

ISED CABid: ES1909

Lab. Company Number: 4621A

Test Report No:

79798RRF.004A2

Partial Test Report

USA FCC Part 24

CANADA RSS-133

(*) 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 24 (10-1-22 Edition). CANADA RSS-133 Issue 7, Jul. 2024. 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"

Index

Competences and guarantees 3

General conditions 3

Uncertainty 3

Data provided by the client.....3

Usage of samples 4

Test sample description 4

Identification of the client.....5

Testing period and place.....5

Document history 5

Environmental conditions 6

Remarks and comments 7

Testing verdicts.....8

Summary 8

Appendix A: Test results for FCC 24 / RSS-133: LTE Cat-M1 Bands 2, 25.....9

Competences and guarantees

DEKRA Testing and Certification is a testing laboratory accredited by the National Accreditation Body (ENAC - Entidad Nacional de Acreditación), to perform the tests indicated in the Certificate No. 51/LE 147.

DEKRA Testing and Certification is an FCC-recognized accredited testing laboratory with appropriate scope of accreditation that covers the performed tests in this 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.

In order to assure the traceability to other national and international laboratories, DEKRA Testing and Certification has a calibration and maintenance program for its measurement equipment.

DEKRA Testing and Certification guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated on the report and, it is based on the knowledge and technical facilities available at DEKRA Testing and Certification at the time of performance of the test.

DEKRA Testing and Certification is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document. **IMPORTANT:** No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA Testing and Certification.

General conditions

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA Testing and Certification S.A.U.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA Testing and Certification S.A.U. and the Accreditation Bodies.

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	HW Version	Serial N°	Date Reception of	Application
S/01	79798/056	Non-invasive ventilation (NIV) device	AIR11M1TA	22242275637	2025-04-02	Element Under Test	Element Under Test
S/01	79798/058	Power Cord	-	-	2025-04-02	Auxiliary Element	Auxiliary Element
S/01	79798/059	AC/DC	-	23022251803	2025-04-02	Auxiliary Element	Auxiliary Element
S/02	79798/038	Non-invasive ventilation (NIV) device	AIR11M1TA	R510-718	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)	2025-07-29

Document history

Report number	Date	Description
79798RRF.004	2026-02-20	First release.
79798RRF.004A1	2026-03-04	First revision. On the main page, a typo in the description “RSS-133 Issue 6” has been corrected to “RSS-133 Issue 7”. This report cancels and replaces the previous report 79798RRF.004.
79798RRF.004A2	2026-04-06	Second revision. The antenna gain values are updated with the correct values provided by the client. This report cancels and replaces the previous report 79798RRF.004A1.

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, Carmen Vázquez.

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
6667	WIDEBAND RADIO COMMUNICATION TESTER	CMW500	ROHDE AND SCHWARZ	2025-09-27
6792	SHIELDED ROOM	S101	ETS LINDGREN	N/A
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 2, 25.

FCC 24 / RSS-133		
Requirement – Test case	Verdict	Remark
FCC 24.232 / RSS-133 6.4: RF Output Power	P	
FCC 2.1047 / RSS-133 6.2: Modulation characteristics	N/M	(1)
FCC 24.235 / RSS-133 6.3: Frequency stability	N/M	(1)
FCC 2.1049: Occupied Bandwidth	N/M	(1)
FCC 24.238 / RSS-133 6.5: Spurious emissions at antenna terminals	N/M	(1)
FCC 24.238 / RSS-133 6.5: Spurious emissions at antenna terminals at Block Edges	N/M	(1)
FCC 24.238 / RSS-133 6.5: Radiated Emissions	P	
<u>Supplementary information and remarks:</u> (1) Test not requested.		

Appendix A: Test results for FCC 24 / RSS-133: LTE Cat-M1 Bands 2, 25

INDEX

TEST CONDITIONS 11

RF Output Power 12

Radiated Emissions 14

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 (*):

Band	Max Gain (dBi)	Type of Antenna
LTE Cat-M1 25	+2.2	Internal

TEST FREQUENCIES:

LTE Cat-M1 Band 25. QPSK and 16QAM:

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	26047 (1850.7)	26055 (1851.5)	26065 (1852.5)	26090 (1855)	26115 (1857.5)	26140 (1860)
Middle	26365 (1882.5)	26365 (1882.5)	26365 (1882.5)	26365 (1882.5)	26365 (1882.5)	26365 (1882.5)
High	26683 (1914.3)	26675 (1913.5)	26665 (1912.5)	26640 (1910)	26615 (1907.5)	26590 (1905)

RF Output Power

Limits

FCC § 2.1046 and § 24.232:

Mobile/portable stations are limited to 2 Watts (33 dBm) Effective Isotropic Radiated Power (E.I.R.P.).
The peak-to-average ratio (PAR) of the transmission shall not exceed 13 dB.

RSS-133 Clause 6.4:

Mobile stations and hand-held portables are limited to 2 watts maximum e.i.r.p. The peak-to-average power ratio (PAPR) shall not exceed 13 dB for more than 0.1% of the time using a signal corresponding to the High PAPR during periods of continuous transmission.

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 25:

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, QPSK, 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	20.32	2.2	22.52	20.37
MIDDLE	20.24	2.2	22.44	20.29
HIGH	19.79	2.2	21.99	19.84
MAX:	20.32		22.52	20.37

Measurement uncertainty (dB) <±0.941

Verdict

Pass

Radiated Emissions

Limits

* FCC § 24.238. RSS-133 Clause 6.5:

The power of emissions shall be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB. P in watts.

Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater.

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 Limit:

At P_o transmitting power. the specified minimum attenuation becomes $43 + 10 \log (P_o)$ and the level in dBm relative P_o becomes:

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

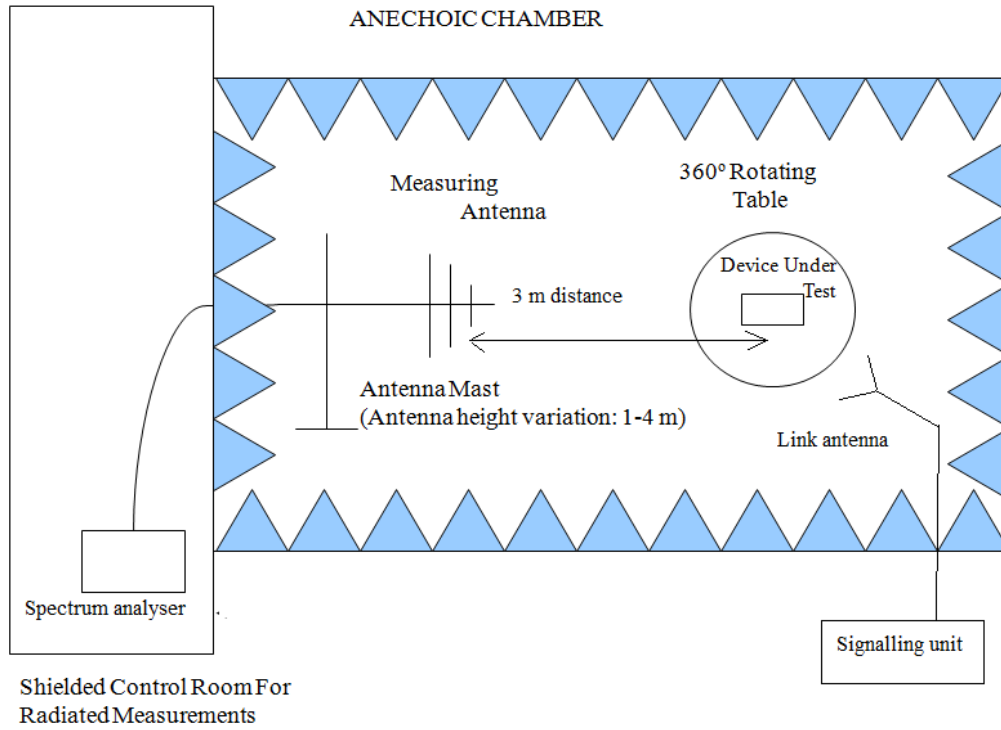
The maximum field strength (dB μ V/m) of each detected emission at less than 20 dB respect to the limit is converted to an equivalent EIRP level (dBm) according to ANSI C63.26 with the formula:

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

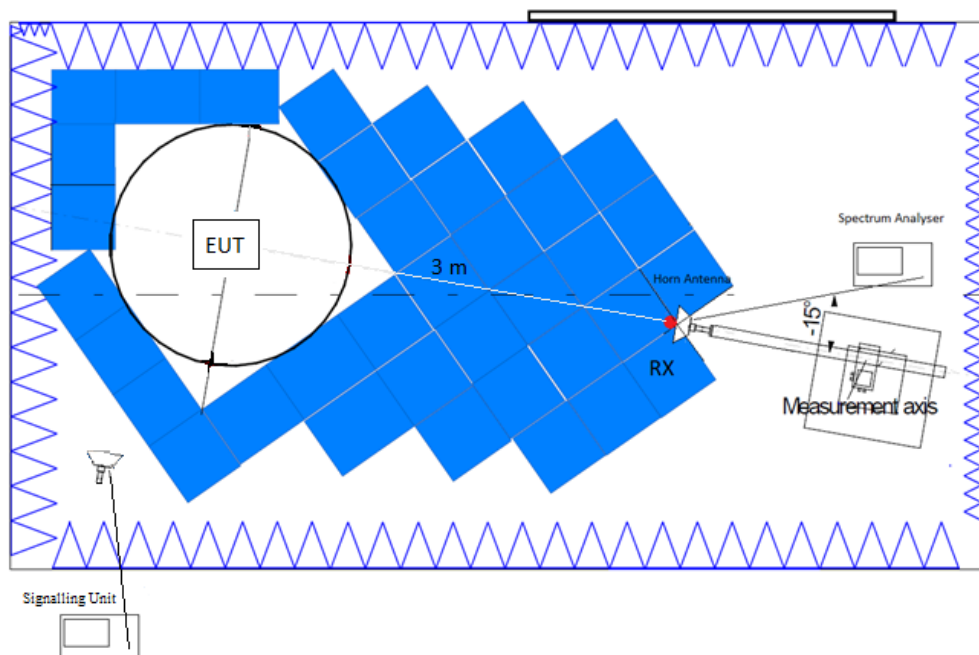
where D is the measurement distance (in the far field region) in m.

Test Setup

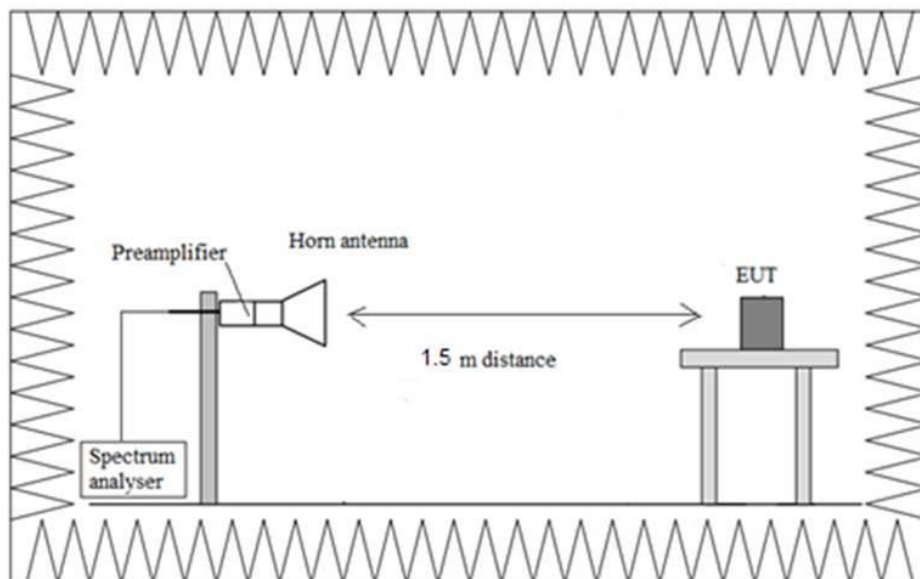
Radiated measurements below 1 GHz:



Radiated measurements above 1 GHz up to 17 GHz:



Radiated measurements above 17 GHz:



Results

LTE Cat-M1 Band 25:

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, QPSK, RB Size=1, RB Offset=0.

Frequency Range 30 MHz - 1 GHz:

- LOW CHANNEL:

No spurious signals were found at less than 20 dB below the limit.

- MIDDLE CHANNEL:

No spurious signals were found at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious signals were found at less than 20 dB below the limit.

Frequency Range 1 - 20 GHz:

- LOW CHANNEL:

No spurious signals were found at less than 20 dB below the limit.

- MIDDLE CHANNEL:

No spurious signals were found at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious signals were found at less than 20 dB below the limit.

	$< \pm 5.03$ for $f < 1$ GHz
Measurement uncertainty (dB)	$< \pm 4.32$ for $f \geq 1$ GHz up to 17 GHz
	$< \pm 4.58$ for $f \geq 17$ GHz up to 20 GHz

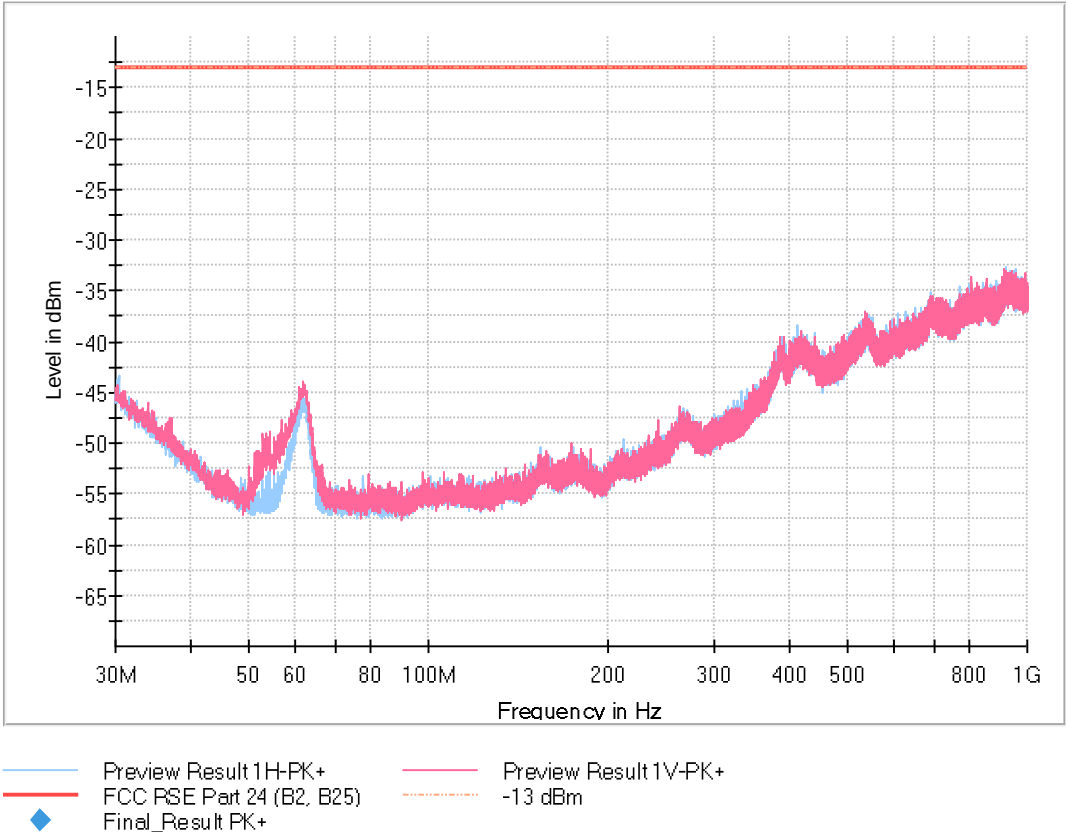
Verdict

Pass

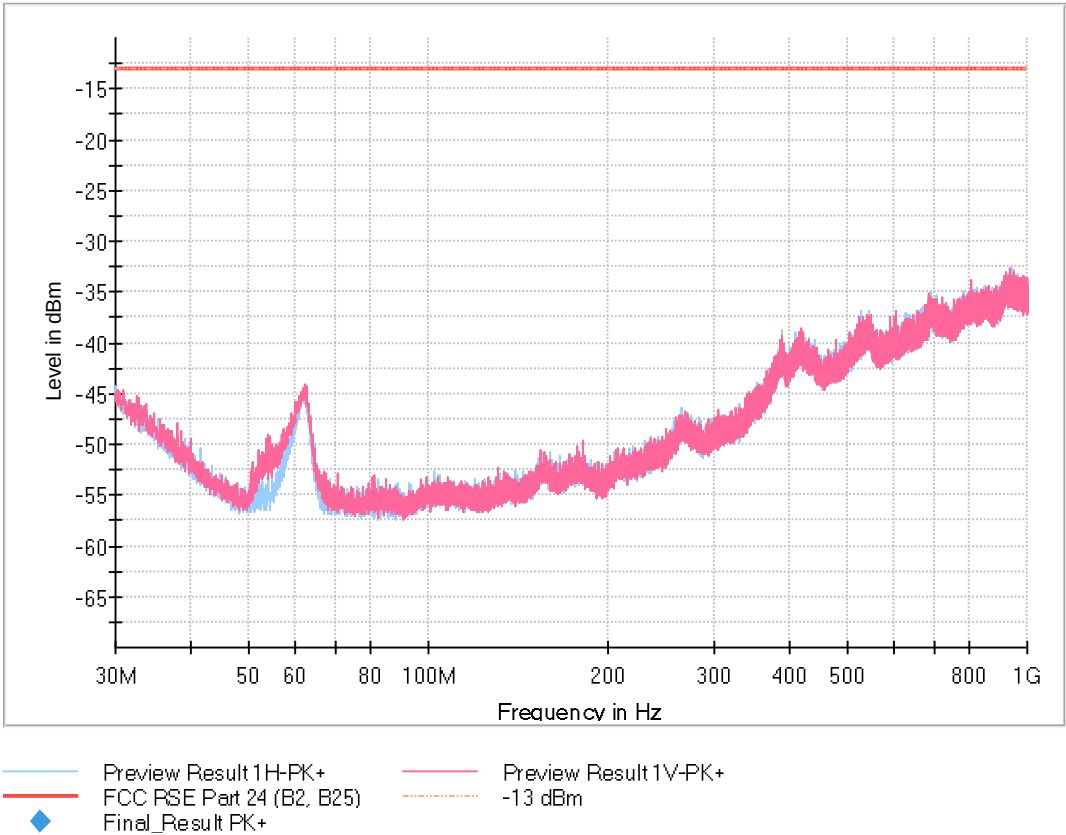
Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	30,312 kHz	PK+	1 MHz	Coupled	0 dB
1 GHz - 3 GHz	62.5 kHz	PK+	1 MHz	1 s	0 dB
3 GHz - 17 GHz	437.5 kHz	PK+	1 MHz	1 s	0 dB
17 GHz - 20 GHz	93.75 kHz	PK+	1 MHz	1 s	0 dB

FREQUENCY RANGE 30 MHz - 1 GHz:

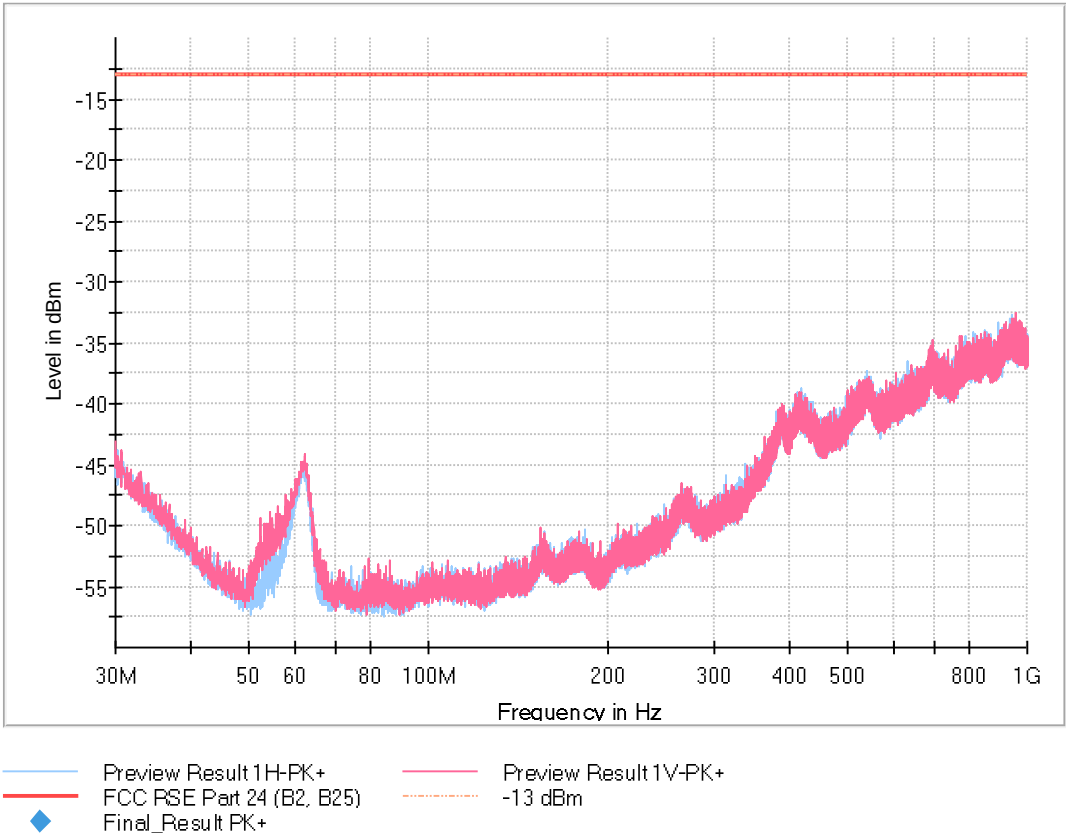
- Low Channel:



- Middle Channel:

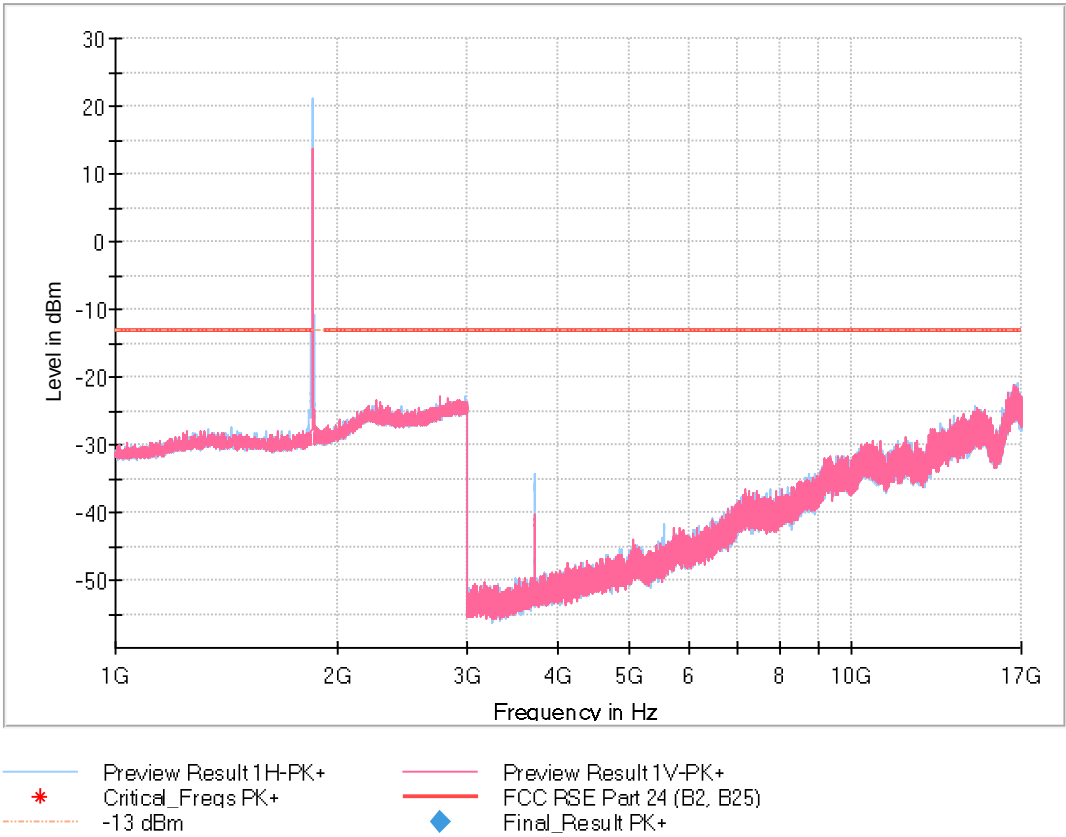


- High Channel:

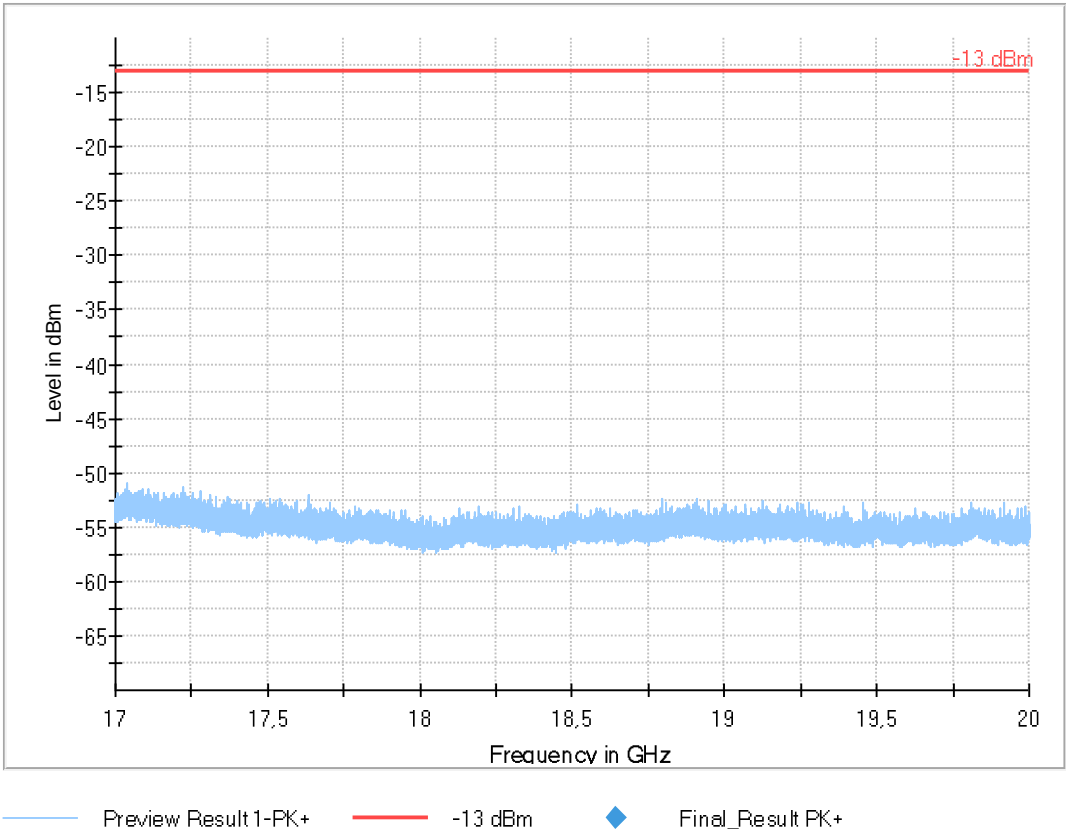


FREQUENCY RANGE 1 - 20 GHz:

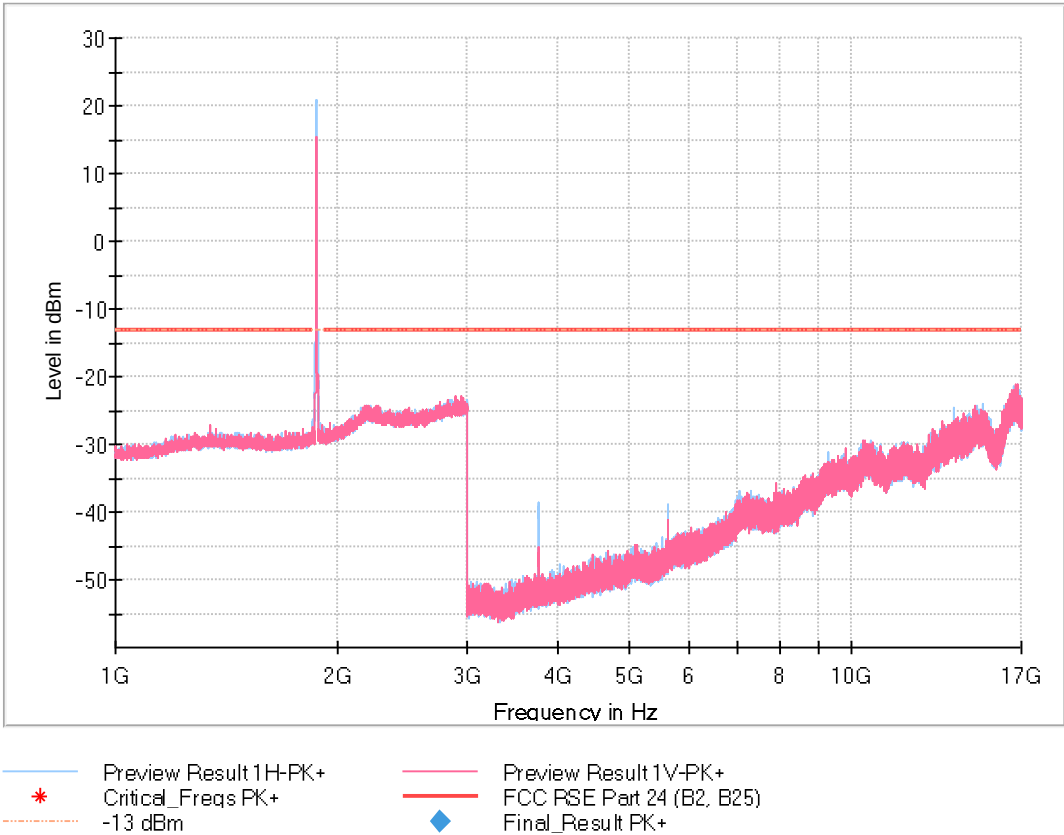
- Low Channel:



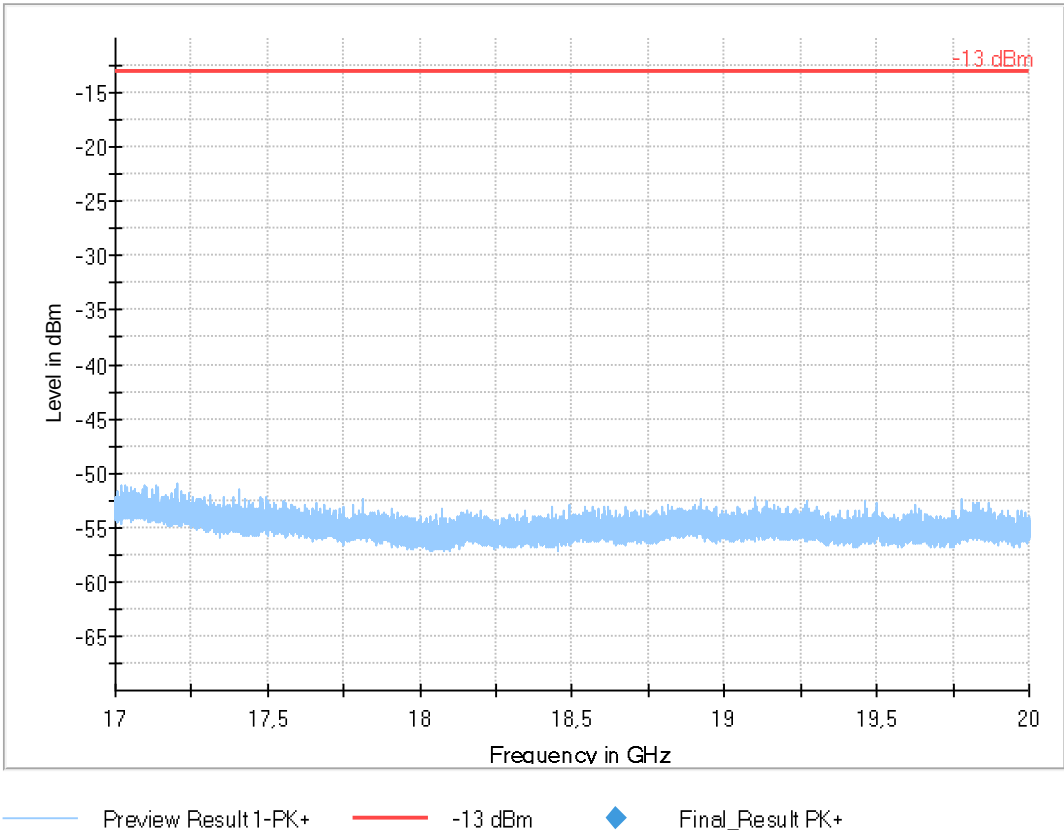
The peak above the limit is the carrier frequency.



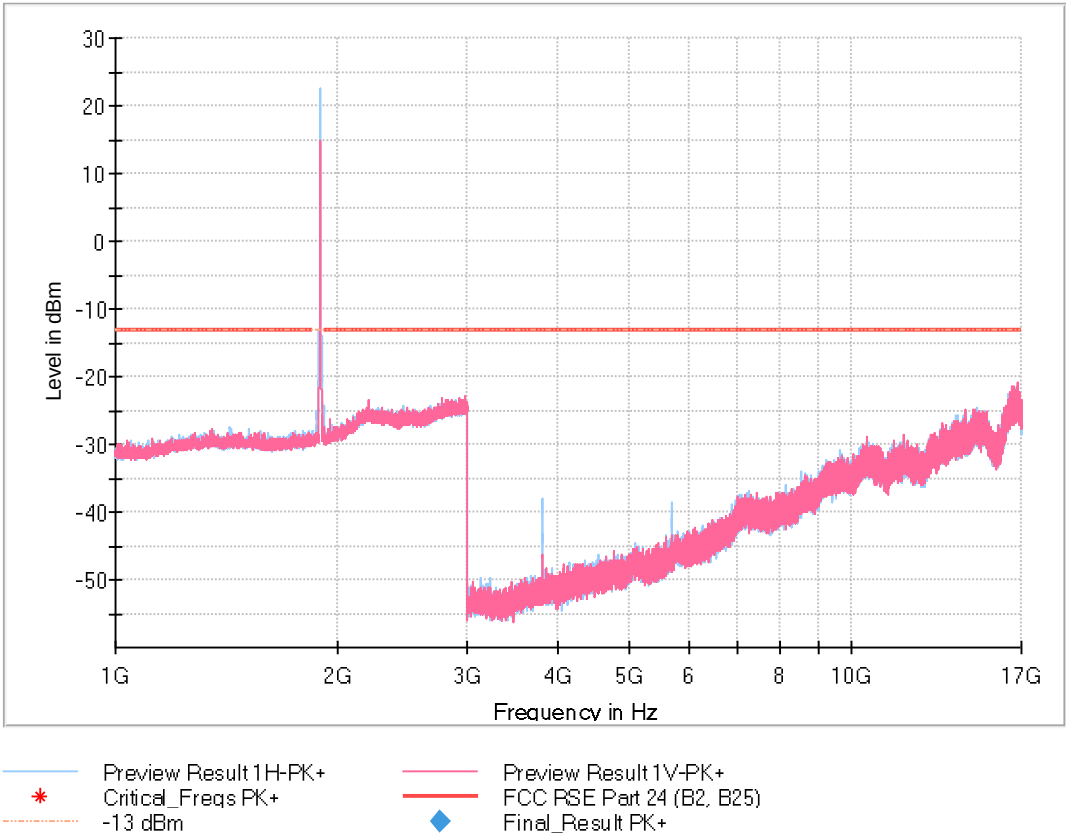
- Middle Channel:



The peak above the limit is the carrier frequency.



- High Channel:



The peak above the limit is the carrier frequency.

