**DEKRA Testing and Certification, S.A.U.**
Parque Tecnológico de Andalucía
c/ Severo Ochoa nº 2 · 29590 Campanillas · Málaga · España
C.I.F. A29507456

ISED CABid: ES1909
Lab. Company Number: 4621A

Test Report No:
NIE: 72676RRF.006

# Partial Test Report

## USA FCC 15.31(h), 15.209, 15.247, 24, 27
## CANADA RSS-130, RSS-133, RSS-247, RSS-Gen

| | |
|---|---|
| (*) Identification of item tested | Continuous Positive Airway Pressure (CPAP) Device |
| (*) Trademark | ResMed |
| (*) Model and /or type reference | 39485 |
| (*) Derived model not tested | 39523,39524,39525,39526,39527,39528 |
| Other identification of the product | FCC ID: 2ACHL-AIR11M1U<br>IC: 9103A-AIR11M1U |
| (*) Features | HW version: R390-7667<br>SW version: SW04600<br>LTE Cat-M1, BLE |
| Applicant | ResMed Pty Ltd<br>1 Elizabeth Macarthur Drive, Bella Vista, NSW, 2153, Australia |
| Test method requested, standard | USA FCC Part 15.31(h) (10-1-21 Edition).<br>USA FCC Part 15.247 (10-1-21 Edition): Operation within the bands 902 - 928 MHz, 2400 -2483.5 MHz, and 5725 - 5850 MHz.<br>USA FCC Part 15.209 (10-1-21 Edition): Radiated emission limits; general requirements.<br>USA FCC Part 24 (10-1-21 Edition).<br>USA FCC Part 27 (10-1-21 Edition).<br>CANADA RSS-247 Issue 2 (Feb. 2017).<br>CANADA RSS-Gen Issue 5 Amendment 1 (Mar. 2019) + Amendment 2 (Feb. 2021).<br>CANADA RSS-130 Issue 2, Feb. 2019.<br>CANADA RSS-133 Issue 6, Jan. 2018 Amendment.<br>- Transmitter out of band radiated emissions with simultaneous transmissions.<br>Guidance for Performing Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid Systems Devices Operating Under Section 15.247 of the FCC Rules. 558074 D01 Meas Guidance v05r02 dated April 2, 2019.<br>KDB 971168 D01 Power Meas License Digital Systems v03r01, April. 2018.<br>ANSI C63.10-2013.<br>ANSI C63.26-2015. |
| Approved by (name / position & signature) | Rafael López Martín<br>EMC Consumer & RF Lab. Manager<br>  2023.01.31 14:56:19 +01'00' |
| Date of issue | 2023-01-31 |
| Report template No. | FDT08_24<br>(*) "Data provided by the client" |

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# 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.



# 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.

The total uncertainty of the measurement system for the radiated emissions of EUT from 30 MHz to 1 GHz is: Measurement uncertainty ≤ ±5.03 dB with factor (k = 2).

The total uncertainty of the measurement system for the radiated emissions of EUT from 1 GHz to 17 GHz is: Measurement uncertainty ≤ ±4.28 dB with factor (k = 2).

The total uncertainty of the measurement system for the radiated emissions of EUT from 17 GHz to 26 GHz is: Measurement uncertainty ≤ ±5.51 dB with factor (k = 2).

# 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 of the model 39485 is a CPAP device with integrated cellular and Bluetooth connectivity.

3. Derived models not tested. These models have been declared by the supplier of the sample as being the same as the model under test.

ResMed
Changing lives with every breath

Date: 30-Nov-2022

**DECLARATION OF EQUIVALENCE**

This document declares that the following designated products are equivalent to the unit under test **39485**.

| Model Name / Product Code | Marketing Name |
|---|---|
| 39523 | AirSense 11 AutoSet USA |
| 39524 | AirSense 11 CPAP USA |
| 39525 | AirSense 11 Elite USA |
| 39526 | AirSense 11 AutoSet CAN |
| 39527 | AirSense 11 CPAP CAN |
| 39528 | AirSense 11 Elite CAN |

All the above stated products and the unit under test - 39485 have the same cellular hardware and firmware.

**Applicant**:
Company Name: ResMed Pty Ltd
Address: 1 Elizabeth Macarthur Drive,
Bella Vista NSW 2153
Australia
By,

**Christopher Jenkins**
Title: Manager – Systems Engineering
Company: ResMed Pty Ltd
Telephone: +61 2 8884 1517
e-mail: Christopher.jenkins@resmed.com.au

ResMed Pty Ltd 1 Elizabeth Macarthur Drive, Bella Vista NSW 2153, Australia
T +61 2 8884 1000 E Christopher.jenkins@ResMed.com.au ResMed.com

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.

# Usage of samples

Samples undergoing test have been selected by: The client.

- Sample S/01 is composed of the following elements:

| Control Nº | Description | Model | Serial Nº | Date of reception |
|---|---|---|---|---|
| 72676/003 | Continuous Positive Airway Pressure (CPAP) Device | 39485 | 22222172432 | 2022-10-03 |
| 72676/007 | AC/DC Adapter | 390000 | 02GNXL04 | 2022-10-03 |
| 72676/009 | Power Cord | - | - | 2022-10-03 |
| 66427/006 | Climate line | AIR11 | - | 2020-12-29 |

Sample S/01 has undergone the following test(s): The Radiated tests indicated in Appendix A.

# Test sample description

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Ports……..: | Port name and description | | Cable | | | | |
| | | | Specified max length [m] | Attached during test | Shielded | Coupled to patient(3) | |
| | 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 2.0A | ☒ | ☐ | ☐ | ☒ | ☐ |
| | ☒ | AC: 115V~400Hz 1.5A | ☒ | ☐ | ☐ | ☒ | ☐ |
| | ☒ | DC: 12V (DC-DC for Vehicle Use) | | | | | |
| | ☒ | DC: 24V (DC-DC for Vehicle Use) | | | | | |
| Rated Power..... : | - | | | | | | |
| Clock frequencies..... : | N/A | | | | | | |
| Other parameters ..... : | 390000 (PSU Model Number) | | | | | | |
| Software version..... : | SW04600 (DUT) | | | | | | |
| Hardware version ..... : | R390-7667 | | | | | | |
| Dimensions in cm (W x H x D) ... : | 138.5 mm x 259.4 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 | | |
| | Wireless Module | | SARA-R5 | | U-blox | | |
| | Bluetooth LE | | EFR32BG22 | | SiLabs | | |
| Accessories (not part of the test item)..... : | Description | | Type | | Manufacturer | | |
| | - | | - | | - | | |
| Documents as provided by the applicant ..... : | Description | | File name | | Issue date | | |
| | - | | - | | - | | |

(3) Only for Medical Equipment.

# 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)** | 2022-10-14 |
| **Date (finish)** | 2022-10-17 |

# Document history

| Report number | Date | Description |
|---|---|---|
| 72676RRF.006 | 2023-01-31 | First release. |

# Environmental conditions

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

| | |
|---|---|
| **Temperature** | Min. = 15 ºC<br>Max. = 35 ºC |
| **Relative humidity** | Min. = 20 %<br>Max. = 75 % |

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

| | |
|---|---|
| **Temperature** | Min. = 15 ºC<br>Max. = 35 ºC |
| **Relative humidity** | Min. = 20 %<br>Max. = 75 % |

# Remarks and comments

The tests have been performed by the technical personnel: Miguel Manuel López, Pablo Redondo, Myriam Godoy.

Used instrumentation:

Radiated Measurements

| | | Last Calibration | Due Calibration |
|---|---|---|---|
| 1. | Semianechoic Absorber Lined Chamber ETS LINDGREN FACT 3 200 STP | N/A | N/A |
| 2. | Shielded Room ETS LINDGREN S101 | N/A | N/A |
| 3. | Biconical/Log Antenna 30 MHz - 6 GHz ETS LINDGREN 3142E | 2020/10 | 2023/10 |
| 4. | Horn Antenna 1-18 GHz SCHWARZBECK MESS-ELEKTRONIK BBHA 9120 D | 2020/08 | 2023/08 |
| 5. | RF Preamplifier G>30dB, 1-18GHz BONN ELEKTRONIK BLMA 0118-3A | 2021/12 | 2022/12 |
| 6. | Pre-Amplifier G>30dB 17-40GHz BONN ELEKTRONIK BLMA 1840-4A | 2022/11 | 2023/11 |
| 7. | EMI Test Receiver 2Hz-44GHz, ROHDE AND SCHWARZ ESW44 | 2021/12 | 2023/12 |
| 8. | Wideband Radio Communication Tester ROHDE AND SCHWARZ CMW500 | N/A | N/A |
| 9. | AC Power Supply CHROMA 6490 | 2020/12 | 2022/12 |
| 10. | EMC/RF Testing SW ROHDE AND SCHWARZ EMC32 | N/A | N/A |

# Testing verdicts

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

# Summary

| FCC 15, 24, 27 / RSS-130, RSS-133, RSS-247, RSS-Gen | | | |
|---|---|---|---|
| **Requirement – Test case** | | **Verdict** | **Remark** |
| FCC 15.31 (h)<br>FCC 15.247 (d), FCC 15.209 (a)<br>FCC 24.238<br>FCC 27.53<br>RSS-130 4.7, RSS-133 6.5<br>RSS-247 5.5, RSS-Gen 8.9 | Transmitter out of band radiated emissions with simultaneous transmissions | P | (1) |
| Supplementary information and remarks:<br>(1) Only Simultaneous Transmission radiated spurious emissions test was requested. | | | |

# **Appendix A:** Test results. FCC 15, 24, 27 / RSS-130, RSS-133, RSS-247, RSS-Gen

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# TEST CONDITIONS

(*): Declared by the Applicant.

POWER SUPPLY (*):

Vnormal: Preliminary scan determined 115Vac / 60Hz as worst case of power supply.

Type of Power Supply: Mains Supply.

ANTENNA (*):

Type of Bluetooth LE Antenna: Internal.

Maximum Declared Antenna Gain for Bluetooth Low Energy: 3.31 dBi

Type of Cellular Antenna: Internal (ceramic).

| Band | Gain (dBi) |
|---|---|
| LTE 25 | +2.5 |
| LTE 71 | +2 |

SUPPORTED BANDS:

The EUT supports the following cellular bands. Based on their EIRP for each band, it was selected the worst case for each range:

| Frequency range | Technologies | Modulations | Worst case |
|---|---|---|---|
| f < 1 GHz | LTE Cat M1 B5, B13, B26, B71 | LTE Cat M1 (QPSK, 16QAM) | B71 (CH Low, QPSK) |
| 1 GHz < f < 2 GHz | LTE Cat M1 B25, B66 | LTE Cat M1 (QPSK, 16QAM) | B25 (CH Mid, QPSK) |

TEST FREQUENCIES (*):

| Cellular LTE Cat-M1 | | |
|---|---|---|
| | | |
| Band: | LTE Band 25 | |
| Frequency Range: | 1850 -1915 MHz | |
| Transmit Channel: | Channel | Channel Frequency |
| | Middle: 26365 | 1882.5 MHz (BW 1.4 MHz, RB Size 1, RB Offset 0, Narrow Band=0, QPSK) |
| | | |
| Band: | LTE Band 71 | |
| Frequency Range: | 663 - 698 MHz | |
| Transmit Channel: | Channel | Channel Frequency (MHz) |
| | Low: 133172 | 668 MHz (BW 10 MHz, RB Size 1, RB Offset 0, Narrow Band=0, QPSK) |

| | Bluetooth LE | |
|---|---|---|
| Mode: | GFSK | |
| Channel Spacing: | 1 MHz | |
| Frequency Range: | 2400 MHz to 2483.5 MHz | |
| Transmit Channel: | Channel | Channel Frequency (MHz) |
| | Low: 37 | 2402 |

The test set-up was made in accordance to the general provisions of FCC DTS Measurement 558074 D01 DTS Meas Guidance v05r02 dated April 2, 2019 and ANSI C63.26-2015.

During transmitter test the EUT was being controlled by the SW tool to operate in a continuous transmit mode on the Bluetooth LE test channel as required. An auxiliary signalling unit was used to establish a cellular link and control the EUT to operate in a continuous transmission mode on the channel and configuration as required.

**Selected Transmission Modes for each Radio:**

The next configurations were selected based on preliminary testing that identified these settings as the worst cases:

* Cellular LTE Cat-M1:

Transmitter radiated spurious emissions tests were performed with the EUT transmitting in:
- Cellular LTE Cat-M1 Band 25, BW 1.4 MHz, RB Size 1, RB Offset 0, Narrow Band=0, QPSK, Middle Channel configuration.
- Cellular LTE Cat-M1 Band 71, BW 10 MHz, RB Size 1, RB Offset 0, Narrow Band=0, QPSK, Low Channel configuration

These channels and configurations were found to transmit higher EIRP than all the other LTE Cat-M1 channels.

* Bluetooth Low Energy:

Transmitter radiated spurious emissions tests were performed with the EUT transmitting in Bluetooth Low Energy, GFSK 1 Mbps, Low Channel configuration.

**Tested Simultaneous Transmission Modes:**

*** Cellular LTE Cat-M1 Band 25, Bluetooth Low Energy**, with the EUT configured to simultaneously transmit the following signals at maximum output power: Cellular LTE Cat-M1 Band 25 QPSK / Middle Channel and Bluetooth Low Energy GFSK 1 Mbps / Low Channel.

*** Cellular LTE Cat-M1 Band 71, Bluetooth Low Energy**, with the EUT configured to simultaneously transmit the following signals at maximum output power: Cellular LTE Cat-M1 Band 71 QPSK / Low Channel and Bluetooth Low Energy GFSK 1 Mbps / Low Channel.

# Transmitter out of band radiated emissions with simultaneous transmissions

***Limits***

**Bluetooth Low Energy**

Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c) / RSS-Gen):

| Frequency Range (MHz) | Field strength (µV/m) | Field strength (dBµV/m) | Measurement distance (m) |
|---|---|---|---|
| 0.009-0.490 | 2400/F(kHz) | - | 300 |
| 0.490-1.705 | 24000/F(kHz) | - | 30 |
| 1.705 - 30.0 | 30 | - | 30 |
| 30 - 88 | 100 | 40 | 3 |
| 88 - 216 | 150 | 43.5 | 3 |
| 216 - 960 | 200 | 46 | 3 |
| Above 960 | 500 | 54 | 3 |

The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

For average radiated emission measurements above 1000 MHz, there is also a limit corresponding to 20 dB above the indicated values in the table, specified when measuring with peak detector function.

RSS-247. Attenuation below the general field strength limits specified in RSS-Gen is not required.

**1. LTE Band 25.** 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.

LTE Band 25 MEASUREMENT LIMIT:

At Po transmitting power, the specified minimum attenuation becomes 43+10 log (Po), and the level in dBm relative Po becomes:

Po (dBm) – [43 + 10 log (Po in mwatts) - 30] = -13 dBm

**2. LTE Band 71.** FCC §2.1053 & §27.53 (g) / RSS-130 Issue 2 Clause 4.7.

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:

4.7.1. The unwanted emissions in any 100 kHz bandwidth on any frequency outside the low frequency edge and the high frequency edge of each frequency block range(s), shall be attenuated below the transmitter power, P (dBW), by at least 43 + 10 log10 p (watts), dB. However, in the 100 kHz band immediately outside of the equipment's frequency block range, a resolution bandwidth of 30 kHz may be employed.

LTE Band 71 MEASUREMENT LIMIT:

At Po transmitting power, the specified minimum attenuation becomes 43+10 log (Po), and the level in dBm relative Po becomes:

Po (dBm) – [43 + 10 log (Po in mwatts) - 30] = -13 dBm

***Method***

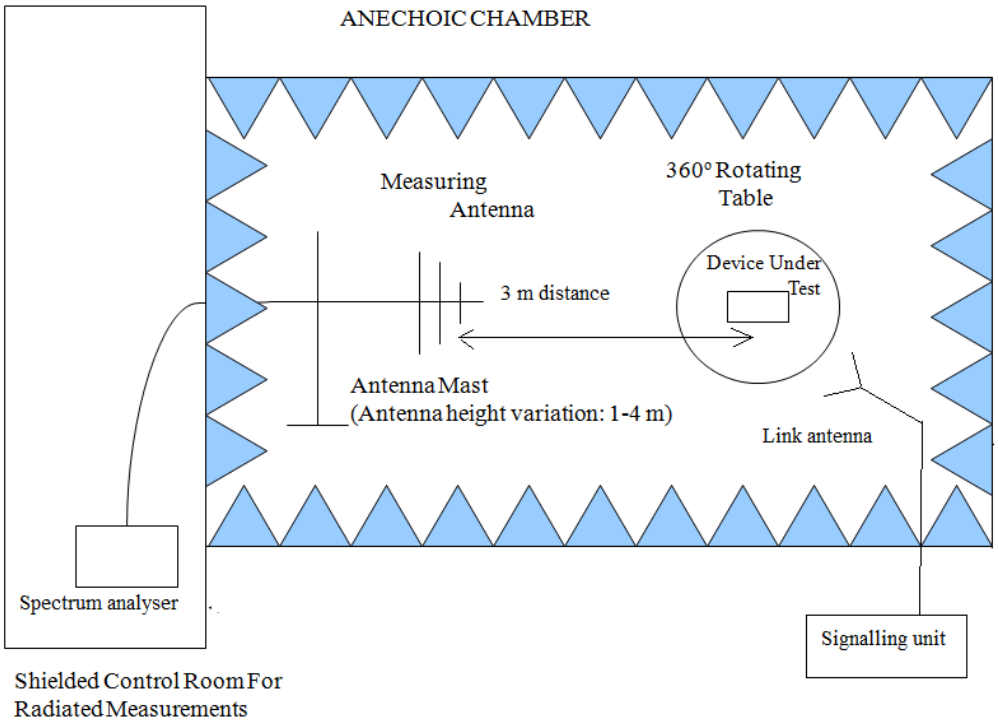
The measurement was performed with the EUT inside an anechoic chamber. The spectrum was scanned from 30 MHz to at least the 10th harmonic of the highest fundamental frequency generated within the equipment.

The EUT was placed on a non-conductive stand at 3-meter distance from the measuring antenna for measurements up to 18 GHz. Measurements above 18 GHz require the distance to be reduced to 1.5 meters.

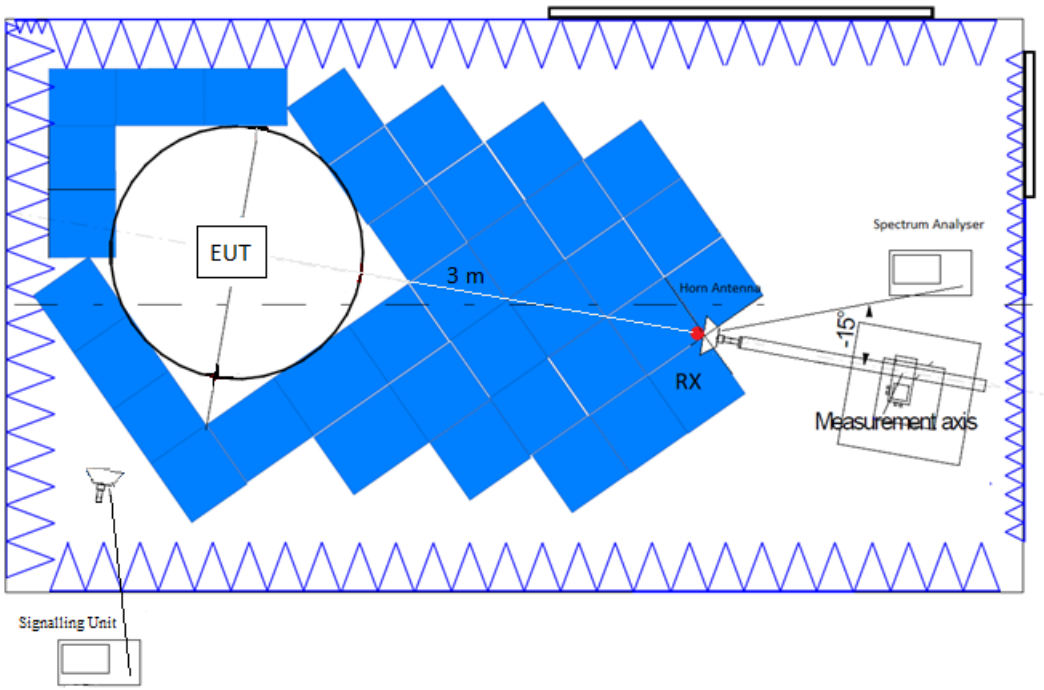
Detected emissions were maximized at each frequency by rotating the EUT and adjusting the height and polarization of the measuring antenna. The maximum meter reading was recorded.

***Test setup***

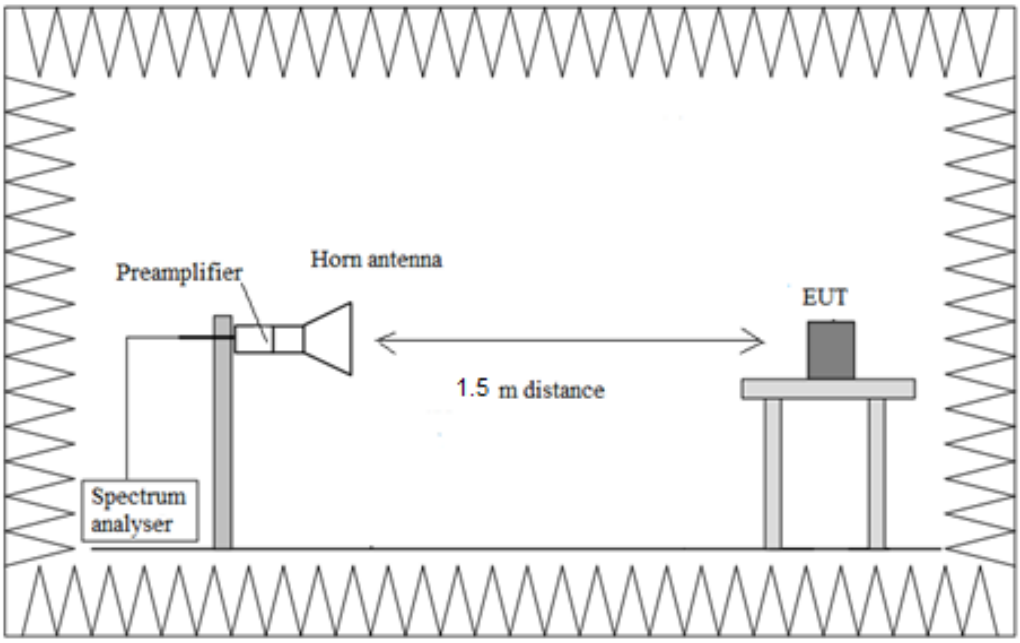
Radiated measurements below 1 GHz:




Radiated measurements between 1 GHz and 17 GHz:



Radiated measurements above 17 GHz:



***Results***

***Simultaneous Transmission mode Cellular LTE Cat-M1 Band 25, Bluetooth Low Energy:***

LTE Cat-M1 Band 25: Middle Channel (1882.5 MHz). QPSK, BW 1.4 MHz, RB Size 1, RB Offset 0, Narrow Band=0.

Bluetooth Low Energy: Low Channel (2402 MHz). GFSK 1 Mbps.

The limit of the test is determined by:

| Frequency Range | Detector | Limit at 3m (dBµV/m) |
|---|---|---|
| 30 MHz to 19.15 GHz | Peak | 43 + 10 log (P) dB = -13 dBm → 82.23 dBµV/m |
| 19.15 GHz to 26 GHz | Peak | 74 dBµV/m |
| 19.15 GHz to 26 GHz | Average | 54 dBµV/m (*) |

(*) Radiated emissions which fall in the restricted bands, as defined in §15.205(a).

**Frequency range 30 MHz - 1 GHz:**

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

**Frequency range 1 - 26 GHz:**

Spurious frequencies at less than 20 dB below the limit:

| Unwanted Frequency (MHz) | Unwanted Level (dBµV/m) | Polarization | Detector |
|---|---|---|---|
| 2921.969231 | 66.91 | H | Peak |

***Verdict***

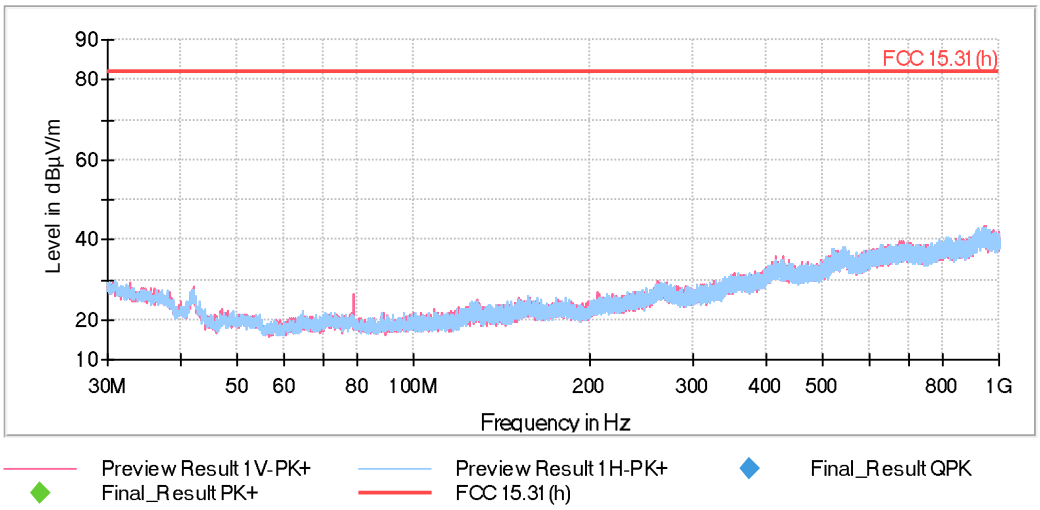
Pass

### *Attachments*

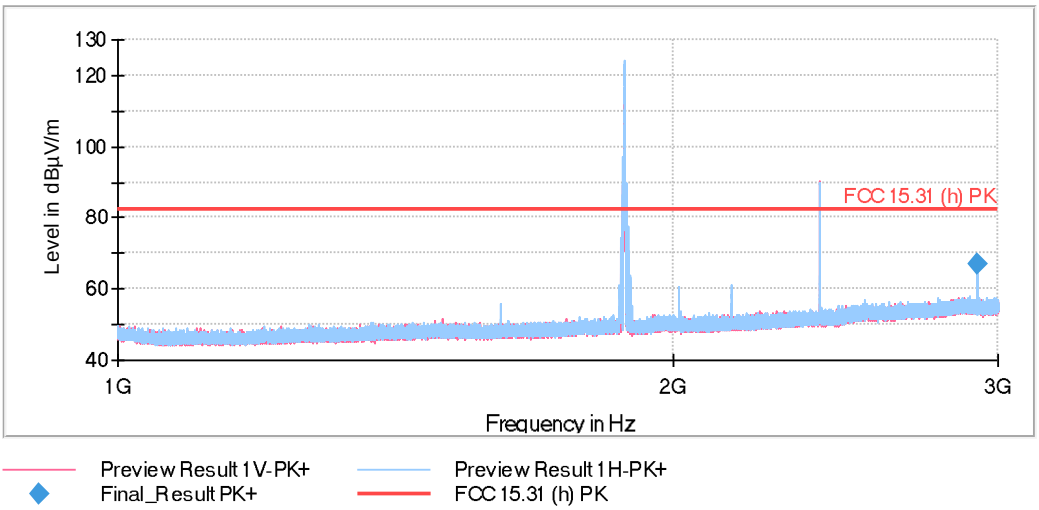
Measurement settings:

| 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 | 30.769 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |
| 3 GHz - 17 GHz | 140 kHz | PK+ ; AVG | 1 MHz | 1 s | 30 dB |
| 17 GHz - 26 GHz | 300 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |

**FREQUENCY RANGE 30 MHz - 1 GHz:**



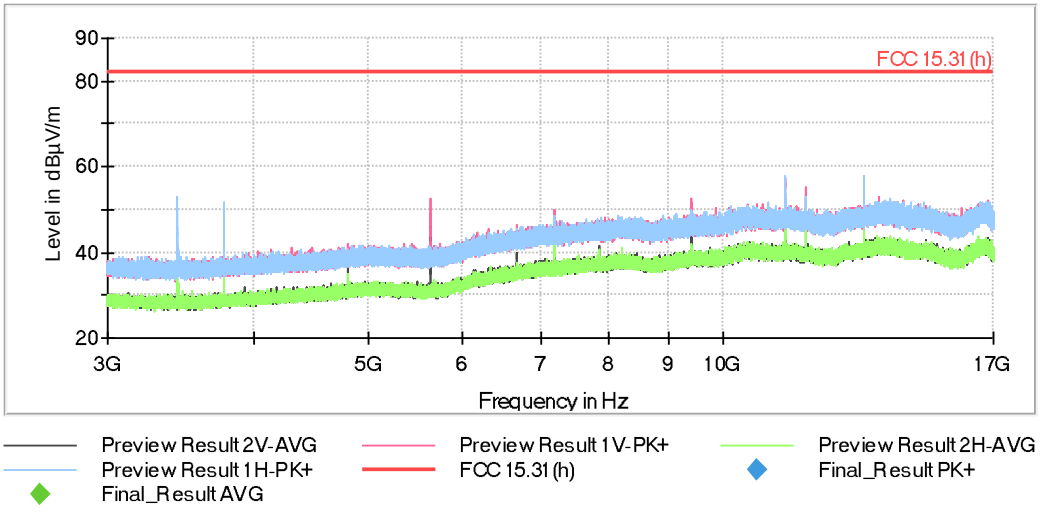
## FREQUENCY RANGE 1 - 3 GHz:



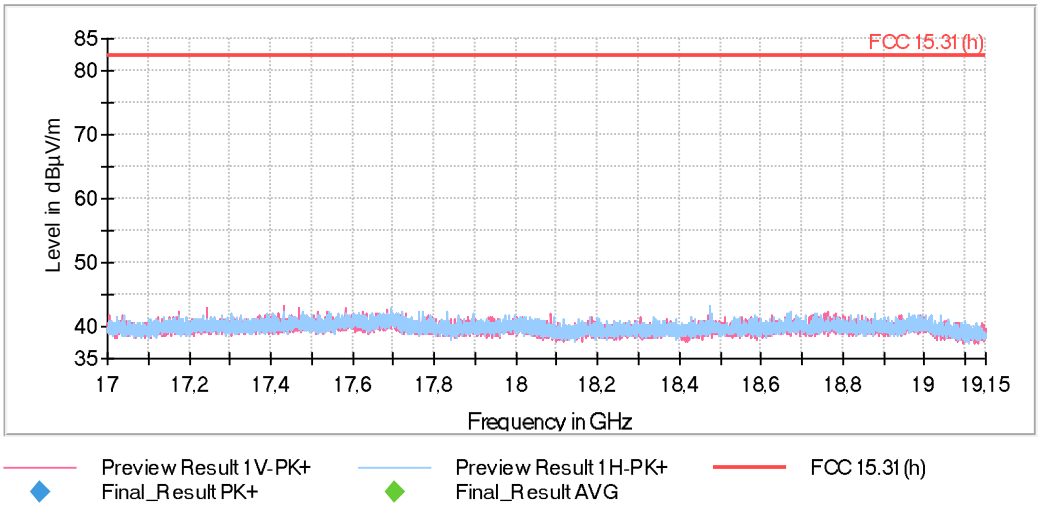

The peak above the limit is the carrier frequency LTE Cat-M1 Band 25 (1882.5 MHz).

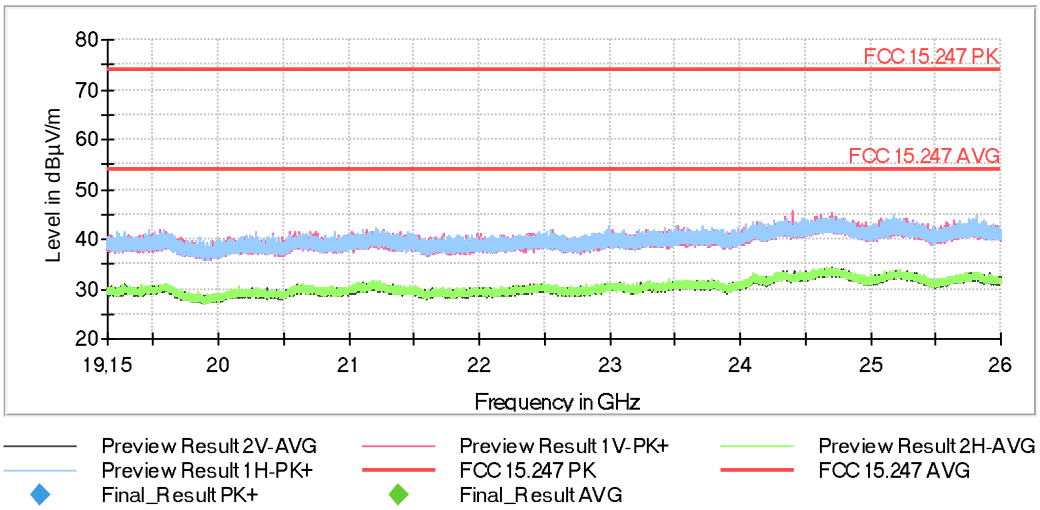
The peak above the limit is the carrier frequency Bluetooth Low Energy (2402 MHz).

## FREQUENCY RANGE 3 - 17 GHz:



## FREQUENCY RANGE 17 - 26 GHz:



***Simultaneous Transmission mode Cellular LTE Cat-M1 Band 71, Bluetooth Low Energy.***

LTE Cat-M1 Band 71: Low Channel (668 MHz). QPSK, BW 10 MHz, RB Size 1, RB Offset 0, Narrow Band=0.

Bluetooth Low Energy: Low Channel (2402 MHz). GFSK 1 Mbps.

The limit of the test is determined by:

| Frequency Range | Detector | Limit at 3m (dBµV/m) |
|---|---|---|
| 30 MHz to 6.98 GHz | Peak | 43 + 10 log (P) dB = -13 dBm → 82.23 dBµV/m |
| 6.98 GHz to 26 GHz | Peak | 74 dBµV/m |
| 6.98 GHz to 26 GHz | Average | 54 dBµV/m (*) |

(*) Radiated emissions which fall in the restricted bands, as defined in §15.205(a).

**Frequency range 30 MHz - 1 GHz:**

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

**Frequency range 1 - 26 GHz:**

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

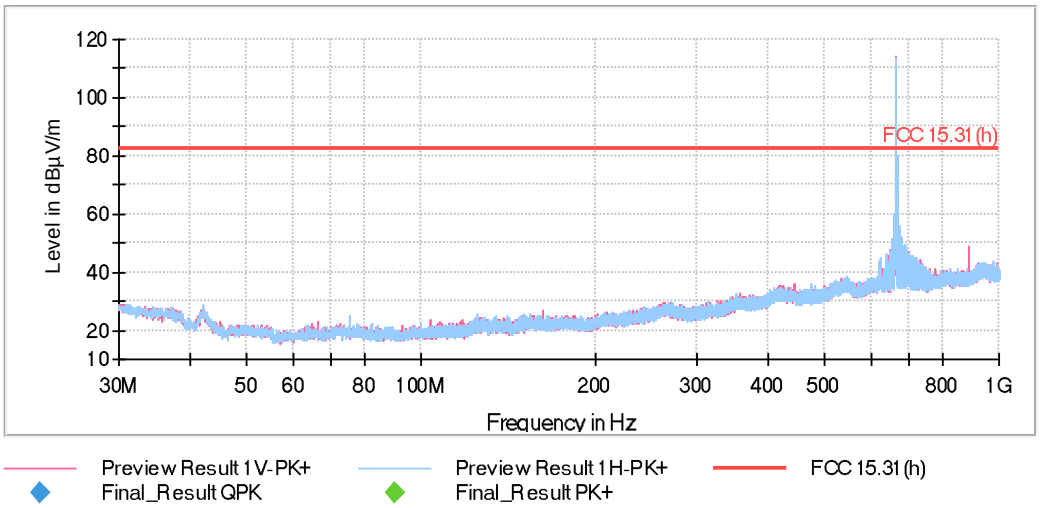
***Verdict***
Pass

### *Attachments*

Measurement settings:

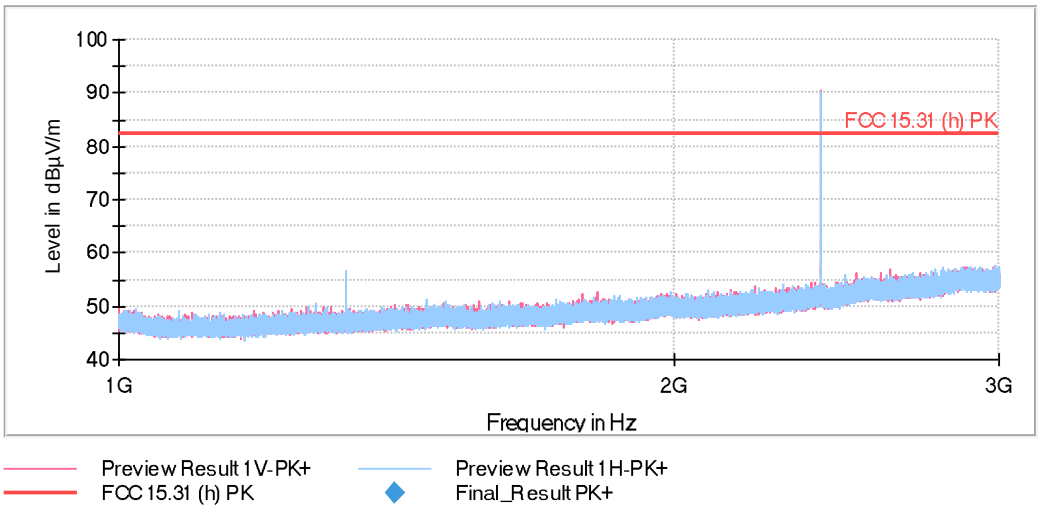
| Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamp |
|---|---|---|---|---|---|
| 30 MHz - 1 GHz | 30.312 kHz | PK+ | 100 kHz | 1 s | 0 dB |
| 1 GHz - 3 GHz | 30.769 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |
| 3 GHz - 17 GHz | 140 kHz | PK+ ; AVG | 1 MHz | 1 s | 30 dB |
| 17 GHz - 26 GHz | 300 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |

**FREQUENCY RANGE 30 MHz - 1 GHz:**



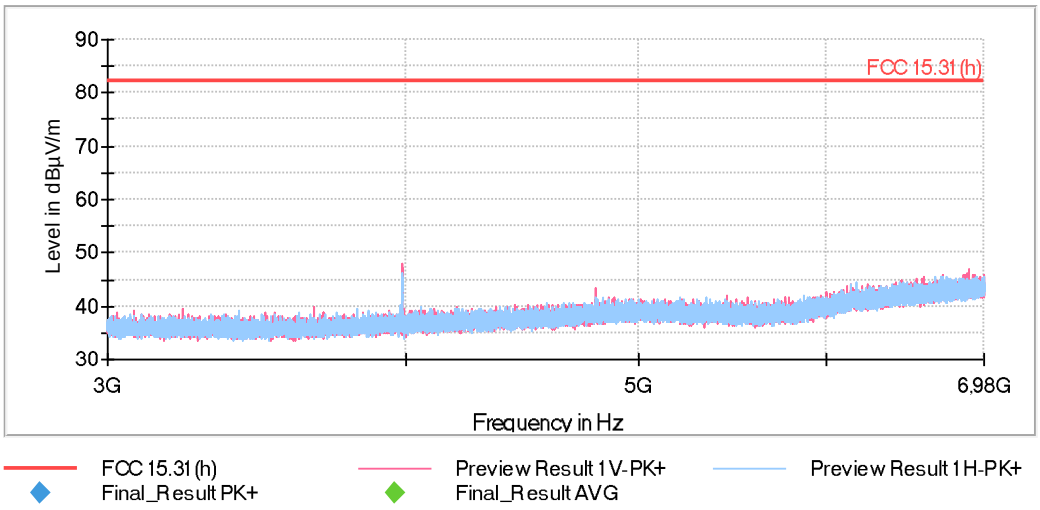

The peak on the left above the limit is the carrier frequency LTE Cat-M1 Band 71 (668 MHz).

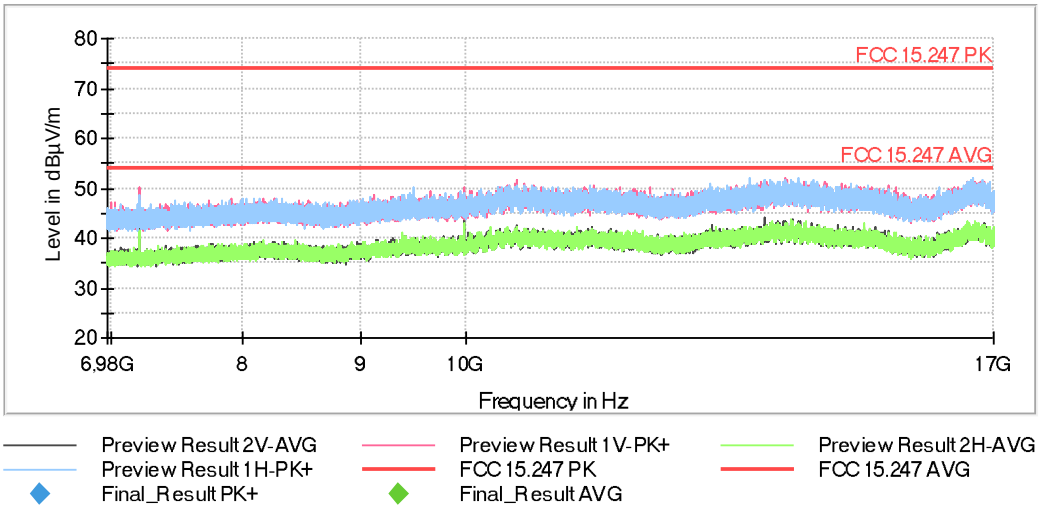
## FREQUENCY RANGE 1 - 3 GHz:




The peak on the right above the limit is the carrier frequency Bluetooth Low Energy (2402 MHz).

## FREQUENCY RANGE 3 - 17 GHz:






**FREQUENCY RANGE 17 - 26 GHz:**