2/F., Garment Centre,
576 Castle Peak Road, Kowloon,
Hong Kong.

Telephone: (852) 2173 8888
Facsimile: (852) 2785 5487
www.intertek.com

TEST REPORT

Report Number: 16090671HKG-001

Application for Original Grant of 47 CFR Part 15 Certification

FCC ID: 2ANJG-KUBEV1001

PREPARED AND CHECKED BY:	APPROVED BY:
Signed On File Lee Shui Tim, Tim Lead Engineer	Digitally signed by Koo Wai Ip Location: Intertek Testing Services Hong Kong Ltd. Koo Wai Ip Technical Supervisor Date: June 30, 2017

TEST REPORT

GENERAL INFORMATION

Applicant Name:	Thomas & Darden Inc.
Applicant Address:	916 Springdale Road, Building 4, Suite 104, Austin, TX 78702, United States.
FCC Specification Standard:	FCC Part 15, October 1, 2015 Edition
FCC ID:	2ANJG-KUBEV1001
FCC Model(s):	KUBEv1-001
Type of EUT:	Spread Spectrum Transmitter
Description of EUT:	Wi-Fi, BT, Aux-in Speaker
Serial Number:	N/A
Sample Receipt Date:	April 26, 2017
Date of Test:	April 26, 2017 to May 15, 2017
Report Date:	June 30, 2017
Environmental Conditions:	Temperature: +10 to 40°C Humidity: 10 to 90%

TEST REPORT

TABLE OF CONTENTS

TEST REPORT

EXHIBIT 1 TEST RESULTS SUMMARY & STATEMENT OF COMPLIANCE

1.0 TEST RESULTS SUMMARY & STATEMENT OF COMPLIANCE

1.1 Summary of Test Results

TEST ITEMS	FCC PART 15 SECTION	RESULTS	DETAILS SEE SECTION
Antenna Requirement	15.203	Pass	2.1
Max. Conducted Output Power (Peak)	15.247(b)(3)&(4)	Pass	4.1
Min. 6dB RF Bandwidth	15.247(a)(2)	Pass	4.2
Max. Power Density (average)	15.247(e)	Pass	4.3
Out of Band Antenna Conducted Emission	15.247(d)	Pass	4.4
Radiated Emission in Restricted Bands and Spurious Emissions	15.247(d), 15.209 & 15.109	Pass	4.6
AC Power Line Conducted Emission	15.207 & 15.107	Pass	4.7

Note: Pursuant to FCC Part 15 Section 15.215(c), the 20dB bandwidth of the emission was contained within the frequency band designated (mentioned as above) which the EUT operated. The effects, if any, from frequency sweeping, frequency hopping, other modulation techniques and frequency stability over expected variations in temperature and supply voltage were considered.

1.2 Statement of Compliance

The equipment under test is found to be complying with the following standard:

FCC Part 15, October 1, 2016 Edition

TEST REPORT

EXHIBIT 2 GENERAL DESCRIPTION

2.0 GENERAL DESCRIPTION

2.1 Product Description

The KUBEv1-001 is a Wi-Fi, BT, Aux-in Speaker.

The EUT can support Bluetooth 3.0 mode, Bluetooth 4.0 BLE mode, 2.4GHz WiFi mode, 5.8GHz WiFi mode and 1.9GHz DECT mode.

For 802.11b mode, it operates at frequency range of 2412.000MHz to 2462.000MHz with 11 channels. It transmits via Direct-sequence spread spectrum (DSSS) modulation. Maximum bit rate can be up to 11Mbps.
For 802.11g mode, it operates at frequency range of 2412.000MHz to 2462.000MHz with 11 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can be up to 54Mbps.
For 802.11n (with 20MHz bandwidth) mode, it operates at frequency range of 2412.000MHz to 2462.000MHz with 11 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 65Mbps.
For 802.11n (with 40MHz bandwidth) mode, it operates at frequency range of 2422.000MHz to 2452.000MHz with 7 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 65Mbps.

For 5.15-5.25GHz:
The Equipment Under Test (EUT) operates at frequency range of 5180MHz to 5240MHz with 4 channels.
For 802.11a mode, it operates at frequency range of 5180.00MHz to 5250.000MHz with 4 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can be up to 54Mbps.
For 802.11n (with 20MHz bandwidth) mode, it operates at frequency range of 5180.00MHz to 5250.000MHz with 4 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 65.0Mbps.
For 802.11n (with 40MHz bandwidth) mode, it operates at frequency range of 5190.00MHz to 5230.000MHz with 2 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 135.0Mbps.
For 802.11ac (with 20MHz bandwidth) mode, it operates at frequency range of 5180.00MHz to 5250.000MHz with 4 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 86.7Mbps.
For 802.11ac (with 40MHz bandwidth) mode, it operates at frequency range of 5190.00MHz to 5230.000MHz with 2 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 180Mbps.
For 802.11ac (with 80MHz bandwidth) mode, it operates at frequency 5210MHz. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 390Mbps.

TEST REPORT

For 5.725-5.850GHz:
The Equipment Under Test (EUT) operates at frequency range of 5745MHz to 5825MHz with 5 channels.
For 802.11a mode, it operates at frequency range of 5745.00MHz to 5825.000MHz with 5 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can be up to 54Mbps.
For 802.11n (with 20MHz bandwidth) mode, it operates at frequency range of 5745MHz to 5825MHz with 5 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 216.6Mbps.
For 802.11n (with 40MHz bandwidth) mode, it operates at frequency range of 5755.00MHz to 5795.000MHz with 2 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 450Mbps.
For 802.11ac (with 20MHz bandwidth) mode, it operates at frequency range of 5745MHz to 5825MHz with 5 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 260Mbps.
For 802.11ac (with 40MHz bandwidth) mode, it operates at frequency range of 5755.00MHz to 5795.000MHz with 2 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 600Mbps.
For 802.11ac (with 80MHz bandwidth) mode, it operates at frequency 5775MHz. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 1300Mbps.

For the Bluetooth module:
For Bluetooth 3.0 mode, it occupies a frequency range from 2402MHz to 2480MHz (79 channels with channel spacing of 1MHz). It transmits via GFSK modulation.

The EUT is power by an 100-240VAC adaptor.

The antenna(s) used in the EUT are Internal, Integral and without MIMO function.

The circuit description is saved with filename: descri.pdf.

2.2 Test Methodology

Both AC power line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.10 (2013). Preliminary radiated scans and all radiated measurements were performed in radiated emission test sites. All Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "**Justification Section**" of this Application. Antenna port conducted measurements were performed according to ANSI C63.10 (2013) and KDB Publication No.558074 D01 v03r05 (08-April-2016) All other measurements were made in accordance with the procedures in 47 CFR Part 2.

2.3 Test Facility

The radiated emission test site and antenna port conducted measurement facility used to collect the radiated data and conductive data are at Workshop No. 3, G/F., World-Wide Industrial Centre, 43-47 Shan Mei Street, Fo Tan, Sha Tin, N.T., Hong Kong. This test facility and site measurement data have been fully placed on file with the FCC.

2.4 Related Submittal(s) Grants

This is a single application for certification of a transceiver (WiFi portion)

EXHIBIT 3 SYSTEM TEST CONFIGURATION

3.0 SYSTEM TEST CONFIGURATION

3.1 Justification

For radiated emissions testing, the equipment under test (EUT) was setup to transmit / receive continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, all cables (if any) were manipulated to produce worst case emissions.

The EUT was powered by a 100-240VAC adaptor.

For the measurements, the EUT was attached to a plastic stand if necessary and placed on the wooden turntable. If the base unit attached to peripherals, they were connected and operational (as typical as possible).

The signal was maximized through rotation and placement in the three orthogonal axes. The antenna height and polarization were varied during the search for maximum signal level. The antenna height was varied from 1 to 4 meters. Radiated emissions were taken at three meters unless the signal level was too low for measurement at that distance. If necessary, a pre-amplifier was used and/or the test was conducted at a closer distance.

For any intentional radiator powered by AC power line, measurements of the radiated signal level of the fundamental frequency component of the emission was performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage.

Radiated emission measurement for transmitter were performed from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

Emission that are directly caused by digital circuits in the transmit path and transmitter portion were measured, and the limit are according to FCC Part 15 Section 15.209. Digital circuitries used to control additional functions other than the operation of the transmitter are subject to FCC Part 15 Section 15.109.

TEST REPORT

3.1 Justification – Cont'd

Detector function for radiated emissions was in peak mode. Average readings, when required, were taken by measuring the duty cycle of the equipment under test and subtracting the corresponding amount in dB from the measured peak readings. A detailed description for the calculation of the average factor can be found in section 4.8.3.

Determination of pulse desensitization was made according to *Hewlett Packard Application Note 150-2, Spectrum Analysis... Pulsed RF.* The effective period (Teff) was referred to Exhibit 4.8.3. With the resolution bandwidth 1MHz and spectrum analyzer IF bandwidth 3dB, the pulse desensitization factor was 0dB.

For AC line conducted emission test, the EUT along with its peripherals were placed on a 1.0m(W)x1.5m(L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane. The EUT was connected to power mains through a line impedance stabilization network (LISN), which provided 50ohm coupling impedance for measuring instrument. The LISN housing, measuring instrument case, reference ground plane, and vertical ground plane were bounded together. The excess power cable between the EUT and the LISN was bundled.

All connecting cables of EUT and peripherals were manipulated to find the maximum emission.

Different data rates have been tested. Worst case is reported only.

All relevant operation modes have been tested, and the worst case data is included in this report.

All data rates were tested under normal mode of WiFi. Only the worst-case data is shown in the report for DSSS and OFDM

3.2 EUT Exercising Software

The EUT exercise program (if any) used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use.

3.3 Details of EUT and Description of Accessories

Details of EUT:

An AC adaptor or an internal battery (provided with the unit) was used to power the device. Their description are listed below.

(1) An AC adaptor (Model: SLD4502300P2, Input: 100-240VAC 50-60Hz; Output: 45VDC 2300mA) (Provided by Client)
(2) A LI-ION type rechargeable battery (33VDC) (Provided by Client)

Description of Accessories:

There are no accessories for compliance of this product.

3.4 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test at a level of confidence of 95% has been considered. The values of the Measurement uncertainty for radiated emission test and RF conducted measurement test are ± 5.3dB and ±0.99dB respectively. The value of the Measurement uncertainty for conducted emission test is ±4.2dB.

Uncertainty and Compliance - Unless the standard specifically states that measured values are to be extended by the measurement uncertainty in determining compliance, all compliance determinations are based on the actual measured value.

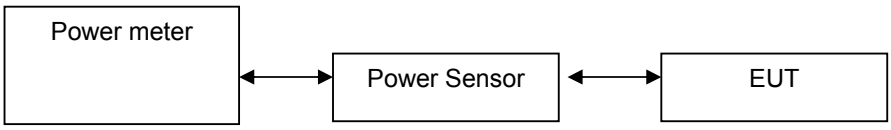
EXHIBIT 4 TEST RESULTS

4.0 TEST RESULTS

4.1 Maximum Conducted (peak) Output Power at Antenna Terminals

RF Conduct Measurement Test Setup

The figure below shows the test setup, which is utilized to make these measurements.



The antenna port of the EUT was connected to the input of a spectrum analyzer.

☒ The antenna power of the EUT was connected to the input of a power meter. Power was read directly and cable loss correction was added to the reading to the obtain power at the EUT antenna terminals. The measurement procedure 9.1.2 was used.

☐ The EUT should be configured to transmit continuously (at a minimum duty cycle of 98%) at full power over the measurement duration. The measurement procedure AVG1 was used.

IEEE 802.11b (DSSS, 1 Mbps) Antenna Gain = 2 dBi ANT 1

Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2412	17.60	57.5
Middle Channel: 2437	17.50	56.2
High Channel: 2462	17.56	57.0

IEEE 802.11b (DSSS, 1 Mbps) Antenna Gain = 2 dBi ANT 2

Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2412	17.96	62.5
Middle Channel:2437	17.65	58.2
High Channel: 2462	17.70	58.9

IEEE 802.11g (OFDM, 6 Mbps) Antenna Gain = 2 dBi ANT 1

Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2412	22.79	190.1
Middle Channel: 2437	22.68	185.4
High Channel: 2462	22.98	198.6

IEEE 802.11g (OFDM, 6 Mbps) Antenna Gain = 2 dBi ANT 2

Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2412	23.17	207.5
Middle Channel: 2437	23.22	209.9
High Channel: 2462	22.77	189.2

IEEE 802.11n (20MHz) (OFDM, MCS0) Antenna Gain = 2 dBi ANT 1

Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2412	22.62	182.8
Middle Channel: 2437	23.07	202.8
High Channel: 2462	22.86	193.2

IEEE 802.11n (20MHz) (OFDM, MCS0) Antenna Gain = 2 dBi ANT 2

Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2412	22.36	172.2
Middle Channel: 2437	22.81	191.0
High Channel: 2462	22.78	189.7

TEST REPORT

4.1 Maximum Conducted Output Power at Antenna Terminals – Cont'd

IEEE 802.11n (40MHz) (OFDM, MCS0) Antenna Gain = 2 dBi ANT 1

Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2412	21.94	156.3
Middle Channel: 2437	21.98	157.8
High Channel: 2462	21.78	150.7

IEEE 802.11n (40MHz) (OFDM, MCS0) Antenna Gain = 2 dBi ANT 2

Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2412	22.03	159.6
Middle Channel: 2437	21.74	149.3
High Channel: 2462	22.07	161.1

IEEE 802.15.1 BLE (GFSK) Antenna Gain = 2 dBi ANT 1

Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2402	9.8	9.5
Middle Channel: 2440	9.7	9.3
High Channel: 2480	9.4	8.7

IEEE 802.15.1 BLE (GFSK) Antenna Gain = 2 dBi ANT 2

Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2402	9.7	9.3
Middle Channel: 2440	9.7	9.3
High Channel: 2480	9.3	8.5

Cable loss : 0.5 dB External Attenuation : 0 dB

Cable loss, external attenuation: ☒ included in OFFSET function
☐ added to SA raw reading

IEEE 802.11b (DSSS, 1 Mbps)
max. conducted (peak) output level = 17.96 dBm
IEEE 802.11g (OFDM, 9 Mbps)
max. conducted (peak) output level = 23.22 dBm
IEEE 802.11n (20MHz) (OFDM, MCS0)
max. conducted (peak) output level = 23.07 dBm
IEEE 802.11n (40MHz) (OFDM, MCS0)
max. conducted (peak) output level = 22.07 dBm
IEEE 802.15.1 (BLE) (GFSK)
max. conducted (peak) output level = 9.8 dBm
Limits:
☒ 1W (30dBm) for antennas with gains of 6dBi or less

☐ ___W (___dBm) for antennas with gains more than 6dBi

4.2 Minimum 6dB RF Bandwidth

The antenna port of the EUT was connected to the input of a spectrum analyzer. The EBW measurement procedure was used. A PEAK output reading was taken, a DISPLAY line was drawn 6dB lower than PEAK level. The 6dB bandwidth was determined from where the channel output spectrum intersected the display line.

IEEE 802.11b (DSSS, 1 Mbps) ANT 1

Frequency (MHz)	6dB Bandwidth (MHz)
Low Channel: 2412	10.274314
Middle Channel: 2437	10.274314
High Channel: 2462	10.274314

IEEE 802.11b (DSSS, 1 Mbps) ANT 2

Frequency (MHz)	6dB Bandwidth (MHz)
Low Channel: 2412	10.274314
Middle Channel: 2437	10.274314
High Channel: 2462	10.274314

IEEE 802.11g (OFDM, 6 Mbps) ANT 1

Frequency (MHz)	6dB Bandwidth (MHz)
Low Channel: 2412	16.458853
Middle Channel: 2437	16.458853
High Channel: 2462	16.458853

IEEE 802.11g (OFDM, 6 Mbps) ANT 2

Frequency (MHz)	6dB Bandwidth (MHz)
Low Channel: 2412	16.458853
Middle Channel: 2437	16.458853
High Channel: 2462	16.458853

IEEE 802.11n (20MHz) (OFDM, MCS0) ANT 1

Frequency (MHz)	6dB Bandwidth (MHz)
Low Channel: 2412	17.456359
Middle Channel: 2437	17.456359
High Channel: 2462	17.655860

IEEE 802.11n (20MHz) (OFDM, MCS0) ANT 2

Frequency (MHz)	6dB Bandwidth (MHz)
Low Channel: 2412	17.655860
Middle Channel: 2437	17.655860
High Channel: 2462	17.456359

IEEE 802.11n (40MHz) (OFDM, MCS0) ANT 1

Frequency (MHz)	6dB Bandwidth (MHz)
Low Channel: 2422	35.755306
Middle Channel: 2437	35.955056
High Channel: 2452	35.955056

IEEE 802.11n (40MHz) (OFDM, MCS0) ANT 2

Frequency (MHz)	6dB Bandwidth (MHz)
Low Channel: 2422	35.955056
Middle Channel: 2437	35.755306
High Channel: 2452	35.955056

IEEE 802.15.1 BLE (GFSK) Antenna Gain = 2 dBi ANT 1

Frequency (MHz)	6dB Bandwidth (MHz)
Low Channel: 2402	0.745
Middle Channel: 2440	0.745
High Channel: 2480	0.745

IEEE 802.15.1 BLE (GFSK) Antenna Gain = 2 dBi ANT 2

Frequency (MHz)	6dB Bandwidth (MHz)
Low Channel: 2402	0.745
Middle Channel: 2440	0.745
High Channel: 2480	0.745

Limits
6 dB bandwidth shall be at least 500kHz
The plots of 6dB RF bandwidth are saved as below.

TEST REPORT

PLOTS OF 6DB RF BANDWIDTH

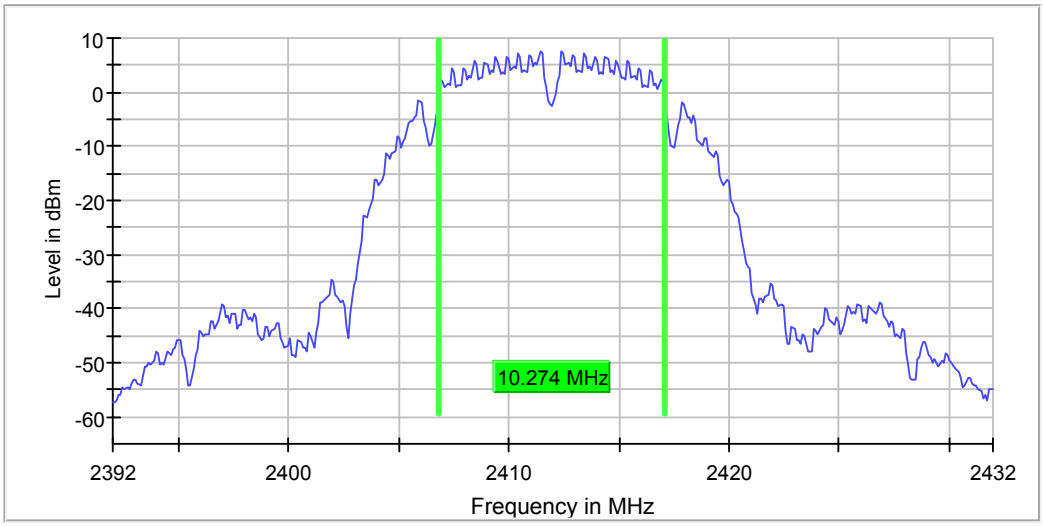
ANT 1 B mode
Minimum Emission Bandwidth 6 dB (2412 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2412.000000	10.274314	0.500000	---	2406.812968	2417.087282	7.6

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2412.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	23 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

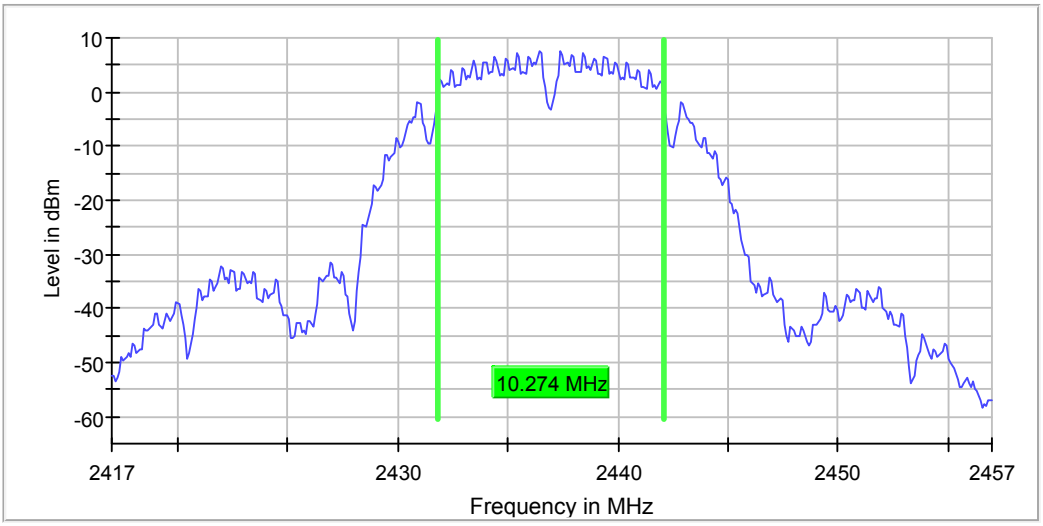
ANT 1 B mode
Minimum Emission Bandwidth 6 dB (2437 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2437.000000	10.274314	0.500000	---	2431.812968	2442.087282	7.5

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	40 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

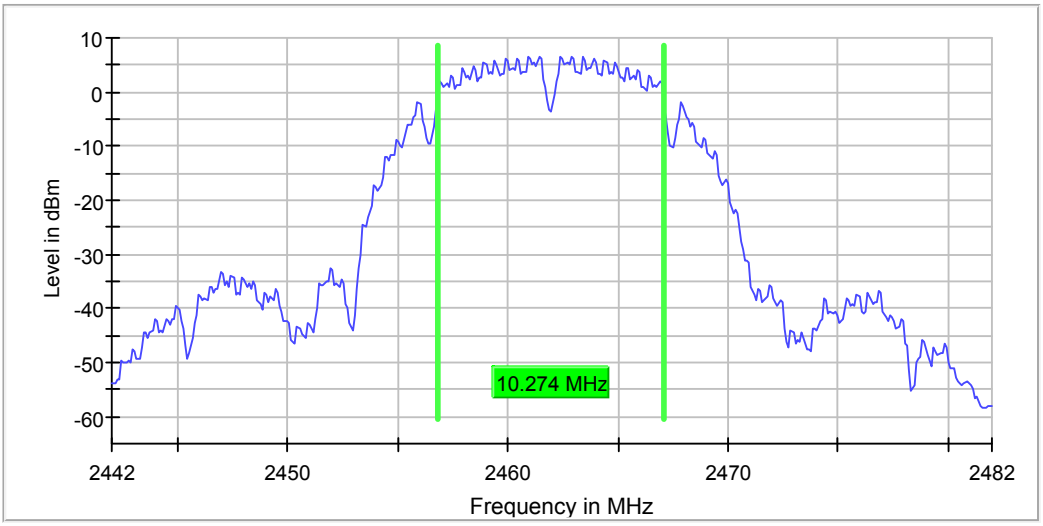
ANT 1 B mode
Minimum Emission Bandwidth 6 dB (2462 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2462.000000	10.274314	0.500000	---	2456.812968	2467.087282	6.7

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	23 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.03 dB	0.50 dB

Total Quality. Assured.

TEST REPORT

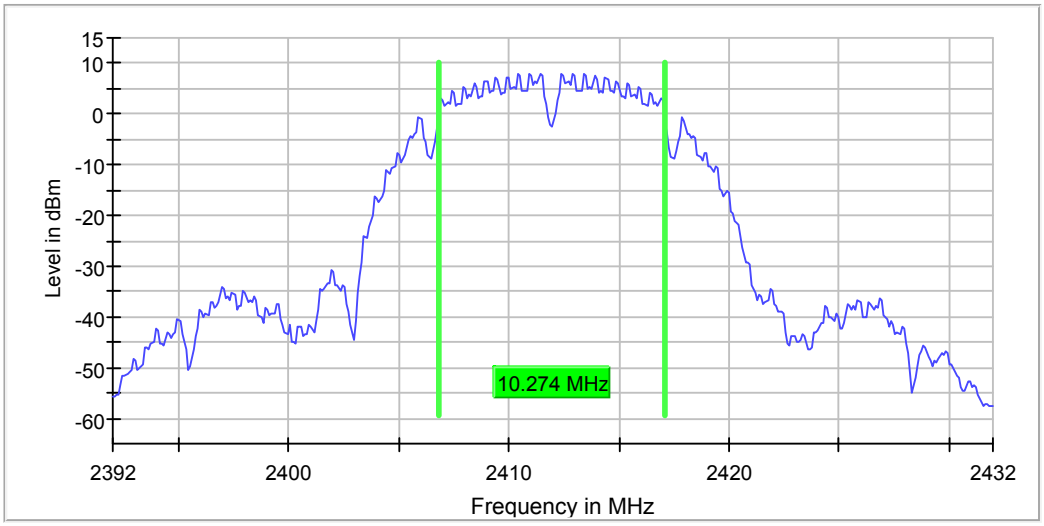
Ant 2 B mode
Minimum Emission Bandwidth 6 dB (2412 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2412.000000	10.274314	0.500000	---	2406.812968	2417.087282	8.1

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2412.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	20 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.42 dB	0.50 dB

TEST REPORT

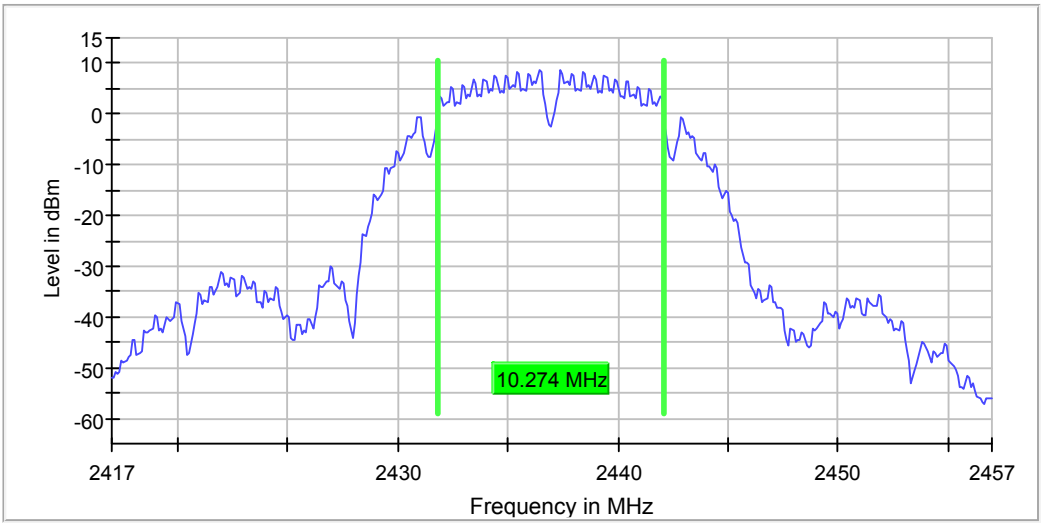
Ant 2 B mode
Minimum Emission Bandwidth 6 dB (2437 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2437.000000	10.274314	0.500000	---	2431.812968	2442.087282	8.6

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	30 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.01 dB	0.50 dB

TEST REPORT

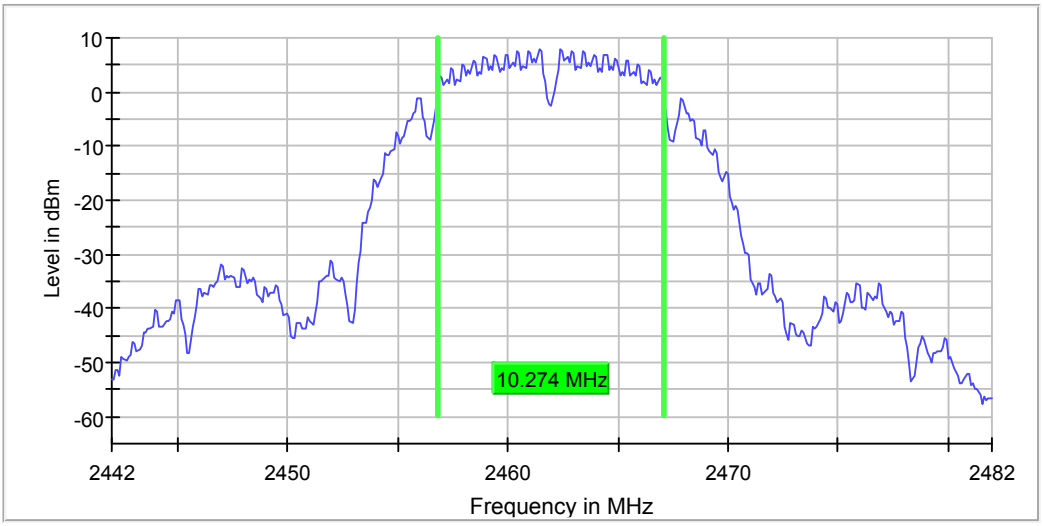
Ant 2 B mode
Minimum Emission Bandwidth 6 dB (2462 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2462.000000	10.274314	0.500000	---	2456.812968	2467.087282	7.9

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	19 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

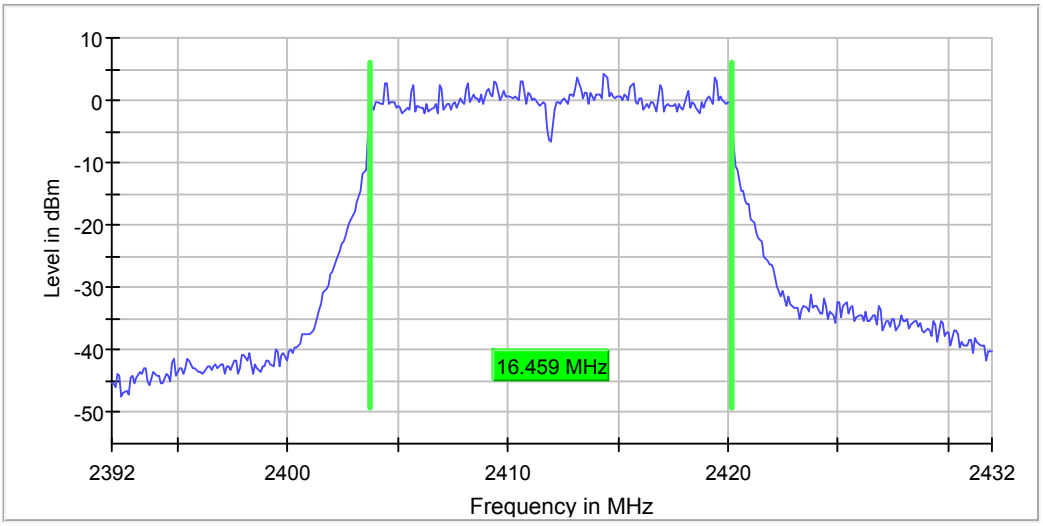
ANT 1 G mode
Minimum Emission Bandwidth 6 dB (2412 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2412.000000	16.458853	0.500000	---	2403.720698	2420.179551	4.2

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2412.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	68 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.29 dB	0.50 dB

TEST REPORT

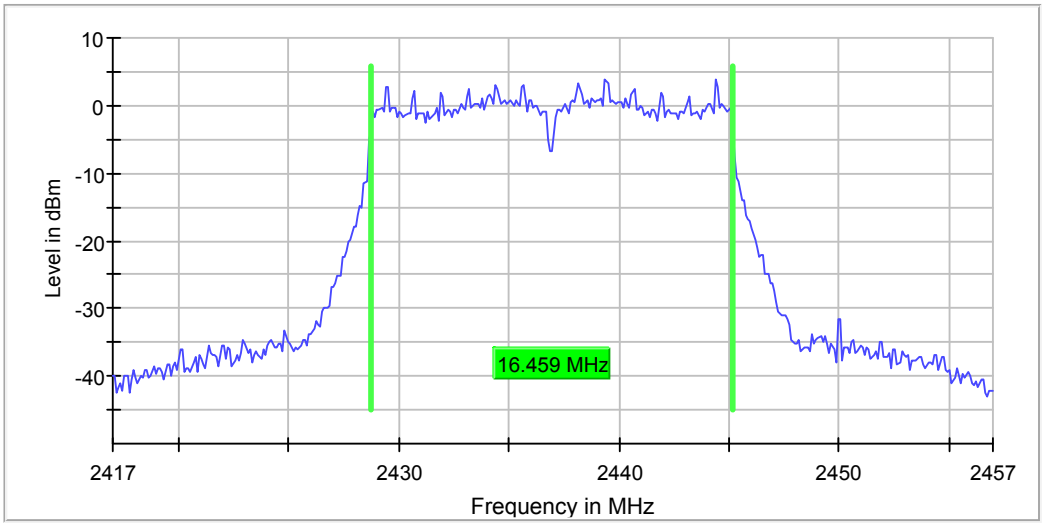
ANT 1 G mode
Minimum Emission Bandwidth 6 dB (2437 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2437.000000	16.458853	0.500000	---	2428.720698	2445.179551	3.9

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	57 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.12 dB	0.50 dB

TEST REPORT

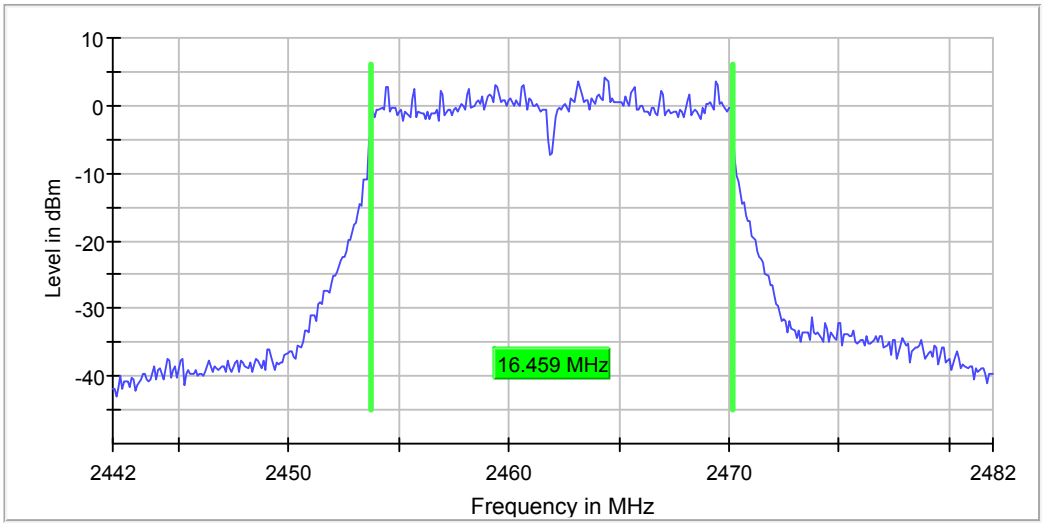
ANT 1 G mode
Minimum Emission Bandwidth 6 dB (2462 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2462.000000	16.458853	0.500000	---	2453.720698	2470.179551	4.1

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	45 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.40 dB	0.50 dB

TEST REPORT

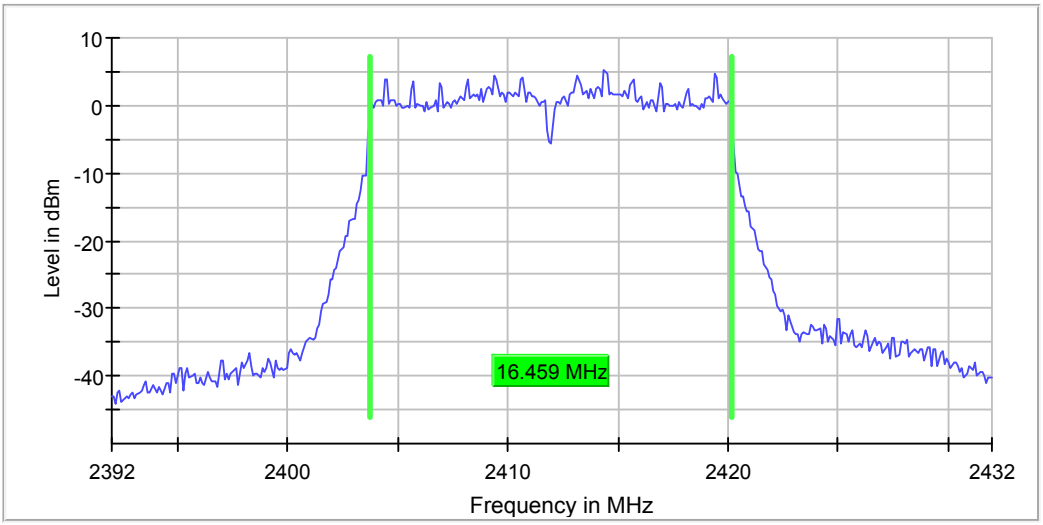
Ant 2 G mode
Minimum Emission Bandwidth 6 dB (2412 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2412.000000	16.458853	0.500000	---	2403.720698	2420.179551	5.3

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2412.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	47 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.31 dB	0.50 dB

TEST REPORT

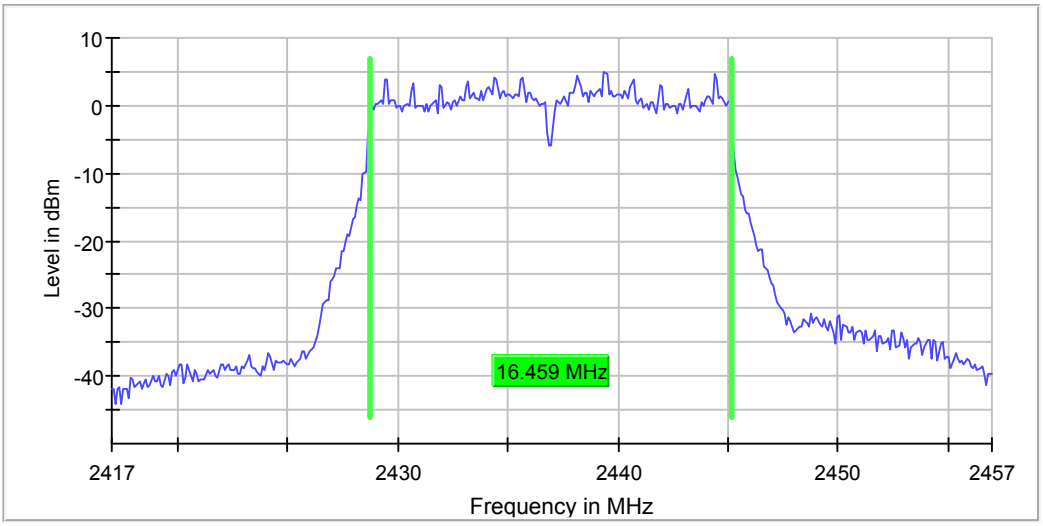
Ant 2 G mode
Minimum Emission Bandwidth 6 dB (2437 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2437.000000	16.458853	0.500000	---	2428.720698	2445.179551	5.0

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	51 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

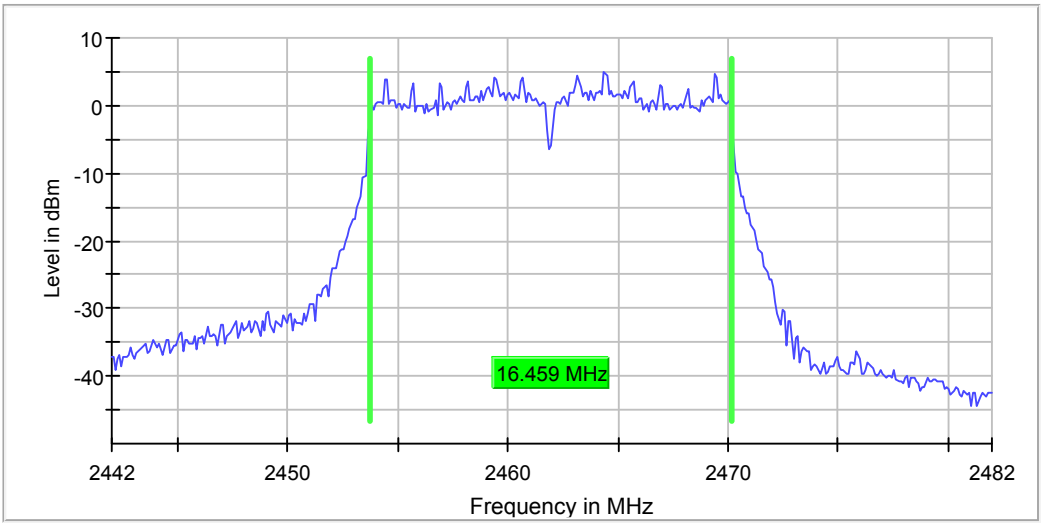
Ant 2 G mode
Minimum Emission Bandwidth 6 dB (2462 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2462.000000	16.458853	0.500000	---	2453.720698	2470.179551	5.0

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	43 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.40 dB	0.50 dB

TEST REPORT

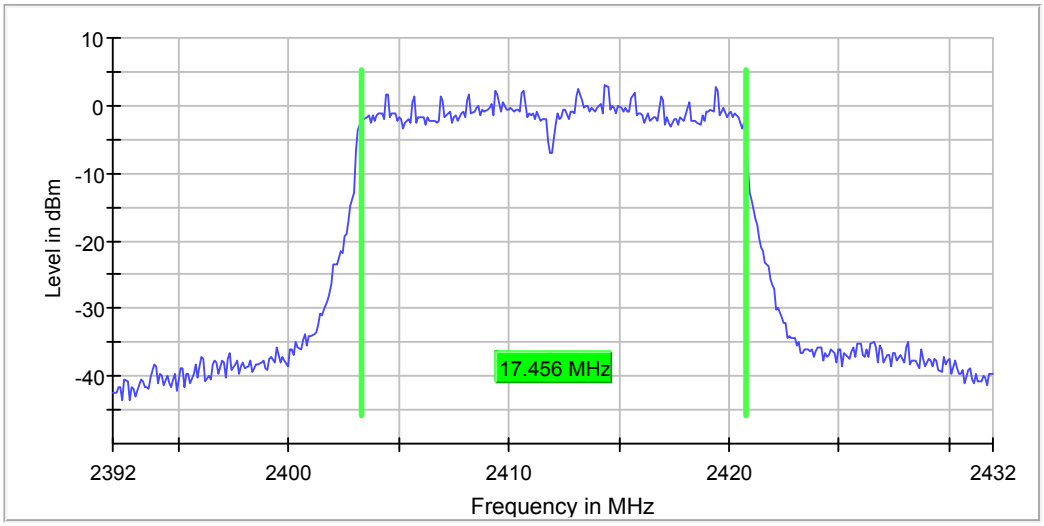
ANT 1 NHT20
Minimum Emission Bandwidth 6 dB (2412 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2412.000000	17.456359	0.500000	---	2403.321696	2420.778055	3.1

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2412.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	56 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.36 dB	0.50 dB

TEST REPORT

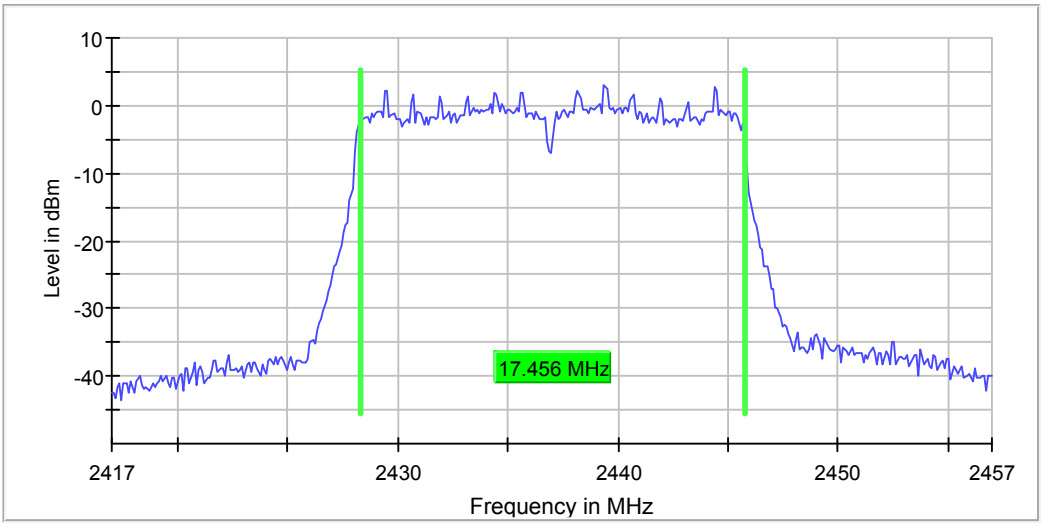
ANT 1 NHT20
Minimum Emission Bandwidth 6 dB (2437 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2437.000000	17.456359	0.500000	---	2428.321696	2445.778055	3.2

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	70 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.30 dB	0.50 dB

TEST REPORT

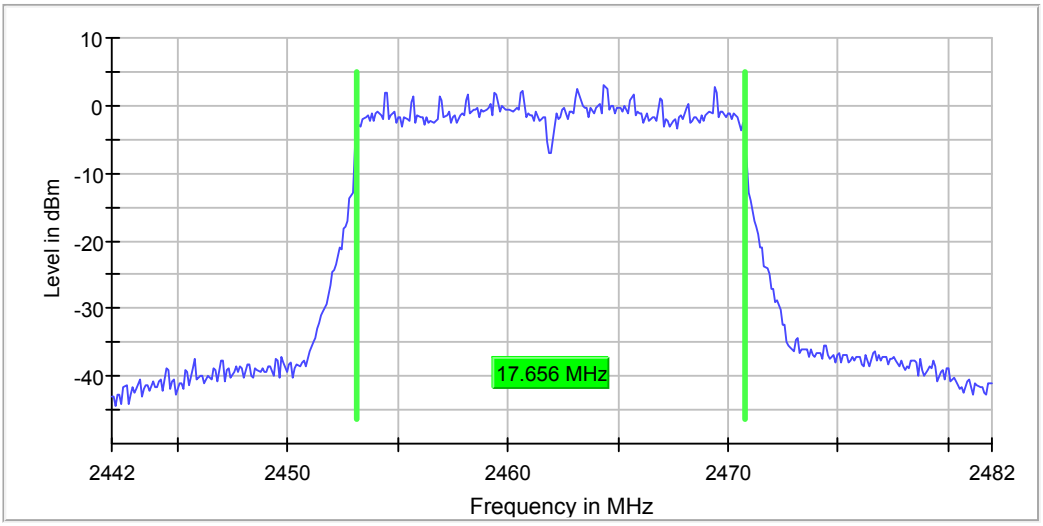
ANT 1 NHT20
Minimum Emission Bandwidth 6 dB (2462 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2462.000000	17.655860	0.500000	---	2453.122195	2470.778055	3.1

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	49 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.20 dB	0.50 dB

TEST REPORT

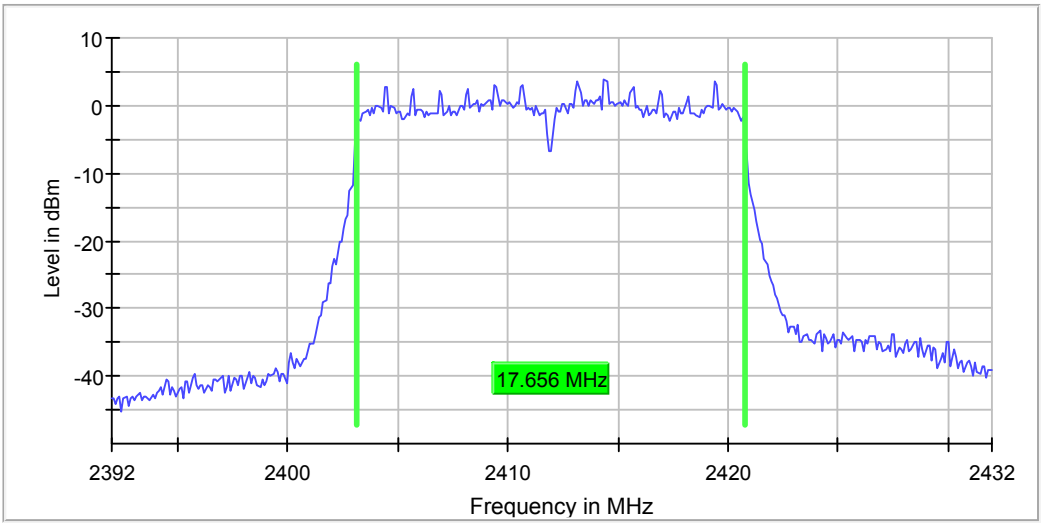
Ant 2 NHT20
Minimum Emission Bandwidth 6 dB (2412 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2412.000000	17.655860	0.500000	---	2403.122195	2420.778055	4.0

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2412.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	68 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.09 dB	0.50 dB

TEST REPORT

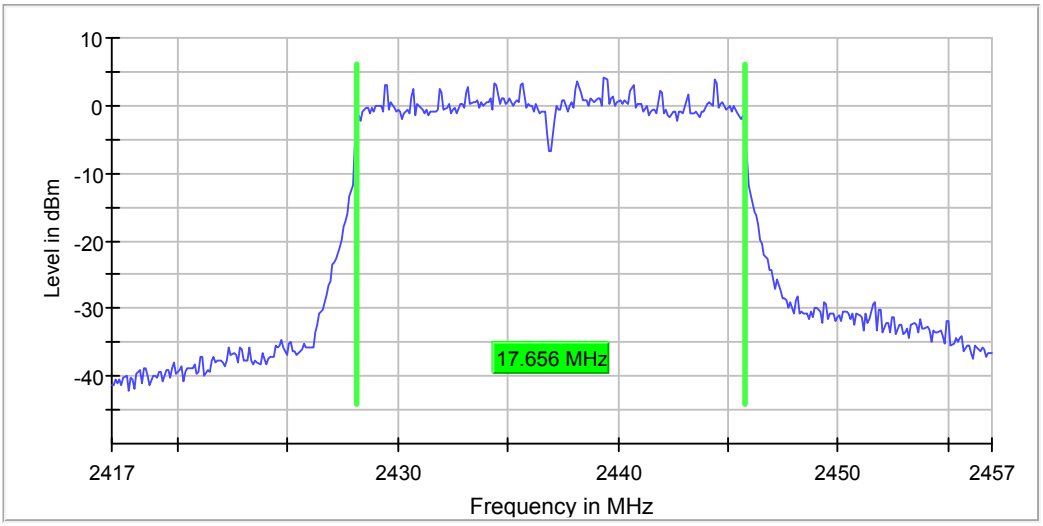
Ant 2 NHT20
Minimum Emission Bandwidth 6 dB (2437 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2437.000000	17.655860	0.500000	---	2428.122195	2445.778055	4.2

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	65 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.11 dB	0.50 dB

TEST REPORT

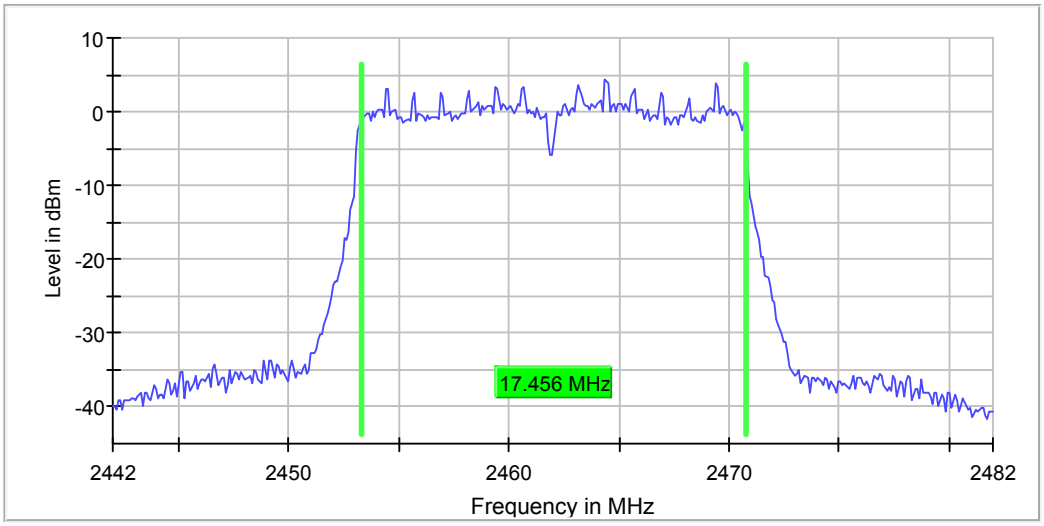
Ant 2 NHT20
Minimum Emission Bandwidth 6 dB (2462 MHz; 0.000 dBm; 20 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2462.000000	17.456359	0.500000	---	2453.321696	2470.778055	4.4

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	56.886 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	88 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.16 dB	0.50 dB

TEST REPORT

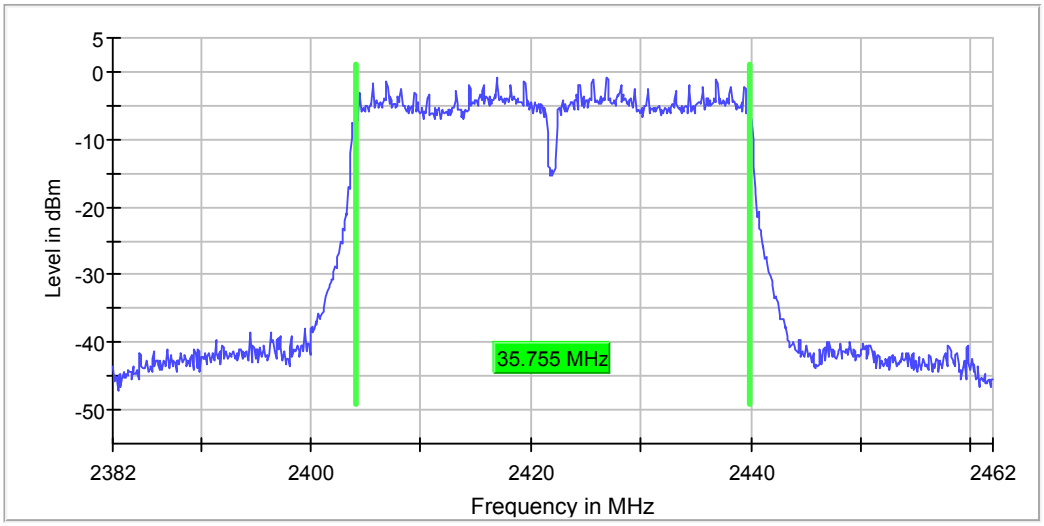
ANT 1 NHT40
Minimum Emission Bandwidth 6 dB (2422 MHz; 0.000 dBm; 40 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2422.000000	35.755306	0.500000	---	2404.122347	2439.877653	-0.9

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2422.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.38200 GHz	2.38200 GHz
Stop Frequency	2.46200 GHz	2.46200 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	94.810 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	109 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.36 dB	0.50 dB

TEST REPORT

ANT 1 NHT40

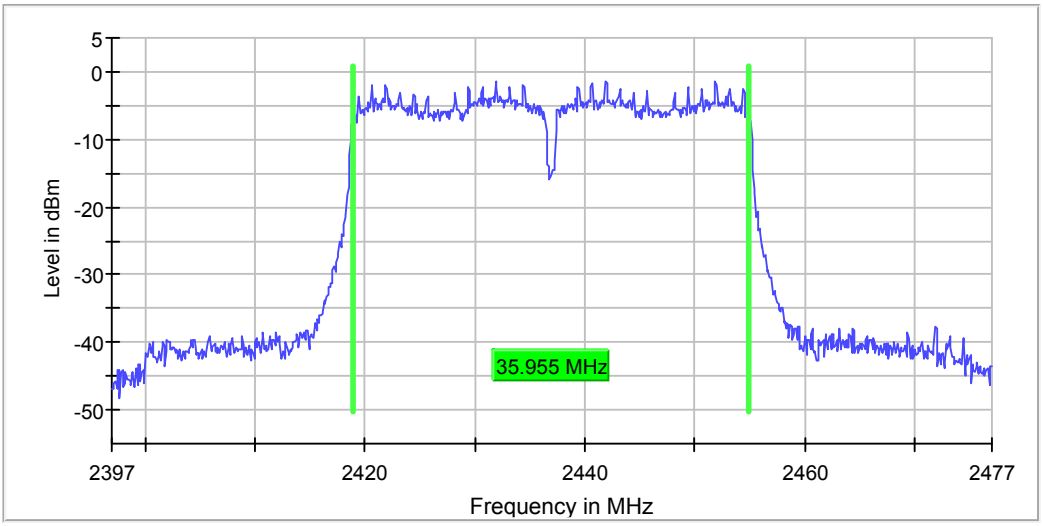
Minimum Emission Bandwidth 6 dB (2437 MHz; 0.000 dBm; 40 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2437.000000	35.955056	0.500000	---	2418.922597	2454.877653	-1.3

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39700 GHz	2.39700 GHz
Stop Frequency	2.47700 GHz	2.47700 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	94.810 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	92 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.09 dB	0.50 dB

TEST REPORT

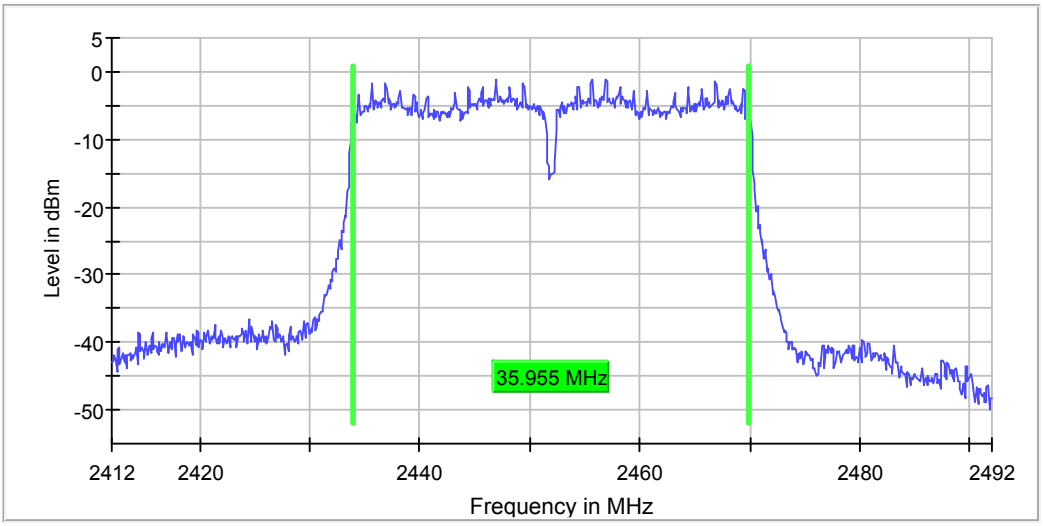
ANT 1 NHT40
Minimum Emission Bandwidth 6 dB (2452 MHz; 0.000 dBm; 40 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2452.000000	35.955056	0.500000	---	2433.922597	2469.877653	-1.1

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2452.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41200 GHz	2.41200 GHz
Stop Frequency	2.49200 GHz	2.49200 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	94.810 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	61 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

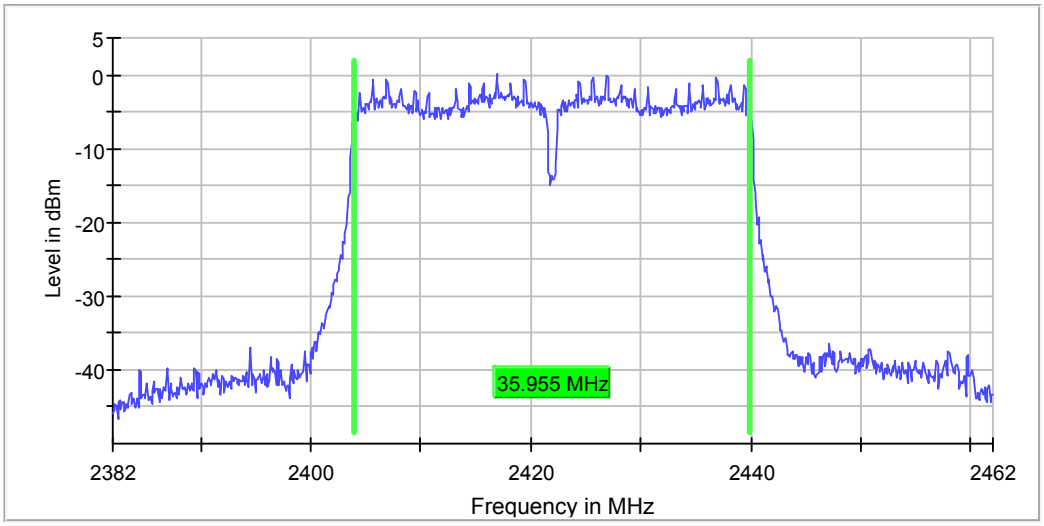
Ant 2 NHT40
Minimum Emission Bandwidth 6 dB (2422 MHz; 0.000 dBm; 40 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2422.000000	35.955056	0.500000	---	2403.922597	2439.877653	0.0

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2422.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.38200 GHz	2.38200 GHz
Stop Frequency	2.46200 GHz	2.46200 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	94.810 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	90 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.31 dB	0.50 dB

TEST REPORT

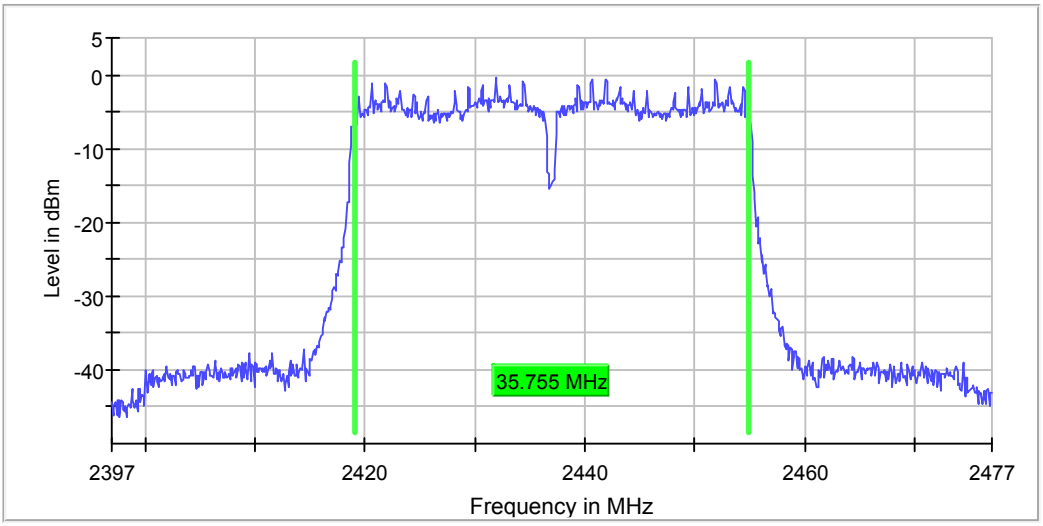
Ant 2 NHT40
Minimum Emission Bandwidth 6 dB (2437 MHz; 0.000 dBm; 40 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2437.000000	35.755306	0.500000	---	2419.122347	2454.877653	-0.4

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39700 GHz	2.39700 GHz
Stop Frequency	2.47700 GHz	2.47700 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	94.810 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	72 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.09 dB	0.50 dB

TEST REPORT

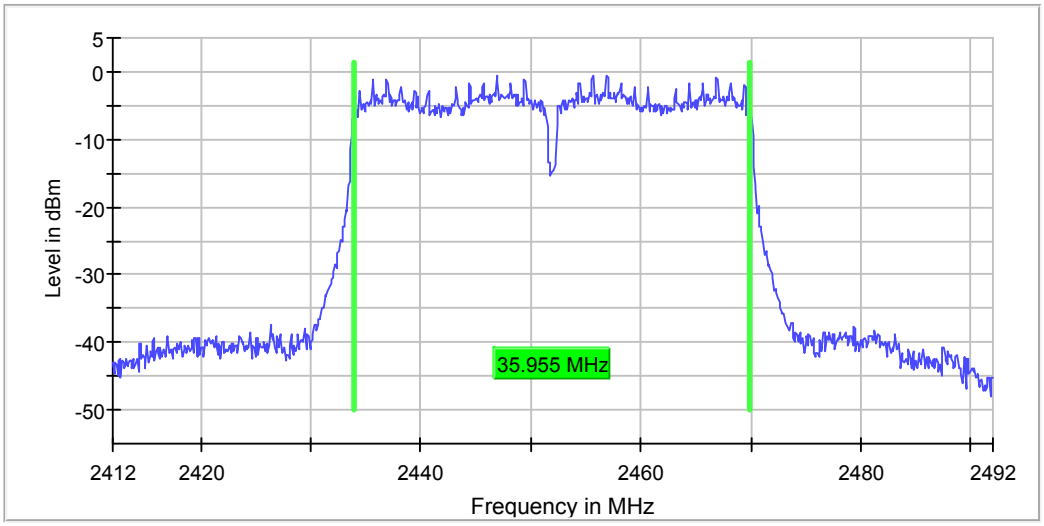
Ant 2 NHT40
Minimum Emission Bandwidth 6 dB (2452 MHz; 0.000 dBm; 40 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2452.000000	35.955056	0.500000	---	2433.922597	2469.877653	-0.5

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2452.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41200 GHz	2.41200 GHz
Stop Frequency	2.49200 GHz	2.49200 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	94.810 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	64 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.47 dB	0.50 dB

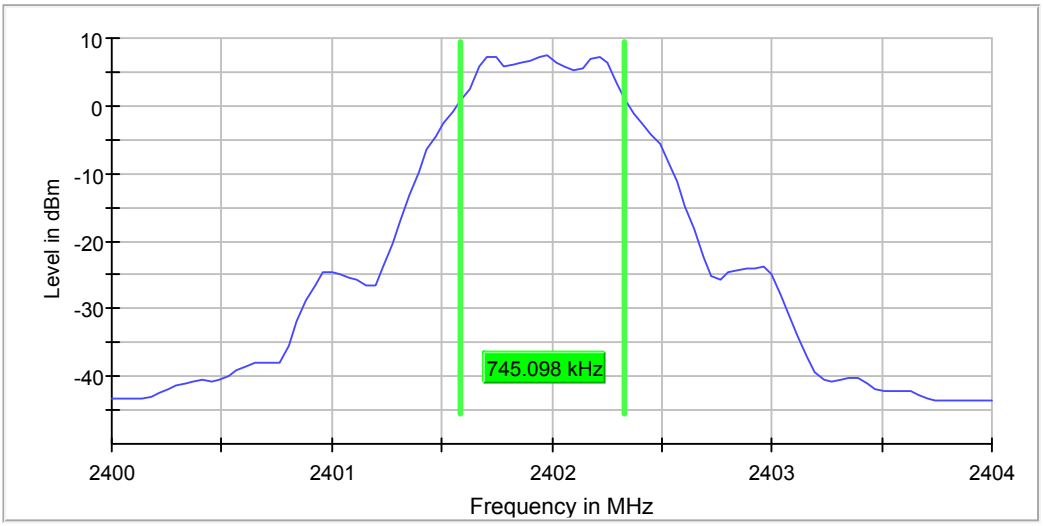
ANT 1 BLE
Minimum Emission Bandwidth 6 dB (2402 MHz; 0 (0 dBm); 2 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2402.000000	0.745098	0.500000	---	2401.588235	2402.333333	7.4

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.40400 GHz	2.40400 GHz
Span	4.000 MHz	4.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	18.938 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	19 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

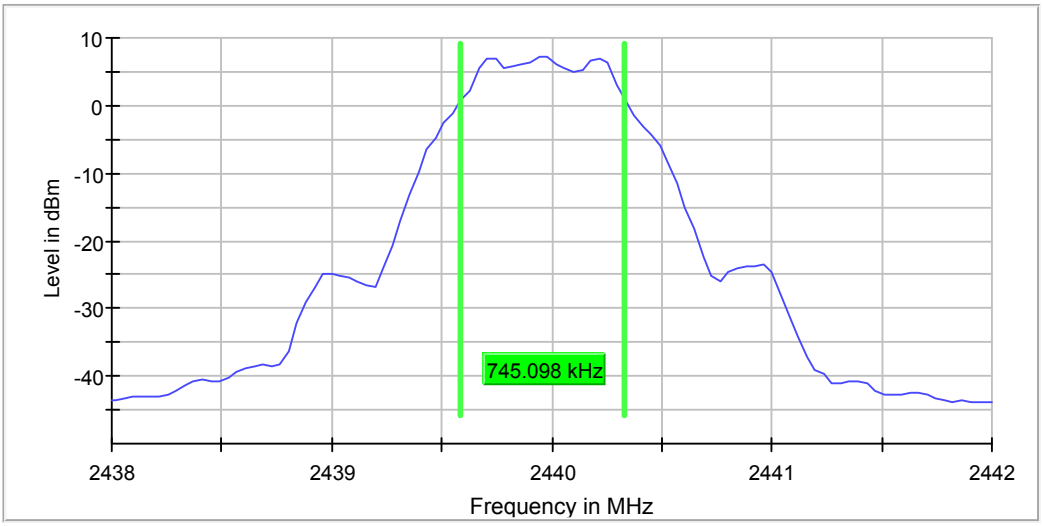
ANT 1 BLE
Minimum Emission Bandwidth 6 dB (2440 MHz; 0 (0 dBm); 2 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2440.000000	0.745098	0.500000	---	2439.588235	2440.333333	7.2

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2440.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43800 GHz	2.43800 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	4.000 MHz	4.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	18.938 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	19 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.08 dB	0.50 dB

TEST REPORT

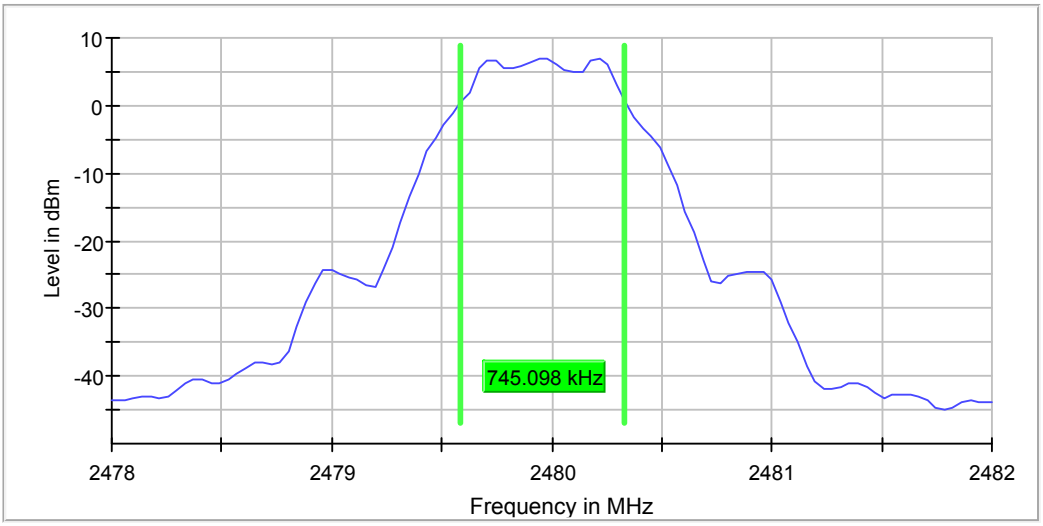
ANT 1 BLE
Minimum Emission Bandwidth 6 dB (2480 MHz; 0 (0 dBm); 2 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2480.000000	0.745098	0.500000	---	2479.588235	2480.333333	7.0

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47800 GHz	2.47800 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	4.000 MHz	4.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	18.938 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	19 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.00 dB	0.50 dB

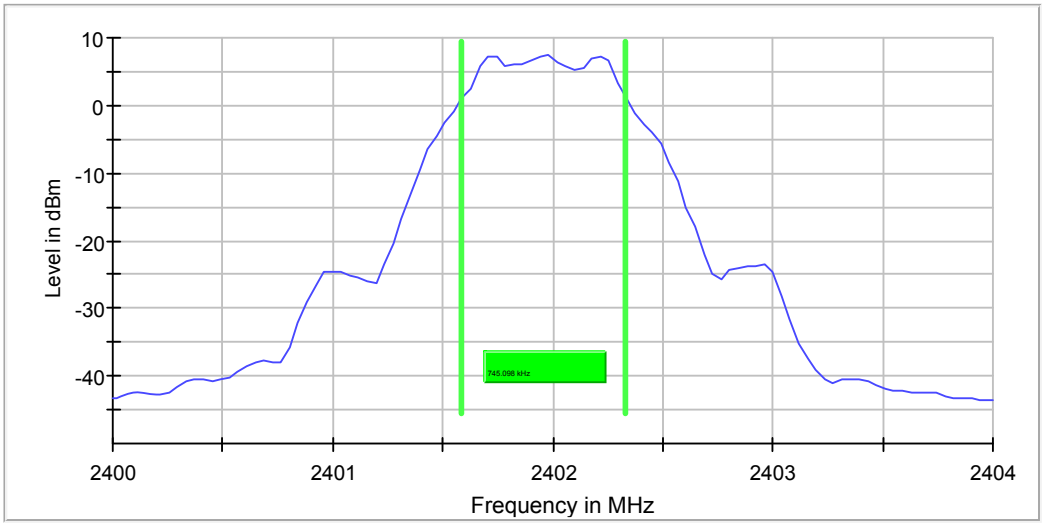
Ant 2 BLE
Minimum Emission Bandwidth 6 dB (2402 MHz; 0 (0 dBm); 2 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2402.000000	0.745098	0.500000	---	2401.588235	2402.333333	7.4

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.40400 GHz	2.40400 GHz
Span	4.000 MHz	4.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	18.938 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	19 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

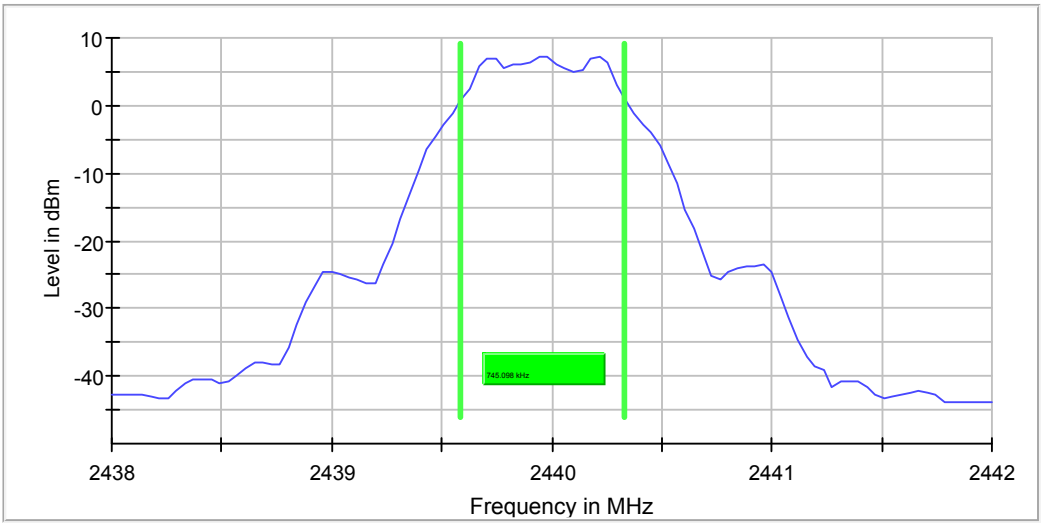
Ant 2 BLE
Minimum Emission Bandwidth 6 dB (2440 MHz; 0 (0 dBm); 2 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2440.000000	0.745098	0.500000	---	2439.588235	2440.333333	7.3

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2440.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43800 GHz	2.43800 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	4.000 MHz	4.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	18.938 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	21 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

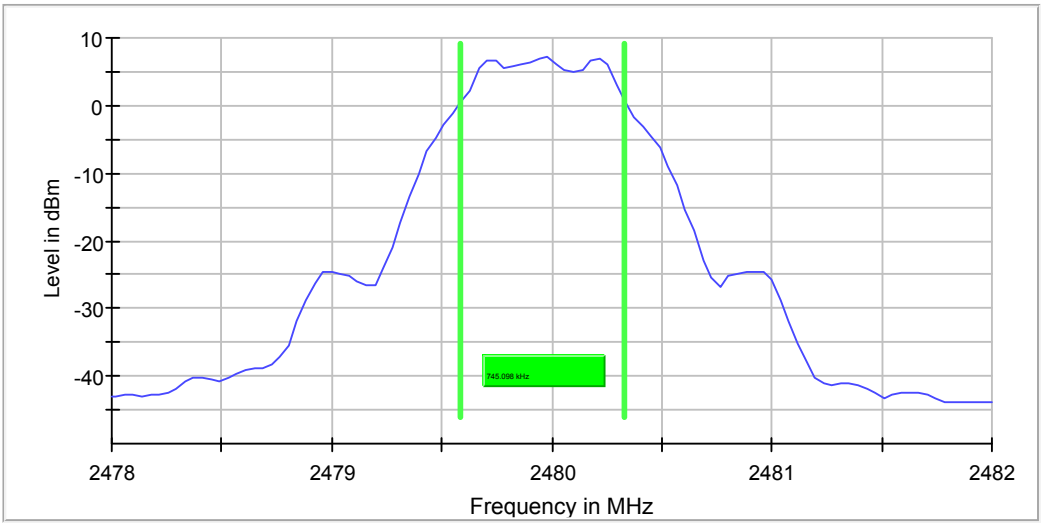
Ant 2 BLE
Minimum Emission Bandwidth 6 dB (2480 MHz; 0 (0 dBm); 2 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2480.000000	0.745098	0.500000	---	2479.588235	2480.333333	7.1

(continuation of the "6 dB Bandwidth" table from column 7 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47800 GHz	2.47800 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	4.000 MHz	4.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	18.938 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	18 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.05 dB	0.50 dB

4.3 Maximum Power Spectral Density

Antenna output of the EUT was coupled directly to spectrum analyzer. The measurement procedure 10.2 PKPSD was used. If an external attenuator and/or cable was used, these losses are compensated for using the OFFSET function of the analyser.

IEEE 802.11b (DSSS, 1 Mbps) ANT 1

Frequency (MHz)	PSD in 100kHz (dBm)
Low Channel: 2412	7.824
Middle Channel: 2437	7.779
High Channel: 2462	7.724

IEEE 802.11b (DSSS, 1 Mbps) ANT 2

Frequency (MHz)	PSD in 100kHz (dBm)
Low Channel: 2412	8.218
Middle Channel: 2437	8.279
High Channel: 2462	8.411

IEEE 802.11b (DSSS, 1 Mbps) ANT 2

Frequency (MHz)	PSD in 3kHz (dBm)
Low Channel: 2412	-7.436
Middle Channel: 2437	-7.344
High Channel: 2462	-7.252

IEEE 802.11g (OFDM, 6 Mbps) ANT 1

Frequency (MHz)	PSD in 100kHz (dBm)
Low Channel: 2412	4.033
Middle Channel: 2437	4.293
High Channel: 2462	4.226

IEEE 802.11g (OFDM, 6 Mbps) ANT 2

Frequency (MHz)	PSD in 100kHz (dBm)
Low Channel: 2412	4.350
Middle Channel: 2437	4.729
High Channel: 2462	4.139

IEEE 802.11n (20MHz) (OFDM, MCS0) ANT 1

Frequency (MHz)	PSD in 100kHz (dBm)
Low Channel: 2412	3.458
Middle Channel: 2437	3.309
High Channel: 2462	3.238

IEEE 802.11n (20MHz) (OFDM, MCS0) ANT 2

Frequency (MHz)	PSD in 100kHz (dBm)
Low Channel: 2412	3.741
Middle Channel: 2437	4.420
High Channel: 2462	3.686

IEEE 802.11n (40MHz) (OFDM, MCS0) ANT 1

Frequency (MHz)	PSD in 100kHz (dBm)
Low Channel: 2422	-0.897
Middle Channel: 2437	-0.785
High Channel: 2452	-0.769

IEEE 802.11n (40MHz) (OFDM, MCS0) ANT 2

Frequency (MHz)	PSD in 100kHz (dBm)
Low Channel: 2422	-0.568
Middle Channel: 2437	0.308
High Channel: 2452	-0.335

IEEE 802.15.1 BLE (GFSK) Antenna Gain = 2 dBi ANT 1

Frequency (MHz)	PSD in 100kHz (dBm)
Low Channel: 2402	8.226
Middle Channel: 2440	8.135
High Channel: 2480	7.889

IEEE 802.15.1 BLE (GFSK) Antenna Gain = 2 dBi ANT 2

Frequency (MHz)	PSD in 100kHz (dBm)
Low Channel: 2402	8.335
Middle Channel: 2440	8.141
High Channel: 2480	7.858

IEEE 802.15.1 BLE (GFSK) Antenna Gain = 2 dBi ANT 1	
Frequency (MHz)	**PSD in 3kHz (dBm)**
Low Channel: 2402	-6.920
Middle Channel: 2440	-7.187
High Channel: 2480	-7.323
IEEE 802.15.1 BLE (GFSK) Antenna Gain = 2 dBi ANT 2	
Frequency (MHz)	**PSD in 3kHz (dBm)**
Low Channel: 2402	-6.926
Middle Channel: 2440	-7.236
High Channel: 2480	-7.366

Cable Loss: 0.5 dB

Limit:
8dBm

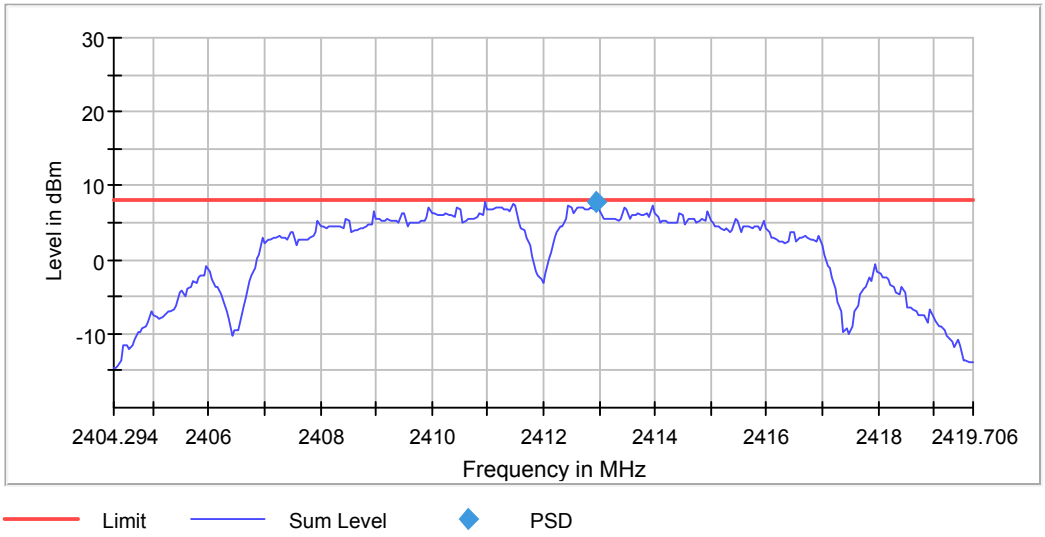
The plots of power spectral density are as below.

TEST REPORT

PLOTS OF POWER SPECTRAL DENSITY
ANT 1 B mode
Power Spectral Density (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2412.947602	7.824	8.0	PASS



Measurement

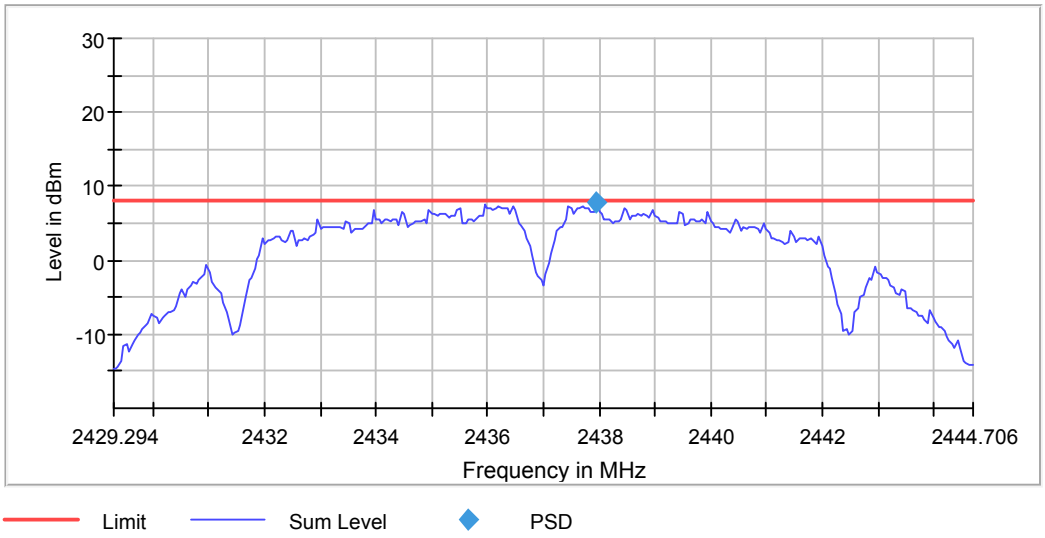
Setting	Instrument Value	Target Value
Start Frequency	2.40429 GHz	2.40429 GHz
Stop Frequency	2.41971 GHz	2.41971 GHz
Span	15.411 MHz	15.411 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	308	~ 308
Sweeptime	309.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

ANT 1 B mode
Power Spectral Density (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2437.947602	7.779	8.0	PASS



Measurement

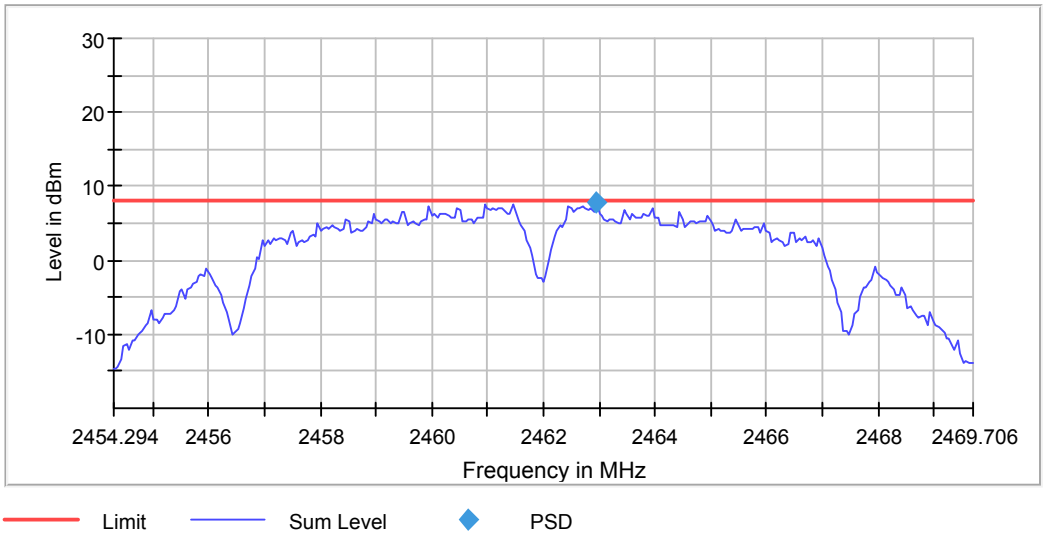
Setting	Instrument Value	Target Value
Start Frequency	2.42929 GHz	2.42929 GHz
Stop Frequency	2.44471 GHz	2.44471 GHz
Span	15.411 MHz	15.411 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	308	~ 308
Sweeptime	309.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

ANT 1 B mode
Power Spectral Density (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2462.000000	2462.947602	7.724	8.0	PASS



Measurement

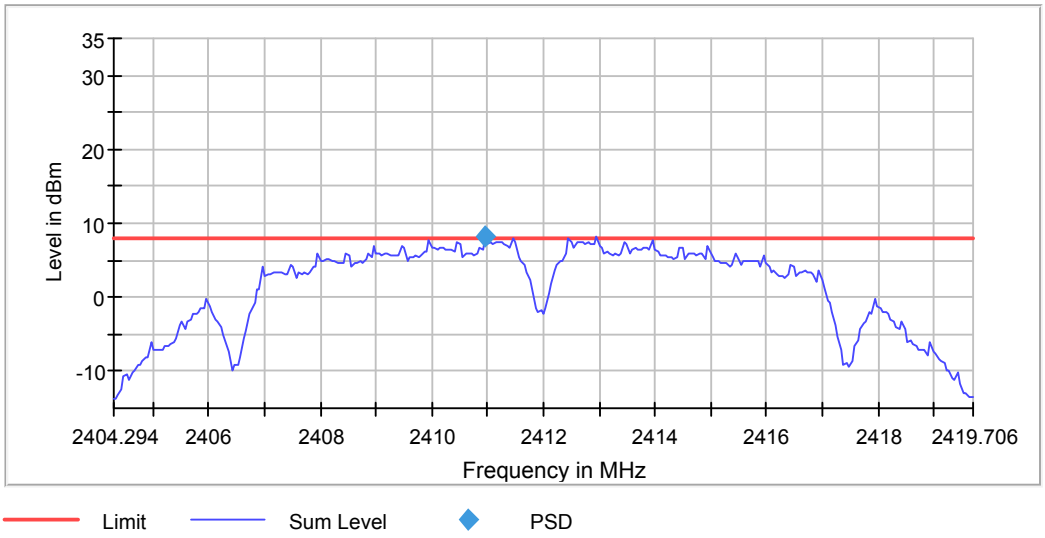
Setting	Instrument Value	Target Value
Start Frequency	2.45429 GHz	2.45429 GHz
Stop Frequency	2.46971 GHz	2.46971 GHz
Span	15.411 MHz	15.411 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	308	~ 308
Sweeptime	309.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 B mode
Power Spectral Density (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2410.952650	8.218	8.0	FAIL



Measurement

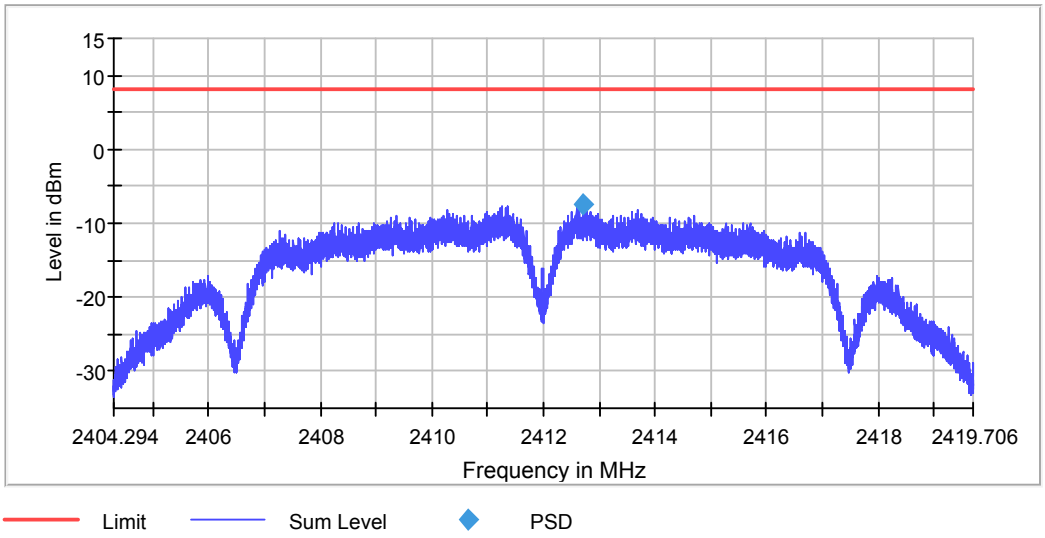
Setting	Instrument Value	Target Value
Start Frequency	2.40429 GHz	2.40429 GHz
Stop Frequency	2.41971 GHz	2.41971 GHz
Span	15.411 MHz	15.411 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	308	~ 308
Sweeptime	309.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 B mode
Power Spectral Density (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2412.701932	-7.436	8.0	PASS



Measurement

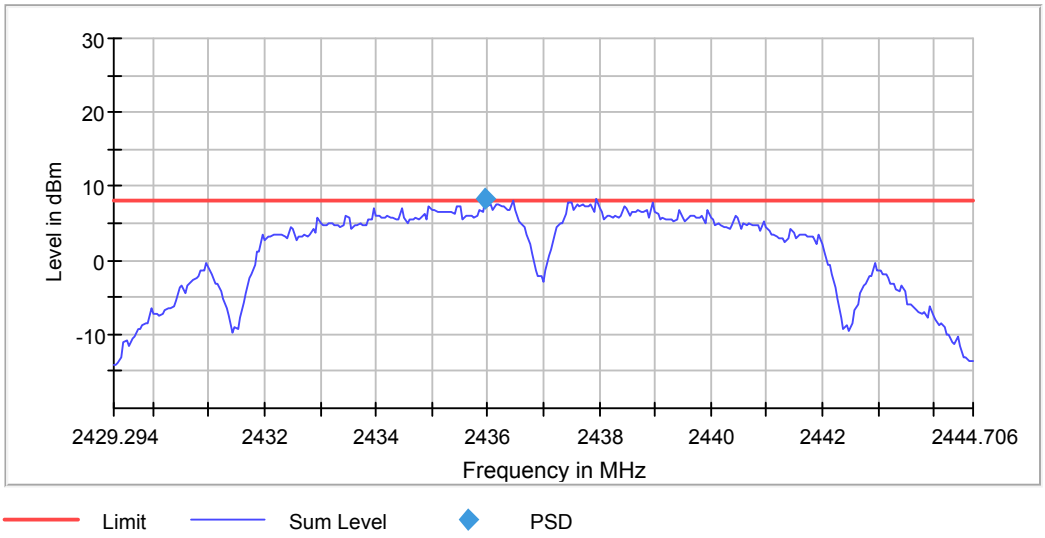
Setting	Instrument Value	Target Value
Start Frequency	2.40429 GHz	2.40429 GHz
Stop Frequency	2.41971 GHz	2.41971 GHz
Span	15.411 MHz	15.411 MHz
RBW	3.000 kHz	~ 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	10274	~ 10274
Sweeptime	343.000 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 B mode
Power Spectral Density (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2435.952650	8.279	8.0	FAIL



Measurement

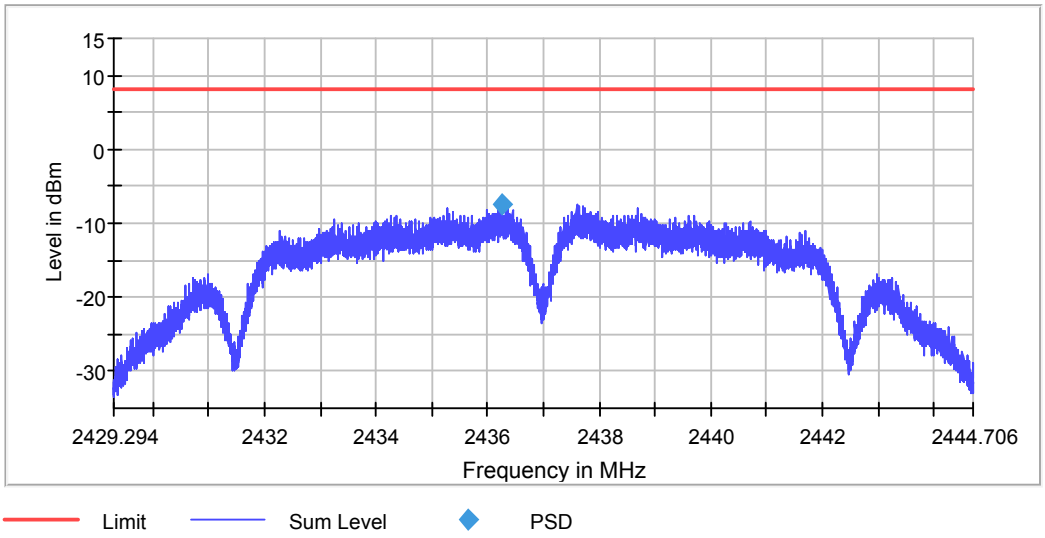
Setting	Instrument Value	Target Value
Start Frequency	2.42929 GHz	2.42929 GHz
Stop Frequency	2.44471 GHz	2.44471 GHz
Span	15.411 MHz	15.411 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	308	~ 308
Sweeptime	309.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 B mode
Power Spectral Density (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2436.262072	-7.344	8.0	PASS



Measurement

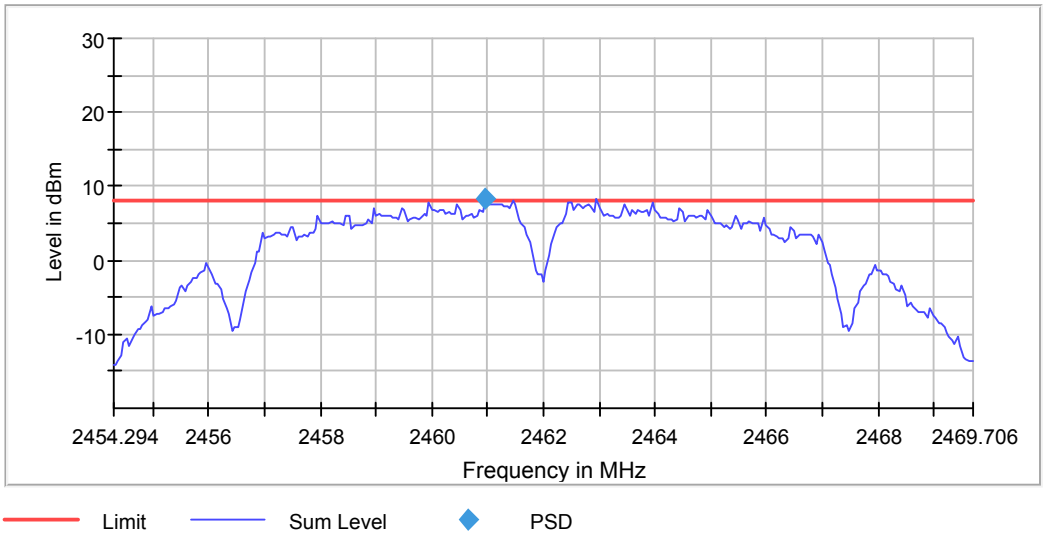
Setting	Instrument Value	Target Value
Start Frequency	2.42929 GHz	2.42929 GHz
Stop Frequency	2.44471 GHz	2.44471 GHz
Span	15.411 MHz	15.411 MHz
RBW	3.000 kHz	~ 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	10274	~ 10274
Sweeptime	343.000 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 B mode
Power Spectral Density (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2462.000000	2460.952650	8.411	8.0	FAIL



Measurement

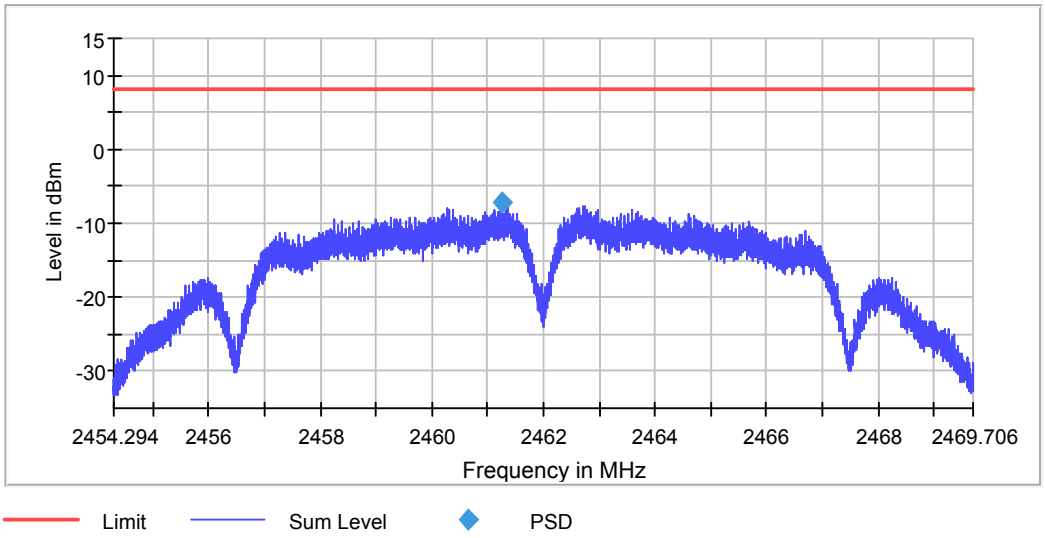
Setting	Instrument Value	Target Value
Start Frequency	2.45429 GHz	2.45429 GHz
Stop Frequency	2.46971 GHz	2.46971 GHz
Span	15.411 MHz	15.411 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	308	~ 308
Sweeptime	309.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 B mode
Power Spectral Density (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2462.000000	2461.260572	-7.252	8.0	PASS



Measurement

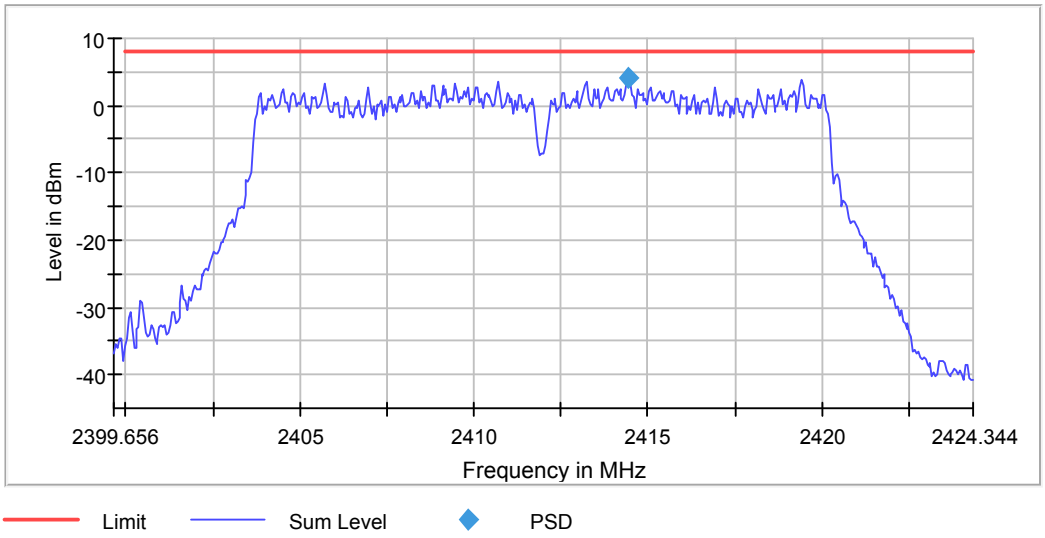
Setting	Instrument Value	Target Value
Start Frequency	2.45429 GHz	2.45429 GHz
Stop Frequency	2.46971 GHz	2.46971 GHz
Span	15.411 MHz	15.411 MHz
RBW	3.000 kHz	~ 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	10274	~ 10274
Sweeptime	343.000 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

ANT 1 G mode
Power Spectral Density (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2414.443912	4.033	8.0	PASS



Measurement

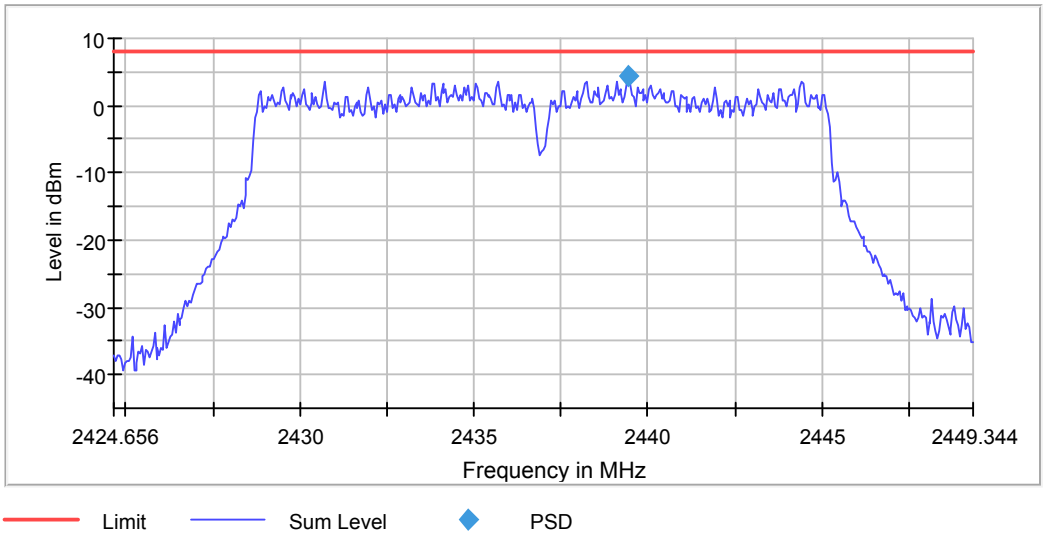
Setting	Instrument Value	Target Value
Start Frequency	2.39966 GHz	2.39966 GHz
Stop Frequency	2.42434 GHz	2.42434 GHz
Span	24.689 MHz	24.689 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	494	~ 494
Sweeptime	494.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

ANT 1 G mode
Power Spectral Density (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2439.443912	4.293	8.0	PASS



Measurement

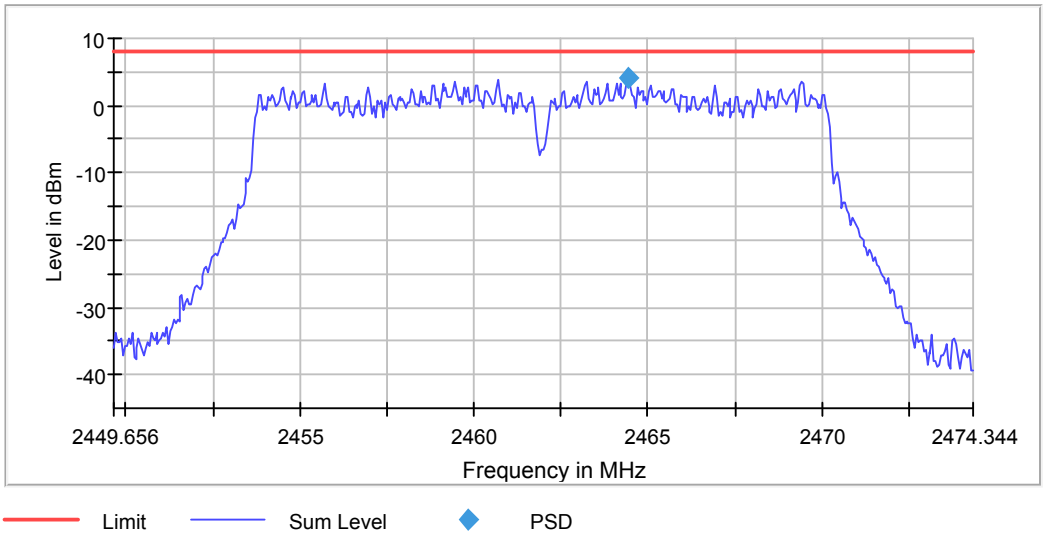
Setting	Instrument Value	Target Value
Start Frequency	2.42466 GHz	2.42466 GHz
Stop Frequency	2.44934 GHz	2.44934 GHz
Span	24.689 MHz	24.689 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	494	~ 494
Sweeptime	494.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

ANT 1 G mode
Power Spectral Density (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2462.000000	2464.443912	4.226	8.0	PASS



Measurement

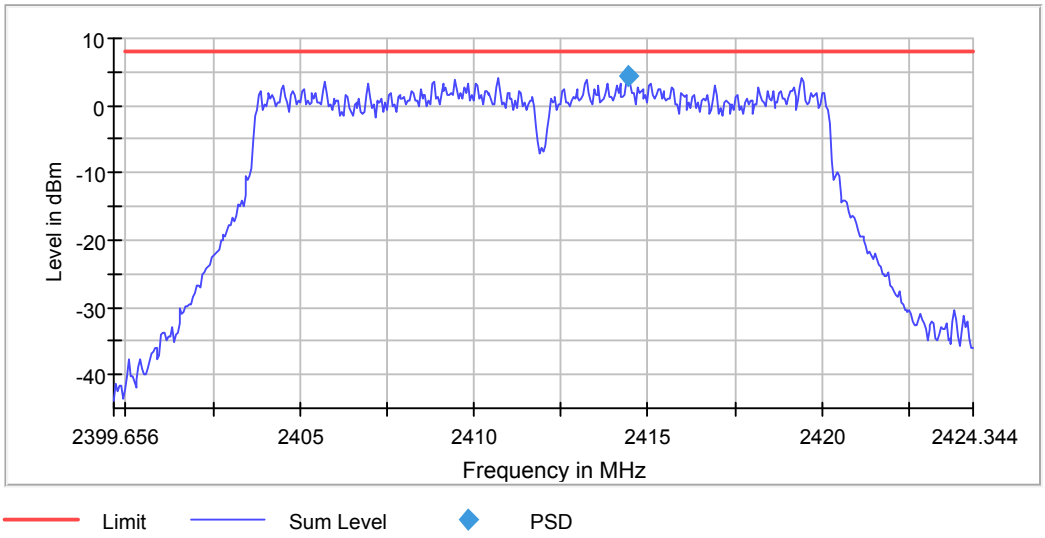
Setting	Instrument Value	Target Value
Start Frequency	2.44966 GHz	2.44966 GHz
Stop Frequency	2.47434 GHz	2.47434 GHz
Span	24.689 MHz	24.689 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	494	~ 494
Sweeptime	494.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 G mode
Power Spectral Density (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2414.443912	4.350	8.0	PASS



Measurement

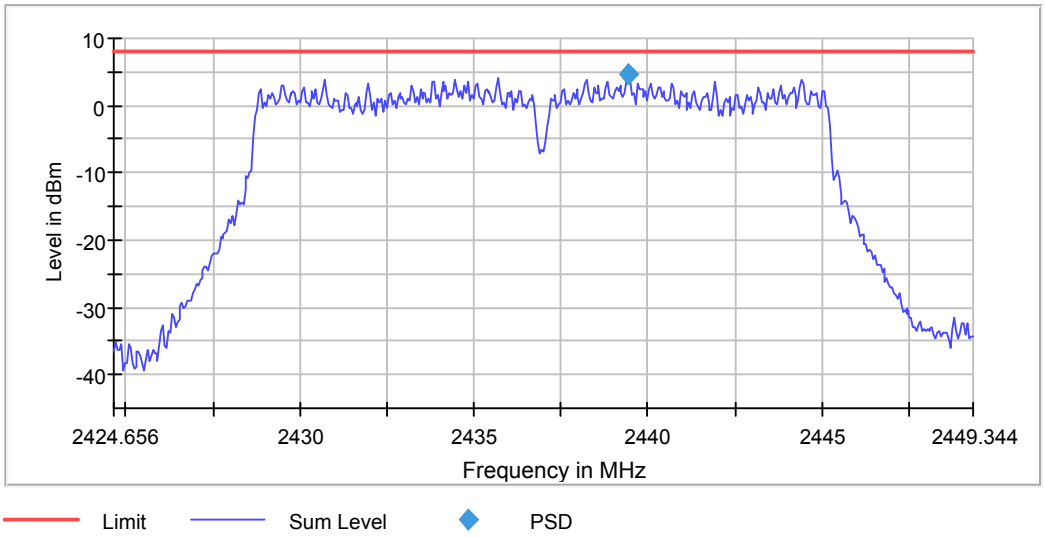
Setting	Instrument Value	Target Value
Start Frequency	2.39966 GHz	2.39966 GHz
Stop Frequency	2.42434 GHz	2.42434 GHz
Span	24.689 MHz	24.689 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	494	~ 494
Sweeptime	494.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 G mode
Power Spectral Density (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2439.443912	4.729	8.0	PASS



Measurement

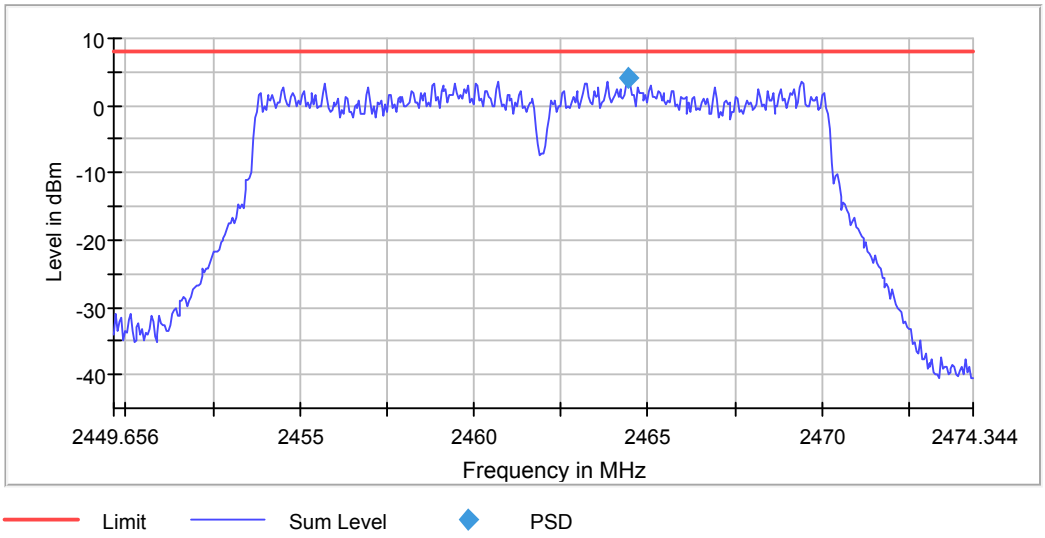
Setting	Instrument Value	Target Value
Start Frequency	2.42466 GHz	2.42466 GHz
Stop Frequency	2.44934 GHz	2.44934 GHz
Span	24.689 MHz	24.689 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	494	~ 494
Sweeptime	494.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 G mode
Power Spectral Density (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2462.000000	2464.443912	4.139	8.0	PASS



Measurement

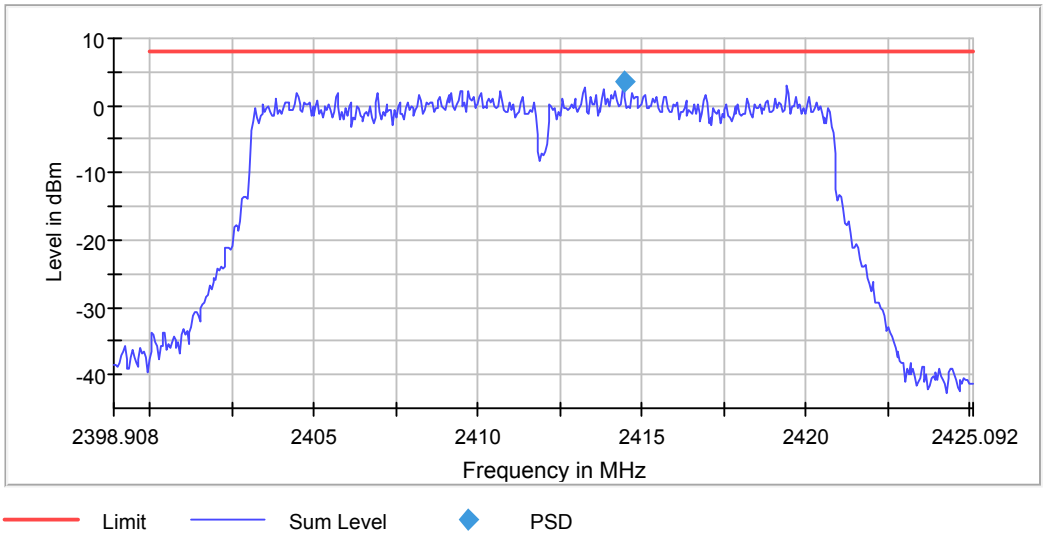
Setting	Instrument Value	Target Value
Start Frequency	2.44966 GHz	2.44966 GHz
Stop Frequency	2.47434 GHz	2.47434 GHz
Span	24.689 MHz	24.689 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	494	~ 494
Sweeptime	494.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

ANT 1 NHT20
Power Spectral Density (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2414.443840	3.458	8.0	PASS



Measurement

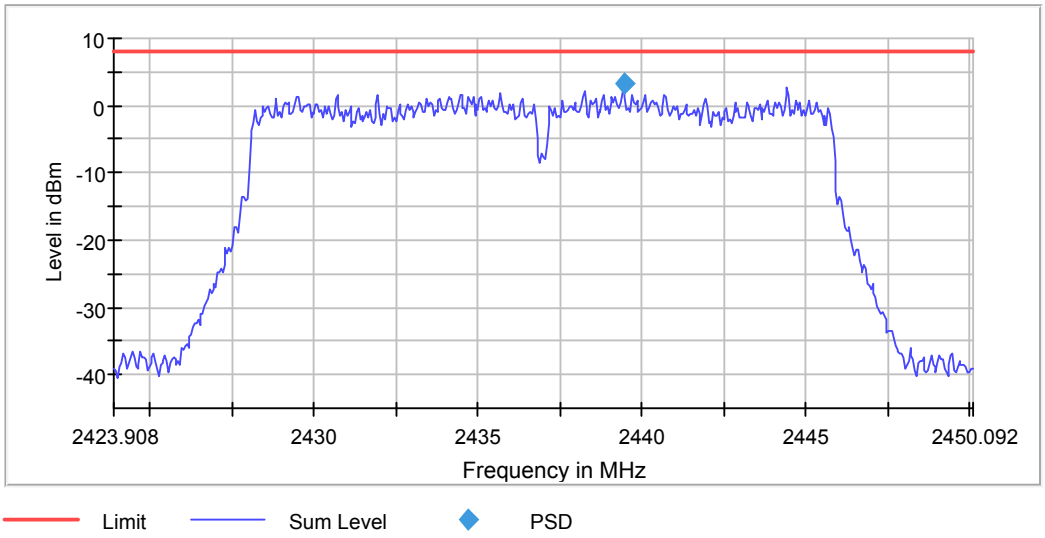
Setting	Instrument Value	Target Value
Start Frequency	2.39891 GHz	2.39891 GHz
Stop Frequency	2.42509 GHz	2.42509 GHz
Span	26.184 MHz	26.184 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	524	~ 524
Sweeptime	524.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

ANT 1 NHT20
Power Spectral Density (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2439.443840	3.309	8.0	PASS



Measurement

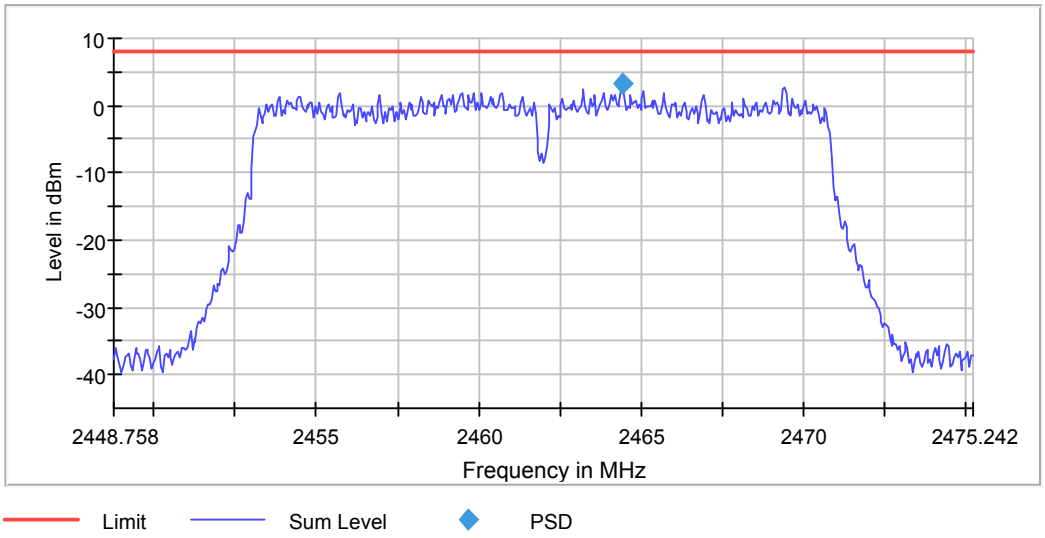
Setting	Instrument Value	Target Value
Start Frequency	2.42391 GHz	2.42391 GHz
Stop Frequency	2.45009 GHz	2.45009 GHz
Span	26.184 MHz	26.184 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	524	~ 524
Sweeptime	524.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

ANT 1 NHT20
Power Spectral Density (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2462.000000	2464.443910	3.238	8.0	PASS



Measurement

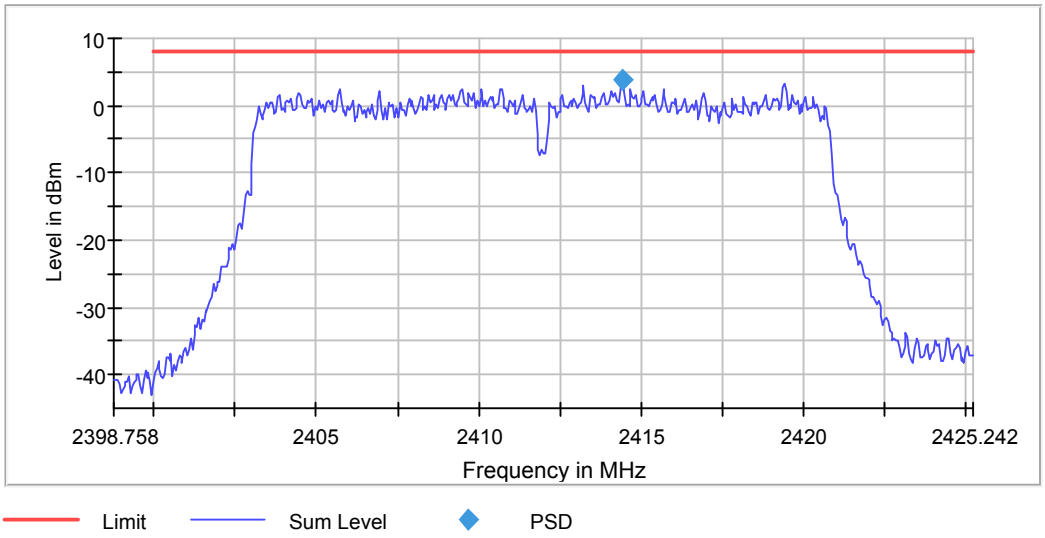
Setting	Instrument Value	Target Value
Start Frequency	2.44876 GHz	2.44876 GHz
Stop Frequency	2.47524 GHz	2.47524 GHz
Span	26.484 MHz	26.484 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	530	~ 530
Sweeptime	530.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 NHT 20
Power Spectral Density (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2414.443910	3.741	8.0	PASS



Measurement

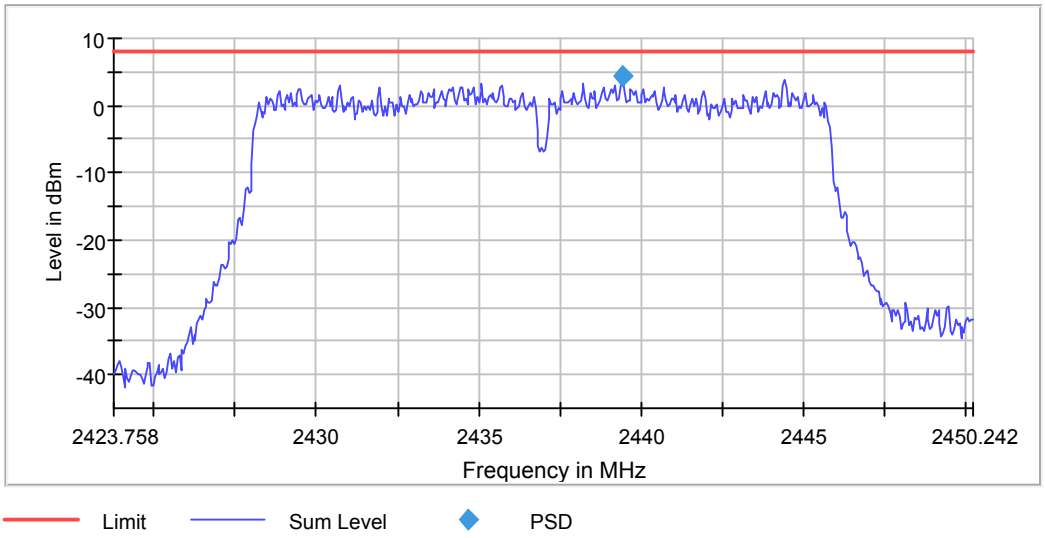
Setting	Instrument Value	Target Value
Start Frequency	2.39876 GHz	2.39876 GHz
Stop Frequency	2.42524 GHz	2.42524 GHz
Span	26.484 MHz	26.484 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	530	~ 530
Sweeptime	530.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 NHT 20
Power Spectral Density (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2439.443910	4.420	8.0	PASS



Measurement

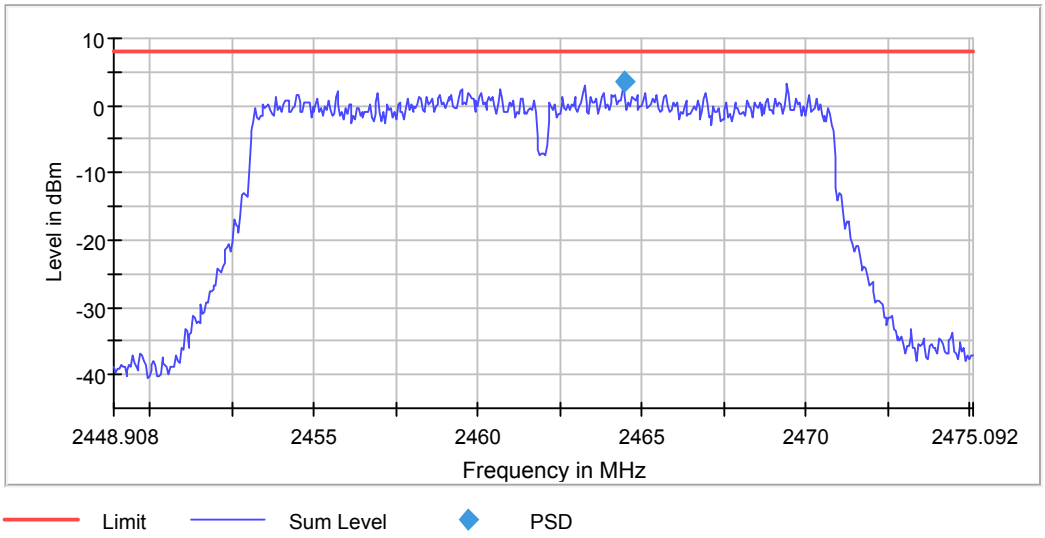
Setting	Instrument Value	Target Value
Start Frequency	2.42376 GHz	2.42376 GHz
Stop Frequency	2.45024 GHz	2.45024 GHz
Span	26.484 MHz	26.484 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	530	~ 530
Sweeptime	530.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 NHT 20
Power Spectral Density (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2462.000000	2464.443840	3.686	8.0	PASS



Measurement

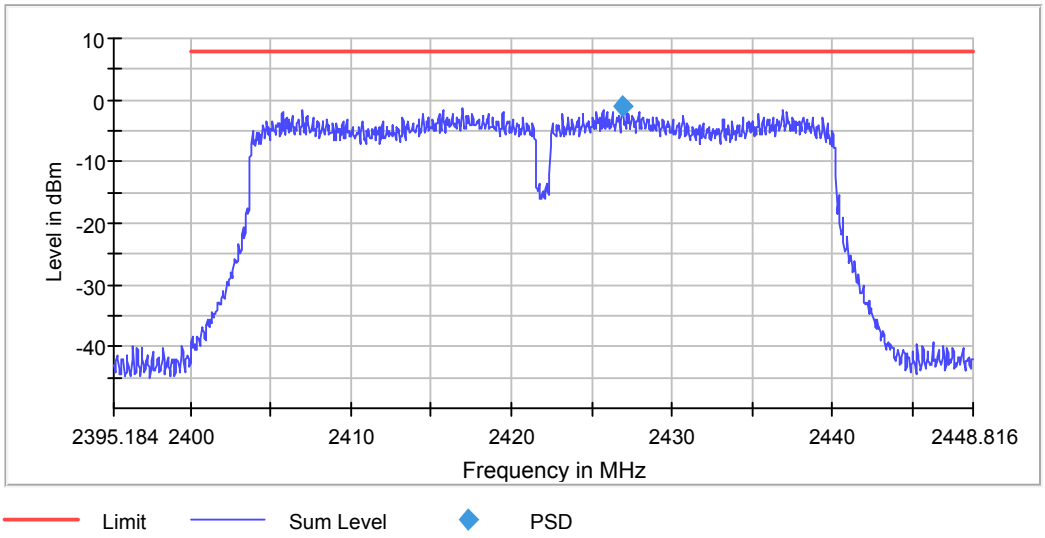
Setting	Instrument Value	Target Value
Start Frequency	2.44891 GHz	2.44891 GHz
Stop Frequency	2.47509 GHz	2.47509 GHz
Span	26.184 MHz	26.184 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	524	~ 524
Sweeptime	524.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

ANT 1 NCT40
Power Spectral Density (2422 MHz; 0.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2422.000000	2426.968747	-0.897	8.0	PASS



Measurement

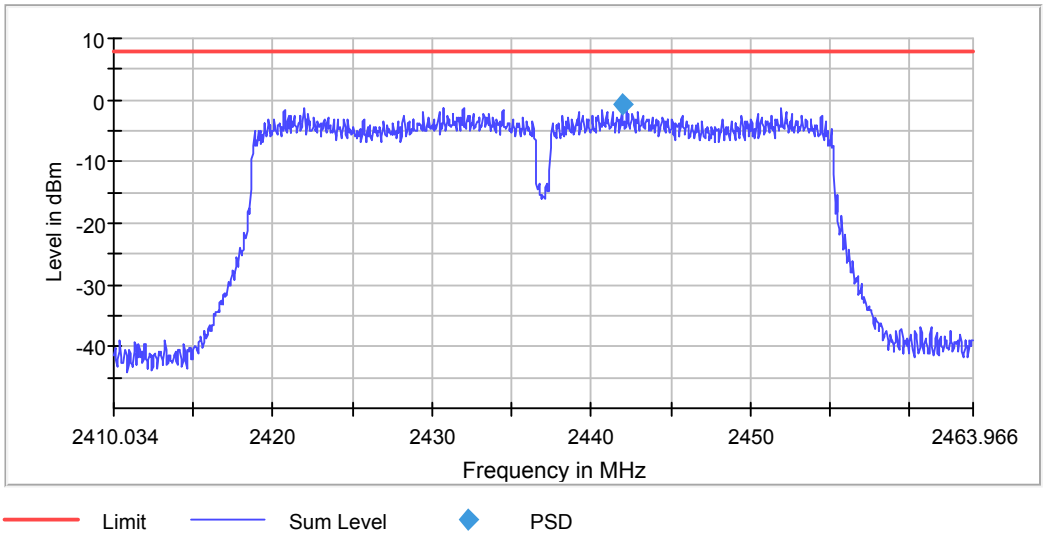
Setting	Instrument Value	Target Value
Start Frequency	2.39518 GHz	2.39518 GHz
Stop Frequency	2.44882 GHz	2.44882 GHz
Span	53.633 MHz	53.633 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1073	~ 1073
Sweeptime	1.080 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

ANT 1 NCT40
Power Spectral Density (2437 MHz; 0.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2441.968781	-0.785	8.0	PASS



Measurement

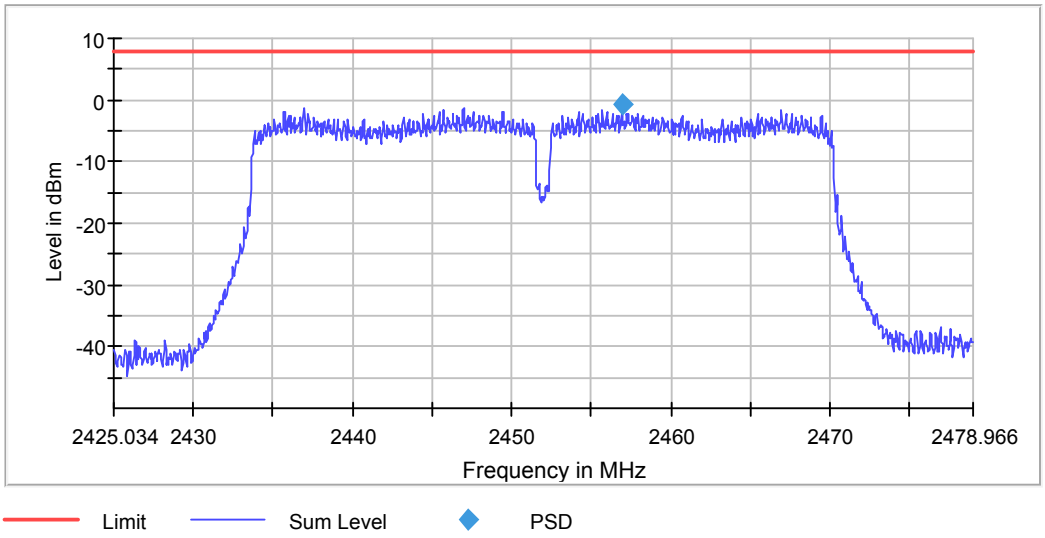
Setting	Instrument Value	Target Value
Start Frequency	2.41003 GHz	2.41003 GHz
Stop Frequency	2.46397 GHz	2.46397 GHz
Span	53.933 MHz	53.933 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1079	~ 1079
Sweeptime	1.080 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

ANT 1 NCT40
Power Spectral Density (2452 MHz; 0.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2452.000000	2456.968781	-0.769	8.0	PASS



Measurement

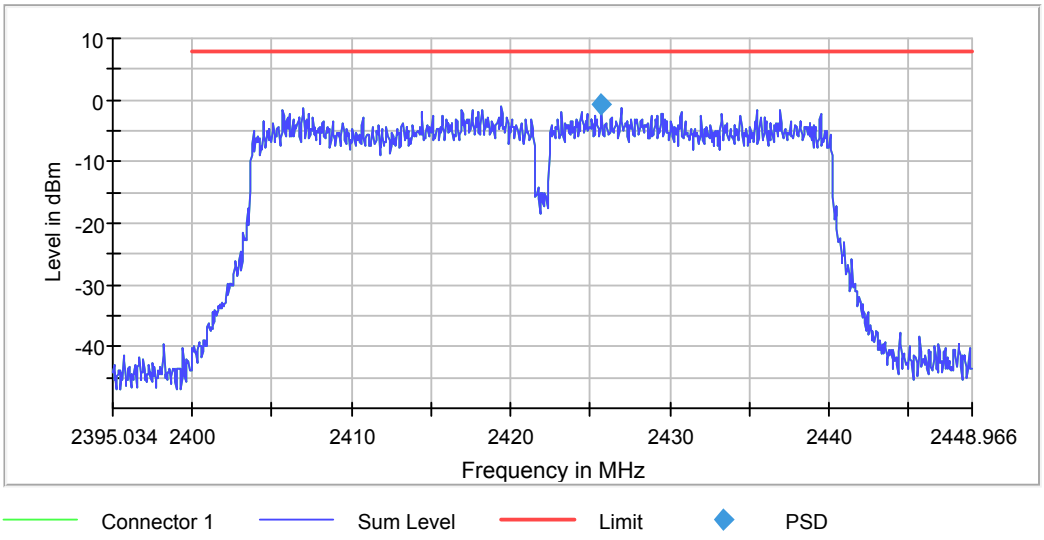
Setting	Instrument Value	Target Value
Start Frequency	2.42503 GHz	2.42503 GHz
Stop Frequency	2.47897 GHz	2.47897 GHz
Span	53.933 MHz	53.933 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1079	~ 1079
Sweeptime	1.080 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 NHT 40
Power Spectral Density (2422 MHz; 0.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2422.000000	2425.720344	-0.568	8.0	PASS



Measurement

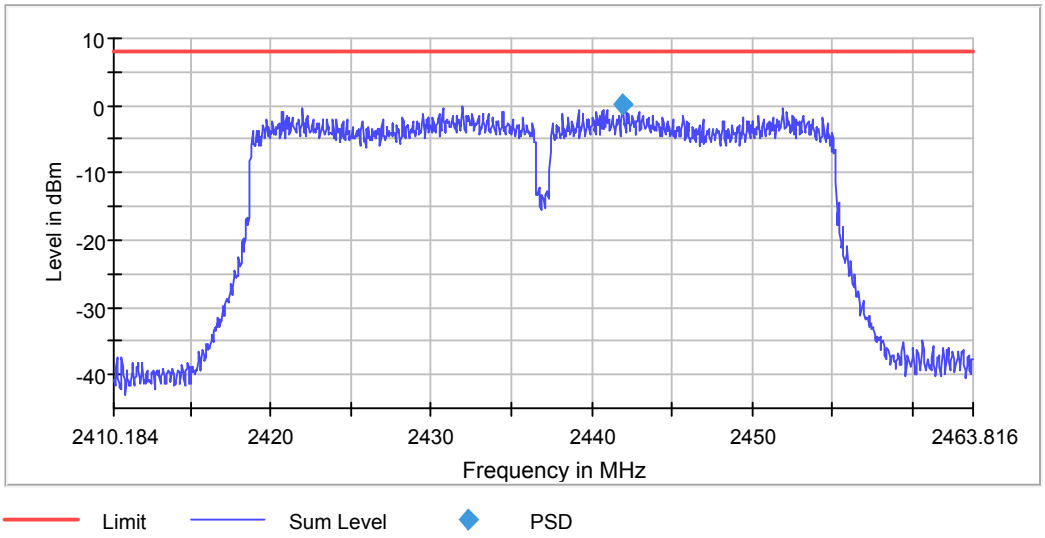
Setting	Instrument Value	Target Value
Start Frequency	2.39503 GHz	2.39503 GHz
Stop Frequency	2.44897 GHz	2.44897 GHz
Span	53.933 MHz	53.933 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1079	~ 1079
Sweeptime	1.080 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 NHT 40
Power Spectral Density (2437 MHz; 0.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2441.968747	0.308	8.0	PASS



Measurement

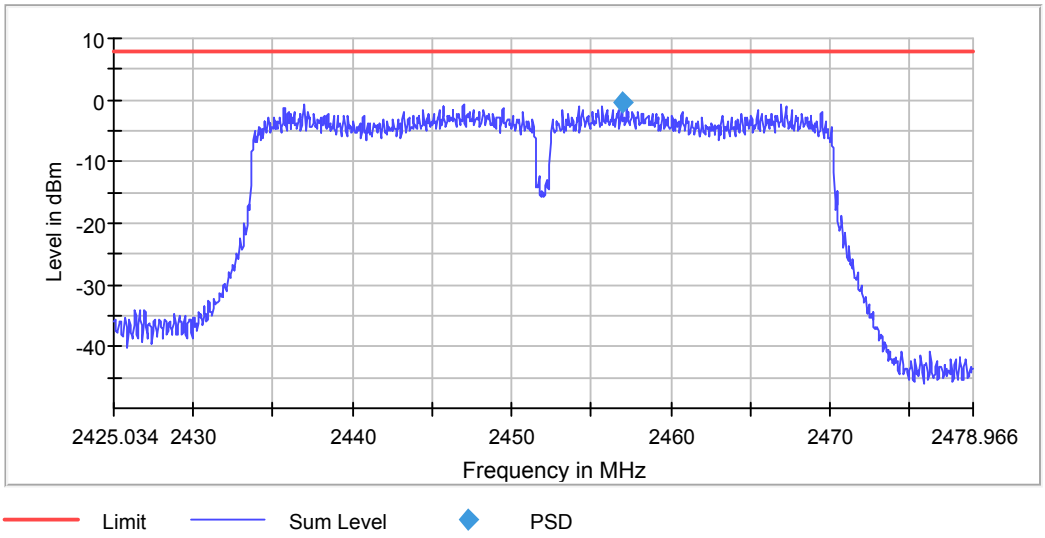
Setting	Instrument Value	Target Value
Start Frequency	2.41018 GHz	2.41018 GHz
Stop Frequency	2.46382 GHz	2.46382 GHz
Span	53.633 MHz	53.633 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1073	~ 1073
Sweeptime	1.080 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

Ant 2 NHT 40
Power Spectral Density (2452 MHz; 0.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2452.000000	2456.968781	-0.335	8.0	PASS



Measurement

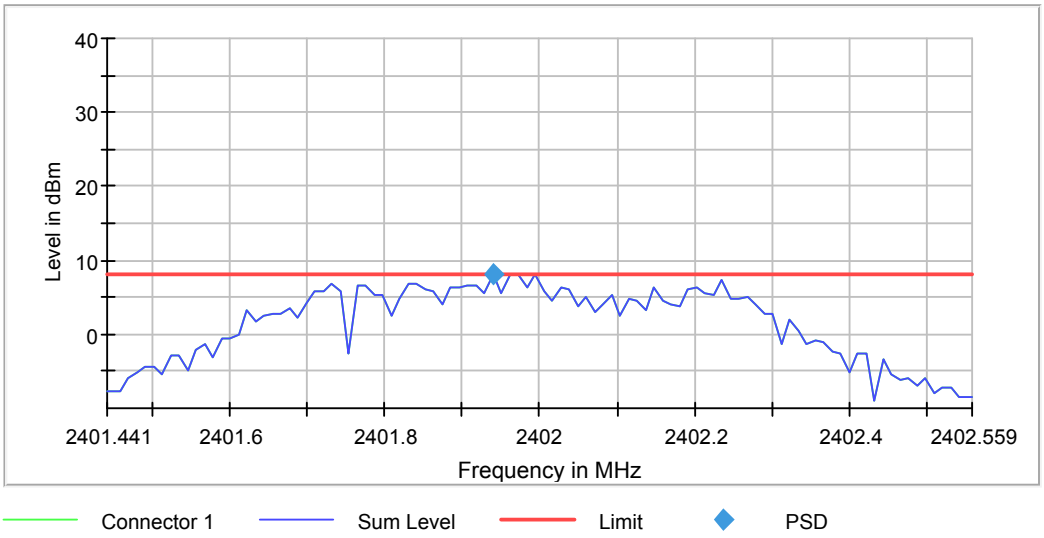
Setting	Instrument Value	Target Value
Start Frequency	2.42503 GHz	2.42503 GHz
Stop Frequency	2.47897 GHz	2.47897 GHz
Span	53.933 MHz	53.933 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1079	~ 1079
Sweeptime	1.080 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

TEST REPORT

ANT 1 BLE
Power Spectral Density (2402 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2402.000000	2401.939743	8.226	8.0	FAIL



Measurement

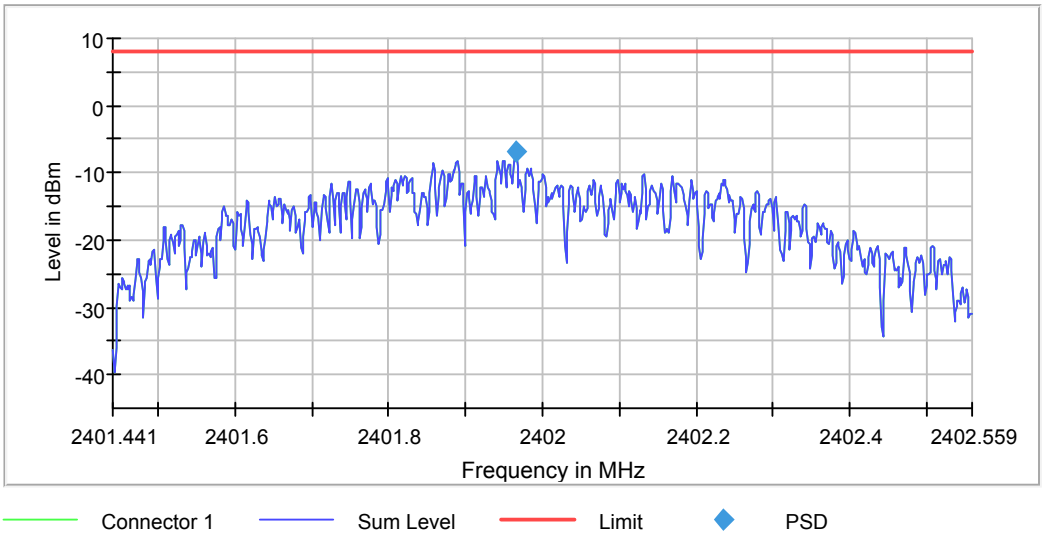
Setting	Instrument Value	Target Value
Start Frequency	2.40144 GHz	2.40144 GHz
Stop Frequency	2.40256 GHz	2.40256 GHz
Span	1.118 MHz	1.118 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 22
Sweeptime	22.400 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	10	10
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

TEST REPORT

ANT 1 BLE
Power Spectral Density (2402 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2402.000000	2401.966295	-6.920	8.0	PASS



Measurement

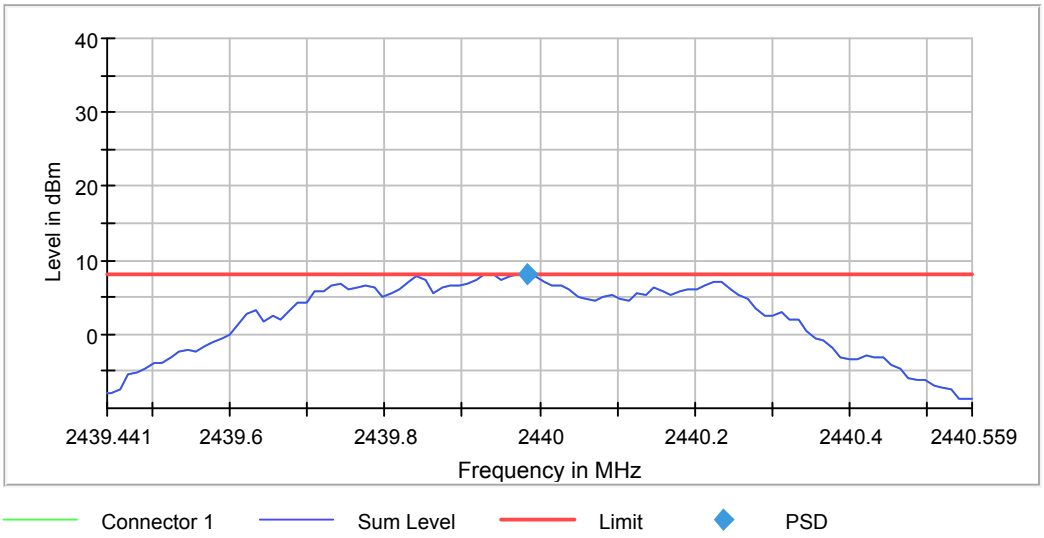
Setting	Instrument Value	Target Value
Start Frequency	2.40144 GHz	2.40144 GHz
Stop Frequency	2.40256 GHz	2.40256 GHz
Span	1.118 MHz	1.118 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	745	~ 745
Sweeptime	24.900 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	10	10
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

TEST REPORT

ANT 1 BLE
Power Spectral Density (2440 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2440.000000	2439.983566	8.135	8.0	FAIL



Measurement

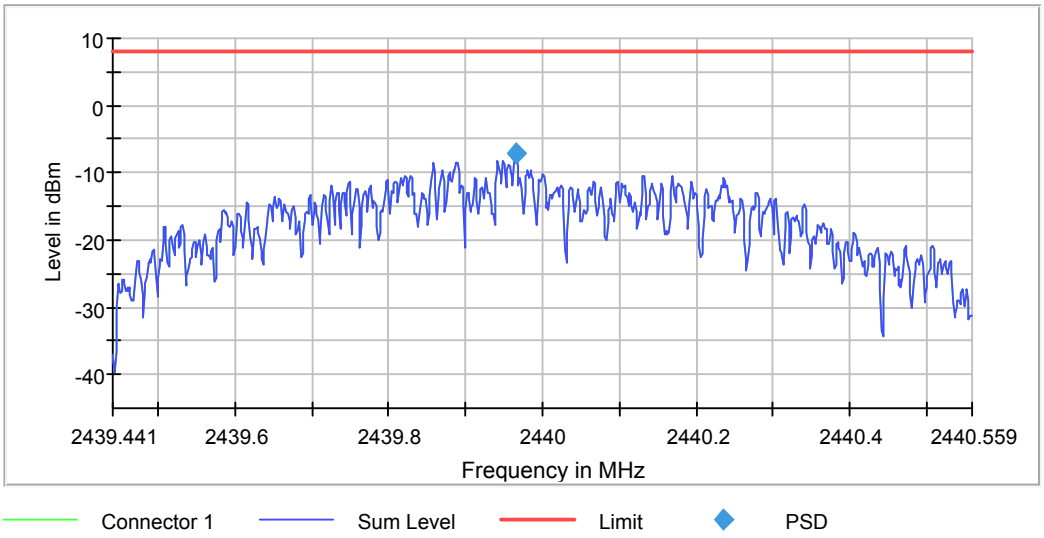
Setting	Instrument Value	Target Value
Start Frequency	2.43944 GHz	2.43944 GHz
Stop Frequency	2.44056 GHz	2.44056 GHz
Span	1.118 MHz	1.118 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 22
Sweeptime	22.400 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	10	10
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

TEST REPORT

ANT 1 BLE
Power Spectral Density (2440 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2440.000000	2439.966295	-7.187	8.0	PASS



Measurement

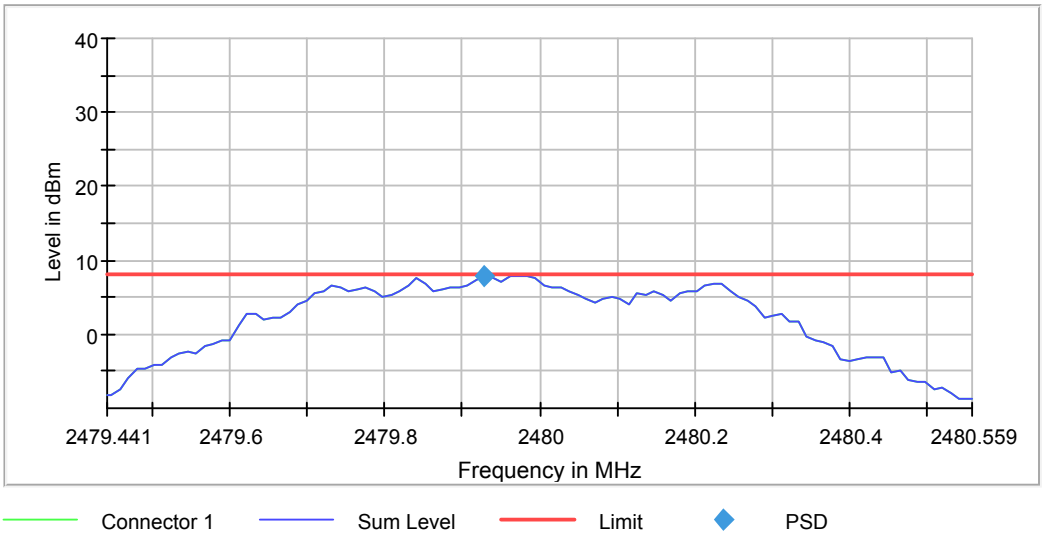
Setting	Instrument Value	Target Value
Start Frequency	2.43944 GHz	2.43944 GHz
Stop Frequency	2.44056 GHz	2.44056 GHz
Span	1.118 MHz	1.118 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	745	~ 745
Sweeptime	24.900 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	10	10
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

TEST REPORT

ANT 1 BLE
Power Spectral Density (2480 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2480.000000	2479.928787	7.889	8.0	PASS



Measurement

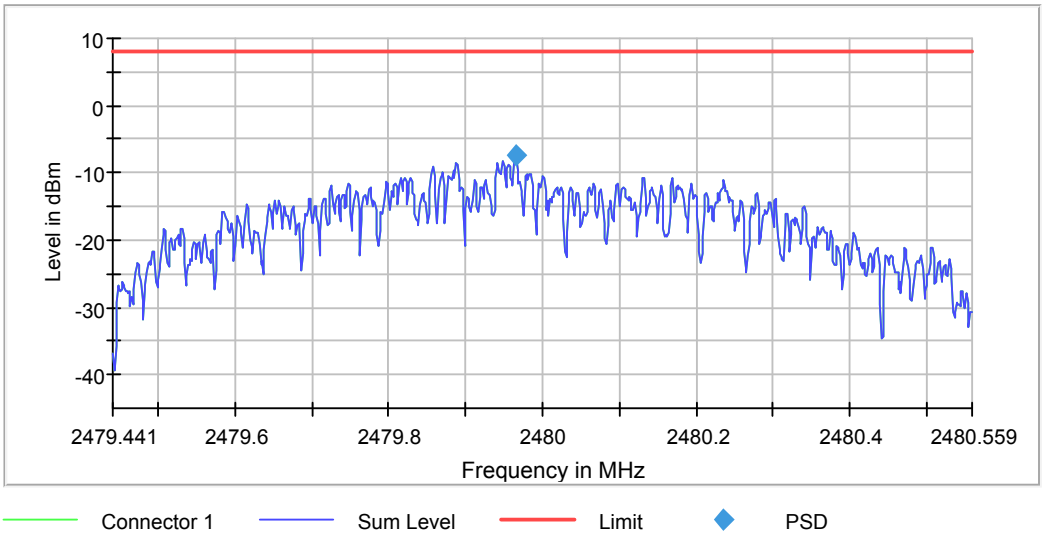
Setting	Instrument Value	Target Value
Start Frequency	2.47944 GHz	2.47944 GHz
Stop Frequency	2.48056 GHz	2.48056 GHz
Span	1.118 MHz	1.118 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 22
Sweeptime	22.400 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	10	10
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

TEST REPORT

ANT 1 BLE
Power Spectral Density (2480 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2480.000000	2479.964797	-7.323	8.0	PASS



Measurement

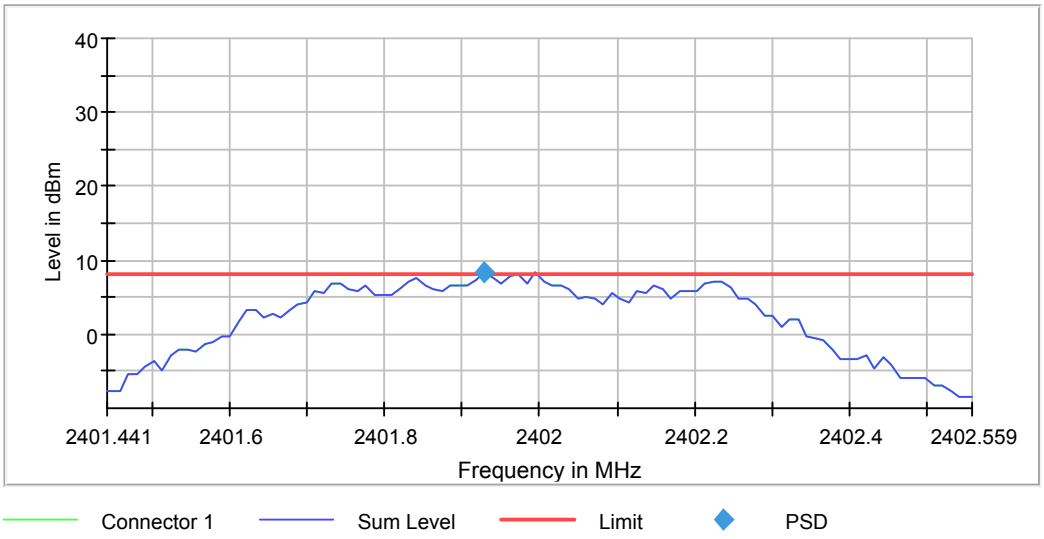
Setting	Instrument Value	Target Value
Start Frequency	2.47944 GHz	2.47944 GHz
Stop Frequency	2.48056 GHz	2.48056 GHz
Span	1.118 MHz	1.118 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	745	~ 745
Sweeptime	24.900 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	10	10
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

TEST REPORT

Ant 2 BLE
Power Spectral Density (2402 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2402.000000	2401.928787	8.335	8.0	FAIL



Measurement

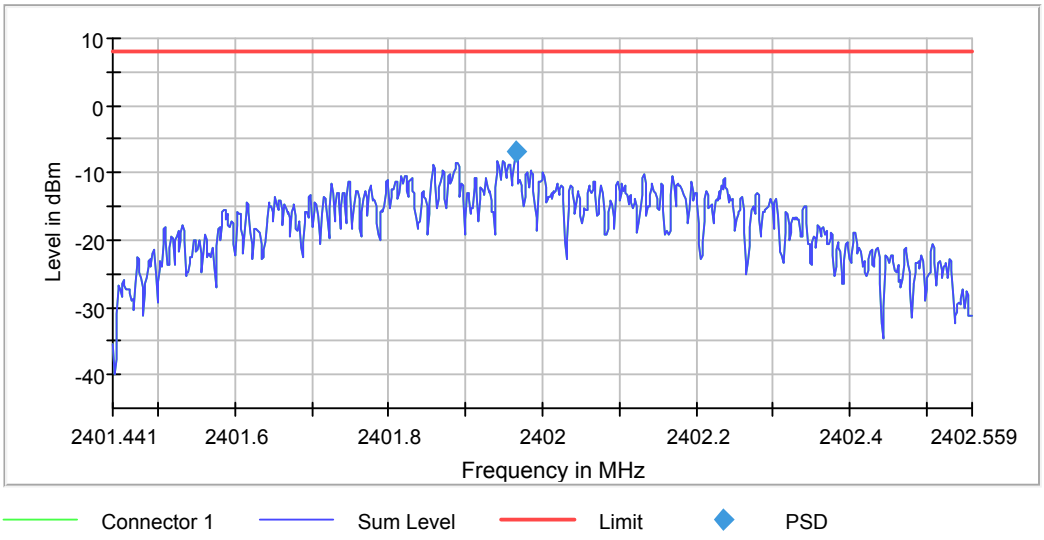
Setting	Instrument Value	Target Value
Start Frequency	2.40144 GHz	2.40144 GHz
Stop Frequency	2.40256 GHz	2.40256 GHz
Span	1.118 MHz	1.118 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 22
Sweeptime	22.400 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	10	10
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

TEST REPORT

Ant 2 BLE
Power Spectral Density (2402 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2402.000000	2401.964797	-6.926	8.0	PASS



Measurement

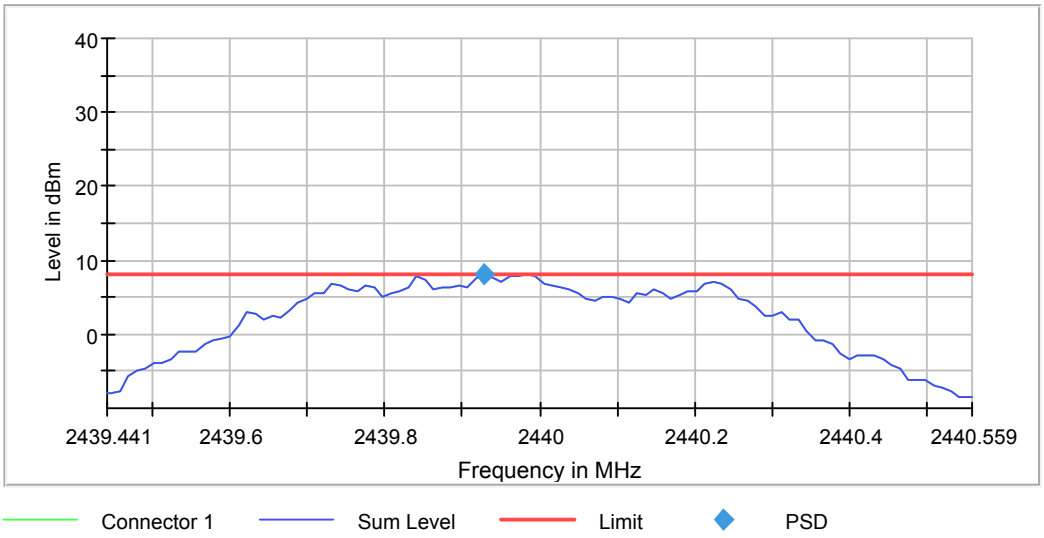
Setting	Instrument Value	Target Value
Start Frequency	2.40144 GHz	2.40144 GHz
Stop Frequency	2.40256 GHz	2.40256 GHz
Span	1.118 MHz	1.118 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	745	~ 745
Sweeptime	24.900 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	10	10
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

TEST REPORT

Ant 2 BLE
Power Spectral Density (2440 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2440.000000	2439.928787	8.141	8.0	FAIL



Measurement

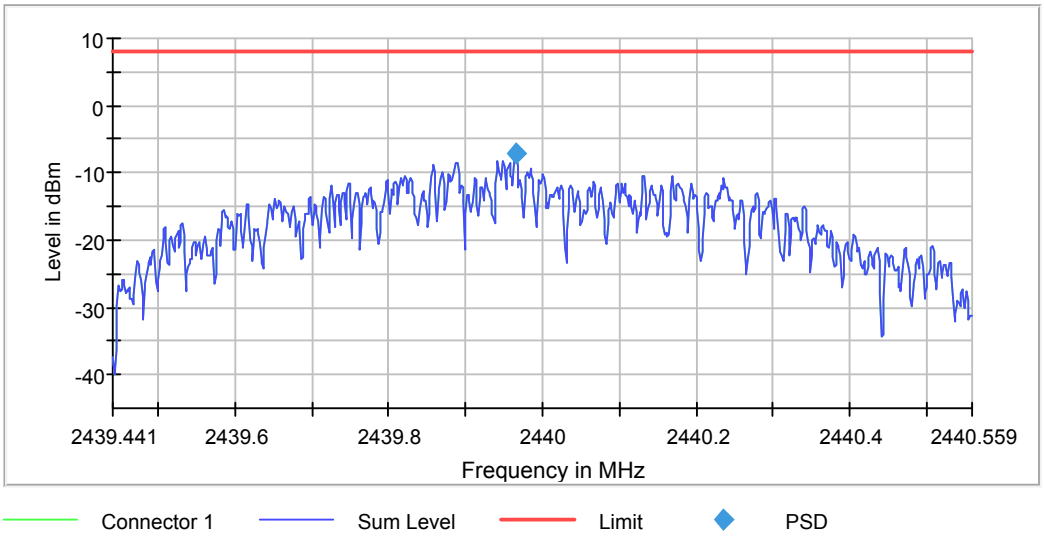
Setting	Instrument Value	Target Value
Start Frequency	2.43944 GHz	2.43944 GHz
Stop Frequency	2.44056 GHz	2.44056 GHz
Span	1.118 MHz	1.118 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 22
Sweeptime	22.400 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	10	10
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

TEST REPORT

Ant 2 BLE
Power Spectral Density (2440 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2440.000000	2439.966295	-7.236	8.0	PASS



Measurement

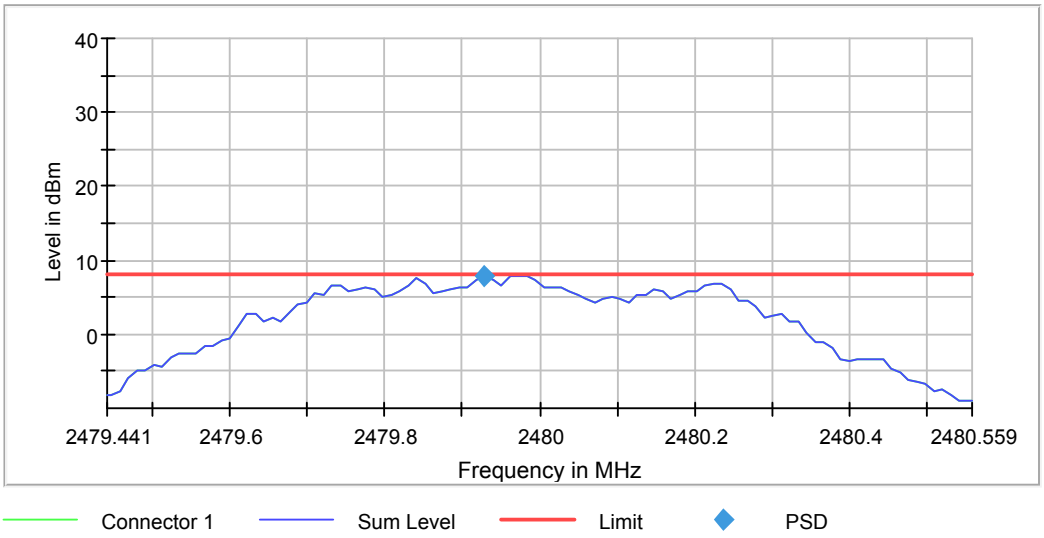
Setting	Instrument Value	Target Value
Start Frequency	2.43944 GHz	2.43944 GHz
Stop Frequency	2.44056 GHz	2.44056 GHz
Span	1.118 MHz	1.118 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	745	~ 745
Sweeptime	24.900 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	10	10
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

TEST REPORT

Ant 2 BLE
Power Spectral Density (2480 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2480.000000	2479.928787	7.858	8.0	PASS



Measurement

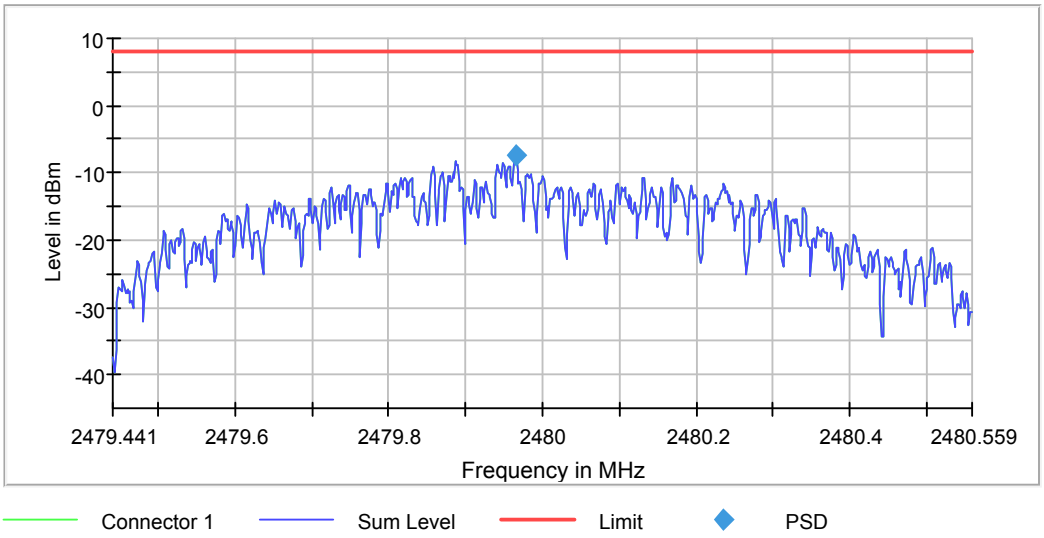
Setting	Instrument Value	Target Value
Start Frequency	2.47944 GHz	2.47944 GHz
Stop Frequency	2.48056 GHz	2.48056 GHz
Span	1.118 MHz	1.118 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 22
Sweeptime	22.400 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	10	10
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

TEST REPORT

Ant 2 BLE
Power Spectral Density (2480 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2480.000000	2479.964797	-7.366	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47944 GHz	2.47944 GHz
Stop Frequency	2.48056 GHz	2.48056 GHz
Span	1.118 MHz	1.118 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	745	~ 745
Sweeptime	24.900 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	10	10
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

4.4 Out of Band Conducted Emissions

For 802.11b/g/n20/n40MHz, the maximum conducted (peak) output power was used to demonstrate compliance as described in 9.1. Then the display line (in red) shown in the following plots denotes the limit at 20dB below maximum measured in-band peak PSD level in 100 KHz bandwidth for 802.11b/g/n20/n40MHz.

The measurement procedures under sections 11 of KDB558074 D01 v04 (05-April-2017) were used.

Furthermore, delta measurement technique for measuring bandedge emissions was incorporated in the test of the edge at 2483.5MHz.

Limits:
All spurious emission and up to the tenth harmonic was measured and they were found to be at least for 802.11b,g,n20MHz, n40MHz below the maximum measured in-band peak PSD level.

TEST REPORT

PLOTS OF OUT OF BAND CONDUCTED EMISSIONS

Ant 1 B mode
Tx Spurious Emission (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2412.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

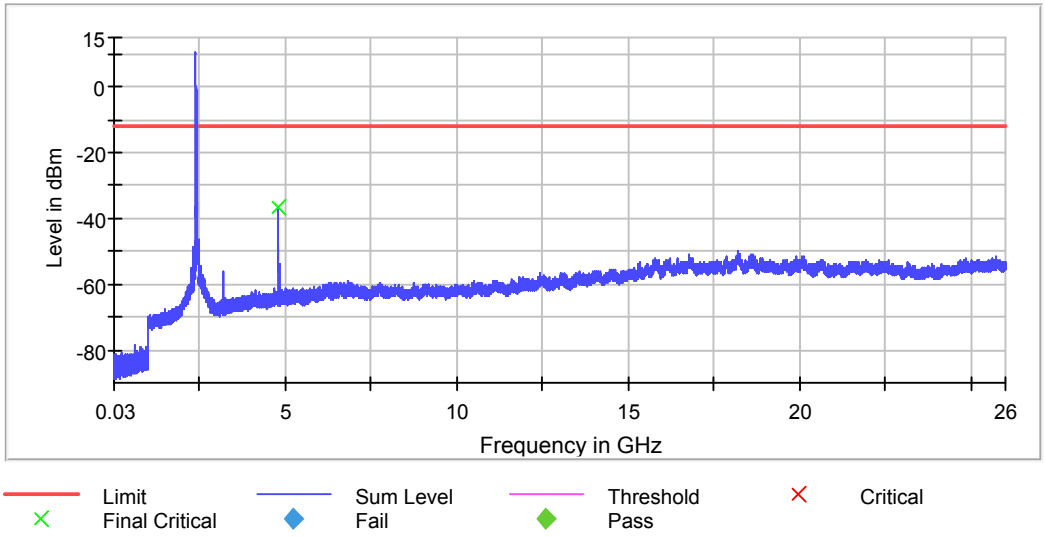
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2397.250982	-36.7	-24.5	-12.2
2396.751160	-36.8	-24.6	-12.2
4823.990896	-36.9	-24.7	-12.2
2397.750803	-37.4	-25.2	-12.2
4824.490840	-37.4	-25.2	-12.2
4823.490951	-37.7	-25.5	-12.2
2396.251339	-37.9	-25.7	-12.2
2398.250625	-38.2	-26.0	-12.2
2398.750446	-38.4	-26.2	-12.2
2399.250268	-39.4	-27.2	-12.2
2395.751517	-39.5	-27.3	-12.2
2395.251696	-40.1	-27.9	-12.2
2394.252053	-42.8	-30.6	-12.2
4824.990785	-42.8	-30.6	-12.2
2394.751874	-42.9	-30.7	-12.2

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.32 dB	0.50 dB

TEST REPORT

Ant 1 B mode
Tx Spurious Emission (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

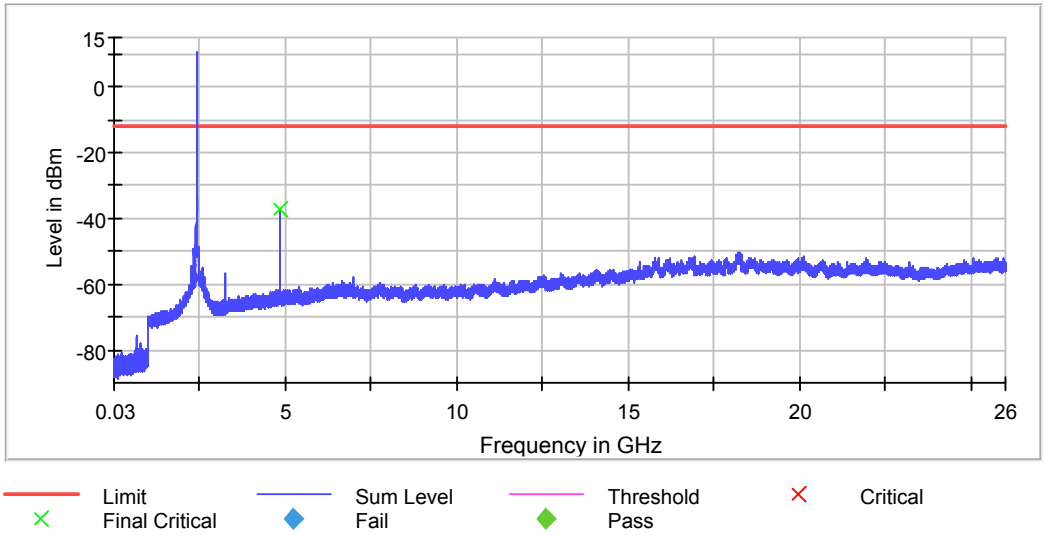
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4873.985361	-36.9	-24.7	-12.2
4873.485416	-37.8	-25.6	-12.2
4874.485306	-38.1	-25.9	-12.2
4874.985250	-42.3	-30.1	-12.2
4872.985472	-43.0	-30.8	-12.2
4870.485748	-47.9	--35.7	-12.2
4877.484973	-48.0	-35.8	-12.2
4870.985693	-48.4	-36.2	-12.2
4876.985029	-48.5	-36.3	-12.2
2513.746652	-48.5	-36.3	-12.2
2510.746984	-48.7	-36.5	-12.2
2511.246928	-48.8	-36.6	-12.2
2513.246707	-48.9	-36.7	-12.2
2509.747094	-49.0	-36.8	-12.2
2509.247150	-49.0	-36.8	-12.2

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	13 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.17 dB	0.50 dB

B mode

TEST REPORT

Ant 1 B Mode
Tx Spurious Emission (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2462.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

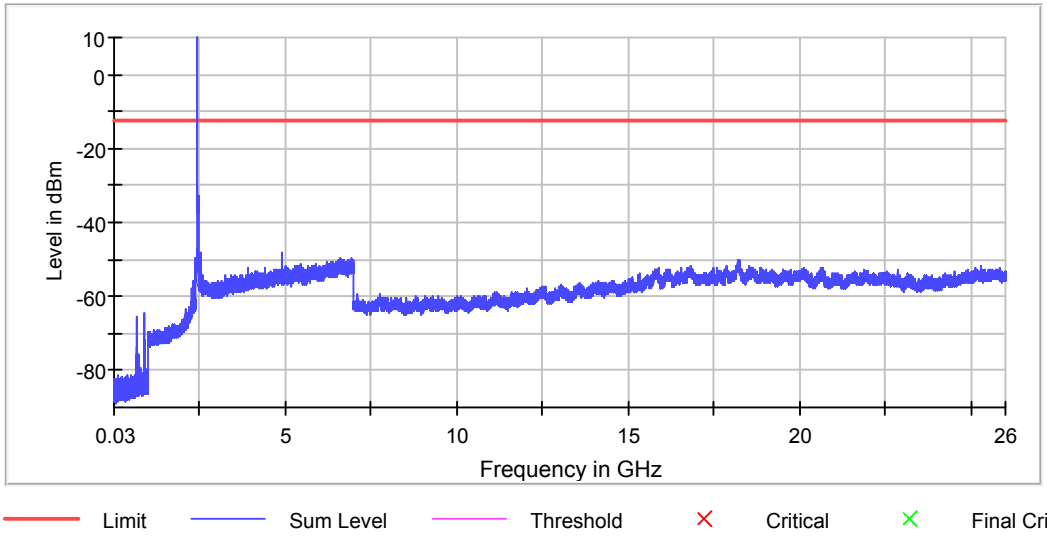
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4923.979826	-48.0	-35.7	-12.3
2538.243940	-48.3	-36.0	-12.3
2534.744327	-48.5	-36.2	-12.3
4923.479882	-48.6	-36.3	-12.3
2538.743884	-48.6	-36.3	-12.3
2539.243829	-48.8	-36.5	-12.3
2535.744216	-48.8	-36.5	-12.3
2483.500000	-48.9	-36.6	-12.3
2536.244161	-49.0	-36.7	-12.3
2537.743995	-49.2	-36.9	-12.3
2535.244272	-49.2	-36.9	-12.3
4924.479771	-49.3	-37.0	-12.3
2388.754016	-49.5	-37.2	-12.3
2536.744106	-49.6	-37.3	-12.3
2385.255266	-49.6	-37.3	-12.3

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.48 dB	0.50 dB

TEST REPORT

Ant 2 B mode
Tx Spurious Emission (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2412.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

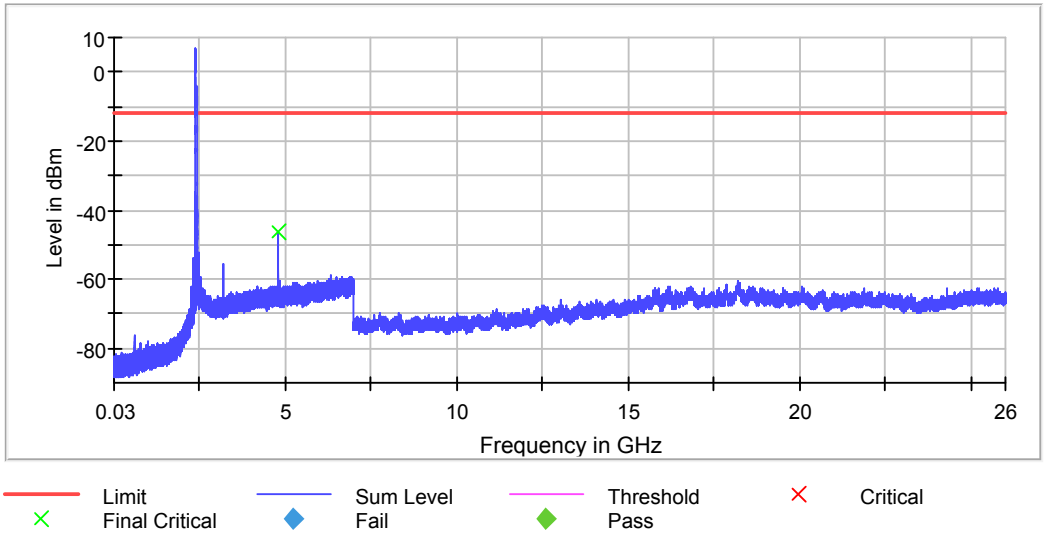
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2396.925110	-42.3	-30.5	-11.8
2396.975108	-42.8	-31.0	-11.8
2397.475090	-43.0	-31.2	-11.8
2397.175101	-43.2	-31.4	-11.8
2397.425092	-43.5	-31.7	-11.8
2398.475054	-43.5	-31.7	-11.8
2396.875112	-43.7	-31.9	-11.8
2397.925074	-43.8	-32.0	-11.8
2397.075104	-43.8	-32.0	-11.8
2398.425056	-43.8	-32.0	-11.8
2397.025106	-43.9	-32.1	-11.8
2397.975072	-44.0	-32.2	-11.8
2396.825113	-44.4	-32.6	-11.8
2396.775115	-44.7	-32.9	-11.8
2397.275097	-44.7	-32.9	-11.8

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	2 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	28000	~ 28000
Sweeptime	28.000 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	2.09 dB	0.50 dB

TEST REPORT

Ant 2 B mode
Tx Spurious Emission (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

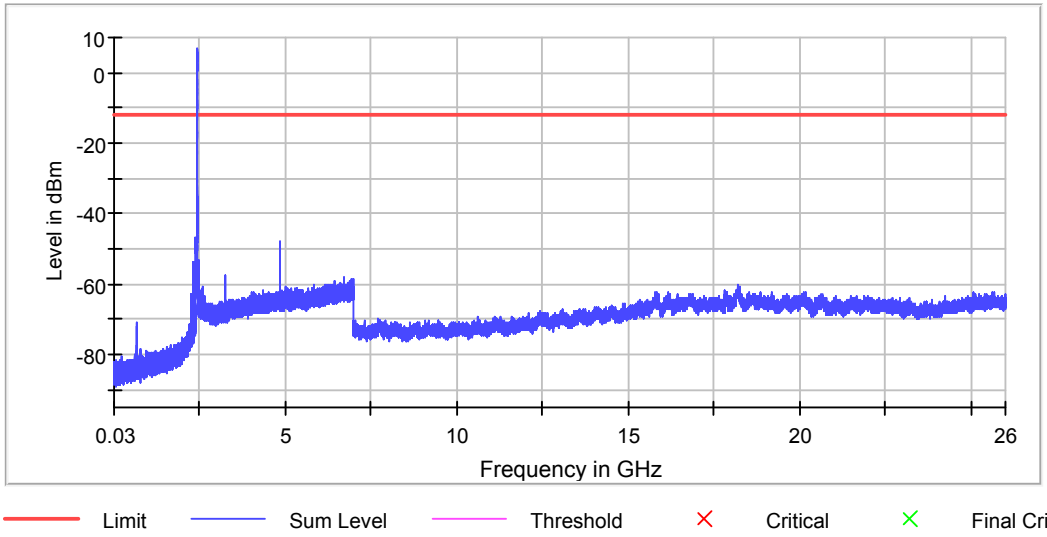
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4873.919935	-47.9	-36.2	-11.7
4874.061066	-53.1	-41.4	-11.7
2512.784849	-53.5	-41.8	-11.7
2363.626299	-53.9	-42.2	-11.7
4873.778803	-54.0	--42.3	-11.7
2361.626370	-54.0	-42.3	-11.7
2361.126388	-54.0	-42.3	-11.7
2361.176387	-54.0	42.3	-11.7
2512.361454	-54.1	-42.4	-11.7
2361.676369	-54.1	-42.4	-11.7
2512.220322	-54.3	-42.6	-11.7
2511.232400	-54.4	-42.7	-11.7
2360.626406	-54.4	-42.7	-11.7
2359.676440	-54.4	-42.7	-11.7
2364.126281	-54.4	-42.7	-11.7

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	0.58 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	28000	~ 28000
Sweeptime	28.000 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	2.00 dB	0.50 dB

TEST REPORT

Ant 2 B mode
Tx Spurious Emission (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2462.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

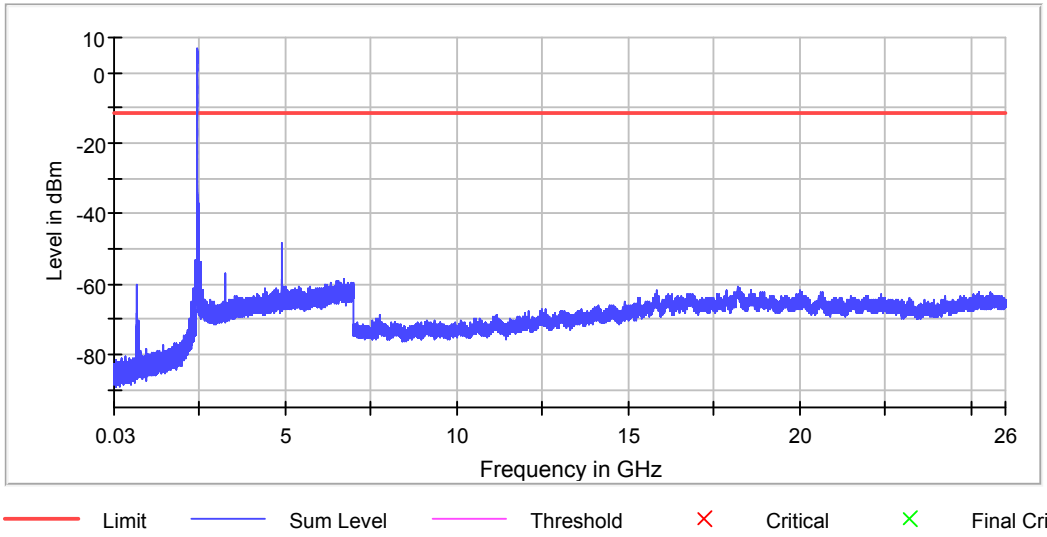
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4923.880593	-48.6	-37.0	-11.6
4924.021725	-51.5	-39.9	-11.6
2388.125424	-53.4	-41.8	-11.6
2388.175422	-53.5	-41.9	-11.6
2534.801411	-53.6	-42.0	-11.6
2535.365938	-53.6	-42.0	-11.6
2387.675440	-53.6	-42.0	-11.6
2386.625478	-53.8	-42.2	-11.6
2386.675476	-53.9	-42.3	-11.6
2538.329706	-53.9	-42.3	-11.6
2387.625442	-53.9	-42.3	-11.6
2386.125496	-54.1	-42.5	-11.6
2386.175494	-54.1	-42.5	-11.6
2385.675512	-54.1	-42.5	-11.6
2388.625406	-54.2	-42.6	-11.6

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	1 / 3	3
Max Stable Difference	0.20 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	28000	~ 28000
Sweeptime	28.000 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	1.67 dB	0.50 dB

TEST REPORT

Ant 1 G mode
Tx Spurious Emission (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2412.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

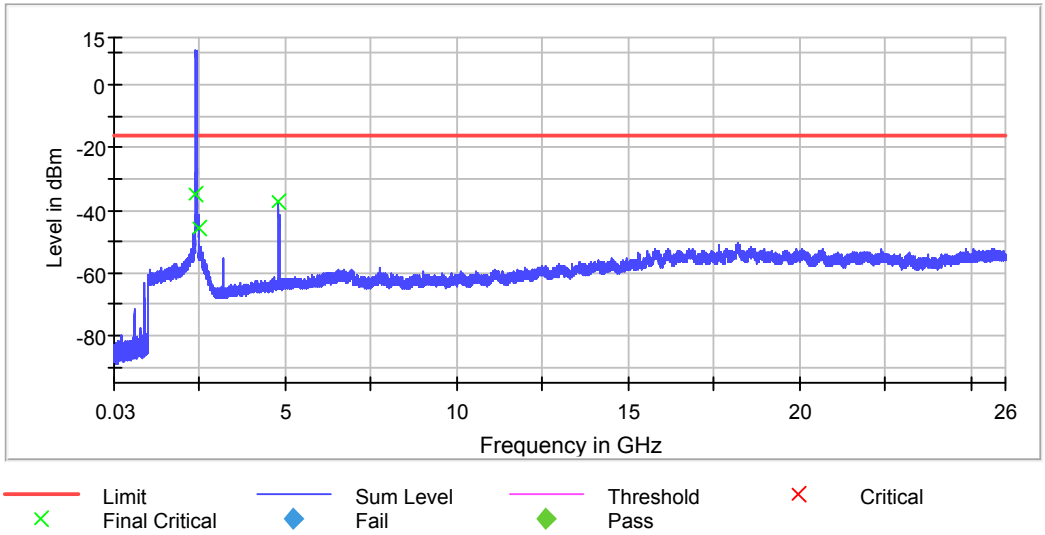
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2394.252053	-28.5	-12.5	-16.0
2394.751874	-30.2	-14.2	-16.0
2398.750446	-30.3	-14.3	-16.0
2397.750803	-30.7	-14.7	-16.0
2398.250625	-30.8	-14.8	-16.0
2399.250268	-30.9	-14.9	-16.0
2395.751517	-30.9	-14.9	-16.0
2395.251696	-30.9	-14.9	-16.0
2396.751160	-31.1	-15.1	-16.0
2392.752588	-31.3	-15.3	-16.0
2396.251339	-31.4	-15.4	-16.0
2390.253481	-31.6	-15.6	-16.0
2390.753302	-31.6	-15.6	-16.0
2397.250982	-31.9	-15.9	-16.0
2391.253124	-32.6	-16.6	-16.0

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	10 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.44 dB	0.50 dB

TEST REPORT

Ant 1 G mode
Tx Spurious Emission (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
4873.485416	-36.5	-50.1	-15.7	34.4	PASS

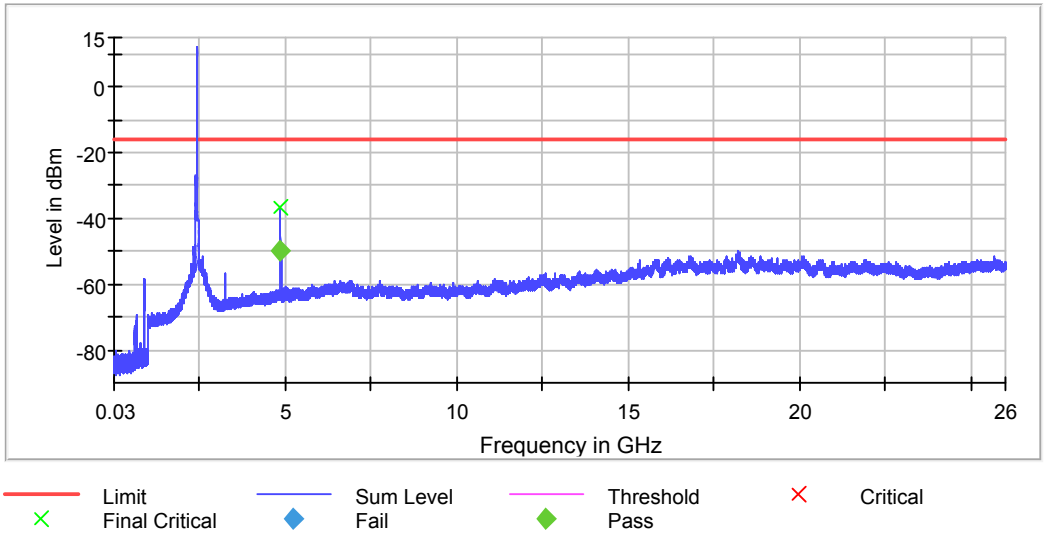
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4873.485416	-36.5	-20.8	-15.7
4873.985361	-36.9	-21.2	-15.7
4877.984918	-37.1	-21.4	-15.7
4872.985472	-37.1	-21.4	-15.7
4878.484863	-37.8	-22.1	-15.7
4876.985029	-38.3	-22.6	-15.7
4872.485527	-38.5	-22.8	-15.7
4874.985250	-38.5	-22.8	-15.7
4875.985139	-38.8	-23.1	-15.7
4875.485195	-38.8	-23.1	-15.7
4867.986025	-39.1	-23.4	-15.7
4878.984807	-39.4	-23.7	-15.7
4870.485748	-39.5	-23.8	-15.7
4881.984475	-39.6	-23.9	-15.7
4874.485306	-39.7	-24.0	-15.7

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	18 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	14 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

G mode

TEST REPORT

Ant 1 G mode
Tx Spurious Emission (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2462.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

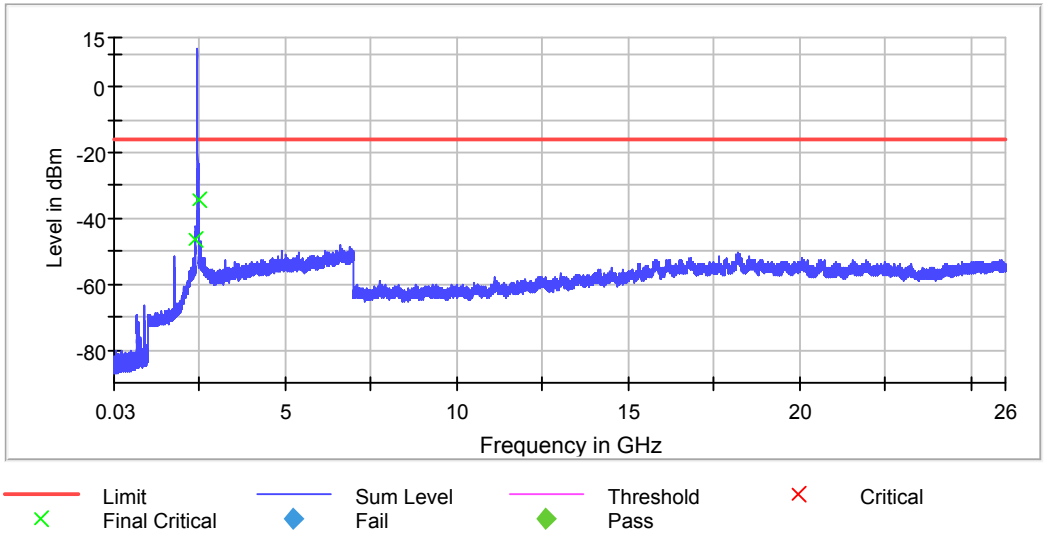
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2483.500000	-31.7	-15.9	-15.8
2484.249917	-34.5	-18.7	-15.8
2483.749972	-34.9	-19.1	-15.8
2484.749862	-36.0	-20.2	-15.8
2485.249806	-36.8	-21.0	-15.8
2486.749640	-37.4	-21.6	-15.8
2486.249696	-37.8	-22.0	-15.8
2485.749751	-38.8	-23.0	-15.8
2487.749530	-39.3	-23.5	-15.8
2489.749308	-39.4	-23.6	-15.8
2488.749419	-40.0	-24.2	-15.8
2487.249585	-40.7	-24.9	-15.8
2489.249364	-40.8	-25.0	-15.8
2490.249253	-41.0	-25.2	-15.8
2488.249474	-41.3	-25.5	-15.8

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	31 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.42 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	15 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.50 dB	0.50 dB

TEST REPORT

Ant 2 G mode
Tx Spurious Emission (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2412.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

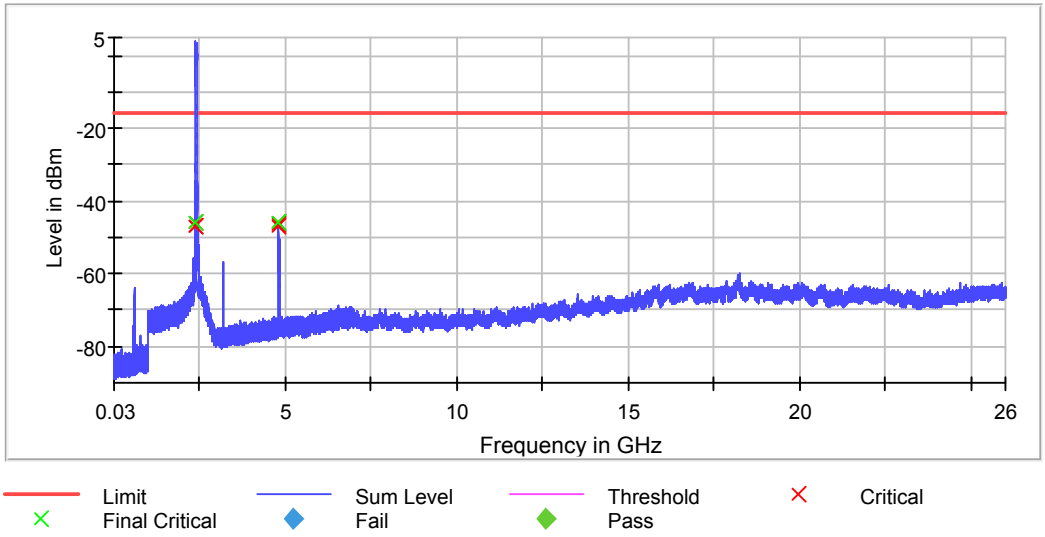
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2398.475054	-37.6	-21.9	-15.7
2399.175029	-38.0	-22.3	-15.7
2394.425199	-38.2	-22.5	-15.7
2399.025035	-38.3	-22.6	-15.7
2399.125031	-38.4	-22.7	-15.7
2397.575087	-38.5	-22.8	-15.7
2399.075033	-38.6	-22.9	-15.7
2394.475197	-38.7	-23.0	-15.7
2397.625085	-38.8	-23.1	-15.7
2399.225028	-38.8	-23.1	-15.7
2399.475019	-38.8	-23.1	-15.7
2397.525088	-39.1	-23.4	-15.7
2399.425021	-39.2	-23.5	-15.7
2398.425056	-39.3	-23.6	-15.7
2395.075176	-39.5	-23.8	-15.7

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	3.88 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	28000	~ 28000
Sweeptime	28.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	3.13 dB	0.50 dB

TEST REPORT

Ant 2 G mode
Tx Spurious Emission (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

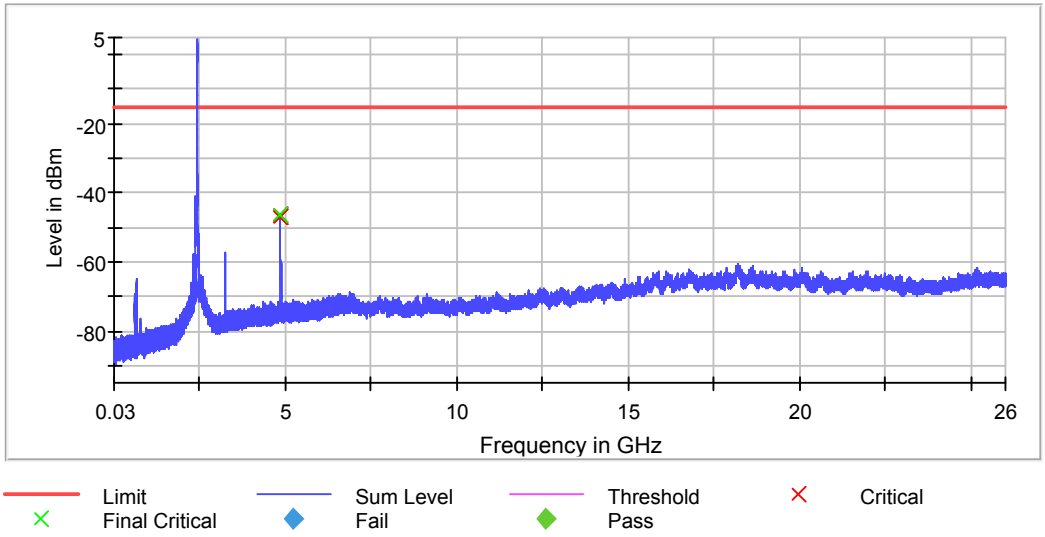
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4876.460307	-46.2	-30.9	-15.3
4876.319175	-46.3	-31.0	-15.3
4869.262585	-46.9	-31.6	-15.3
4874.484462	-46.9	-31.6	-15.3
4873.496539	-46.9	-31.6	-15.3
4870.109376	-47.0	-31.7	-15.3
4875.754648	-47.4	-32.1	-15.3
4873.637671	-47.5	-32.2	-15.3
4870.815035	-47.6	-32.3	-15.3
4868.980322	-47.8	-32.5	-15.3
4867.992399	-47.8	-32.5	-15.3
4877.307098	-47.9	-32.6	-15.3
4874.625594	-48.0	-32.7	-15.3
4873.214276	-48.0	-32.7	-15.3
4879.565207	-48.1	-32.8	-15.3

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	3.37 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	28000	~ 28000
Sweeptime	28.000 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	3.40 dB	0.50 dB

TEST REPORT

Ant 2 G mode
Tx Spurious Emission (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2462.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

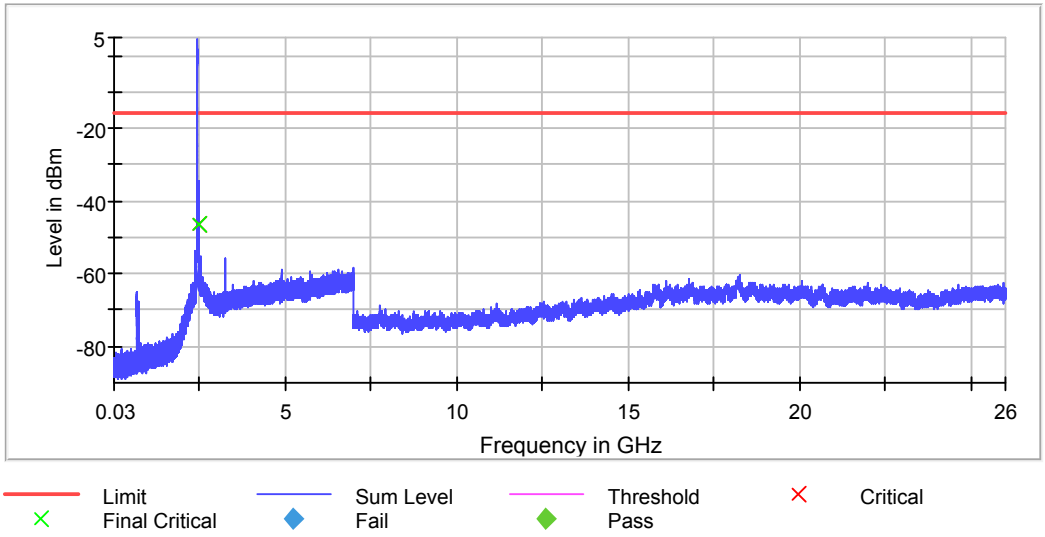
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2483.500000	-44.9	-29.0	-15.9
2484.417357	-46.4	-30.5	-15.9
2484.699620	-47.3	-31.4	-15.9
2485.123016	-47.3	-31.4	-15.9
2484.840752	-47.5	-31.6	-15.9
2484.276225	-47.5	-31.6	-15.9
2485.264148	-47.8	-31.9	-15.9
2483.852830	-47.8	-31.9	-15.9
2483.993961	-47.9	-32.0	-15.9
2484.135093	-47.9	-32.0	-15.9
2483.711698	-48.0	-32.1	-15.9
2483.570566	-48.1	-32.2	-15.9
2486.252070	-48.1	-32.2	-15.9
2486.110938	-48.2	-32.3	-15.9
2485.405279	-48.3	-32.4	-15.9

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	5.23 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	28000	~ 28000
Sweeptime	28.000 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	3.46 dB	0.50 dB

TEST REPORT

Ant 1 NHT20
Tx Spurious Emission (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2412.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

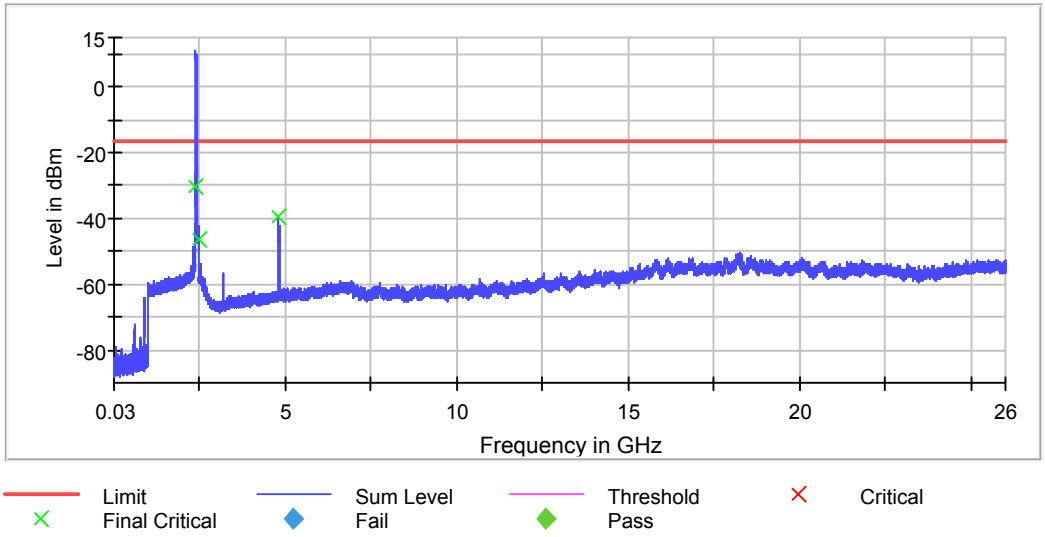
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2398.250625	-26.5	-10.0	-16.5
2398.750446	-27.3	-10.8	-16.5
2399.250268	-27.8	-11.3	-16.5
2397.250982	-28.7	-12.2	-16.5
2395.751517	-29.4	-12.9	-16.5
2396.751160	-30.0	-13.5	-16.5
2389.753659	-30.5	-14.0	-16.5
2397.750803	-30.5	-14.0	-16.5
2395.251696	-31.1	-14.6	-16.5
2396.251339	-31.2	-14.7	-16.5
2394.751874	-31.5	-15.0	-16.5
2393.252410	-31.6	-15.1	-16.5
2390.253481	-31.7	-15.2	-16.5
2392.752588	-32.9	-16.4	-16.5
2391.752945	-33.0	-16.5	-16.5

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	10 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

Ant 1 NHT20
Tx Spurious Emission (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

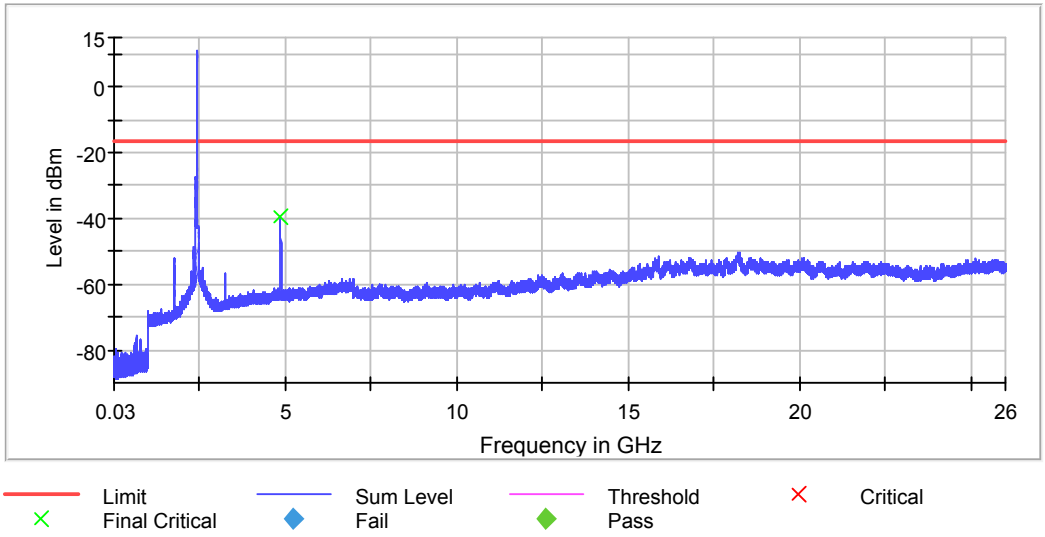
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4873.485416	-39.6	-22.9	-16.7
4872.985472	-40.2	-23.5	-16.7
4877.984918	-40.3	-23.6	-16.7
4876.985029	-40.8	-24.1	-16.7
4873.985361	-40.9	-24.2	-16.7
4874.985250	-40.9	-24.2	-16.7
4868.485970	-41.0	-24.3	-16.7
4872.485527	-41.0	-24.3	-16.7
4871.985582	-41.0	-24.3	-16.7
4883.484309	-41.2	-24.5	-16.7
4869.985804	-41.3	-24.6	-16.7
4868.985914	-41.4	-24.7	-16.7
4867.986025	-41.6	-24.9	-16.7
4882.484420	-41.6	-24.9	-16.7
4880.484641	-41.6	-24.9	-16.7

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	20 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.12 dB	0.50 dB

TEST REPORT

Ant 1 NHT20
Tx Spurious Emission (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2462.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

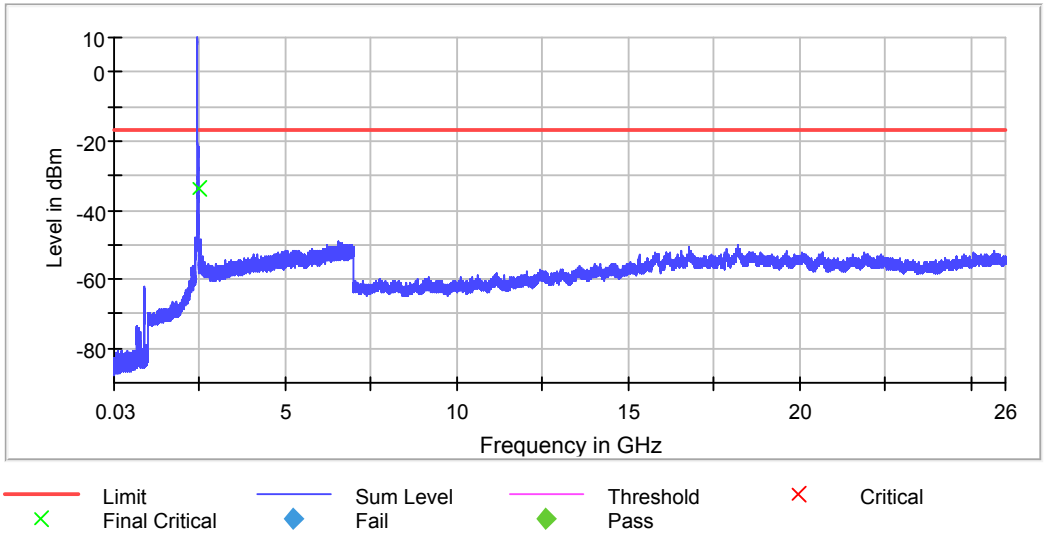
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2483.500000	-27.6	-10.8	-16.8
2483.749972	-33.6	-16.8	-16.8
2484.749862	-34.3	-17.5	-16.8
2485.249806	-34.8	-18.0	-16.8
2484.249917	-34.8	-18.0	-16.8
2486.749640	-36.0	-19.2	-16.8
2485.749751	-36.9	-20.1	-16.8
2486.249696	-37.5	-20.7	-16.8
2487.249585	-40.5	-23.7	-16.8
2488.249474	-41.2	-24.4	-16.8
2487.749530	-42.1	-25.3	-16.8
2490.749197	-42.2	-25.4	-16.8
2489.249364	-42.6	-25.8	-16.8
2490.249253	-42.6	-25.8	-16.8
2489.749308	-42.7	-25.9	-16.8

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	18 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	10 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.16 dB	0.50 dB

TEST REPORT

Ant 2 NHT 20
Tx Spurious Emission (2412 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2412.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

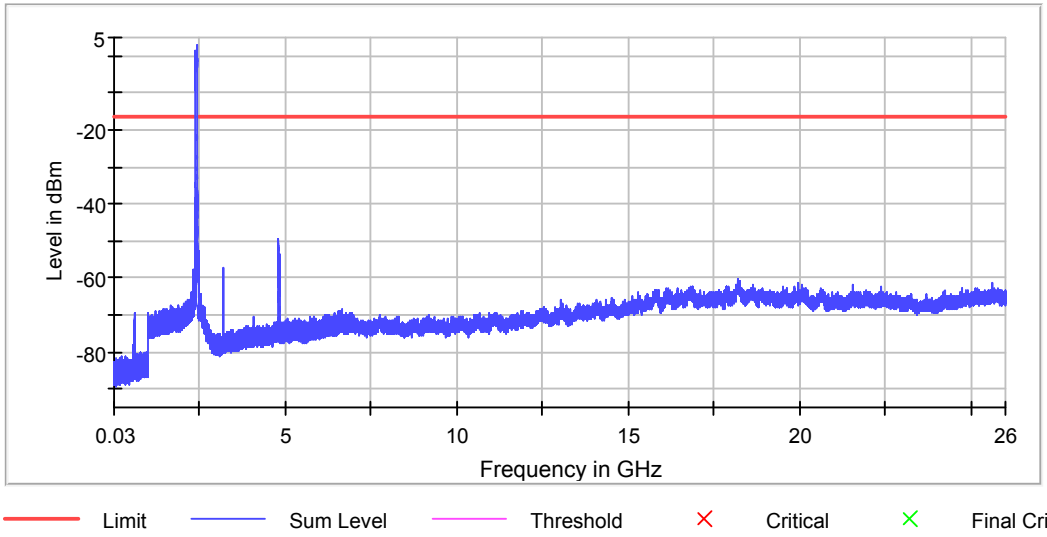
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2398.175065	-40.5	-24.2	-16.3
2398.225063	-40.9	-24.6	-16.3
2399.125031	-41.5	-25.2	-16.3
2399.075033	-41.7	-25.4	-16.3
2398.875040	-41.9	-25.6	-16.3
2399.175029	-42.0	-25.7	-16.3
2398.925038	-42.1	-25.8	-16.3
2398.125067	-42.2	-25.9	-16.3
2396.925110	-42.5	-26.2	-16.3
2397.925074	-42.7	-26.4	-16.3
2398.575051	-42.7	-26.4	-16.3
2397.625085	-42.8	-26.5	-16.3
2397.825078	-42.9	-26.6	-16.3
2397.975072	-42.9	-26.6	-16.3
2397.025106	-43.0	-26.7	-16.3

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	4.25 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	28000	~ 28000
Sweeptime	28.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	3.83 dB	0.50 dB

TEST REPORT

Ant 2 NHT 20
Tx Spurious Emission (2437 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

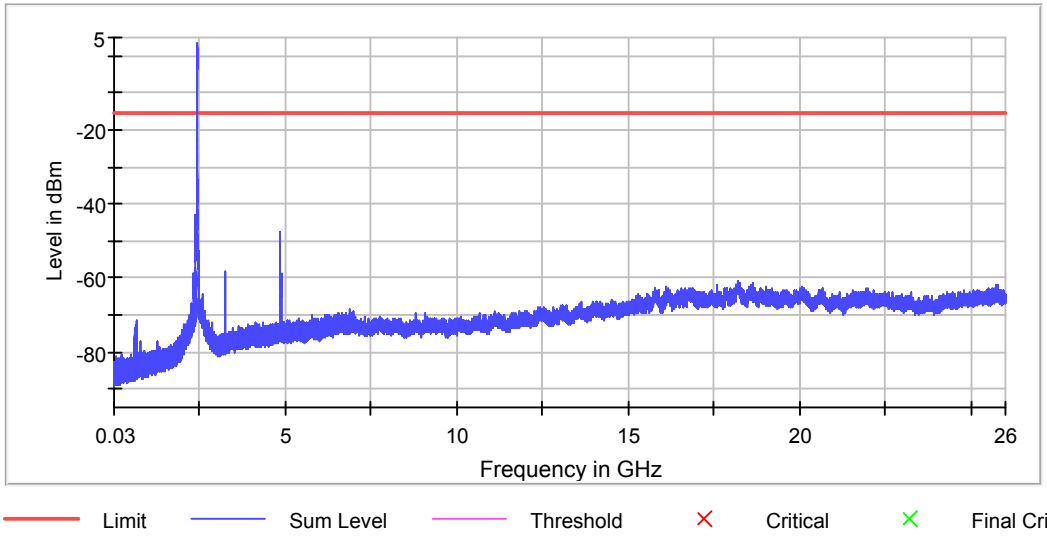
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4875.190121	-47.5	-31.9	-15.6
4869.544849	-47.8	-32.2	-15.6
4872.367485	-49.3	-33.7	-15.6
4874.343330	-49.4	-33.8	-15.6
4874.766726	-49.5	-33.9	-15.6
4874.202198	-49.5	-33.9	-15.6
4872.226353	-49.9	-34.3	-15.6
4868.556926	-49.9	-34.3	-15.6
4878.577284	-50.1	-34.5	-15.6
4874.484462	-50.2	-34.6	-15.6
4879.000680	-50.2	-34.6	-15.6
4873.496539	-50.2	-34.6	-15.6
4878.295021	-50.3	-34.7	-15.6
4876.742571	-50.5	-34.9	-15.6
4867.710135	-50.6	-35.0	-15.6

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	6.11 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	28000	~ 28000
Sweeptime	28.000 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	3.12 dB	0.50 dB

TEST REPORT

Ant 2 NHT 20
Tx Spurious Emission (2462 MHz; 0.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Result
2462.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

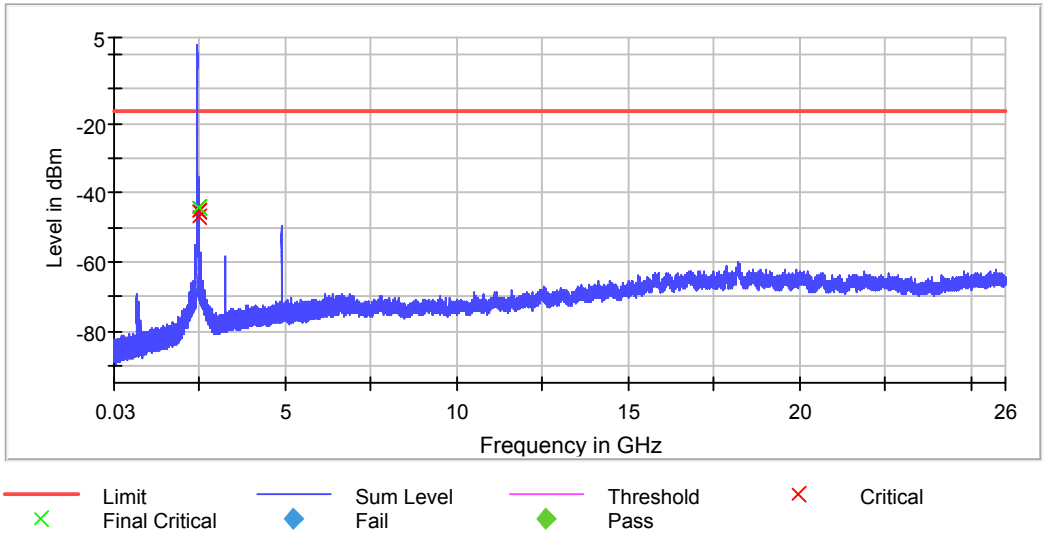
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2483.500000	-42.0	-25.7	-16.3
2483.570566	-44.1	-27.8	-16.3
2483.852830	-45.1	-28.8	-16.3
2483.993961	-45.1	-28.8	-16.3
2485.123016	-47.2	-30.9	-16.3
2484.135093	-47.3	-31.0	-16.3
2484.276225	-47.4	-31.1	-16.3
2484.417357	-47.9	-31.6	-16.3
2485.687543	-47.9	-31.6	-16.3
2483.711698	-48.0	-31.7	-16.3
2484.558489	-48.2	-31.9	-16.3
2485.828675	-48.7	-32.4	-16.3
2484.840752	-48.8	-32.5	-16.3
2484.699620	-49.2	-32.9	-16.3
4921.481353	-49.5	-33.2	-16.3

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	7.25 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	28000	~ 28000
Sweeptime	28.000 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	2.50 dB	0.50 dB

TEST REPORT

Ant 1 NHT40
Tx Spurious Emission (2422 MHz; 0.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Result
2422.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

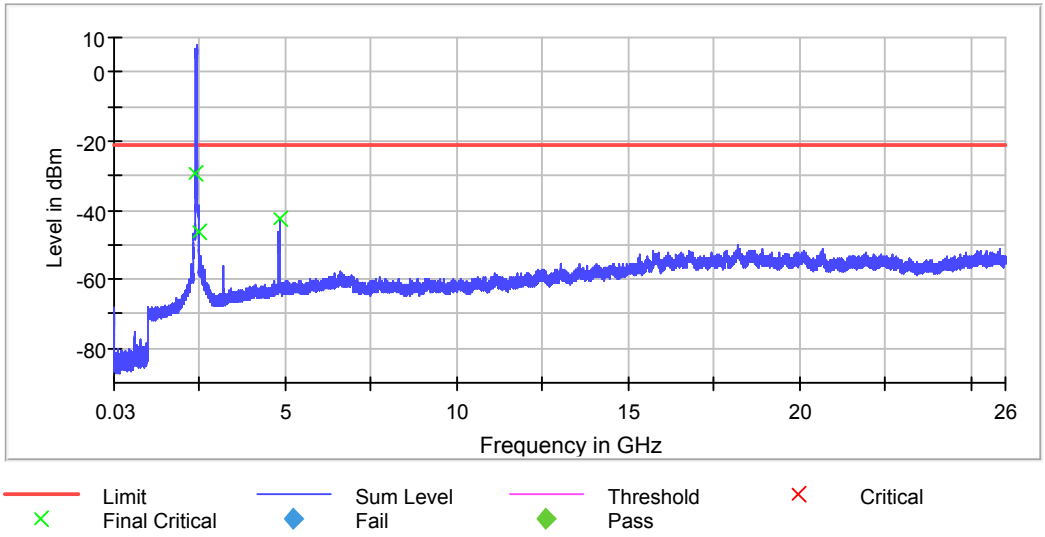
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2390.753302	-28.7	-7.8	-20.9
2392.752588	-28.7	-7.8	-20.9
2391.253124	-28.8	-7.9	-20.9
2392.252767	-28.9	-8.0	-20.9
2393.252410	-29.0	-8.1	-20.9
2394.751874	-29.3	-8.4	-20.9
2388.754016	-29.3	-8.4	-20.9
2389.253838	-29.4	-8.5	-20.9
2398.750446	-29.5	-8.6	-20.9
2395.251696	-29.7	-8.8	-20.9
2394.252053	-29.7	-8.8	-20.9
2398.250625	-29.7	-8.8	-20.9
2390.253481	-29.7	-8.8	-20.9
2397.250982	-29.9	-9.0	-20.9
2387.754373	-29.9	-9.0	-20.9

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	30 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	45 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

Ant 1 NHT40
Tx Spurious Emission (2437 MHz; 0.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

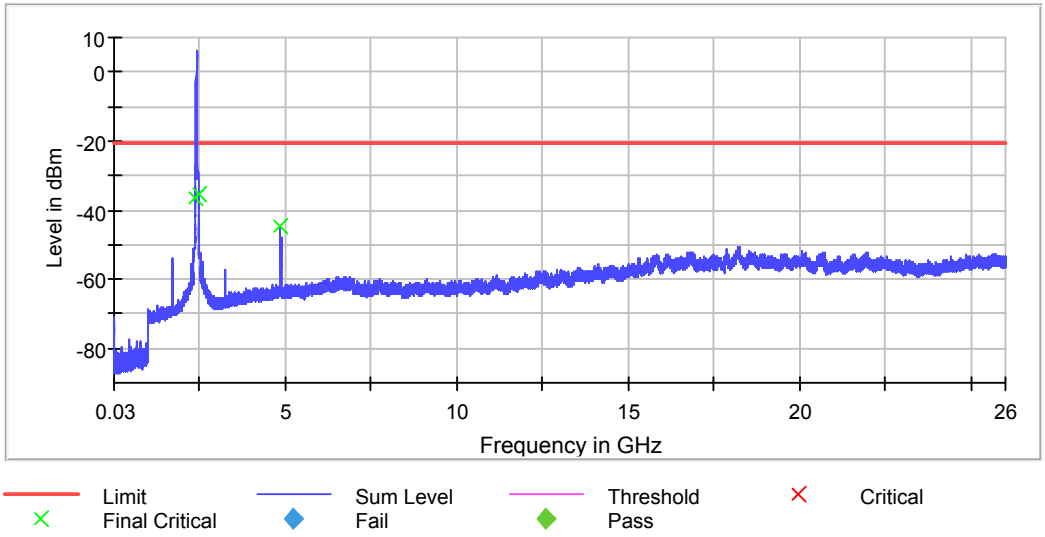
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2395.751517	-32.9	-12.1	-20.8
2396.251339	-33.1	-12.3	-20.8
2397.750803	-34.0	-13.2	-20.8
2398.750446	-34.2	-13.4	-20.8
2399.250268	-34.2	-13.4	-20.8
2397.250982	-35.4	-14.6	-20.8
2486.249696	-35.5	-14.7	-20.8
2395.251696	-35.6	-14.8	-20.8
2398.250625	-35.6	-14.8	-20.8
2394.751874	-35.6	-14.8	-20.8
2391.752945	-35.9	-15.1	-20.8
2393.252410	-36.1	-15.3	-20.8
2394.252053	-36.2	-15.4	-20.8
2484.749862	-36.6	-15.8	-20.8
2389.753659	-36.6	-15.8	-20.8

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	23 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	29 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

Ant 1 NHT40
Tx Spurious Emission (2452 MHz; 0.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Result
2452.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

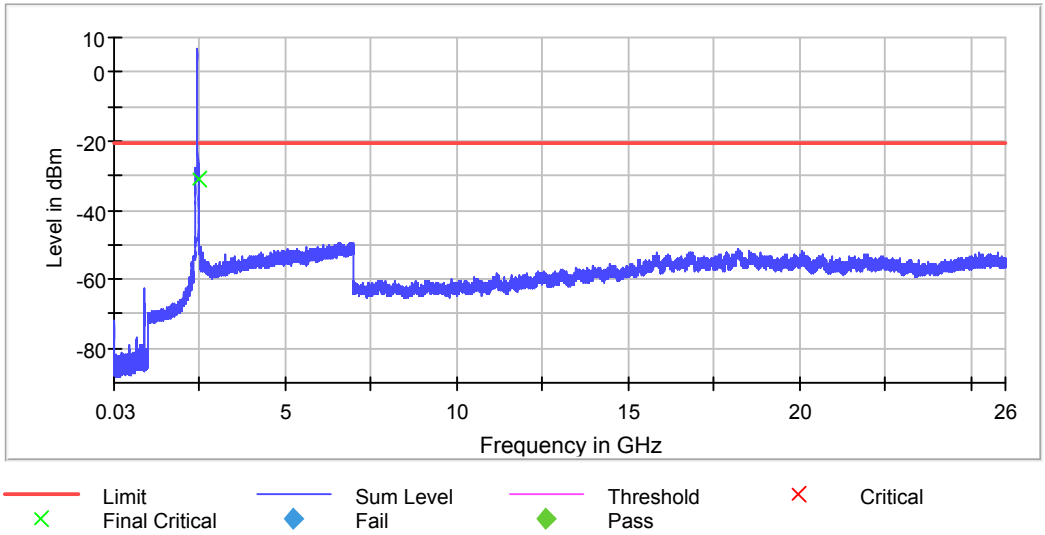
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2487.249585	-31.2	-10.4	-20.8
2489.249364	-32.8	-12.0	-20.8
2483.500000	-33.1	-12.3	-20.8
2486.749640	-35.1	-14.3	-20.8
2489.749308	-35.4	-14.6	-20.8
2485.749751	-35.5	-14.7	-20.8
2490.749197	-35.5	-14.7	-20.8
2483.749972	-35.5	-14.7	-20.8
2486.249696	-35.6	-14.8	-20.8
2493.748865	-35.9	-15.1	-20.8
2488.249474	-36.1	-15.3	-20.8
2493.248921	-36.4	-15.6	-20.8
2484.749862	-36.7	-15.9	-20.8
2488.749419	-36.8	-16.0	-20.8
2492.249031	-37.3	-16.5	-20.8

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	24 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.49 dB	0.50 dB

TEST REPORT

Ant 2 NHT 40
Tx Spurious Emission (2422 MHz; 0.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Result
2422.000000	PASS

Final measurements

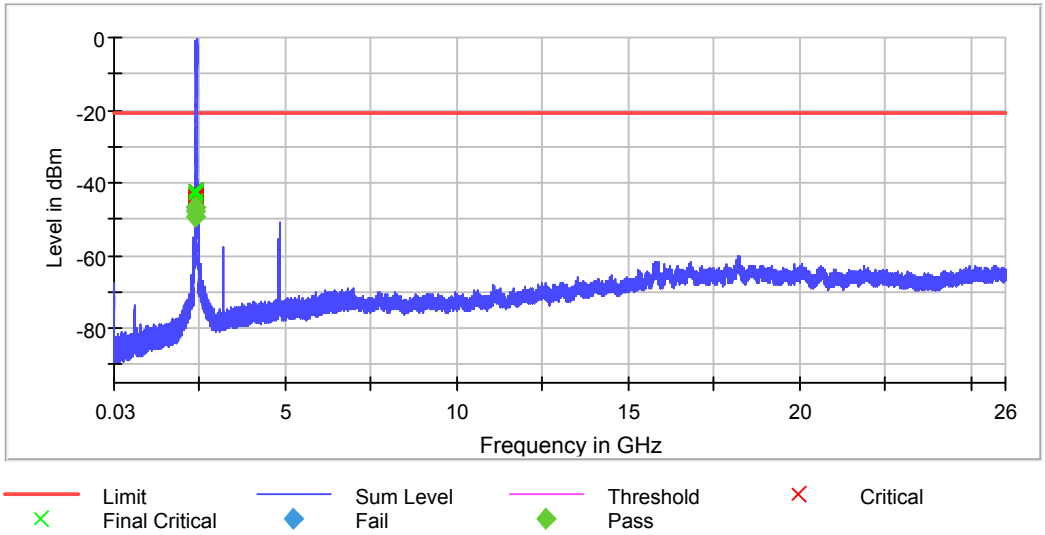
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
2382.575622	-44.9	-49.4	-20.6	28.8	PASS
2384.425556	-42.6	-48.0	-20.6	27.4	PASS
2388.175422	-43.0	-46.5	-20.6	26.0	PASS
2389.825363	-42.1	-46.6	-20.6	26.0	PASS

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2399.425021	-39.7	-19.1	-20.6
2399.475019	-40.0	-19.4	-20.6
2396.925110	-40.6	-20.1	-20.6
2396.975108	-40.7	-20.2	-20.6
2399.375022	-40.8	-20.2	-20.6
2398.275062	-40.8	-20.2	-20.6
2398.225063	-40.8	-20.2	-20.6
2394.475197	-41.0	-20.4	-20.6
2398.175065	-41.0	-20.5	-20.6
2390.675333	-41.4	-20.8	-20.6
2394.425199	-41.4	-20.8	-20.6
2390.725331	-41.6	-21.0	-20.6
2395.725153	-42.1	-21.5	-20.6
2389.825363	-42.1	-21.5	-20.6
2389.775365	-42.2	-21.6	-20.6

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	3.86 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	28000	~ 28000
Sweeptime	28.000 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	5.38 dB	0.50 dB

TEST REPORT

Ant 2 NHT 40
Tx Spurious Emission (2437 MHz; 0.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

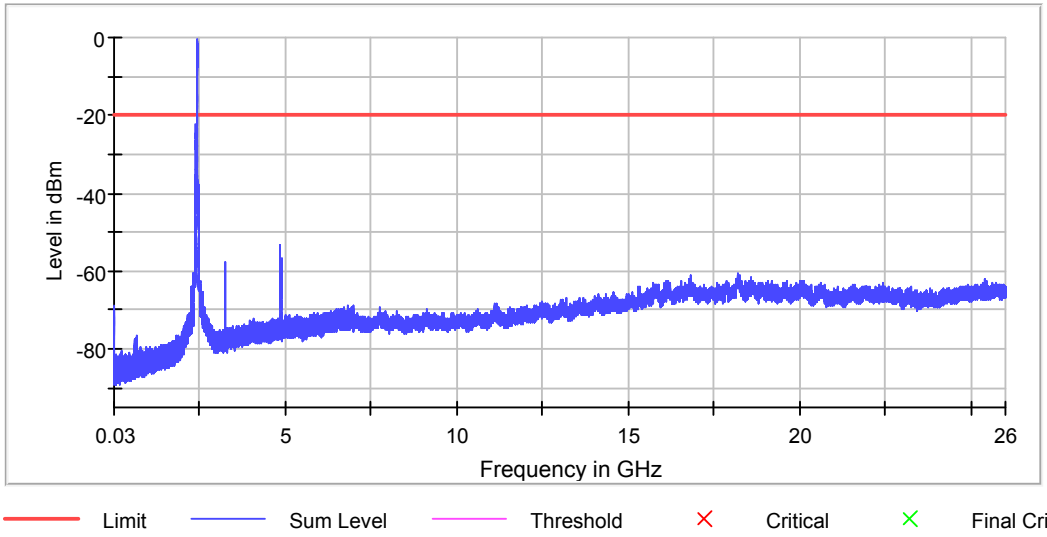
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2399.175029	-44.2	-24.5	-19.7
2399.225028	-45.5	-25.8	-19.7
2399.125031	-45.5	-25.8	-19.7
2399.425021	-45.6	-25.9	-19.7
2399.075033	-45.8	-26.1	-19.7
2398.575051	-45.9	-26.2	-19.7
2399.725010	-45.9	-26.2	-19.7
2399.475019	-45.9	-26.2	-19.7
2398.225063	-45.9	-26.2	-19.7
2398.525053	-46.1	-26.4	-19.7
2398.175065	-46.1	-26.4	-19.7
2398.775044	-46.1	-26.4	-19.7
2399.575015	-46.4	-26.7	-19.7
2399.525017	-46.5	-26.8	-19.7
2399.375022	-46.6	-26.9	-19.7

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	4.36 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	28000	~ 28000
Sweeptime	28.000 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	6.12 dB	0.50 dB

TEST REPORT

Ant 2 NHT 40
Tx Spurious Emission (2452 MHz; 0.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Result
2452.000000	PASS

Final measurements

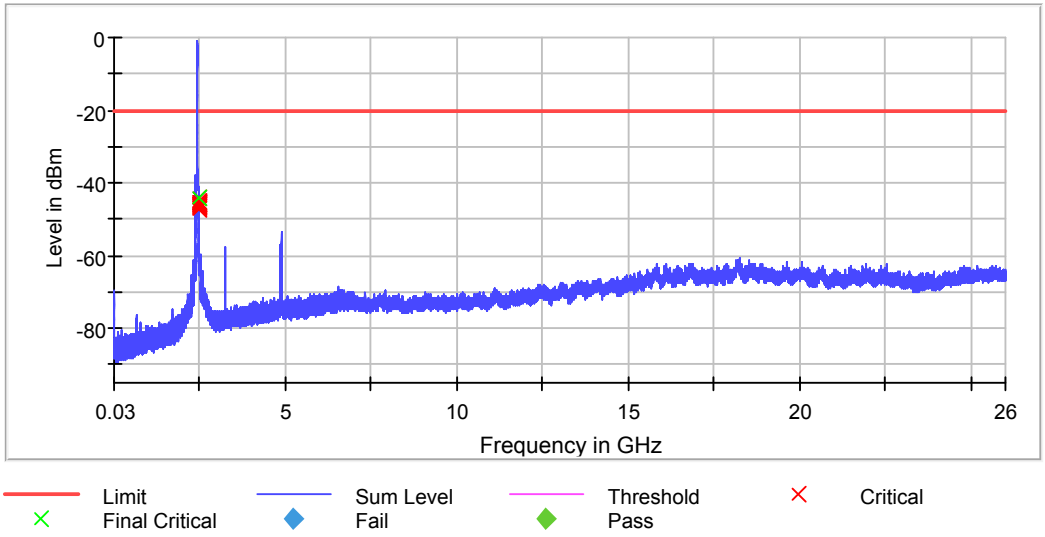
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2488.227915	-44.2	-23.9	-20.3
2489.498102	-45.2	-24.9	-20.3
2486.957729	-45.3	-25.0	-20.3
2485.828675	-45.4	-25.1	-20.3
2487.804520	-45.4	-25.1	-20.3
2490.203761	-45.7	-25.4	-20.3
2484.558489	-45.7	-25.4	-20.3
2488.369047	-45.8	-25.5	-20.3
2485.687543	-45.8	-25.5	-20.3
2487.381125	-45.9	-25.6	-20.3
2484.417357	-46.0	-25.7	-20.3
2488.086784	-46.0	-25.7	-20.3
2483.500000	-46.3	-26.0	-20.3
2487.522256	-46.3	-26.0	-20.3
2489.780365	-46.3	-26.0	-20.3

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	2.75 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	28000	~ 28000
Sweeptime	28.000 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	5.41 dB	0.50 dB

TEST REPORT

Ant 1 BLE
Tx Spurious Emission (2402 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Result
2402.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

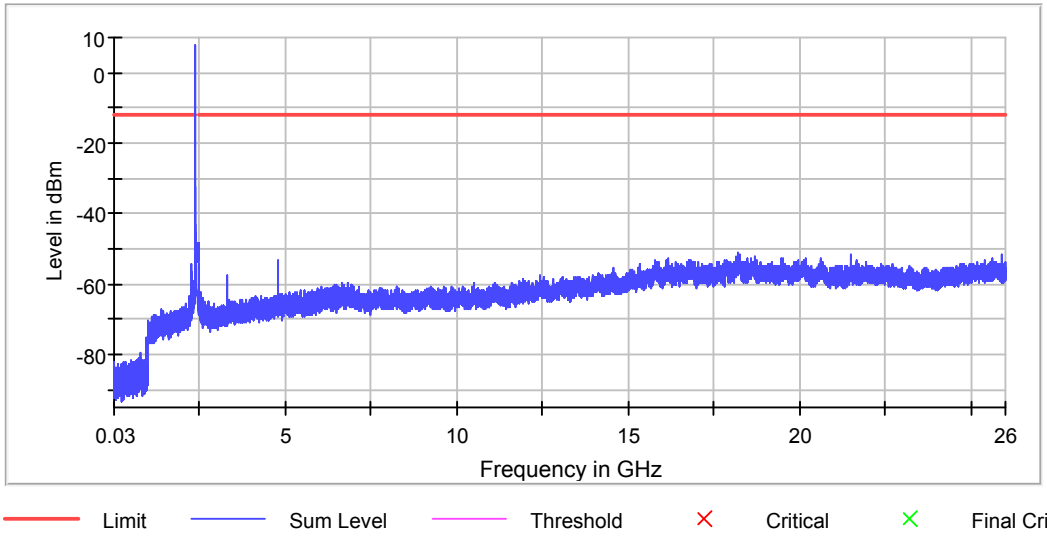
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2397.250982	-32.6	-20.8	-11.8
2397.750803	-34.0	-22.2	-11.8
2399.250268	-41.4	-29.6	-11.8
2386.254909	-43.1	-31.3	-11.8
2394.252053	-51.0	-39.2	-11.8
2394.751874	-51.1	-39.3	-11.8
2393.752231	-51.3	-39.5	-11.8
18195.347166	-51.3	-39.5	-11.8
18197.128304	-51.5	-39.7	-11.8
2375.258836	-51.5	-39.7	-11.8
2393.252410	-51.7	-39.9	-11.8
25875.617149	-51.7	-39.9	-11.8
25876.210862	-51.7	-39.9	-11.8
18244.031623	-51.8	-40.0	-11.8
21472.048622	-51.8	-40.0	-11.8

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	5	5
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	1.37 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	5	5
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	1 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

Ant 1 BLE
Tx Spurious Emission (2440 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Result
2440.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

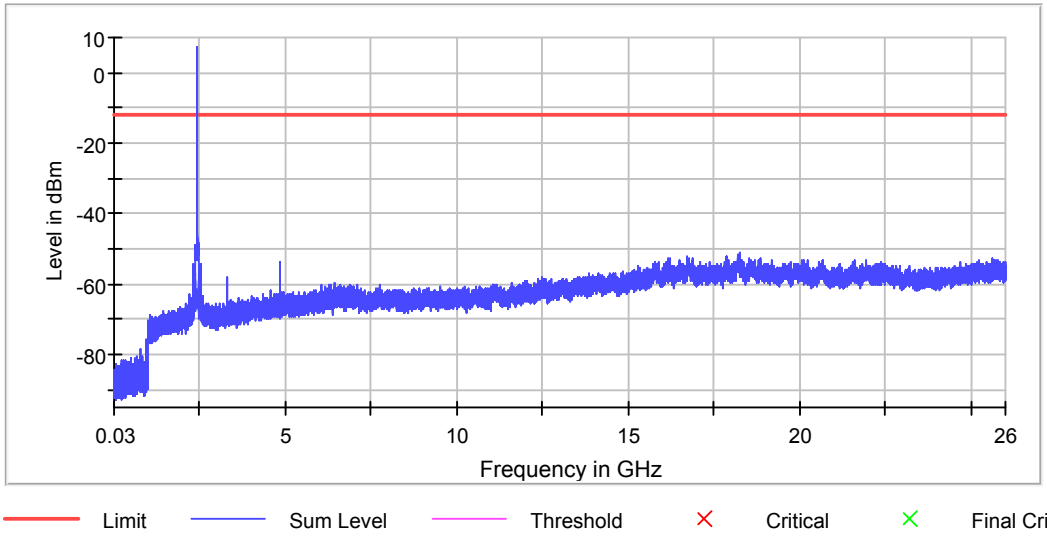
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
18236.907068	-50.8	-38.9	-11.9
18248.187613	-51.5	-39.6	-11.9
18209.596275	-51.7	-39.8	-11.9
17874.742204	-51.9	-40.0	-11.9
18238.688207	-51.9	-40.0	-11.9
2399.250268	-52.1	-40.2	-11.9
18190.597463	-52.2	-40.3	-11.9
18224.439098	-52.2	-40.3	-11.9
16746.093994	-52.3	-40.4	-11.9
17854.555965	-52.3	-40.4	-11.9
18191.191176	-52.4	-40.5	-11.9
18214.345978	-52.5	-40.6	-11.9
25619.133179	-52.5	-40.6	-11.9
18220.283107	-52.6	-40.7	-11.9
18184.660334	-52.6	-40.7	-11.9

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	5	5
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	5.22 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	5	5
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	10.00 dB	0.50 dB

TEST REPORT

Ant 1 BLE
Tx Spurious Emission (2480 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Result
2480.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

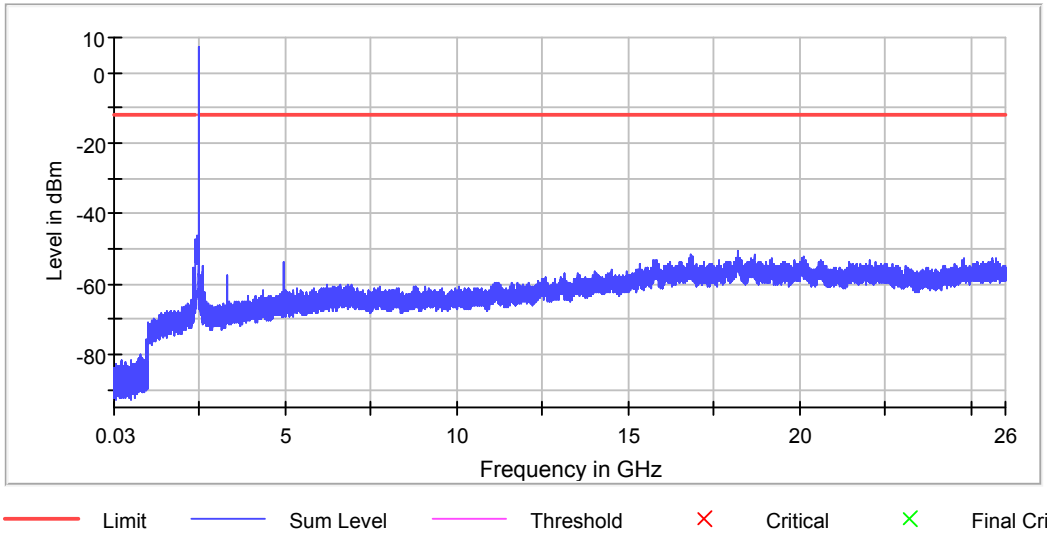
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2487.749530	-49.4	-37.3	-12.1
2488.249474	-49.6	-37.5	-12.1
18185.847760	-50.8	-38.7	-12.1
2483.749972	-51.1	-39.0	-12.1
18670.317480	-51.6	-39.5	-12.1
18221.470533	-51.6	-39.5	-12.1
16819.714393	-51.9	-39.8	-12.1
2487.249585	-52.0	-39.9	-12.1
16863.649147	-52.1	-40.0	-12.1
20098.196988	-52.1	-40.0	-12.1
18203.065433	-52.1	-40.0	-12.1
18223.251672	-52.2	-40.1	-12.1
2488.749419	-52.3	-40.2	-12.1
2485.249806	-52.3	-40.2	-12.1
18191.784888	-52.3	-40.2	-12.1

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	5	5
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	4.03 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	5	5
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	2.57 dB	0.50 dB

TEST REPORT

Ant 2 BLE
Tx Spurious Emission (2402 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Result
2402.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

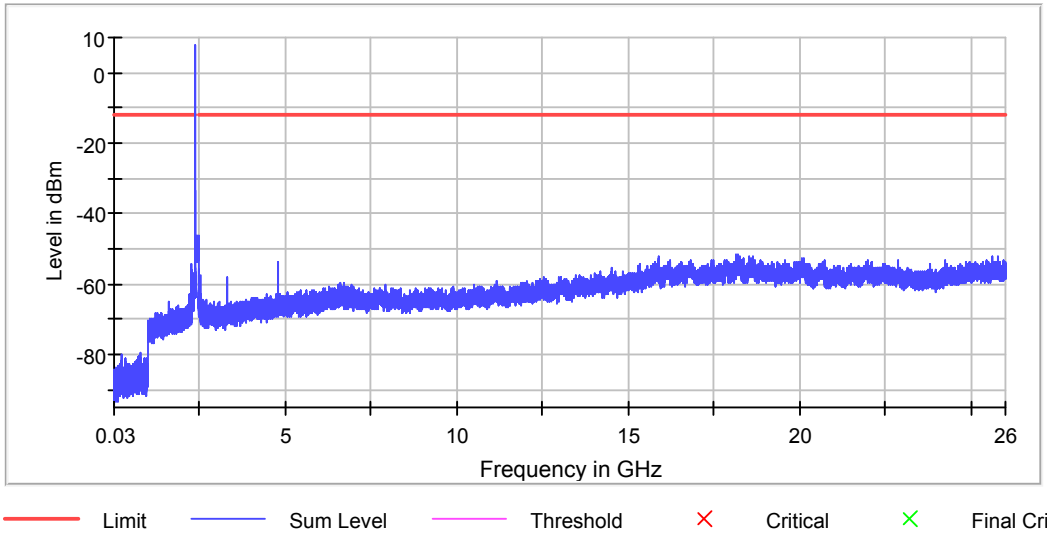
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2396.751160	-33.3	-21.6	-11.7
2399.250268	-41.1	-29.4	-11.7
2396.251339	-41.9	-30.2	-11.7
2398.750446	-47.5	-35.8	-11.7
2397.250982	-50.7	-39.0	-11.7
2368.761157	-51.0	-39.3	-11.7
2394.751874	-51.0	-39.3	-11.7
18160.911818	-51.7	-40.0	-11.7
18216.720830	-51.7	-40.0	-11.7
18158.536966	-51.9	-40.2	-11.7
18228.001375	-51.9	-40.2	-11.7
18192.972314	-51.9	-40.2	-11.7
2398.250625	-51.9	-40.2	-11.7
18252.937316	-52.1	-40.4	-11.7
15875.117180	-52.1	-40.4	-11.7

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	5	5
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	9.50 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	5	5
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	2 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

Ant 2 BLE
Tx Spurious Emission (2440 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Result
2440.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

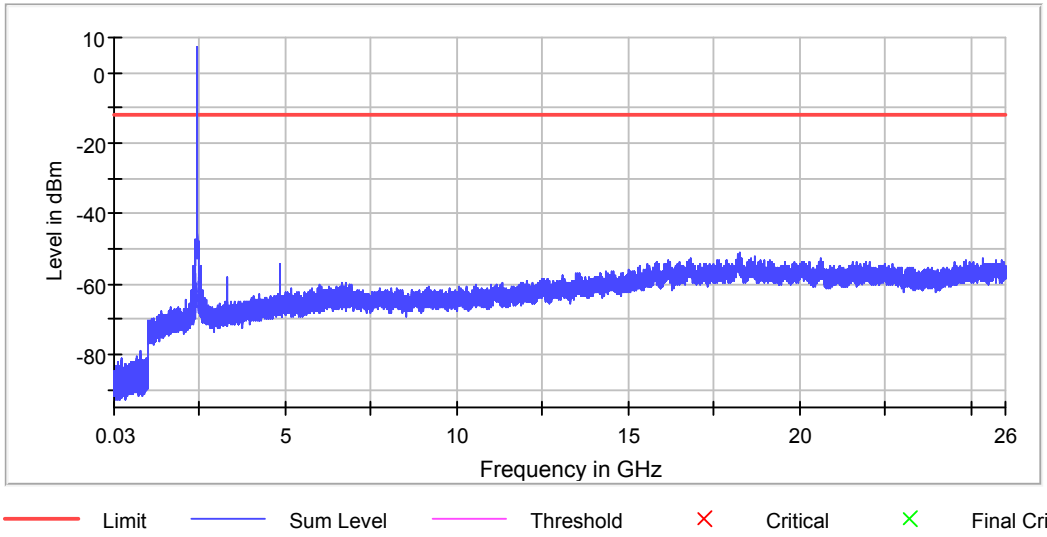
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
18245.219049	-51.0	-39.1	-11.9
18200.690582	-51.6	-39.7	-11.9
18214.939691	-51.8	-39.9	-11.9
18225.626523	-52.3	-40.4	-11.9
18676.254609	-52.4	-40.5	-11.9
18216.720830	-52.4	-40.5	-11.9
18284.404100	-52.5	-40.6	-11.9
18209.002562	-52.5	-40.6	-11.9
16848.806325	-52.6	-40.7	-11.9
18212.564840	-52.6	-40.7	-11.9
25323.464158	-52.6	-40.7	-11.9
18220.876820	-52.6	-40.7	-11.9
18234.532217	-52.8	-40.9	-11.9
18202.471721	-52.8	-40.9	-11.9
18226.220236	-52.8	-40.9	-11.9

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	5	5
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	8.57 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	5	5
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	4.23 dB	0.50 dB

TEST REPORT

Ant 2 BLE
Tx Spurious Emission (2480 MHz; 0 (0 dBm); 2 MHz)

Result

DUT Frequency (MHz)	Result
2480.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

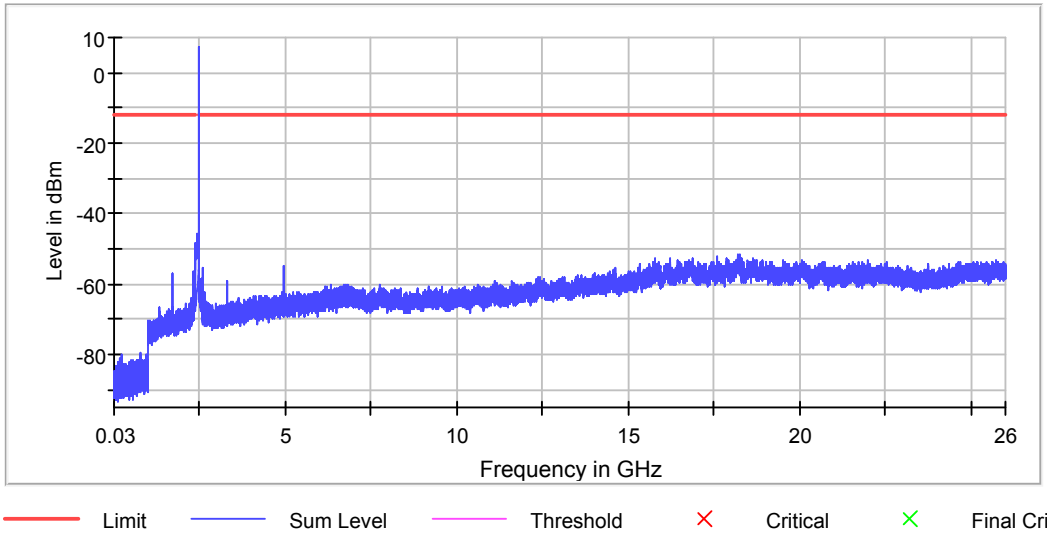
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2488.749419	-49.6	-37.5	-12.1
2483.749972	-49.9	-37.8	-12.1
2488.249474	-50.4	-38.3	-12.1
2487.249585	-50.6	-38.5	-12.1
2487.749530	-50.8	-38.7	-12.1
18200.690582	-51.5	-39.4	-12.1
18249.375039	-51.9	-39.8	-12.1
18178.723205	-51.9	-39.8	-12.1
17615.289669	-52.0	-39.9	-12.1
2484.249917	-52.0	-39.9	-12.1
18220.283107	-52.1	-40.0	-12.1
18233.938504	-52.2	-40.1	-12.1
18232.751078	-52.3	-40.2	-12.1
18257.093307	-52.4	-40.3	-12.1
18247.593900	-52.4	-40.3	-12.1

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2

TEST REPORT



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	1.061 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	5	5
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	11.20 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	5	5
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 3	max. 3
Stable	0 / 3	3
Max Stable Difference	7.23 dB	0.50 dB

TEST REPORT

PLOTS OF BAND EDGE

Ant 1 B mode
Band Edge low (2412 MHz; 0.000 dBm; 20 MHz)

Result

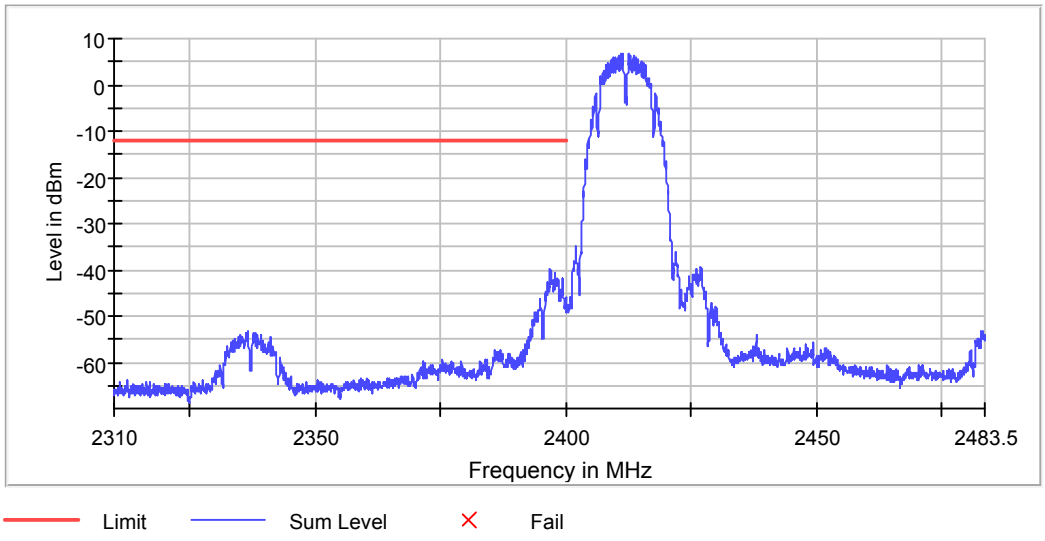
DUT Frequency (MHz)	Result
2412.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2411.468133	6.8

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2396.926707	-39.8	-27.6	-12.2	PASS
2396.976680	-40.0	-27.8	-12.2	PASS
2397.926152	-40.6	-28.4	-12.2	PASS
2397.976124	-40.9	-28.7	-12.2	PASS
2396.876735	-40.9	-28.7	-12.2	PASS
2397.876180	-41.5	-29.3	-12.2	PASS
2399.425319	-41.8	-29.6	-12.2	PASS
2398.425875	-41.9	-29.7	-12.2	PASS
2397.426430	-42.1	-29.9	-12.2	PASS
2399.475292	-42.2	-30.0	-12.2	PASS
2397.176569	-42.3	-30.1	-12.2	PASS
2398.475847	-42.4	-30.2	-12.2	PASS
2397.126596	-42.5	-30.3	-12.2	PASS
2398.126041	-42.7	-30.5	-12.2	PASS
2397.476402	-42.7	-30.5	-12.2	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	12 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.27 dB	0.50 dB

TEST REPORT

Ant 1 B mode
Band Edge high (2462 MHz; 0.000 dBm; 20 MHz)

Result

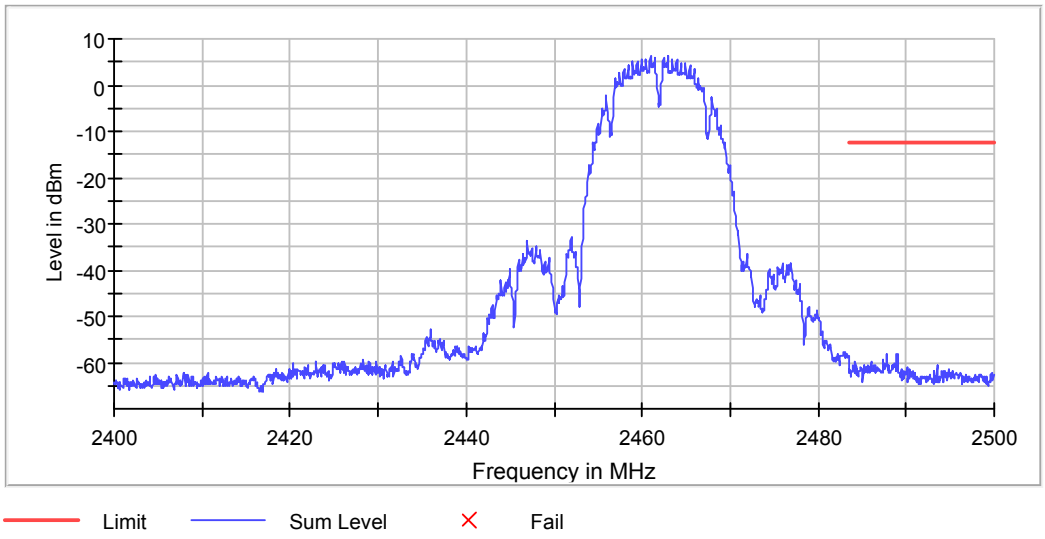
DUT Frequency (MHz)	Result
2462.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2460.938510	6.2

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2488.958459	-58.0	-45.7	-12.3	PASS
2487.811934	-58.0	-45.7	-12.3	PASS
2489.008308	-58.0	-45.7	-12.3	PASS
2487.762085	-58.1	-45.8	-12.3	PASS
2487.363293	-59.4	-47.1	-12.3	PASS
2487.313444	-59.5	-47.2	-12.3	PASS
2487.861782	-59.7	-47.4	-12.3	PASS
2484.222810	-59.7	-47.4	-12.3	PASS
2486.067221	-59.9	-47.6	-12.3	PASS
2486.017372	-60.0	-47.7	-12.3	PASS
2487.562689	-60.1	-47.8	-12.3	PASS
2487.712236	-60.1	-47.8	-12.3	PASS
2488.908610	-60.1	-47.8	-12.3	PASS
2484.172961	-60.1	-47.8	-12.3	PASS
2487.512840	-60.2	-47.9	-12.3	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.26 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
Sweeptime	18.945 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

Ant 2 B mode
Band Edge low (2412 MHz; 0.000 dBm; 20 MHz)

Result

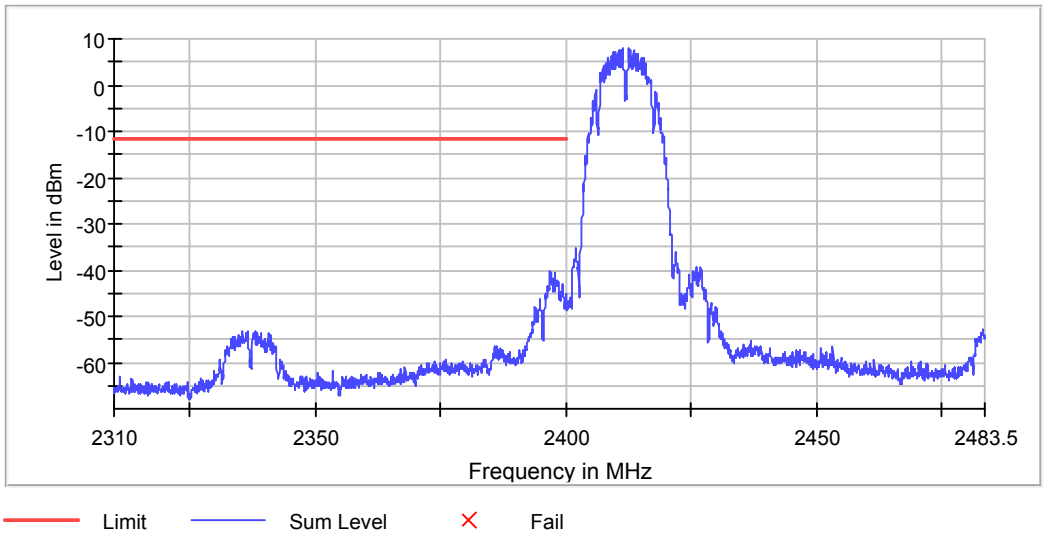
DUT Frequency (MHz)	Result
2412.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2411.468133	8.0

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2396.926707	-40.1	28.3	-11.8	PASS
2396.976680	-40.5	28.7	-11.8	PASS
2397.926152	-40.8	29.0	-11.8	PASS
2396.876735	-41.0	29.2	-11.8	PASS
2397.976124	-41.2	29.4	-11.8	PASS
2397.426430	-41.7	29.9	-11.8	PASS
2397.876180	-41.8	30.0	-11.8	PASS
2397.476402	-42.1	30.3	-11.8	PASS
2398.425875	-42.2	30.4	-11.8	PASS
2397.026652	-42.4	30.6	-11.8	PASS
2397.126596	-42.5	30.7	-11.8	PASS
2398.275958	-42.6	30.8	-11.8	PASS
2398.126041	-42.6	30.8	-11.8	PASS
2398.475847	-42.7	30.9	-11.8	PASS
2398.076069	-42.7	30.9	-11.8	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	14 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.47 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.25 dB	0.50 dB

TEST REPORT

Ant 2 B mode
Band Edge high (2462 MHz; 0.000 dBm; 20 MHz)

Result

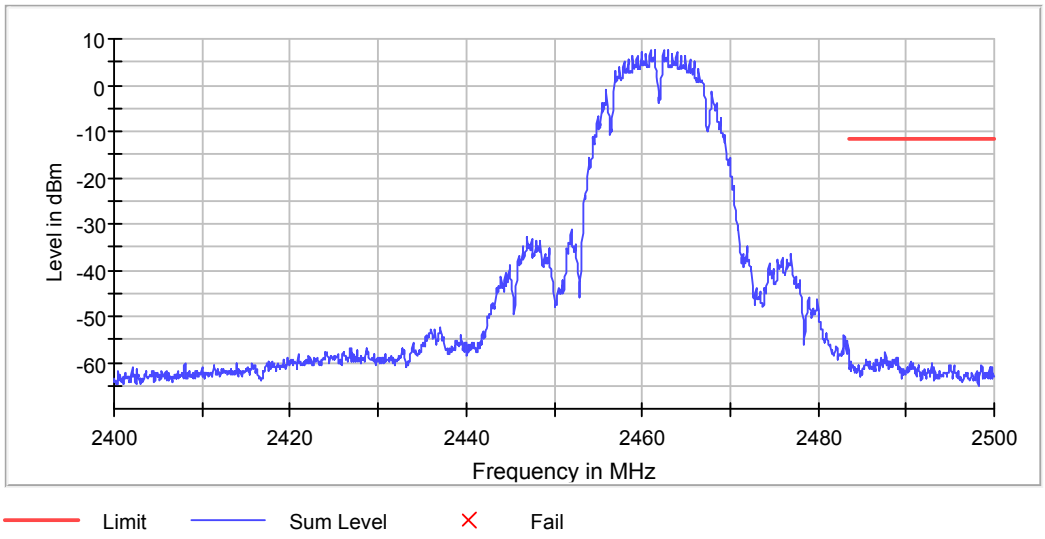
DUT Frequency (MHz)	Result
2462.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2460.938510	7.7

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2487.662387	-57.7	-46.1	-11.6	PASS
2487.612538	-58.2	-46.6	-11.6	PASS
2487.114048	-58.9	-47.3	-11.6	PASS
2487.712236	-58.9	-47.3	-11.6	PASS
2488.958459	-58.9	-47.3	-11.6	PASS
2489.008308	-59.1	-47.5	-11.6	PASS
2487.064199	-59.1	-47.5	-11.6	PASS
2486.615559	-59.2	-47.6	-11.6	PASS
2488.858761	-59.2	-47.6	-11.6	PASS
2486.665408	-59.2	-47.6	-11.6	PASS
2488.609517	-59.3	-47.7	-11.6	PASS
2488.659366	-59.3	-47.7	-11.6	PASS
2487.462991	-59.4	-47.8	-11.6	PASS
2487.413142	-59.5	-47.9	-11.6	PASS
2488.509819	-59.5	-47.9	-11.6	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	12 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.18 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
Sweeptime	18.945 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

Ant 1 G mode
Band Edge low (2412 MHz; 0.000 dBm; 20 MHz)

Result

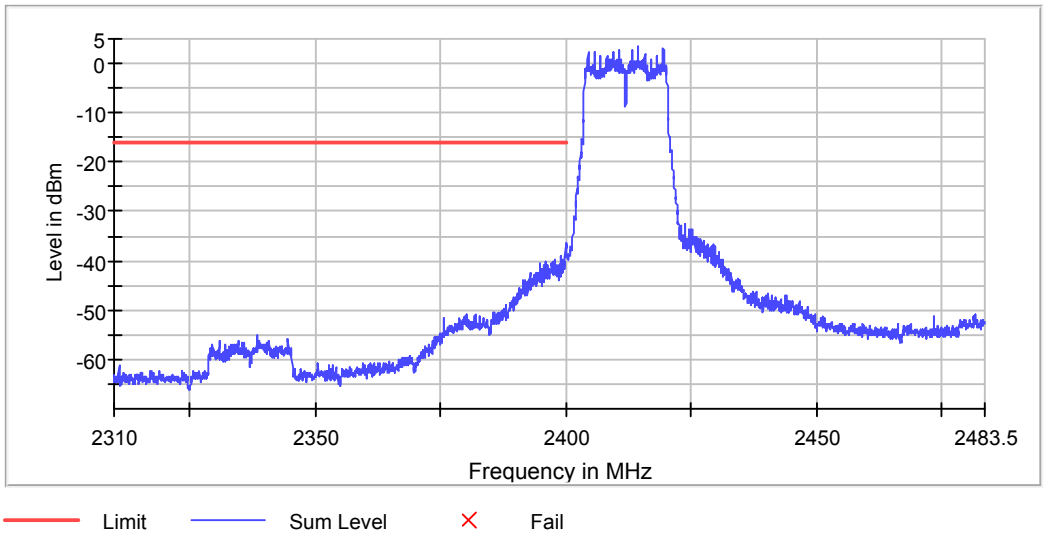
DUT Frequency (MHz)	Result
2412.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2414.466338	3.5

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.125486	-39.1	-23.1	-16.0	PASS
2399.075514	-39.2	-23.2	-16.0	PASS
2399.025541	-39.4	-23.4	-16.0	PASS
2399.925042	-39.4	-23.4	-16.0	PASS
2399.175458	-39.6	-23.6	-16.0	PASS
2397.926152	-39.7	-23.7	-16.0	PASS
2399.425319	-39.9	-23.9	-16.0	PASS
2397.876180	-40.0	-24.0	-16.0	PASS
2399.225430	-40.0	-24.0	-16.0	PASS
2397.526374	-40.1	-24.1	-16.0	PASS
2399.825097	-40.1	-24.1	-16.0	PASS
2397.576346	-40.2	-24.2	-16.0	PASS
2396.077179	-40.3	-24.3	-16.0	PASS
2396.027207	-40.3	-24.3	-16.0	PASS
2399.375347	-40.3	-24.3	-16.0	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	30 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	19 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.35 dB	0.50 dB

TEST REPORT

Ant 1 G mode
Band Edge high (2462 MHz; 0.000 dBm; 20 MHz)

Result

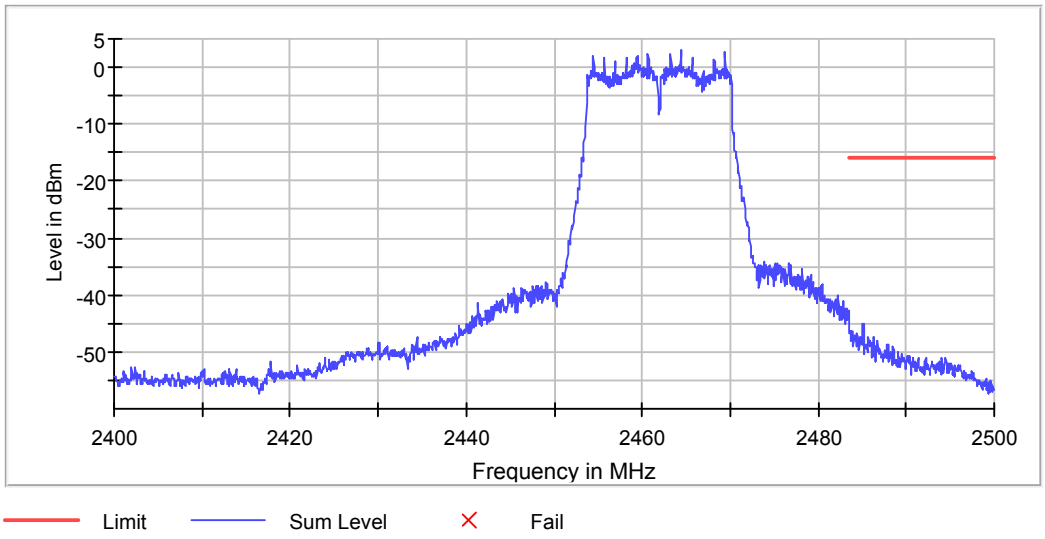
DUT Frequency (MHz)	Result
2462.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2464.436415	2.9

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2485.120091	-45.2	-29.4	-15.8	PASS
2485.070242	-45.2	-29.4	-15.8	PASS
2483.824018	-46.3	-30.5	-15.8	PASS
2483.873867	-46.3	-30.5	-15.8	PASS
2483.674471	-46.4	-30.6	-15.8	PASS
2483.624622	-46.6	-30.8	-15.8	PASS
2483.574773	-46.7	-30.9	-15.8	PASS
2483.724320	-46.8	-31.0	-15.8	PASS
2484.422205	-46.8	-31.0	-15.8	PASS
2484.472054	-46.8	-31.0	-15.8	PASS
2483.524924	-46.9	-31.1	-15.8	PASS
2485.169940	-46.9	-31.1	-15.8	PASS
2485.020393	-47.0	-31.2	-15.8	PASS
2484.172961	-47.0	-31.2	-15.8	PASS
2484.222810	-47.1	-31.3	-15.8	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	35 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.23 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
Sweeptime	18.945 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	10 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

Ant 2 G mode
Band Edge low (2412 MHz; 0.000 dBm; 20 MHz)

Result

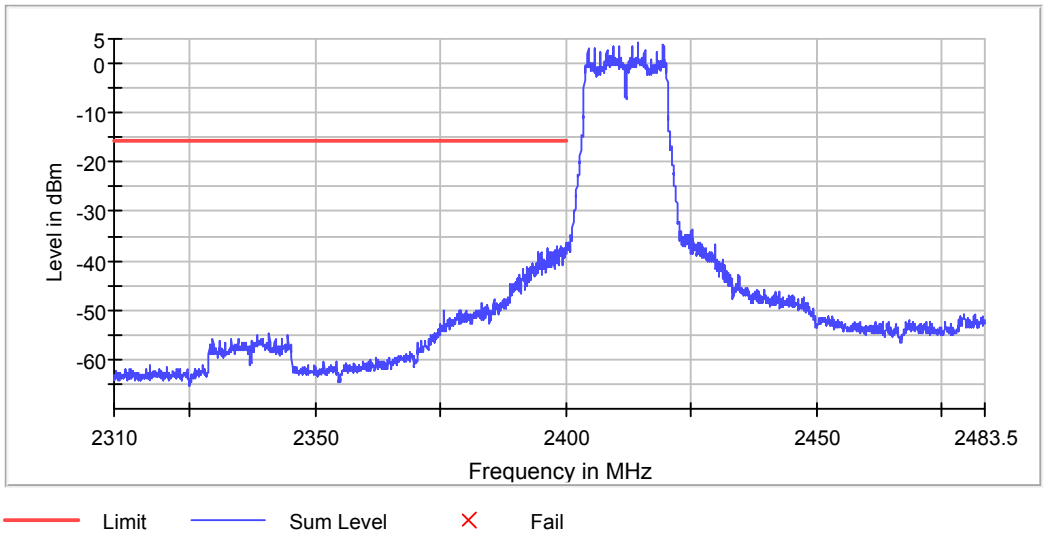
DUT Frequency (MHz)	Result
2412.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2414.466338	4.1

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.075514	-37.2	-21.5	-15.7	PASS
2398.176013	-37.3	-21.6	-15.7	PASS
2399.425319	-37.4	-21.7	-15.7	PASS
2399.025541	-37.4	-21.7	-15.7	PASS
2398.225986	-37.4	-21.7	-15.7	PASS
2399.675180	-37.4	-21.7	-15.7	PASS
2399.825097	-37.5	-21.8	-15.7	PASS
2396.327041	-37.5	-21.8	-15.7	PASS
2398.825652	-37.6	-21.9	-15.7	PASS
2399.775125	-37.6	-21.9	-15.7	PASS
2396.277068	-37.7	-22.0	-15.7	PASS
2399.125486	-37.9	-22.2	-15.7	PASS
2397.926152	-37.9	-22.2	-15.7	PASS
2399.475292	-37.9	-22.2	-15.7	PASS
2398.775680	-37.9	-22.2	-15.7	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	90 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.21 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	27 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.36 dB	0.50 dB

TEST REPORT

Ant 2 G mode
Band Edge high (2462 MHz; 0.000 dBm; 20 MHz)

Result

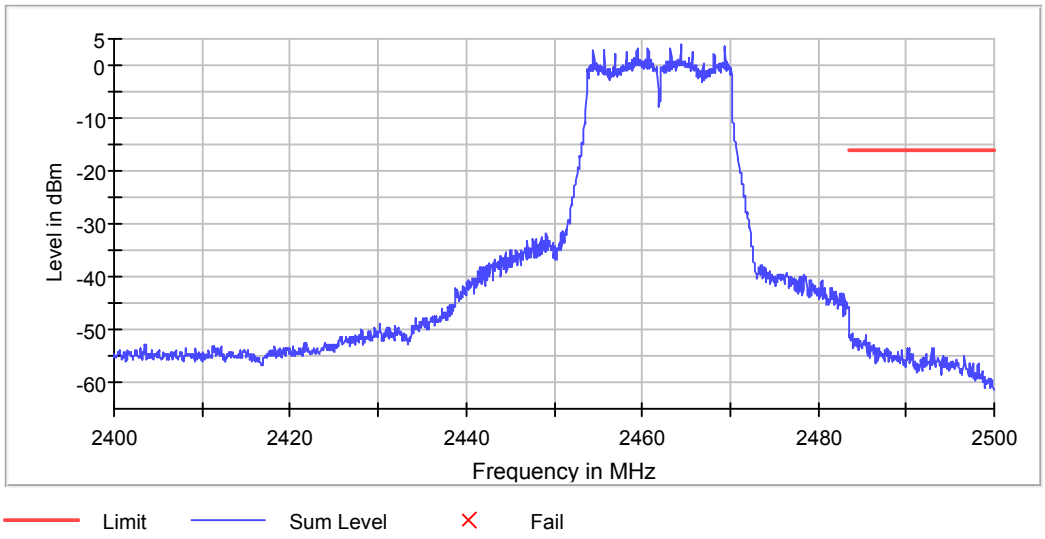
DUT Frequency (MHz)	Result
2462.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2464.436415	3.9

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.873867	-50.7	-34.8	-15.9	PASS
2483.923716	-50.9	-35.0	-15.9	PASS
2483.824018	-51.1	-35.2	-15.9	PASS
2483.774169	-51.2	-35.3	-15.9	PASS
2485.419184	-51.2	-35.3	-15.9	PASS
2483.574773	-51.2	-35.3	-15.9	PASS
2485.369335	-51.3	-35.4	-15.9	PASS
2483.524924	-51.3	-35.4	-15.9	PASS
2484.172961	-51.7	-35.8	-15.9	PASS
2484.521903	-51.8	-35.9	-15.9	PASS
2485.469033	-51.8	-35.9	-15.9	PASS
2484.123112	-51.8	-35.9	-15.9	PASS
2484.472054	-51.9	-36.0	-15.9	PASS
2484.771148	-52.0	-36.1	-15.9	PASS
2484.820997	-52.0	-36.1	-15.9	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	28 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.40 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
Sweeptime	18.945 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

Ant 1 NHT20
Band Edge low (2412 MHz; 0.000 dBm; 20 MHz)

Result

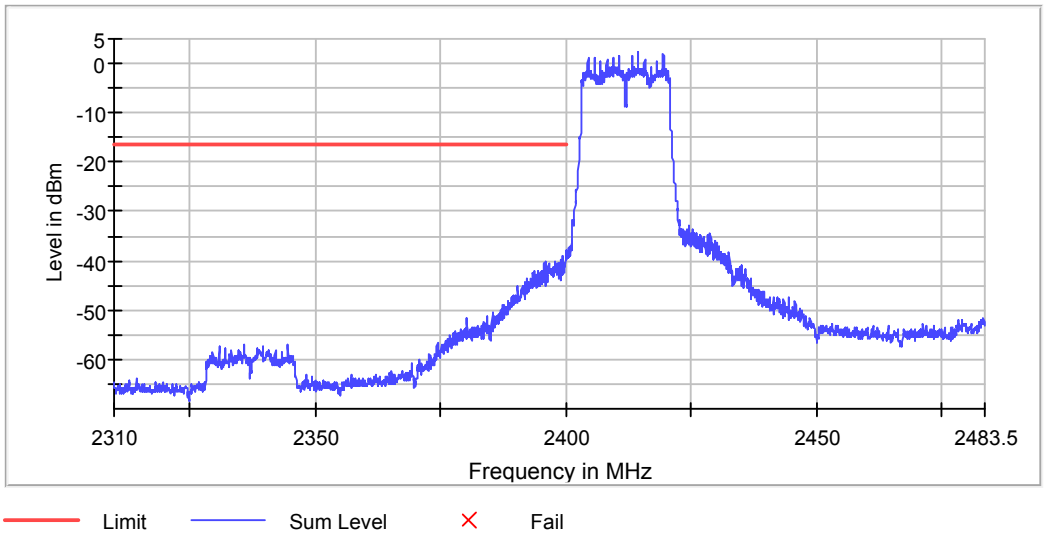
DUT Frequency (MHz)	Result
2412.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2414.466338	2.2

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.425319	-38.9	-22.3	-16.5	PASS
2399.375347	-39.1	-22.6	-16.5	PASS
2399.125486	-39.6	-23.1	-16.5	PASS
2399.175458	-39.6	-23.1	-16.5	PASS
2399.475292	-40.2	-23.6	-16.5	PASS
2396.027207	-40.2	-23.7	-16.5	PASS
2397.926152	-40.3	-23.8	-16.5	PASS
2395.977235	-40.4	-23.9	-16.5	PASS
2398.475847	-40.5	-23.9	-16.5	PASS
2399.725153	-40.5	-24.0	-16.5	PASS
2397.876180	-40.5	-24.0	-16.5	PASS
2398.775680	-40.5	-24.0	-16.5	PASS
2398.425875	-40.6	-24.0	-16.5	PASS
2396.576902	-40.6	-24.1	-16.5	PASS
2398.825652	-40.6	-24.1	-16.5	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	35 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	31 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.25 dB	0.50 dB

TEST REPORT

Ant 1 NHT20
Band Edge high (2462 MHz; 0.000 dBm; 20 MHz)

Result

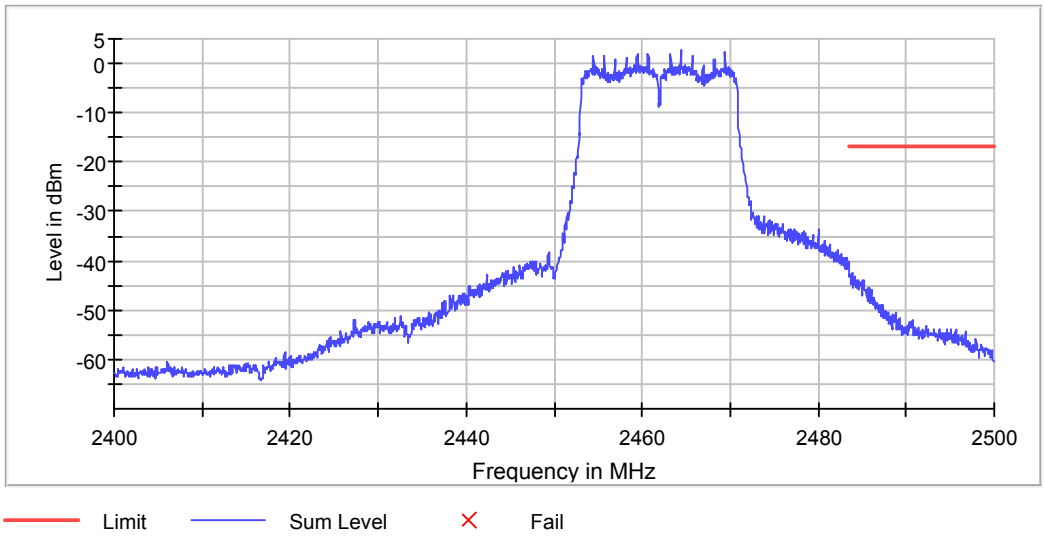
DUT Frequency (MHz)	Result
2462.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2464.436415	2.6

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.873867	-42.3	-25.5	-16.8	PASS
2483.824018	-42.9	-26.1	-16.8	PASS
2483.574773	-43.0	-26.2	-16.8	PASS
2483.524924	-43.1	-26.3	-16.8	PASS
2483.624622	-43.2	-26.4	-16.8	PASS
2484.123112	-43.2	-26.4	-16.8	PASS
2483.923716	-43.3	-26.5	-16.8	PASS
2484.073263	-43.7	-26.9	-16.8	PASS
2484.472054	-43.8	-27.0	-16.8	PASS
2484.521903	-43.9	-27.1	-16.8	PASS
2483.774169	-44.0	-27.2	-16.8	PASS
2485.070242	-44.0	-27.2	-16.8	PASS
2484.172961	-44.0	-27.2	-16.8	PASS
2485.120091	-44.2	-27.4	-16.8	PASS
2483.973565	-44.3	-27.5	-16.8	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	36 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.42 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
Sweeptime	18.945 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	17 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.46 dB	0.50 dB

TEST REPORT

Ant 2 NHT 20
Band Edge low (2412 MHz; 0.000 dBm; 20 MHz)

Result

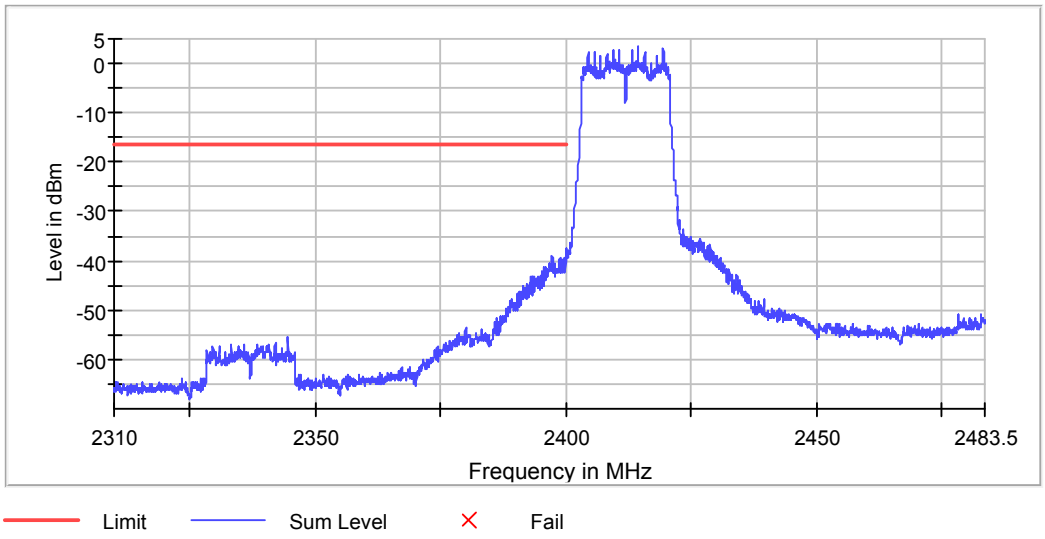
DUT Frequency (MHz)	Result
2412.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2414.466338	3.4

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2397.276513	-39.0	-22.7	-16.3	PASS
2399.675180	-39.3	-23.0	-16.3	PASS
2397.326485	-39.4	-23.1	-16.3	PASS
2398.825652	-39.5	-23.2	-16.3	PASS
2398.875625	-39.5	-23.2	-16.3	PASS
2399.625208	-39.5	-23.2	-16.3	PASS
2397.226541	-39.5	-23.2	-16.3	PASS
2398.775680	-39.8	-23.5	-16.3	PASS
2399.325375	-39.9	-23.6	-16.3	PASS
2398.925597	-40.0	-23.7	-16.3	PASS
2399.375347	-40.1	-23.8	-16.3	PASS
2399.275403	-40.2	-23.9	-16.3	PASS
2399.425319	-40.3	-24.0	-16.3	PASS
2399.725153	-40.4	-24.1	-16.3	PASS
2399.775125	-40.4	-24.1	-16.3	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	27 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.30 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	35 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.48 dB	0.50 dB

TEST REPORT

Ant 2 NHT 20
Band Edge high (2462 MHz; 0.000 dBm; 20 MHz)

Result

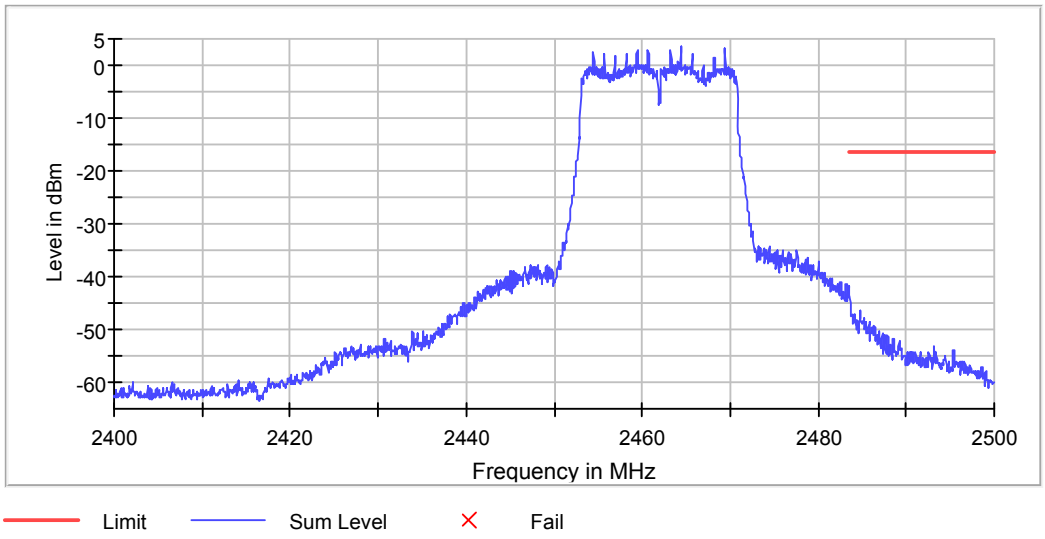
DUT Frequency (MHz)	Result
2462.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2464.436415	3.5

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.574773	-43.7	-27.4	-16.3	PASS
2483.524924	-43.8	-27.5	-16.3	PASS
2483.624622	-45.0	-28.7	-16.3	PASS
2484.771148	-46.3	-30.0	-16.3	PASS
2484.820997	-46.6	-30.3	-16.3	PASS
2483.873867	-47.2	-30.9	-16.3	PASS
2484.123112	-47.2	-30.9	-16.3	PASS
2484.172961	-47.4	-31.1	-16.3	PASS
2483.824018	-47.4	-31.1	-16.3	PASS
2483.674471	-47.6	-31.3	-16.3	PASS
2483.724320	-47.6	-31.3	-16.3	PASS
2483.774169	-47.6	-31.3	-16.3	PASS
2484.721299	-47.7	-31.4	-16.3	PASS
2483.923716	-47.8	-31.5	-16.3	PASS
2484.073263	-47.8	-31.5	-16.3	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	48 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.42 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
Sweeptime	18.945 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

Ant 1 NHT40
Band Edge low (2422 MHz; 0.000 dBm; 40 MHz)

Result

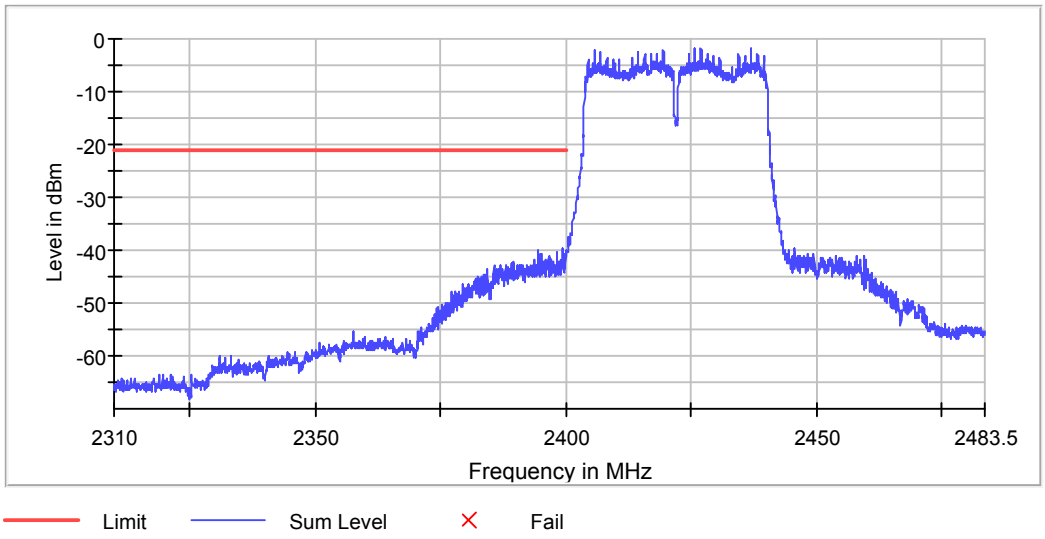
DUT Frequency (MHz)	Result
2422.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2426.958857	-1.6

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.425319	-39.8	-18.9	-20.9	PASS
2394.428096	-40.1	-19.2	-20.9	PASS
2398.176013	-40.3	-19.4	-20.9	PASS
2399.375347	-40.3	-19.4	-20.9	PASS
2398.225986	-40.4	-19.5	-20.9	PASS
2399.475292	-40.4	-19.5	-20.9	PASS
2394.478068	-40.5	-19.6	-20.9	PASS
2399.725153	-40.7	-19.8	-20.9	PASS
2395.027762	-40.7	-19.8	-20.9	PASS
2399.775125	-40.8	-19.9	-20.9	PASS
2395.077735	-40.9	-20.0	-20.9	PASS
2394.378123	-41.0	-20.1	-20.9	PASS
2396.576902	-41.1	-20.2	-20.9	PASS
2396.626874	-41.2	-20.3	-20.9	PASS
2396.926707	-41.5	-20.6	-20.9	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	52 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.18 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	60 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.46 dB	0.50 dB

TEST REPORT

Ant 1 NHT40
Band Edge high (2452 MHz; 0.000 dBm; 40 MHz)

Result

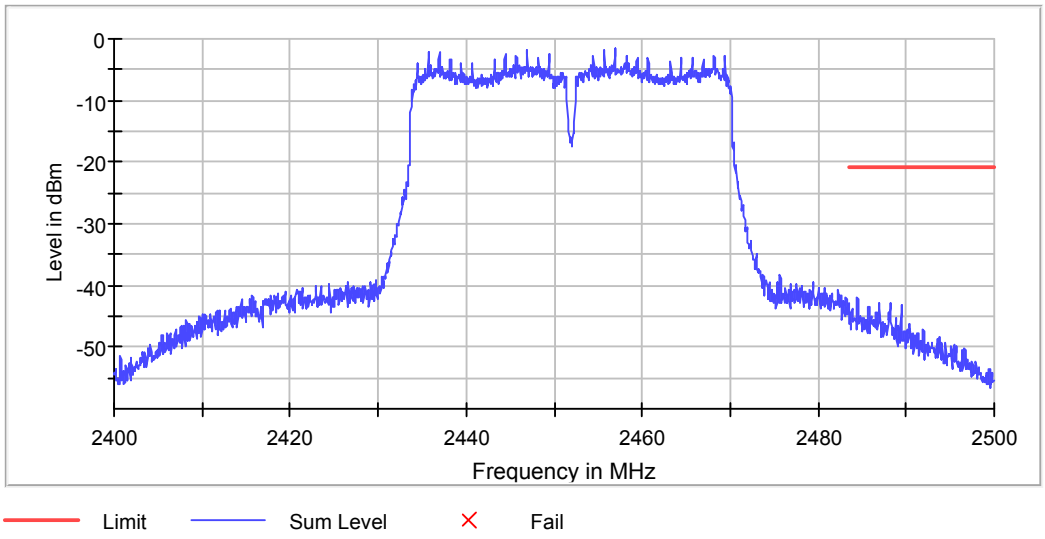
DUT Frequency (MHz)	Result
2452.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2456.940904	-1.7

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2484.472054	-41.8	-21.0	-20.8	PASS
2484.521903	-42.3	-21.5	-20.8	PASS
2484.422205	-42.7	-21.9	-20.8	PASS
2486.964502	-43.0	-22.2	-20.8	PASS
2488.210725	-43.0	-22.2	-20.8	PASS
2489.456949	-43.1	-22.3	-20.8	PASS
2488.260574	-43.3	-22.5	-20.8	PASS
2485.718278	-43.3	-22.5	-20.8	PASS
2485.768127	-43.5	-22.7	-20.8	PASS
2489.506798	-43.6	-22.8	-20.8	PASS
2486.914653	-43.7	-22.9	-20.8	PASS
2487.014350	-43.7	-22.9	-20.8	PASS
2488.160876	-43.8	-23.0	-20.8	PASS
2483.873867	-43.8	-23.0	-20.8	PASS
2483.824018	-44.3	-23.5	-20.8	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	53 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.42 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
Sweeptime	18.945 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	10 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

Ant 2 NHT 40
Band Edge low (2422 MHz; 0.000 dBm; 40 MHz)

Result

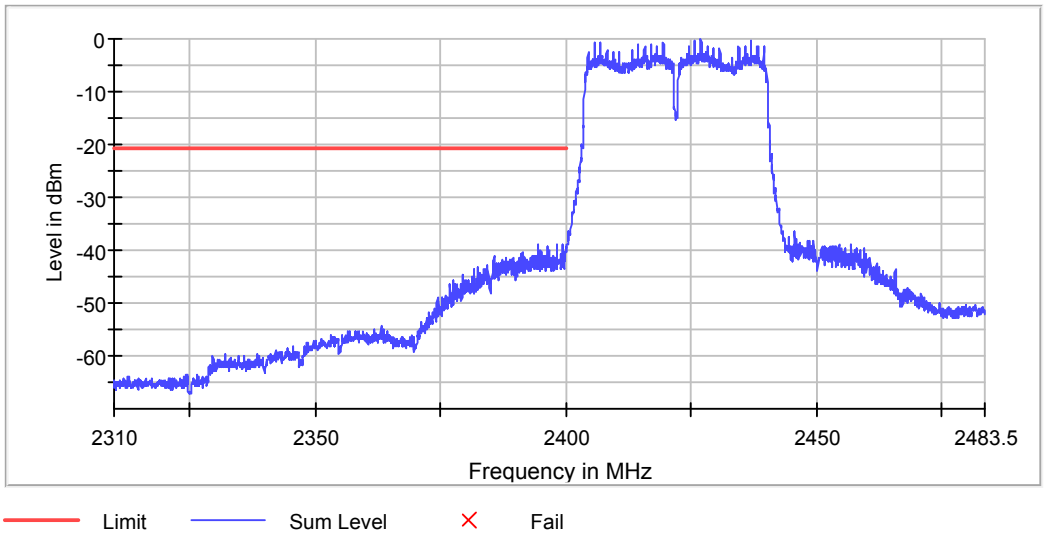
DUT Frequency (MHz)	Result
2422.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2426.958857	-0.1

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.425319	-38.8	-18.2	-20.6	PASS
2398.176013	-38.9	-18.3	-20.6	PASS
2399.375347	-38.9	-18.3	-20.6	PASS
2398.225986	-38.9	-18.3	-20.6	PASS
2394.428096	-39.1	-18.5	-20.6	PASS
2396.327041	-39.4	-18.8	-20.6	PASS
2399.475292	-39.6	-19.0	-20.6	PASS
2394.478068	-39.6	-19.0	-20.6	PASS
2396.277068	-39.7	-19.1	-20.6	PASS
2394.378123	-39.9	-19.3	-20.6	PASS
2395.027762	-40.0	-19.4	-20.6	PASS
2396.576902	-40.1	-19.5	-20.6	PASS
2395.077735	-40.2	-19.6	-20.6	PASS
2399.725153	-40.3	-19.7	-20.6	PASS
2399.775125	-40.4	-19.8	-20.6	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	52 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.31 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	0.000 dBm	-10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	48 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.41 dB	0.50 dB

TEST REPORT

Ant 2 NHT 40
Band Edge high (2452 MHz; 0.000 dBm; 40 MHz)

Result

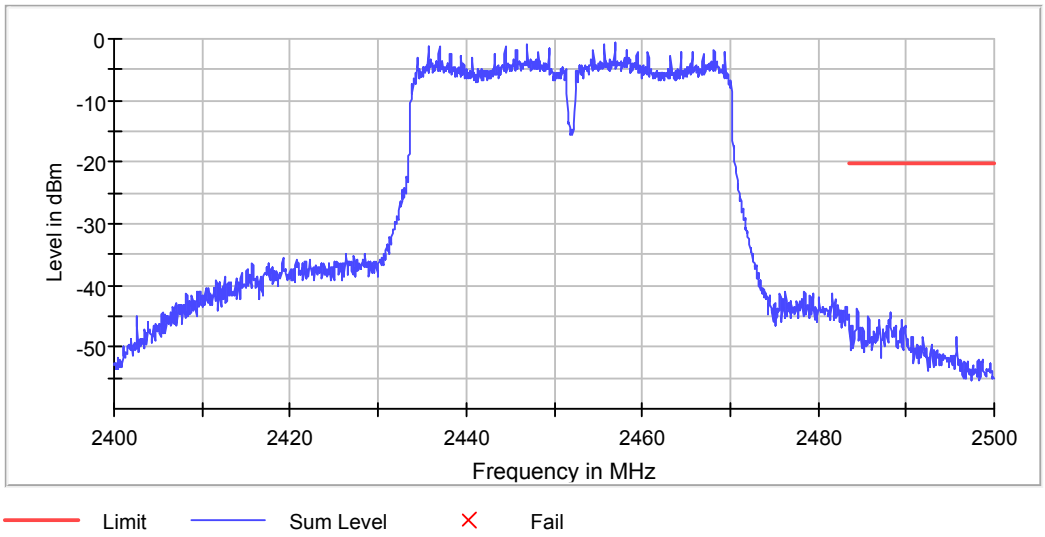
DUT Frequency (MHz)	Result
2452.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2456.940904	-0.8

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2484.472054	-43.7	-23.4	-20.3	PASS
2488.210725	-44.3	-24.0	-20.3	PASS
2484.422205	-44.3	-24.0	-20.3	PASS
2484.521903	-44.3	-24.0	-20.3	PASS
2488.260574	-44.4	-24.1	-20.3	PASS
2485.718278	-45.1	-24.8	-20.3	PASS
2488.160876	-45.3	-25.0	-20.3	PASS
2485.768127	-45.6	-25.3	-20.3	PASS
2488.061178	-45.7	-25.4	-20.3	PASS
2489.456949	-45.7	-25.4	-20.3	PASS
2486.964502	-45.8	-25.5	-20.3	PASS
2485.668429	-45.8	-25.5	-20.3	PASS
2489.506798	-46.1	-25.8	-20.3	PASS
2488.111027	-46.2	-25.9	-20.3	PASS
2487.014350	-46.2	-25.9	-20.3	PASS



Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO

TEST REPORT

Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	54 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.36 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
Sweeptime	18.945 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

TEST REPORT

Ant 1 BLE
Band Edge low (2402 MHz; 0 (0 dBm); 2 MHz)

Result

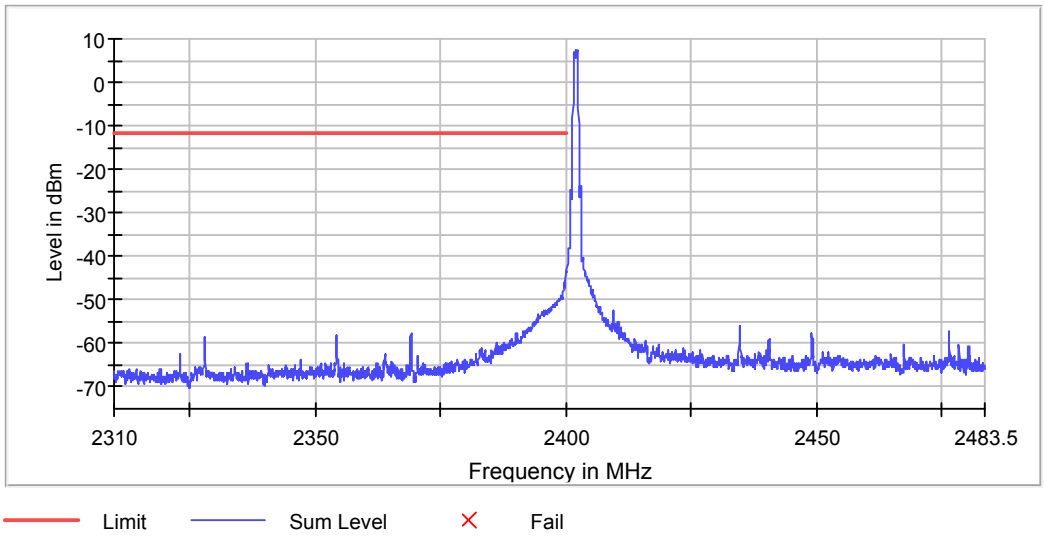
DUT Frequency (MHz)	Result
2402.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2401.973818	7.4

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.725153	-46.0	-34.2	-11.8	PASS
2399.675180	-46.1	-34.3	-11.8	PASS
2399.925042	-46.2	-34.4	-11.8	PASS
2399.775125	-46.3	-34.5	-11.8	PASS
2399.625208	-46.8	-35.0	-11.8	PASS
2399.825097	-47.1	-35.3	-11.8	PASS
2399.875069	-47.1	-35.3	-11.8	PASS
2399.575236	-47.8	-36.0	-11.8	PASS
2399.425319	-48.1	-36.3	-11.8	PASS
2399.475292	-48.1	-36.3	-11.8	PASS
2399.375347	-48.1	-36.3	-11.8	PASS
2399.525264	-48.2	-36.4	-11.8	PASS
2399.175458	-49.1	-37.3	-11.8	PASS
2399.125486	-49.1	-37.3	-11.8	PASS
2399.325375	-49.2	-37.4	-11.8	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.01 dB	0.50 dB

TEST REPORT

Ant 1 BLE
Band Edge high (2480 MHz; 0 (0 dBm); 2 MHz)

Result

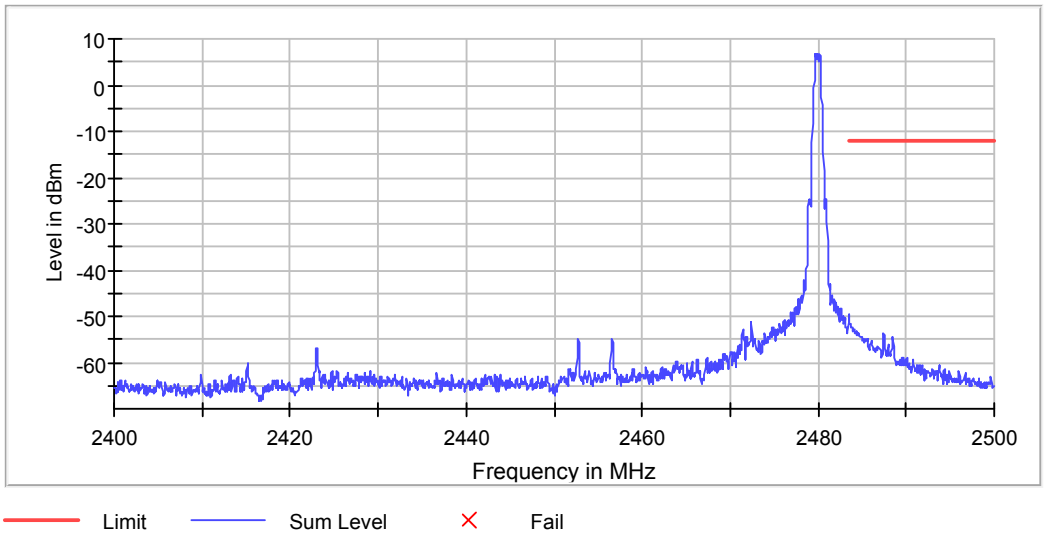
DUT Frequency (MHz)	Result
2480.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2479.927139	6.9

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.524924	-51.5	-39.4	-12.1	PASS
2483.574773	-51.7	-39.6	-12.1	PASS
2483.624622	-51.8	-39.7	-12.1	PASS
2483.674471	-52.1	-40.0	-12.1	PASS
2483.724320	-52.3	-40.2	-12.1	PASS
2483.824018	-52.4	-40.3	-12.1	PASS
2483.774169	-52.4	-40.3	-12.1	PASS
2483.873867	-52.5	-40.4	-12.1	PASS
2484.023414	-52.8	-40.7	-12.1	PASS
2484.073263	-52.9	-40.8	-12.1	PASS
2483.973565	-53.0	-40.9	-12.1	PASS
2483.923716	-53.1	-41.0	-12.1	PASS
2484.123112	-53.3	-41.2	-12.1	PASS
2484.372356	-53.4	-41.3	-12.1	PASS
2484.322508	-53.4	-41.3	-12.1	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.37 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
Sweeptime	18.945 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	10 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Ant 2 BLE
Band Edge low (2402 MHz; 0 (0 dBm); 2 MHz)

Test according to FCC title 47 part 15 §15.247(d), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

Result

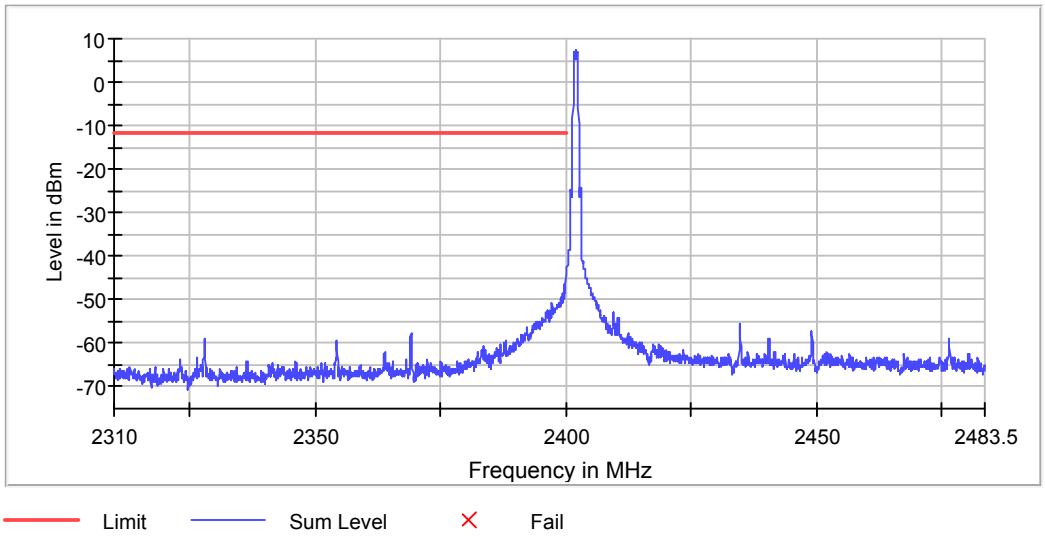
DUT Frequency (MHz)	Result
2402.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2401.973818	7.3

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.725153	-46.2	34.5	-11.7	PASS
2399.775125	-46.3	34.6	-11.7	PASS
2399.675180	-46.8	35.1	-11.7	PASS
2399.925042	-47.1	35.4	-11.7	PASS
2399.825097	-47.7	36.0	-11.7	PASS
2399.875069	-48.4	36.7	-11.7	PASS
2399.625208	-48.5	36.8	-11.7	PASS
2399.475292	-48.7	37.0	-11.7	PASS
2399.425319	-48.7	37.0	-11.7	PASS
2399.375347	-49.2	37.5	-11.7	PASS
2399.175458	-49.3	37.6	-11.7	PASS
2399.525264	-49.3	37.6	-11.7	PASS
2399.225430	-49.5	37.8	-11.7	PASS
2399.125486	-49.6	37.9	-11.7	PASS
2398.975569	-49.9	38.2	-11.7	PASS



Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz

VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.01 dB	0.50 dB

TEST REPORT

Ant 2 BLE
Band Edge high (2480 MHz; 0 (0 dBm); 2 MHz)

Result

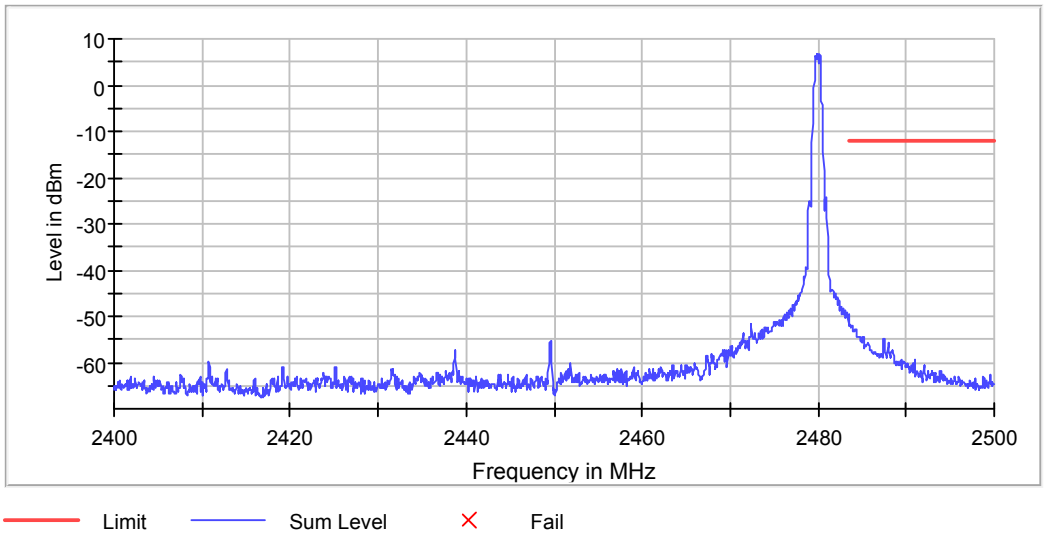
DUT Frequency (MHz)	Result
2480.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2479.927139	6.8

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.574773	-51.8	-39.7	-12.1	PASS
2483.824018	-51.9	-39.8	-12.1	PASS
2483.524924	-51.9	-39.8	-12.1	PASS
2483.774169	-51.9	-39.8	-12.1	PASS
2483.624622	-52.1	-40.0	-12.1	PASS
2483.873867	-52.2	-40.1	-12.1	PASS
2483.674471	-52.4	-40.3	-12.1	PASS
2483.724320	-52.5	-40.4	-12.1	PASS
2484.222810	-52.7	-40.6	-12.1	PASS
2484.272659	-52.8	-40.7	-12.1	PASS
2483.923716	-52.8	-40.7	-12.1	PASS
2484.172961	-53.0	-40.9	-12.1	PASS
2484.322508	-53.2	-41.1	-12.1	PASS
2484.073263	-53.2	-41.1	-12.1	PASS
2484.123112	-53.2	-41.1	-12.1	PASS



TEST REPORT

Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.35 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
Sweeptime	18.945 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

4.5 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

FS = RA + AF + CF - AG + PD + AV

Where FS = Field Strength in dBμV/m
RA = Receiver Amplitude (including preamplifier) in dBμV
CF = Cable Attenuation Factor in dB
AF = Antenna Factor in dB
AG = Amplifier Gain in dB
PD = Pulse Desensitization in dB
AV = Average Factor in -dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

FS = RA + AF + CF - AG + PD + AV

Example
Assume a receiver reading of 62.0 dBμV is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29.0 dB is subtracted. The pulse desensitization factor of the spectrum analyzer is 0.0 dB, and the resultant average factor is -10.0 dB. The net field strength for comparison to the appropriate emission limit is 32.0 dBμV/m. This value in dBμV/m is converted to its corresponding level in μV/m.

RA = 62.0 dBμV
AF = 7.4 dB
CF = 1.6 dB
AG = 29.0 dB
PD = 0.0 dB
AV = -10 dB

FS = 62.0 + 7.4 + 1.6 – 29.0 + 0.0 + (-10.0) = 32.0 dBμV/m

Level in μV/m = Common Antilogarithm [(32.0 dBμV/m)/20] = 39.8 μV/m

TEST REPORT

4.6 Transmitter Radiated Emissions in Restricted Bands and Spurious Emissions

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included.

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

4.6.1 Radiated Emission Configuration Photograph

Worst Case Restricted Band Radiated Emission
at

12200MHz

The worst case radiated emission configuration photographs are saved with filename: config photos.pdf

4.6.2 Radiated Emission Data

The data in tables 1-31 list the significant emission frequencies, the limit and the margin of compliance.

Judgement -

Passed by 0.2 dB margin

TEST REPORT

RADIATED EMISSION DATA

Antenna 1
Mode: TX-Channel 01

Table 1
IEEE 802.11b (DSSS, 1 Mbps)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4824.000***	***44.1***	***33***	***34.9***	***46.0***	***54.0***	***-8.0***
H	***12060.000***	***42.6***	***33***	***40.5***	***50.1***	***54.0***	***-3.9***
H	***14472.000***	***45.2***	***33***	***40.0***	***52.2***	***54.0***	***-1.8***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4824.000***	***44.1***	***33***	***34.9***	***46.0***	***74.0***	***-28.0***
H	***12060.000***	***42.6***	***33***	***40.5***	***50.1***	***74.0***	***-23.9***
H	***14472.000***	***45.2***	***33***	***40.0***	***52.2***	***74.0***	***-21.8***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: TX-Channel 06

Table 2
IEEE 802.11b (DSSS, 1 Mbps)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4874.000***	***44.9***	***33***	***34.9***	***46.8***	***54.0***	***-7.2***
H	***7311.000***	***43.0***	***33***	***37.9***	***47.9***	***54.0***	***-6.1***
H	***12185.000***	***42.9***	***33***	***40.5***	***50.4***	***54.0***	***-3.6***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4874.000***	***44.9***	***33***	***34.9***	***46.8***	***74.0***	***-27.2***
H	***7311.000***	***43.0***	***33***	***37.9***	***47.9***	***74.0***	***-26.1***
H	***12185.000***	***42.9***	***33***	***40.5***	***50.4***	***74.0***	***-23.6***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: TX-Channel 11

Table 3
IEEE 802.11b (DSSS, 1 Mbps)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4924.000***	***44.9***	***33***	***34.9***	***46.8***	***54.0***	***-7.2***
H	***7386.000***	***43.3***	***33***	***37.9***	***48.2***	***54.0***	***-5.8***
H	***12310.000***	***42.9***	***33***	***40.5***	***50.4***	***54.0***	***-3.6***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4924.000***	***44.9***	***33***	***34.9***	***46.8***	***74.0***	***-27.2***
H	***7386.000***	***43.3***	***33***	***37.9***	***48.2***	***74.0***	***-25.8***
H	***12310.000***	***42.9***	***33***	***40.5***	***50.4***	***74.0***	***-23.6***

NOTES:

1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: TX-Channel 01

Table 4
IEEE 802.11g (OFDM, 6 Mbps)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	***4824.000***	***39.3***	***33***	***34.9***	***41.2***	***54.0***	***-12.8***
H	***12060.000***	***44.7***	***33***	***40.5***	***52.2***	***54.0***	***-1.8***
H	***14472.000***	***46.3***	***33***	***40.0***	***53.3***	***54.0***	***-0.7***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	***4824.000***	***39.3***	***33***	***34.9***	***41.2***	***74.0***	***-32.8***
H	***12060.000***	***44.7***	***33***	***40.5***	***52.2***	***74.0***	***-21.8***
H	***14472.000***	***46.3***	***33***	***40.0***	***53.3***	***74.0***	***-20.7***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: TX-Channel 06

Table 5
IEEE 802.11g (OFDM, 6 Mbps)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	***4874.000***	***50.5***	***33***	***34.9***	***52.4***	***54.0***	***-1.6***
H	***7311.000***	***45.8***	***33***	***37.9***	***50.7***	***54.0***	***-3.3***
H	***12185.000***	***44.0***	***33***	***40.5***	***51.5***	***54.0***	***-2.5***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	***4874.000***	***50.5***	***33***	***34.9***	***52.4***	***74.0***	***-21.6***
H	***7311.000***	***45.8***	***33***	***37.9***	***50.7***	***74.0***	***-23.3***
H	***12185.000***	***44.0***	***33***	***40.5***	***51.5***	***74.0***	***-22.5***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: TX-Channel 11

Table 6
IEEE 802.11g (OFDM, 6 Mbps)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	***4924.000***	***44.9***	***33***	***34.9***	***46.8***	***54.0***	***-7.2***
H	***7386.000***	***46.3***	***33***	***37.9***	***51.2***	***54.0***	***-2.8***
H	***12310.000***	***45.0***	***33***	***40.5***	***52.5***	***54.0***	***-1.5***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	***4924.000***	***44.9***	***33***	***34.9***	***46.8***	***74.0***	***-27.2***
H	***7386.000***	***46.3***	***33***	***37.9***	***51.2***	***74.0***	***-22.8***
H	***12310.000***	***45.0***	***33***	***40.5***	***52.5***	***74.0***	***-21.5***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: TX-Channel 01

Table 7
IEEE 802.11n (20MHz) (OFDM, MCS0)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4824.000***	***39.8***	***33***	***34.9***	***41.7***	***54.0***	***-12.3***
H	***12060.000***	***44.2***	***33***	***40.5***	***51.7***	***54.0***	***-2.3***
H	***14472.000***	***45.4***	***33***	***40.0***	***52.4***	***54.0***	***-1.6***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4824.000***	***39.8***	***33***	***34.9***	***41.7***	***74.0***	***-32.3***
H	***12060.000***	***44.2***	***33***	***40.5***	***51.7***	***74.0***	***-22.3***
H	***14472.000***	***45.4***	***33***	***40.0***	***52.4***	***74.0***	***-21.6***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: TX-Channel 06

Table 8
IEEE 802.11n (20MHz) (OFDM, MCS0)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4874.000***	***51.4***	***33***	***34.9***	***53.3***	***54.0***	***-0.7***
H	***7311.000***	***44.4***	***33***	***37.9***	***49.3***	***54.0***	***-4.7***
H	***12185.000***	***43.9***	***33***	***40.5***	***51.4***	***54.0***	***-2.6***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4874.000***	***51.4***	***33***	***34.9***	***53.3***	***74.0***	***-20.7***
H	***7311.000***	***44.4***	***33***	***37.9***	***49.3***	***74.0***	***-24.7***
H	***12185.000***	***43.9***	***33***	***40.5***	***51.4***	***74.0***	***-22.6***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: TX-Channel 11

Table 9
IEEE 802.11n (20MHz) (OFDM, MCS0)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4924.000***	***37.6***	***33***	***34.9***	***39.5***	***54.0***	***-14.5***
H	***7386.000***	***44.7***	***33***	***37.9***	***49.6***	***54.0***	***-4.4***
H	***12310.000***	***43.9***	***33***	***40.5***	***51.4***	***54.0***	***-2.6***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4924.000***	***37.6***	***33***	***34.9***	***39.5***	***74.0***	***-34.5***
H	***7386.000***	***44.7***	***33***	***37.9***	***49.6***	***74.0***	***-24.4***
H	***12310.000***	***43.9***	***33***	***40.5***	***51.4***	***74.0***	***-22.6***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: TX-Channel 01

Table 10
IEEE 802.11n (40MHz) (OFDM, MCS0)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4844.000***	***38.4***	***33***	***34.9***	***40.3***	***54.0***	***-13.7***
H	***7266.000***	***43.6***	***33***	***37.9***	***48.5***	***54.0***	***-5.5***
H	***12110.000***	***45.1***	***33***	***40.5***	***52.6***	***54.0***	***-1.4***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4844.000***	***38.4***	***33***	***34.9***	***40.3***	***74.0***	***-33.7***
H	***7266.000***	***43.6***	***33***	***37.9***	***48.5***	***74.0***	***-25.5***
H	***12110.000***	***45.1***	***33***	***40.5***	***52.6***	***74.0***	***-21.4***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: TX-Channel 06

Table 11
IEEE 802.11n (40MHz) (OFDM, MCS0)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4859.000***	***38.6***	***33***	***34.9***	***40.5***	***54.0***	***-13.5***
H	***7281.000***	***45.4***	***33***	***37.9***	***50.3***	***54.0***	***-3.7***
H	***12125.000***	***44.6***	***33***	***40.5***	***52.1***	***54.0***	***-1.9***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4859.000***	***38.6***	***33***	***34.9***	***40.5***	***74.0***	***-33.5***
H	***7281.000***	***45.4***	***33***	***37.9***	***50.3***	***74.0***	***-23.7***
H	***12125.000***	***44.6***	***33***	***40.5***	***52.1***	***74.0***	***-21.9***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: TX-Channel 11

Table 12
IEEE 802.11n (40MHz) (OFDM, MCS0)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4874.000***	***38.6***	***33***	***34.9***	***40.5***	***54.0***	***-13.5***
H	***12140.000***	***44.2***	***33***	***40.5***	***51.7***	***54.0***	***-2.3***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4874.000***	***38.6***	***33***	***34.9***	***40.5***	***74.0***	***-33.5***
H	***12140.000***	***44.2***	***33***	***40.5***	***51.7***	***74.0***	***-22.3***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: 2402MHz

Table 13
BLE

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4804.000***	***40.2***	***33***	***34.9***	***42.1***	***54.0***	***-11.9***
V	***12010.000***	***44.6***	***33***	***40.5***	***52.1***	***54.0***	***-1.9***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4804.000***	***40.2***	***33***	***34.9***	***42.1***	***74.0***	***-31.9***
V	***12010.000***	***44.6***	***33***	***40.5***	***52.1***	***74.0***	***-21.9***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: 2440MHz

Table 14
BLE

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4880.000***	***40.9***	***33***	***34.9***	***42.8***	***54.0***	***-11.2***
H	***7320.000***	***44.6***	***33***	***37.9***	***49.5***	***54.0***	***-4.5***
V	***12200.000***	***44.4***	***33***	***40.5***	***51.9***	***54.0***	***-2.1***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4880.000***	***40.9***	***33***	***34.9***	***42.8***	***74.0***	***-31.2***
H	***7320.000***	***44.6***	***33***	***37.9***	***49.5***	***74.0***	***-24.5***
V	***12200.000***	***44.4***	***33***	***40.5***	***51.9***	***74.0***	***-22.1***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: 2480MHz

Table 15
BLE

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4960.000***	***41.8***	***33***	***34.9***	***43.7***	***54.0***	***-10.3***
H	***7440.000***	***44.3***	***33***	***37.9***	***49.2***	***54.0***	***-4.8***
V	***12400.000***	***44.3***	***33***	***40.5***	***51.8***	***54.0***	***-2.2***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4960.000***	***41.8***	***33***	***34.9***	***43.7***	***74.0***	***-30.3***
H	***7440.000***	***44.3***	***33***	***37.9***	***49.2***	***74.0***	***-24.8***
V	***12400.000***	***44.3***	***33***	***40.5***	***51.8***	***74.0***	***-22.2***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: TX-Channel 01

Table 16
IEEE 802.11b (DSSS, 1 Mbps)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4824.000***	***40.5***	***33***	***34.9***	***42.4***	***54.0***	***-11.6***
H	***12060.000***	***43.3***	***33***	***40.5***	***50.8***	***54.0***	***-3.2***
H	***14472.000***	***45.8***	***33***	***40.0***	***52.8***	***54.0***	***-1.2***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4824.000***	***40.5***	***33***	***34.9***	***42.4***	***74.0***	***-31.6***
H	***12060.000***	***43.3***	***33***	***40.5***	***50.8***	***74.0***	***-23.2***
H	***14472.000***	***45.8***	***33***	***40.0***	***52.8***	***74.0***	***-21.2***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: TX-Channel 06

Table 17
IEEE 802.11b (DSSS, 1 Mbps)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4874.000***	***40.9***	***33***	***34.9***	***42.8***	***54.0***	***-11.2***
H	***7311.000***	***42.0***	***33***	***37.9***	***46.9***	***54.0***	***-7.1***
H	***12185.000***	***41.9***	***33***	***40.5***	***49.4***	***54.0***	***-4.6***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4874.000***	***40.9***	***33***	***34.9***	***42.8***	***74.0***	***-31.2***
H	***7311.000***	***42.0***	***33***	***37.9***	***46.9***	***74.0***	***-27.1***
H	***12185.000***	***41.9***	***33***	***40.5***	***49.4***	***74.0***	***-24.6***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: TX-Channel 11

Table 18
IEEE 802.11b (DSSS, 1 Mbps)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4924.000***	***43.9***	***33***	***34.9***	***45.8***	***54.0***	***-8.2***
H	***7386.000***	***43.2***	***33***	***37.9***	***48.1***	***54.0***	***-5.9***
H	***12310.000***	***43.0***	***33***	***40.5***	***50.5***	***54.0***	***-3.5***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4924.000***	***43.9***	***33***	***34.9***	***45.8***	***74.0***	***-28.2***
H	***7386.000***	***43.2***	***33***	***37.9***	***48.1***	***74.0***	***-25.9***
H	***12310.000***	***43.0***	***33***	***40.5***	***50.5***	***74.0***	***-23.5***

NOTES:

1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: TX-Channel 01

Table 19
IEEE 802.11g (OFDM, 6 Mbps)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	***4824.000***	***40.5***	***33***	***34.9***	***42.4***	***54.0***	***-11.6***
H	***12060.000***	***43.7***	***33***	***40.5***	***51.2***	***54.0***	***-2.8***
H	***14472.000***	***45.4***	***33***	***40.0***	***52.4***	***54.0***	***-1.6***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	***4824.000***	***40.5***	***33***	***34.9***	***42.4***	***74.0***	***-31.6***
H	***12060.000***	***43.7***	***33***	***40.5***	***51.2***	***74.0***	***-22.8***
H	***14472.000***	***45.4***	***33***	***40.0***	***52.4***	***74.0***	***-21.6***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: TX-Channel 06

Table 20
IEEE 802.11g (OFDM, 6 Mbps)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	***4874.000***	***50.5***	***33***	***34.9***	***52.4***	***54.0***	***-1.6***
H	***7311.000***	***45.8***	***33***	***37.9***	***50.7***	***54.0***	***-3.3***
H	***12185.000***	***44.0***	***33***	***40.5***	***51.5***	***54.0***	***-2.5***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	***4874.000***	***50.5***	***33***	***34.9***	***52.4***	***74.0***	***-21.6***
H	***7311.000***	***45.8***	***33***	***37.9***	***50.7***	***74.0***	***-23.3***
H	***12185.000***	***44.0***	***33***	***40.5***	***51.5***	***74.0***	***-22.5***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: TX-Channel 11

Table 21
IEEE 802.11g (OFDM, 6 Mbps)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	***4924.000***	***43.9***	***33***	***34.9***	***45.8***	***54.0***	***-8.2***
H	***7386.000***	***46.5***	***33***	***37.9***	***51.4***	***54.0***	***-2.6***
H	***12310.000***	***45.1***	***33***	***40.5***	***52.6***	***54.0***	***-1.4***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	***4924.000***	***43.9***	***33***	***34.9***	***45.8***	***74.0***	***-28.2***
H	***7386.000***	***46.5***	***33***	***37.9***	***51.4***	***74.0***	***-22.6***
H	***12310.000***	***45.1***	***33***	***40.5***	***52.6***	***74.0***	***-21.4***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: TX-Channel 01

Table 22
IEEE 802.11n (20MHz) (OFDM, MCS0)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4824.000***	***39.7***	***33***	***34.9***	***41.6***	***54.0***	***-12.4***
H	***7236.000***	***44.2***	***33***	***37.9***	***49.1***	***54.0***	***-4.9***
H	***12060.000***	***45.2***	***33***	***40.5***	***52.7***	***54.0***	***-1.3***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4824.000***	***39.7***	***33***	***34.9***	***41.6***	***74.0***	***-32.4***
H	***7236.000***	***44.2***	***33***	***37.9***	***49.1***	***74.0***	***-24.9***
H	***12060.000***	***45.2***	***33***	***40.5***	***52.7***	***74.0***	***-21.3***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: TX-Channel 06

Table 23
IEEE 802.11n (20MHz) (OFDM, MCS0)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4874.000***	***40.3***	***33***	***34.9***	***42.2***	***54.0***	***-11.8***
H	***7311.000***	***44.5***	***33***	***37.9***	***49.4***	***54.0***	***-4.6***
H	***12185.000***	***44.9***	***33***	***40.5***	***52.4***	***54.0***	***-1.6***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4874.000***	***40.3***	***33***	***34.9***	***42.2***	***74.0***	***-31.8***
H	***7311.000***	***44.5***	***33***	***37.9***	***49.4***	***74.0***	***-24.6***
H	***12185.000***	***44.9***	***33***	***40.5***	***52.4***	***74.0***	***-21.6***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: TX-Channel 11

Table 24
IEEE 802.11n (20MHz) (OFDM, MCS0)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4924.000***	***38.9***	***33***	***34.9***	***40.8***	***54.0***	***-13.2***
H	***7386.000***	***43.8***	***33***	***37.9***	***48.7***	***54.0***	***-5.3***
H	***12310.000***	***45.9***	***33***	***40.5***	***53.4***	***54.0***	***-0.6***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4924.000***	***38.9***	***33***	***34.9***	***40.8***	***74.0***	***-33.2***
H	***7386.000***	***43.8***	***33***	***37.9***	***48.7***	***74.0***	***-25.3***
H	***12310.000***	***45.9***	***33***	***40.5***	***53.4***	***74.0***	***-20.6***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: TX-Channel 01

Table 25
IEEE 802.11n (40MHz) (OFDM, MCS0)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4844.000***	***39.2***	***33***	***34.9***	***41.1***	***54.0***	***-12.9***
H	***7266.000***	***43.2***	***33***	***37.9***	***48.1***	***54.0***	***-5.9***
H	***12110.000***	***44.6***	***33***	***40.5***	***52.1***	***54.0***	***-1.9***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4844.000***	***39.2***	***33***	***34.9***	***41.1***	***74.0***	***-32.9***
H	***7266.000***	***43.2***	***33***	***37.9***	***48.1***	***74.0***	***-25.9***
H	***12110.000***	***44.6***	***33***	***40.5***	***52.1***	***74.0***	***-21.9***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: TX-Channel 06

Table 26
IEEE 802.11n (40MHz) (OFDM, MCS0)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4859.000***	***40.4***	***33***	***34.9***	***42.3***	***54.0***	***-11.7***
H	***7281.000***	***43.5***	***33***	***37.9***	***48.4***	***54.0***	***-5.6***
H	***12125.000***	***44.3***	***33***	***40.5***	***51.8***	***54.0***	***-2.2***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4859.000***	***40.4***	***33***	***34.9***	***42.3***	***74.0***	***-31.7***
H	***7281.000***	***43.5***	***33***	***37.9***	***48.4***	***74.0***	***-25.6***
H	***12125.000***	***44.3***	***33***	***40.5***	***51.8***	***74.0***	***-22.2***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: TX-Channel 11

Table 27
IEEE 802.11n (40MHz) (OFDM, MCS0)

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4874.000***	***40.9***	***33***	***34.9***	***42.8***	***54.0***	***-11.2***
H	***7296.000***	***42.8***	***33***	***37.9***	***47.7***	***54.0***	***-6.3***
H	***12140.000***	***44.9***	***33***	***40.5***	***52.4***	***54.0***	***-1.6***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4874.000***	***40.9***	***33***	***34.9***	***42.8***	***74.0***	***-31.2***
H	***7296.000***	***42.8***	***33***	***37.9***	***47.7***	***74.0***	***-26.3***
H	***12140.000***	***44.9***	***33***	***40.5***	***52.4***	***74.0***	***-21.6***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: 2402MHz

Table 28
BLE

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4804.000***	***40.0***	***33***	***34.9***	***41.9***	***54.0***	***-12.1***
V	***12010.000***	***42.7***	***33***	***40.5***	***50.2***	***54.0***	***-3.8***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4804.000***	***40.0***	***33***	***34.9***	***41.9***	***74.0***	***-32.1***
V	***12010.000***	***42.7***	***33***	***40.5***	***50.2***	***74.0***	***-23.8***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: 2440MHz

Table 29
BLE

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4880.000***	***39.9***	***33***	***34.9***	***41.8***	***54.0***	***-12.2***
H	***7320.000***	***46.5***	***33***	***37.9***	***51.4***	***54.0***	***-2.6***
V	***12200.000***	***46.3***	***33***	***40.5***	***53.8***	***54.0***	***-0.2***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4880.000***	***39.9***	***33***	***34.9***	***41.8***	***74.0***	***-32.2***
H	***7320.000***	***46.5***	***33***	***37.9***	***51.4***	***74.0***	***-22.6***
V	***12200.000***	***46.3***	***33***	***40.5***	***53.8***	***74.0***	***-20.2***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 2
Mode: 2480MHz

Table 30
BLE

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	***4960.000***	***40.4***	***33***	***34.9***	***42.3***	***54.0***	***-11.7***
H	***7440.000***	***44.1***	***33***	***37.9***	***49.0***	***54.0***	***-5.0***
V	***12400.000***	***44.3***	***33***	***40.5***	***51.8***	***54.0***	***-2.2***

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	***4960.000***	***40.4***	***33***	***34.9***	***42.3***	***74.0***	***-31.7***
H	***7440.000***	***44.1***	***33***	***37.9***	***49.0***	***74.0***	***-25.0***
V	***12400.000***	***44.3***	***33***	***40.5***	***51.8***	***74.0***	***-22.2***

NOTES:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement
3. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
7. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
8. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.

TEST REPORT

Antenna 1
Mode: BT

Table 31

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-amp (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
V	242.187	35.2	16	19.0	38.2	46.0	-7.8
H	609.817	28.5	16	29.0	41.5	46.0	-4.5
V	975.628	24.5	16	33.0	41.5	54.0	-12.5

NOTES:
1. Peak detector is used for the emission measurement.

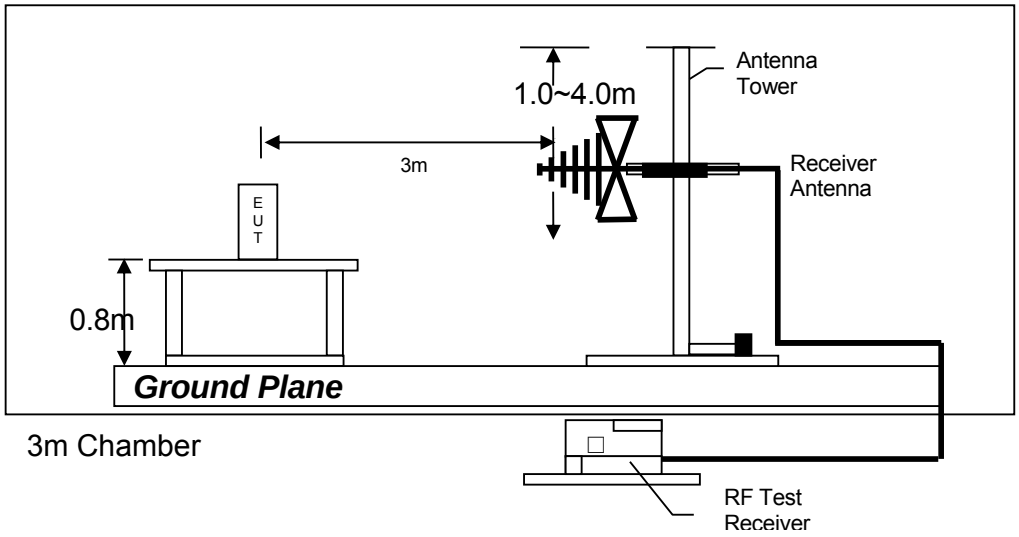
2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

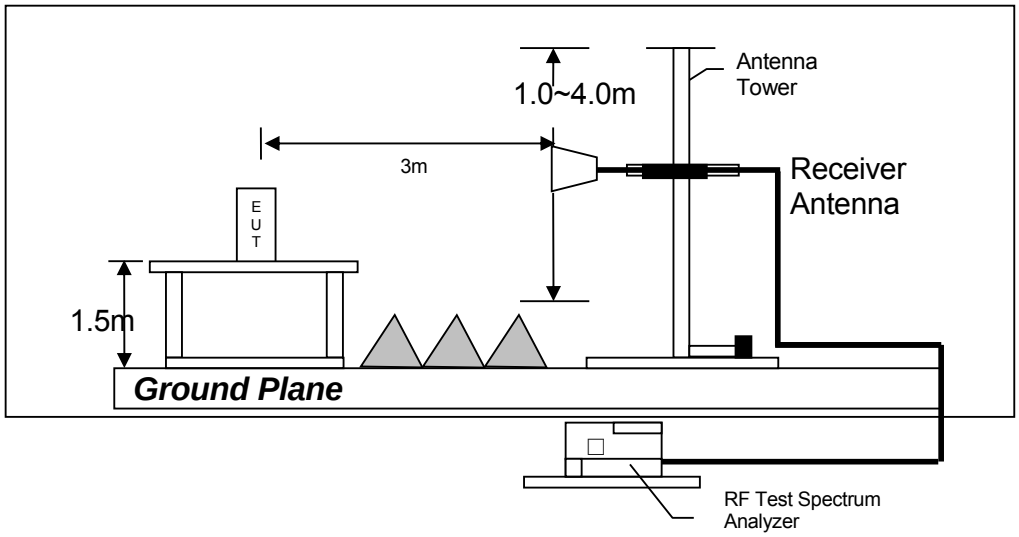
4. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.

4.6.3 Radiated Emission Test Setup

The figure below shows the test setup, which is utilized to make these measurements.



Test setup of radiated emissions up to 1GHz



Test setup of radiated emissions above 1GHz

TEST REPORT

4.6.4 Transmitter Duty Cycle Calculation

Not applicable – No average factor is required.

TEST REPORT

4.7 AC Power Line Conducted Emission

☐ Not applicable – EUT is only powered by battery for operation.

☒ EUT connects to AC power line. Emission Data is listed in following pages.

☐ Base Unit connects to AC power line and has transmission. Handset connects to AC power line but has no transmission. Emission Data of Base Unit is listed in following pages.

4.7.1 AC Power Line Conducted Emission Configuration Photograph

Worst Case Line-Conducted Configuration
at

469.5 kHz

The worst case line conducted configuration photographs are attached in the Appendix and saved with filename: config photos.pdf

4.7.2 AC Power Line Conducted Emission Data

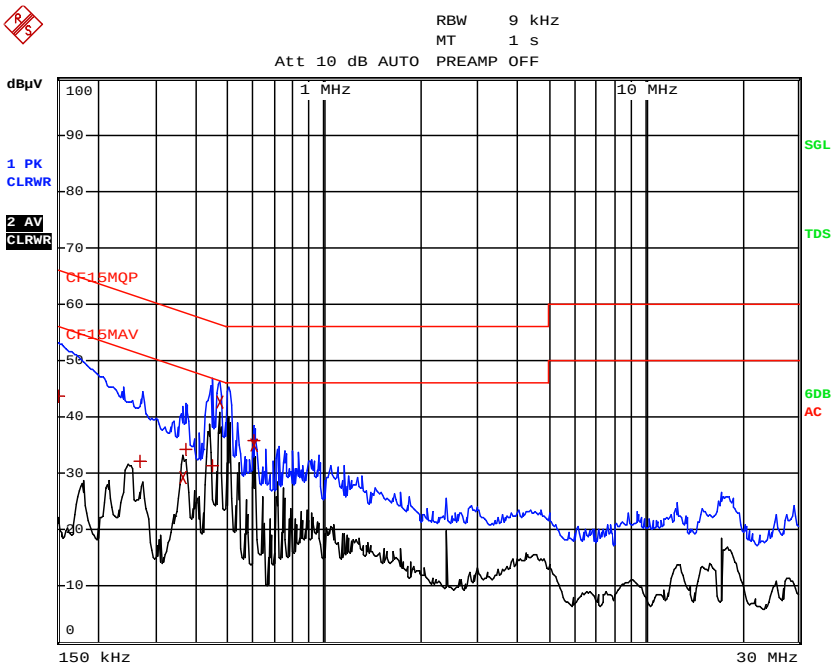
The plot(s) and data in the following pages list the significant emission frequencies, the limit and the margin of compliance.

Passed by 3.74 dB margin

TEST REPORT

AC POWER LINE CONDUCTED EMISSION

Worst Case: WiFi on



Date: 15.MAY.2017 17:00:16

TEST REPORT

Worst Case: WiFi on

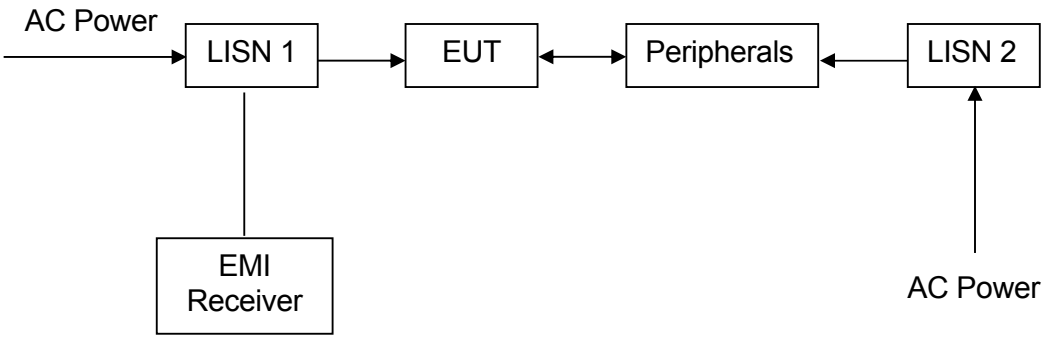
EDIT PEAK LIST (Final Measurement Results)

Trace1: CF15MQP
Trace2: CF15MAV
Trace3: ---

TRACE		FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	150 kHz	43.57	L1	-22.42
1	Quasi Peak	271.5 kHz	32.19	L1	-28.87
2	CISPR Average	361.5 kHz	29.34	L1	-19.34
1	Quasi Peak	370.5 kHz	34.31	L1	-24.17
1	Quasi Peak	447 kHz	31.31	N	-25.61
2	CISPR Average	469.5 kHz	42.77	L1	-3.74
1	Quasi Peak	600 kHz	35.89	L1	-20.10
2	CISPR Average	600 kHz	35.12	L1	-10.87

Date: 15.MAY.2017 17:00:09

4.7.3 Conducted Emission Test Setup



TEST REPORT

EXHIBIT 5 EQUIPMENT LIST

5.0 EQUIPMENT LIST

1) Radiated Emissions Test

Equipment	EMI Test Receiver	Spectrum Analyzer	Biconical Antenna
Registration No.	EW-3095	EW-2466	EW-0571
Manufacturer	R&S	R&S	EMCO
Model No.	ESCI	FSP30	3104C
Calibration Date	Oct. 25, 2016	Oct. 03, 2016	May. 18, 2016
Calibration Due Date	Oct. 25, 2017	Aug. 20, 2017	Nov. 18, 2017

Equipment	Log Periodic Antenna	Biconical Antenna	Log Periodic Antenna
Registration No.	EW-0447	EW-0571	EW-0447
Manufacturer	EMCO	EMCO	EMCO
Model No.	3146	3104C	3146
Calibration Date	May. 18, 2016	May. 18, 2016	May. 18, 2016
Calibration Due Date	Nov. 18, 2017	Nov. 18, 2017	Nov. 18, 2017

Equipment	Broad-Band Horn Antenna with frequency range 14G - 40GHz	Double Ridged Guide Antenna
Registration No.	EW-1679	EW-1015
Manufacturer	SCHWARZBECK	EMCO
Model No.	BBHA9170	3115
Calibration Date	June. 28, 2016	Apr. 26, 2016
Calibration Due Date	June. 28, 2017	Oct. 26, 2017

2) Conducted Emissions Test

Equipment	EMI Test Receiver	LISN
Registration No.	EW-2500	EW-2501
Manufacturer	R&S	R&S
Model No.	ESCI	ENV-216
Calibration Date	Nov. 17, 2016	Feb. 21, 2017
Calibration Due Date	Nov. 17, 2017	Jan. 05, 2018

3) Conductive Measurement Test

Equipment	Spectrum Analyzer
Registration No.	EW-2466
Manufacturer	R&S
Model No.	FSP30
Calibration Date	Oct. 03, 2016
Calibration Due Date	Aug. 20, 2017