

ISED CABid: ES1909

Test Report No:

Lab. Company Number: 4621A

72140RRF.003A1

## Test Report

USA FCC Part 15.247, 15.209

CANADA RSS-247, RSS-Gen

(*) Identification of item tested	Tire pressure monitoring sensor. Sends Tire pressure information via bluetooth
(*) Trademark	LDL Technology
(*) Model and /or type reference	20186
Other identification of the product	FCC ID: T4520186 IC: 6450A-20186
(*) Features	Features: Bluetooth LE, 125 KHz LF Reception HW version: 320-186-1090-H SW version: 421064011011
Manufacturer	LDL Technology S.A.S. Parc technologique du Canal, 3 rue Giotto, 31520, Ramonville-Saint-Agne, FRANCE
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 3 (August 2023). CANADA RSS-Gen Issue 5 amendment 2 (February 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)	José Manuel Gómez Galván EMC Consumer & RF Lab. Manager
Date of issue	2024-03-13
Report template No	FDT08_24 (* ) "Data provided by the client"

## Index

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INDEX .....	2
ACRONYMS .....	3
COMPETENCES AND GUARANTEES .....	3
GENERAL CONDITIONS .....	4
UNCERTAINTY .....	4
DATA PROVIDED BY THE CLIENT .....	4
USAGE OF SAMPLES .....	5
TEST SAMPLE DESCRIPTION .....	6
IDENTIFICATION OF THE CLIENT .....	7
TESTING PERIOD AND PLACE .....	7
DOCUMENT HISTORY .....	7
ENVIRONMENTAL CONDITIONS .....	7
REMARKS AND COMMENTS .....	8
TESTING VERDICTS .....	9
SUMMARY .....	9
<b>APPENDIX A: TEST RESULTS. BLUETOOTH LOW ENERGY 5.2 (1M)</b> .....	<b>10</b>

## Acronyms

Acronym ID	Acronym Description
# of Tx Chains	Number of Transmission Chains
26Ebw	Emission Bandwidth
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
Peak Power	Maximum Peak Conducted Output Power
Pol	Polarization
Port	Active Port
Unwanted Freq	Unwanted Emissions Frequency
Unwanted Lvl	Unwanted Emissions Level

## Competences and guarantees

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

DEKRA Testing and Certification is a 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, with the appropriate scope of accreditation that covers the performed tests in this report.

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

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The results presented in this Test Report apply only to the particular item under test established in this document.

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## General conditions

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1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or competent Authorities.
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## Uncertainty

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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 Peak Output Power: Measurement uncertainty  $\leq \pm 0,80$  dB

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

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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 Tire pressure monitoring sensor. Sends Tire pressure information via Bluetooth. The DUT acquires pressure information inside a vehicle tire then sends it to the vehicle's receiver.

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 N°	Date of Reception	Application
S/01	72140C_14.1	Tire pressure monitoring sensor	20186	--	2022-07-07	Element Under Test
S/02	72140C_16.1	Tire pressure monitoring sensor (conducted)	20186	--	2022-09-05	Element Under Test

Notes referenced to samples during the project:

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

## Test sample description

Ports..... :			Cable			
			Specified max length [m]	Attached during test	Shielded	Coupled to patient <sup>(3)</sup>
.....	.....		[ ]	[ ]	[ ]	
Supplementary information to the ports..... :	.....					
Rated power supply .....	Voltage and Frequency		Reference poles			
			L1	L2	L3	N
	[ ]	AC: .....	[ ]	[ ]	[ ]	[ ]
	[X]	DC: 3V				
Rated Power .....	3V					
Clock frequencies.....	32 MHz, 26 MHz					
Other parameters .....	.....					
Software version .....	421064011011					
Hardware version .....	320-186-1090-H					
Dimensions in cm (W x H x D) .....	4.95 x 1.35 x 2.3					
Mounting position .....	[ ]	Table top equipment				
	[ ]	Wall/Ceiling mounted equipment				
	[ ]	Floor standing equipment				
	[ ]	Hand-held equipment				
	[X]	Other: Vehicle wheel equipment				
Modules/parts..... :	Module/parts of test item		Type		Manufacturer	
	.....		.....		.....	
Accessories (not part of the test item) .....	Description		Type		Manufacturer	
	Programming tool unit		Tool		LDL Technology	
	Trigger		Tool		LDL Technology	
	.....		.....		.....	
Documents as provided by the applicant .....	Description		File name		Issue date	
	Product description		320-186-Z052_Product_Description.pdf		13/07/2022	
	Quick Guide		320-186-Z053_Quick_Guide.pdf		13/07/2022	
	.....		.....		.....	

<sup>(3)</sup> Only for Medical Equipment

## Identification of the client

LDL Technology S.A.S.  
Parc technologique du Canal, 3 rue Giotto  
31520, Ramonville-Saint-Agne, FRANCE

## Testing period and place

<b>Test Location</b>	DEKRA Testing and Certification S.A.U.
<b>Date (start)</b>	2022-09-16
<b>Date (finish)</b>	2022-10-03

## Document history

Report number	Date	Description
72140RRF.003	2023-12-13	First release.
72140RRF.003A1	2024-03-13	Second release. Modification and correction of some minor typos. This modification of test report cancels and replaces the test report 72140RRF003.

## Environmental conditions

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

<b>Temperature</b>	Min. = 15 °C Max. = 35 °C
<b>Relative humidity</b>	Min. = 20 % Max. = 75 %

In the semianechoic chamber, the following limits were not exceeded during the test.

<b>Temperature</b>	Min. = 15 °C Max. = 35 °C
<b>Relative humidity</b>	Min. = 20 % Max. = 75 %

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

<b>Temperature</b>	Min. = 15 °C Max. = 35 °C
<b>Relative humidity</b>	Min. = 20 % Max. = 75 %

## Remarks and comments

The tests have been performed by the technical personnel: Antonio Manuel Sánchez and Pablo Redondo Reyes.

Used instrumentation:

Control No.	Equipment	Model	Manufacturer	Next Calibration
8130	SEMIANECHOIC ABSORBER LINED CHAMBER	P29419	ALBATROSS	N/A
8134	SHIELDED ROOM	P29419	ALBATROSS PROJECTS GMBH	N/A
5862	EMI TEST RECEIVER 9kHz-7GHz	ESR7	ROHDE AND SCHWARZ	2022-12-12
7826	ULTRALOG ANTENNA 30MHz-6GHz	HL562E_UPG	ROHDE AND SCHWARZ	2022-10-15
7763	HORN ANTENNA 1-18GHz	BBHA 9120D	SCHWARZBECK MESS-ELEKTRONIK	2022-11-15
6495	HORN ANTENNA 18-40GHz	BBHA 9170	SCHWARZBECK	2024-03-19
7862	PRE-AMPLIFIER G>30dB 18-40GHz	BLMA 1840-3G	BONN ELEKTRONIK	2023-02-15
7769	PREAMPLIFIER 30dB 500MHz-18GHz	BBV 9718 C	SCHWARZBECK	2023-03-25
6158	SIGNAL AND SPECTRUM ANALYZER 10Hz-40GHz	FSV40	ROHDE AND SCHWARZ	2023-10-22
6793	SHIELDED ROOM	S101	ETS LINDGREN	N/A
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 & SCHWARZ	2023-08-20
0922	POWER SUPPLY DC 40 V / 40 A	NGPE 40/40	ROHDE AND SCHWARZ	N/A
7760	DIGITAL MULTIMETER	175	FLUKE	2022-11-04
7798	EMC/RF MEASUREMENT SOFTWARE	WMS32	ROHDE AND SCHWARZ	N/A
4848	SOFTWARE FOR EMC/RF TESTING	EMC	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 5.2 (1M)

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

## Appendix A: Test results. Bluetooth Low Energy 5.2 (1M)

## INDEX

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TEST CONDITIONS .....	12
TEST CASES DETAILS .....	15
<i>99dBw Occupied Channel Bandwidth 99%</i> .....	15
<i>RSS-247 5.2 (a) / FCC 15.247 (a) (2) 6 dB Bandwidth</i> .....	19
<i>RSS-247 5.2 (b) / FCC 15.247 (e) Power spectral density</i> .....	23
<i>RSS-247 5.4 (d) / FCC 15.247 (b) (3) Maximum Peak Conducted output power</i> .....	27
<i>RSS-247 5.5 / FCC 15.247 (d) Band-edge emissions compliance (Transmitter)</i> .....	31
<i>RSS-247 5.5 / FCC 15.247 (d) Emission limitations radiated (Transmitter)</i> .....	36

## TEST CONDITIONS

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(\*): Data provided by the client.

### POWER SUPPLY (\*):

Vnominal:	3Vdc
Type of Power Supply:	Battery

### ANTENNA (\*):

Type of Antenna:	Internal antenna
Maximum Declared Antenna Gain:	2 dBi

### TEST FREQUENCIES (\*):

Low Channel:	2402 MHz
Middle Channel:	2440 MHz
High Channel:	2480 MHz

### CONDUCTED MEASUREMENTS:

The equipment under test was set up in a shielded room and it is connected to the TS8997 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).

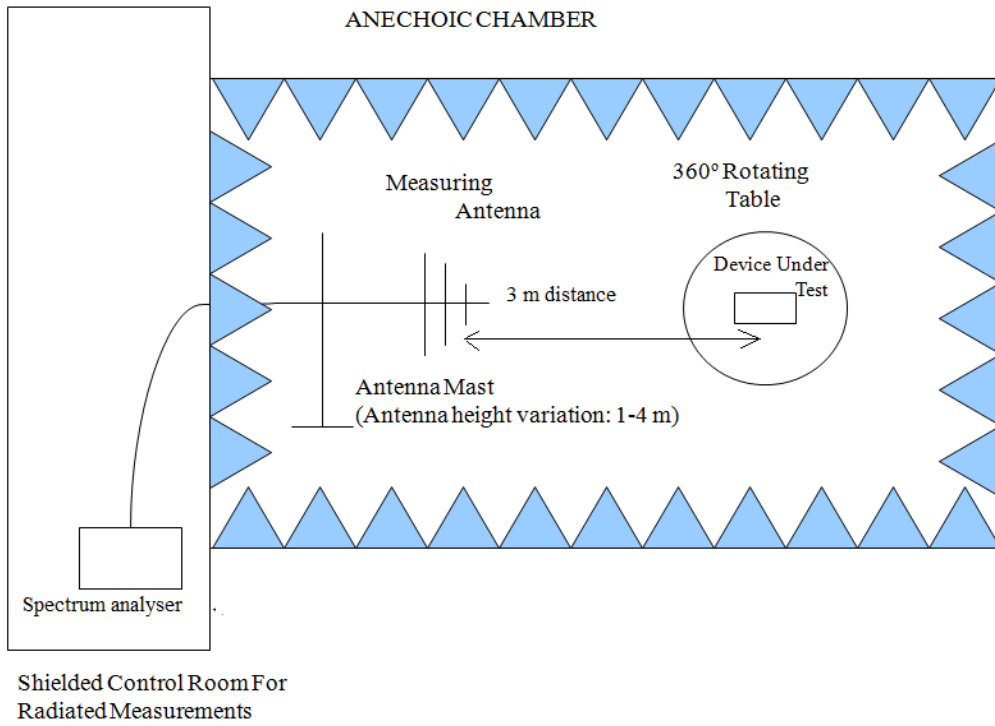
For radiated emissions in the range 17 GHz-26 GHz that is performed at a distance closer than the specified distance, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

The equipment under test was set up on a non-conductive platform above the ground plane and the situation and orientation was 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.

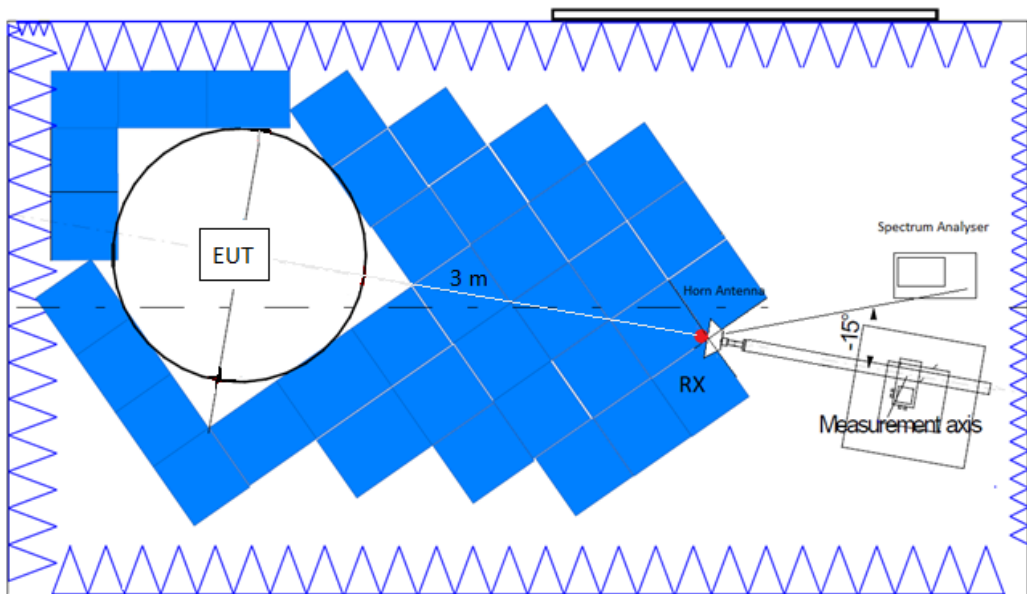
Measurements were made in both horizontal and vertical planes of polarization.

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.

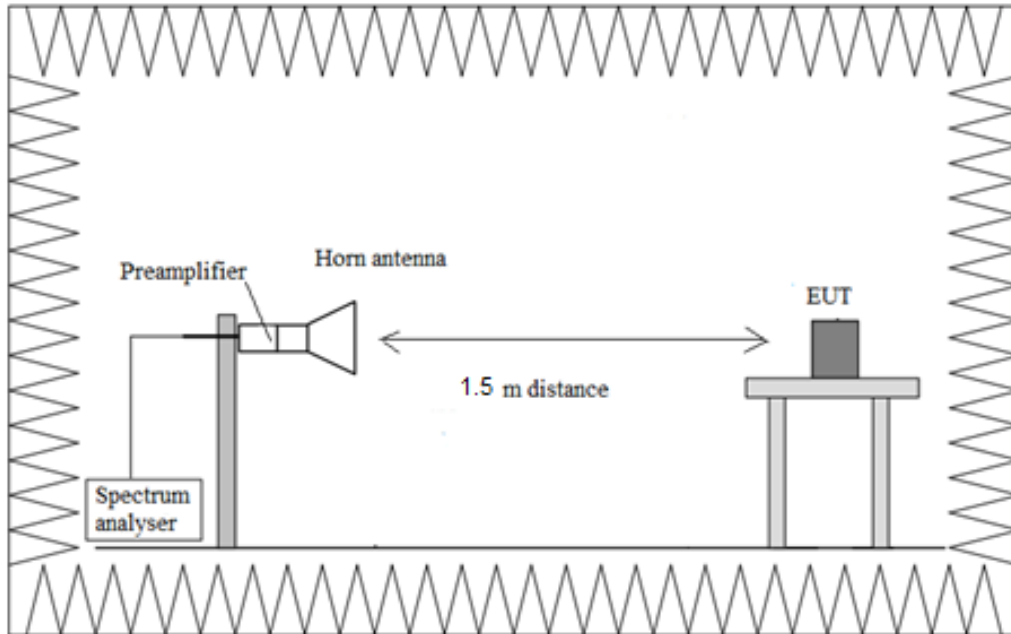
Radiated measurements setup from 30 MHz to 1 GHz:



Radiated measurements setup from 1 GHz to 17 GHz:



Radiated measurements setup  $f > 17$  GHz:



## TEST CASES DETAILS

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### 99dBw Occupied Channel Bandwidth 99%

Modulation: BTLE 5.2 (GFSK 1 Mbit/s)

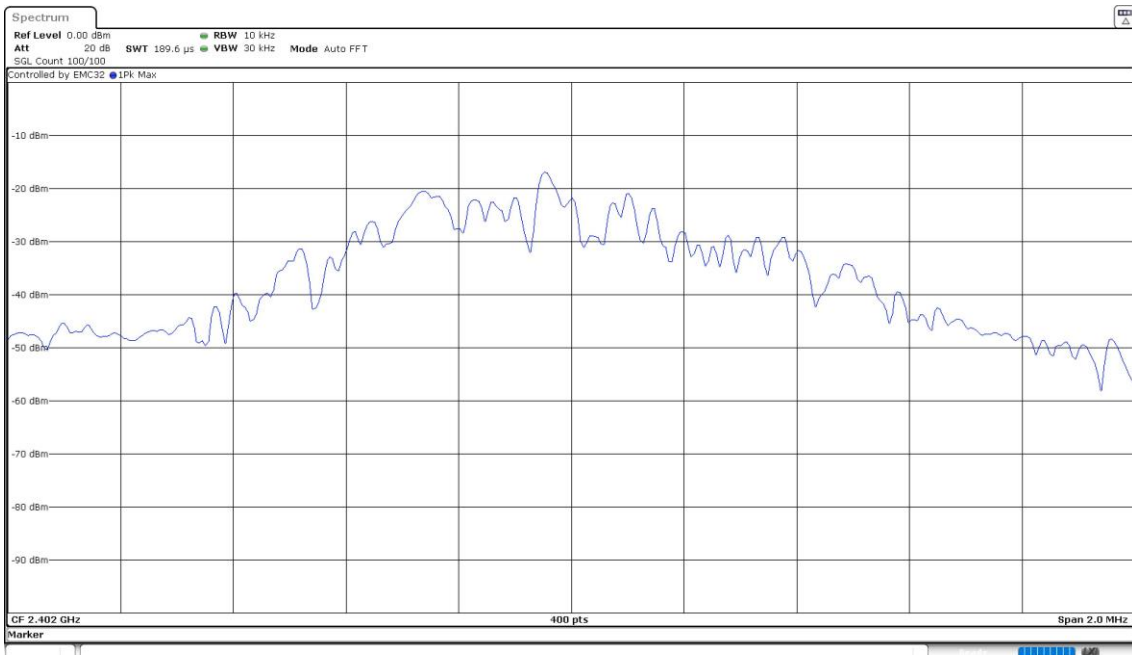
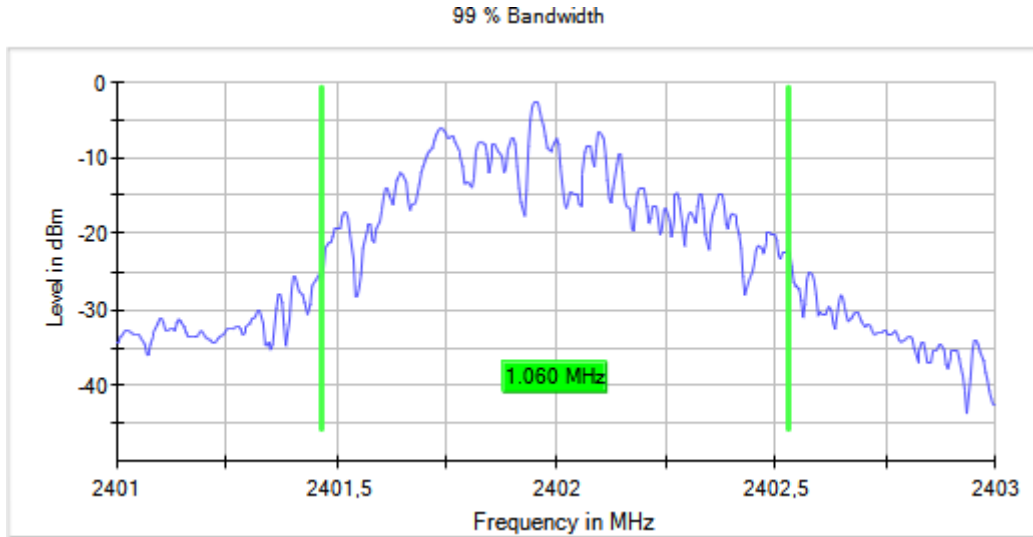
#### Results

Freq (MHz)	Occ Ch BW (MHz)
2402.00000	1.060
2440.00000	1.055
2480.00000	1.020

**Attachments**

**Frequency MHz = 2402.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Number of Transmission Chains = 1, Active Port = 1**

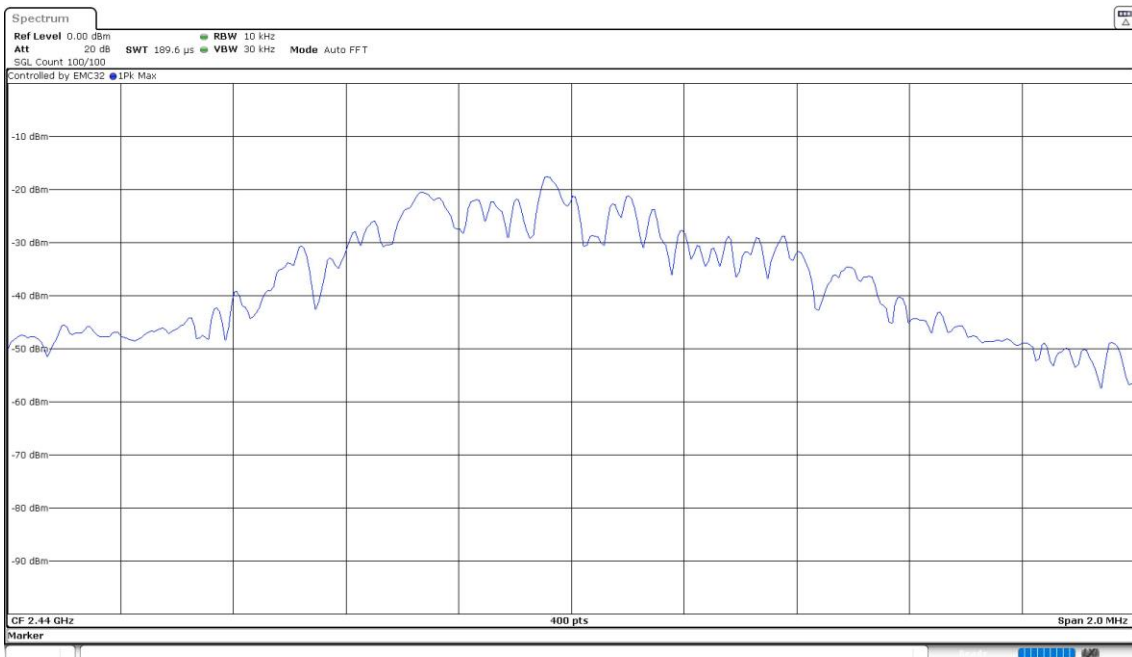
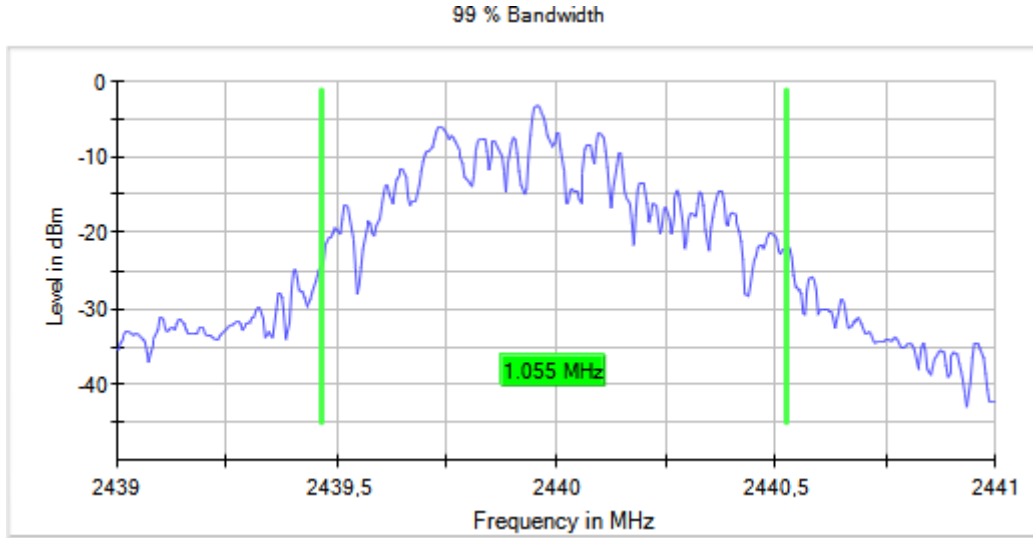
**Images:**





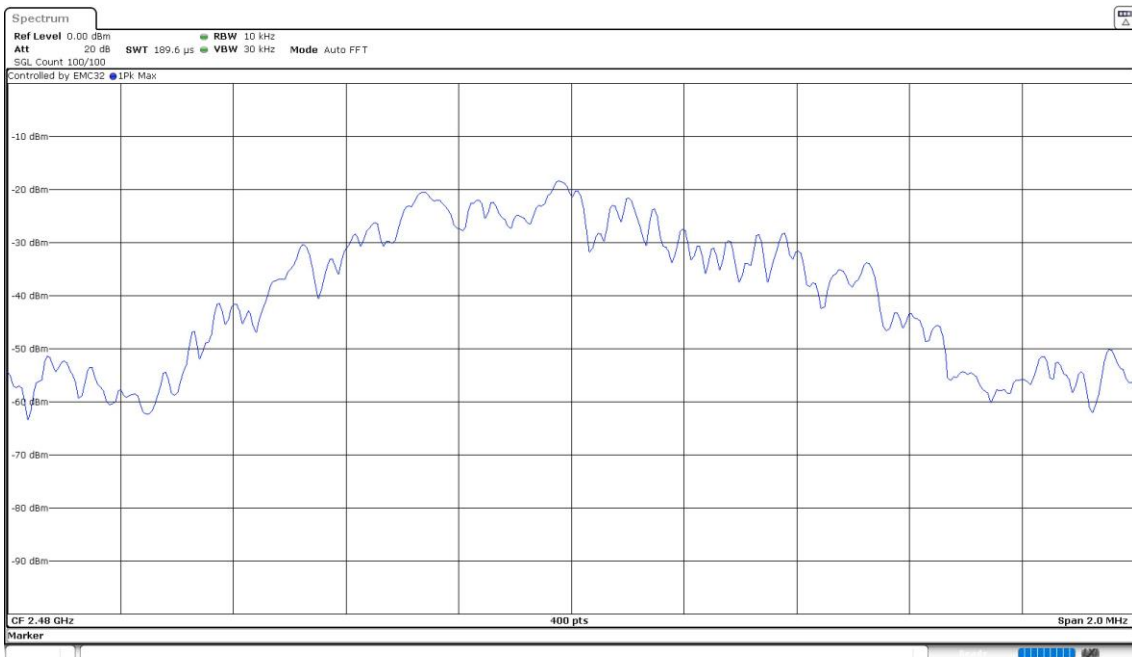
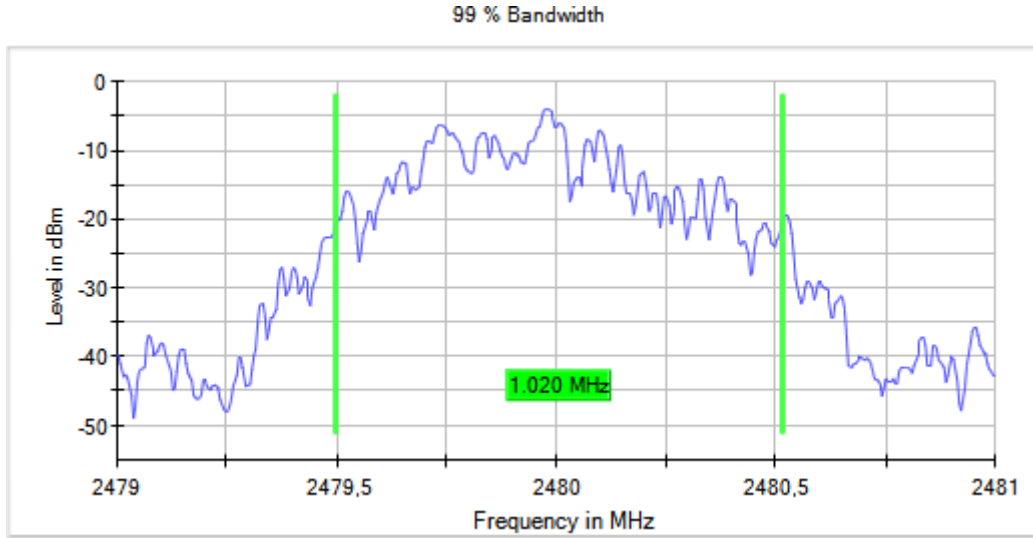
Frequency MHz = 2440.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1,  
Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Number of Transmission Chains = 1, Active Port = 1

Images:



Frequency MHz = 2480.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1,  
Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Number of Transmission Chains = 1, Active Port = 1

Images:



## 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.

Modulation: BTLE 5.2 (GFSK 1 Mbit/s)

### Results

Freq (MHz)	6 dB Bandwidth (MHz)
2402.00000	0.535
2440.00000	0.535
2480.00000	0.535

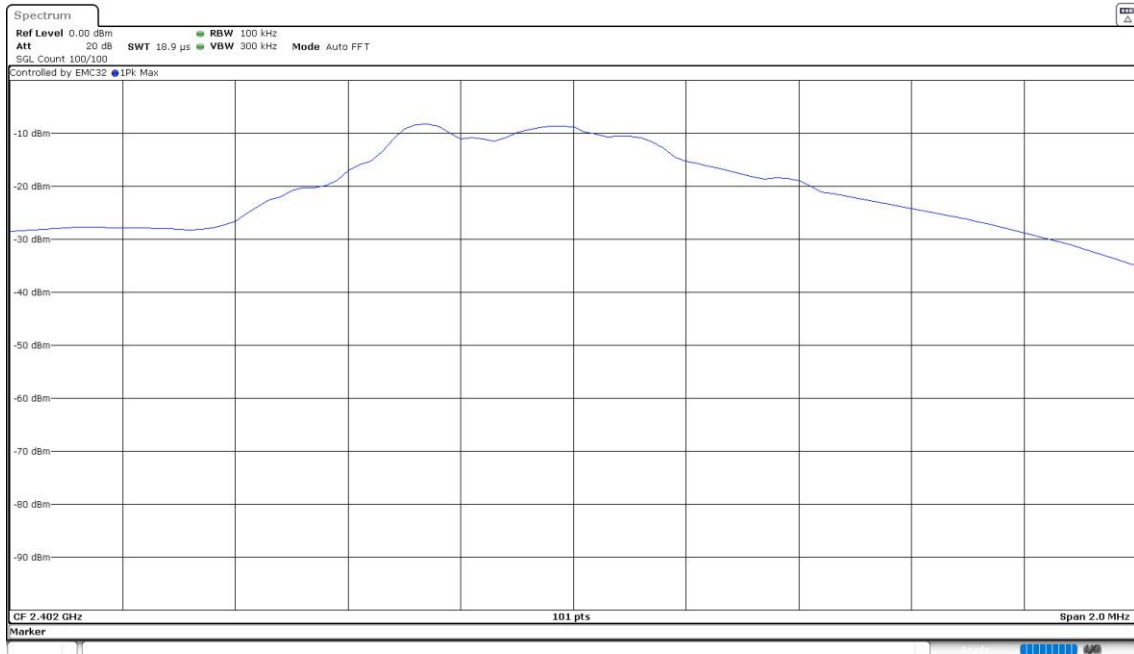
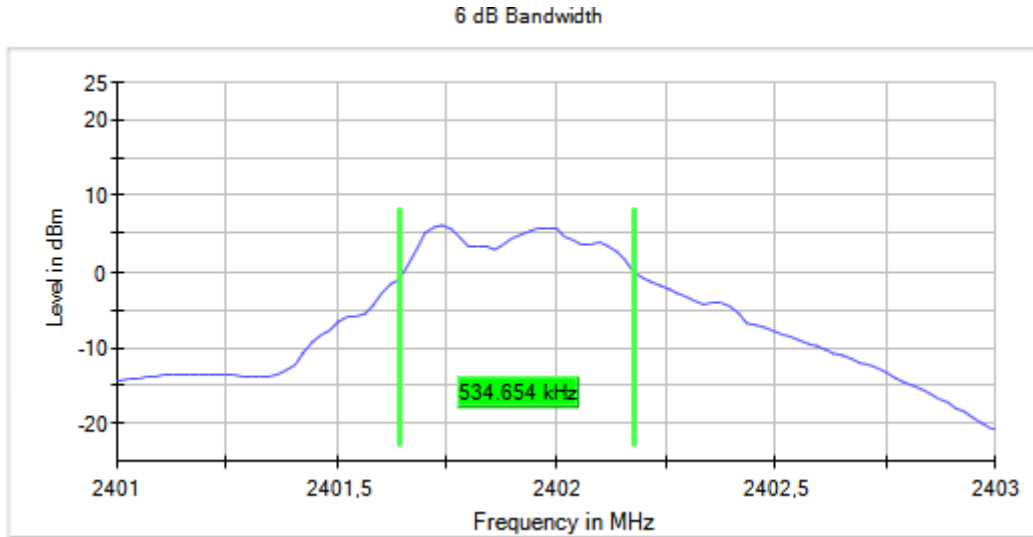
### Verdict

Pass

**Attachments**

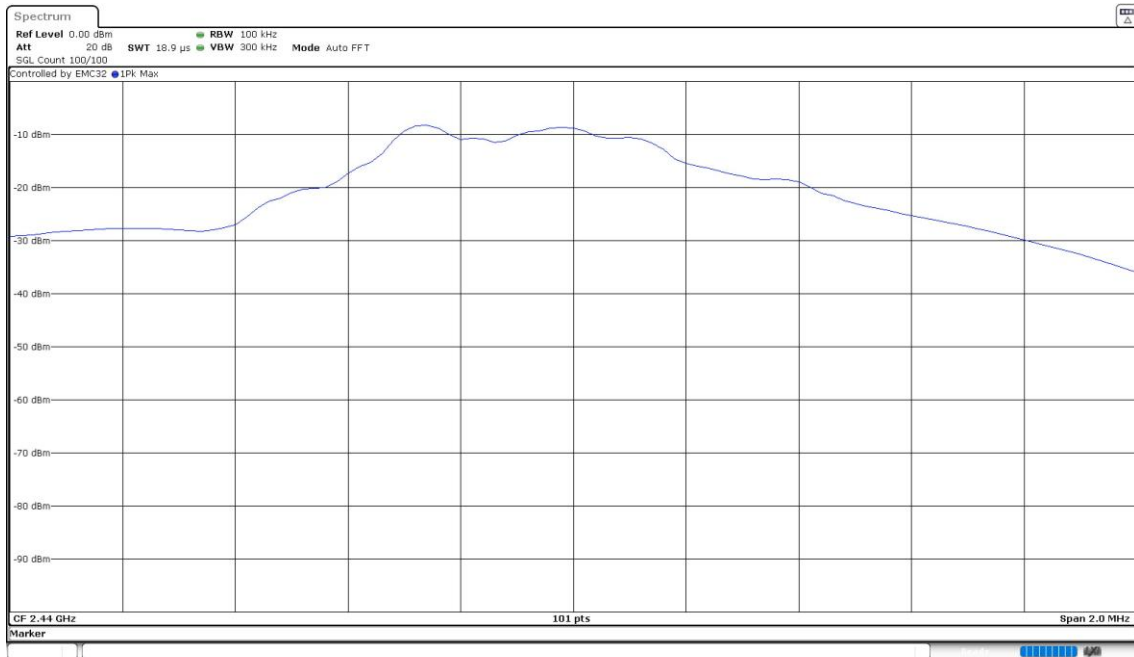
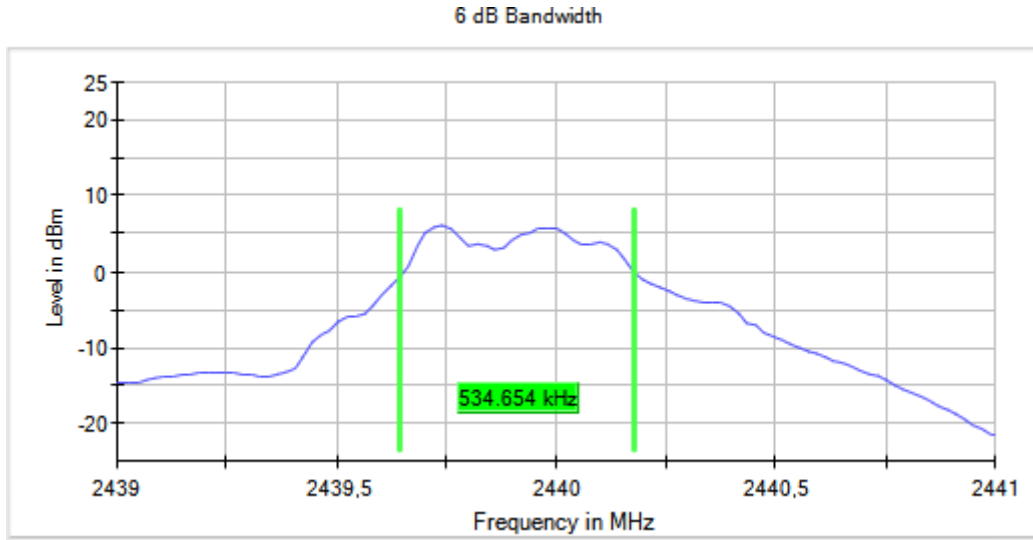
**Frequency MHz = 2402.00000, Bandwidth MHz = 1, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Number of Transmission Chains = 1, Active Port = 1**

**Images:**



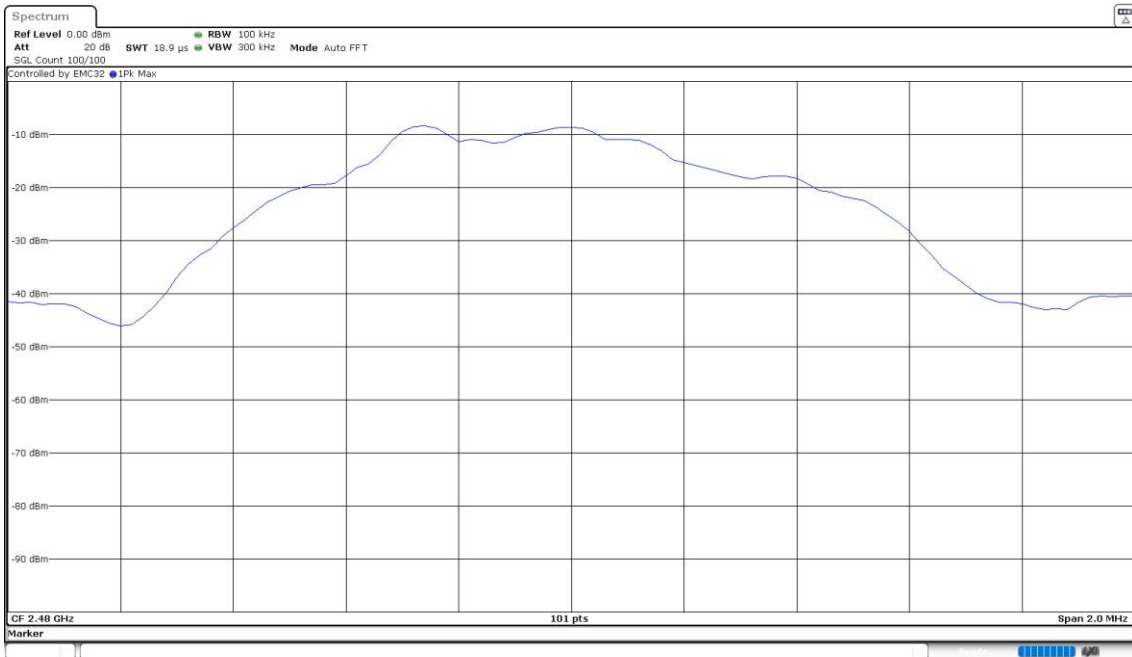
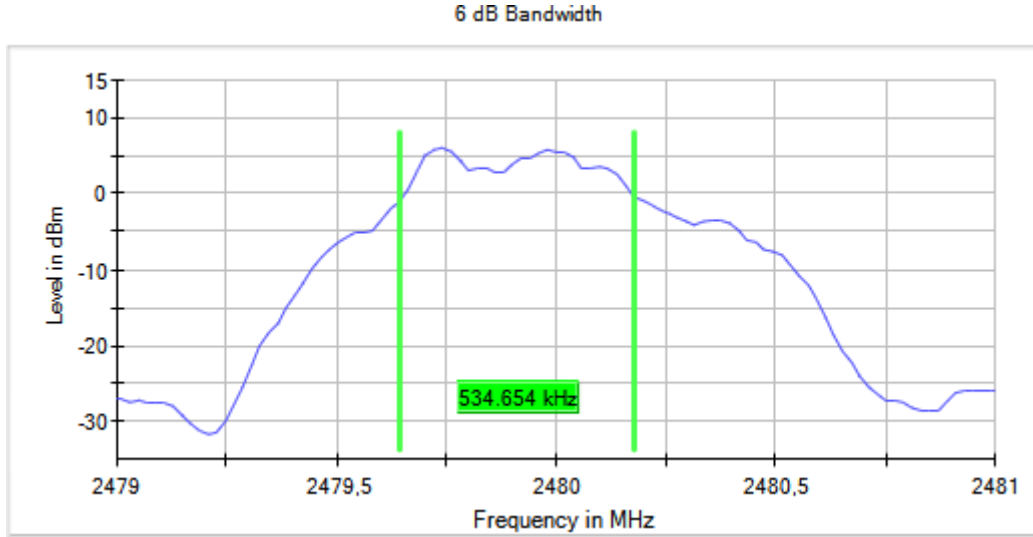
Frequency MHz = 2440.00000, Bandwidth MHz = 1, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Number of Transmission Chains = 1, Active Port = 1

Images:



Frequency MHz = 2480.00000, Bandwidth MHz = 1, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Number of Transmission Chains = 1, Active Port = 1

Images:



## 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.

Modulation: BTLE 5.2 (GFSK 1 Mbit/s)

### Results

Freq (MHz)	PSD (dBm)
2402.00000	-2.59
2440.00000	-2.93
2480.00000	-3.83

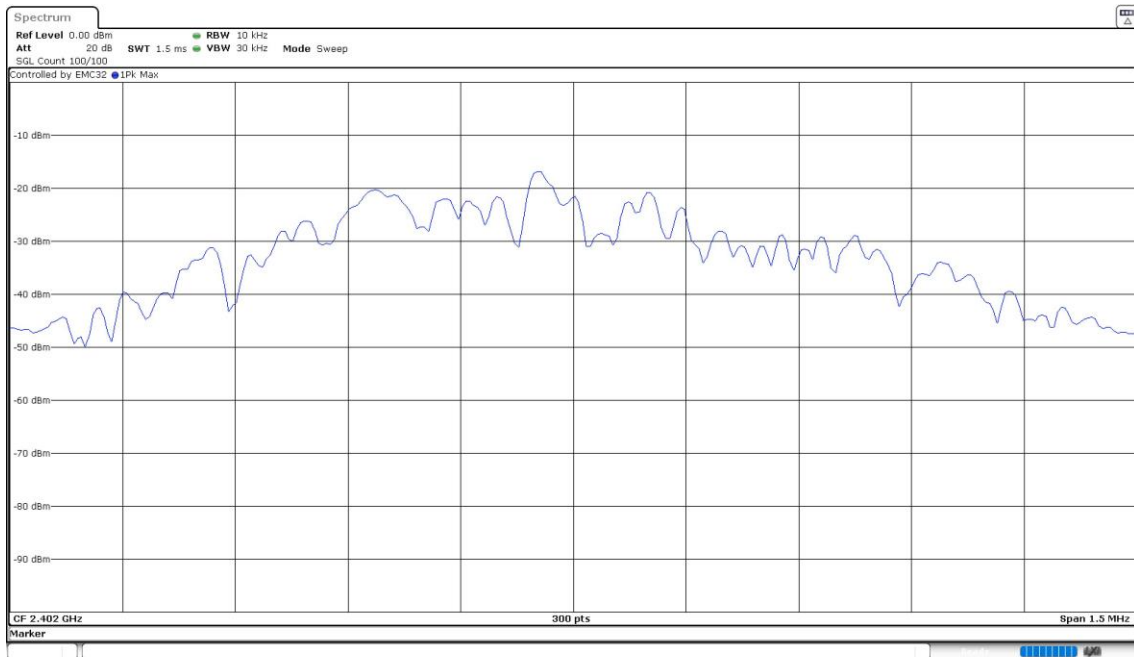
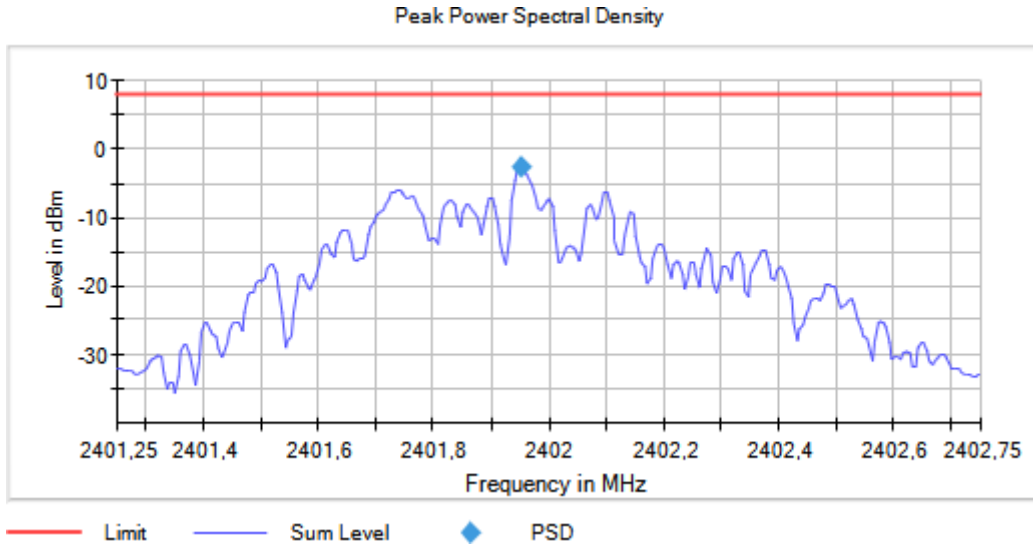
### Verdict

Pass

**Attachments**

**Frequency MHz = 2402.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Number of Transmission Chains = 1, Active Port = 1**

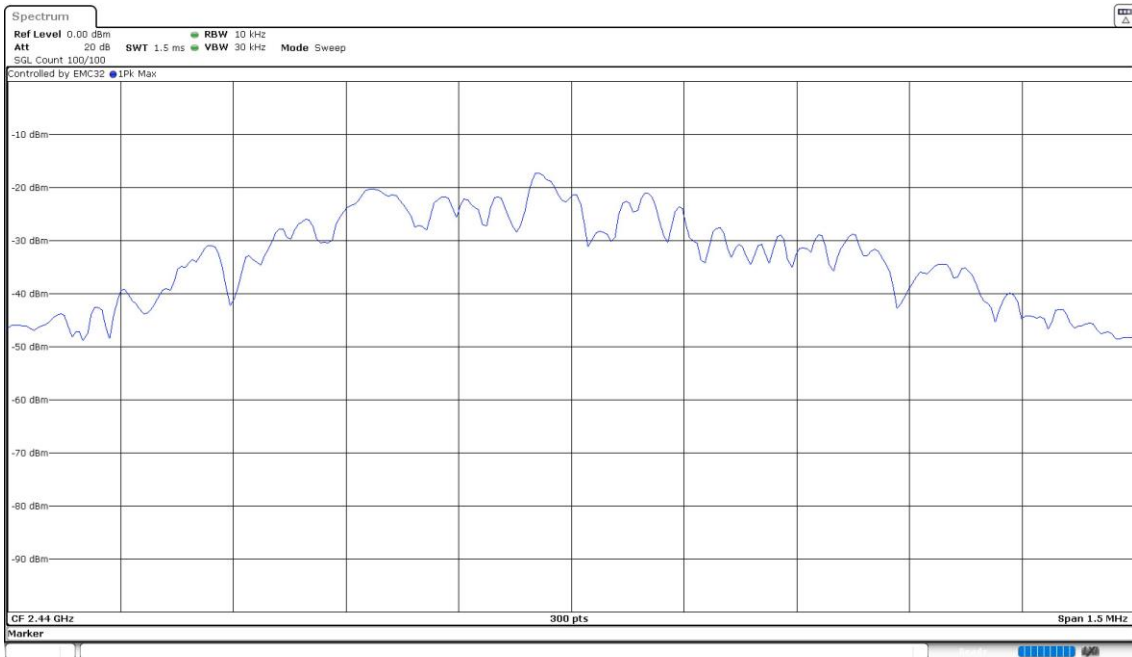
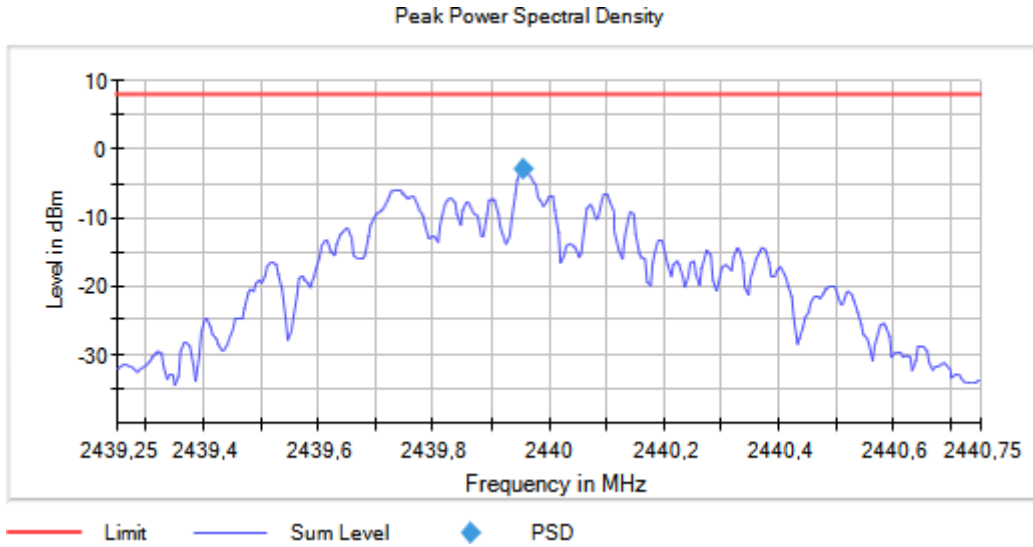
**Images:**





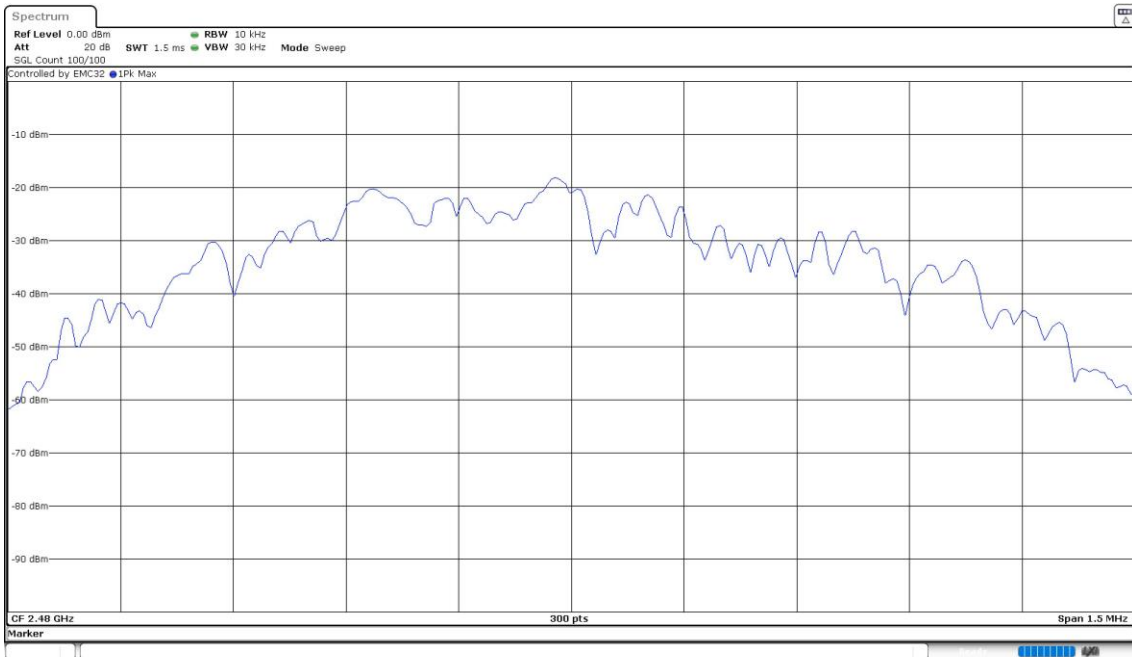
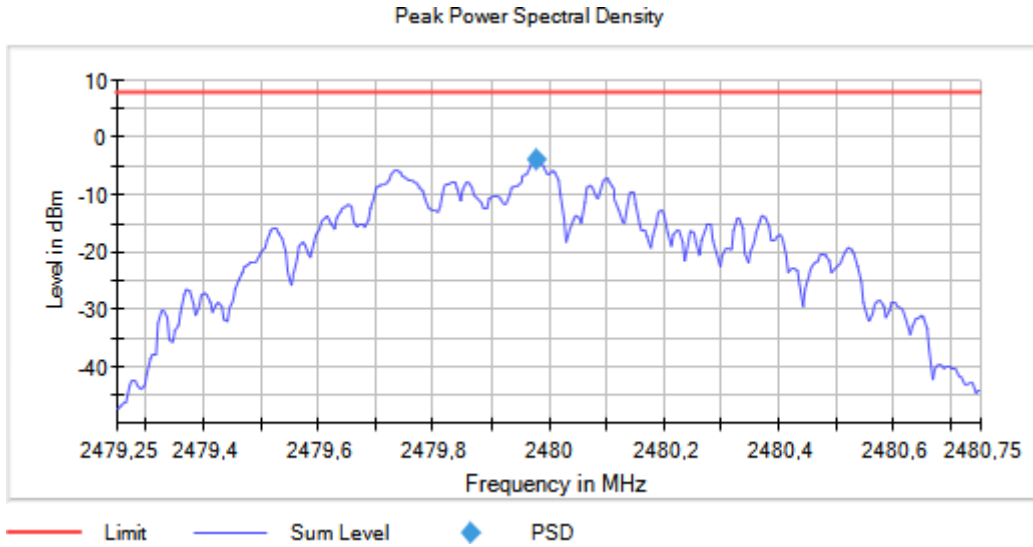
Frequency MHz = 2440.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1,  
Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Number of Transmission Chains = 1, Active Port = 1

Images:



Frequency MHz = 2480.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1,  
Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Number of Transmission Chains = 1, Active Port = 1

Images:



## 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 peak conducted output power level in the fundamental emission was measured using the method according to point 11.9.1.1 "RBW  $\geq$  DTS bandwidth" 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: 2 dBi

Modulation: BTLE 5.2 (GFSK 1 Mbit/s)

### Results

Freq (MHz)	Maximum Conducted Power (dBm)	Maximum EIRP Power (dBm)
2402.00000	6.112	8.112
2440.00000	6.102	8.102
2480.00000	6.078	8.078

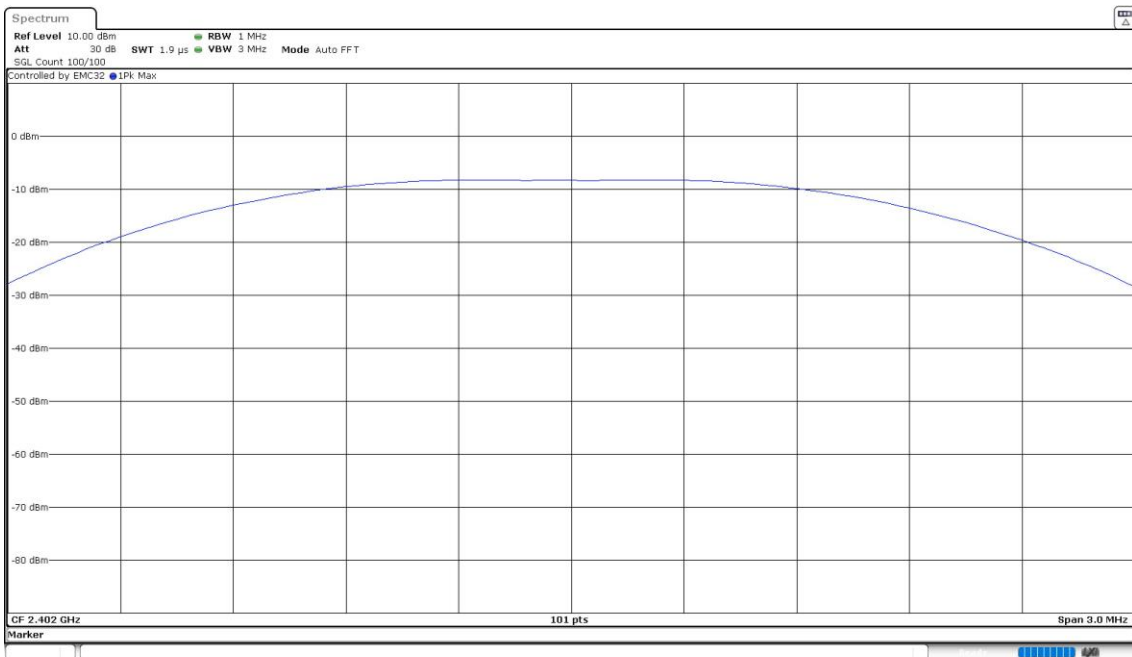
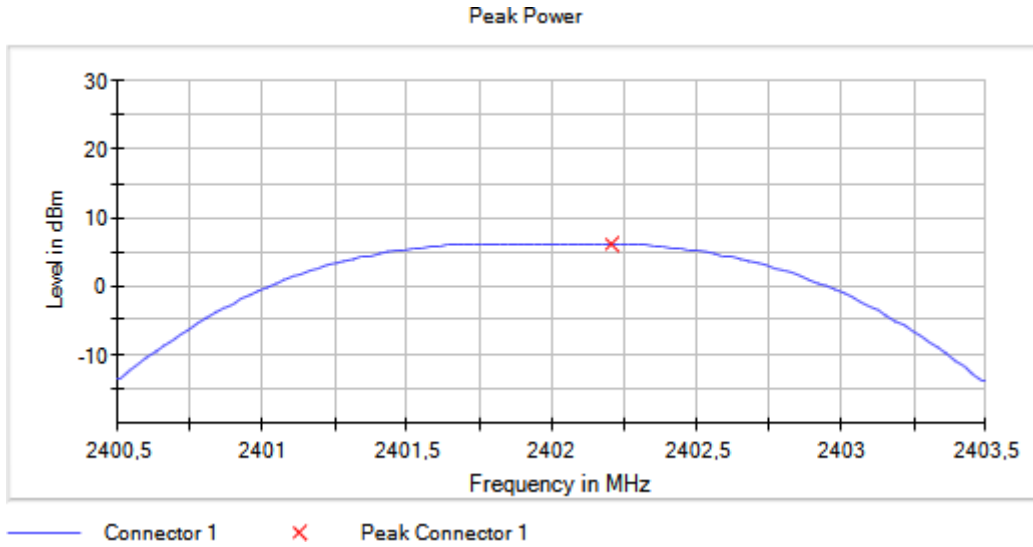
### Verdict

Pass

**Attachments**

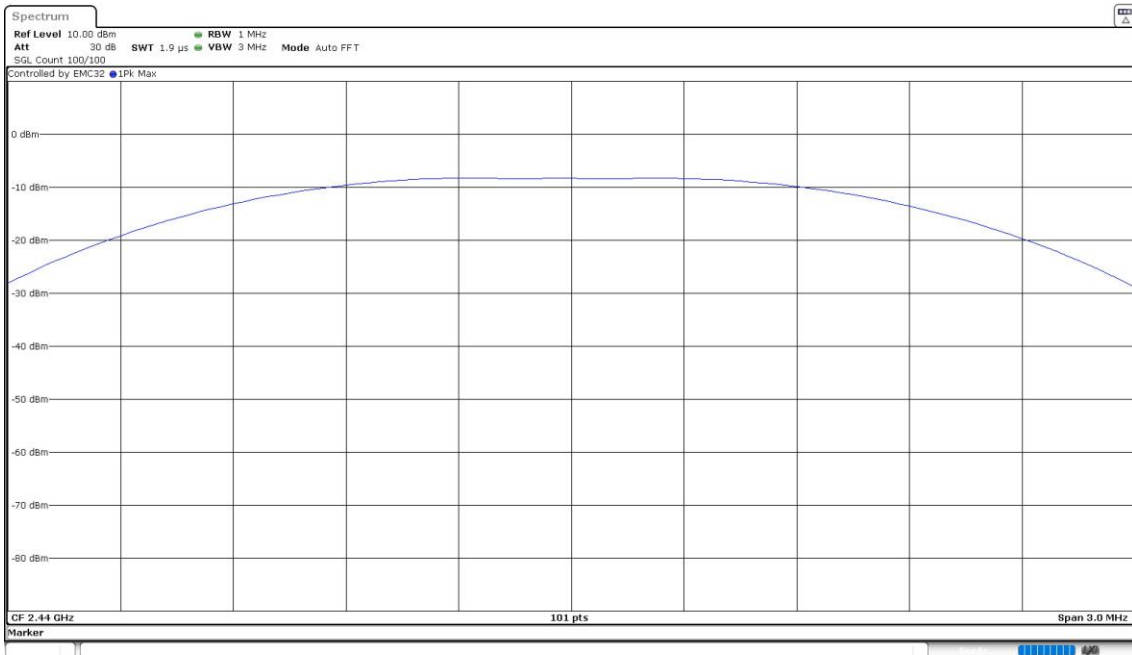
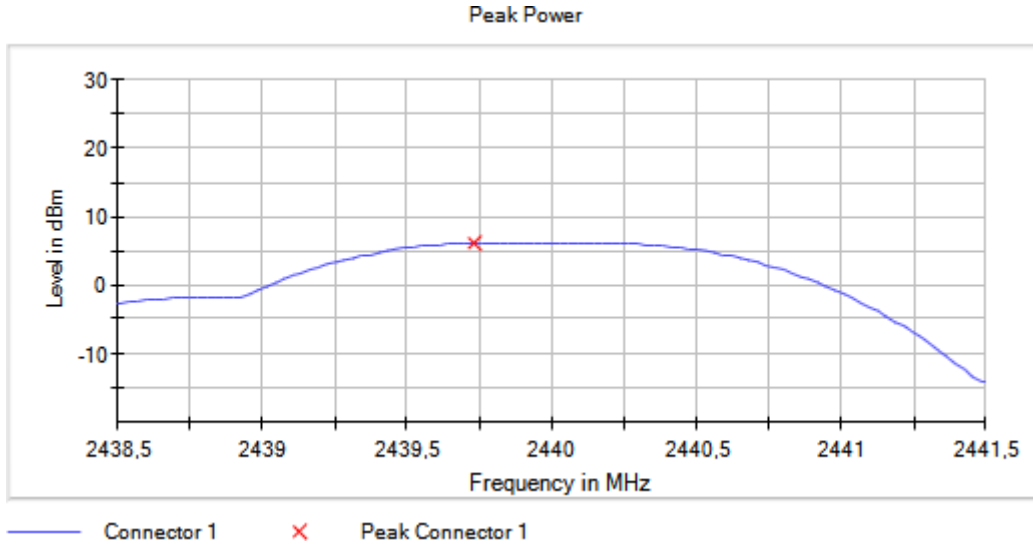
**Frequency MHz = 2402.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Number of Transmission Chains = 1, Active Port = 1**

**Images:**



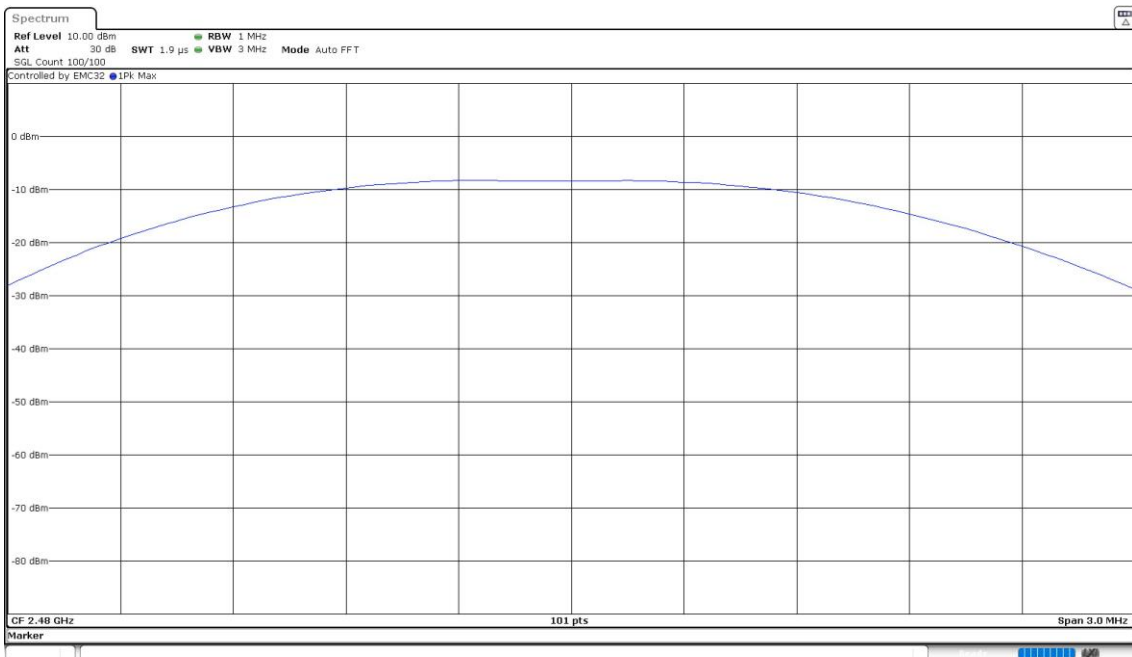
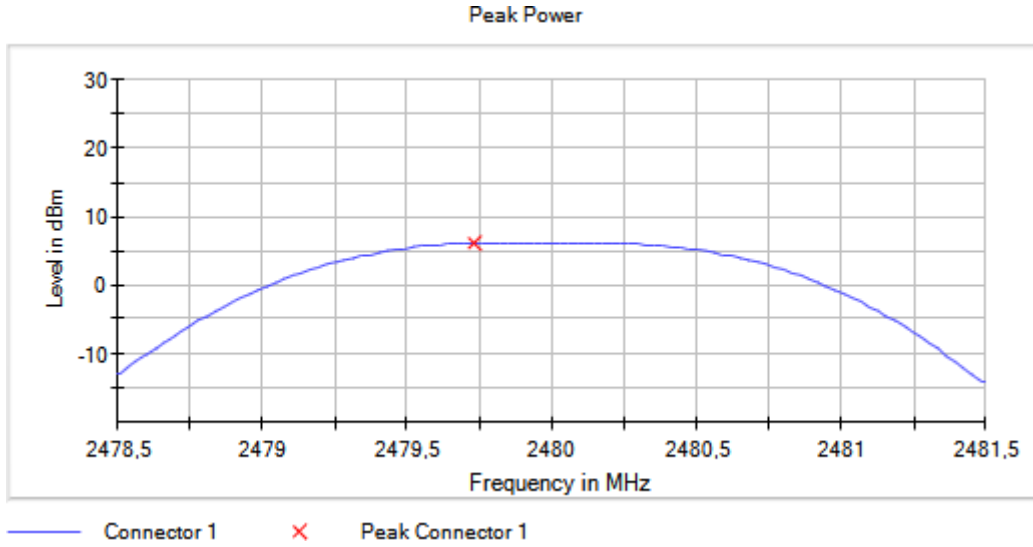
Frequency MHz = 2440.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1,  
Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Number of Transmission Chains = 1, Active Port = 1

Images:



Frequency MHz = 2480.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1,  
Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Number of Transmission Chains = 1, Active Port = 1

Images:



## 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.

Modulation: BTLE 5.2 (GFSK 1 Mbit/s)

### **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.

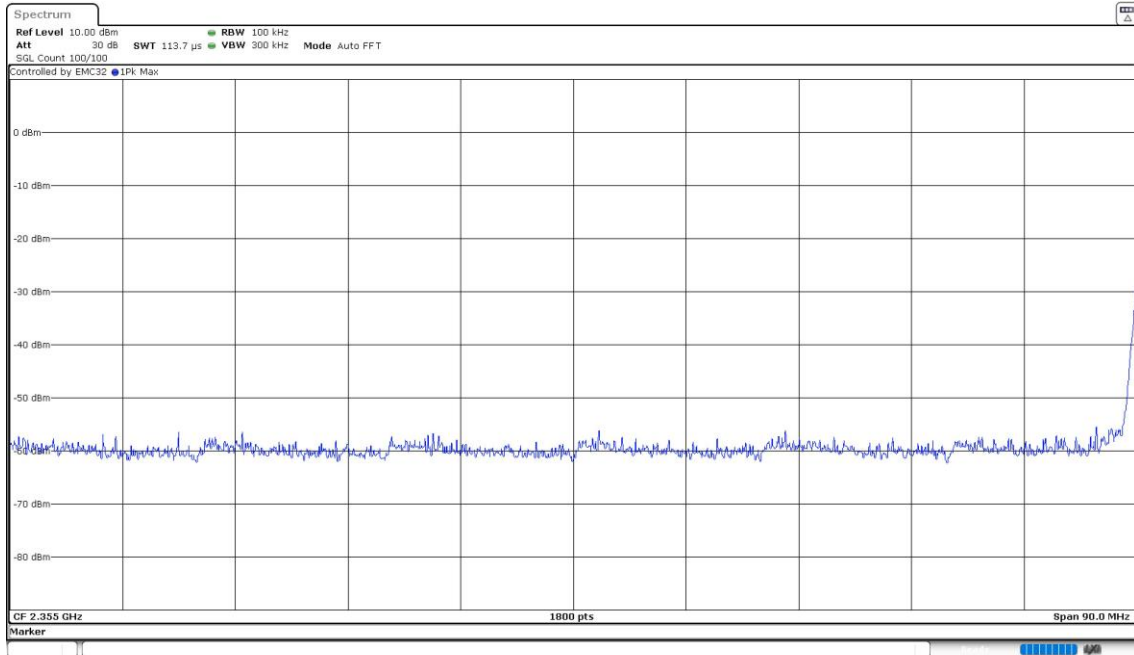
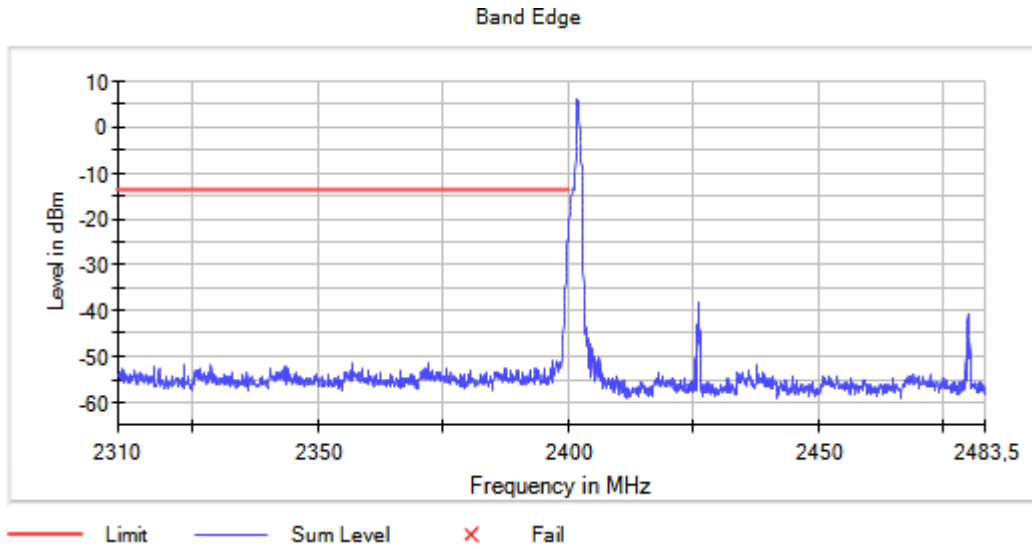
### **Verdict**

Pass

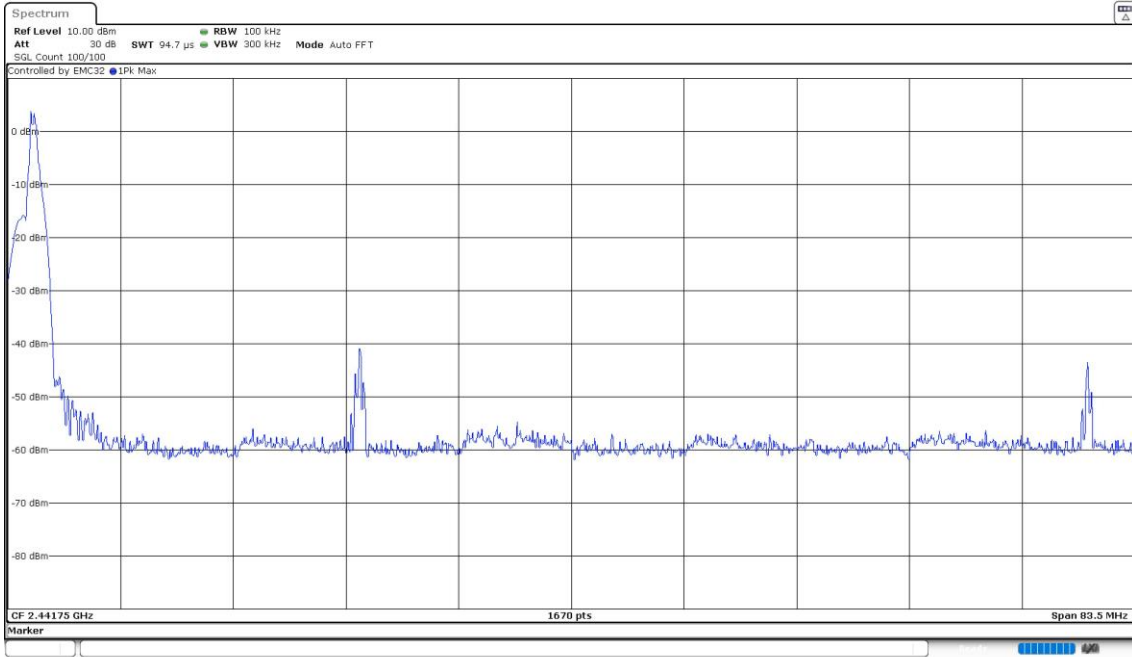
**Attachments**

**Frequency MHz = 2402.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1, Modulation = BTLE 5.2 (GFSK 1 Mbit/s)**

**Images:**

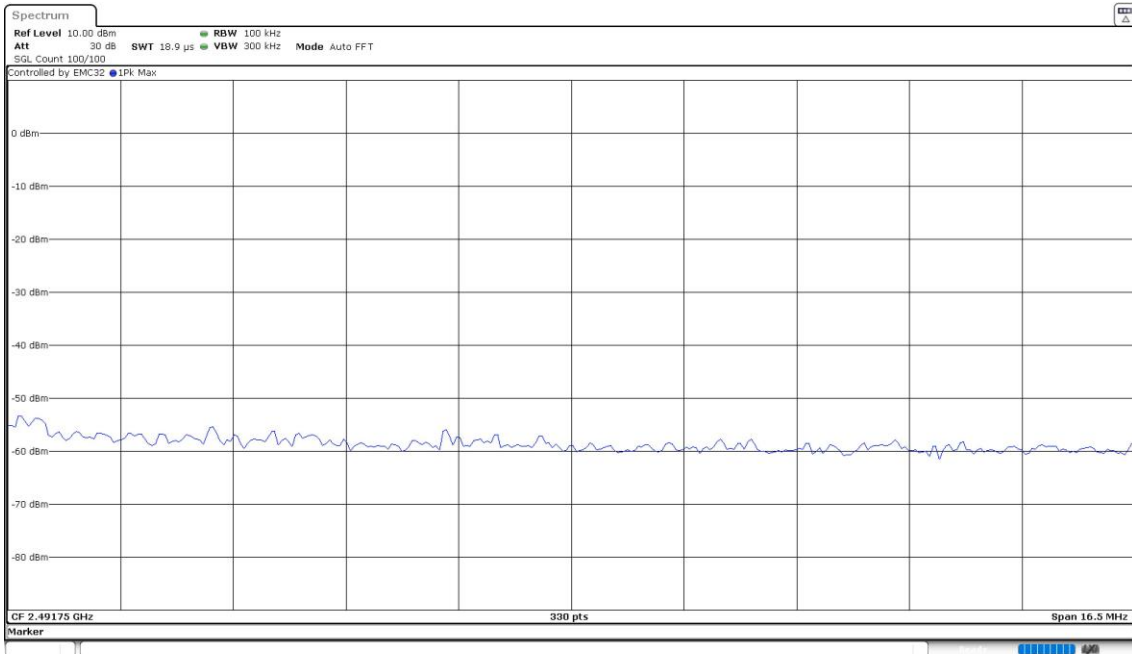
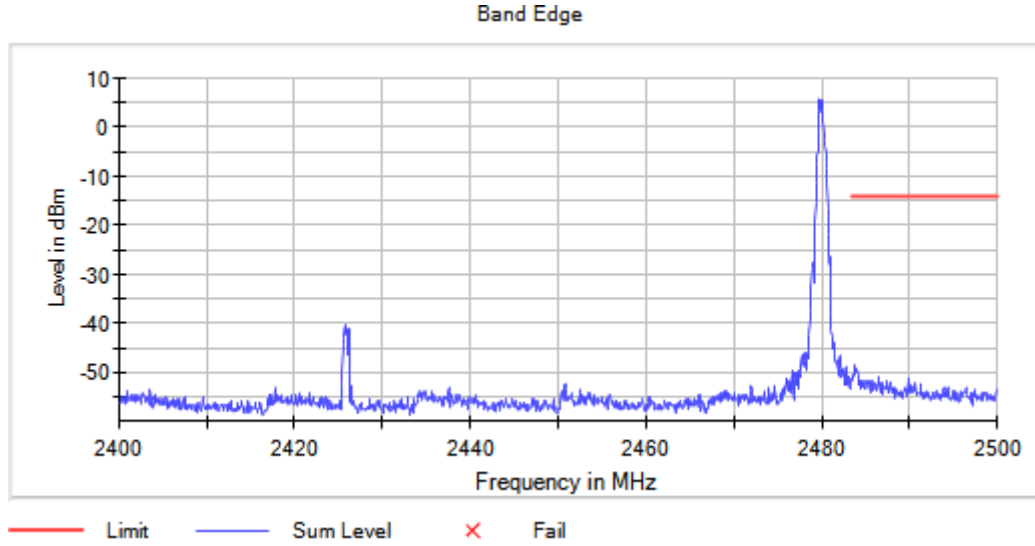


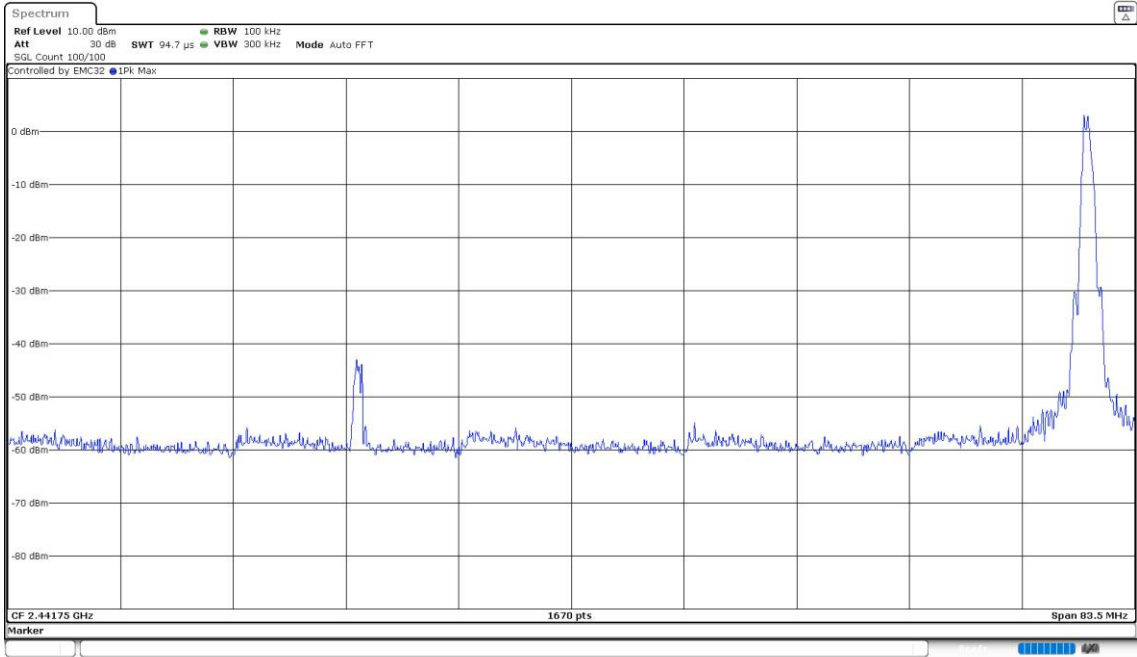




Frequency MHz = 2480.00000, Equipment Type = Digital Transmission System (DTS), Bandwidth MHz = 1,  
Modulation = BTLE 5.2 (GFSK 1 Mbit/s)

Images:





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

### Limits

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 is specified when measuring with peak detector function.

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

### Results

#### Frequency range 30 MHz – 1 GHz:

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

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

**Frequency range 1 GHz – 26 GHz:**

The results in the next tables 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 dBµV/m at 3 m) are measured with average detector for compliance checking with the average limit.

Modulation: BTLE 5.2 (GFSK 1 Mbit/s)

Duty Cycle correction factor: 8.4 dB

Freq (MHz)	Freq Rng (GHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Corrected Unwanted Lvl (dBµV/m)	Pol	Detector
2402.00000	[3, 17]	4803.500	60.55	--	H	PK
			34.09	42.49	H	AVG
		7206.500*	67.86		H	PK
		9607.000*	55.85		V	PK
		12010.000	58.33	--	H	PK
			43.79	52.19	H	AVG
15977.000		58.74	--	V	PK	
2440.00000		4879.500	61.45	--	H	PK
			35.53	43.93	H	AVG
		7320.500	68.91	--	H	PK
			41.84	50.24	H	AVG
		9760.500*	56.47			PK
	12199.000	60.11	--	H	PK	
43.93		52.33	H	AVG		
2480.00000	4959.500	61.99	--	H	PK	
		34.60	43.00	H	AVG	
	4960.000	63.19	--	H	PK	
	7439.000	73.66	--	H	PK	
	7440.000	71.40	--	V	PK	
		43.02	51.42	V	AVG	
	9919.500*	58.84	--	V	PK	
	12398.500	57.55	--	V	PK	
43.14		51.54	V	AVG		
16120.500	56.94	--	H	PK		
	44.92	53.32	H	AVG		

(\*): This frequency is not within any restricted band. The emission levels were measured with a RBW = 100 kHz and the measured radiated carrier level was 97.3 dBµV/m with RBW = 100 kHz. The emission level is therefore more than 20 dB below the carrier level as indicated in FCC 15.247 (d).

**Verdict**

Pass

**Attachments**

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

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
Receiver: [ESR 7] 30 MHz - 1 GHz	48,5 kHz	PK+	100 kHz	1 s	20 dB

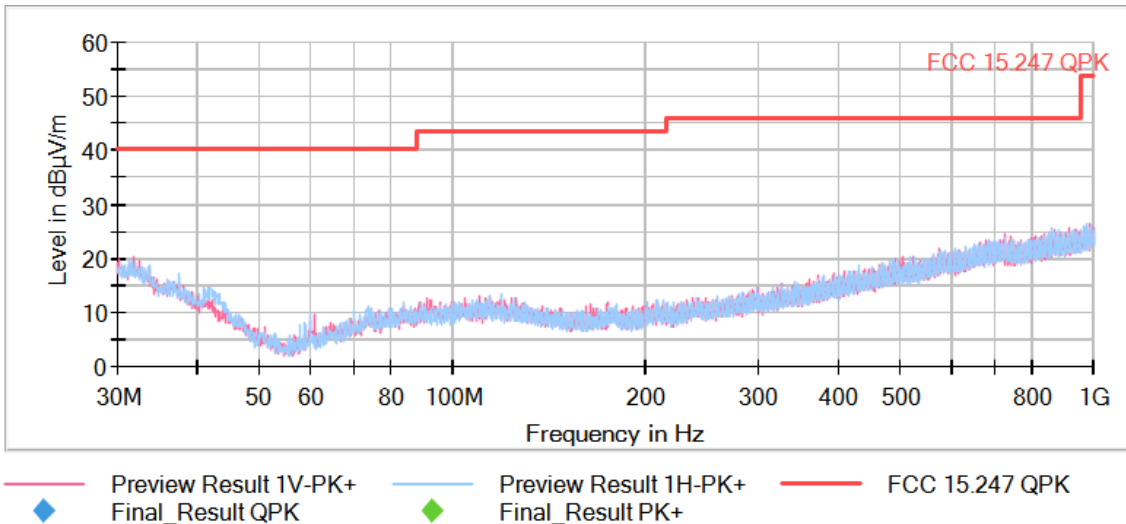
Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
Receiver: [FSV 40] 1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
Receiver: [FSV 40] 3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
Receiver: [FSV 40] 17 GHz - 26 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

**Frequency = The spurious frequencies detected do not depend neither on the operating channel;**  
**Equipment Type = DTS, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Frequency Range GHz = [0.03, 1]**

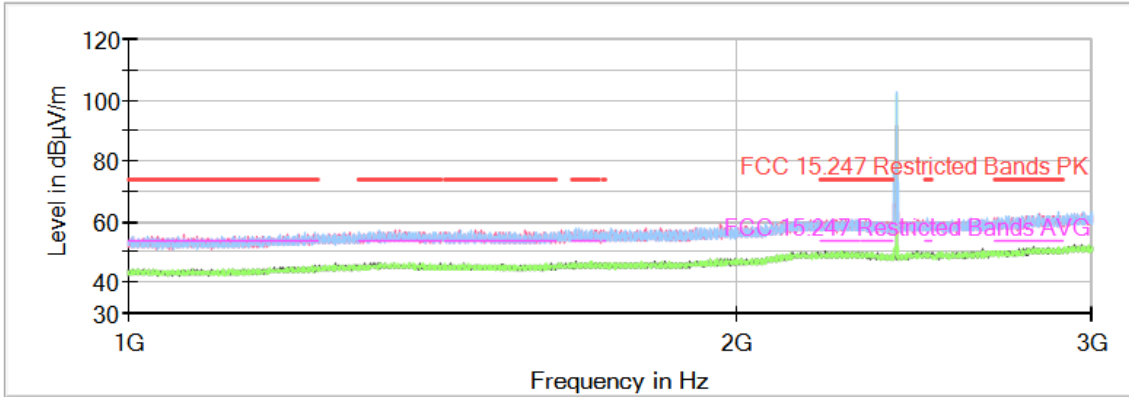
Images:



This plot is valid for all channel

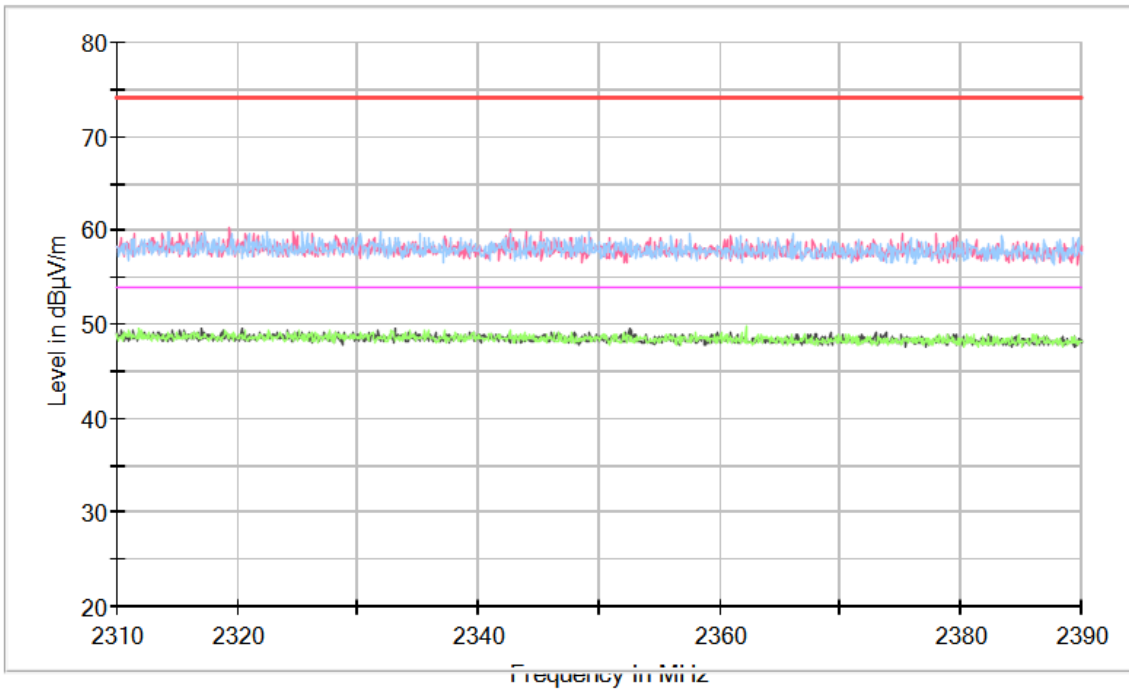
Frequency MHz = 2402.00000, Equipment Type = DTS, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Frequency Range GHz = [1, 3]

Images:



- Preview Result 2V-AVG
- Preview Result 2H-AVG
- FCC 15.247 Restricted Bands PK
- ◆ Final\_Result PK+
- Preview Result 1V-PK+
- Preview Result 1H-PK+
- FCC 15.247 Restricted Bands AVG
- ◆ Final\_Result AVG

Full Spectrum



- Preview Result 2V-AVG
- Preview Result 2H-AVG
- FCC 15.247 Restricted Bands PK
- ◆ Final\_Result PK+
- Preview Result 1V-PK+
- Preview Result 1H-PK+
- FCC 15.247 Restricted Bands AVG
- ◆ Final\_Result AVG

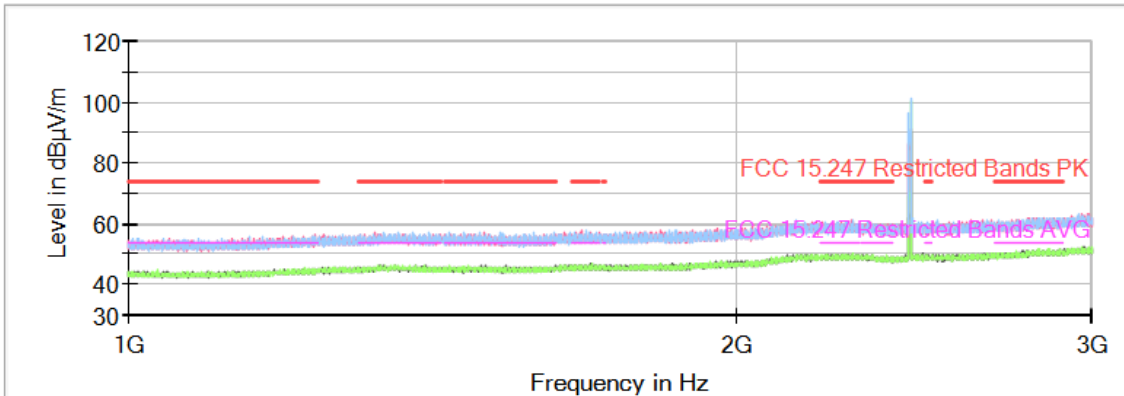
Full Spectrum





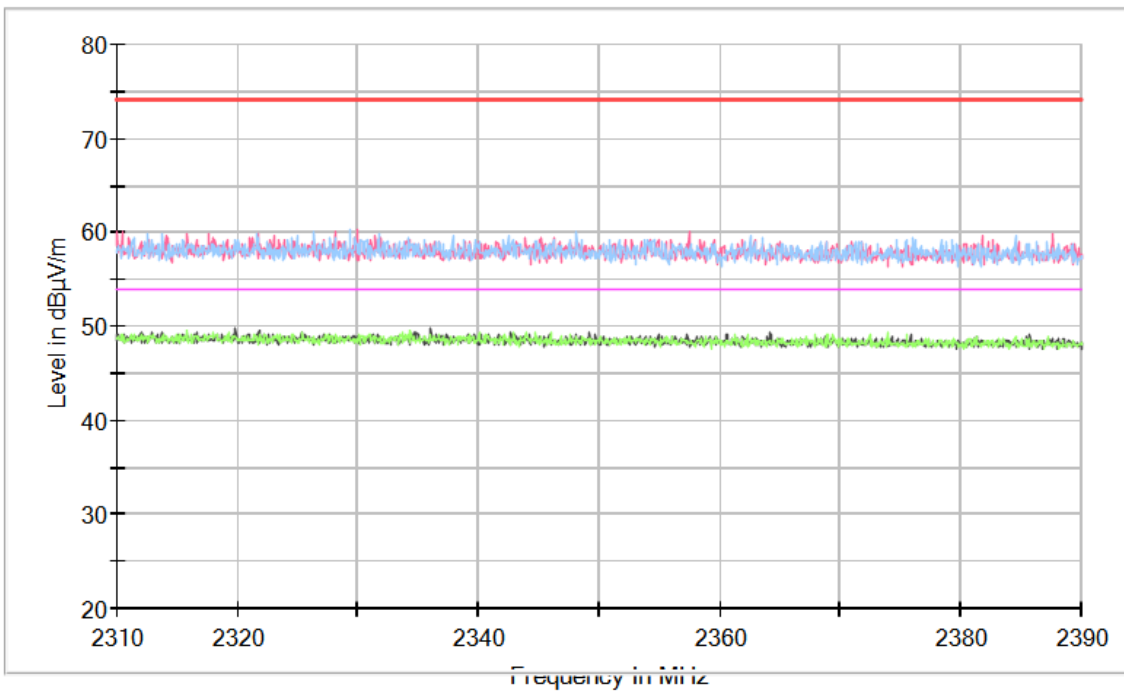
Frequency MHz = 2440.00000, Equipment Type = DTS, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Frequency Range GHz = [1, 3], Number of Transmission Chains = 1, Measurement Point = 1, Active Port = 1

Images:



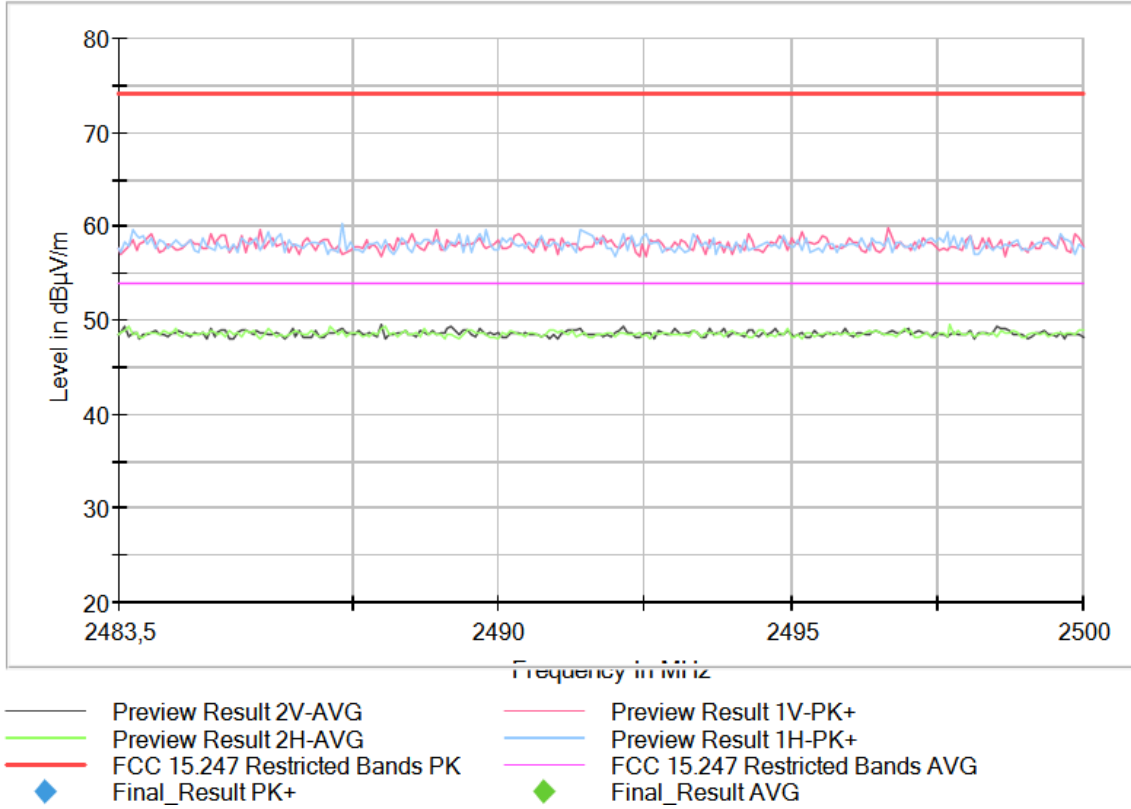
- Preview Result 2V-AVG
- Preview Result 2H-AVG
- FCC 15.247 Restricted Bands PK
- ◆ Final\_Result PK+
- Preview Result 1V-PK+
- Preview Result 1H-PK+
- FCC 15.247 Restricted Bands AVG
- ◆ Final\_Result AVG

Full Spectrum



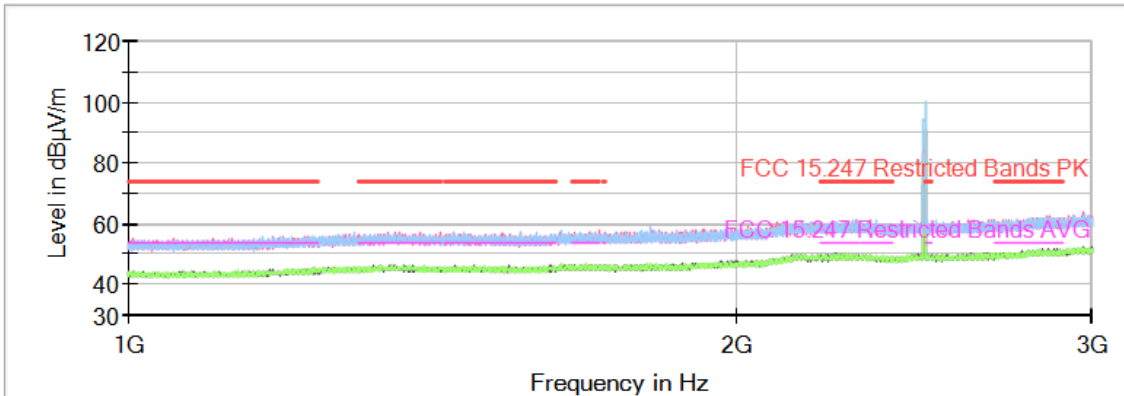
- Preview Result 2V-AVG
- Preview Result 2H-AVG
- FCC 15.247 Restricted Bands PK
- ◆ Final\_Result PK+
- Preview Result 1V-PK+
- Preview Result 1H-PK+
- FCC 15.247 Restricted Bands AVG
- ◆ Final\_Result AVG

### Full Spectrum



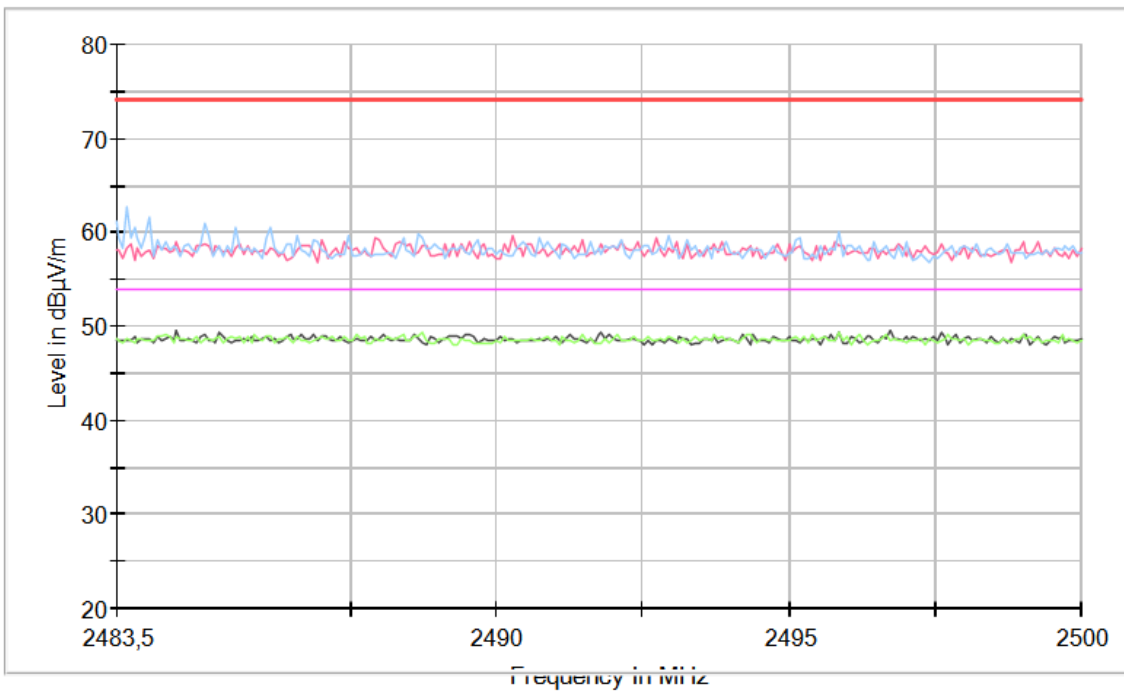
Frequency MHz = 2480.00000, Equipment Type = DTS, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Frequency Range GHz = [1, 3], Number of Transmission Chains = 1, Measurement Point = 1, Active Port = 1

Images:



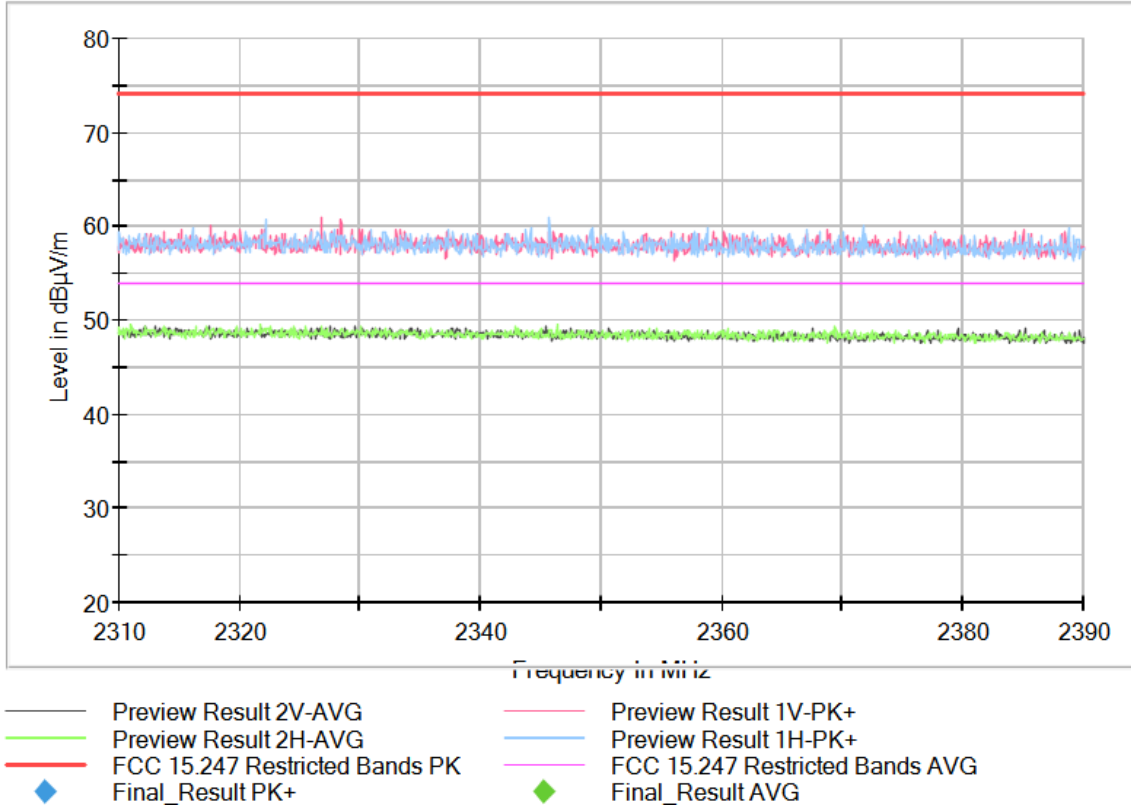
- Preview Result 2V-AVG
- Preview Result 2H-AVG
- FCC 15.247 Restricted Bands PK
- ◆ Final\_Result PK+
- Preview Result 1V-PK+
- Preview Result 1H-PK+
- FCC 15.247 Restricted Bands AVG
- ◆ Final\_Result AVG

Full Spectrum



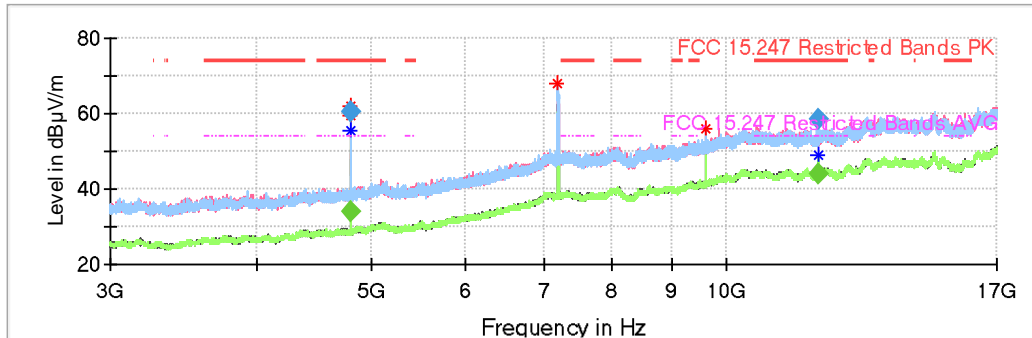
- Preview Result 2V-AVG
- Preview Result 2H-AVG
- FCC 15.247 Restricted Bands PK
- ◆ Final\_Result PK+
- Preview Result 1V-PK+
- Preview Result 1H-PK+
- FCC 15.247 Restricted Bands AVG
- ◆ Final\_Result AVG

### Full Spectrum



Frequency MHz = 2402.00000, Equipment Type = DTS, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Frequency Range GHz = [3, 17], Number of Transmission Chains = 1, Measurement Point = 1, Active Port = 1

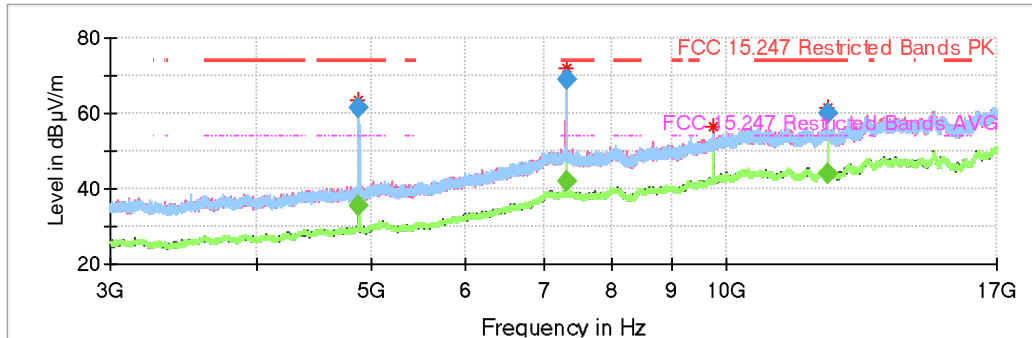
Images:



- Preview Result 2V-AVG
- Preview Result 2H-AVG
- \* PK+
- FCC 15.247 Restricted Bands PK
- ◆ Final\_Result PK+
- Preview Result 1V-PK+
- Preview Result 1H-PK+
- \* AVG
- FCC 15.247 Restricted Bands AVG
- ◆ Final\_Result AVG

Frequency MHz = 2440.00000, Equipment Type = DTS, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Frequency Range GHz = [3, 17], Number of Transmission Chains = 1, Measurement Point = 1, Active Port = 1

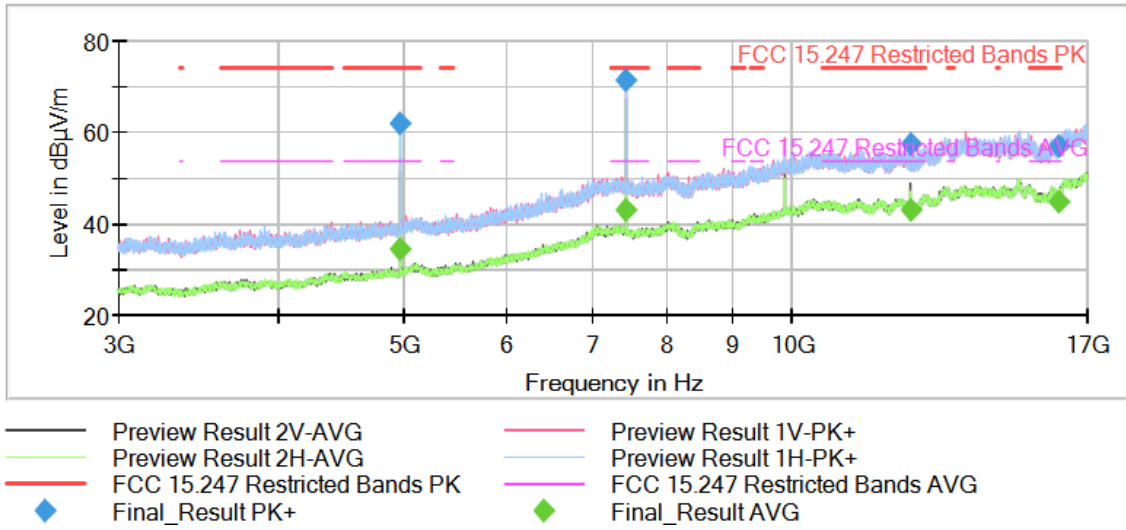
Images:



- Preview Result 2V-AVG
- Preview Result 2H-AVG
- \* PK+
- FCC 15.247 Restricted Bands PK
- ◆ Final\_Result PK+
- Preview Result 1V-PK+
- Preview Result 1H-PK+
- \* AVG
- FCC 15.247 Restricted Bands AVG
- ◆ Final\_Result AVG

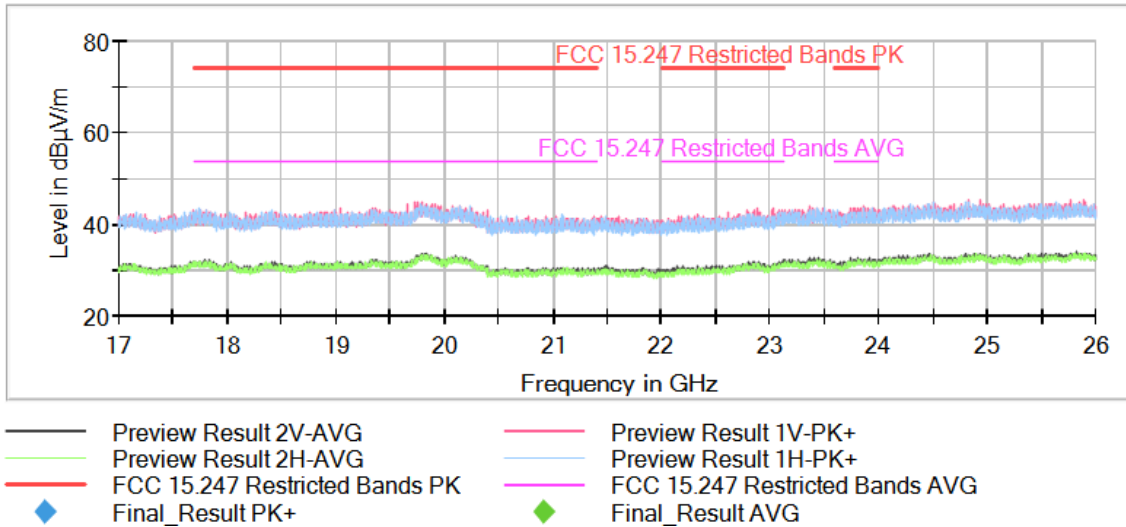
Frequency MHz = 2480.00000, Equipment Type = DTS, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Frequency Range GHz = [3, 17], Number of Transmission Chains = 1, Measurement Point = 1, Active Port = 1

Images:



Frequency = The spurious frequencies detected do not depend neither on the operating channel;  
 Equipment Type = DTS, Modulation = BTLE 5.2 (GFSK 1 Mbit/s), Frequency Range GHz = [17, 26]

Images:



This plot is valid for all channel