



FCC/ISED Test Report

FOR:
Aversan Inc.

Model #:
1205

Product Description:
Cell and Wi-Fi carrier with integrated RF switching.

FCC ID: 2AWBR002250
IC ID: 26073-002250

Per:
Title 47 CFR: Part 22, Part 24, Part 27, Part 90s
RSS-130 Issue 2, RSS-132 Issue 3; RSS-133 Issue 6; RSS-139 Issue 3; RSS-199 Issue 3

REPORT #: EMC_AVERS_006_20001_FCC_22_24_27_90_ISED_REV1

DATE: 9/4/2020



A2LA Accredited

IC recognized #
3462B-1
3462B-2

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1 Assessment

The following device as further described in section 3 of this report was evaluated for radiated spurious emissions in simultaneous transmission of cellular and Wi-Fi 2.4 GHz radio according to criteria specified in the Code of Federal Regulations Title 47 CFR: Part 22, Part 24, Part 27, Part 90s and Industry Canada Radio Standard Specifications RSS-130 Issue 2, RSS-132 Issue 3; RSS-133 Issue 6; RSS-139 Issue 3; RSS-199 Issue 3 .

No deficiencies were ascertained.

According to section 6 of this report, the overall result is PASS.

Company	Description	Model #
Aversan Inc.	Cell and Wi-Fi carrier with integrated RF switching.	1205

Responsible for Testing Laboratory:

9/4/2020	Compliance	Li, Cindy (Lab Manager)	
Date	Section	Name	Signature

Responsible for the Report:

9/4/2020	Compliance	Ghanma, Issa (EMC Engineer)	
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
Fax:	+1 (408) 586 6299
Lab Manager:	Li, Cindy
Responsible Project Leader:	Saman, Rami

2.1 Identification of the Client

Applicant's Name:	Aversan Inc.
Street Address:	30 Eglinton Avenue West, Suite 500
City/Zip Code	Mississauga, ON L5R 3E7
Country	Canada

2.2 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 #:	1205
FCC ID:	2AWBR002250
IC ID:	26073-002250
HW Version :	05
SW Version :	- Cell: SWI9X50C_01.07.02.00 - Internal Wi-Fi: 5.4.24.1 - External Wi-Fi: 5.6.23.4
HVIN:	1205
PMN:	RF Board
Product Description:	Cell and Wi-Fi carrier with integrated RF switching.
Transceiver Technology / Type(s) of Modulation:	❖ Cellular Module: - Name / Number: AirPrime / EM7565 - FCC / IC ID: N7NEM75 / 2417C-EM75 4G LTE (CAT 12): LTE FDD Bands 2, 4, 5, 7, 12, 13, 26, 41, 66 3G WCDMA (HSPA+): UMTS FDD Bands II, IV, V
Frequency Range:	- UMTS Band II : 1850 ~ 1910 MHz - UMTS Band IV : 1710 ~ 1755 MHz - UMTS Band V : 824 ~ 849 MHz - LTE Band 2 : 1850 ~ 1910 MHz - LTE Band 4 : 1710 ~ 1755 MHz - LTE Band 5 : 824 ~ 849 MHz - LTE Band 7 : 2500 ~ 2570 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 - LTE Band 66 : 1710 ~ 1780 MHz

Max. declared antenna gain:	❖ External, ANT-LTE-MON-SMA - Peak gain [dBi] 698 – 960 MHz : 5.8 1710 – 2170 MHz : 3.7 2300 – 2400 MHz : 2.0 2500 – 2700 MHz : 1.4 3400 – 3600 MHz : 5.2 3600 – 3800 MHz : 6.1
Power Supply/ Rated Operating Voltage Range:	Low 18 VDC, Nominal 28 VDC, High 33 VDC
Operating Temperature Range:	Low -15° C, Nominal 25° C, High 55° C
Other Radios included in the device:	❖ WLAN (Wi-Fi) , Bluetooth , BLE Module: - FCC / IC ID: SQG-60SIPT / 3147A-602230C - Name / Number: 60-2230C / 60-2230C-PU - Wi-Fi 2.4 and 5 GHz: 802.11 a/b/g/n/h/ac - Bluetooth 4.2 - Name / Number: 60-2230C / 60-2230C-U - Wi-Fi 2.4 and 5 GHz: 802.11 a/b/g/n/h/ac
Sample Revision	☐ Prototype Unit; ☐ Production Unit; ☒ Pre-Production
EUT Diameter	☒ < 60 cm ☐ Other _____

3.2 EUT Sample details

EUT #	Serial Number	HW Version	SW Version	Notes/Comments
1	ADG-RL3-0029	05	- Cell: SWI9X50C_01.07.02.00 - Internal Wi-Fi: 5.4.24.1 - External Wi-Fi: 5.6.23.4	Radiated

3.3 Accessory Equipment (AE) details

AE #	Type	Model	Manufacturer	Serial Number
N/A	-	-	-	-

3.4 Test Sample Configuration

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

3.5 Mode of Operation details

Mode of Operation	Description of Operating modes	Additional Information
Op. 1	Cellular & Wi-Fi Co-TX	Cellular was tested on Low, Mid and High Channels at the maximum power, simultaneous transmission with Wi-Fi 2.4 GHz. Cellular was configured using AT commands, through TeraTerm terminal. LRU/LMU tools provided by module supplier through client, used to configure the Co-transmitter <u>Wi-Fi</u> radio to: ▪ Mode: <u>g</u> ▪ Transmit mode: Continuous <u>TX</u> ▪ Hopping: <u>No</u> ▪ Frequency: <u>2437 MHz</u> ▪ Data rate: <u>6 Mb/s</u>

3.6 Justification for Worst Case Mode of Operation

During the testing process the cellular radio was tested with transmitter sets to low, mid and high channel at the maximum power in simultaneous transmission mode with the highest output power of radios included in the device (Wi-Fi 2.4GHz), as it is described in section 3.5 of this document; representing the worst case mode of operation.

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 evaluation conducted by CETECOM Inc. is to perform and check radiated spurious emissions against the limits per Code of Federal Regulations Title 47 CFR: Part 22, Part 24, Part 27, Part 90s and Industry Canada Radio Standard Specifications RSS-130 Issue 2, RSS-132 Issue 3; RSS-133 Issue 6; RSS-139 Issue 3; RSS-199 Issue 3, in simultaneous transmission mode of Cellular (AirPrime EM7565 FCC/IC ID: N7NEM75/2417C-EM75) and Wi-Fi 2.4 GHz (60-2230C, 60-2230C-PU) Radios.

The host device contains two identical Wi-Fi modules:

1. Name/Number: 60-2230C / 60-2230C-PU; (Used as a Co-transmitter)
 - a. supports BT and BLE
2. Name/Number: 60-2230C / 60-2230C-U
 - a. BT and BLE not used

4.1 Dates of Testing:

4/10/2020 – 5/22/2020

4.2 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=1.

Radiated measurement

9 kHz to 30MHz	±2.5 dB (Magnetic Loop Antenna)
30 MHz to 1000 MHz	±2.0 dB (Biconilog Antenna)
1 GHz to 40 GHz	±2.3 dB (Horn Antenna)

4.3 Environmental Conditions during Testing:

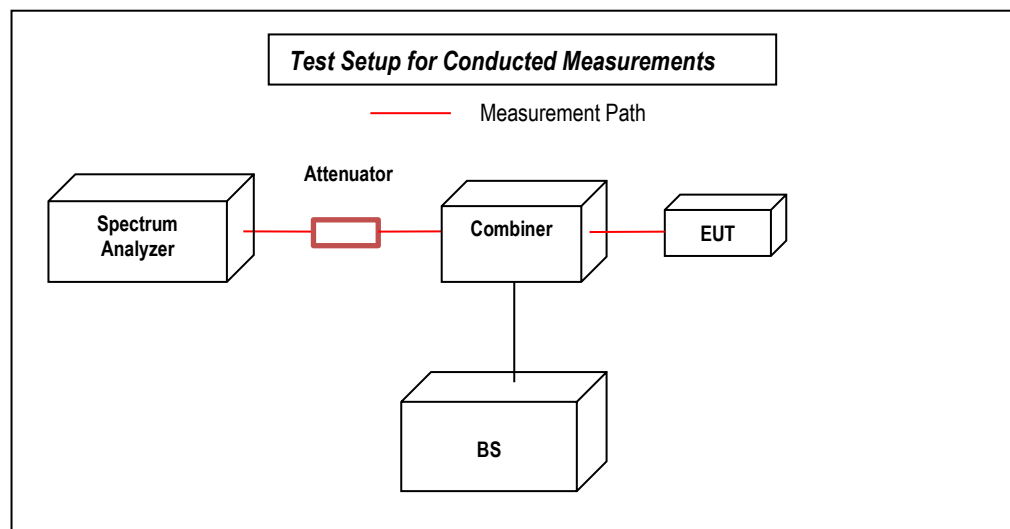
The following environmental conditions were maintained during the course of testing:

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

Deviating test conditions are indicated at individual test description where applicable.

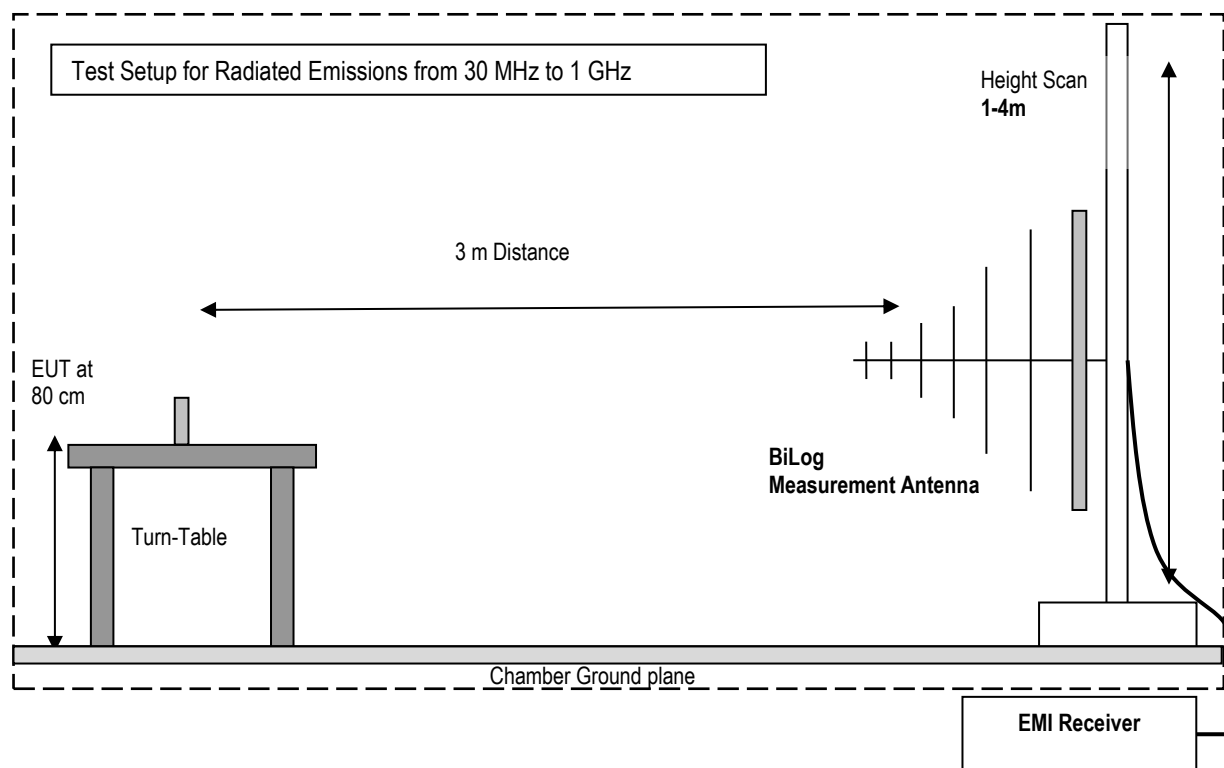
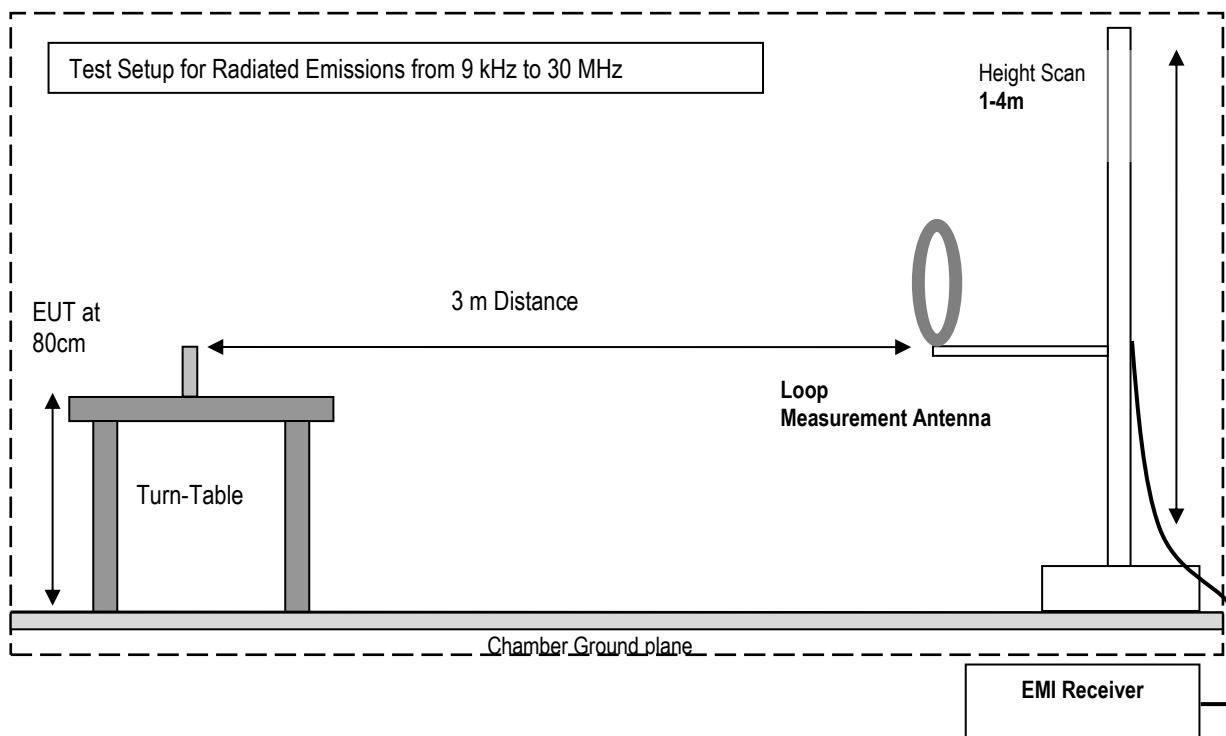
5 Measurement Procedures

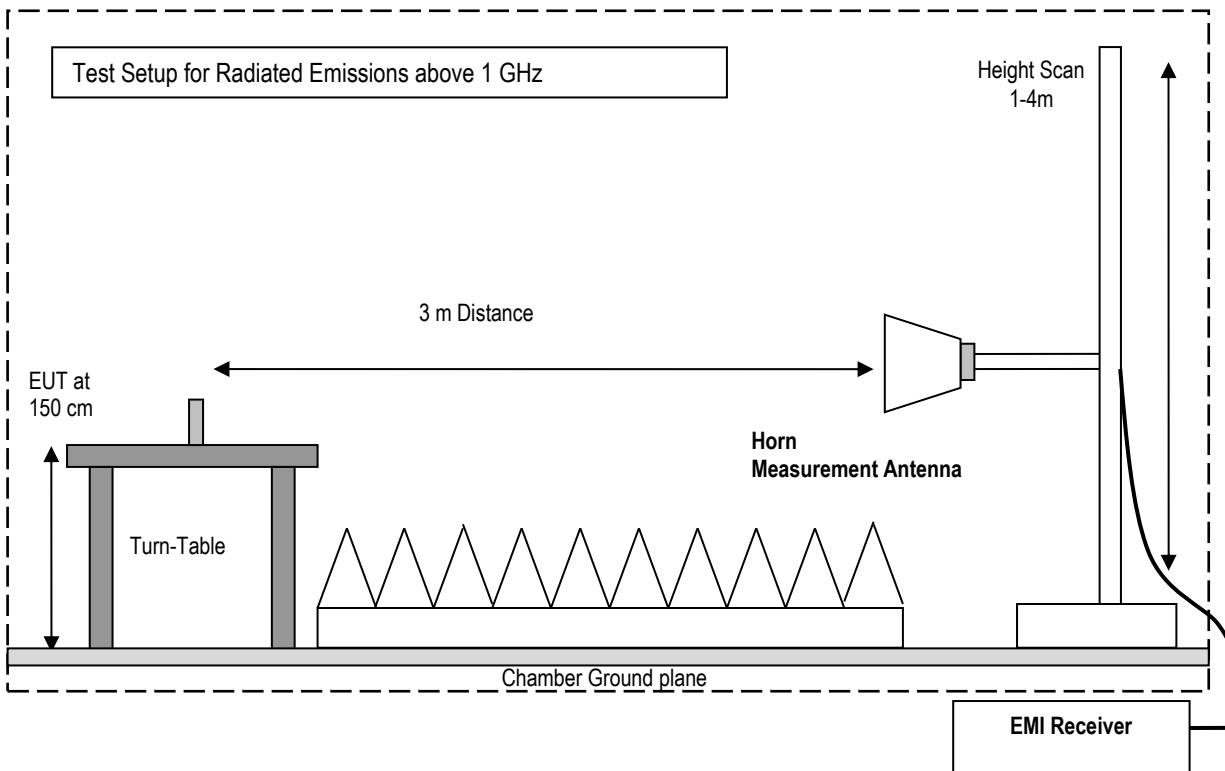
Testing is performed according to the guidelines provided in FCC publication (KDB) 971168 D01 v03r01 – “Measurement Guidance for Certification of Licensed Digital Transmitters” and according to relevant parts of ANSI/TIA-603-D-2010 as detailed below.



5.1 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.





5.2 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

6 Measurement Results Summary

6.1 FCC 22, RSS-132:

Test Specification	Test Case	Temperature and Voltage Conditions	Mode	Pass	Fail	NA	NP	Result
§2.1046; §22.913 (a)	RF Output Power	-	-	■	□	□	□	Complies
§2.1055; §22.355	Frequency Stability	-	-	□	□	□	■	Note 1 Note 2
§2.1049; §22.917	Occupied Bandwidth	-	-	□	□	□	■	Note 1 Note 2
§2.1051; §22.917	Band Edge Compliance	-	-	□	□	□	■	Note 1 Note 2
§2.1051; §22.917	Conducted Spurious Emissions	-	-	□	□	□	■	Note 1 Note 2
§2.1053; §22.917(a); RSS-132 Issue 3-5.5;	Radiated Spurious Emissions	Nominal	UMTS V, LTE 5, 26	■	□	□	□	Complies

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

Note 2: Leveraged from module certification report: AirPrime FCC ID: N7NEM75/ IC ID: 2417C-EM75;

6.2 FCC 24, RSS-133:

Test Specification	Test Case	Temperature and Voltage Conditions	Mode	Pass	Fail	NA	NP	Result
§2.1046; §24.232 (a)	RF Output Power	-	-	☐	☐	☐	■	Note 1 Note 2
§2.1055; §24.235	Frequency Stability	-	-	☐	☐	☐	■	Note 1 Note 2
§2.1049; §24.238	Occupied Bandwidth	-	-	☐	☐	☐	■	Note 1 Note 2
§2.1051; §24.238	Band Edge Compliance	-	-	☐	☐	☐	■	Note 1 Note 2
§2.1051; §24.238	Conducted Spurious Emissions	-	-	☐	☐	☐	■	Note 1 Note 2
§2.1053; §24.238(a); RSS-133 Issue 6-6.5.1;	Radiated Spurious Emissions	Nominal	UMTS II, LTE 2	■	☐	☐	☐	Complies

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

Note 2: Leveraged from module certification report: AirPrime FCC ID: N7NEM75/ IC ID: 2417C-EM75;

6.3 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 (d)	RF Output Power	Nominal	-	☐	☐	☐	■	Note 1 Note 2
§2.1055; §27.54	Frequency Stability	Nominal	-	☐	☐	☐	■	Note 1 Note 2
§2.1049; §27.53	Occupied Bandwidth	Nominal	-	☐	☐	☐	■	Note 1 Note 2
§2.1051; §27.53	Band Edge Compliance	Nominal	-	☐	☐	☐	■	Note 1 Note 2
§2.1051; §27.53	Conducted Spurious Emissions	Nominal	-	☐	☐	☐	■	Note 1 Note 2
§2.1053; §27.53(h); §27.53(m) 4); §27.53(g); §27.53(c); RSS-130 Issue 2-4.7; RSS-139 Issue 3-6.6; RSS-199 Issue 3-4.5;	Radiated Spurious Emissions	Nominal	LTE 4, 7, 12, 13, 41, 66	■	☐	☐	☐	Complies

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

Note 2: Leveraged from module certification report: AirPrime FCC ID: N7NEM75/ IC ID: 2417C-EM75;

6.4 FCC 90:

Test Specification	Test Case	Temperature and Voltage Conditions	Mode	Pass	Fail	NA	NP	Result
§2.1046; §90.635;	RF Output Power	Nominal	-	☐	☐	☐	☒	Note 1 Note 2
§2.1055; §90.213	Frequency Stability	Nominal	-	☐	☐	☐	☒	Note 1 Note 2
§2.1049; §90.209	Occupied Bandwidth	Nominal	-	☐	☐	☐	☒	Note 1 Note 2
§2.1051; §90.691	Band Edge Compliance	Nominal	-	☐	☐	☐	☒	Note 1 Note 2
§90.691 (a) 2);	Radiated Spurious Emissions	Nominal	LTE 26	☒	☐	☐	☐	Complies

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

Note 2: Leveraged from module certification report: AirPrime FCC ID: N7NEM75/ IC ID: 2417C-EM75;

7 Test Result Data

7.1 RF Output Power and Emissions

Conducted output power, frequency deviation and OBW are taken from the reports on file (FG791919xxx from SPORTON) for module FCC ID: N7NEM75, ISED ID: 2417C-EM75 for the relevant emissions. These reports have been provided by the client identified in section 2.1 as part of the application for certification. From ISO 17025 perspective they are treated as a declaration from the client, not as subcontracted testing.

Declared antenna gains have been added to calculate ERP <1GHz and EIRP > 1GHz. Compliance of all resulting emissions has been re-evaluated to the current FCC regulations and ISED standards as indicated on title page.

Highest emissions are taken from section 7.2.

Equipment Specifications										
Frequency Range (MHz)		Conducted RMS power dBm	Gain dBi	Rated RF power output E(I)RP in W	Frequency Tolerance (% , Hz, ppm)		Emission Designator (NOT for Part 15 devices)	Equipment Code (ex: DTS, DSS, PCE)	Rule Part (ex: 15.247, etc.)	Highest emissions in dBm or dBuV/m @3 m
1852.4	1907.6	22.58	3.7	0.425	0.016	ppm	4M14D7D	PCB	24	-24.5
1712.4	1752.6	22.83	3.7	0.450	0.016	ppm	4M12D7D	PCB	27	-24.4
826.4	846.6	22.86	5.8	0.448	0.016	ppm	4M12D7D	PCB	22	-24.6
1860	1900	22.5	3.7	0.417	0.0044	ppm	18M5D7D	PCB	24	-23.5
1850.7	1909.3	22.11	3.7	0.381	0.0044	ppm	1M09D7D	PCB	24	-23.5
2502.5	2567.5	21.97	1.4	0.217	0.0065	ppm	4M46D7D	PCB	27	-41.8
2510	2560	21.82	1.4	0.210	0.0065	ppm	18M5D7D	PCB	27	-41.8
2510	2560	23	1.4	0.275	0.0065	ppm	37M7D7D	PCB	27	-41.8
704	711	22.76	5.8	0.438	0.0134	ppm	9M11D7D	PCB	27	-25.2
699.7	715.3	22.6	5.8	0.422	0.0134	ppm	1M08D7D	PCB	27	-25.2
782	782	22.85	5.8	0.447	0.0136	ppm	9M01D7D	PCB	27	-24.7
779.5	784.5	22.82	5.8	0.444	0.0136	ppm	4M49D7D	PCB	27	-24.7
821.5	841.5	22.84	5.8	0.446	0.074	ppm	13M5D7D	PCB	22/90	-24.6
816.5	846.5	22.75	5.8	0.437	0.074	ppm	1M09D7D	PCB	22/90	-24.6
2506	2680	21.99	1.4	0.218	0.0037	ppm	18M3D7D	PCB	27	-33.9
2498.5	2687.5	21.88	1.4	0.213	0.0037	ppm	4M46D7D	PCB	27	-33.9
2506	2680	23	1.4	0.275	0.0037	ppm	37M9D7D	PCB	27	-33.9
1720	1770	22.99	3.7	0.467	0.0093	ppm	18M46D7D	PCB	27	-22.4
1712.5	1777.5	22.73	3.7	0.440	0.0093	ppm	1M09D7D	PCB	27	-22.4

7.2 Radiated Spurious Emissions

7.2.1 Measurement according to FCC: CFR 47 Part 2.1053; CFR Part 22.917; CFR Part 24.238, Part 27.53 utilizing KDB 971168 D01 Power Meas License Digital Systems v03r01, and according to ANSI C63.26 2015

Spectrum Analyzer Settings for FCC 22

Frequency Range	30 MHz – 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, 27 and 90

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

7.2.2 Limits:**7.2.2.1** FCC Part 22.917 (a); FCC Part 24.238 (a); FCC Part 27.53 (c), (g), (h); FCC Part 90.691 (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.

7.2.2.2 FCC Part 27.53 (m); -25 dBm

(4) For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB 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. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

7.2.2.3 RSS-130 Part 4.7; RSS-132 Part 5.5; RSS-133 Part 6.5; RSS-139 Part 6.6

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.

7.2.2.4 RSS-199 Part 4.5

In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment, and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% or 2% of the occupied bandwidth, as applicable.

Equipment shall comply with the following unwanted emission limits:

for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least $43 + 10 \log_{10} p$

for mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least:

$40 + 10 \log_{10} p$ from the channel edges to 5 MHz away

$43 + 10 \log_{10} p$ between 5 MHz and X MHz from the channel edges, and

$55 + 10 \log_{10} p$ at X MHz and beyond from the channel edges

In addition, the attenuation shall not be less than $43 + 10 \log_{10} p$ on all frequencies between 2490.5 MHz and 2496 MHz, and $55 + 10 \log_{10} p$ at or below 2490.5 MHz.

In (a) and (b), p is the transmitter power measured in watts and X is 6 MHz or the equipment occupied bandwidth, whichever is greater.

7.2.3 Test conditions and setup:

Ambient Temperature (C)	EUT operating mode	Power Input
23	Op. 1	28v DC

7.2.4 Measurement result:

Plot #	Channel	EUT operating mode	Scan Frequency	Limit (dBm)	Result
1 – 3	Low	UMTS Band II	30 MHz – 18 GHz	-13	Pass
4 – 8	Mid		9 kHz – 26 GHz	-13	Pass
9 – 11	High		30 MHz – 18 GHz	-13	Pass
12 – 14	Low	UMTS Band IV	30 MHz – 18 GHz	-13	Pass
15 – 18	Mid		9 kHz – 18 GHz	-13	Pass
19 – 21	High		30 MHz – 18 GHz	-13	Pass
22 – 24	Low	UMTS Band V	30 MHz – 9 GHz	-13	Pass
25 – 28	Mid		9 kHz – 9 GHz	-13	Pass
29 – 31	High		30 MHz – 9 GHz	-13	Pass
32 – 34	Low	LTE Band 2	30 MHz – 18 GHz	-13	Pass
35 – 39	Mid		9 kHz – 26 GHz	-13	Pass
40 – 42	High		30 MHz – 18 GHz	-13	Pass
43 – 45	Low	LTE Band 4	30 MHz – 18 GHz	-13	Pass
46 – 49	Mid		9 kHz – 18 GHz	-13	Pass
50 – 52	High		30 MHz – 18 GHz	-13	Pass
53 – 55	Low	LTE Band 5	30 MHz – 9 GHz	-13	Pass
56 – 59	Mid		9 kHz – 9 GHz	-13	Pass
60 – 62	High		30 MHz – 9 GHz	-13	Pass
63 – 65	Low	LTE Band 7	30 MHz – 18 GHz	-25	Pass
66 – 70	Mid		9 kHz – 26 GHz	-25	Pass
71 – 73	High		30 MHz – 18 GHz	-25	Pass
74 – 76	Low	LTE Band 12	30 MHz – 9 GHz	-13	Pass
77 – 80	Mid		9 kHz – 9 GHz	-13	Pass
81 – 83	High		30 MHz – 9 GHz	-13	Pass

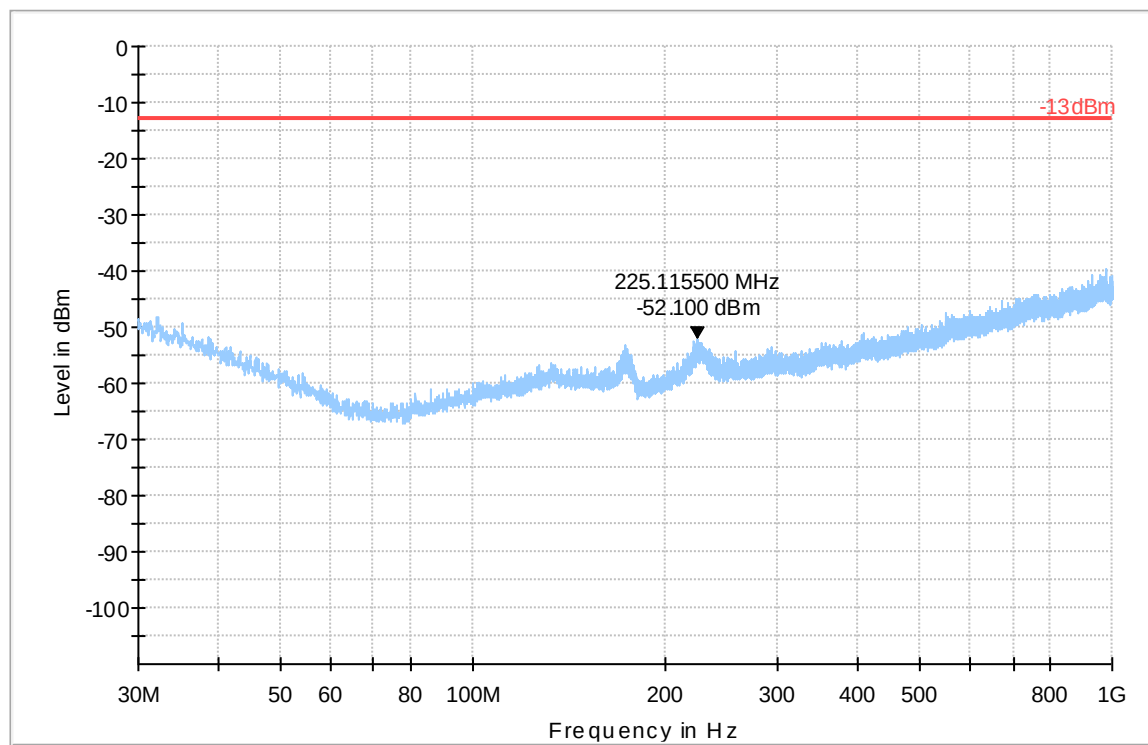
84 – 86	Low	LTE Band 13	30 MHz – 9 GHz	-13	Pass
87 – 90	Mid		9 kHz – 9 GHz	-13	Pass
91 – 93	High		30 MHz – 9 GHz	-13	Pass
94 – 96	Low	LTE Band 26	30 MHz – 9 GHz	-13	Pass
97 – 100	Mid		9 kHz – 9 GHz	-13	Pass
101 – 103	High		30 MHz – 9 GHz	-13	Pass
104 – 106	Low	LTE Band 41	30 MHz – 18 GHz	-25	Pass
107 – 111	Mid		9 kHz – 26 GHz	-25	Pass
112 – 114	High		30 MHz – 18 GHz	-25	Pass
115 – 117	Low	LTE Band 66	30 MHz – 18 GHz	-13	Pass
118 – 122	Mid		9 kHz – 18 GHz	-13	Pass
123 – 125	High		30 MHz – 18 GHz	-13	Pass

7.2.5 Measurement plots:

UMTS II

Plot # 1 Radiated Emissions: 30 MHz – 1GHz

Channel: Low



— Preview Result 1-PK+



Critical_Freqs PK+

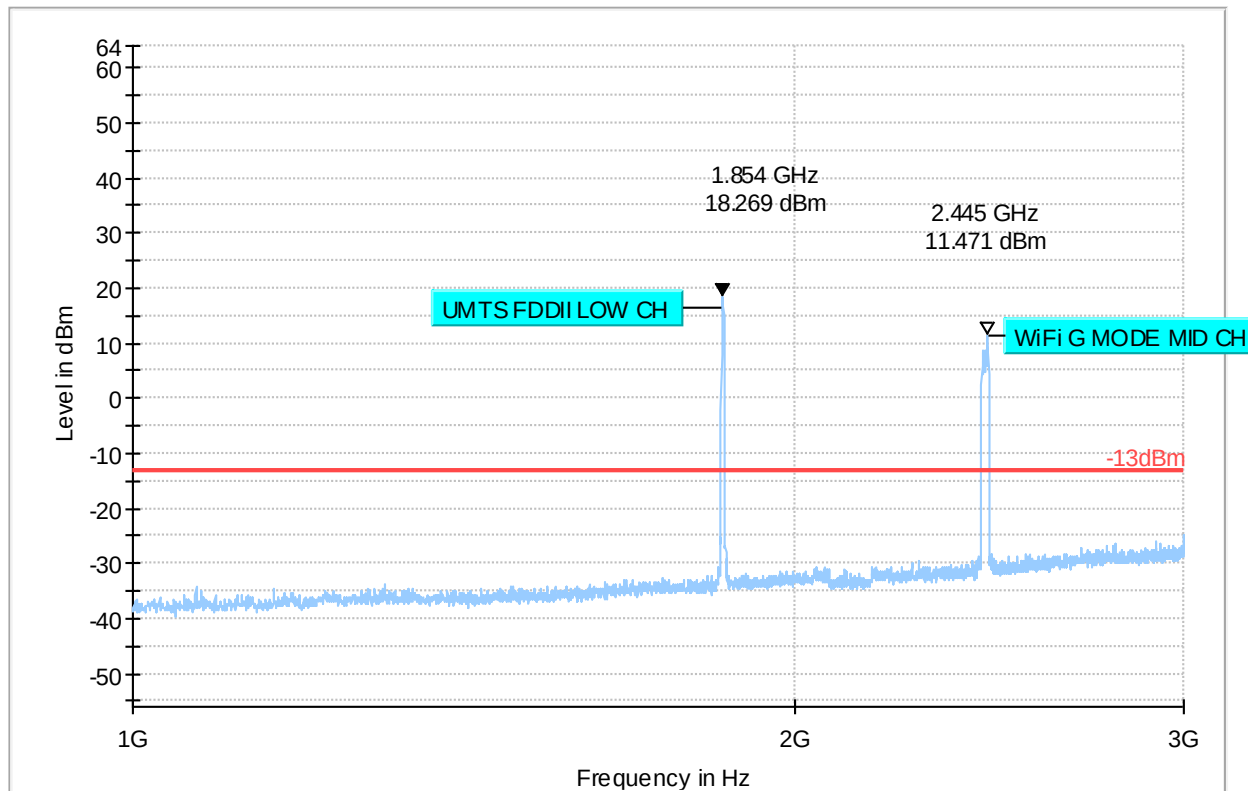
— -13dBm



Final_Result RMS

Plot # 2 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low



— Preview Result 1-PK+

*

Critical_Freqs PK+

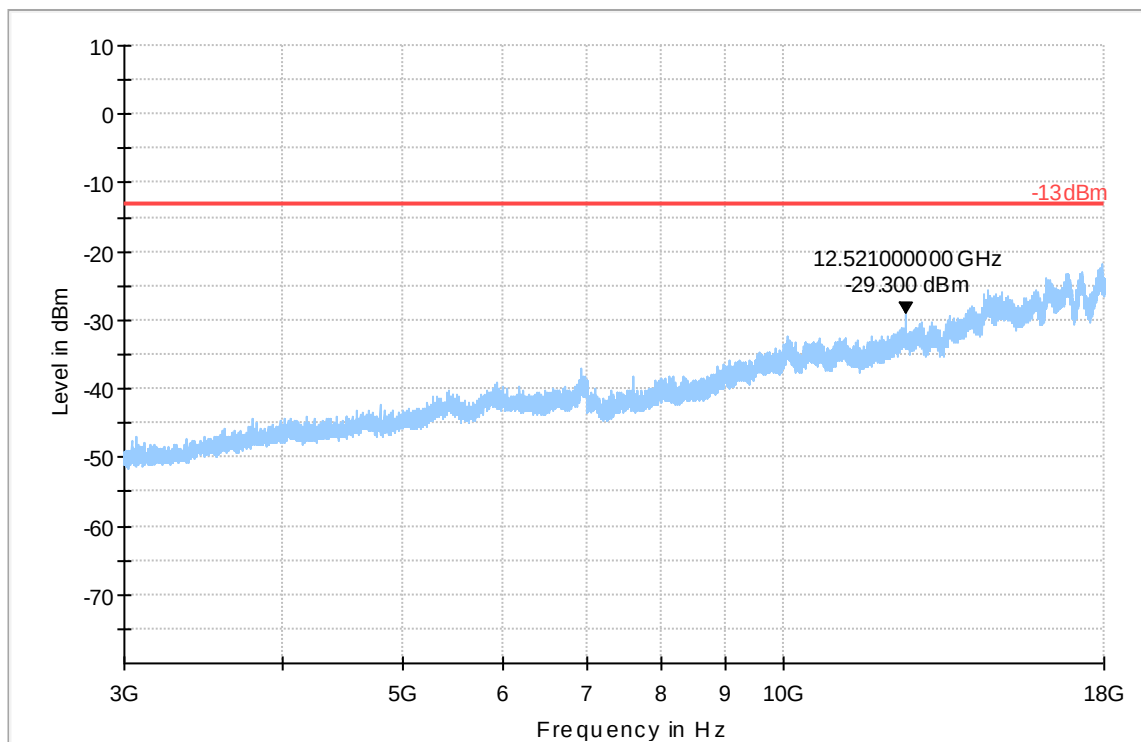
— -13dBm

◆

Final_Result RMS

Plot # 3 Radiated Emissions: 3 GHz – 18 GHz

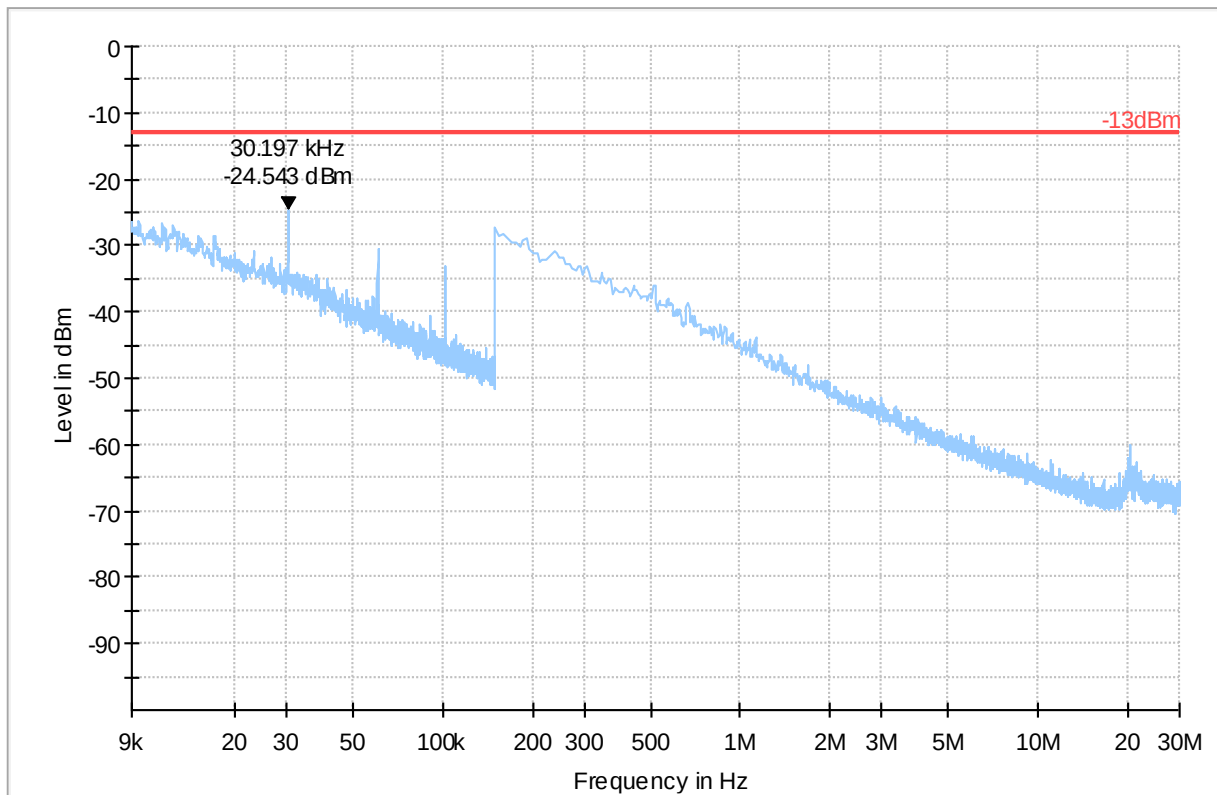
Channel: Low



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

Plot # 4 Radiated Emissions: 9 kHz - 30 MHz

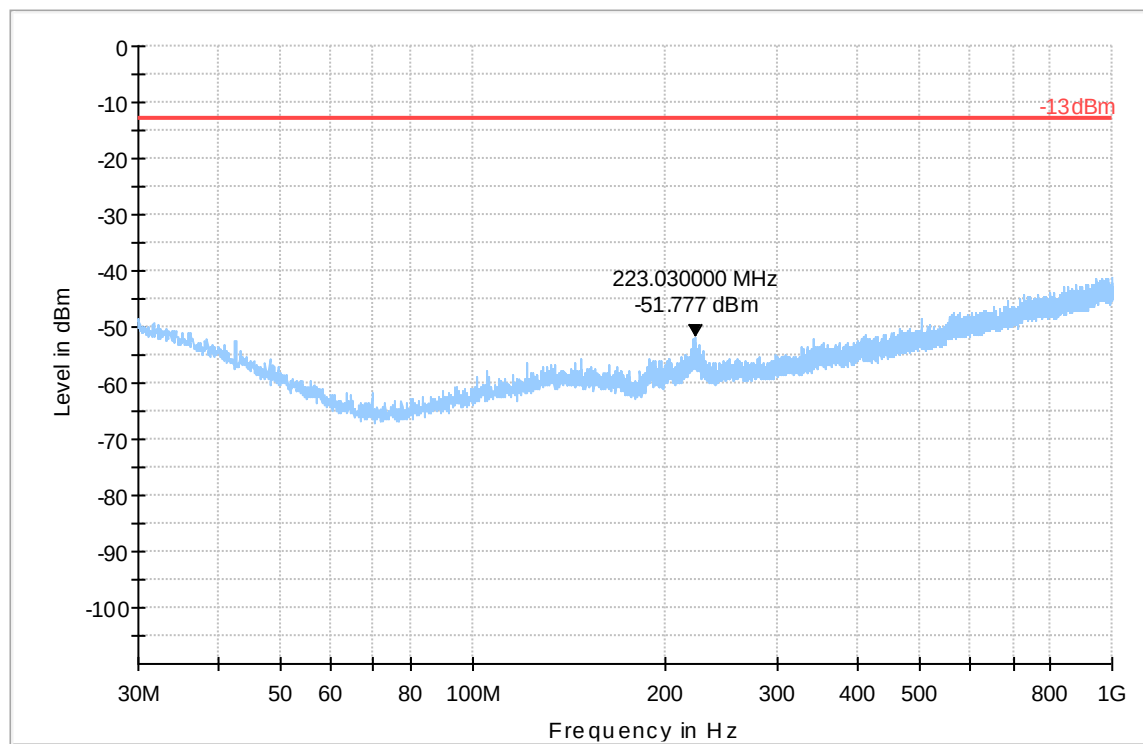
Channel: Mid



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

Plot # 5 Radiated Emissions: 30 MHz – 1GHz

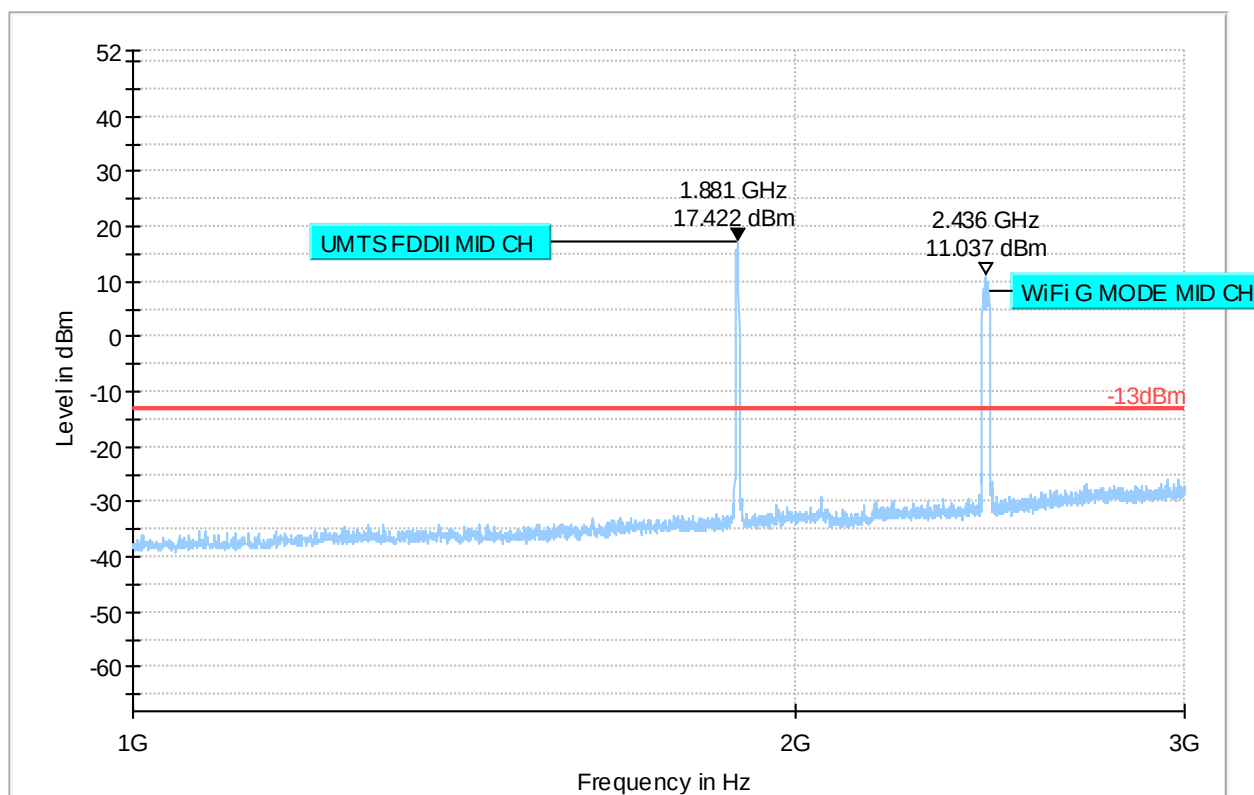
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 6 Radiated Emissions: 1 GHz - 3 GHz

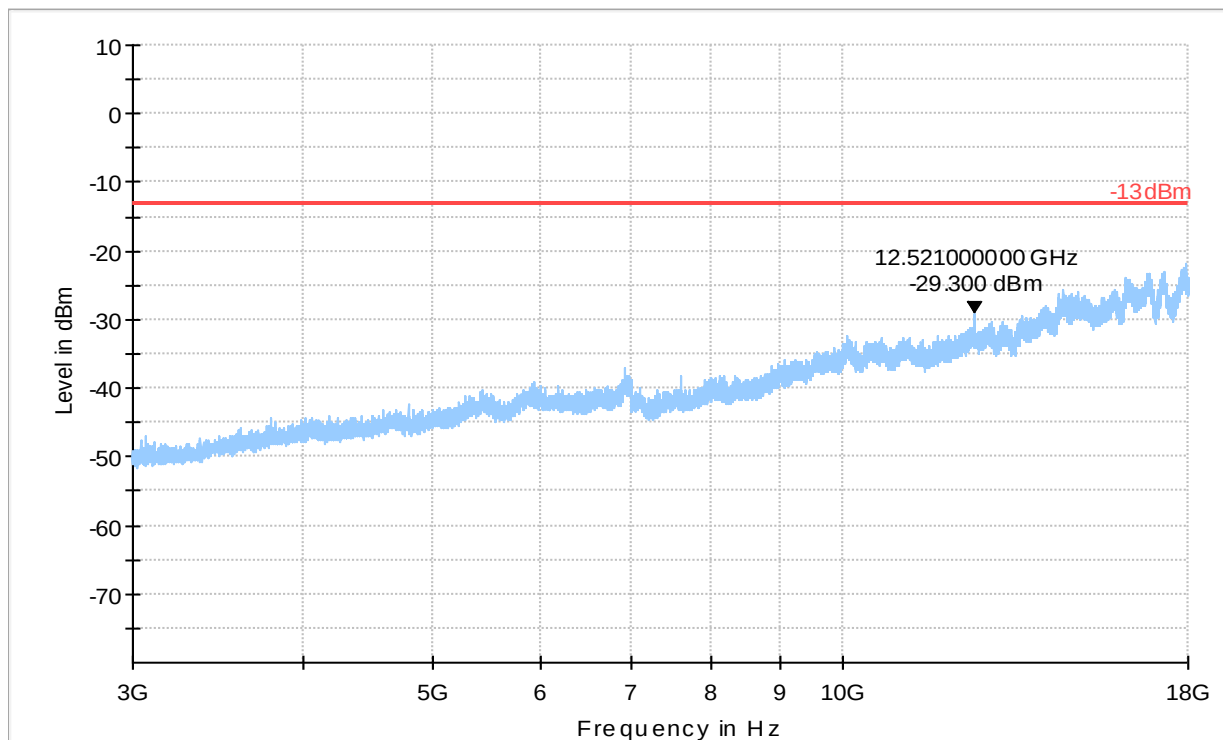
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 7 Radiated Emissions: 3 GHz – 18 GHz

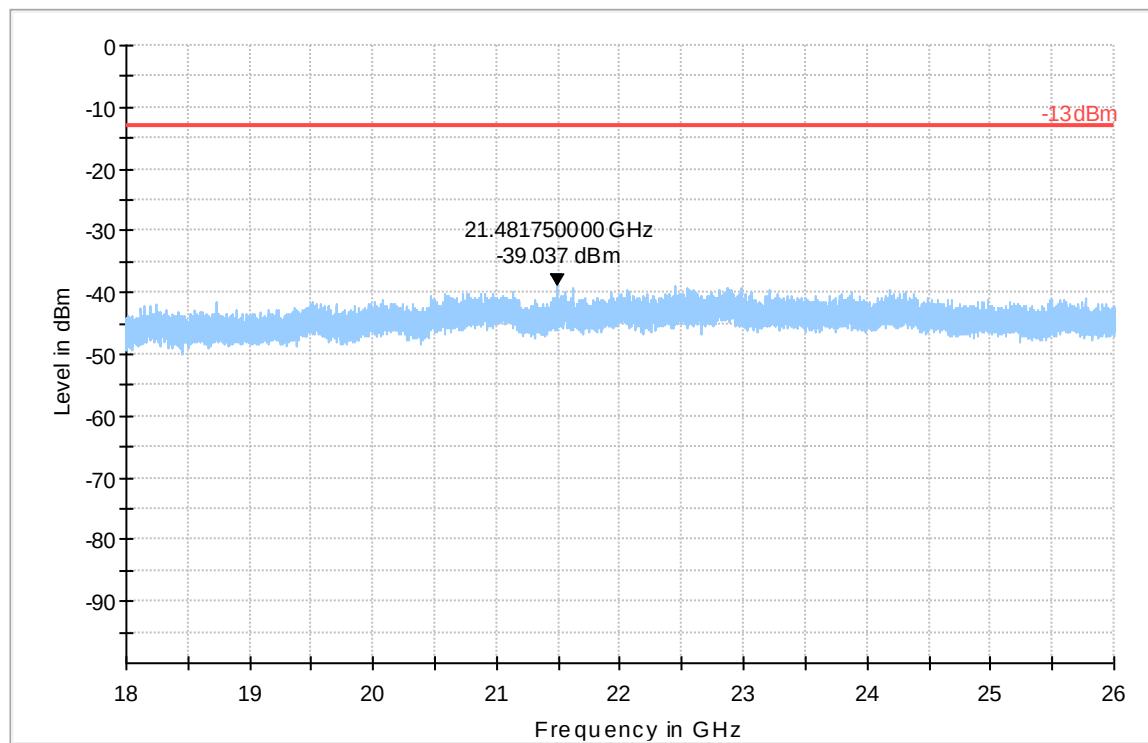
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 8 Radiated Emissions: 18 GHz – 26 GHz

Channel: Mid



Preview Result 1-PK+



Critical_Freqs PK+

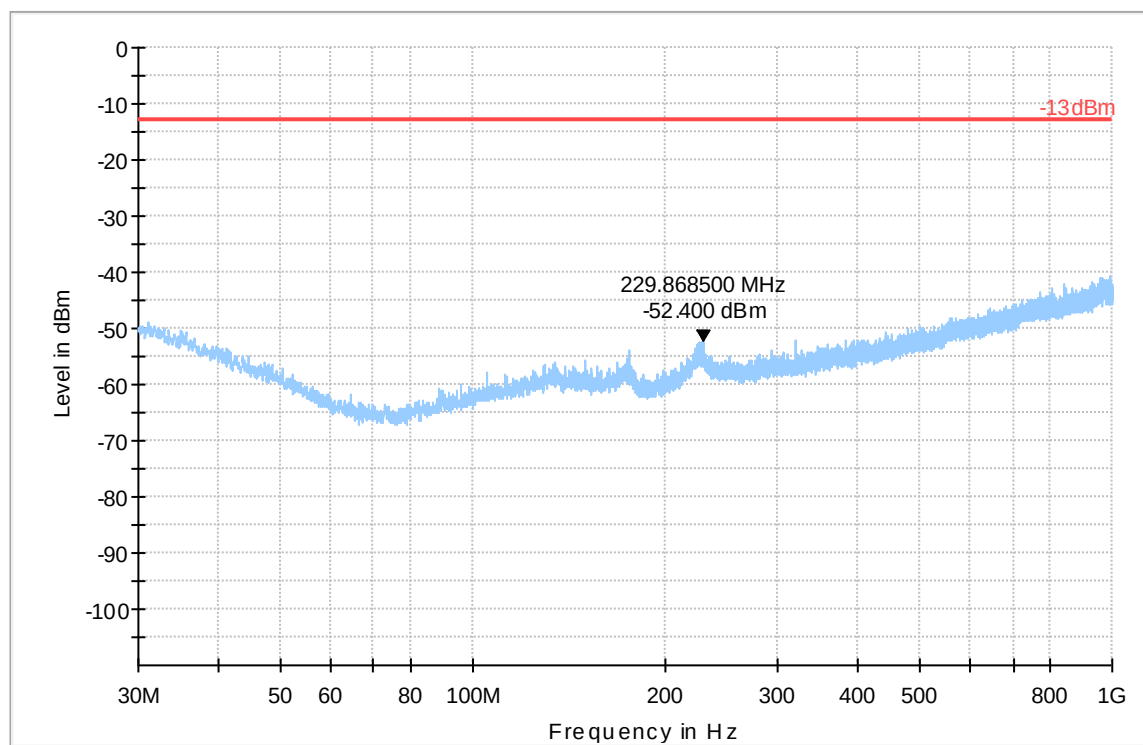
-13dBm



Final_Result RMS

Plot # 9 Radiated Emissions: 30 MHz – 1GHz

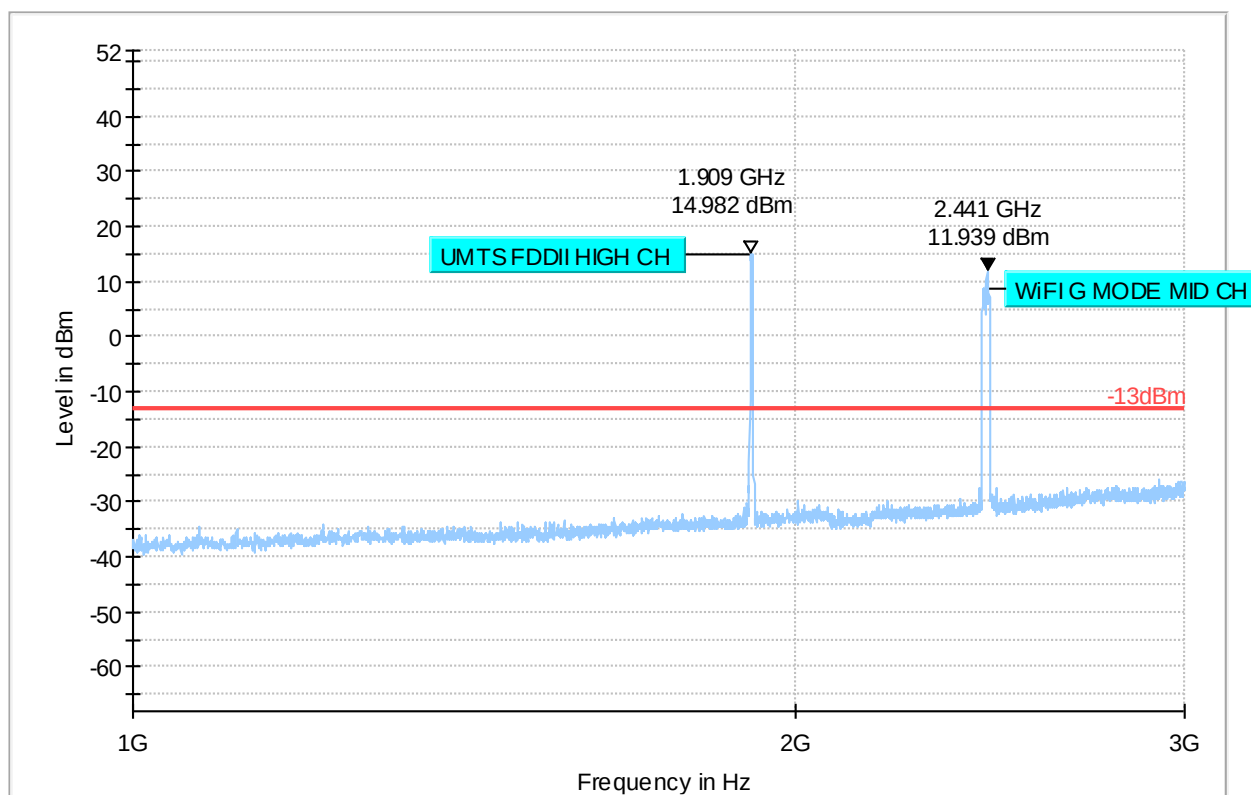
Channel: High



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

Plot # 10 Radiated Emissions: 1 GHz - 3 GHz

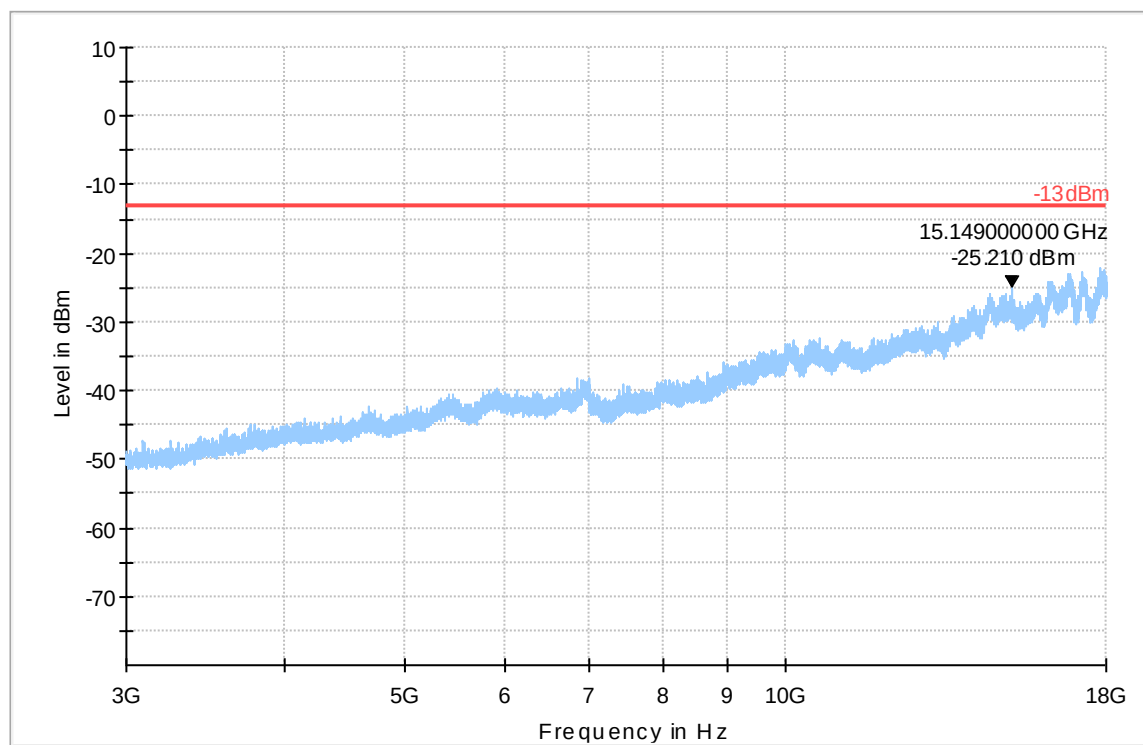
Channel: High



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 11 Radiated Emissions: 3 GHz – 18 GHz

Channel: High



Preview Result 1-PK+



Critical_Freqs PK+

-13dBm

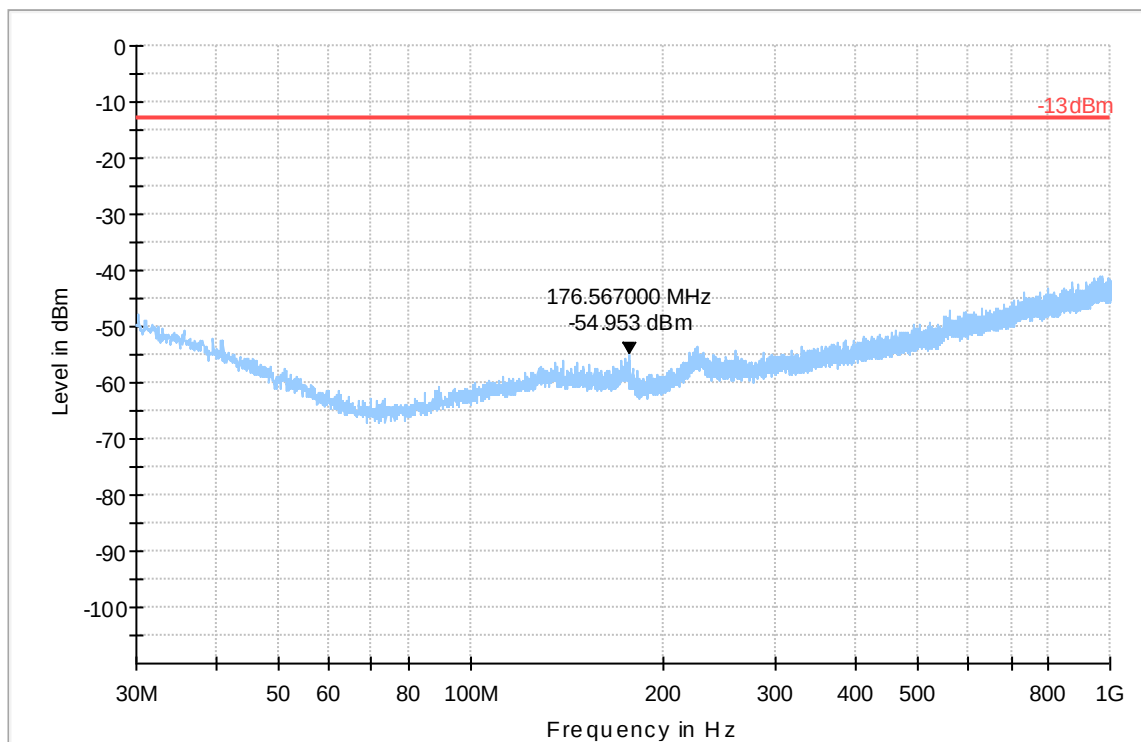


Final_Result RMS

UMTS IV

Plot # 12 Radiated Emissions: 30 MHz – 1GHz

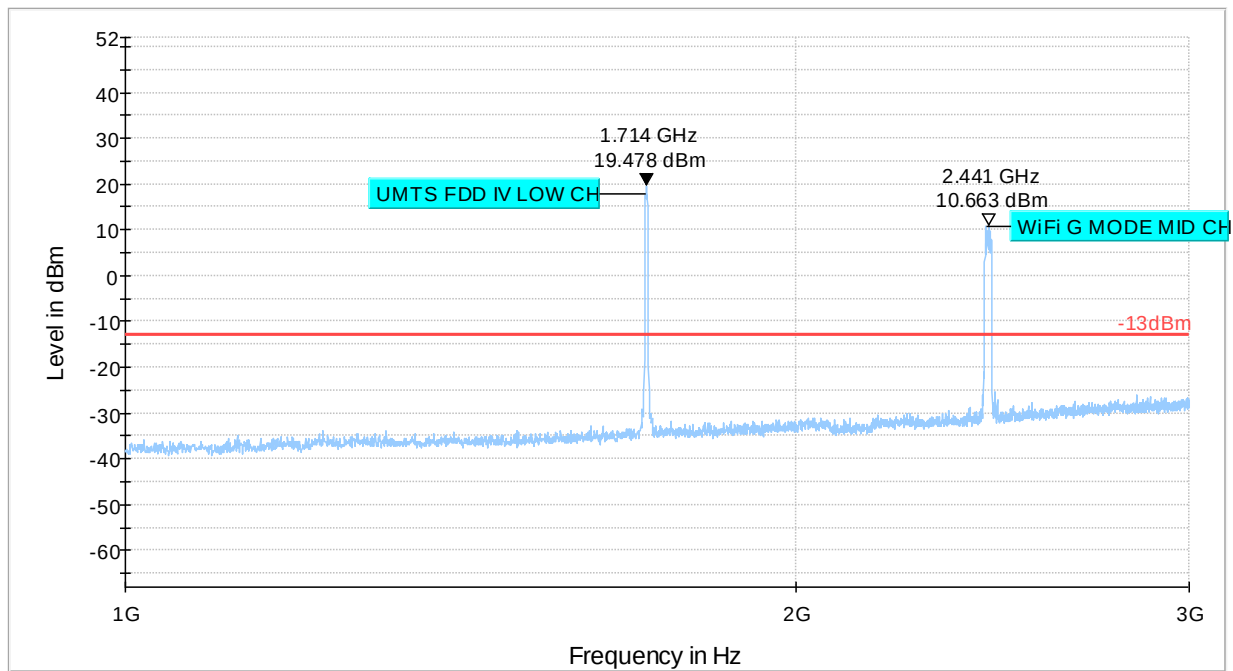
Channel: Low



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 13 Radiated Emissions: 1 GHz - 3 GHz

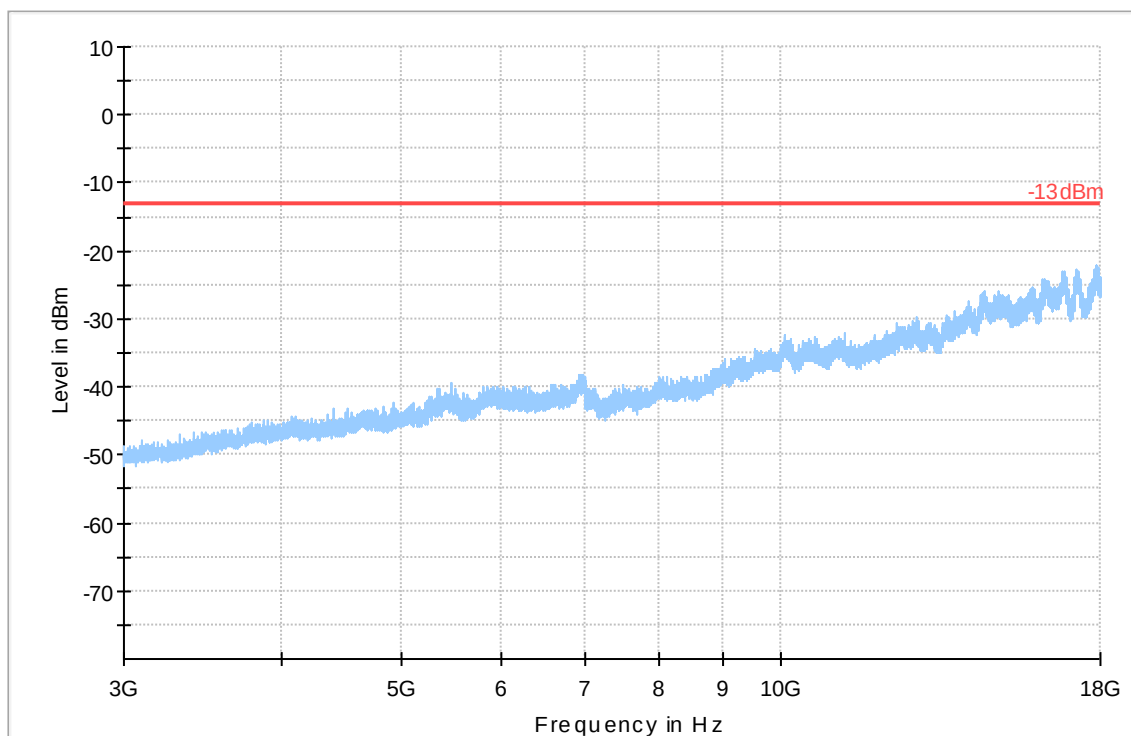
Channel: Low



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

Plot # 14 Radiated Emissions: 3 GHz – 18 GHz

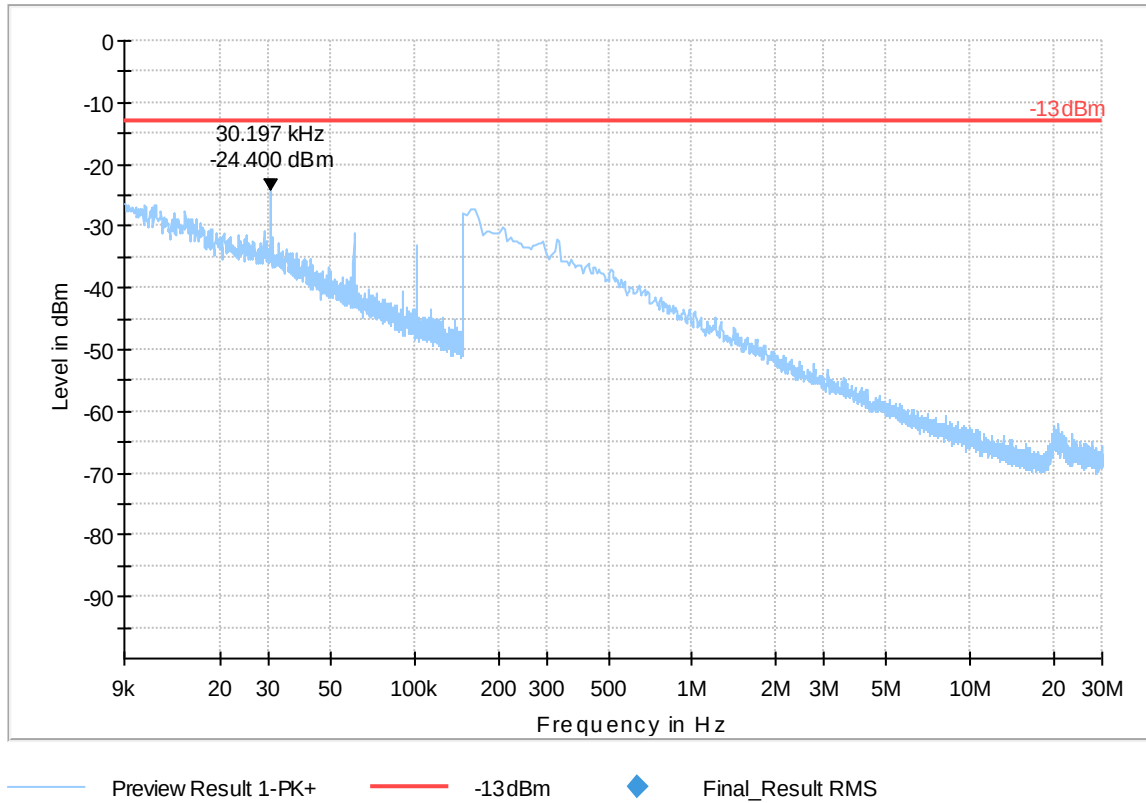
Channel: Low



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

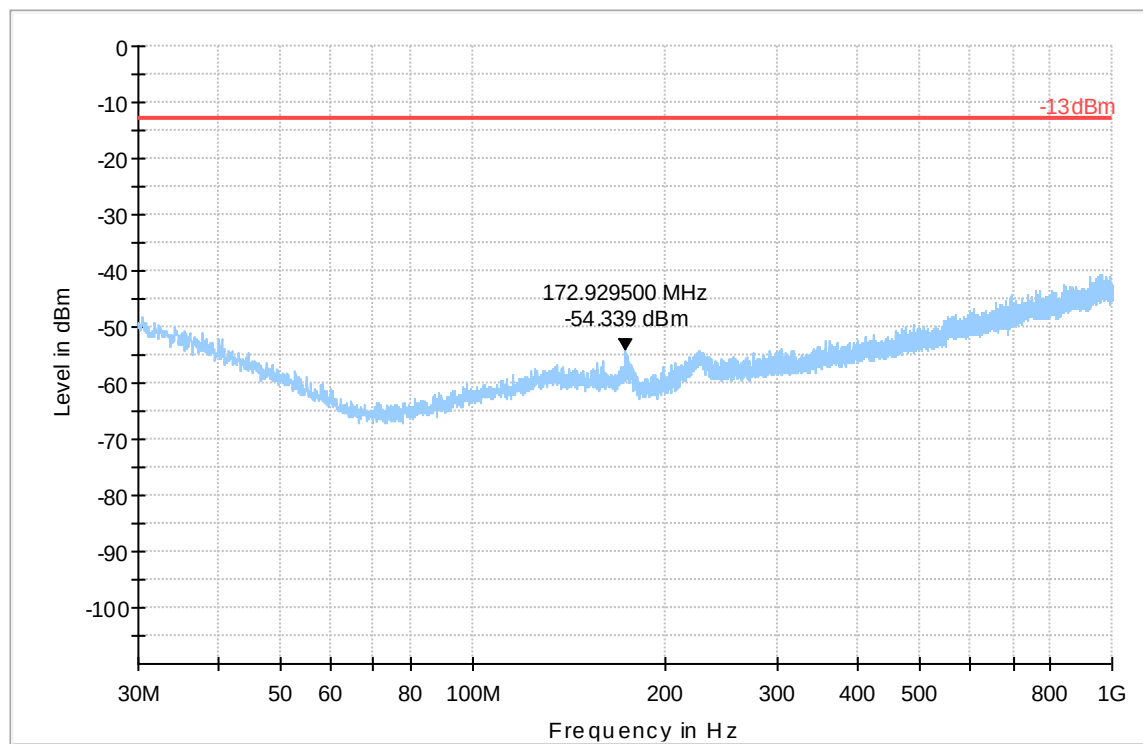
Plot # 15 Radiated Emissions: 9 kHz - 30 MHz

Channel: Mid



Plot # 16 Radiated Emissions: 30 MHz – 1GHz

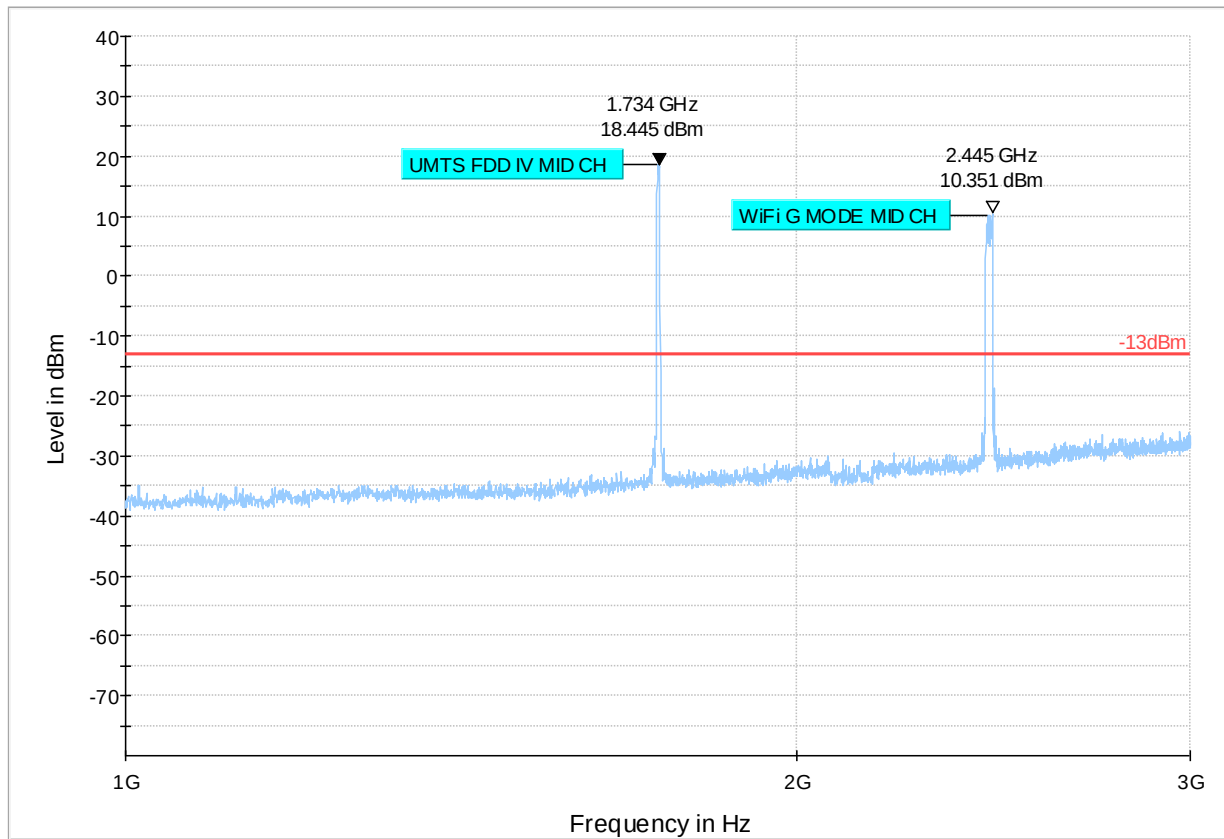
Channel: Mid



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

Plot # 17 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid



Preview Result 1-PK+



Critical_Freqs PK+



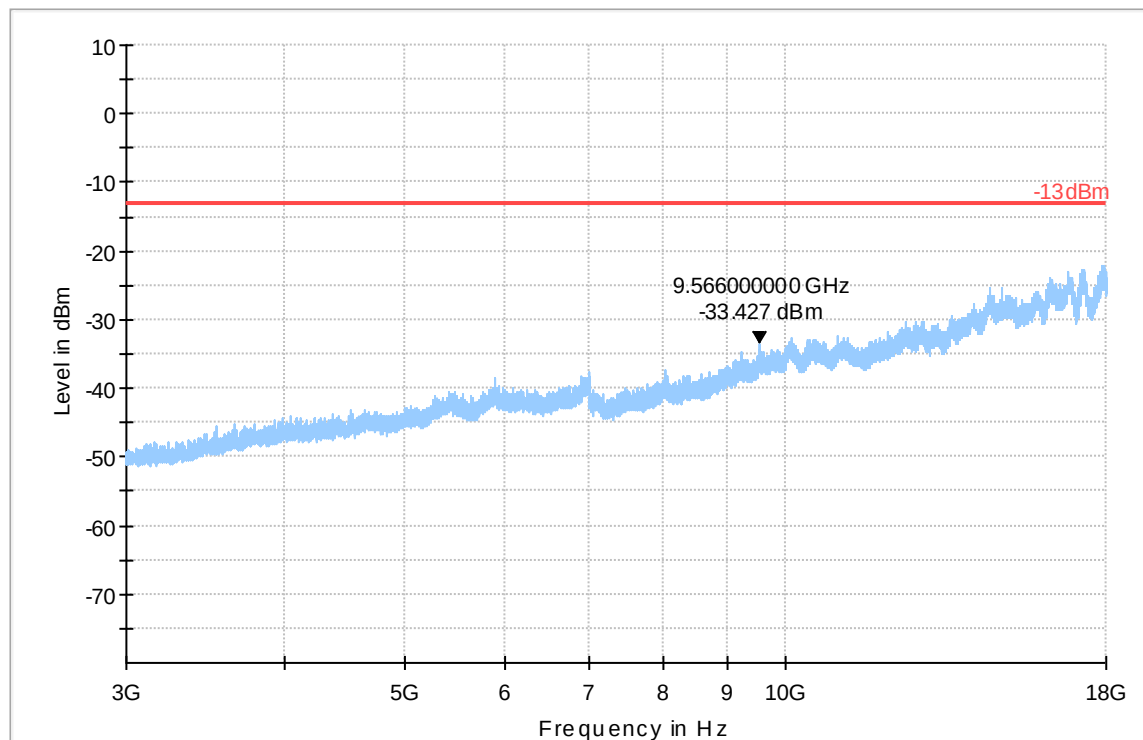
-13dBm



Final_Result RMS

Plot # 18 Radiated Emissions: 3 GHz – 18 GHz

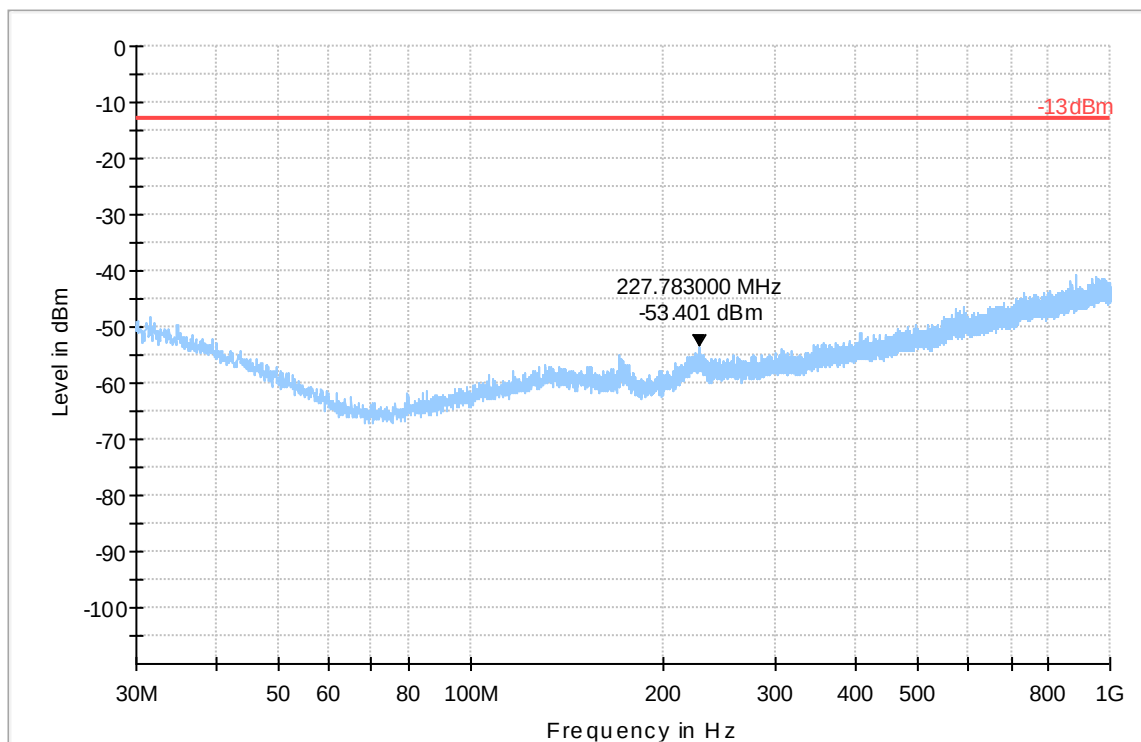
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 19 Radiated Emissions: 30 MHz – 1GHz

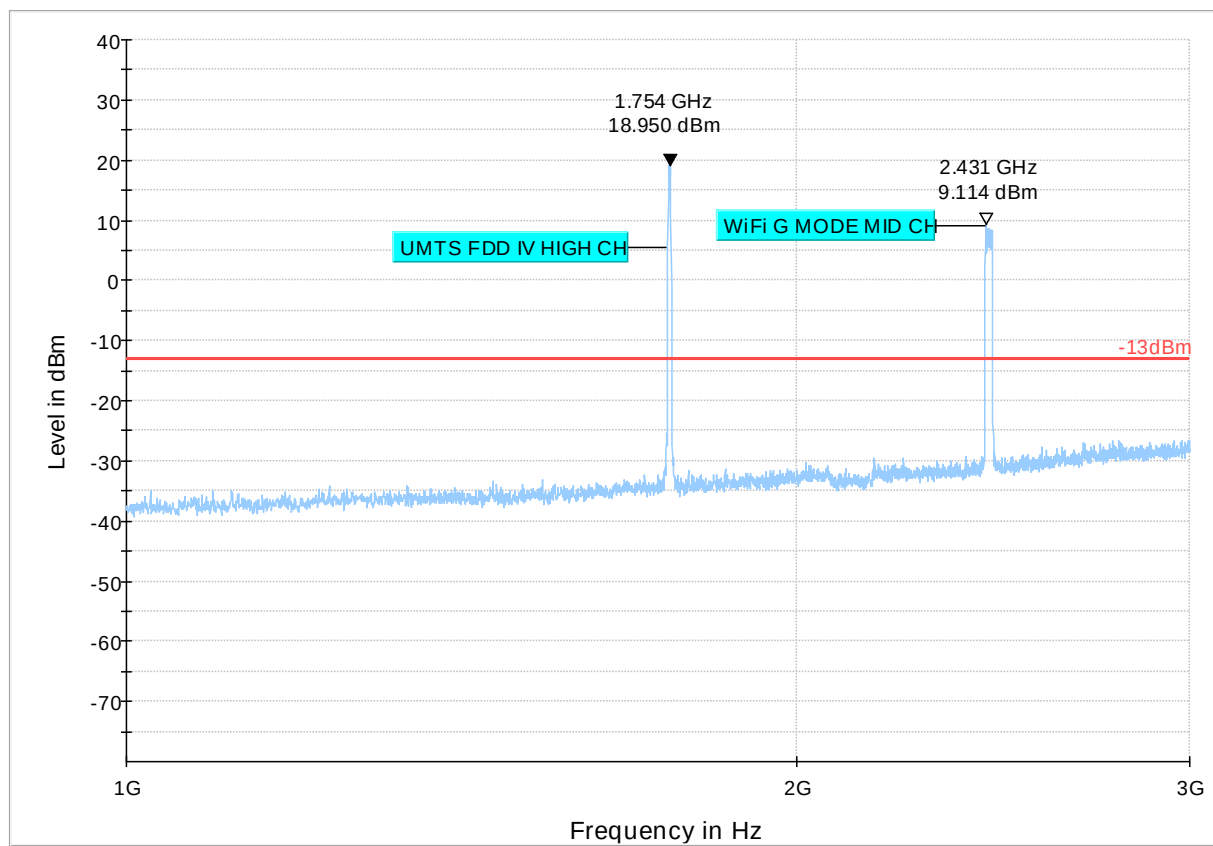
Channel: High



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 20 Radiated Emissions: 1 GHz - 3 GHz

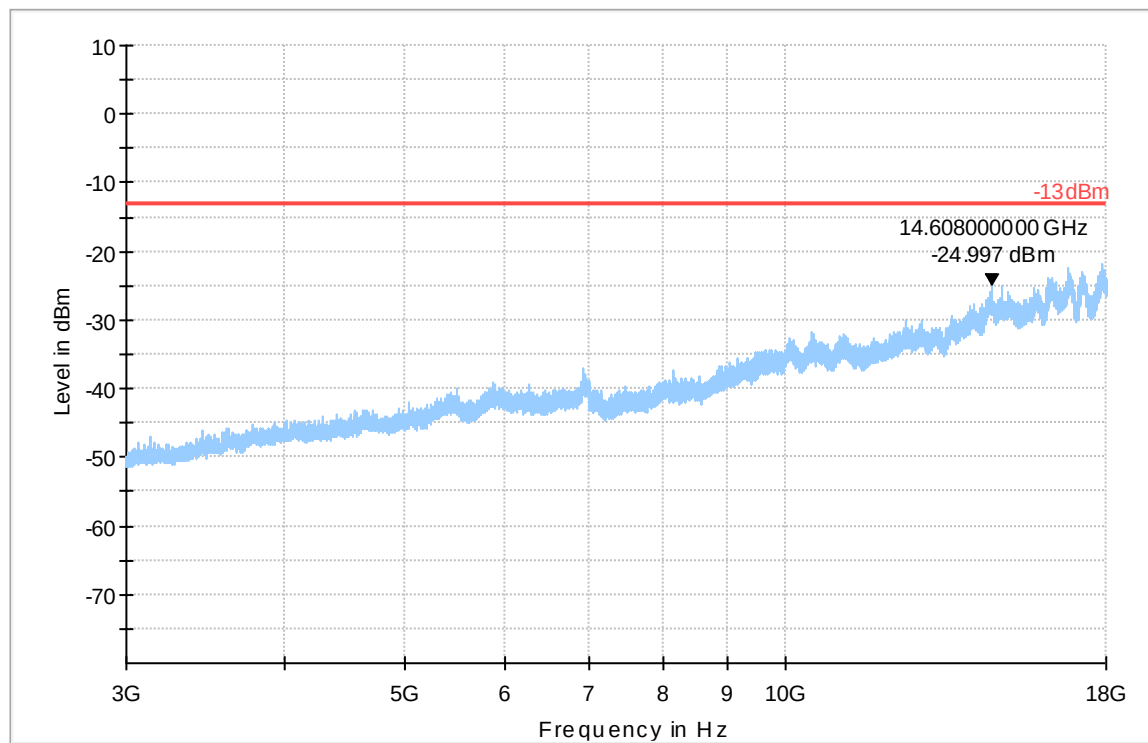
Channel: High



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

Plot # 21 Radiated Emissions: 3 GHz – 18 GHz

Channel: High



Preview Result 1-PK+



Critical_Freqs PK+

-13dBm

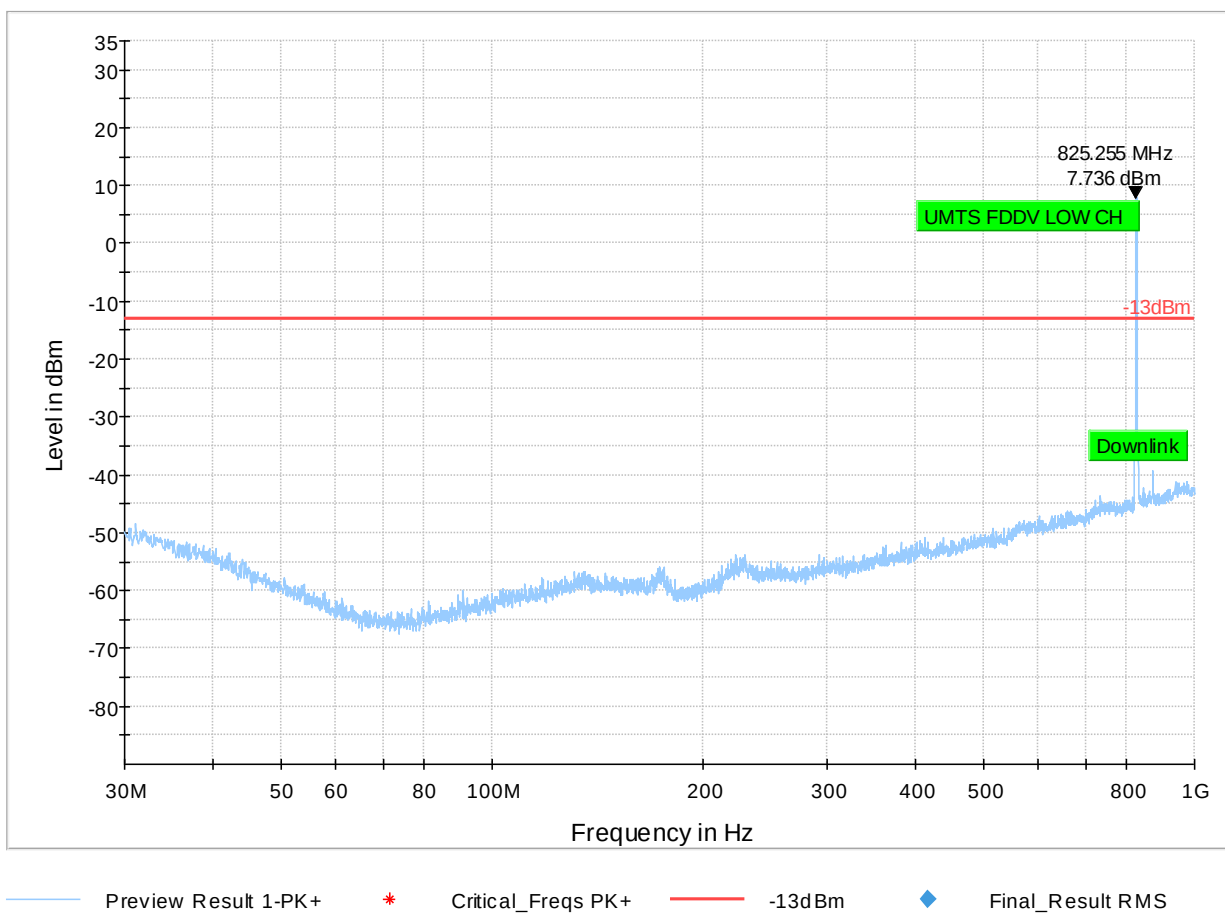


Final_Result RMS

UMTS V

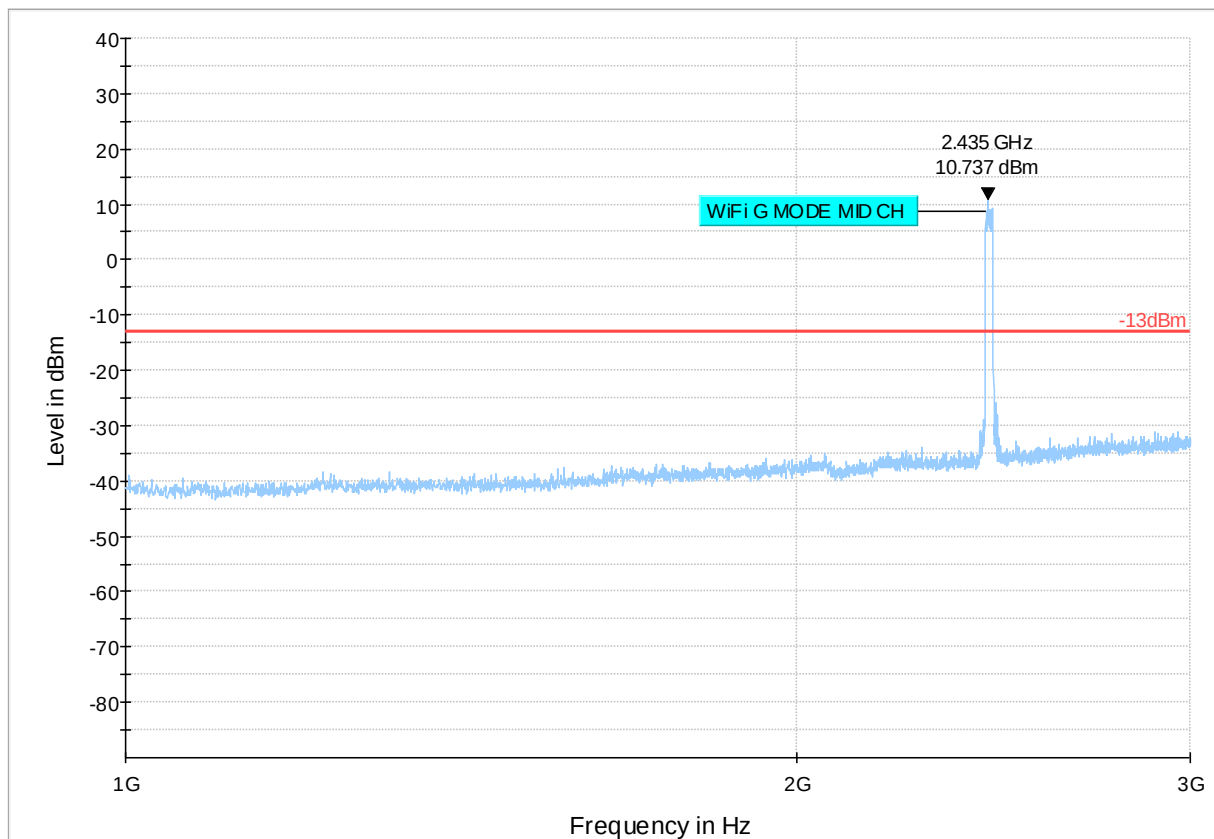
Plot # 22 Radiated Emissions: 30 MHz – 1GHz

Channel: Low



Plot # 23 Radiated Emissions: 1 GHz - 3 GHz

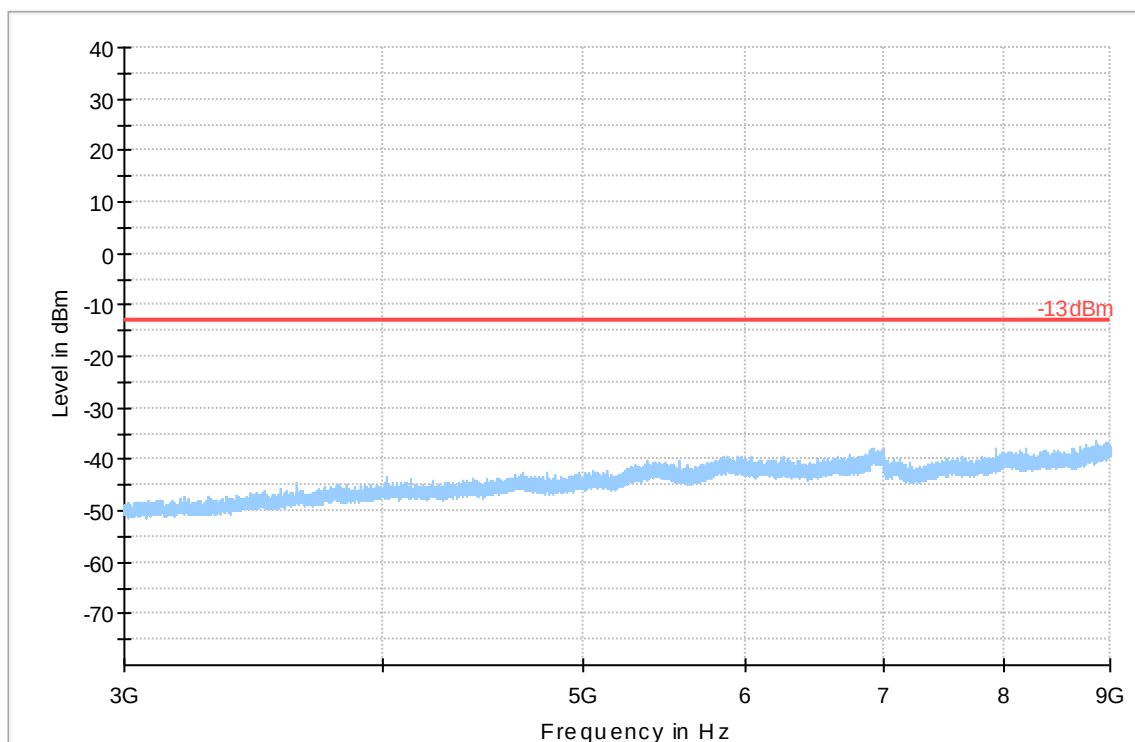
Channel: Low



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 24 Radiated Emissions: 3 GHz – 9 GHz

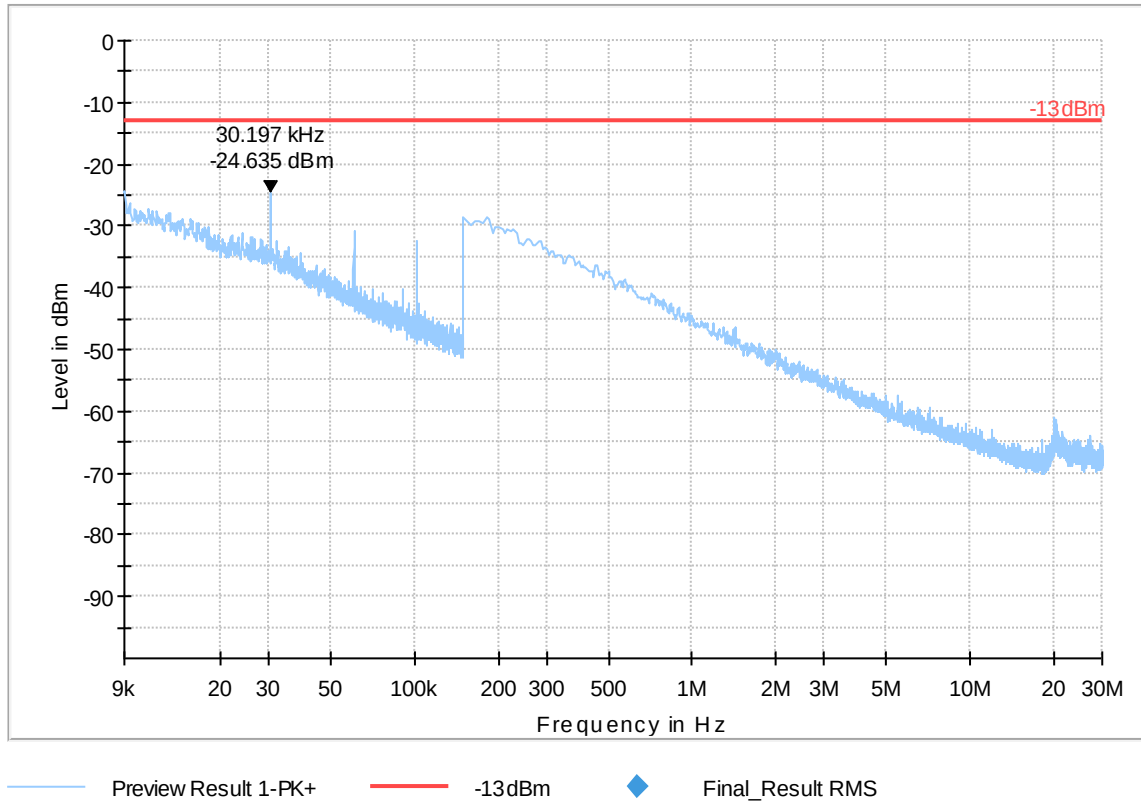
Channel: Low



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

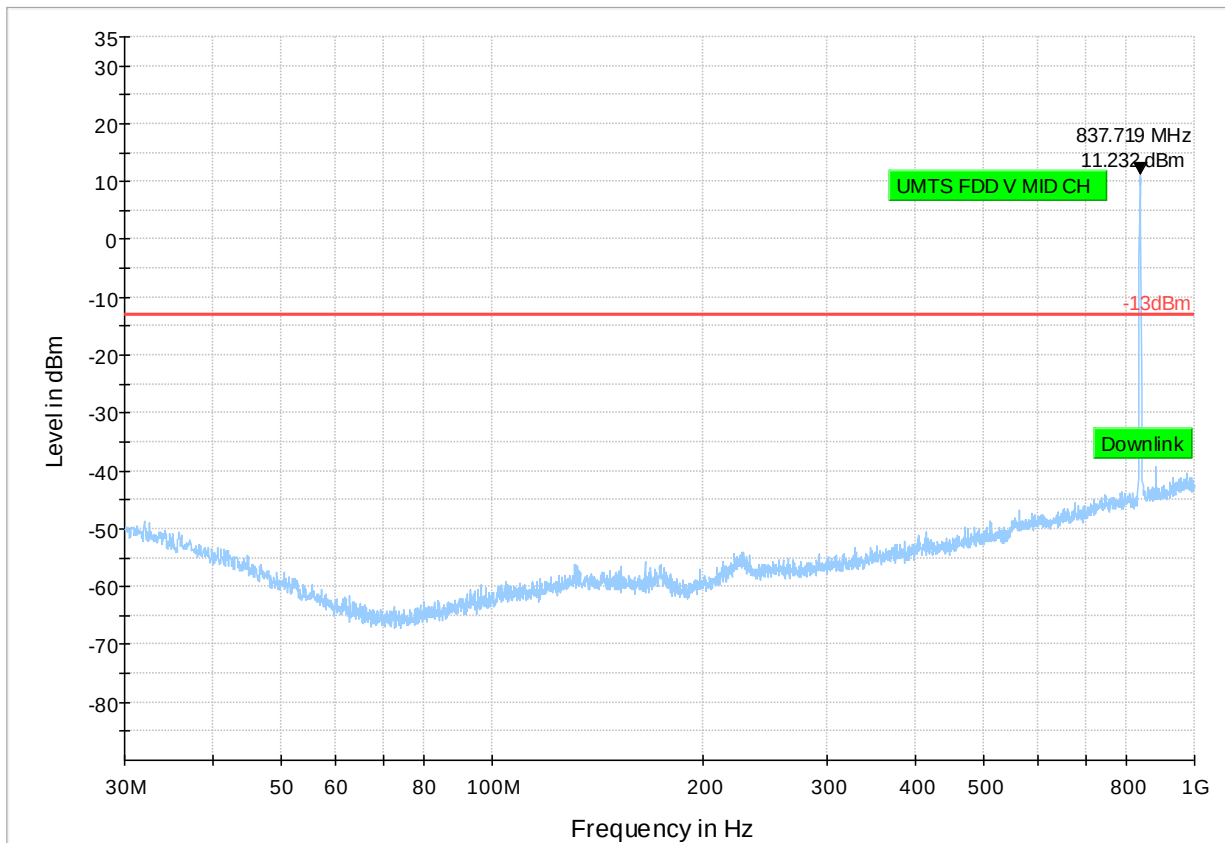
Plot # 25 Radiated Emissions: 9 kHz - 30 MHz

Channel: Mid



Plot # 26 Radiated Emissions: 30 MHz – 1GHz

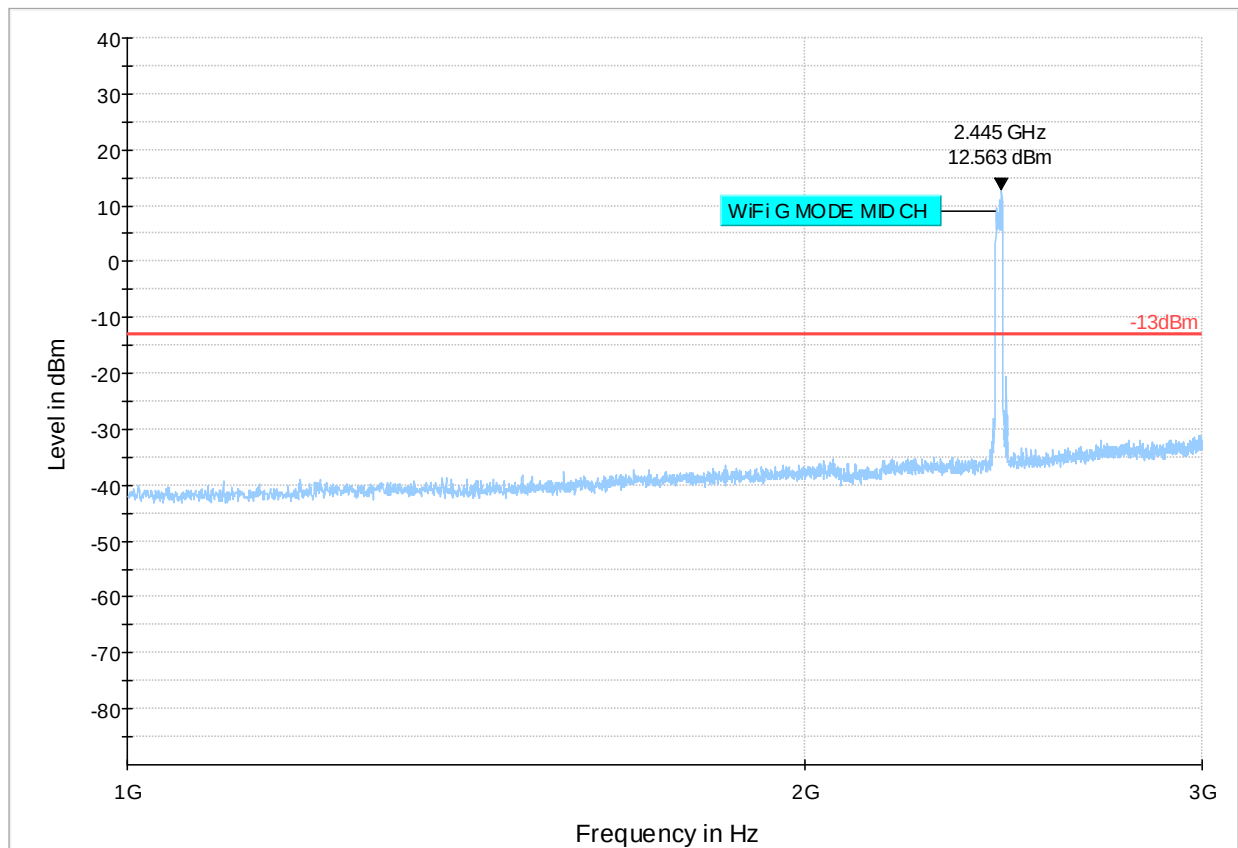
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 27 Radiated Emissions: 1 GHz - 3 GHz

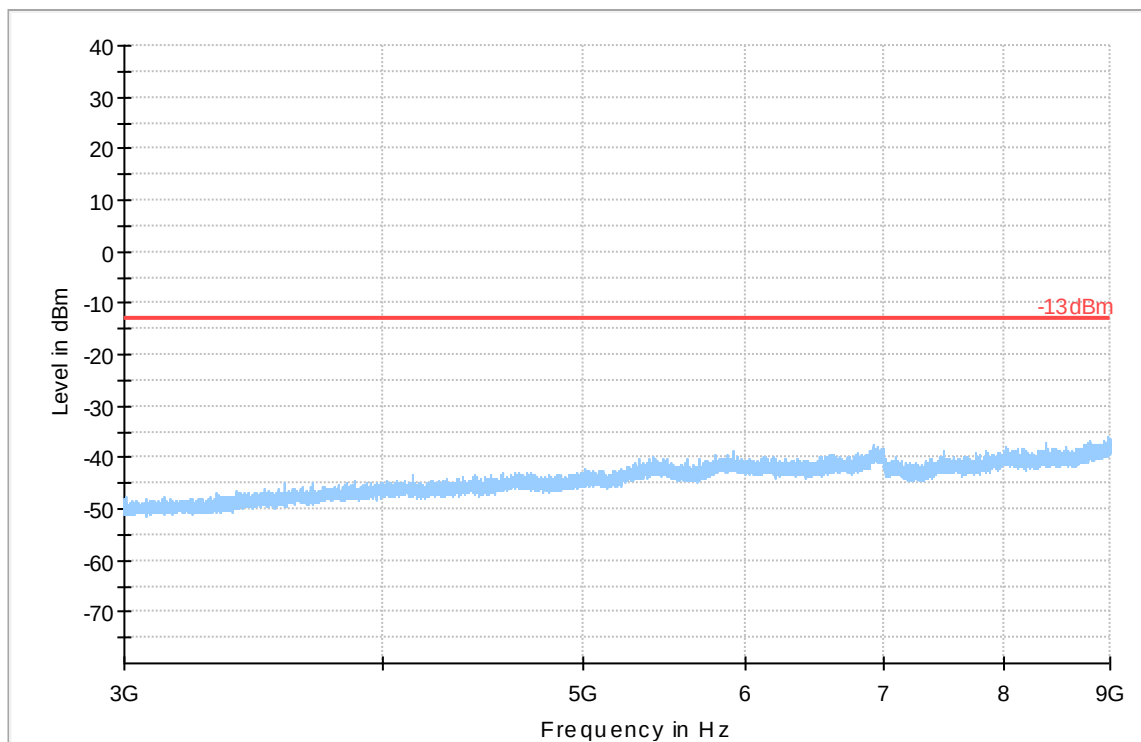
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 28 Radiated Emissions: 3 GHz – 9 GHz

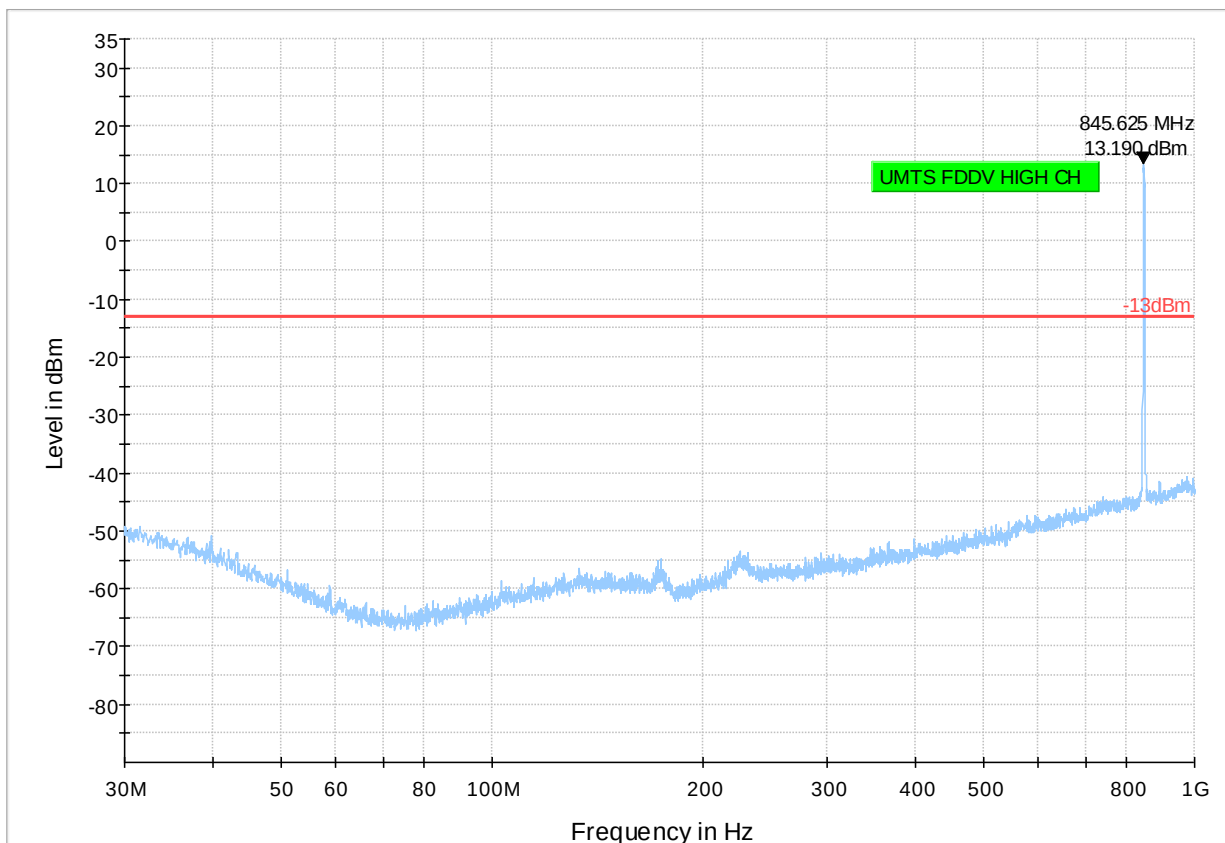
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 29 Radiated Emissions: 30 MHz – 1GHz

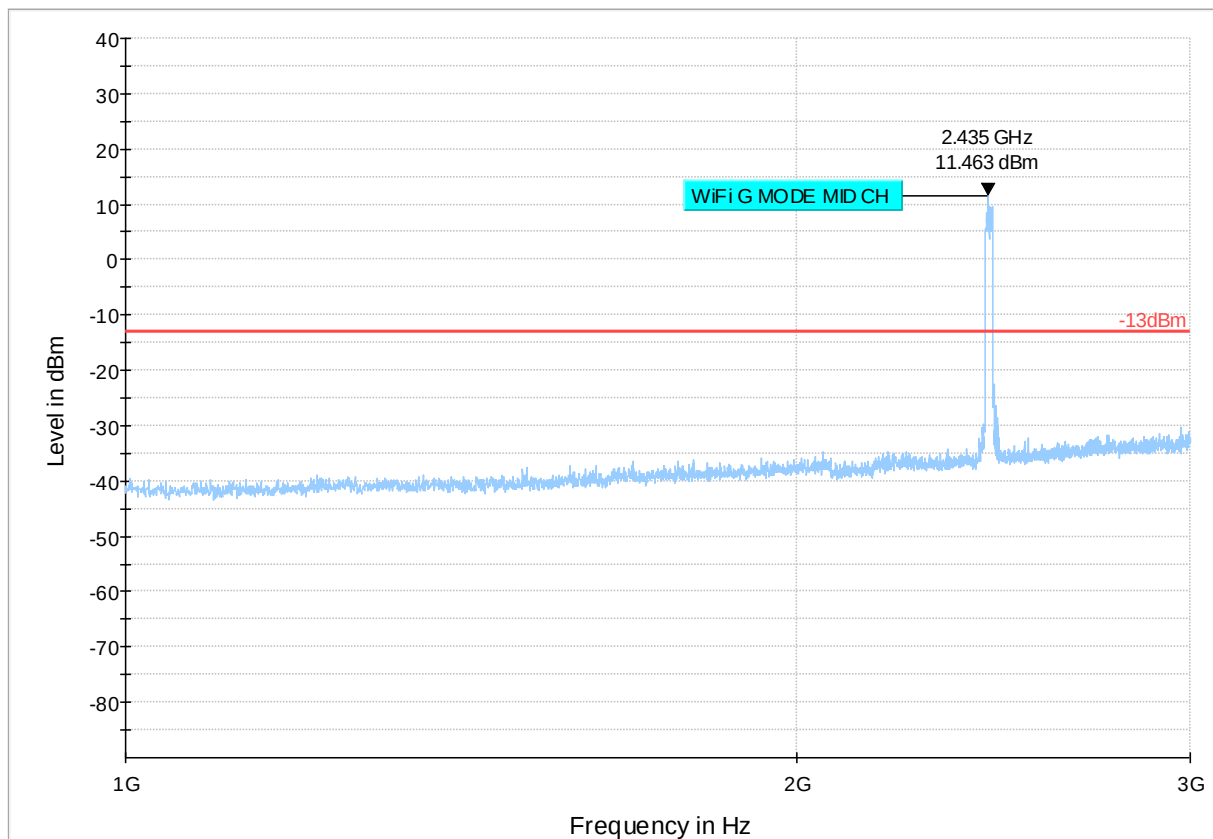
Channel: High



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

Plot # 30 Radiated Emissions: 1 GHz - 3 GHz

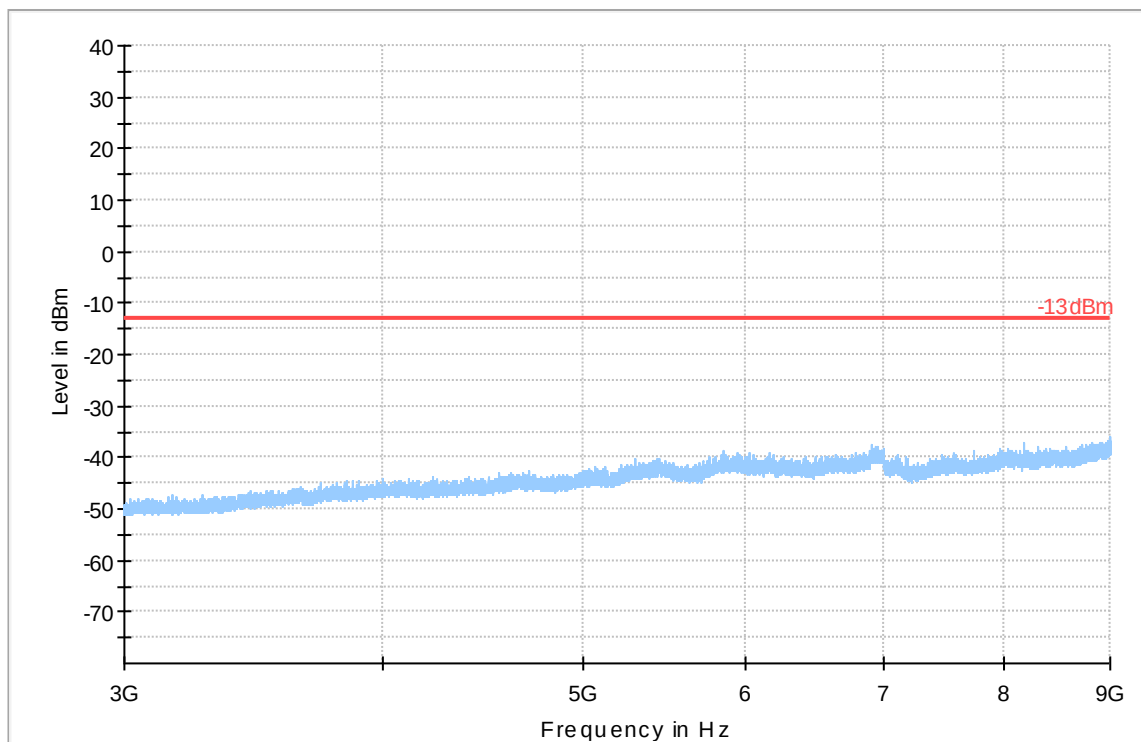
Channel: High



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 31 Radiated Emissions: 3 GHz – 9 GHz

Channel: High

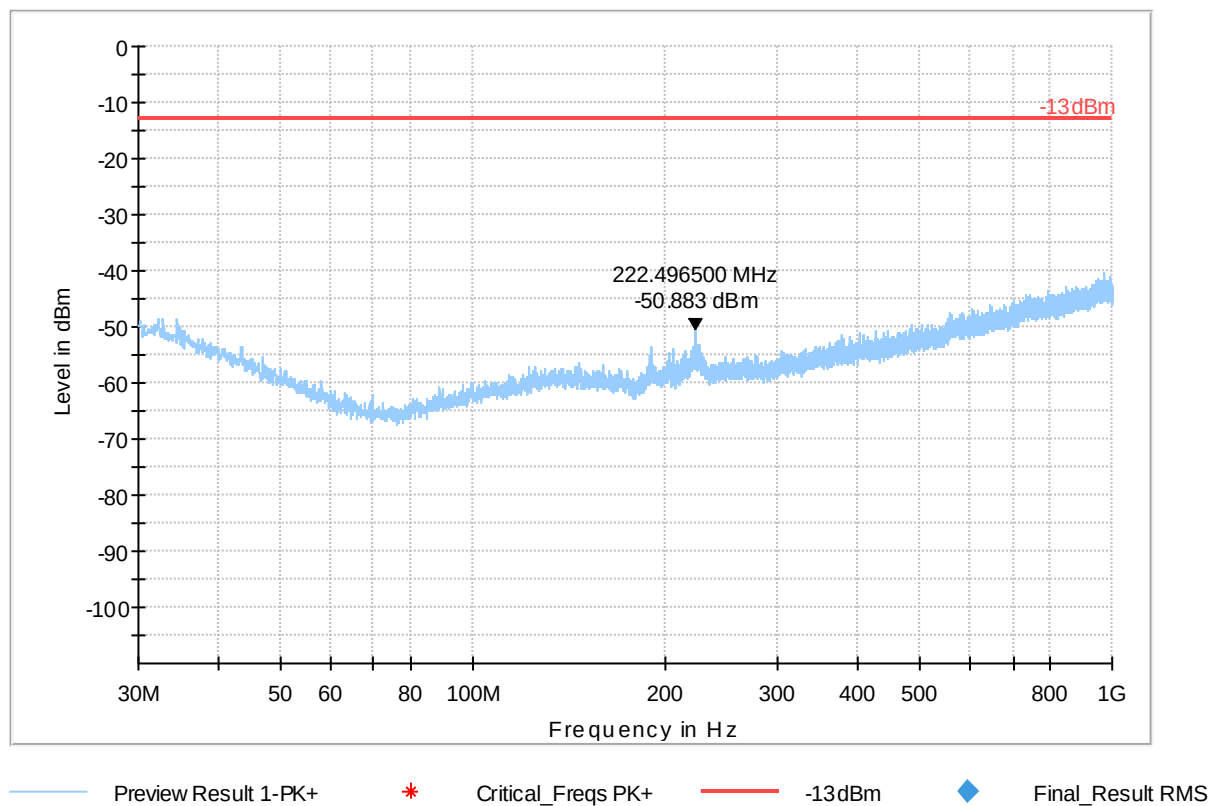


— Preview Result 1-PK+ * Critical_Freqs PK+ — -13dBm ◆ Final_Result RMS

LTE 2

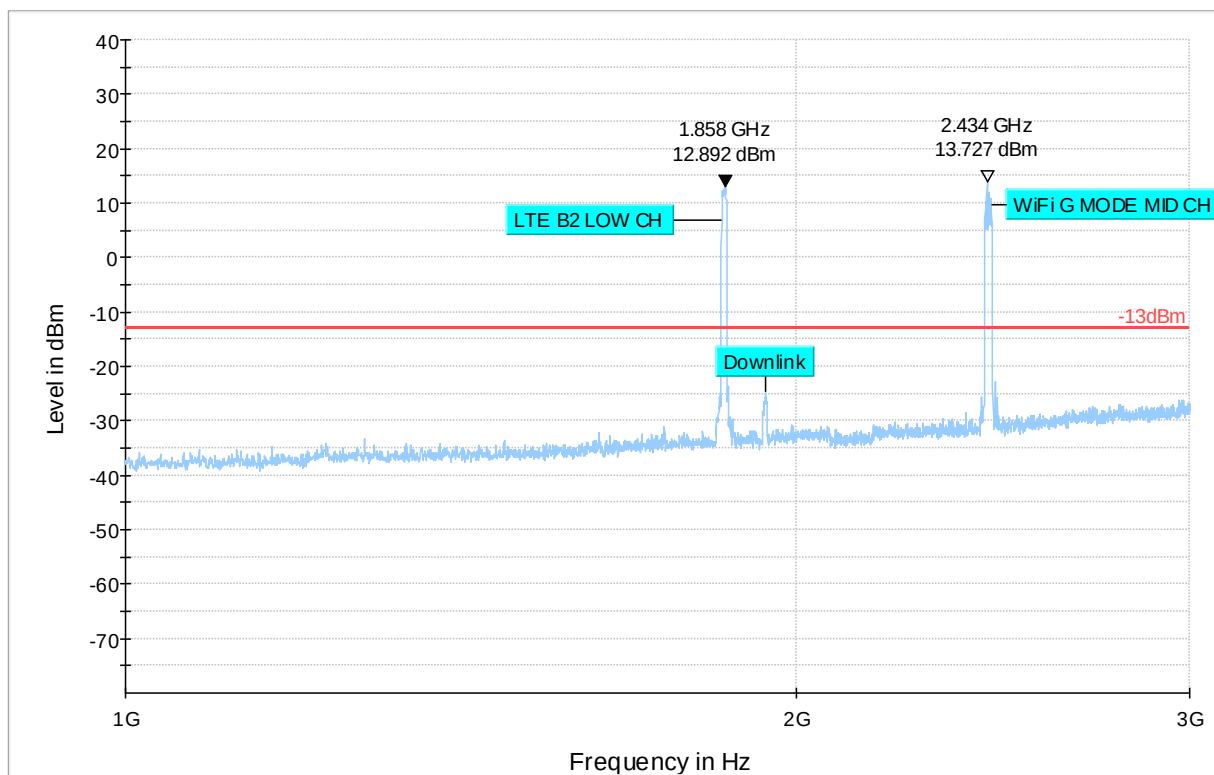
Plot # 32 Radiated Emissions: 30 MHz – 1GHz

Channel: Low



Plot # 33 Radiated Emissions: 1 GHz - 3 GHz

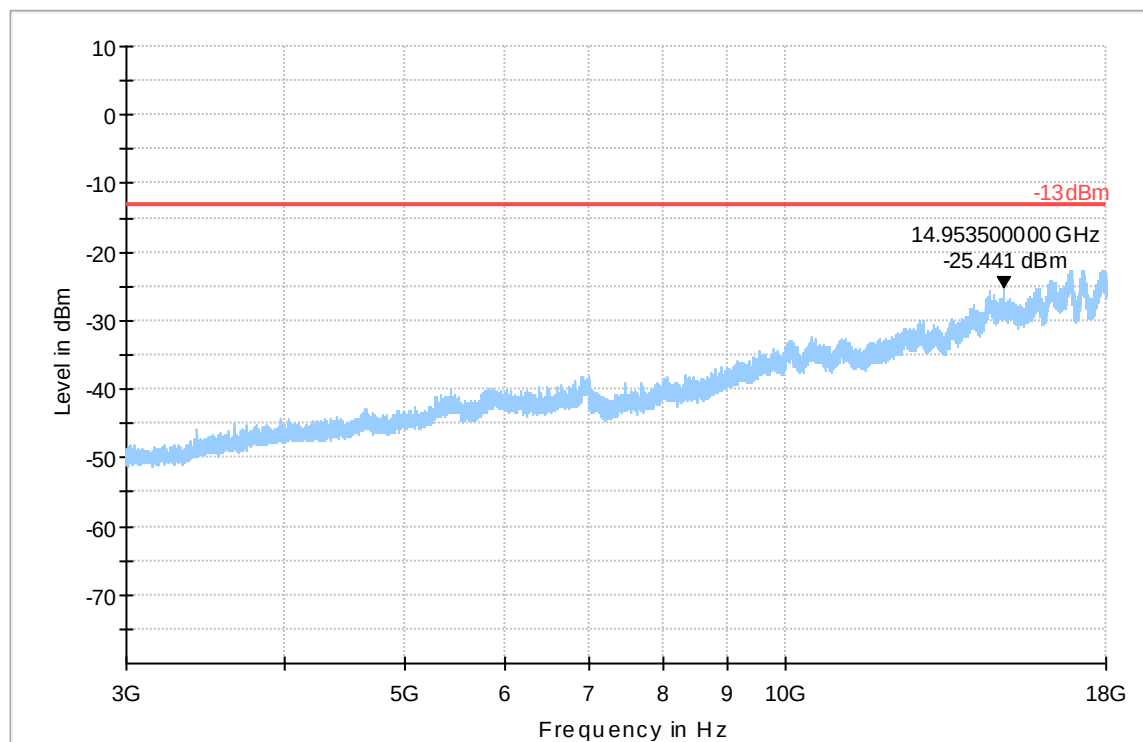
Channel: Low



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 34 Radiated Emissions: 3 GHz – 18 GHz

Channel: Low



Preview Result 1-PK+



Critical_Freqs PK+



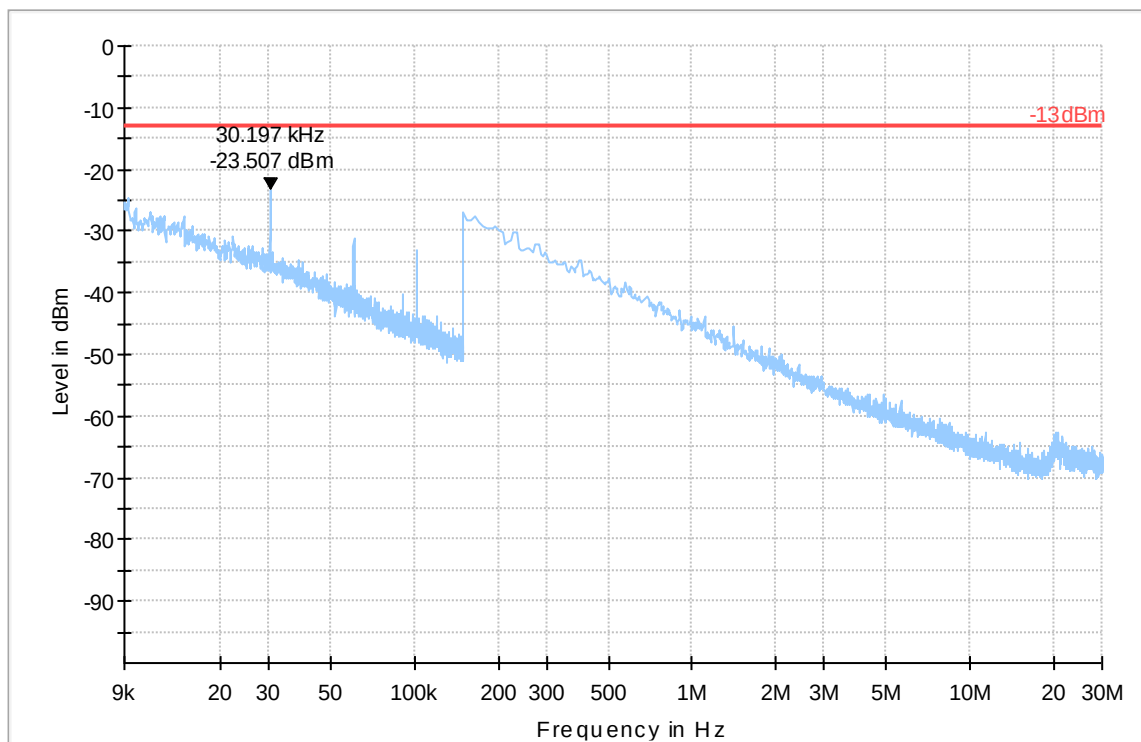
-13dBm



Final_Result RMS

Plot # 35 Radiated Emissions: 9 kHz - 30 MHz

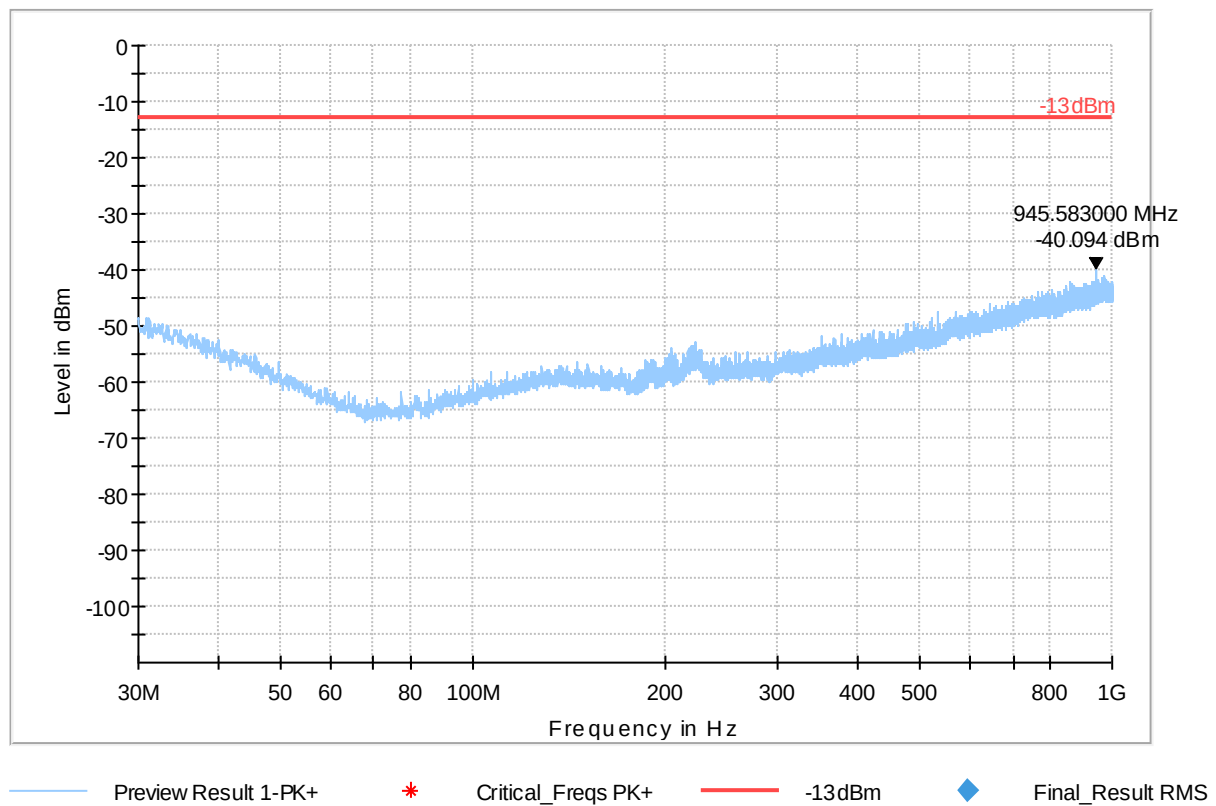
Channel: Mid



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

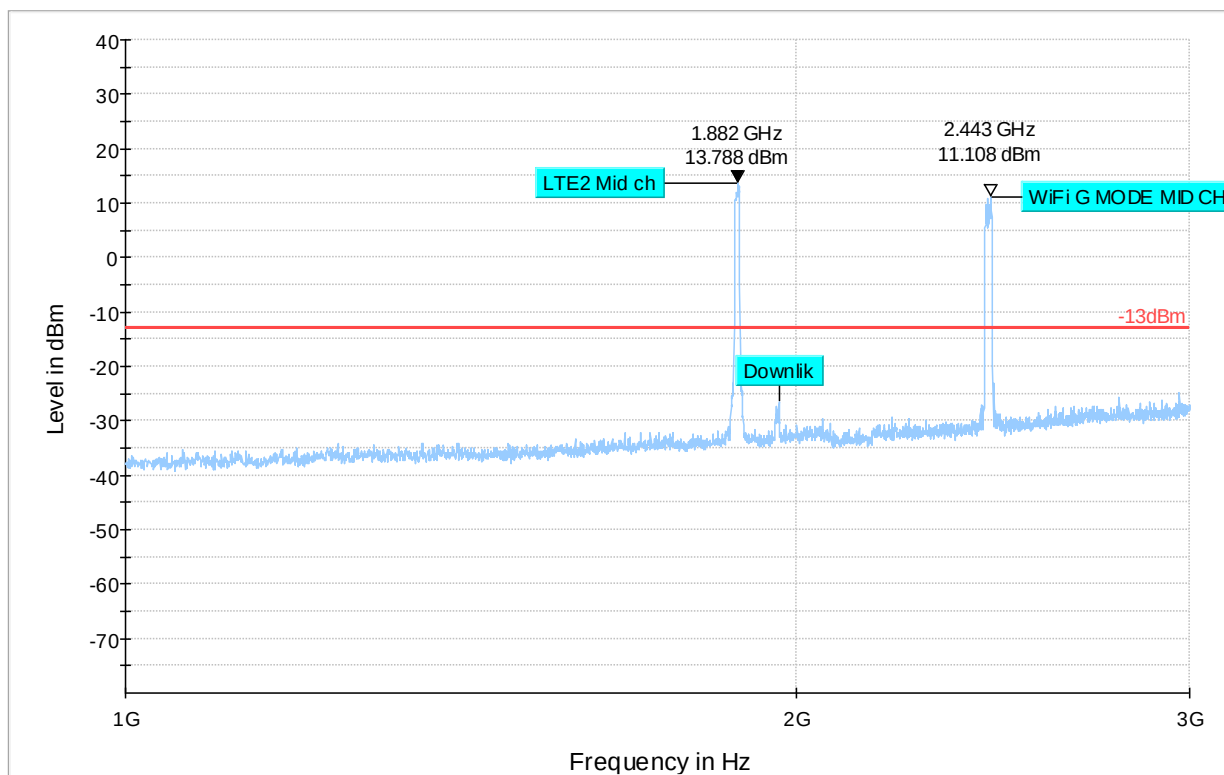
Plot # 36 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid



Plot # 37 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid



Preview Result 1-PK+



Critical_Freqs PK+



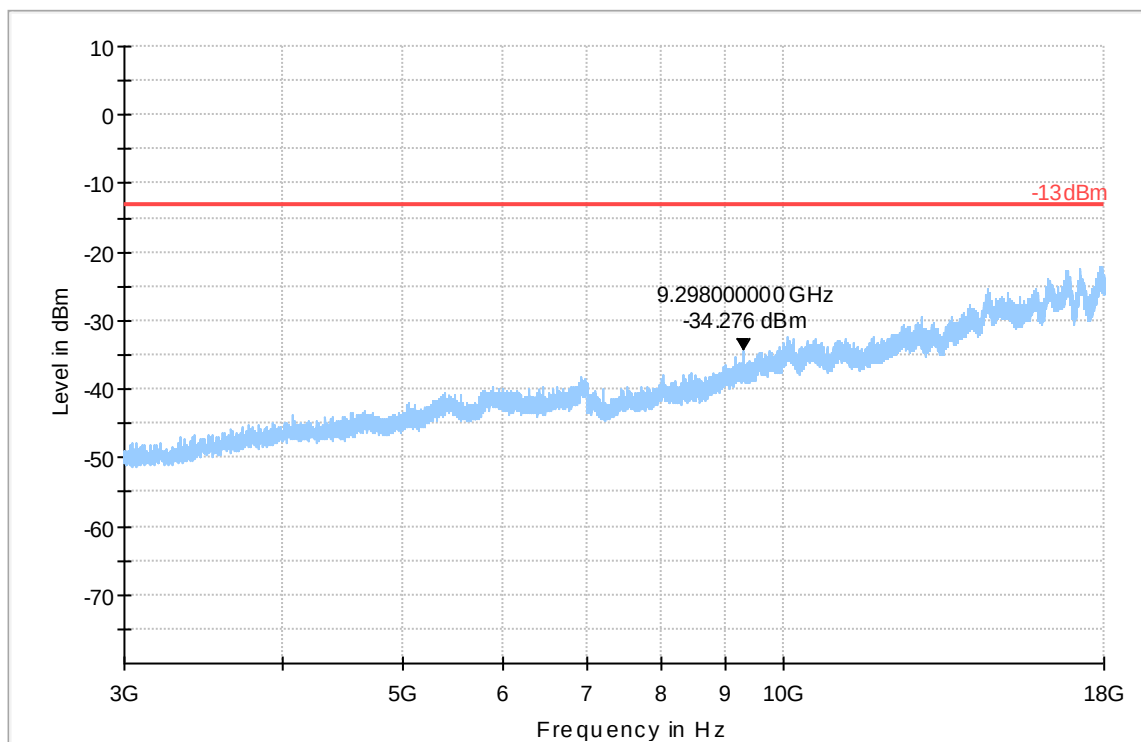
-13dBm



Final_Result RMS

Plot # 38 Radiated Emissions: 3 GHz – 18 GHz

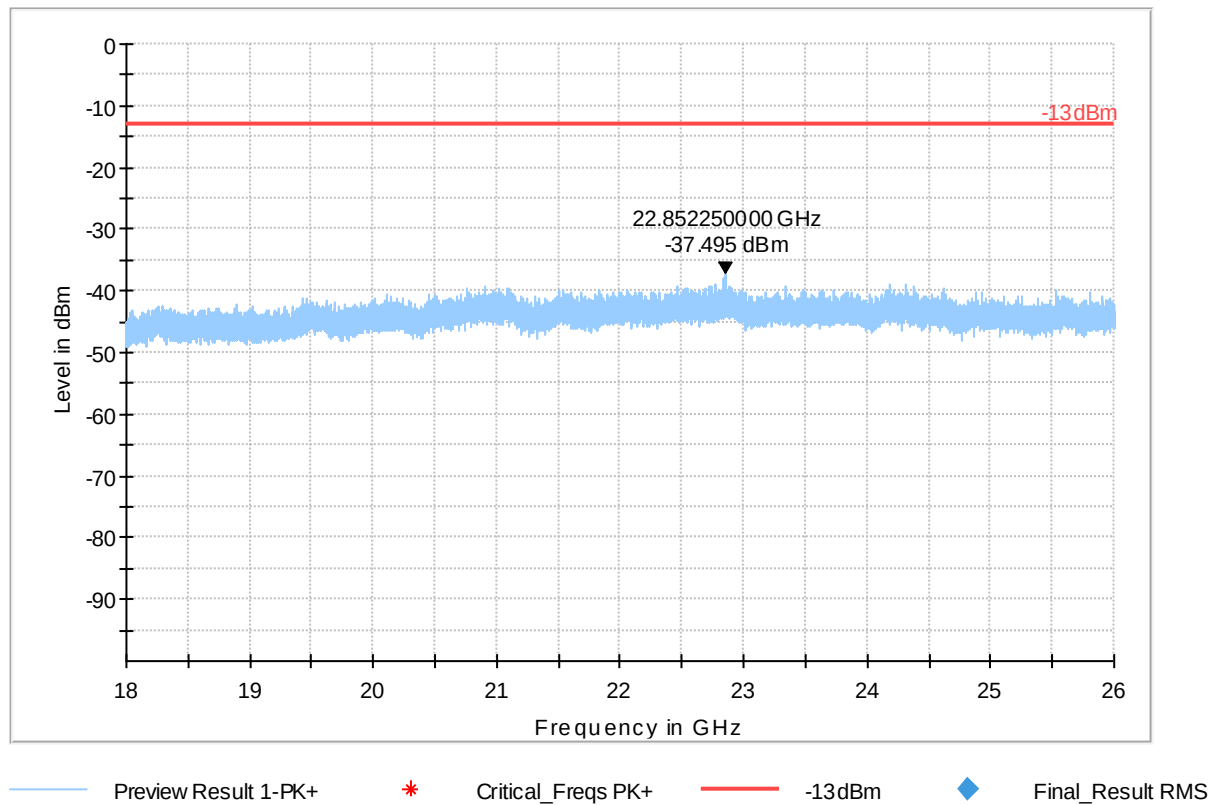
Channel: Mid



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

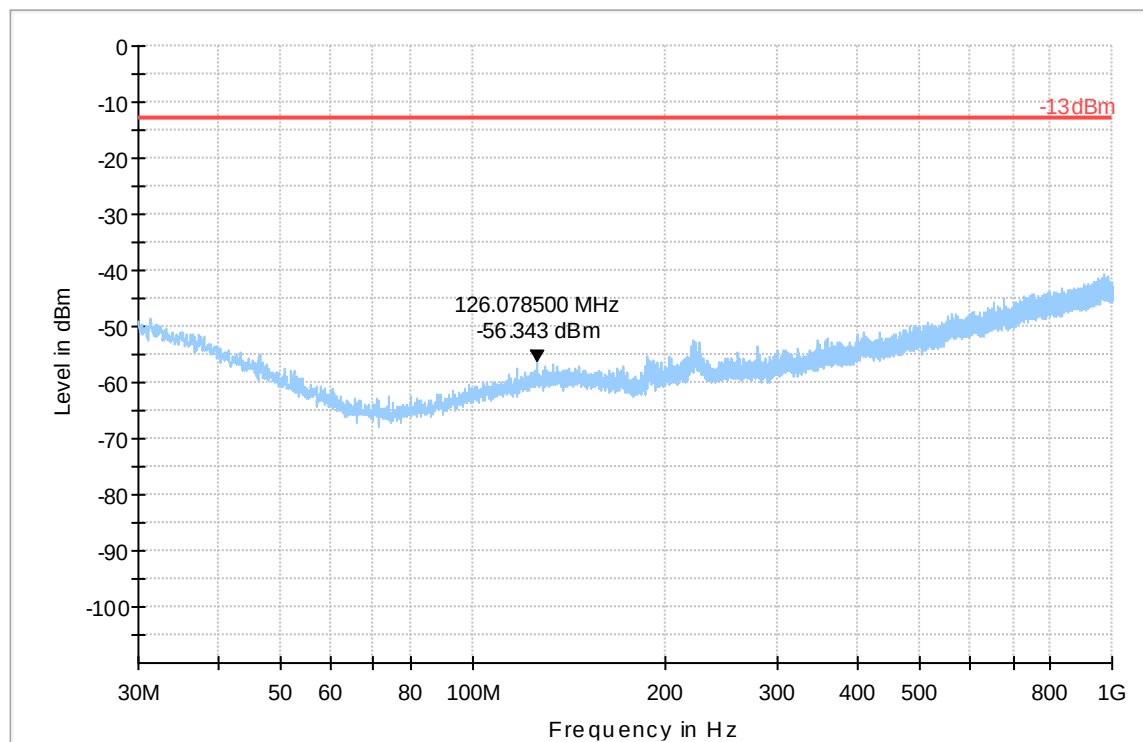
Plot # 39 Radiated Emissions: 18 GHz – 26 GHz

Channel: Mid



Plot # 40 Radiated Emissions: 30 MHz – 1GHz

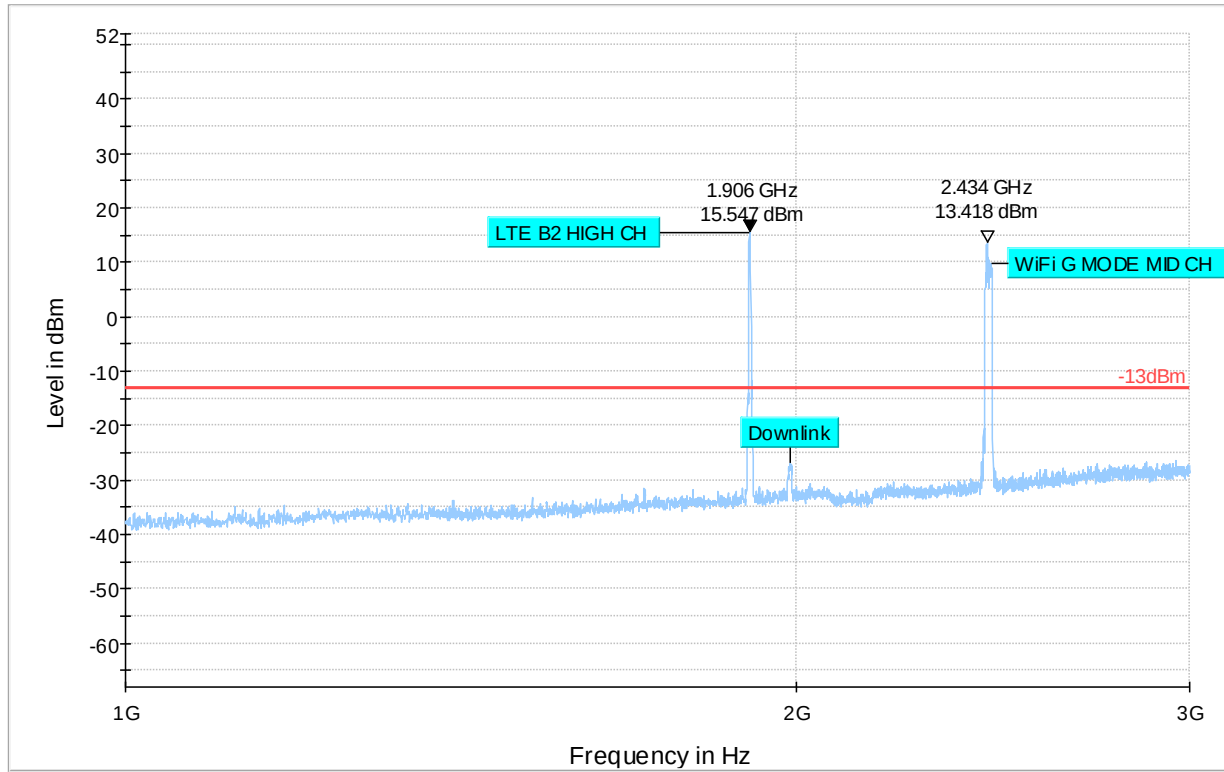
Channel: High



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

Plot # 41 Radiated Emissions: 1 GHz - 3 GHz

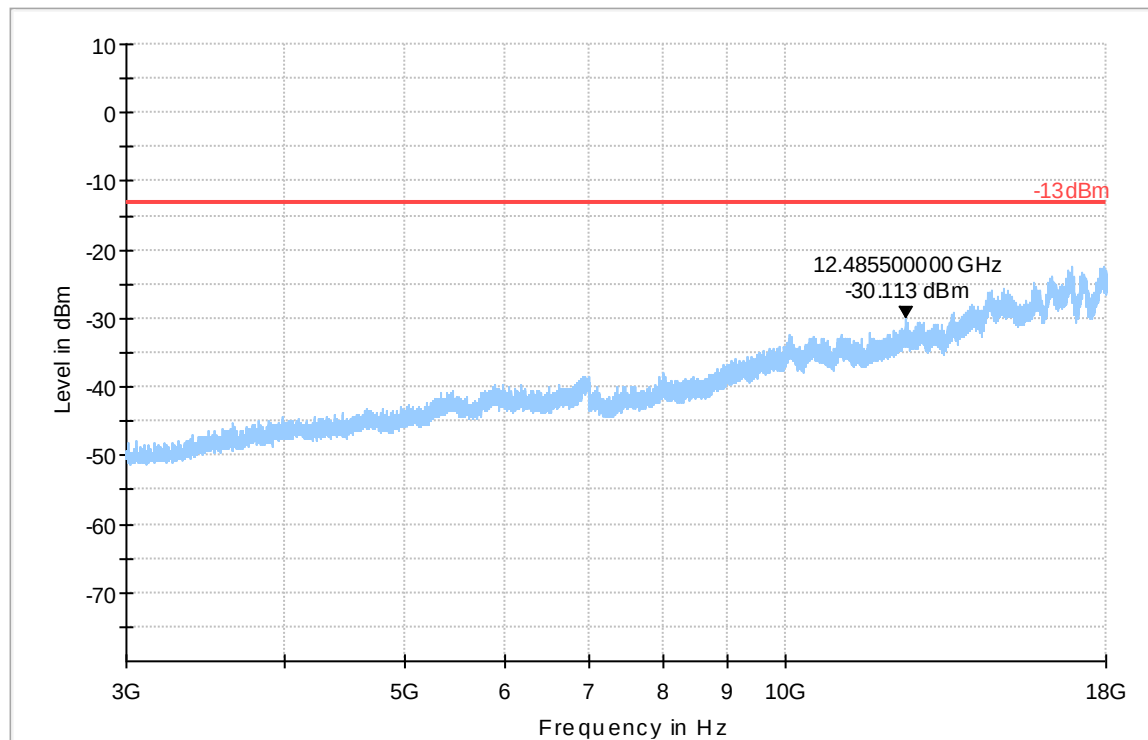
Channel: High



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

Plot # 42 Radiated Emissions: 3 GHz – 18 GHz

Channel: High



Preview Result 1-PK+



Critical_Freqs PK+

-13dBm

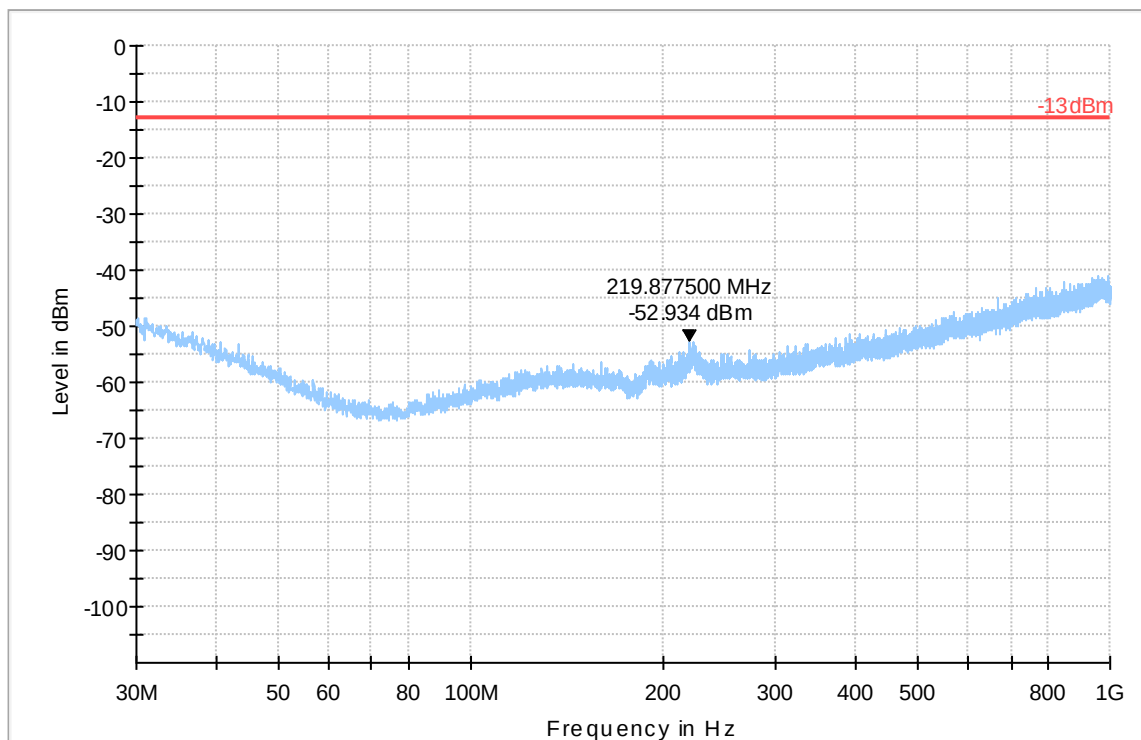


Final_Result RMS

LTE 4

Plot # 43 Radiated Emissions: 30 MHz – 1GHz

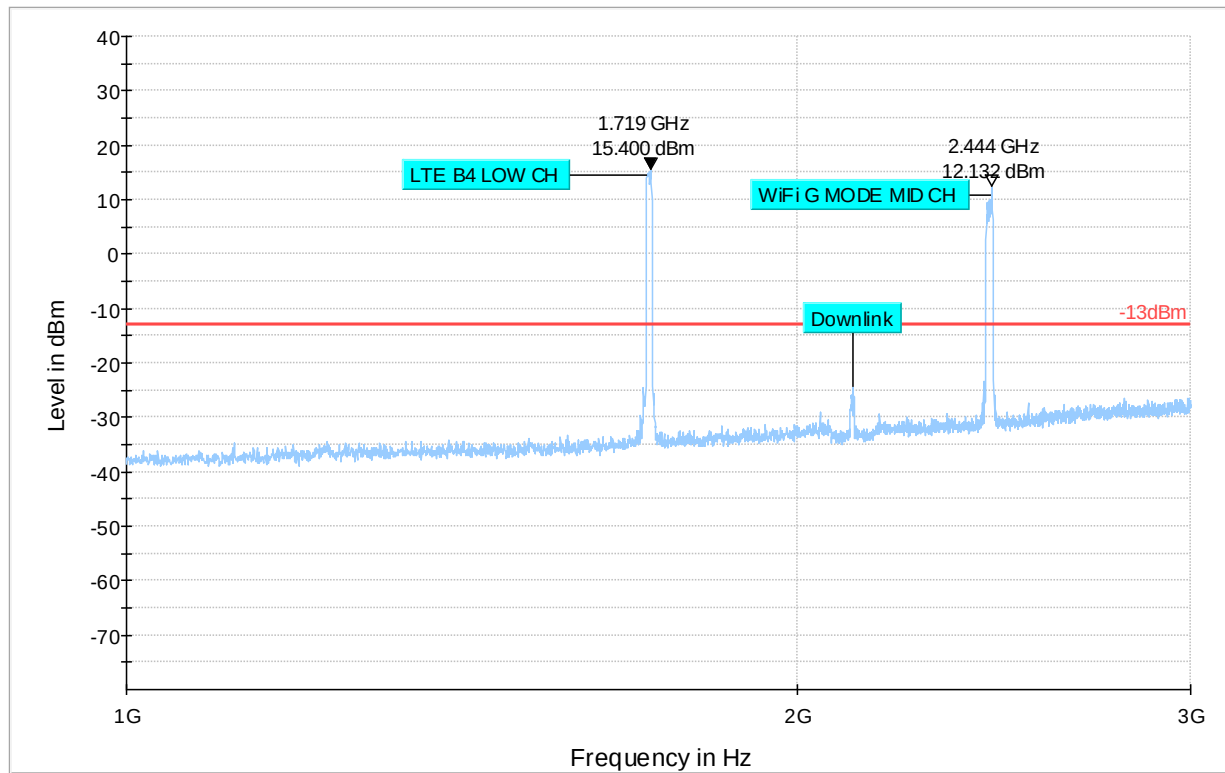
Channel: Low



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

Plot # 44 Radiated Emissions: 1 GHz - 3 GHz

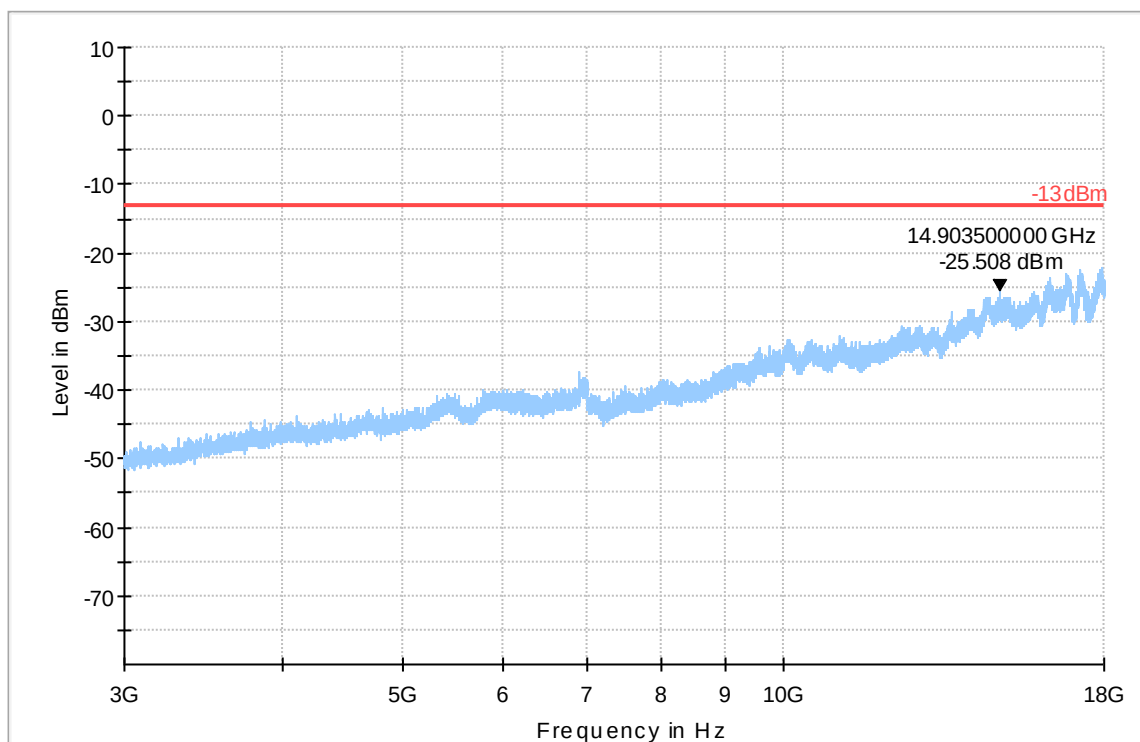
Channel: Low



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 45 Radiated Emissions: 3 GHz – 18 GHz

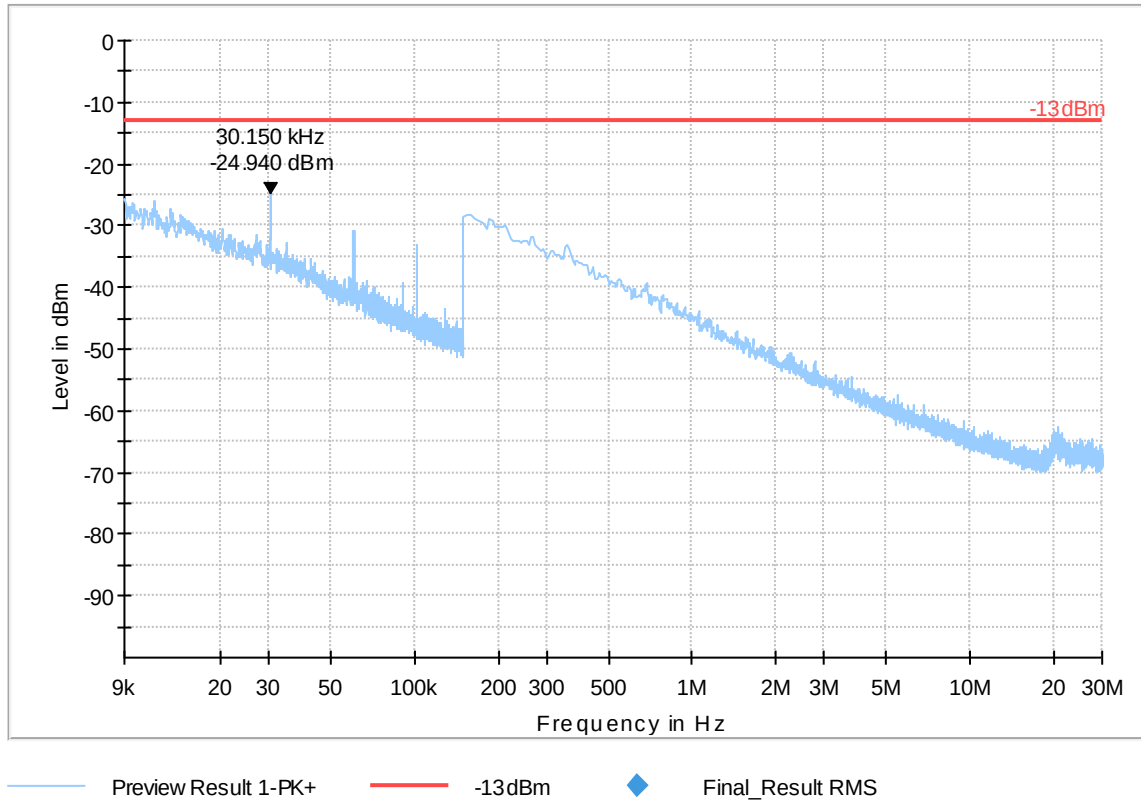
Channel: Low



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

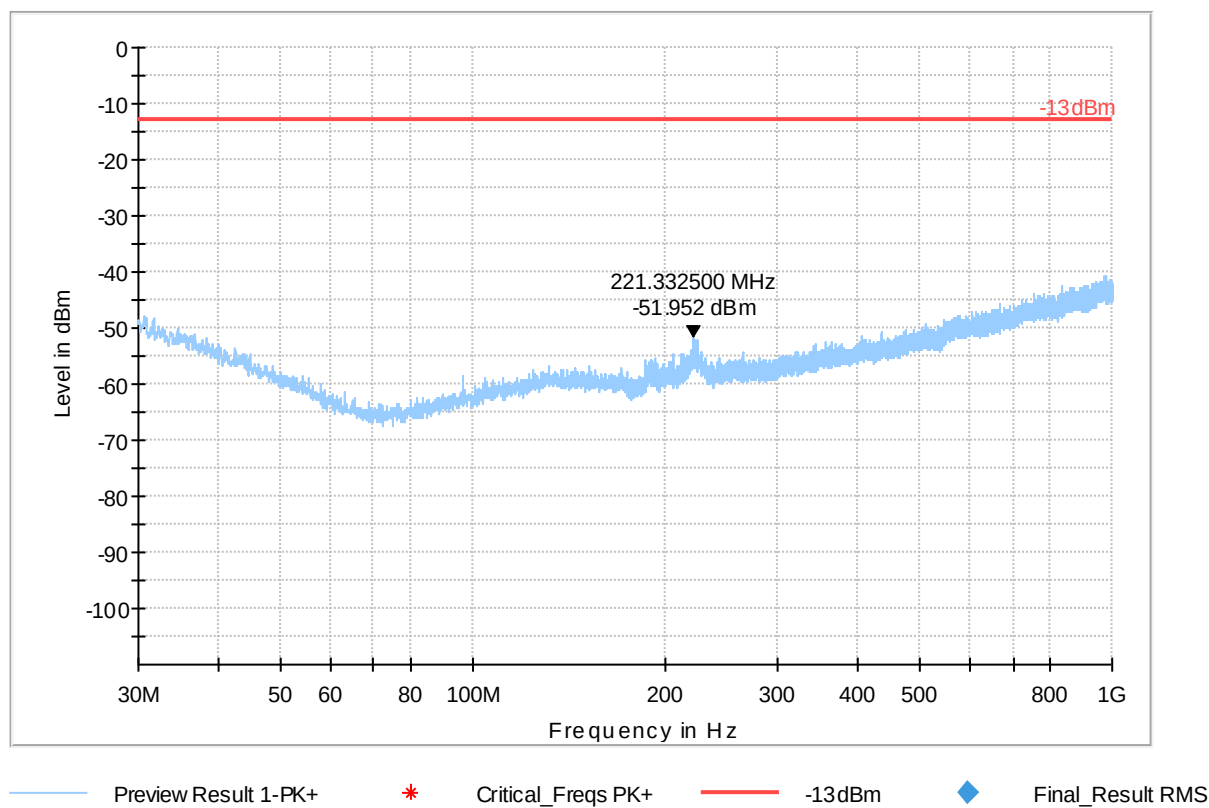
Plot # 46 Radiated Emissions: 9 kHz - 30 MHz

Channel: Mid



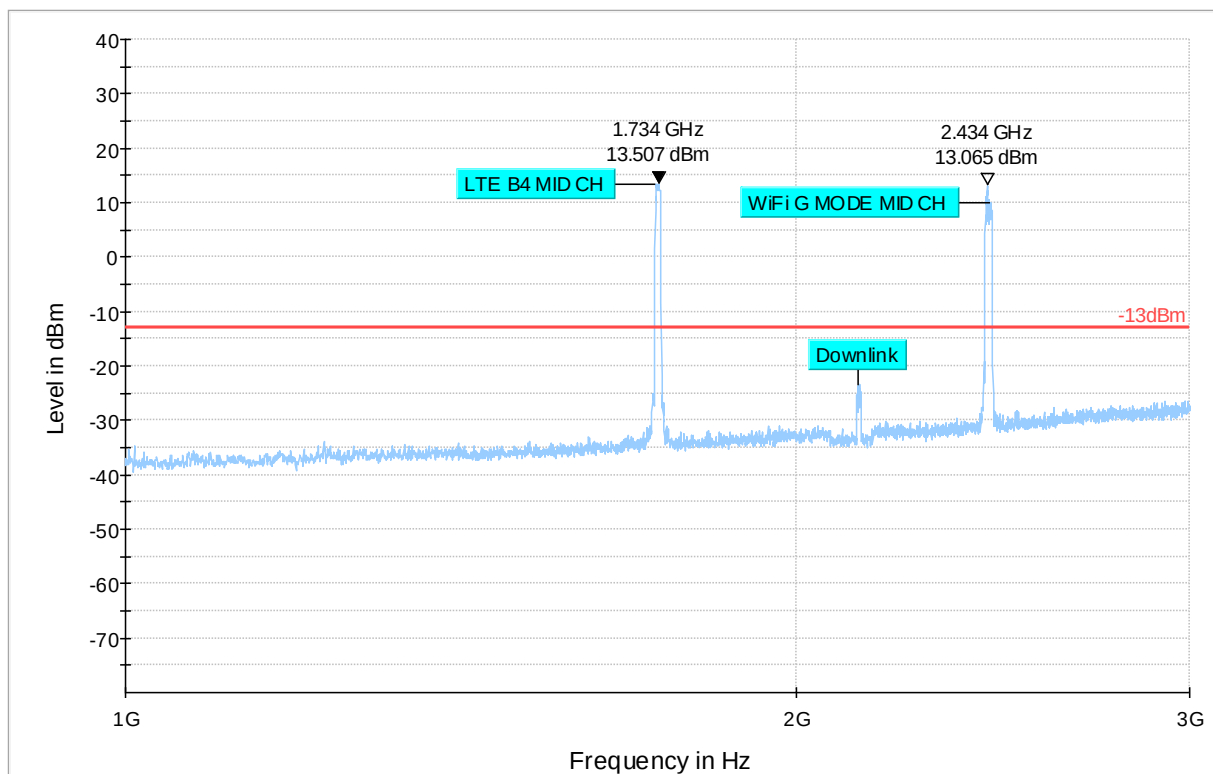
Plot # 47 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid



Plot # 48 Radiated Emissions: 1 GHz - 3 GHz

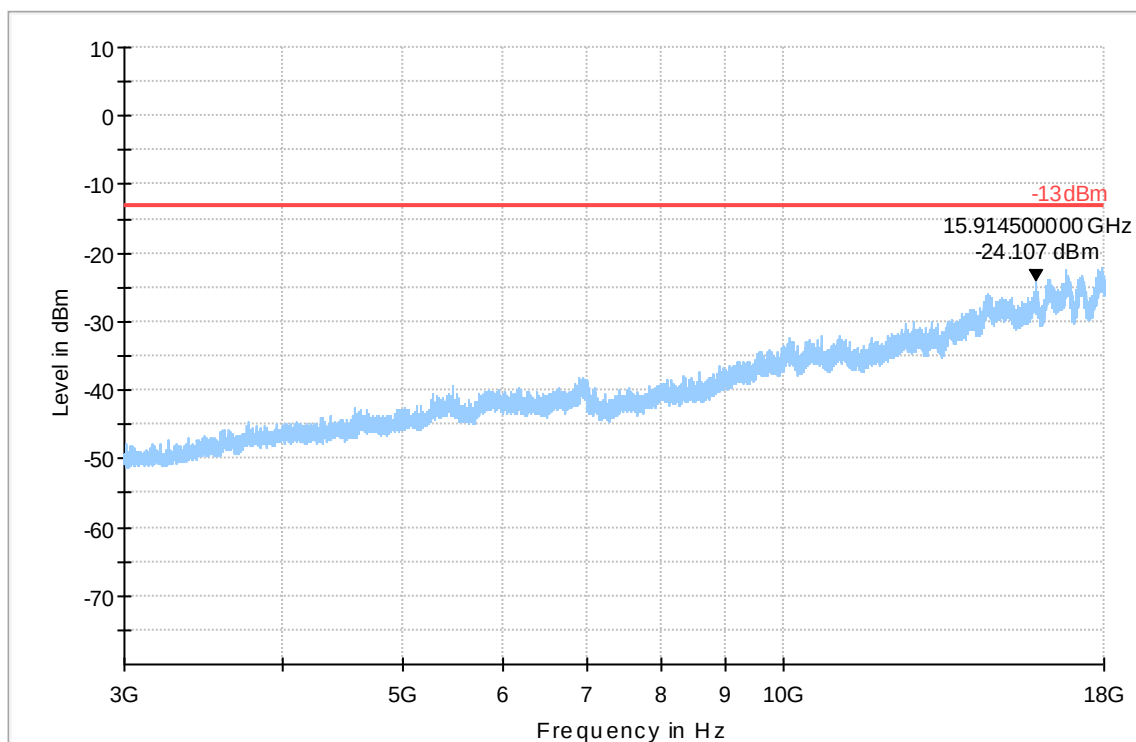
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 49 Radiated Emissions: 3 GHz – 18 GHz

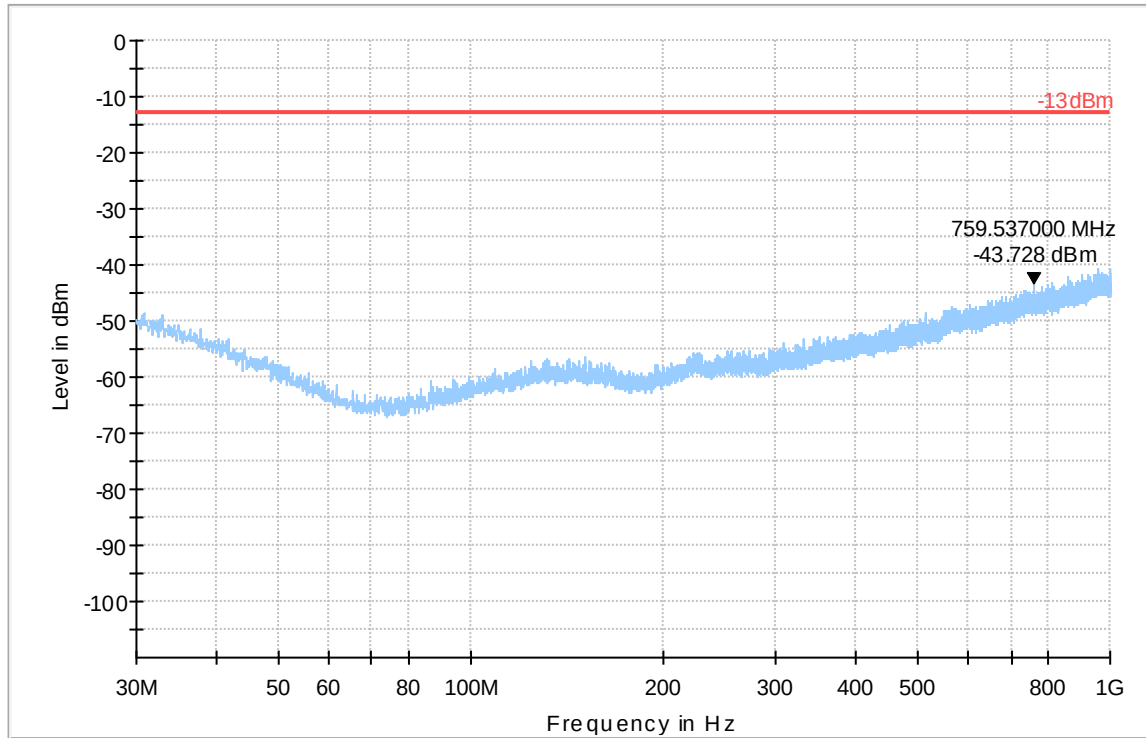
Channel: Mid



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

Plot # 50 Radiated Emissions: 30 MHz – 1GHz

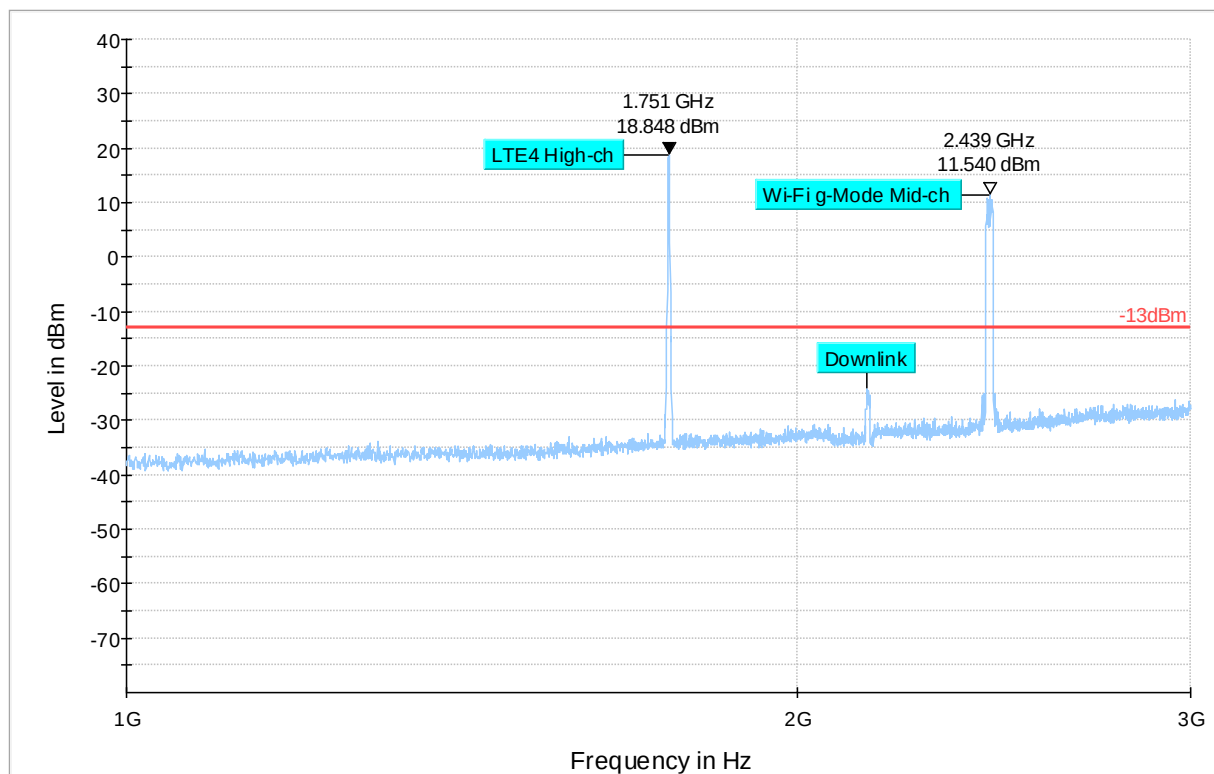
Channel: High



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

Plot # 51 Radiated Emissions: 1 GHz - 3 GHz

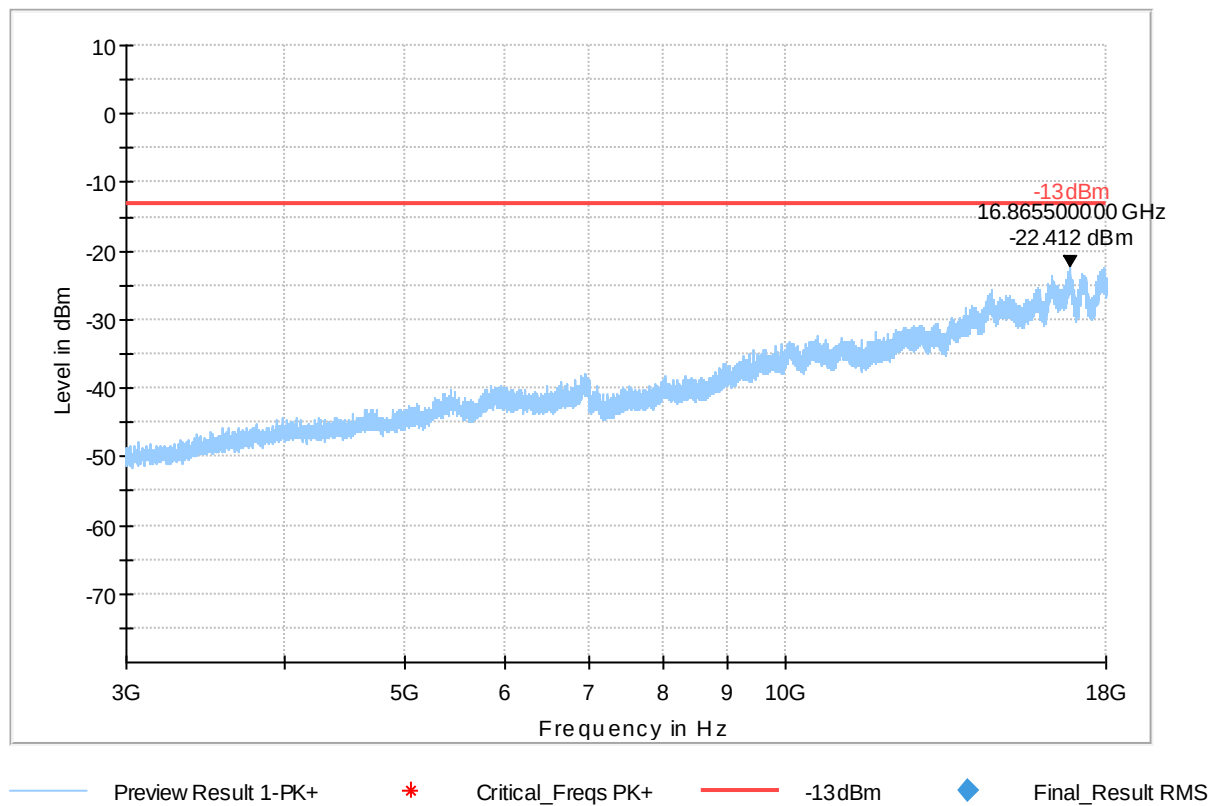
Channel: High



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 52 Radiated Emissions: 3 GHz – 18 GHz

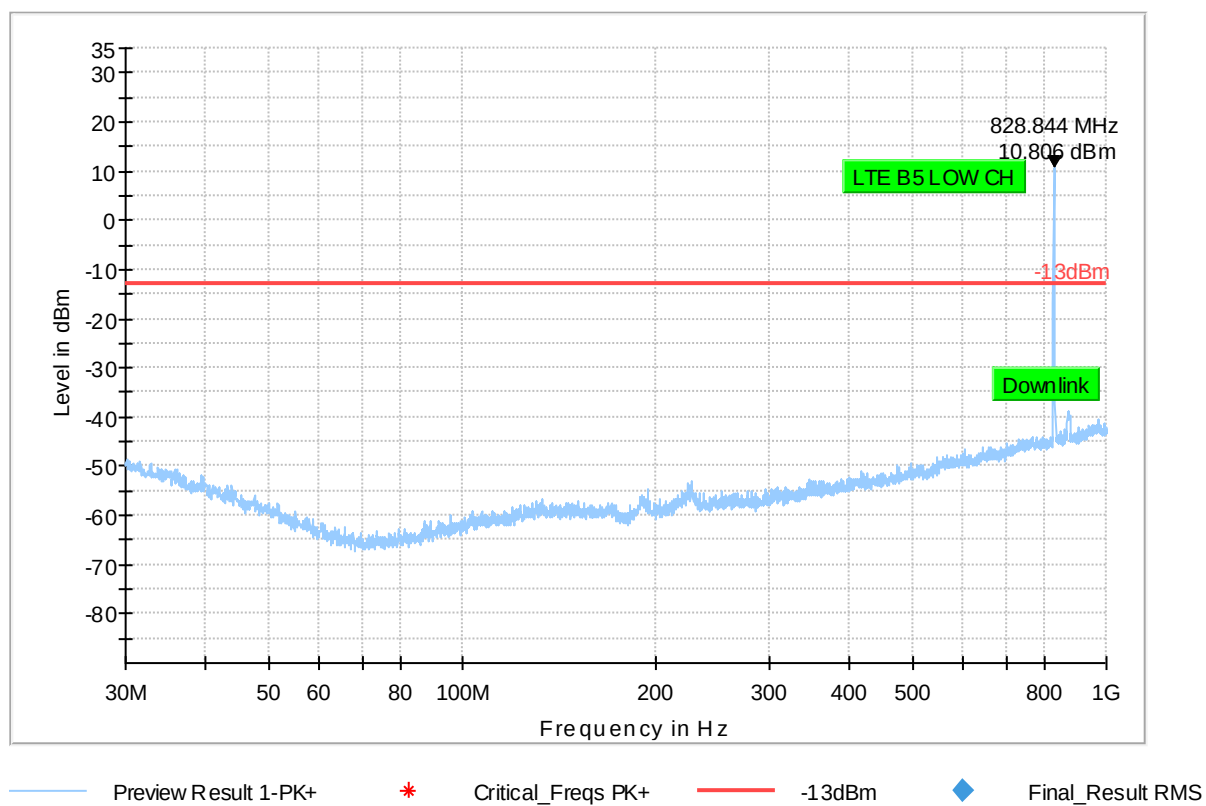
Channel: High



LTE 5

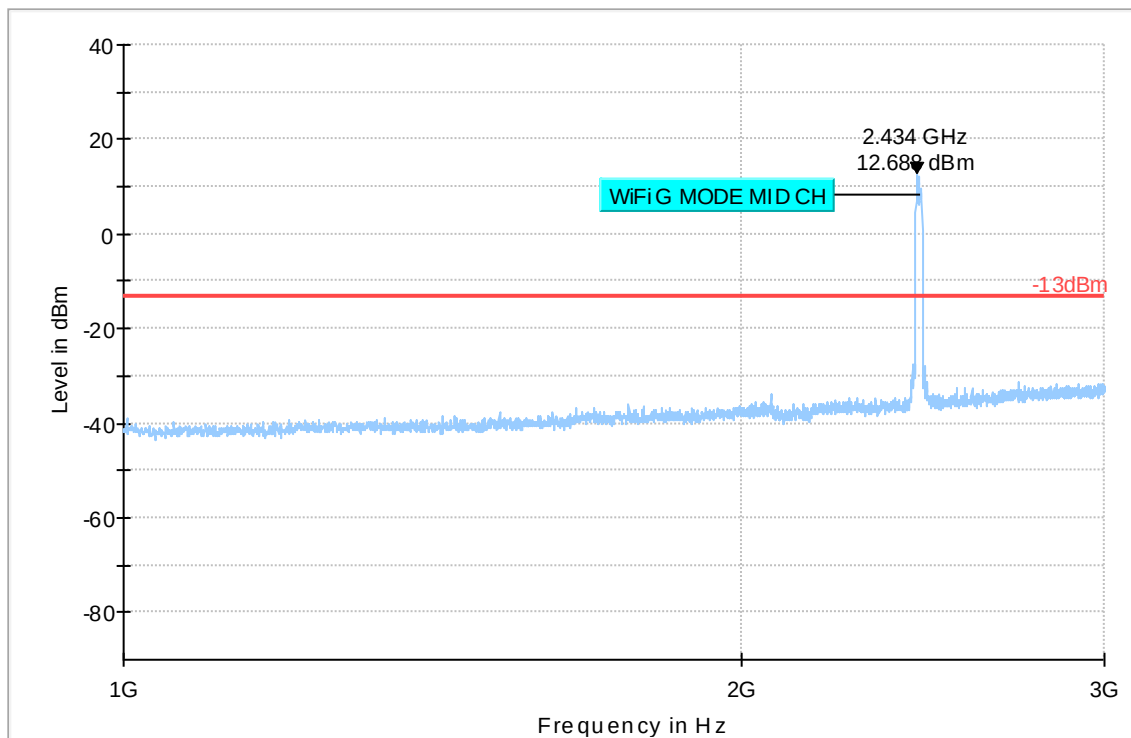
Plot # 53 Radiated Emissions: 30 MHz – 1GHz

Channel: Low



Plot # 54 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low



Preview Result 1-PK+



Critical_Freqs PK+

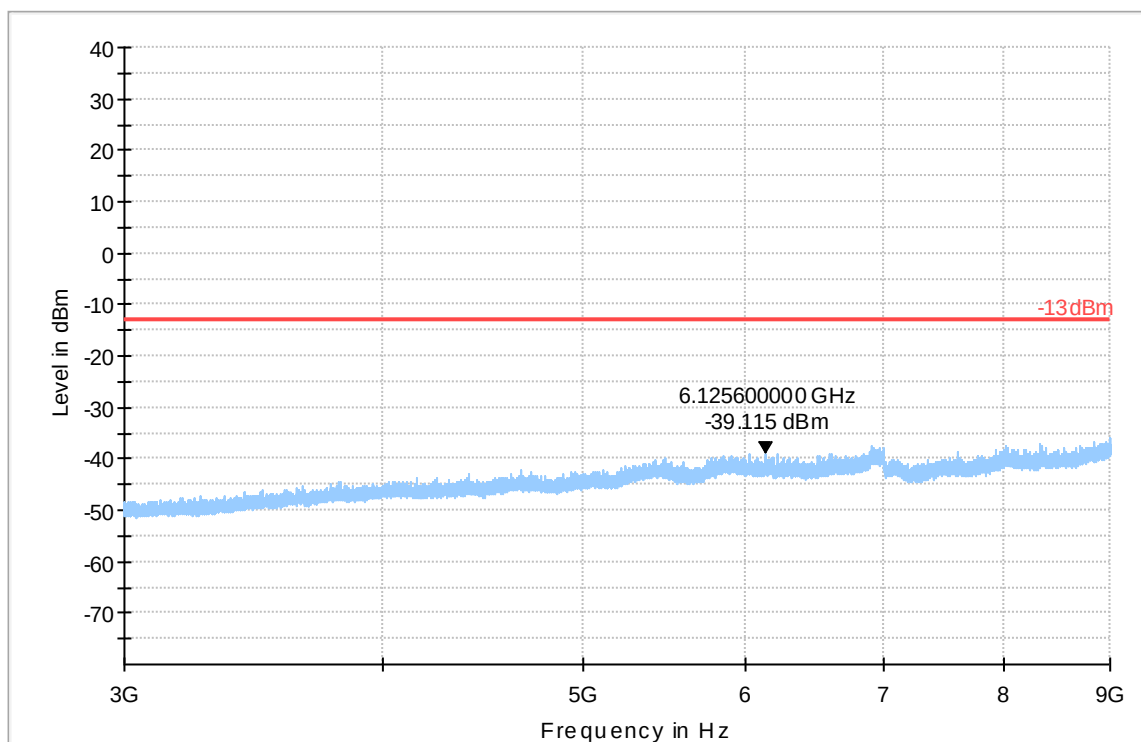
-13dBm



Final_Result RMS

Plot # 55 Radiated Emissions: 3 GHz – 9 GHz

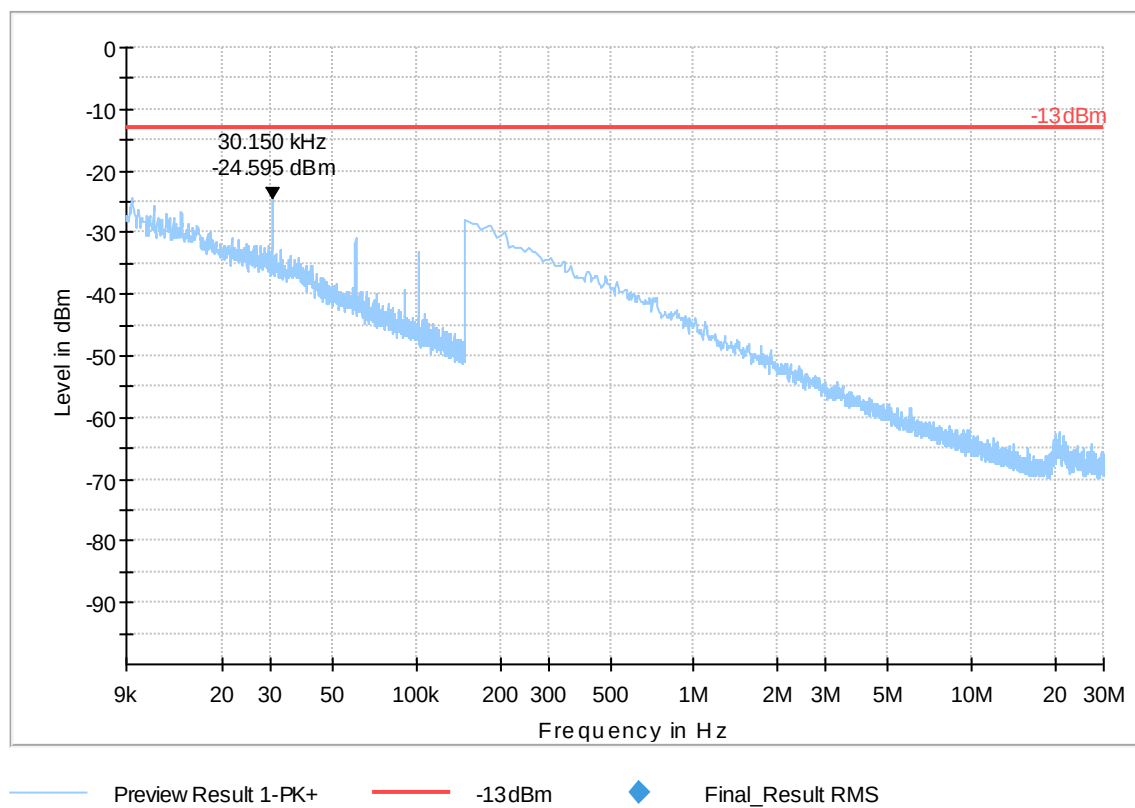
Channel: Low



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

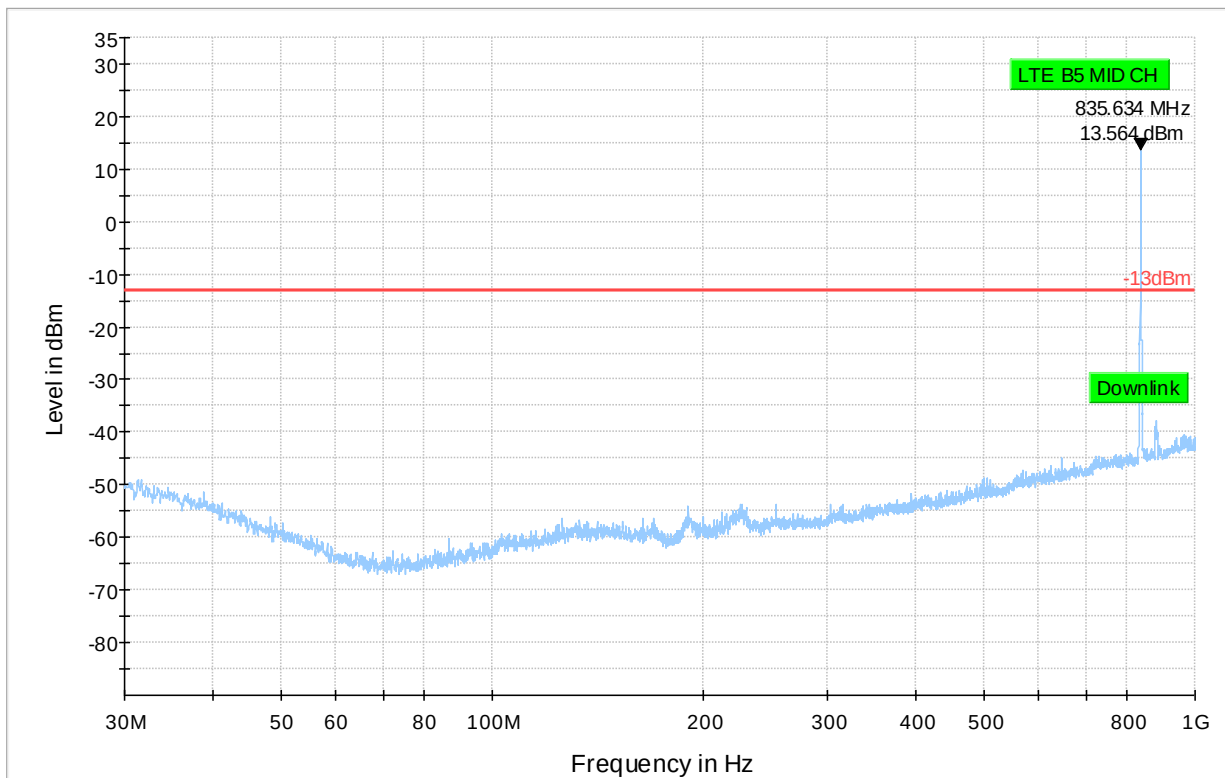
Plot # 56 Radiated Emissions: 9 kHz - 30 MHz

Channel: Mid



Plot # 57 Radiated Emissions: 30 MHz – 1GHz

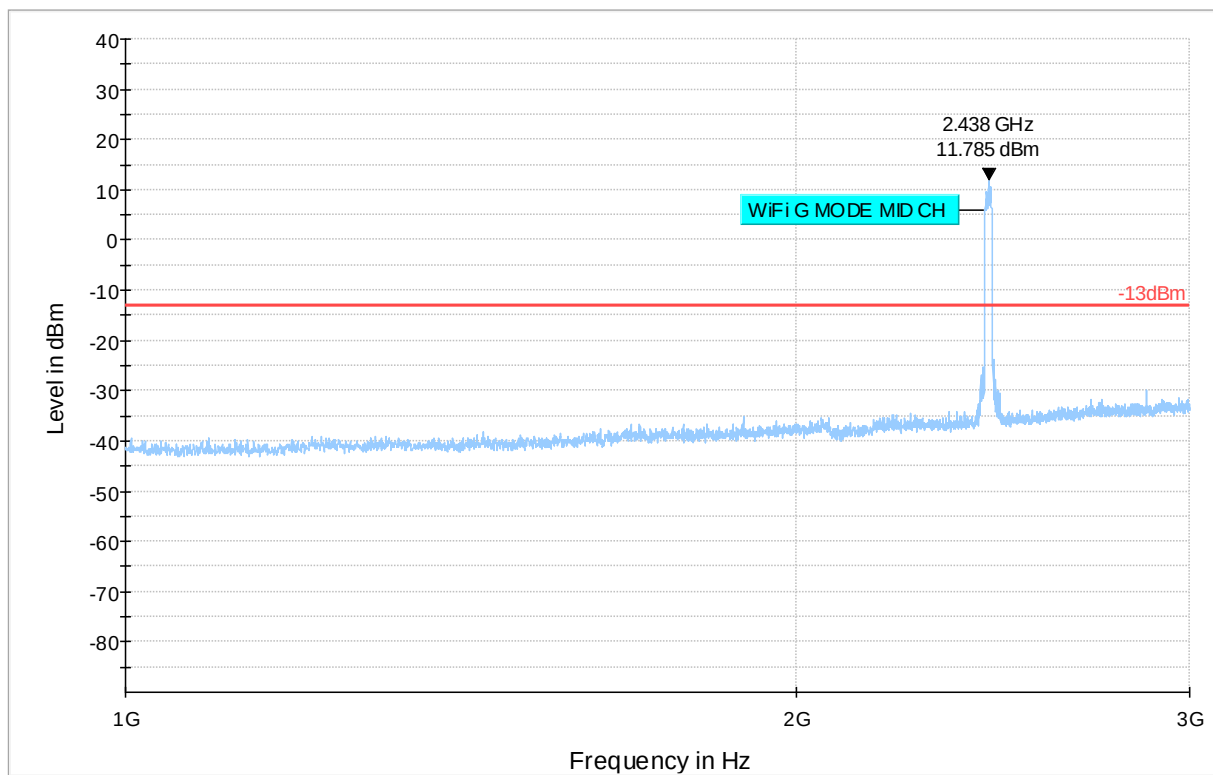
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 58 Radiated Emissions: 1 GHz - 3 GHz

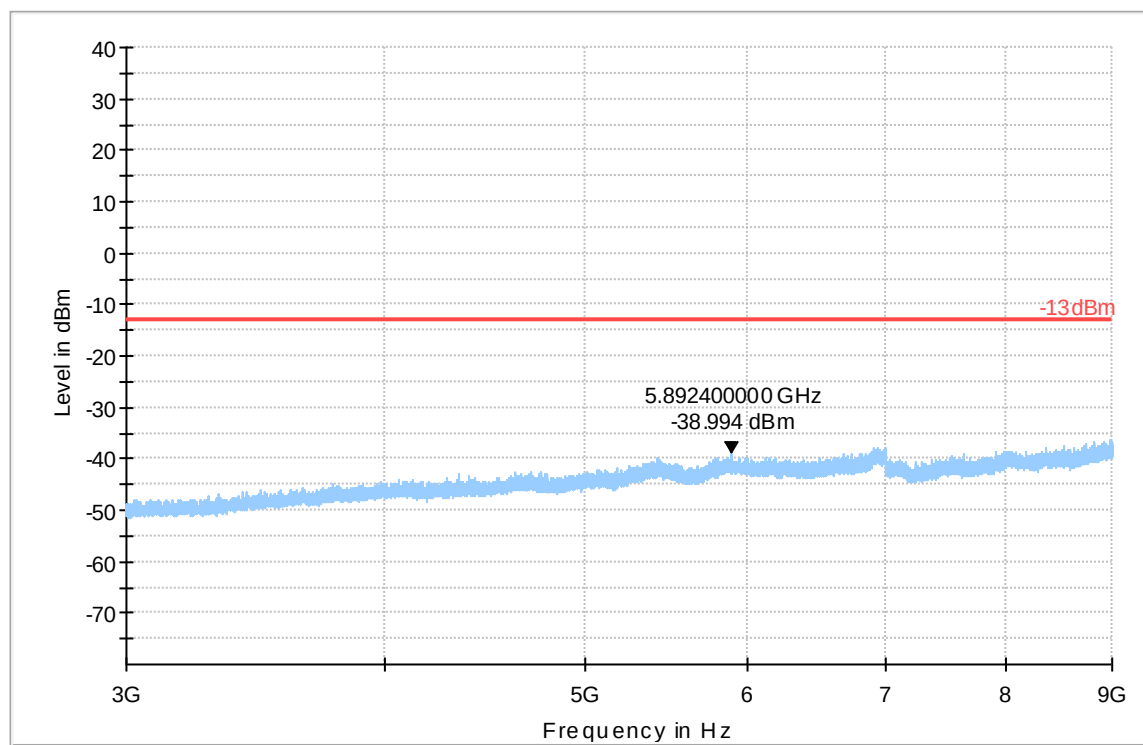
Channel: Mid



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

Plot # 59 Radiated Emissions: 3 GHz – 9 GHz

Channel: Mid



Preview Result 1-PK+



Critical_Freqs PK+



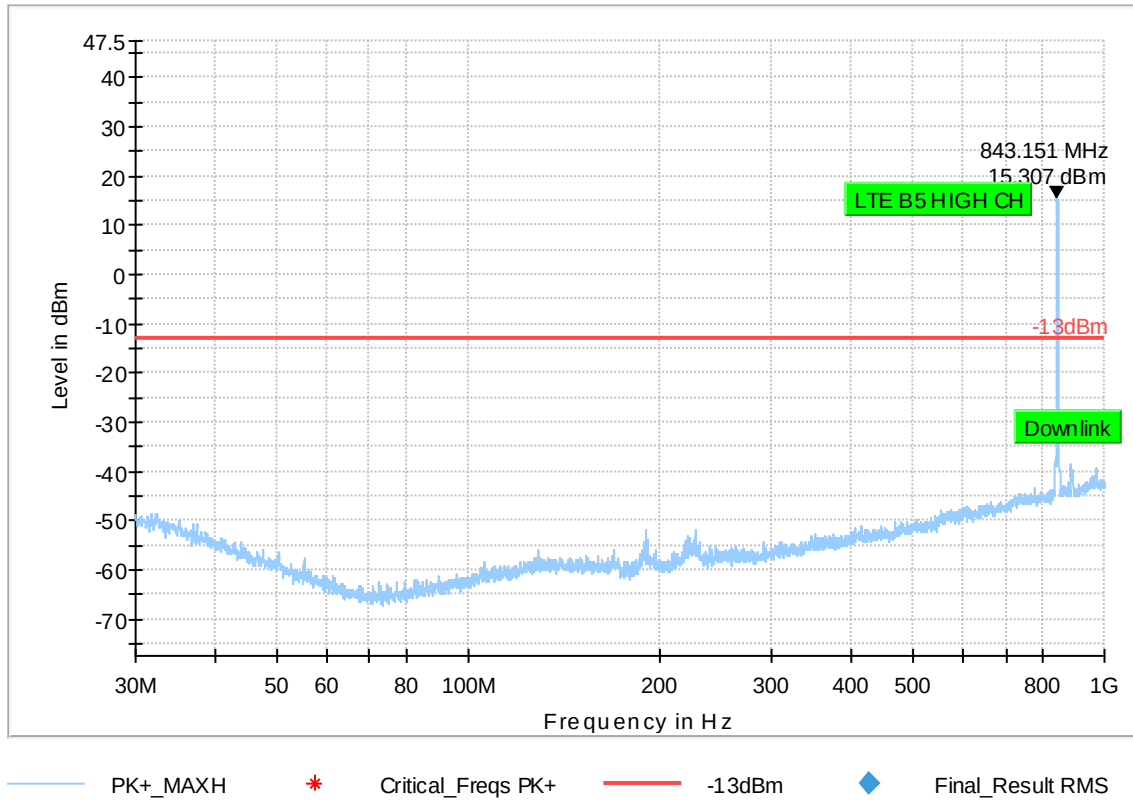
-13dBm



Final_Result RMS

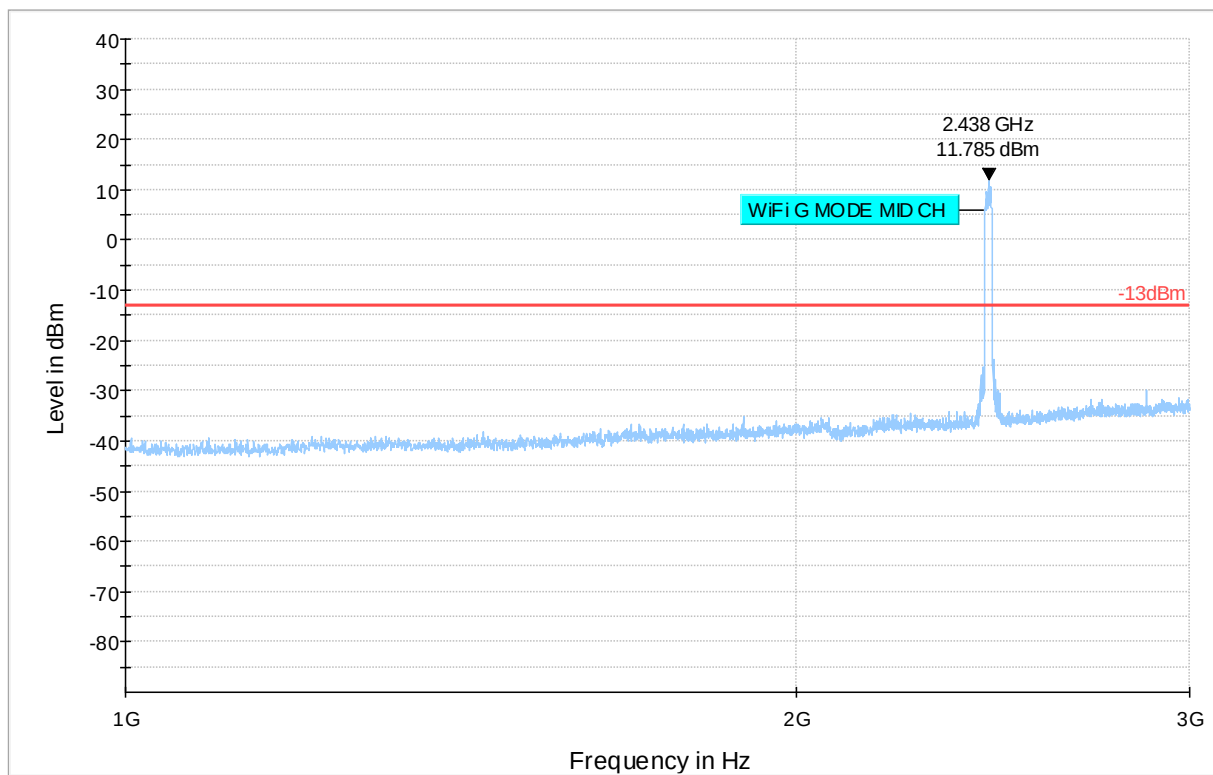
Plot # 60 Radiated Emissions: 30 MHz – 1GHz

Channel: High



Plot # 61 Radiated Emissions: 1 GHz - 3 GHz

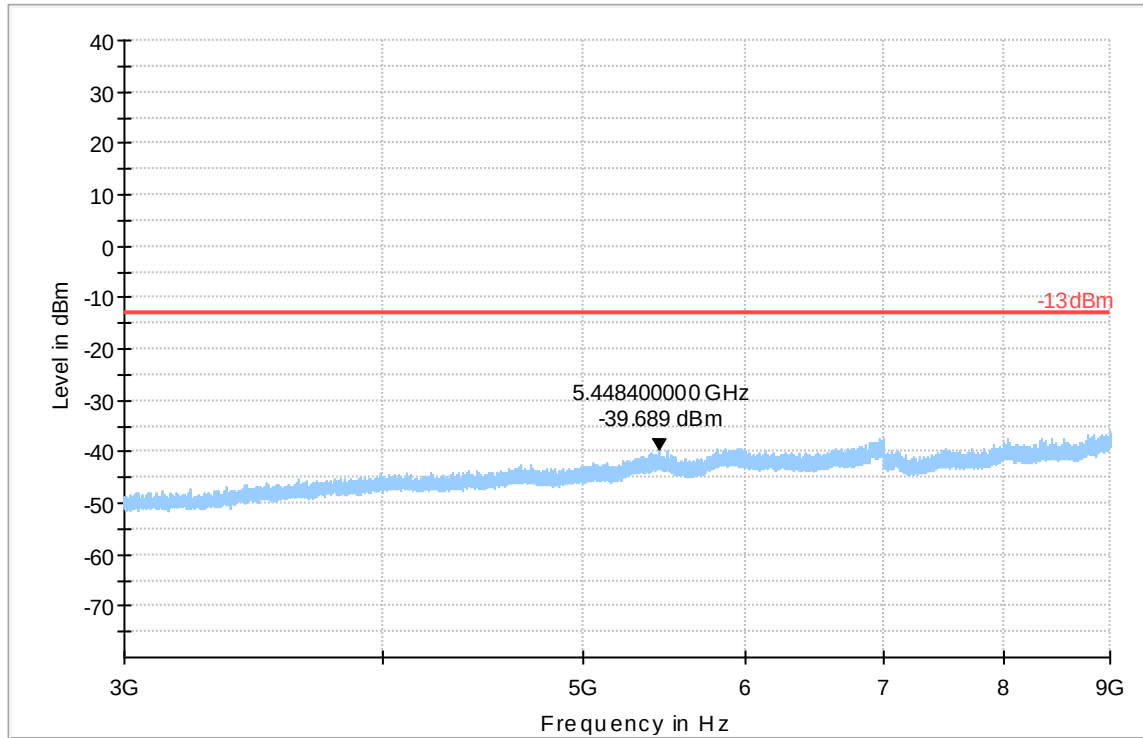
Channel: High



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 62 Radiated Emissions: 3 GHz – 9 GHz

Channel: High

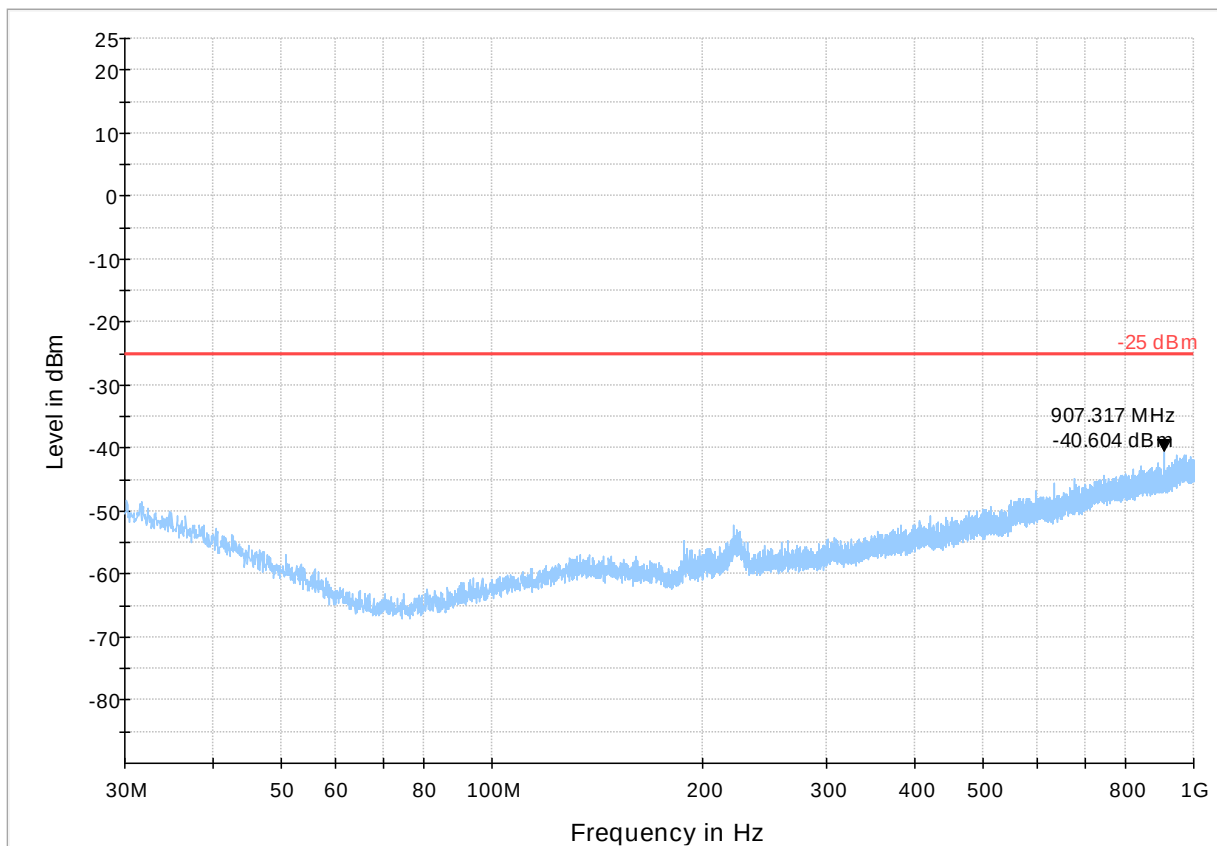


Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm ♦ Final_Result RMS

LTE 7

Plot # 63 Radiated Emissions: 30 MHz – 1GHz

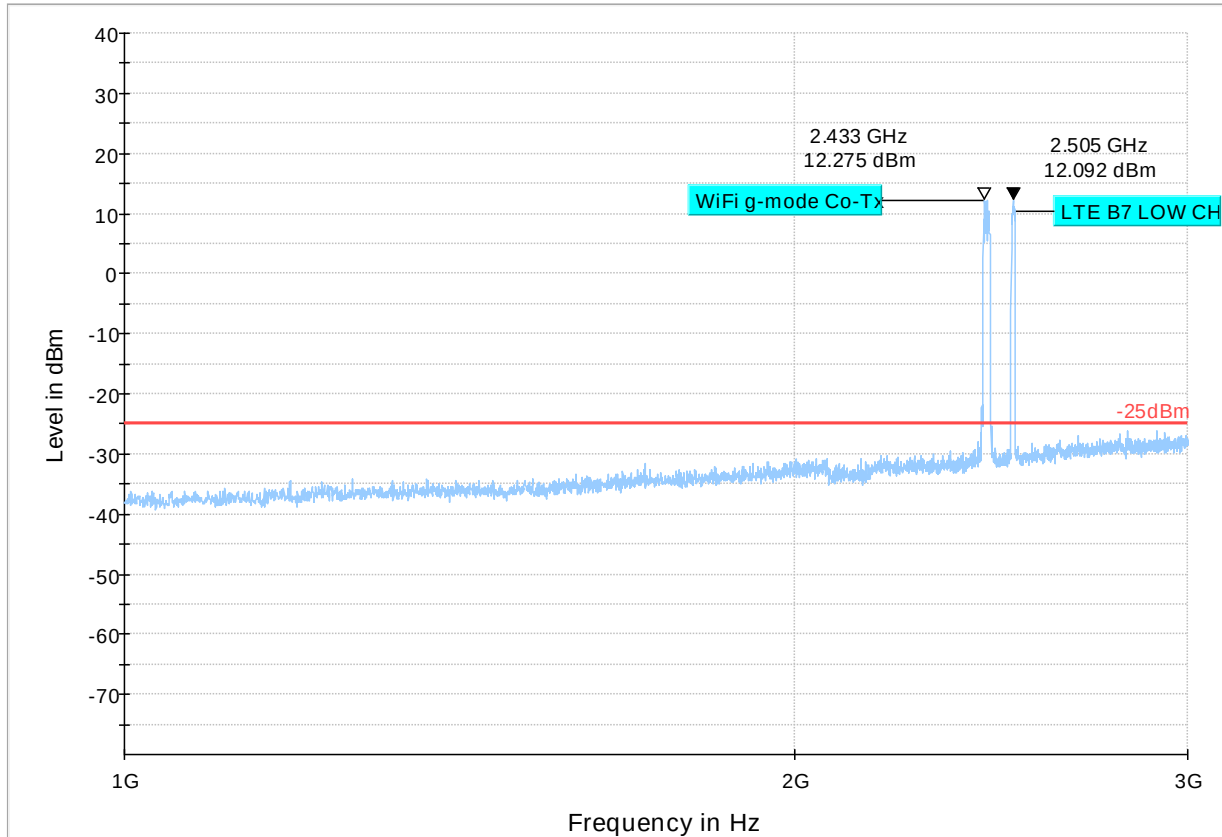
Channel: Low



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

Plot # 64 Radiated Emissions: 1 GHz - 3 GHz

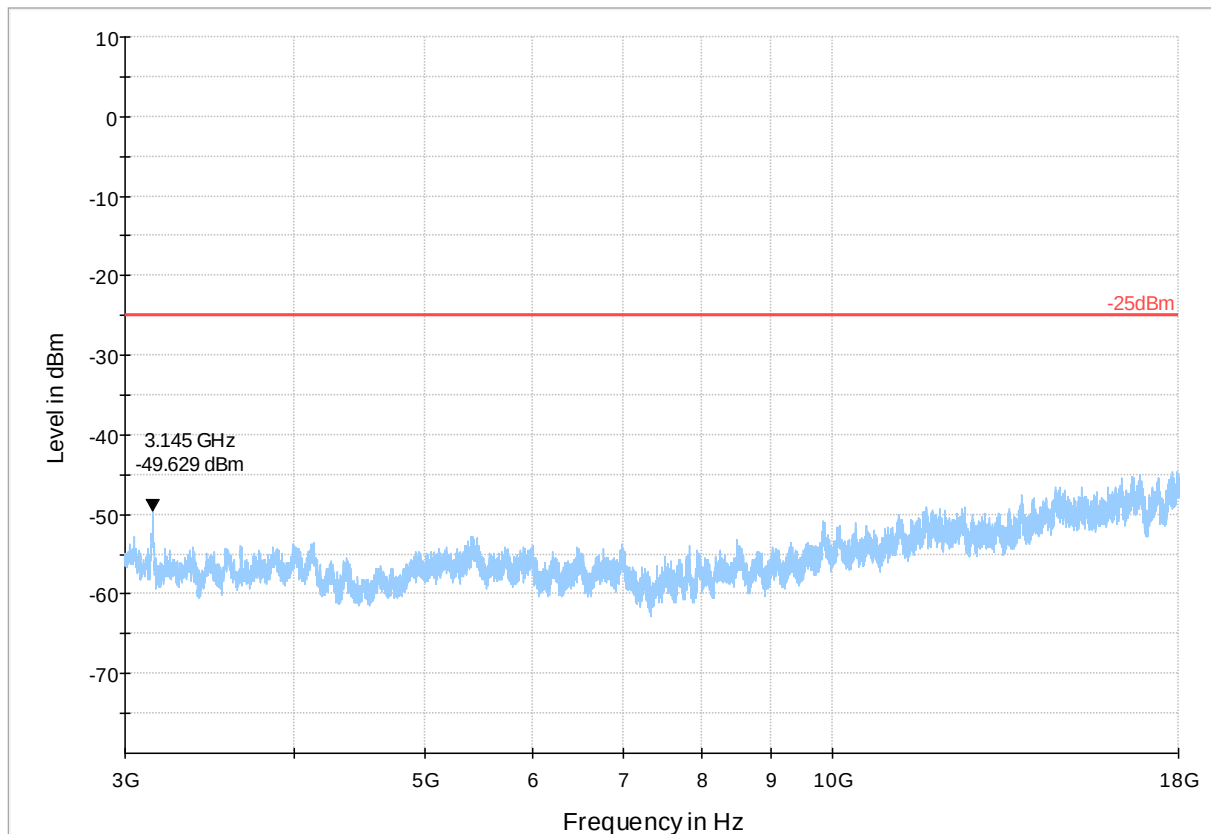
Channel: Low



Preview Result 1-PK+ * Critical_Freqs PK+ -25dBm ◆ Final_Result RMS

Plot # 65 Radiated Emissions: 3 GHz – 18 GHz

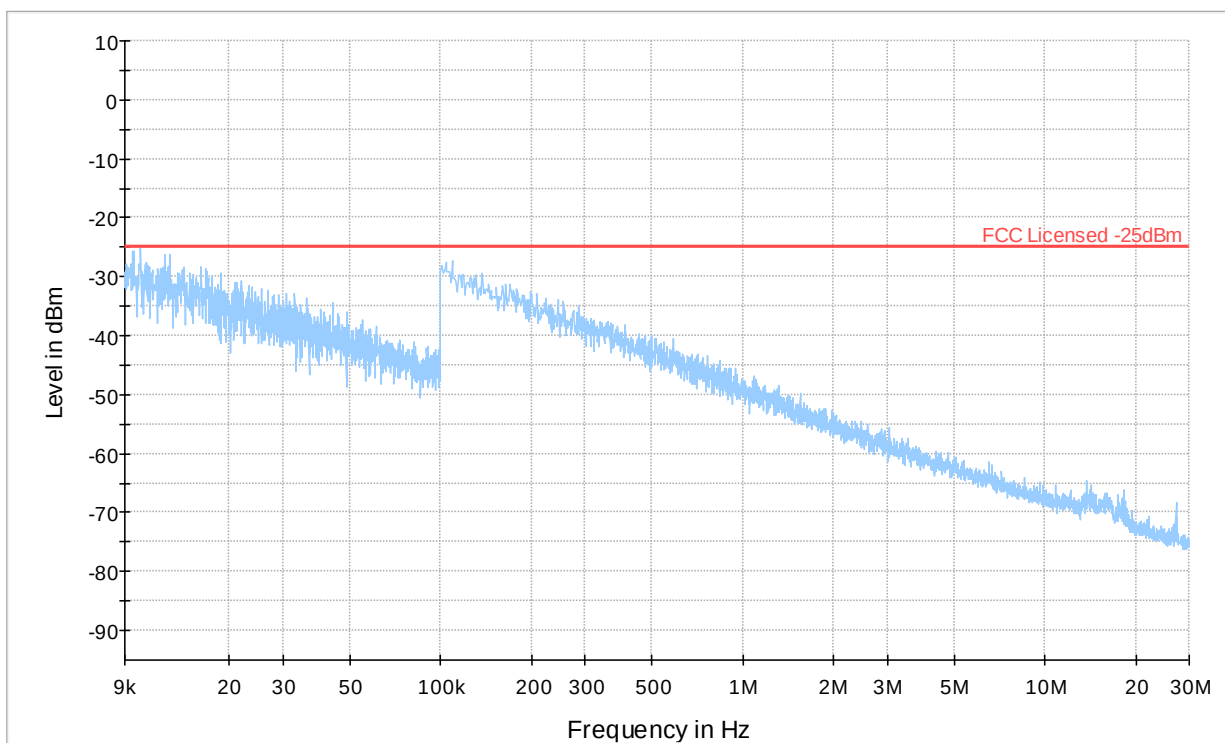
Channel: Low



Preview Result 1-PK+ * Critical_Freqs PK+ -25dBm ◆ Final_Result RMS

Plot # 66 Radiated Emissions: 9 kHz - 30 MHz

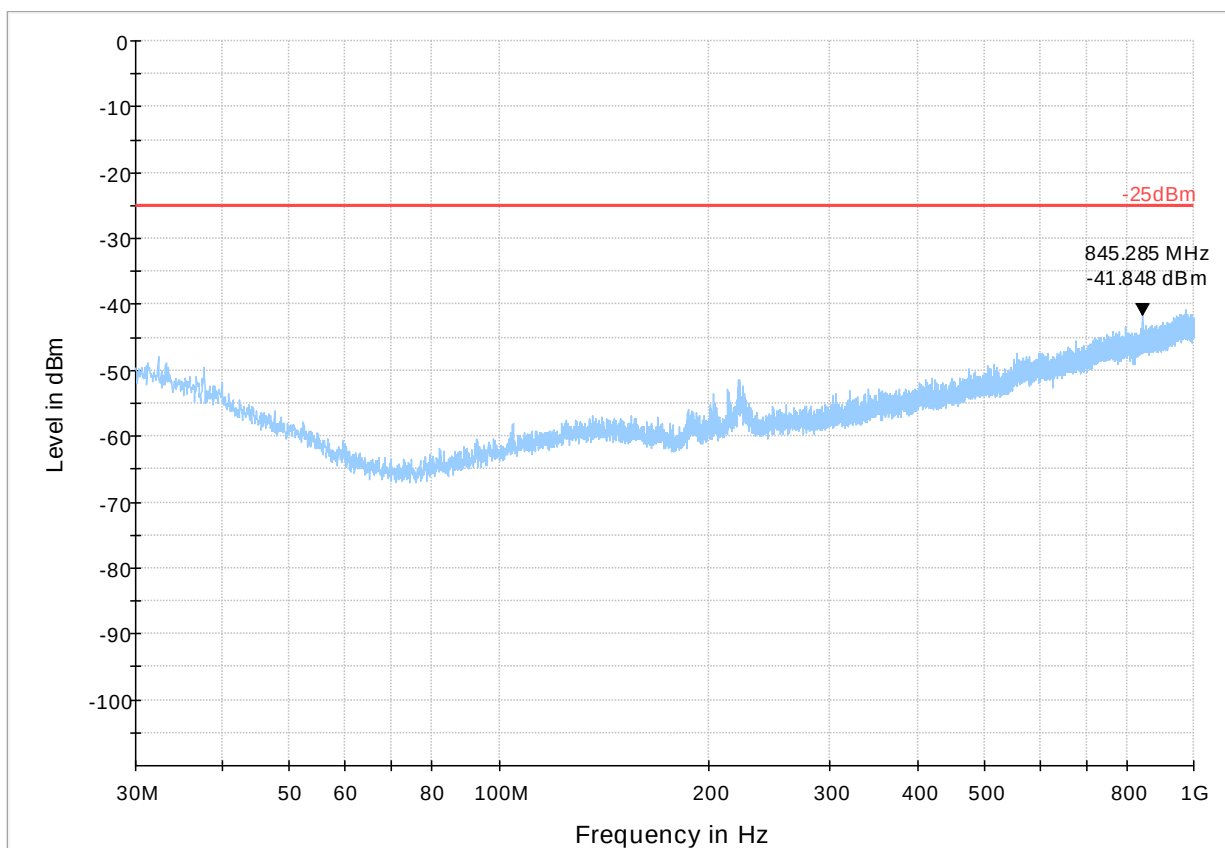
Channel: Mid



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

Plot # 67 Radiated Emissions: 30 MHz – 1GHz

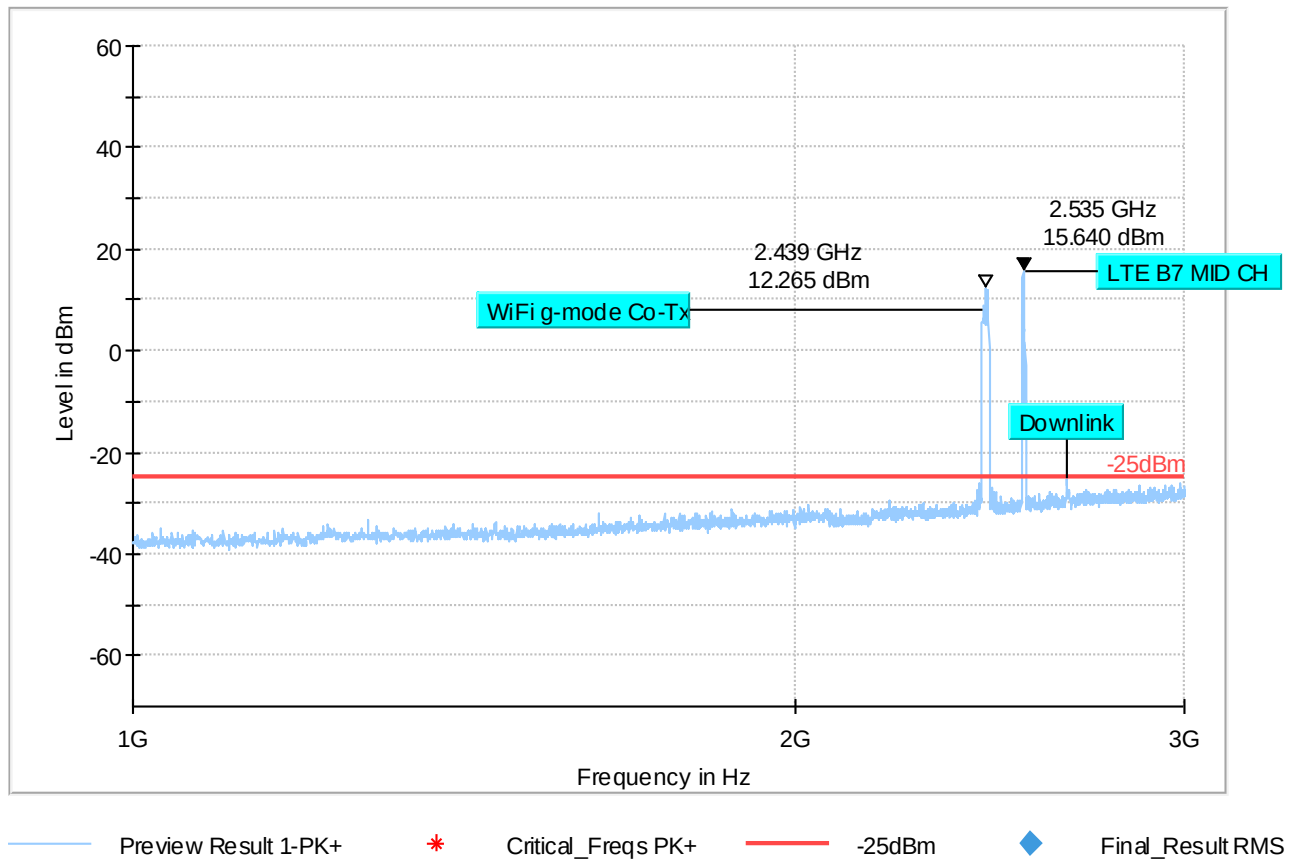
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -25dBm Final_Result RMS

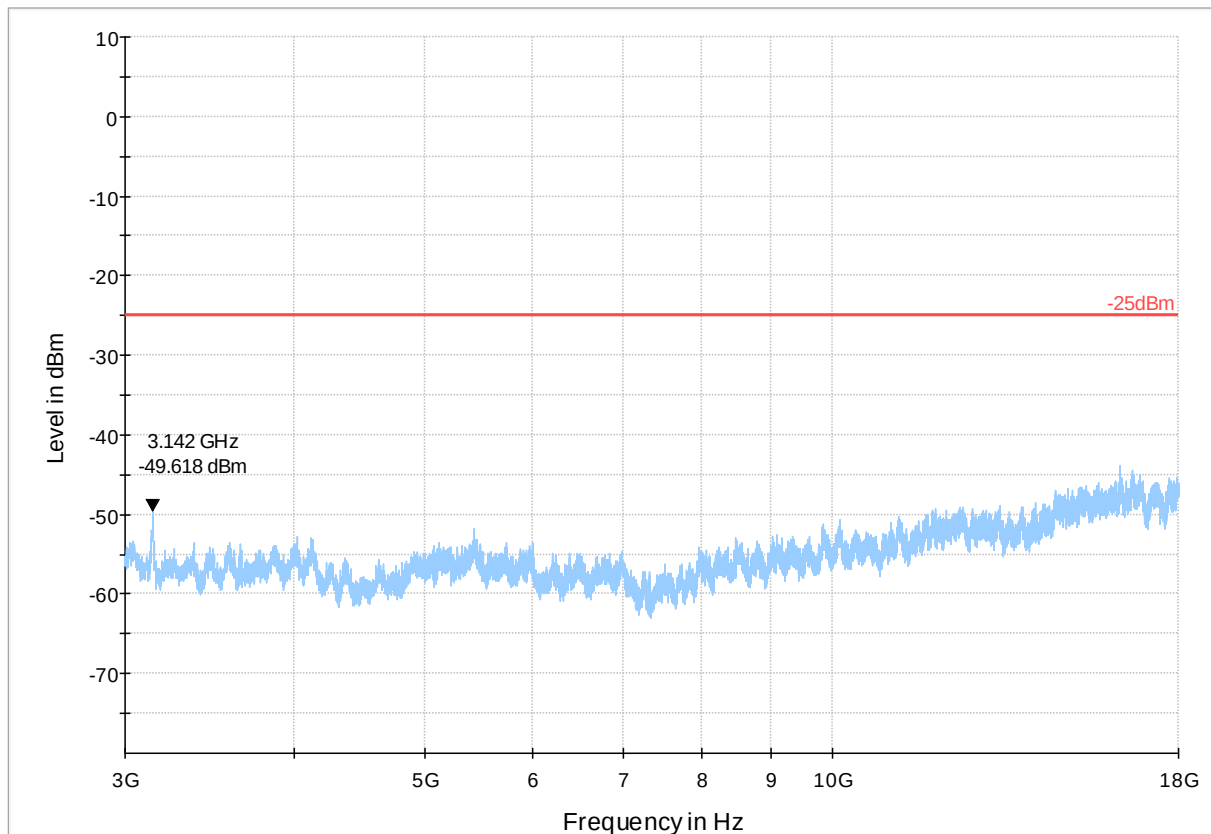
Plot # 68 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid



Plot # 69 Radiated Emissions: 3 GHz – 18 GHz

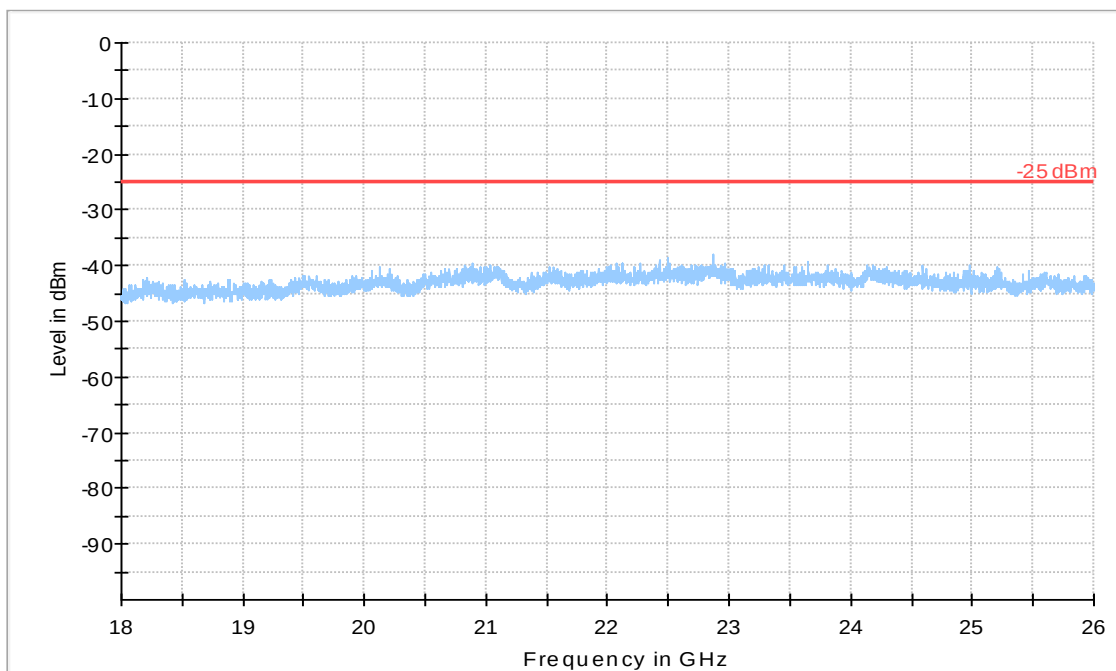
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -25dBm ◆ Final_Result RMS

Plot # 70 Radiated Emissions: 18 GHz – 26 GHz

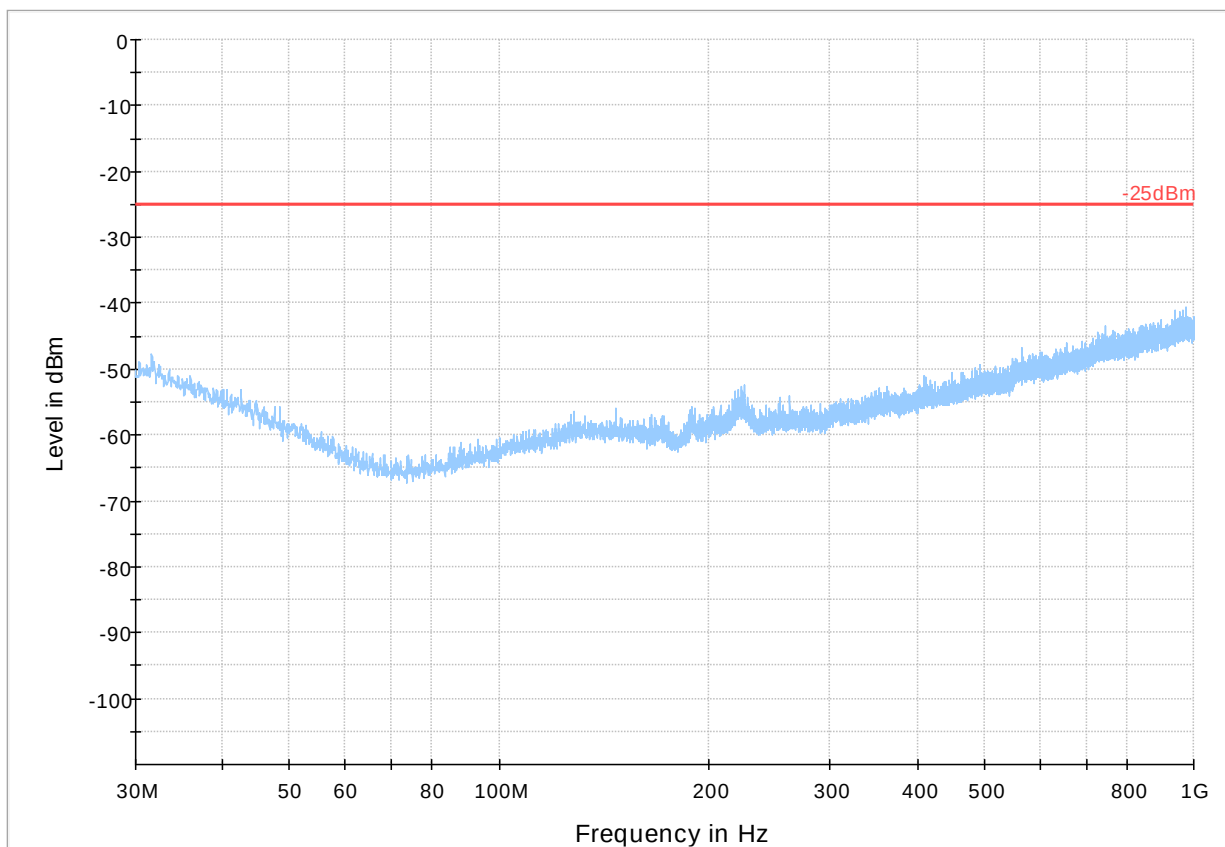
Channel: Mid



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

Plot # 71 Radiated Emissions: 30 MHz – 1GHz

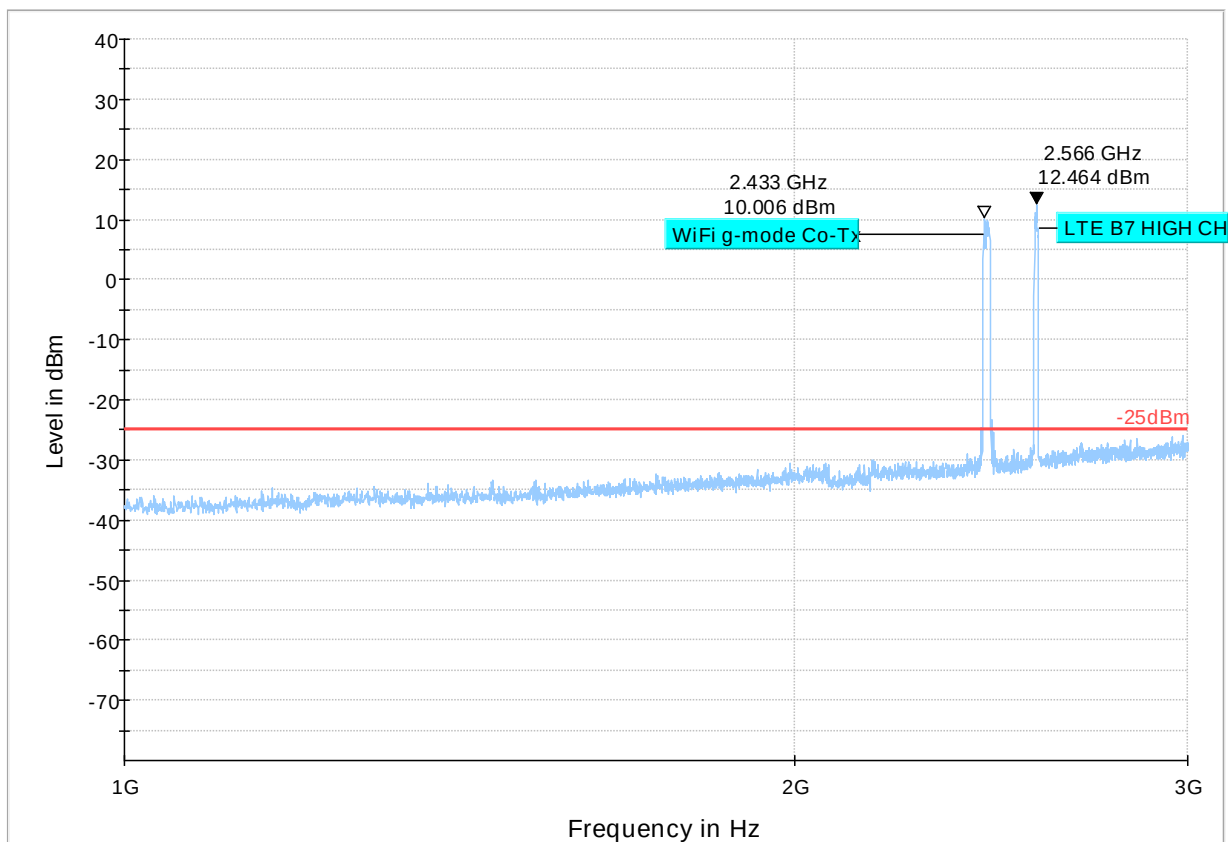
Channel: High



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

Plot # 72 Radiated Emissions: 1 GHz - 3 GHz

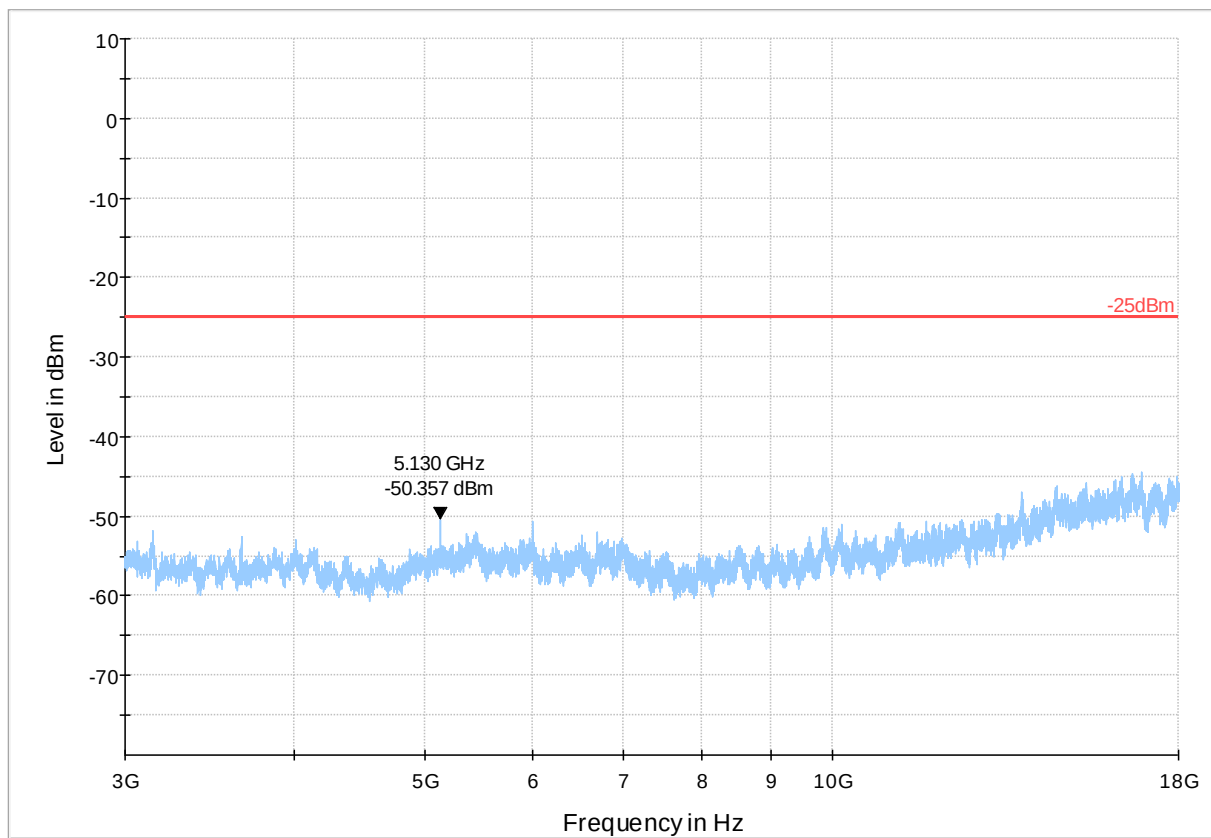
Channel: High



Preview Result 1-PK+ * Critical_Freqs PK+ ◆ Final_Result RMS -25dBm

Plot # 73 Radiated Emissions: 3 GHz – 18 GHz

Channel: High

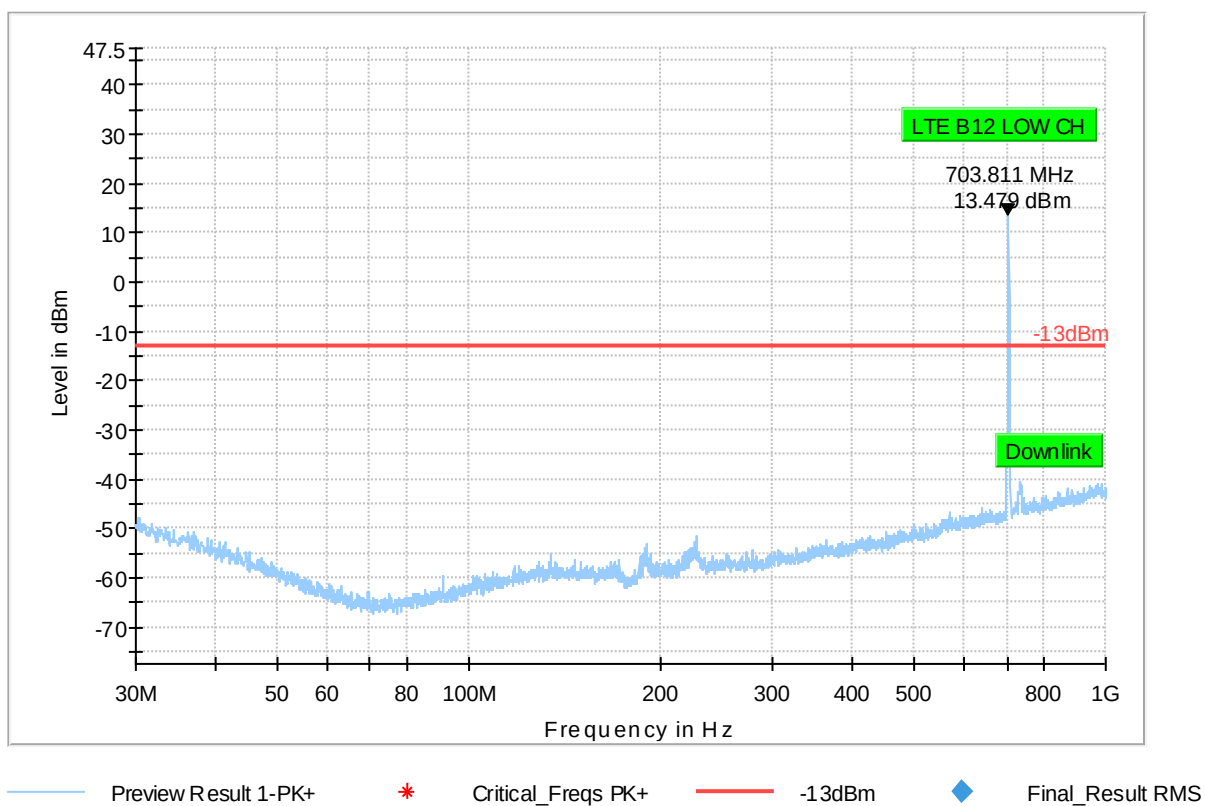


Preview Result 1-PK+ * Critical_Freqs PK+ -25dBm Final_Result RMS

LTE 12

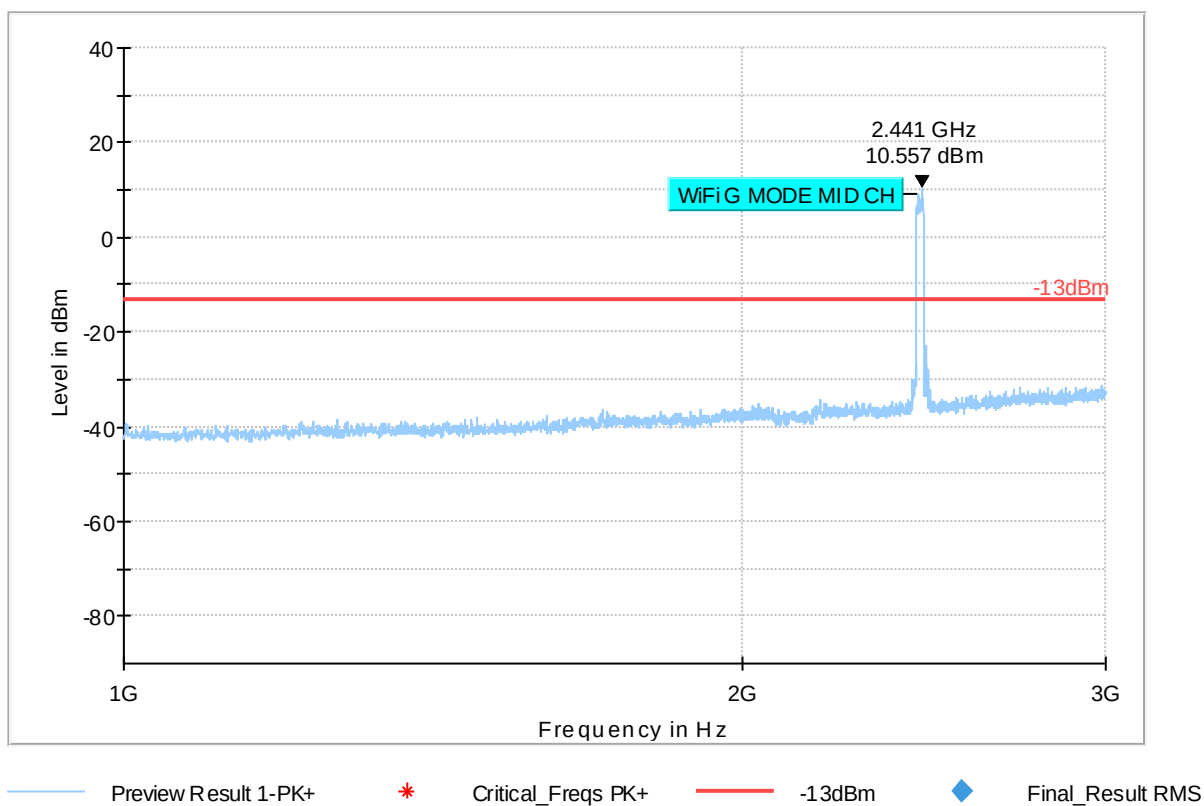
Plot # 74 Radiated Emissions: 30 MHz – 1GHz

Channel: Low



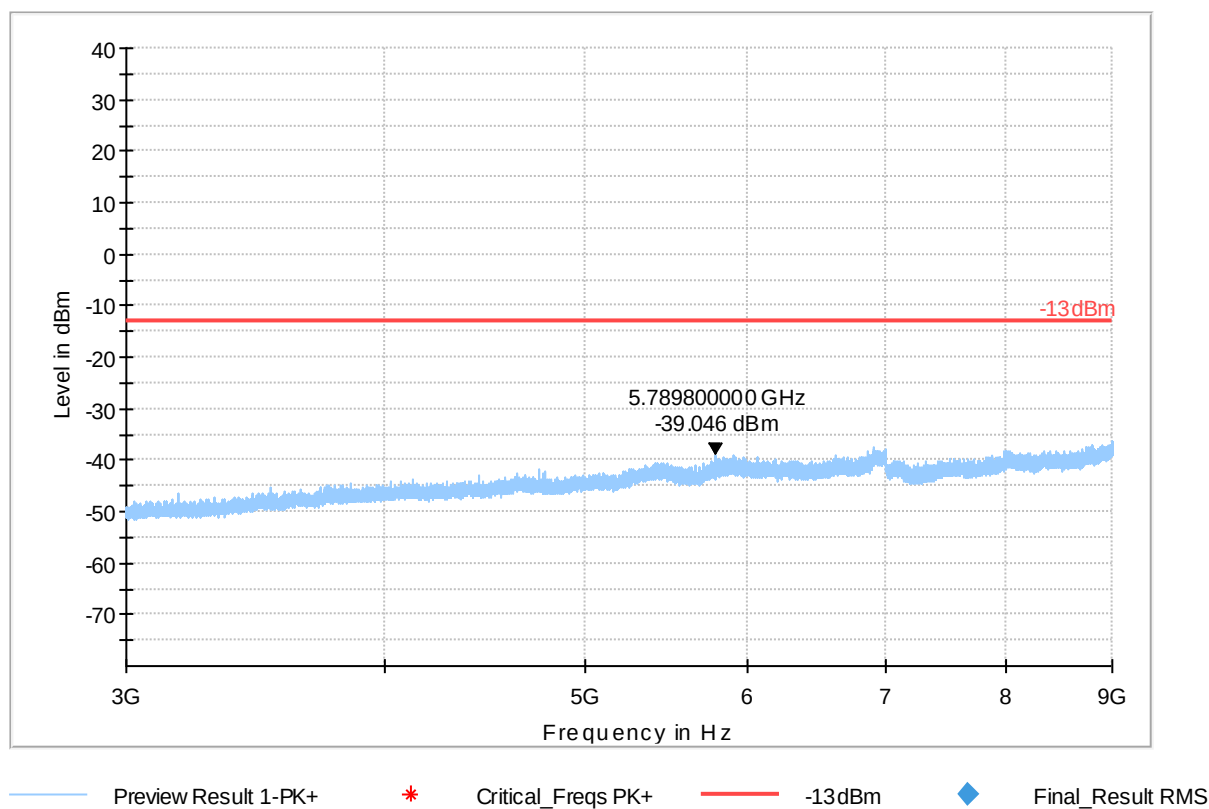
Plot # 75 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low



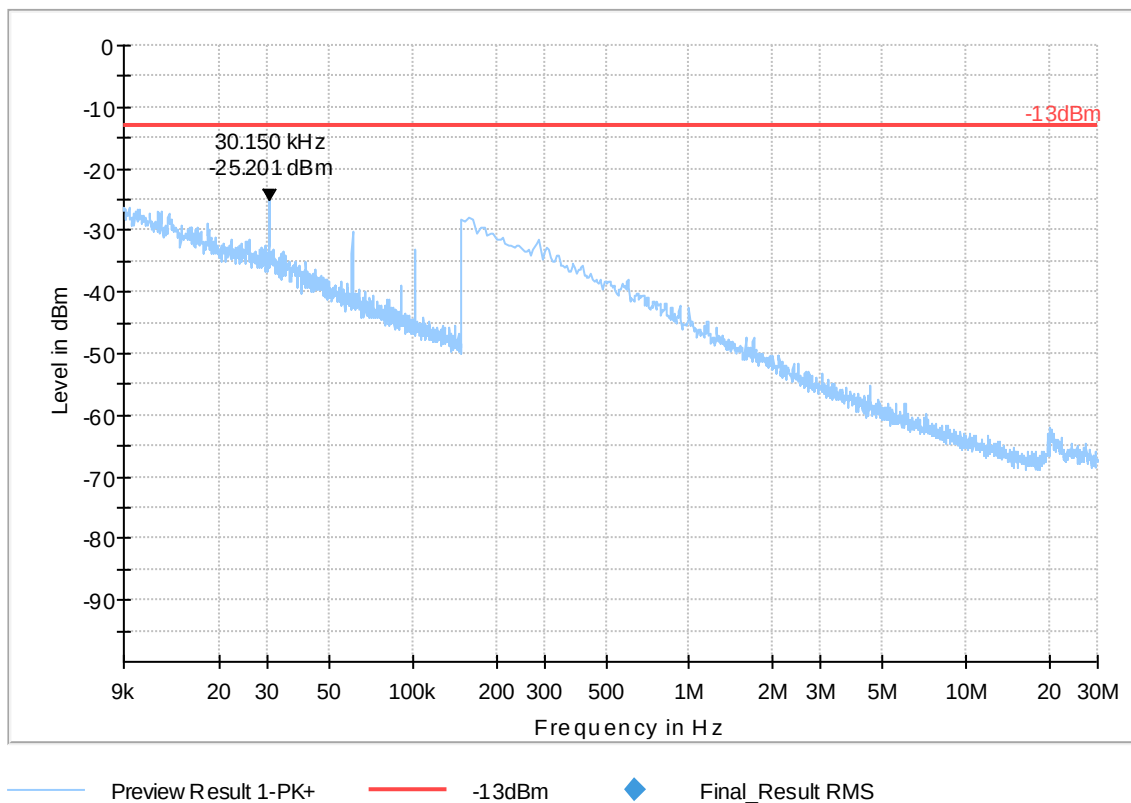
Plot # 76 Radiated Emissions: 3 GHz – 9 GHz

Channel: Low



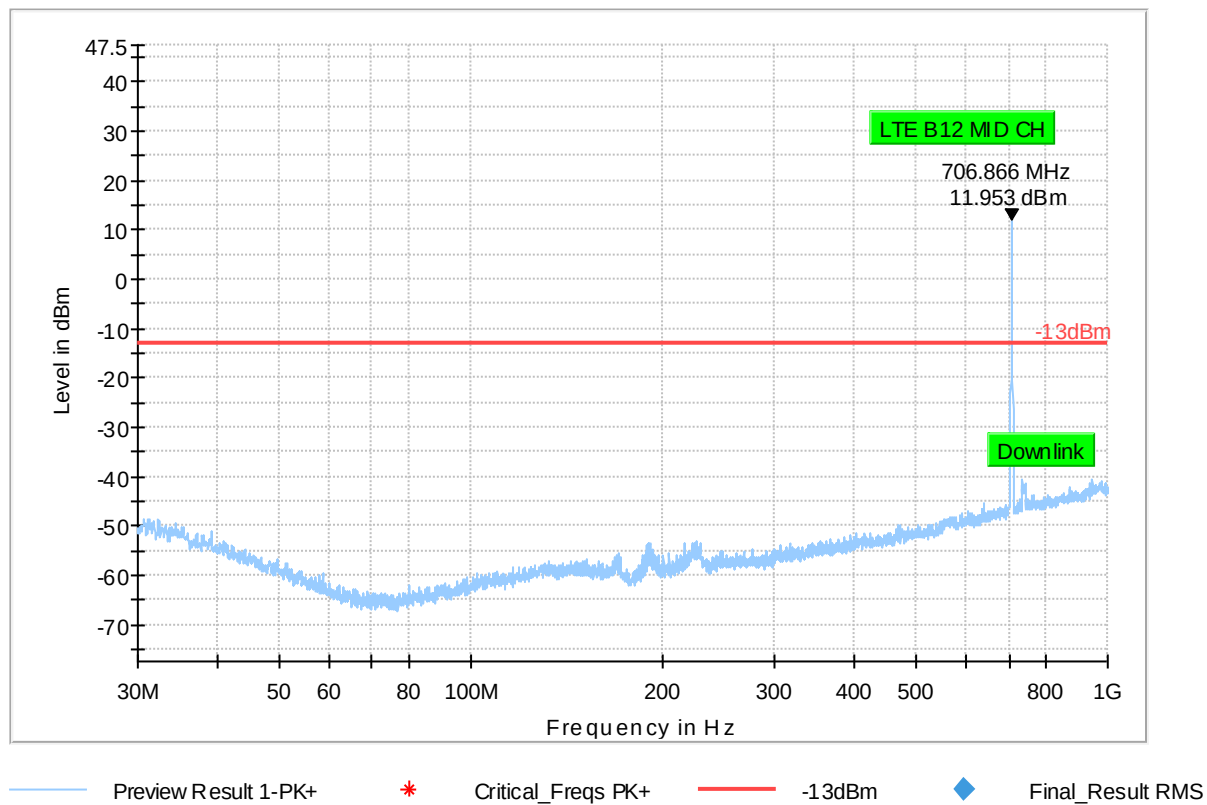
Plot # 77 Radiated Emissions: 9 kHz - 30 MHz

Channel: Mid



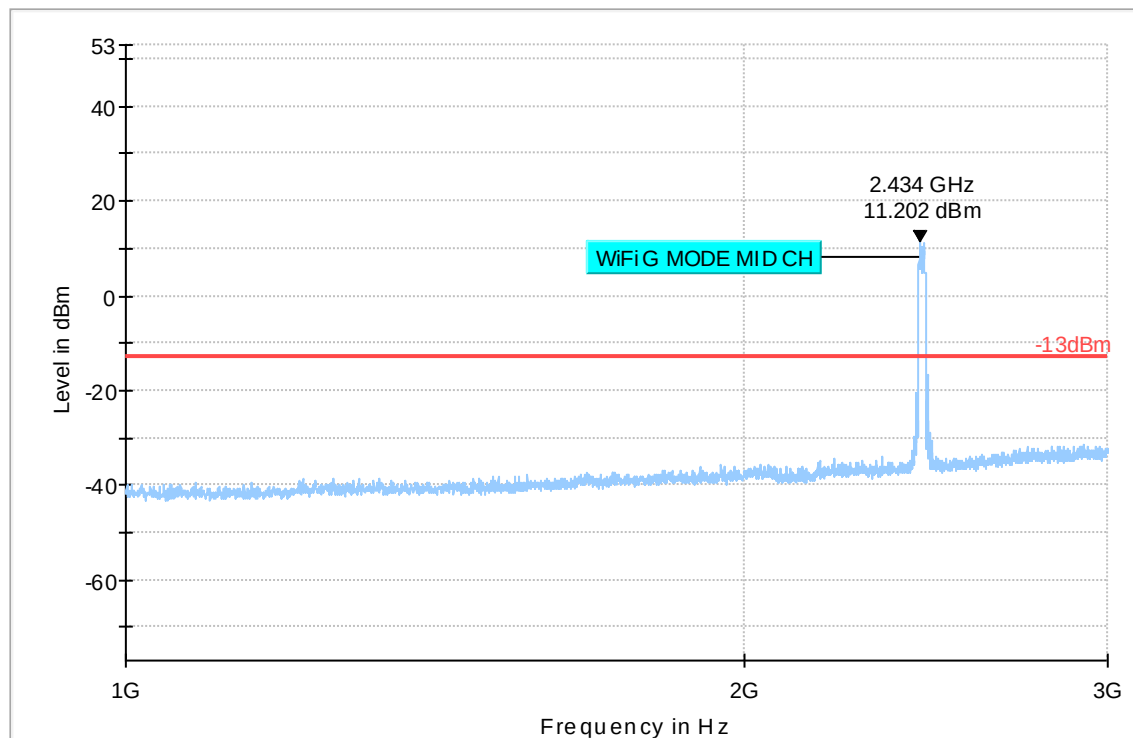
Plot # 78 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid



Plot # 79 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid



Preview Result 1-PK+



Critical_Freqs PK+

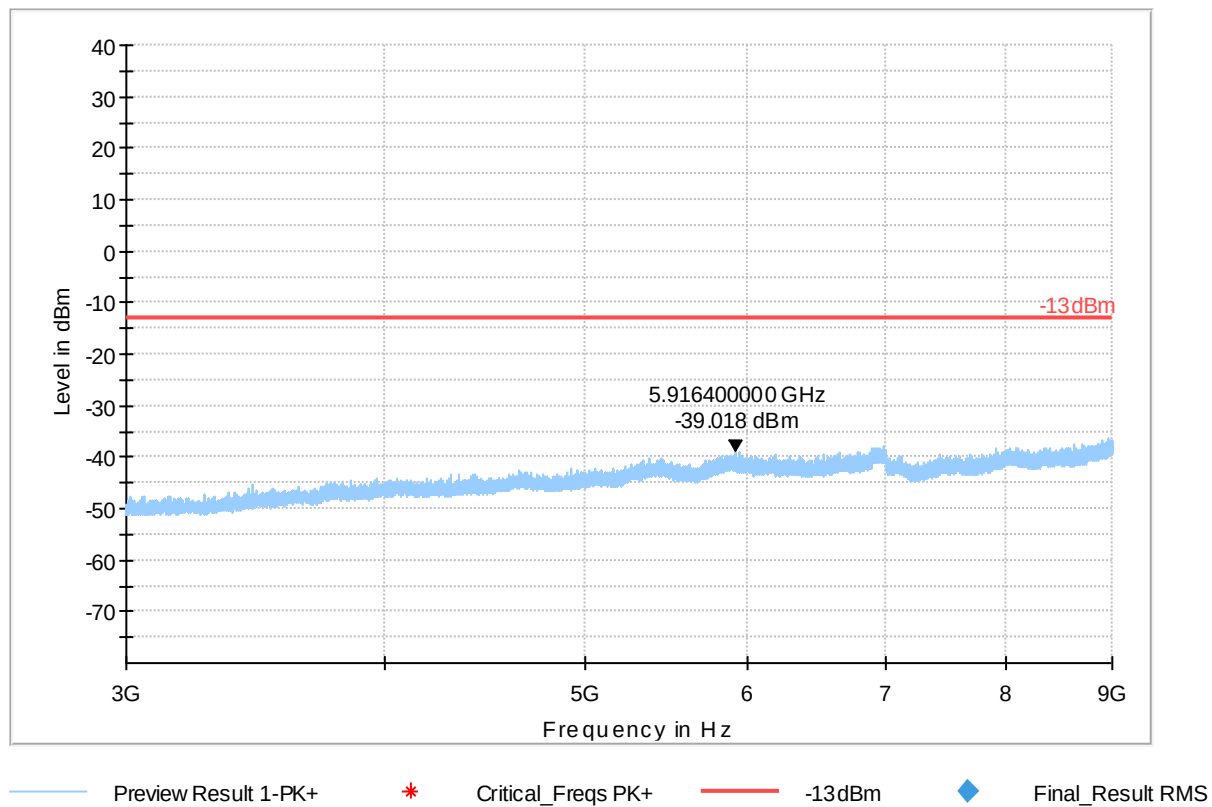
-13dBm



Final_Result RMS

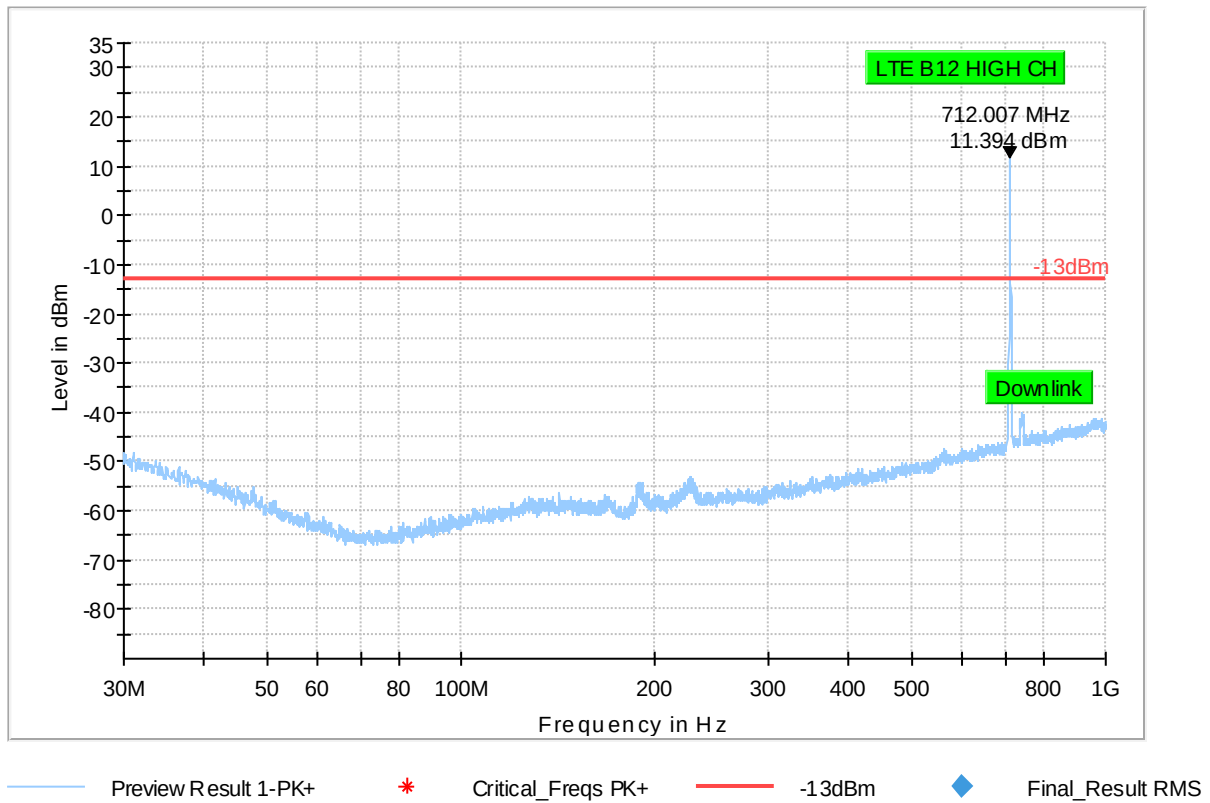
Plot # 80 Radiated Emissions: 3 GHz – 9 GHz

Channel: Mid



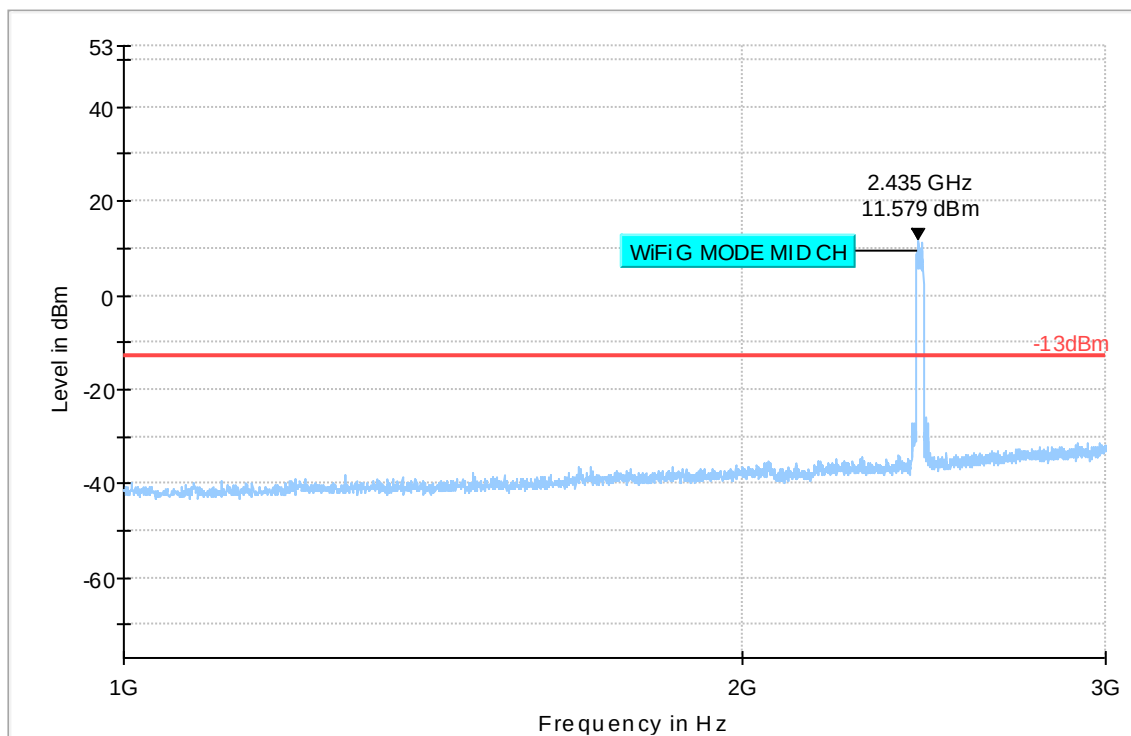
Plot # 81 Radiated Emissions: 30 MHz – 1GHz

Channel: High



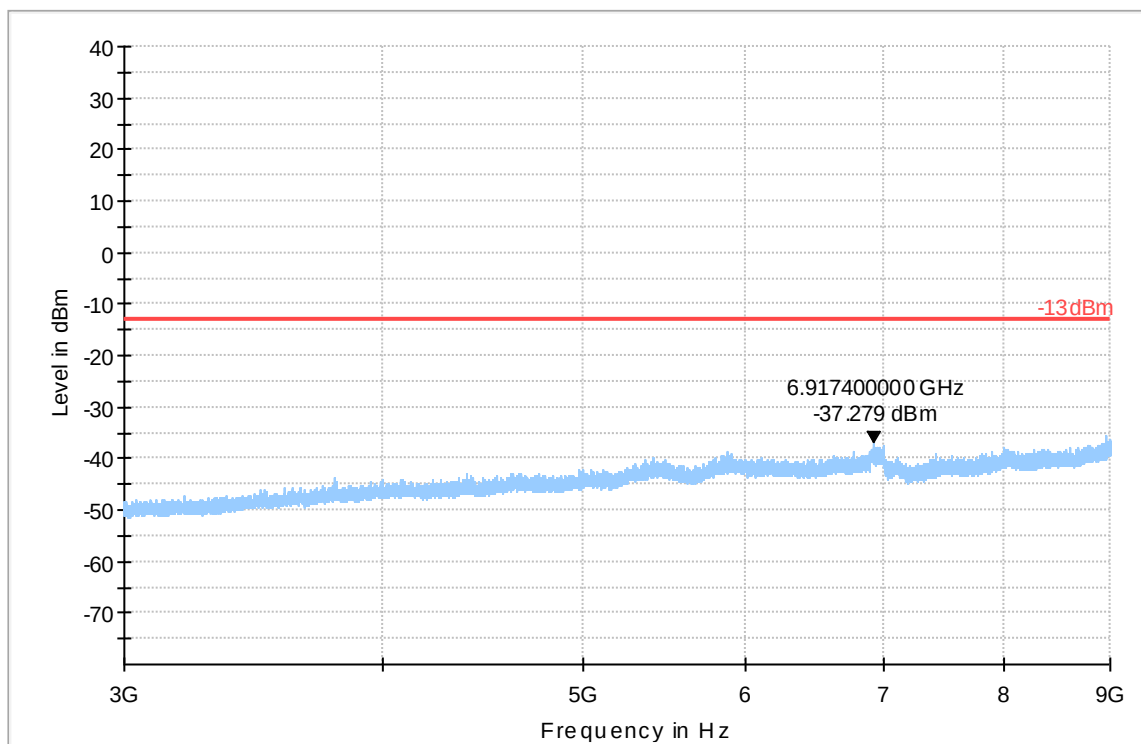
Plot # 82 Radiated Emissions: 1 GHz - 3 GHz

Channel: High



Plot # 83 Radiated Emissions: 3 GHz – 9 GHz

Channel: High

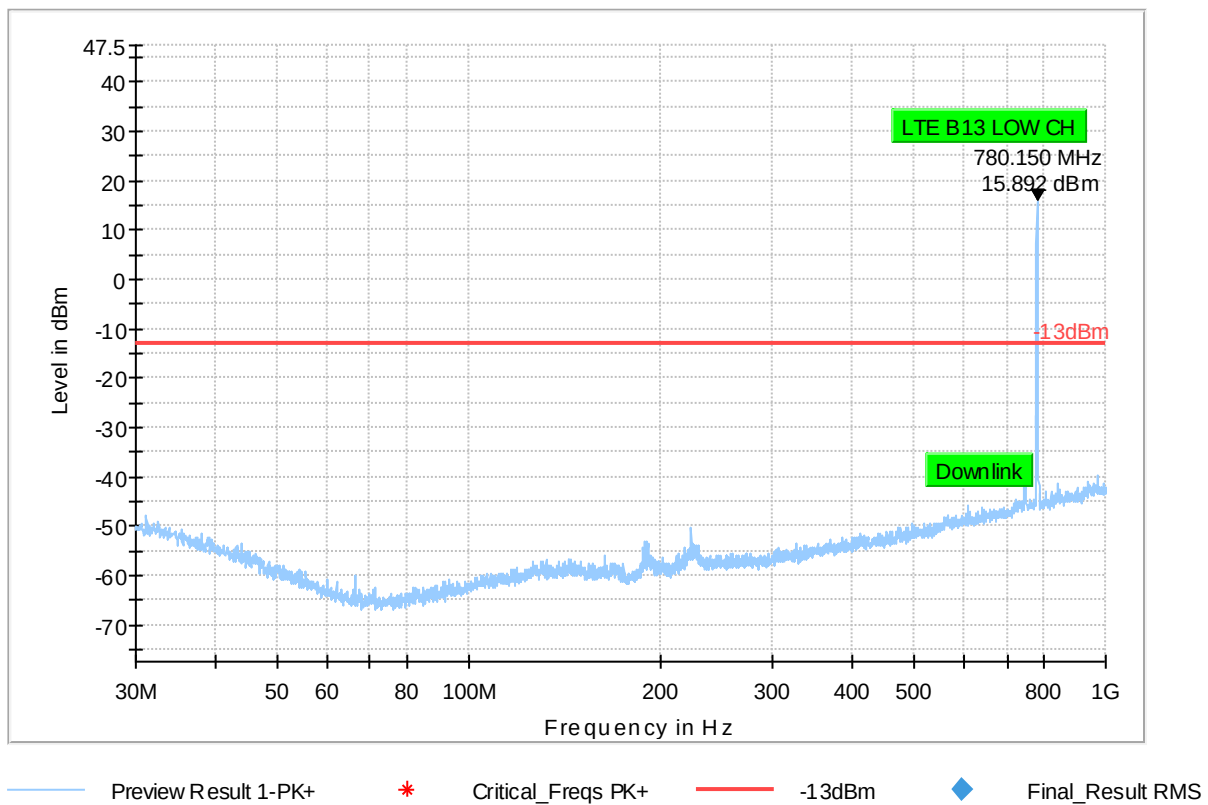


Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

LTE 13

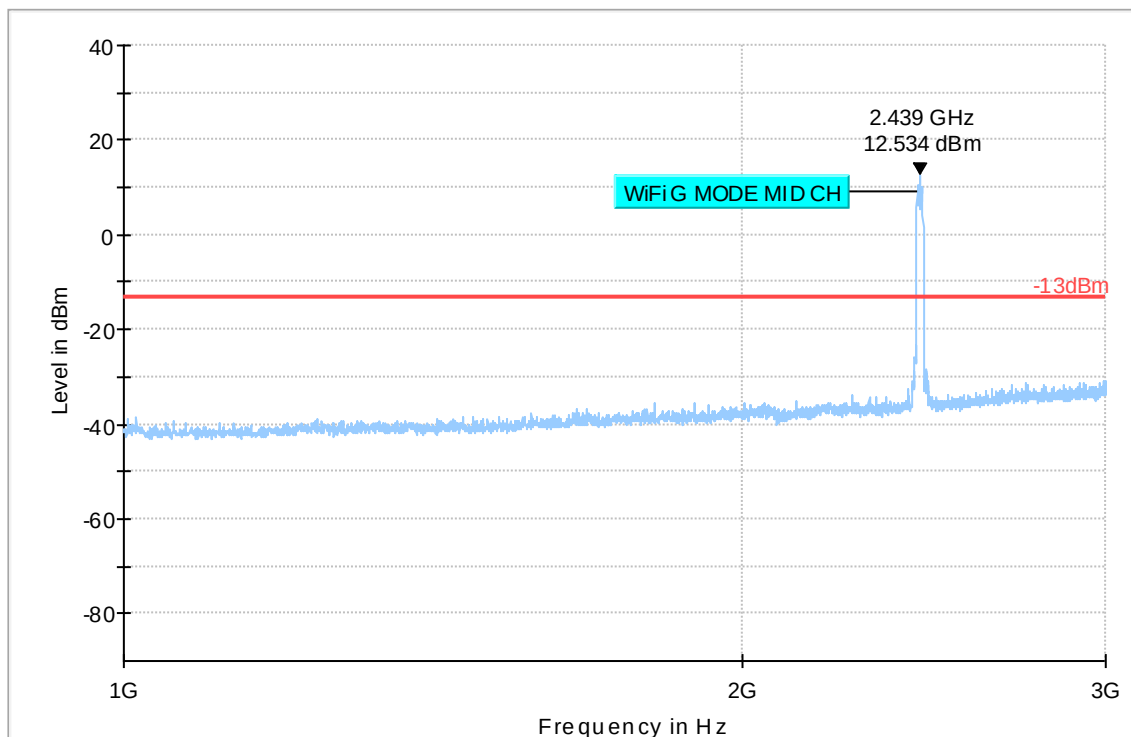
Plot # 84 Radiated Emissions: 30 MHz – 1GHz

Channel: Low



Plot # 85 Radiated Emissions: 1 GHz - 3 GHz

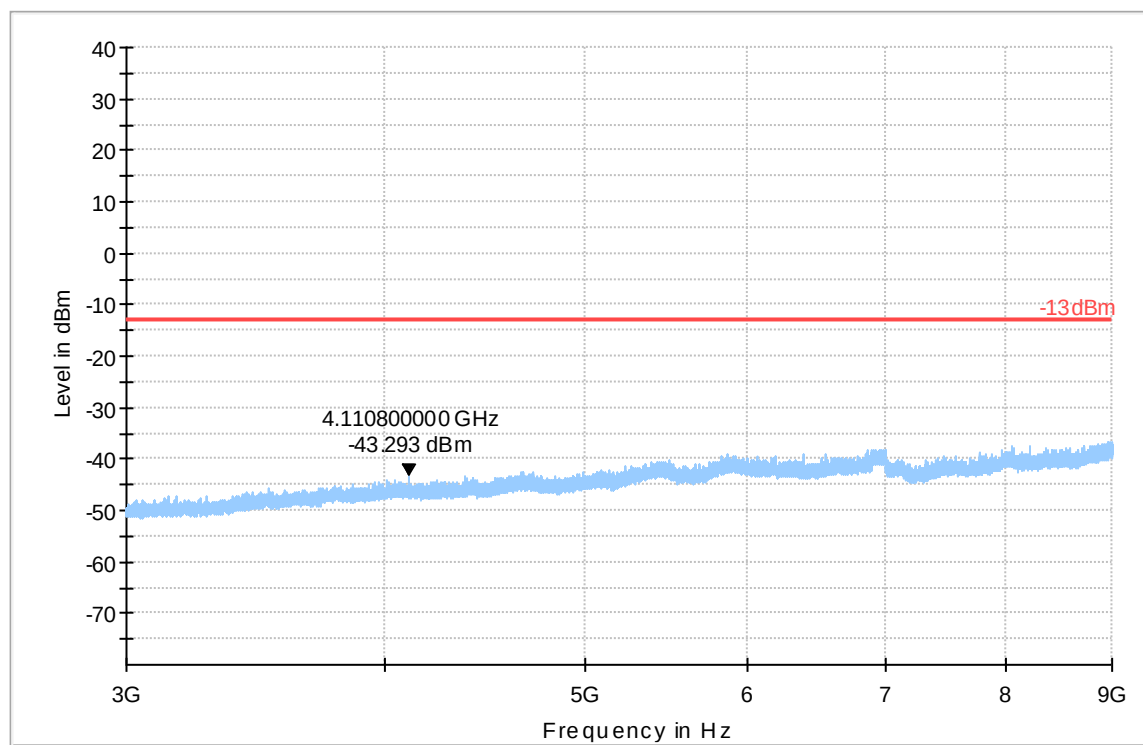
Channel: Low



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

Plot # 86 Radiated Emissions: 3 GHz – 9 GHz

Channel: Low



Preview Result 1-PK+



Critical_Freqs PK+



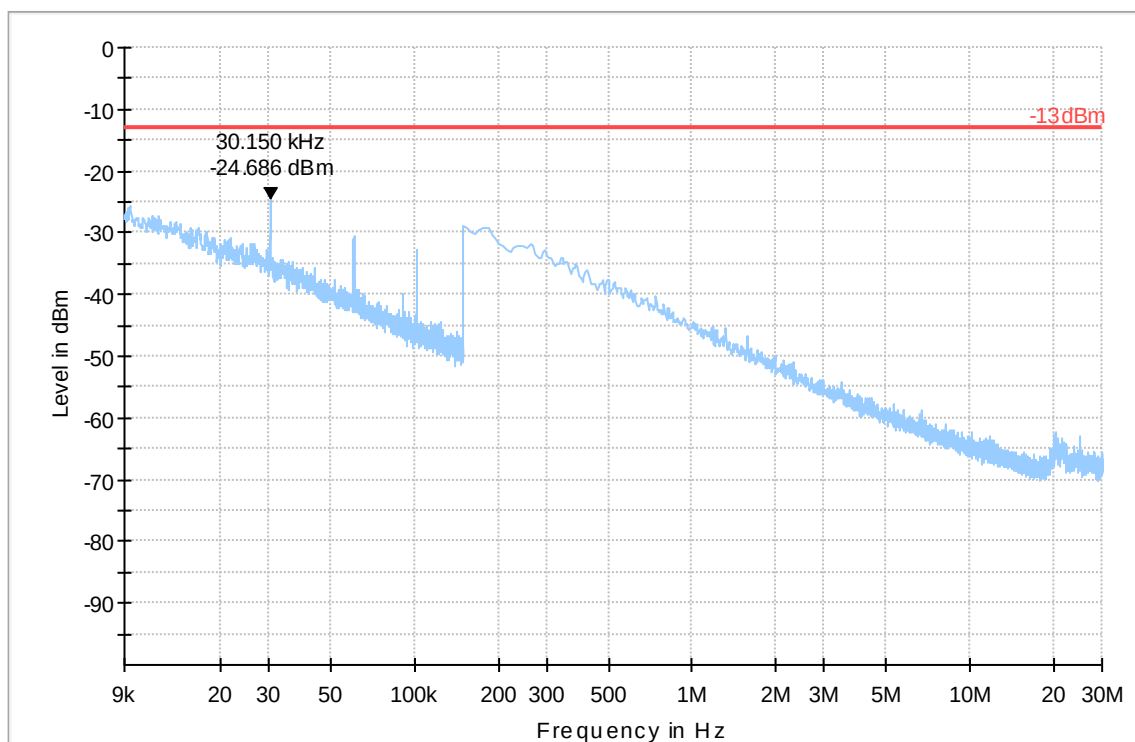
-13dBm



Final_Result RMS

Plot # 87 Radiated Emissions: 9 kHz - 30 MHz

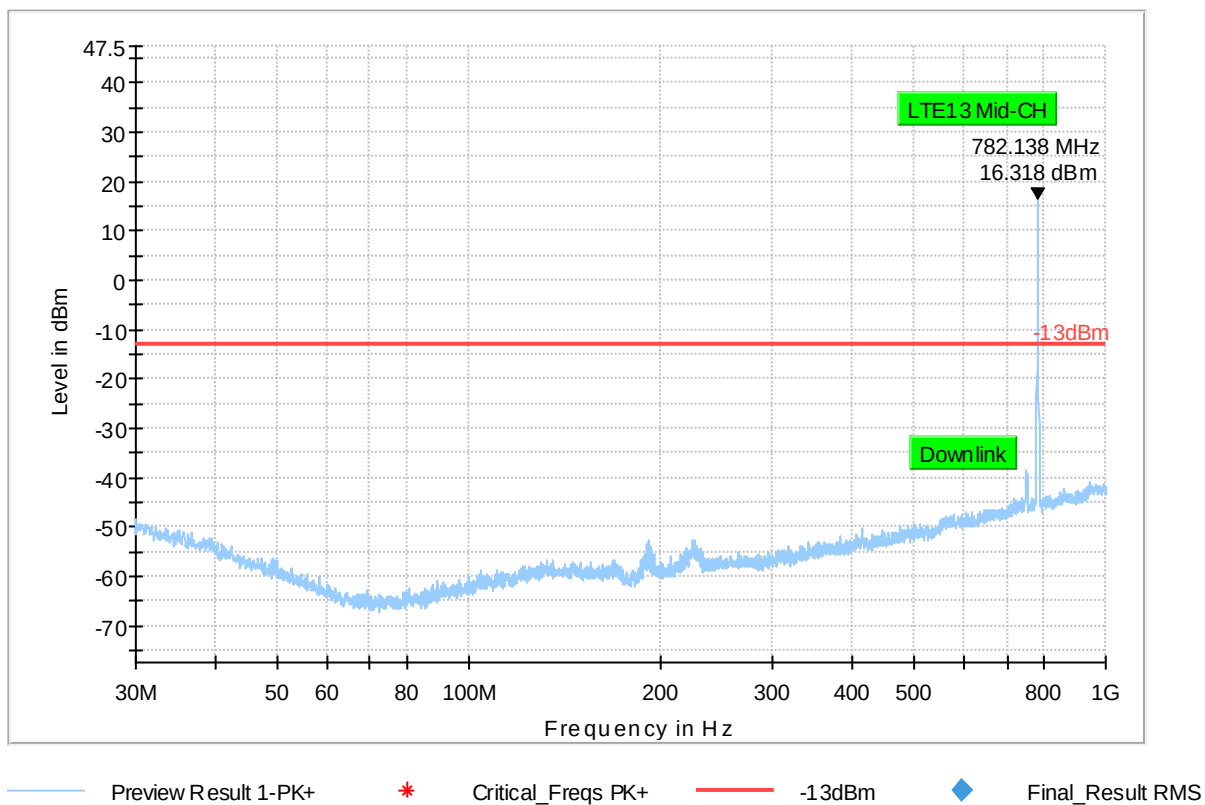
Channel: Mid



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

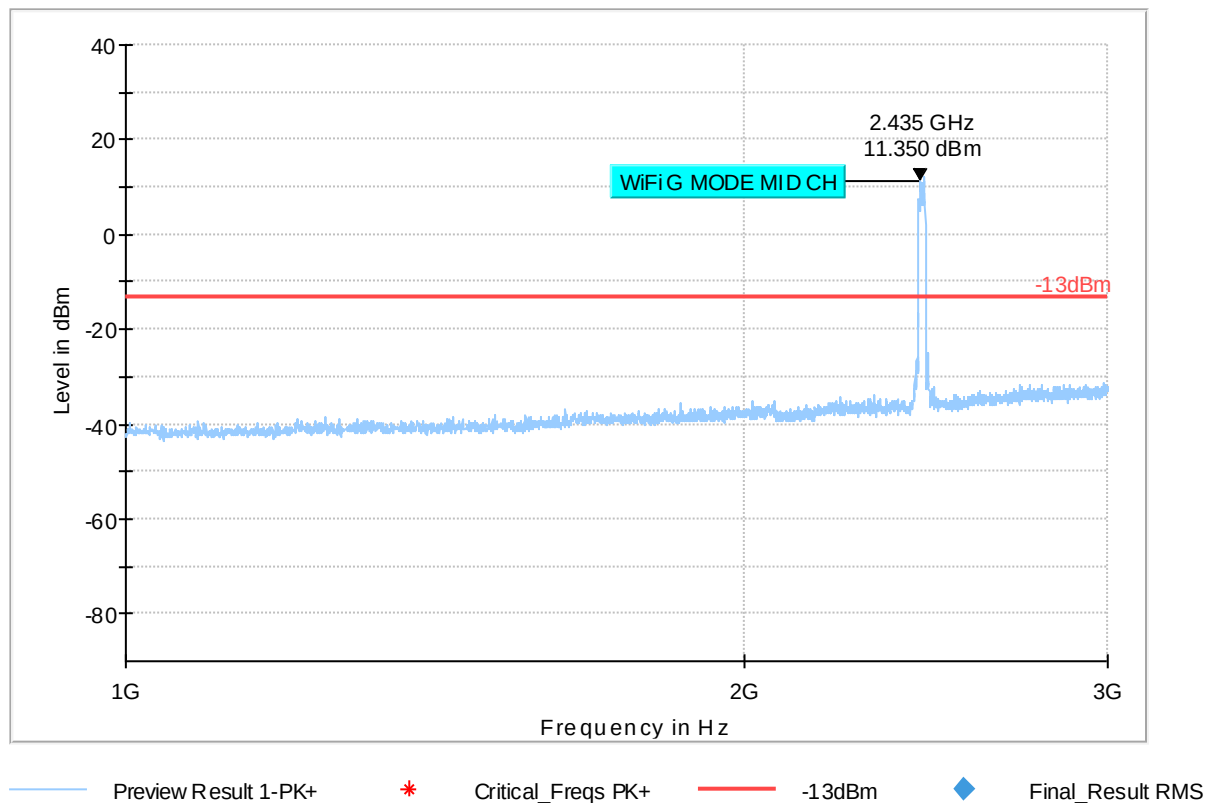
Plot # 88 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid



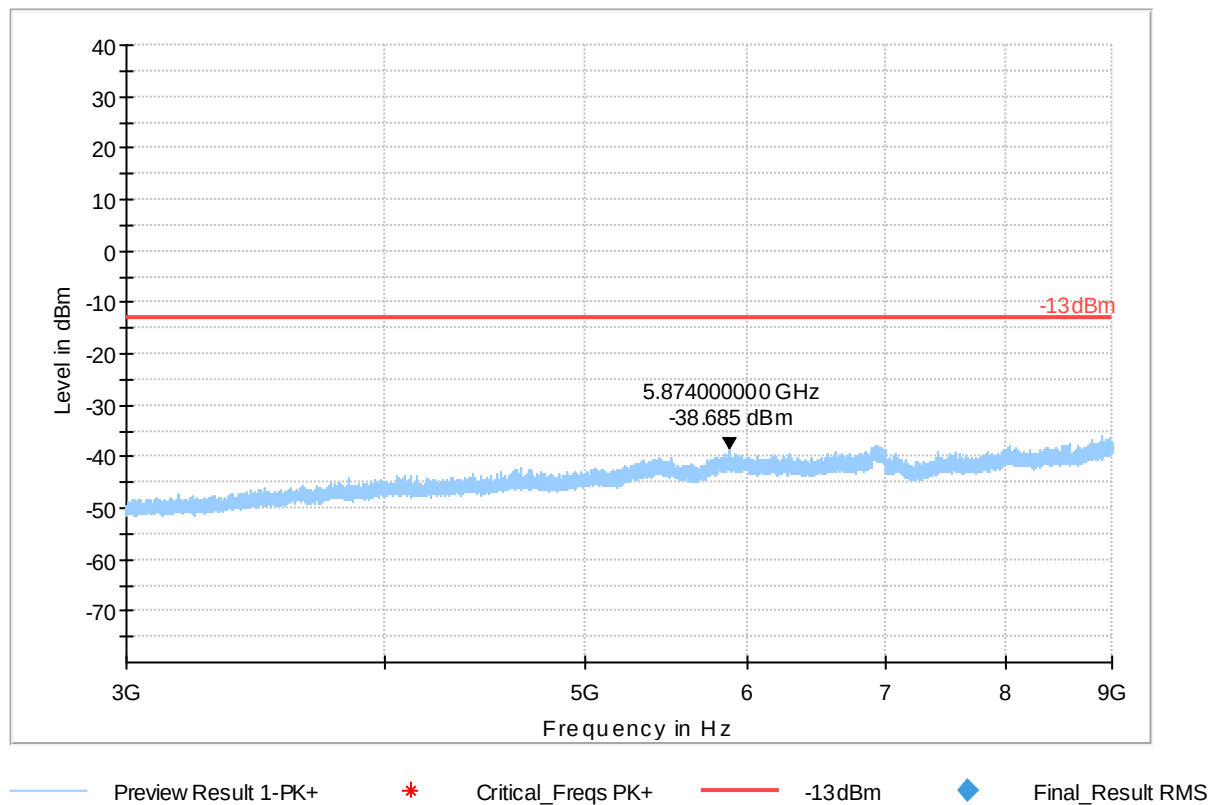
Plot # 89 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid



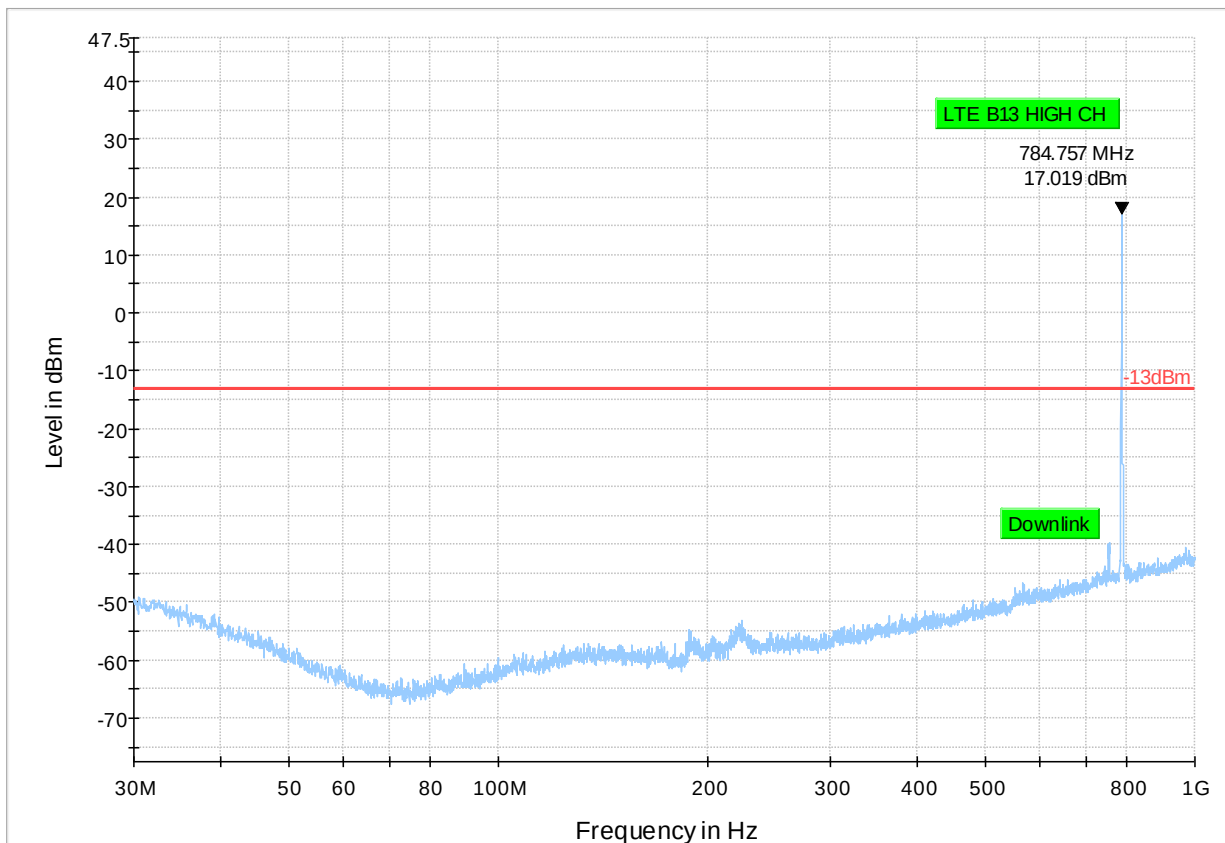
Plot # 90 Radiated Emissions: 3 GHz – 9 GHz

Channel: Mid



Plot # 91 Radiated Emissions: 30 MHz – 1GHz

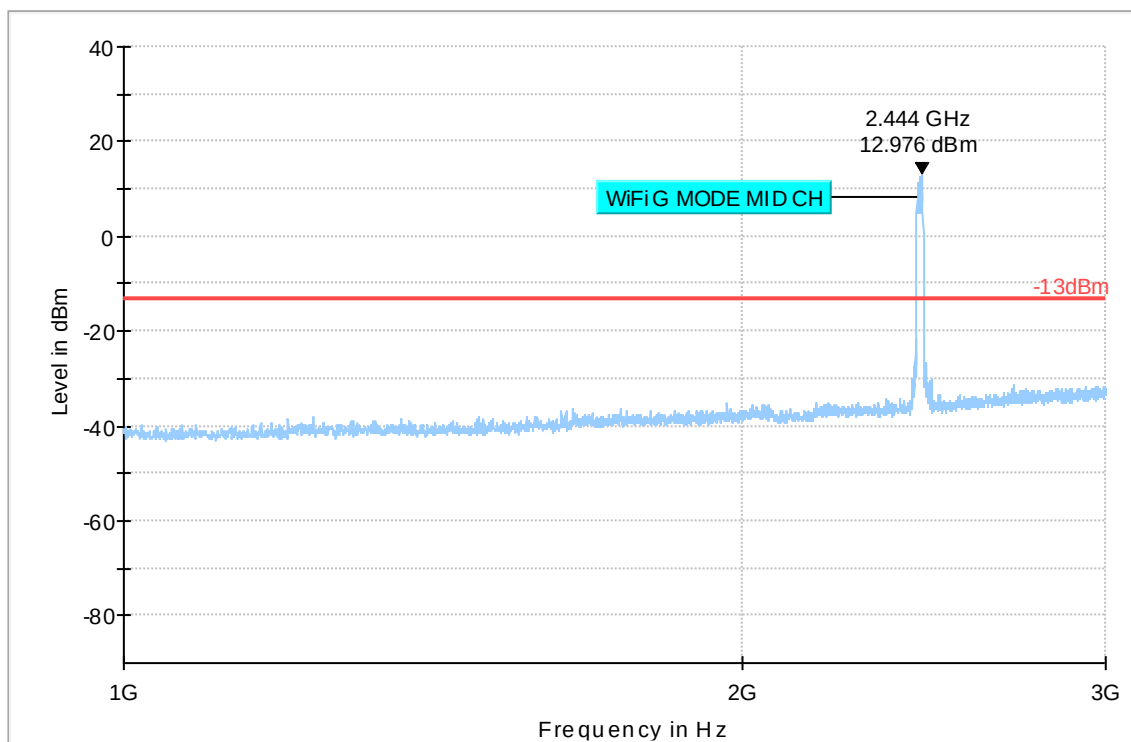
Channel: High



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

Plot # 92 Radiated Emissions: 1 GHz - 3 GHz

Channel: High



Preview Result 1-PK+



Critical_Freqs PK+

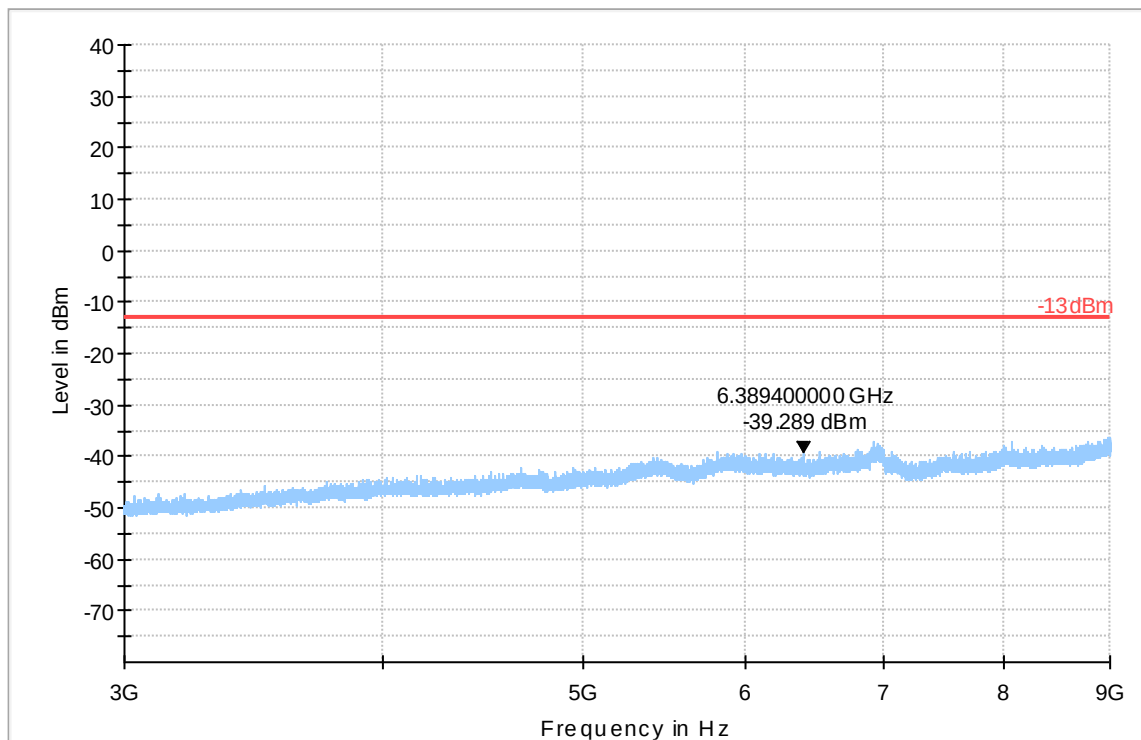
-13dBm



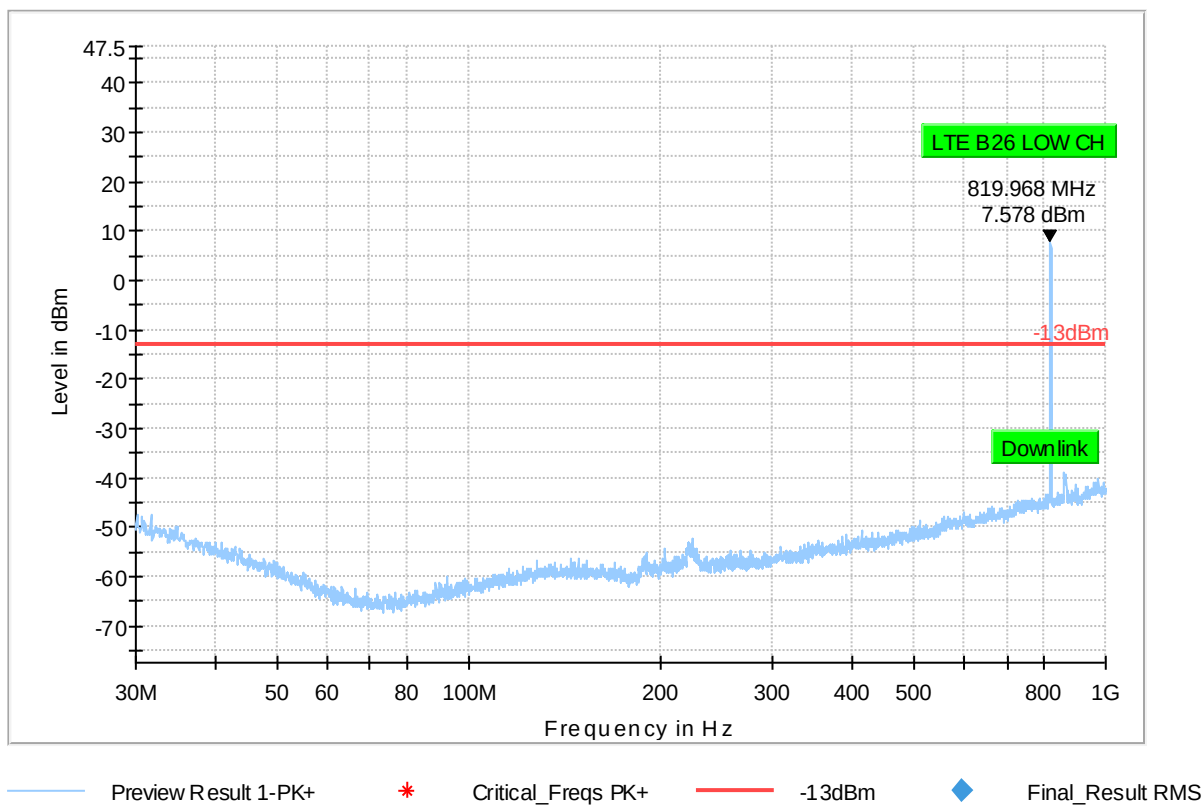
Final_Result RMS

Plot # 93 Radiated Emissions: 3 GHz – 9 GHz

Channel: High

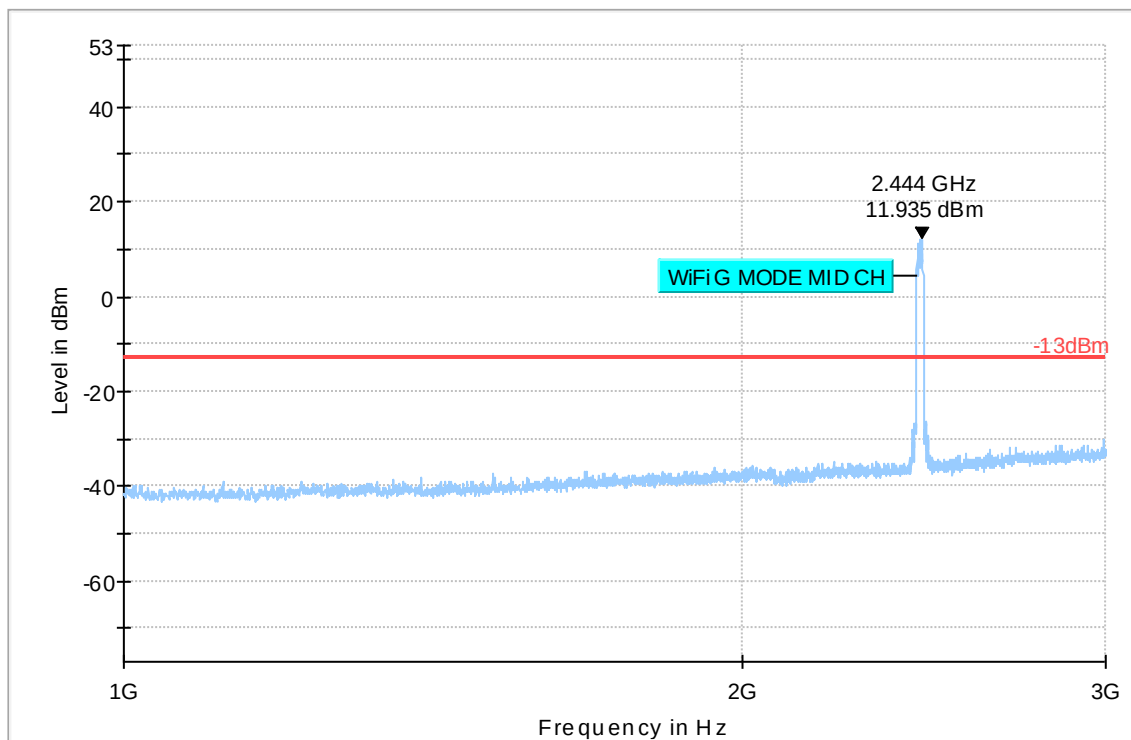


— Preview Result 1-PK+
 * Critical_Freqs PK+
 — -13dBm
 ◆ Final_Result RMS

LTE 26**Plot # 94 Radiated Emissions: 30 MHz – 1GHz****Channel: Low**

Plot # 95 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low



Preview Result 1-PK+



Critical_Freqs PK+

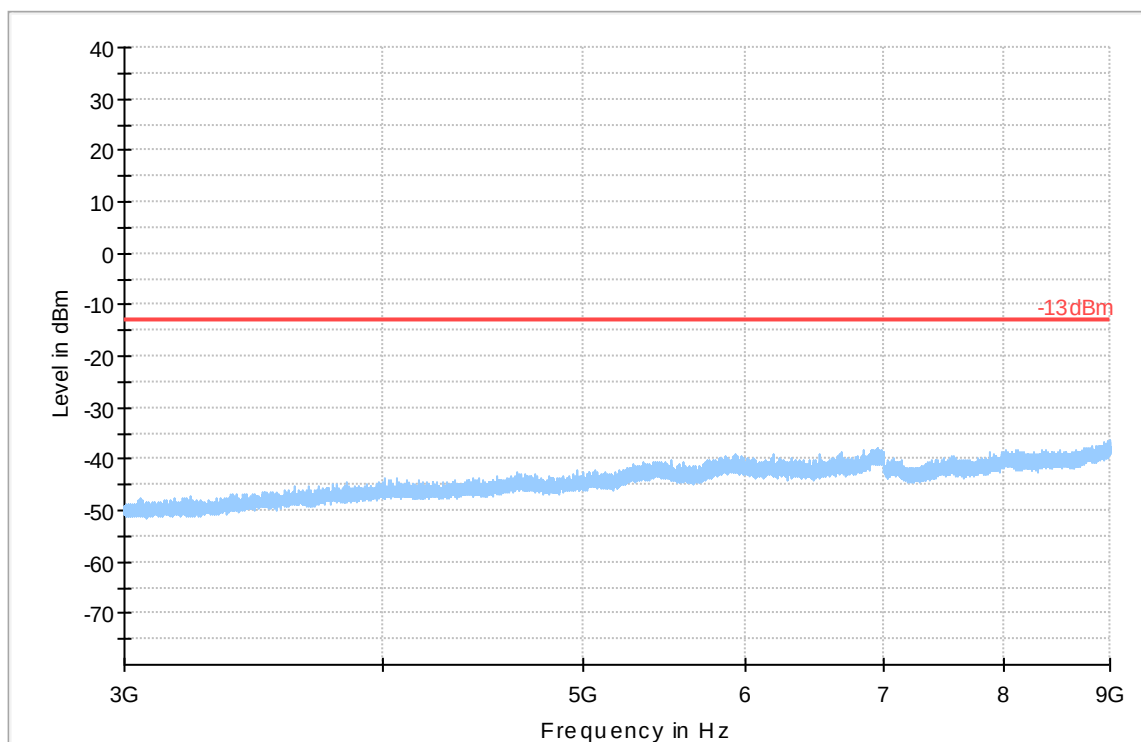
-13dBm



Final_Result RMS

Plot # 96 Radiated Emissions: 3 GHz – 9 GHz

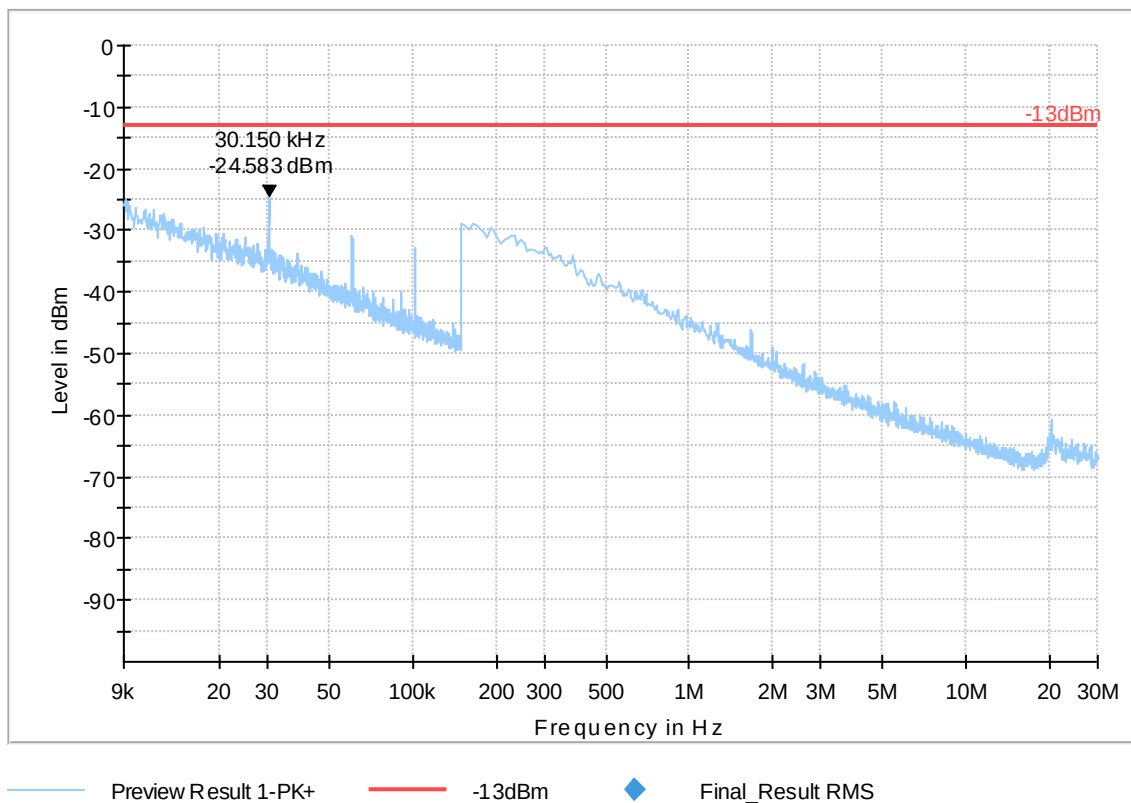
Channel: Low



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

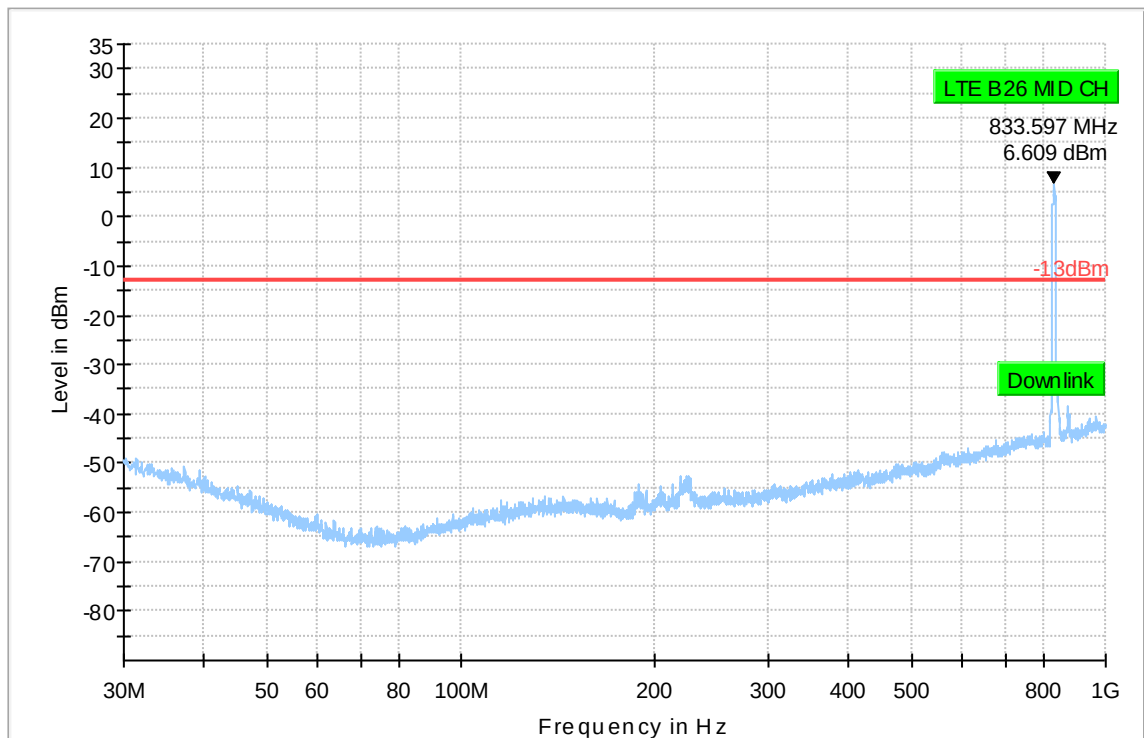
Plot # 97 Radiated Emissions: 9 kHz - 30 MHz

Channel: Mid



Plot # 98 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid



Preview Result 1-PK+



Critical_Freqs PK+

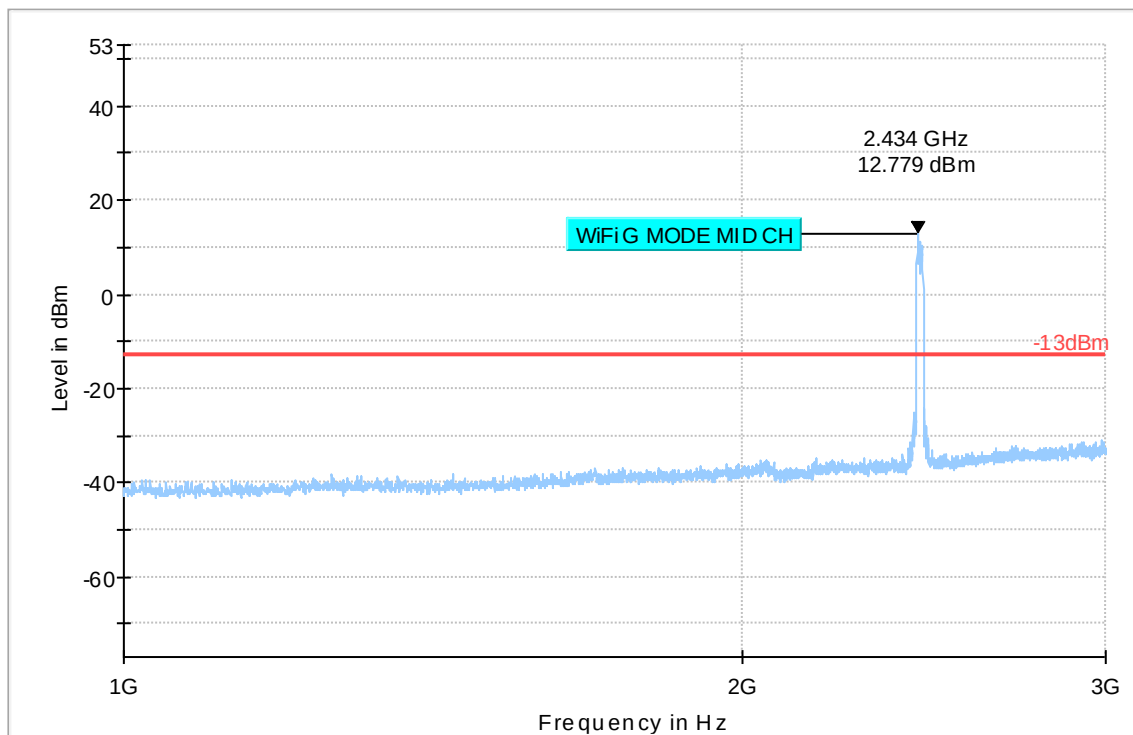
-13dBm



Final_Result RMS

Plot # 99 Radiated Emissions: 1 GHz - 3 GHz

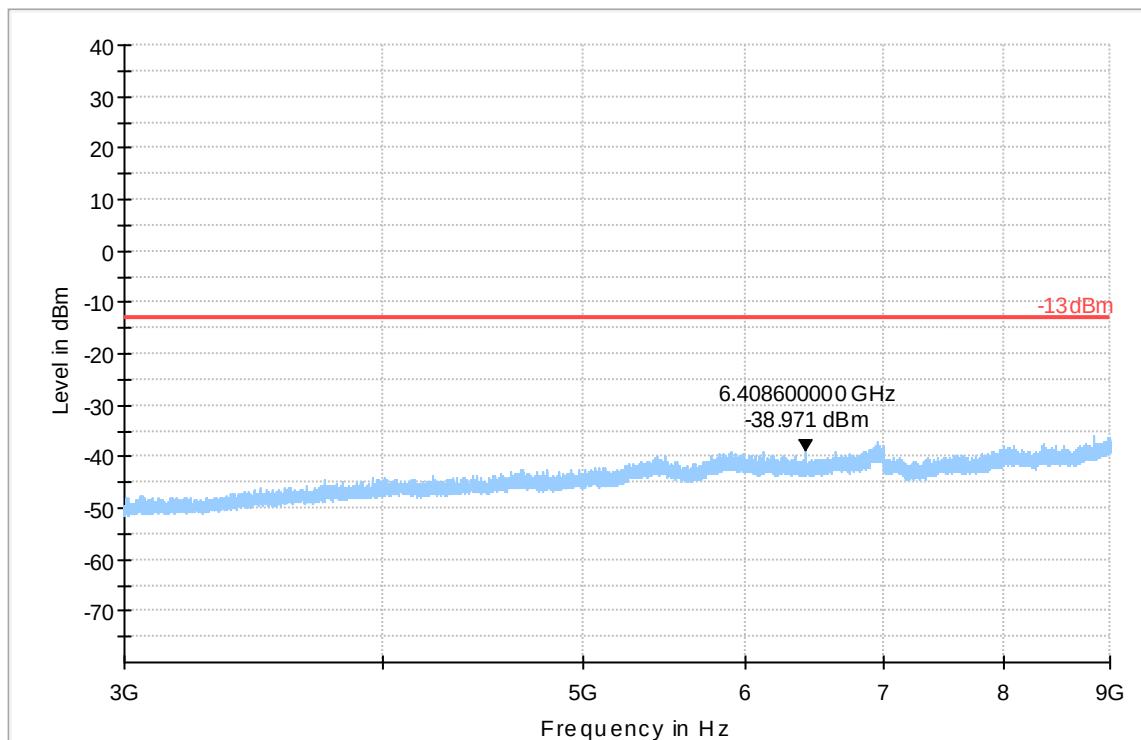
Channel: Mid



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

Plot # 100 Radiated Emissions: 3 GHz – 9 GHz

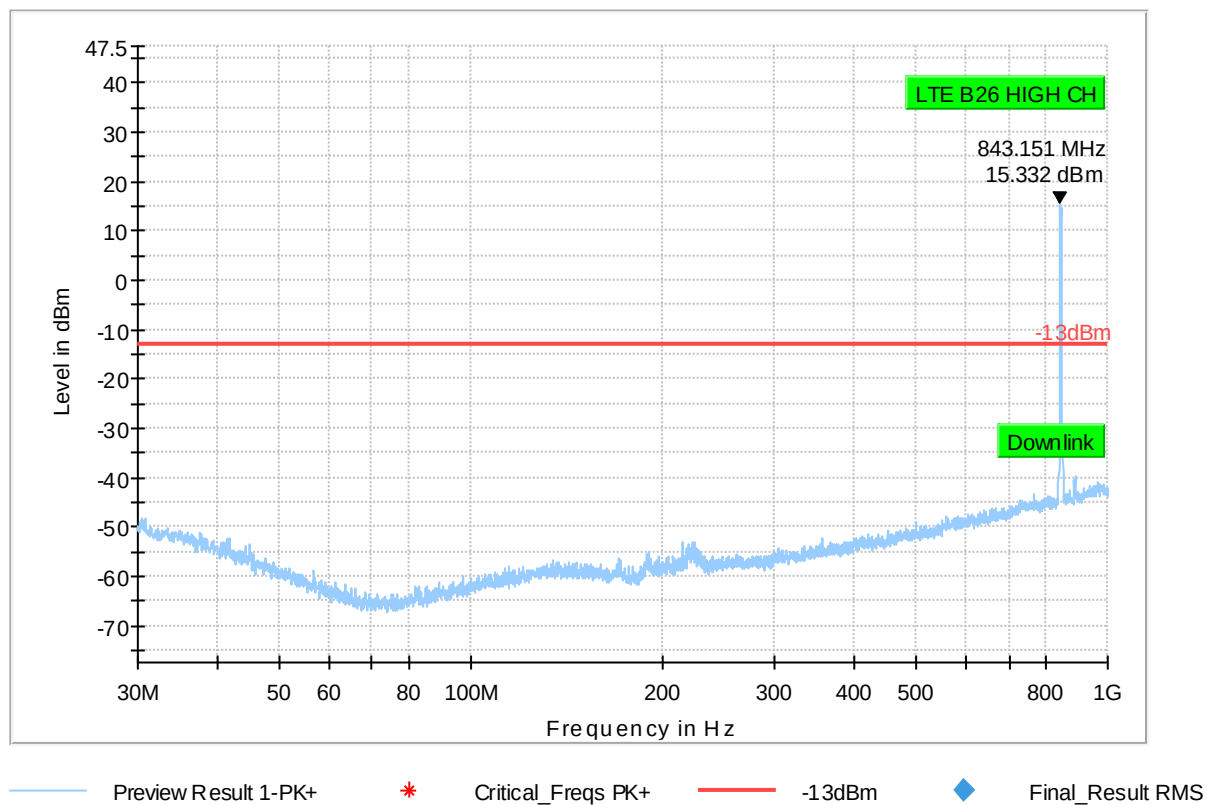
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

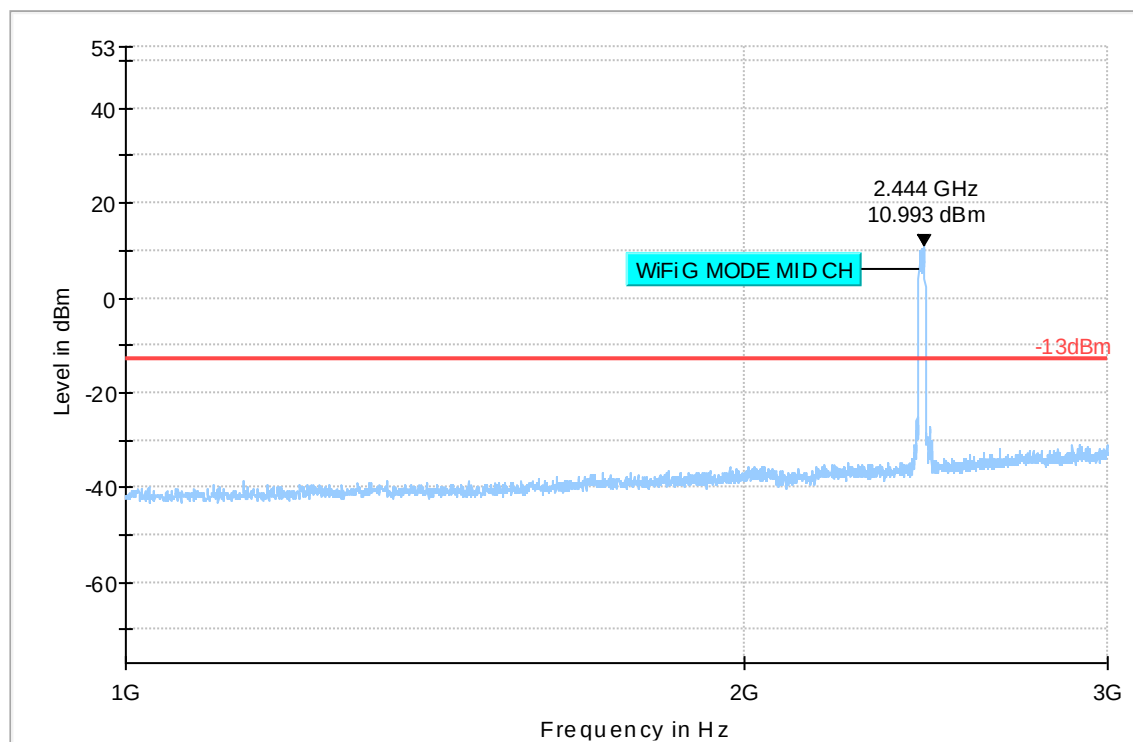
Plot # 101 Radiated Emissions: 30 MHz – 1GHz

Channel: High



Plot # 102 Radiated Emissions: 1 GHz - 3 GHz

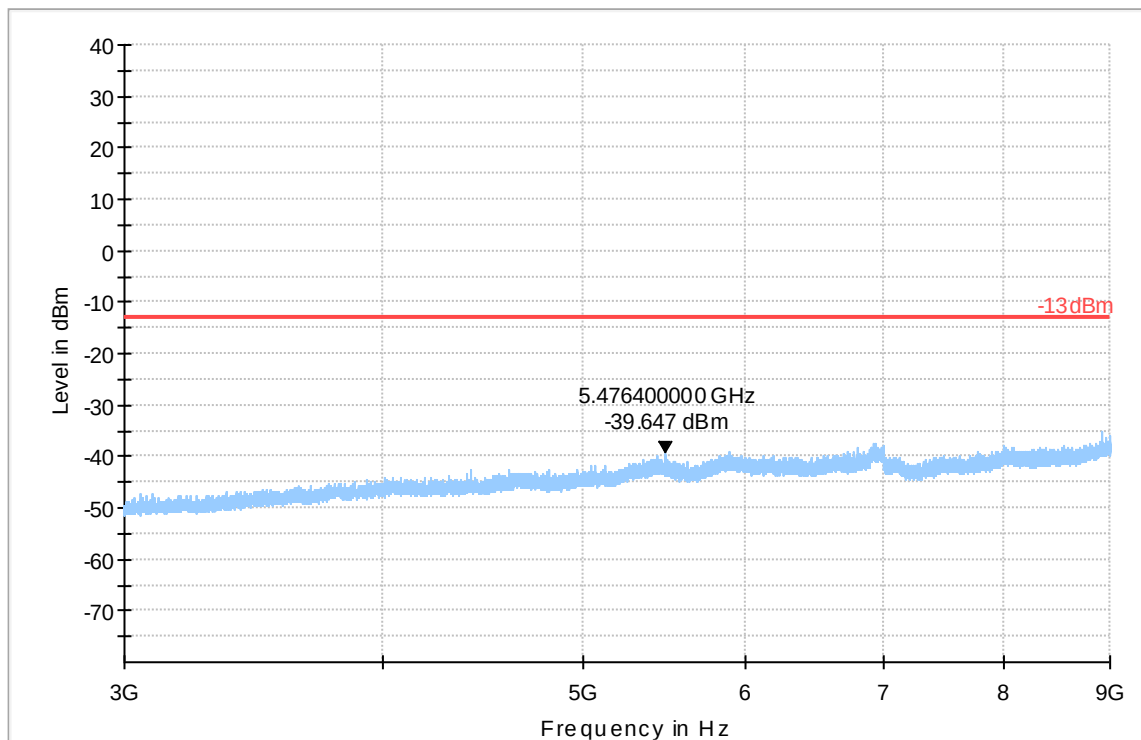
Channel: High



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

Plot # 103 Radiated Emissions: 3 GHz – 9 GHz

Channel: High

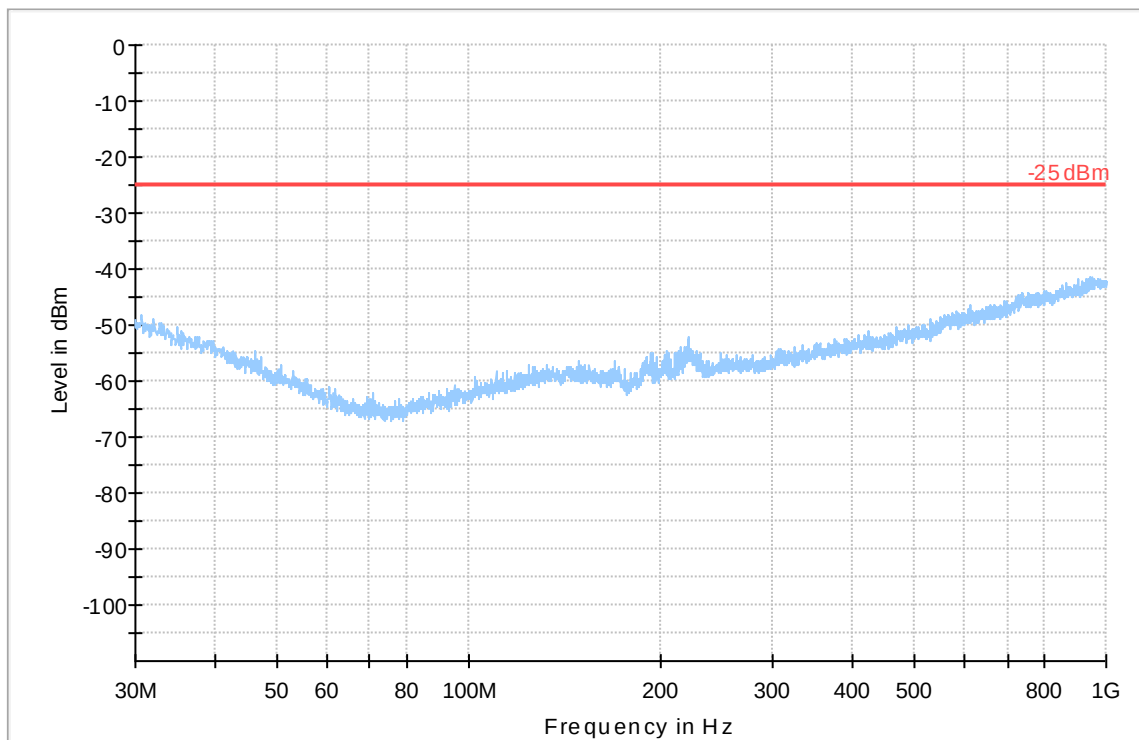


Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm Final_Result RMS

LTE 41

Plot # 104 Radiated Emissions: 30 MHz – 1GHz

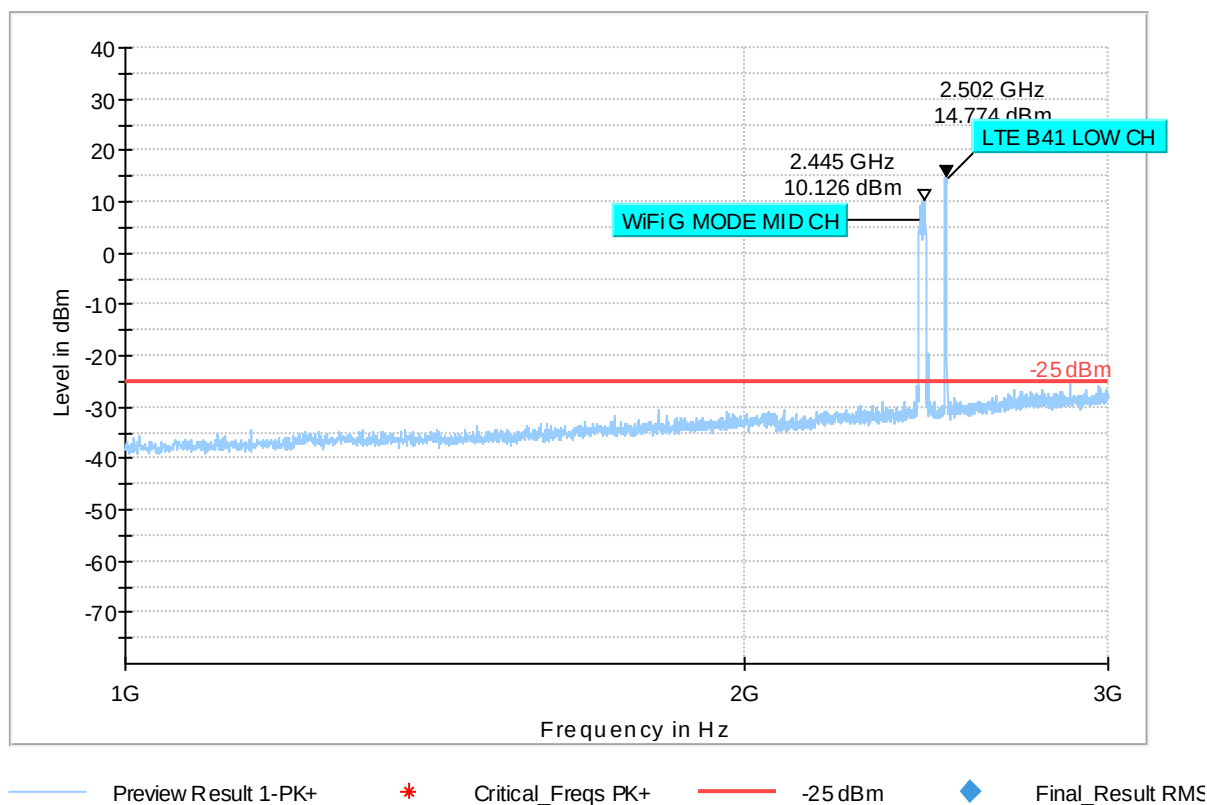
Channel: Low



Preview Result 1-PK+ * Critical_Freqs PK+ Final_Result RMS -25 dBm

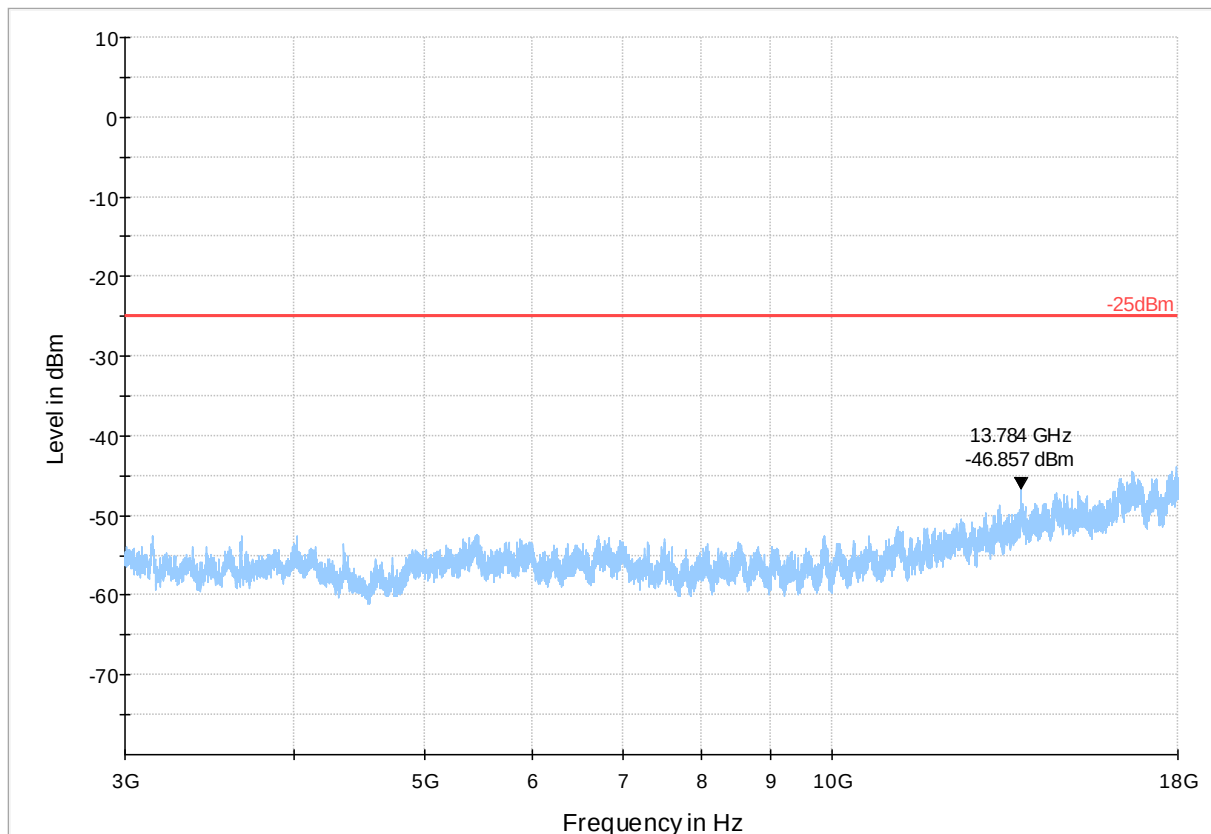
Plot # 105 Radiated Emissions: 1 GHz - 3 GHz

Channel: Low



Plot # 106 Radiated Emissions: 3 GHz – 18 GHz

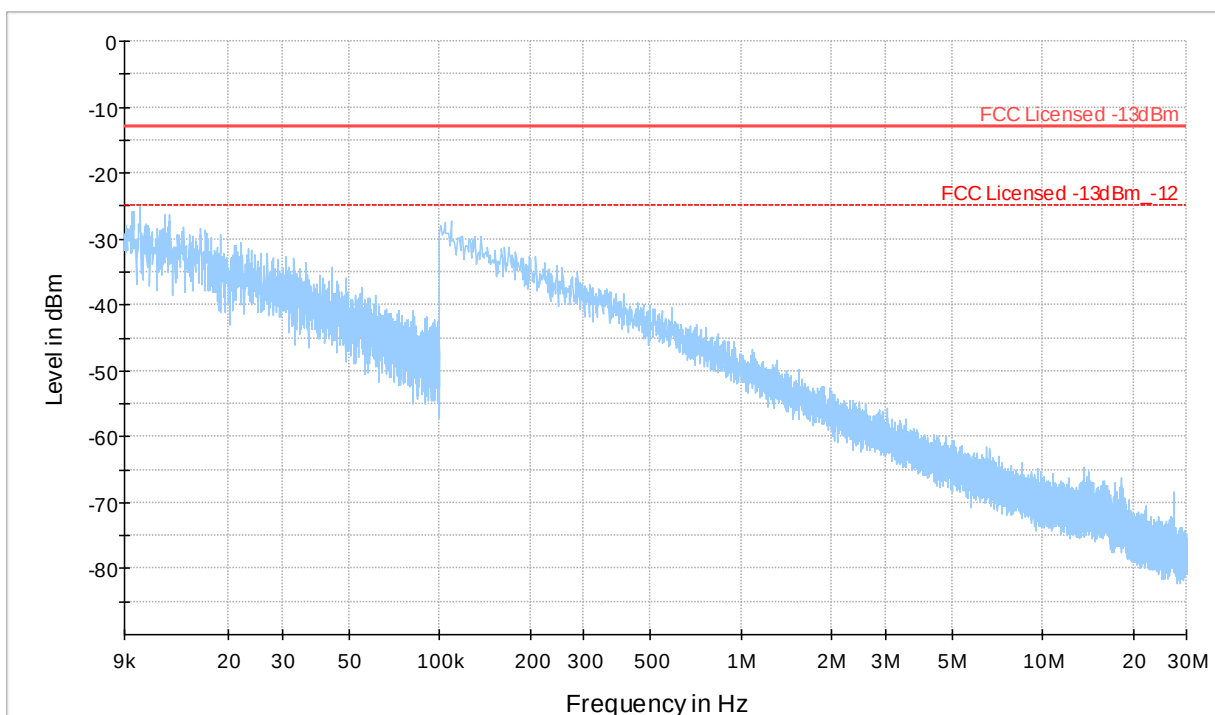
Channel: Low



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

Plot # 107 Radiated Emissions: 9 kHz - 30 MHz

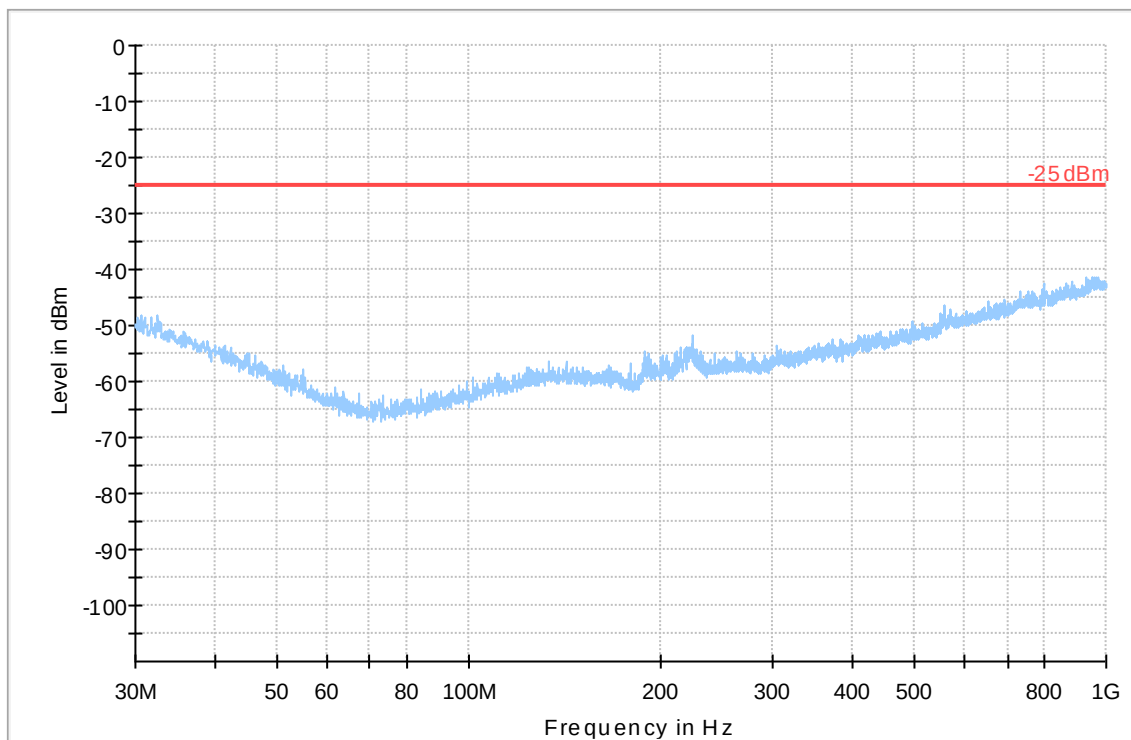
Channel: Mid



— Preview Result 1-PK+
 — FCC Licensed -13dBm
 ◆ Final_Result RMS
 - - - FCC Licensed -13dBm_-12

Plot # 108 Radiated Emissions: 30 MHz – 1GHz

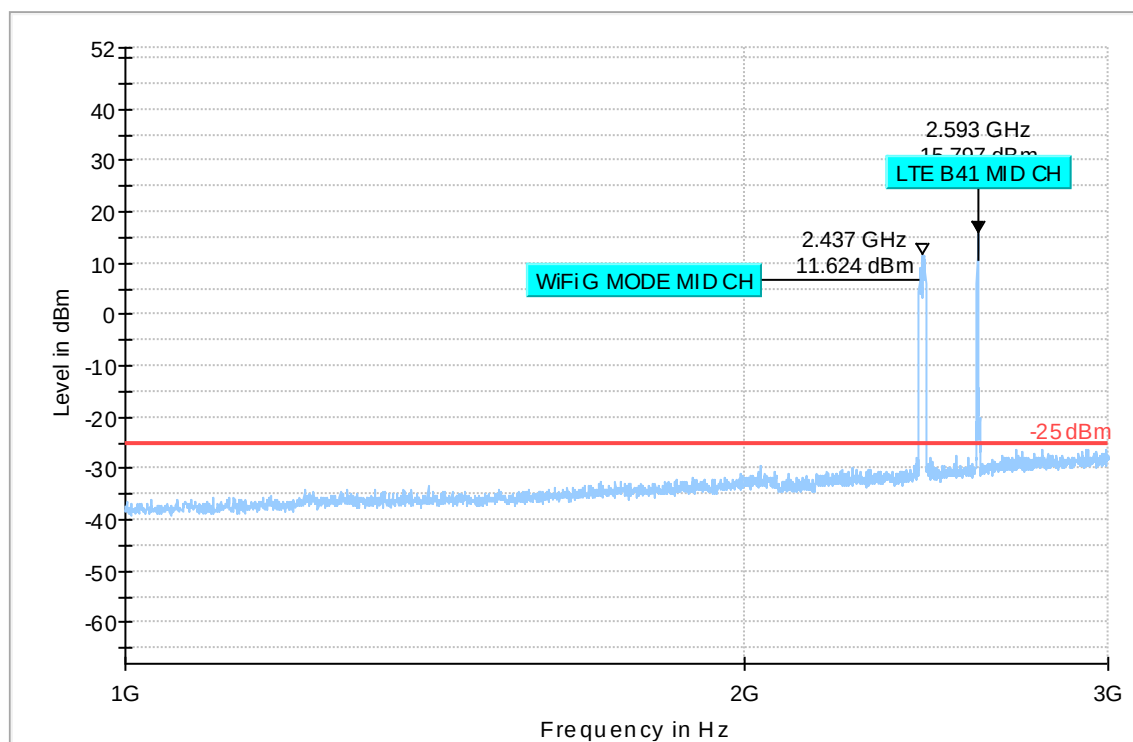
Channel: Mid



Preview Result 1-PK+ * Critical_Freqs PK+ -25 dBm Final_Result RMS

Plot # 109 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid



Preview Result 1-PK+



Critical_Freqs PK+

-25 dBm



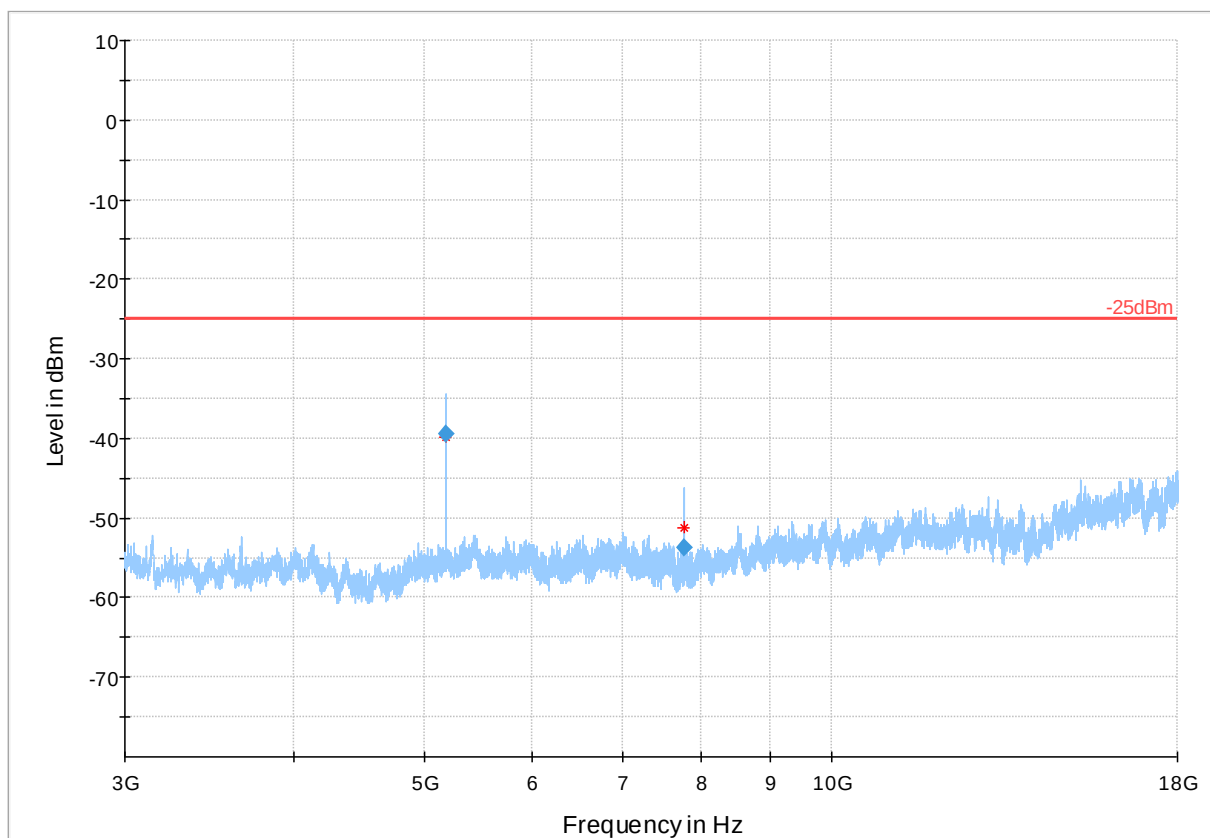
Final_Result RMS

Plot # 110 Radiated Emissions: 3 GHz – 18 GHz

Channel: Mid

Final Result

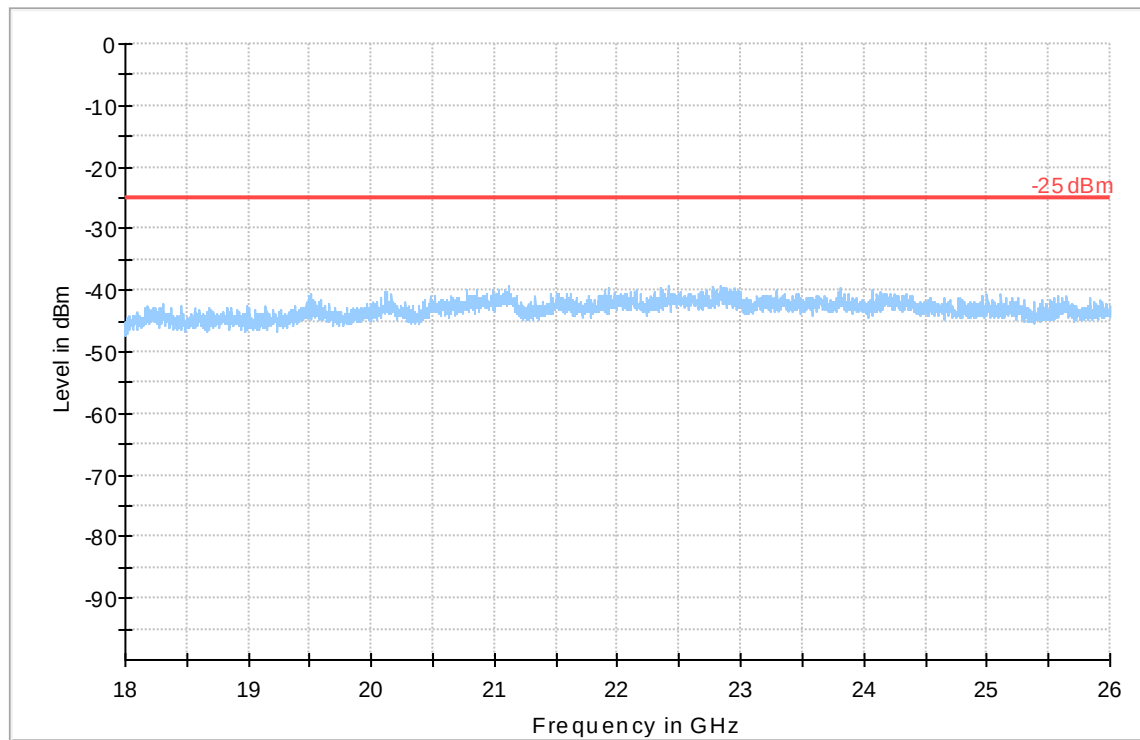
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Comment
5185.662	-39.48	-25.00	14.48	200.0	1000.000	148.0	H	268.0	-128.3	7:45:25 PM - 5/21/2020
7778.529	-53.75	-25.00	28.75	200.0	1000.000	144.0	H	268.0	-124.7	7:48:28 PM - 5/21/2020



Preview Result 1-PK+ * Critical_Freqs PK+ -25dBm Final_Result RMS

Plot # 111 Radiated Emissions: 18 GHz – 26 GHz

Channel: Mid



Preview Result 1-PK+



Critical_Freqs PK+

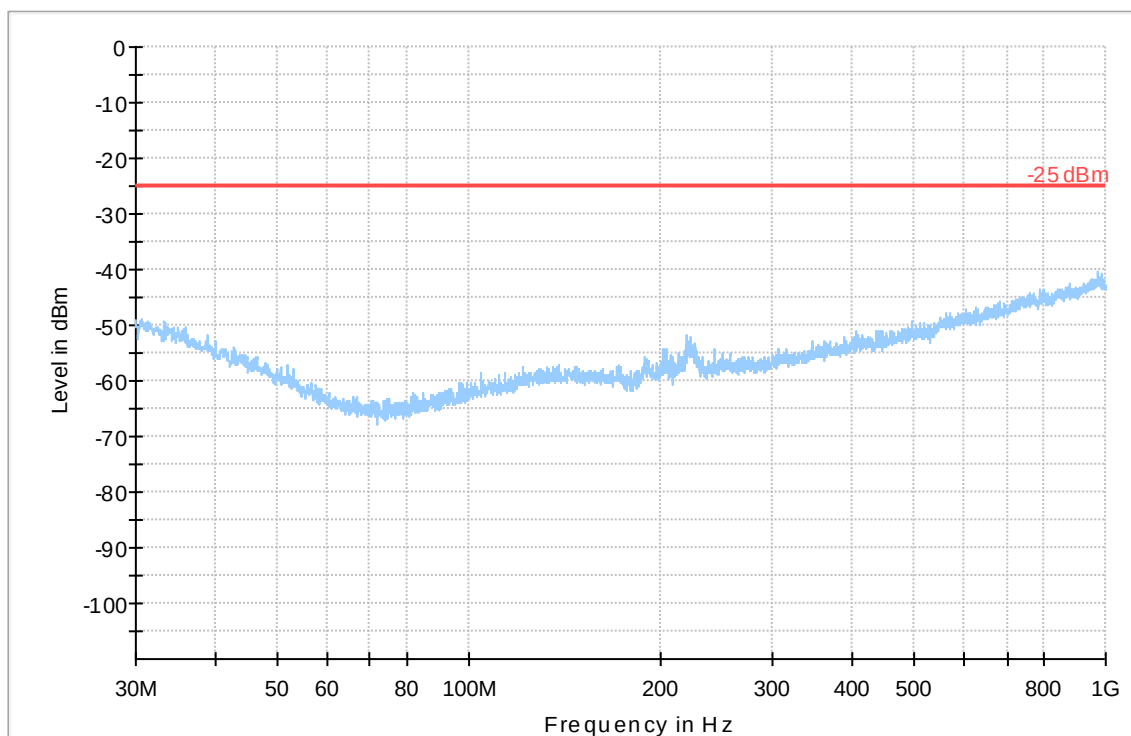
-25 dBm



Final_Result RMS

Plot # 112 Radiated Emissions: 30 MHz – 1GHz

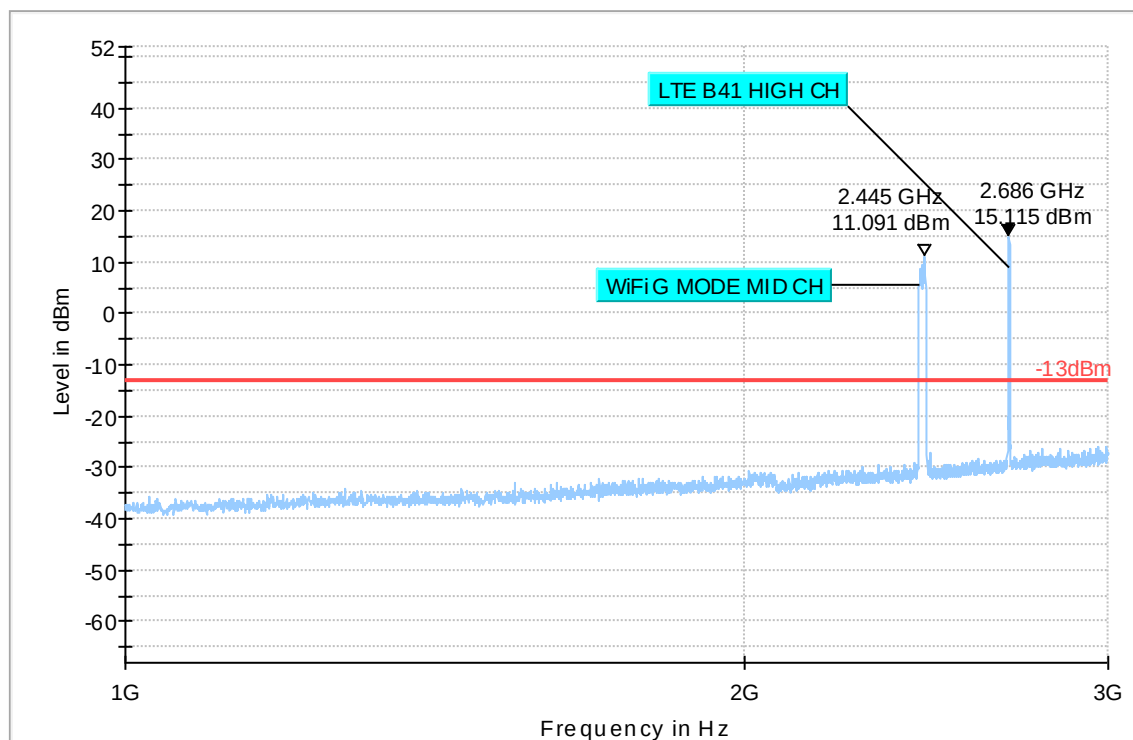
Channel: High



Preview Result 1-PK+ * Critical_Freqs PK+ -25 dBm Final_Result RMS

Plot # 113 Radiated Emissions: 1 GHz - 3 GHz

Channel: High



Preview Result 1-PK+



Critical_Freqs PK+



-13dBm



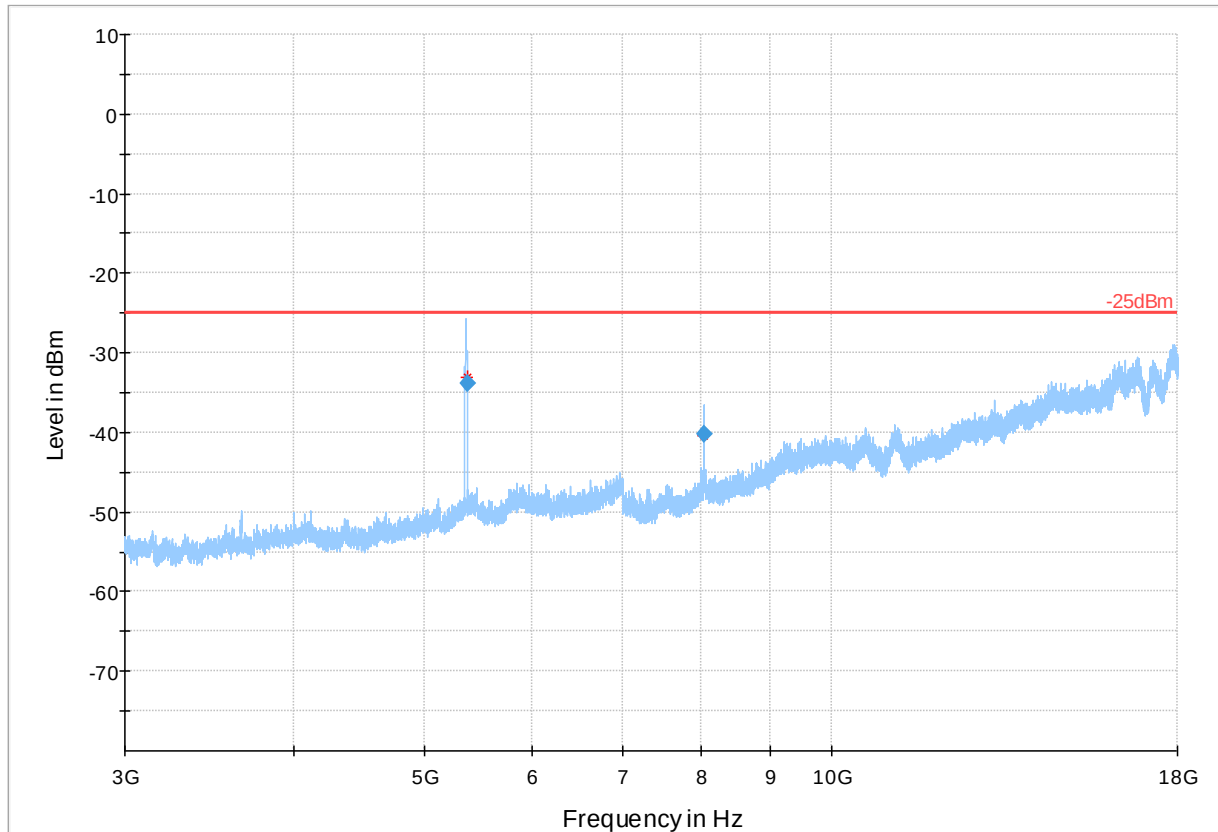
Final_Result RMS

Plot # 114 Radiated Emissions: 3 GHz – 18 GHz

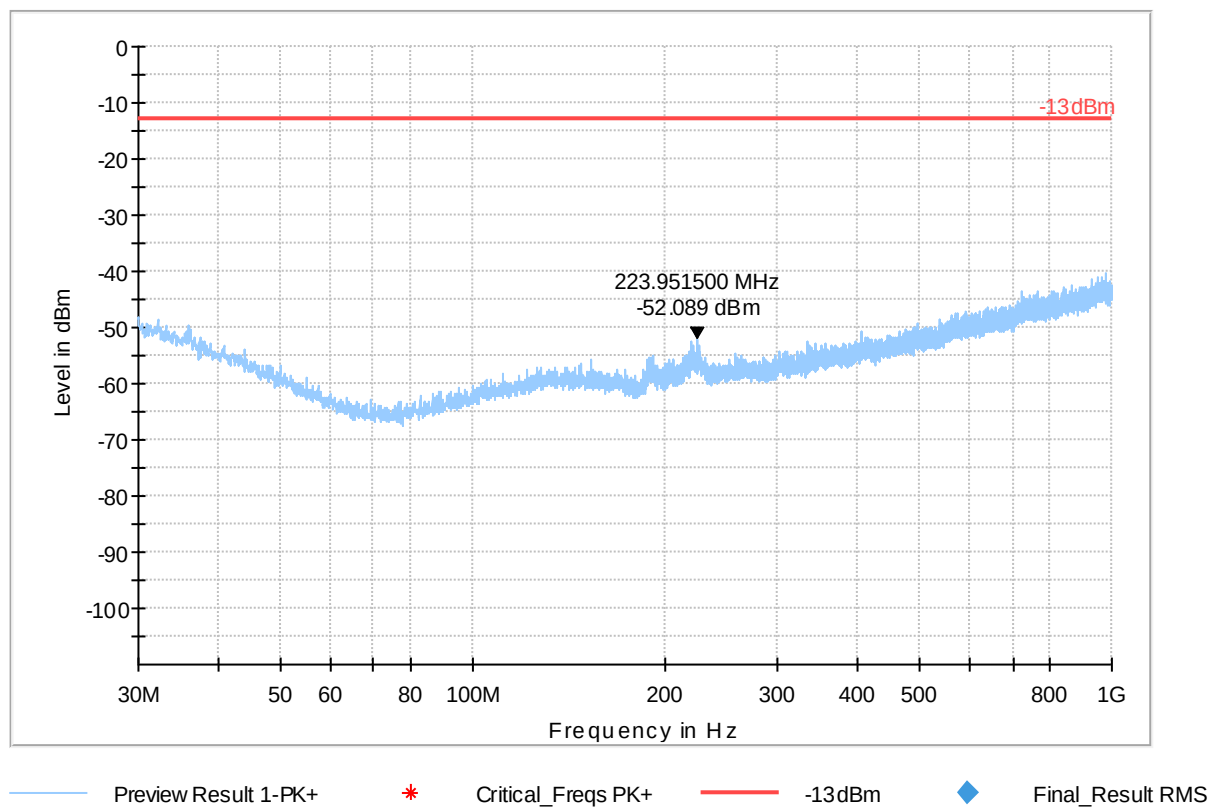
Channel: High

Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Comment
5369.560	-33.87	-25.00	8.87	200.0	1000.000	187.0	H	257.0	-106.4	9:16:51 PM - 5/21/2020
8044.488	-40.26	-25.00	15.26	200.0	1000.000	192.0	H	266.0	-103.2	9:20:15 PM - 5/21/2020

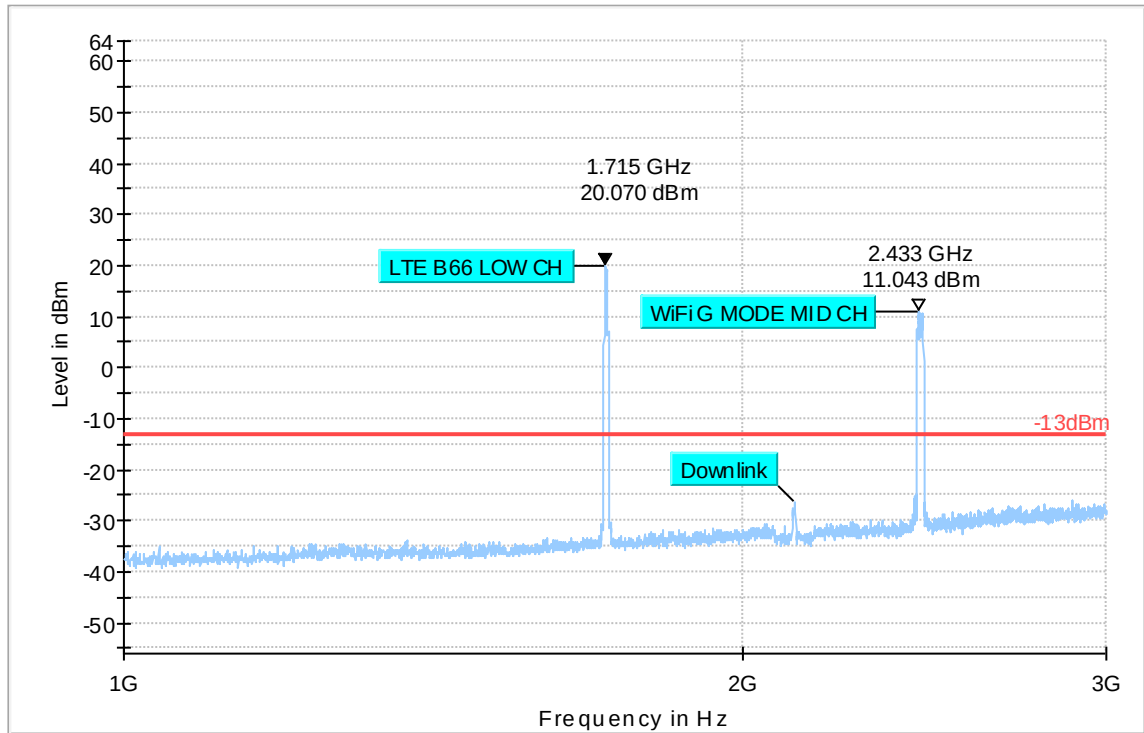


— Preview Result 1-PK+ * Critical_Freqs PK+ — -25dBm ◆ Final_Result RMS

LTE 66**Plot # 115 Radiated Emissions: 30 MHz – 1GHz****Channel: Low**

Plot # 116 Radiated Emissions: 1 GHz - 3 GHz

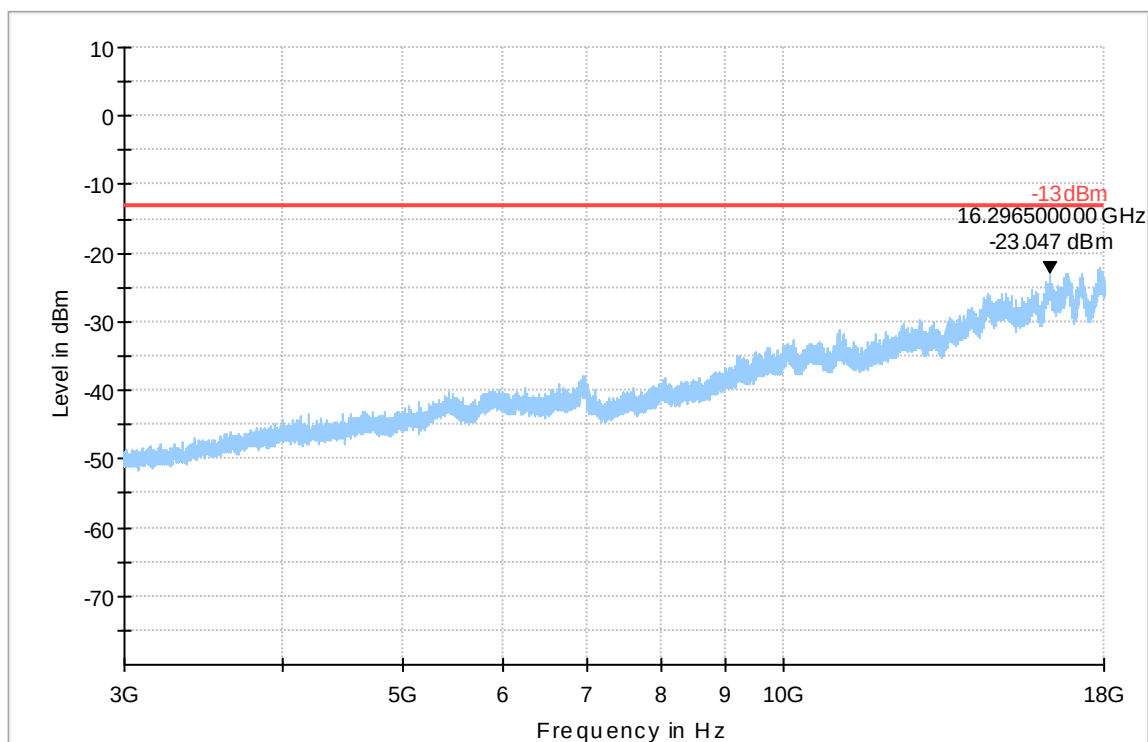
Channel: Low



Preview Result 1-PK+ * Critical_Freqs PK+ -13dBm ♦ Final_Result RMS

Plot # 117 Radiated Emissions: 3 GHz – 18 GHz

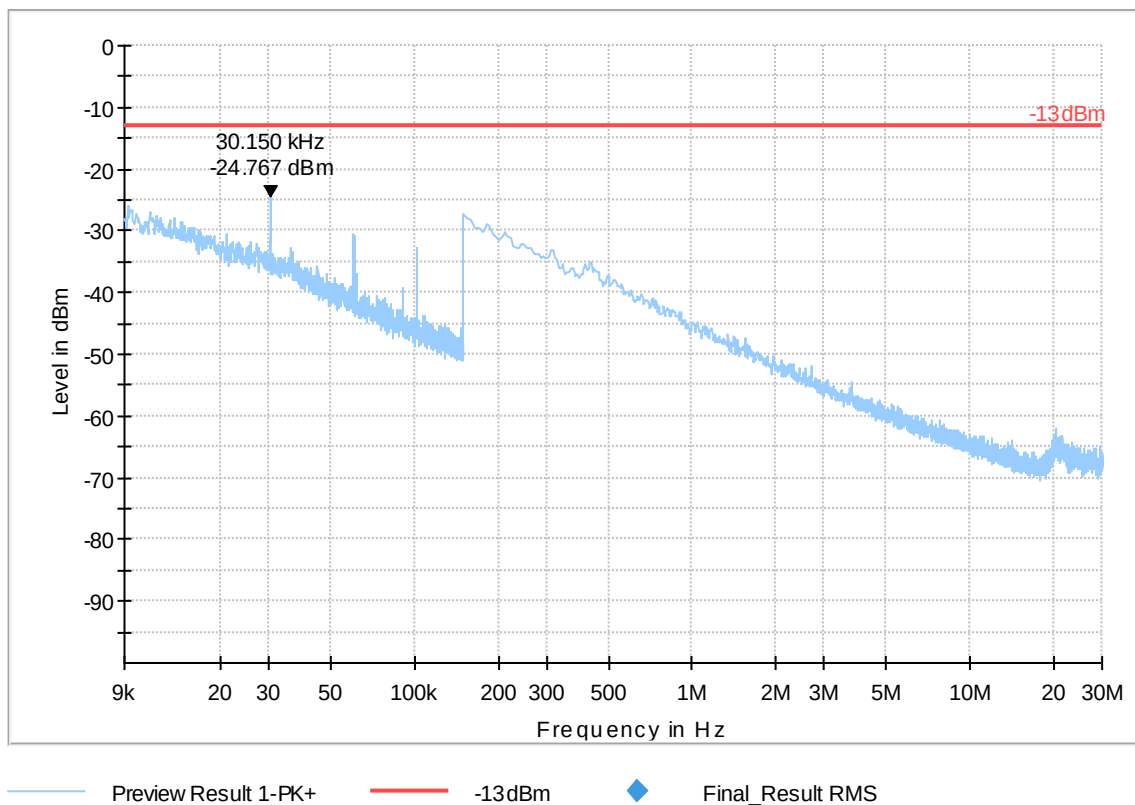
Channel: Low



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

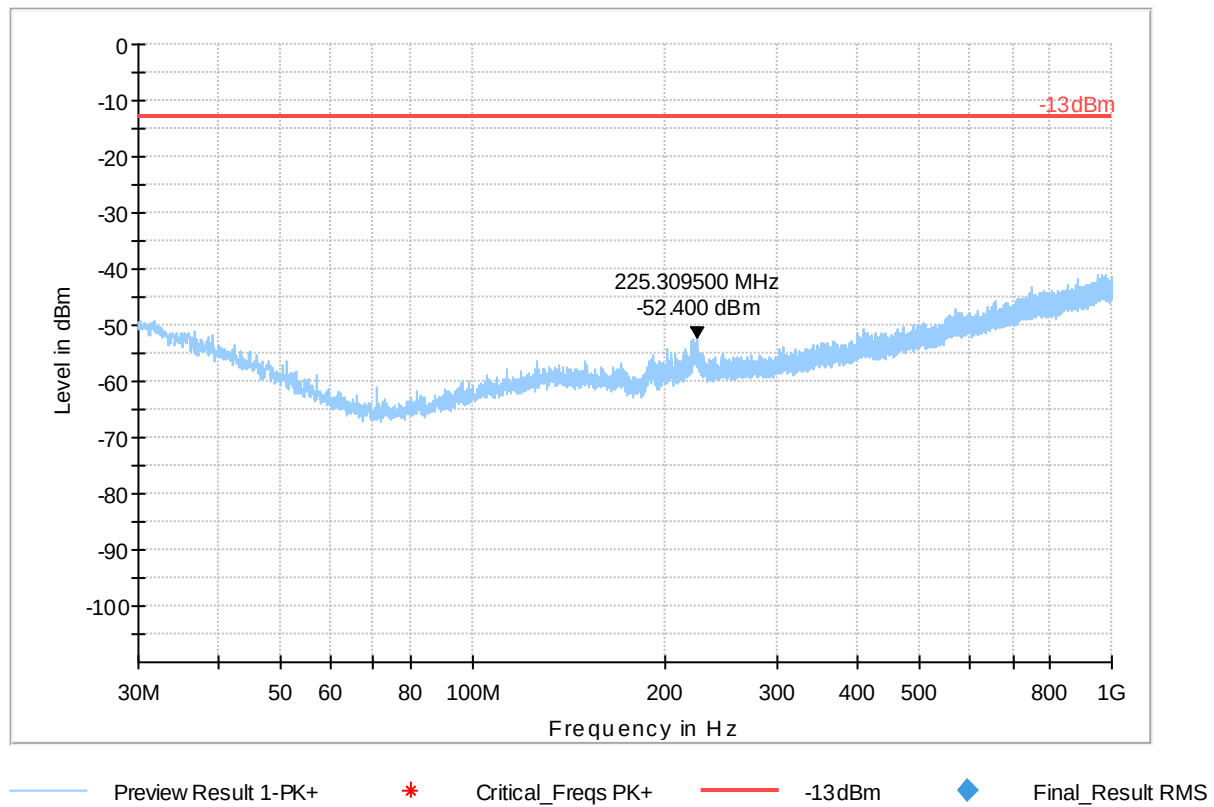
Plot # 118 Radiated Emissions: 9 kHz - 30 MHz

Channel: Mid



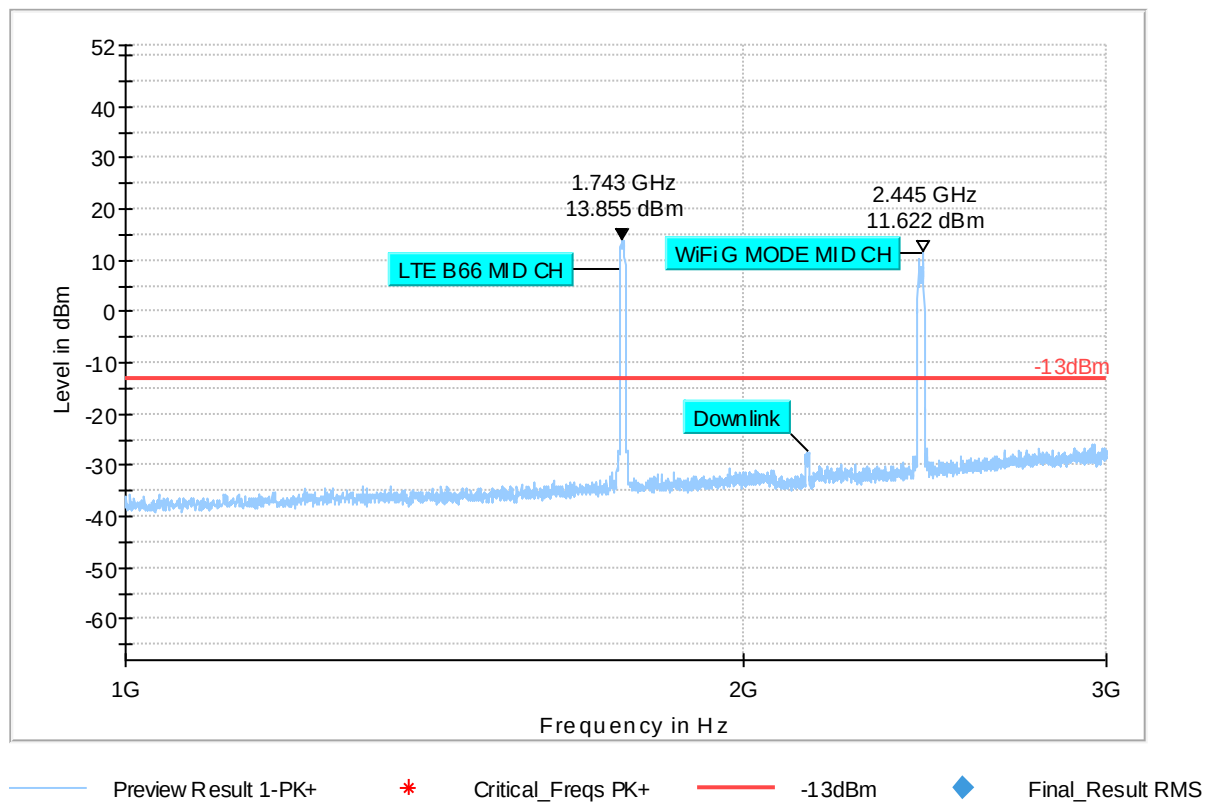
Plot # 119 Radiated Emissions: 30 MHz – 1GHz

Channel: Mid



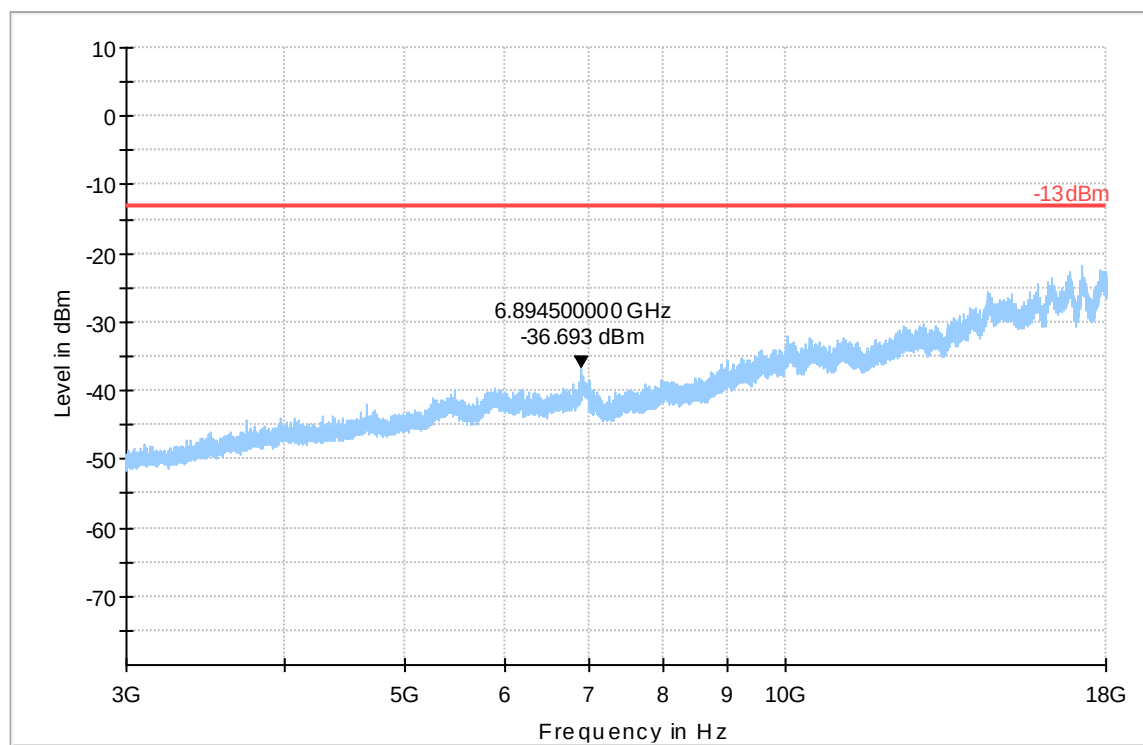
Plot # 120 Radiated Emissions: 1 GHz - 3 GHz

Channel: Mid



Plot # 121 Radiated Emissions: 3 – 18 GHz

Channel: Mid



Preview Result 1-PK+



Critical_Freqs PK+

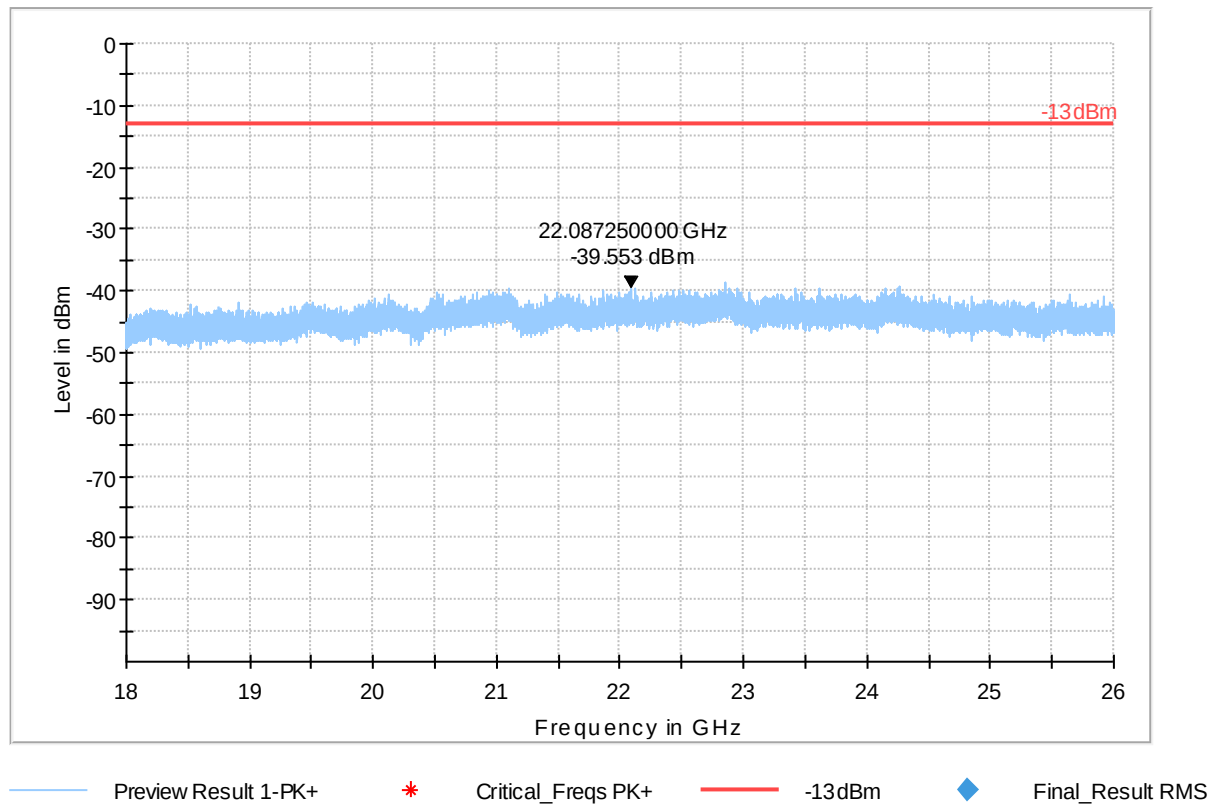
-13dBm



Final_Result RMS

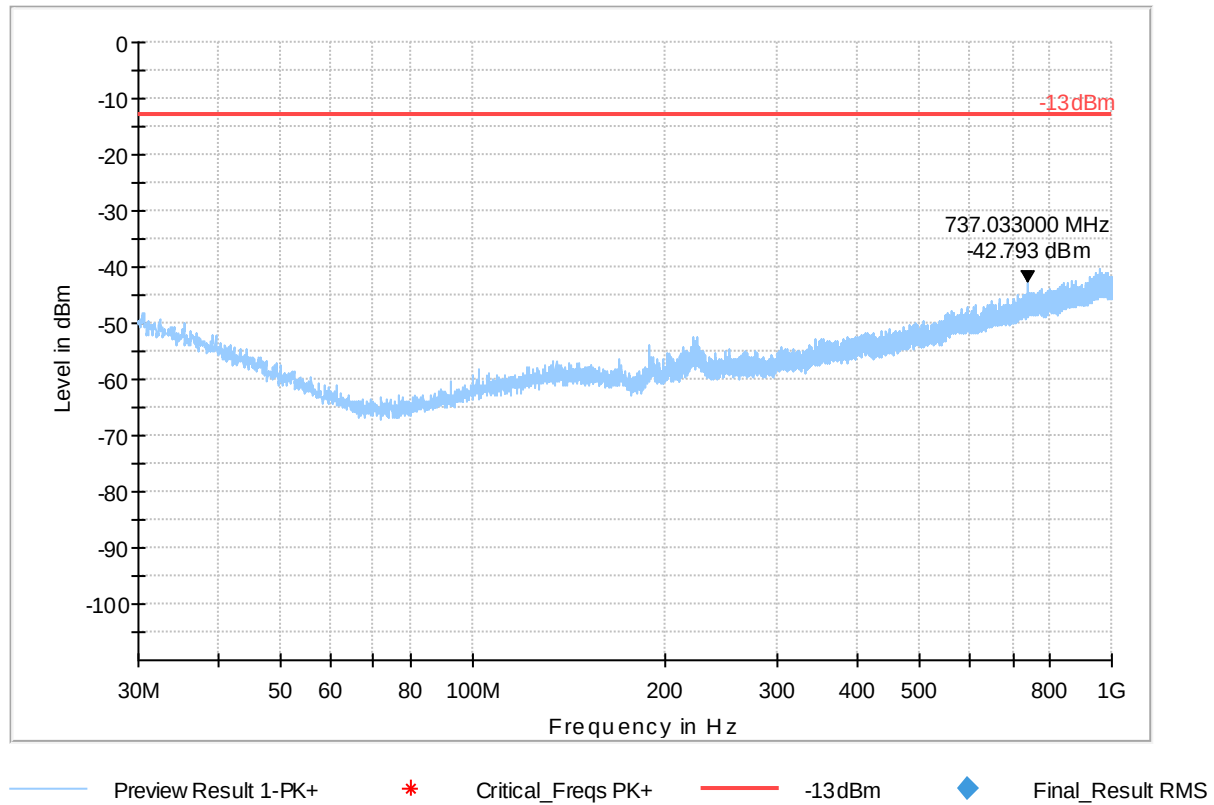
Plot # 122 Radiated Emissions: 18 GHz – 26 GHz

Channel: Mid



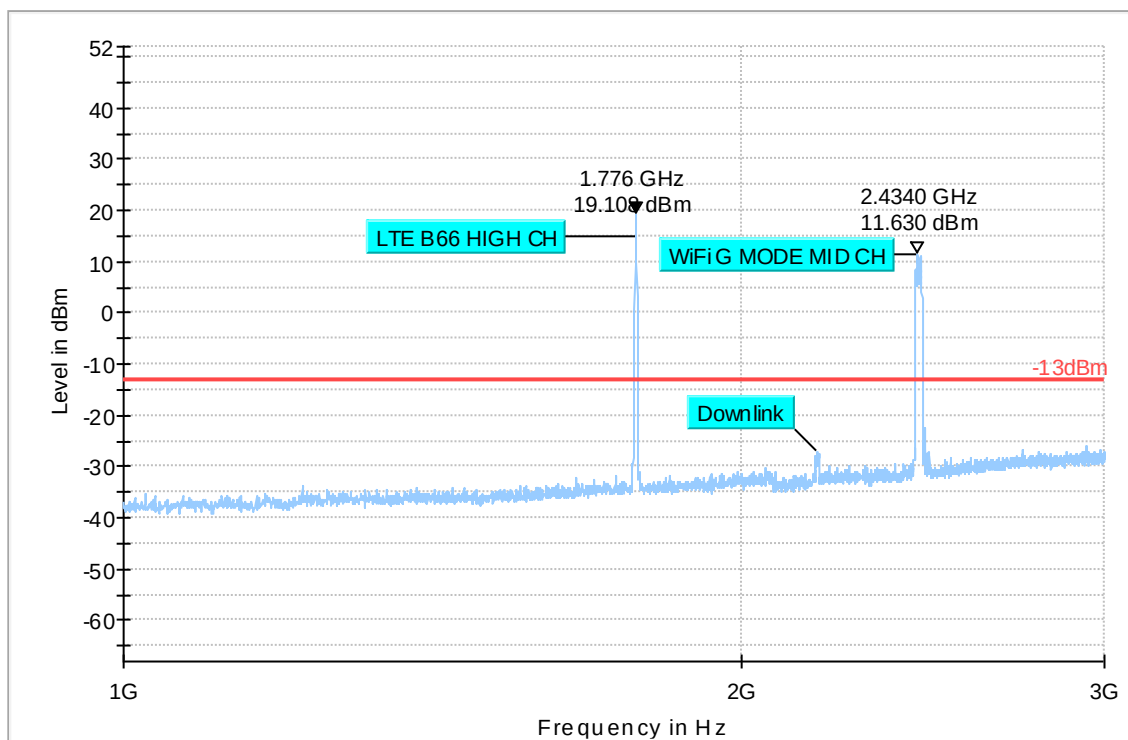
Plot # 123 Radiated Emissions: 30 MHz – 1GHz

Channel: High



Plot # 124 Radiated Emissions: 1 GHz - 3 GHz

Channel: High



Preview Result 1-PK+



Critical_Freqs PK+

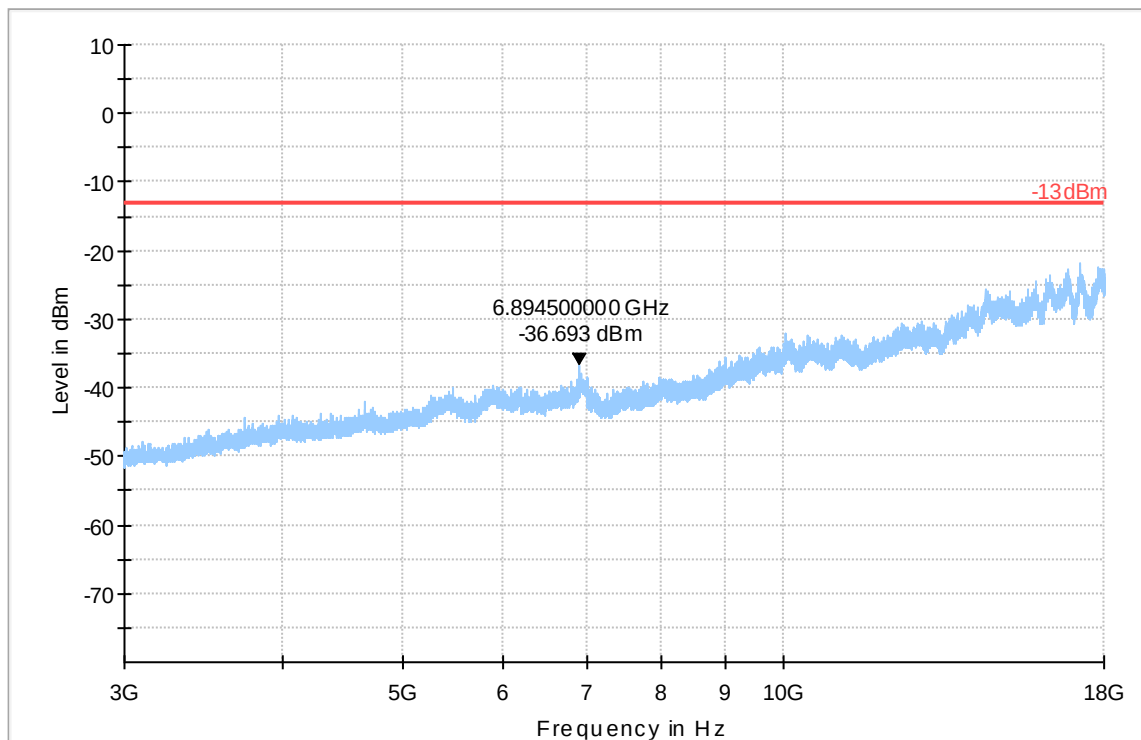
-13dBm



Final_Result RMS

Plot # 125 Radiated Emissions: 3 GHz – 18 GHz

Channel: High



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

8 Test setup photos

Setup photos are included in supporting file name: "EMC_AVERS-006-20001_FCC_ISED_Setup_Photos.pdf"

9 Test Equipment And Ancillaries Used For Testing

Equipment Type	Manufacturer	Model	Serial #	Calibration Cycle	Last Calibration Date
ACTIVE LOOP ANTENNA	ETS LINDGREN	6507	00161344	3 YEARS	10/26/2017
PASSIVE LOOP ANTENNA	ETS LINKDGREN	6512	49838	3 YEARS	7/28/2017
BILOG ANTENNA	TESEO	CBL 6141B	41106	3 YEARS	11/1/2017
HORN ANTENNA	EMCO	3115	00035111	3 YEARS	4/17/2019
HORN ANTENNA	ETS LINDGREN	3117	00169547	3 YEARS	8/8/2017
HORN ANTENNA	ETS LINDGREN	3116C	00169535	3 YEARS	9/24/2017
SIGNAL ANALYZER	R&S	FSV 40	101022	3 YEARS	7/16/2019
DIGITAL THERMOMETER	CONTROL COMPANY	36934-164	191871994	2 YEARS	10/1/2019

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

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

10 Revision History

Date	Report Name	Changes to report	Report prepared by
6/26/2020	EMC_AVERS-006-20001_FCC_22_24_27_ISED	Initial Version	Issa Ghanma
09/04/2020	EMC_AVERS-006-20001_FCC_22_24_27_ISED	Correct ISED ID, add emission table with E(I)RP results, add report reference for conducted report, add quick links to final pdf document.	admin

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