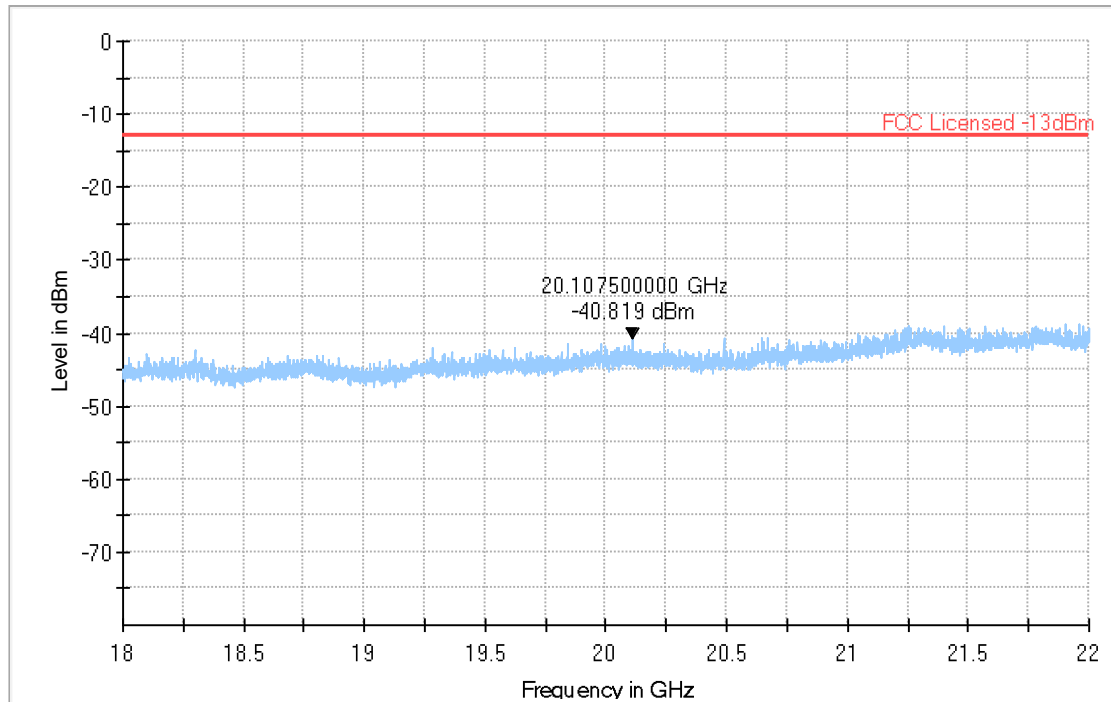
Frequency (MHz)	MaxPeak (dBm)	RMS (dBm)	Limit (dBm)	Margin	Meas. Time (ms)	Bandwidth (h)	Height	Pol	Azimuth	Corr. (dB)	Comment
3605.500	---	-59.68	---	---	500.0	1000.0	129.0	H	276.0	-100.3	
3605.500	-47.96	---	-13.00	34.96	500.0	1000.0	129.0	H	276.0	-100.3	



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

Plot # 4 Radiated Emissions: 18 GHz – 22 GHz**Channel: Low****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)
---	---	---	---	---	---	---	---	---	---	---	---	---	---



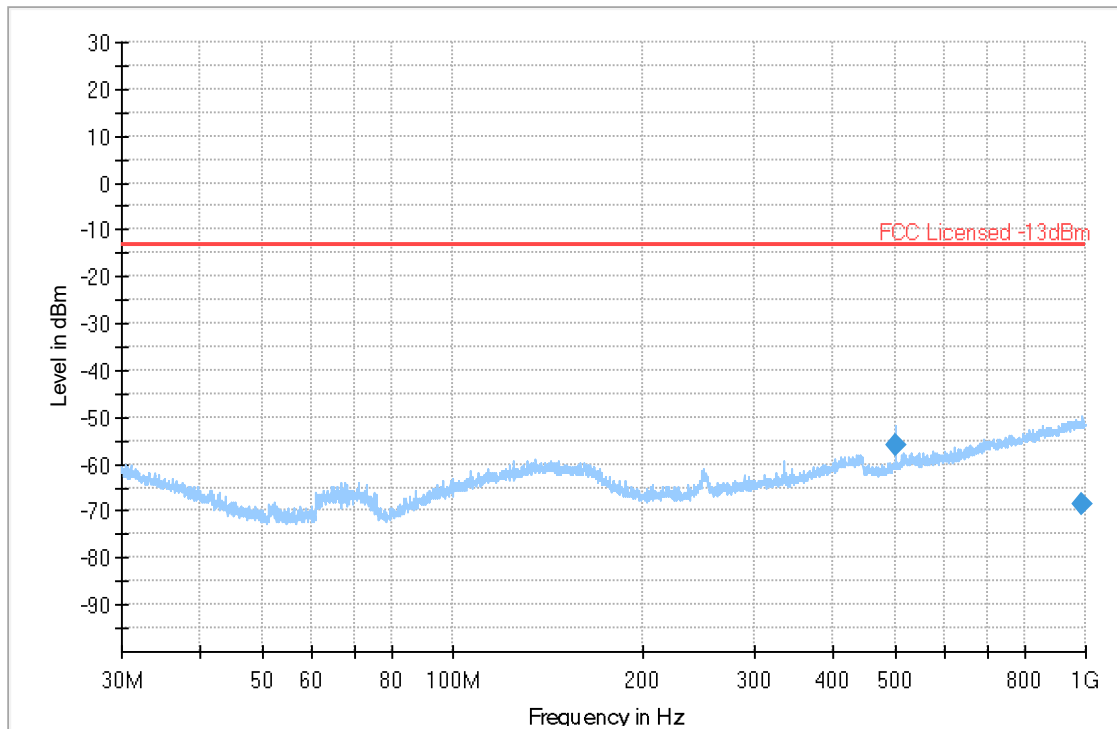
— Preview Result 1-PK+ * Critical_Freqs PK+
— FCC Licensed -13dBm ◆ Final_Result RMS

Plot # 5 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid

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)
499.994	-56.157	-13.00	43.16	500.0	120.0	100.0	H	35.0	-71.4	2.1	0.0	-73.5	15.2
989.074	-68.582	-13.00	55.58	500.0	120.0	307.0	V	142.0	-64.8	2.9	0.0	-67.7	-3.8



— Preview Result 1-PK+

— FCC Licensed -13dBm

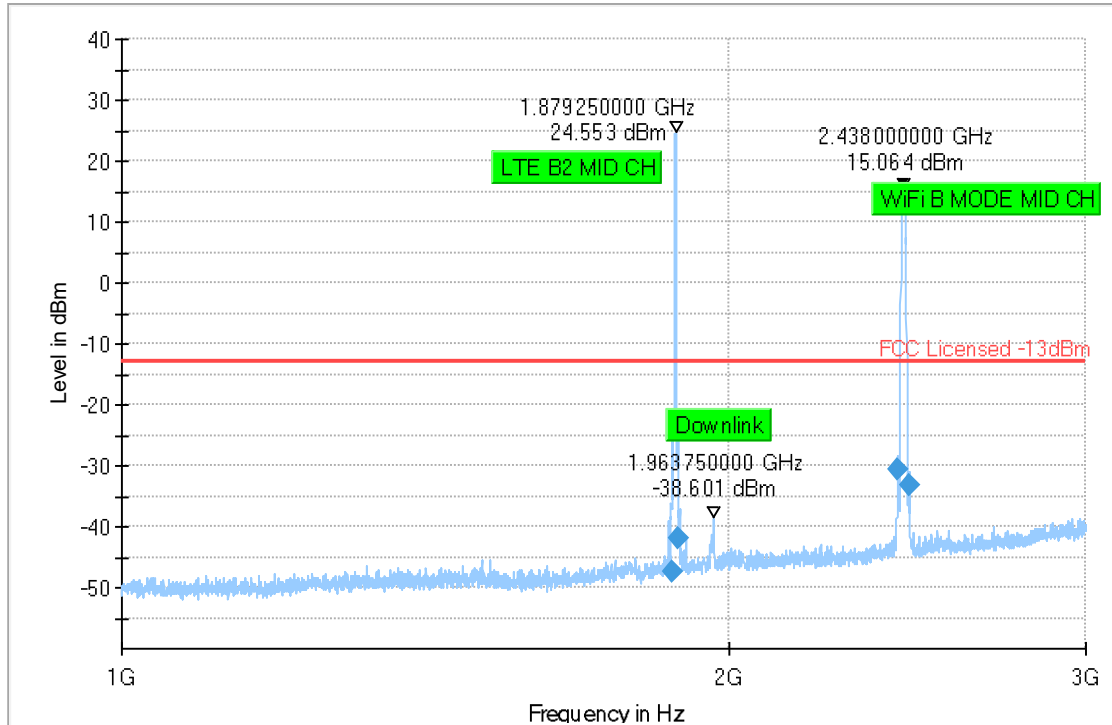
◆ Final_Result RMS

Plot # 6 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid

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)
1873.000	-47.508	-13.00	34.51	500.0	1000.0	100.0	V	22.0	-64.0	4.4	0.0	-68.4	16.5
1883.750	-41.789	-13.00	28.79	500.0	1000.0	100.0	V	27.0	-63.9	4.4	0.0	-68.4	22.1
2422.250	-30.505	-13.00	17.50	500.0	1000.0	150.0	H	8.0	-62.3	4.8	0.0	-67.1	31.8
2451.250	-33.146	-13.00	20.15	500.0	1000.0	194.0	H	23.0	-62.0	5.0	0.0	-67.0	28.9

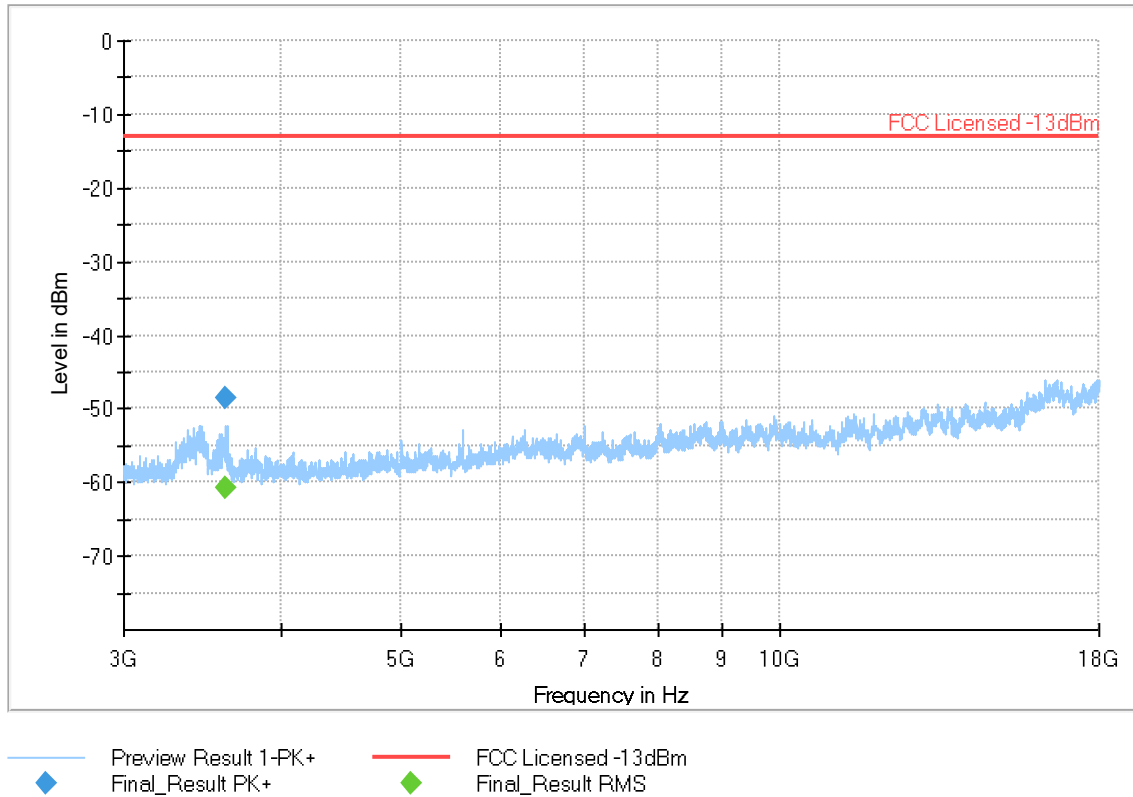


Plot # 7 Radiated Emissions: 3 GHz – 18 GHz

Channel: Mid

Final Result

Frequency (MHz)	MaxPeak (dBm)	RMS (dBm)	Limit (dBm)	Margin	Meas. Time (ms)	Bandwidth (Hz)	Height (dB)	Pol	Azimuth (°)	Corr. (dB)	Comment
3616.500	---	-60.65	---	---	500.0	1000.0	130.0	H	273.0	-100.3	
3616.500	-48.65	---	-13.00	35.65	500.0	1000.0	130.0	H	273.0	-100.3	

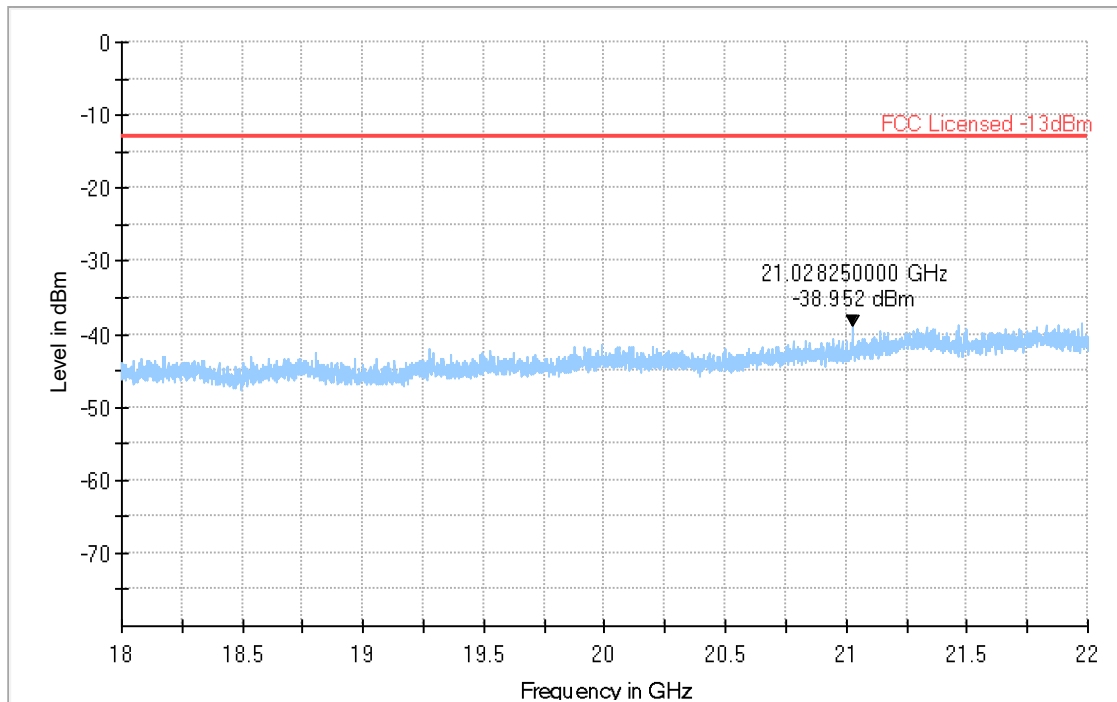


Plot # 8 Radiated Emissions: 18 GHz – 22 GHz

Channel: Mid

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)
---	---	---	---	---	---	---	---	---	---	---	---	---	---



Preview Result 1-PK+
FCC Licensed -13dBm

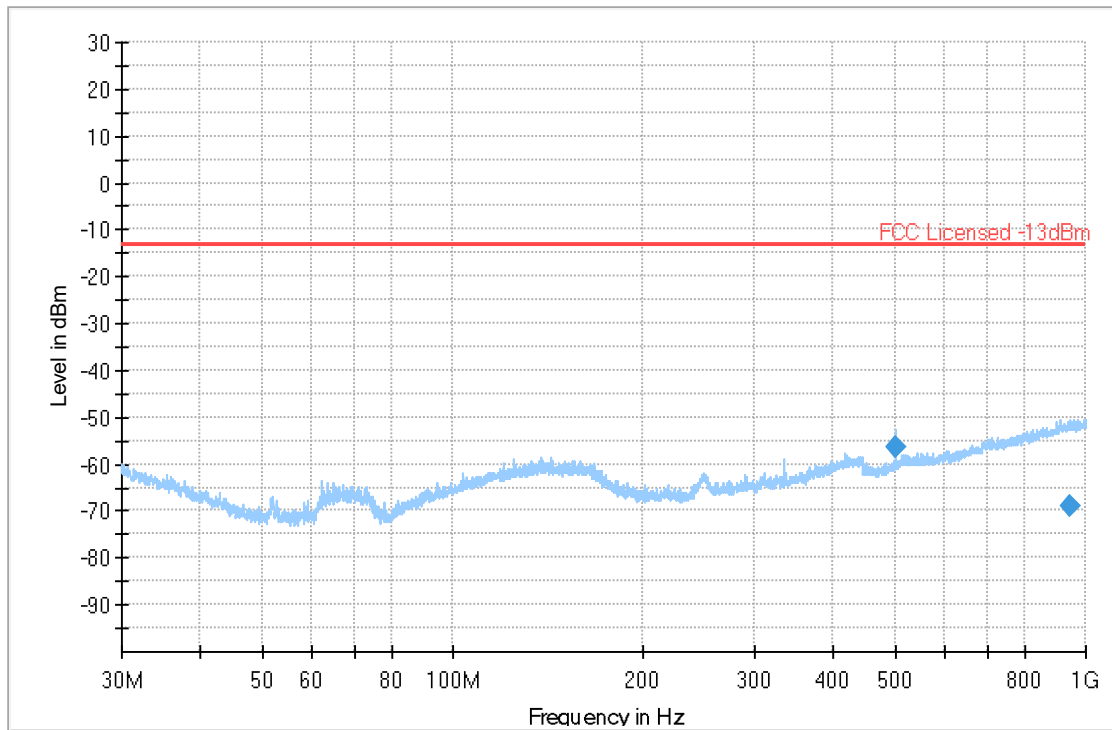
* Critical_Freqs PK+
◆ Final_Result RMS

Plot # 9 Radiated Emissions: 30 MHz – 1GHz

Channel: High

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)
500.006	-56.261	-13.00	43.26	500.0	120.0	134.0	H	28.0	-71.4	2.1	0.0	-73.5	15.1
941.902	-68.790	-13.00	55.79	500.0	120.0	331.0	H	102.0	-65.2	2.9	0.0	-68.0	-3.6



Preview Result 1-PK+

FCC Licensed -13dBm



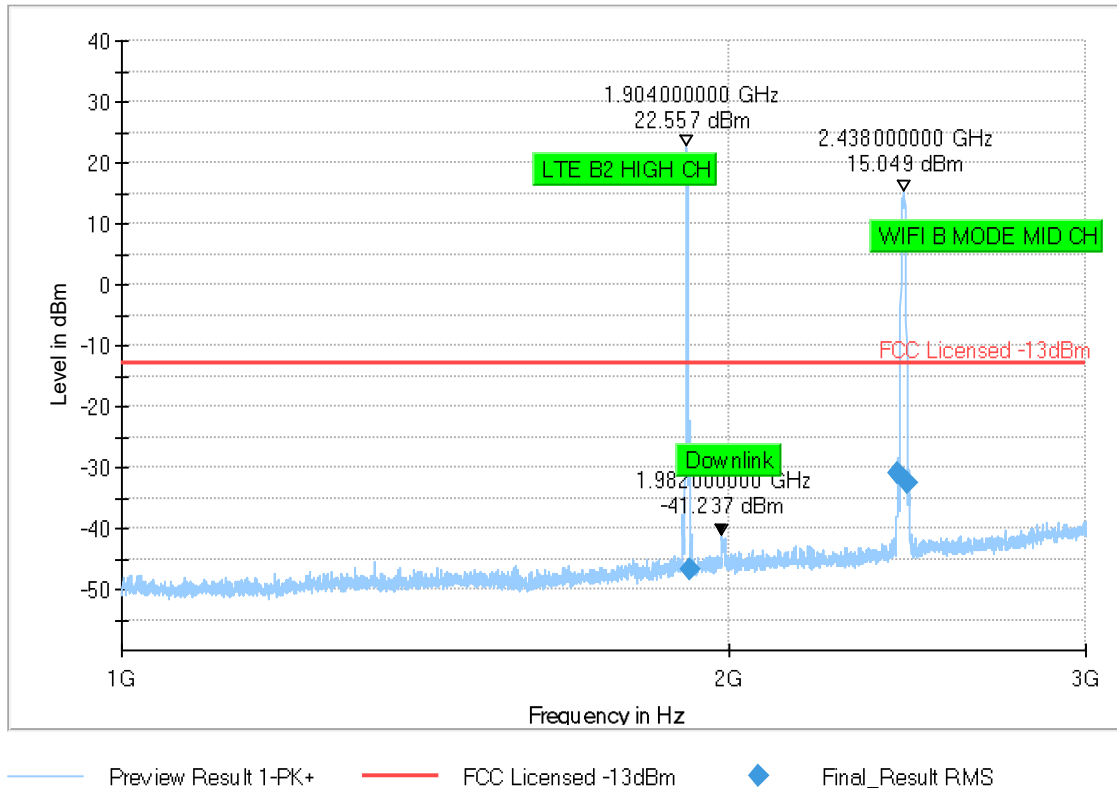
Final_Result RMS

Plot # 10 Radiated Emissions: 1 GHz - 3 GHz

Channel: High

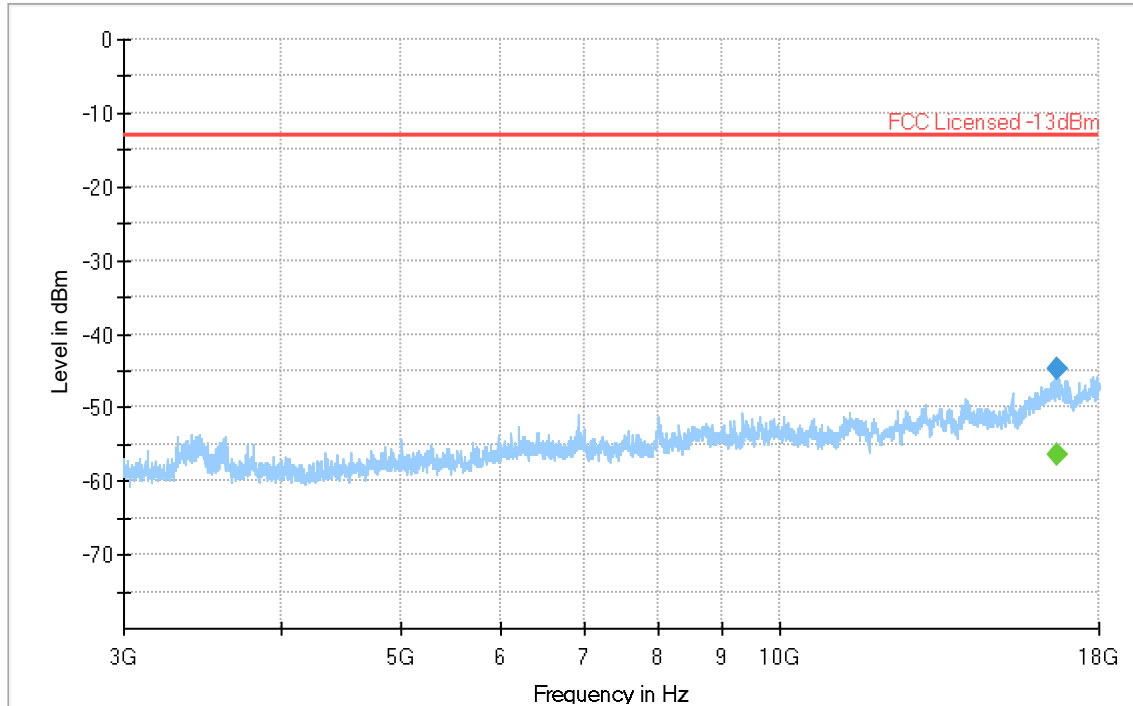
Final_Result

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)
1908.827	-46.923	-13.00	33.92	500.0	1000.0	117.0	H	32.0	-63.8	4.5	0.0	-68.2	16.8
2422.505	-30.963	-13.00	17.96	500.0	1000.0	144.0	H	9.0	-62.3	4.8	0.0	-67.1	31.3
2450.750	-32.558	-13.00	19.56	500.0	1000.0	196.0	H	19.0	-62.0	5.0	0.0	-67.0	29.5



Plot # 11 Radiated Emissions: 3 GHz – 18 GHz**Channel: High****Final_Result**

Frequency (MHz)	MaxPeak (dBm)	RMS (dBm)	Limit (dBm)	Margin	Meas. Time (ms)	Bandwidth	Height	Pol	Azimuth	Corr. (dB)	Comment
16675.500	---	-56.37	---	---	500.0	1000.0	310.0	V	-20.0	-80.8	
16675.500	-44.74	---	-13.00	31.74	500.0	1000.0	310.0	V	-20.0	-80.8	



Preview Result 1-PK+ Final_Result PK+ (Blue Diamond)

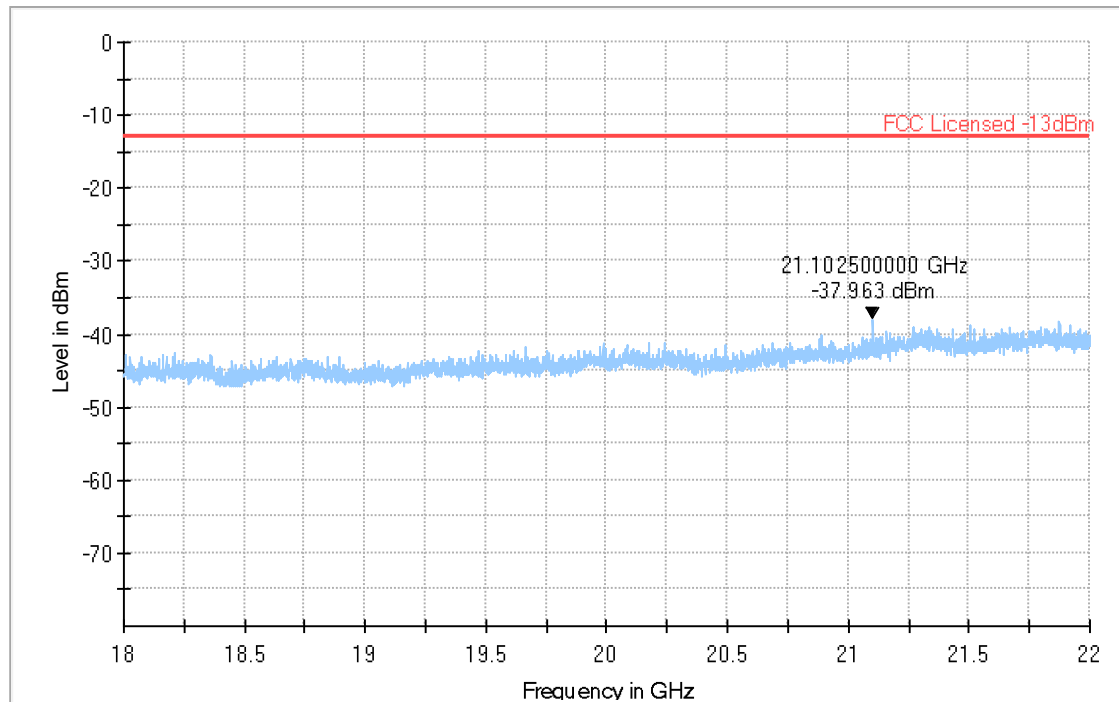
FCC Licensed -13dBm Final_Result RMS (Green Diamond)

Plot # 12 Radiated Emissions: 18 GHz – 22 GHz

Channel: High

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)
---	---	---	---	---	---	---	---	---	---	---	---	---	---



Preview Result 1-PK+
FCC Licensed -13dBm

* Critical_Freqs PK+
◆ Final_Result RMS

8.2.6 Measurement plots:

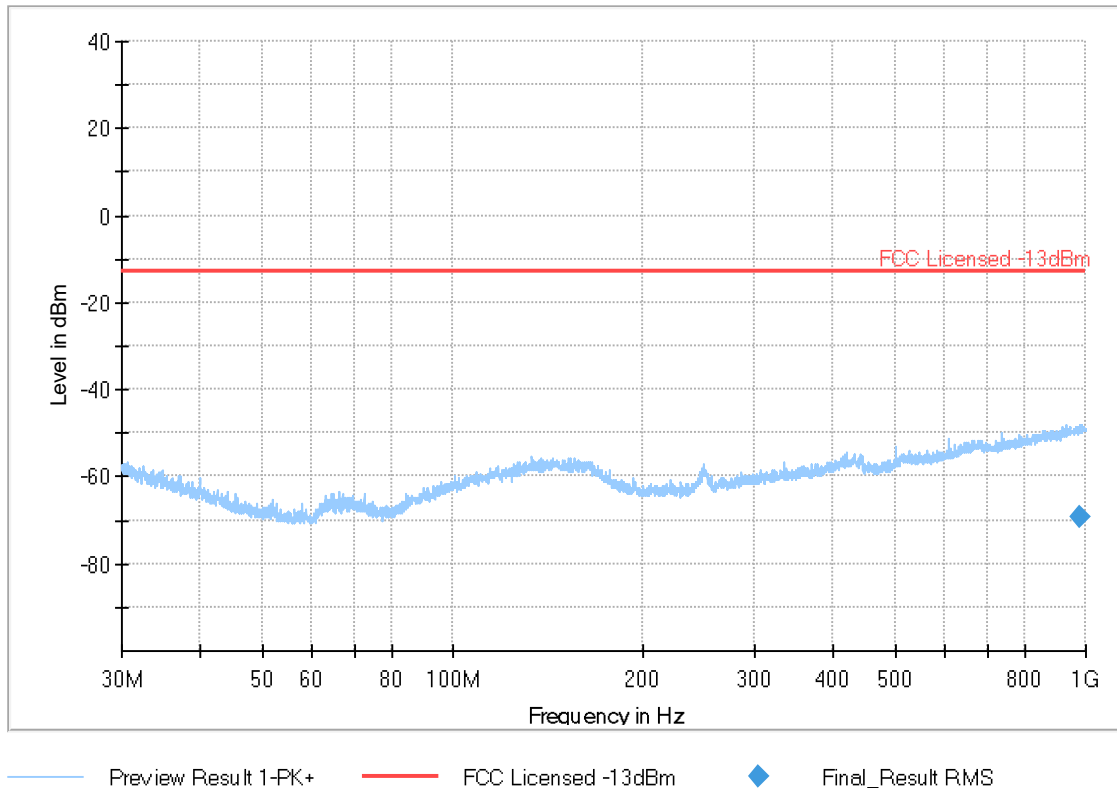
8.2.6.1 LTE Band 4

Plot # 13 Radiated Emissions: 30 MHz – 1GHz

Channel: Low

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)
979.416	-69.081	-13.00	56.08	500.0	100.0	334.0	H	325.0	-64.6	3.0	0.0	-67.6	-4.5

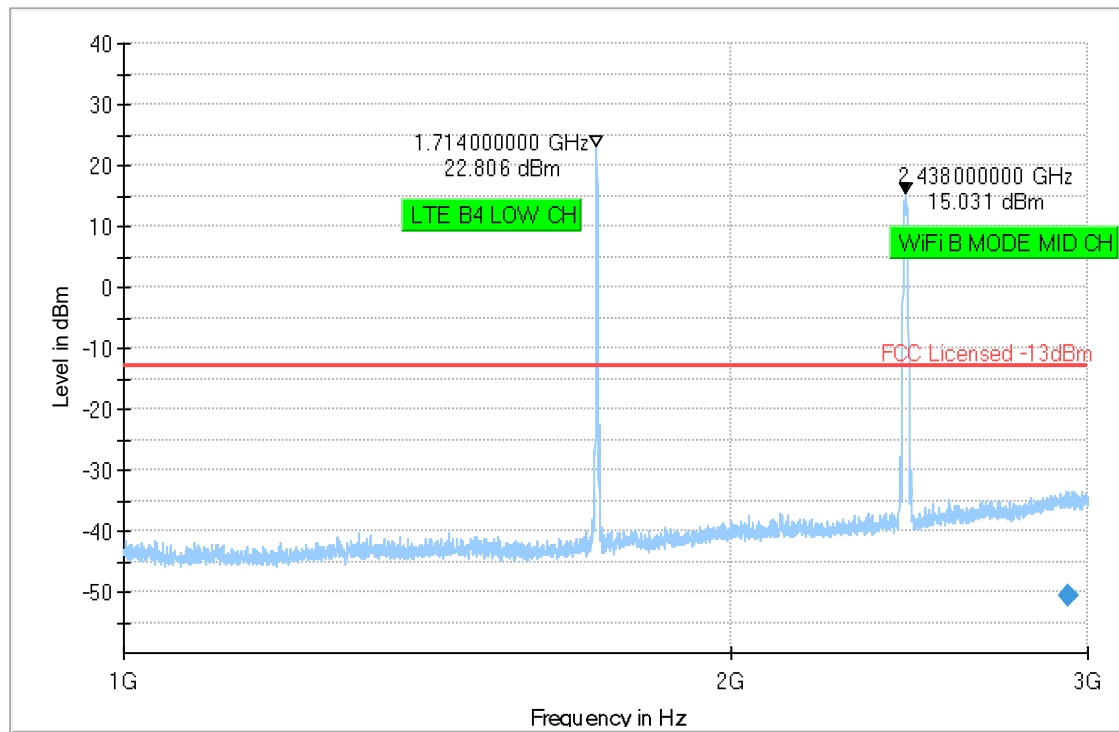


Plot # 14 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low

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)
2936.500	-50.727	-13.00	37.73	500.0	1000.0	254.0	H	251.0	-59.7	5.9	0.0	-65.6	9.0



Preview Result 1-PK+

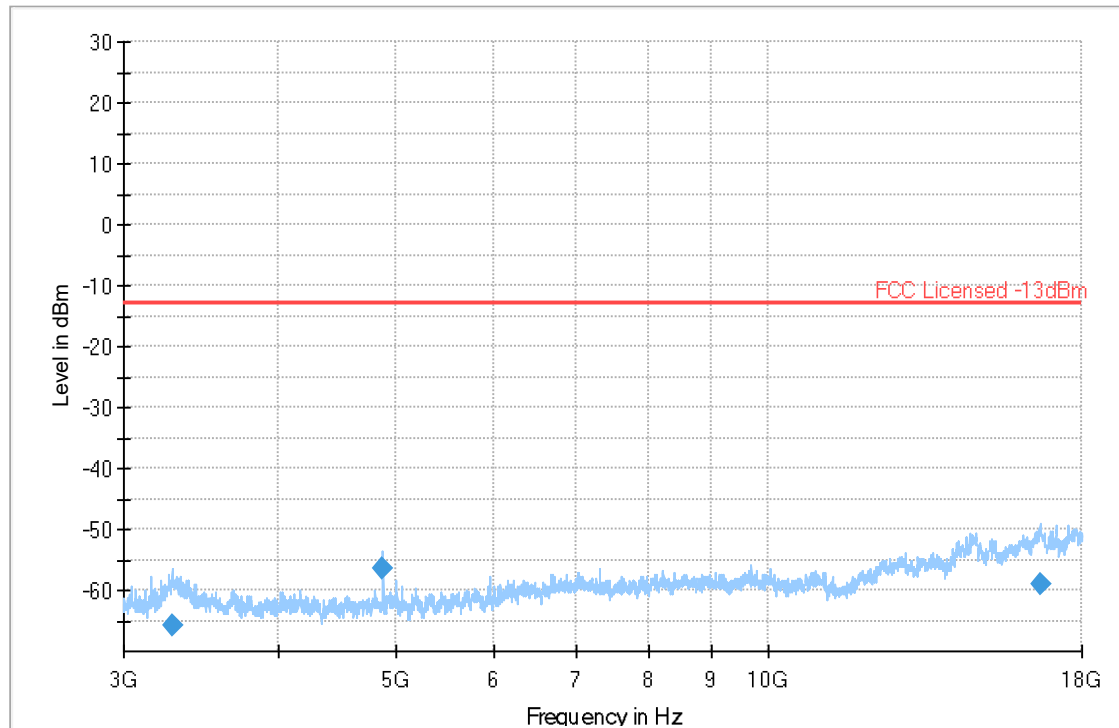
FCC Licensed -13dBm



Final_Result RMS

Plot # 15 Radiated Emissions: 3 GHz – 18 GHz**Channel: Low****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)
3291.333	-65.909	-13.00	52.91	500.0	1000.0	187.0	V	19.0	-	5.6	-45.9	-62.6	37.1
4873.844	-56.566	-13.00	43.57	500.0	1000.0	159.0	H	181.0	-	7.0	-45.9	-61.1	43.4
16636.679	-59.113	-13.00	46.11	500.0	1000.0	349.0	H	301.0	-81.4	15.2	-42.6	-54.0	22.3



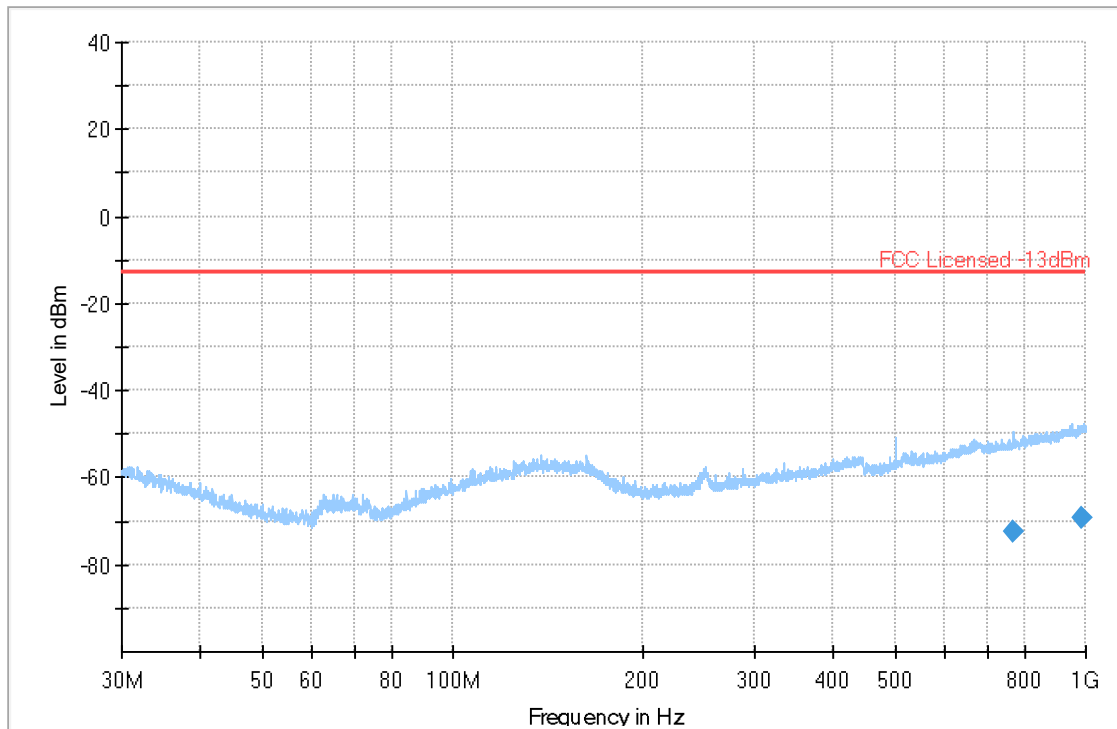
Preview Result 1-PK+ FCC Licensed -13dBm Final_Result RMS

Plot # 16 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid

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)
768.583	-72.642	-13.00	59.64	500.0	100.0	211.0	V	53.0	-67.3	2.6	0.0	-69.9	-5.4
984.576	-69.428	-13.00	56.43	500.0	100.0	392.0	V	222.0	-64.8	3.0	0.0	-67.8	-4.6



— Preview Result 1-PK+

— FCC Licensed -13dBm

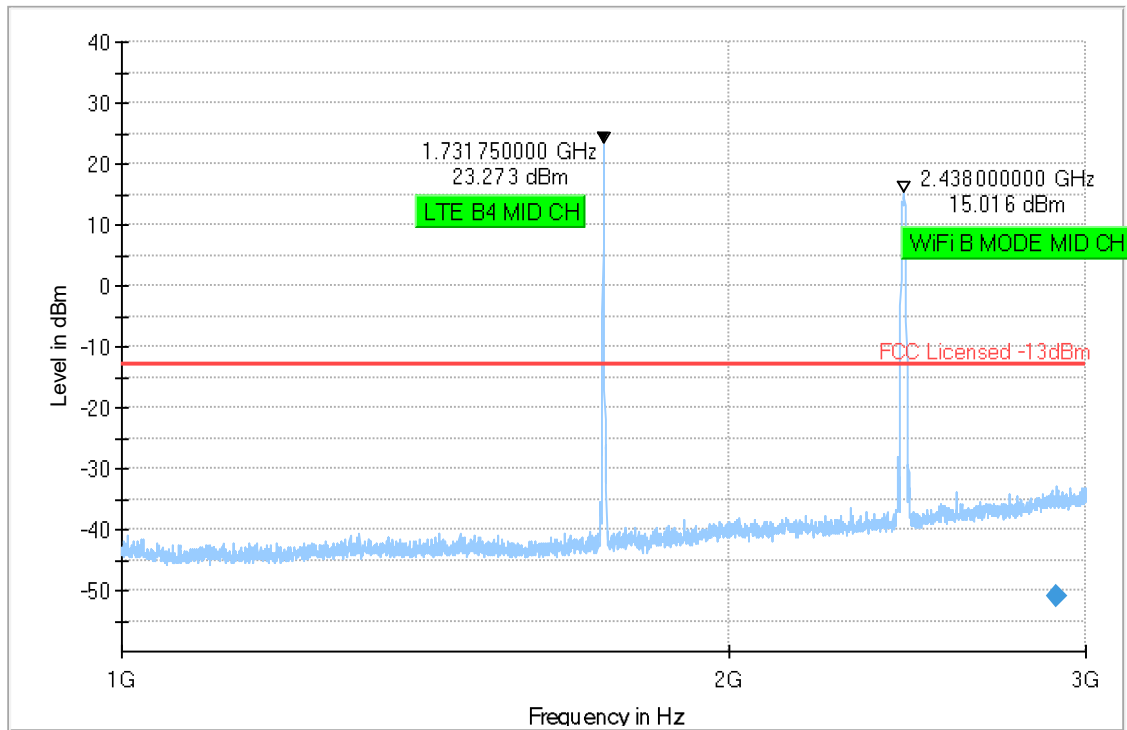
◆ Final_Result RMS

Plot # 17 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid

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)
2900.250	-50.834	-13.00	37.83	500.0	1000.0	100.0	V	239.0	-59.9	6.0	0.0	-65.9	9.1



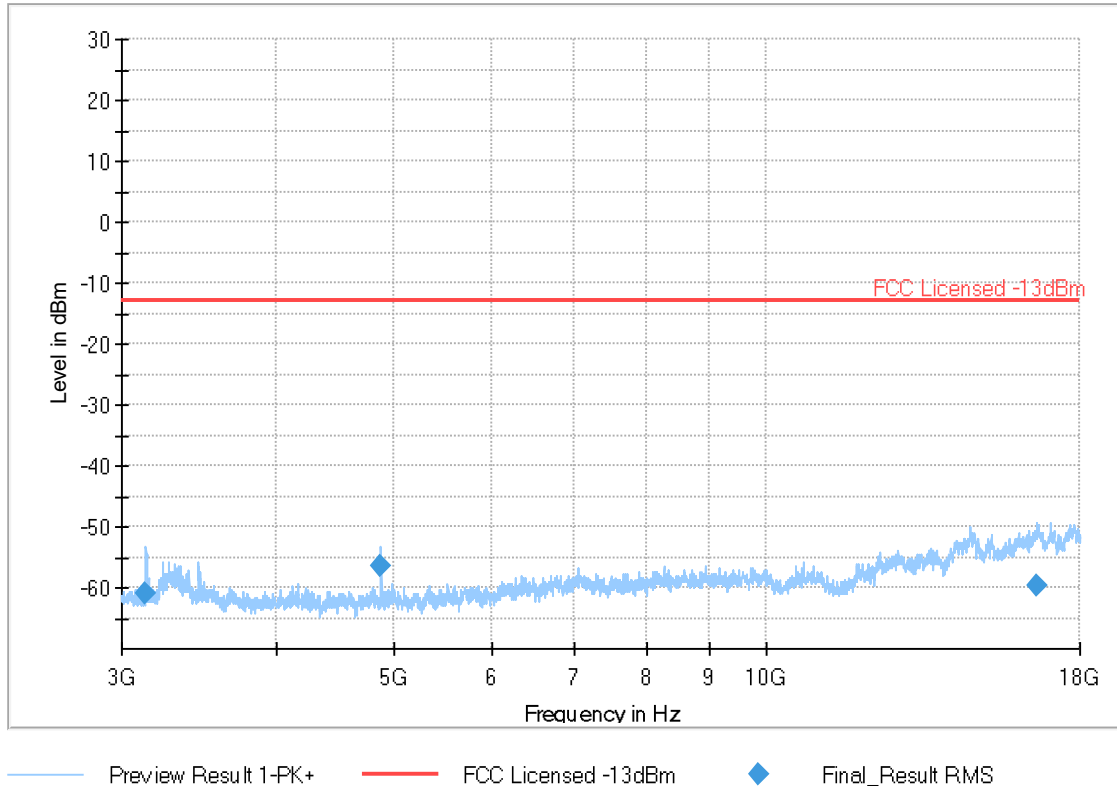
— Preview Result 1-PK+

— FCC Licensed -13dBm

◆ Final_Result RMS

Plot # 18 Radiated Emissions: 3 GHz – 18 GHz**Channel: Mid****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)
3139.438	-61.125	-13.00	48.13	500.0	1000.0	119.0	H	14.0	-	5.5	-46.0	-62.6	41.9
4873.844	-56.393	-13.00	43.39	500.0	1000.0	221.0	H	180.0	-	7.0	-45.9	-61.1	43.6
16626.774	-59.567	-13.00	46.57	500.0	1000.0	236.0	H	26.0	-81.5	15.2	-42.6	-54.0	21.9

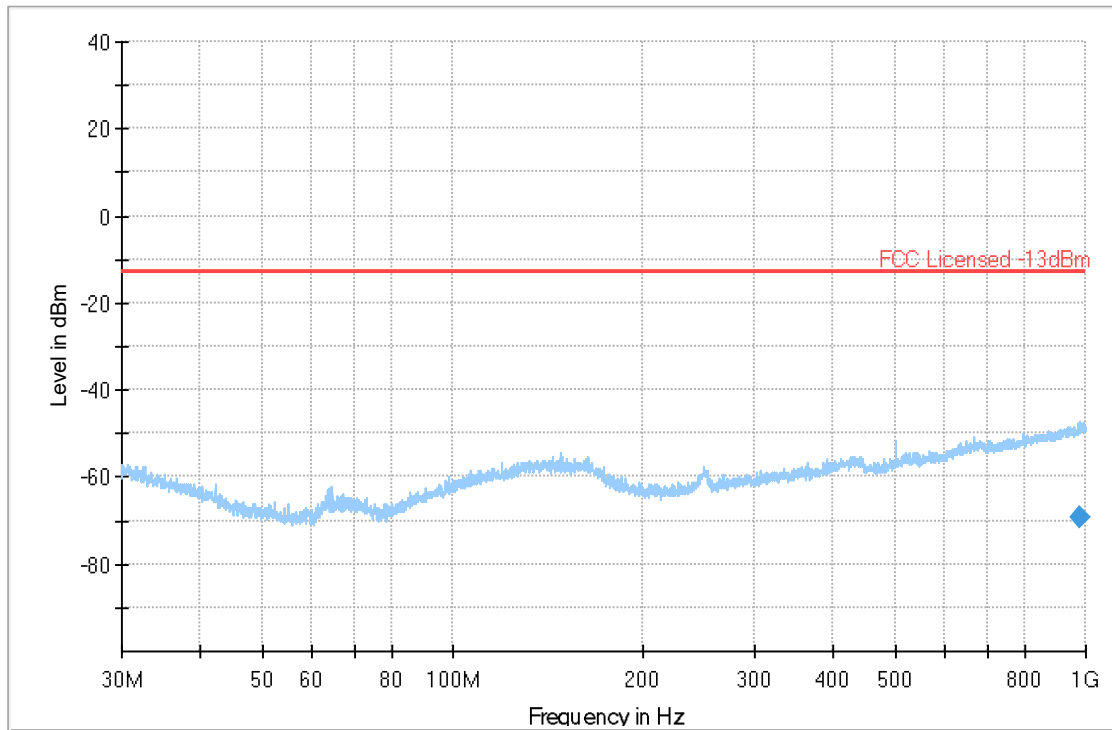


Plot # 19 Radiated Emissions: 30 MHz – 1GHz

Channel: High

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)
978.281	-69.178	-13.00	56.18	500.0	100.0	126.0	H	184.0	-64.6	3.0	0.0	-67.6	-4.5



Preview Result 1-PK+

FCC Licensed -13dBm

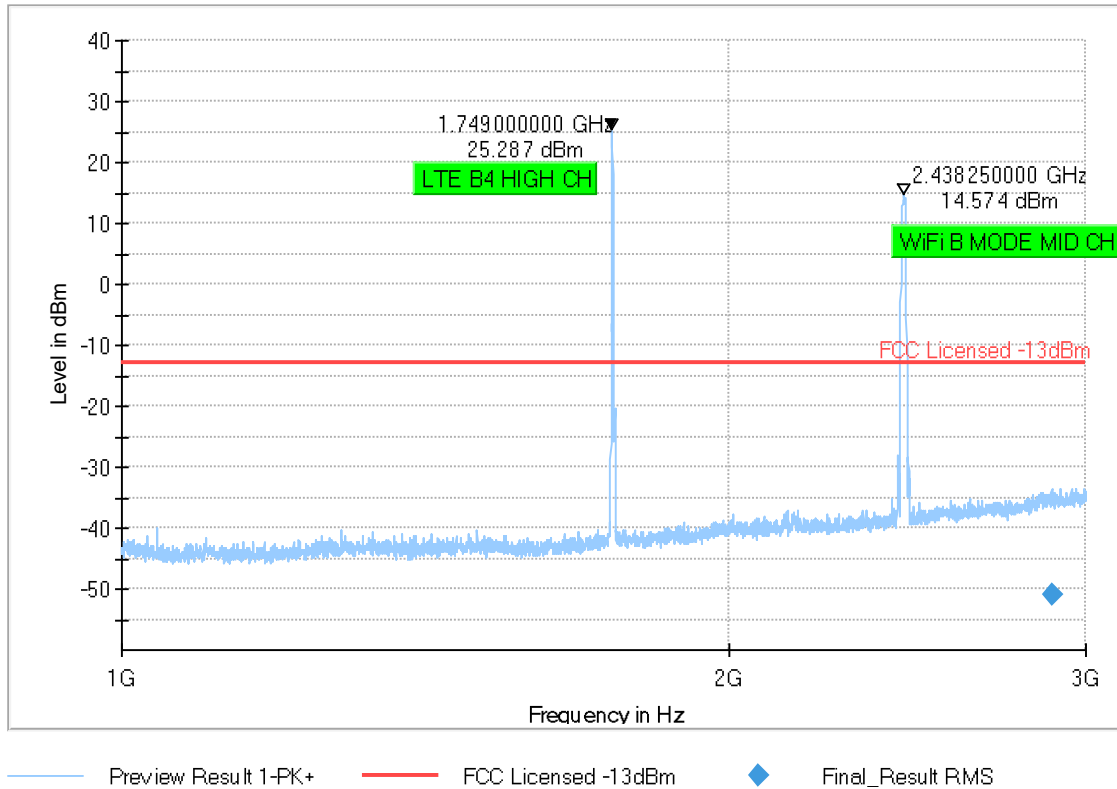
Final_Result RMS

Plot # 20 Radiated Emissions: 1 GHz - 3 GHz

Channel: High

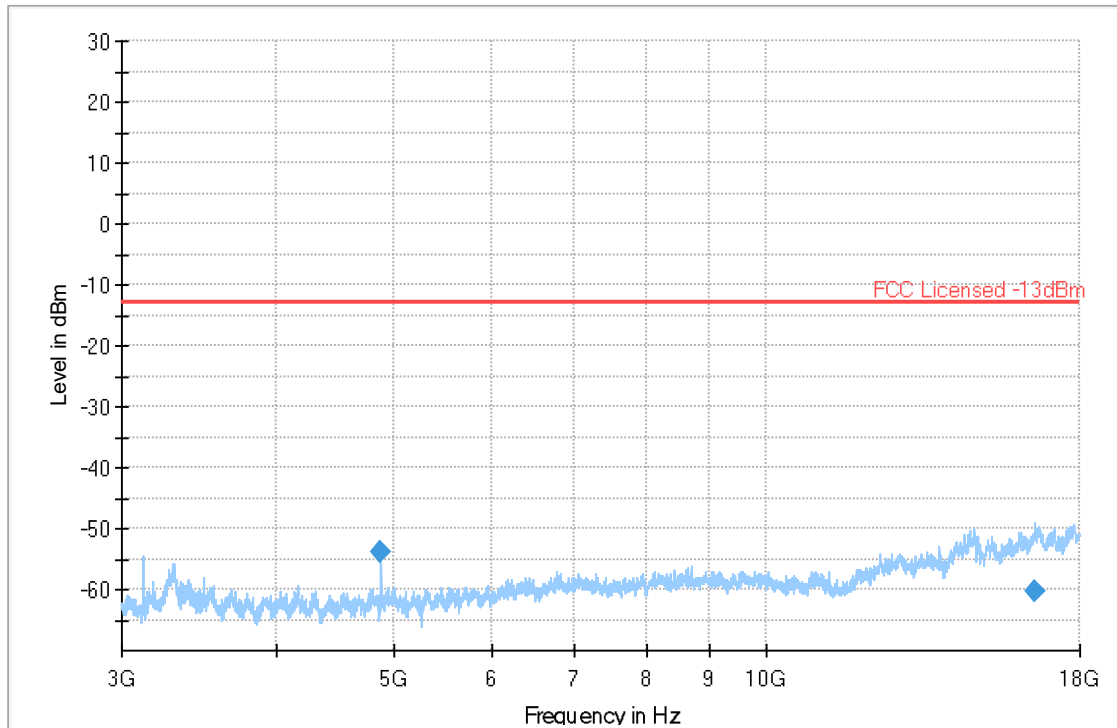
Final Result

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)
2885.500	-50.837	-13.00	37.84	500.0	1000.0	203.0	H	72.0	-60.0	6.0	0.0	-66.0	9.2



Plot # 21 Radiated Emissions: 3 GHz – 18 GHz**Channel: High****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)
4873.844	-53.951	-13.00	40.95	500.0	1000.0	100.0	H	337.0	-	7.0	-45.9	-61.1	46.0
16525.532	-60.394	-13.00	47.39	500.0	1000.0	297.0	V	112.0	-82.3	15.2	-43.4	-54.1	21.9



— Preview Result 1-PK+

— FCC Licensed -13dBm

◆ Final_Result RMS

8.2.7 Measurement plots:

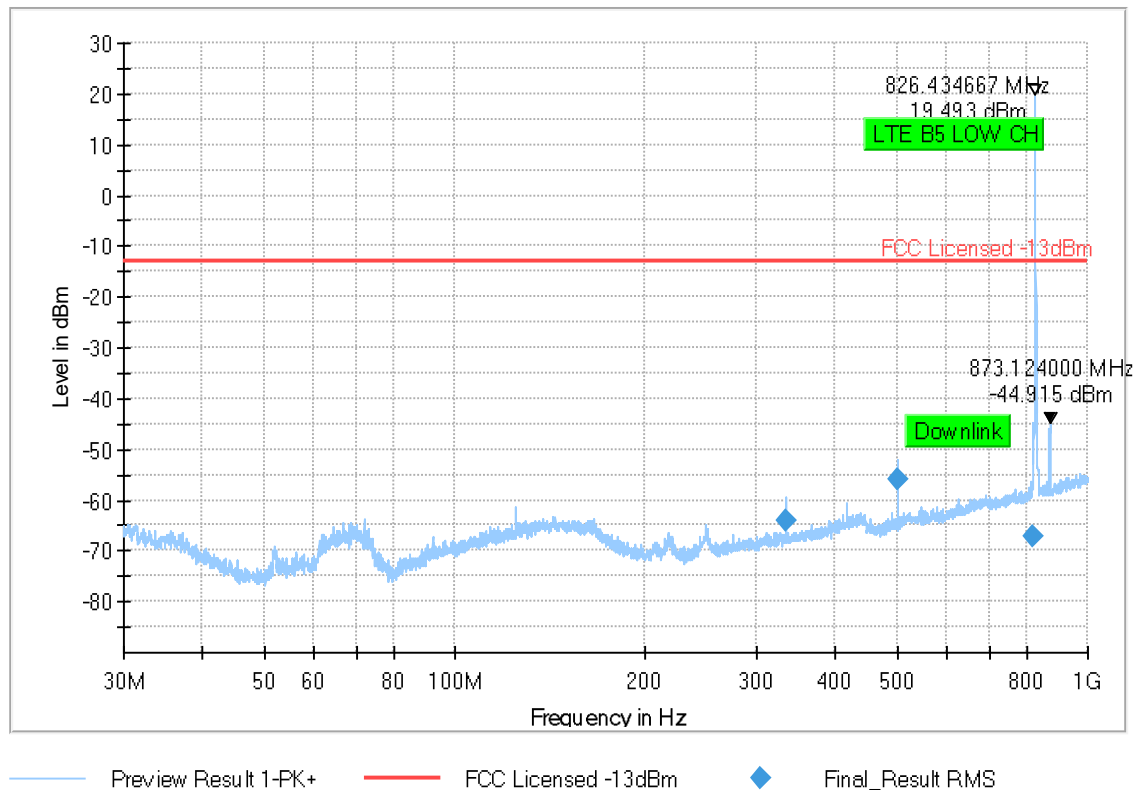
8.2.7.1 LTE Band 5

Plot # 22 Radiated Emissions: 30 MHz – 1GHz

Channel: Low

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)
333.343	-64.110	-13.00	51.11	500.0	100.0	107.0	H	225.0	-74.8	1.7	0.0	-76.5	10.7
500.005	-55.880	-13.00	42.88	500.0	100.0	152.0	H	28.0	-71.4	2.1	0.0	-73.5	15.5
818.635	-67.137	-13.00	54.14	500.0	100.0	128.0	V	279.0	-66.6	2.7	0.0	-69.3	-0.5

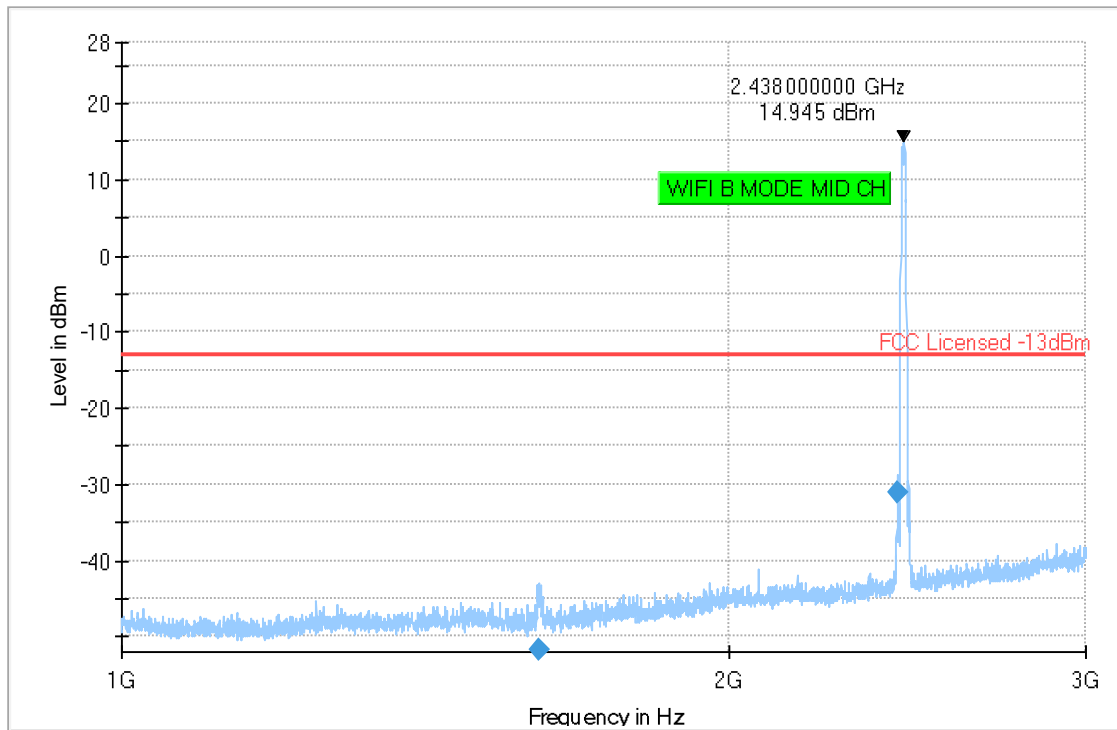


Plot # 23 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low

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)
1609.877	-51.802	-13.00	38.80	500.0	1000.0	155.0	H	6.0	-65.2	4.5	0.0	-69.8	13.4
2422.474	-31.057	-13.00	18.06	500.0	1000.0	202.0	H	15.0	-61.7	5.4	0.0	-67.1	30.7



Preview Result 1-PK+

FCC Licensed -13dBm

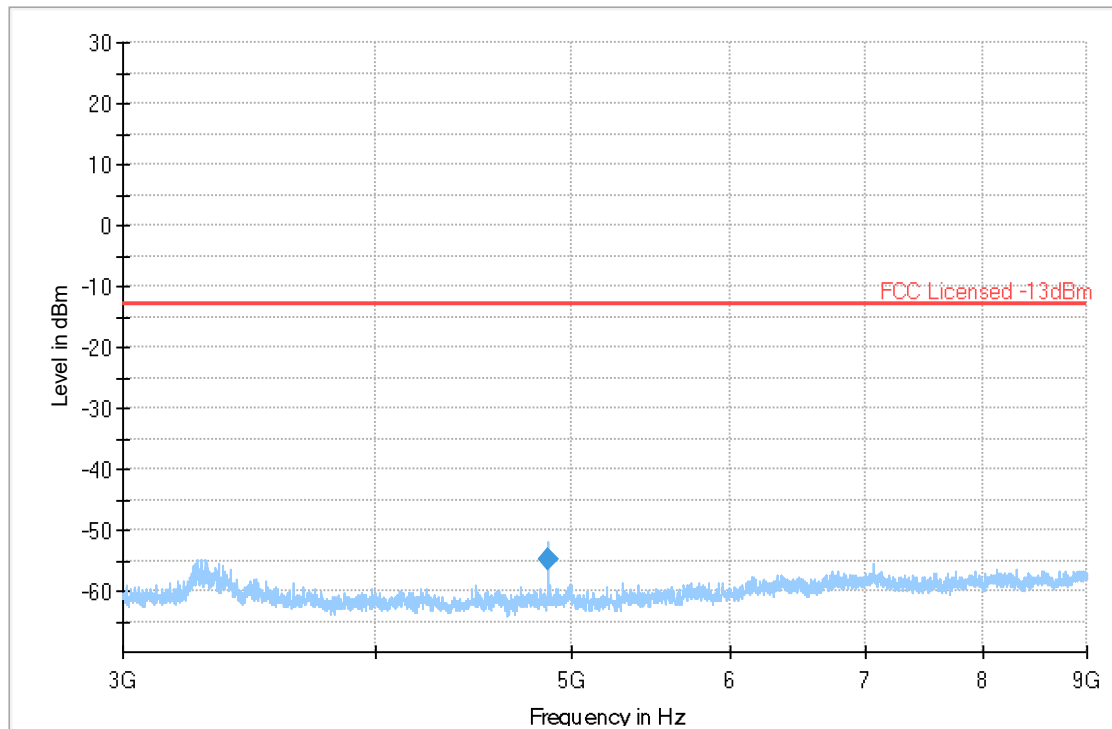
Final_Result RMS

Plot # 24 Radiated Emissions: 3 GHz – 9 GHz

Channel: Low

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)
4874.000	-54.933	-13.00	41.93	500.0	1000.0	187.0	H	15.0	-	7.0	-45.9	-61.1	45.0



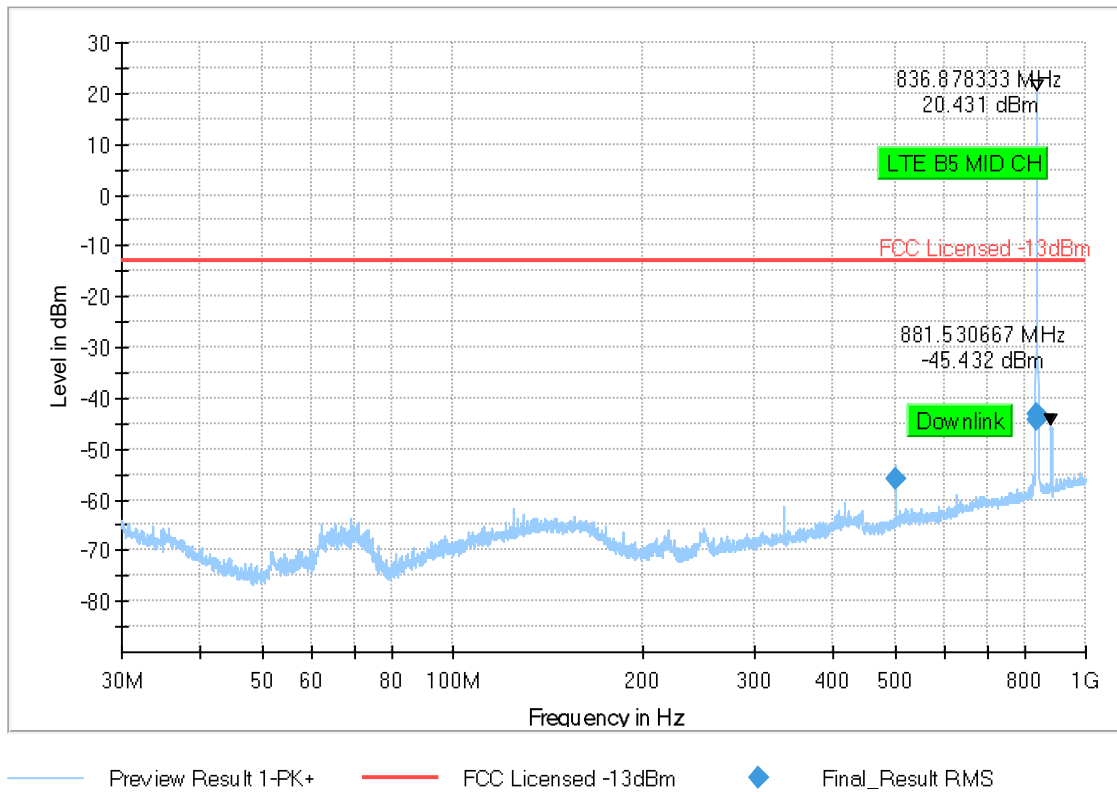
— Preview Result 1-PK+ — FCC Licensed -13dBm ◆ Final_Result RMS

Plot # 25 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid

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)
499.996	-56.122	-13.00	43.12	500.0	100.0	134.0	H	20.0	-71.4	2.1	0.0	-73.5	15.2
834.151	-44.413	-13.00	31.41	500.0	100.0	100.0	H	354.0	-66.5	2.7	0.0	-69.2	22.1
838.867	-42.991	-13.00	29.99	500.0	100.0	100.0	H	355.0	-66.5	2.7	0.0	-69.2	23.5

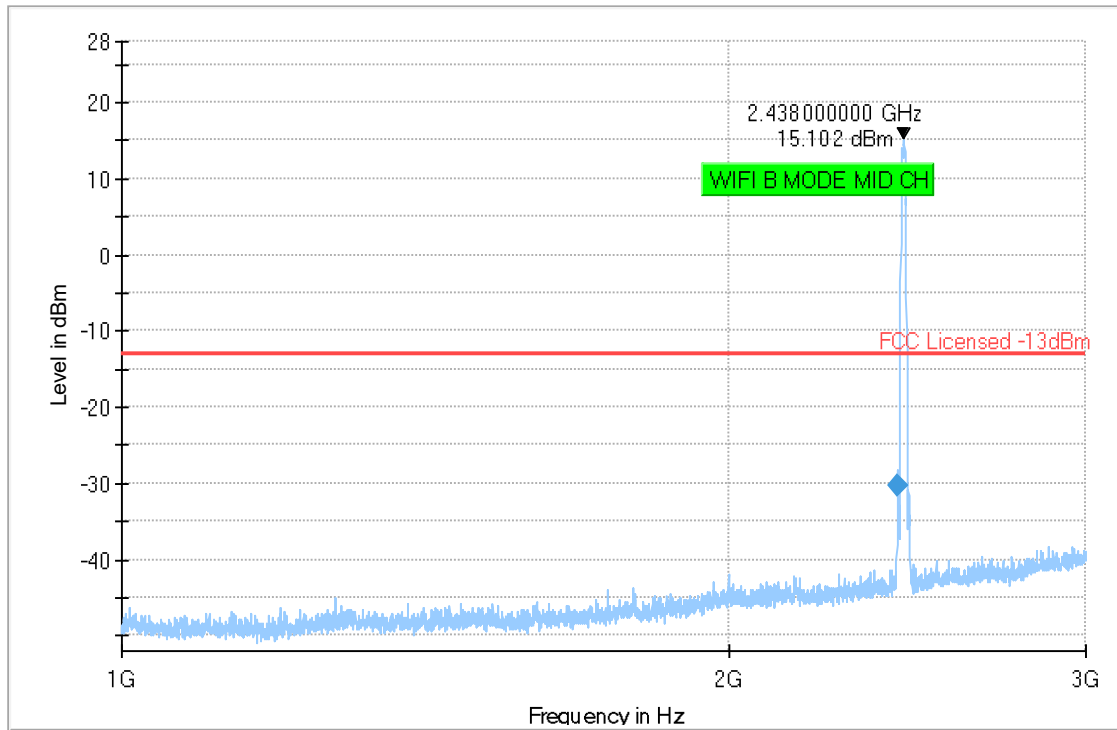


Plot # 26 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid

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)
2422.250	-30.197	-13.00	17.20	500.0	1000.0	150.0	H	9.0	-61.7	5.4	0.0	-67.1	31.5



Preview Result 1-PK+

FCC Licensed -13dBm

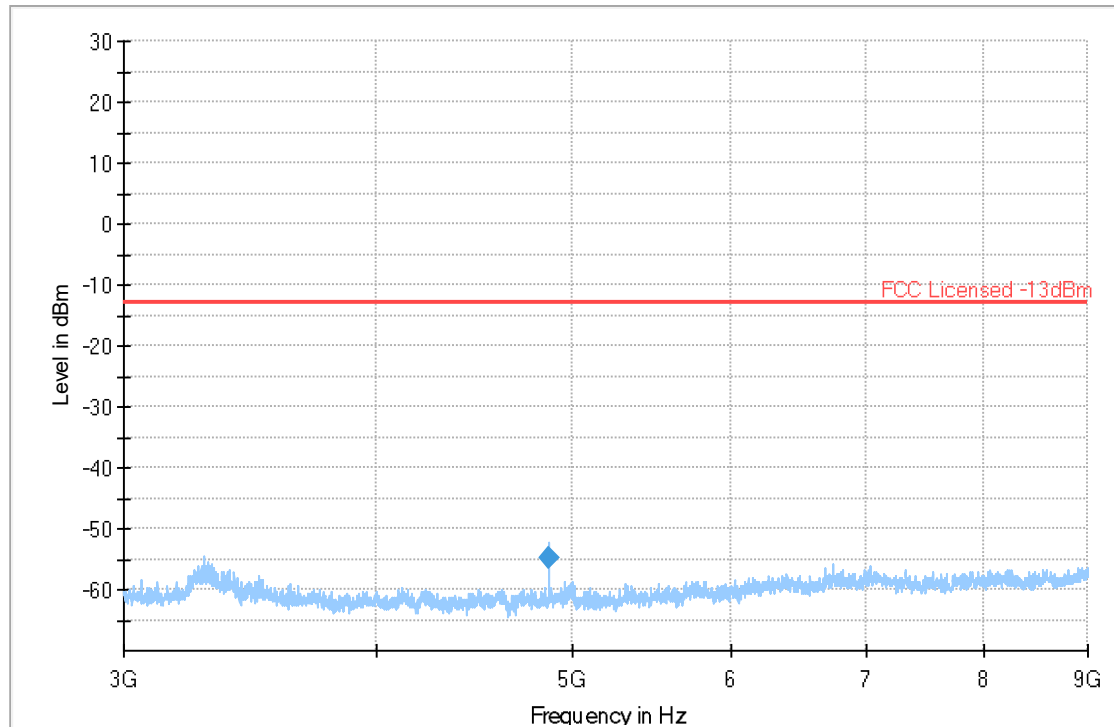
Final_Result RMS

Plot # 27 Radiated Emissions: 3 GHz – 9 GHz

Channel: Mid

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)
4873.989	-54.828	-13.00	41.83	500.0	1000.0	107.0	H	179.0	-	7.0	-45.9	-61.1	45.1



Preview Result 1-PK+

FCC Licensed -13dBm

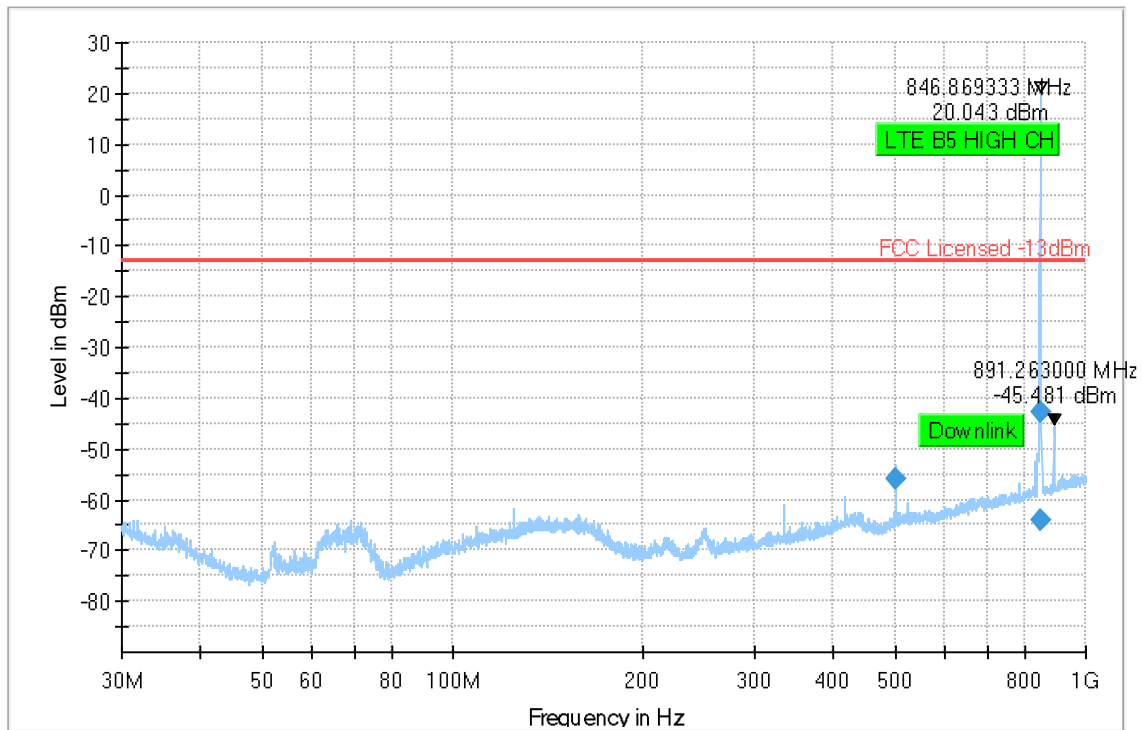
Final_Result RMS

Plot # 28 Radiated Emissions: 30 MHz – 1GHz

Channel: High

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)
500.000	-55.924	-13.00	42.92	500.0	100.0	135.0	H	23.0	-71.4	2.1	0.0	-73.5	15.4
848.834	-42.716	-13.00	29.72	500.0	100.0	169.0	H	198.0	-66.2	2.7	0.0	-68.9	23.5
851.736	-64.033	-13.00	51.03	500.0	100.0	100.0	H	348.0	-66.1	2.7	0.0	-68.9	2.1



Preview Result 1-PK+

FCC Licensed -13dBm

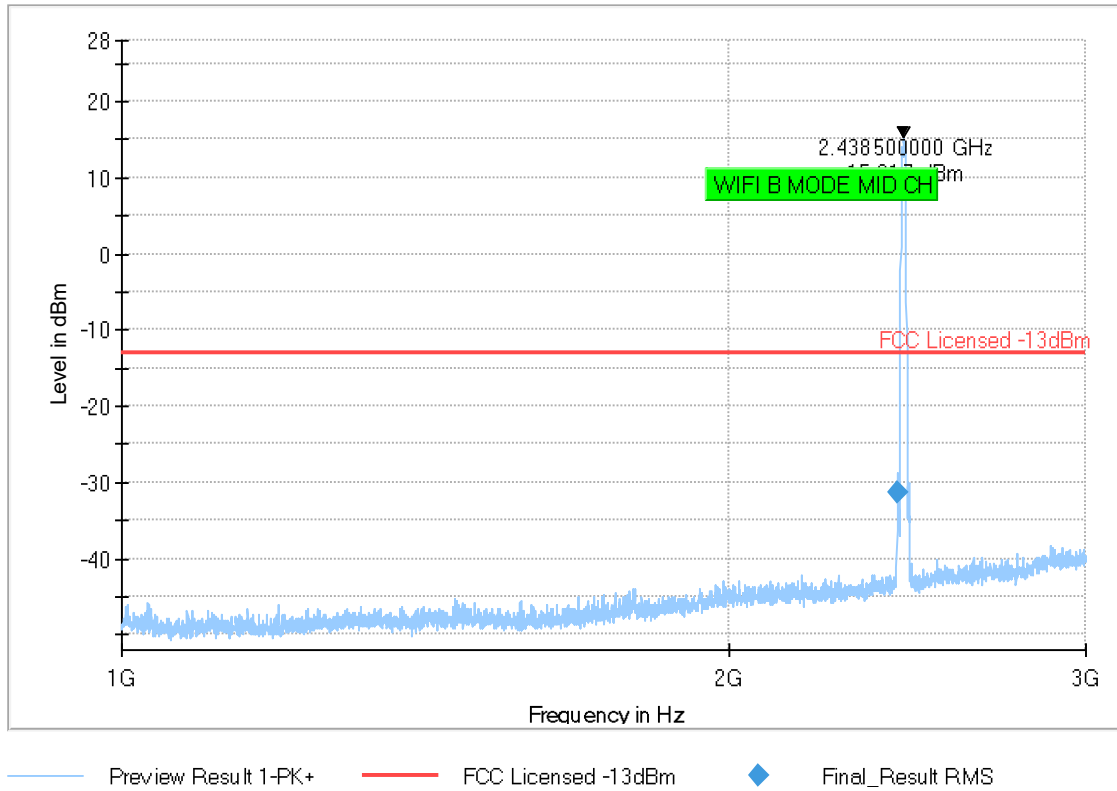
◆ Final_Result RMS

Plot # 29 Radiated Emissions: 1 GHz - 3 GHz

Channel: High

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)
2421.983	-31.439	-13.00	18.44	500.0	1000.0	180.0	H	357.0	-61.7	5.4	0.0	-67.1	30.3

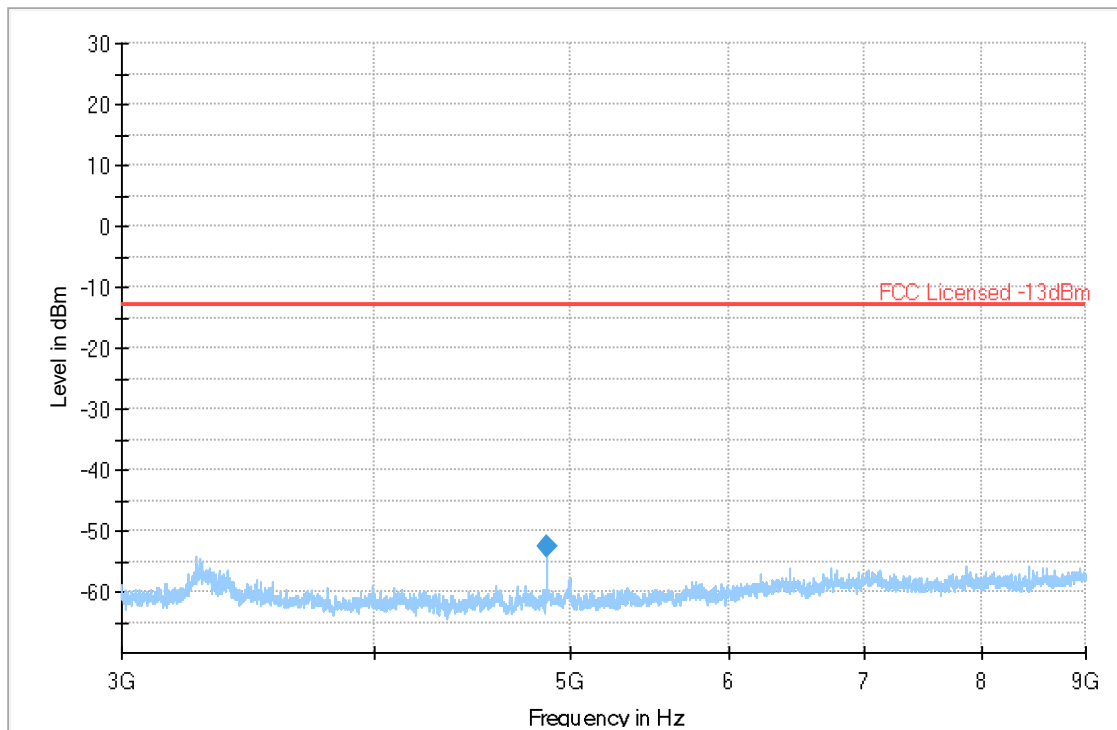


Plot # 30 Radiated Emissions: 3 GHz – 9 GHz

Channel: High

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)
4873.975	-52.549	-13.00	39.55	500.0	1000.0	100.0	H	337.0	-	7.0	-45.9	-61.1	47.4



Preview Result 1-PK+

FCC Licensed -13dBm

Final_Result RMS

8.2.8 Measurement plots:

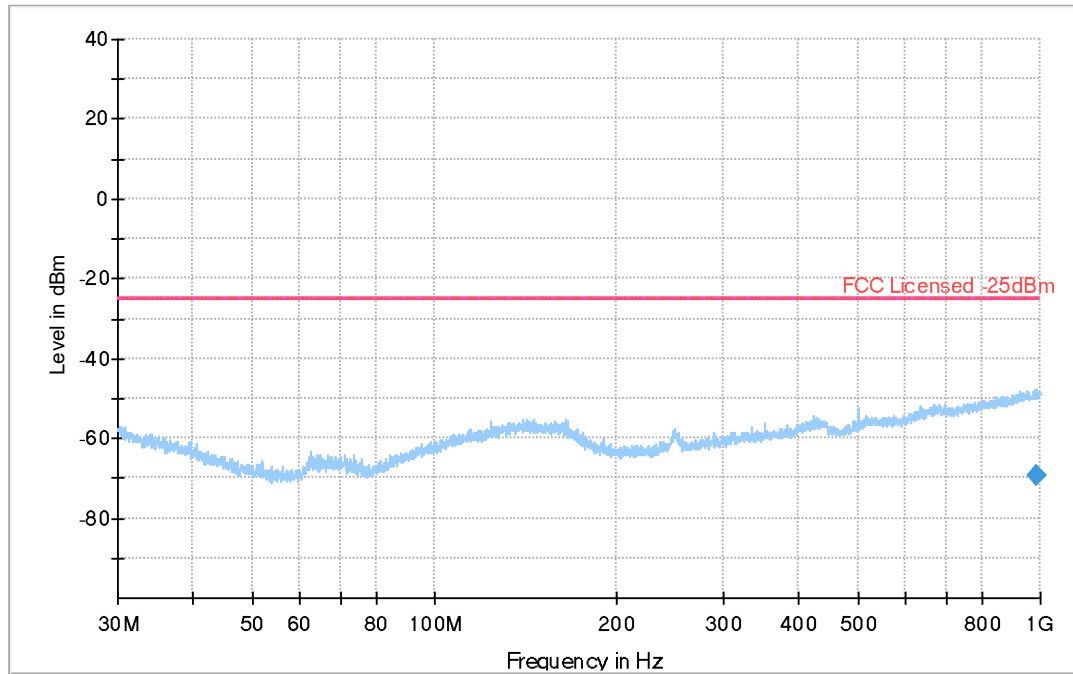
8.2.8.1 LTE Band 7

Plot # 31 Radiated Emissions: 30 MHz – 1GHz

Channel: Low

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)
985.381	-69.129	-25.00	44.13	500.0	100.0	315.0	H	121.0	-64.6	3.0	0.0	-67.5	-4.5



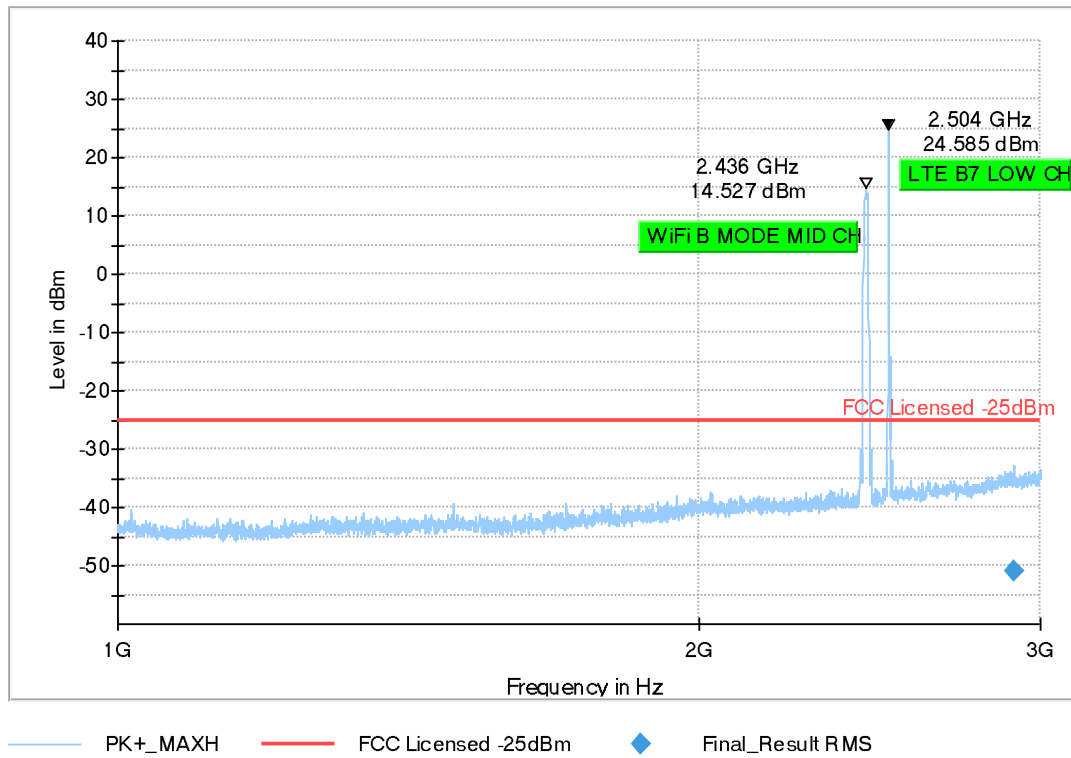
— PK+_MAXH
— FCC Licensed -25dBm
◆ Final_Result RMS

Plot # 32 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low

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)
2906.000	-50.812	-25.00	25.81	500.0	1000.0	379.0	H	164.0	-59.9	6.0	0.0	-65.9	9.1

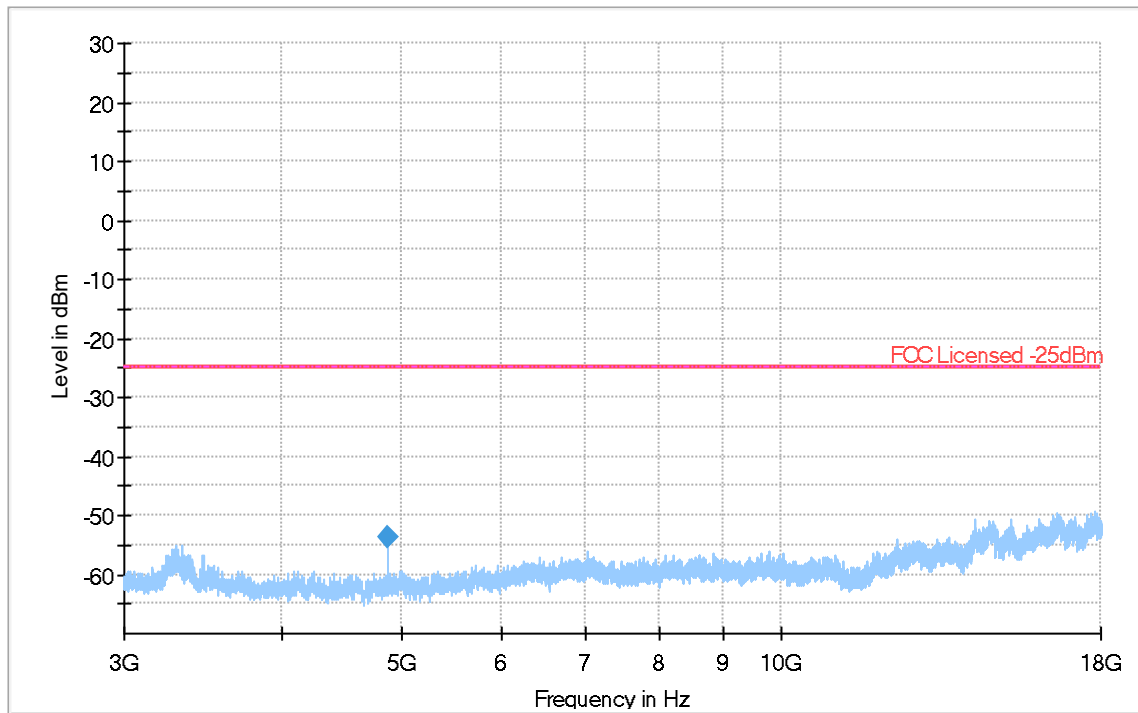


Plot # 33 Radiated Emissions: 3 GHz – 18 GHz

Channel: Low

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)
4873.844	-53.720	-25.00	28.72	500.0	1000.0	107.0	H	335.0	-100.0	7.0	-45.9	-61.1	46.3

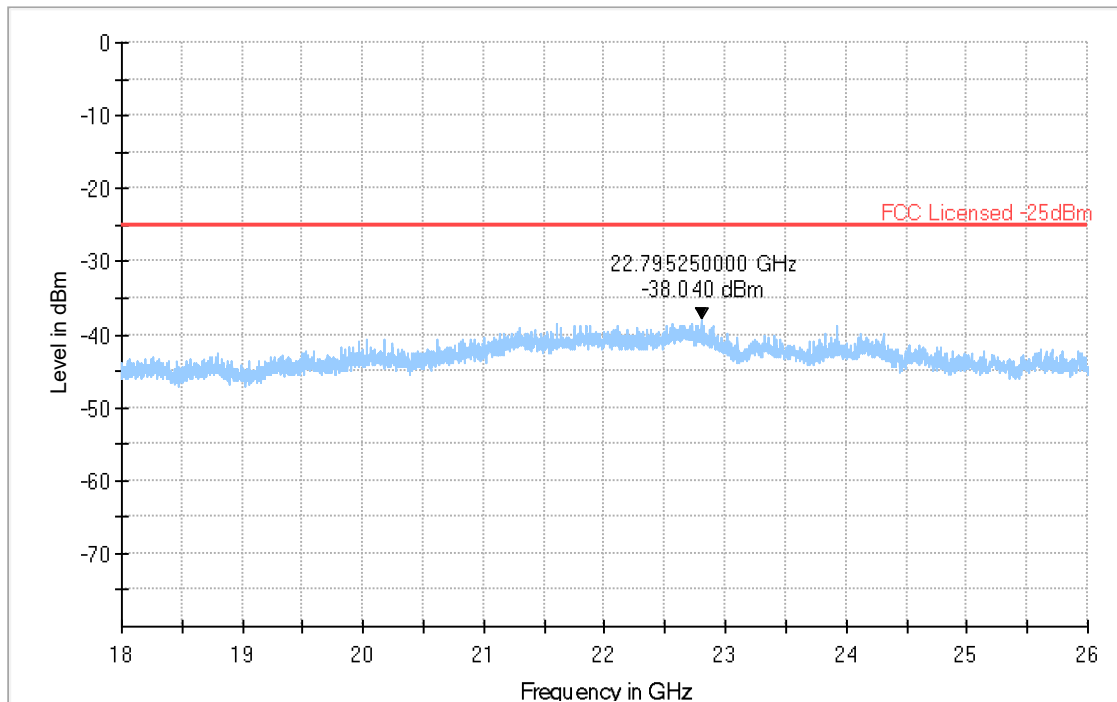


Plot # 34 Radiated Emissions: 18 GHz – 26 GHz

Channel: Low

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)
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Preview Result 1-PK+
FCC Licensed -25dBm

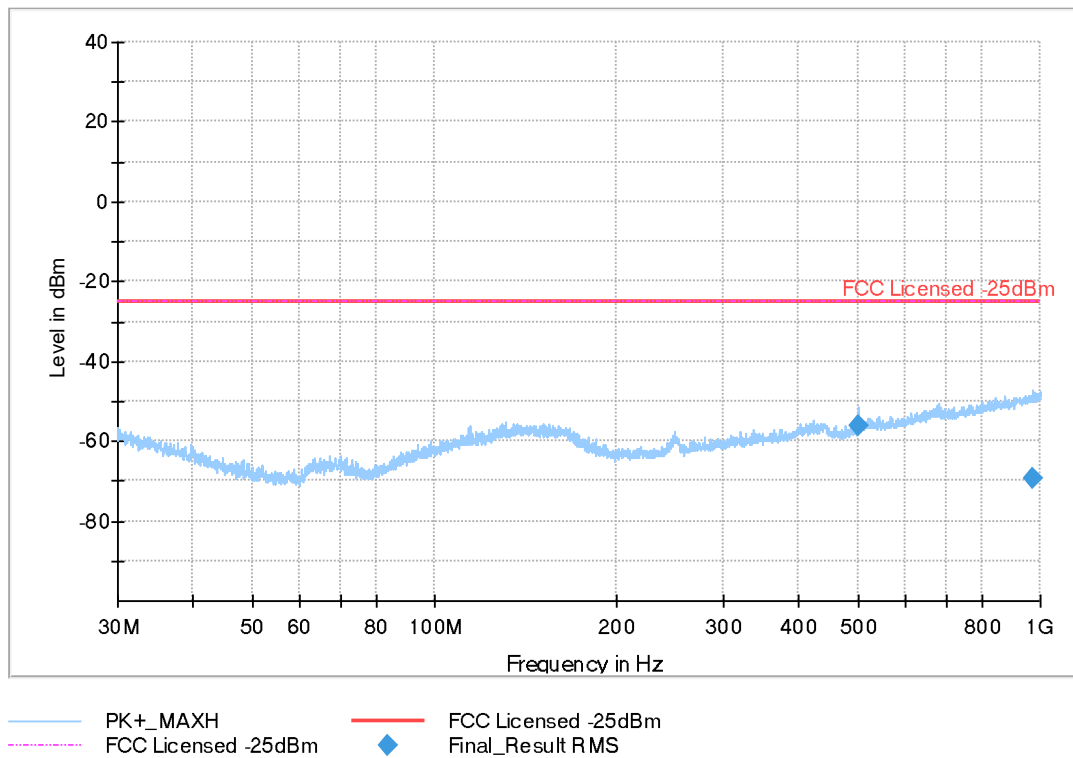
* Critical_Freqs PK+
◆ Final_Result RMS

Plot # 35 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid

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)
500.001	-56.198	-25.00	31.20	500.0	100.0	135.0	H	20.0	-71.4	2.1	0.0	-73.5	15.2
972.332	-69.369	-25.00	44.37	500.0	100.0	192.0	H	0.0	-64.7	2.9	0.0	-67.7	-4.6

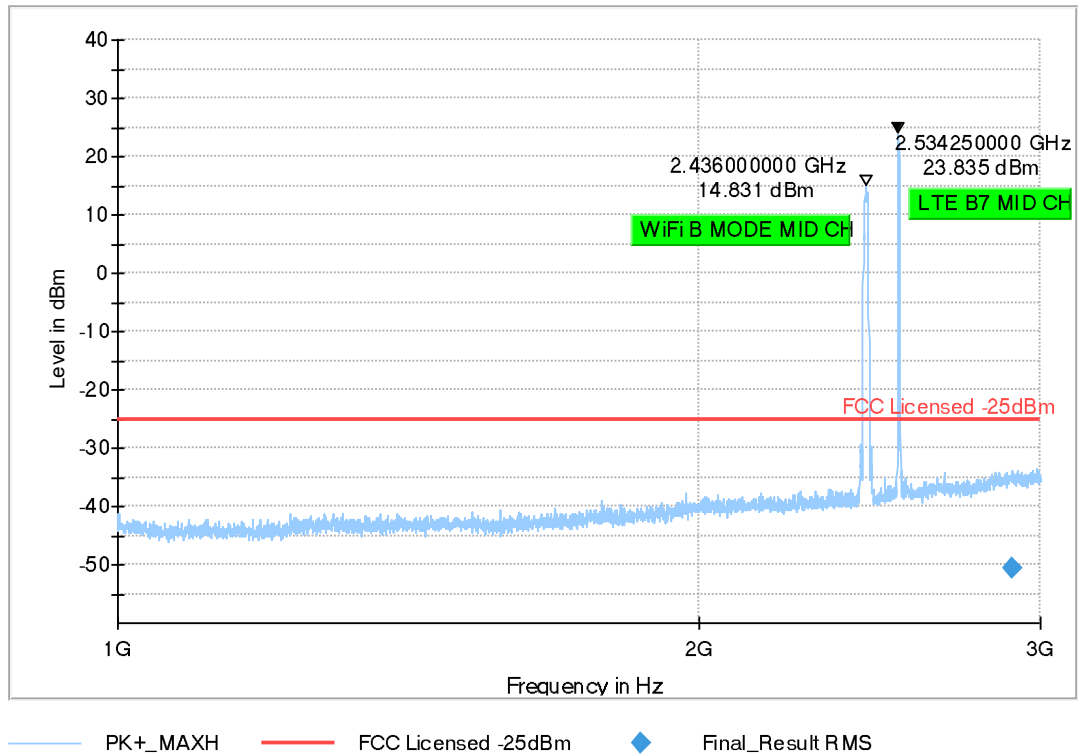


Plot # 36 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid

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)
2901.379	-50.803	-25.00	25.80	500.0	1000.0	265.0	V	23.0	-59.9	6.0	0.0	-65.9	9.1

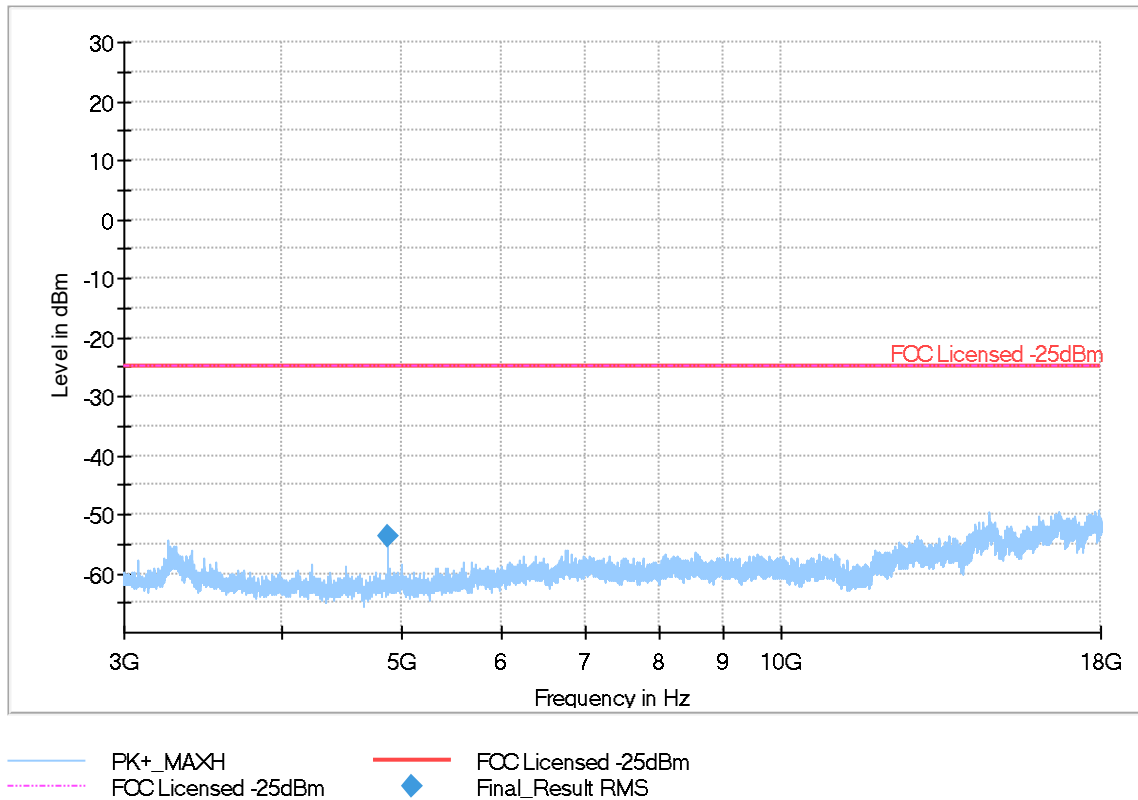


Plot # 37 Radiated Emissions: 3 GHz – 18 GHz

Channel: Mid

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)
4873.844	-53.745	-25.00	28.75	500.0	1000.0	107.0	H	335.0	-	7.0	-45.9	-61.1	46.2

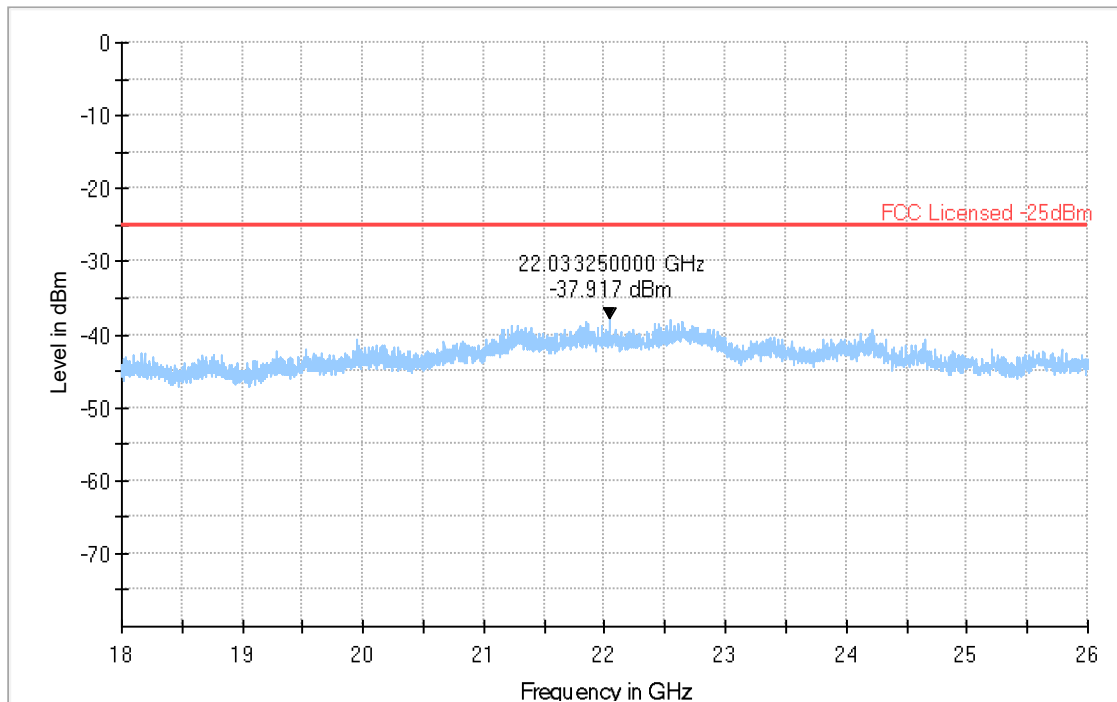


Plot # 38 Radiated Emissions: 18 GHz – 26 GHz

Channel: Mid

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)
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Preview Result 1-PK+
FCC Licensed -25dBm

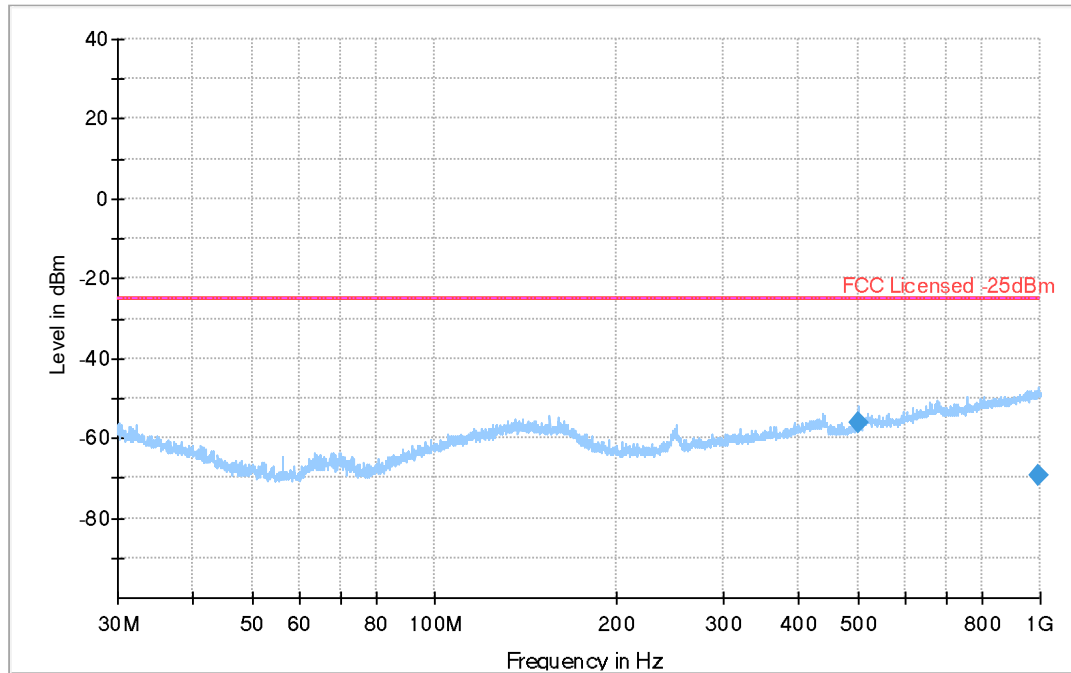
* Critical_Freqs PK+
◆ Final_Result RMS

Plot # 39 Radiated Emissions: 30 MHz – 1GHz

Channel: High

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)
500.000	-55.941	-25.00	30.94	500.0	100.0	142.0	H	22.0	-71.4	2.1	0.0	-73.5	15.4
995.296	-69.403	-25.00	44.40	500.0	100.0	151.0	V	27.0	-64.9	2.9	0.0	-67.8	-4.5

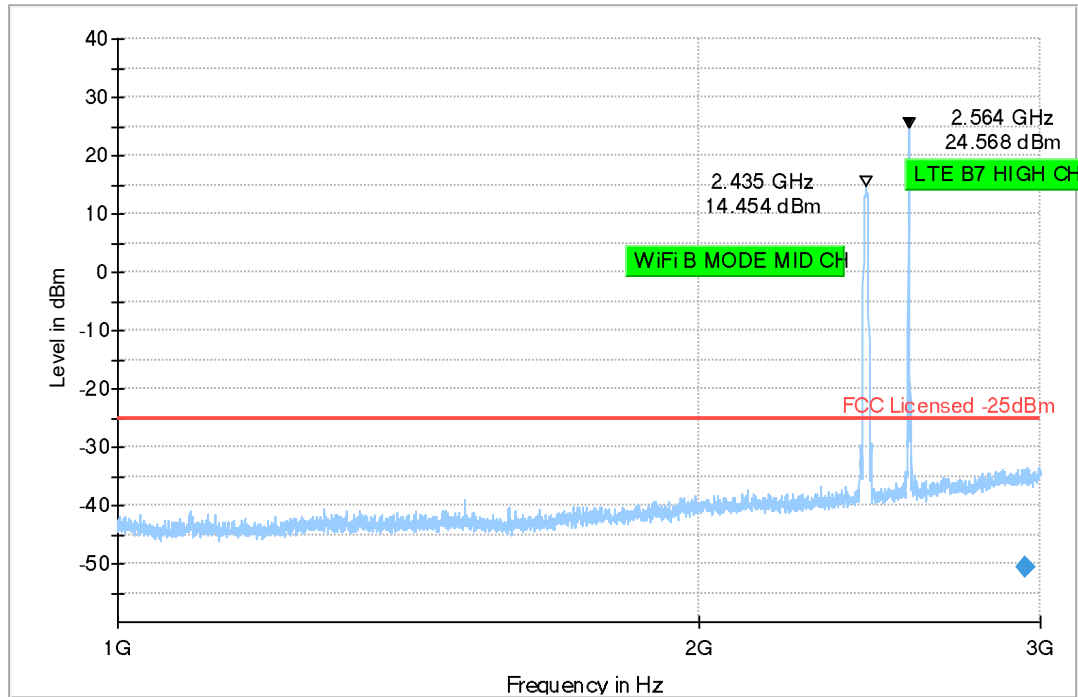


Plot # 40 Radiated Emissions: 1 GHz - 3 GHz

Channel: High

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)
2945.000	-50.718	-25.00	25.72	500.0	1000.0	400.0	H	34.0	-59.7	5.9	0.0	-65.6	9.0



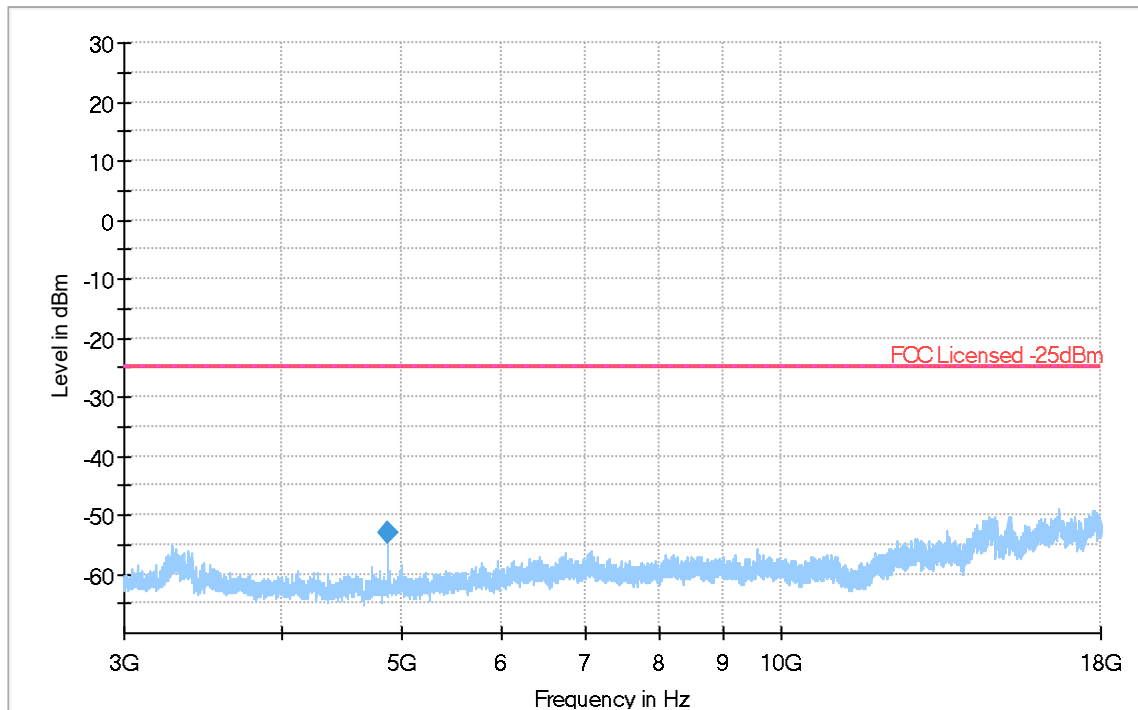
— PK+_MAXH

— FCC Licensed -25dBm

◆ Final_Result RMS

Plot # 41 Radiated Emissions: 3 GHz – 18 GHz**Channel: High****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)
4873.844	-52.925	-25.00	27.93	500.0	1000.0	100.0	H	338.0	-	7.0	-45.9	-61.1	47.1



— PK+_MAXH
— FCC Licensed -25dBm

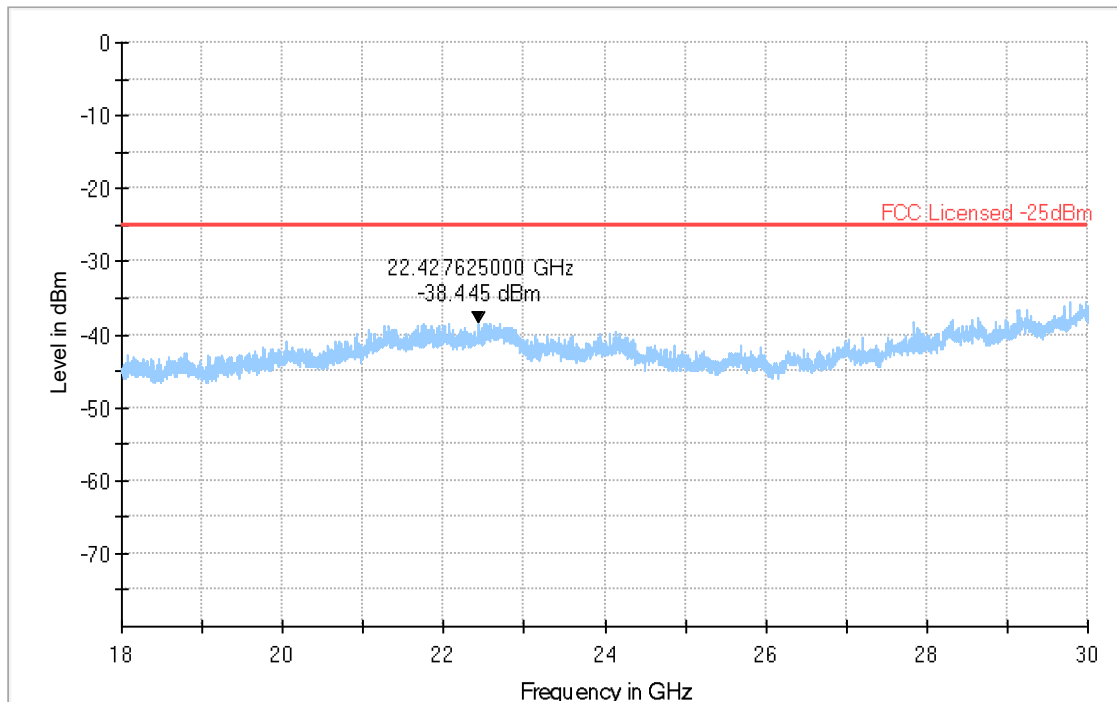
◆ Final_Result RMS

Plot # 42 Radiated Emissions: 18 GHz – 26 GHz

Channel: High

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)
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Preview Result 1-PK+
FCC Licensed -25dBm

* Critical_Freqs PK+
◆ Final_Result RMS

8.2.9 Measurement plots:

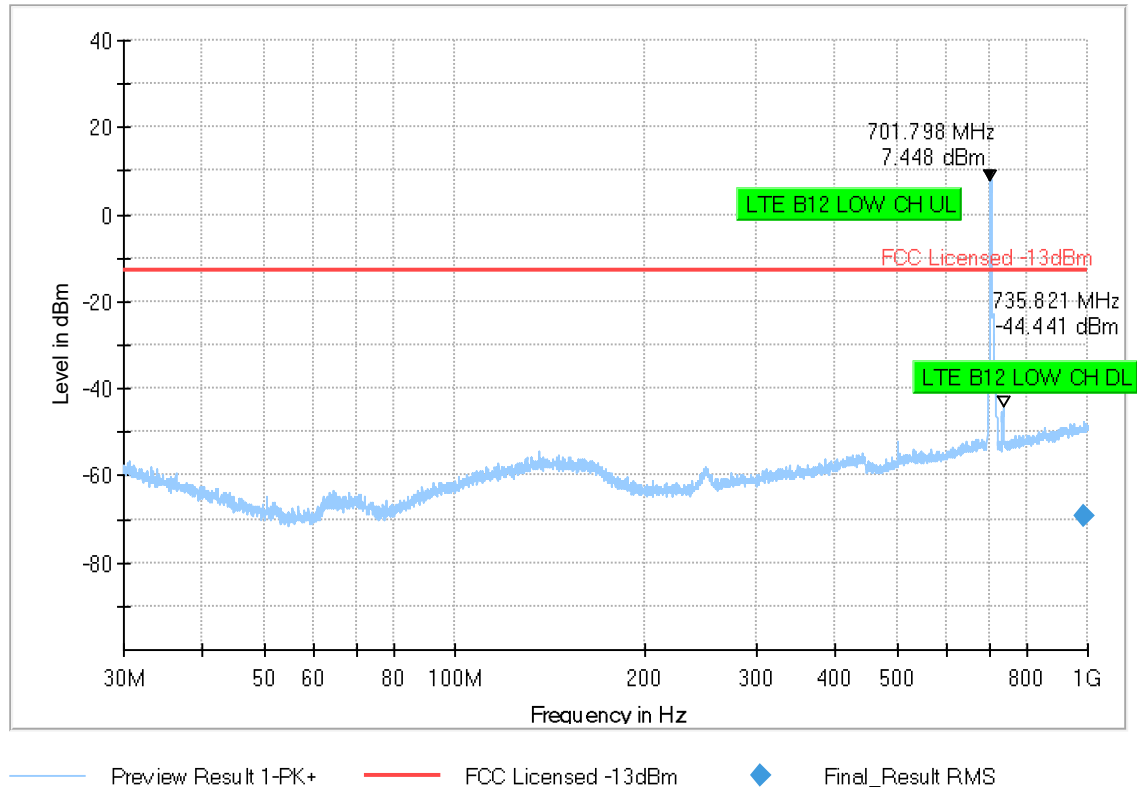
8.2.9.1 LTE Band 12

Plot # 43 Radiated Emissions: 30 MHz – 1GHz

Channel: Low

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)
984.127	-69.182	-13.00	56.18	500.0	100.0	349.0	H	84.0	-64.6	3.0	0.0	-67.6	-4.6

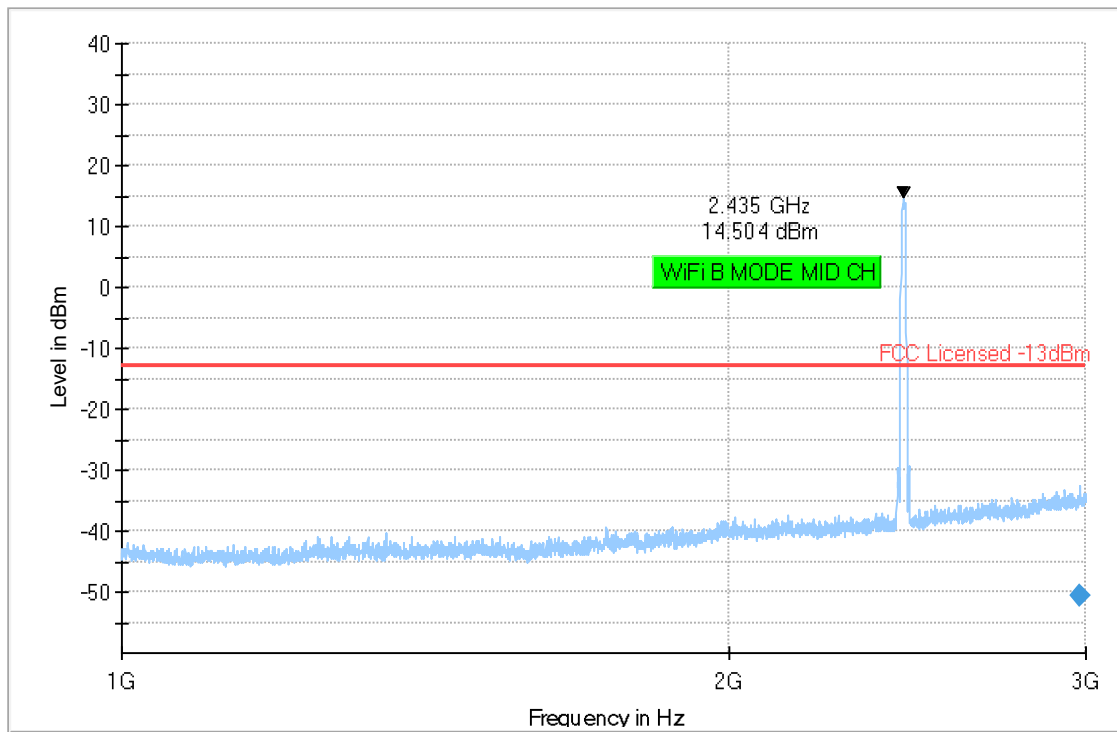


Plot # 44 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low

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)
2980.500	-50.590	-13.00	37.59	500.0	1000.0	231.0	H	56.0	-59.5	5.9	0.0	-65.4	8.9



Preview Result 1-PK+

FCC Licensed -13dBm



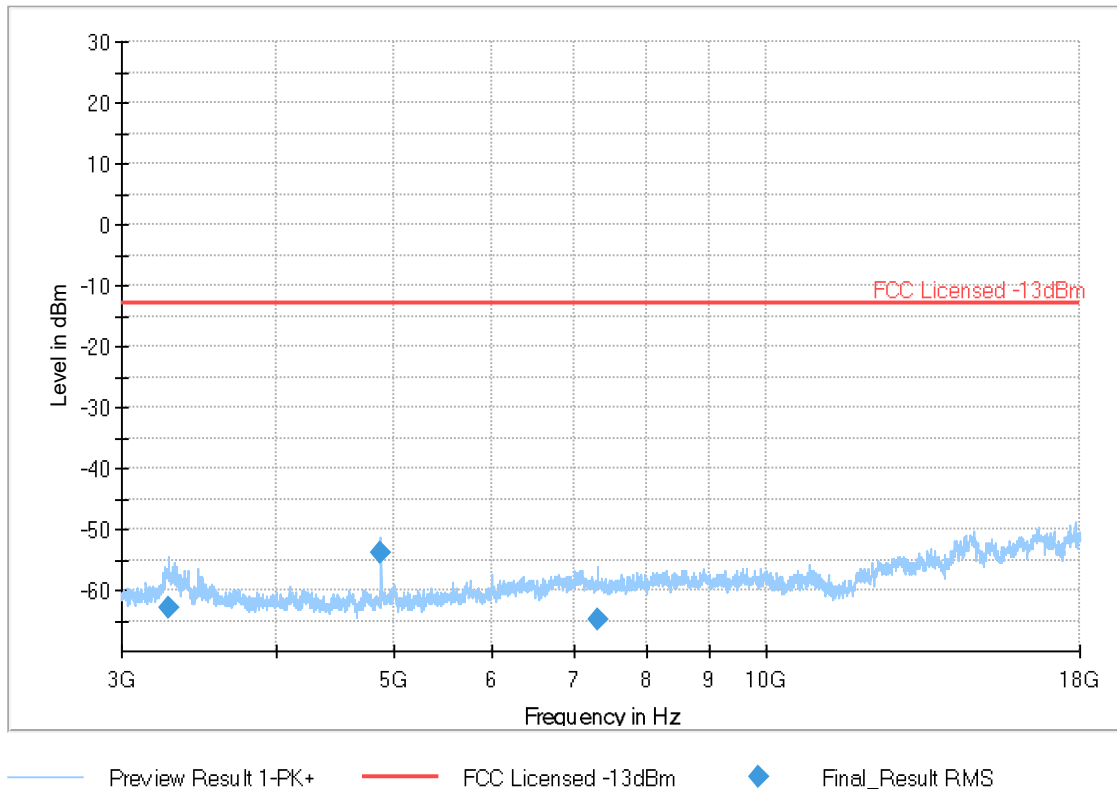
Final_Result RMS

Plot # 45 Radiated Emissions: 3 GHz – 18 GHz

Channel: Low

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)
3280.562	-62.979	-13.00	49.98	500.0	1000.0	107.0	V	22.0	-	5.6	-45.9	-62.6	40.0
4873.844	-53.783	-13.00	40.78	500.0	1000.0	100.0	H	336.0	-	7.0	-45.9	-61.1	46.2
7313.688	-64.789	-13.00	51.79	500.0	1000.0	126.0	H	1.0	-96.9	9.0	-46.6	-59.3	32.1

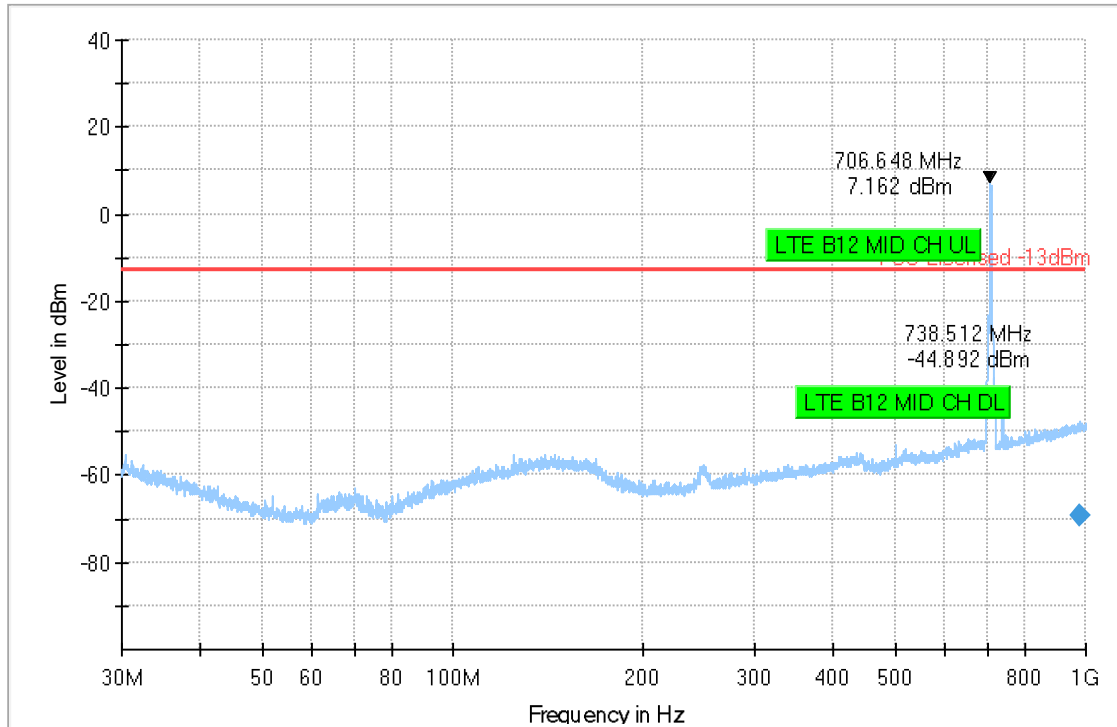


Plot # 46 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid

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)
977.048	-69.221	-13.00	56.22	500.0	100.0	292.0	H	159.0	-64.7	3.0	0.0	-67.6	-4.5



Preview Result 1-PK+

FCC Licensed -13dBm

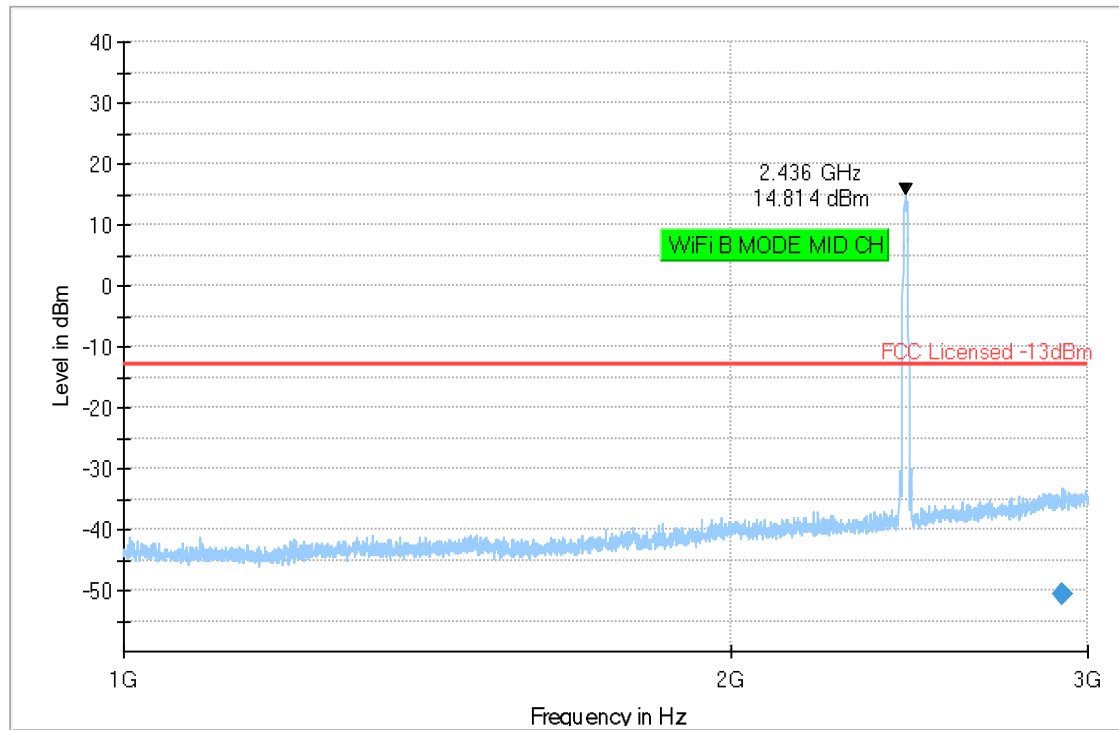
Final_Result RMS

Plot # 47 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid

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)
2915.750	-50.763	-13.00	37.76	500.0	1000.0	303.0	H	272.0	-59.8	6.0	0.0	-65.8	9.1



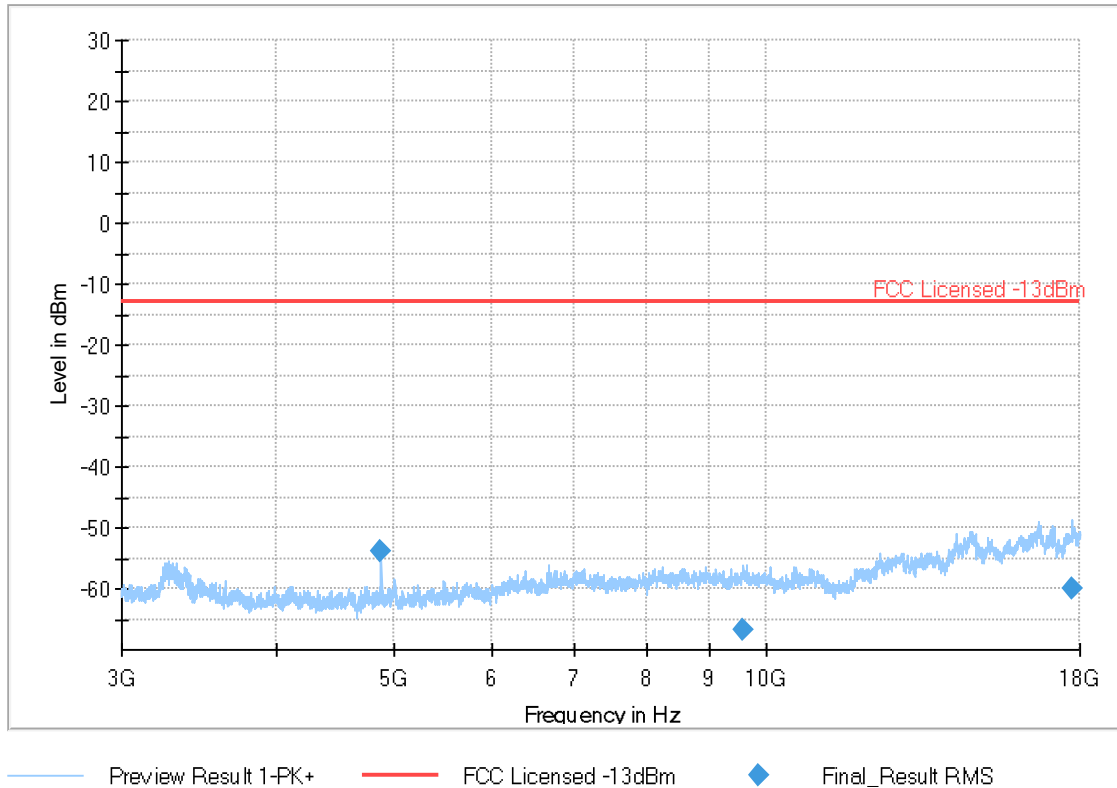
Preview Result 1-PK+

FCC Licensed -13dBm

Final_Result RMS

Plot # 48 Radiated Emissions: 3 GHz – 18 GHz**Channel: Mid****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)
4873.844	-53.821	-13.00	40.82	500.0	1000.0	100.0	H	336.0	-	7.0	-45.9	-61.1	46.2
9597.310	-66.681	-13.00	53.68	500.0	1000.0	125.0	V	5.0	-94.0	10.7	-46.5	-58.3	27.4
17713.375	-60.130	-13.00	47.13	500.0	1000.0	375.0	V	45.0	-81.1	15.5	-42.7	-53.8	20.9

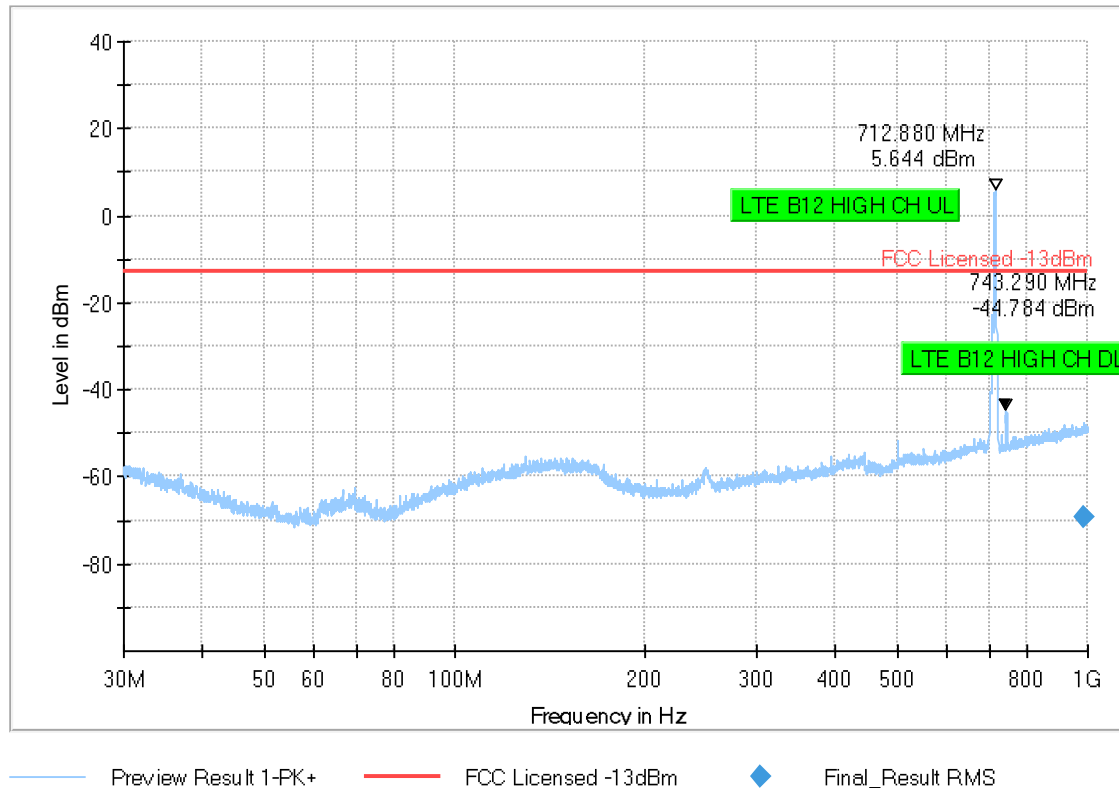


Plot # 49 Radiated Emissions: 30 MHz – 1GHz

Channel: High

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)
986.740	-69.244	-13.00	56.24	500.0	100.0	267.0	H	311.0	-64.6	2.9	0.0	-67.5	-4.6

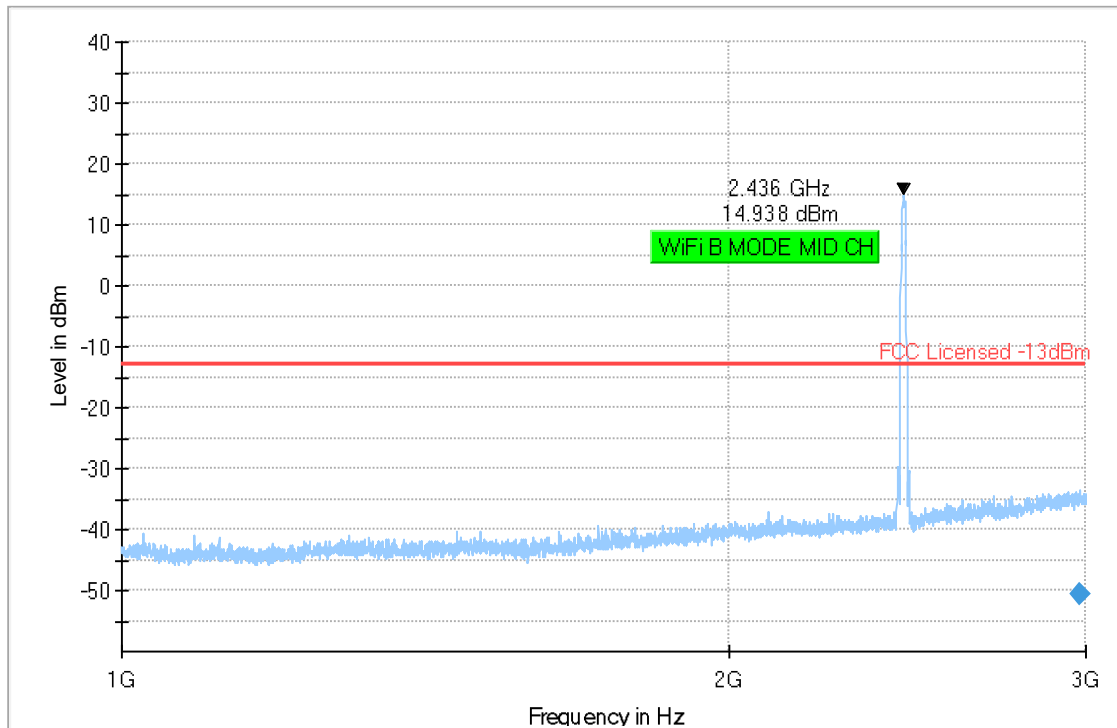


Plot # 50 Radiated Emissions: 1 GHz - 3 GHz

Channel: High

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)
2980.899	-50.602	-13.00	37.60	500.0	1000.0	382.0	H	251.0	-59.5	5.9	0.0	-65.4	8.9



Preview Result 1-PK+

FCC Licensed -13dBm

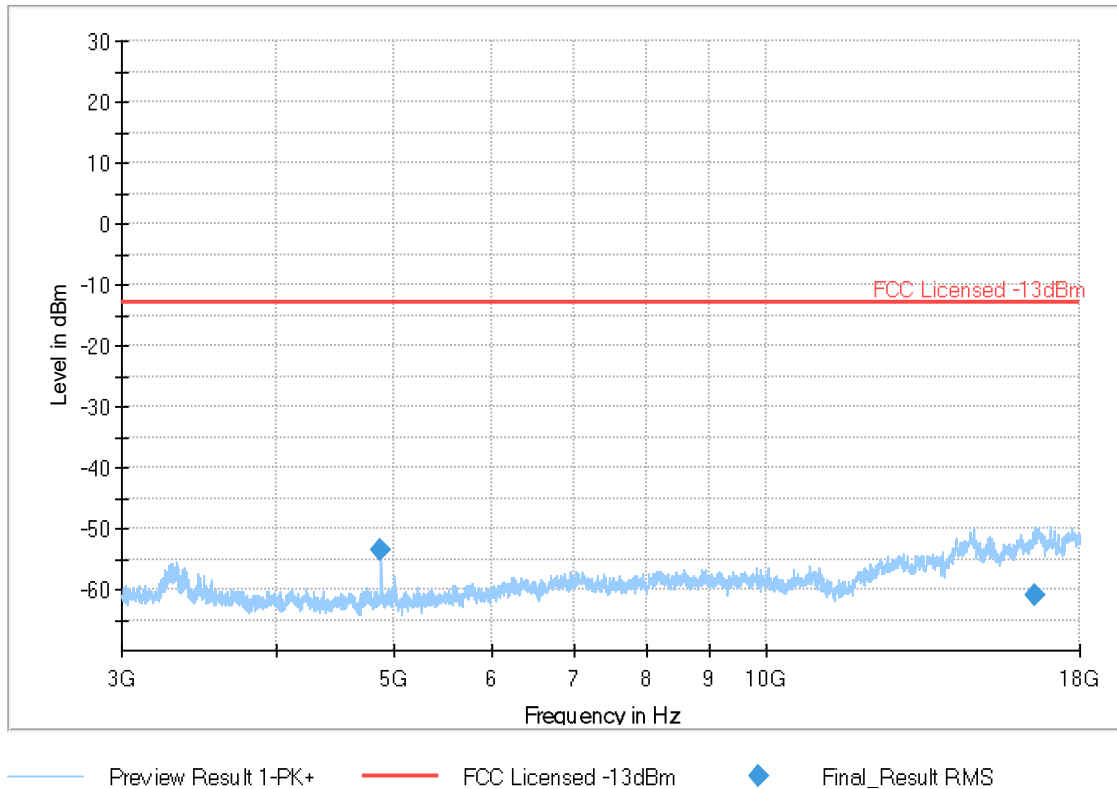
Final_Result RMS

Plot # 51 Radiated Emissions: 3 GHz – 18 GHz

Channel: High

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)
4873.844	-53.615	-13.00	40.61	500.0	1000.0	100.0	H	336.0	-	7.0	-45.9	-61.1	46.4
16559.234	-61.061	-13.00	48.06	500.0	1000.0	400.0	V	227.0	-82.1	15.2	-43.2	-54.1	21.0

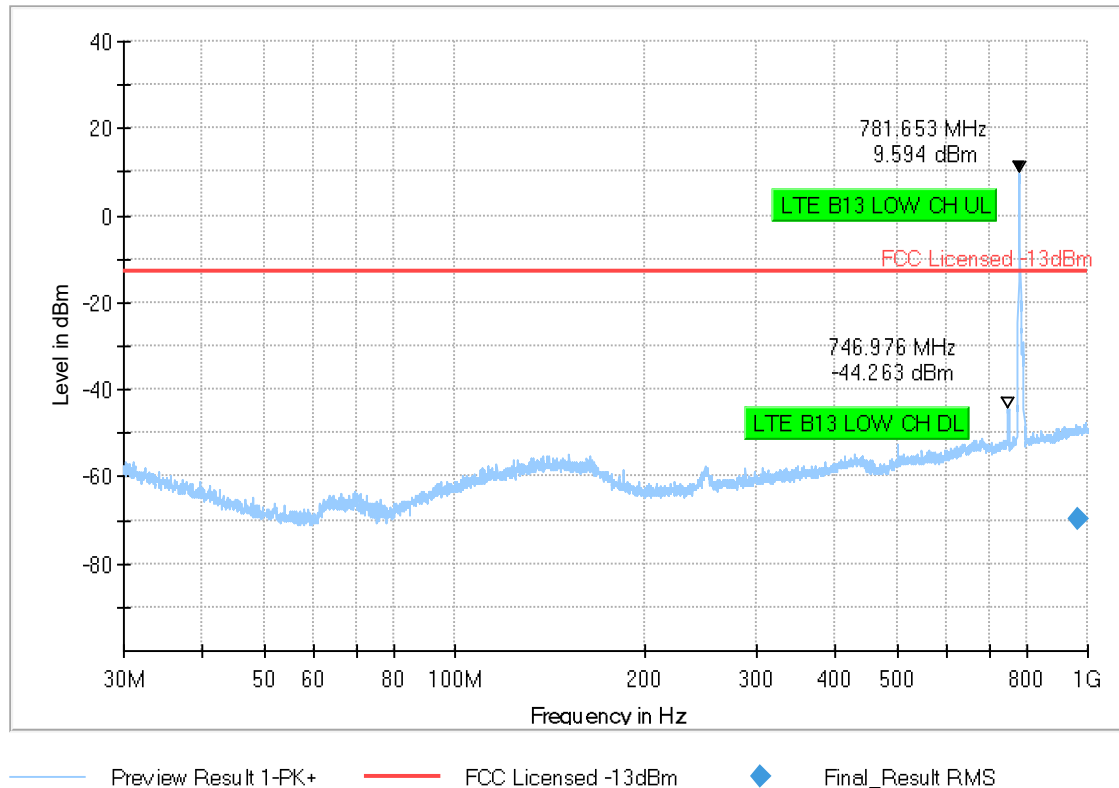


8.2.10 Measurement plots:**8.2.10.1 LTE Band 13****Plot # 52 Radiated Emissions: 30 MHz – 1GHz**

Channel: Low

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)
963.309	-69.706	-13.00	56.71	500.0	100.0	313.0	H	-39.0	-65.0	2.9	0.0	-67.9	-4.7

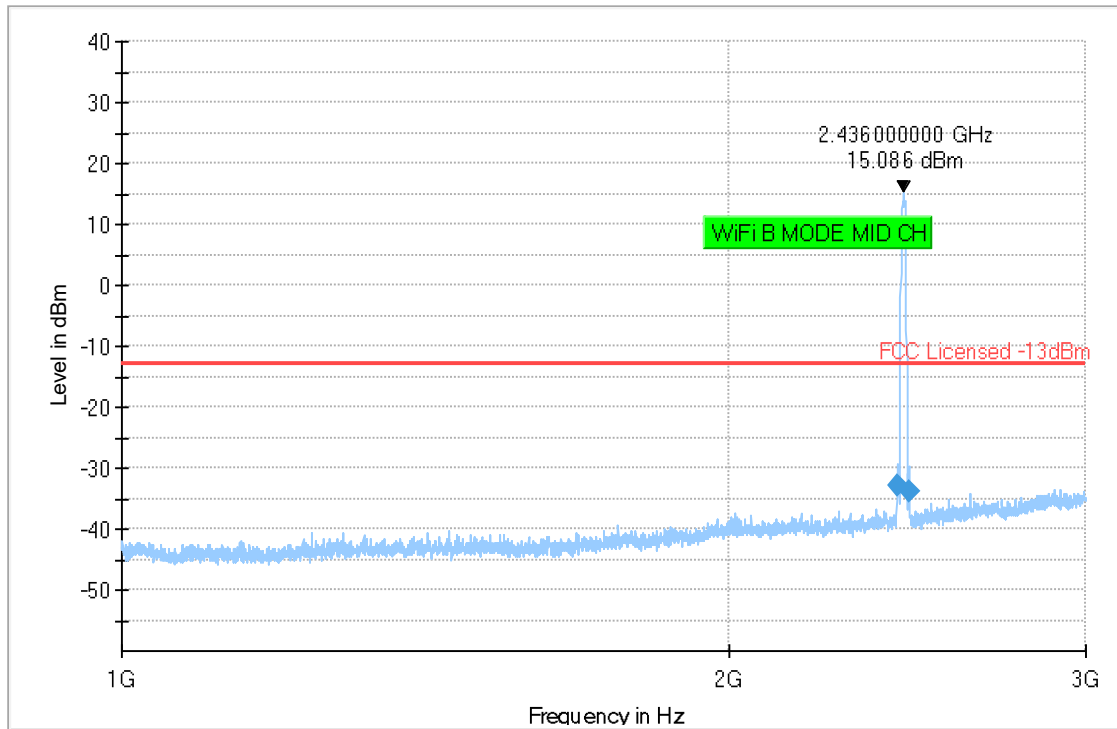


Plot # 53 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low

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)
2422.938	-32.870	-13.00	19.87	500.0	1000.0	222.0	H	349.0	-61.7	5.4	0.0	-67.1	28.8
2451.571	-33.906	-13.00	20.91	500.0	1000.0	202.0	H	0.0	-61.5	5.5	0.0	-67.0	27.6



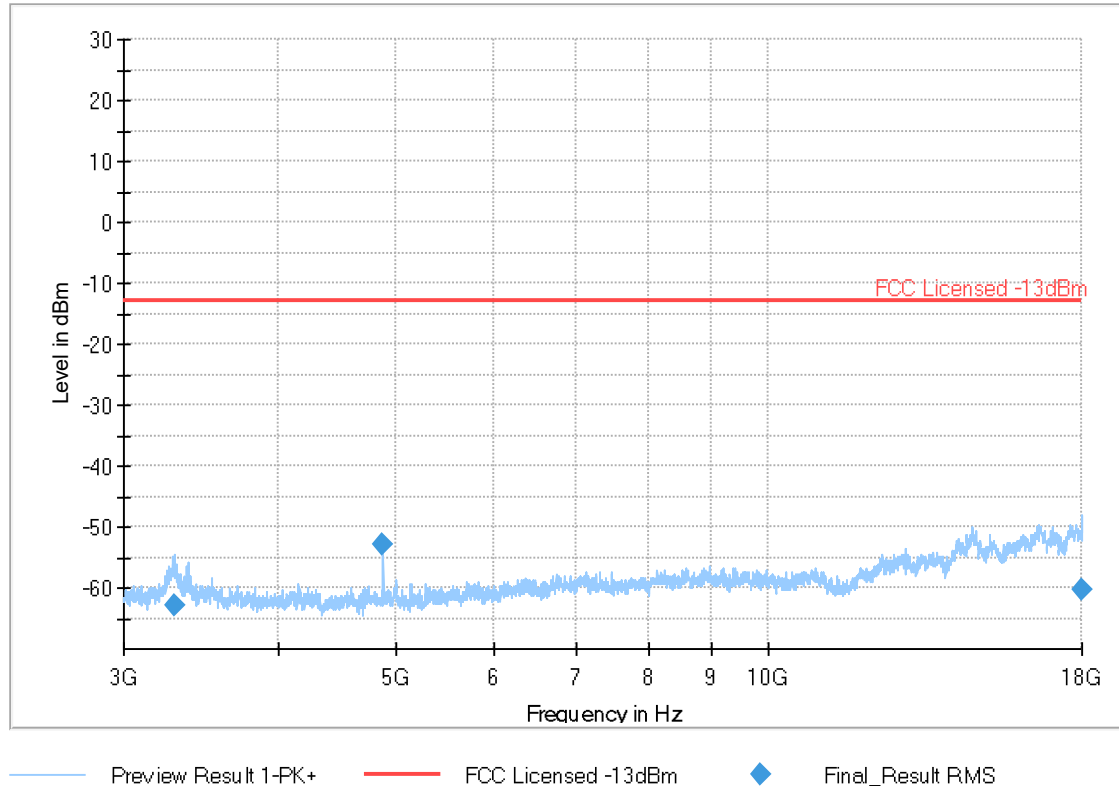
Preview Result 1-PK+

FCC Licensed -13dBm

Final_Result RMS

Plot # 54 Radiated Emissions: 3 GHz – 18 GHz**Channel: Low****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)
3297.945	-62.906	-13.00	49.91	500.0	1000.0	100.0	V	30.0	-	5.6	-45.9	-62.6	40.1
4873.844	-52.830	-13.00	39.83	500.0	1000.0	379.0	H	23.0	-	7.0	-45.9	-61.1	47.1
17980.769	-60.420	-13.00	47.42	500.0	1000.0	272.0	V	55.0	-80.4	15.4	-42.2	-53.6	20.0

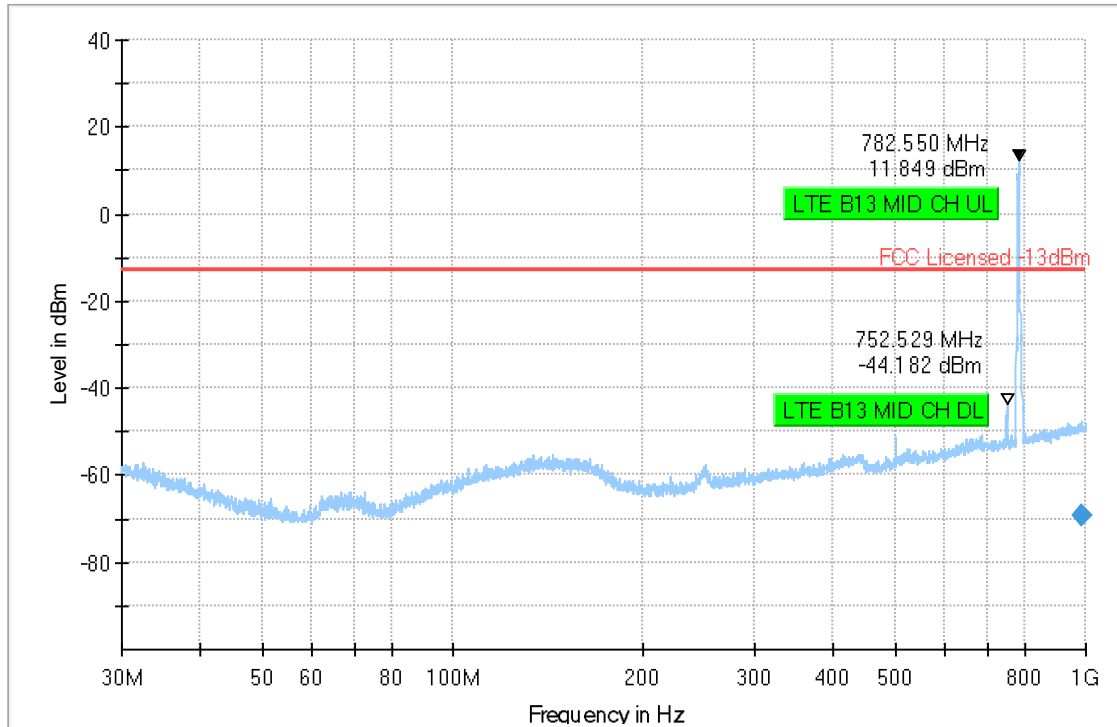


Plot # 55 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid

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)
987.536	-69.275	-13.00	56.27	500.0	100.0	372.0	V	72.0	-64.8	2.9	0.0	-67.7	-4.5



Preview Result 1-PK+

FCC Licensed -13dBm

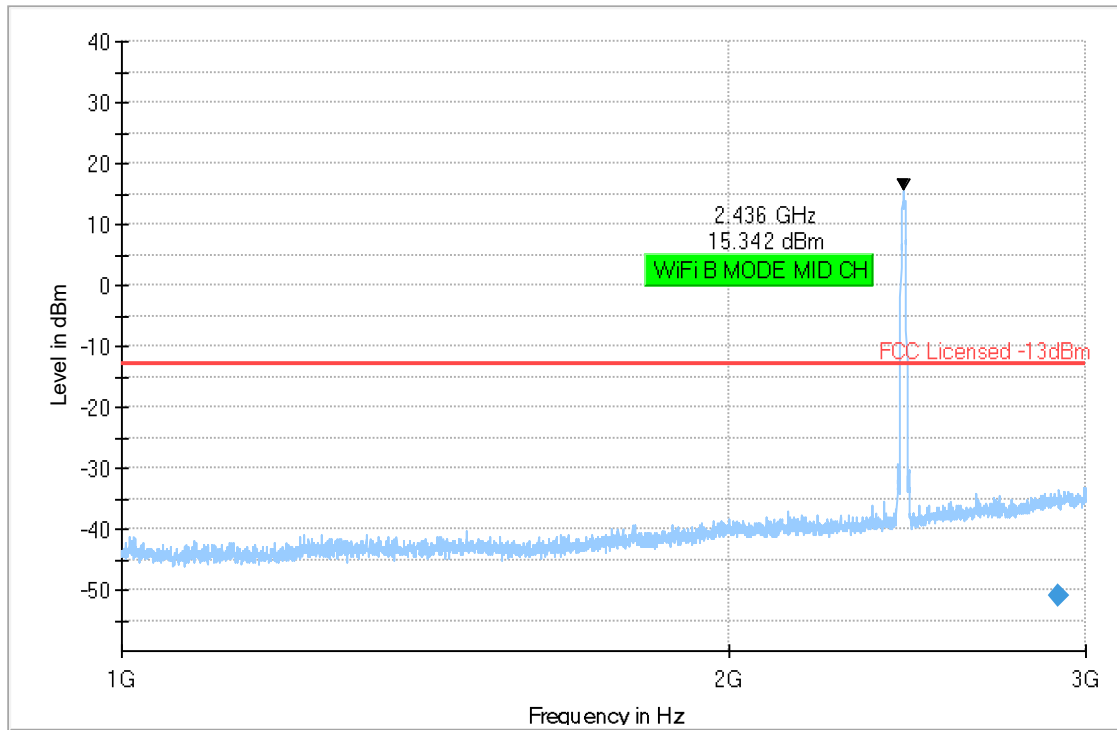
Final_Result RMS

Plot # 56 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid

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)
2910.500	-50.809	-13.00	37.81	500.0	1000.0	256.0	V	24.0	-59.9	6.0	0.0	-65.8	9.0

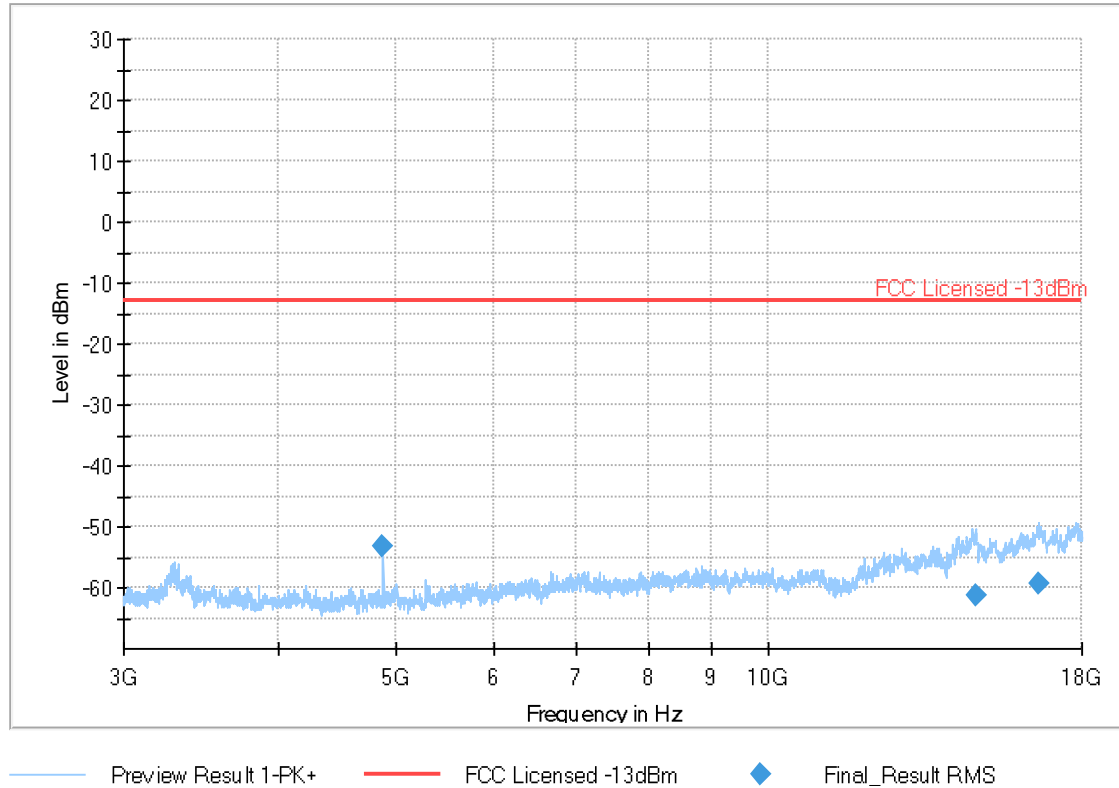


Plot # 57 Radiated Emissions: 3 GHz – 18 GHz

Channel: Mid

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)
4873.844	-53.075	-13.00	40.07	500.0	1000.0	359.0	H	22.0	-	7.0	-45.9	-61.1	46.9
14742.874	-61.359	-13.00	48.36	500.0	1000.0	342.0	V	236.0	-86.0	13.5	-45.5	-54.0	24.6
16628.188	-59.371	-13.00	46.37	500.0	1000.0	238.0	V	355.0	-81.5	15.2	-42.6	-54.0	22.1

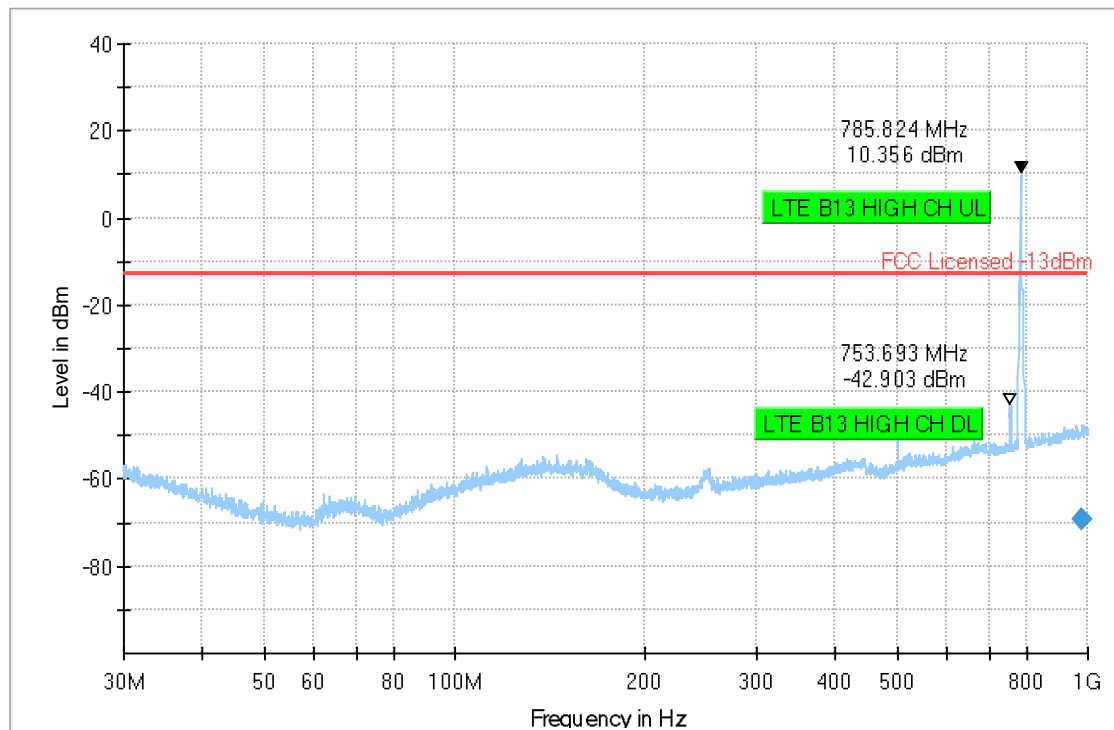


Plot # 58 Radiated Emissions: 30 MHz – 1GHz

Channel: High

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)
978.346	-69.194	-13.00	56.19	500.0	100.0	163.0	H	167.0	-64.6	3.0	0.0	-67.6	-4.5



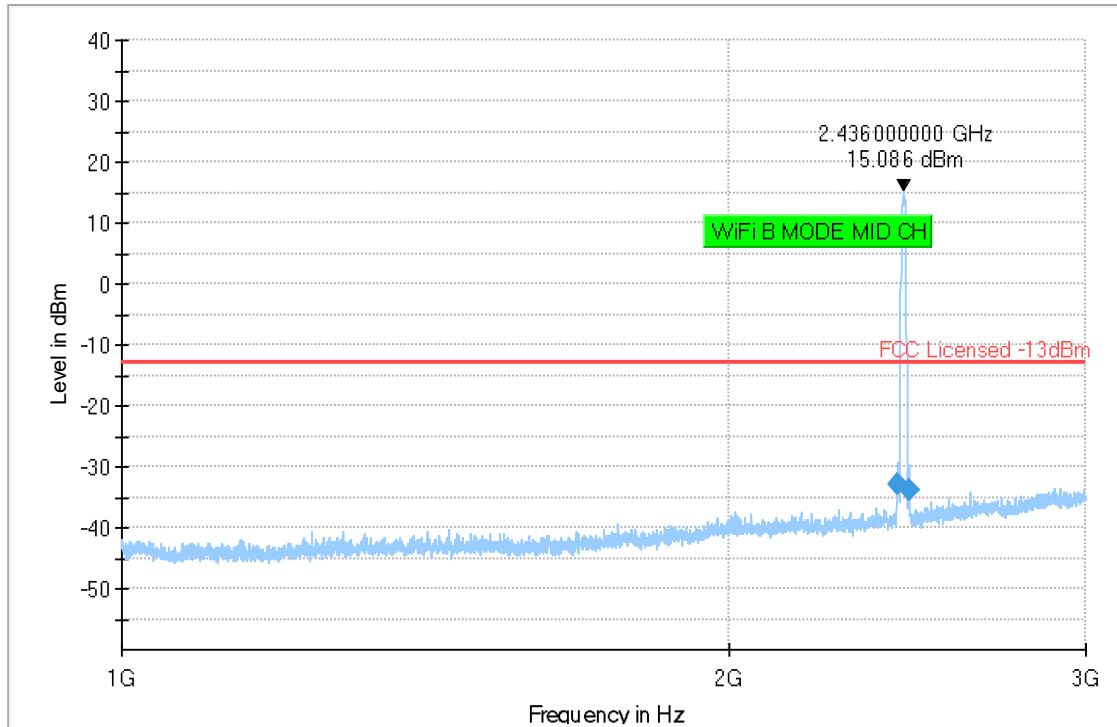
Preview Result 1-PK+ FCC Licensed -13dBm Final_Result RMS

Plot # 59 Radiated Emissions: 1 GHz - 3 GHz

Channel: High

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)
2422.938	-32.870	-13.00	19.87	500.0	1000.0	222.0	H	349.0	-61.7	5.4	0.0	-67.1	28.8
2451.571	-33.906	-13.00	20.91	500.0	1000.0	202.0	H	0.0	-61.5	5.5	0.0	-67.0	27.6



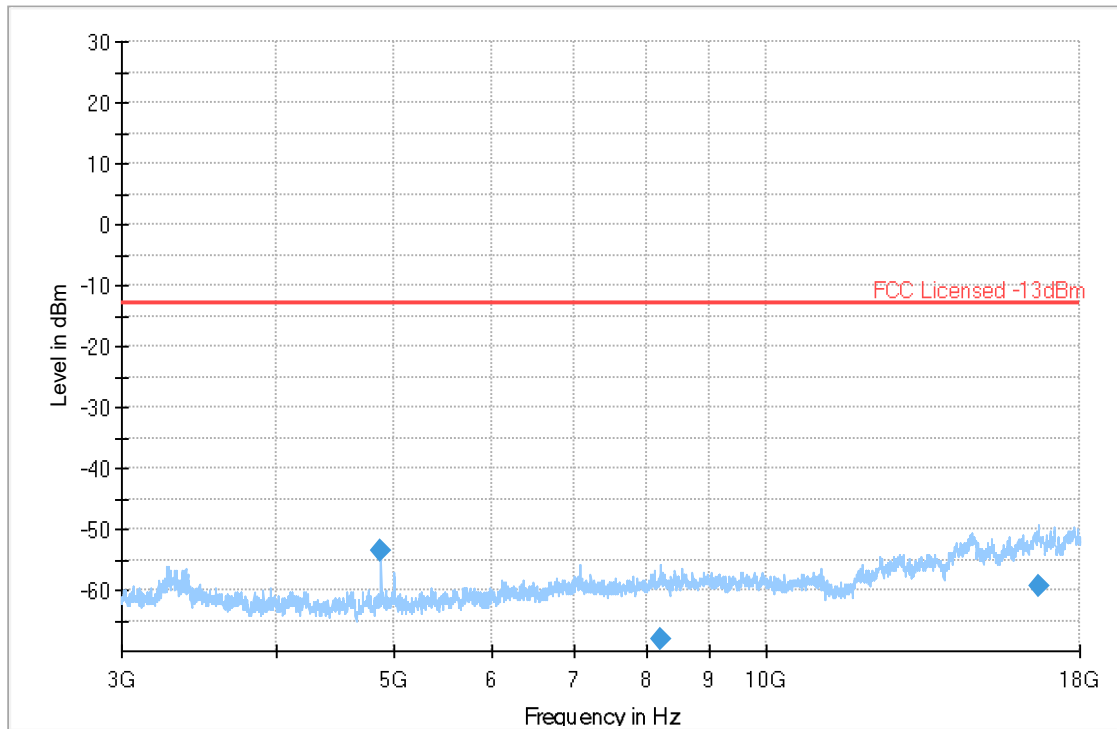
Preview Result 1-PK+

FCC Licensed -13dBm

Final_Result RMS

Plot # 60 Radiated Emissions: 3 GHz – 18 GHz**Channel: High****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)
4873.844	-53.707	-13.00	40.71	500.0	1000.0	100.0	H	336.0	-	7.0	-45.9	-61.1	46.3
8225.406	-68.148	-13.00	55.15	500.0	1000.0	160.0	H	199.0	-96.5	9.8	-47.1	-59.2	28.4
16662.438	-59.242	-13.00	46.24	500.0	1000.0	264.0	V	266.0	-81.2	15.2	-42.4	-54.0	21.9



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

8.2.11 Measurement plots:

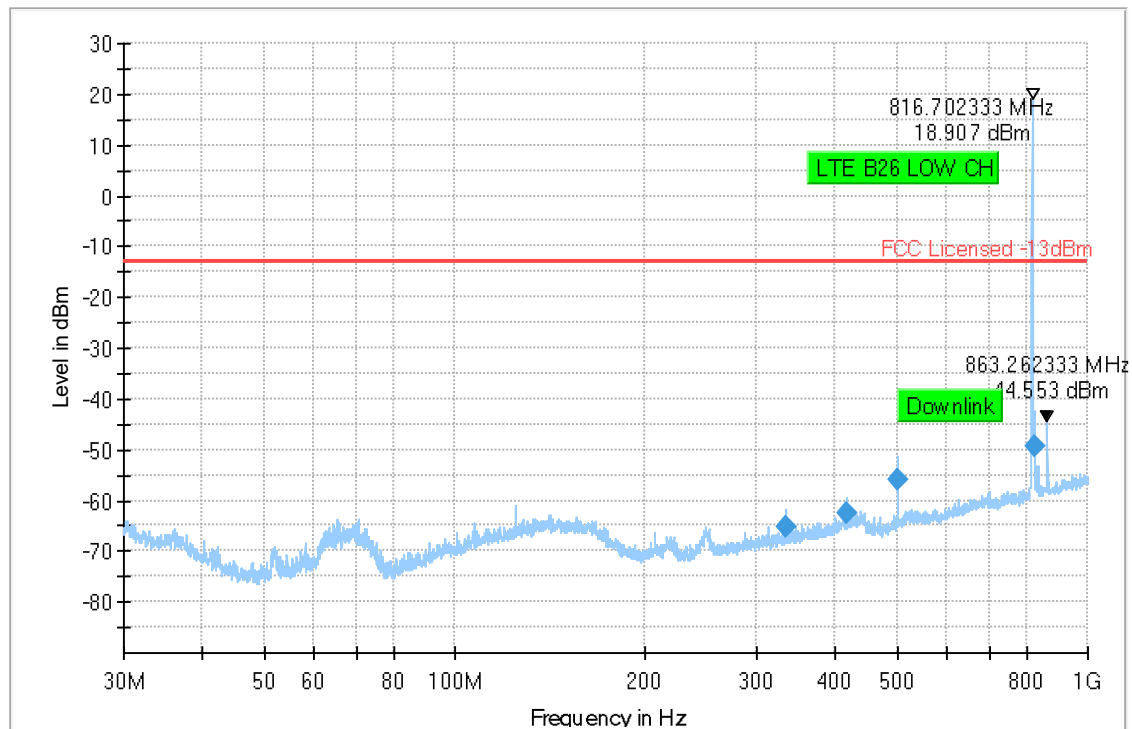
8.2.11.1 LTE Band 26

Plot # 61 Radiated Emissions: 30 MHz – 1GHz

Channel: Low

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)
333.330	-65.046	-13.00	52.05	500.0	100.0	150.0	V	135.0	-75.5	1.7	0.0	-77.2	10.5
416.667	-62.441	-13.00	49.44	500.0	100.0	100.0	H	340.0	-72.7	1.9	0.0	-74.6	10.3
499.993	-56.073	-13.00	43.07	500.0	100.0	134.0	H	24.0	-71.4	2.1	0.0	-73.5	15.3
825.930	-49.368	-13.00	36.37	500.0	100.0	100.0	H	341.0	-66.5	2.7	0.0	-69.2	17.2



— Preview Result 1-PK+

— FCC Licensed -13dBm

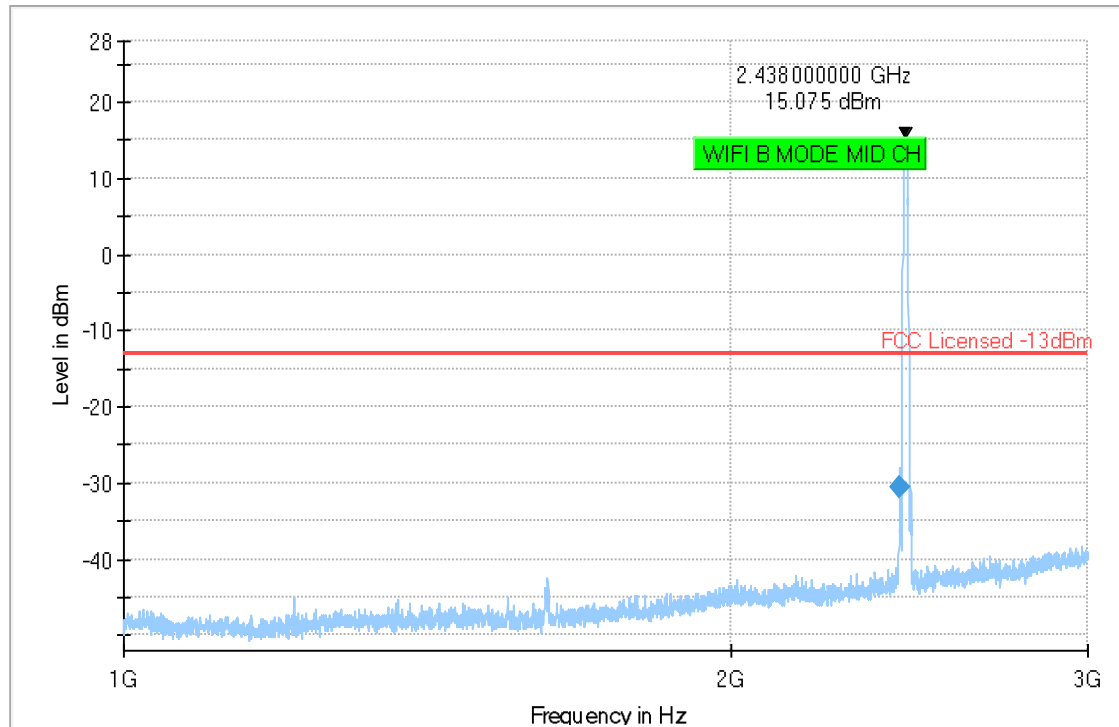
◆ Final_Result RMS

Plot # 62 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low

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)
2422.000	-30.526	-13.00	17.53	500.0	1000.0	150.0	H	9.0	-61.7	5.4	0.0	-67.1	31.2



Preview Result 1-PK+

FCC Licensed -13dBm

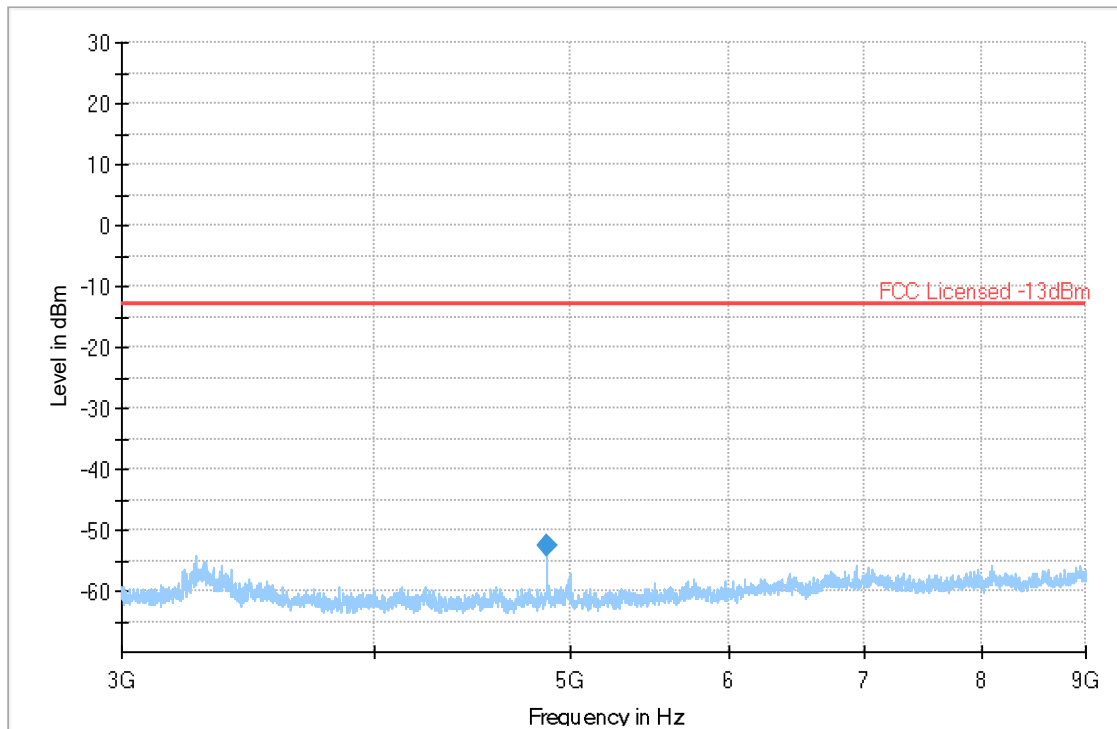
Final_Result RMS

Plot # 63 Radiated Emissions: 3 GHz – 9 GHz

Channel: Low

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)
4873.919	-52.576	-13.00	39.58	500.0	1000.0	100.0	H	337.0	-	7.0	-45.9	-61.1	47.4



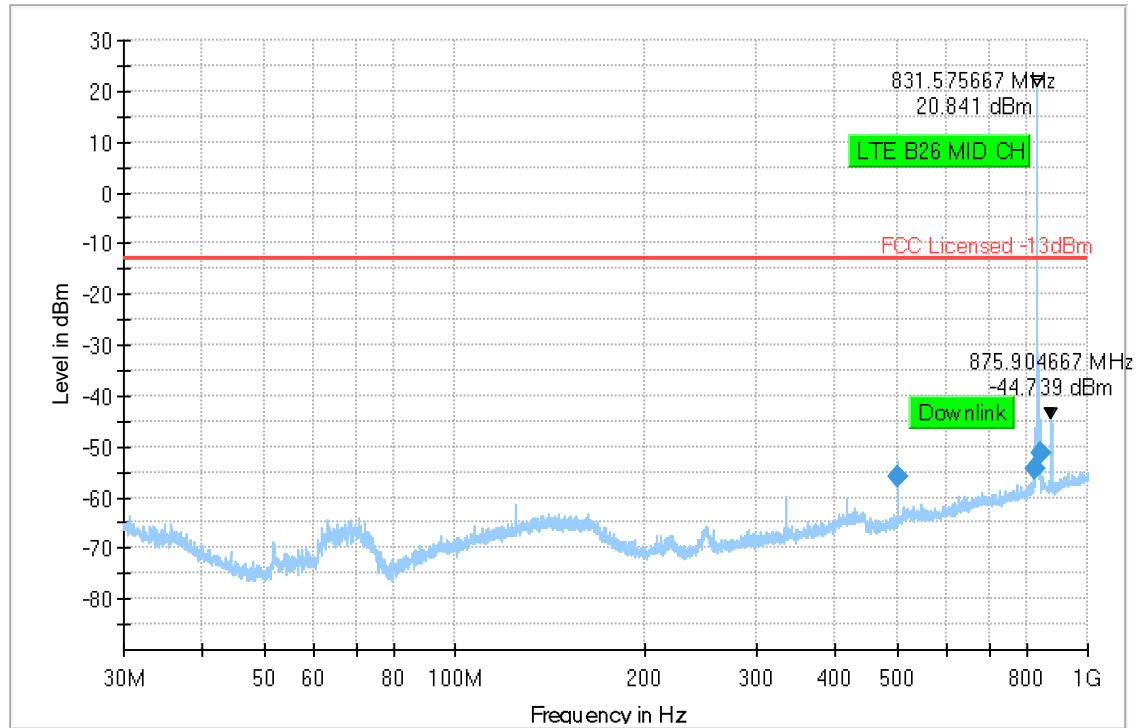
— Preview Result 1-PK+ — FCC Licensed -13dBm ◆ Final_Result RMS

Plot # 64 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid

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)
500.009	-55.844	-13.00	42.84	500.0	100.0	143.0	H	26.0	-71.4	2.1	0.0	-73.5	15.5
822.433	-54.274	-13.00	41.27	500.0	100.0	100.0	H	335.0	-66.6	2.7	0.0	-69.2	12.3
841.057	-51.163	-13.00	38.16	500.0	100.0	100.0	H	344.0	-66.4	2.7	0.0	-69.1	15.2



Preview Result 1-PK+

FCC Licensed -13dBm



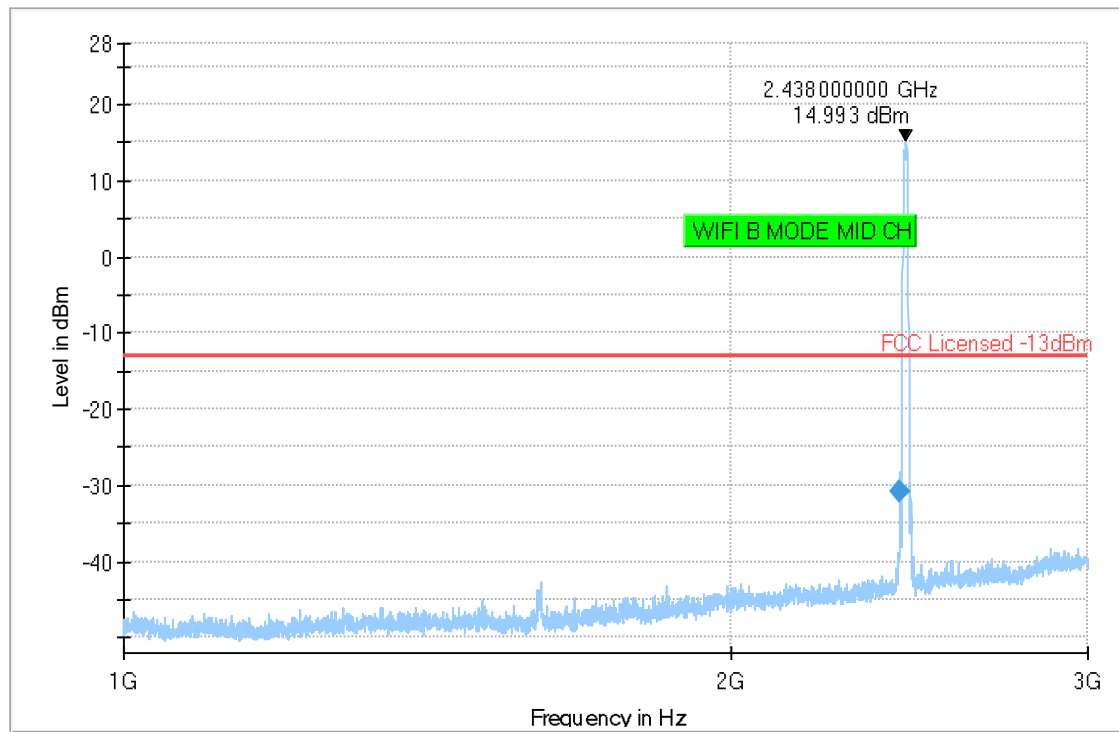
Final_Result RMS

Plot # 65 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid

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)
2422.250	-30.795	-13.00	17.79	500.0	1000.0	142.0	H	8.0	-61.7	5.4	0.0	-67.1	30.9



Preview Result 1-PK+

FCC Licensed -13dBm



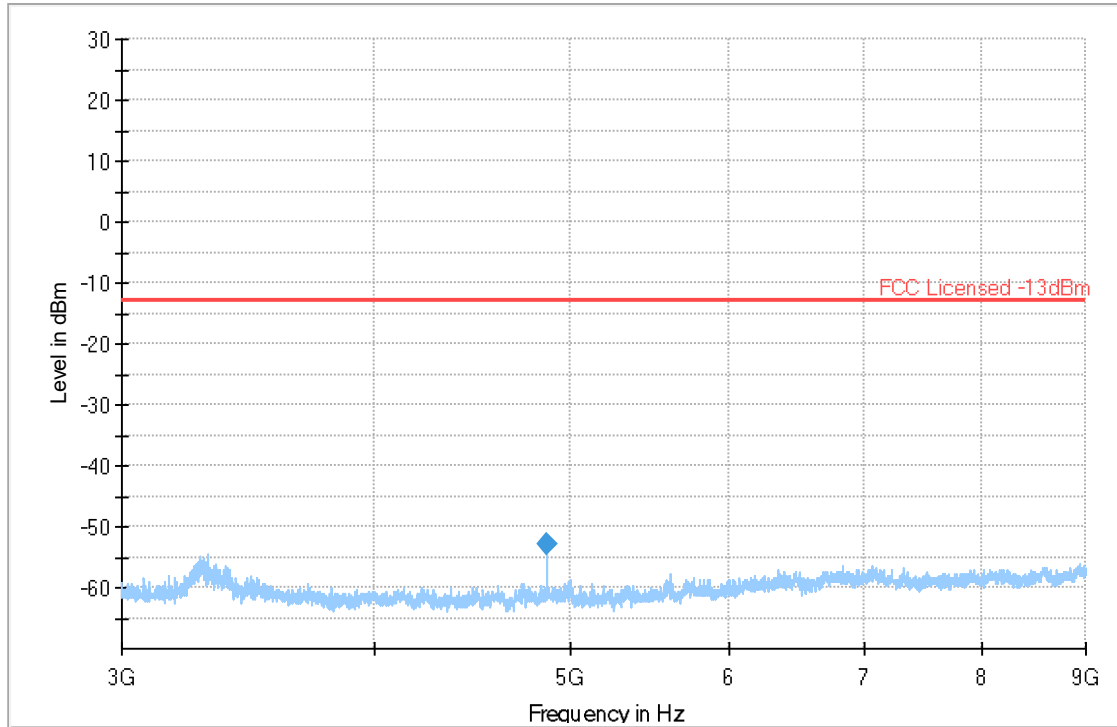
Final_Result RMS

Plot # 66 Radiated Emissions: 3 GHz – 9 GHz

Channel: Mid

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)
4873.972	-52.780	-13.00	39.78	500.0	1000.0	228.0	H	16.0	-	7.0	-45.9	-61.1	47.2



Preview Result 1-PK+

FCC Licensed -13dBm

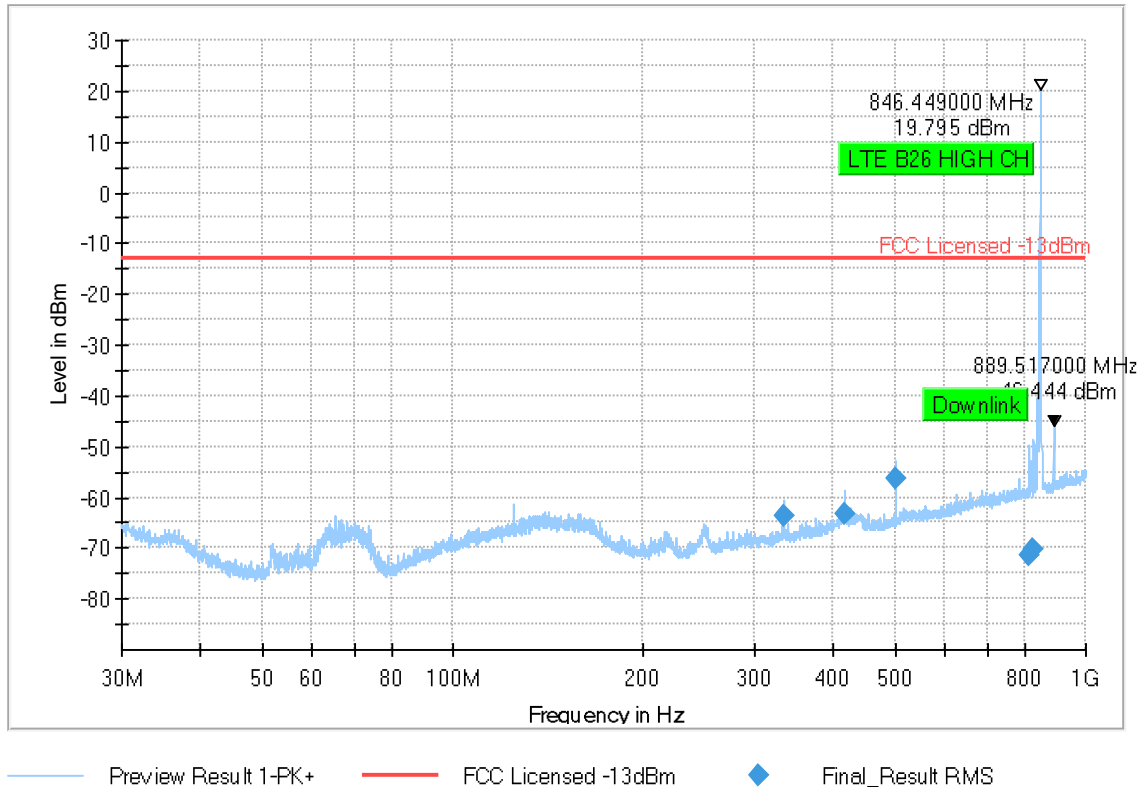
Final_Result RMS

Plot # 67 Radiated Emissions: 30 MHz – 1GHz

Channel: High

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)
333.339	-63.576	-13.00	50.58	500.0	100.0	100.0	H	270.0	-74.8	1.7	0.0	-76.5	11.2
416.667	-63.364	-13.00	50.36	500.0	100.0	100.0	H	325.0	-72.7	1.9	0.0	-74.6	9.3
499.994	-56.189	-13.00	43.19	500.0	100.0	160.0	H	25.0	-71.4	2.1	0.0	-73.5	15.2
815.125	-71.519	-13.00	58.52	500.0	100.0	100.0	H	329.0	-66.6	2.7	0.0	-69.3	-5.0
827.153	-70.259	-13.00	57.26	500.0	100.0	100.0	H	-18.0	-66.6	2.7	0.0	-69.2	-3.7

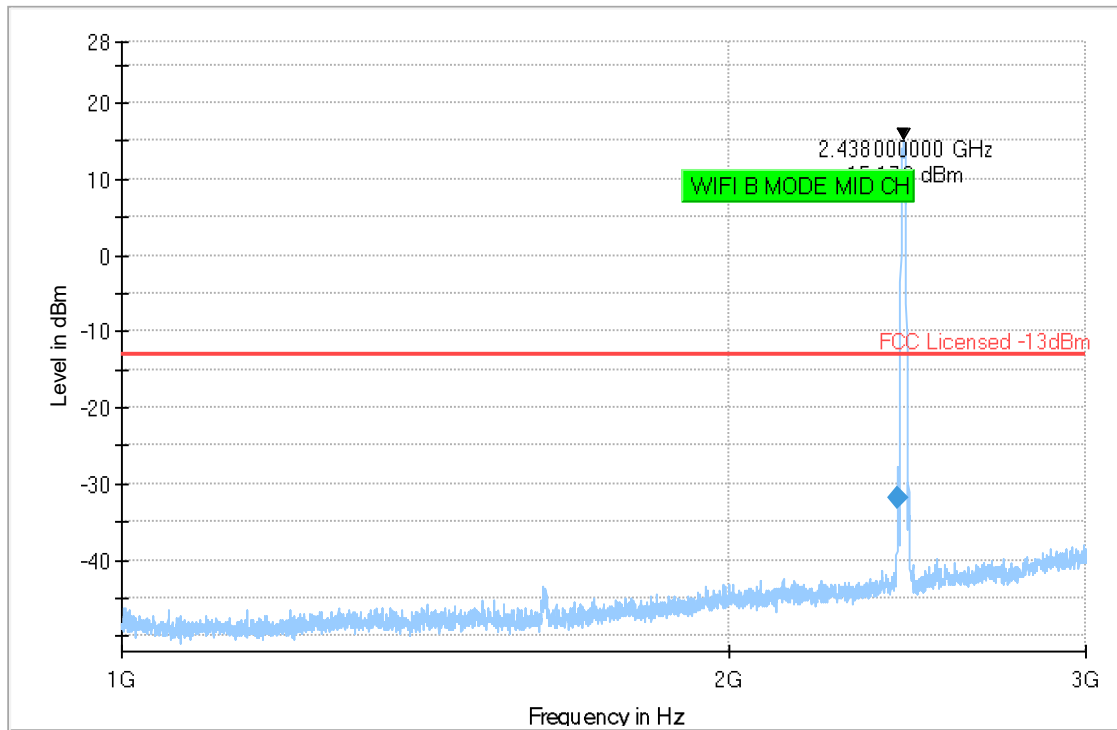


Plot # 68 Radiated Emissions: 1 GHz - 3 GHz

Channel: High

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)
2422.750	-31.812	-13.00	18.81	500.0	1000.0	151.0	H	6.0	-61.7	5.4	0.0	-67.1	29.9



Preview Result 1-PK+

FCC Licensed -13dBm

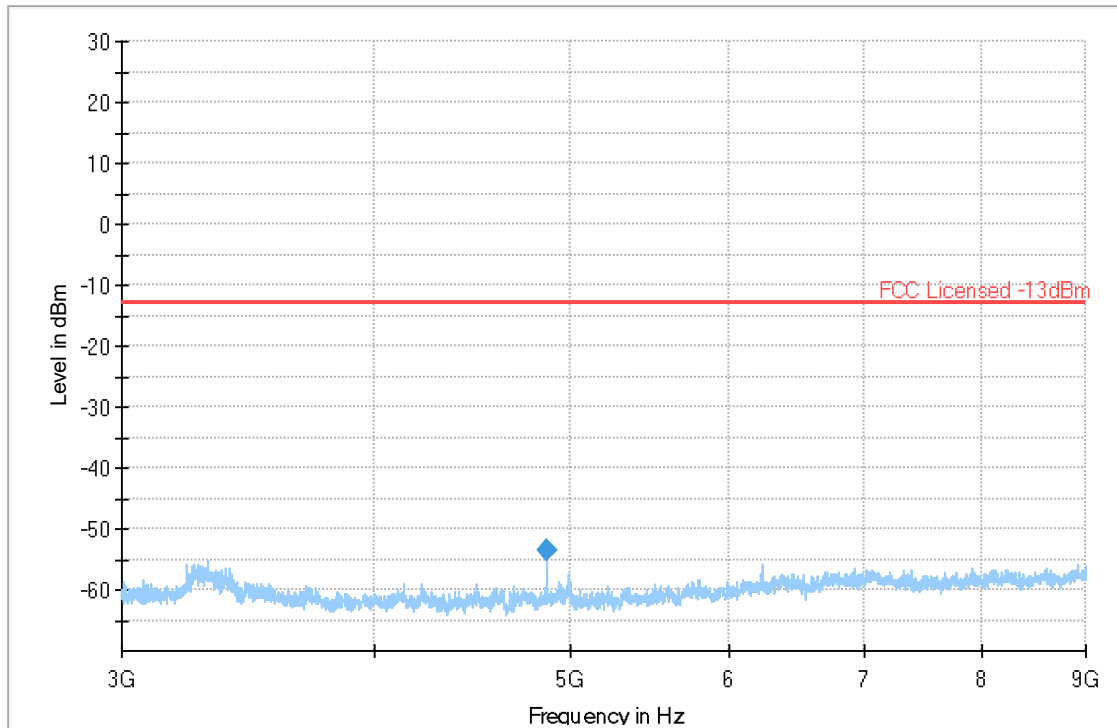
Final_Result RMS

Plot # 69 Radiated Emissions: 3 GHz – 9 GHz

Channel: High

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)
4873.994	-53.399	-13.00	40.40	500.0	1000.0	100.0	H	336.0	-	7.0	-45.9	-61.1	46.6



Preview Result 1-PK+

FCC Licensed -13dBm

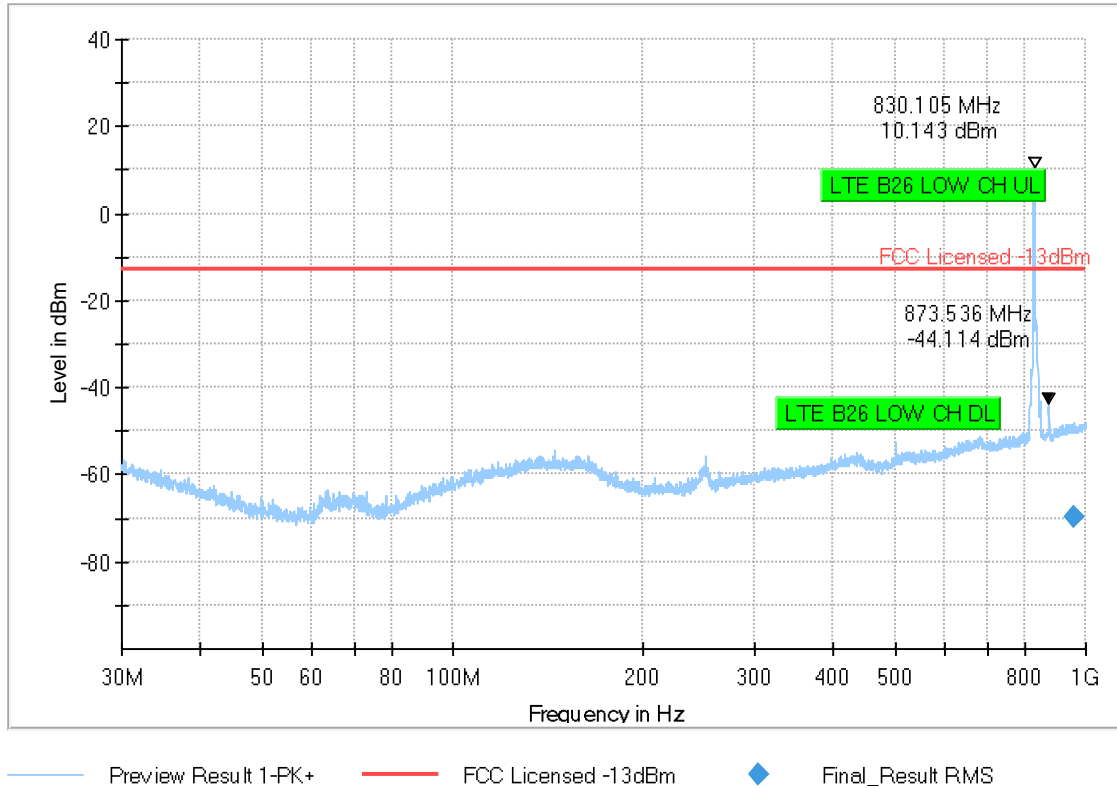
Final_Result RMS

8.2.12 Measurement plots:**8.2.12.1 LTE Band 26****Plot # 70 Radiated Emissions: 30 MHz – 1GHz**

Channel: Low

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)
957.174	-69.557	-13.00	56.56	500.0	100.0	252.0	H	225.0	-65.1	2.9	0.0	-67.9	-4.5

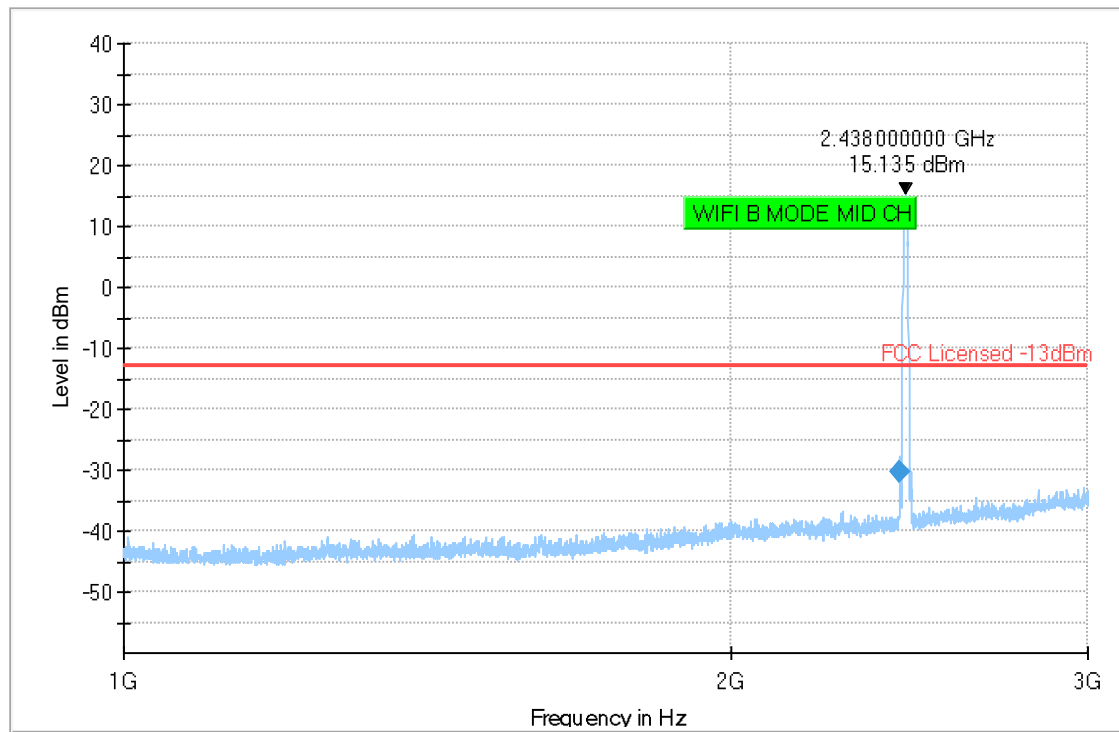


Plot # 71 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low

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)
2422.250	-30.352	-13.00	17.35	500.0	1000.0	146.0	H	9.0	-61.7	5.4	0.0	-67.1	31.4



Preview Result 1-PK+

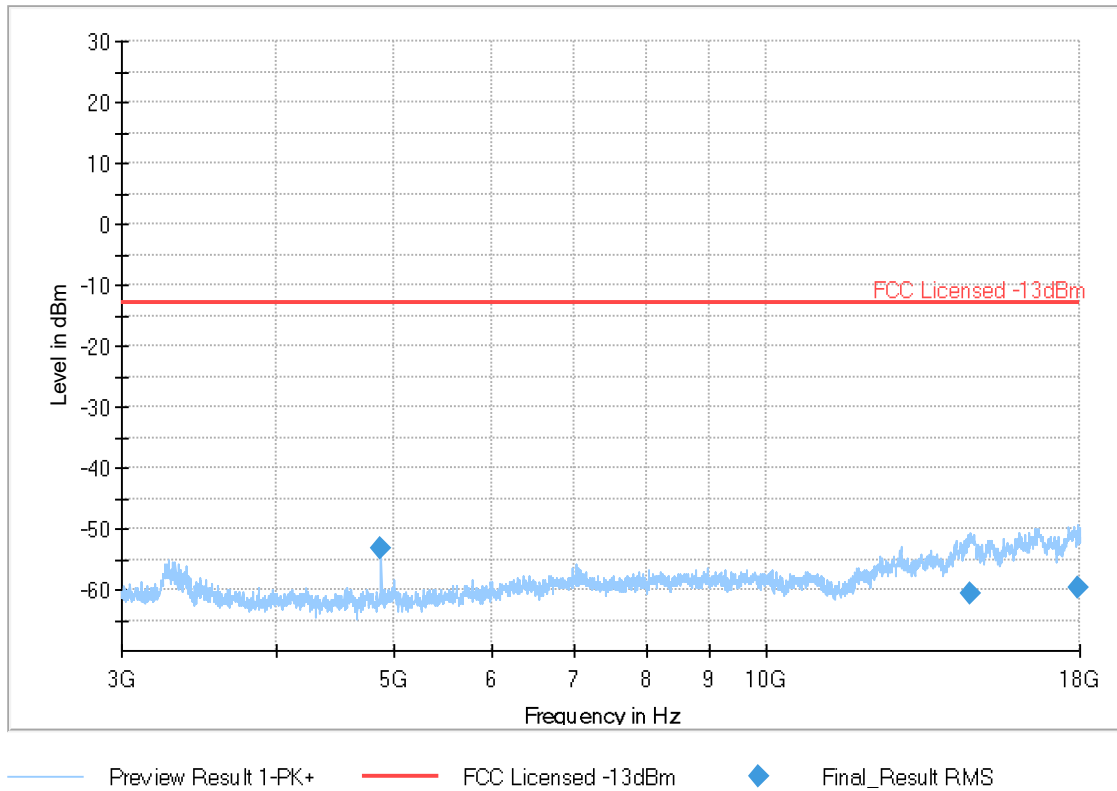
FCC Licensed -13dBm



Final_Result RMS

Plot # 72 Radiated Emissions: 3 GHz – 18 GHz**Channel: Low****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)
4873.844	-53.310	-13.00	40.31	500.0	1000.0	377.0	H	25.0	-	7.0	-45.9	-61.1	46.7
14680.532	-60.779	-13.00	47.78	500.0	1000.0	356.0	H	122.0	-85.4	13.6	-45.0	-54.0	24.6
17944.084	-59.665	-13.00	46.67	500.0	1000.0	142.0	V	153.0	-80.4	15.5	-42.3	-53.6	20.7

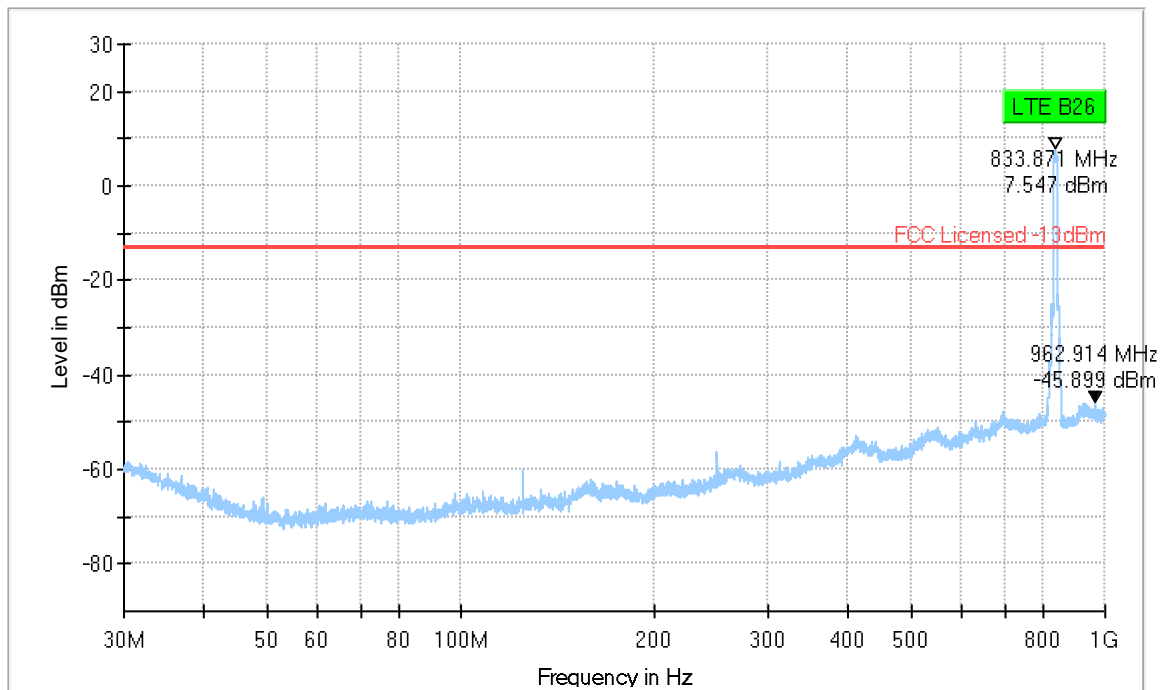


Plot # 73 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid

Final Result

Frequency (MHz)	MaxPeak (dBm)	RMS (dBm)	Limit (dBm)	Margin	Meas. Time (ms)	Bandwidth (Hz)	Height	Pol	Azimuth	Corr. (dB)	Comment
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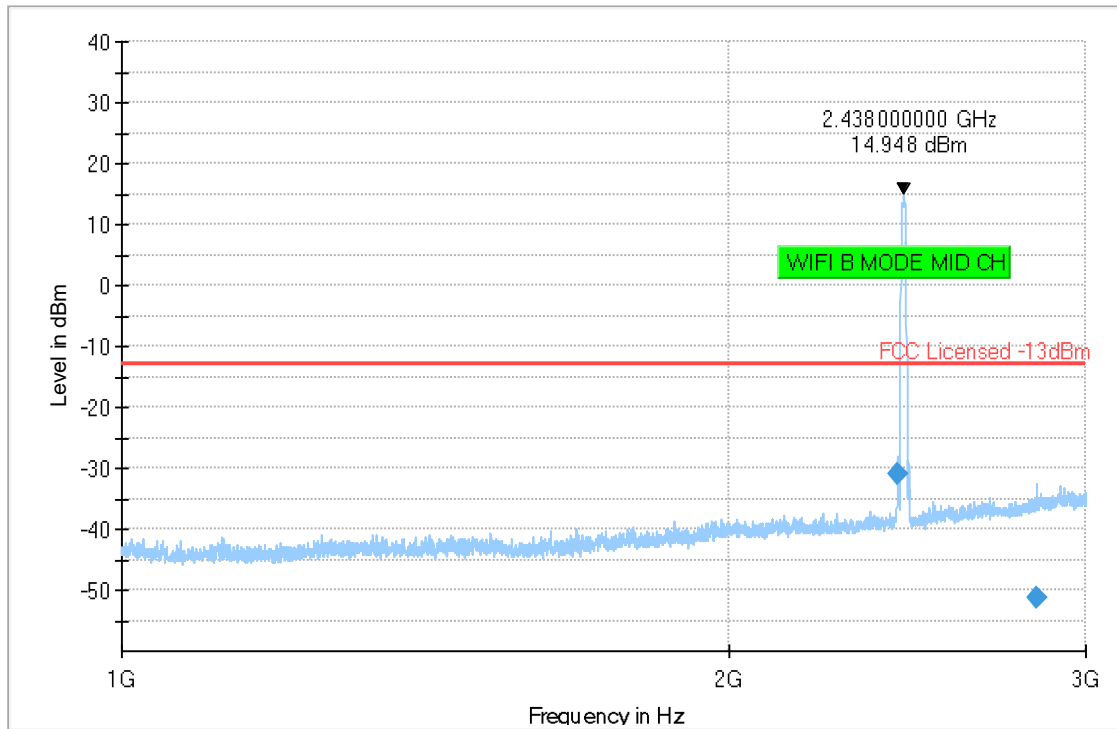
—	RMS_MAXH	—	PK+_MAXH	*	Critical_Freqs RMS
*	Critical_Freqs PK+	—	FCC Licensed -13dBm	*	Critical_Freqs RMS
◆	Final_Result RMS			◆	Final_Result PK+

Plot # 74 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid

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)
2422.097	-30.946	-13.00	17.95	500.0	1000.0	287.0	H	12.0	-61.7	5.4	0.0	-67.1	30.8
2839.190	-51.322	-13.00	38.32	500.0	1000.0	359.0	V	152.0	-60.3	5.9	0.0	-66.1	8.9



— PK+_MAXH

— FCC Licensed -13dBm

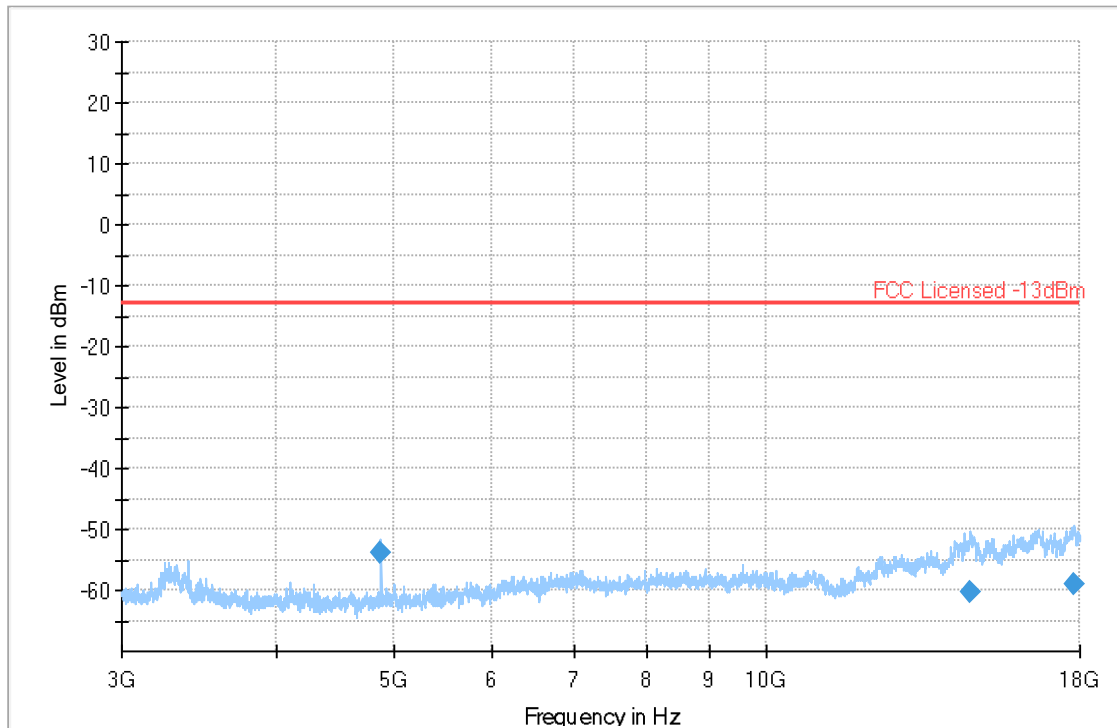
◆ Final_Result RMS

Plot # 75 Radiated Emissions: 3 GHz – 18 GHz

Channel: Mid

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)
4873.844	-53.791	-13.00	40.79	500.0	1000.0	100.0	H	336.0	-	7.0	-45.9	-61.1	46.2
14665.532	-60.315	-13.00	47.31	500.0	1000.0	256.0	V	319.0	-85.5	13.6	-45.0	-54.0	25.1
17827.754	-59.079	-13.00	46.08	500.0	1000.0	280.0	H	6.0	-80.7	15.5	-42.5	-53.7	21.6

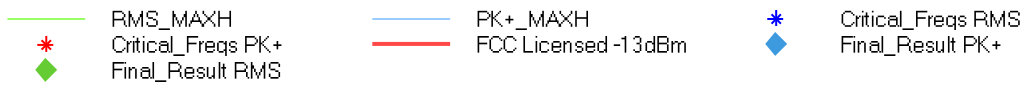
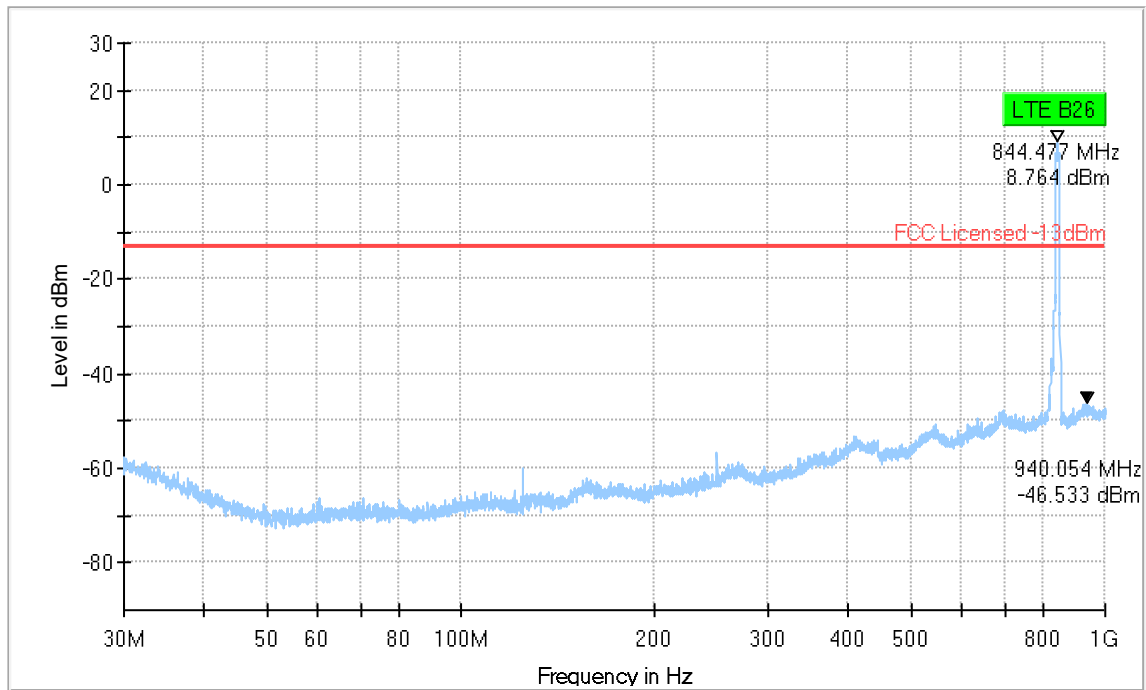


Plot # 76 Radiated Emissions: 30 MHz – 1GHz

Channel: High

Final Result

Frequency (MHz)	MaxPeak (dBm)	RMS (dBm)	Limit (dBm)	Margin	Meas. Time (ms)	Bandwidth (h)	Height	Pol	Azimuth	Corr. (dB)	Comment
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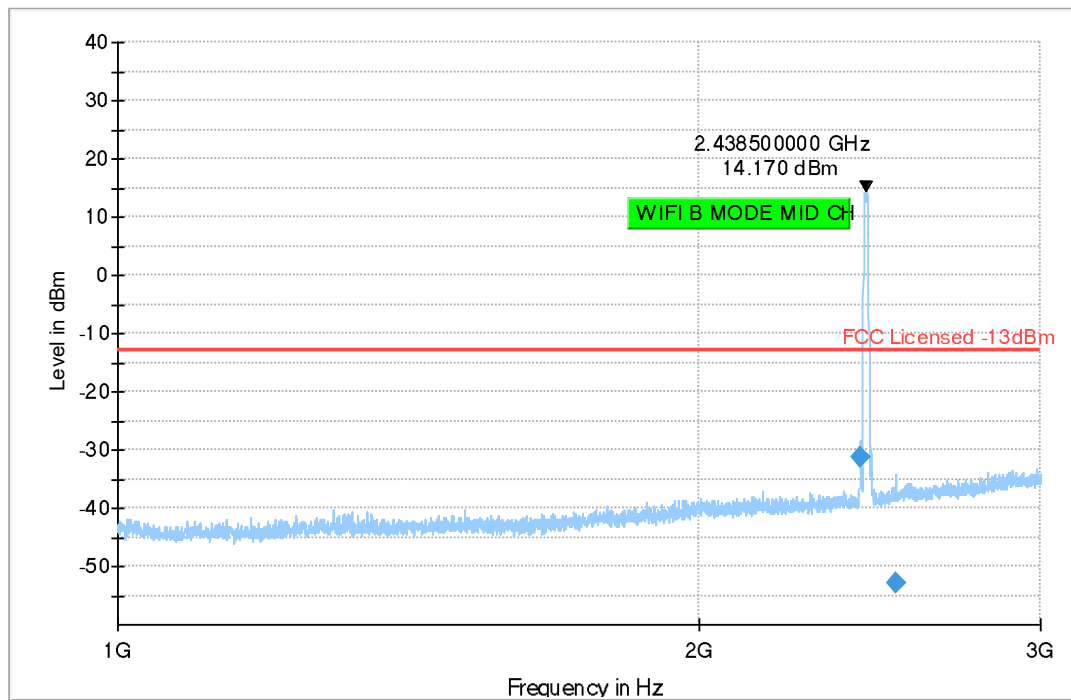


Plot # 77 Radiated Emissions: 1 GHz - 3 GHz

Channel: High

Final Result

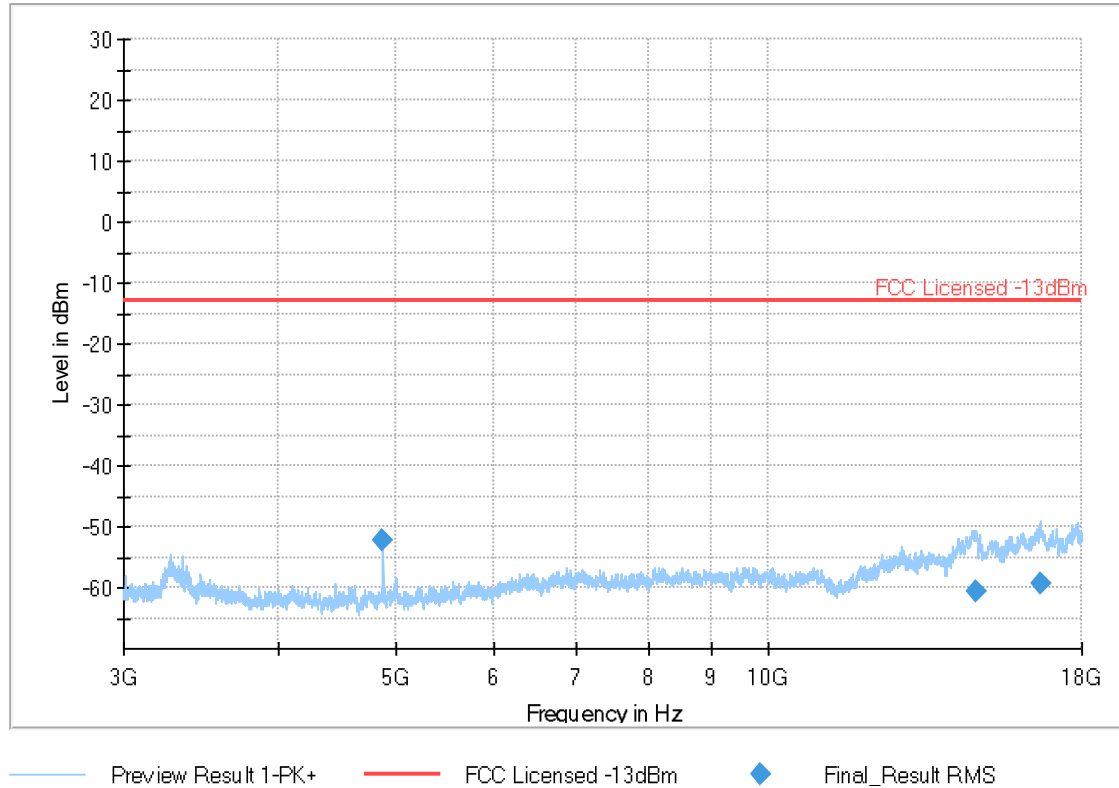
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB)	Raw Rec (dBμV)
2422.229	-31.343	-13.00	18.34	500.0	1000.0	185.0	H	-4.0	-61.7	5.4	0.0	-67.1	30.4
2524.754	-52.984	-13.00	39.98	500.0	1000.0	322.0	H	169.0	-61.3	5.5	0.0	-66.8	8.3



PK+_MAXH FCC Licensed -13dBm Final_Result RMS

Plot # 78 Radiated Emissions: 3 GHz – 18 GHz**Channel: High****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)
4873.844	-52.197	-13.00	39.20	500.0	1000.0	228.0	H	17.0	-	7.0	-45.9	-61.1	47.8
14763.283	-60.783	-13.00	47.78	500.0	1000.0	290.0	V	184.0	-86.2	13.5	-45.6	-54.0	25.4
16638.882	-59.438	-13.00	46.44	500.0	1000.0	139.0	H	146.0	-81.4	15.2	-42.5	-54.0	21.9

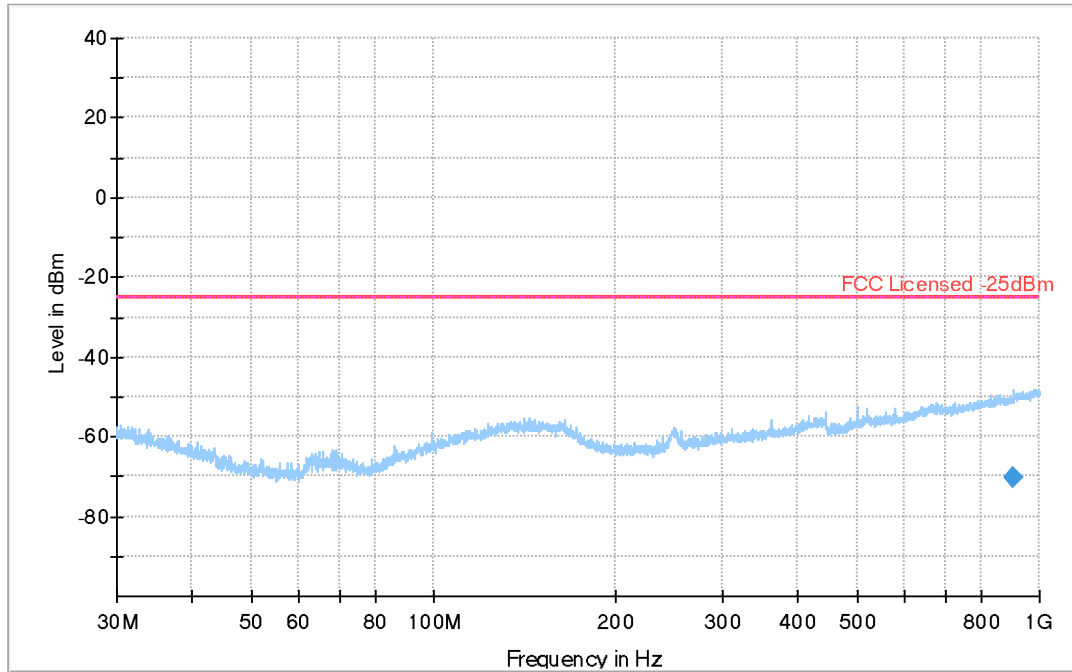


8.2.13 Measurement plots:**8.2.13.1 LTE Band 41****Plot # 79 Radiated Emissions: 30 MHz – 1GHz**

Channel: Low

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)
908.092	-70.202	-25.00	45.20	500.0	100.0	372.0	H	7.0	-65.7	2.8	0.0	-68.5	-4.5



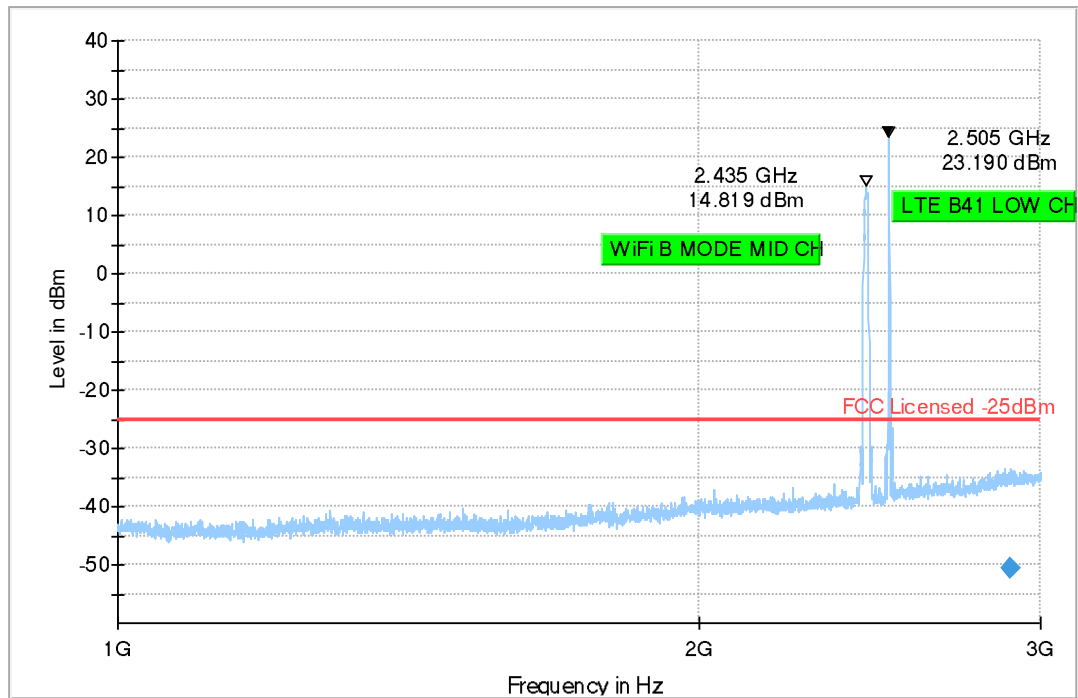
— PK+_MAXH
— FCC Licensed -25dBm
◆ Final_Result RMS

Plot # 80 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low

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)
2893.994	-50.768	-25.00	25.77	500.0	1000.0	127.0	H	46.0	-59.9	6.0	0.0	-65.9	9.2



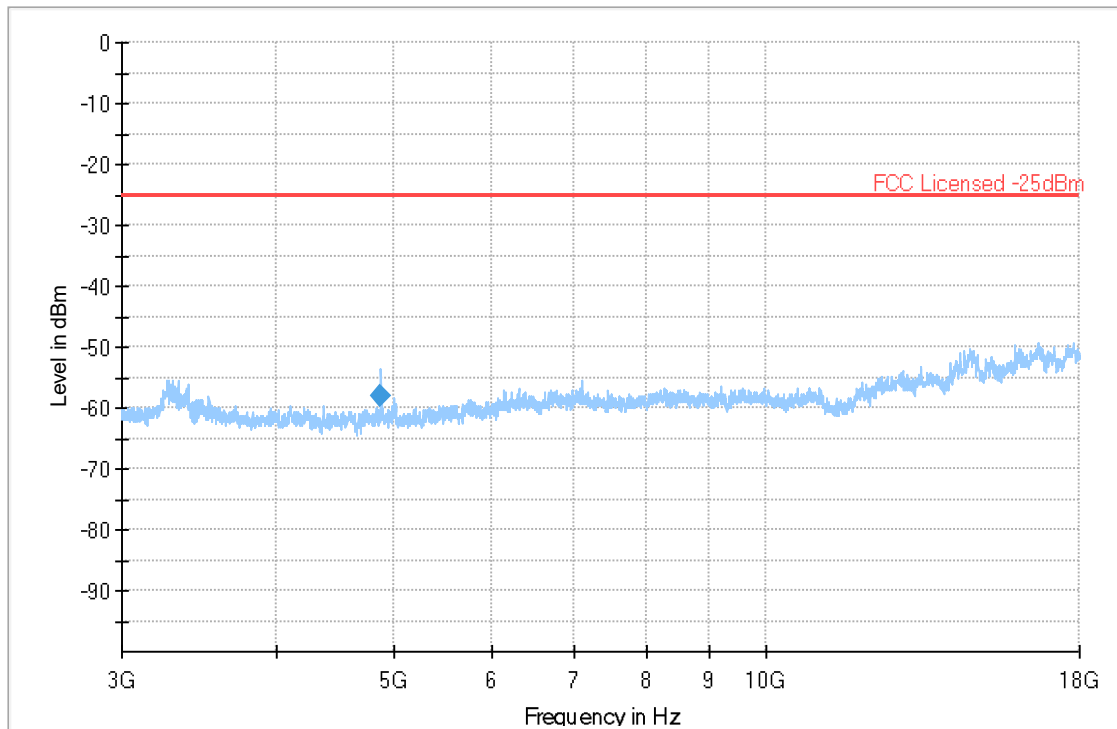
— PK+_MAXH

— FCC Licensed -25dBm

◆ Final_Result RMS

Plot # 81 Radiated Emissions: 3 GHz – 18 GHz**Channel: Low****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)
4873.594	-57.937	-25.00	32.94	500.0	1000.0	192.0	H	136.0	-	7.0	-45.9	-61.1	42.0



— Preview Result 1-PK+

— FCC Licensed -25dBm

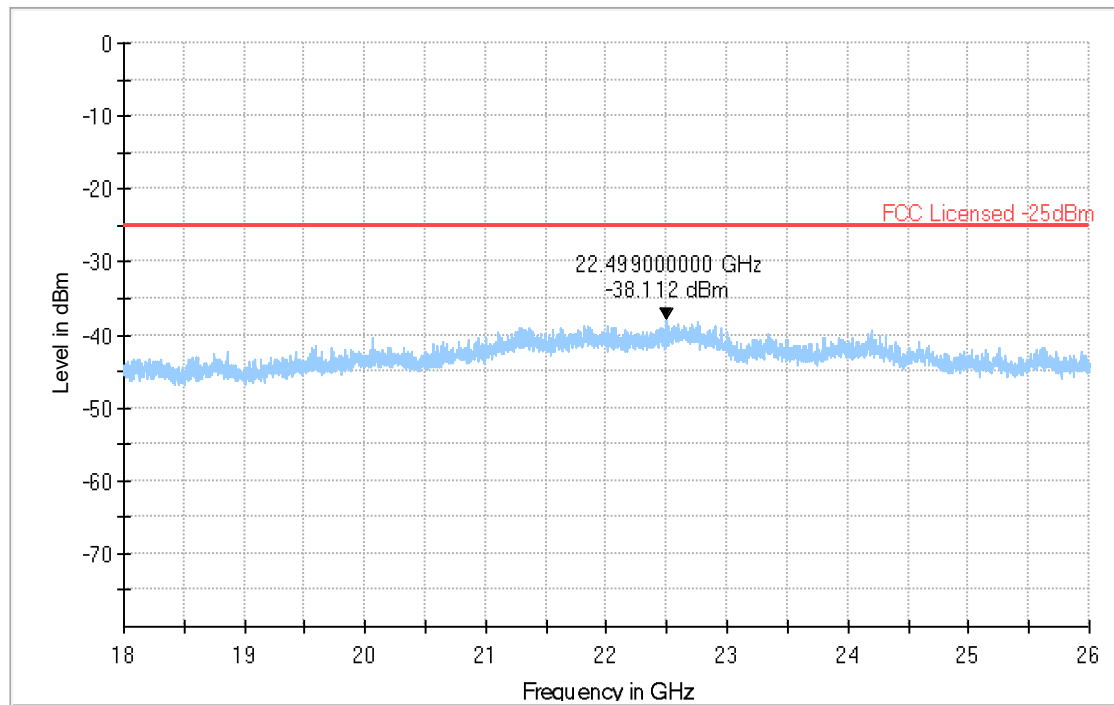
◆ Final_Result RMS

Plot # 82 Radiated Emissions: 18 GHz – 26 GHz

Channel: Low

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)
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Preview Result 1-PK+
FCC Licensed -25dBm

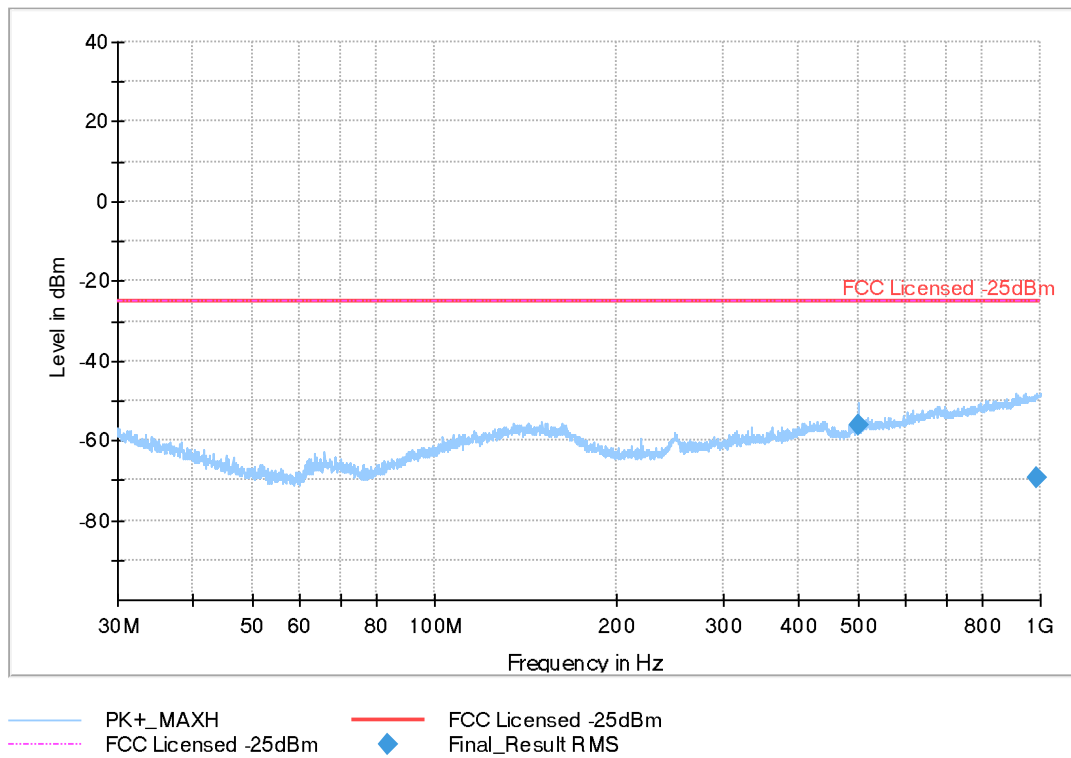
* Critical_Freqs PK+
◆ Final_Result RMS

Plot # 83 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid

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)
499.990	-56.033	-25.00	31.03	500.0	100.0	143.0	H	28.0	-71.4	2.1	0.0	-73.5	15.3
987.220	-69.366	-25.00	44.37	500.0	100.0	282.0	V	96.0	-64.8	2.9	0.0	-67.7	-4.6

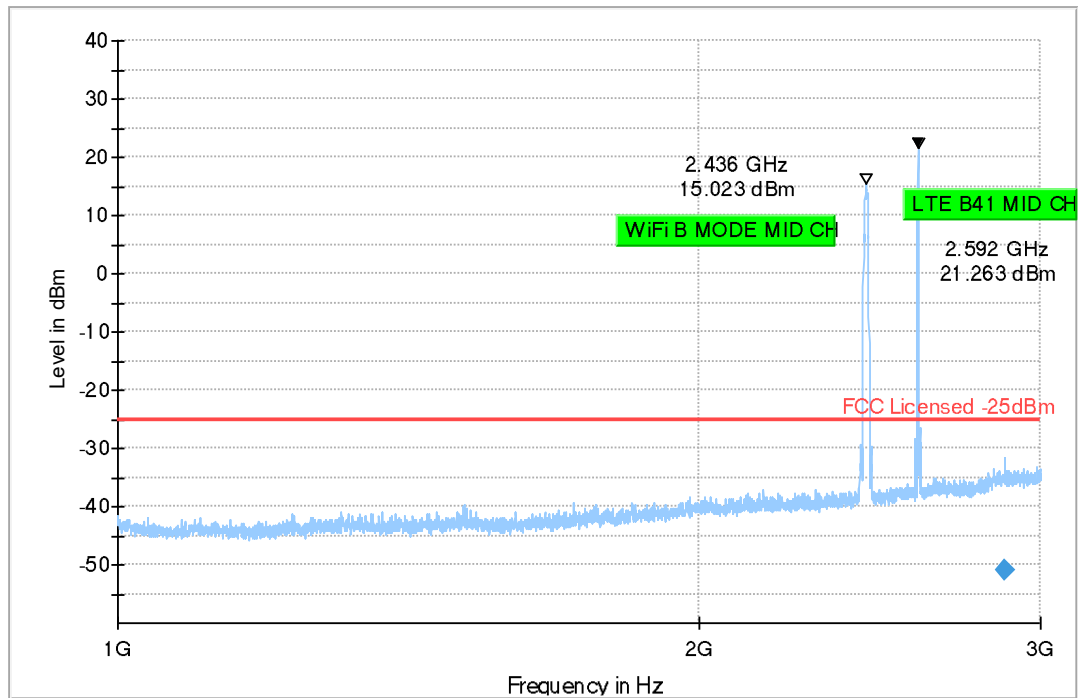


Plot # 84 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid

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)
2875.703	-50.918	-25.00	25.92	500.0	1000.0	125.0	V	78.0	-60.1	5.9	0.0	-66.0	9.1



— PK+_MAXH

— FCC Licensed -25dBm

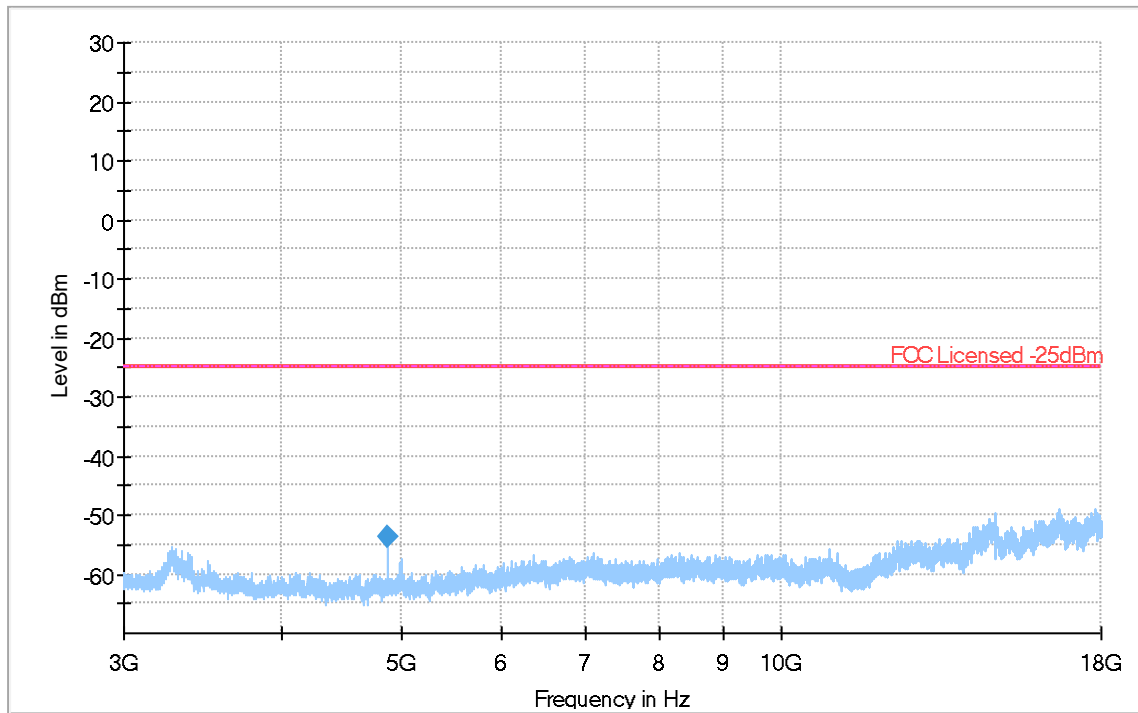
◆ Final_Result RMS

Plot # 85 Radiated Emissions: 3 GHz – 18 GHz

Channel: Mid

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)
4873.844	-53.595	-25.00	28.60	500.0	1000.0	100.0	H	336.0	-	7.0	-45.9	-61.1	46.4



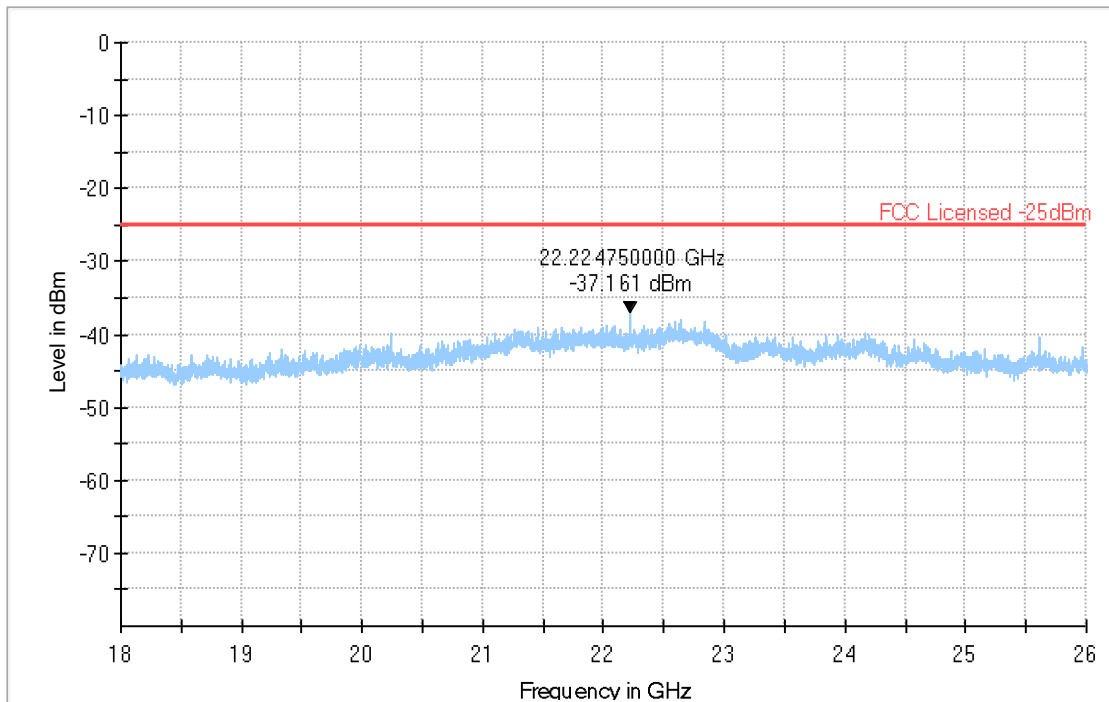
— PK+_MAXH
— FCC Licensed -25dBm
◆ Final_Result RMS

Plot # 86 Radiated Emissions: 18 GHz – 26 GHz

Channel: Mid

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)
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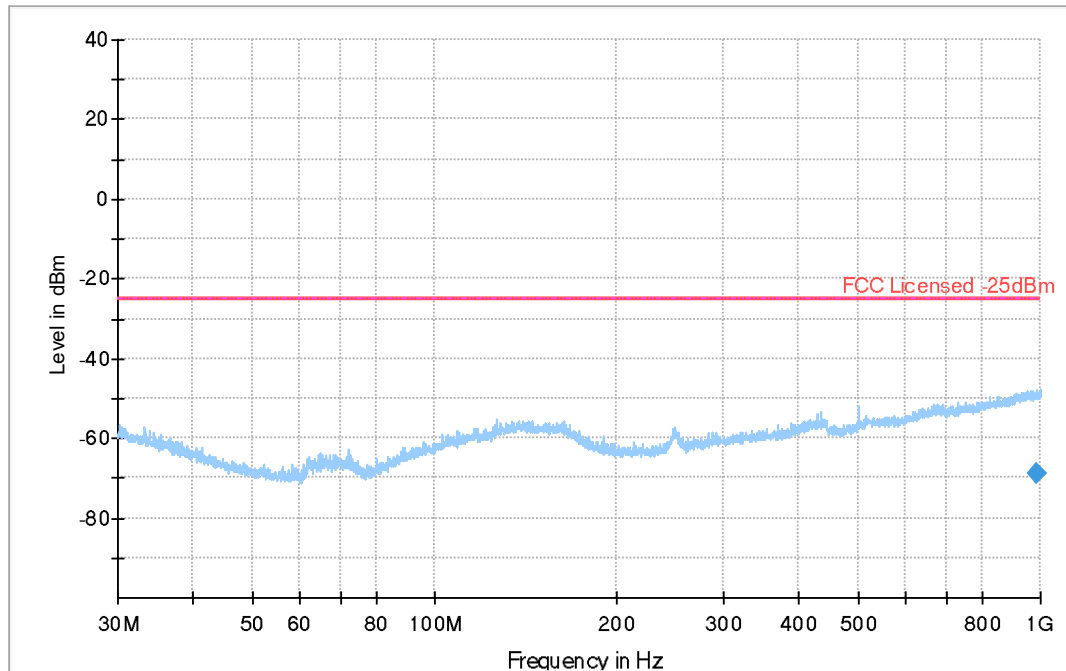
— Preview Result 1-PK+ * Critical_Freqs PK+
— FCC Licensed -25dBm ◆ Final_Result RMS

Plot # 87 Radiated Emissions: 30 MHz – 1GHz

Channel: High

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)
983.240	-68.990	-25.00	43.99	500.0	100.0	213.0	H	53.0	-64.6	3.0	0.0	-67.6	-4.4



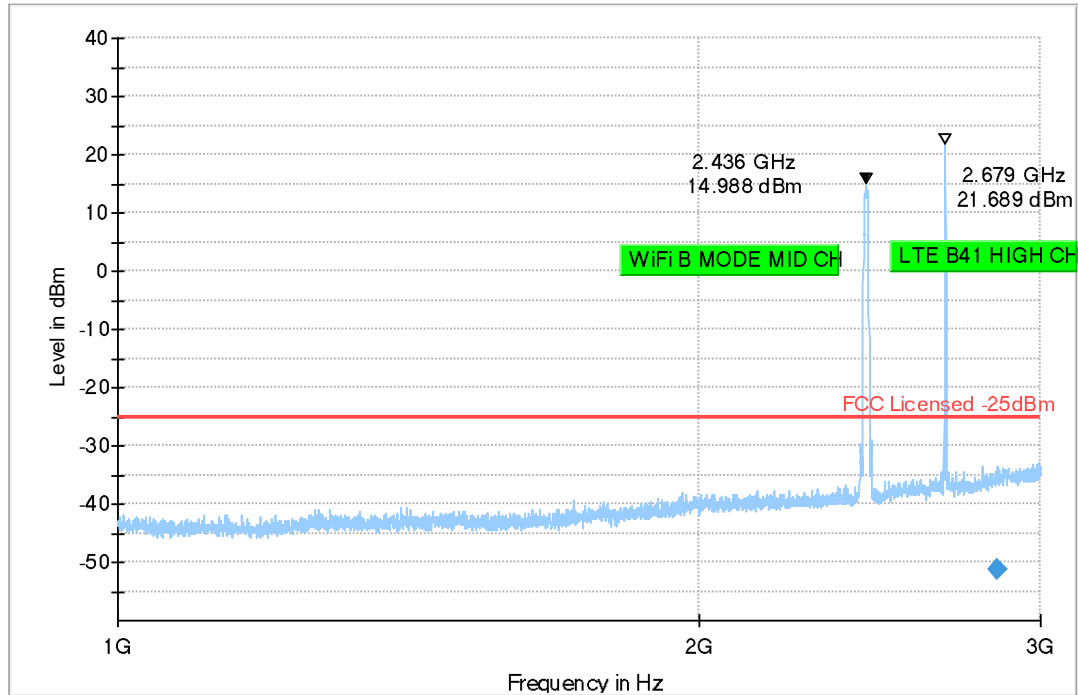
— PK+_MAXH
— FCC Licensed -25dBm
◆ Final_Result RMS

Plot # 88 Radiated Emissions: 1 GHz - 3 GHz

Channel: High

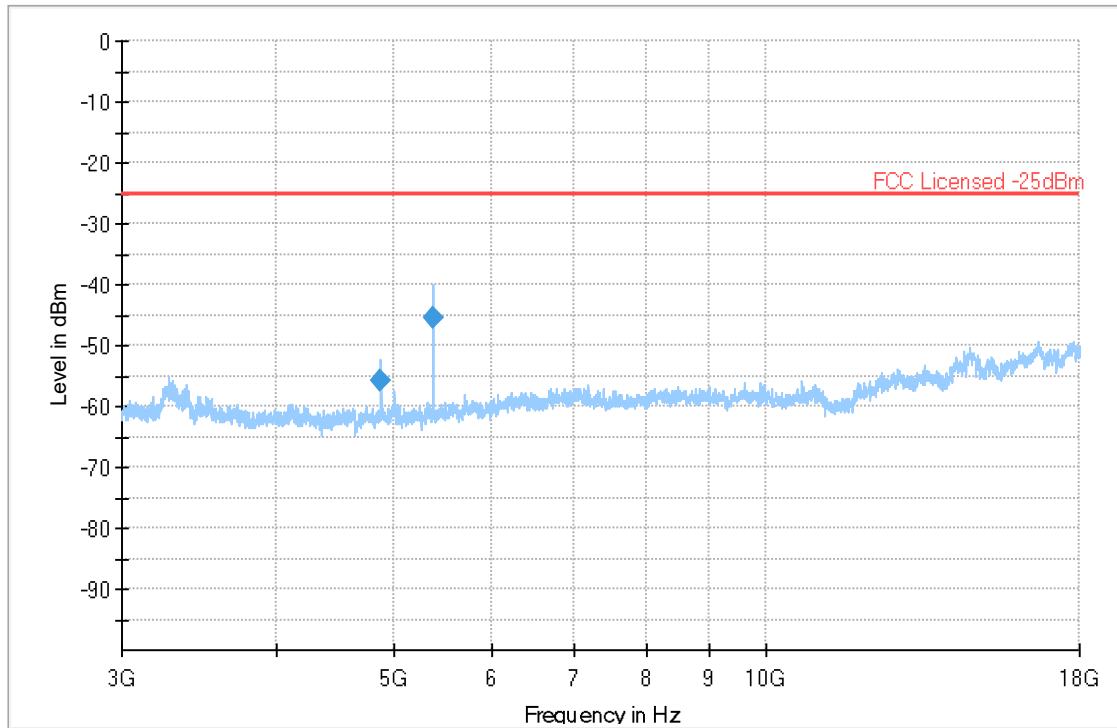
Final Result

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)
2850.000	-51.170	-25.00	26.17	500.0	1000.0	366.0	V	-26.0	-60.2	5.9	0.0	-66.1	9.0



Plot # 89 Radiated Emissions: 3 GHz – 18 GHz**Channel: High****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)
4873.594	-55.712	-25.00	30.71	500.0	1000.0	100.0	H	337.0	-	7.0	-45.9	-61.1	44.3
5375.156	-45.405	-25.00	20.40	500.0	1000.0	142.0	V	326.0	-98.7	7.5	-45.6	-60.6	53.3



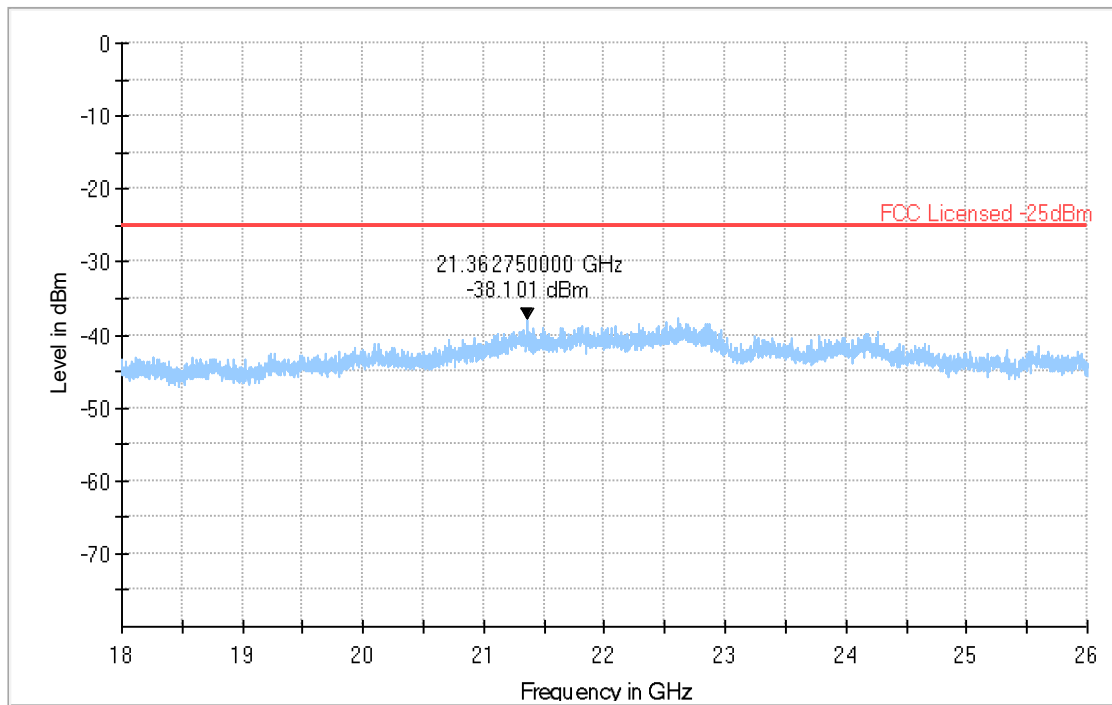
— Preview Result 1-PK+ — FCC Licensed -25dBm ◆ Final_Result RMS

Plot # 90 Radiated Emissions: 18 GHz – 26 GHz

Channel: High

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)
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Preview Result 1-PK+
FCC Licensed -25dBm

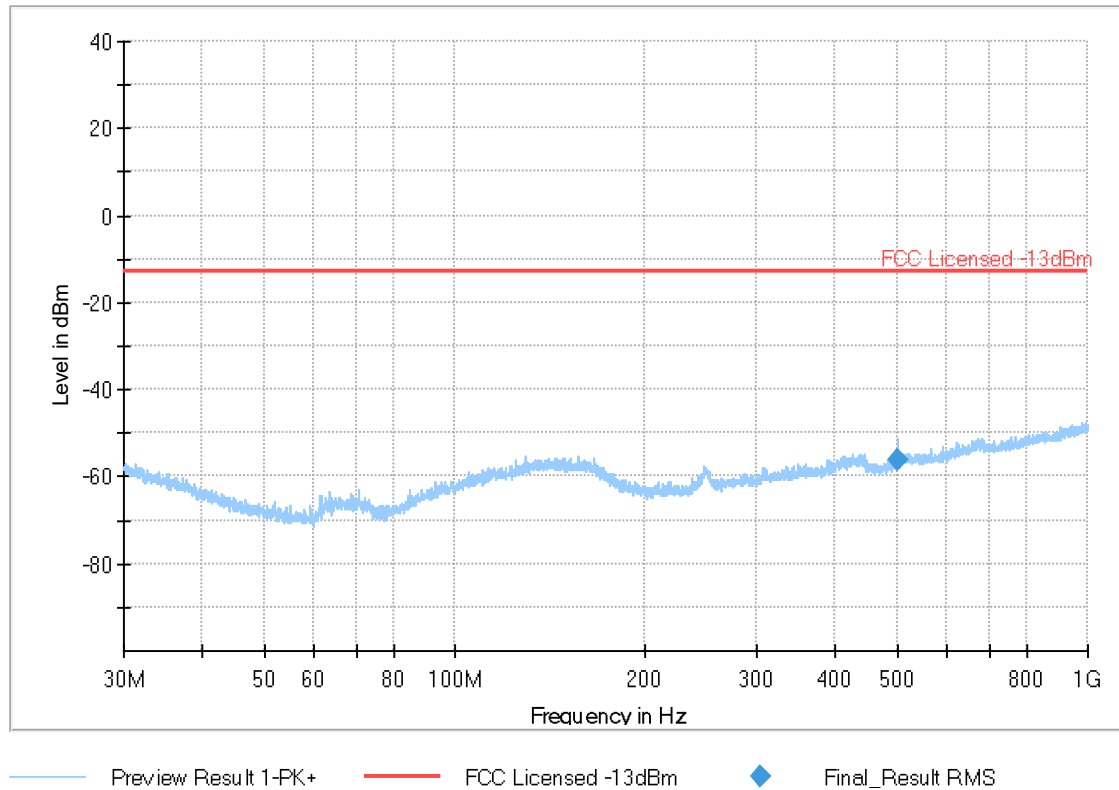
* Critical_Freqs PK+
◆ Final_Result RMS

8.2.14 Measurement plots:**8.2.14.1 W-CDMA Band II****Plot # 91 Radiated Emissions: 30 MHz – 1GHz**

Channel: Low

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)
499.994	-55.978	-13.00	42.98	500.0	100.0	143.0	H	20.0	-71.4	2.1	0.0	-73.5	15.4

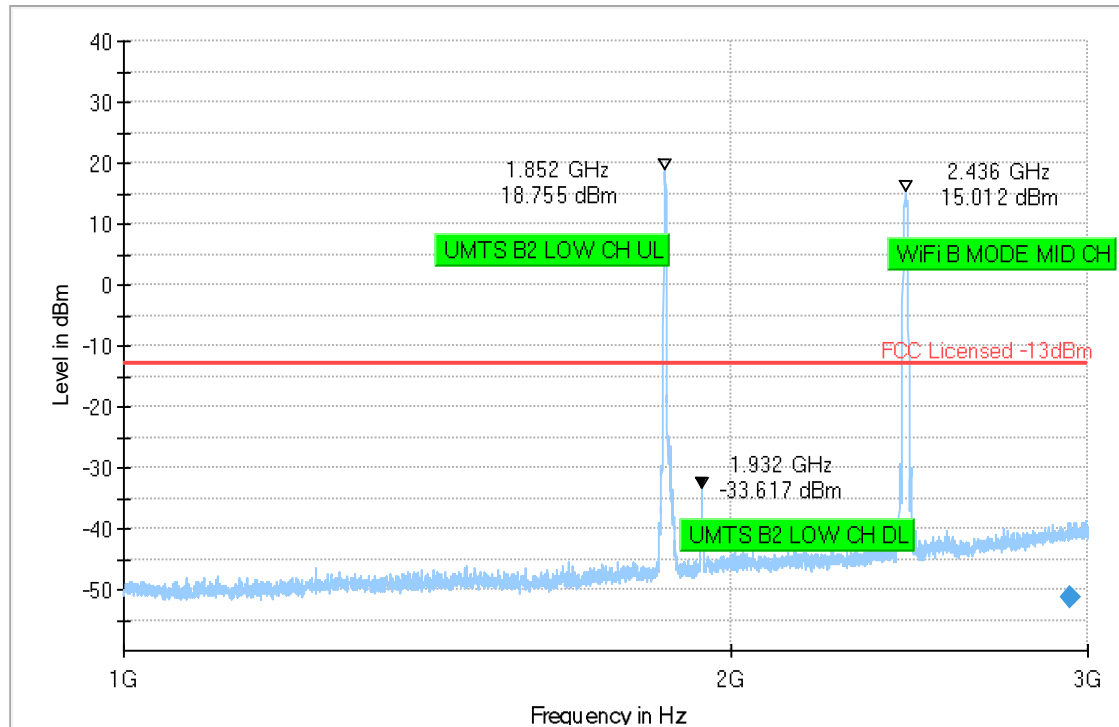


Plot # 92 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low

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)
2938.422	-51.275	-13.00	38.27	500.0	1000.0	306.0	H	249.0	-60.3	5.4	0.0	-65.6	9.0



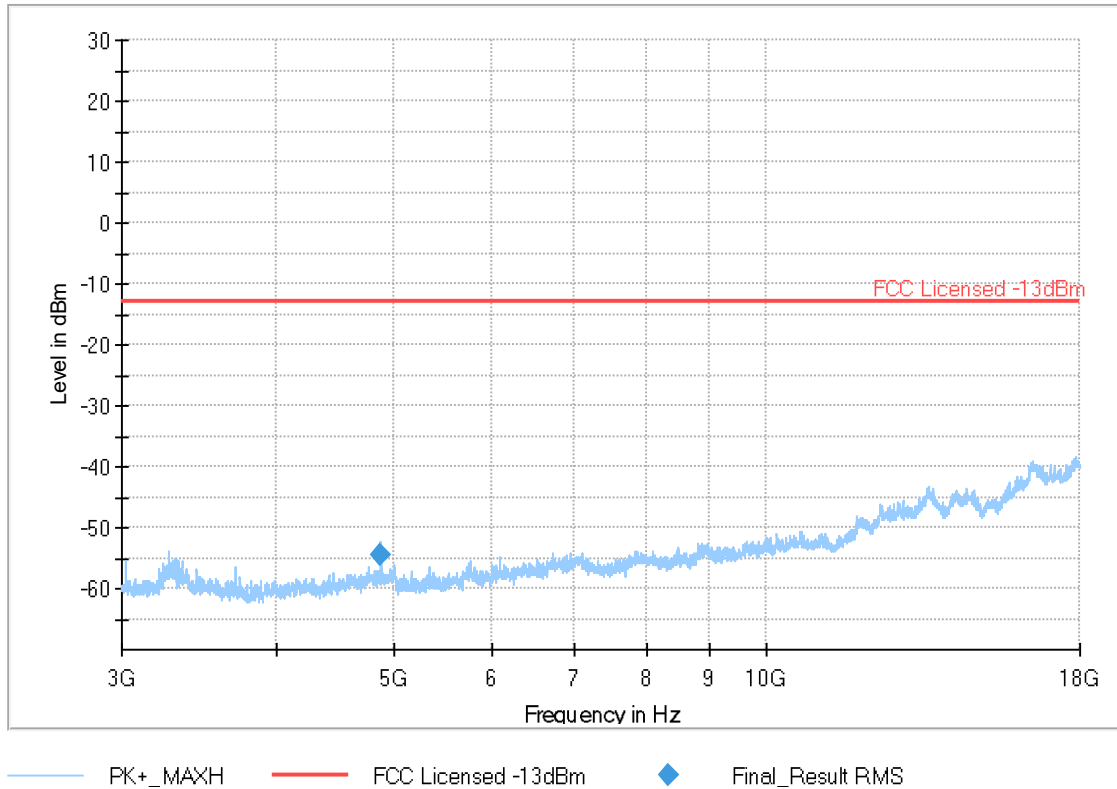
Preview Result 1-PK+

FCC Licensed -13dBm

Final_Result RMS

Plot # 93 Radiated Emissions: 3 GHz – 18 GHz**Channel: Low****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)
4873.906	-54.641	-13.00	41.64	500.0	1000.0	107.0	H	180.0	-	7.0	-45.9	-61.1	45.3

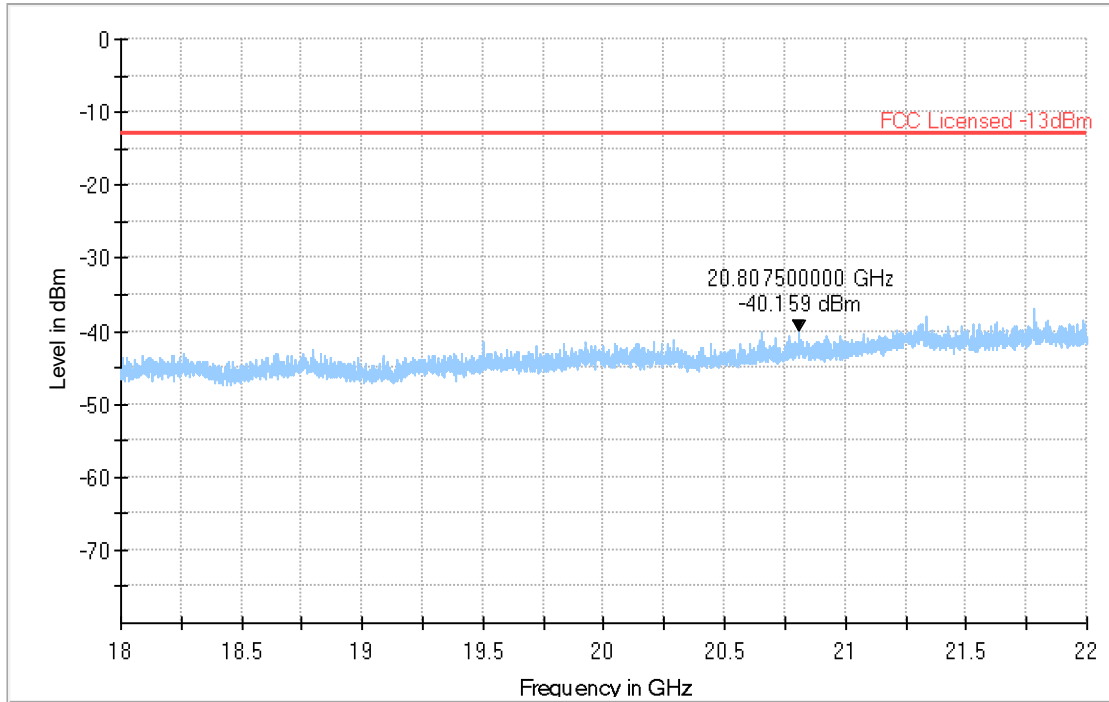


Plot # 94 Radiated Emissions: 18 GHz – 22 GHz

Channel: Low

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)
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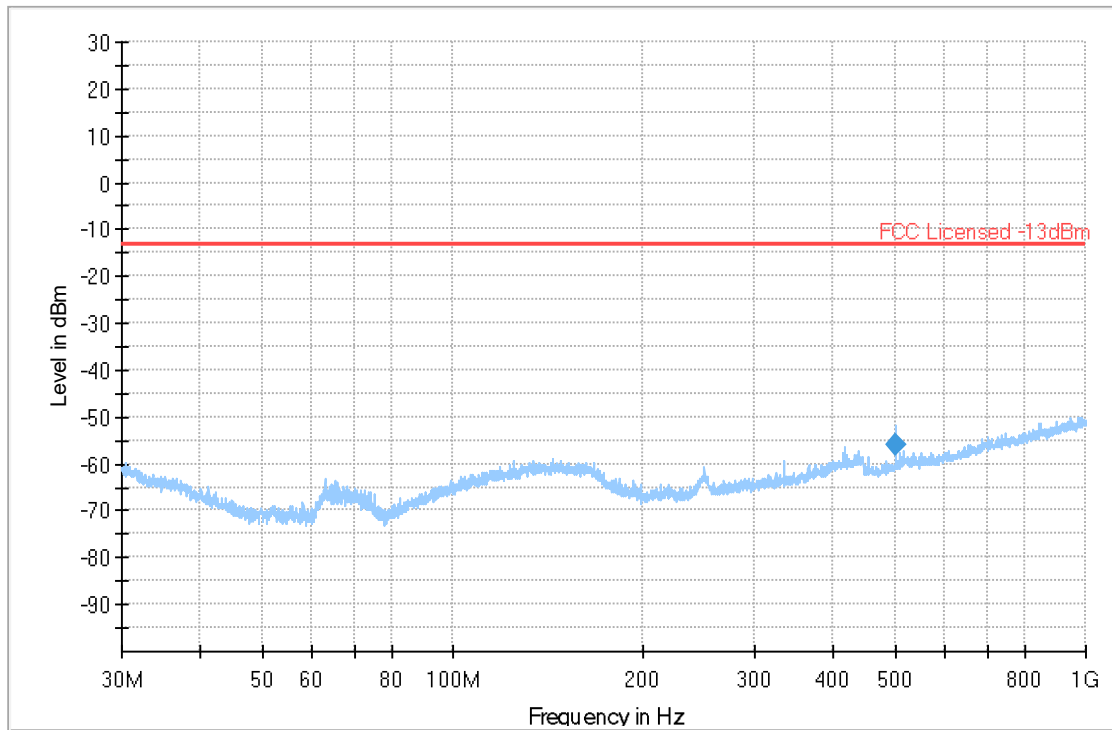
— Preview Result 1-PK+ * Critical_Freqs PK+
— FCC Licensed -13dBm ◆ Final_Result RMS

Plot # 95 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid

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)
499.998	-55.874	-13.00	42.87	500.0	120.0	144.0	H	23.0	-71.4	2.1	0.0	-73.5	15.5



— Preview Result 1-PK+

— FCC Licensed -13dBm

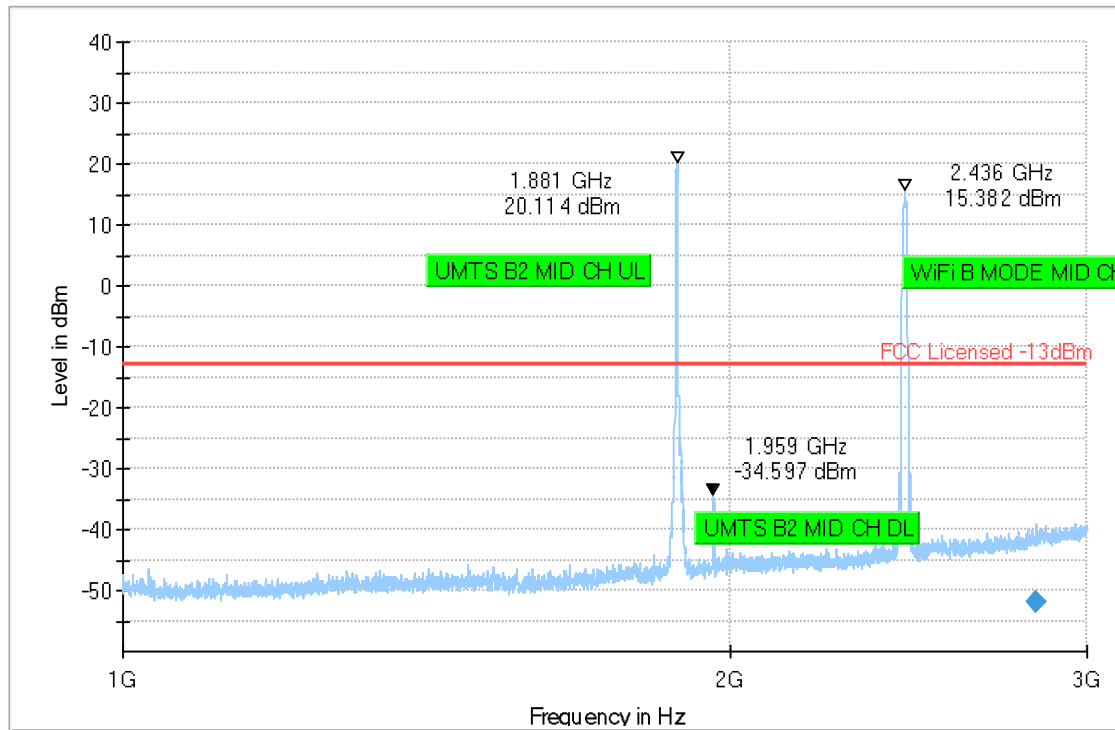
◆ Final_Result RMS

Plot # 96 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid

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)
2833.500	-51.900	-13.00	38.90	500.0	1000.0	210.0	V	-40.0	-60.8	5.3	0.0	-66.2	8.9



Preview Result 1-PK+

FCC Licensed -13dBm



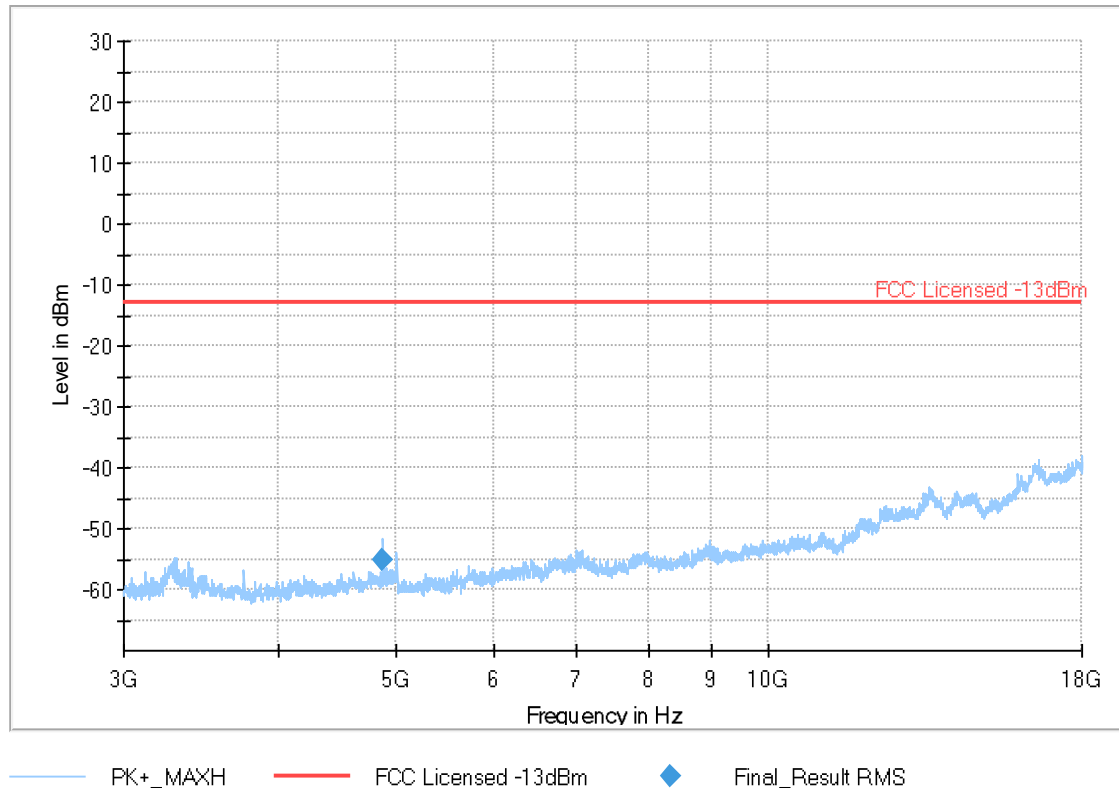
Final_Result RMS

Plot # 97 Radiated Emissions: 3 GHz – 18 GHz

Channel: Mid

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)
4873.844	-55.205	-13.00	42.21	500.0	1000.0	107.0	H	180.0	-	7.0	-45.9	-61.1	44.8

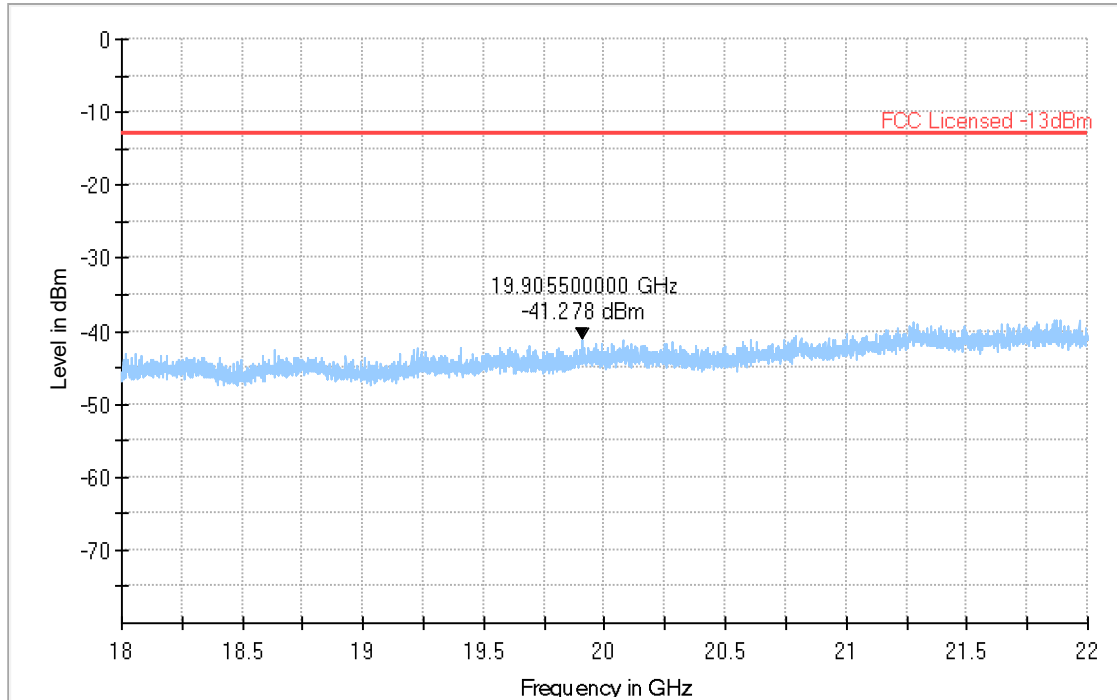


Plot # 98 Radiated Emissions: 18 GHz – 22 GHz

Channel: Mid

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)
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Preview Result 1-PK+
FCC Licensed -13dBm

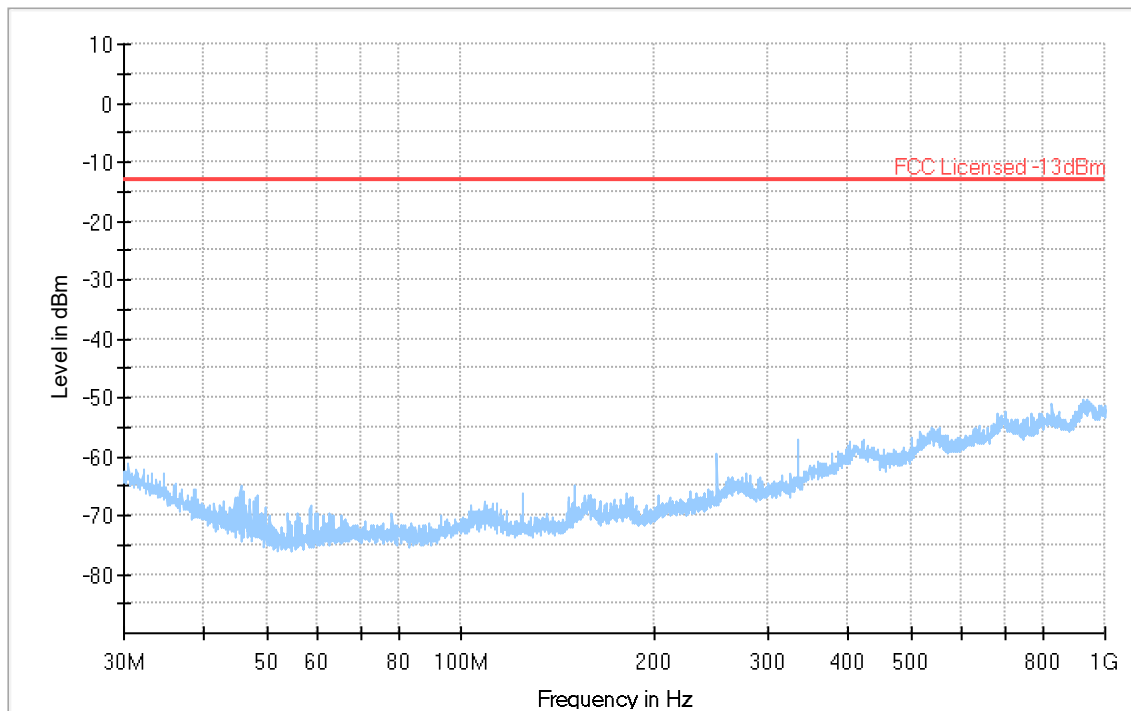
* Critical_Freqs PK+
◆ Final_Result RMS

Plot # 99 Radiated Emissions: 30 MHz – 1GHz

Channel: High

Final Result

Frequency (MHz)	MaxPeak (dBm)	RMS (dBm)	Limit (dBm)	Margin	Meas. Time (ms)	Bandwidth	Height	Pol	Azimuth	Corr. (dB)	Comment
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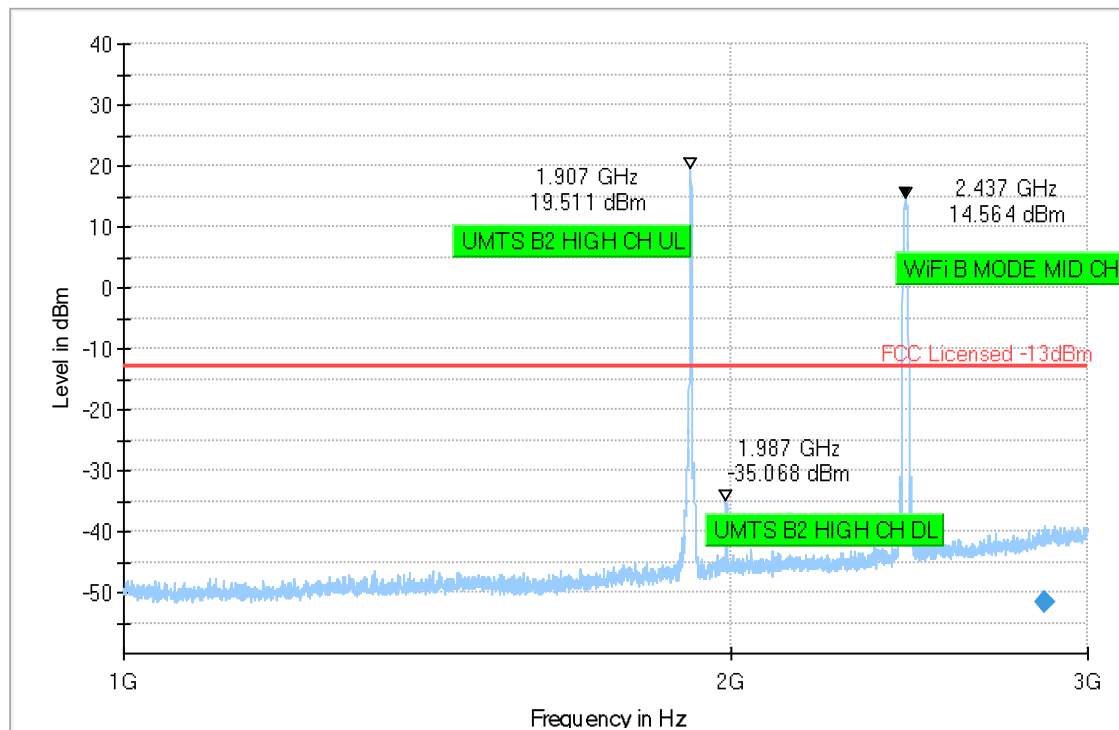
Preview Result 1-PK+ Final_Result PK+ FCC Licensed -13dBm Final_Result RMS

Plot # 100 Radiated Emissions: 1 GHz - 3 GHz

Channel: High

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)
2855.500	-51.682	-13.00	38.68	500.0	1000.0	107.0	H	179.0	-60.8	5.4	0.0	-66.1	9.1



Preview Result 1-PK+

FCC Licensed -13dBm

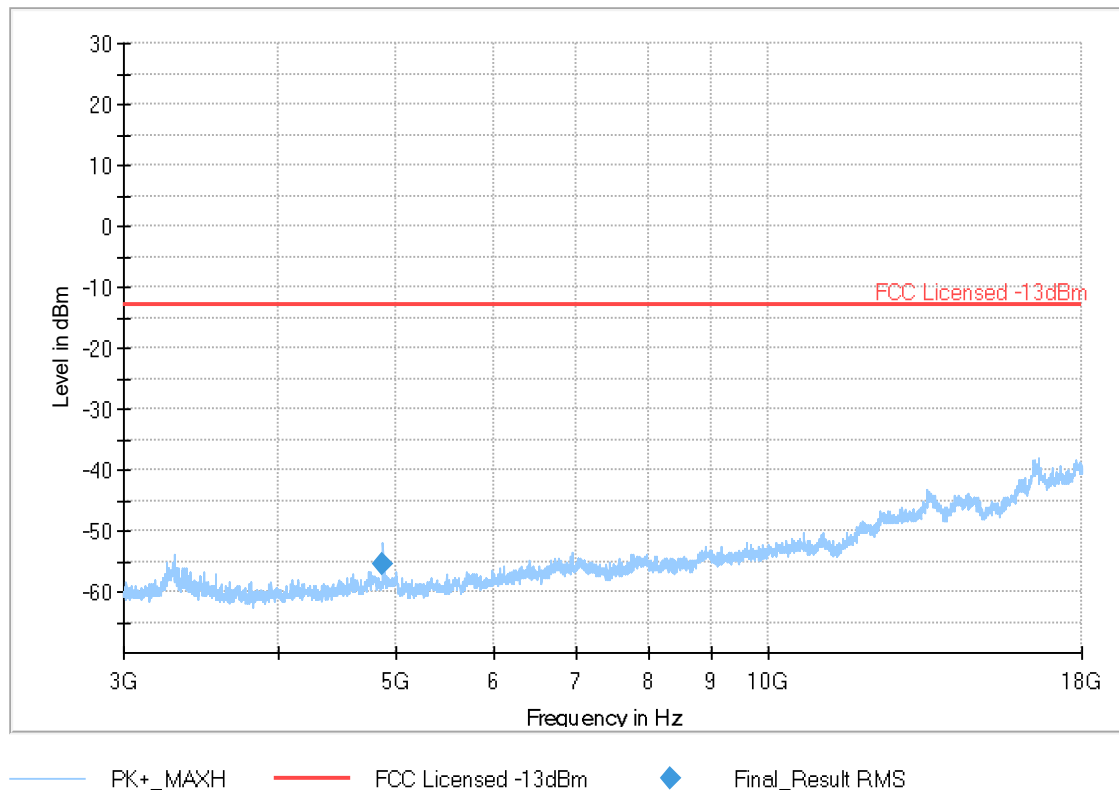
Final_Result RMS

Plot # 101 Radiated Emissions: 3 GHz – 18 GHz

Channel: High

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)
4873.844	-55.541	-13.00	42.54	500.0	1000.0	160.0	H	181.0	-	7.0	-45.9	-61.1	44.4

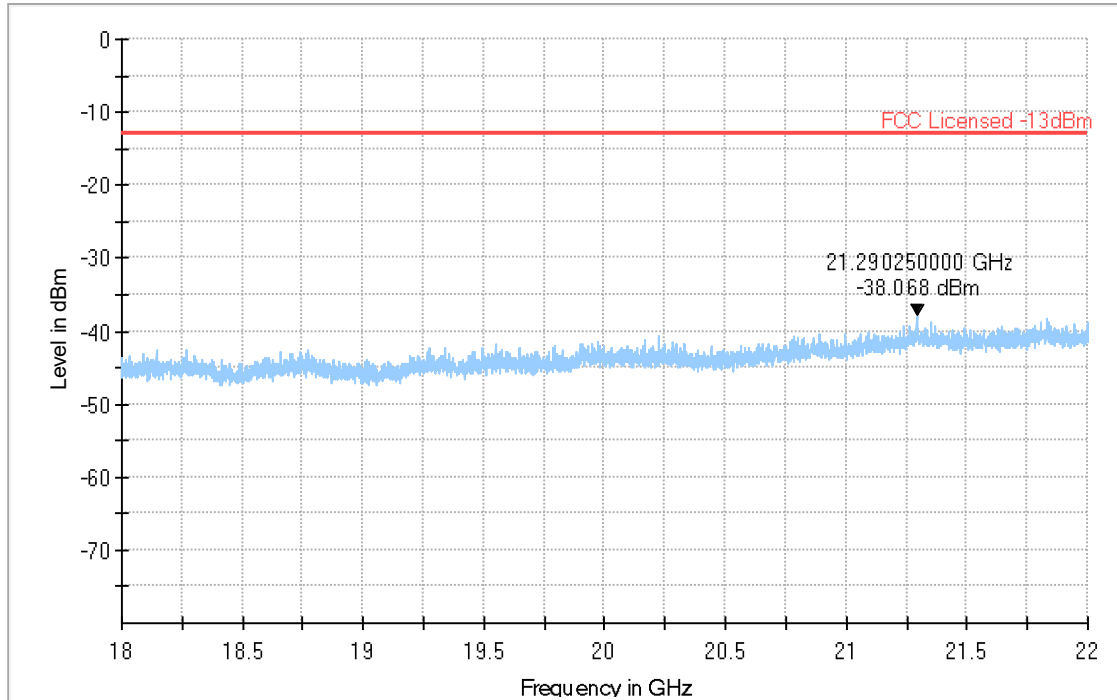


Plot # 102 Radiated Emissions: 18 GHz – 22 GHz

Channel: High

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)
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Preview Result 1-PK+
FCC Licensed -13dBm

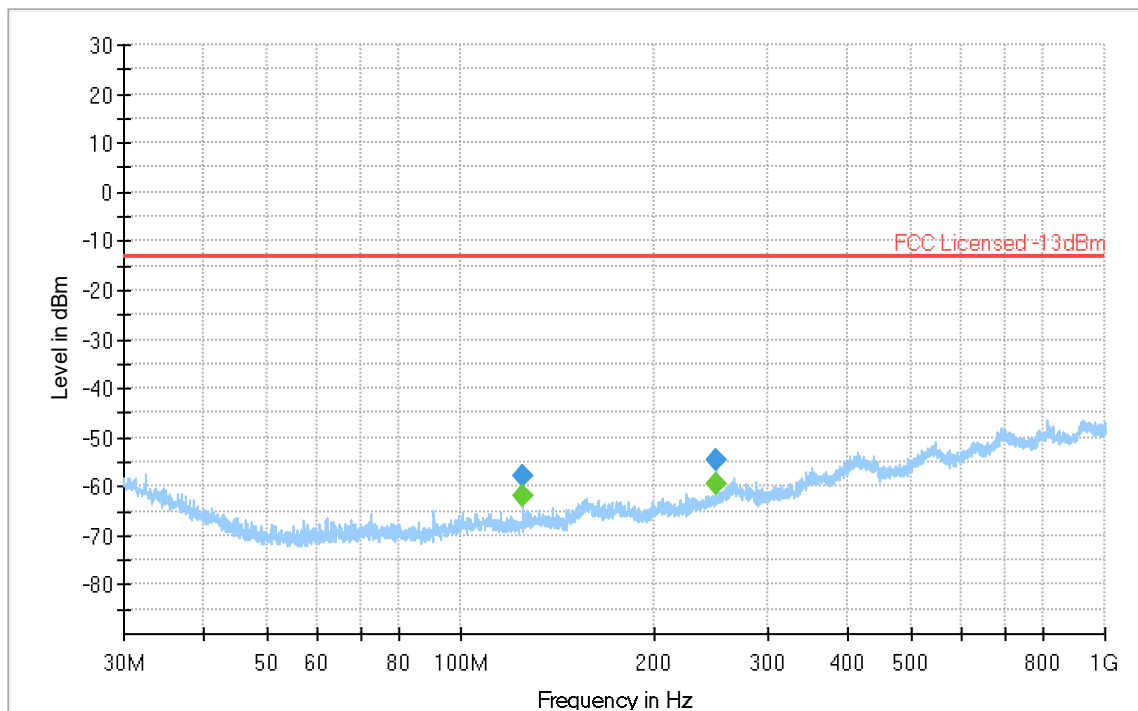
* Critical_Freqs PK+
◆ Final_Result RMS

8.2.15 Measurement plots:**8.2.15.1 W-CDMA Band IV****Plot # 103 Radiated Emissions: 30 MHz – 1GHz**

Channel: Low

Final_Result

Frequency (MHz)	MaxPeak (dBm)	RMS (dBm)	Limit (dBm)	Margin	Meas. Time (ms)	Bandwidth (h)	Height (t)	Pol	Azimuth (h)	Corr. (dB)	Comment
124.995	-57.90	---	-13.00	44.90	500.0	100.0	167.0	H	300.0	-82.7	
124.995	---	-62.02	---	---	500.0	100.0	167.0	H	300.0	-82.7	
249.996	-54.61	---	-13.00	41.61	500.0	100.0	100.0	H	218.0	-77.6	
249.996	---	-59.47	---	---	500.0	100.0	100.0	H	218.0	-77.6	



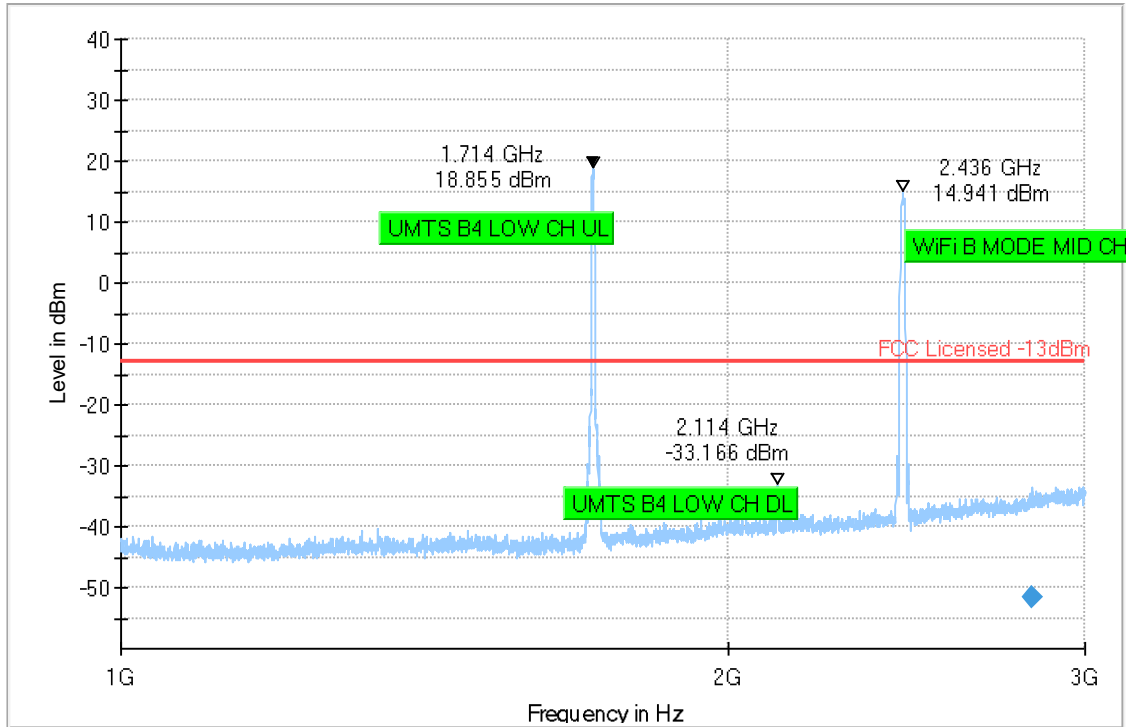
— RMS_MAXH
◆ Final_Result PK+ — PK+_MAXH
◆ Final_Result RMS — FCC Licensed -13dBm

Plot # 104 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low

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)
2824.275	-51.548	-13.00	38.55	500.0	1000.0	344.0	V	16.0	-60.4	5.8	0.0	-66.2	8.8



Preview Result 1-PK+

FCC Licensed -13dBm



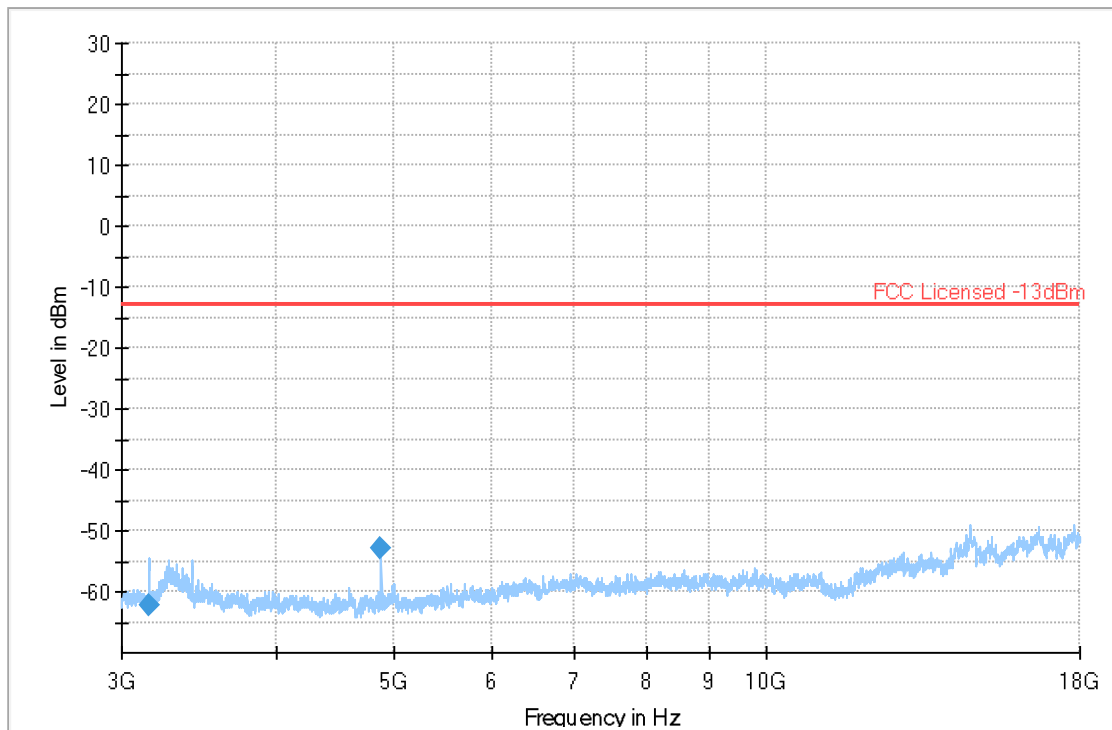
Final_Result RMS

Plot # 105 Radiated Emissions: 3 GHz – 18 GHz

Channel: Low

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)
3162.406	-62.144	-13.00	49.14	500.0	1000.0	168.0	H	191.0	-	5.5	-46.0	-62.6	40.9
4873.844	-52.851	-13.00	39.85	500.0	1000.0	100.0	H	337.0	-	7.0	-45.9	-61.1	47.1



Preview Result 1-PK+

FCC Licensed -13dBm

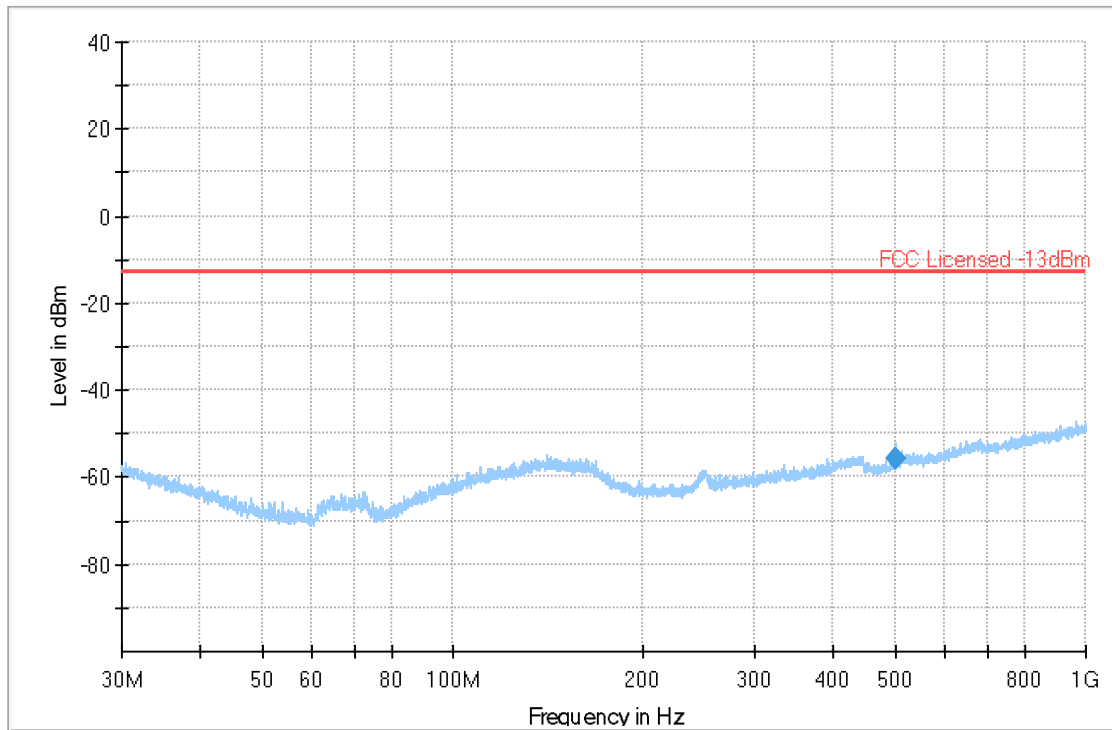
Final_Result RMS

Plot # 106 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid

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)
500.000	-55.947	-13.00	42.95	500.0	100.0	146.0	H	32.0	-71.4	2.1	0.0	-73.5	15.4



— Preview Result 1-PK+

— FCC Licensed -13dBm

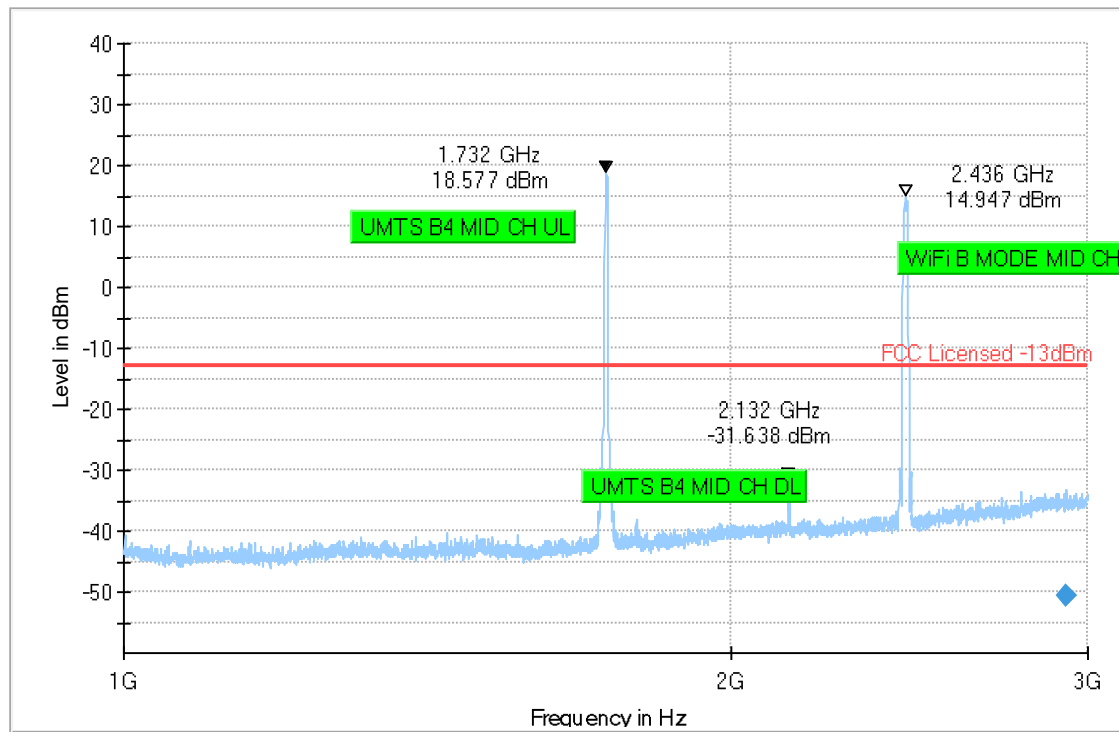
◆ Final_Result RMS

Plot # 107 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid

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)
2928.209	-50.744	-13.00	37.74	500.0	1000.0	107.0	V	320.0	-59.8	5.9	0.0	-65.7	9.0



Preview Result 1-PK+

FCC Licensed -13dBm



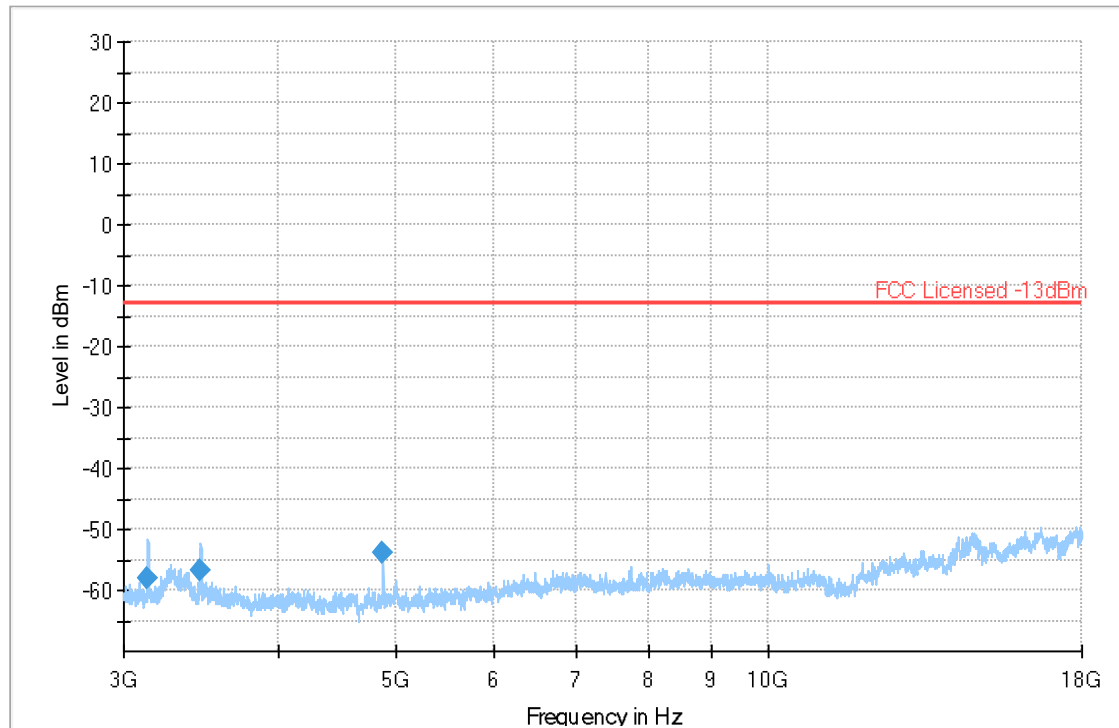
Final_Result RMS

Plot # 108 Radiated Emissions: 3 GHz – 18 GHz

Channel: Mid

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)
3139.438	-57.936	-13.00	44.94	500.0	1000.0	186.0	H	19.0	-	5.5	-46.0	-62.6	45.1
3467.125	-56.865	-13.00	43.87	500.0	1000.0	134.0	V	346.0	-	5.7	-46.1	-62.5	46.0
4873.844	-53.740	-13.00	40.74	500.0	1000.0	100.0	H	336.0	-	7.0	-45.9	-61.1	46.2



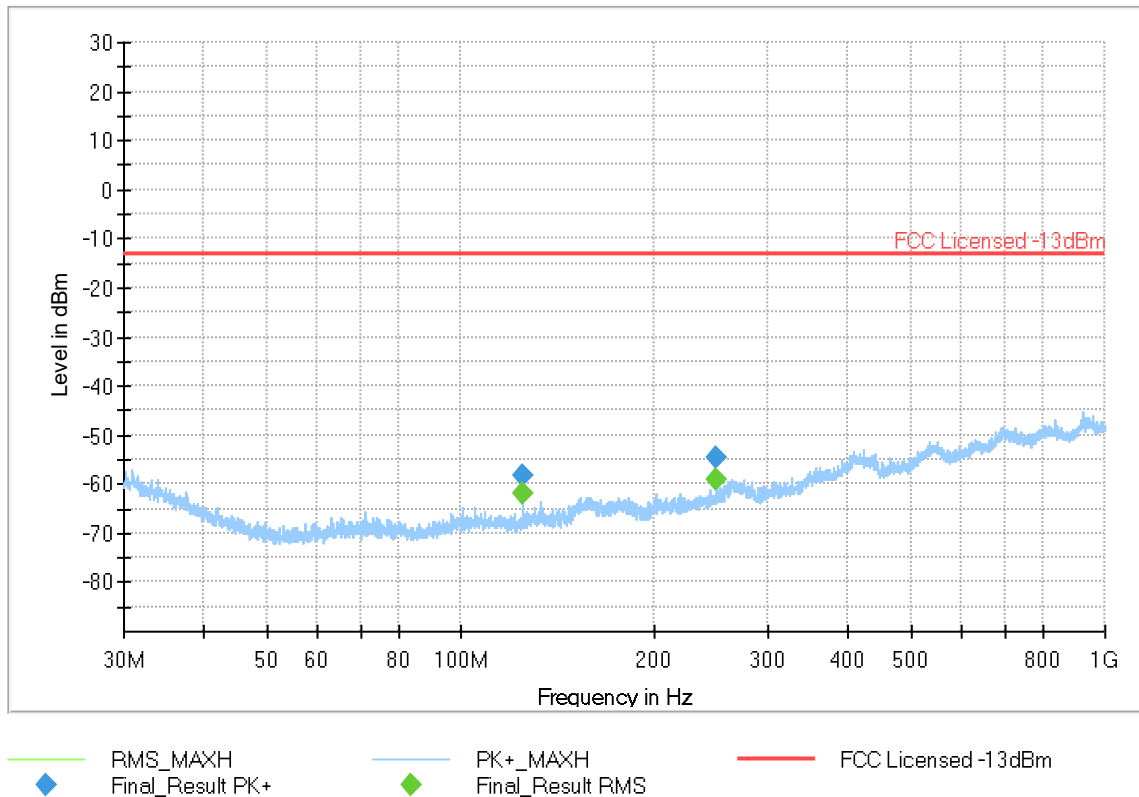
Preview Result 1-PK+ FCC Licensed -13dBm Final_Result RMS

Plot # 109 Radiated Emissions: 30 MHz – 1GHz

Channel: High

Final Result

Frequency (MHz)	MaxPeak (dBm)	RMS (dBm)	Limit (dBm)	Margin	Meas. Time (ms)	Bandwidth (Hz)	Height	Pol	Azimuth	Corr. (dB)	Comment
124.995	-58.19	---	-13.00	45.19	500.0	100.0	165.0	H	296.0	-82.7	
124.995	---	-62.08	---	---	500.0	100.0	165.0	H	296.0	-82.7	
249.996	-54.58	---	-13.00	41.58	500.0	100.0	100.0	H	232.0	-77.6	
249.996	---	-59.06	---	---	500.0	100.0	100.0	H	232.0	-77.6	

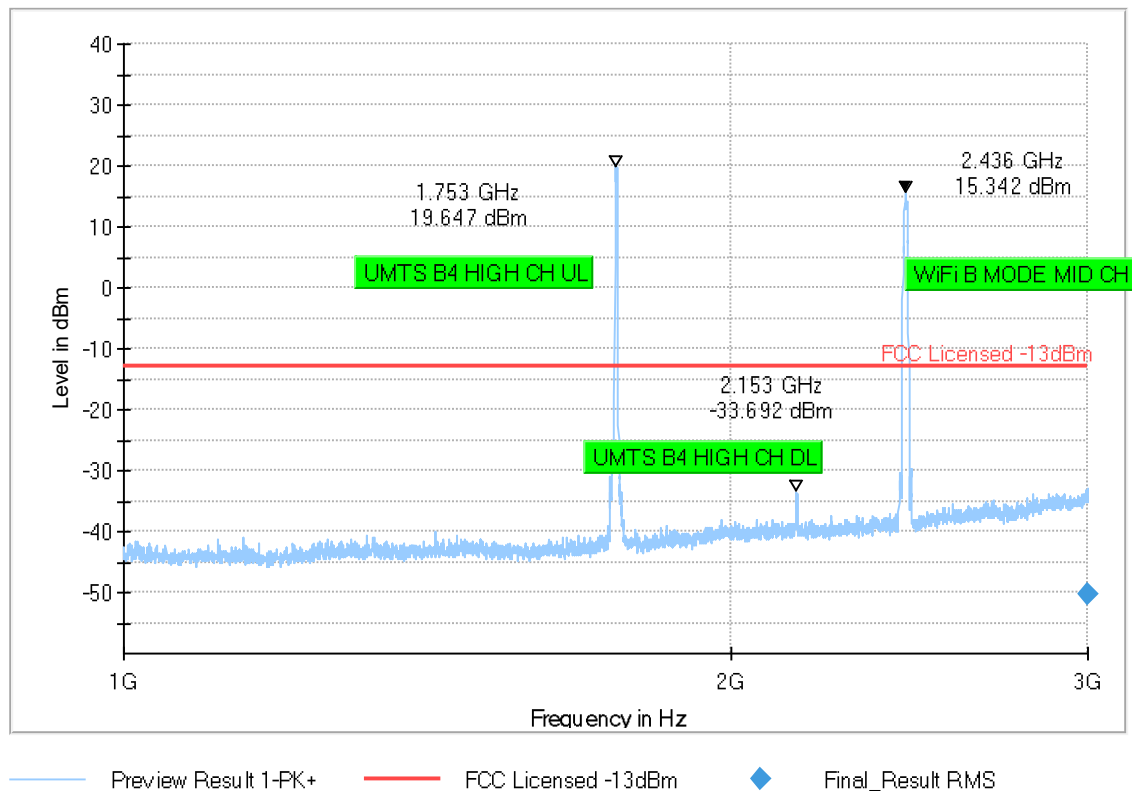


Plot # 110 Radiated Emissions: 1 GHz - 3 GHz

Channel: High

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)
2997.000	-50.270	-13.00	37.27	500.0	1000.0	254.0	V	222.0	-59.4	5.9	0.0	-65.4	9.2

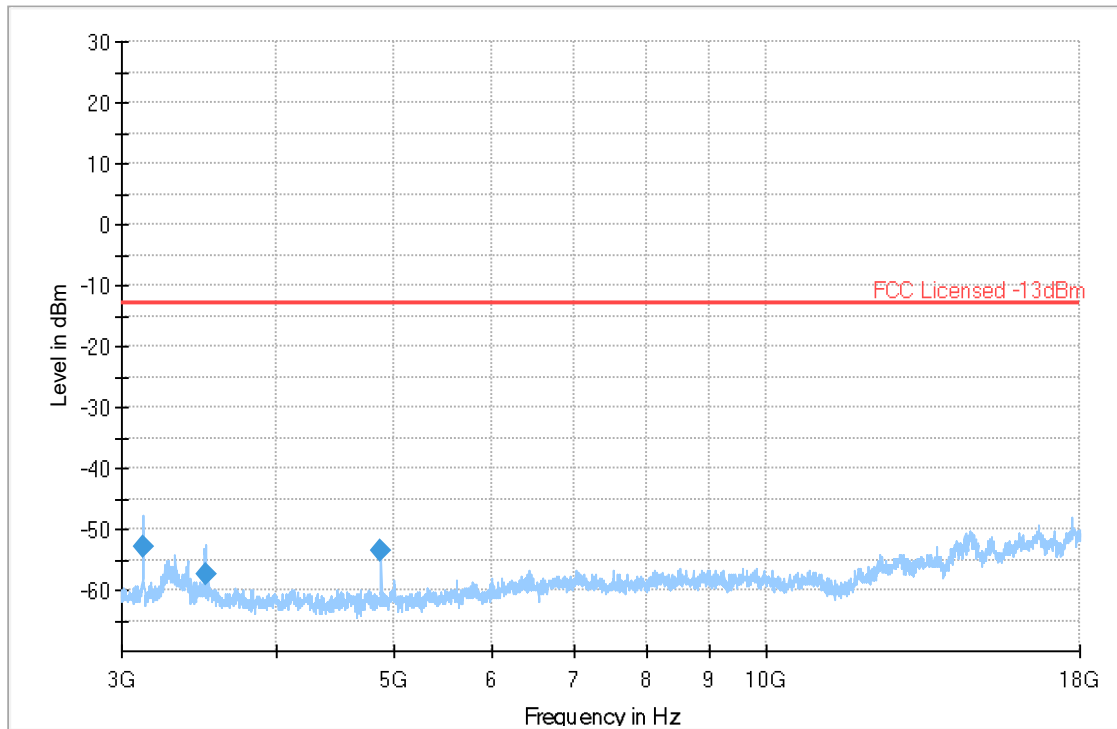


Plot # 111 Radiated Emissions: 3 GHz – 18 GHz

Channel: High

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)
3121.625	-52.777	-13.00	39.78	500.0	1000.0	210.0	H	24.0	-	5.5	-45.9	-62.5	50.2
3506.500	-57.300	-13.00	44.30	500.0	1000.0	100.0	V	352.0	-	6.0	-46.0	-62.4	45.1
4873.844	-53.582	-13.00	40.58	500.0	1000.0	100.0	H	336.0	-	7.0	-45.9	-61.1	46.4



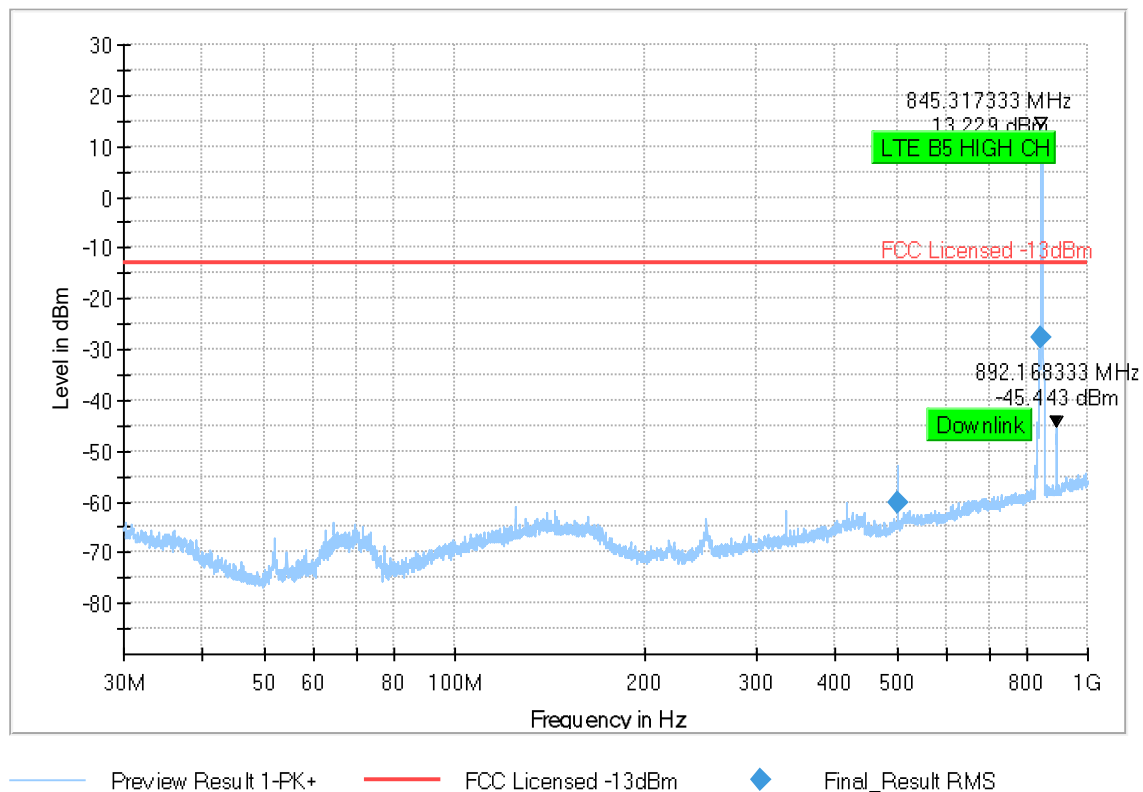
Preview Result 1-PK+ FCC Licensed -13dBm Final_Result RMS

8.2.16 Measurement plots:**8.2.16.1 W-CDMA Band V****Plot # 112 Radiated Emissions: 30 MHz – 1GHz**

Channel: Low

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)
499.977	-60.004	-13.00	47.00	500.0	100.0	187.0	H	188.0	-71.4	2.1	0.0	-73.5	11.4
843.320	-27.498	-13.00	14.50	500.0	100.0	100.0	H	344.0	-66.3	2.7	0.0	-69.1	38.8

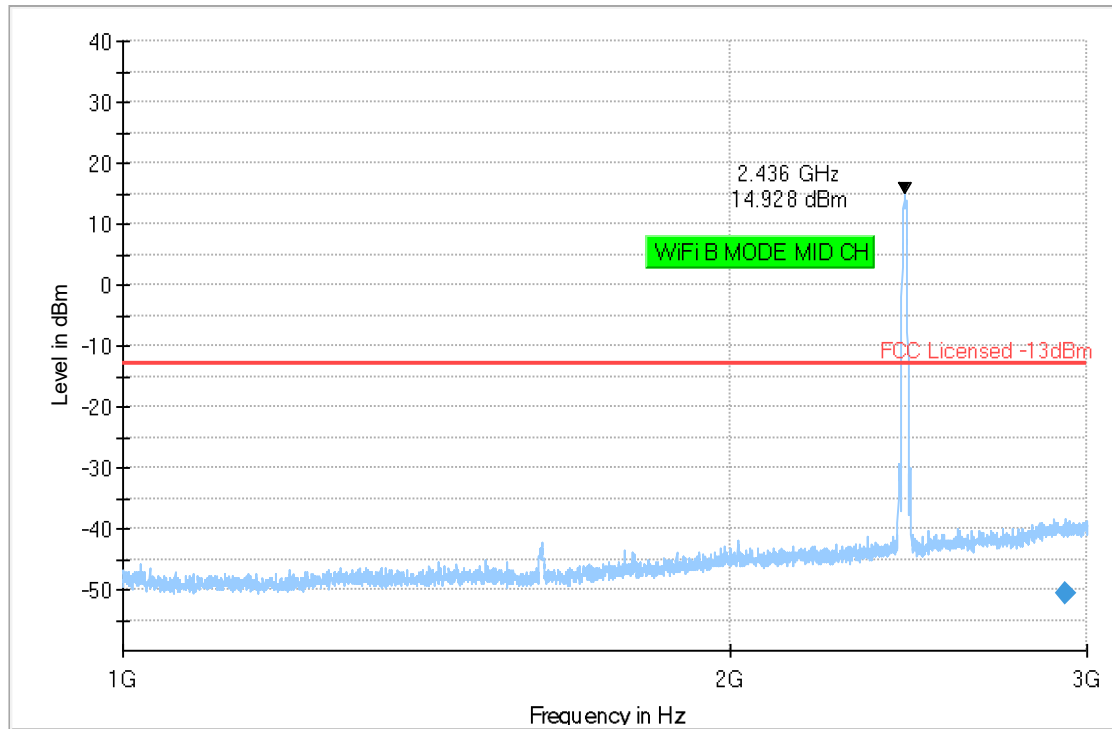


Plot # 113 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low

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)
2928.750	-50.715	-13.00	37.71	500.0	1000.0	256.0	H	183.0	-59.8	5.9	0.0	-65.7	9.0



Preview Result 1-PK+

FCC Licensed -13dBm



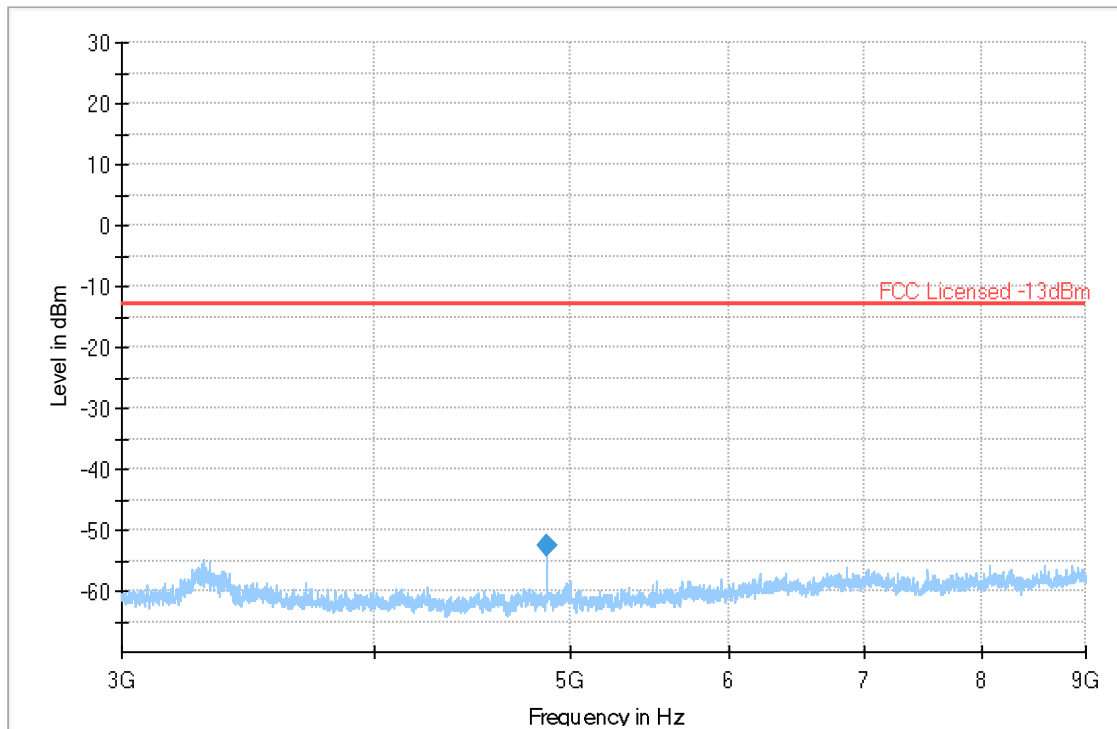
Final_Result RMS

Plot # 114 Radiated Emissions: 3 GHz – 9 GHz

Channel: Low

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)
4873.972	-52.489	-13.00	39.49	500.0	1000.0	100.0	H	337.0	-	7.0	-45.9	-61.1	47.5



Preview Result 1-PK+

FCC Licensed -13dBm

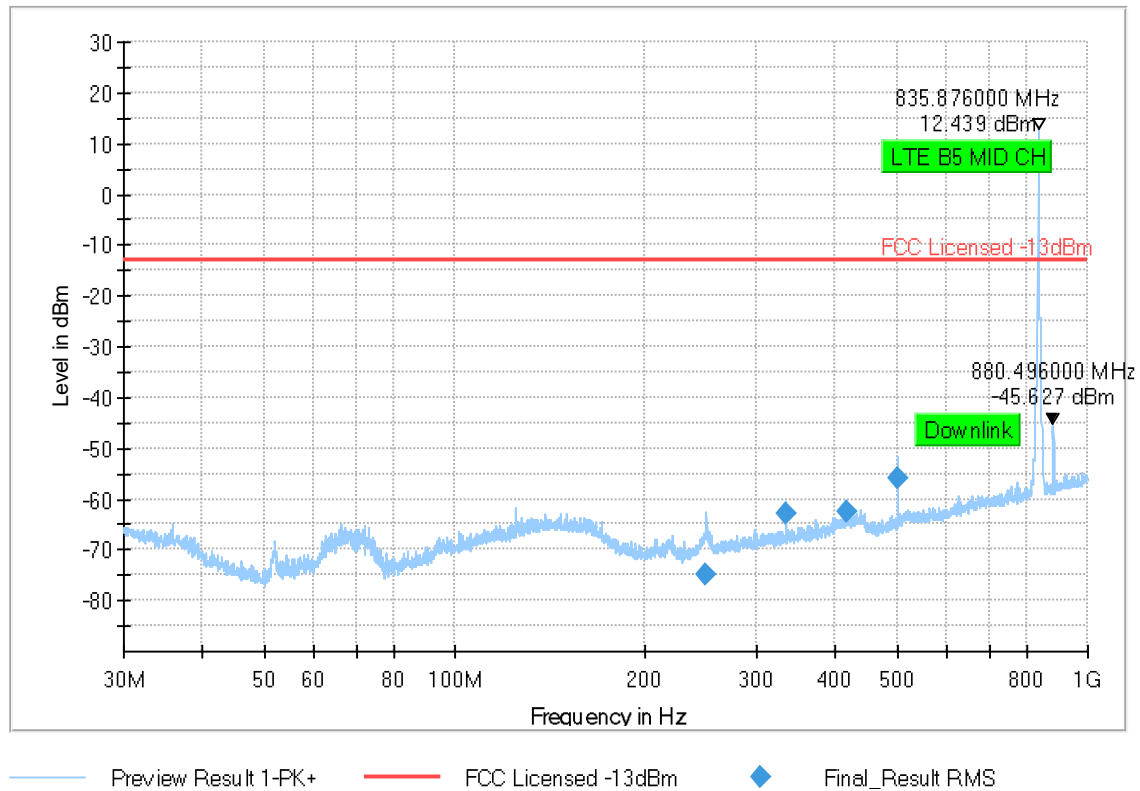
Final_Result RMS

Plot # 115 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid

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)
249.945	-74.777	-13.00	61.78	500.0	100.0	213.0	V	67.0	-73.9	1.5	0.0	-75.4	-0.9
333.340	-62.742	-13.00	49.74	500.0	100.0	100.0	H	275.0	-74.8	1.7	0.0	-76.5	12.0
416.666	-62.640	-13.00	49.64	500.0	100.0	100.0	H	342.0	-72.7	1.9	0.0	-74.6	10.1
499.994	-56.069	-13.00	43.07	500.0	100.0	131.0	H	20.0	-71.4	2.1	0.0	-73.5	15.3

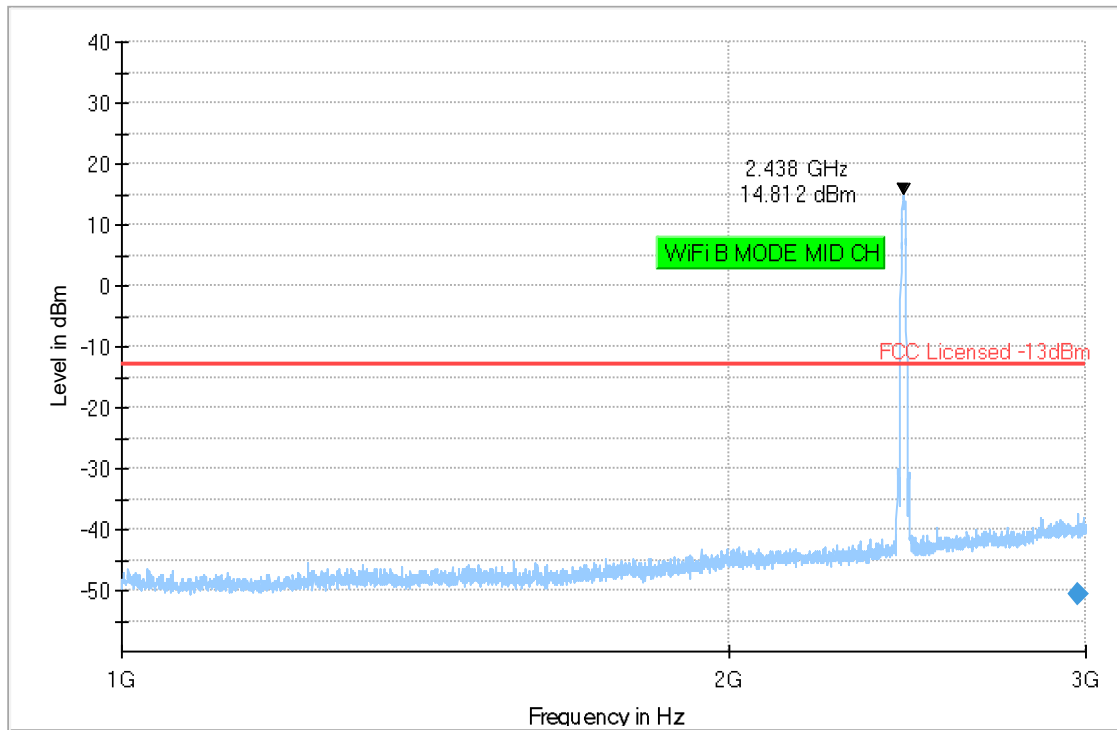


Plot # 116 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid

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)
2974.355	-50.712	-13.00	37.71	500.0	1000.0	388.0	V	17.0	-59.6	5.9	0.0	-65.5	8.9



Preview Result 1-PK+

FCC Licensed -13dBm

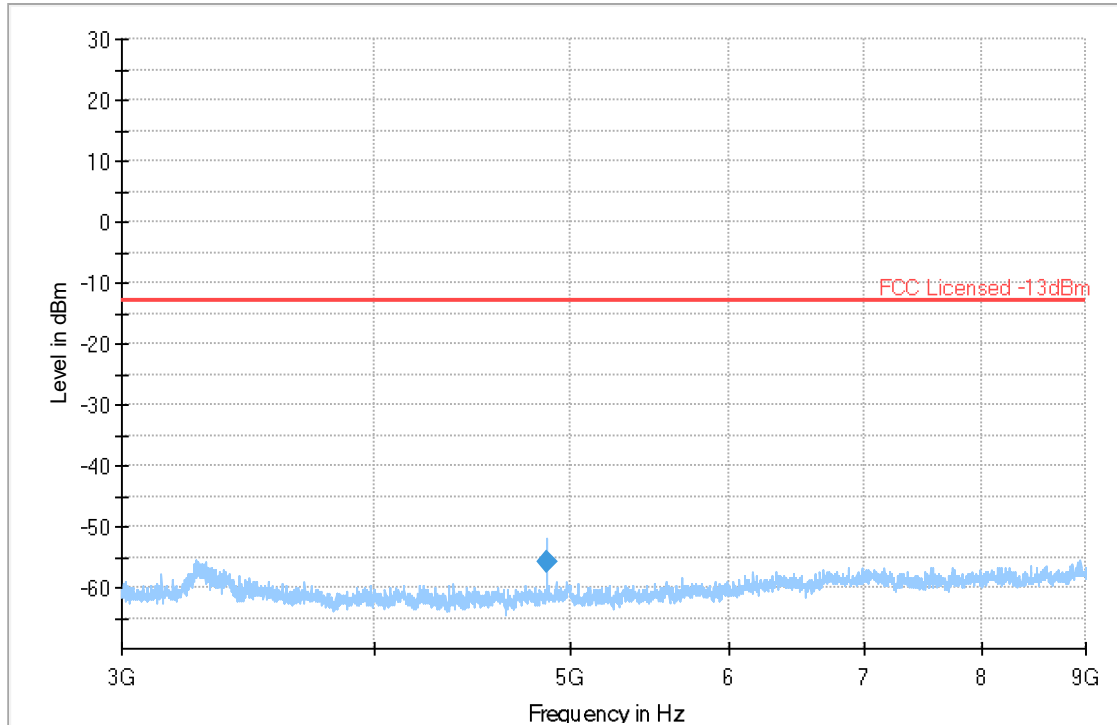
Final_Result RMS

Plot # 117 Radiated Emissions: 3 GHz – 9 GHz

Channel: Mid

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)
4873.960	-55.797	-13.00	42.80	500.0	1000.0	263.0	H	141.0	-	7.0	-45.9	-61.1	44.2



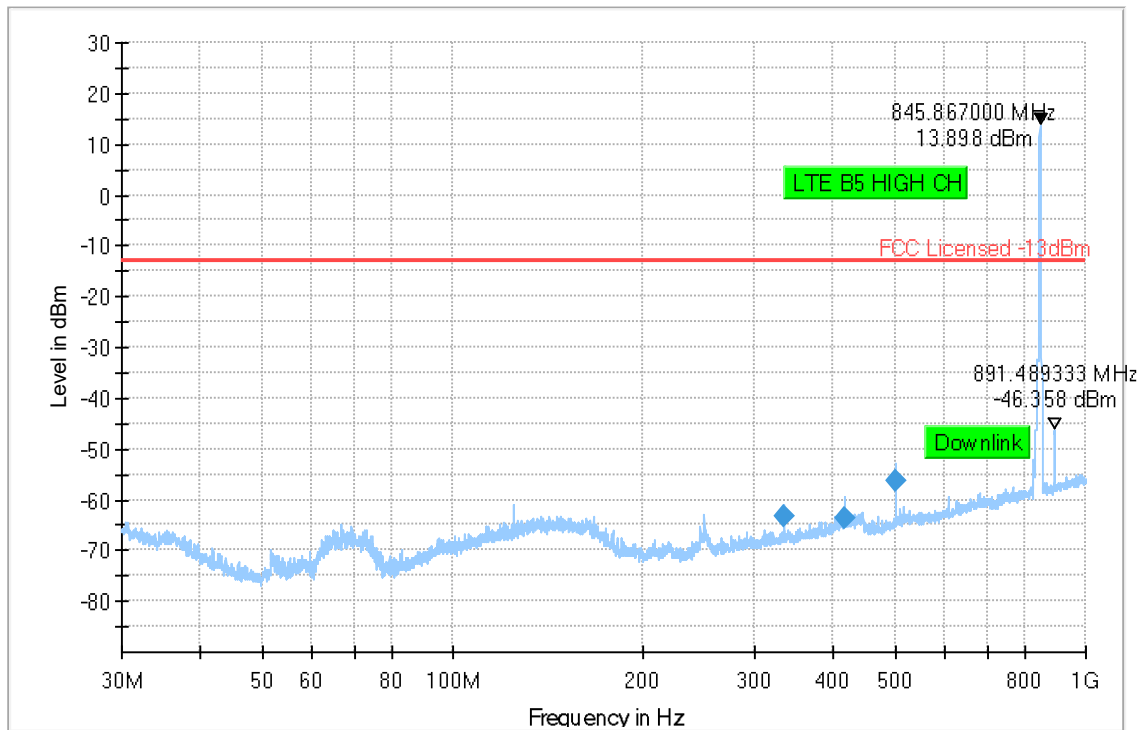
Preview Result 1-PK+ FCC Licensed -13dBm Final_Result RMS

Plot # 118 Radiated Emissions: 30 MHz – 1GHz

Channel: High

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)
333.338	-63.223	-13.00	50.22	500.0	100.0	100.0	H	293.0	-74.8	1.7	0.0	-76.5	11.5
416.664	-63.761	-13.00	50.76	500.0	100.0	100.0	H	325.0	-72.7	1.9	0.0	-74.6	8.9
500.001	-56.282	-13.00	43.28	500.0	100.0	134.0	H	14.0	-71.4	2.1	0.0	-73.5	15.1



Preview Result 1-PK+

FCC Licensed -13dBm

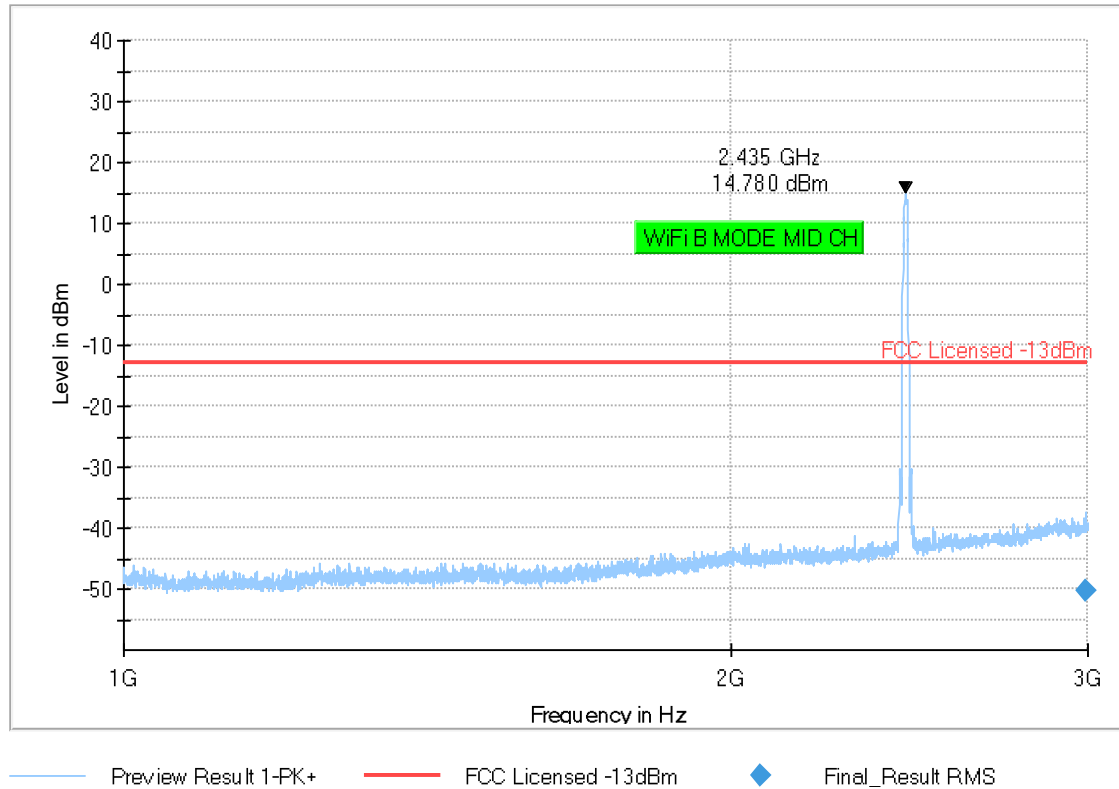
Final_Result RMS

Plot # 119 Radiated Emissions: 1 GHz - 3 GHz

Channel: High

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)
2995.500	-50.204	-13.00	37.20	500.0	1000.0	256.0	H	116.0	-59.4	5.9	0.0	-65.3	9.2

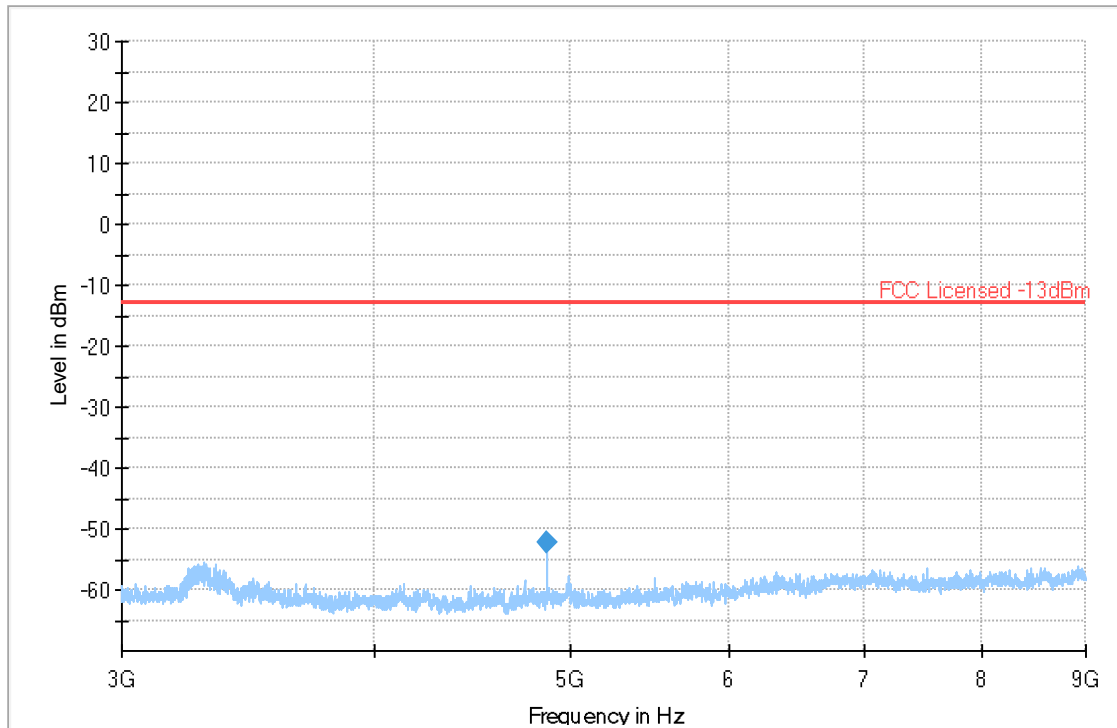


Plot # 120 Radiated Emissions: 3 GHz – 9 GHz

Channel: High

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)
4873.977	-52.117	-13.00	39.12	500.0	1000.0	357.0	H	22.0	-	7.0	-45.9	-61.1	47.9



Preview Result 1-PK+

FCC Licensed -13dBm

Final_Result RMS

9 Test setup photos

Setup photos are included in supporting file name: "EMC_ASTRO_072_25001_FCC_22_24_27_Setup_photos.pdf"

10 Test Equipment And Ancillaries Used For Testin

EMC Lab 1

Equipment Type	Manufacturer	Model	Serial #	Calibration Cycle	Last Calibration Date
PASSIVE LOOP ANTENNA	ETS LINDGREN	6512	00049838	3 Years	09/18/2025
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
Multimeter	Fluke	115	56090717MV	3 Years	09/25/2025
Software	EMC32	Version 11.40.00	-	-	-

EMC Lab 2

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

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.

11 Revision History

Date	Report Name	Changes to report	Prepared by
2025-10-30	EMC_ASTRO_072_25001_FCC_22_24_27_90	Initial Version	Art Thammanavarat

<<< The End >>>
