

ISED CABid: ES1909
Lab. Company Number: 4621A

Test Report No:
79798RRF.005A1

Partial Test Report

USA FCC Part 27

CANADA RSS-Gen, RSS-130, RSS-139

(*) Identification of item tested	Non-invasive ventilation (NIV) device
(*) Trademark	ResMed
(*) Model and /or type reference	AIR11M1TA
Other identification of the product	FCC ID: 2ACHL-AIR11M1TA IC: 9103A-AIR11M1TA
(*) Features	LTE Cat-M1, BLE HW version: R510-718 SW version: SW04600
Applicant	ResMed Pty Ltd 1 Elizabeth Macarthur Drive, Bella Vista, NSW, 2153, Australia
Test method requested, standard	USA FCC Part 27 (10-1-22 Edition). CANADA RSS-Gen Issue 5, April 2018, Amendment March 2019, Amendment February 2021. CANADA RSS-130 Issue 2, February 2019. CANADA RSS-139 Issue 4 September 2022, Amendment October 2022. ANSI C63.26-2015. KDB 971168 D01 Power Meas License Digital Systems v03r01, April. 2018.
Approved by (name / position & signature)	José Manuel Gómez Galván EMC Consumer & RF Lab. Manager  Firmado digitalmente por 53680346W JOSE MANUEL GOMEZ (C:A29507456)
Date of issue	2026-04-06
Report template No.	FDT08_25 (*) "Data provided by the client"

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Competences and guarantees

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DEKRA Testing and Certification is an FCC-recognized accredited testing laboratory with appropriate scope of accreditation that include testing performed in this test report.

DEKRA Testing and Certification is an ISED-recognized accredited testing laboratory, CABid: ES1909, Company Number: 4621A, with the appropriate scope of accreditation that covers the performed tests in this report.

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Uncertainty

Uncertainty (factor $k=2$) was calculated according to the DEKRA Testing and Certification S.A.U. internal document PODT000.

Data provided by the client

The following data has been provided by the client:

1. Information relating to the description of the sample ("Identification of the item tested", "Trademark", "Model and/or type reference tested").
2. The sample model AIR11M1TA is a NIV Device with Integrated Cellular and Bluetooth Connectivity.

DEKRA Testing and Certification S.A.U. declines any responsibility with respect to the information provided by the client and that may affect the validity of results. The laboratory is not responsible for such information and it is not covered by accreditation.

Usage of samples

Samples undergoing test have been selected by: The client.

Id	Control Number	Description	Model	Serial N°	Date Reception	of Application
S/01	79798/056	Non-invasive ventilation (NIV) device	AIR11M1TA	22242275637	2025-04-02	Element Under Test
S/01	79798/058	Power Cord	-	-	2025-04-02	Auxiliary Element
S/01	79798/059	AC/DC	-	23022251803	2025-04-02	Auxiliary Element
S/02	79798/038	Non-invasive ventilation (NIV) device	AIR11M1TA	22242275641	2025-04-02	Element Under Test
S/02	79798/036	DC/DC	-	000X2003	2025-04-02	Auxiliary Element
S/02	79798/039	Water Deposit	-	-	2025-04-02	Auxiliary Element
S/02	79798/043	Tube	-	-	2025-04-02	Auxiliary Element

Notes referenced to samples during the project:

Id	Type
S/01	Conducted tests.
S/02	Radiated tests.

Test sample description

Ports.....:	Port name and description	Cable					
		Specified max length [m]	Attached during test		Shielded		
	Power	-	☒		☒		
Supplementary information to the ports.....:	-						
Rated power supply :	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	☒	AC: 100-240V~50-60 Hz 1.0-1.5A	☒	☐	☐	☒	☐
	☒	AC: 115V~400Hz 1.5A	☒	☐	☐	☒	☐
	☒	DC: 12V (DC-DC for Vehicle Use)					
	☒	DC: 24V (DC-DC for Vehicle Use)					
Rated Power..... :	24 VDC, 3.75A						
Clock frequencies..... :	N/A						

Other parameters	390001 (PSU model number)		
Software version.....	SW04600		
Hardware version	R510-718		
Dimensions in cm (W x H x D) ...	140 mm x 280 mm x 94.5 mm		
Mounting position	☒	Table top equipment	
	☐	Wall/Ceiling mounted equipment	
	☐	Floor standing equipment	
	☐	Hand-held equipment	
	☐	Other:	
Modules/parts.....	Module/parts of test item	Type	Manufacturer
	Cellular	EXS62-W	Telit
	Bluetooth SoC	EFR32BG22	SiLabs
Accessories (not part of the test item)	Description	Type	Manufacturer
	Power Supply Unit 390001	N/A	ResMed
	Power Supply Unit R390-7330	N/A	ResMed
Documents as provided by the applicant	Description	File name	Issue date
	-	-	-

Identification of the client

ResMed Pty Ltd
 1 Elizabeth Macarthur Drive, Bella Vista, NSW, 2153, Australia

Testing period and place

Test Location	DEKRA Testing and Certification S.A.U.
Date (start)	2025-05-16
Date (finish)	2025-07-28

Document history

Report number	Date	Description
79798RRF.005	2026-02-20	First release.
79798RRF.005A1	2026-04-06	First revision. The antenna gain values are updated with the correct values provided by the client. This report cancels and replaces the previous report 79798RRF.005.

Environmental conditions

In the control chamber, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 20 % Max. = 75 %

In the semi-anechoic chamber, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 20 % Max. = 75 %

In the chamber for conducted measurements, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 20 % Max. = 75 %

Remarks and comments

The tests have been performed by the technical personnel: Miguel Manuel López.

Used instrumentation:

Control No.	Equipment	Model	Manufacturer	Next Calibration
8866	EMI TEST RECEIVER 2 Hz-44 GHz	ESW44	ROHDE AND SCHWARZ	2026-06-12
5641	HYBRID BILOG ANTENNA 30 MHz - 6 GHz	3142E	ETS LINDGREN	2027-10-23
9360	PRE-AMPLIFIER G>40dB 1-18 GHz	BLMA 0118-1M	BONN ELEKTRONIK	2025-08-05
4612	HORN ANTENNA 1-18 GHz	BBHA 9120 D	SCHWARZBECK MESS- ELEKTRONIK	2027-10-15
6158	SIGNAL AND SPECTRUM ANALYZER 10 Hz - 40 GHz	FSV40	ROHDE AND SCHWARZ	2026-02-05
4657	HORN ANTENNA 18-40 GHz	BBHA 9170	SCHWARZBECK MESS-ELEKTRONIK	2026-06-12
4848	SOFTWARE FOR EMC/RF TESTING	EMC32	ROHDE AND SCHWARZ	N/A

Testing verdicts

Not applicable:	N/A
Pass:	P
Fail:	F
Not measured:	N/M

Summary

Appendix A: LTE Cat-M1 Bands 4, 12, 13, 66.

FCC PART 27 / RSS-Gen, RSS-130, RSS-139		
Requirement – Test case	Verdict	Remark
FCC 27.50 / RSS-130 4.6, RSS-139 5.5: RF Output Power	P	
FCC 2.1047 / RSS-130 4.2, RSS-139 5.3: Modulation Characteristics	N/M	(1)
FCC 27.54 / RSS-130 4.5, RSS-139 5.4: Frequency Stability	N/M	
FCC 2.1049 / RSS-Gen 6.7: Occupied Bandwidth	N/M	
FCC 27.53 / RSS-130 4.7, RSS-139 5.6: Spurious Emissions at Antenna Terminals	N/M	
FCC 27.53 / RSS-130 4.7, RSS-139 5.6: Spurious Emissions at Antenna Terminals at Block Edges	N/M	
FCC 27.53 / RSS-130 4.7, RSS-139 5.6: Radiated Emissions	P	
<u>Supplementary information and remarks:</u>		
(1) Test not requested.		

Appendix A: Test results for FCC 27 / RSS-130, RSS-139: LTE Cat-M1 Bands 4, 12, 13, 66

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TEST CONDITIONS

(*): Declared by the Applicant.

POWER SUPPLY (*):

Vnormal: 230 Vac

Type of Power Supply: AC-DC adapter.

Testing was performed using 230Vac, identified as worst case of power supply during pretesting

ANTENNA (*):

Low Bands	Gain (dBi)	Type of Antenna
LTE Cat-M1 12	-0.9	Internal
LTE Cat-M1 13	-2.2	Internal
High Bands	Gain (dBi)	Type
LTE Cat-M1 66	+2.5	Internal

TEST FREQUENCIES:

LTE Cat-M1 Band 12. QPSK and 16QAM modulations:

Channel (Frequency, MHz)				
	BW = 1.4 MHz	BW = 3 MHz	BW = 5 MHz	BW = 10 MHz
Low	23017 (699.7)	23025 (700.5)	23035 (701.5)	23060 (704.0)
Middle	23095 (707.5)	23095 (707.5)	23095 (707.5)	23095 (707.5)
High	23173 (715.3)	23165 (714.5)	23155 (713.5)	23130 (711.0)

LTE Cat-M1 Band 13. QPSK and 16QAM modulations:

Channel (Frequency, MHz)		
	BW = 5 MHz	BW = 10 MHz
Low	23205 (779.5)	
Middle	23230 (782.0)	23230 (782.0)
High	23255 (784.5)	

LTE Cat-M1 Band 66. QPSK and 16QAM modulations:

Channel per BW=(Frequency, MHz)						
	BW = 1.4 MHz	BW = 3 MHz	BW = 5 MHz	BW = 10 MHz	BW = 15 MHz	BW = 20 MHz
Low	131979 (1710.7)	131987 (1711.5)	131997 (1712.5)	132022 (1715.0)	132047 (1717.5)	132072 (1720.0)
Middle	132322 (1745)	132322 (1745)	132322 (1745)	132322 (1745)	132322 (1745)	132322 (1745)
High	132665 (1779.3)	132657 (1778.5)	132647 (1777.5)	132622 (1775)	132597 (1772.5)	132572 (1770)

RF Output Power

Limits

1. LTE Cat-M1 Band 12. FCC §27.50 (c) (10) / RSS-130 Clause 4.6.

FCC §27.50 (c) (10):

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

RSS-130 Clause 4.6:

4.6.1 General

The transmitter output power shall be measured in terms of average power. In addition, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the High PAPR during periods of continuous transmission.

4.6.3 Frequency bands 698-756 MHz and 777-787 MHz

The e.r.p. shall not exceed 30 watts for mobile equipment and outdoor fixed subscriber equipment. The e.r.p. shall not exceed 3 watts for portable equipment and indoor fixed subscriber equipment.

Table 3: Maximum power of equipment in the band 1710-1780 MHz	
Equipment type	Maximum power
Fixed station and base station	30 dBm e.i.r.p./channel bandwidth
Subscriber equipment	30 dBm e.i.r.p./channel bandwidth

Table 4: Maximum power of equipment in the band 2110-2180 MHz	
Equipment type	Maximum power
Non-AAS fixed station and base station	65 dBm e.i.r.p./MHz
AAS fixed station and base station	46 dBm TRP/MHz
Subscriber equipment	30 dBm e.i.r.p./channel bandwidth

Table 5: Maximum power of equipment in the band 2180-2200 MHz	
Equipment type	Maximum power
Non-AAS base station	65 dBm e.i.r.p./MHz
AAS base station	46 dBm TRP/MHz

In addition, the peak to average power ratio (PAPR) of the equipment shall not exceed 13 dB for more than 0.1% of the time, using a signal that corresponds to the highest PAPR during periods of continuous transmission.

2. LTE Cat-M1 Band 13. FCC §27.50 (b) (10) / RSS-130 Clause 4.6.

FCC §27.50 (b) (10):

Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

RSS-130 4.6:

4.6.1 General

The transmitter output power shall be measured in terms of average power. In addition, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the High PAPR during periods of continuous transmission.

4.6.3 Frequency bands 698-756 MHz and 777-787 MHz

The e.r.p. shall not exceed 30 watts for mobile equipment and outdoor fixed subscriber equipment. The e.r.p. shall not exceed 3 watts for portable equipment and indoor fixed subscriber equipment.

3. LTE Cat-M1 Bands 66. FCC §27.50 (d) / RSS-139 5.5.

FCC §27.50 (d):

(4) Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

(5) In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

RSS-139 5.5:

The maximum output power of the equipment shall comply with the limits specified below. In the tables, maximum power refers to the equivalent isotropically radiated power (e.i.r.p.) or total radiated power (TRP), measured in terms of average values.

The limits in this RSS are specified for the purpose of certification and may not apply to all deployment scenarios. Consult SRSP-513 and SRSP-519 for more details on the bands 2110-2180 MHz and 2180-2200 MHz respectively.

Method

The conducted RF output power measurements were made at the RF output terminals of the EUT using the power meter of the Universal Radio Communication tester CMW500, selecting maximum transmission power of the EUT and different modes of modulation.

The peak-to-average power ratio (PAPR) is measured using an attenuator, power splitter and spectrum analyser with a Complementary Cumulative Distribution Function implemented.

The maximum equivalent isotropically radiated power (e.i.r.p.) is calculated by adding the declared maximum antenna gain (dBi).

The maximum effective radiated power e.r.p. is calculated from the maximum equivalent isotropically radiated power (e.i.r.p.) by subtracting 2.15 dB:

$$\text{E.R.P.} = \text{E.I.R.P.} - 2.15 \text{ dB}$$

Test Setup

1. CONDUCTED AVERAGE POWER:



Results

1. CONDUCTED AVERAGE POWER:

LTE Cat-M1 Band 12:

The worst RF Power case measured on the device corresponds to the configuration with maximum RF Power measured on the integrated module: BW=5 MHz, Middle Channel, 16QAM, RB Size=1, RB Offset=0.

MAX POWER	COND. POWER AVG (dBm)	ANTENNA GAIN (dBi)	RAD. POWER AVG EIRP (dBm)	RAD. POWER AVG ERP (dBm)
LOW	20.17	-0.9	19.27	17.12
MIDDLE	20.03	-0.9	19.13	16.98
HIGH	19.93	-0.9	19.03	16.88
MAX:	20.17		19.27	17.12

Measurement uncertainty (dB) $< \pm 0.941$

LTE Cat-M1 Band 13:

The worst RF Power case measured on the device corresponds to the configuration with maximum RF Power measured on the integrated module: BW=5 MHz, Middle Channel, 16QAM, RB Size=1, RB Offset=0.

MAX POWER	COND. POWER AVG (dBm)	ANTENNA GAIN (dBi)	RAD. POWER AVG EIRP (dBm)	RAD. POWER AVG ERP (dBm)
LOW	20.17	-2.2	17.97	15.82
MIDDLE	20.03	-2.2	17.83	15.68
HIGH	19.93	-2.2	17.73	15.58
MAX:	20.17		17.97	15.82

Measurement uncertainty (dB) $< \pm 0.941$

LTE Cat-M1 Band 66:

The worst RF Power case measured on the device corresponds to the configuration with maximum RF Power measured on the integrated module: BW=20 MHz, Middle Channel, 16QAM, RB Size=1, RB Offset=0.

MAX POWER	COND. POWER AVG (dBm)	ANTENNA GAIN (dBi)	RAD. POWER AVG EIRP (dBm)	RAD. POWER AVG ERP (dBm)
LOW	19.73	2.5	22.23	20.08
MIDDLE	19.98	2.5	22.48	20.33
HIGH	19.87	2.5	22.37	20.22
MAX:	19.98		22.48	20.33

Measurement uncertainty (dB) <±0.941

Verdict

Pass

Radiated Emissions

Limits

1. LTE Cat-M1 Band 12. FCC §27.53 (g).

FCC §27.53 (g):

(g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

RSS-130 Issue 2 Clause 4.7.1 and 4.7.2:

4.7.1. The power of any unwanted emissions in any 100 kHz bandwidth on any frequency outside the frequency range(s) within which the equipment is designed to operate shall be attenuated below the transmitter power. P (dBW). by at least $43 + 10 \log_{10} p$ (watts). dB. However. in the 100 kHz band immediately outside the equipment's operating frequency range. a resolution bandwidth of 30 kHz may be employed.

4.7.2. In addition to the limit outlined in section 4.7.1 above. equipment operating in the frequency bands 746-756 MHz and 777-787 MHz shall also comply with the following restrictions:

a. the power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power. P (dBW). by at least:

i. $76 + 10 \log_{10} p$ (watts). dB. for base and fixed equipment and

ii. $65 + 10 \log_{10} p$ (watts). dB. for mobile and portable equipment

b. the e.i.r.p. in the band 1559-1610 MHz shall not exceed -70 dBW (-40 dBm) /MHz for wideband signal and -80 dBW(-50 dBm) for discrete emission with bandwidth less than 700 Hz.

2. LTE Cat-M1 Band 13. FCC §2.1053 & §27.53 (c) (2) (4) & (f) / RSS-130 Issue 2 Clause 4.7.1. & 4.7.2.

FCC §27.53 (c) (2) (4) & (f):

(c) (2) On any frequency outside the 776-788 MHz band. the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB.

(c) (4) On all frequencies between 763-775 MHz and 793-805 MHz. by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment. for mobile and portable stations.

(f) For operations in the 746-758 MHz. 775-788 MHz. and 805-806 MHz bands. emissions in the band 1559-1610 MHz shall be limited to -70 dBW (-40 dBm)/MHz equivalent isotropically radiated power (EIRP) for wideband signals. and -80 dBW (-50 dBm) EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization. a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

RSS-130 Issue 2 Clause 4.7.1 and 4.7.2:

4.7.1. The power of any unwanted emissions in any 100 kHz bandwidth on any frequency outside the frequency range(s) within which the equipment is designed to operate shall be attenuated below the transmitter power. P (dBW). by at least $43 + 10 \log_{10} p$ (watts). dB. However. in the 100 kHz band immediately outside the equipment's operating frequency range. a resolution bandwidth of 30 kHz may be employed.

4.7.2. In addition to the limit outlined in section 4.7.1 above. equipment operating in the frequency bands 746-756 MHz and 777-787 MHz shall also comply with the following restrictions:

a. the power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power. P (dBW). by at least:

- i. $76 + 10 \log_{10} p$ (watts). dB. for base and fixed equipment and
- ii. $65 + 10 \log_{10} p$ (watts). dB. for mobile and portable equipment
- b. the e.i.r.p. in the band 1559-1610 MHz shall not exceed -70 dBW (-40 dBm) /MHz for wideband signal and -80 dBW (-50 dBm) for discrete emission with bandwidth less than 700 Hz.

3. LTE Cat-M1 4, 66. FCC §2.1053 & §27.53 (h) / RSS-139 Issue 4 Clause 5.6.

FCC §27.53 (h):

(h) For operations in the 1695-1710 MHz. 1710-1755 MHz. 1755-1780 MHz. 1915-1920 MHz. 1995-2000 MHz. 2000-2020 MHz. 2110-2155 MHz. 2155-2180 MHz. and 2180-2200 bands. the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.

RSS-139 Issue 4 Clause 5.6:

Unwanted emissions shall be measured in terms of average value.
Equipment shall have the TRP or conducted power (all antenna connectors). of unwanted emissions outside the frequency block or frequency block group not exceeding the limits shown in the next table:

Offset from the edge of the frequency block or frequency block group	Unwanted emission limits
≤ 1 MHz	-13 dBm/(1% of OB)
> 1 MHz	-13 dBm/MHz

Where OB is the occupied bandwidth.

Method

The measurement was performed with the EUT inside an anechoic chamber. The spectrum was scanned from 30 MHz to at least the 10th harmonic of the High frequency generated within the equipment.

The EUT was placed on a non-conductive stand at 3-meter distance from the measuring antenna for measurements up to 17 GHz. Measurements above 17 GHz require the distance to be reduced to 1.5 meters.

Detected emissions were maximized at each frequency by rotating the EUT and adjusting the height and polarization of the measuring antenna. The maximum meter reading was recorded.

Measurement Limits:

At P_o transmitting power. the specified minimum attenuation $43 + 10 \log_{10} p$ (watts) becomes:

$$P_o \text{ (dBm)} - [43 + 10 \log (P_o \text{ in mwatts}) - 30] = -13 \text{ dBm}$$

At P_o transmitting power. the specified minimum attenuation $65 + 10 \log_{10} p$ (watts) becomes:

$$P_o \text{ (dBm)} - [65 + 10 \log (P_o \text{ in mwatts}) - 30] = -35 \text{ dBm}$$

For operation in band 13. the e.i.r.p. in the band 1559-1610 MHz shall not exceed -70 dBW (-40 dBm) per MHz for wideband signals. and -80 dBW (-50 dBm) for discrete emissions of less than 700 Hz bandwidth.

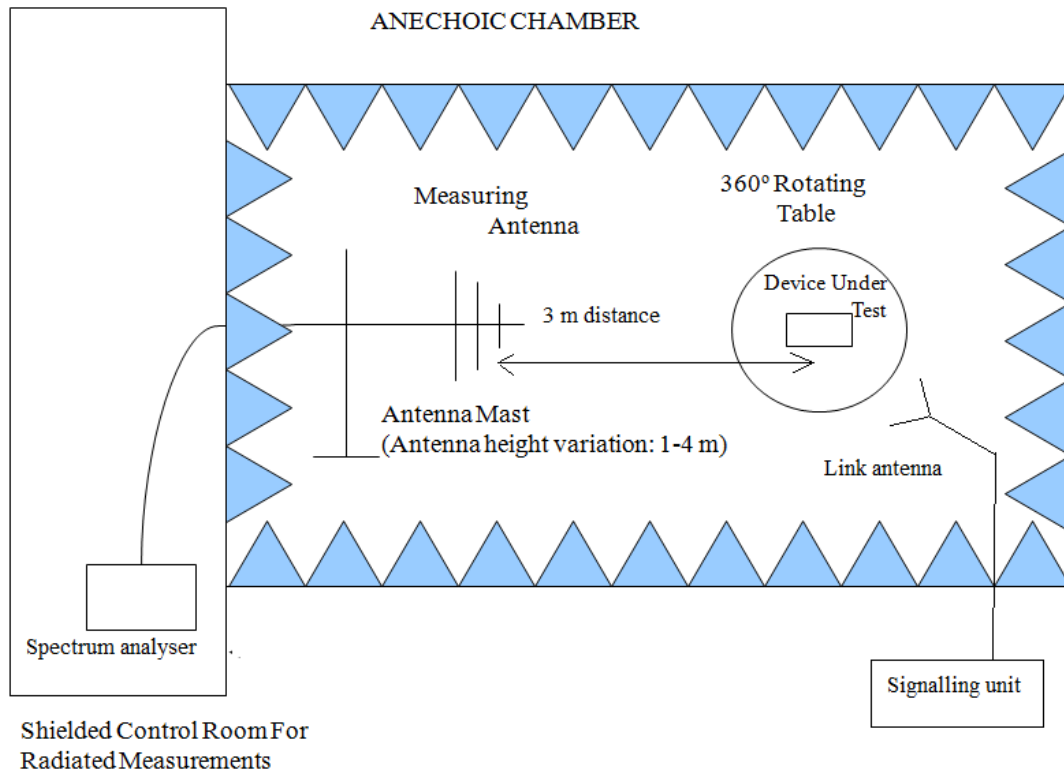
The maximum field strength (dBμV/m) of each detected emission at less than 20 dB respect to the limit is converted to an equivalent EIRP level (dBm) according to ANSI C63.26 with the formula:

$$\text{EIRP (dBm)} = E \text{ (dBμV/m)} + 20 \log(D) - 104.8;$$

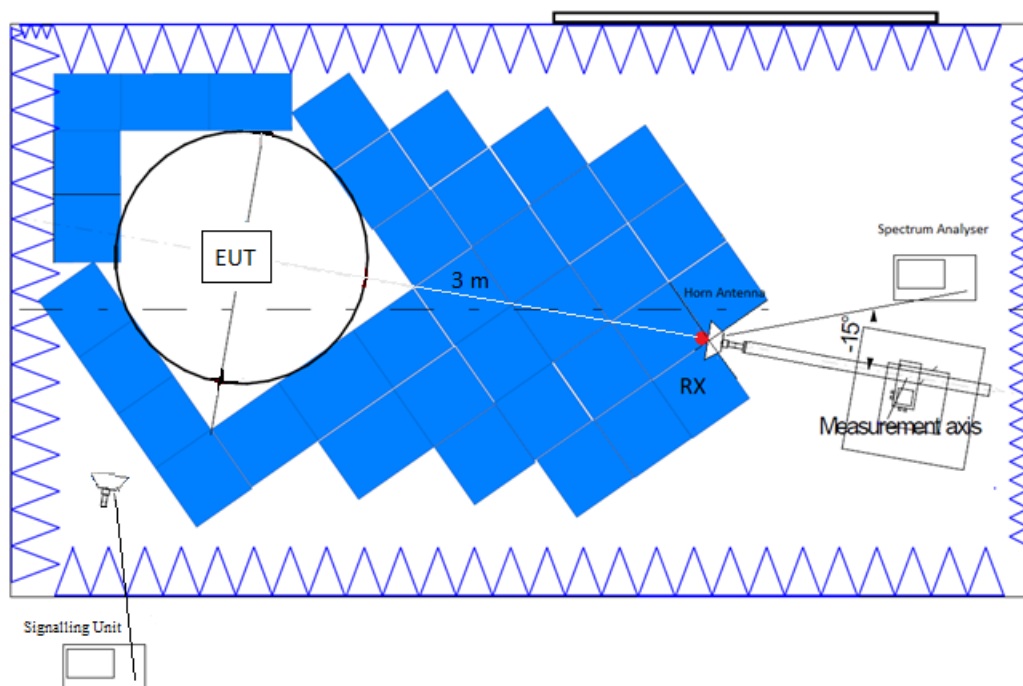
where D is the measurement distance (in the far field region) in m. $D = 3\text{m}$.

Test Setup

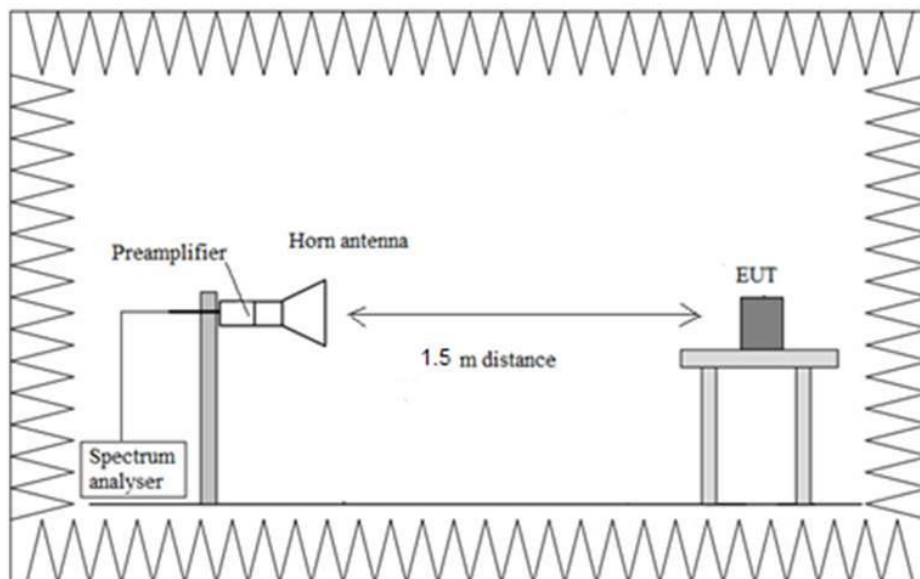
Radiated measurements setup from 30 MHz to 1 GHz:



Radiated measurements setup from 1 GHz to 17 GHz:



Radiated measurements above 17 GHz:



Results

Test was performed on worst-case channel in terms of radiated spurious emissions. determined by a preliminary scan for each band.

LTE Cat-M1 Band 12:

The worst case measured on the device corresponds to the configuration with maximum RF Power measured on the integrated module: BW=5 MHz, Middle Channel, 16QAM, RB Size=1, RB Offset=0.

Frequency range 30 MHz - 1 GHz:

- LOW CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

- MIDDLE CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

Frequency range 1 - 8 GHz:

- LOW CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

Measurement uncertainty (dB) $< \pm 5.35$ for $f < 1$ GHz
 $< \pm 4.32$ for $f \geq 1$ GHz up to 8 GHz

Verdict

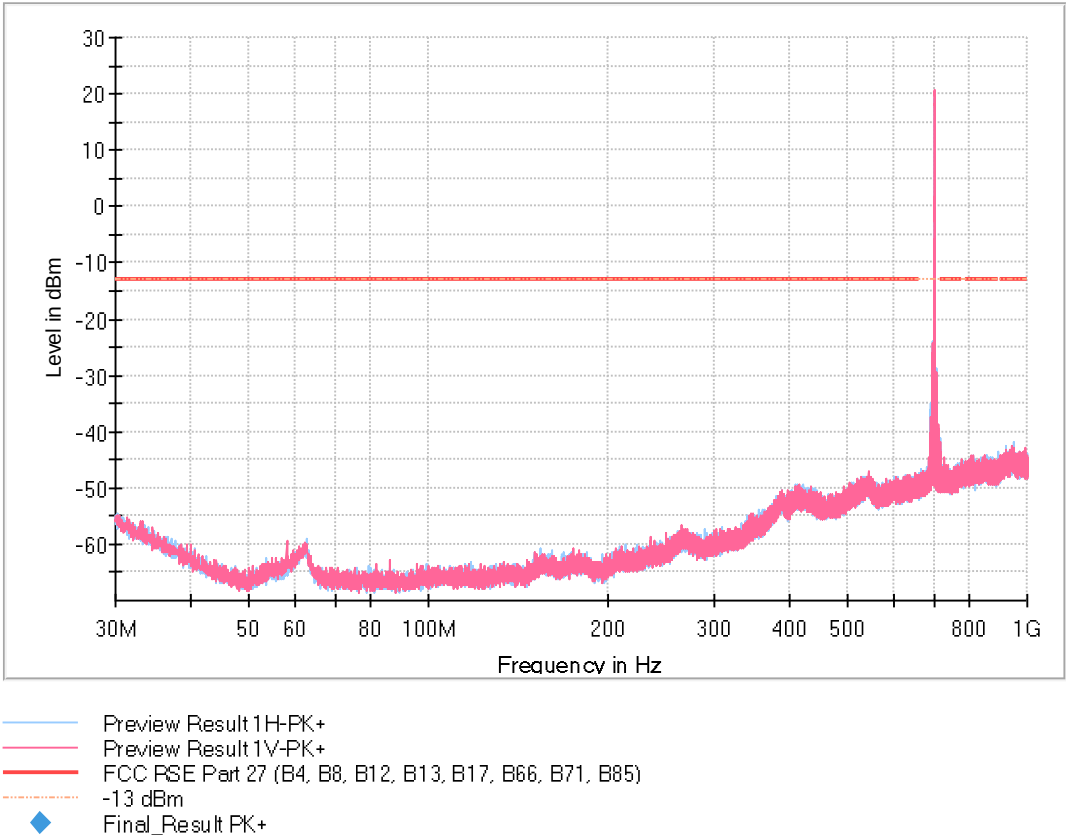
Pass

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	30,312 kHz	PK+	100 kHz	1 s	0 dB
1 GHz - 3 GHz	40 kHz	PK+	100 kHz	0,05 s	0 dB
3 GHz - 8 GHz	40 kHz	PK+	100 kHz	0,05 s	0 dB

LTE Cat-M1 Band 12:

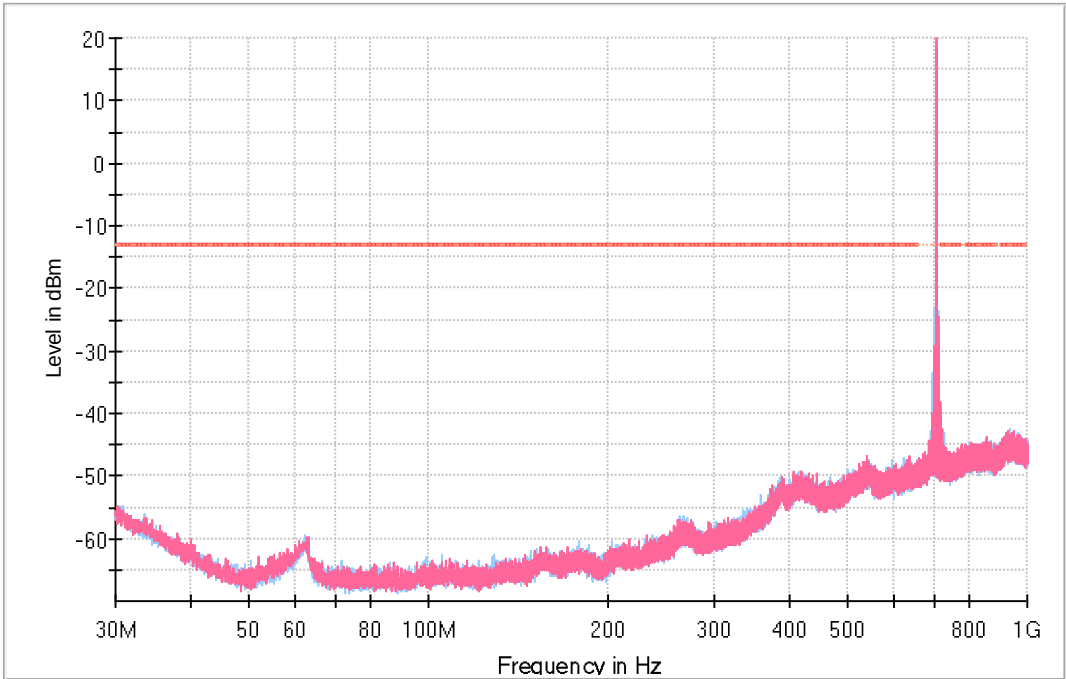
FREQUENCY RANGE 30 MHz - 1 GHz:

- LOW CHANNEL:



The peak above the limit is the LTE Cat-M1 Band 12 carrier frequency.

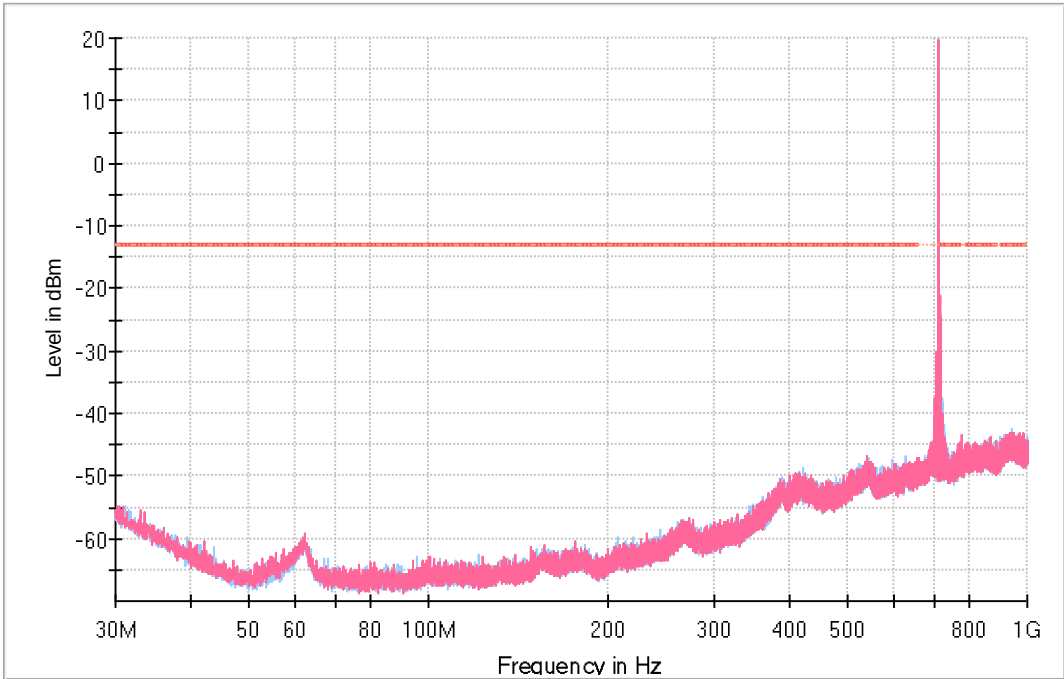
- MIDDLE CHANNEL:



- Preview Result 1H-PK+
- Preview Result 1V-PK+
- FCC RSE Part 27 (B4, B8, B12, B13, B17, B66, B71, B85)
- 13 dBm
- Final_Result PK+

The peak above the limit is the LTE Cat-M1 Band 12 carrier frequency.

- HIGH CHANNEL:

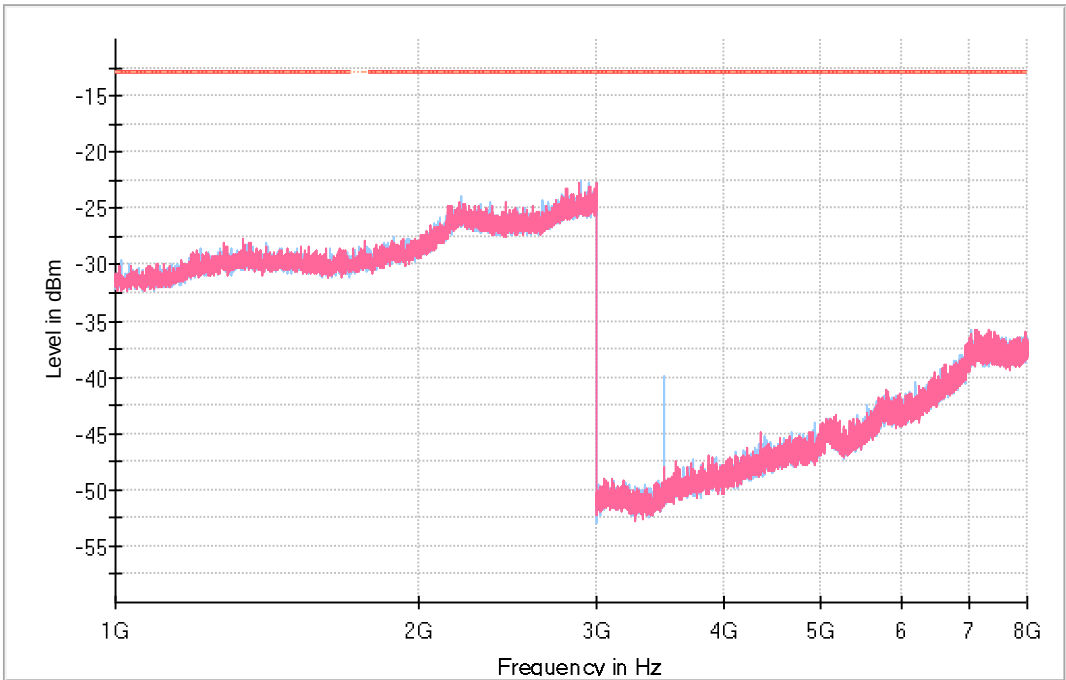


- Preview Result 1H-PK+
- Preview Result 1V-PK+
- FCC RSE Part 27 (B4, B8, B12, B13, B17, B66, B71, B85)
- 13 dBm
- Final_Result PK+

The peak above the limit is the LTE Cat-M1 Band 12 carrier frequency.

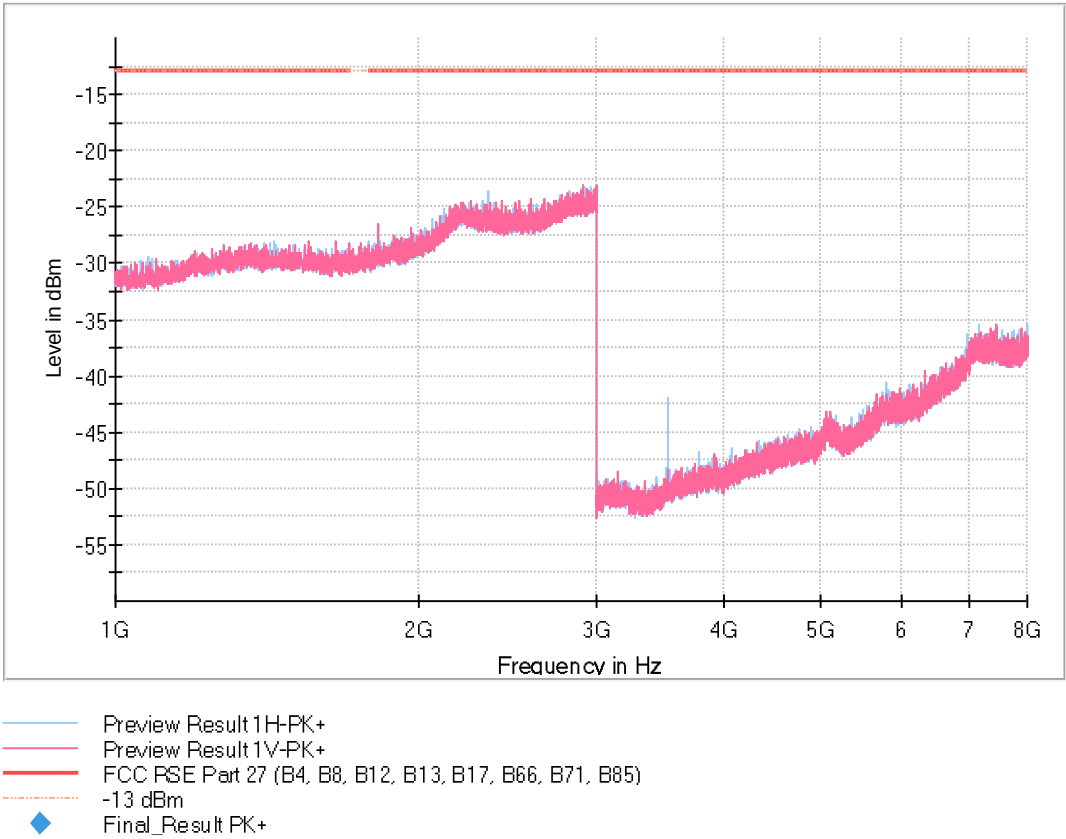
FREQUENCY RANGE 1 GHz - 8 GHz

- LOW CHANNEL:

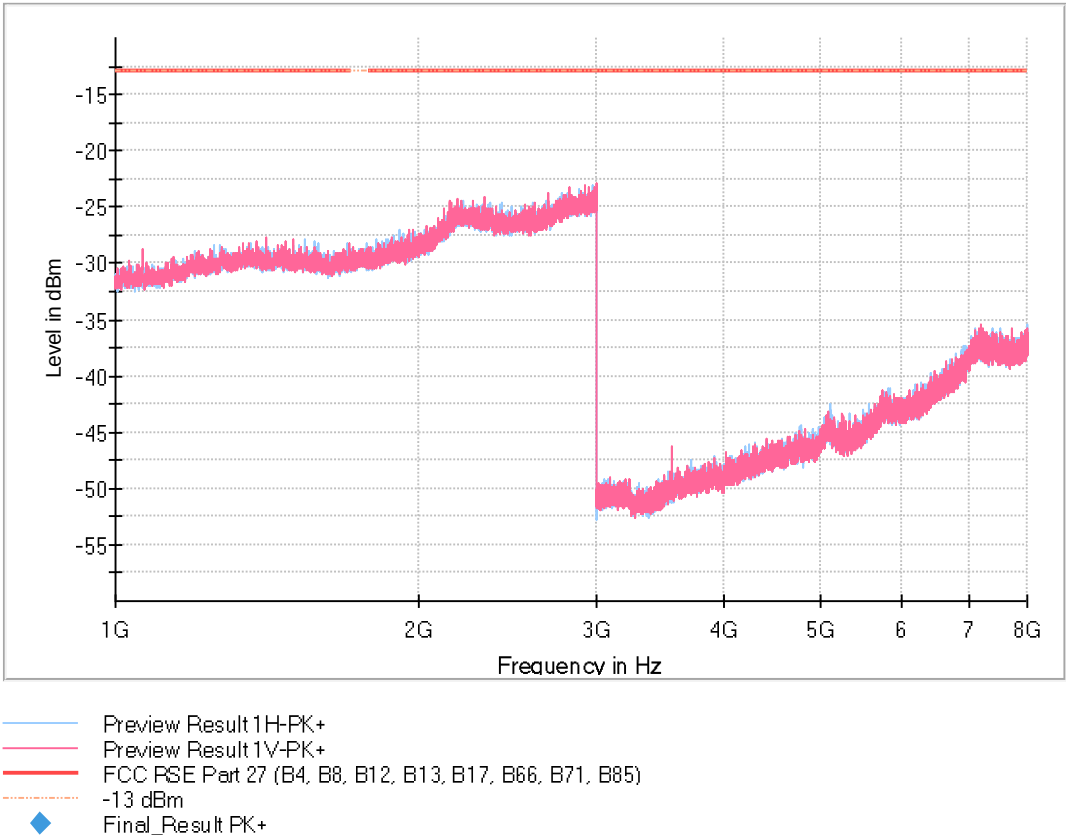


- Preview Result 1H-PK+
- Preview Result 1V-PK+
- FCC RSE Part 27 (B4, B8, B12, B13, B17, B66, B71, B85)
- 13 dBm
- Final_Result PK+

- MIDDLE CHANNEL:



- HIGH CHANNEL:



LTE Cat-M1 Band 13:

The worst RF Power case measured on the device corresponds to the configuration with maximum RF Power measured on the integrated module: BW=5 MHz, Middle Channel, 16QAM, RB Size=1, RB Offset=0.

Frequency range 30 MHz - 1 GHz:

- LOW CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

- MIDDLE CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

Frequency range 1 - 8 GHz:

- LOW CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

- MIDDLE CHANNEL:

Spurious frequencies at less than 20 dB below the limit:

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Polarization
1559.626344	-59.09	-40.00	19.09	H

- HIGH CHANNEL:

Spurious frequencies at less than 20 dB below the limit:

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Polarization
1564.719969	-59.09	-40.00	19.09	H

Measurement uncertainty (dB) $< \pm 5.35$ for $f < 1$ GHz
 $< \pm 4.32$ for $f \geq 1$ GHz up to 8 GHz

Verdict

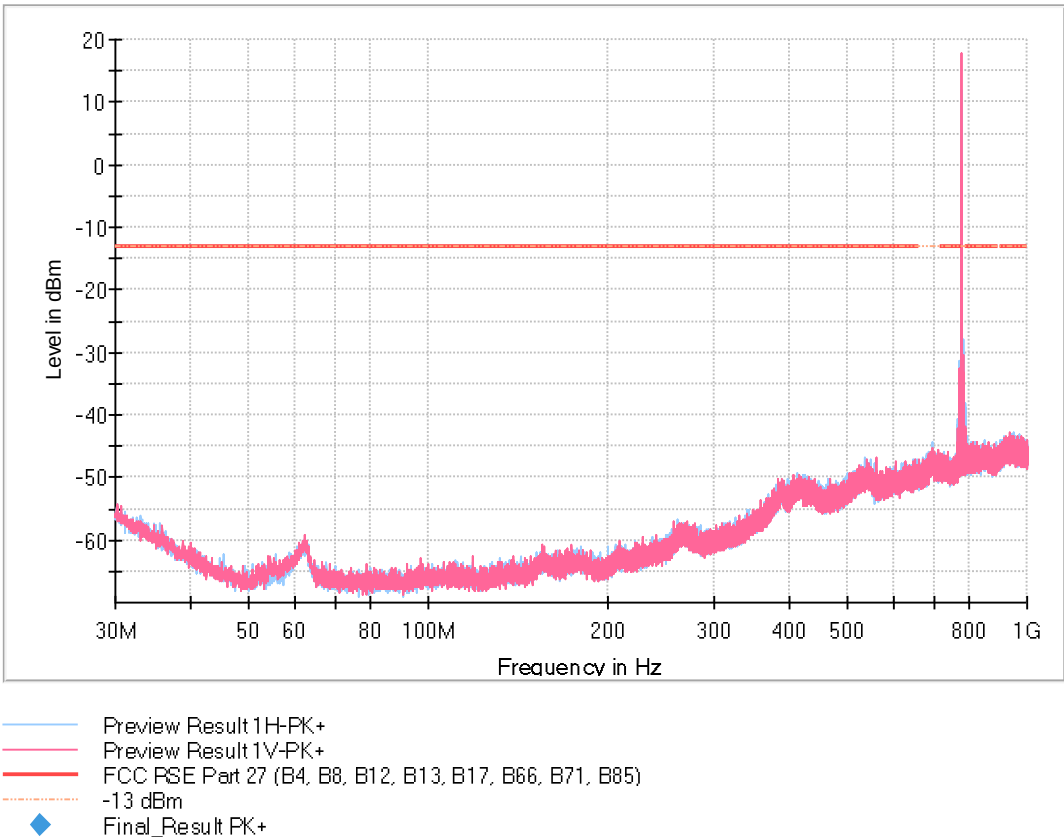
Pass

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	400 kHz	PK+	1 MHz	0,05 s	0 dB
1 GHz - 3 GHz	40 kHz	PK+	100 kHz	0,05 s	0 dB
3 GHz - 17 GHz	40 kHz	PK+	100 kHz	0,05 s	0 dB

LTE Cat-M1 Band 13:

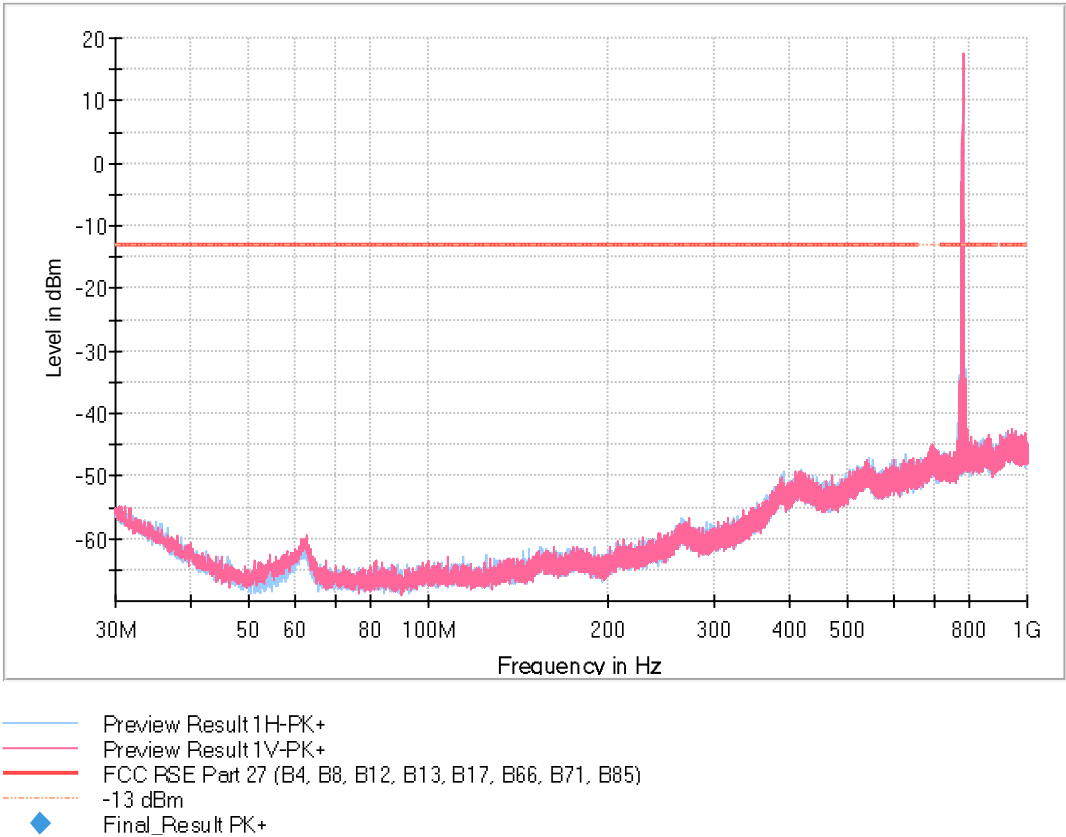
FREQUENCY RANGE 30 MHz - 1 GHz:

- LOW CHANNEL:



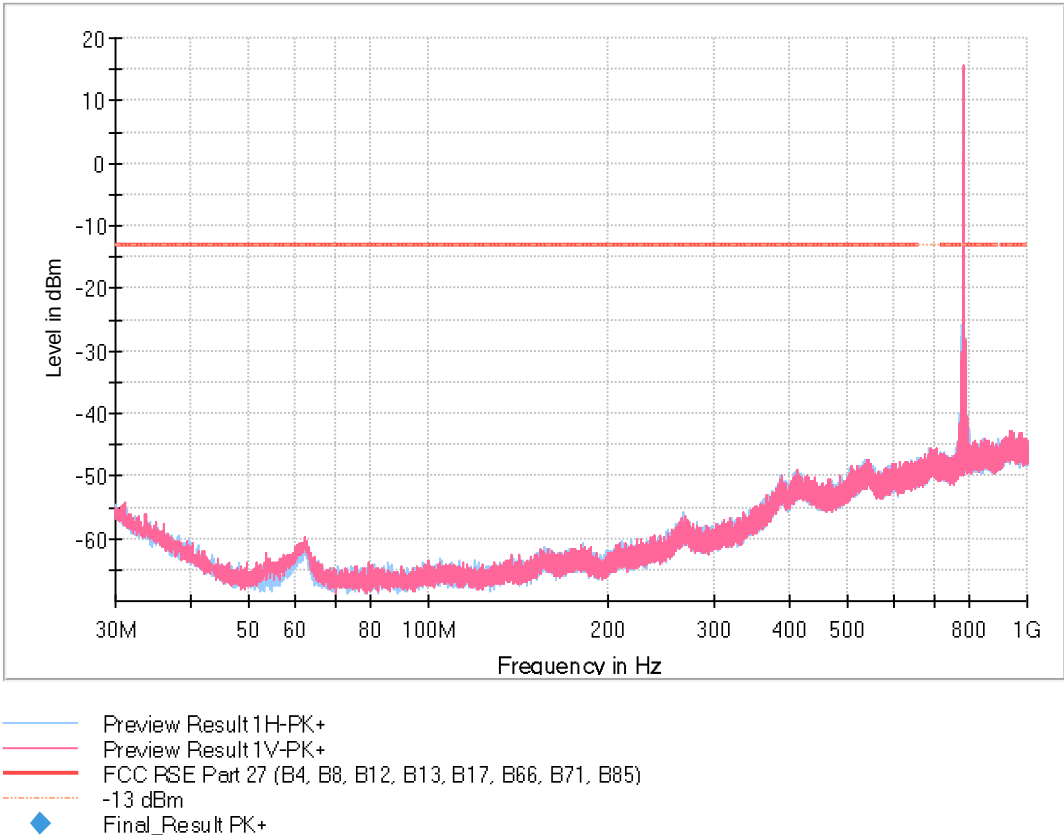
The peak above the limit is the carrier frequency.

- MIDDLE CHANNEL:



The peak above the limit is the carrier frequency.

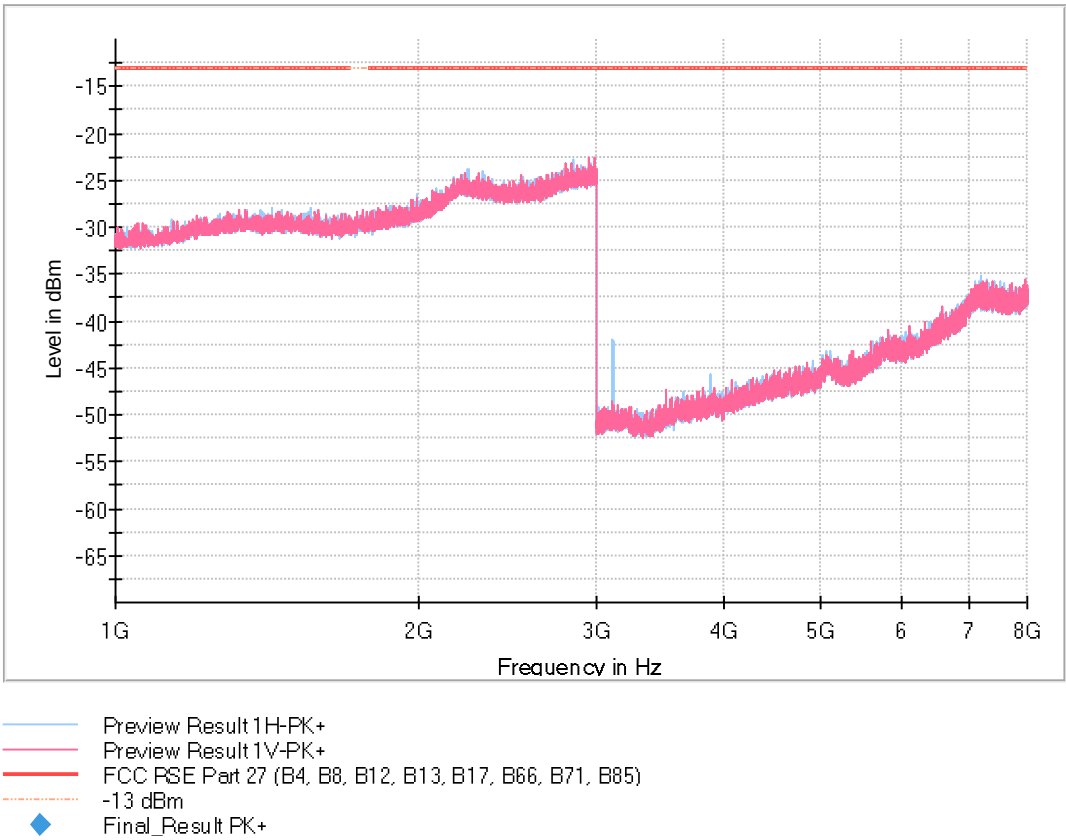
- HIGH CHANNEL:

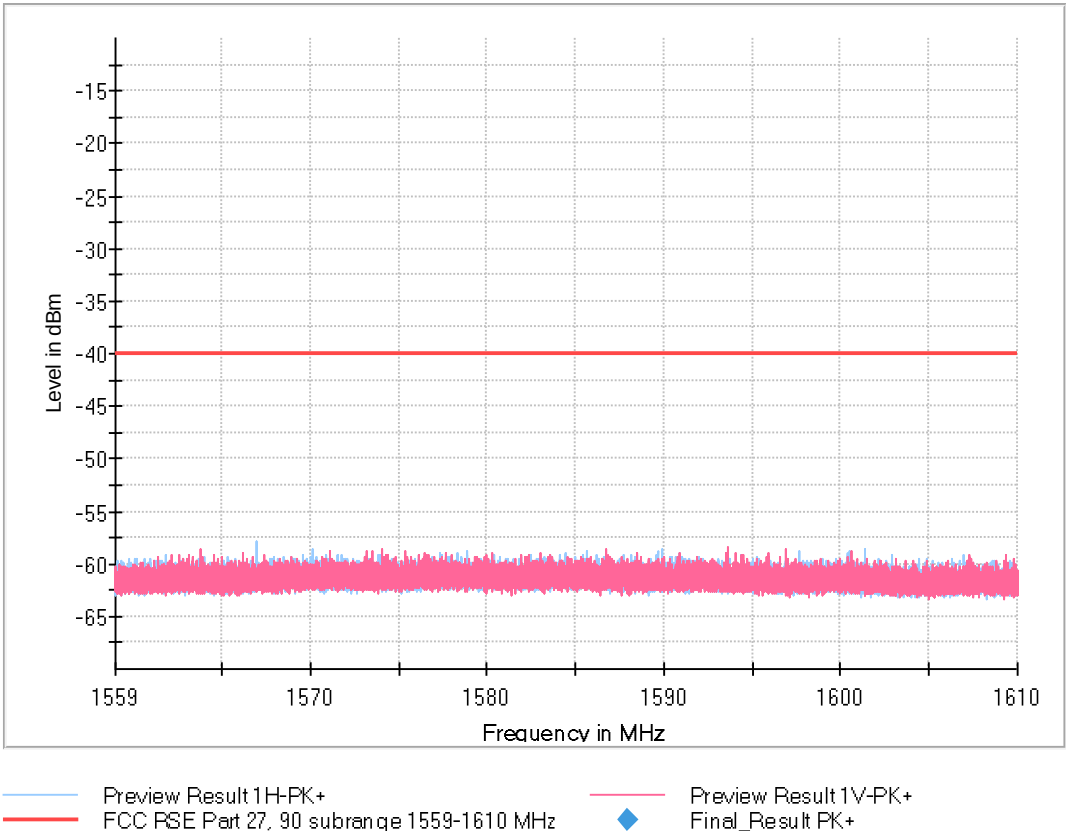


The peak above the limit is the carrier frequency.

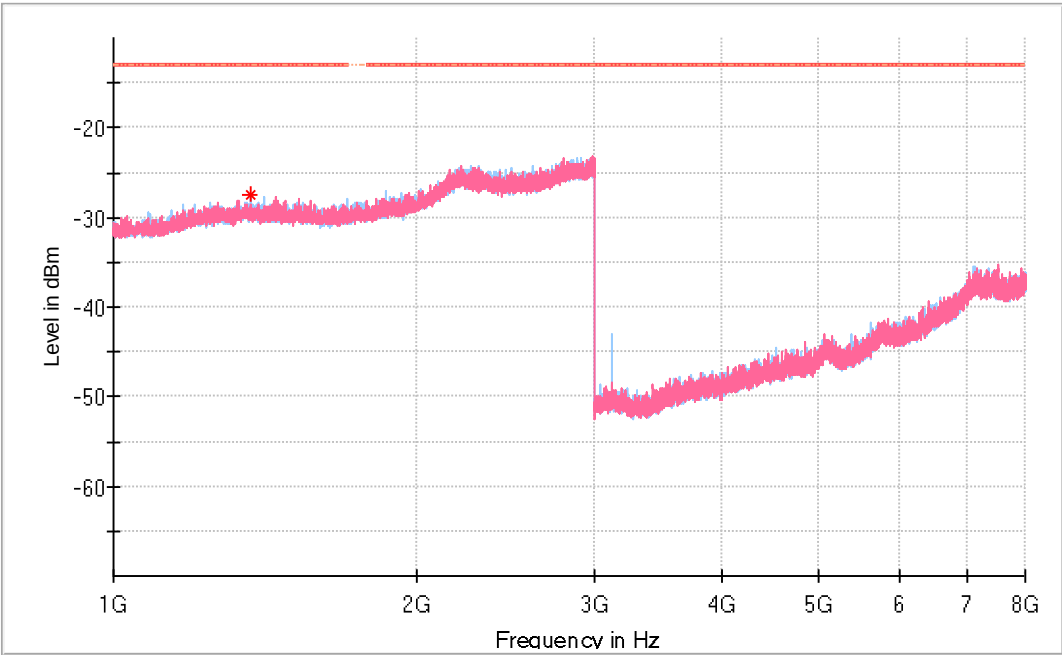
FREQUENCY RANGE 1 - 8 GHz:

- LOW CHANNEL:

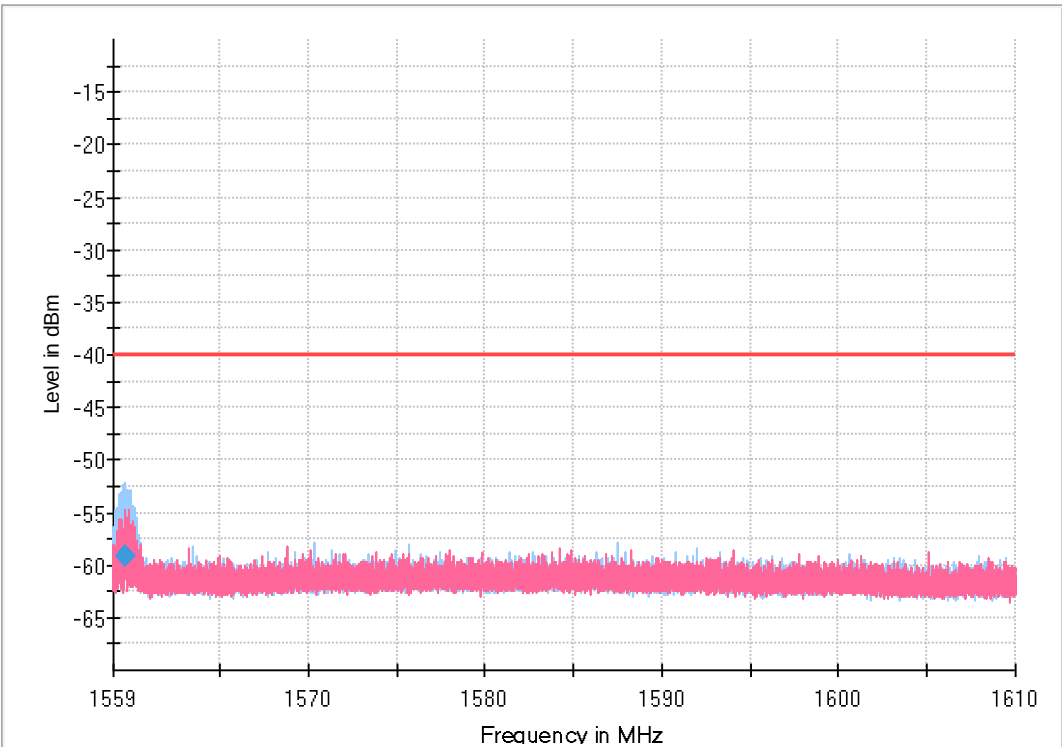




- MIDDLE CHANNEL:

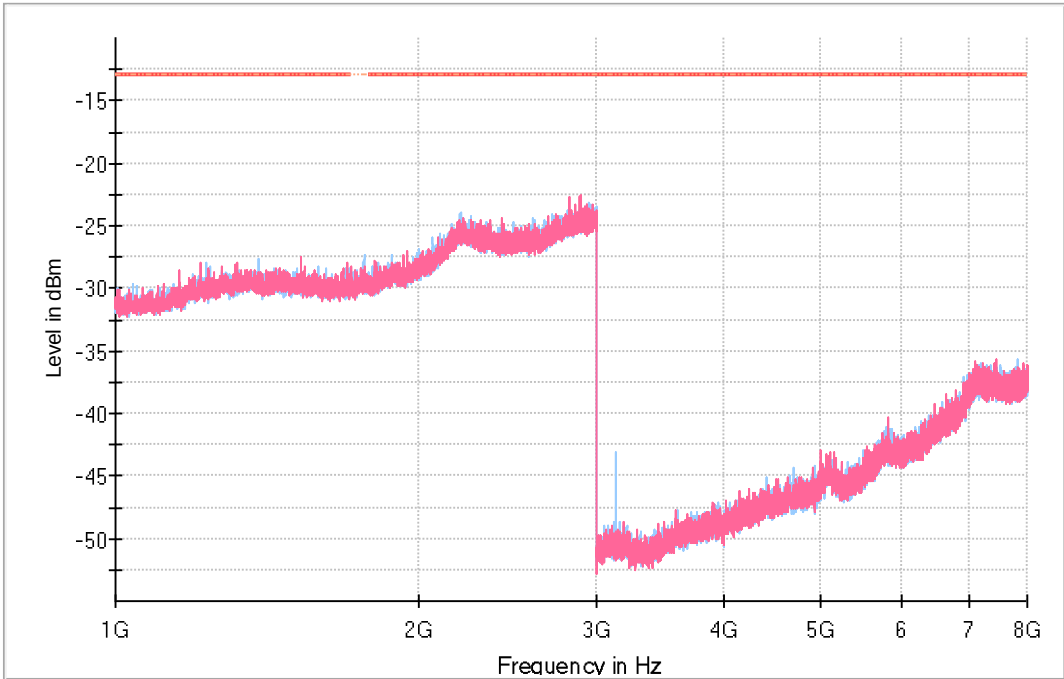


- Preview Result 1H-PK+
- Preview Result 1V-PK+
- * Critical_Freqs PK+
- FCC RSE Part 27 (B4, B8, B12, B13, B17, B66, B71, B85)
- 13 dBm
- ◆ Final_Result PK+

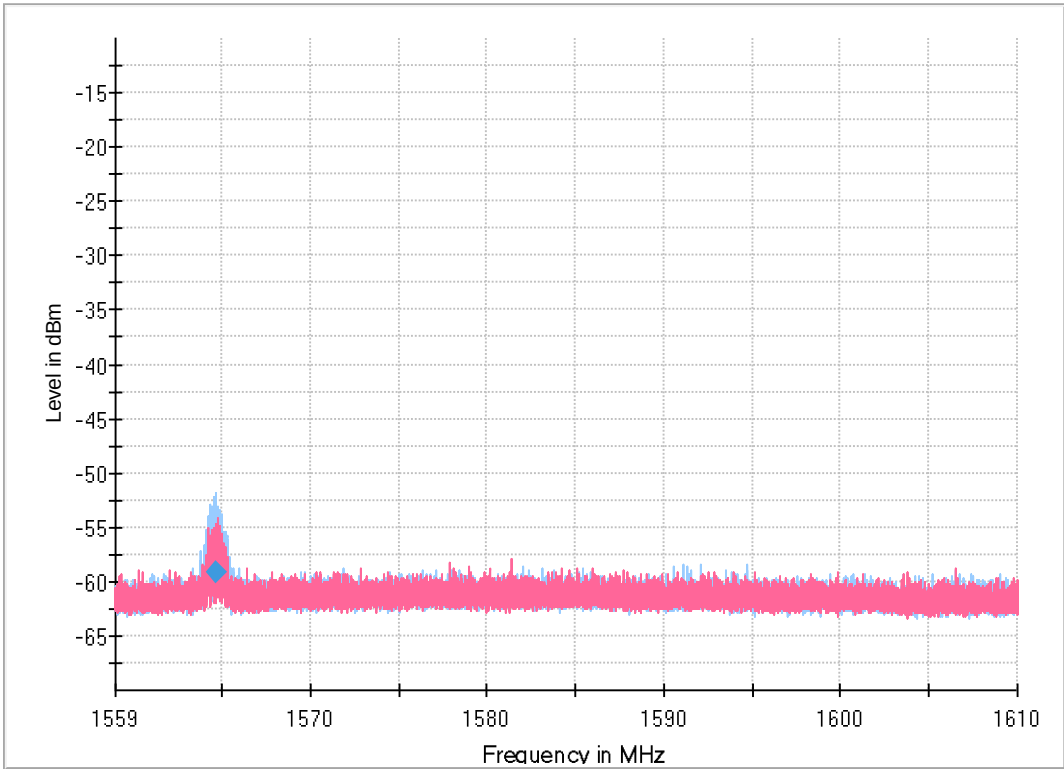


- Preview Result 1H-PK+
- Preview Result 1V-PK+
- FCC RSE Part 27, 90 subrange 1559-1610 MHz
- ◆ Final_Result PK+

- HIGH CHANNEL:



- Preview Result 1H-PK+
- Preview Result 1V-PK+
- FCC RSE Part 27 (B4, B8, B12, B13, B17, B66, B71, B85)
- 13 dBm
- Final_Result PK+



- Preview Result 1H-PK+
- Preview Result 1V-PK+
- Final_Result PK+

LTE Cat-M1 Band 66:

The worst case measured on the device corresponds to the configuration with maximum RF Power measured on the integrated module: BW=20 MHz, Middle Channel, 16QAM, RB Size=1, RB Offset=0.

Frequency range 30 MHz - 1 GHz:

- LOW CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

- MIDDLE CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

Frequency range 1 - 18 GHz:

- LOW CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

- MIDDLE CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies at less than 20 dB below the limit.

Measurement Uncertainty (dB) $< \pm 5.35$ for $f < 1$ GHz
 $< \pm 4.32$ for $f \geq 1$ GHz up to 18 GHz

Verdict

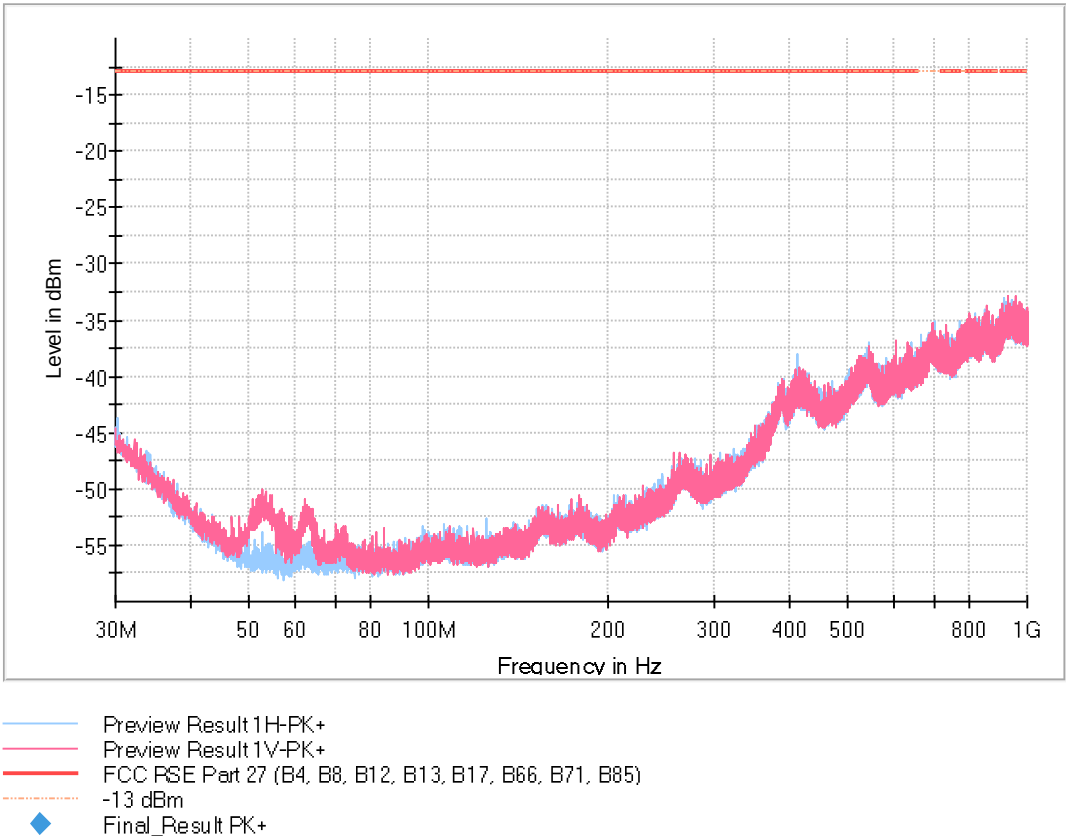
Pass

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	400 kHz	PK+	100 kHz	0,05 s	0 dB
1 GHz - 3 GHz	40 kHz	PK+	100 kHz	0,05 s	0 dB
3 GHz - 17 GHz	40 kHz	PK+	100 kHz	0,05 s	0 dB
17 GHz - 18 GHz	312,5 kHz	PK+	1 MHz	1 s	0 dB

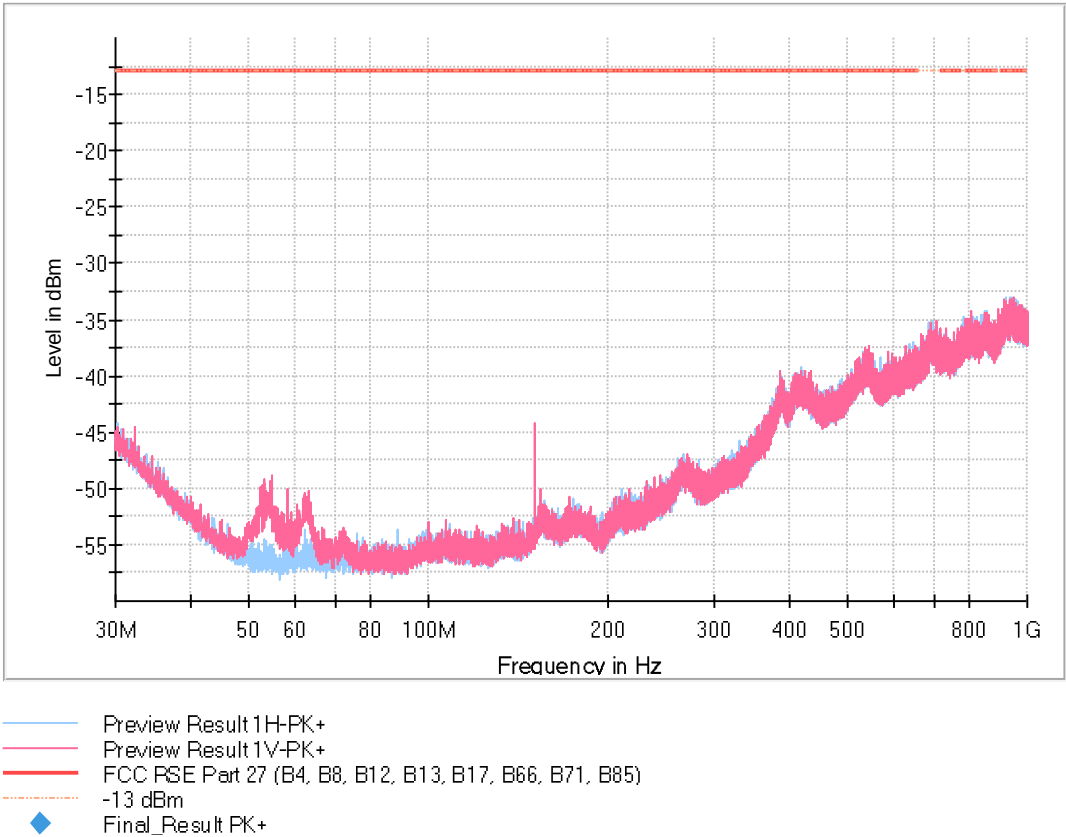
LTE Cat-M1 Band 66:

FREQUENCY RANGE 30 MHz - 1 GHz:

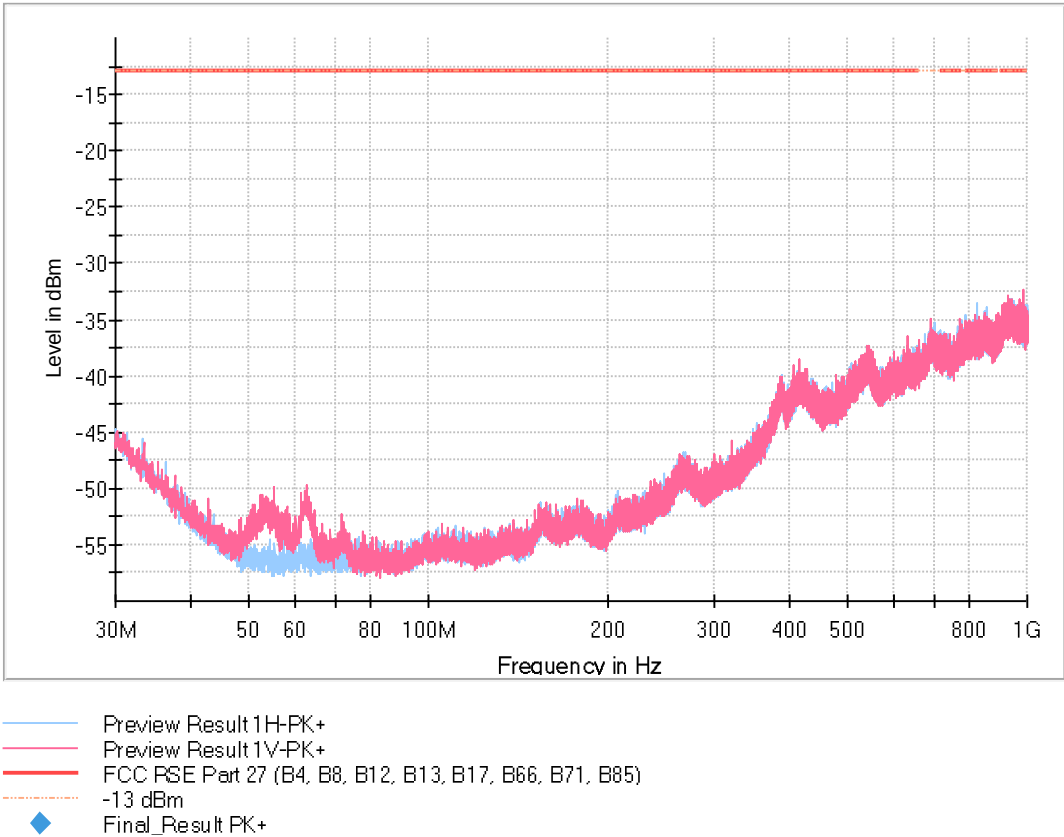
- LOW CHANNEL:



- MIDDLE CHANNEL:

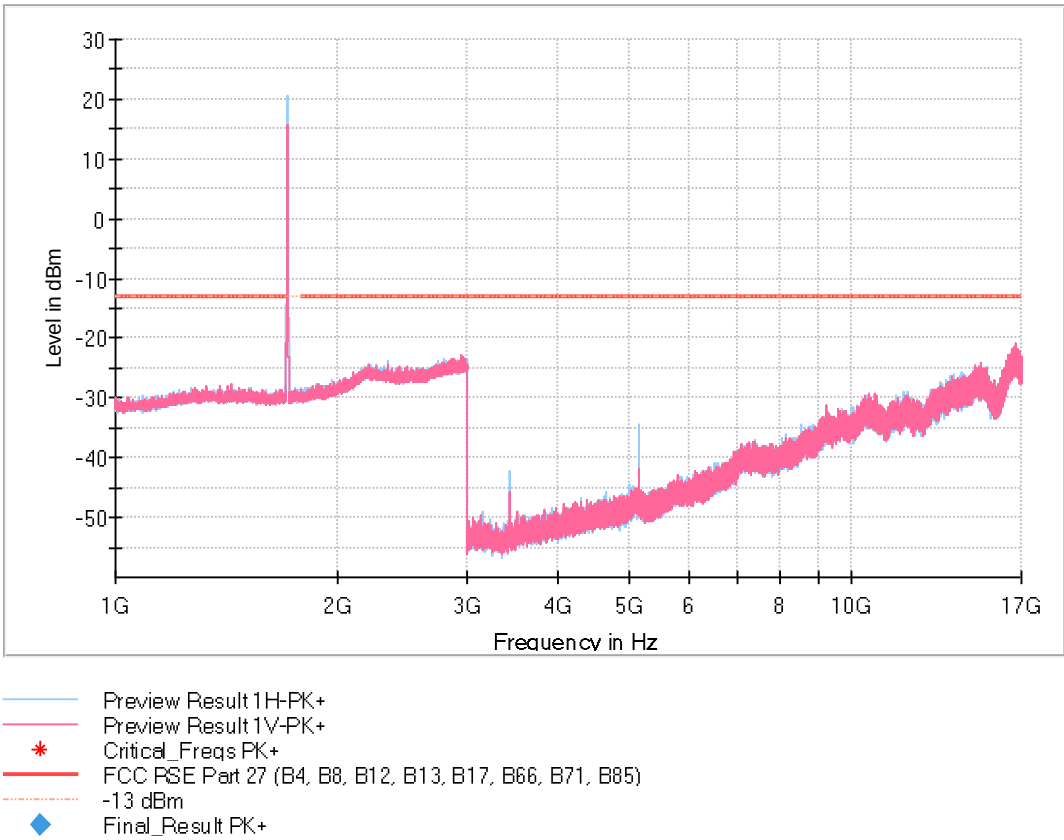


- HIGH CHANNEL:

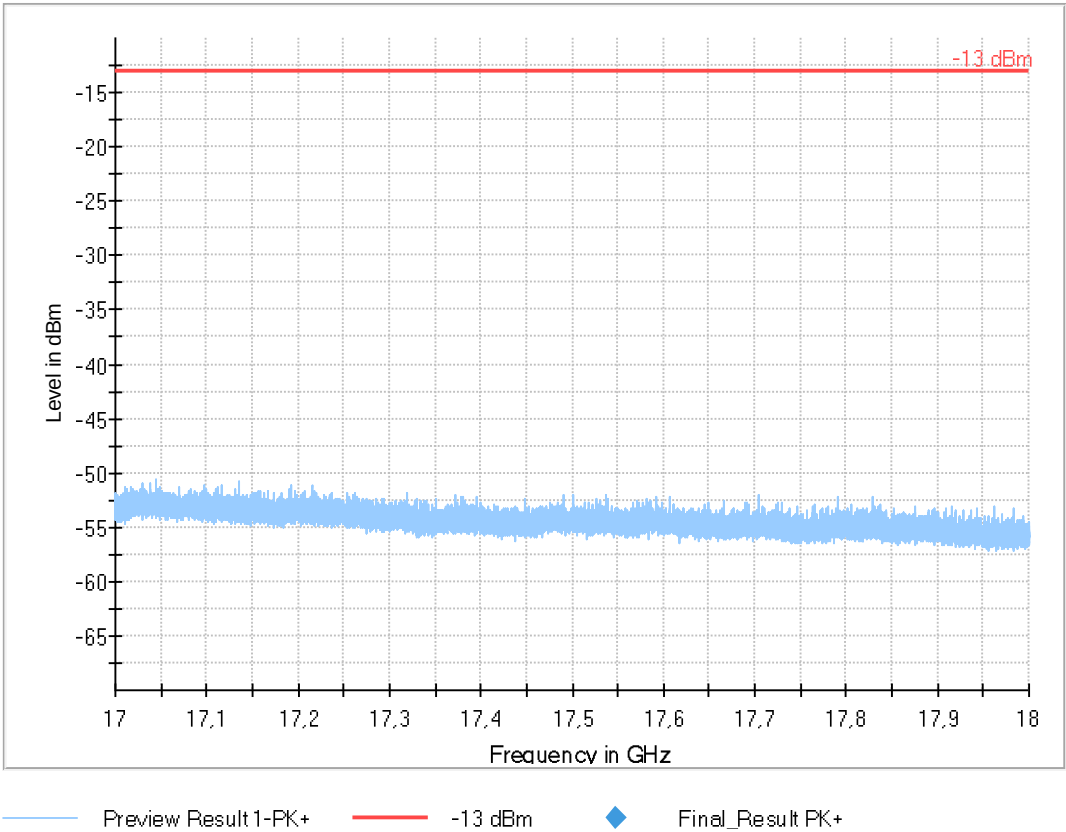


FREQUENCY RANGE 1 - 18 GHz:

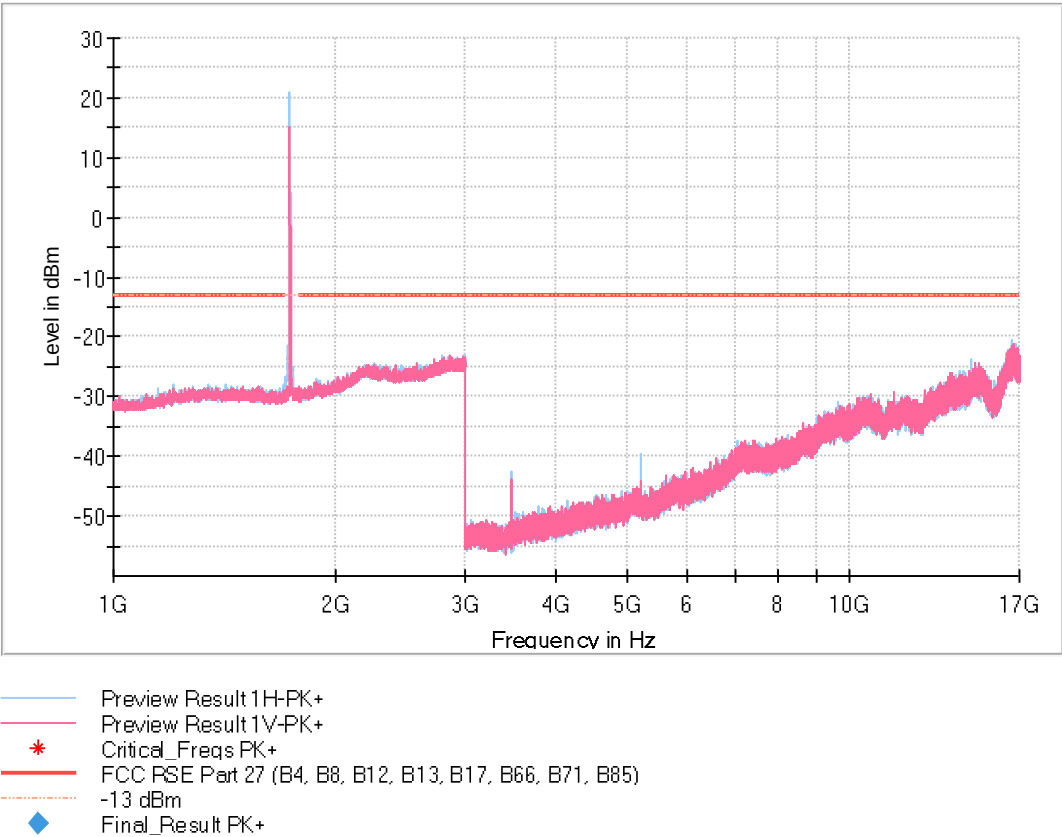
- LOW CHANNEL:



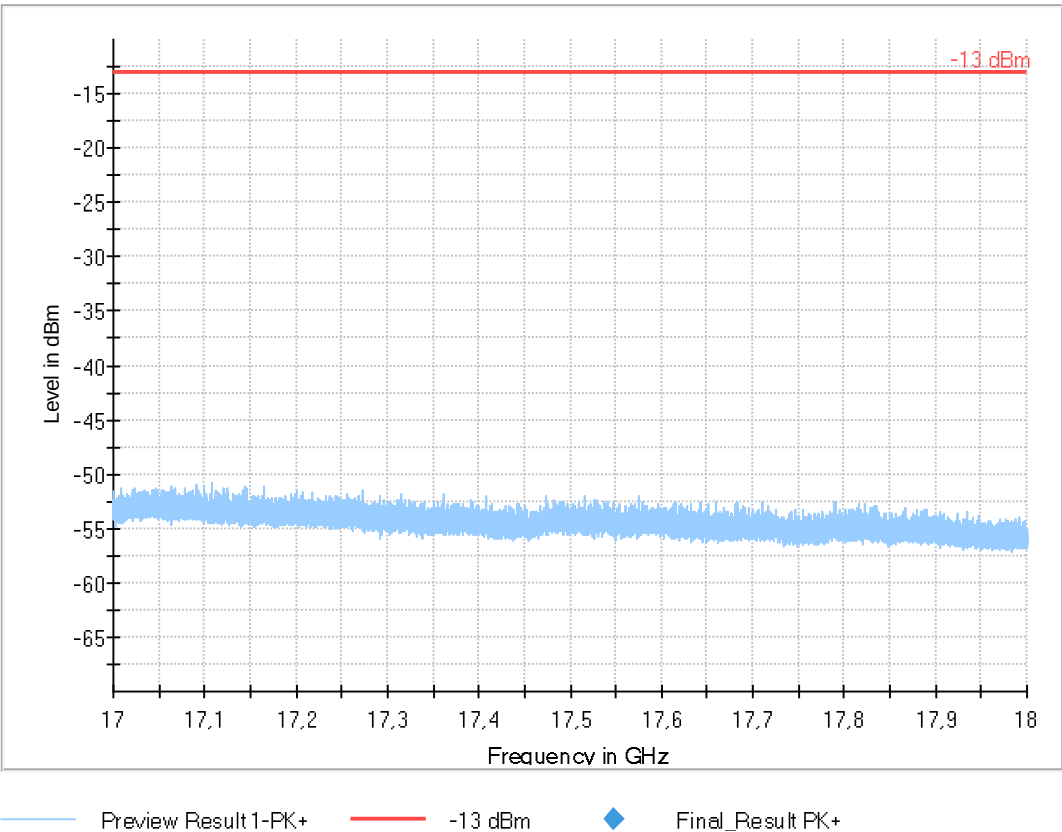
The higher peak is the carrier frequency.



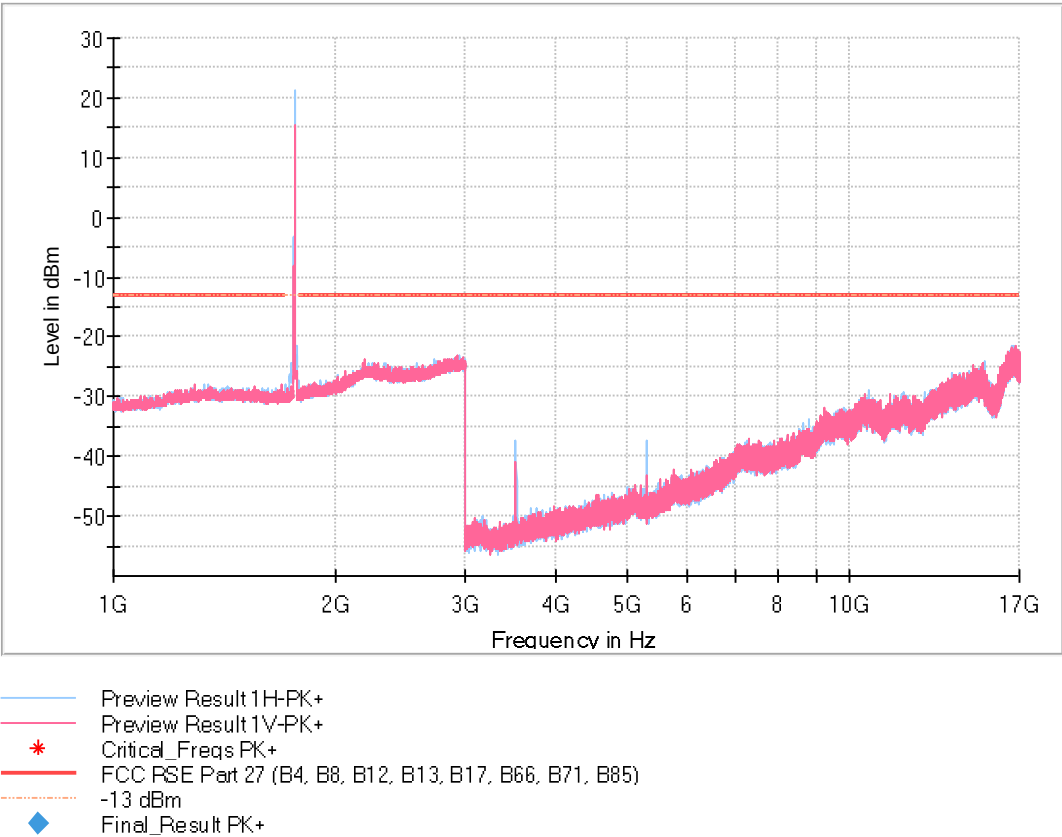
- MIDDLE CHANNEL:



The higher peak is the carrier frequency.



- HIGH CHANNEL:



The higher peak is the carrier frequency.

