

ISED CABid: ES1909
 Lab. Company Number: 4621A

Test Report No:
 NIE: 72943RRF.005A1

Test Report

USA FCC Part 15.247, 15.209

CANADA RSS-247, RSS-Gen

(*) Identification of item tested	Continuous Positive Airway Pressure (CPAP) Device
(*) Trademark	ResMed
(*) Model and /or type reference	39485
(*) Derived model not tested	39517, 39518, 39519, 39520, 39521, 39522
Other identification of the product	FCC ID: 2ACHL-AIR11M1G22 IC: 9103A-AIR11M1G22
(*) Features	LTE Cat-M1, BLE HW version: R390-7654 SW version: SW04600
Applicant	ResMed Pty Ltd 1 Elizabeth Macarthur Drive Bella Vista, NSW, 2153, Australia
Test method requested, standard	USA FCC Part 15.247 (10-1-21 Edition): Operation within the bands 902 - 928 MHz, 2400 -2483.5 MHz, and 5725 - 5850 MHz. USA FCC Part 15.209 (10-1-21 Edition): Radiated emission limits; general requirements. CANADA RSS-247 Issue 2 (February 2017). CANADA RSS-Gen Issue 5 Amendment 1 (Mar. 2019) + Amendment 2 (Feb. 2021). Guidance for Performing Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid Systems Devices Operating Under Section 15.247 of the FCC Rules. 558074 D01 Meas Guidance v05r02 dated April 2, 2019. ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Rafael López Martín EMC Consumer & RF Lab. Manager
Date of issue	2022-12-23
Report template No.	FDT08_24 (*) "Data provided by the client"

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Acronyms

Acronym ID	Acronym Description
	E.I.R.P.
# of Tx Chains	Number of Transmission Chains
26Ebw	Emission Bandwidth
Avg Power	Maximum Average Conducted Output Power
BW	Bandwidth
Detector	Detector used
Equipment	Equipment Type
Freq	Frequency
Freq Rng	Frequency Range
Inband Peak Lvl	Inband Peak Level
Lvl	Level
MP	Measurement Point
Mod	Modulation
Occ Ch BW	Occupied Channel Bandwidth
PSD	Power Spectrum Density
Pol	Polarization
Port	Active Port
Unwanted Freq	Unwanted Emissions Frequency
Unwanted Lvl	Unwanted Emissions Level

Competences and guarantees

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

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

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2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or competent Authorities.
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Uncertainty

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

The total uncertainty of the measurement system for the radiated emissions of EUT from 30 MHz to 1 GHz is:
Measurement uncertainty $\leq \pm 5.35$ dB with factor ($k = 2$).

The total uncertainty of the measurement system for the radiated emissions of EUT from 1 GHz to 17 GHz is:
Measurement uncertainty $\leq \pm 4.32$ dB with factor ($k = 2$).

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

The total uncertainty of the measurement system for the conducted testing of EUT is:

RF Average Output Power: Measurement uncertainty $\leq \pm 0.99$ dB

Power Spectral Density: Measurement uncertainty $\leq \pm 0.99$ dB

6dB Bandwidth: Measurement uncertainty $\leq \pm 2.84$ %

Occupied Channel Bandwidth: Measurement uncertainty $\leq \pm 1.17$ %

Conducted Band-edge spurious emissions: Measurement uncertainty $\leq \pm 1.76$ dB

Data provided by the client

The following data has been provided by the client:

1. Information relating to the description of the sample ("Identification of the item tested", "Trademark", "Model and/or type reference tested").
2. The sample consists of a Continuous Positive Airway Pressure (CPAP) Device. CPAP device with integrated cellular and Bluetooth connectivity.
3. Derived model not tested. These models have been declared by the supplier of the sample as being the same as the model under test.



Date: 25-Oct-2022

DECLARATION OF EQUIVALENCE

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

Model Name / Product Code	Marketing Name
39517	AirSense 11 AutoSet USA
39518	AirSense 11 CPAP USA
39519	AirSense 11 Elite USA
39520	AirSense 11 AutoSet CAN
39521	AirSense 11 CPAP CAN
39522	AirSense 11 Elite CAN

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

Applicant:

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

By,



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

DEKRA Testing and Certification S.A.U. declines any responsibility with respect to the information provided by the client and that may affect the validity of results.

Usage of samples

Samples undergoing test have been selected by: The client.

Id	Control Number	Description	Model	Serial No.	Date of Reception	Application
S/01	72943_46.1	Continuous Positive Airway Pressure Device	39485	22221830061	2022-09-19	Equipment Under Test
S/01	66427_6.1	Climate line	AIR11		2020-12-29	Equipment Under Test
S/01	72943_10.1	Water tank	HumidAir11	--	2022-08-02	Equipment Under Test
S/01	72943_18.1	AC/DC adapter	390000	0001RP02	2022-08-02	Equipment Under Test
S/01	72943_25.1	Power cord	--	--	2022-08-02	Equipment Under Test
S/02	72943_45.1	Continuous Positive Airway Pressure Device	39485	22221830059	2022-09-19	Equipment Under Test
S/02	72943_12.1	Water tank	HumidAir11	--	2022-08-02	Equipment Under Test
S/02	72943_17.1	AC/DC adapter	390000	0001R902	2022-08-02	Equipment Under Test
S/02	72943_24.1	Power cord	--	--	2022-08-02	Equipment Under Test

Notes referenced to samples during the project:

Id	Type
S/01	Sample for radiated test
S/02	Sample for conducted test

Test sample description

Ports..... :	Port name and description	Cable					
		Specified max length [m]	Attached during test	Shielded	Coupled to patient ⁽³⁾		
	Power	[X]	[]	[]		
	--	[]	[]	[]		
Supplementary information to the ports..... :	--						
Rated power supply	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	[X]	AC: 100-240V~50-60 Hz 2.0A	[X]	[]	[]	[X]	[]
	[X]	AC: 115V~400Hz 1.5A	[X]	[]	[]	[X]	[]
	[]	DC: 12V (DC-DC for Vehicle Use)					
[]	DC: 24V (DC-DC for Vehicle Use)						
Rated Power	--						
Clock frequencies.....	N/A						
Other parameters	390000 (PSU Model Number)						
Software version	SW04600 (DUT)						
Hardware version	R390-7654 (DUT)						
Dimensions in cm (W x H x D)	138.5 mm x 259.4 mm x 94.5 mm						
Mounting position	[X]	Table top equipment					
	[]	Wall/Ceiling mounted equipment					
	[]	Floor standing equipment					
	[]	Hand-held equipment					
	[]	Other:					
Modules/parts.....	Module/parts of test item		Type	Manufacturer			
	Wireless Module		EXS62-W	Thales			
	Bluetooth LE		EFR32BG22	SiLabs			
			
Accessories (not part of the test item)	Description		Type	Manufacturer			
			
Documents as provided by the applicant.....	Description		File name	Issue date			
			

⁽³⁾ Only for Medical Equipment

Identification of the client

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

Testing period and place

Test Location	DEKRA Testing and Certification S.A.U.
Date (start)	2022-09-19
Date (finish)	2022-10-21

Document history

Report number	Date	Description
72943RRF005	2022-11-25	First release.
72943RRF.005A1	2022-12-23	Second release. This report is modified due to minor typos. This modification test report cancels and replaces the test report 72943RRF005

Environmental conditions

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

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

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

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

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

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

Remarks and comments

The tests have been performed by the technical personnel: Miguel Manuel López Guzmán and Pablo Redondo Reyes.

Used instrumentation:

Control No.	Equipment	Model	Manufacturer	Next Calibration
6791	SEMIANECHOIC ABSORBER LINED CHAMBER IV	FACT 3 200 STP	ETS LINDGREN	2024-06-07
6793	SHIELDED ROOM	S101	ETS LINDGREN	N/A
7817	EMI TEST RECEIVER 2Hz-44GHz	ESW44	ROHDE AND SCHWARZ	2023-12-30
6496	HORN ANTENNA 1-18GHz	BBHA 9120 D	SCHWARZBECK	2023-08-24
4657	HORN ANTENNA 18-40GHz	BBHA 9170	SCHWARZBECK	2023-05-05
6143	HYBRID BILOG ANTENNA 30MHz-6GHz	3142E	ETS LINDGREN	2023-10-29
8856	PRE-AMPLIFIER G>30dB 18-40GHz	BLMA 1840-4A	BONN ELEKTRONIK	2023-11-02
3783	PRE-AMPLIFIER G>30dB 1GHz-18GHz	BLMA 0118-3A	BONN ELEKTRONIK	2022-12-01
6142	PRE-AMPLIFIER G>38dB 30MHz-6GHz	BLNA 0360-01N	BONN ELEKTRONIK	2023-06-16
4848	SOFTWARE FOR EMC/RF TESTING	EMC32	ROHDE AND SCHWARZ	N/A
4609	AC POWER SUPPLY	6490	CHROMA	2022-12-11
7794	SIGNAL AND SPECTRUM ANALYZER 10Hz-40GHz	FSV40	ROHDE AND SCHWARZ	2023-02-26
8848	OPEN SWITCH UNIT UP TO 7.5 GHz	OSP-B157W8 PLUS	ROHDE AND SCHWARZ	2023-08-20
7798	WMS32	WMS32	ROHDE AND SCHWARZ	N/A

Testing verdicts

Fail	F
Inconclusive	I
Not applicable	N/A
Not measured	N/M
Pass	P

Summary

Bluetooth Low Energy 5.0 (1M)

Requirement – Test case	FCC PART 15 / RSS-247	Verdict	Remark
FCC 15.247 (a) (2) / RSS-247 5.2 (a) 6 dB Bandwidth		P	--
FCC 15.247 (e) / RSS-247 5.2 (b) Power spectral density		P	--
FCC 15.247 (b) / RSS-247 5.4 (d) Maximum output power and antenna gain		P	--
FCC 15.247 (d) / RSS-247 5.5 Band-edge emissions compliance (Transmitter)		P	--
FCC 15.247 (d) / RSS-247 5.5 Emission limitations radiated (Transmitter)		P	--
<u>Supplementary information and remarks:</u> None.			

Appendix A: Test results. Bluetooth Low Energy 5.0 (1M)

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TEST CONDITIONS

(*): Data provided by the client.

POWER SUPPLY (*):

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

ANTENNA (*):

Type of Antenna: Integral.
 Maximum Declared Antenna Gain: +3.31 dBi

TEST FREQUENCIES (*):

		Power Setting for tests
Bluetooth Low Energy (1M)	Low Channel: 2402 MHz Middle Channel: 2440 MHz High Channel: 2480 MHz	0 dBm

CONDUCTED MEASUREMENTS:

The equipment under test was set up in a shielded room and connected to the TS8997 test bench using a low-loss RF cable. The reading of the spectrum analyser is corrected taking into account the cable loss.



RADIATED MEASUREMENTS:

All radiated tests were performed in a semi-anechoic chamber. The measurement antenna (Bilog antenna for the range between 30 MHz to 1000 MHz and 1 GHz-17 GHz Double ridge horn antenna) is situated at a distance of 3 m and at a distance of 1.5 m for the frequency range 17 GHz-26 GHz (17 GHz-40 GHz horn antenna).

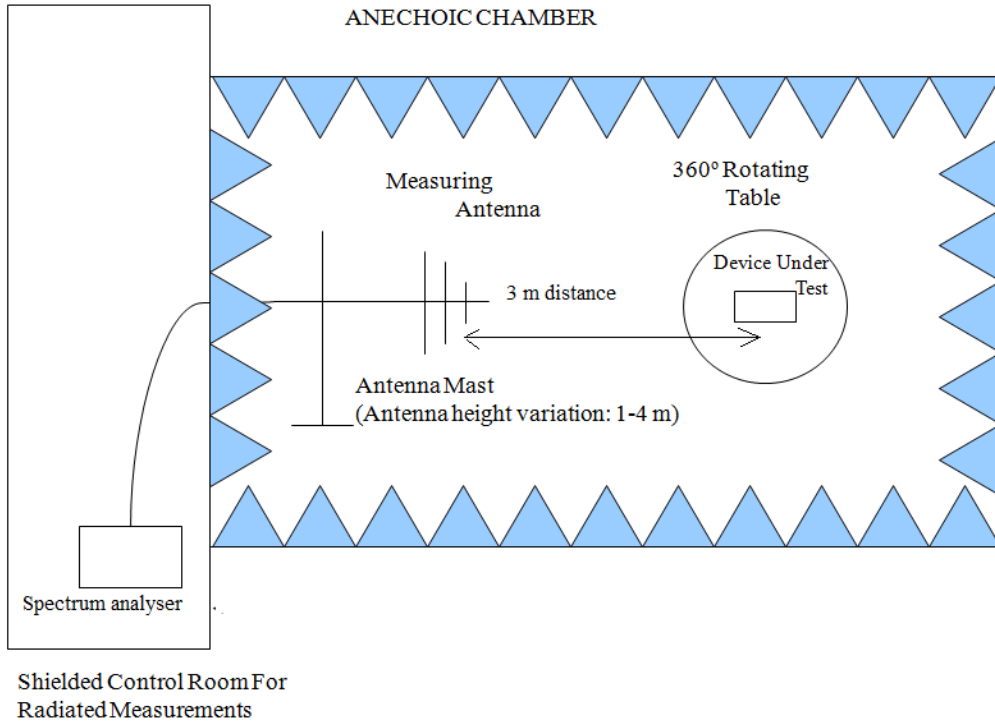
For radiated emissions in the range 17 GHz-26 GHz performed at a distance closer than the distance specified in the standard, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

The equipment under test was set up on a non-conductive platform above the ground plane and its situation and orientation were varied to find the maximum radiated emission. It was also rotated 360° and the antenna height (Bilog antenna and Double ridge horn antenna) was varied from 1 to 4 meters to find the maximum radiated emission.

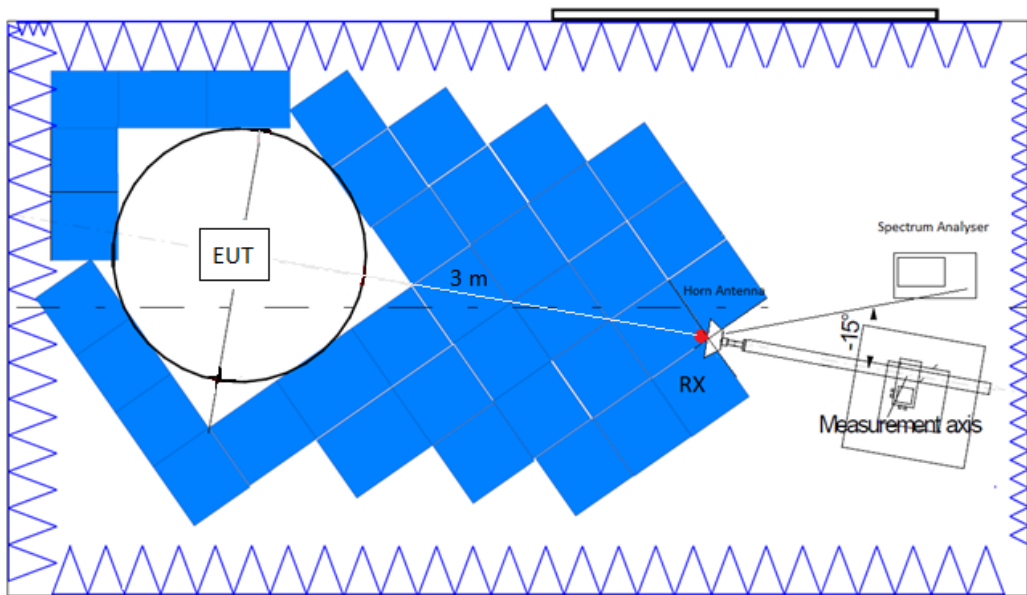
Measurements were made in both horizontal and vertical planes of polarization.

A resolution bandwidth/video bandwidth of 100 kHz / 300 kHz was used for frequencies below 1 GHz and 1 MHz / 3 MHz for frequencies above 1 GHz.

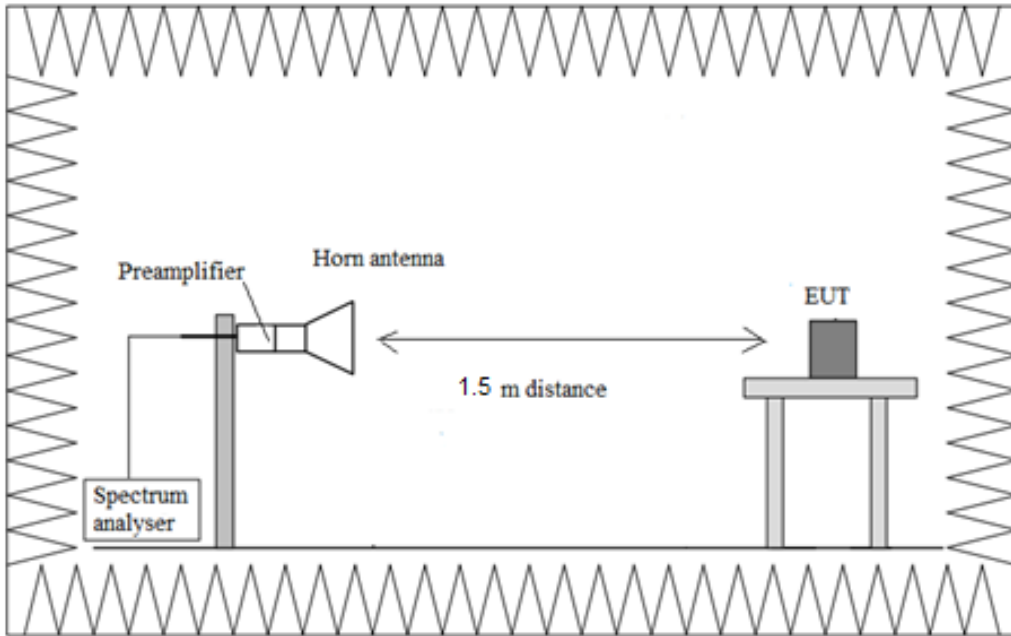
Radiated measurements setup from 30 MHz to 1 GHz:



Radiated measurements setup from 1 GHz to 17 GHz:



Radiated measurements setup $f > 17$ GHz:



TEST CASES DETAILS

Occupied Channel Bandwidth 99%

Results

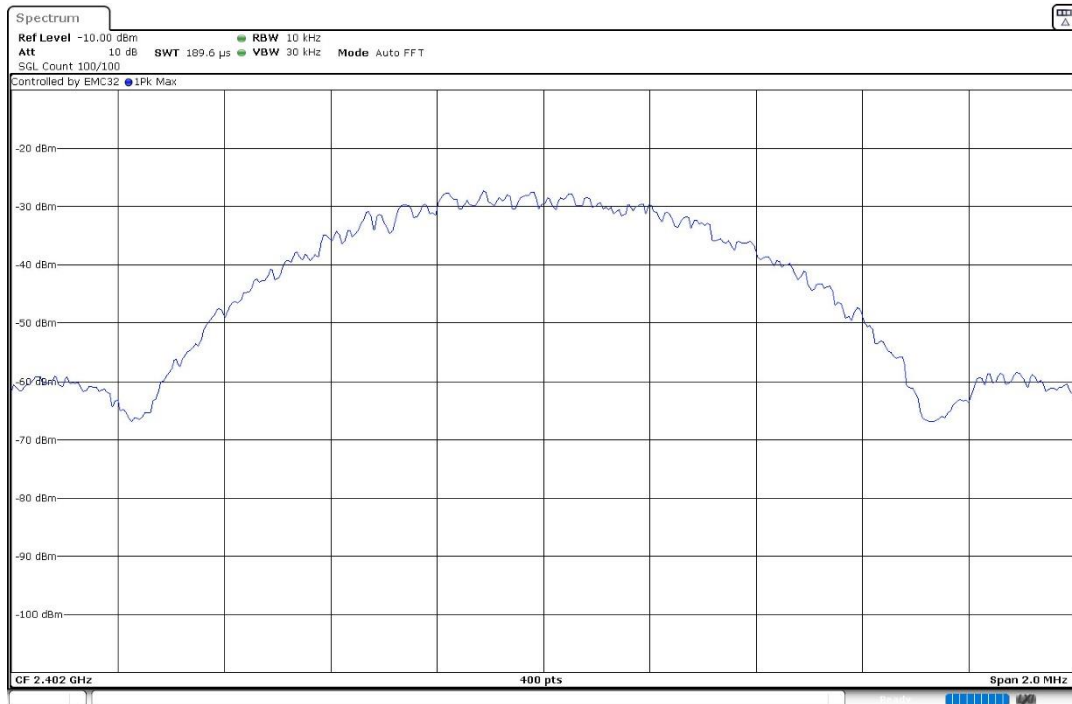
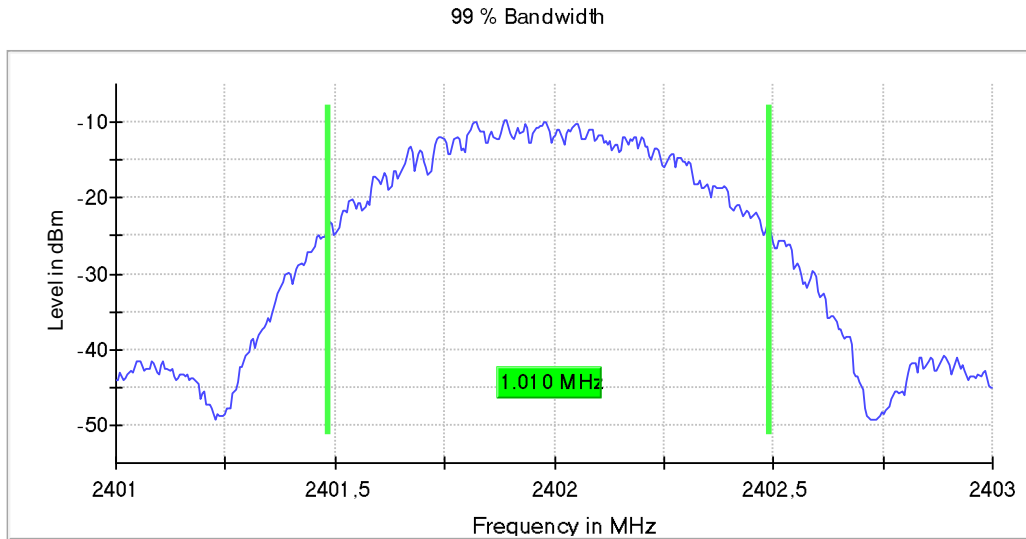
Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Freq (MHz)	Occ Ch BW (MHz)
2402.00000	1.010
2440.00000	1.010
2480.00000	1.010

Attachments

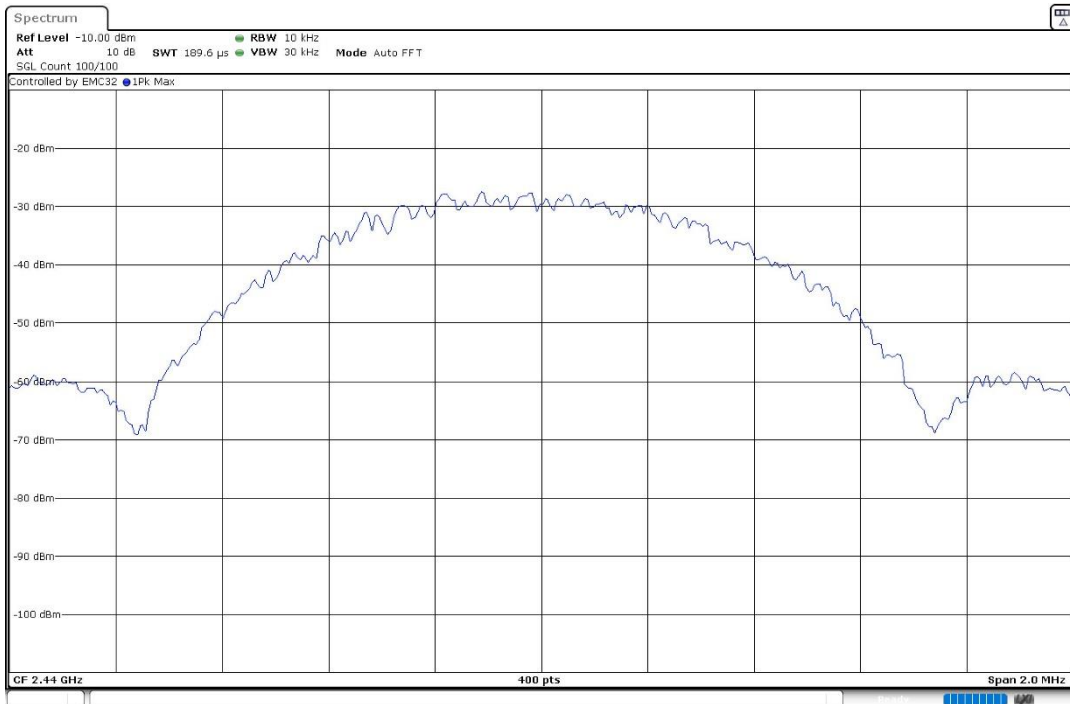
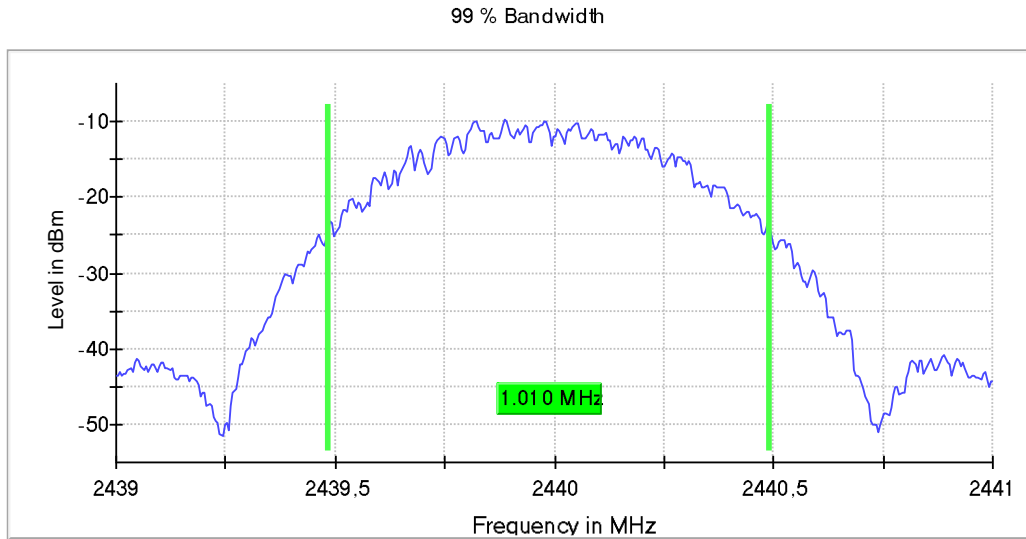
Frequency (MHz) = 2402.00000, Equipment Type: Digital Transmission System (DTS), Bandwidth (MHz) = 1, Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Figures:



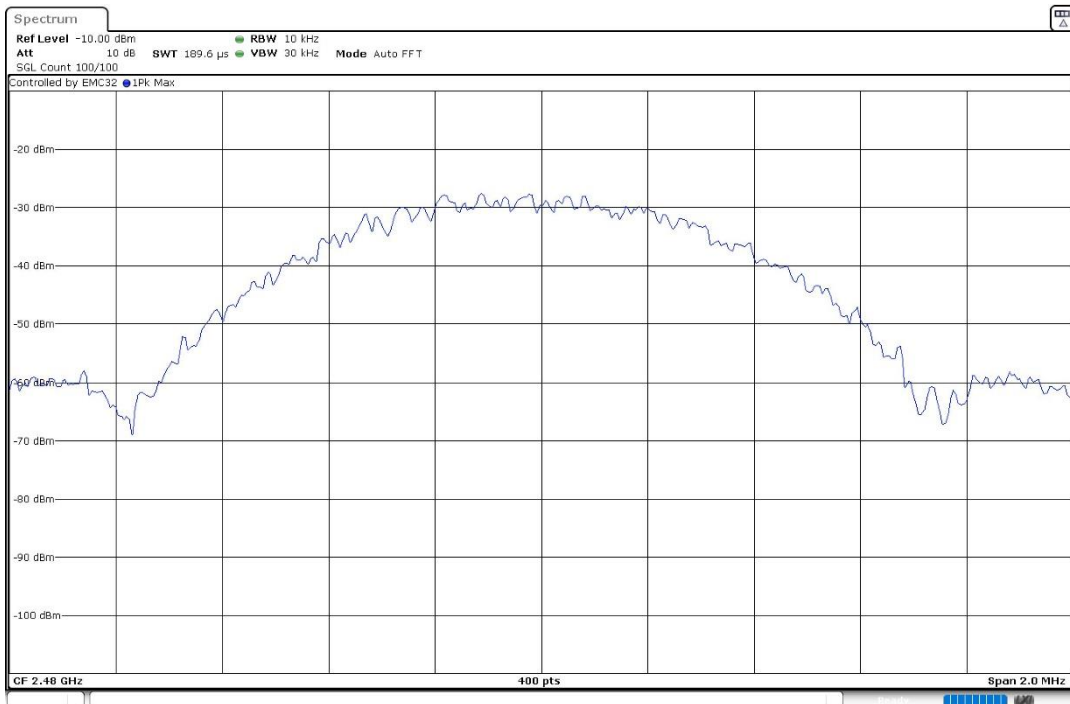
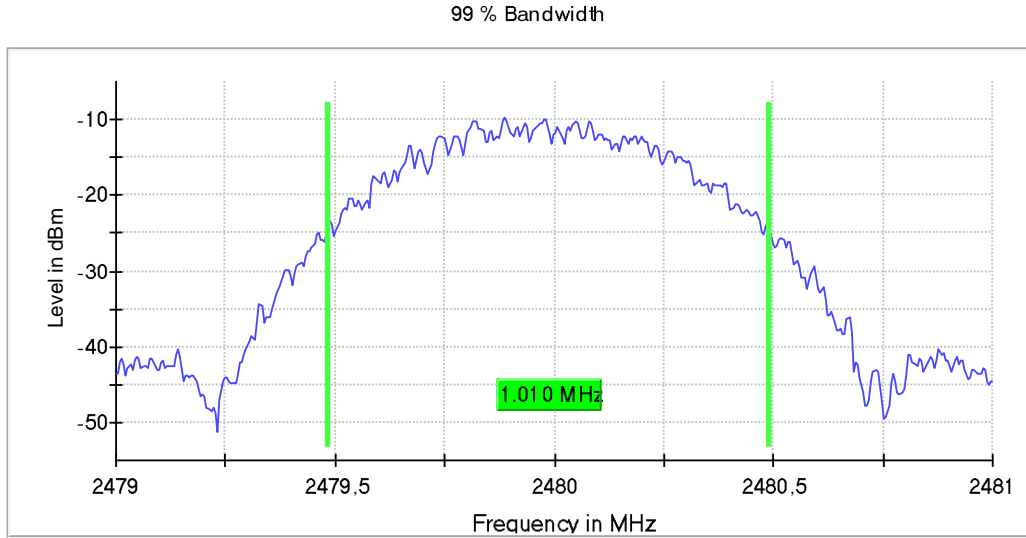
Frequency (MHz) = 2440.0000, Equipment Type: Digital Transmission System (DTS), Bandwidth (MHz) = 1, Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Figures:



Frequency (MHz) = 2480.00000, Equipment Type: Digital Transmission System (DTS), Bandwidth (MHz) = 1, Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Figures:



RSS-247 5.2 (a) / FCC 15.247 (a) (2) 6 dB Bandwidth

Limits

The minimum 6 dB bandwidth shall be at least 500 kHz.

Results

Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Freq (MHz)	6 dB Bandwidth (MHz)
2402.00000	0.693
2440.00000	0.693
2480.00000	0.693

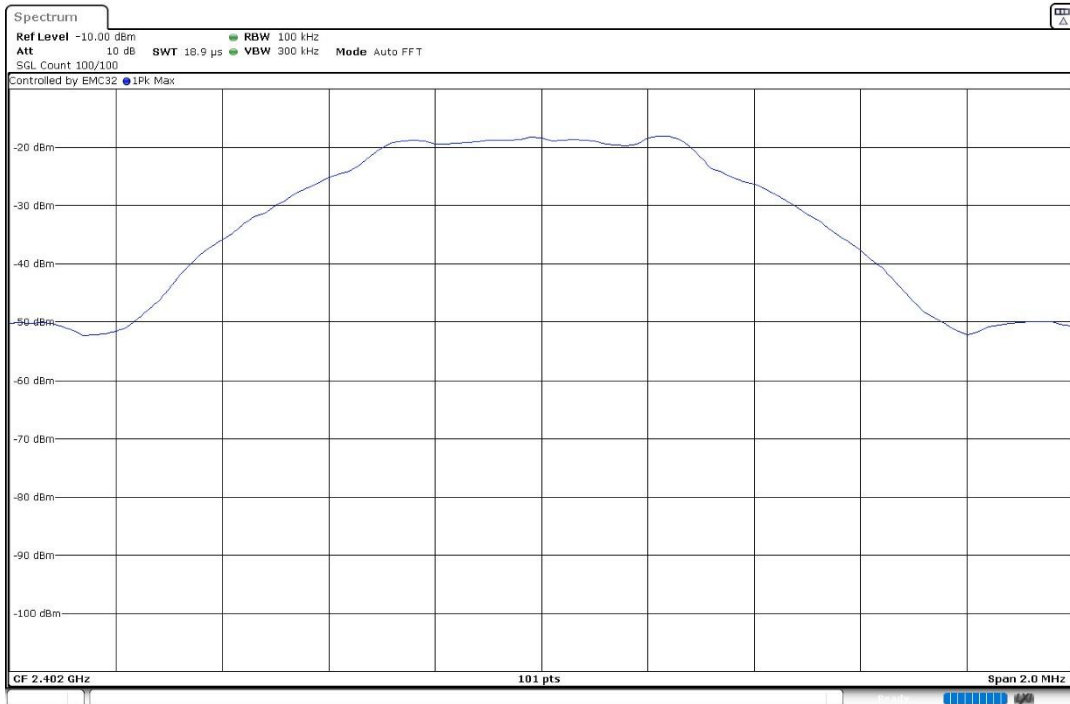
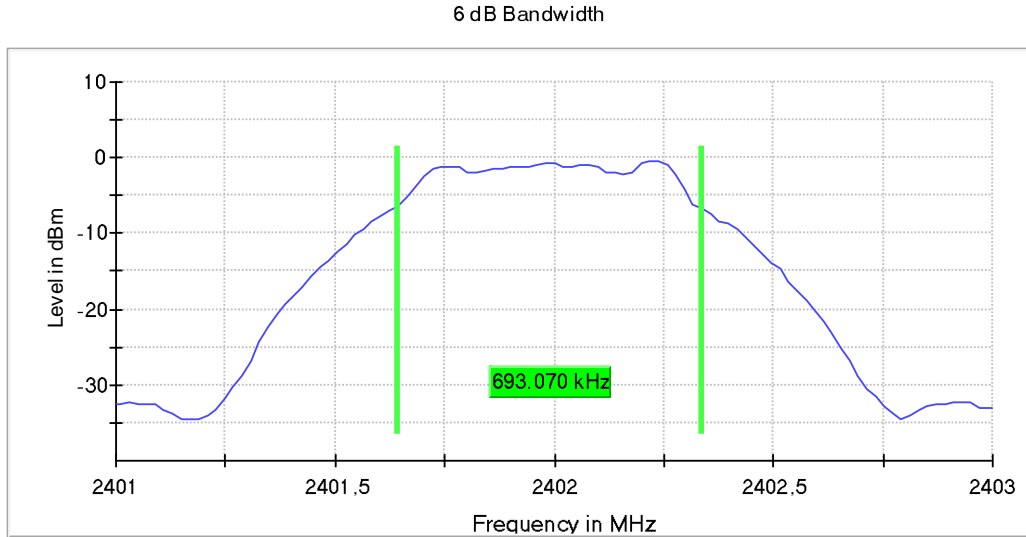
Verdict

Pass

Attachments

Frequency (MHz) = 2402.00000, Bandwidth (MHz) = 1, Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

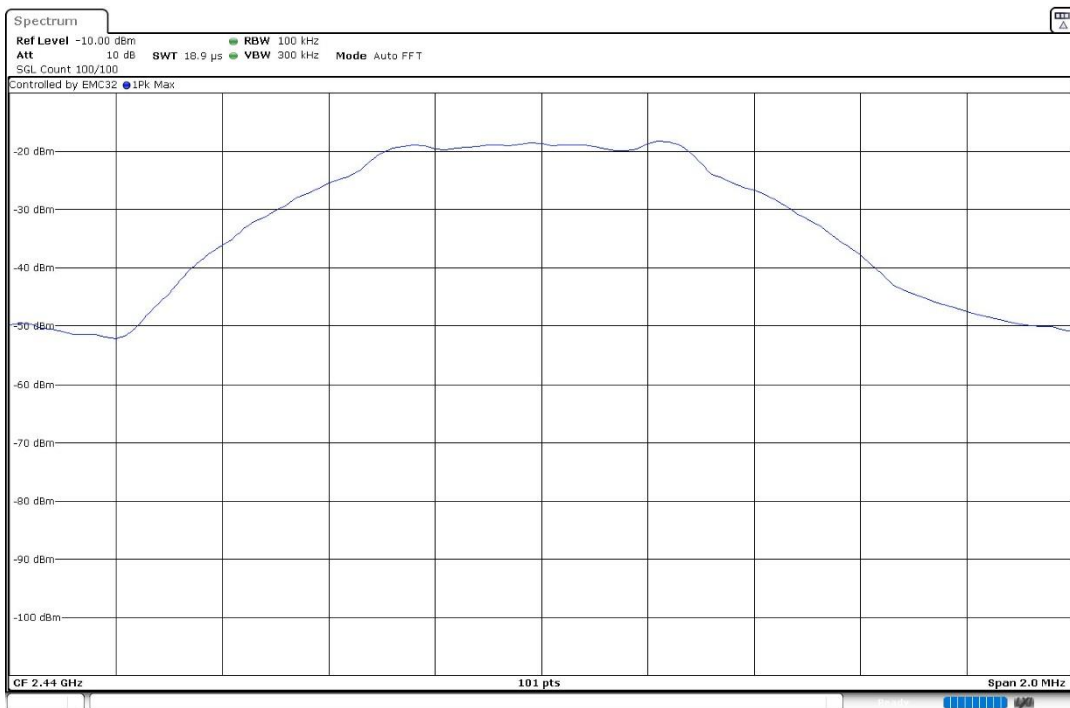
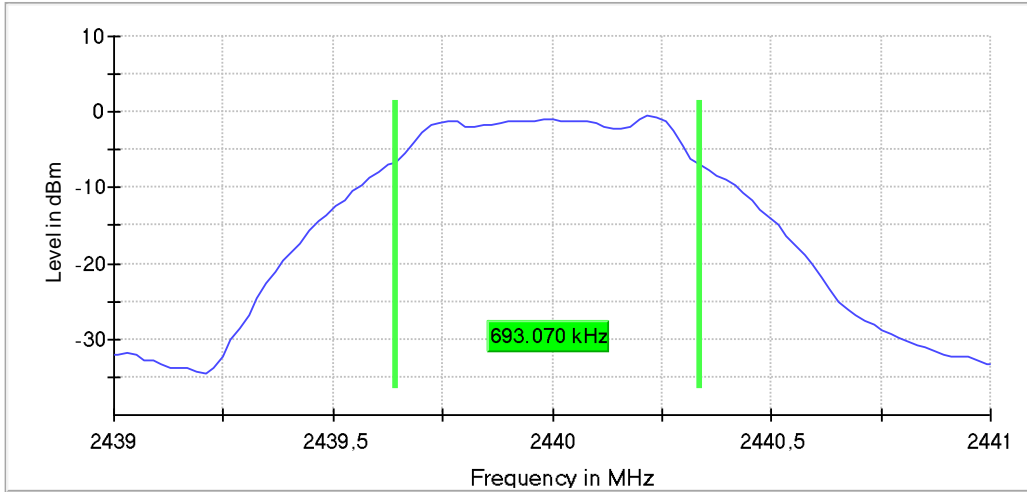
Figures:



Frequency (MHz) = 2440.00000, Bandwidth (MHz) = 1, Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Figures:

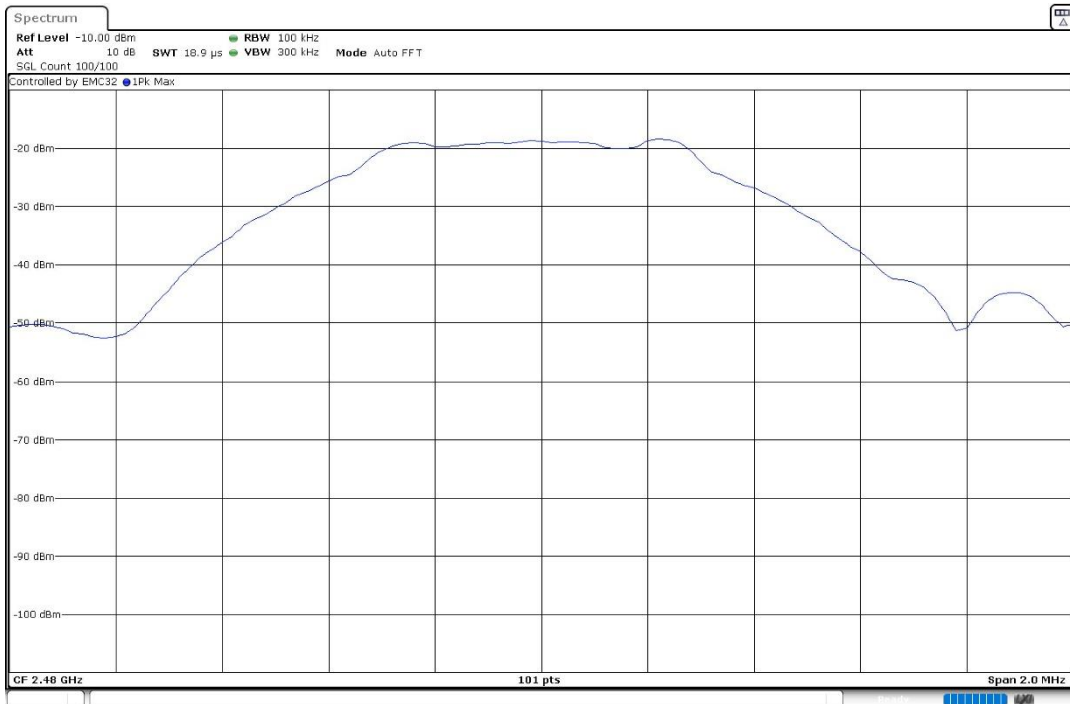
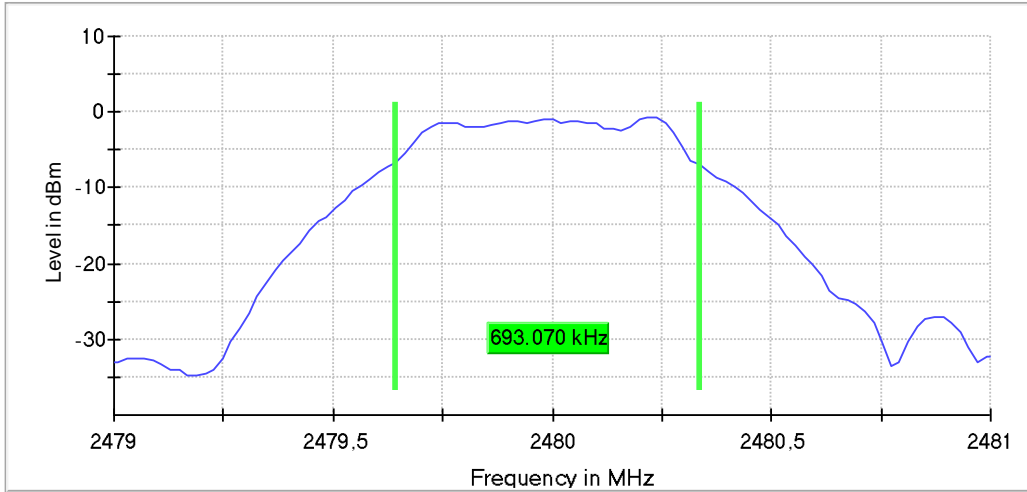
6 dB Bandwidth



Frequency (MHz) = 2480.00000, Bandwidth (MHz) = 1, Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Figures:

6 dB Bandwidth



RSS-247 5.2 (b) / FCC 15.247 (e) Power spectral density

Limits

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

Results

Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Freq (MHz)	PSD (dBm)
2402.00000	-15.576
2440.00000	-15.654
2480.00000	-15.958

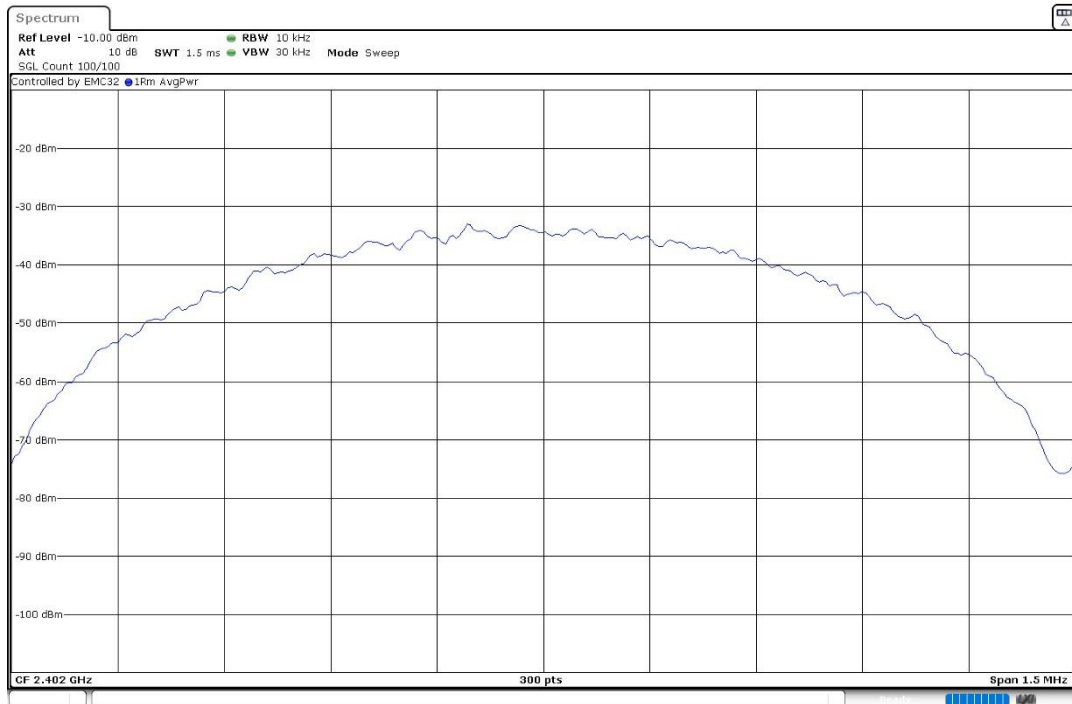
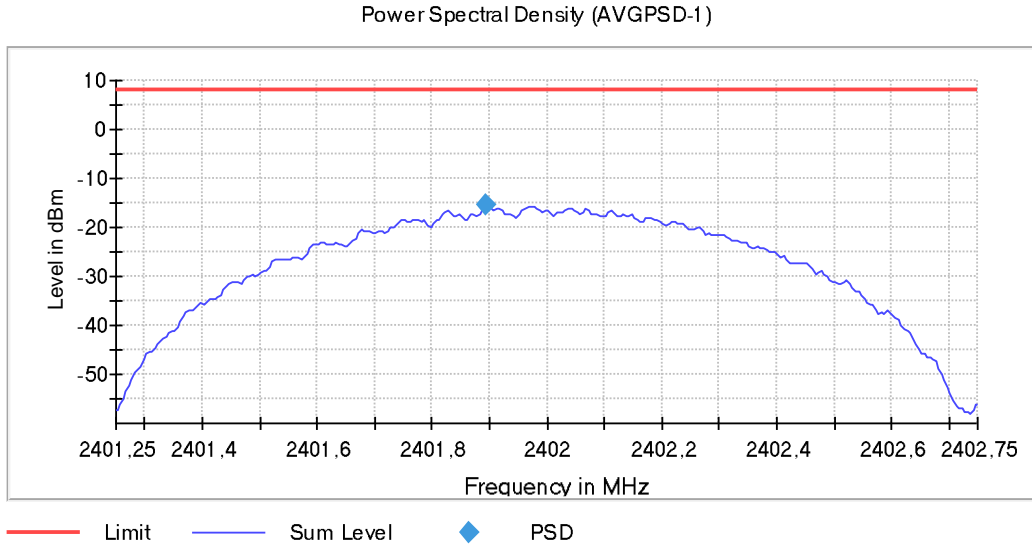
Verdict

Pass

Attachments

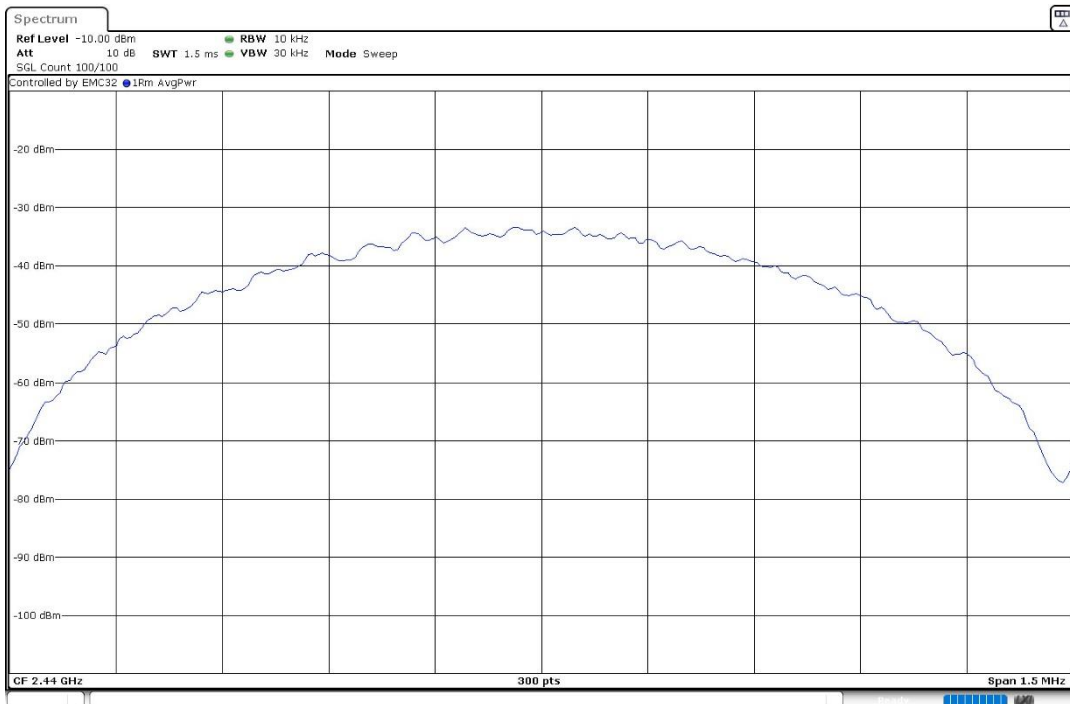
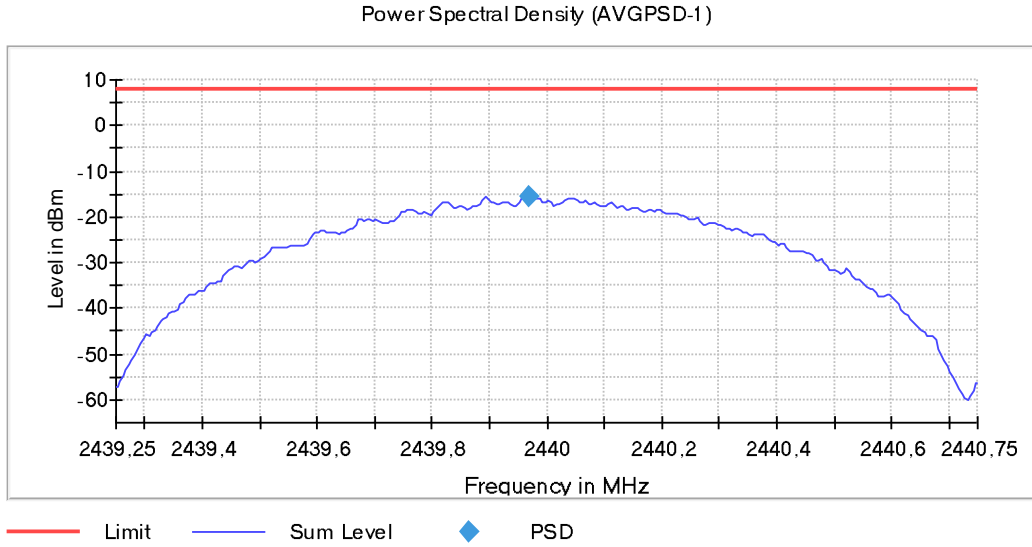
Frequency (MHz) = 2402.00000, Equipment Type: Digital Transmission System (DTS), Bandwidth (MHz) = 1, Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Figures:



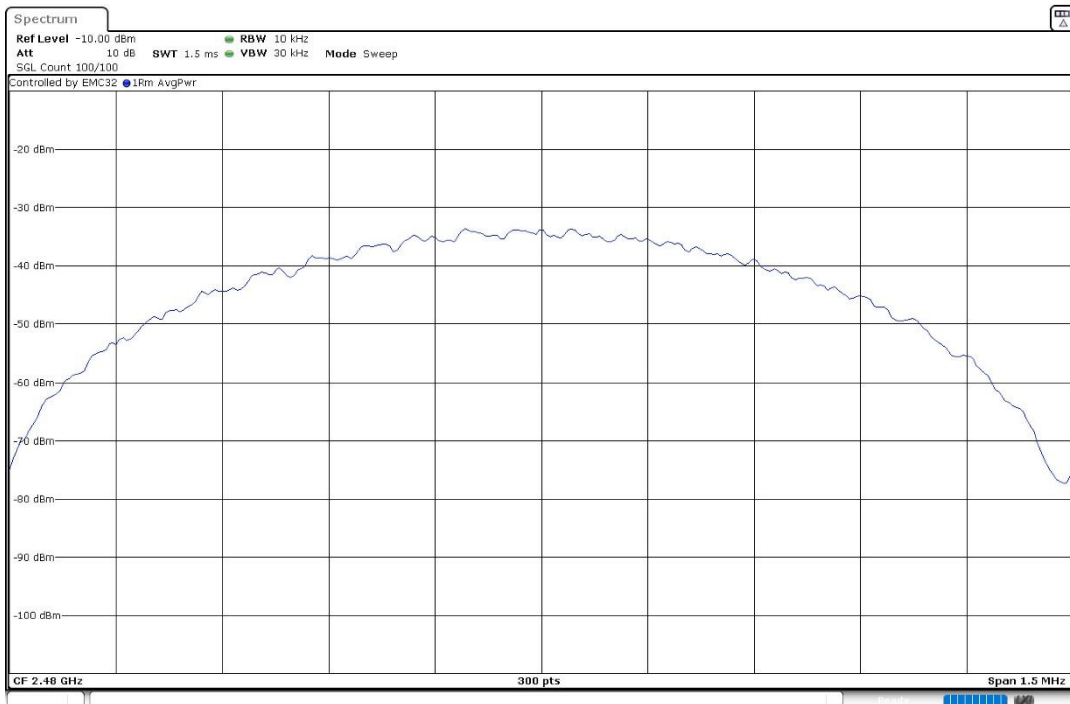
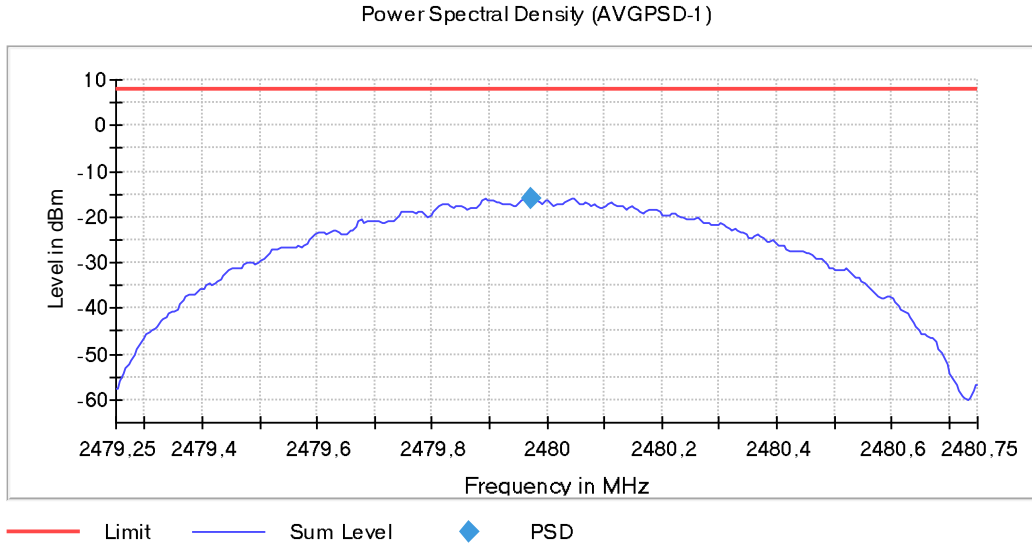
Frequency (MHz) = 2440.00000, Equipment Type: Digital Transmission System (DTS), Bandwidth (MHz) = 1, Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Figures:



Frequency (MHz) = 2480.00000, Equipment Type: Digital Transmission System (DTS), Bandwidth (MHz) = 1, Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Figures:



RSS-247 5.4 (d) / FCC 15.247 (b) (3) Maximum output power and antenna gain

Limits

For systems using digital modulation in the 2400-2483.5 MHz band: 1 watt (30 dBm).
The e.i.r.p. shall not exceed 4 W (36 dBm) (RSS-247).

Results

The maximum average conducted output power level in the fundamental emission was measured according to clause 11.9.2.3.2 "Method AVGPM-G" of ANSI C.63.10-2013.

The EIRP power (dBm) is calculated by adding the declared maximum antenna gain to the measured conducted power.

Maximum Declared Antenna Gain: +3.31 dBi

The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

Results

Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Freq (MHz)	Average Conducted Output Power (dBm)	Maximum EIRP Power (dBm)
2402.00000	-0.387	2.923
2440.00000	0.084	3.394
2480.00000	-0.550	2.760

Verdict

Pass

RSS-247 5.5 / FCC 15.247 (d) Band-edge emissions compliance (Transmitter)

Limits

In any 100 kHz bandwidths outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

Results

Radiated measurements were used to show compliance with the limits in the restricted bands 2.31-2.39 GHz and 2.4835-2.5 GHz.

Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Freq (MHz)	Inband Peak Level (dBm)	Measured Freq (MHz)	Level (dBm)	Limit (dBm)
2402.00000	-0.577	2399.775000	-50.548	-30.577
		2399.725000	-50.656	
		2399.975000	-52.229	
		2399.825000	-52.359	
		2399.925000	-52.393	
		2399.675000	-52.759	
		2399.875000	-52.808	
		2399.575000	-53.027	
		2399.525000	-53.122	
		2399.625000	-53.569	
		2399.475000	-54.221	
		2399.225000	-54.918	
		2399.425000	-55.167	
		2399.375000	-55.240	
2399.025000	-55.342			

Freq (MHz)	Inband Peak Level (dBm)	Measured Freq (MHz)	Level (dBm)	Limit (dBm)
2480.00000	-0.934	2483.525000	-55.623	-30.934
		2485.625000	-56.341	
		2483.575000	-56.493	
		2484.175000	-56.494	
		2484.325000	-56.497	
		2484.375000	-56.538	
		2483.925000	-56.552	
		2486.125000	-56.610	
		2486.825000	-56.627	
		2483.825000	-56.695	
		2483.625000	-56.711	
		2484.225000	-56.725	
		2485.575000	-56.754	
		2484.025000	-56.776	
		2483.975000	-56.783	

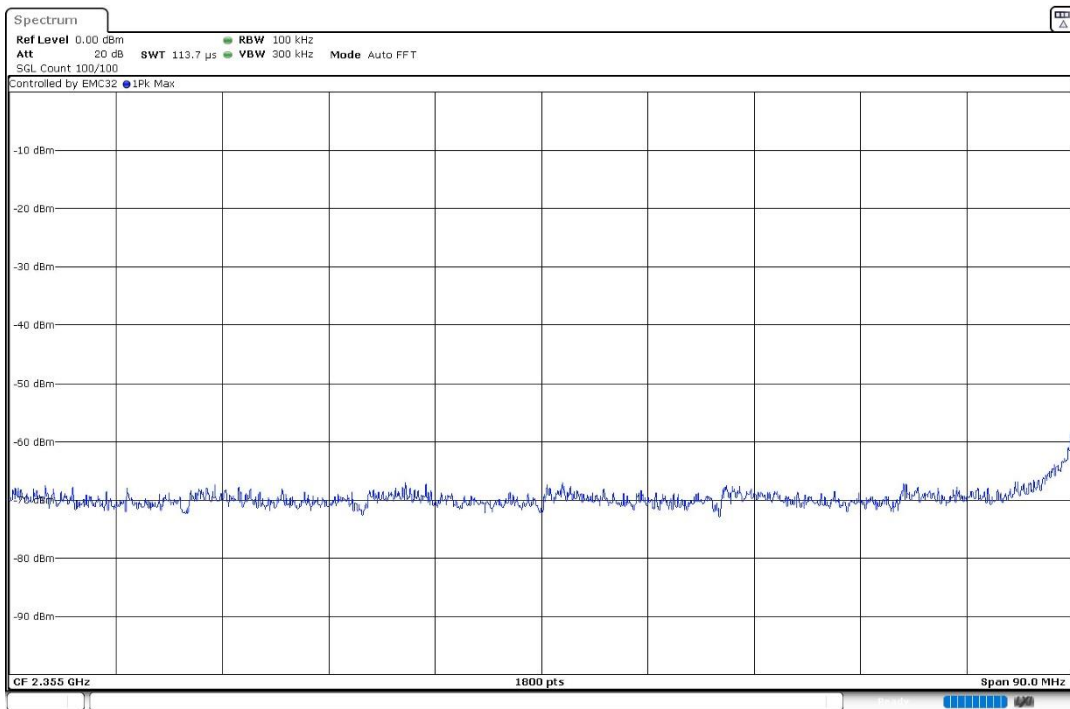
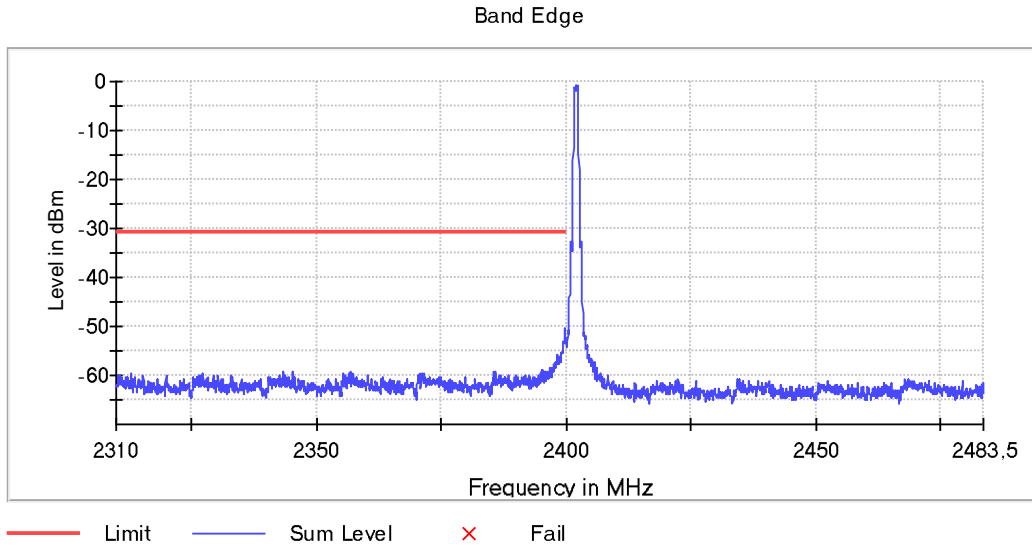
Verdict

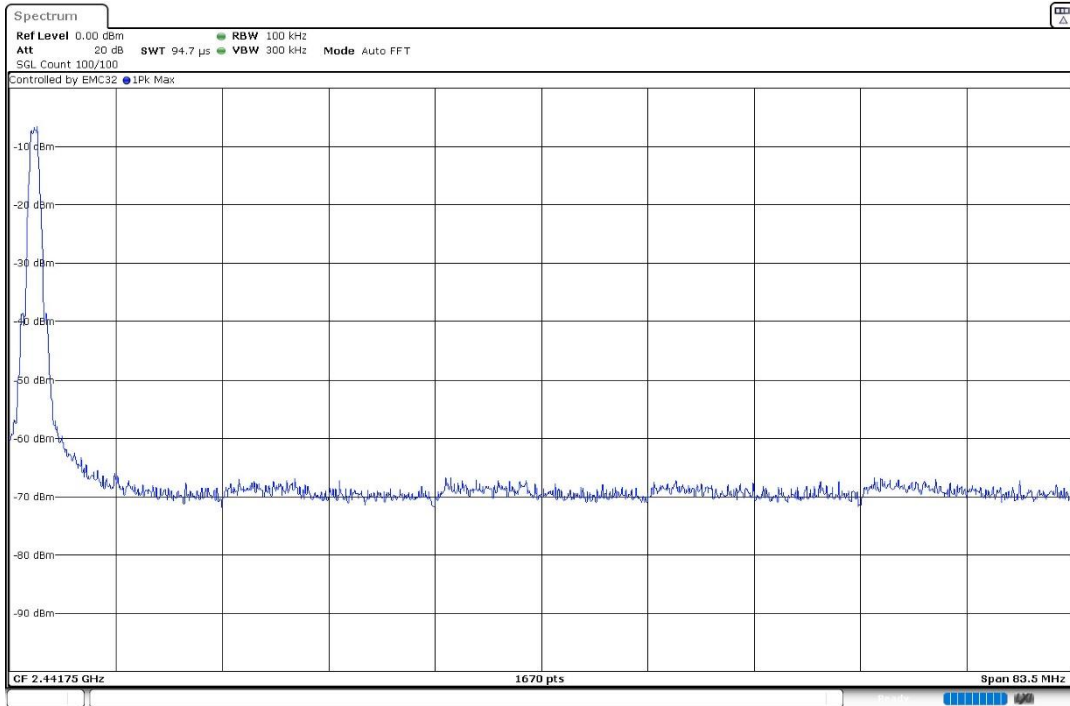
Pass

Attachments

Frequency (MHz) = 2402.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth (MHz) = 1, Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

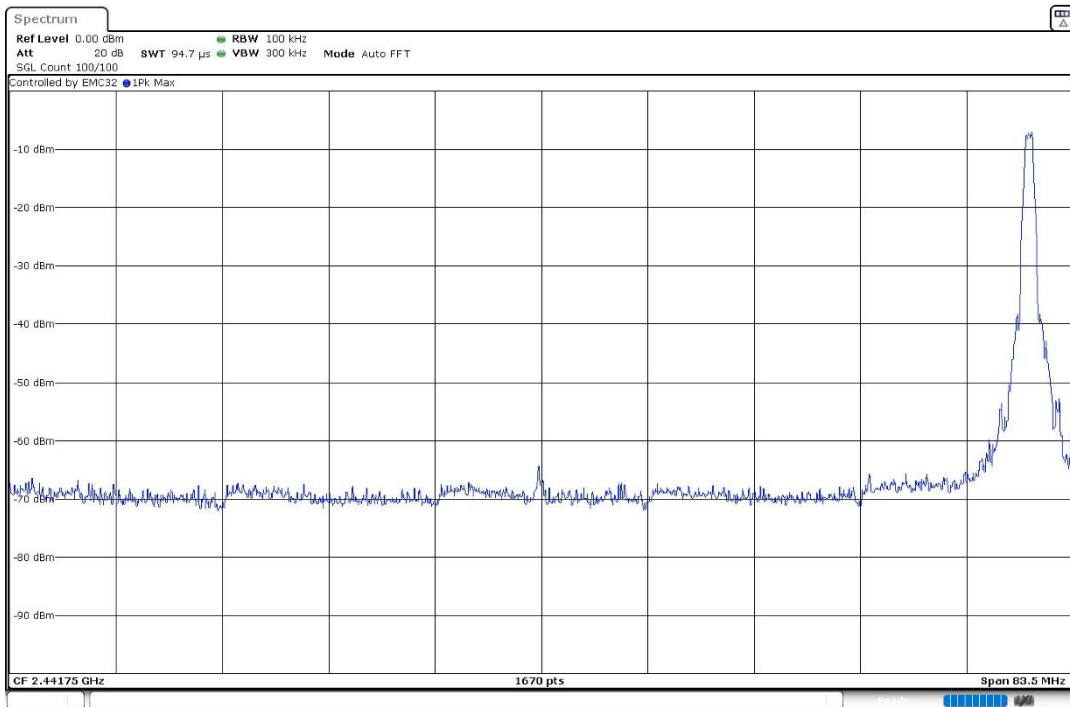
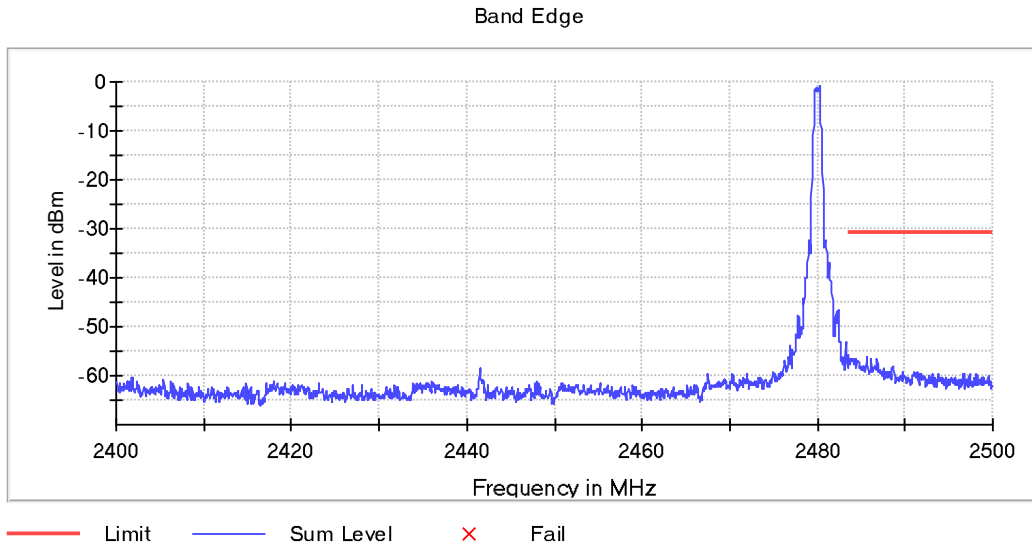
Figures:

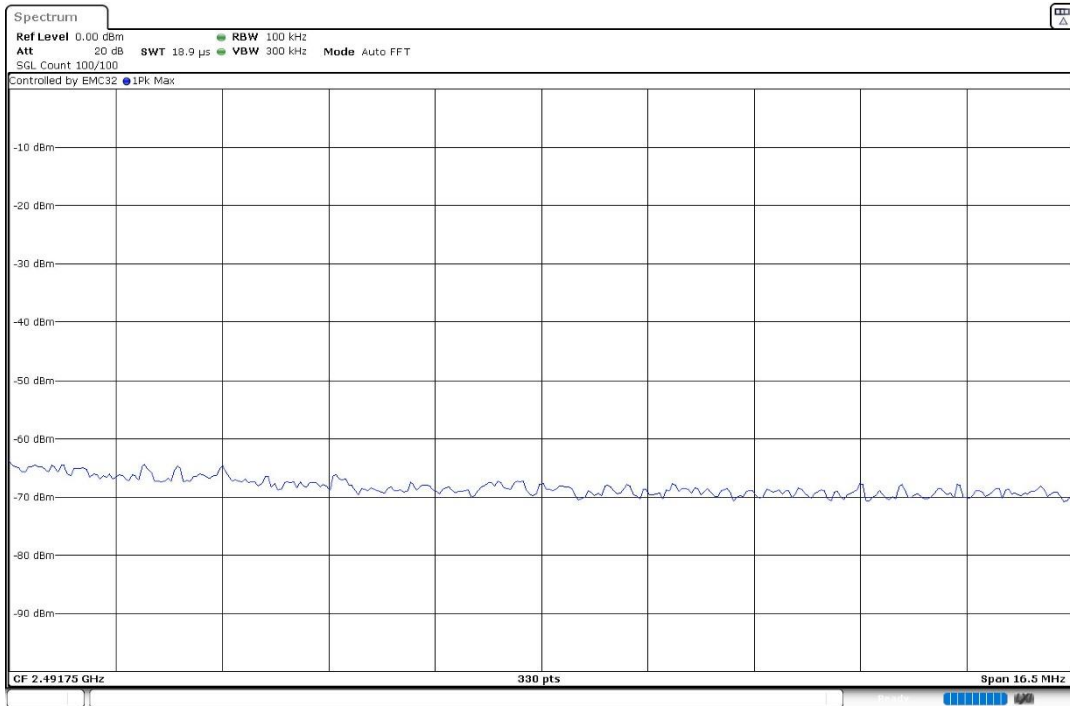




Frequency (MHz) = 2480.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth (MHz) = 1, Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Figures:





RSS-247 5.5 / FCC 15.247 (d) Emission limitations radiated (Transmitter)

Limits

In any 100 kHz bandwidths outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

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

Frequency Range (MHz)	Field strength ($\mu\text{V/m}$)	Field strength ($\text{dB}\mu\text{V/m}$)	Measurement distance (m)
0.009-0.490	2400/F(kHz)	-	300
0.490-1.705	24000/F(kHz)	-	30
1.705 - 30.0	30	-	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

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

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

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

Results

Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Frequency range 30 MHz – 1 GHz:

The spurious signals detected do not depend on the operating channel.

Spurious frequencies detected at less than 20 dB below the limit:

Freq Rng (GHz)	Unwanted Freq (MHz)	Unwanted Lvl ($\text{dB}\mu\text{V/m}$)	PoI	Detector
[0.03, 1]	115.63280	24.82	V	QP

Frequency range 1 GHz – 26 GHz:

The results below show the maximum measured levels in the 1 – 26 GHz range including the restricted bands 2.31 – 2.39 GHz and 2.4835 – 2.5 GHz.

Spurious frequencies with peak levels above the average limit (54 dB μ V/m at 3 m) are measured with average detector for compliance checking with the average limit.

- Low Channel:

No spurious frequencies found close to the limit.

- Middle Channel:

Spurious frequencies found at less than 20 dB below the limit:

Freq (MHz)	Freq Rng (GHz)	Unwanted Freq (MHz)	Unwanted Lvl (dB μ V/m)	Pol	Detector
2440.00000	[3,17]	7320.26000	48.56	V	Peak

- High Channel:

Spurious frequencies found at less than 20 dB below the limit:

Freq (MHz)	Freq Rng (GHz)	Unwanted Freq (MHz)	Unwanted Lvl (dB μ V/m)	Pol	Detector
2480.00000	[3,17]	7440.66000	48.85	V	Peak
2480.00000	[17, 26]	22322.00000	50.07	V	Peak

Verdict

Pass

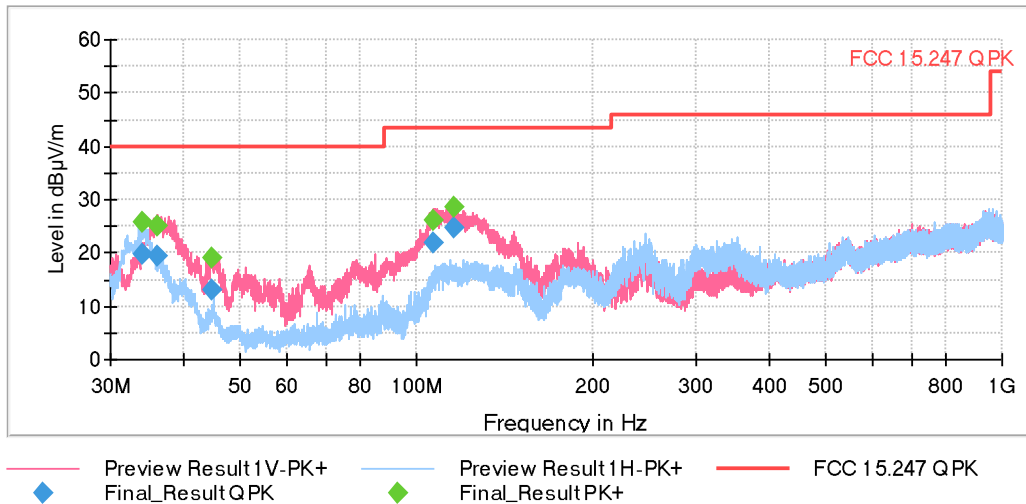
Attachments

The measurement settings for each range of frequency are as follows:

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
Receiver: [ESW 44] 30 MHz - 1 GHz	30,312 kHz	PK+	100 kHz	1 s	0 dB
Receiver: [ESW 44] 1 GHz - 3 GHz	30,769 kHz	PK+ ; AVG	1 MHz	1 s	0 dB
Receiver: [ESW 44] 3 GHz - 17 GHz	140 kHz	PK+ ; AVG	1 MHz	1 s	30 dB
Receiver: [ESW 44] 17 GHz - 26 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Equipment Type: Digital Transmission System (DTS), Modulation: BTLE 5.0 (GFSK 1 Mbit/s), Frequency Range (GHz) = [0.03, 1]

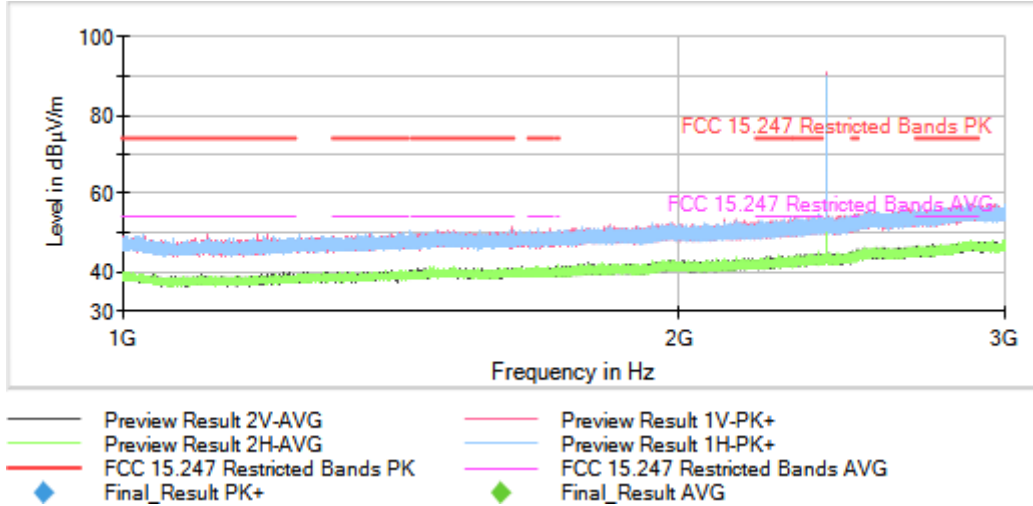
Figures:



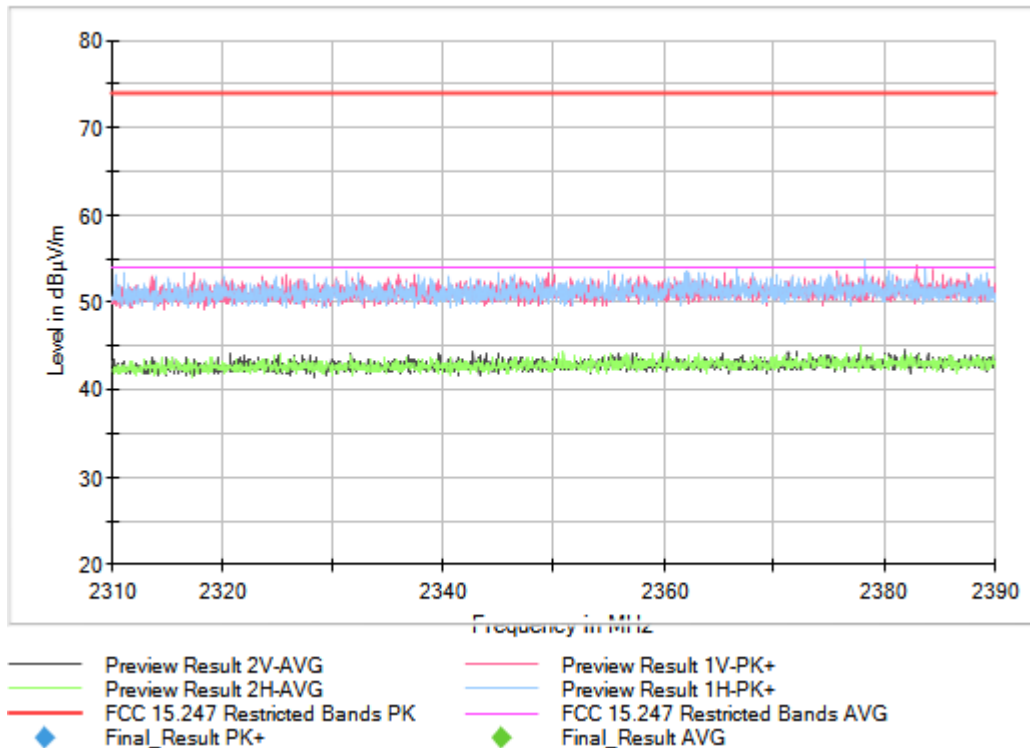
This plot is valid for all channels

Frequency (MHz) = 2402.00000, Equipment Type: Digital Transmission System (DTS), Modulation: BTLE 5.0 (GFSK 1 Mbit/s), Frequency Range (GHz) = [1, 3]

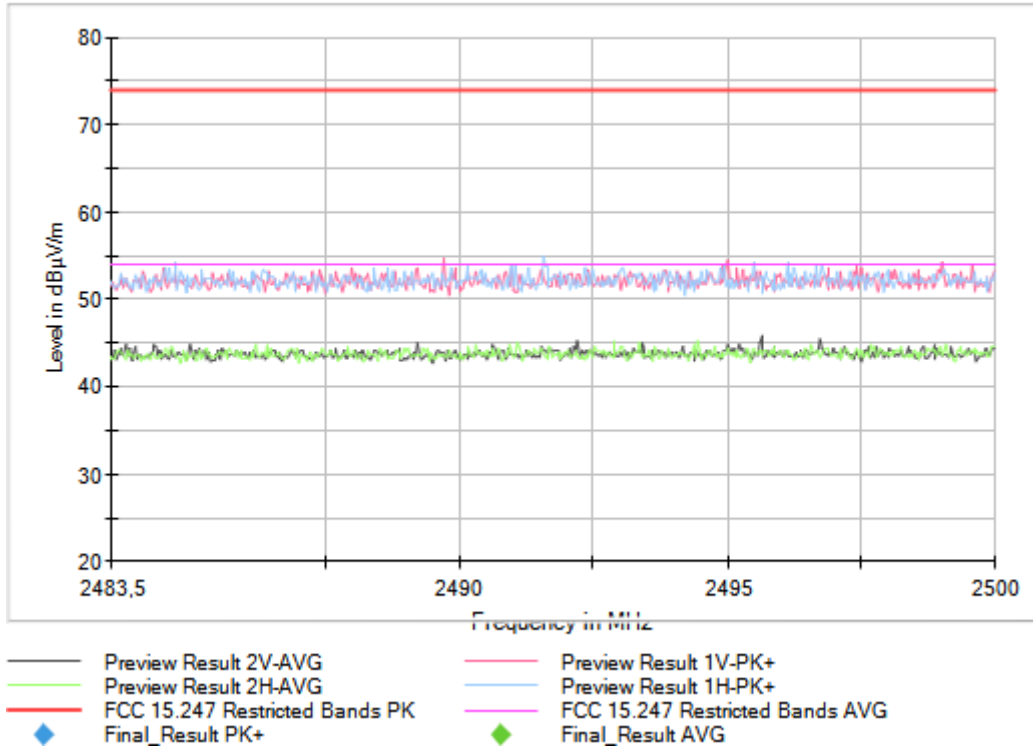
Figures:



Full Spectrum

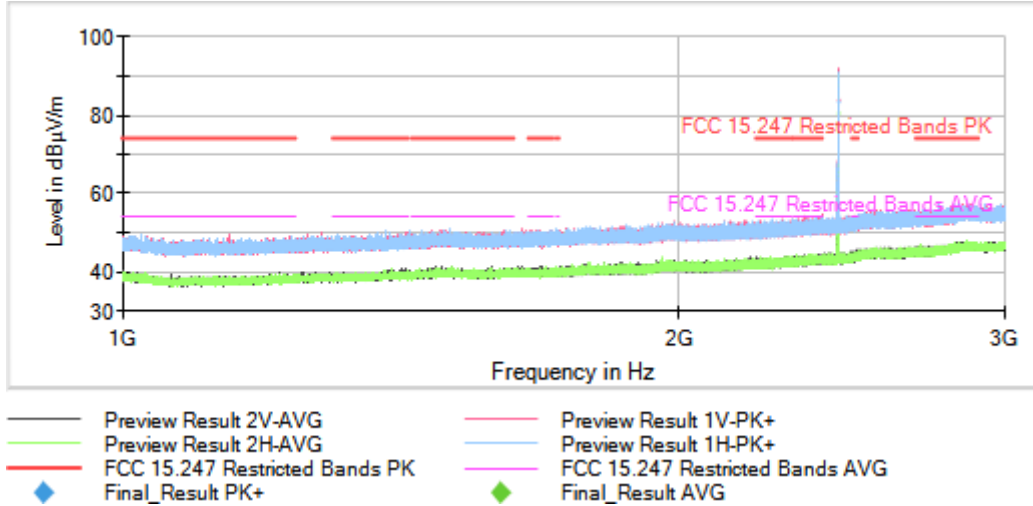


Full Spectrum

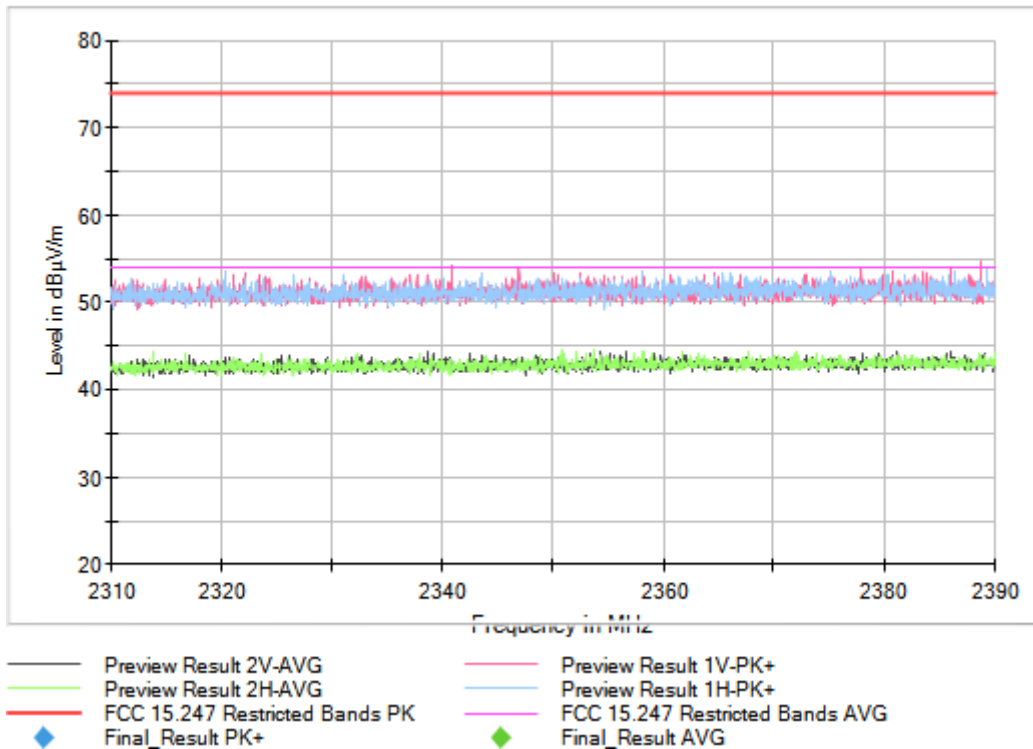


Frequency (MHz) = 2440.00000, Equipment Type: Digital Transmission System (DTS), Modulation: BTLE 5.0 (GFSK 1 Mbit/s), Frequency Range (GHz) = [1, 3]

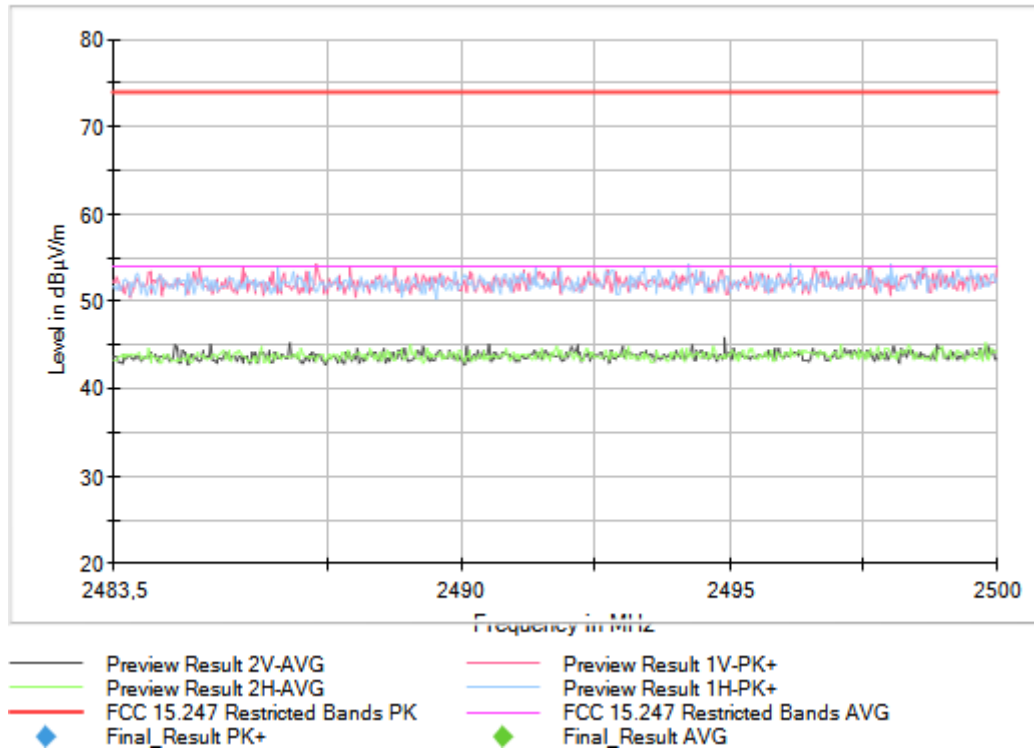
Figures:



Full Spectrum

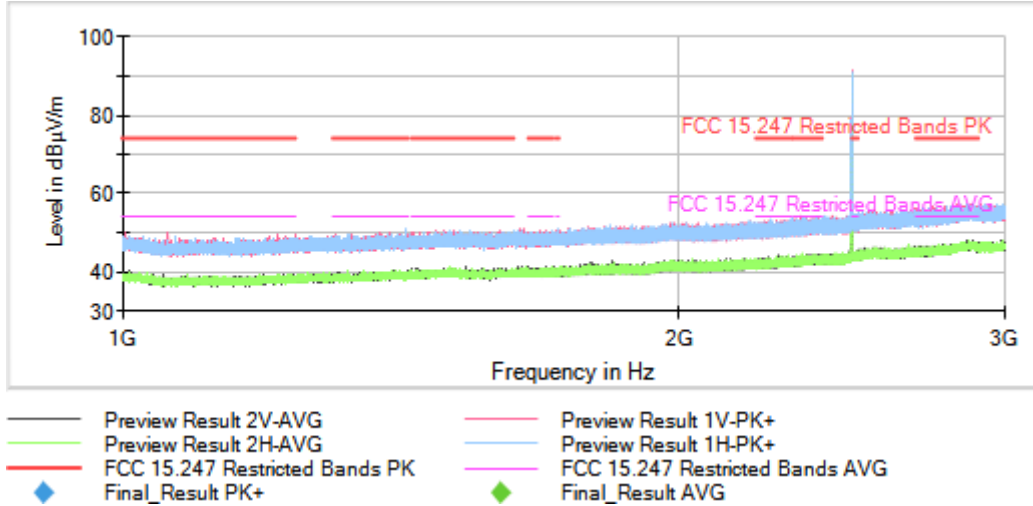


Full Spectrum

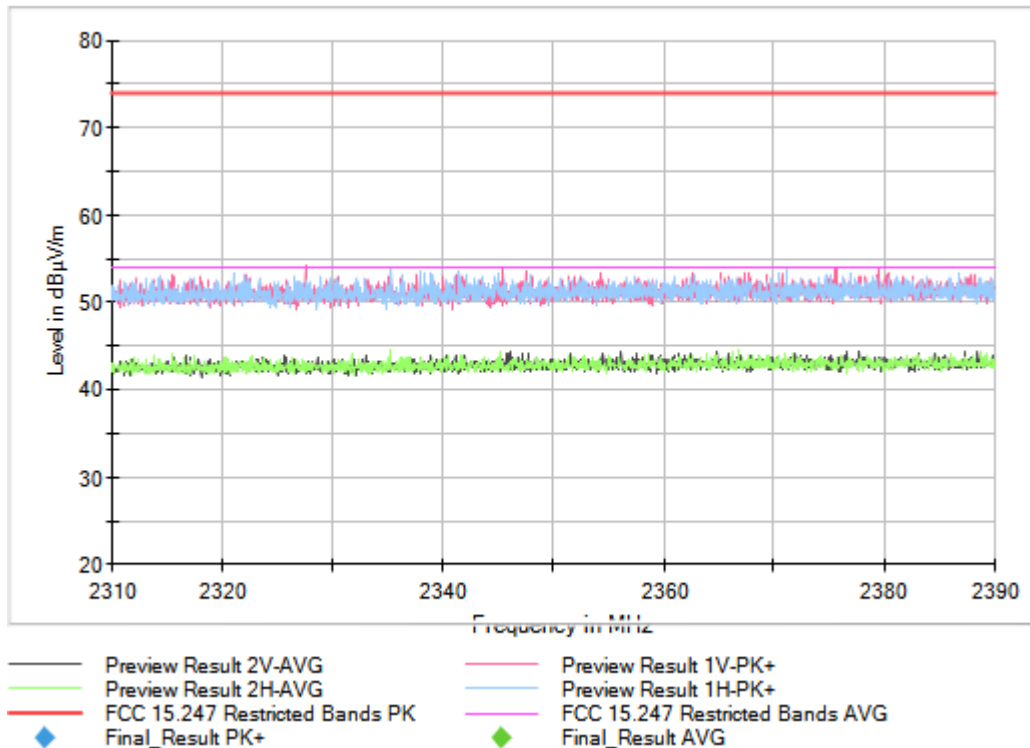


Frequency (MHz) = 2480.00000, Equipment Type: Digital Transmission System (DTS), Modulation: BTLE 5.0 (GFSK 1 Mbit/s), Frequency Range (GHz) = [1, 3]

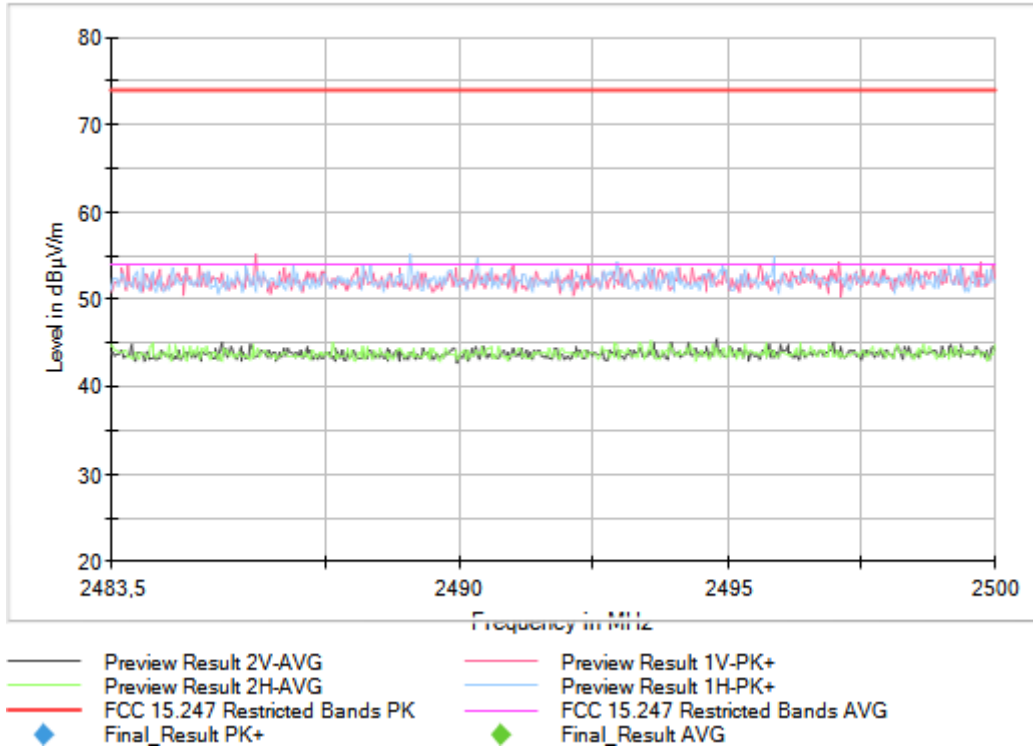
Figures:



Full Spectrum

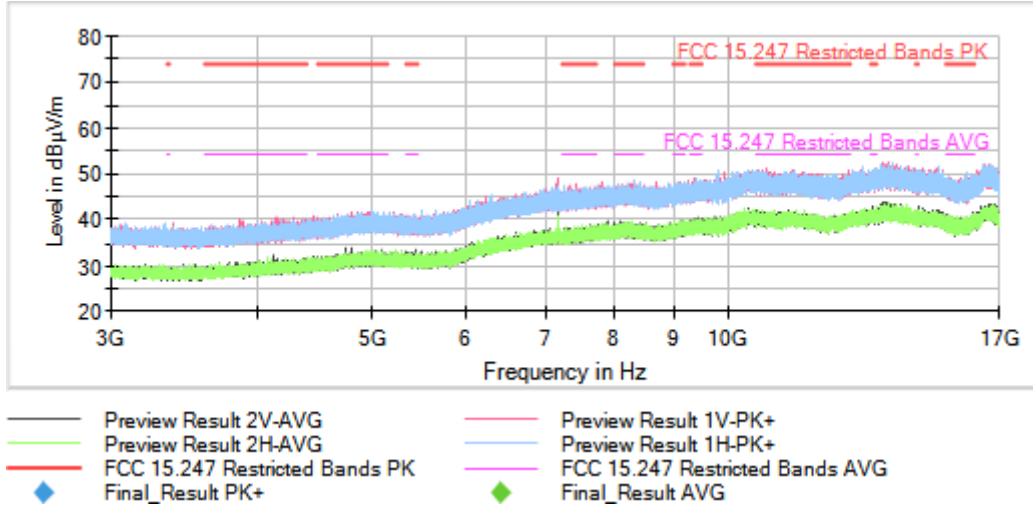


Full Spectrum



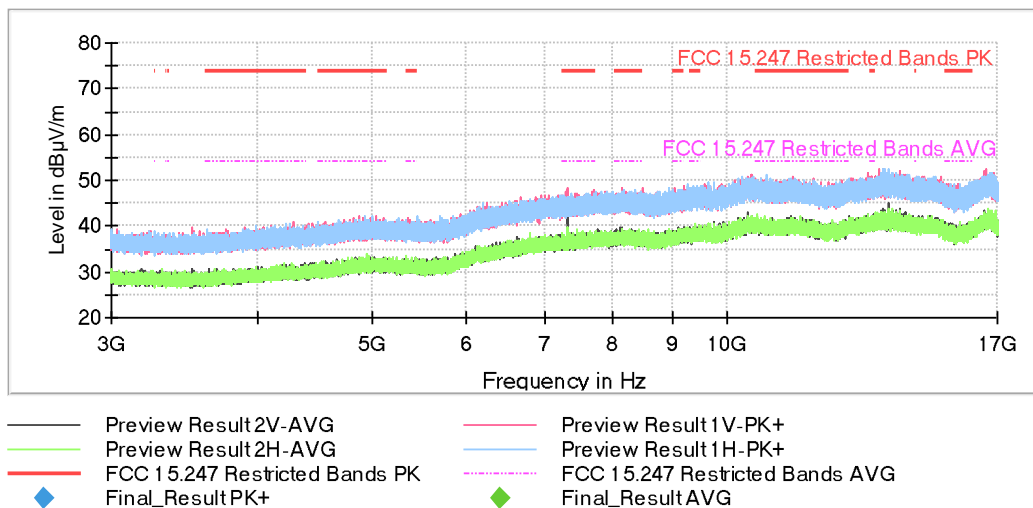
Frequency (MHz) = 2402.00000, Equipment Type: Digital Transmission System (DTS), Modulation: BTLE 5.0 (GFSK 1 Mbit/s), Frequency Range (GHz) = [3, 17]

Figures:



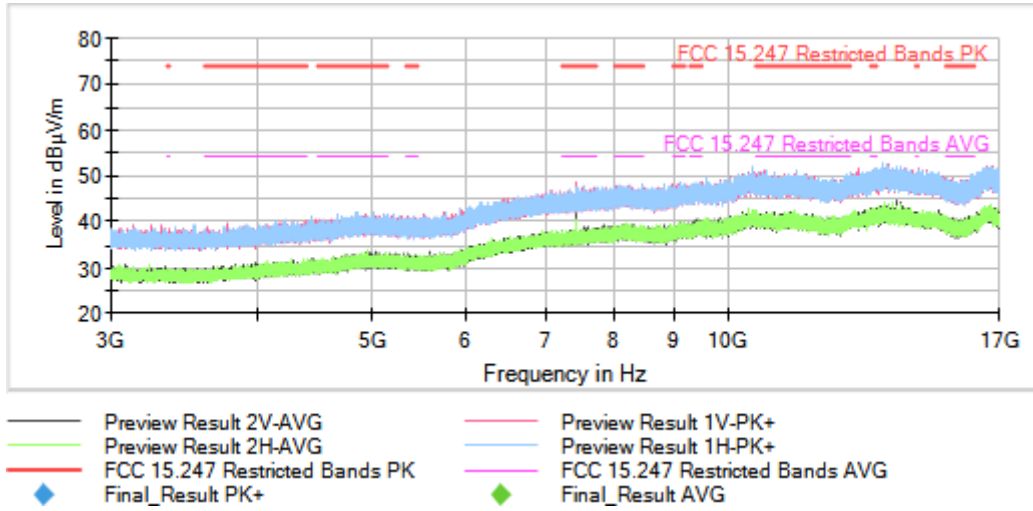
Frequency (MHz) = 2440.00000, Equipment Type: Digital Transmission System (DTS), Modulation: BTLE 5.0 (GFSK 1 Mbit/s), Frequency Range (GHz) = [3, 17]

Figures:



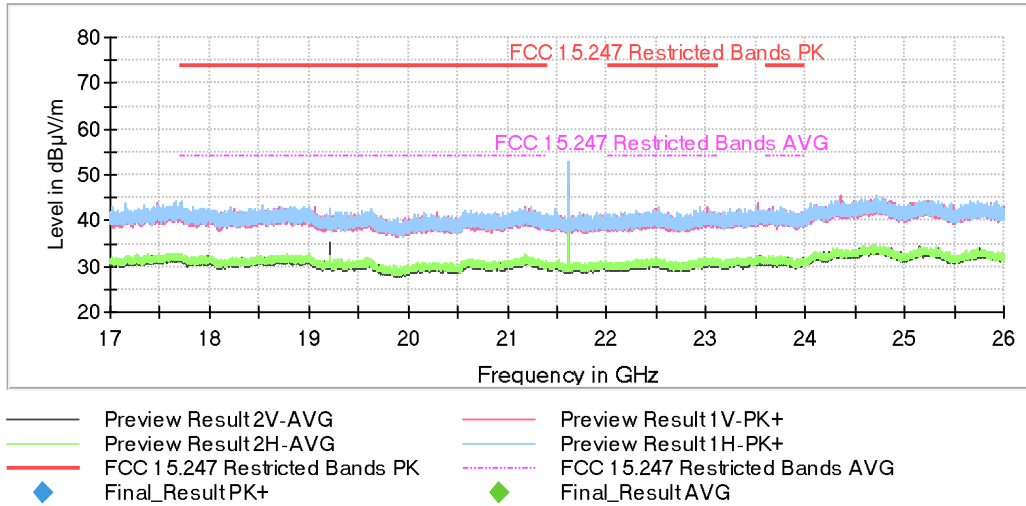
Frequency (MHz) = 2480.00000, Equipment Type: Digital Transmission System (DTS), Modulation: BTLE 5.0 (GFSK 1 Mbit/s), Frequency Range (GHz) = [3, 17]

Figures:



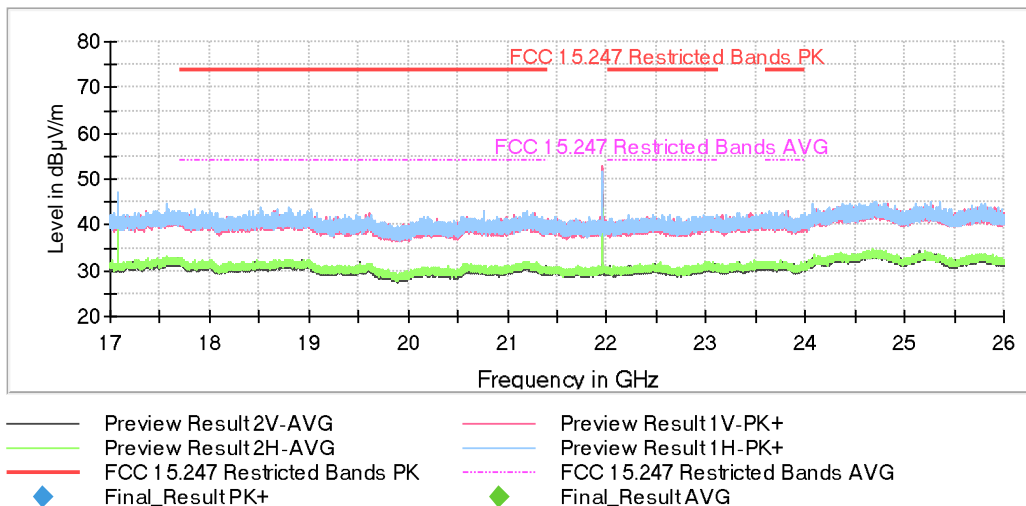
Frequency (MHz) = 2402.00000, Equipment Type: Digital Transmission System (DTS), Modulation: BTLE 5.0 (GFSK 1 Mbit/s), Frequency Range (GHz) = [17, 26]

Figures:



Frequency (MHz) = 2440.00000, Equipment Type: Frequency Hopping Spread Spectrum systems (DSS), Modulation: BTLE 5.0 (GFSK 1 Mbit/s), Frequency Range (GHz) = [17, 26]

Figures:



Frequency (MHz) = 2480.00000, Equipment Type: Frequency Hopping Spread Spectrum systems (DSS),
Modulation: BTLE 5.0 (GFSK 1 Mbit/s), Frequency Range (GHz) = [17, 26]

Figures:

