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

ISED CABid: ES1909

Lab. Company Number: 4621A

Test Report No:
82635RRF.002

Test Report
USA FCC Part 15.247, 15.209
CANADA RSS-247, RSS-Gen

(*) Identification of item tested	Precision Prime 24/7 optical heart rate sensor
(*) Trademark	Polar
(*) Model and /or type reference	Model name: 6F Commercial name: Polar Loop Gen2
Other identification of the product	FCC ID: INW6F IC: 6248A-6F
(*) Features	Bluetooth LE HW version: 007114333.02 SW version: 1.99.175
Applicant	Polar Electro Oy Professorintie 5, 90440 Kempele FNLAND
Test method requested, standard	USA FCC Part 15.247 (10-1-23 Edition): Operation within the bands 902 - 928 MHz, 2400 -2483.5 MHz, and 5725 - 5850 MHz. USA FCC Part 15.209 (10-1-23 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)	Antonio José Jurado Industrial & Automotive EMC Lab. Manager 80157242B ANTONIO JOSE JURADO (C:A29507456) Firmado digitalmente por 80157242B ANTONIO JOSE JURADO (C:A29507456) Fecha: 2025.08.06 14:15:44 +02'00'
Date of issue	2025-08-05
Report template No	FDT08_25 (*) "Data provided by the client"

Index

Acronyms

Acronym ID	Acronym Description
	E.I.R.P.
Detector	Detector used
Ebw	Emission Bandwidth
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
Operation Band	Operation Band
PSD	Power Spectral Density
Peak Power	Maximum Peak Conducted Output Power
Pol	Polarization
Port	Active Port
RU	Resource Unit
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 S.A.U. is an FCC-recognized accredited testing laboratory with appropriate scope of accreditation that covers the performed tests in this report.

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

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

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

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

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

General conditions

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

Uncertainty

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

The total uncertainty of the measurement system for the radiated emissions of EUT from 30 MHz to 1 GHz is: Measurement uncertainty ≤ ± 5,35 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 ≤ ± 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 ≤ ± 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 ≤ ± 0,80 dB
RF Average Output Power: Measurement uncertainty ≤ ± 0,99 dB
Power Spectral Density: Measurement uncertainty ≤ ± 0,99 dB
6dB Bandwidth: Measurement uncertainty ≤ ± 2,84 %
Occupied Channel Bandwidth: Measurement uncertainty ≤ ± 1,17 %
Conducted Band-edge spurious emissions: Measurement uncertainty ≤ ± 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 Precision Prime 24/7 optical heart rate sensor. Precision Prime 24/7 optical heart rate sensor with Bluetooth LE connectivity.

DEKRA Testing and Certification S.A.U. declines any responsibility with respect to the information provided by the client and that may affect the validity of results. The laboratory is not responsible for such information and it is not covered by accreditation.

Usage of samples

Samples undergoing test have been selected by: The client.

Id	Control Number	Description	Model	Serial Nº	Date of Reception	Application
S/01	82635B_4.1	Polar Loop 2	6F	C5236L0000010	2025-06-20	Element Under Test
S/02	82635B_8.1	Polar Loop 2	6F	C5236F0000012	2025-06-20	Element Under Test

Notes referenced to samples during the project:

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

Test sample description

<table>
<tr><td rowspan="7">Ports…… :</td><td rowspan="2">Port name and description</td><td colspan="4">Cable</td></tr>
<tr><td>Specified max length [m]</td><td>Attached during test</td><td>Shielded</td><td>Coupled to patient(3)</td></tr>
<tr><td>USB port</td><td>0.6</td><td>[X]</td><td>[ ]</td><td>[ ]</td></tr>
<tr><td>.....</td><td>.....</td><td>[ ]</td><td>[ ]</td><td>[ ]</td></tr>
<tr><td>.....</td><td>.....</td><td>[ ]</td><td>[ ]</td><td>[ ]</td></tr>
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<tr><td>.....</td><td>.....</td><td>[ ]</td><td>[ ]</td><td>[ ]</td></tr>
<tr><td>Supplementary information to the ports…… :</td><td colspan="5">.....</td></tr>
<tr><td rowspan="5">Rated power supply .....:</td><td colspan="2" rowspan="2">Voltage and Frequency</td><td colspan="4">Reference poles</td></tr>
<tr><td>L1</td><td>L2</td><td>L3</td><td>N</td><td>PE</td></tr>
<tr><td>[ ]</td><td>AC: .....</td><td>[ ]</td><td>[ ]</td><td>[ ]</td><td>[ ]</td><td>[ ]</td></tr>
<tr><td>[ ]</td><td>AC: .....</td><td>[ ]</td><td>[ ]</td><td>[ ]</td><td>[ ]</td><td>[ ]</td></tr>
<tr><td>[X]</td><td colspan="5">DC: 3.87 Vdc</td></tr>
<tr><td></td><td>[ ]</td><td colspan="5">DC: .....</td></tr>
<tr><td>Rated Power .....:</td><td colspan="6">0.658 W</td></tr>
<tr><td>Clock frequencies.....:</td><td colspan="6">32 MHz, 32.768 kHz</td></tr>
<tr><td>Other parameters .....:</td><td colspan="6">.....</td></tr>
<tr><td>Software version .....:</td><td colspan="6">1.99.175</td></tr>
<tr><td>Hardware version .....:</td><td colspan="6">007114333.02</td></tr>
<tr><td>Dimensions in cm (W x H x D) ....:</td><td colspan="6">2.67 x 4.25 x 0.91</td></tr>
<tr><td rowspan="5">Mounting position .....:</td><td>[ ]</td><td colspan="5">Table top equipment</td></tr>
<tr><td>[ ]</td><td colspan="5">Wall/Ceiling mounted equipment</td></tr>
<tr><td>[ ]</td><td colspan="5">Floor standing equipment</td></tr>
<tr><td>[X]</td><td colspan="5">Hand-held equipment</td></tr>
<tr><td>[ ]</td><td colspan="5">Other: .....</td></tr>
</table>

Modules/parts.....:	**Module/parts of test item**	**Type**	**Manufacturer**
	.....	.....	.....
	.....	.....	.....
	.....	.....	.....
	.....	.....	.....
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

Polar Electro Oy
Professorintie 5, 90440 Kempele FNLAND

Testing period and place

Test Location	DEKRA Testing and Certification S.A.U.
Date (start)	2025-07-04
Date (finish)	2025-07-16

Document history

Report number	Date	Description
82635RRF.002	2025-08-05	First release.

Environmental conditions

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

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

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

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

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

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

Remarks and comments

The tests have been performed by the technical personnel: Karla Castilla Alcalde, Rubén Mora Fernandez, Victoria Olmedo Villalba and Álvaro Borrego Robles.

Used instrumentation:

Control No.	Equipment	Model	Manufacturer	Next Calibration
10304	EMI TEST RECEIVER 2Hz-44GHz	ESW44	ROHDE AND SCHWARZ	2026-10-01
07040	EXTENSION FOR OPEN SWITCH UNIT UP TO 40GHz	OSP-B157Wx	Rohde&Schwarz	2025-04-19
07763	HORN ANTENNA 1-18GHz	BBHA 9120D	SCHWARZBECK MESS-ELEKTRONIK	2026-01-16
06495	HORN ANTENNA 18-40GHz	BBHA 9170	SCHWARZBECK	2027-07-11
09968	HYBRID BILOG ANTENNA 30MHz-6GHz	3142E	ETS LINDGREN	2026-09-22
07862	PRE-AMPLIFIER G>30dB 18-40GHz	BLMA 1840-3G	BONN ELEKTRONIK	2026-07-09
07769	PREAMbPLIFIER 30dB 500MHz-18GHz	BBV 9718 C	SCHWARZBECK	2026-03-17
07039	Rohde&Schwarz	OSP-B157W8	ROHDE & SCHWARZ	2025-05-25
08130	SEMIANECHOIC ABSORBER LINED CHAMBER	P29419	ALBATROSS	--
08661	SHIELDED ROOM	-	SIEPEL	--
08134	SHIELDED ROOM	P29419	ALBATROSS PROJECTS GMBH	--
04848	SOFTWARE FOR EMC/RF TESTING	EMC32	ROHDE AND SCHWARZ	--
07552	TEMPERATURE AND HUMIDITY PROBE	HWg-STE	HW GROUP	2026-04-23
07550	TEMPERATURE AND HUMIDITY PROBE	HWg-STE	HW GROUP	2026-04-23
07549	TEMPERATURE AND HUMIDITY PROBE	HWg-STE	HW GROUP	2026-04-23
07798	WMS32	WMS32	ROHDE AND SCHWARZ	--
07794	SIGNAL AND SPECTRUM ANALYZER 10Hz-40GHz	FSV40	ROHDE AND SCHWARZ	2027-06-10
07702	DC POWER SUPPLY 30V/3A 90W	GPS-3030D	GW INSTEK	--
07755	DIGITAL MULTIMETER	175	FLUKE	2025-11-25

Testing verdicts

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

Summary

Bluetooth Low Energy (1Mbps, 2Mbps).

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 Peak Conducted output power	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	--
Supplementary information and remarks: None.			

Appendix A: Test results. Bluetooth Low Energy (1Mbps, 2Mbps)

INDEX

TEST CONDITIONS

(*): Data provided by the client.

POWER SUPPLY (*):

Vnominal:	3.87 Vdc V
Type of Power Supply:	External power supply

ANTENNA (*):

Type of Antenna:	Integral Antenna
Maximum Declared Antenna Gain:	0.5 dBi

TEST FREQUENCIES (*):

Modulation	Data rates	Low Channel:	Middle Channel	High Channel
BTLE GFSK	1M 1 Mbit/s	2402 MHz	2440 MHz	2480 MHz
BTLE GFSK	2M 2 Mbit/s	2402 MHz	2440 MHz	2480 MHz

During transmitter test the EUT was controlled by a SW tool provided by the client to operate in a continuous transmit mode on the modulation schemes and test channels as required.

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).

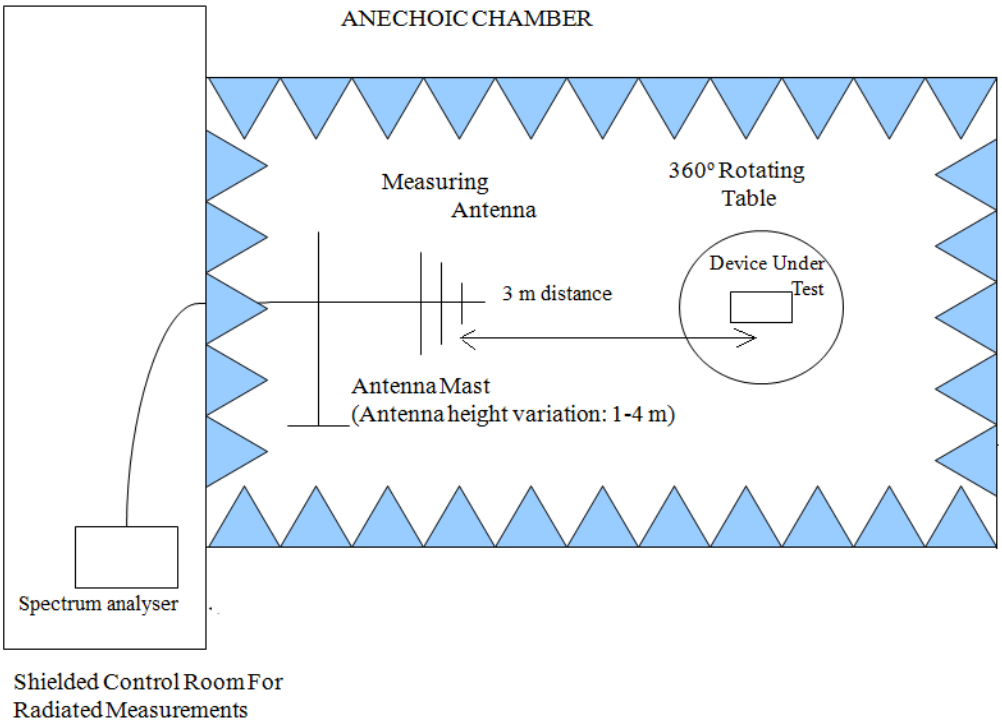
For radiated emissions in the range 17 GHz-26 GHz that is performed at a distance closer than the specified distance, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

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 360º and the antenna height (Bilog antenna and Double ridge horn antenna) was varied from 1 to 4 meters to find the maximum radiated emission.

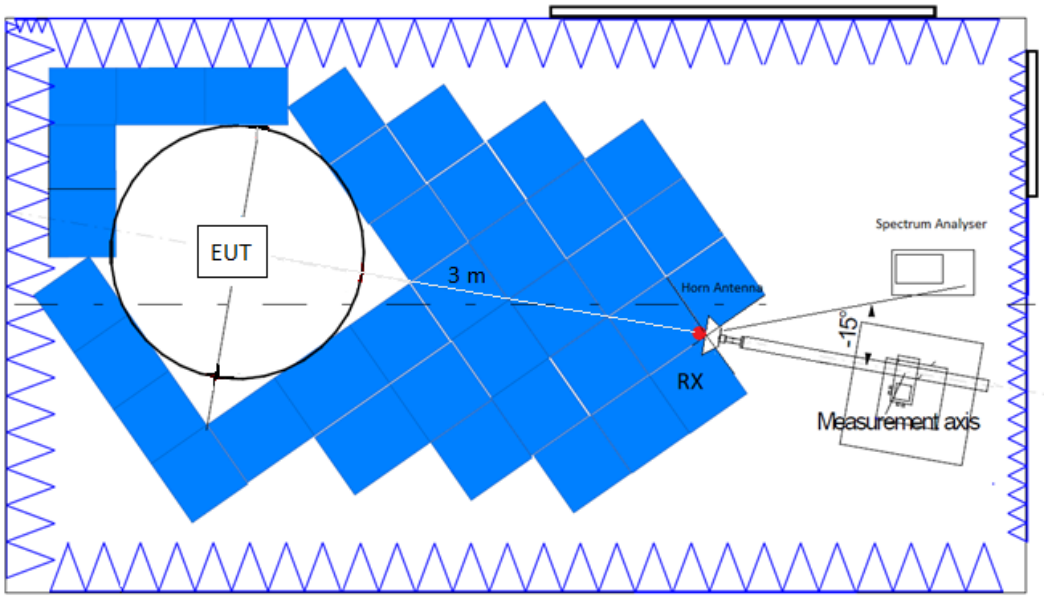
Measurements were made in both horizontal and vertical planes of polarization.

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.

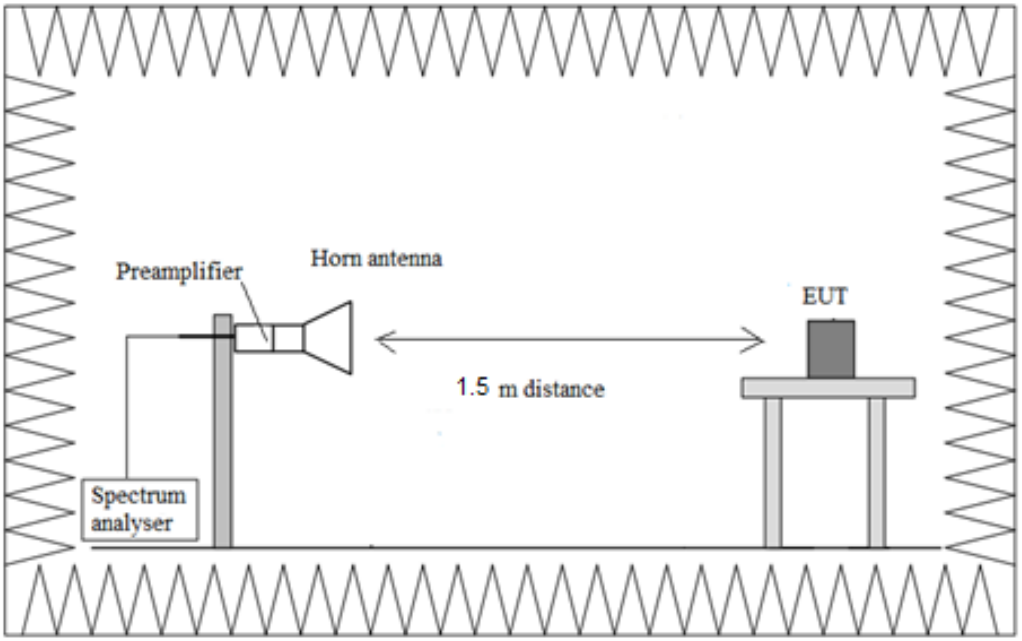
Radiated measurements setup from 30 MHz to 1 GHz:



Radiated measurements setup from 1 GHz to 17 GHz:



Radiated measurements setup f > 17 GHz:



TEST CASES DETAILS

FCC 47 CFR Part 15.247 / RSS-247

99dBw Occupied Channel Bandwidth 99%

Limits

RSS-Gen 6.7 / FCC 2.1049 - Occupied Channel Bandwidth 99%

The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained.

Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Results

Freq (MHz)	Occ Ch BW (MHz)
2402.00000	1.070
2440.00000	1.075
2480.00000	1.075

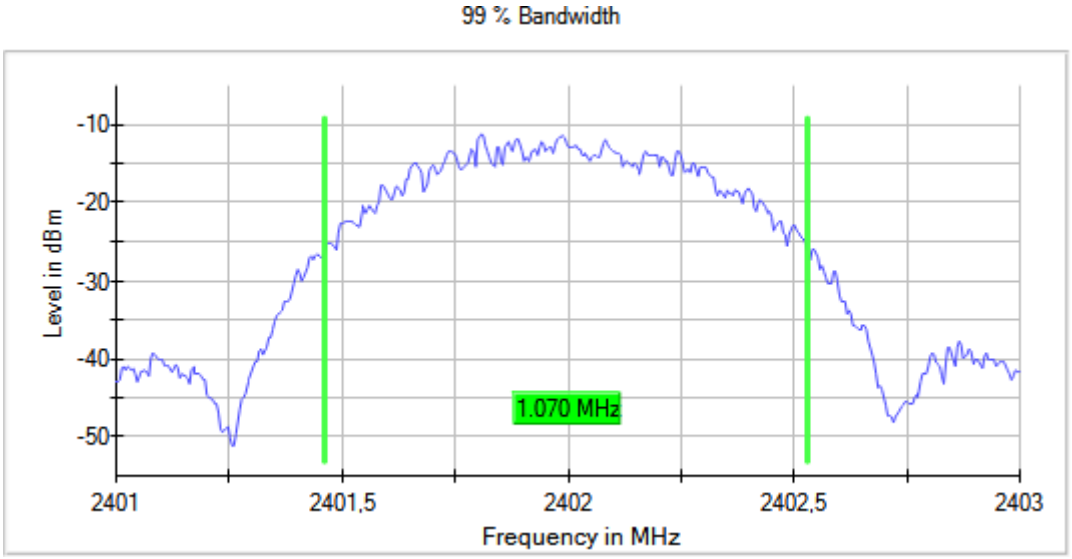
Verdict

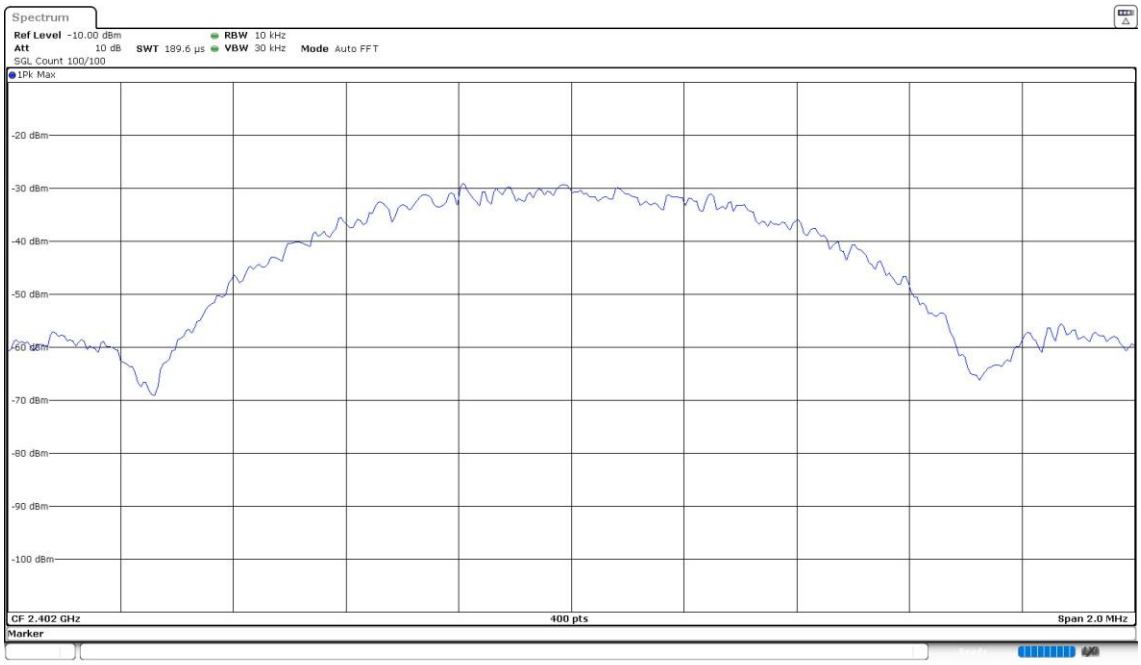
Pass

Attachments

Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:



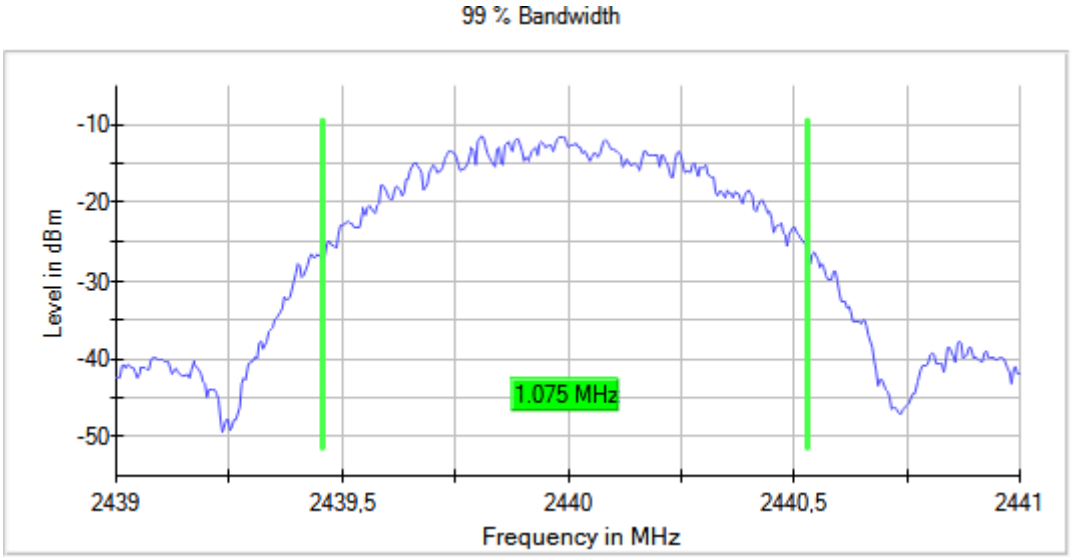


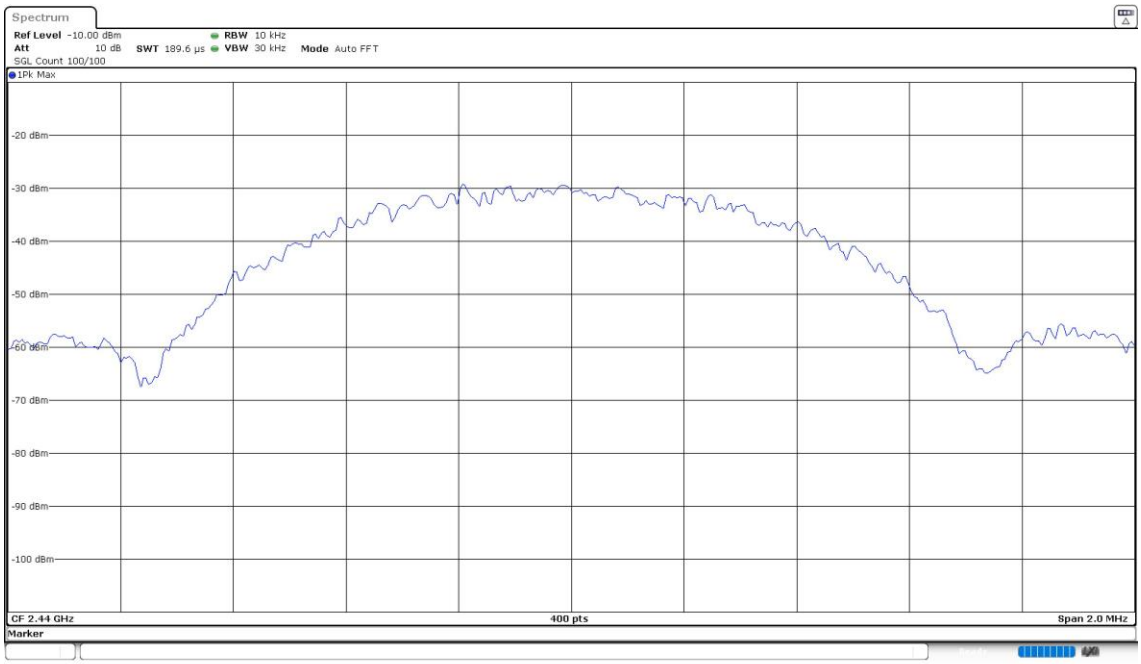
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2440.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:



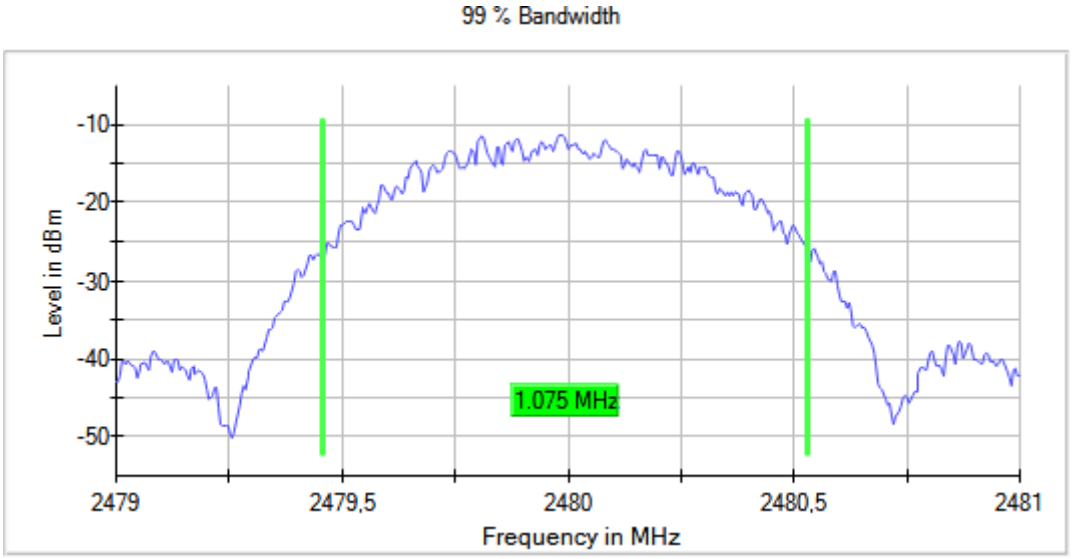


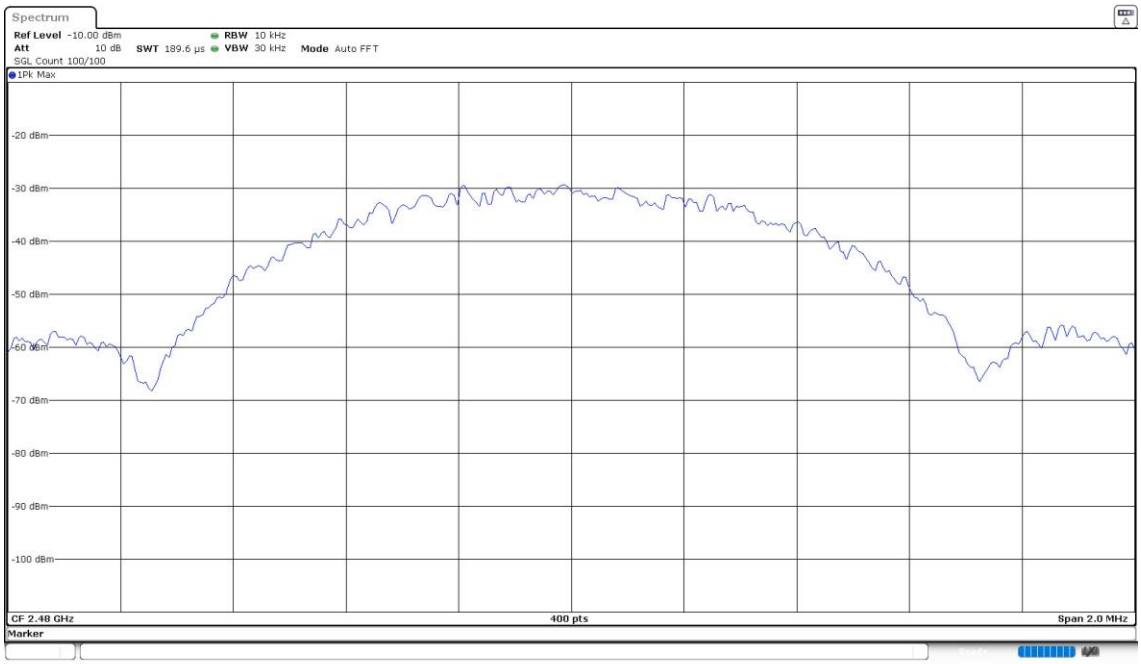
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2480.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:





Modulation: BTLE 5.0 (GFSK 2 Mbit/s)

Results

Freq (MHz)	Occ Ch BW (MHz)
2402.00000	2.110
2440.00000	2.130
2480.00000	2.120

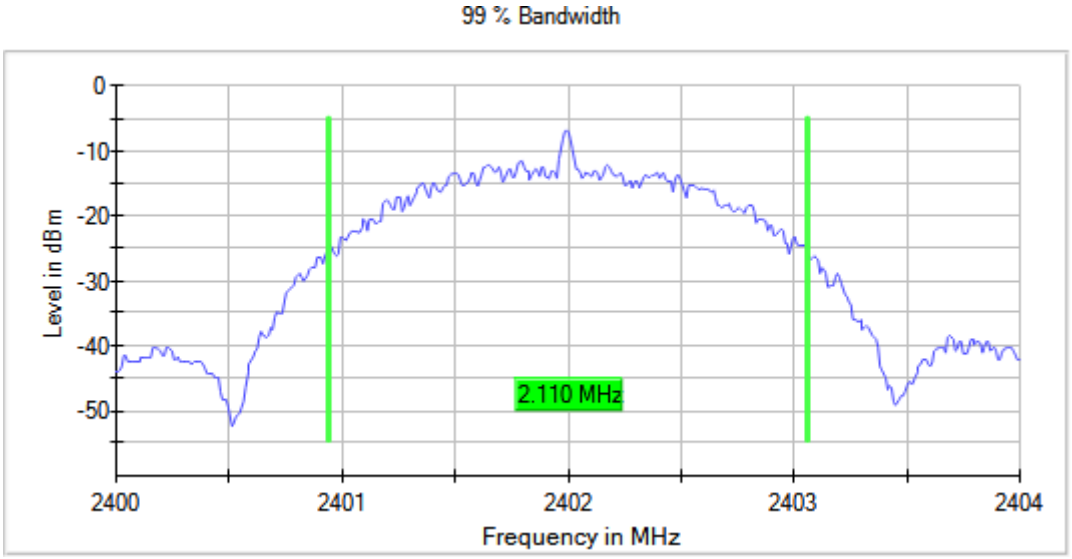
Verdict

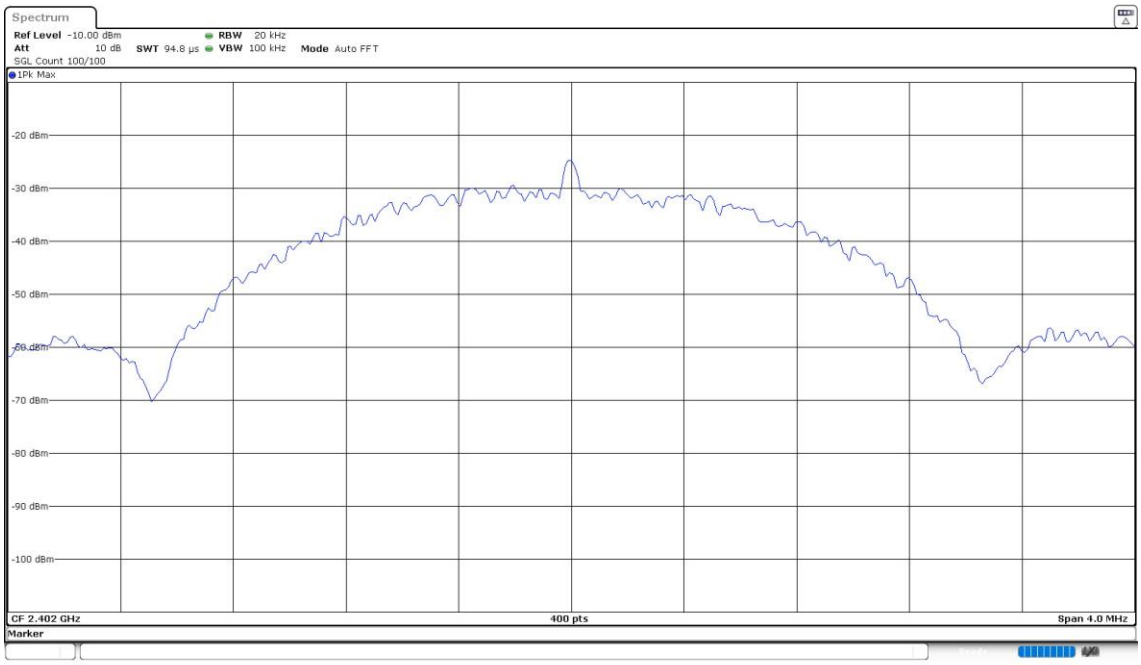
Pass

Attachments

Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:



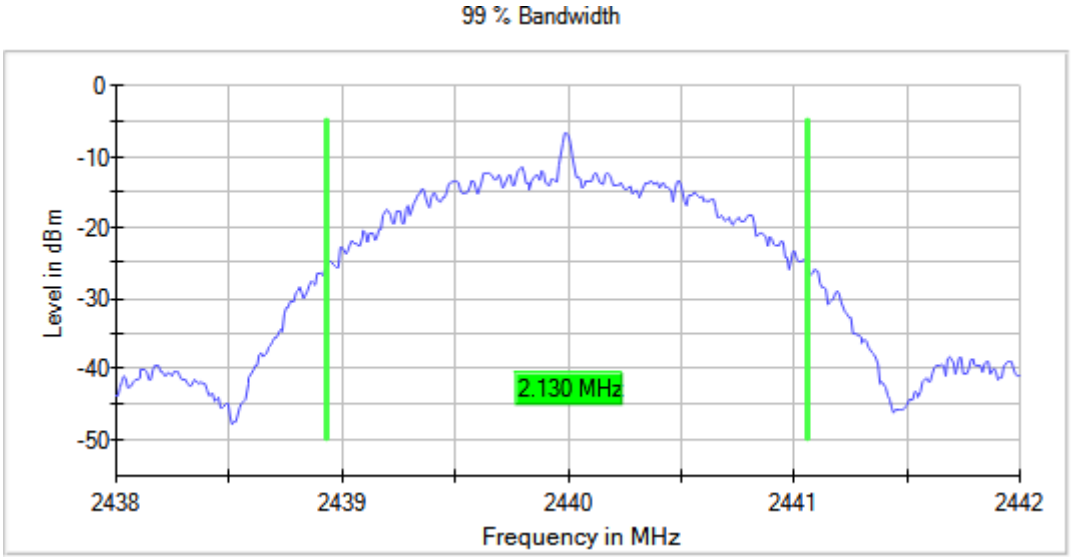


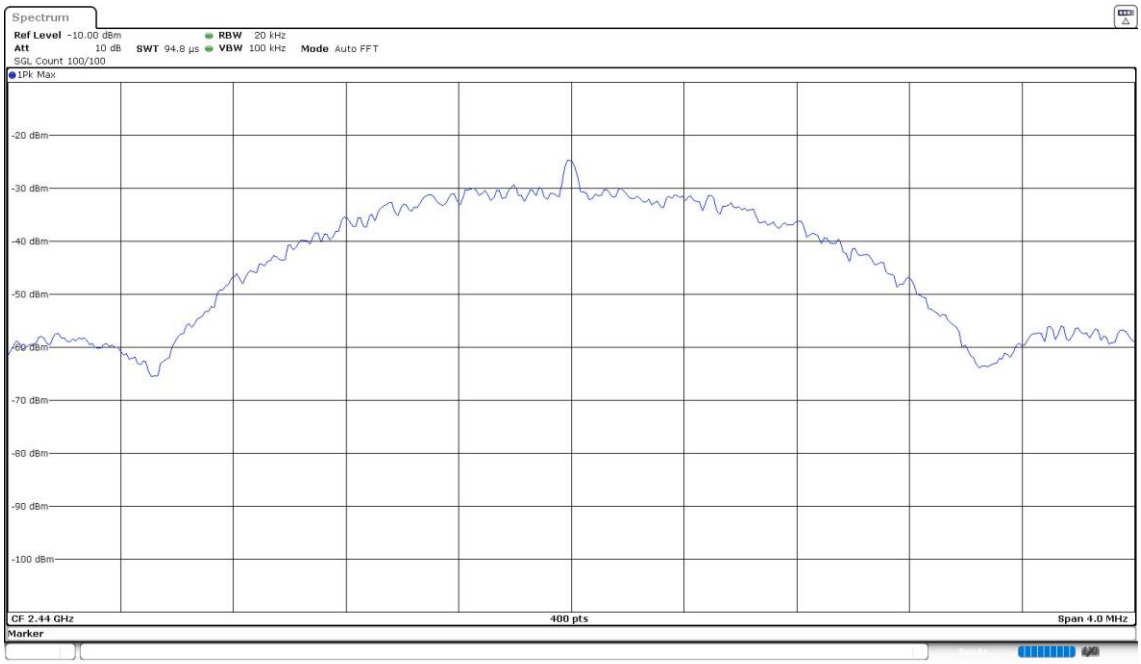
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2440.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:



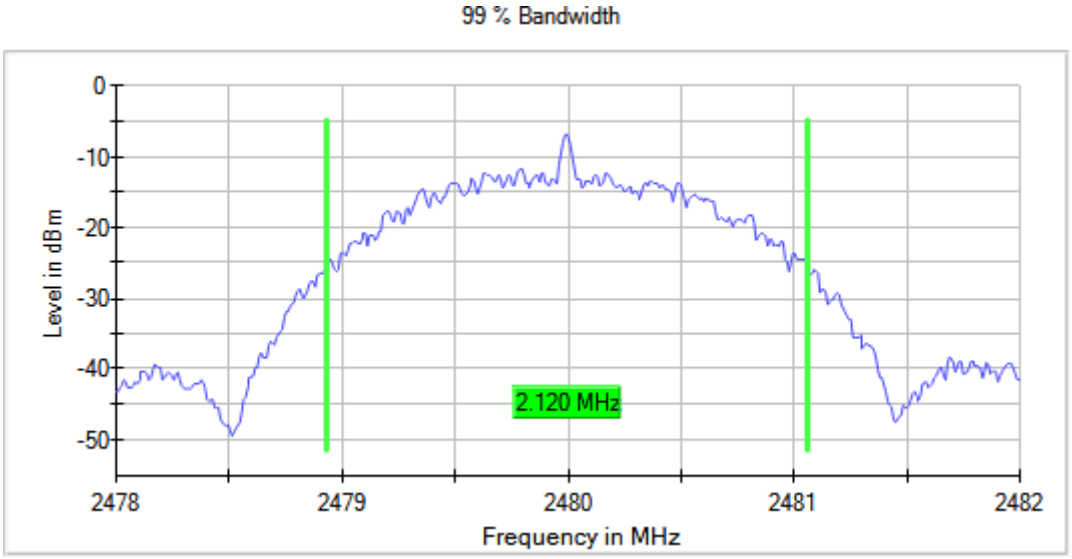


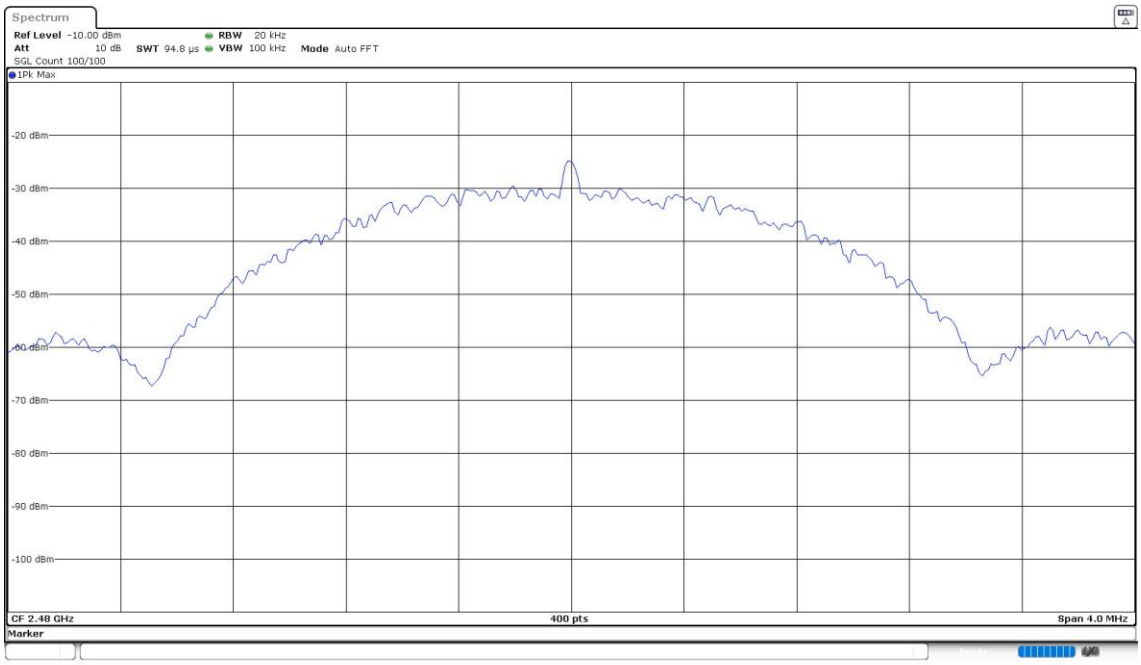
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2480.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:





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

Limits

Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Results

Freq (MHz)	Ebw (MHz)
2402.00000	0.752
2440.00000	0.733
2480.00000	0.733

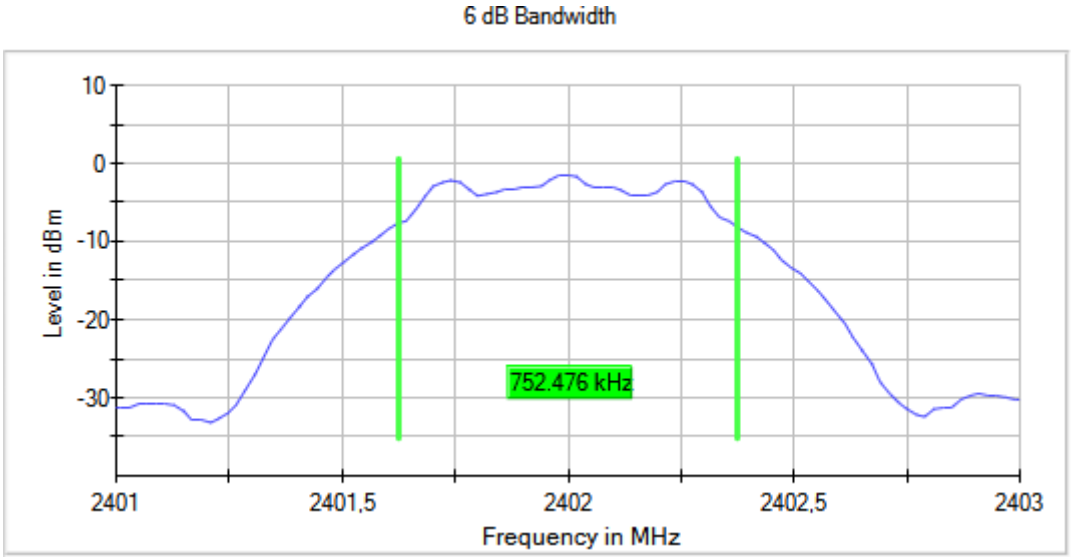
Verdict

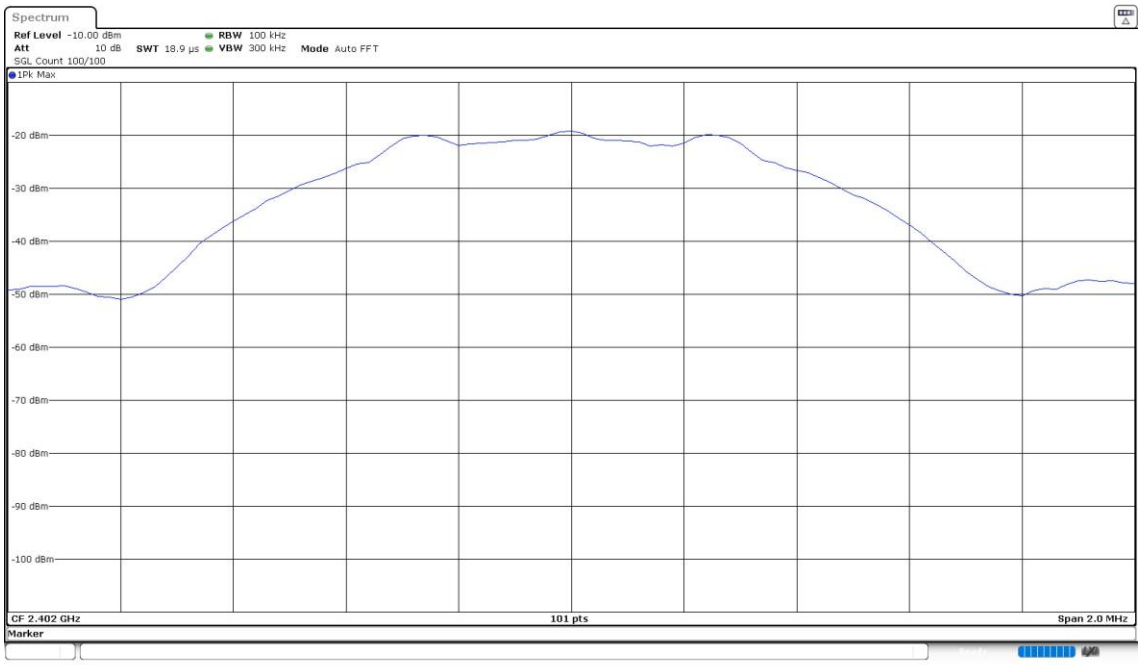
Pass

Attachments

Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:



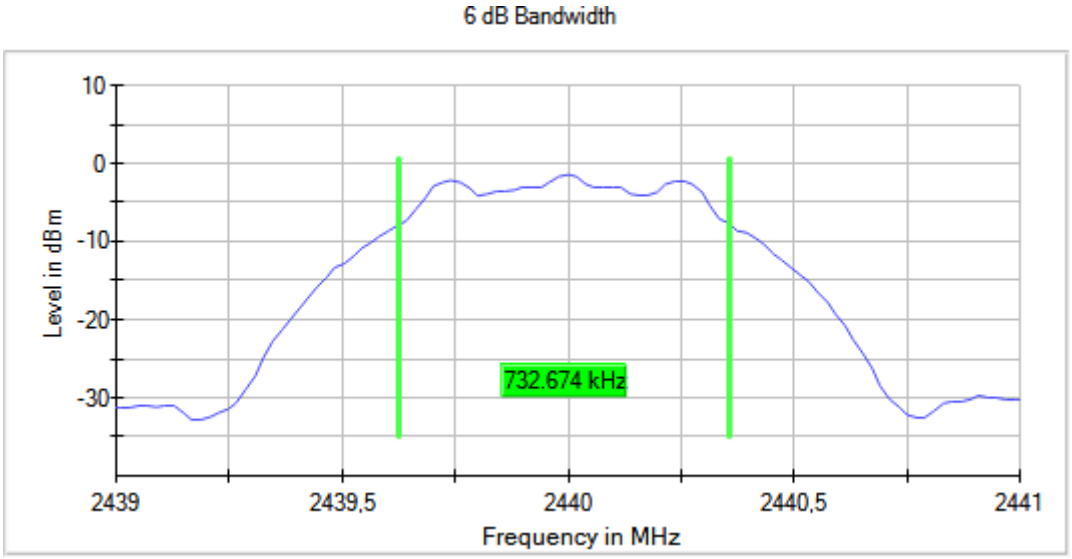


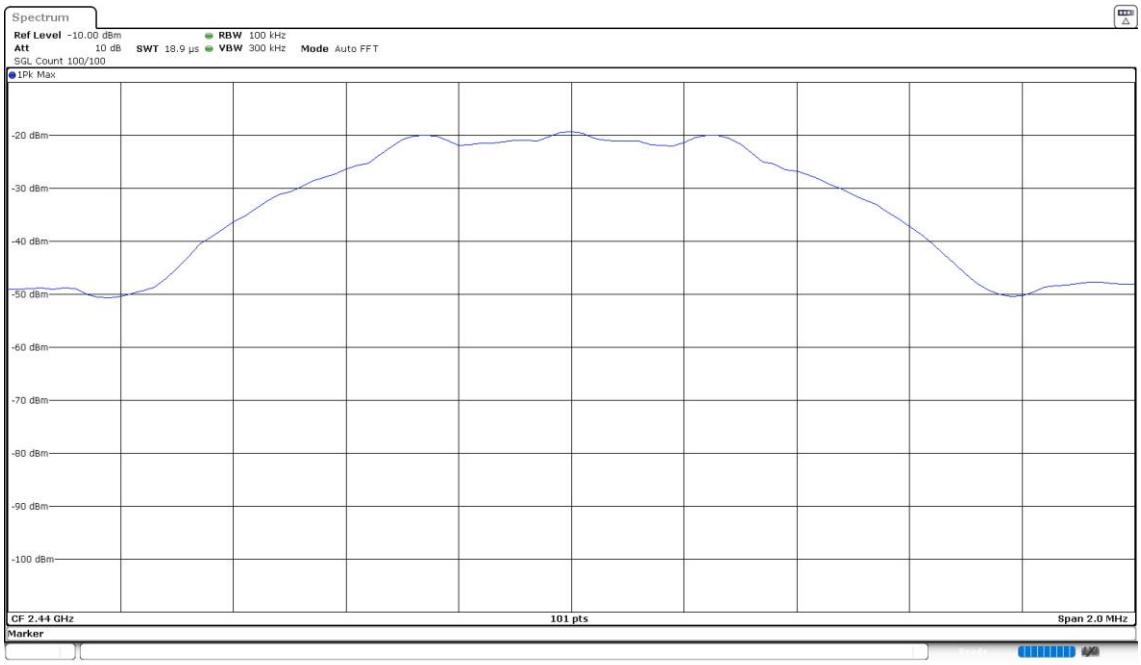
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2440.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:



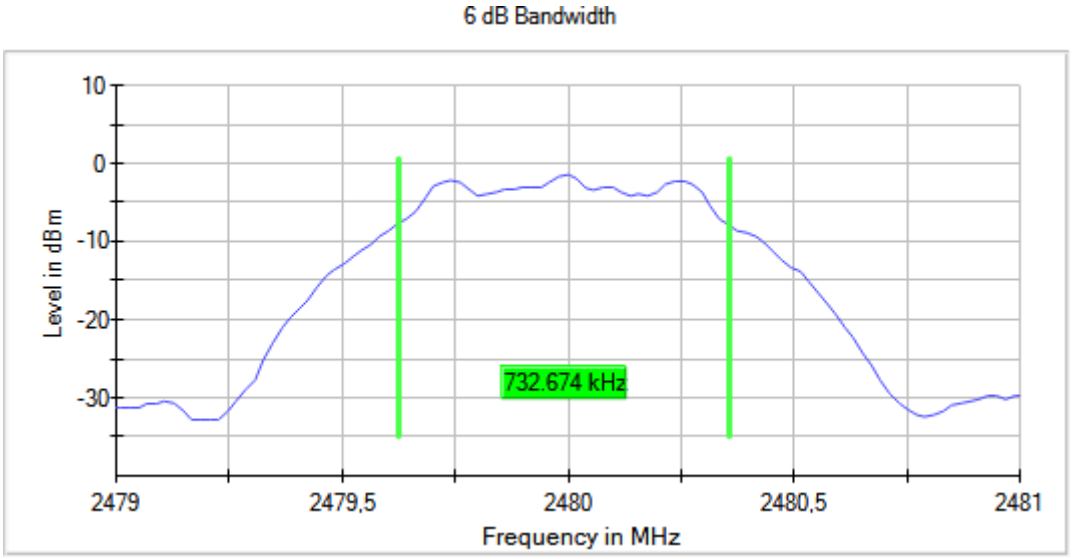


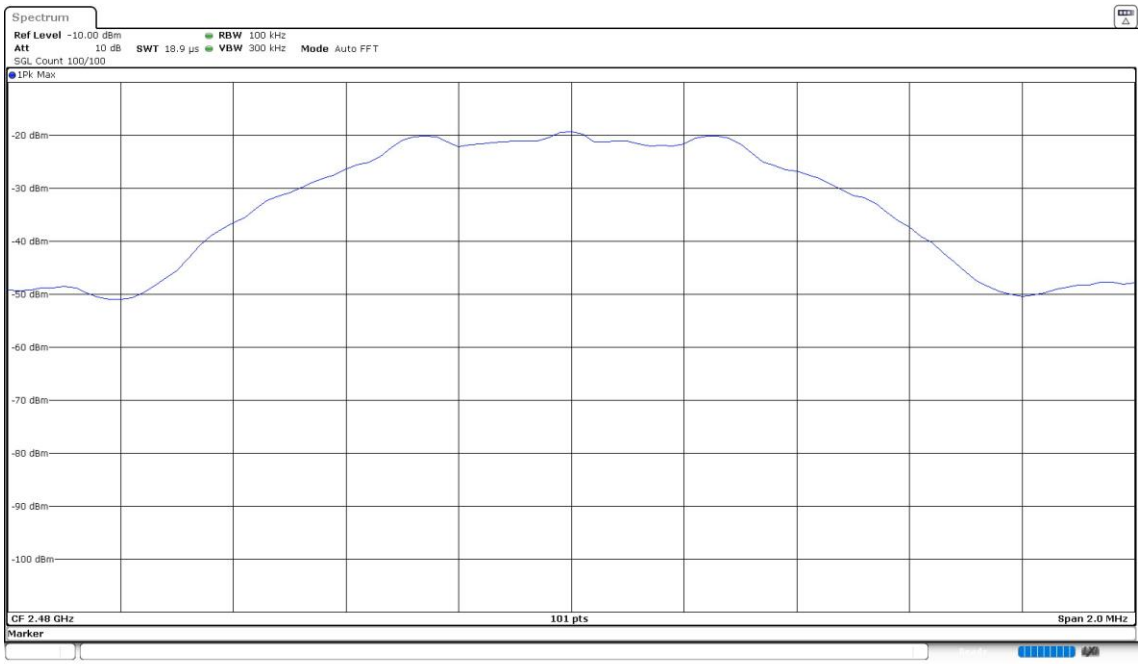
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2480.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:





Modulation: BTLE 5.0 (GFSK 2 Mbit/s)

Results

Freq (MHz)	Ebw (MHz)
2402.00000	1.228
2440.00000	1.188
2480.00000	1.188

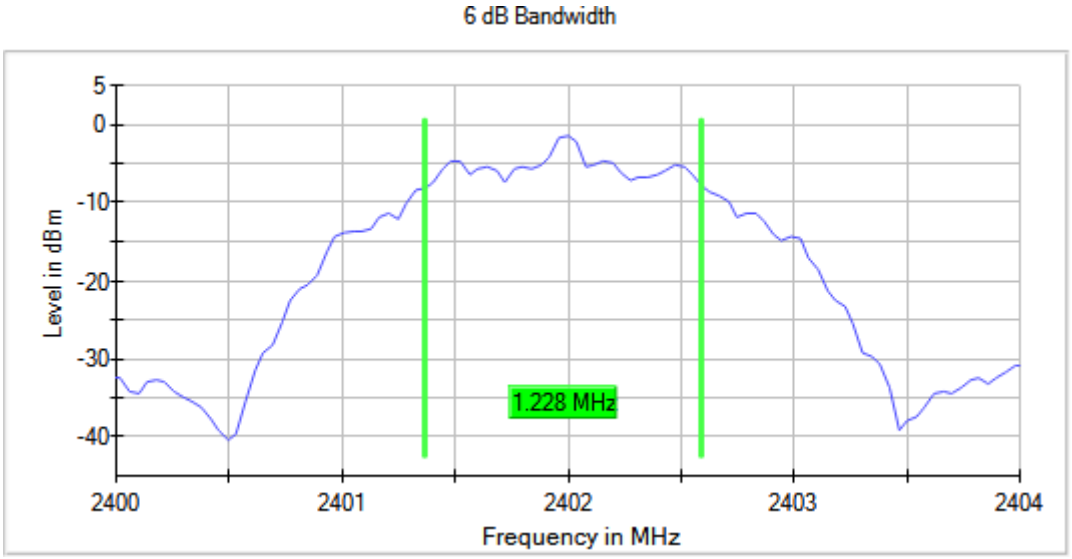
Verdict

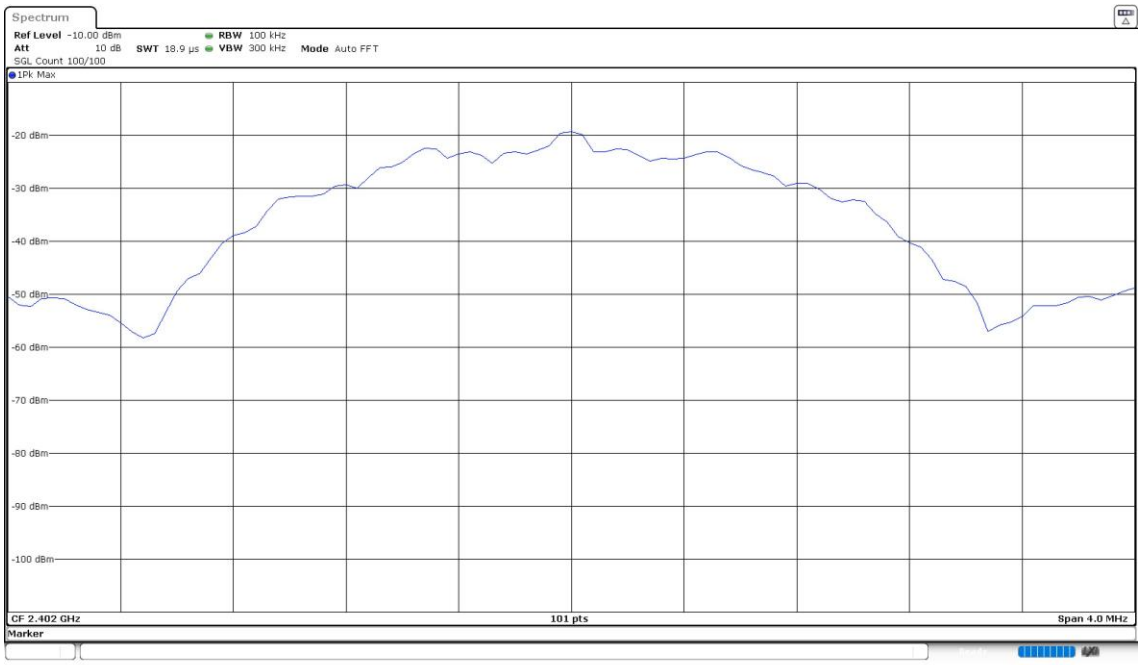
Pass

Attachments

Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:



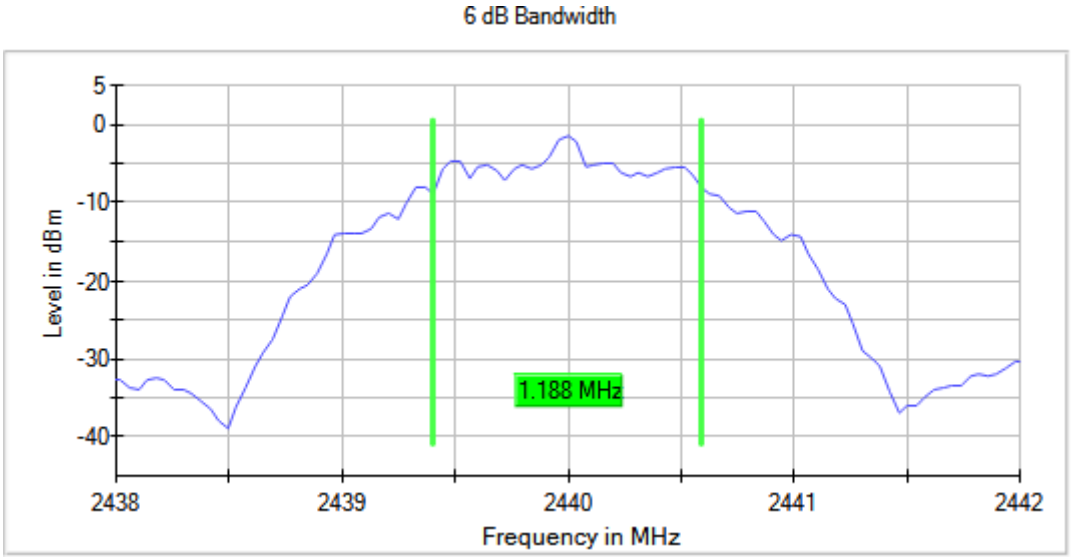


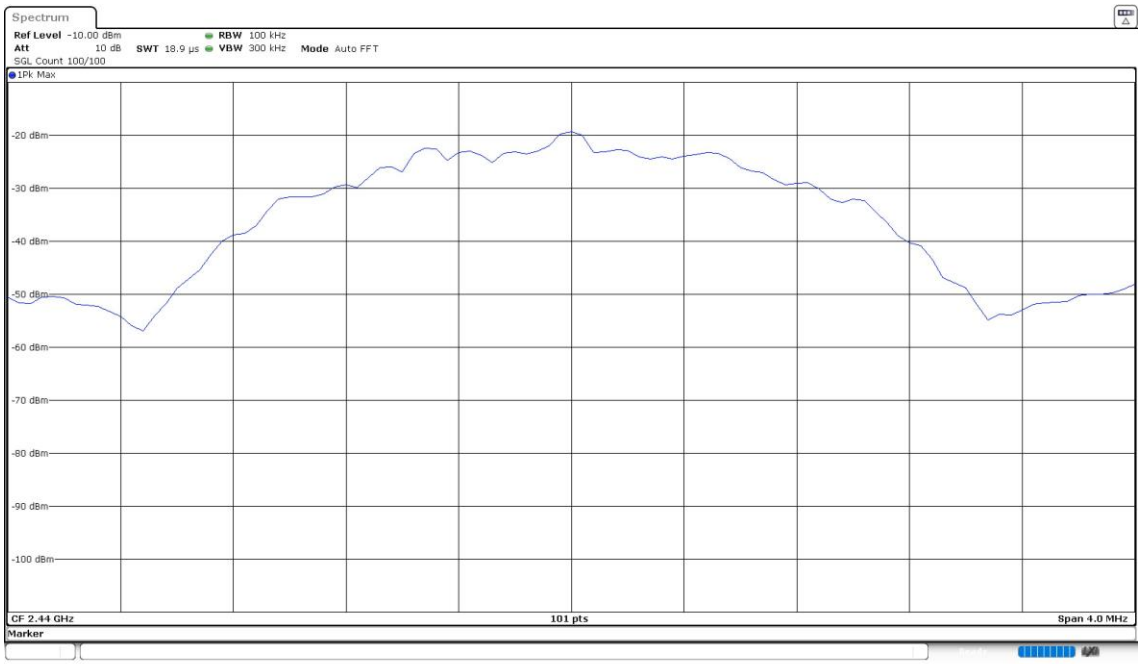
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2440.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:



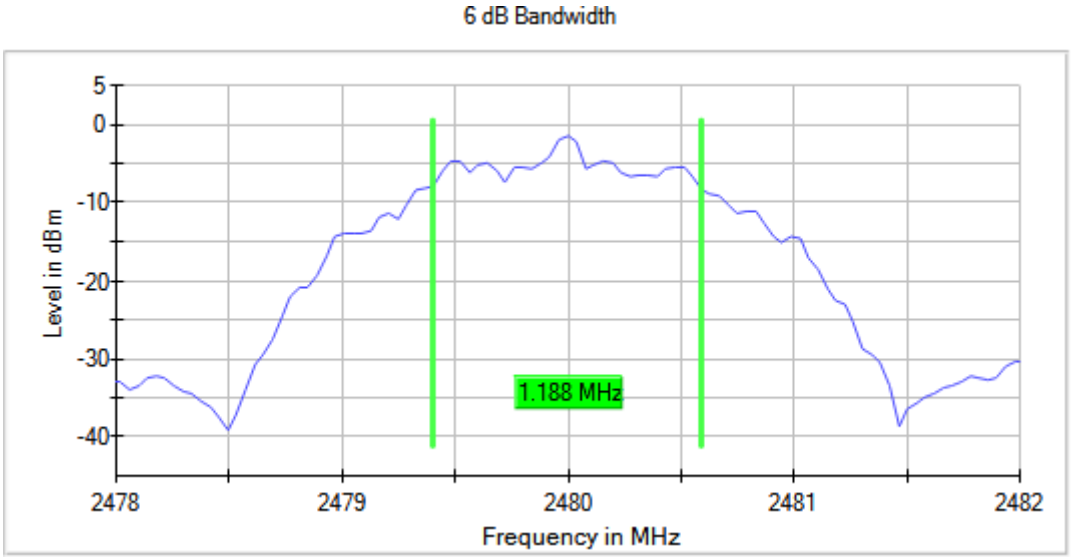


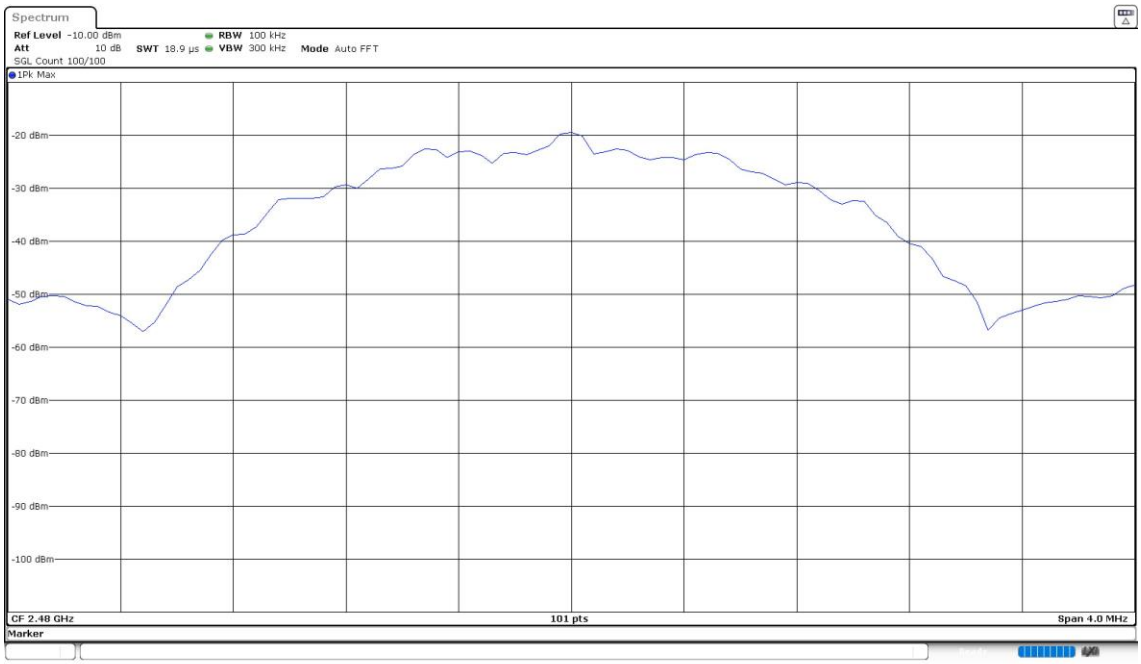
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2480.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:





RSS-247 5.2 (b) / FCC 15.247 (e) [PSD] 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 5.0 (GFSK 1 Mbit/s)

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	PSD (dBm)
[2400, 2483.5]	Digital Transmission System (DTS)	2402.00000	1	-11.39
		2440.00000		-11.36
		2480.00000		-11.34

Verdict

Pass

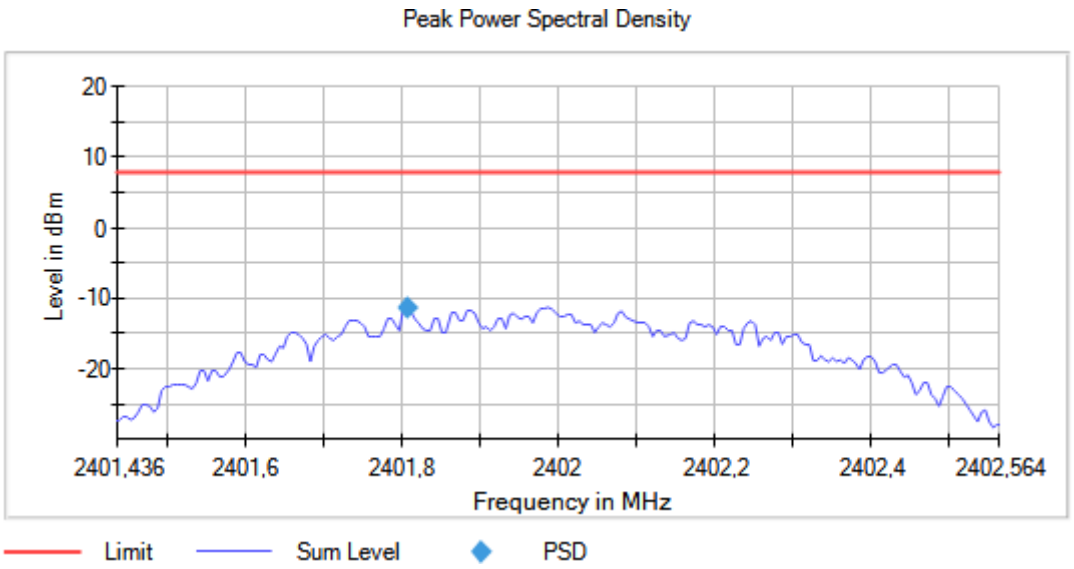
Attachments

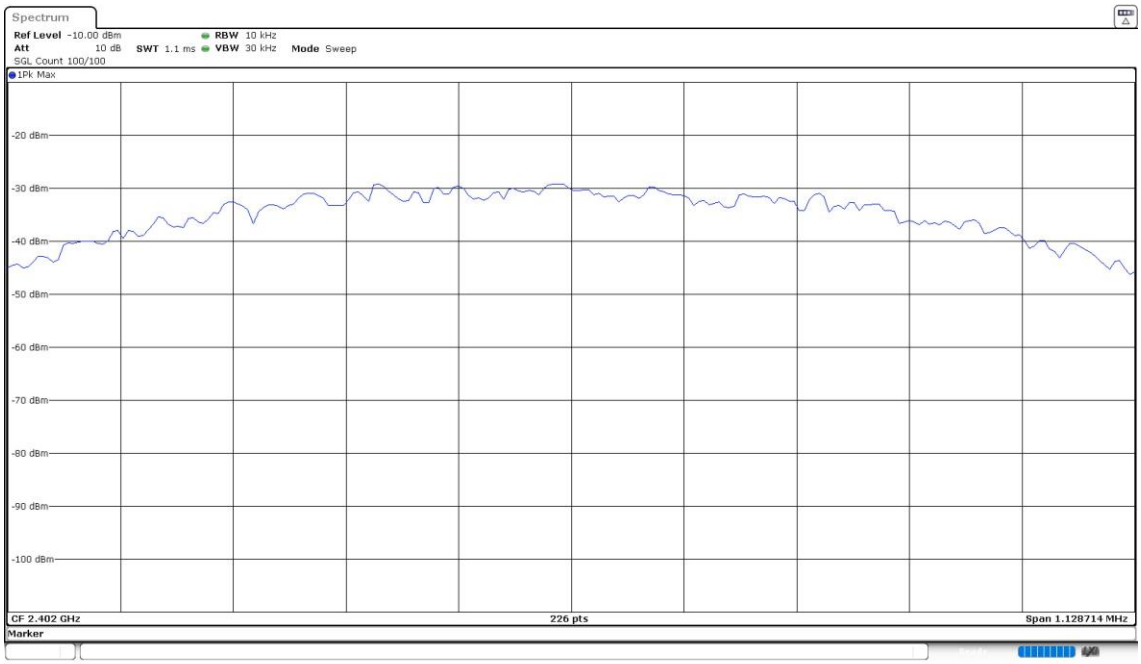
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2402.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:



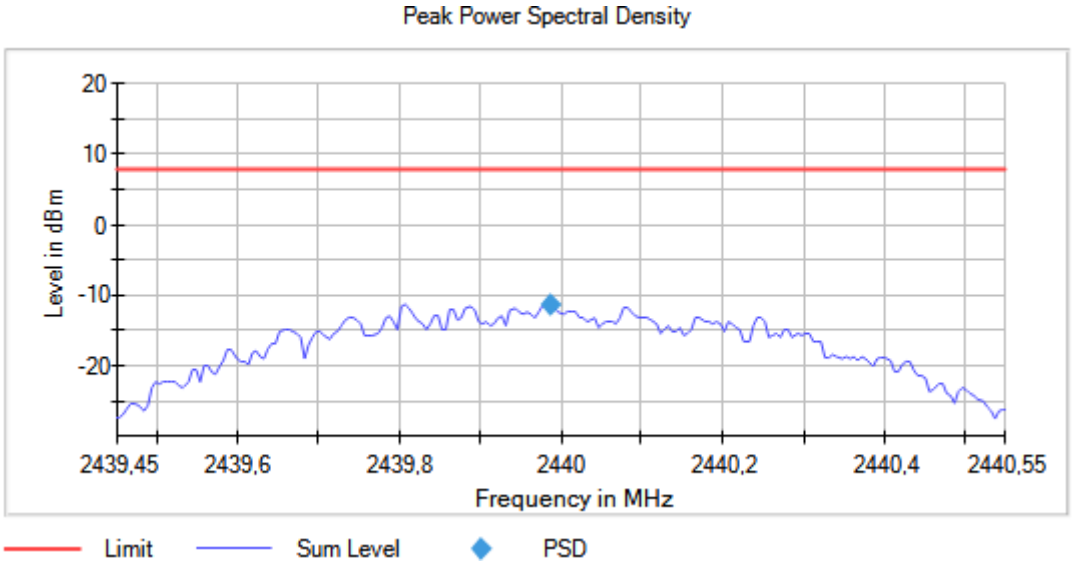


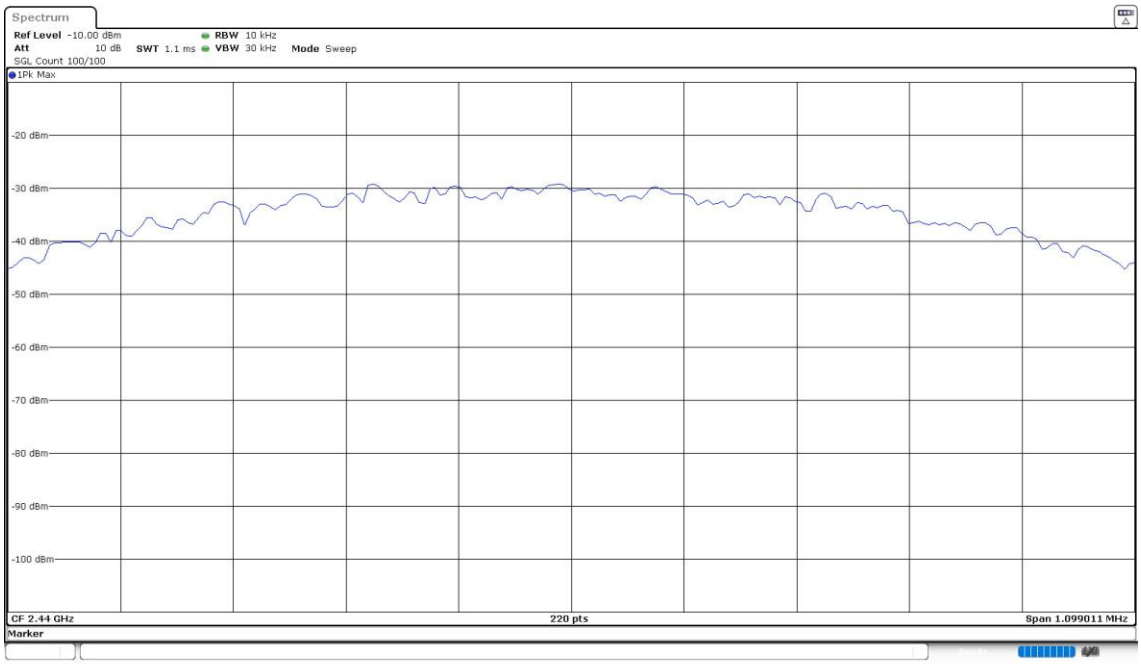
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2440.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:



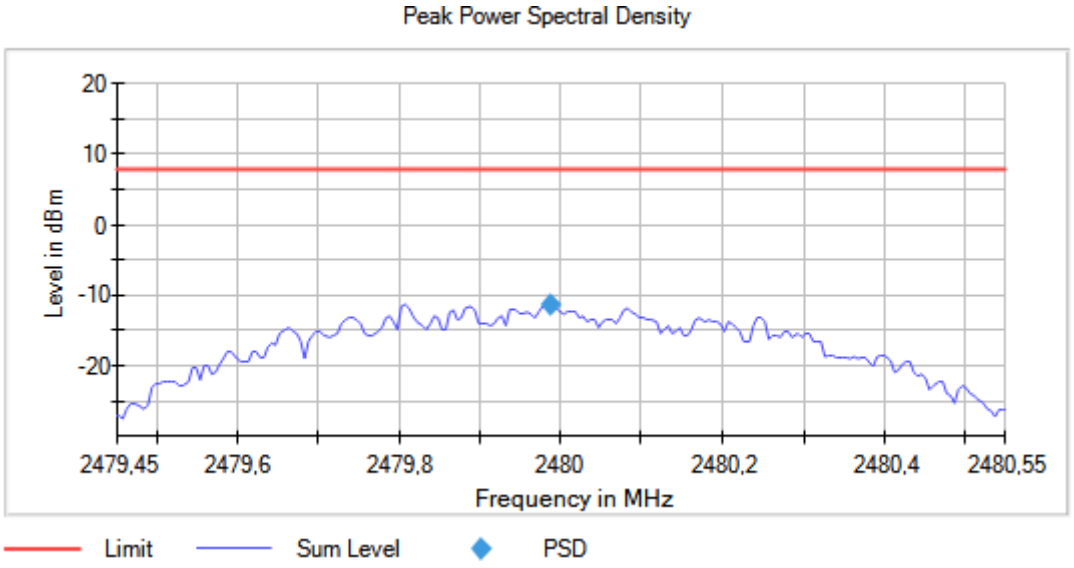


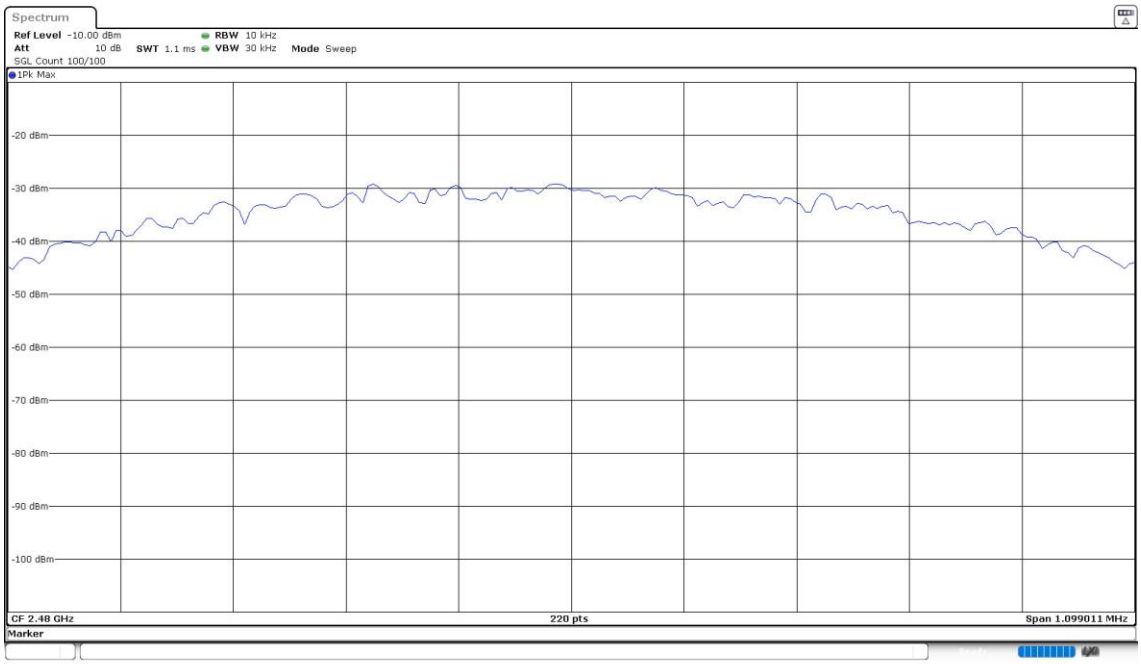
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2480.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:





Modulation: BTLE 5.0 (GFSK 2 Mbit/s)

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	PSD (dBm)
[2400, 2483.5]	Digital Transmission System (DTS)	2402.00000	1	-11.85
		2440.00000		-11.90
		2480.00000		-11.92

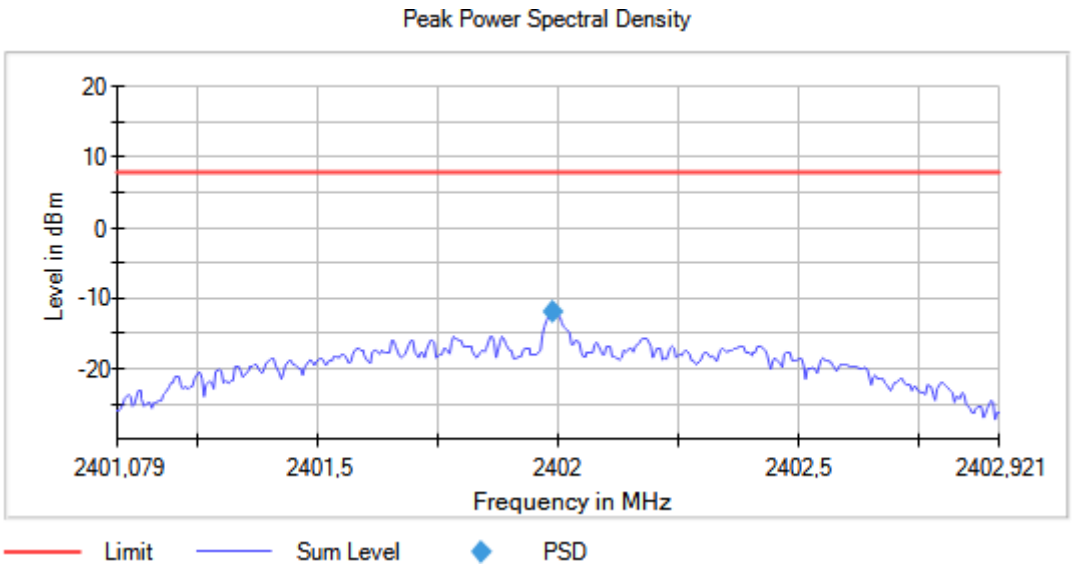
Verdict

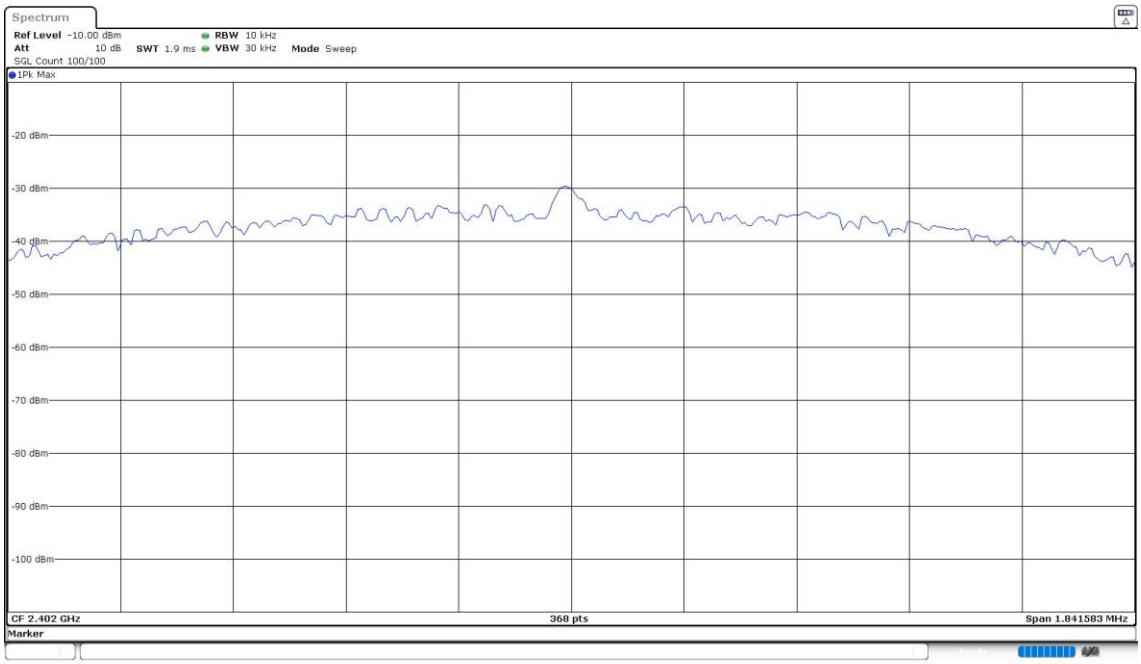
Pass

Attachments

Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:



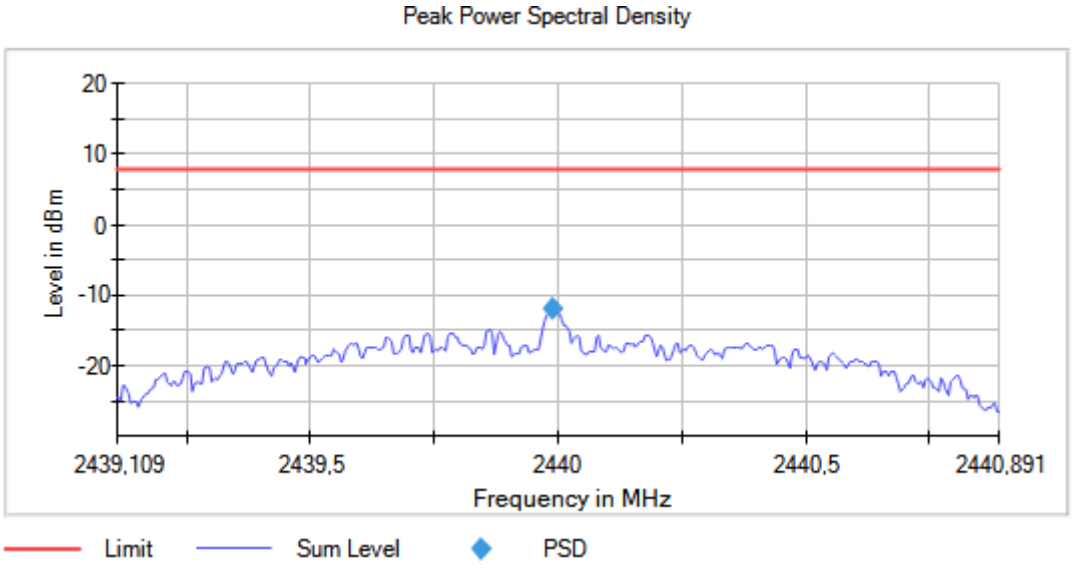


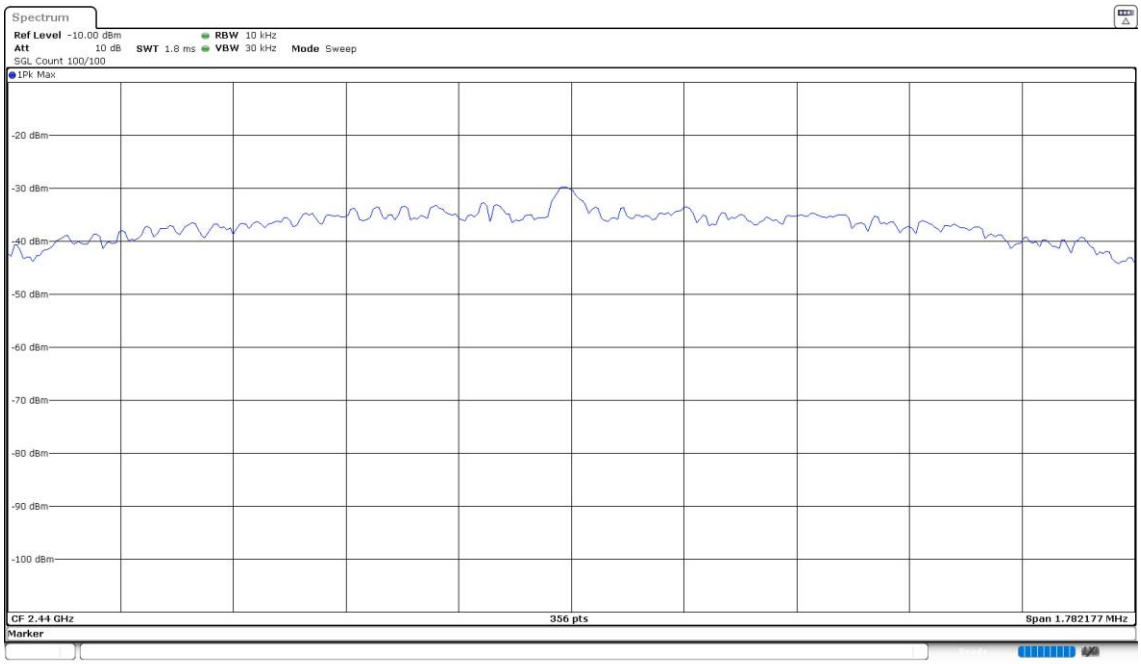
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2440.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:



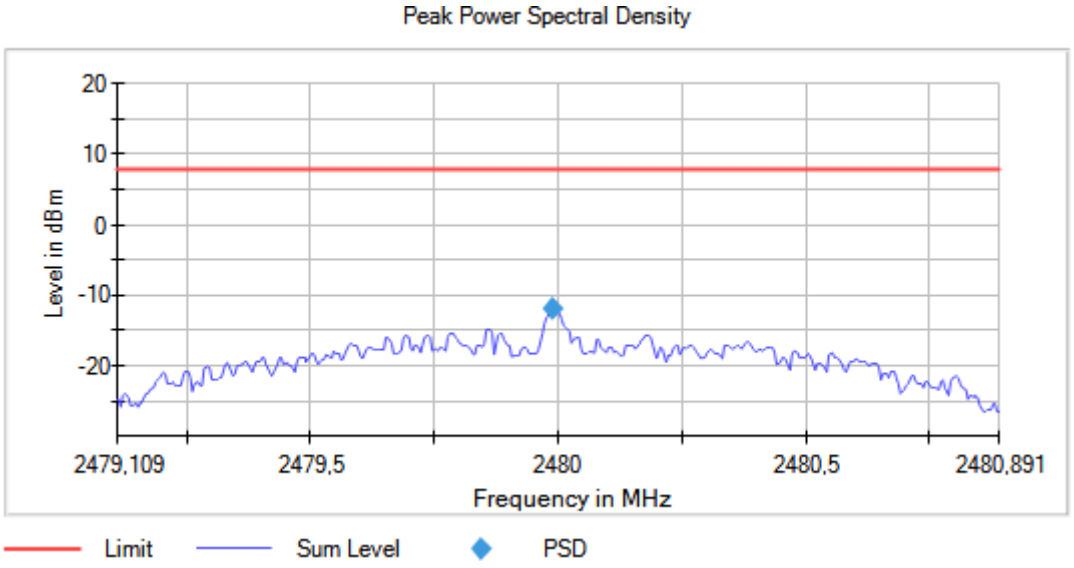


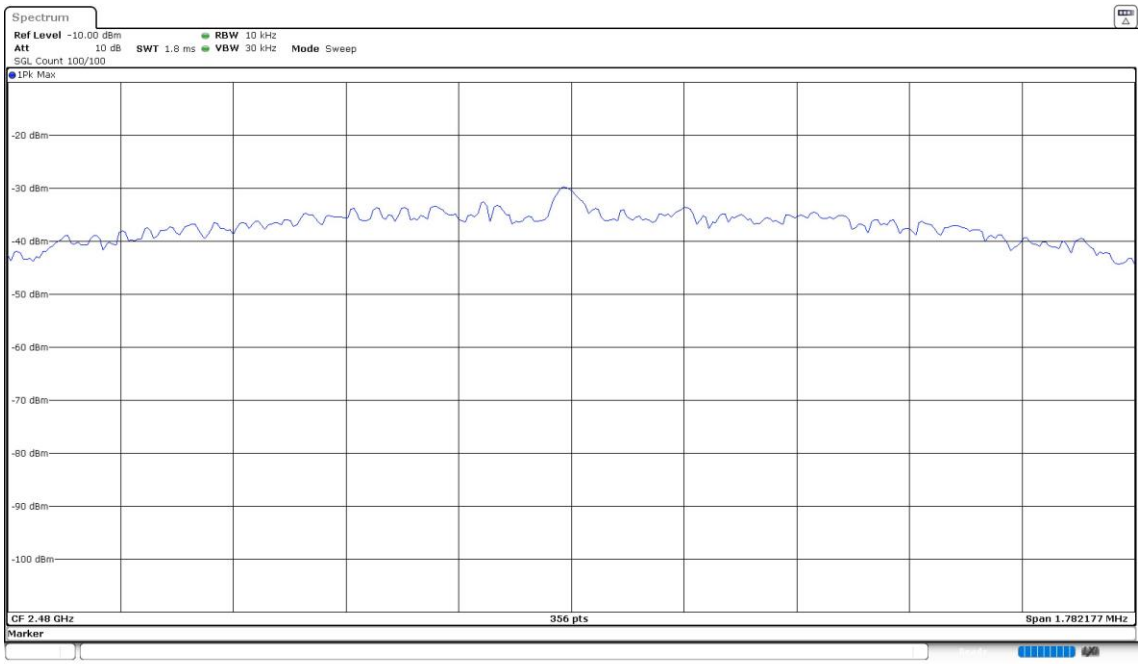
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2480.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:





RSS-247 5.4 (d)/ FCC 15.247 (b) [Pkcp] Maximum Peak Conducted Output Power

Limits

FCC 15.247 (b) (3)

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

RSS 247 5.4 (d)
For DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1 W. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e).

Maximum Declared Antenna Gain: 0.5 dBi

Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Results

Freq (MHz)	Peak Power (dBm)	E.I.R.P. (dBm)
2402.00000	-1.4210	-0.9210
2440.00000	-1.3770	-0.8770
2480.00000	-1.4700	-0.9700

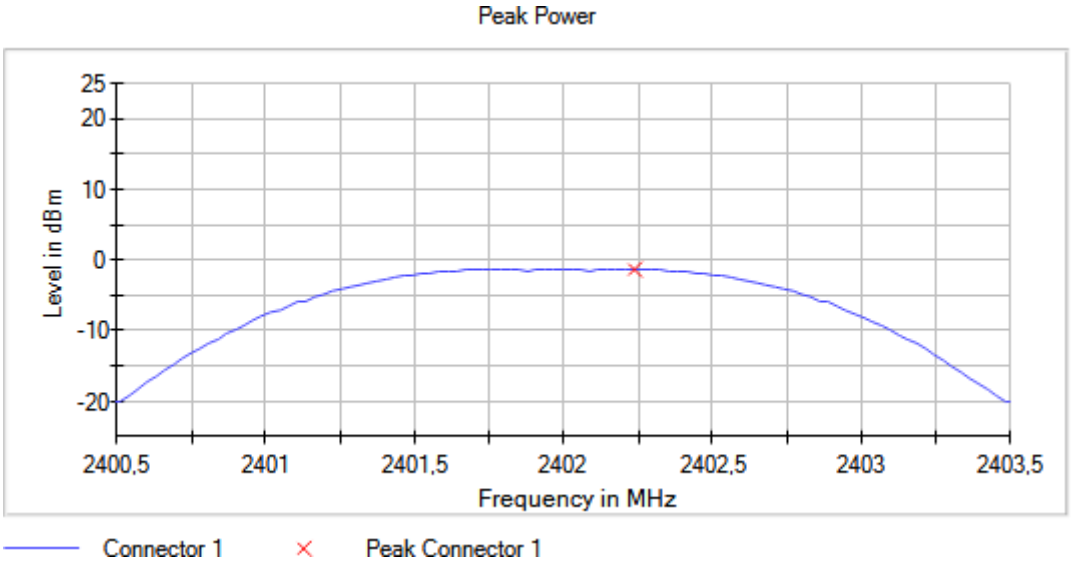
Verdict

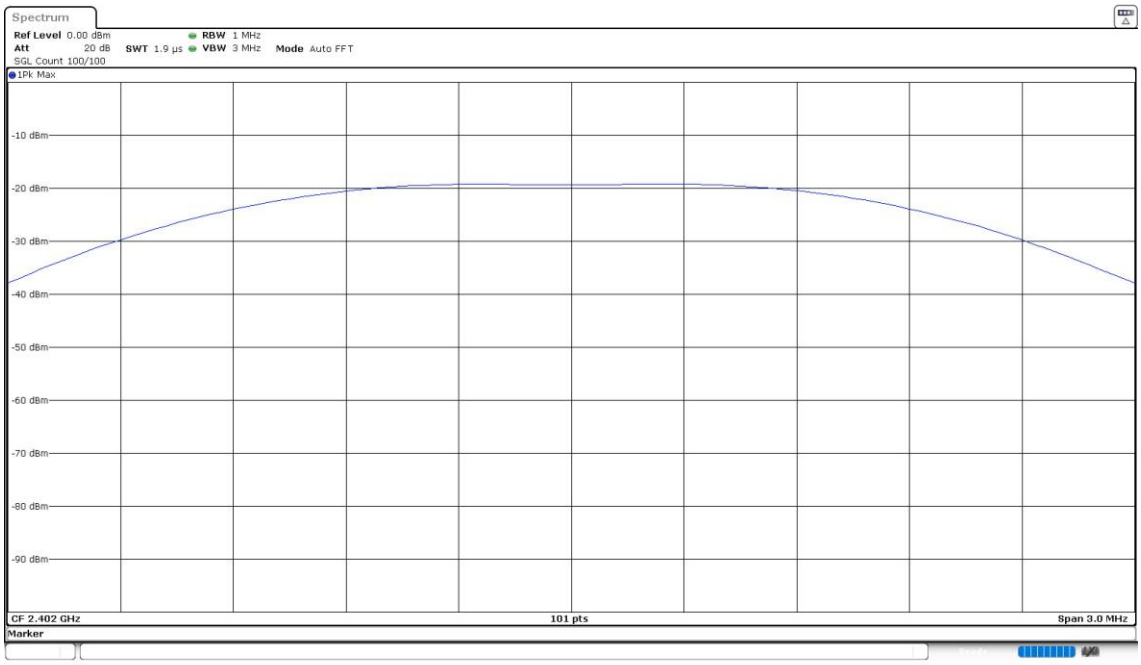
Pass

Attachments

Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:



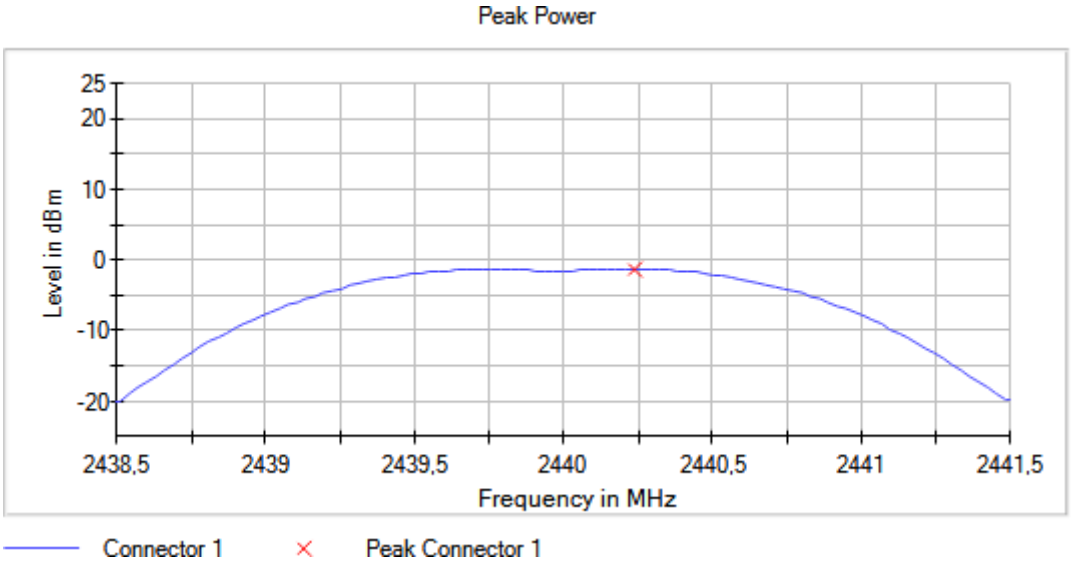


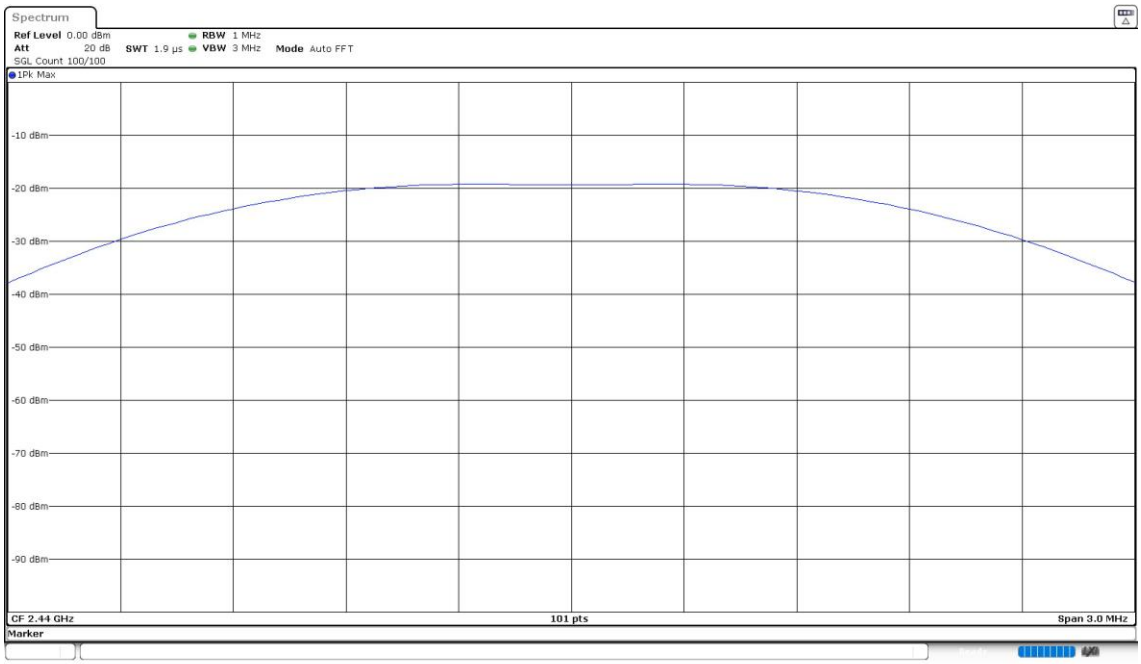
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2440.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:



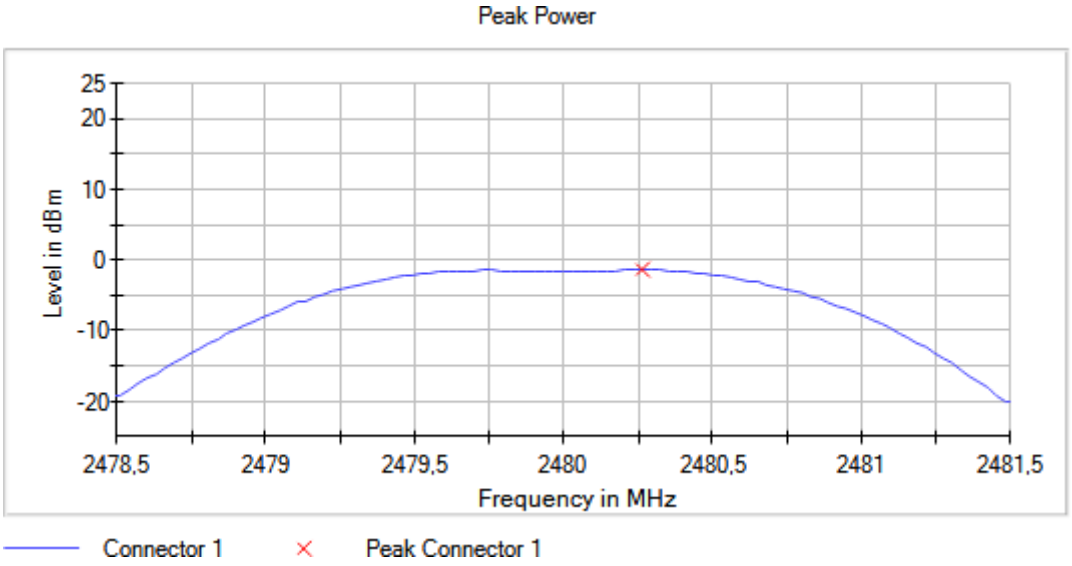


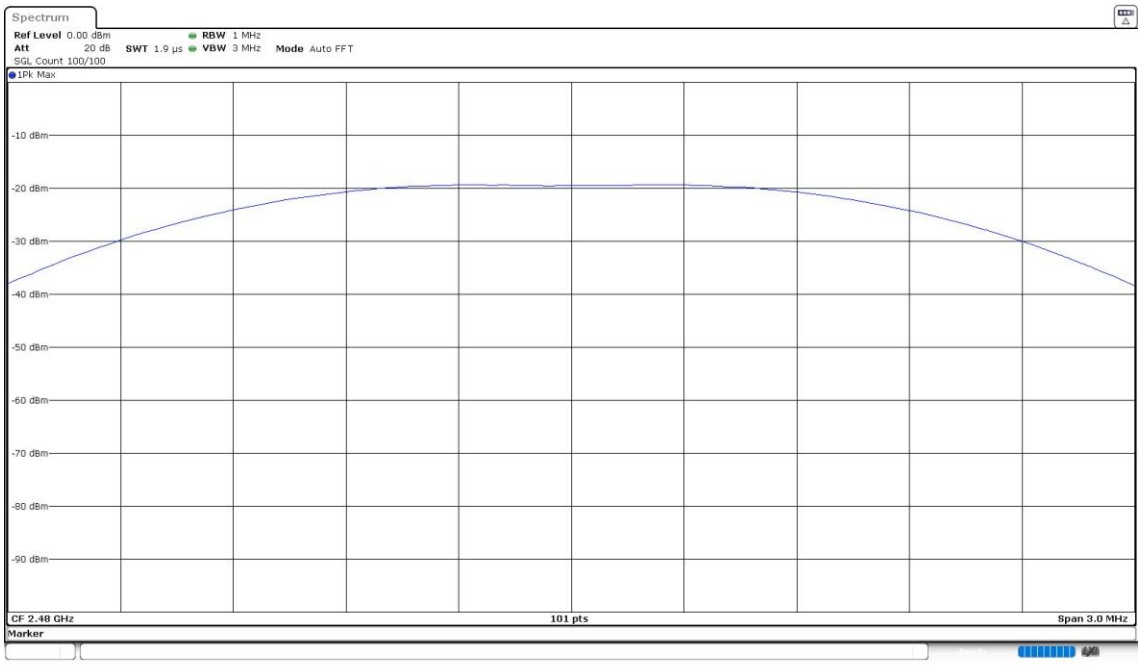
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2480.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:





Modulation: BTLE 5.0 (GFSK 2 Mbit/s)

Results

Freq (MHz)	Peak Power (dBm)	E.I.R.P. (dBm)
2402.00000	-1.4100	-0.9100
2440.00000	-1.3730	-0.8730
2480.00000	-1.4300	-0.9300

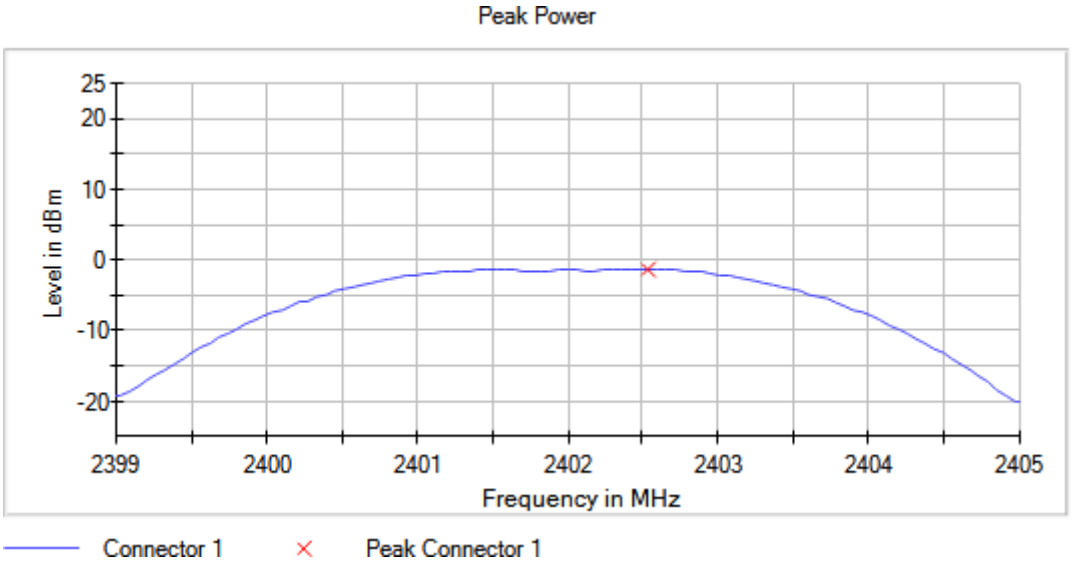
Verdict

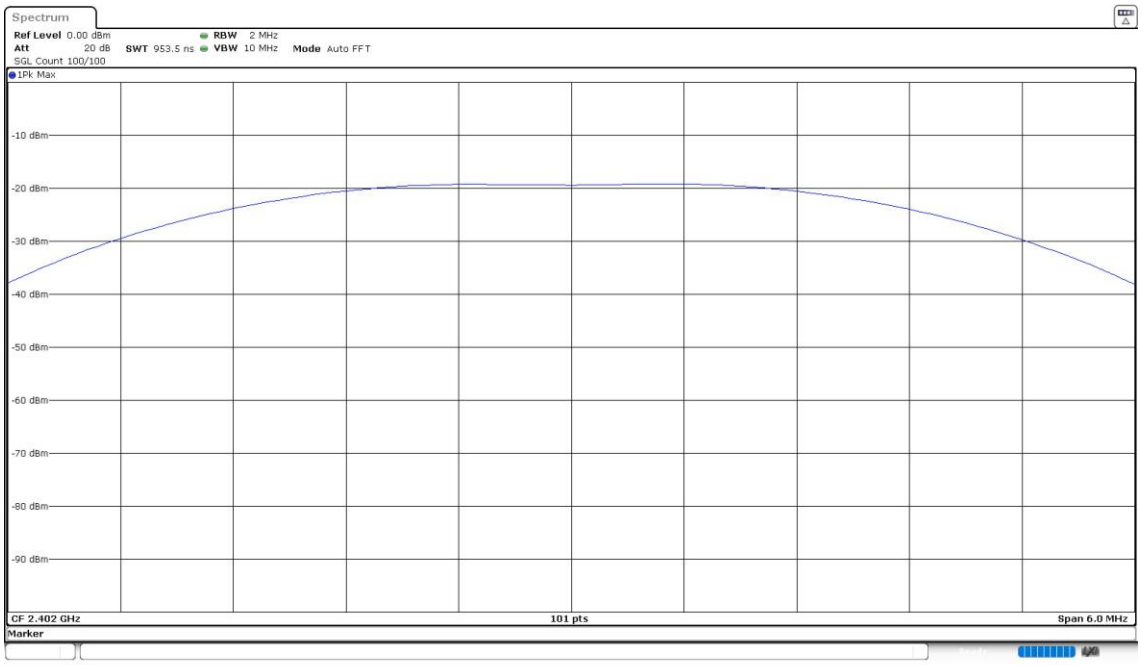
Pass

Attachments

Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:



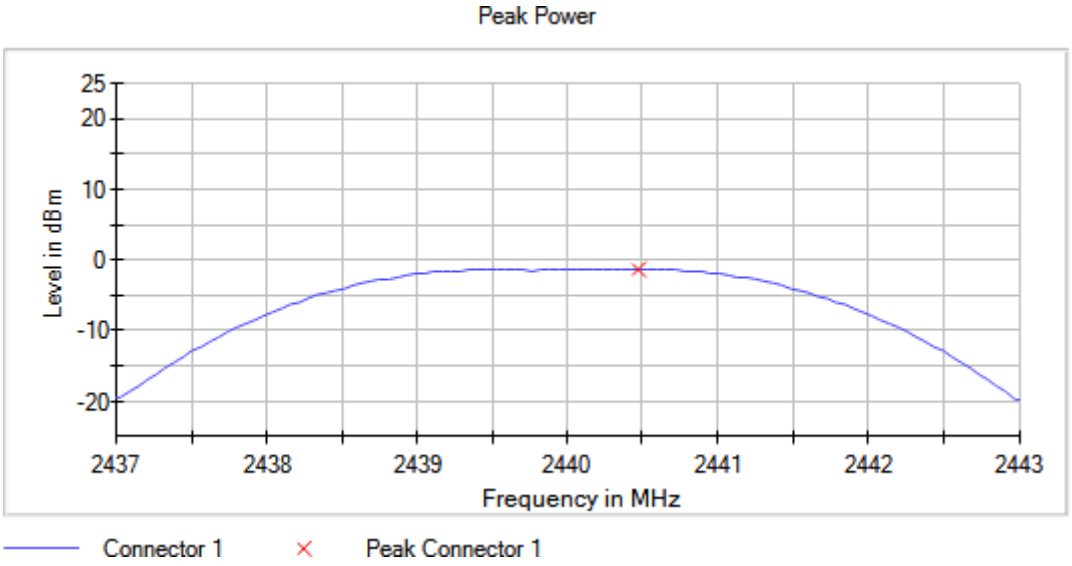


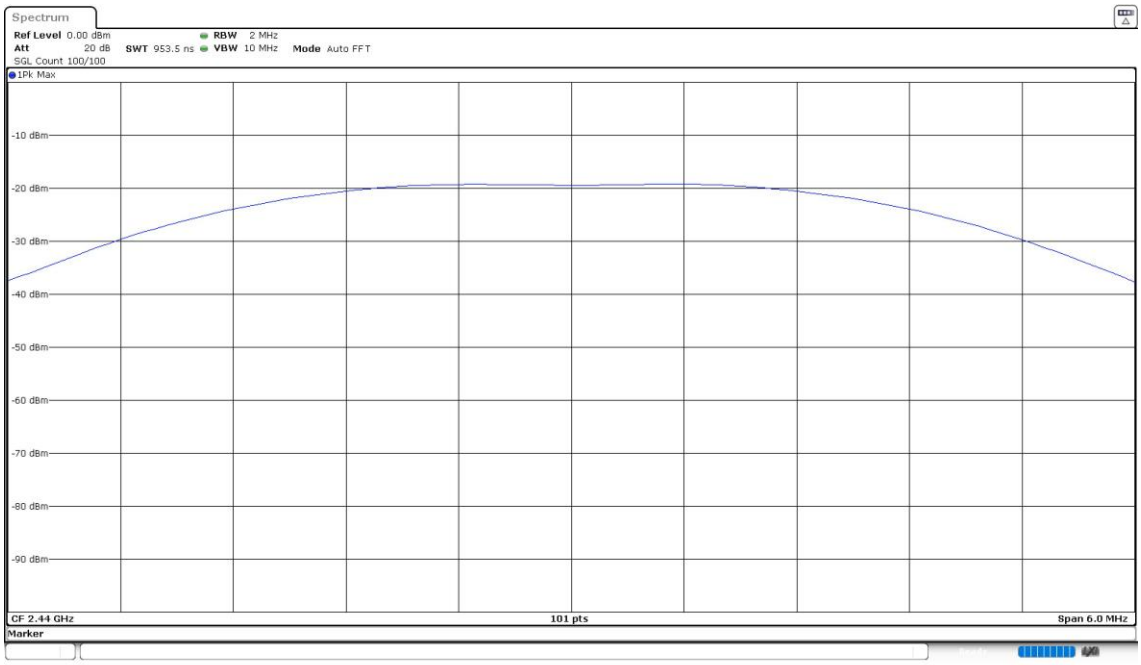
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2440.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:



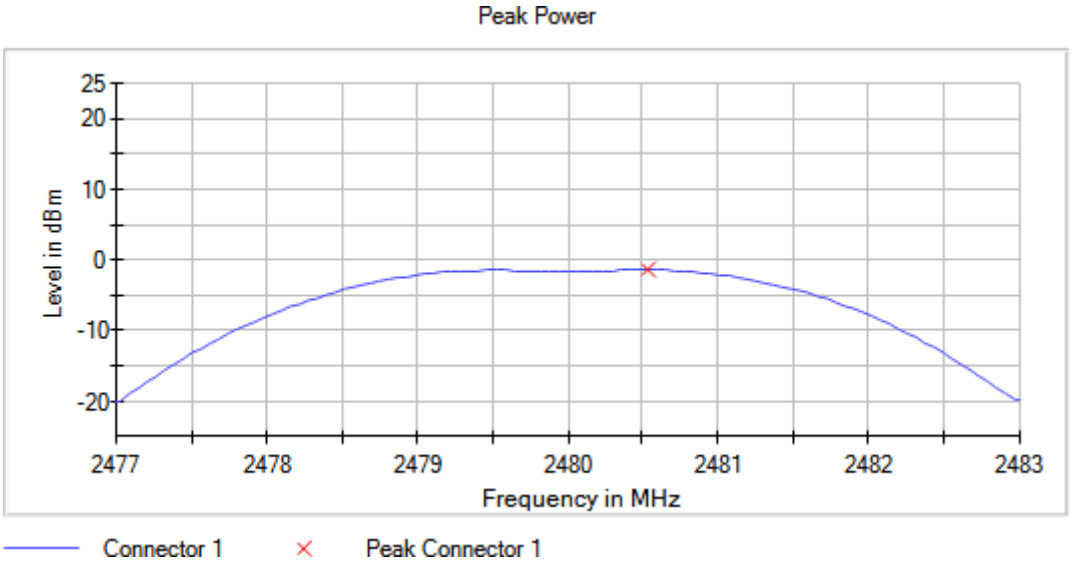


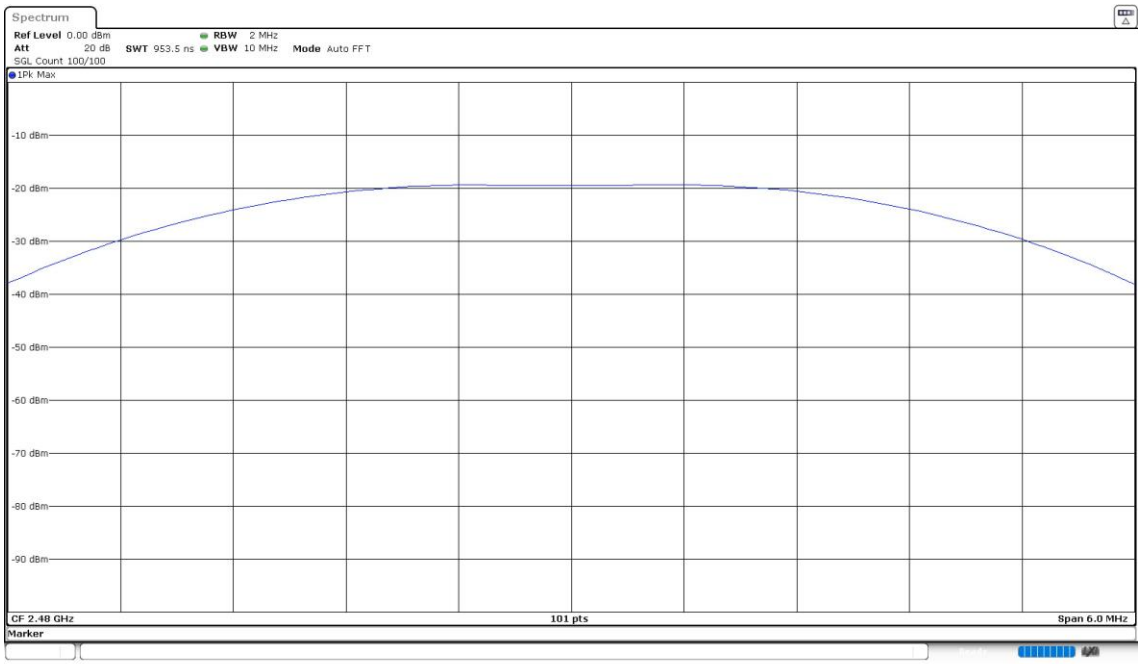
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2480.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:





RSS-247 5.5 / FCC 15.247 (d) [Bndedge] 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 5.0 (GFSK 1 Mbit/s)

Results

Freq (MHz)	Inband Peak Lvl (dBm)	Freq (MHz)	Lvl (dBm)
2402.00000	-0.072	2400.000000	-54.4
	-0.072	2399.925000	-55.1
	-0.072	2399.975000	-55.4
	-0.072	2399.875000	-55.6
	-0.072	2399.825000	-55.8
	-0.072	2399.775000	-56.0
	-0.072	2399.575000	-56.3
	-0.072	2399.625000	-56.9
	-0.072	2399.725000	-56.9
	-0.072	2399.525000	-57.2
	-0.072	2399.675000	-57.3
	-0.072	2387.825000	-57.8
	-0.072	2399.075000	-57.9
	-0.072	2399.025000	-57.9
	-0.072	2387.875000	-58.0
2480.00000	0.146	2483.625000	-56.1
	0.146	2483.675000	-56.1
	0.146	2483.825000	-57.0
	0.146	2485.575000	-57.1
	0.146	2485.625000	-57.3
	0.146	2484.175000	-57.3
	0.146	2483.575000	-57.3
	0.146	2484.225000	-57.5
	0.146	2484.475000	-57.5
	0.146	2483.775000	-57.5
	0.146	2483.875000	-57.5
	0.146	2485.675000	-57.7
	0.146	2483.525000	-57.8
	0.146	2486.275000	-57.8
	0.146	2484.025000	-58.0

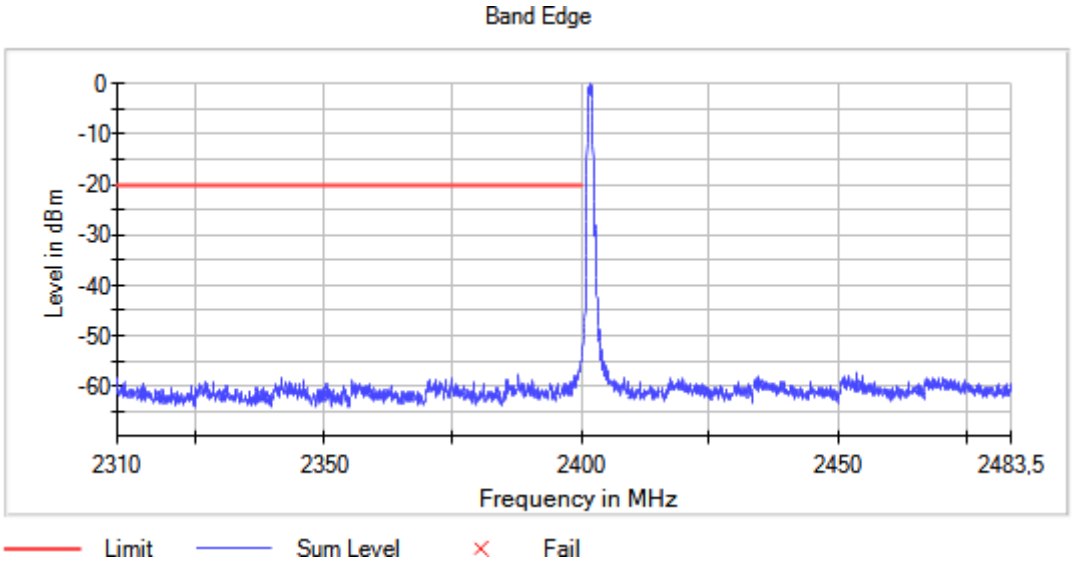
Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	0.000 dBm	0.000 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	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

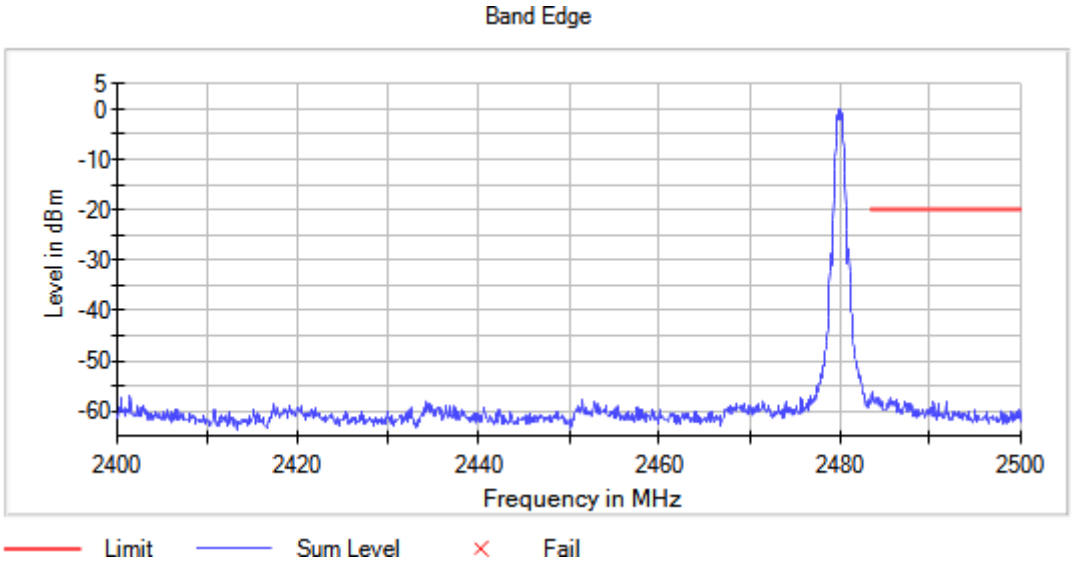
Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	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	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.11 dB	0.50 dB

Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2480.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	0.000 dBm	0.000 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	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
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	0.000 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	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.11 dB	0.50 dB

Modulation: BTLE 5.0 (GFSK 2 Mbit/s)

Results

Freq (MHz)	Inband Peak Lvl (dBm)	Freq (MHz)	Lvl (dBm)
2402.00000	0.162	2400.000000	-31.4
	0.162	2399.975000	-31.4
	0.162	2399.925000	-32.5
	0.162	2399.875000	-35.4
	0.162	2399.825000	-37.5
	0.162	2399.775000	-38.8
	0.162	2399.725000	-40.6
	0.162	2399.675000	-43.5
	0.162	2399.625000	-43.6
	0.162	2399.575000	-45.8
	0.162	2399.525000	-46.0
	0.162	2399.475000	-47.0
	0.162	2399.425000	-48.0
	0.162	2399.075000	-49.5
	0.162	2399.025000	-49.6
2480.00000	-0.281	2483.525000	-50.3
	-0.281	2483.575000	-50.7
	-0.281	2483.675000	-51.9
	-0.281	2483.775000	-52.0
	-0.281	2483.825000	-52.1
	-0.281	2483.725000	-52.5
	-0.281	2484.225000	-52.5
	-0.281	2483.625000	-52.6
	-0.281	2484.125000	-52.7
	-0.281	2484.275000	-52.7
	-0.281	2484.575000	-53.3
	-0.281	2483.875000	-53.4
	-0.281	2484.175000	-53.5
	-0.281	2484.625000	-53.5
	-0.281	2485.275000	-53.6

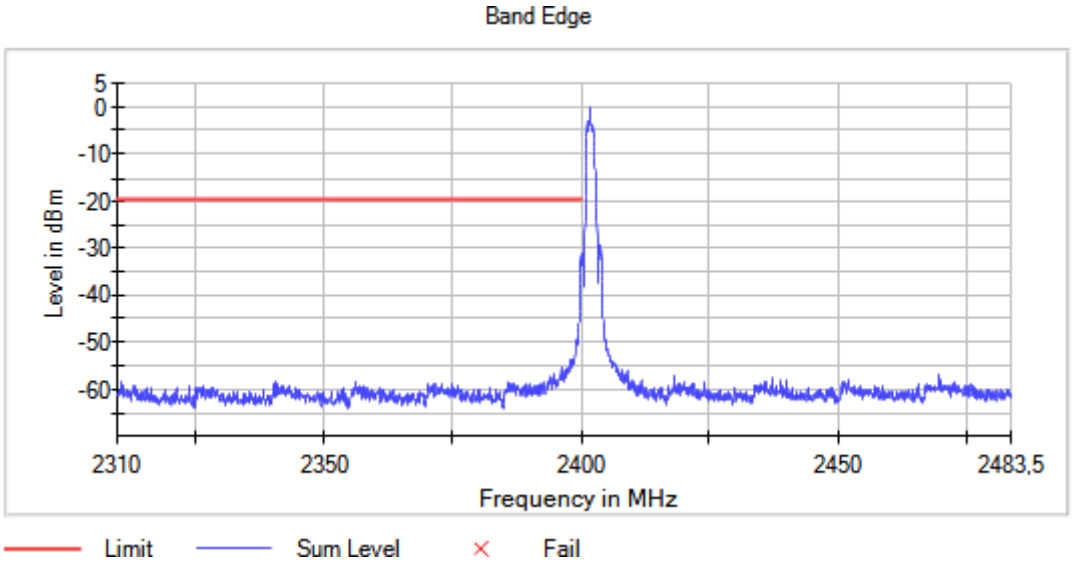
Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	0.000 dBm	0.000 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	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

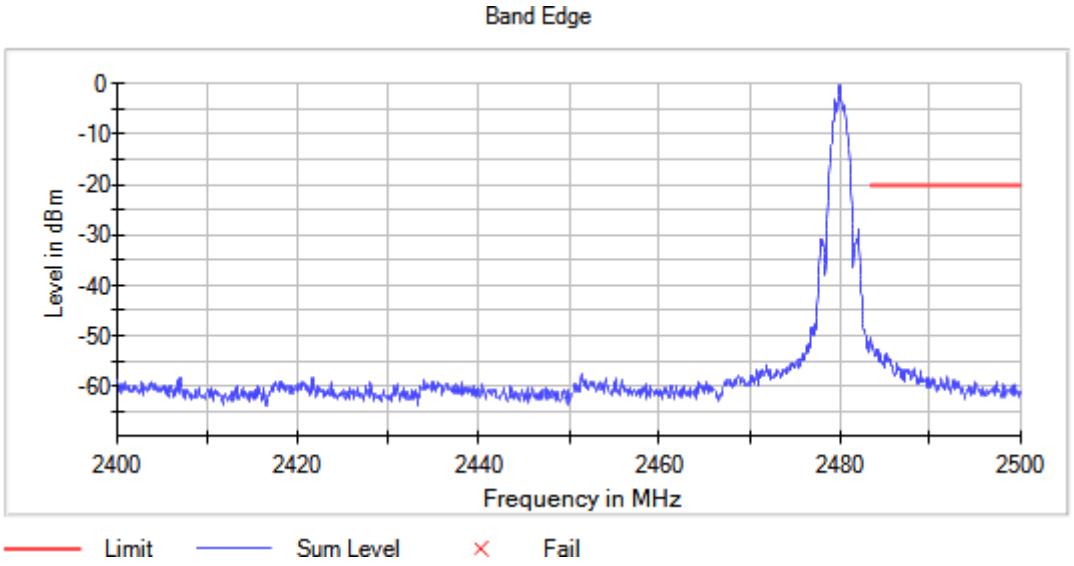
Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	94.727 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	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	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.27 dB	0.50 dB

Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2480.00000 Active Port = 1

Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 µs	AUTO
Reference Level	0.000 dBm	0.000 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	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
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	0.000 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	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.27 dB	0.50 dB

RSS-247 5.5 / FCC 15.247 (d) [RSE] 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 (µV/m)	Field strength (dBµV/m)	Measurement distance (m)
0.009-0.490	2400/F(kHz)	-	300
0.490-1.705	24000/F(kHz)	-	30
1.705 - 30.0	30	-	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

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

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

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

Frequency range tested for Radiated emissions:

Start frequency: no radiofrequency signal generated in the device found below 10th sub-harmonic, no further investigation required.
Stop frequency: it has been performed the radiated spurious emissions until 10th harmonic.

Modulation: BTLE 5.0 (GFSK 1 Mbit/s)

Results

Frequency range 30 MHz – 1 GHz:

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

Frequency range 1 GHz – 26 GHz:

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

Verdict

Pass

Attachments

Frequency Range GHz = [0.03, 1]

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

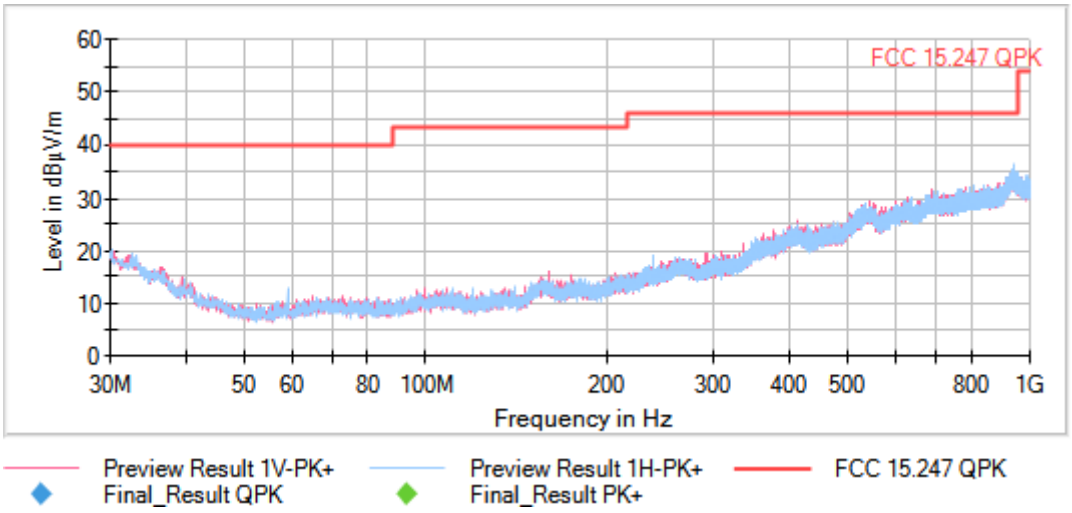
Frequency MHz = 2402.00000

Active Port = 1

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Resource Unit Tone/Index = -

Images:



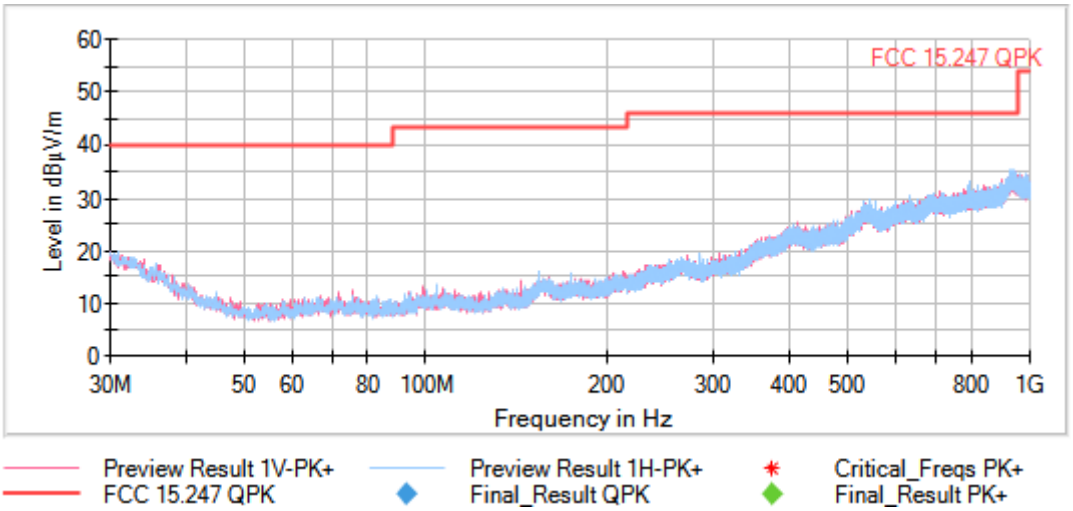
Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	30 MHz - 1 GHz	48,5 kHz	PK+	100 kHz	1 s	20 dB

Frequency Range GHz = [0.03, 1]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2440.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)
Resource Unit Tone/Index = -

Images:

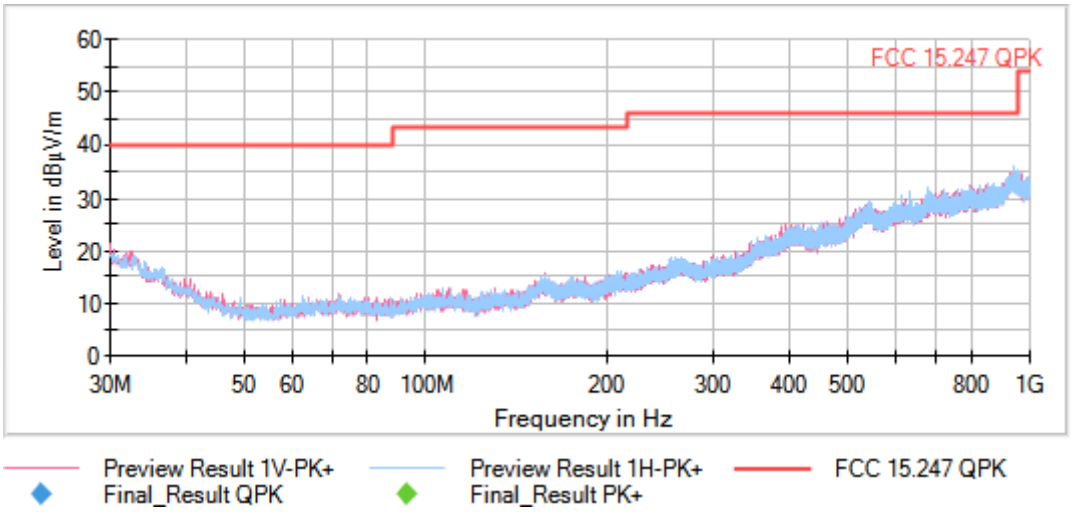


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	30 MHz - 1 GHz	48,5 kHz	PK+	100 kHz	1 s	20 dB

Frequency Range GHz = [0.03, 1]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2480.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)
Resource Unit Tone/Index = -

Images:

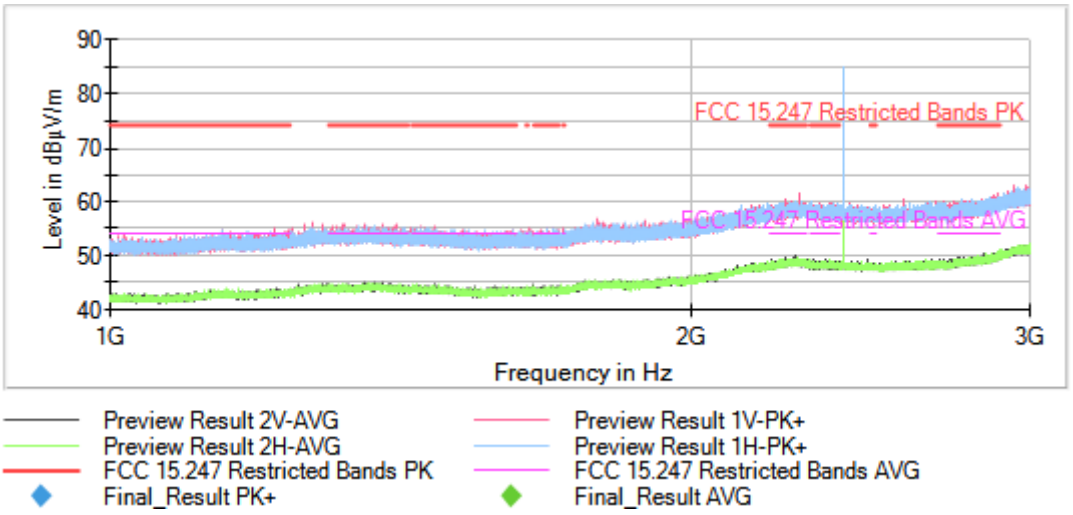


Tables:
Spectrum Analyzer Parameters

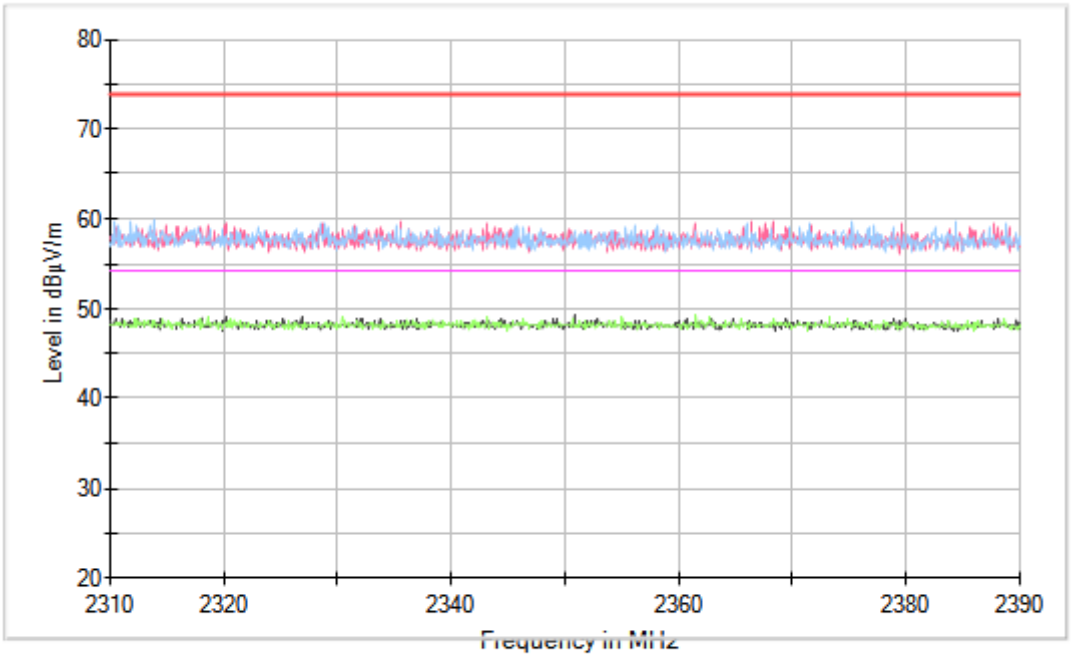
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	30 MHz - 1 GHz	48,5 kHz	PK+	100 kHz	1 s	20 dB

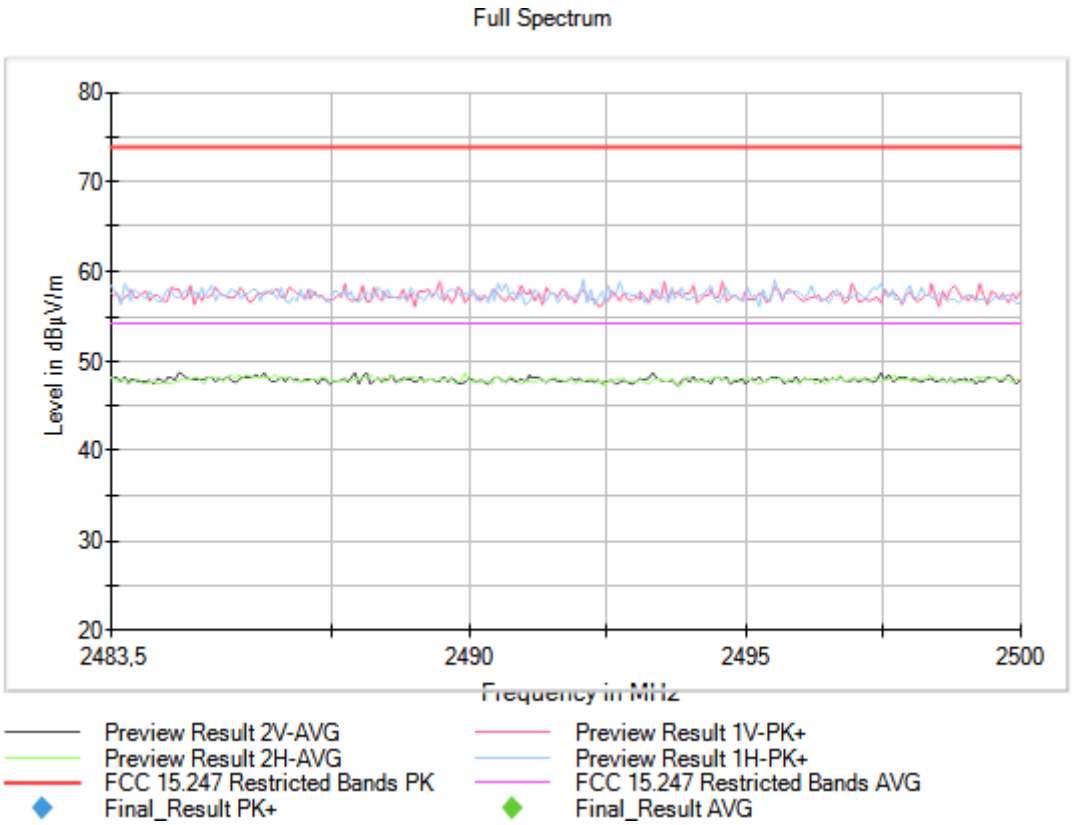
Frequency Range GHz = [1, 3]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)
Resource Unit Tone/Index = -

Images:



Full Spectrum



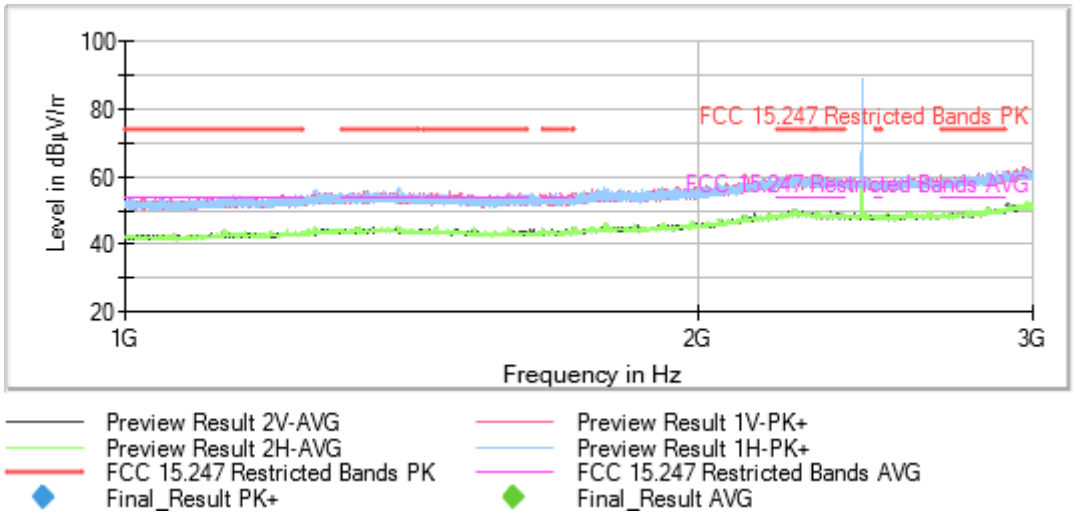


Tables:
Spectrum Analyzer Parameters

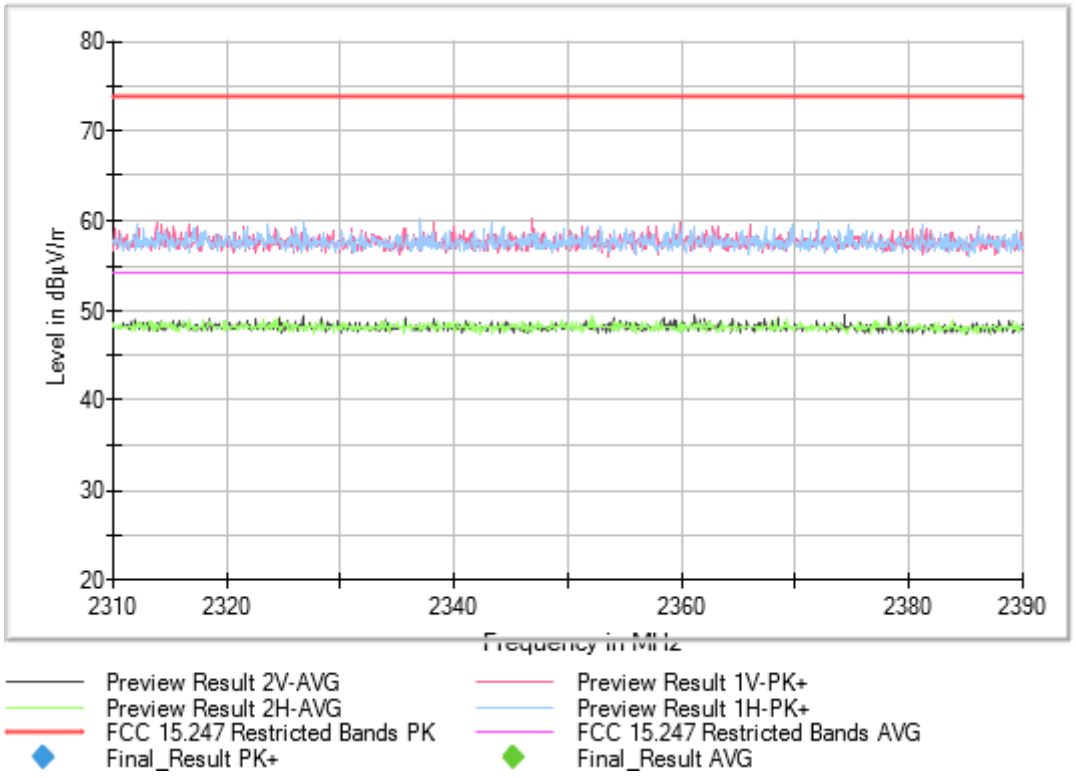
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

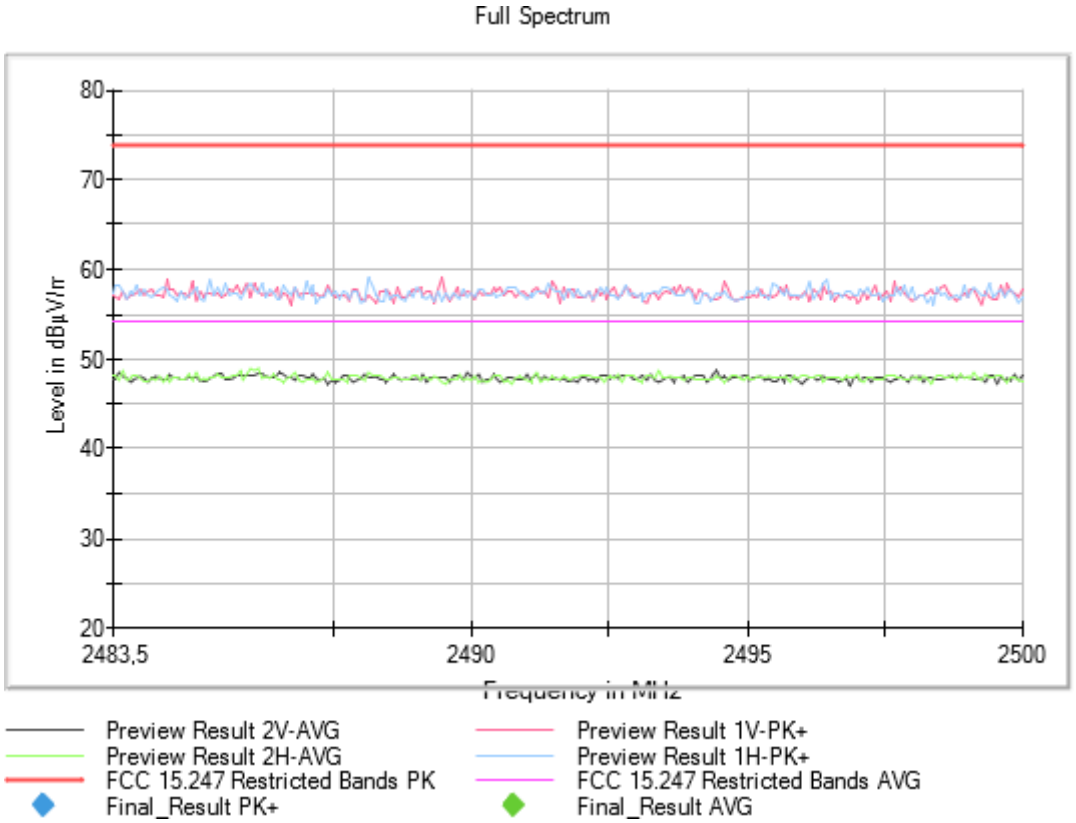
Frequency Range GHz = [1, 3]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2440.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)
Resource Unit Tone/Index = -

Images:



Full Spectrum



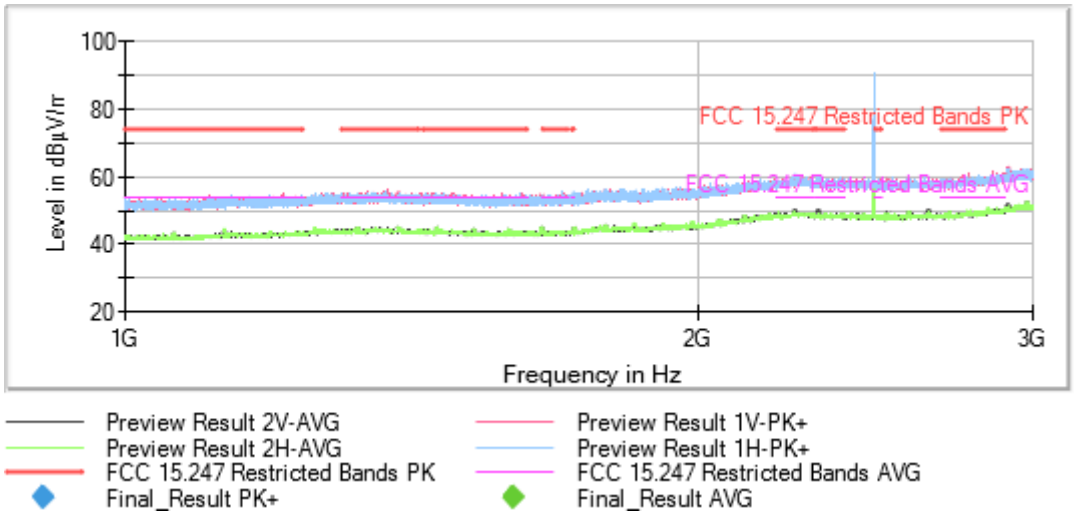


Tables:
Spectrum Analyzer Parameters

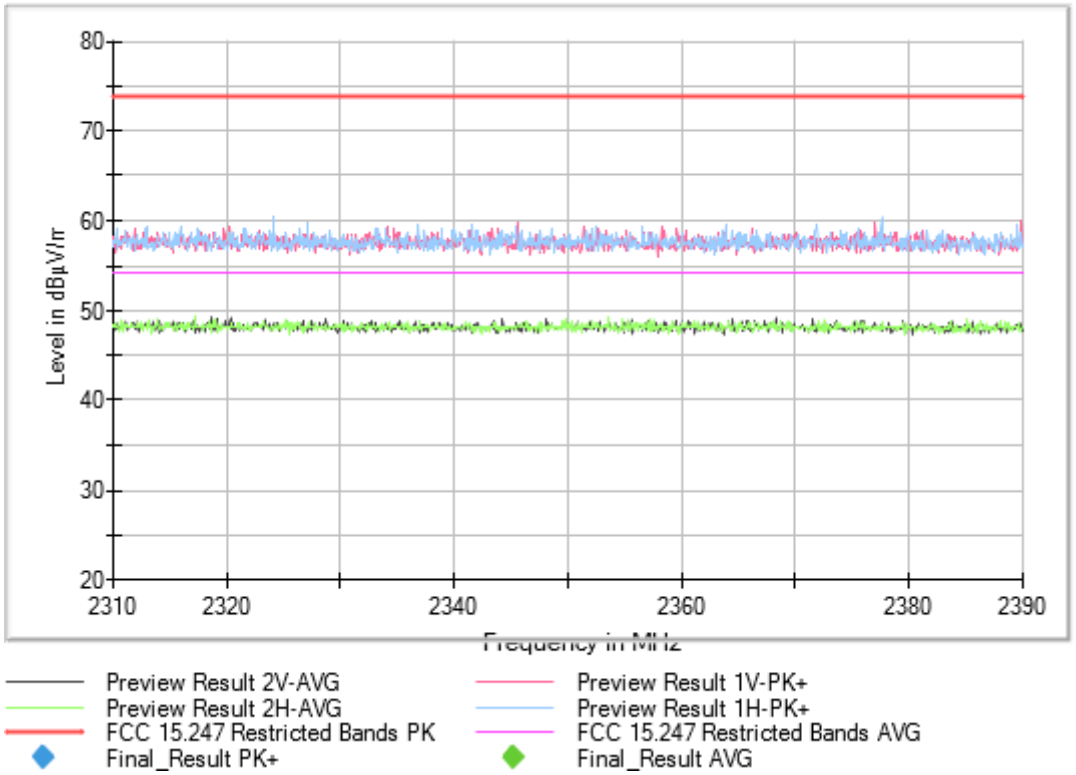
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [1, 3]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2480.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)
Resource Unit Tone/Index = -

Images:



Full Spectrum

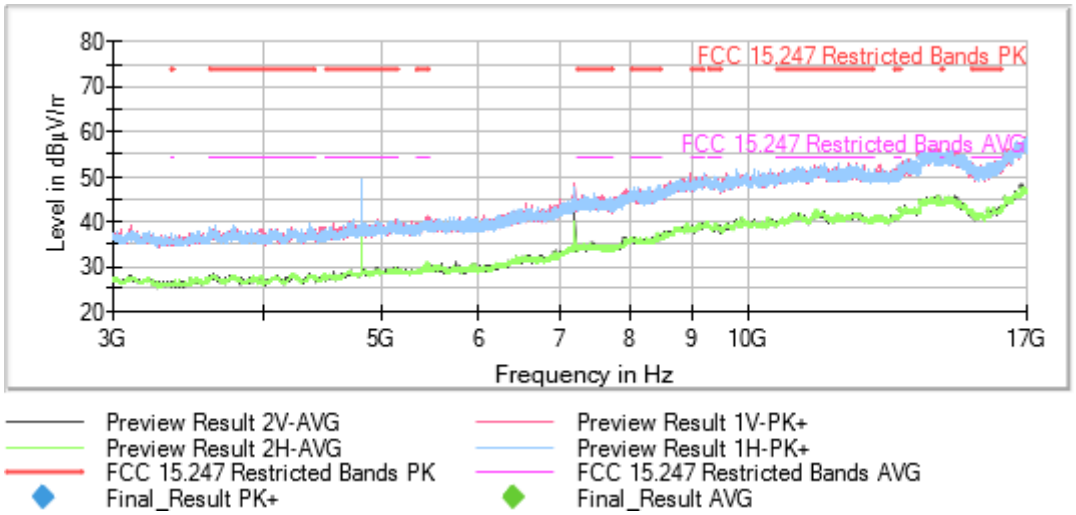


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [3, 17]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)
Resource Unit Tone/Index = -

Images:

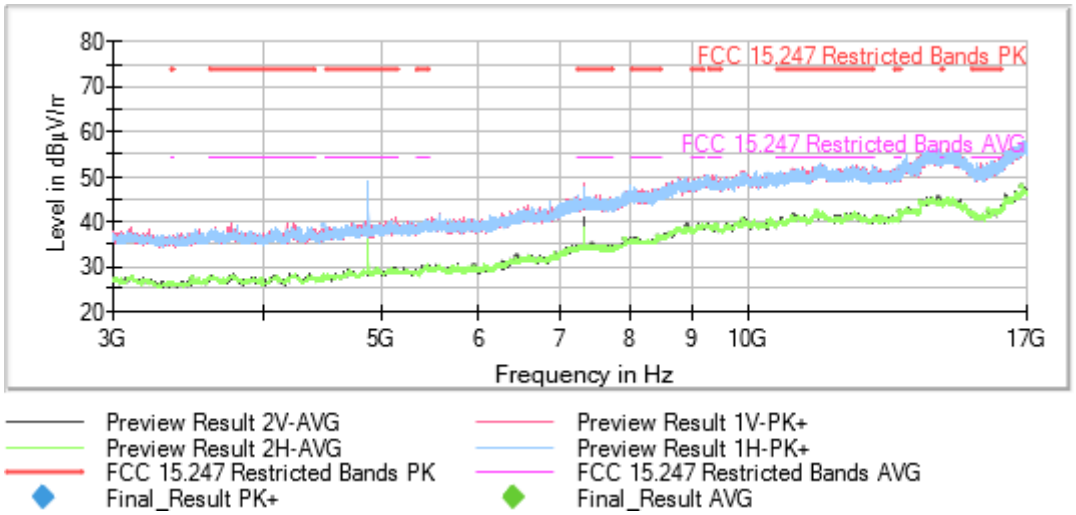


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [3, 17]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2440.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)
Resource Unit Tone/Index = -

Images:

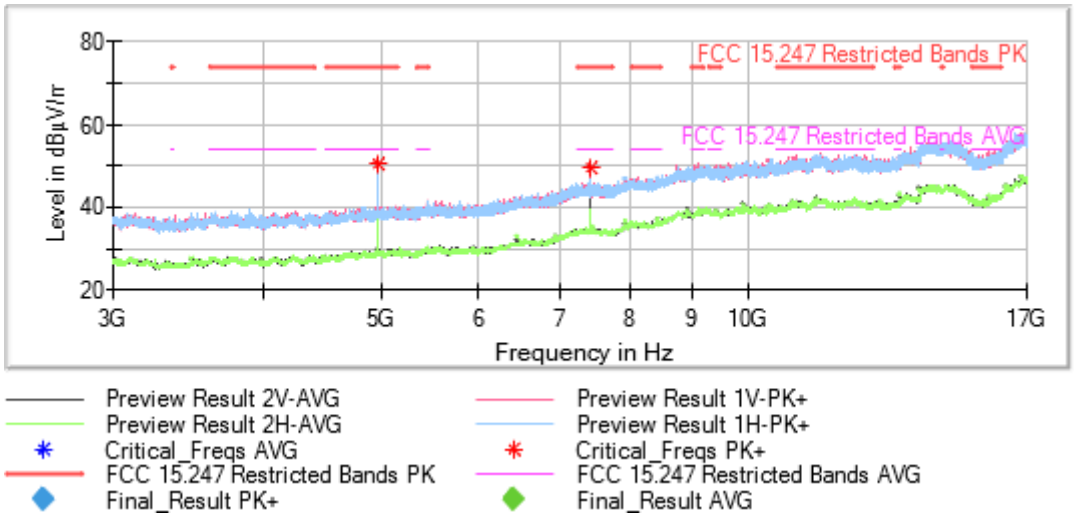


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [3, 17]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2480.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)
Resource Unit Tone/Index = -

Images:

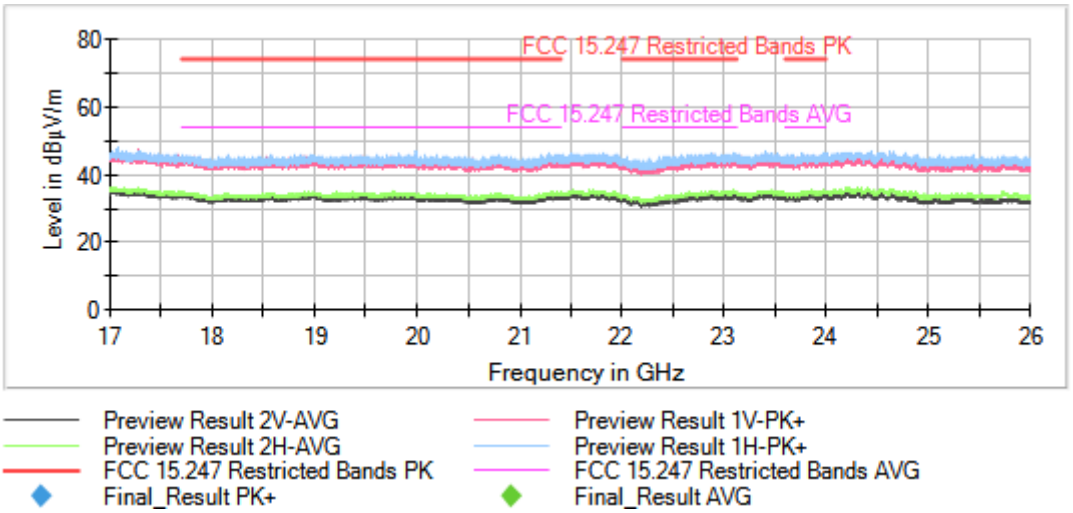


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [17, 26]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)
Resource Unit Tone/Index = -

Images:

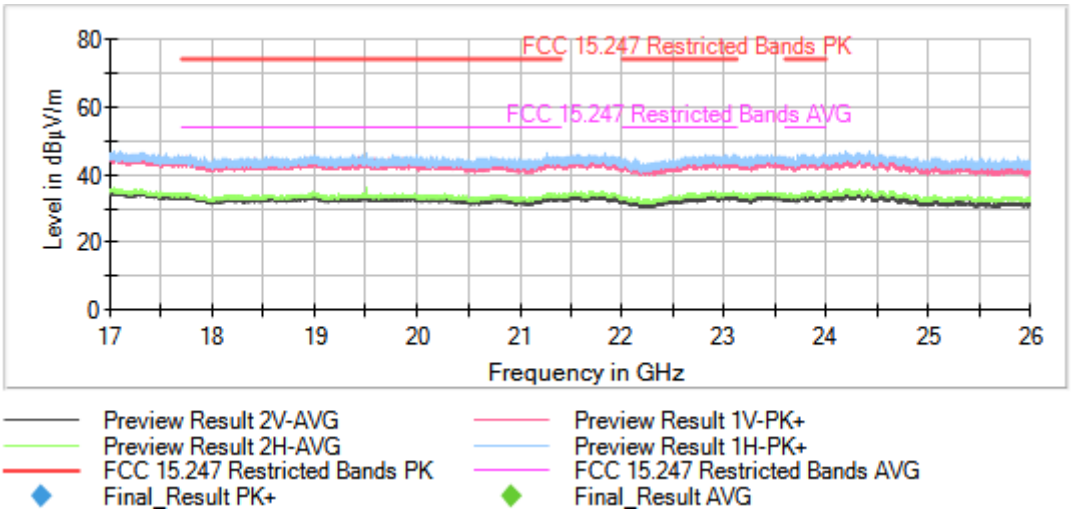


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	17 GHz - 26 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [17, 26]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2440.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)
Resource Unit Tone/Index = -

Images:

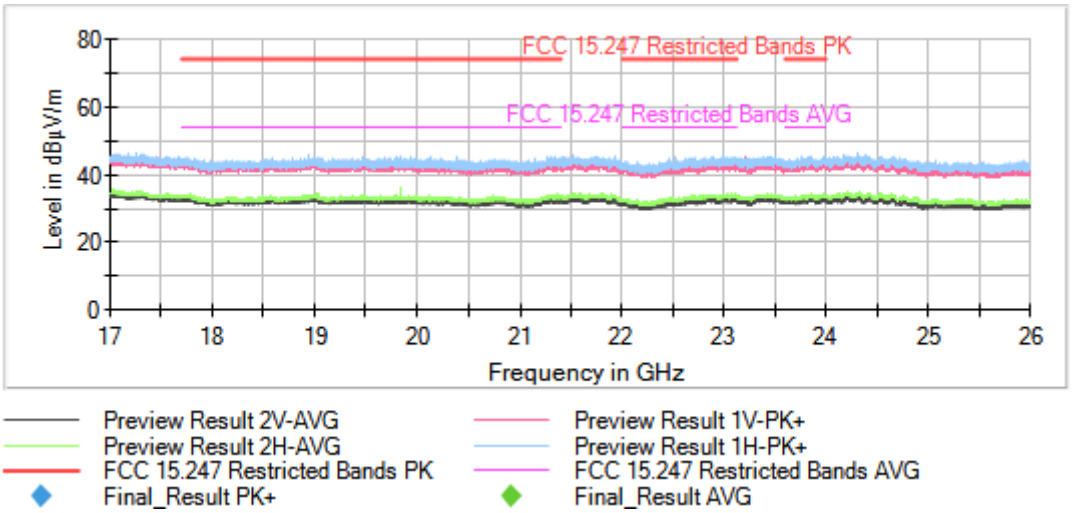


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	17 GHz - 26 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [17, 26]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2480.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)
Resource Unit Tone/Index = -

Images:



Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	17 GHz - 26 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Modulation: BTLE 5.0 (GFSK 2 Mbit/s)

Results

Frequency range 30 MHz – 1 GHz:

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

Frequency range 1 GHz – 26 GHz:

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

Verdict

Pass

Attachments

Frequency Range GHz = [0.03, 1]

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

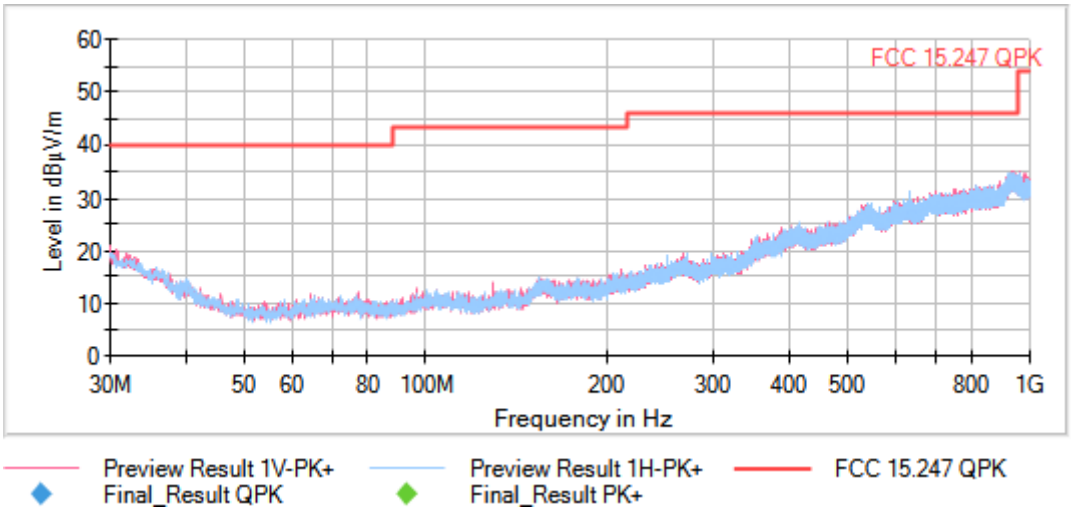
Frequency MHz = 2402.00000

Active Port = 1

Modulation = BTLE 5.0 (GFSK 2 Mbit/s)

Resource Unit Tone/Index = -

Images:



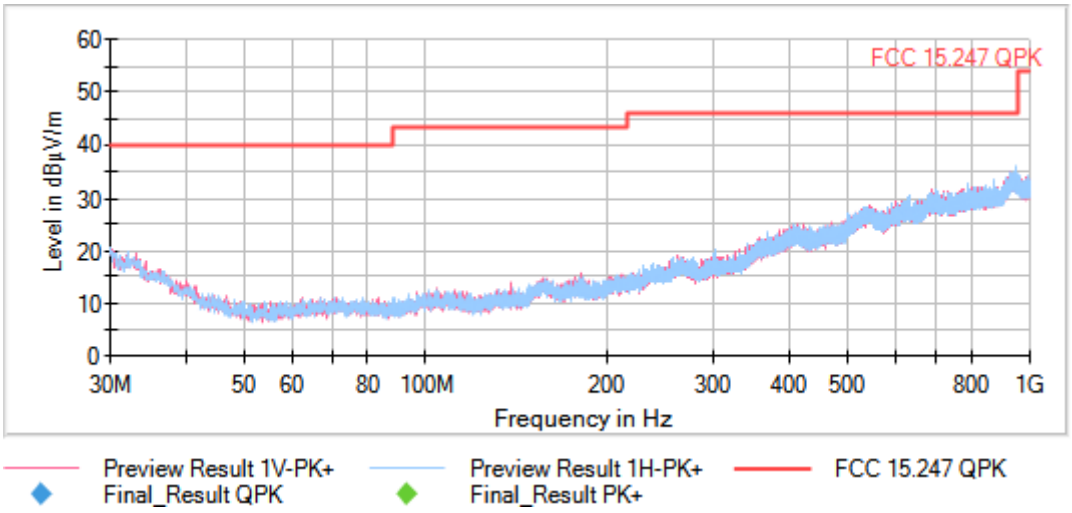
Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	30 MHz - 1 GHz	48,5 kHz	PK+	100 kHz	1 s	20 dB

Frequency Range GHz = [0.03, 1]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2440.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)
Resource Unit Tone/Index = -

Images:

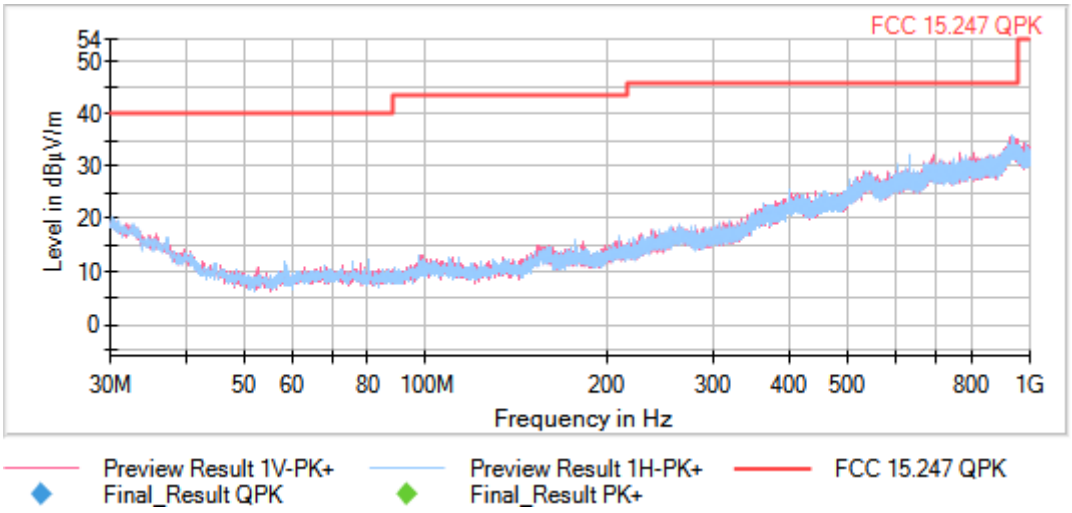


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	30 MHz - 1 GHz	48,5 kHz	PK+	100 kHz	1 s	20 dB

Frequency Range GHz = [0.03, 1]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2480.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)
Resource Unit Tone/Index = -

Images:

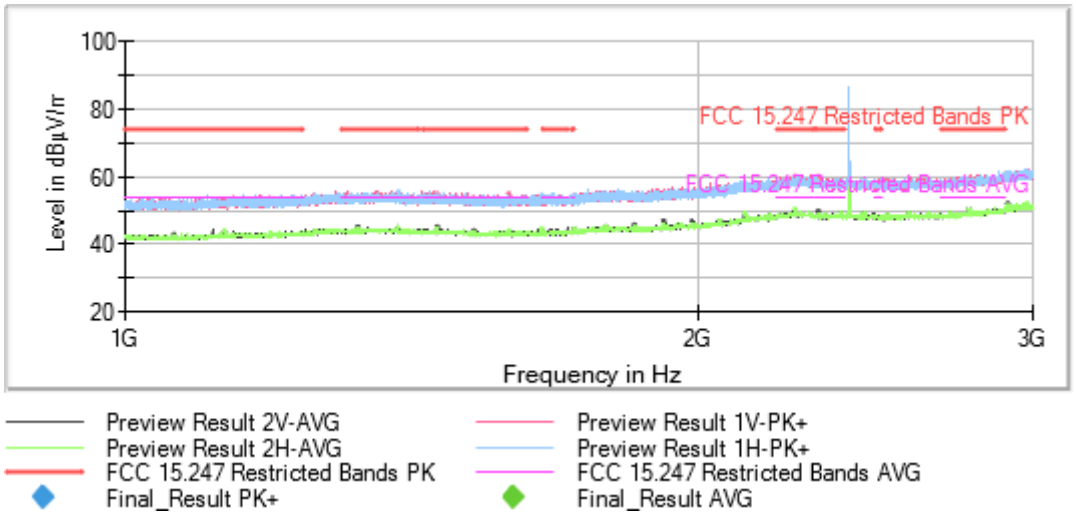


Tables:
Spectrum Analyzer Parameters

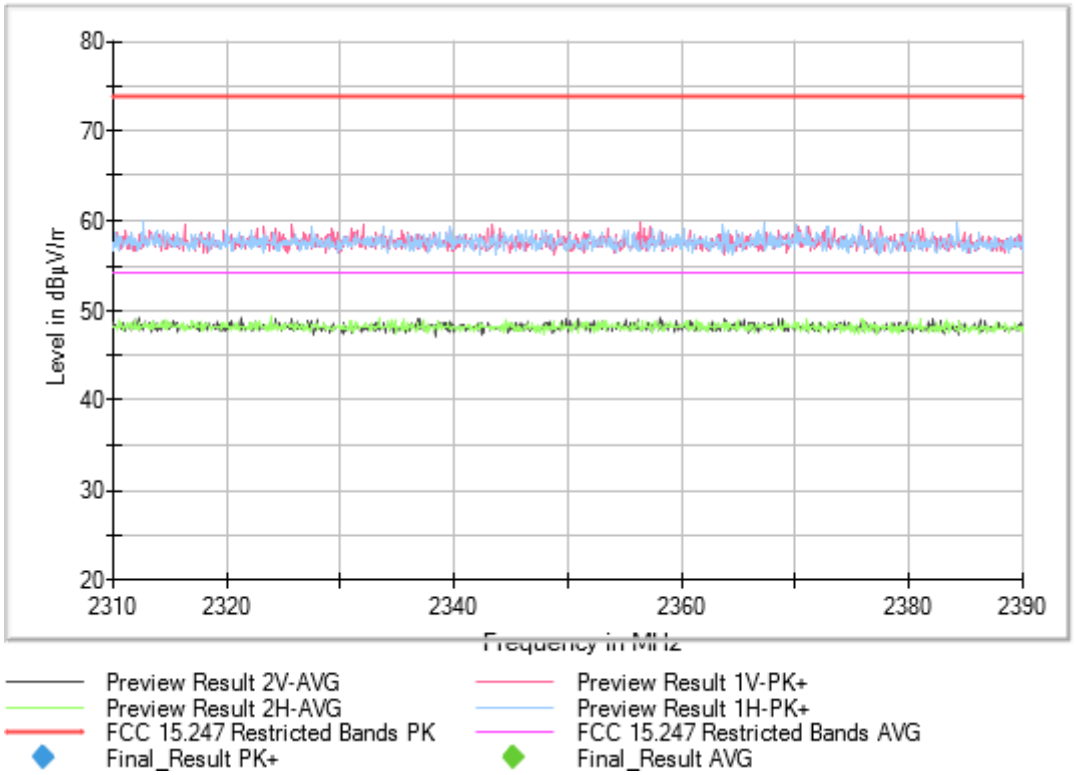
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	30 MHz - 1 GHz	48,5 kHz	PK+	100 kHz	1 s	20 dB

Frequency Range GHz = [1, 3]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)
Resource Unit Tone/Index = -

Images:



Full Spectrum

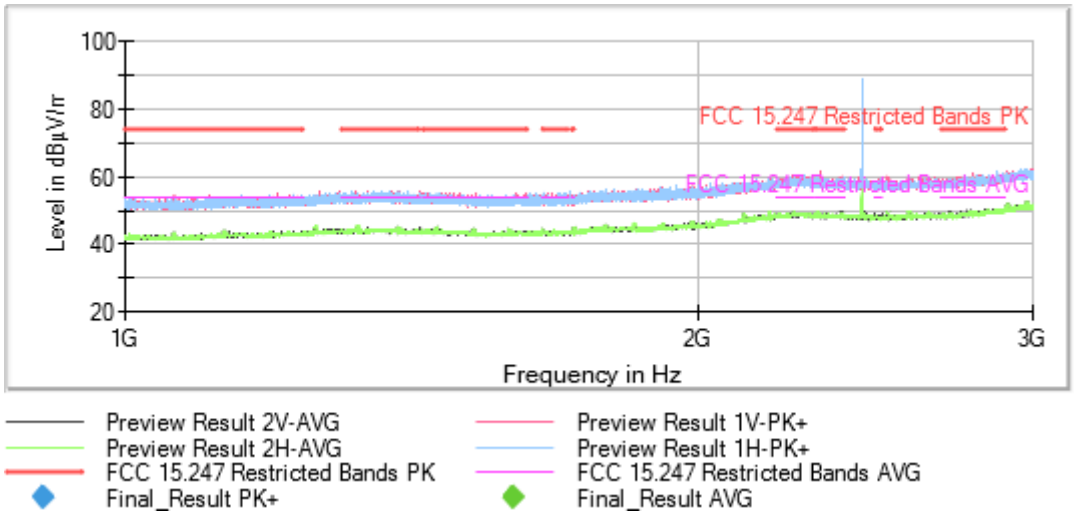


Tables:
Spectrum Analyzer Parameters

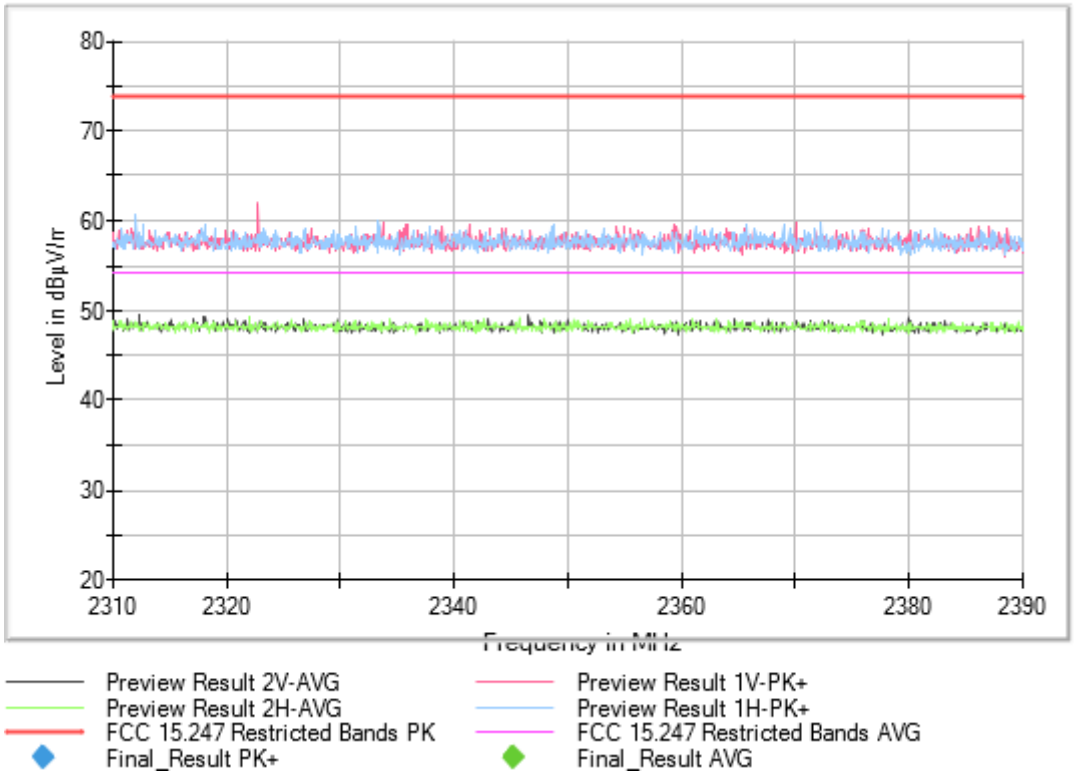
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [1, 3]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2440.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)
Resource Unit Tone/Index = -

Images:



Full Spectrum

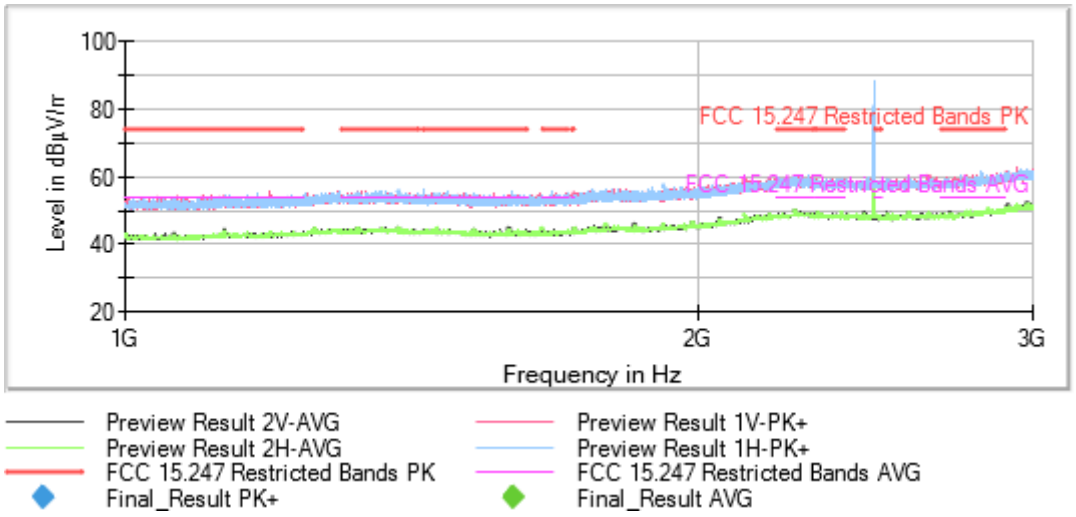


Tables:
Spectrum Analyzer Parameters

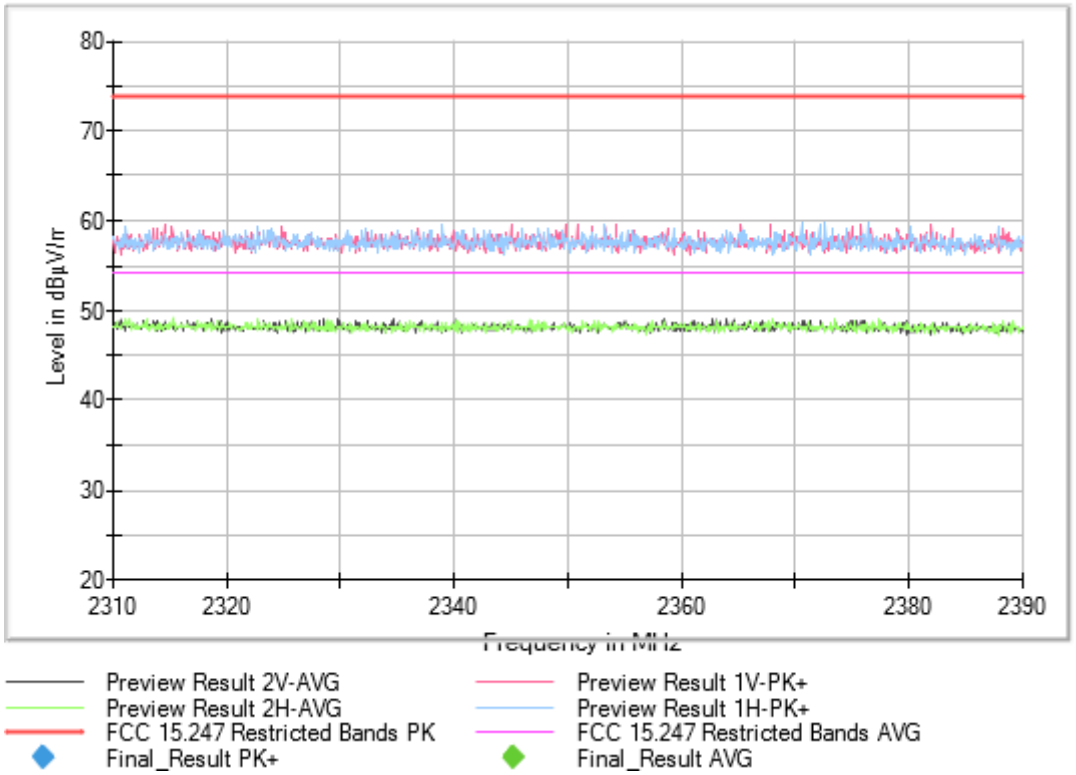
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

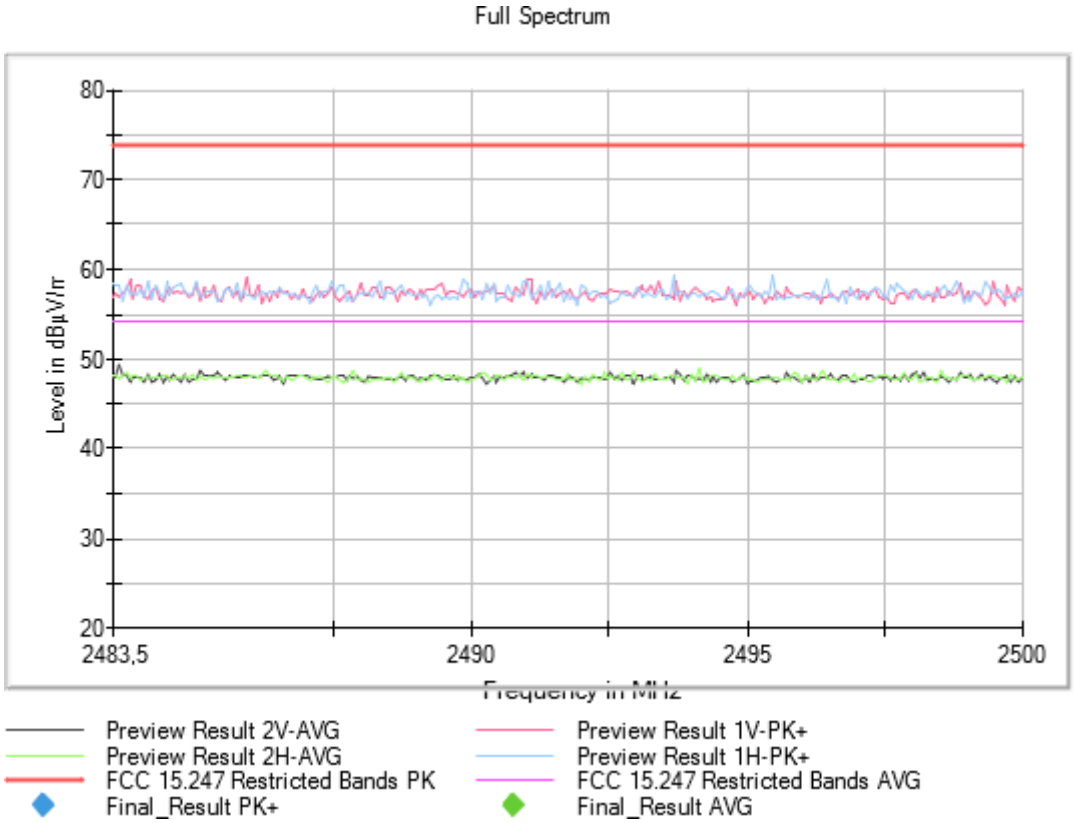
Frequency Range GHz = [1, 3]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2480.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)
Resource Unit Tone/Index = -

Images:



Full Spectrum



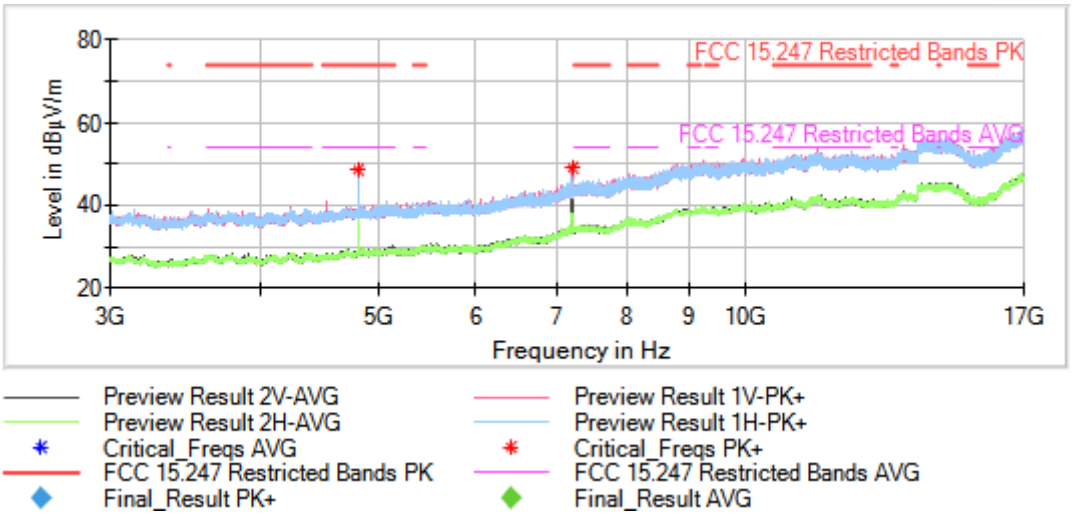


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [3, 17]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)
Resource Unit Tone/Index = -

Images:

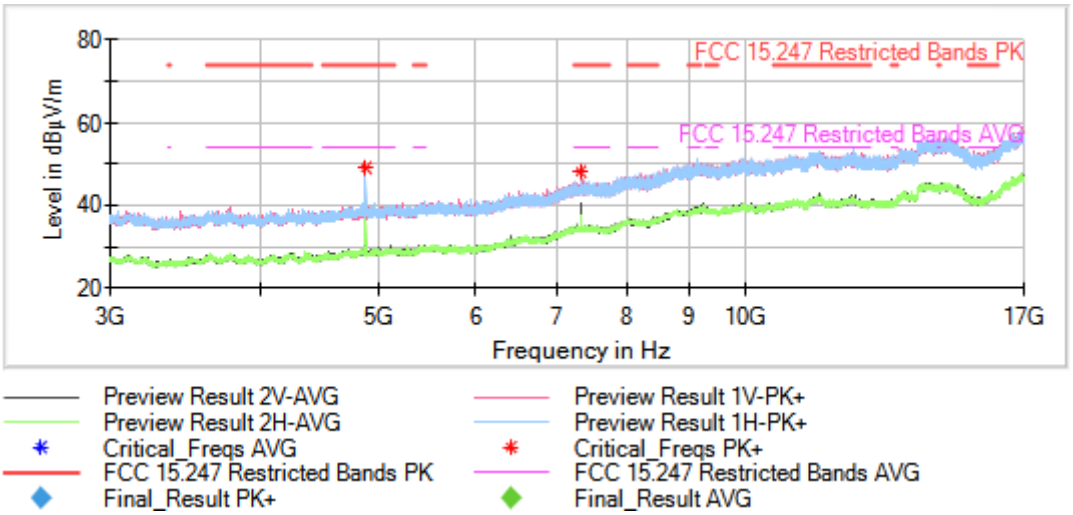


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [3, 17]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2440.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)
Resource Unit Tone/Index = -

Images:

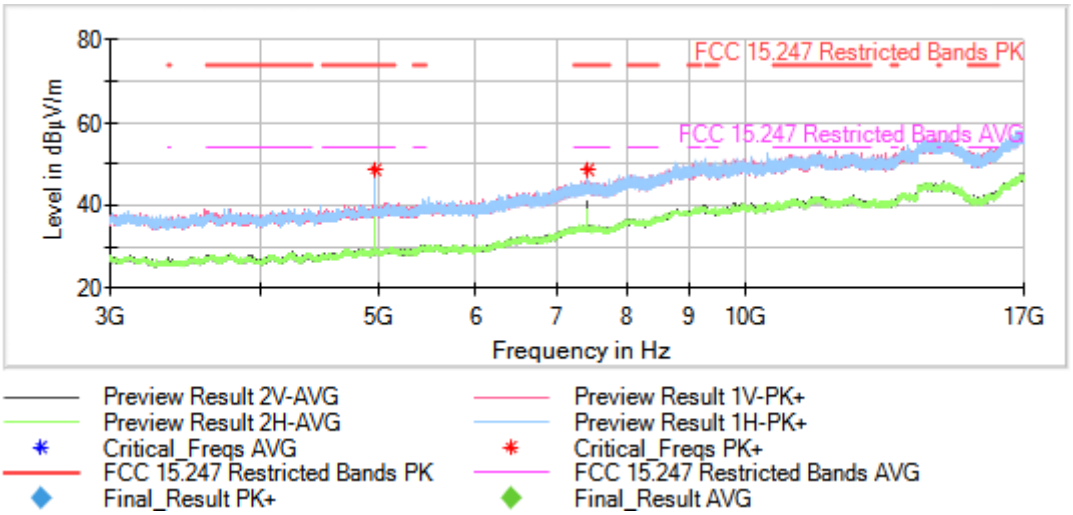


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [3, 17]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2480.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)
Resource Unit Tone/Index = -

Images:

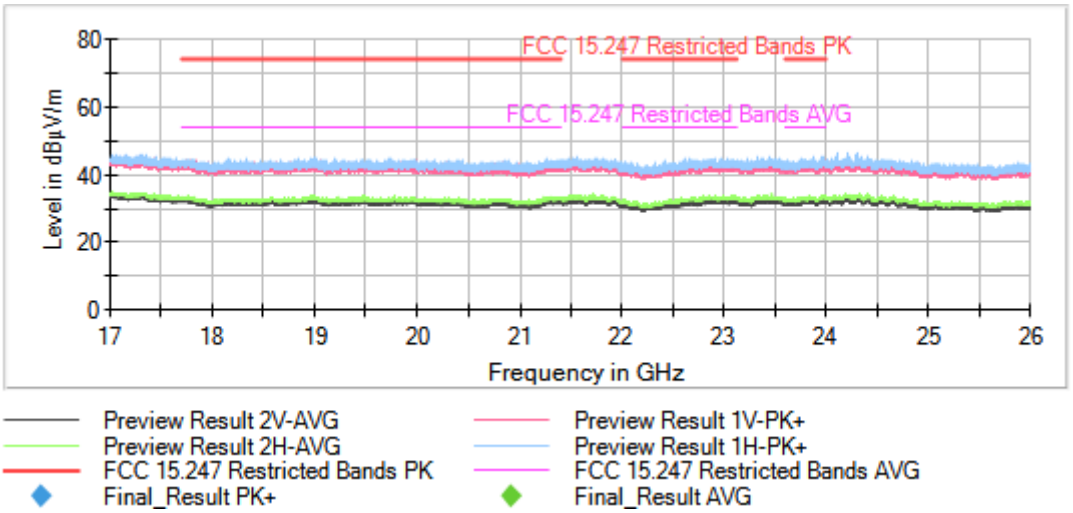


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [17, 26]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2402.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)
Resource Unit Tone/Index = -

Images:

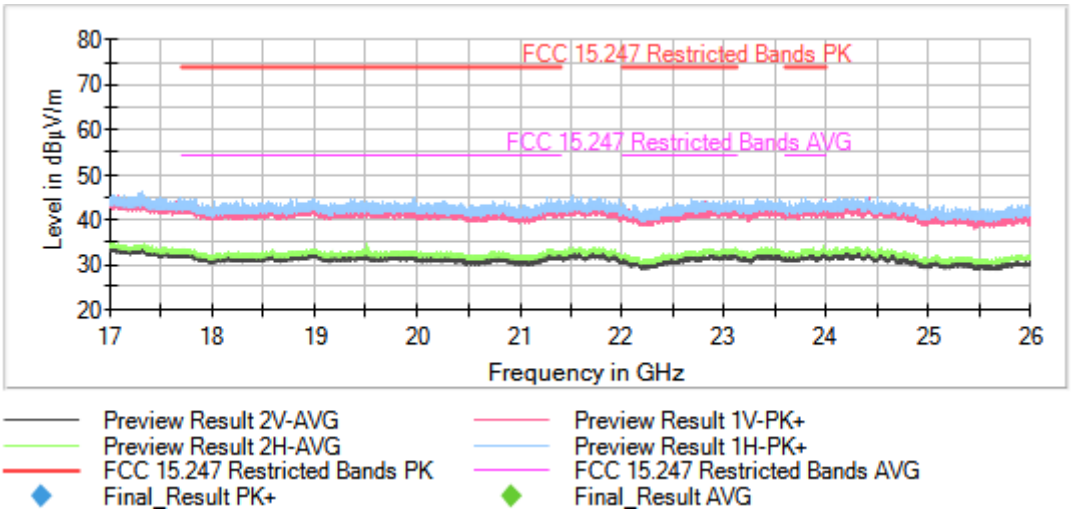


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	17 GHz - 26 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [17, 26]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2440.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)
Resource Unit Tone/Index = -

Images:

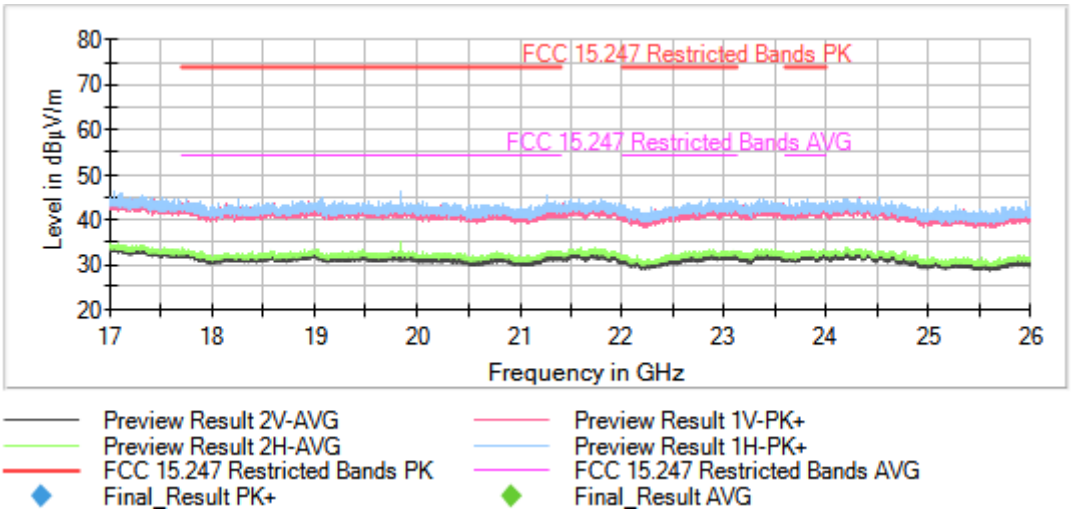


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	17 GHz - 26 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [17, 26]
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2480.00000
Active Port = 1
Modulation = BTLE 5.0 (GFSK 2 Mbit/s)
Resource Unit Tone/Index = -

Images:



Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESW 44]					
	17 GHz - 26 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB