

ISED CABid: ES1909

Lab. Company Number: 4621A

Test Report No:
84979RRF.004

Partial Test Report

USA FCC Part 15.247, 15.209

CANADA RSS-247, RSS-Gen

(*) Identification of item tested	Wellness ring
(*) Trademark	Oura
(*) Model and /or type reference	OA13
Other identification of the product	FCC ID: 2AD7V-OURA2601 IC: 20635- OURA2601
(*) Features	BLE, WPT HW version: 01 SW version: 0.8.1
(*) Manufacturer	Oura Health Oy Elektroniikkatie 10, 90590 Oulu, Finland
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 4 (July 2025). 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 C63.10-2020 + Cor.1-2023 + C63.10a-2024 + Errata to C63.10a-2024: 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	2026-03-02
Report template No	FDT08_27 (*) "Data provided by the client"

Firmado digitalmente por 53680346W JOSE MANUEL GOMEZ (C:A29507456)

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Acronyms

Acronym ID	Acronym Description
BW	Bandwidth
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
Mode	MIMO Mode
Occ Ch BW	Occupied Channel Bandwidth
PSD	Power Spectral 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 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.

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General conditions

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2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or competent Authorities.
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 $\leq \pm 5,35$ 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 ($k = 2$).

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", "Manufacturer").
2. The sample consists of a Wellness ring. Wellness ring and app designed to help user gets more restful sleep and performs better..

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 N°	Date of Reception	Application
S/01	84979_40.1	Smart Ring (Size 6)	OA13	--	2026-01-07	Element Under Test
S/02	84979_44.1	Smart Ring (Size 7)	OA13	--	2026-02-17	Element Under Test
S/03	84979_42.1	Smart Ring (Size 8)	OA13	--	2026-02-17	Element Under Test
S/04	84979_43.1	Smart Ring (Size 9)	OA13	--	2026-02-17	Element Under Test
S/05	84979_7.1	Smart Ring (Size 10)	OA13	--	2025-12-05	Element Under Test
S/06	84979_10.1	Smart Ring (Size 11)	OA13	--	2025-12-05	Element Under Test
S/07	84979_1.1	Smart Ring (Size 12)	OA13	--	2025-12-05	Element Under Test

Notes referenced to samples during the project:

Id	Type
S/01	Radiated. Size 6
S/02	Radiated. Size 7
S/03	Radiated. Size 8
S/04	Radiated. Size 9
S/05	Radiated. Size 10
S/06	Radiated. Size 11
S/07	Radiated. Size 12

Test sample description

Ports..... :	Port name and description	Cable					
		Specified max length [m]	Attached during test		Shielded		
			[]		[]		
			[]		[]		
			[]		[]		
			[]		[]		
			[]		[]		
			[]		[]		
Supplementary information to the ports..... :							
Rated power supply	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	[]	AC:	[]	[]	[]	[]	[]
	[]	AC:	[]	[]	[]	[]	[]
	[X]	DC: 3.7V					
	[]	DC:					
Rated Power							
Clock frequencies.....							
Other parameters							
Software version		0.8.1					
Hardware version		01					
Dimensions in cm (W x H x D)							
Mounting position	[]	Table top equipment					
	[]	Wall/Ceiling mounted equipment					
	[]	Floor standing equipment					
	[X]	Hand-held equipment					
	[]	Other:					
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
			
			
			
			

Identification of the client

Oura Health Oy
Elektroniikkatie 10, 90590 Oulu, Finland

Testing period and place

Test Location	DEKRA TESTING AND CERTIFICATION S.A.U. C/ Margarita Salas Boulevard, 26 - Parque Tecnológico de Andalucía; 29590 Campanillas (Málaga) (Location D)
Date (start)	2025-12-18
Date (finish)	2026-02-21

Document history

Report number	Date	Description
84979RRF.004	2026-03-02	First release.

Environmental conditions

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

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

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

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

Remarks and comments

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

Used instrumentation:

Control No.	Equipment	Model	Manufacturer	Next Calibration
06495	HORN ANTENNA 18-40GHz	BBHA 9170	SCHWARZBECK	2027-07-11
07862	PRE-AMPLIFIER G>30dB 18-40GHz	BLMA 1840-3G	BONN ELEKTRONIK	2026-07-09
10304	EMI TEST RECEIVER 2Hz-44GHz	ESW44	ROHDE AND SCHWARZ	2026-10-01
09782	HORN ANTENNA 1-18GHz	BBHA 9120D	SCHWARZBECK MESS-ELEKTRONIK	2029-01-12
09968	HYBRID BILOG ANTENNA 30MHz-6GHz	3142E	ETS LINDGREN	2026-09-22
07769	PREAMPLIFIER 30dB 500MHz-18GHz	BBV 9718 C	SCHWARZBECK	2026-03-17
08130	SEMIANECHOIC ABSORBER LINED CHAMBER	P29419	ALBATROSS	--
08134	SHIELDED ROOM	P29419	ALBATROSS PROJECTS GMBH	--
04848	SOFTWARE FOR EMC/RF TESTING	EMC32	ROHDE AND SCHWARZ	--
07550	TEMPERATURE AND HUMIDITY PROBE	HWg-STE	HW GROUP	2026-04-23
07549	TEMPERATURE AND HUMIDITY PROBE	HWg-STE	HW GROUP	2026-04-23

Testing verdicts

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

Summary

Bluetooth Low Energy (1Mbps) Appendix B

FCC PART 15 PARAGRAPH/ RSS-247			
Requirement – Test case		Verdict	Remark
FCC 15.247 (a)(2) / RSS-247 6.3.1. (a)	6 dB Bandwidth	N/M	(1)
FCC 15.247 (b) / RSS-247 6.3.2.	Maximum output power and antenna gain	N/M	(1)
FCC 15.247 (d) / RSS-247 6.6	Band-edge emissions compliance (Transmitter)	N/M	(1)
FCC 15.247 (e) / RSS-247 6.3.1. (b)	Power spectral density	N/M	(1)
FCC 15.247 (d) / RSS-247 6.6.	Emission limitations radiated (Transmitter)	P	--
<u>Supplementary information and remarks:</u>			
1. Only Emission limitations radiated (Transmitter) test has been requested			

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

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TEST CONDITIONS

(*): Data provided by the client.

POWER SUPPLY (*):

Vnominal: 3.7V DC
Type of Power Supply: Battery

ANTENNA (*):

Type of Antenna: Integral Antenna
Maximum Declared Antenna Gain: -10.7 dBi

TEST FREQUENCIES (*):

Modulation	Data rates	Low Channel:	Middle Channel	High Channel
BTLE GFSK	1 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.

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).

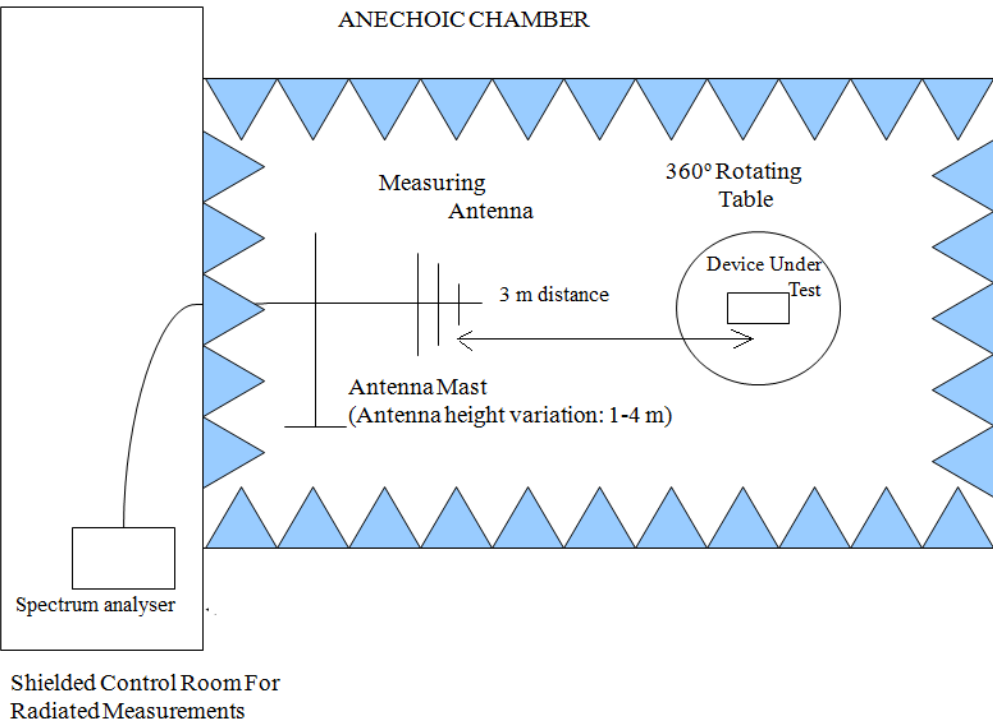
For radiated emissions in the range 17 GHz-26 GHz that is performed at a distance closer than the specified distance, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

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.

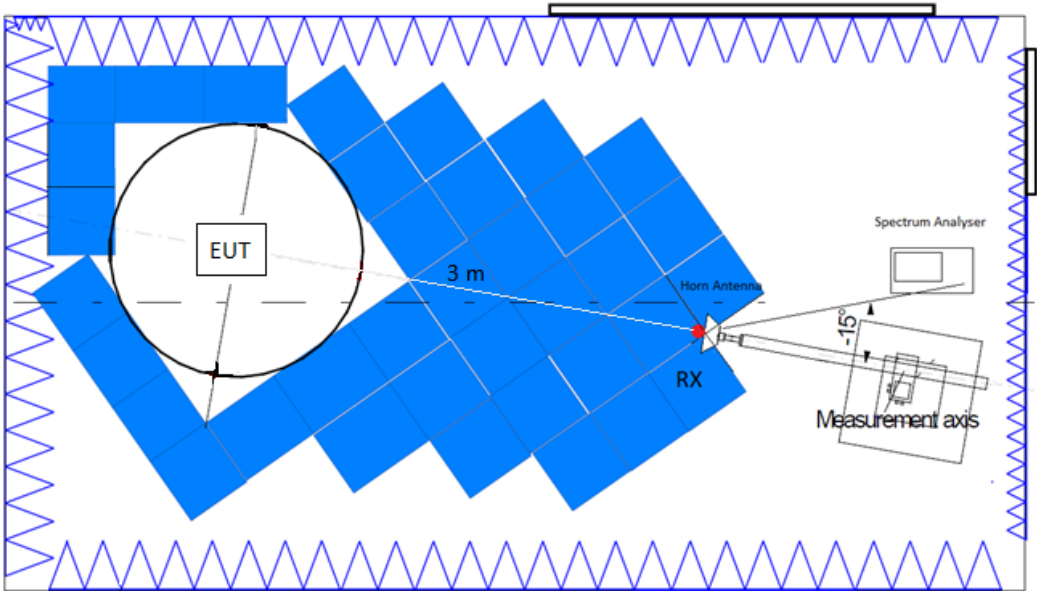
Measurements were made in both horizontal and vertical planes of polarization.

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.

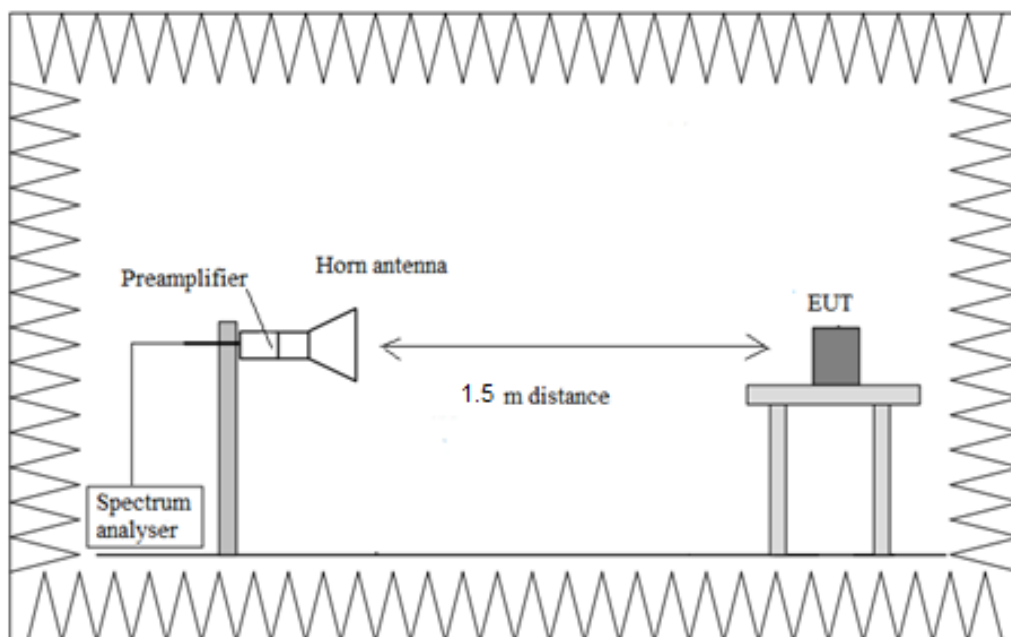
Radiated measurements setup from 30 MHz to 1 GHz:



Radiated measurements setup from 1 GHz to 17 GHz:



Radiated measurements setup $f > 17$ GHz:



SAMPLE CALCULATION

For radiated measurements:

Values measures by the test receiver / analyzer are converted to field strength, in dBuV/m, at the regulatory distance using the following calculation:

$$\text{Unwanted Lvl (dBuV/m)} = \text{Raw Rec (dBuV)} + \text{Preamp (dB)} + \text{Trd Corre. (dB/m)} + \text{SigPath (dB)}$$

Where,

Raw Rec (dBuV): Measured voltage in the receiver / spectrum analyzer in dBuV

Preamp (dB): Path loses due to preamplifier

Trd Corr. (dB/m): Antenna factor in dB/m

SigPath (dB) = Cable loss (dB) – External Gain amplifier (dB) – Distance factor (dB)

Cable loss (dB): Cable loss

External Gain amplifier (dB): Gain from external amplifier (when used)

Distance factor (dB): Distance factor in dB. When measurement distance is different to limit distance

The field strength, calculated by this way is compared with the regulatory limit.

TEST CASES DETAILS

FCC 47 CFR Part 15.247 / RSS-247

RSS-247 6.6 / 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 ($\mu\text{V/m}$)	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.

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.

S/01

The worst case found based on preliminary tests in the laboratory for this sample has been:

- BTLE (GFSK 1 Mbit/s)
- CH Low

Results

Range 30MHz-1GHz

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

Range 1GHz-3GHz

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

Range 3GHz-17GHz

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

Range 17GHz-26GHz

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

Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [0.03, 1]

Equipment Type = Digital Transmission System (DTS)

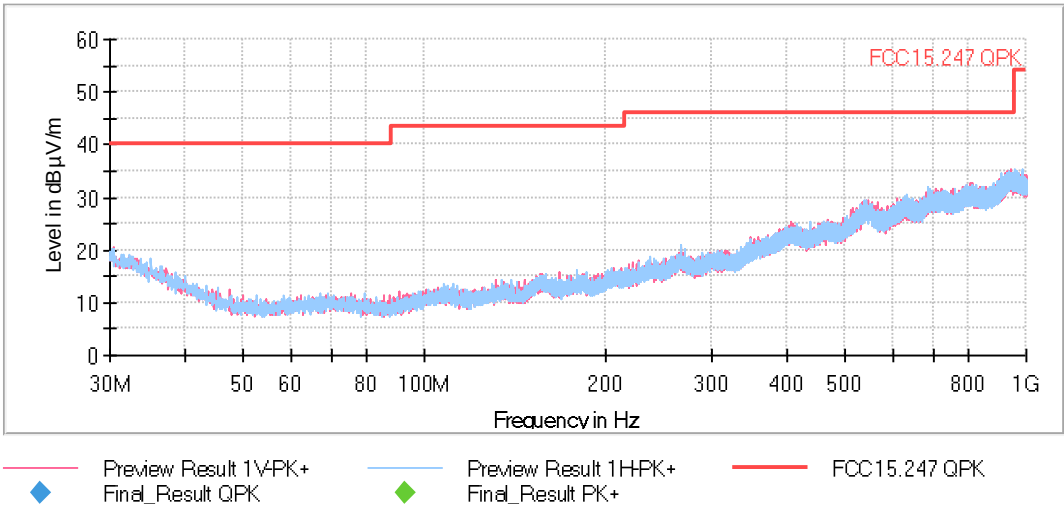
Frequency MHz = 2402.00000

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	0 dB

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [1, 3]

Equipment Type = Digital Transmission System (DTS)

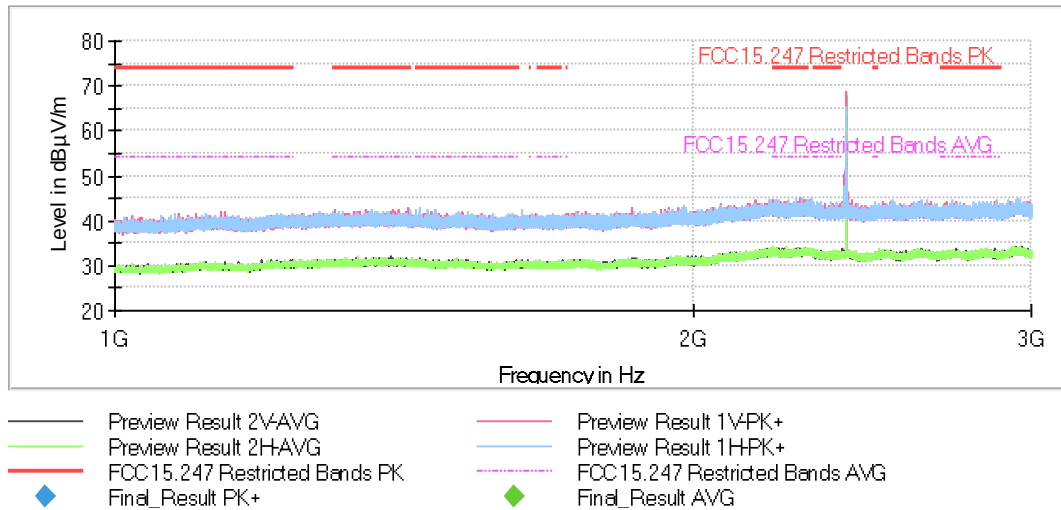
Frequency MHz = 2402.00000

Active Port = 1

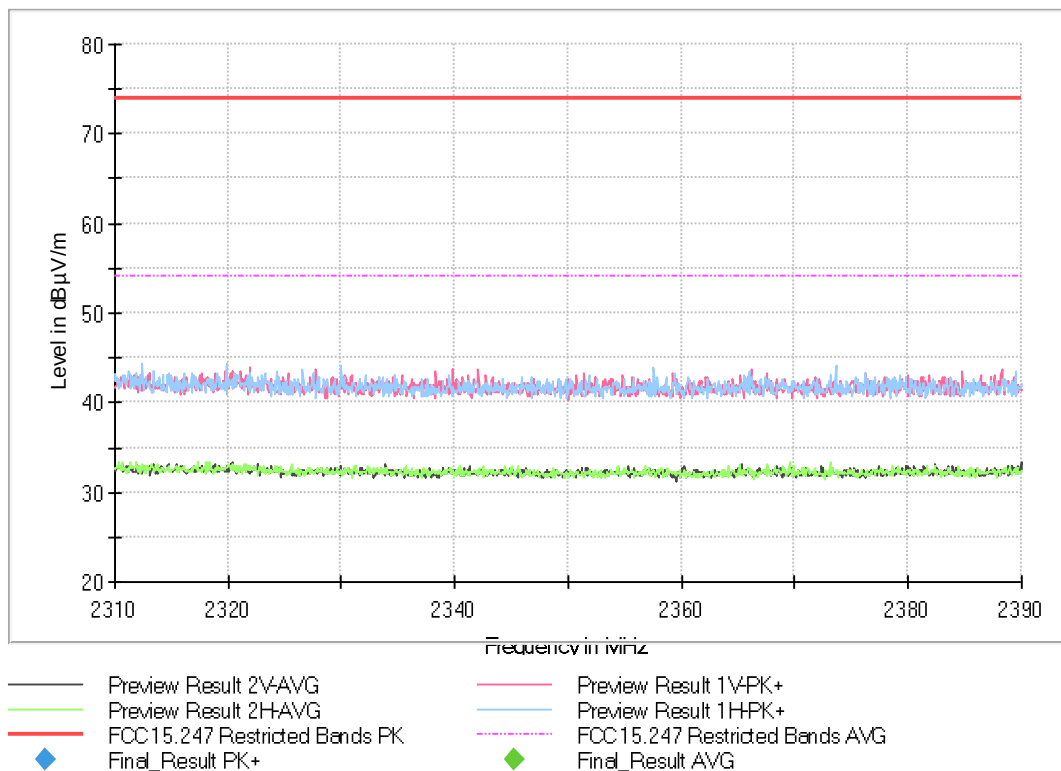
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

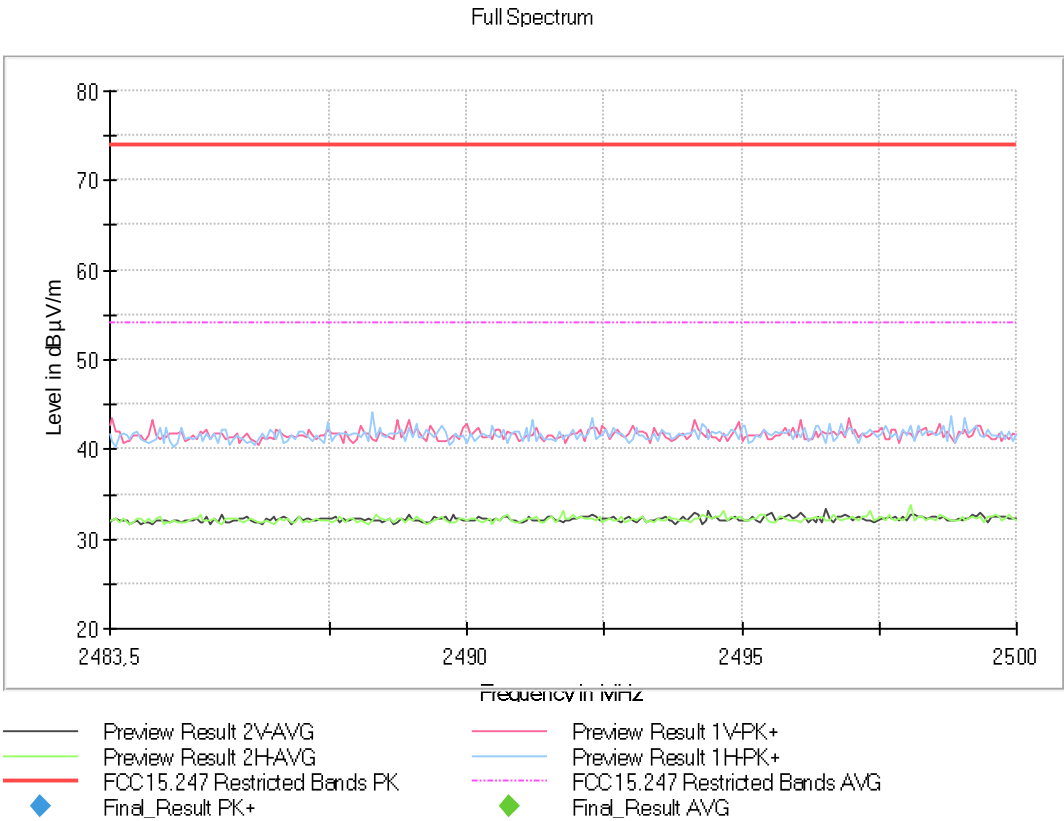
Resource Unit Tone/Index = -

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

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

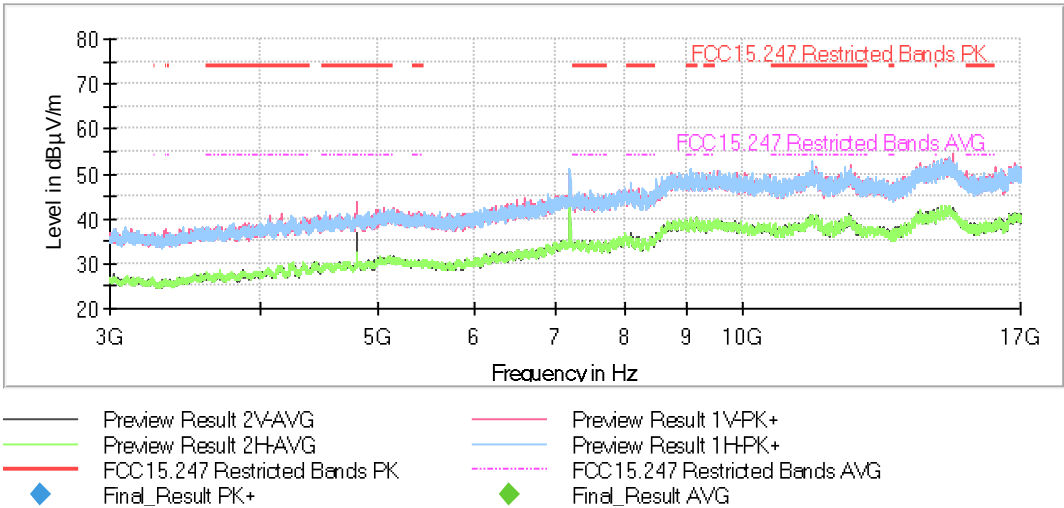
Resource Unit Tone/Index = -

Frequency Range GHz = [3, 17]

Frequency MHz = 2402.00000

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

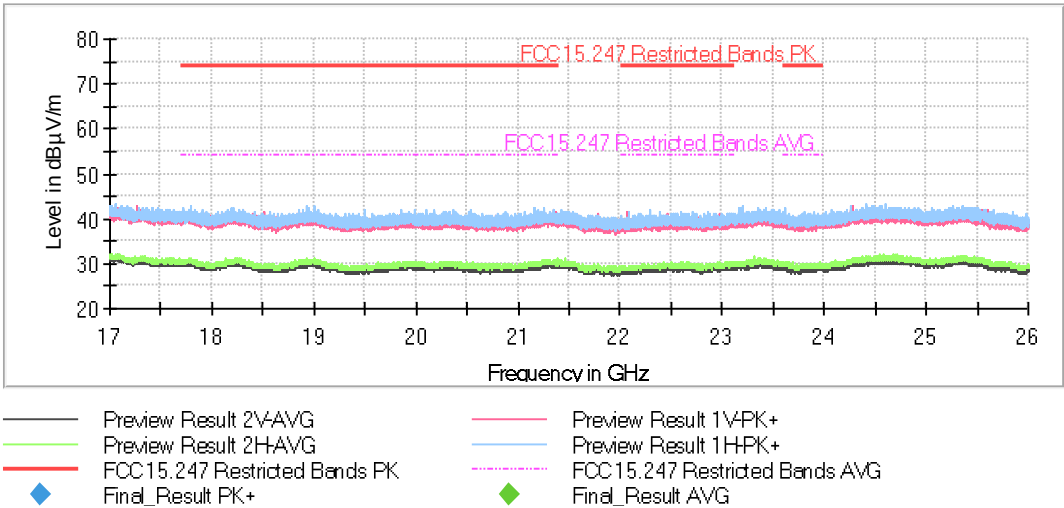
Resource Unit Tone/Index = -

Frequency Range GHz = [17, 26]

Frequency MHz = 2402.00000

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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

S/02

The worst case found based on preliminary tests in the laboratory for this sample has been:

- BTLE (GFSK 1 Mbit/s)
- CH High

Results

Range 30MHz-1GHz

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

Range 1GHz-3GHz

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

Range 3GHz-17GHz

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

Range 17GHz-26GHz

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

Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [0.03, 1]

Equipment Type = Digital Transmission System (DTS)

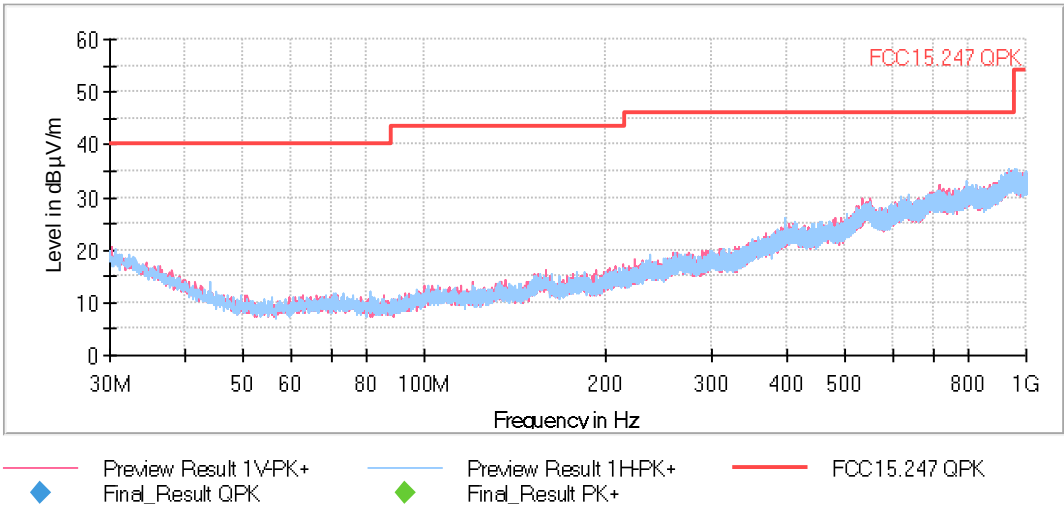
Frequency MHz = 2480.00000

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	0 dB

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [1, 3]

Equipment Type = Digital Transmission System (DTS)

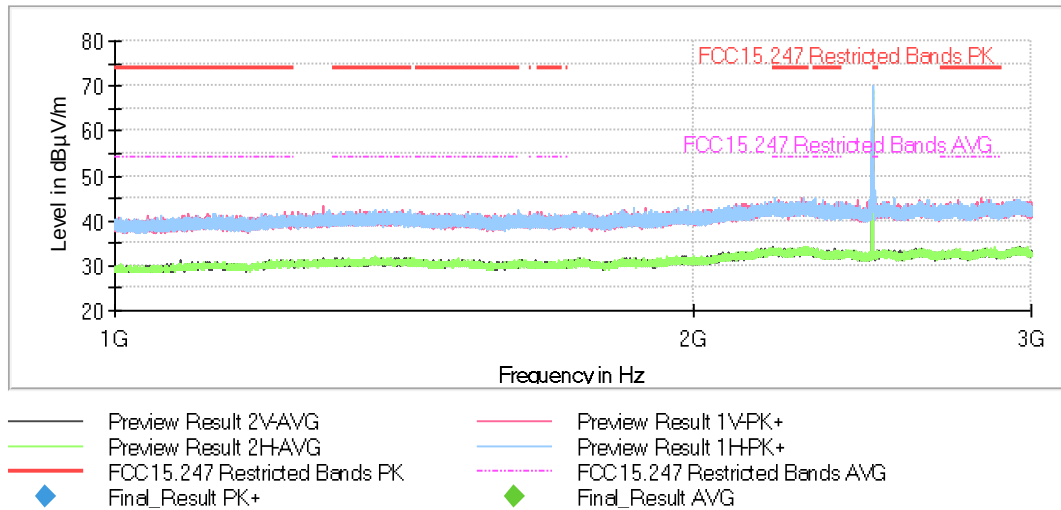
Frequency MHz = 2480.00000

Active Port = 1

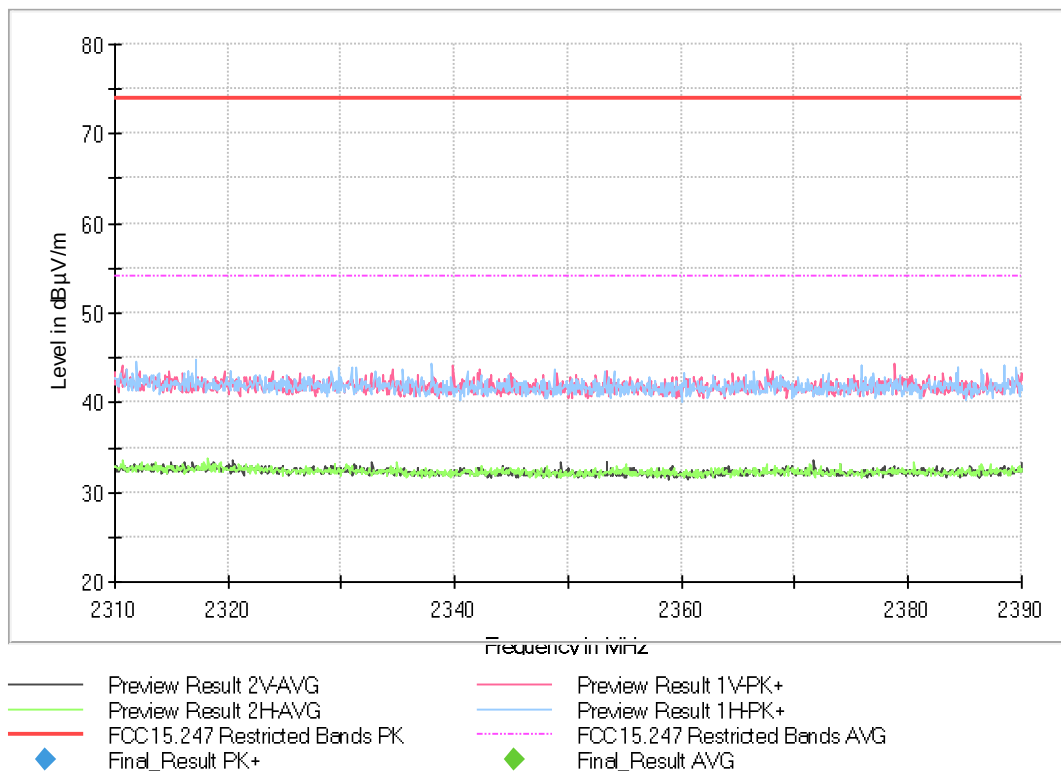
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

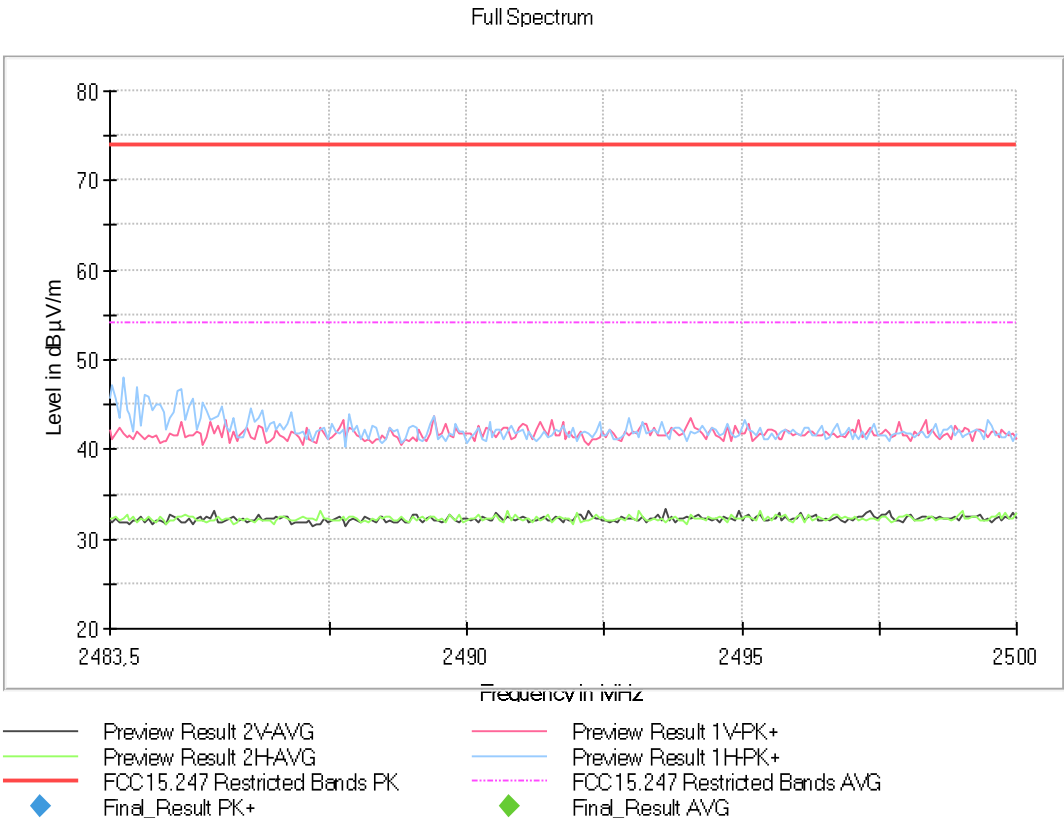
Resource Unit Tone/Index = -

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

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [3, 17]

Equipment Type = Digital Transmission System (DTS)

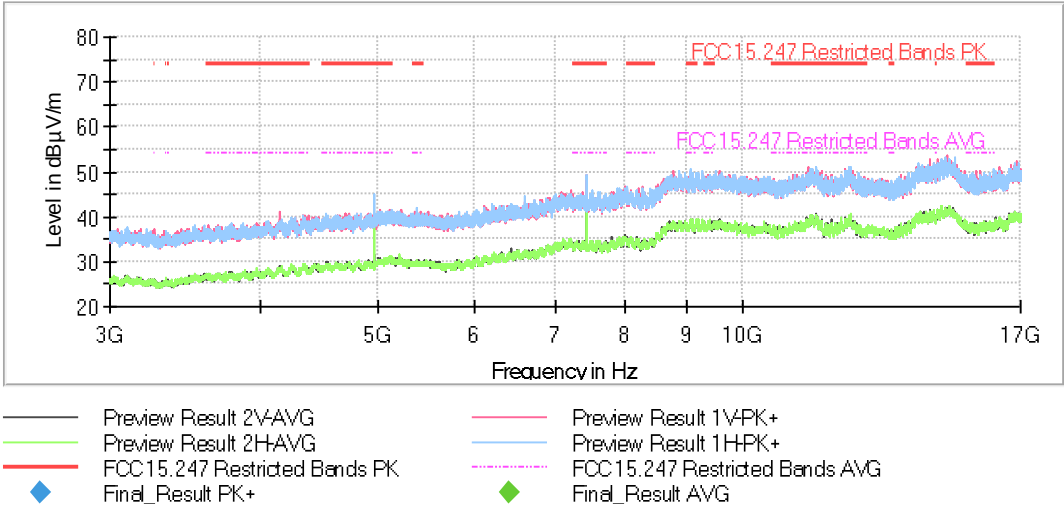
Frequency MHz = 2480.00000

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

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

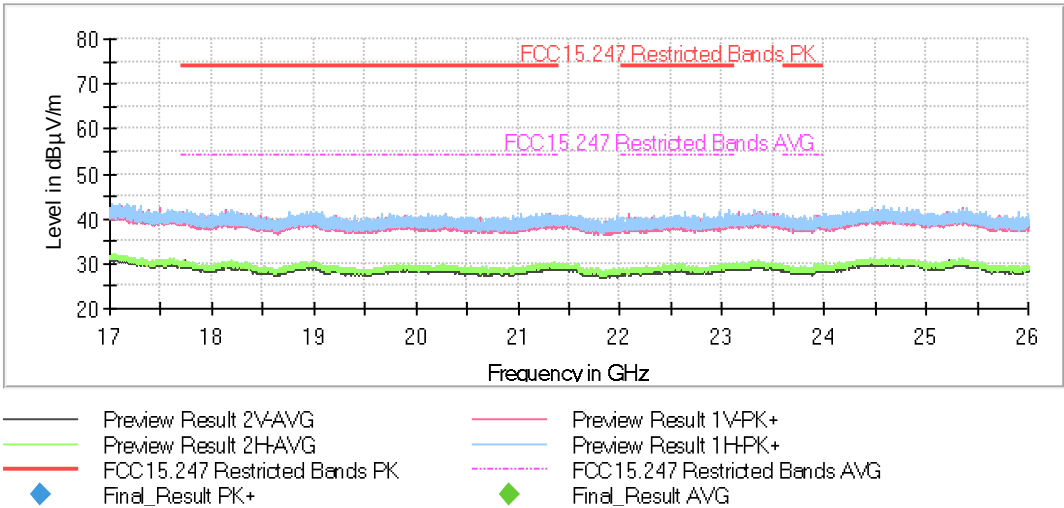
Resource Unit Tone/Index = -

Frequency Range GHz = [17, 26]

Frequency MHz = 2480.00000

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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

S/03

The worst case found based on preliminary tests in the laboratory for this sample has been:

- BTLE (GFSK 1 Mbit/s)
- CH Low

Results

Range 30MHz-1GHz

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

Range 1GHz-3GHz

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

Range 3GHz-17GHz

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

Range 17GHz-26GHz

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

Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [0.03, 1]

Equipment Type = Digital Transmission System (DTS)

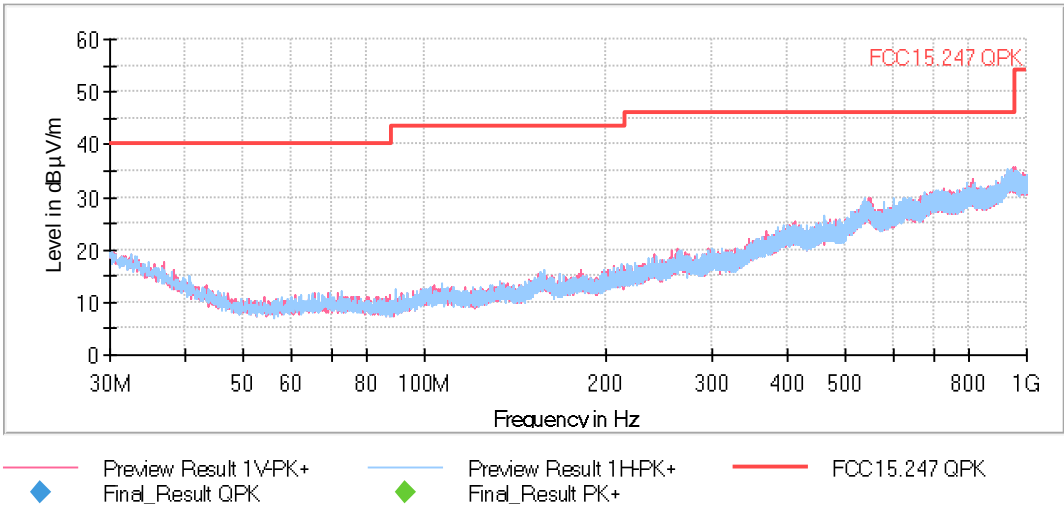
Frequency MHz = 2402.00000

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	0 dB

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [1, 3]

Equipment Type = Digital Transmission System (DTS)

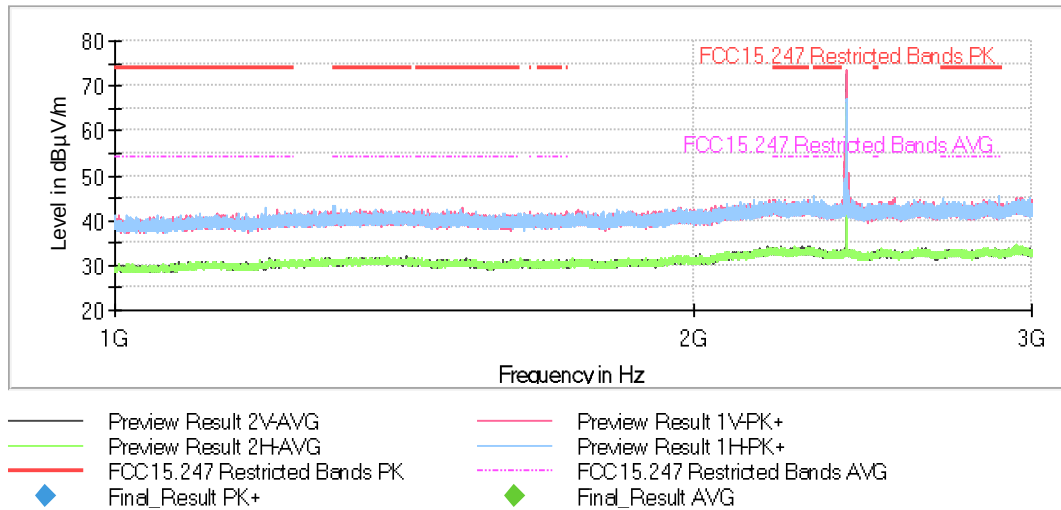
Frequency MHz = 2402.00000

Active Port = 1

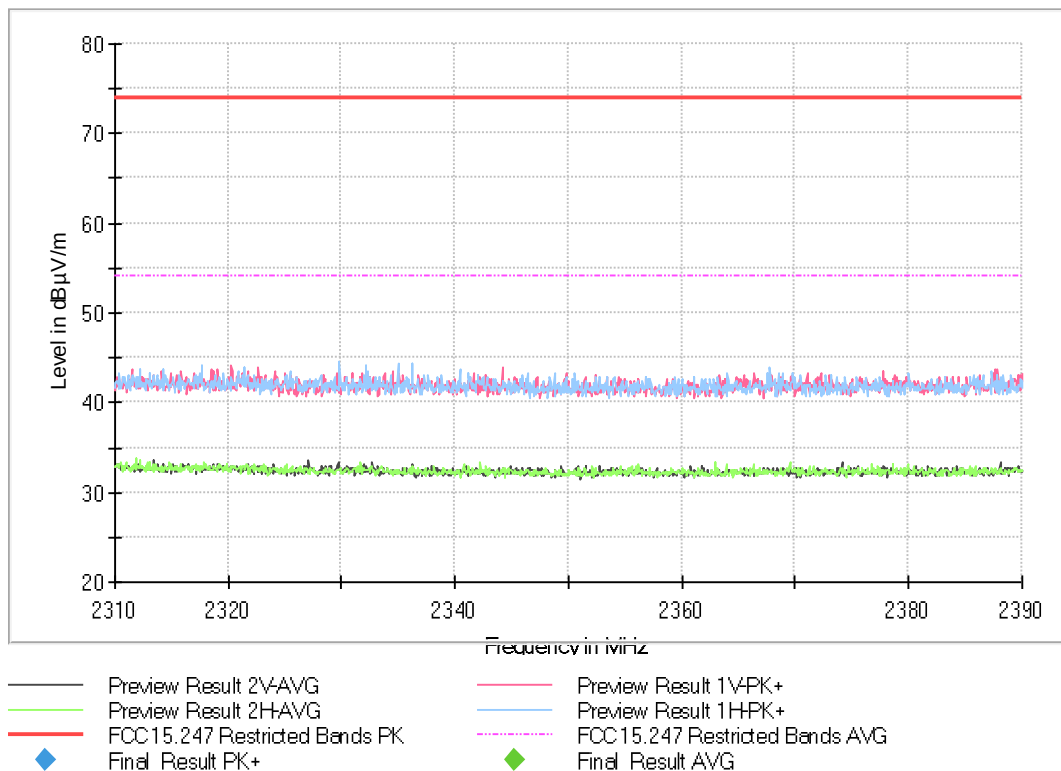
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

Resource Unit Tone/Index = -

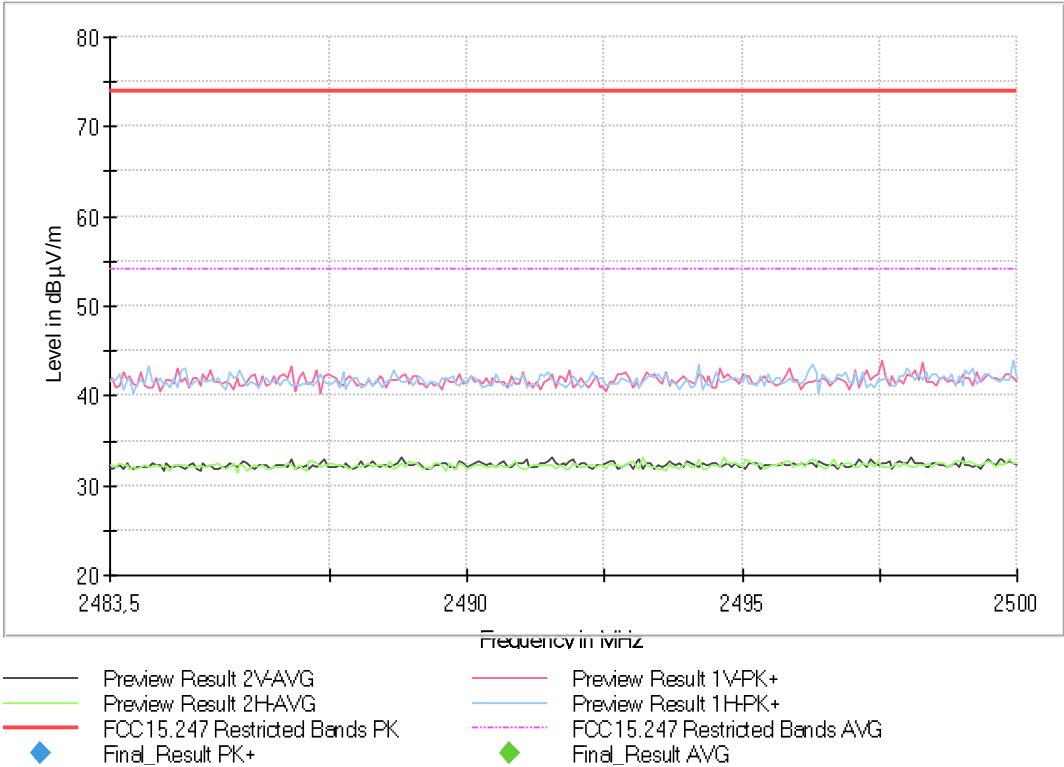
Images:



Full Spectrum



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

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

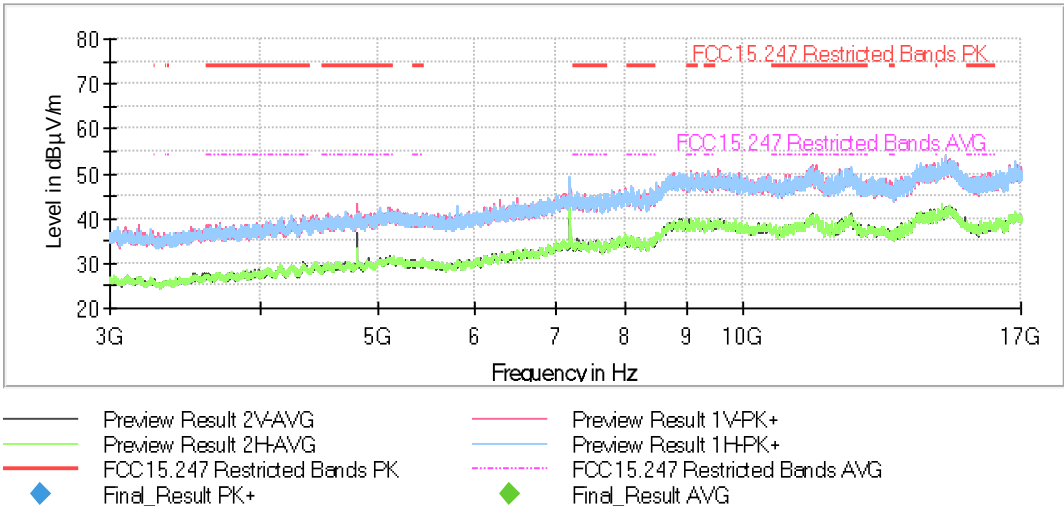
Resource Unit Tone/Index = -

Frequency Range GHz = [3, 17]

Frequency MHz = 2402.00000

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

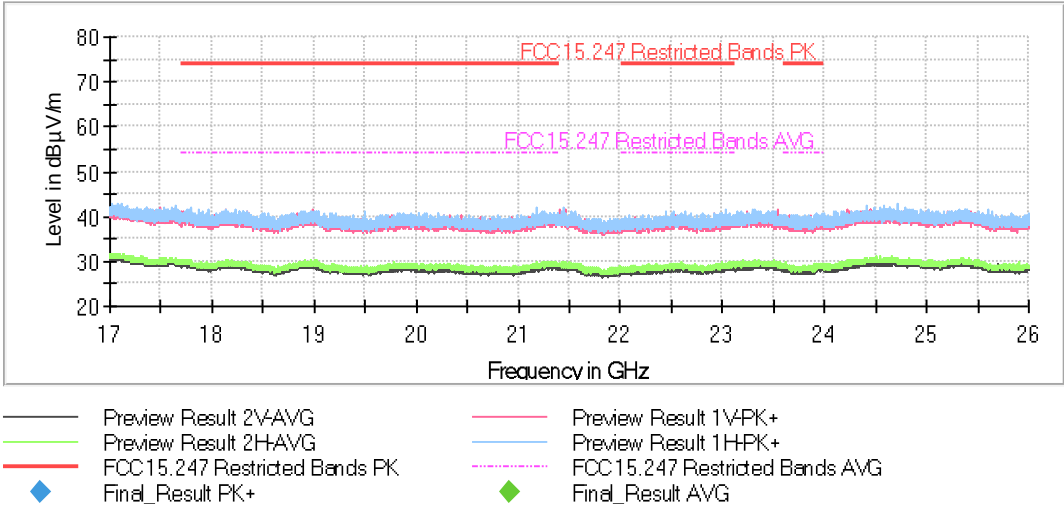
Resource Unit Tone/Index = -

Frequency Range GHz = [17, 26]

Frequency MHz = 2402.00000

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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

S/04

The worst case found based on preliminary tests in the laboratory for this sample has been:

- BTLE (GFSK 1 Mbit/s)
- CH Low

Results

Range 30MHz-1GHz

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

Range 1GHz-3GHz

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

Range 3GHz-17GHz

Freq Rng (GHz)	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB/m)	Raw Rec (dBµV)
[3, 17]	2402.00000	4804.500	42.25	H	PK				
			32.56	H	AVG				

Range 17GHz-26GHz

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

Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [0.03, 1]

Equipment Type = Digital Transmission System (DTS)

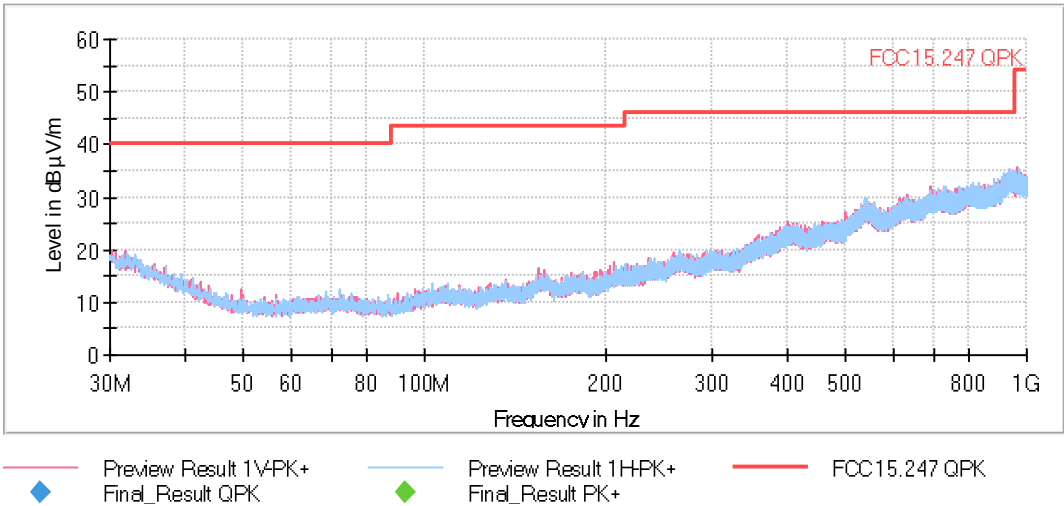
Frequency MHz = 2402.00000

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	0 dB

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [1, 3]

Equipment Type = Digital Transmission System (DTS)

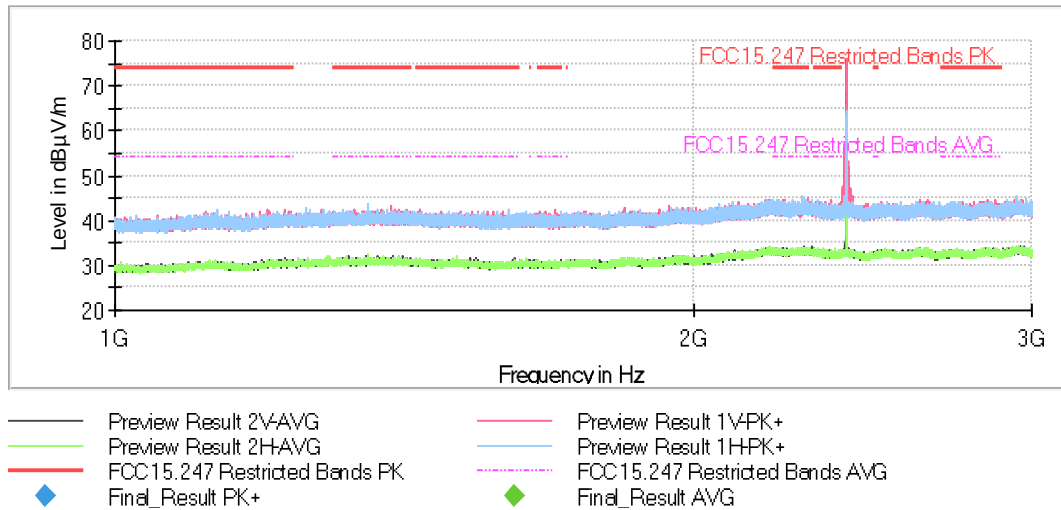
Frequency MHz = 2402.00000

Active Port = 1

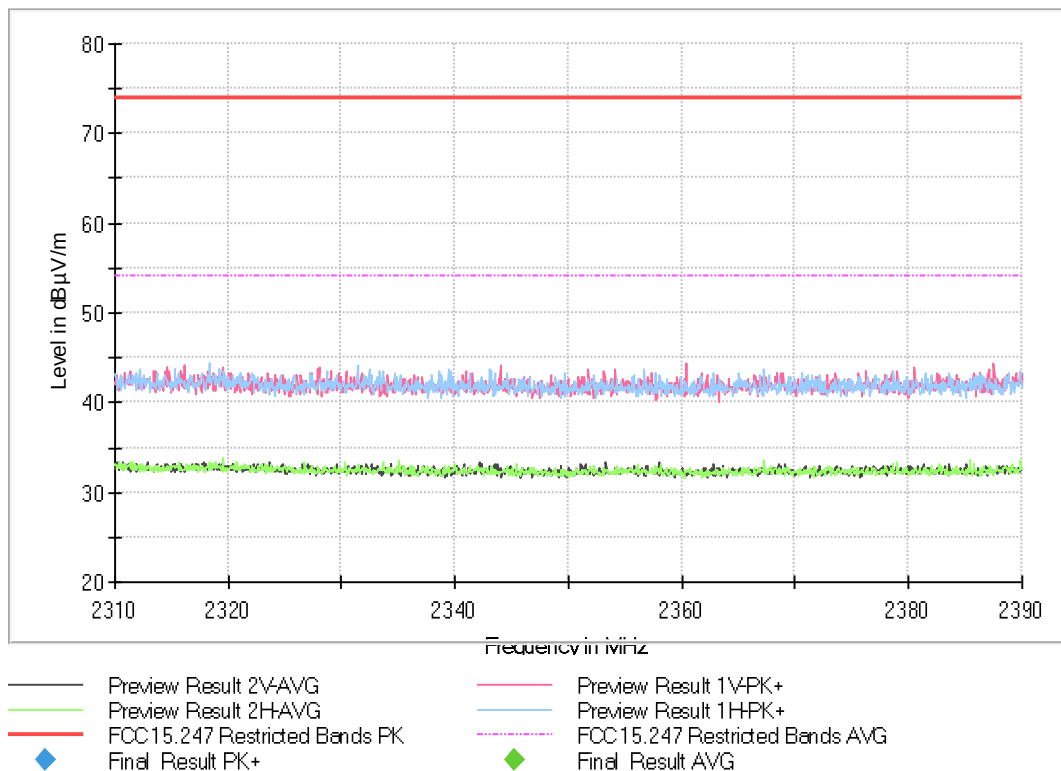
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

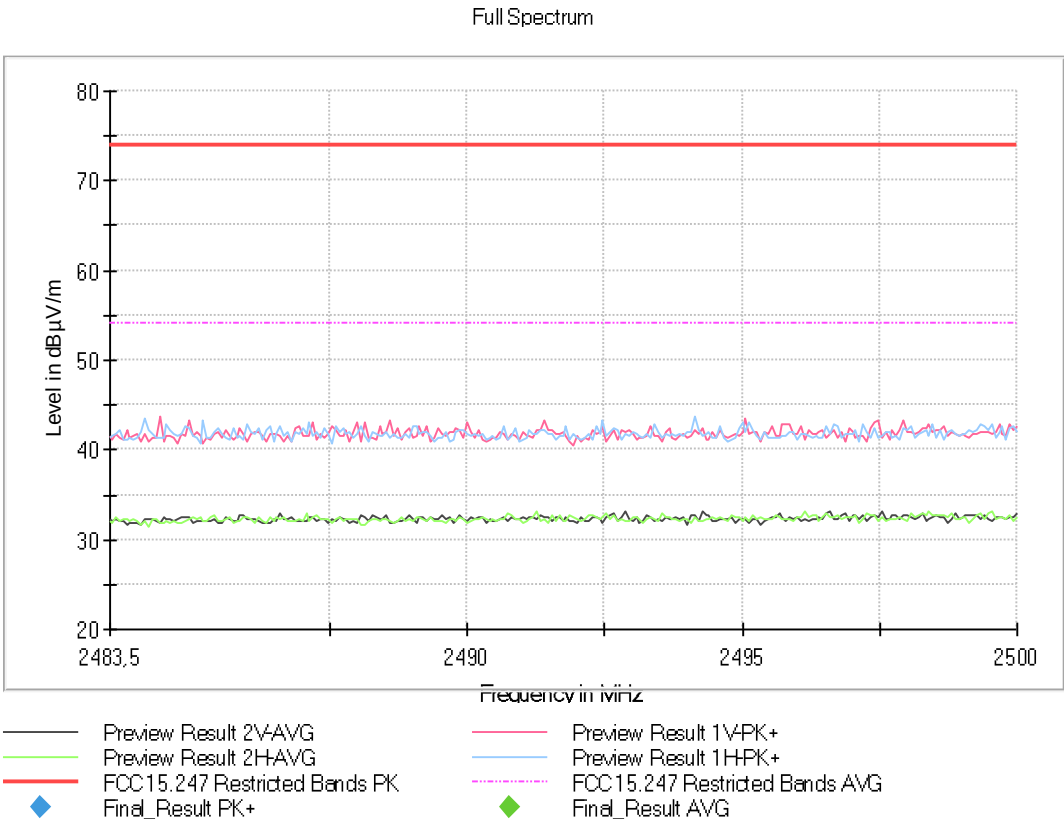
Resource Unit Tone/Index = -

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

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

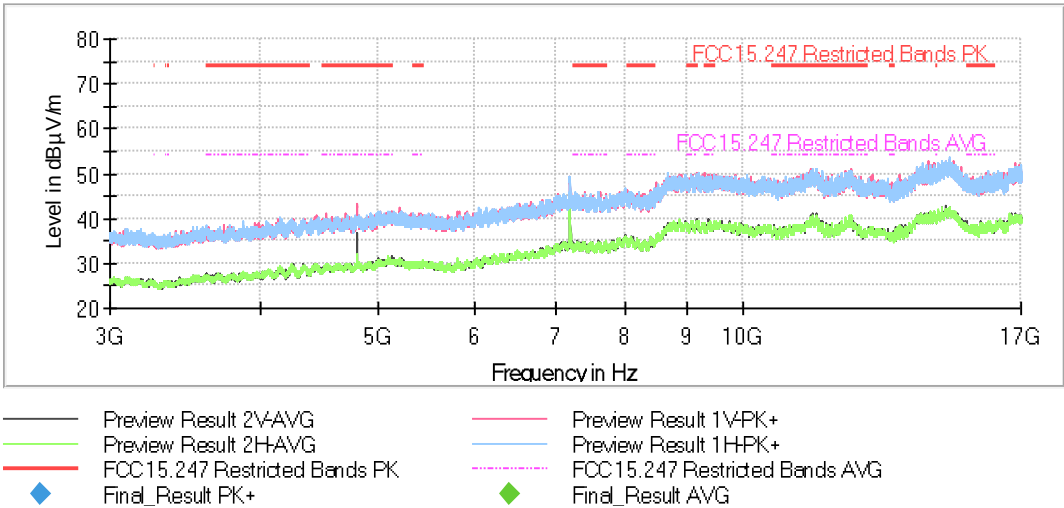
Resource Unit Tone/Index = -

Frequency Range GHz = [3, 17]

Frequency MHz = 2402.00000

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

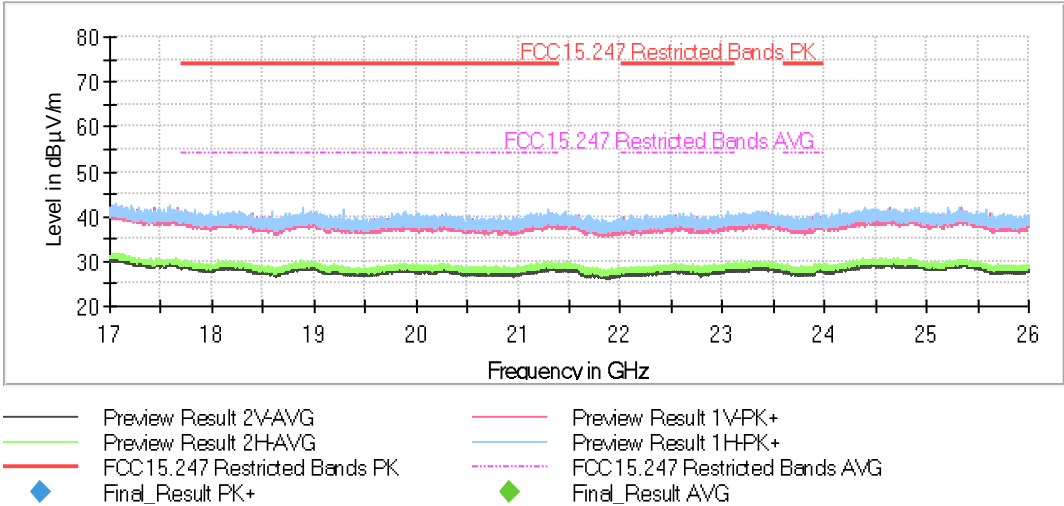
Resource Unit Tone/Index = -

Frequency Range GHz = [17, 26]

Frequency MHz = 2402.00000

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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

S/05

The worst case found based on preliminary tests in the laboratory for this sample has been:

- BTLE (GFSK 1 Mbit/s)
- CH High

Results

Range 30MHz-1GHz

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

Range 1GHz-3GHz

Freq Rng (GHz)	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB/m)	Raw Rec (dBµV)
[1, 3]	2480.00000	2884.067	62.01	V	PK	4.18	0.00	27.62	30.21
			49.18	V	AVG	4.18	0.00	27.62	17.38

Range 3GHz-17GHz

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

Range 17GHz-26GHz

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

Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [0.03, 1]

Equipment Type = Digital Transmission System (DTS)

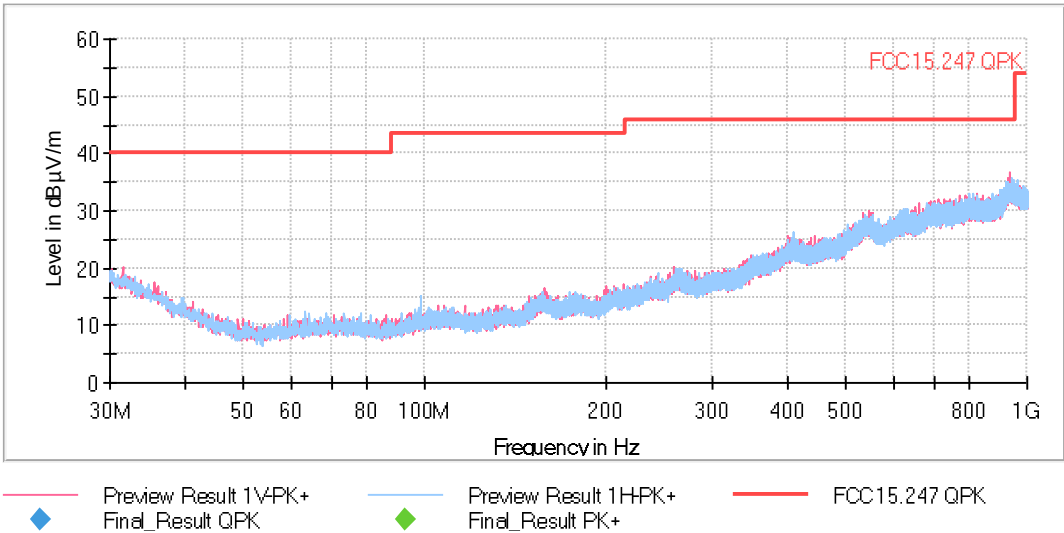
Frequency MHz = 2480.00000

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	0 dB

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

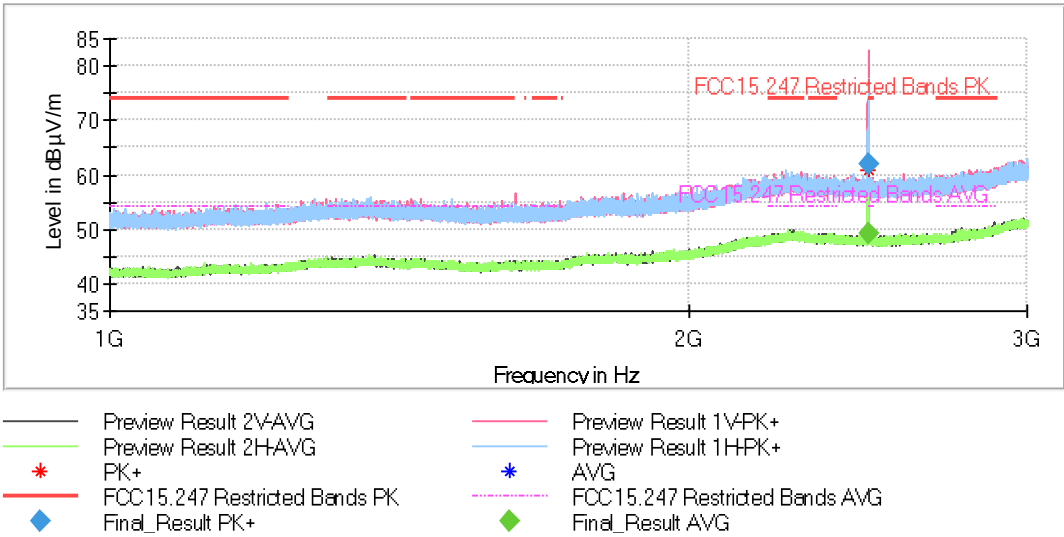
Resource Unit Tone/Index = -

Frequency Range GHz = [1, 3]

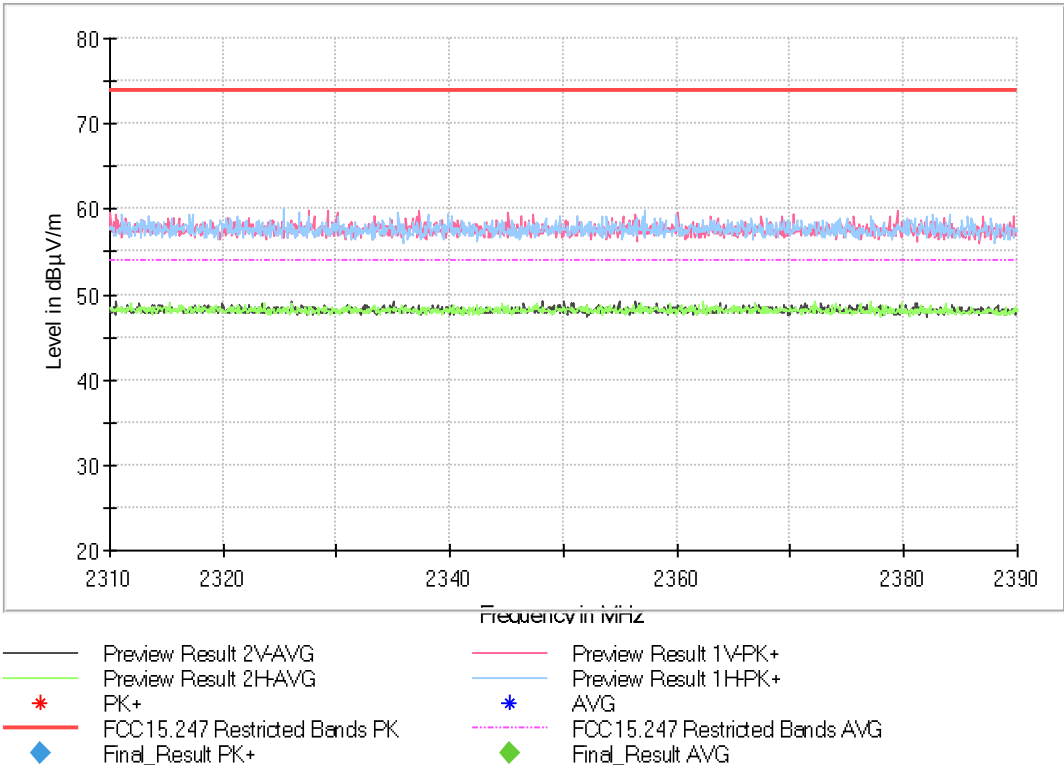
Frequency MHz = 2480.00000

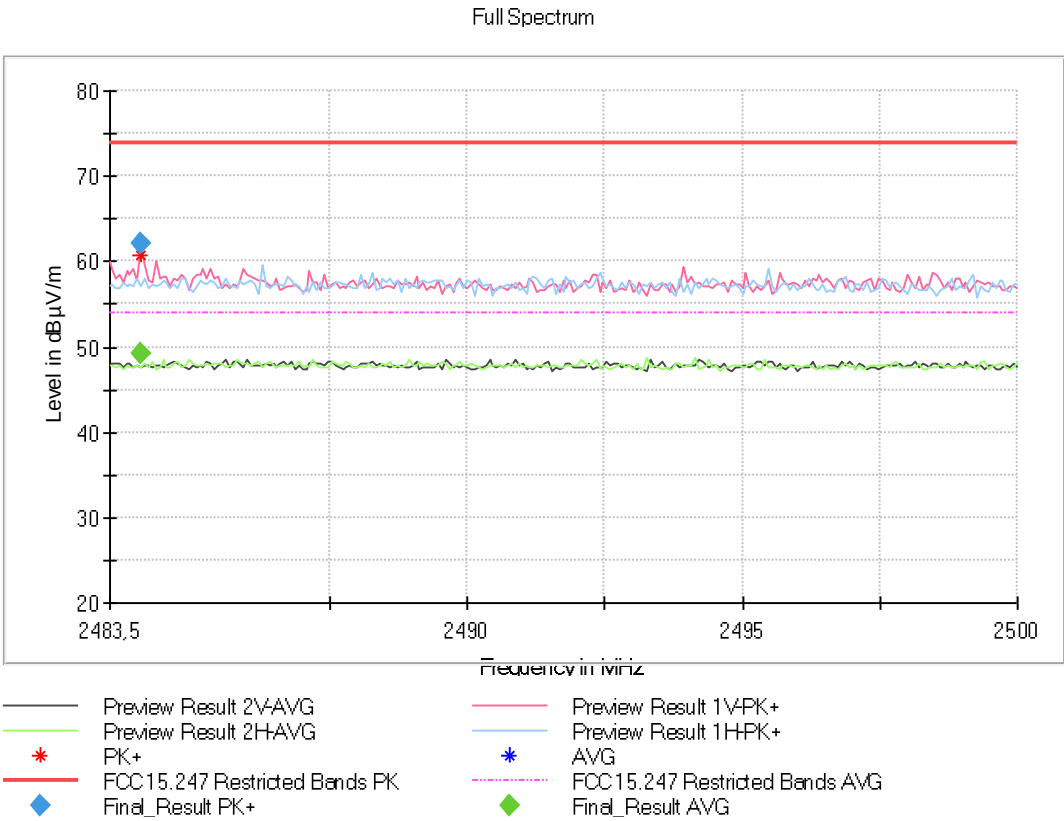
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

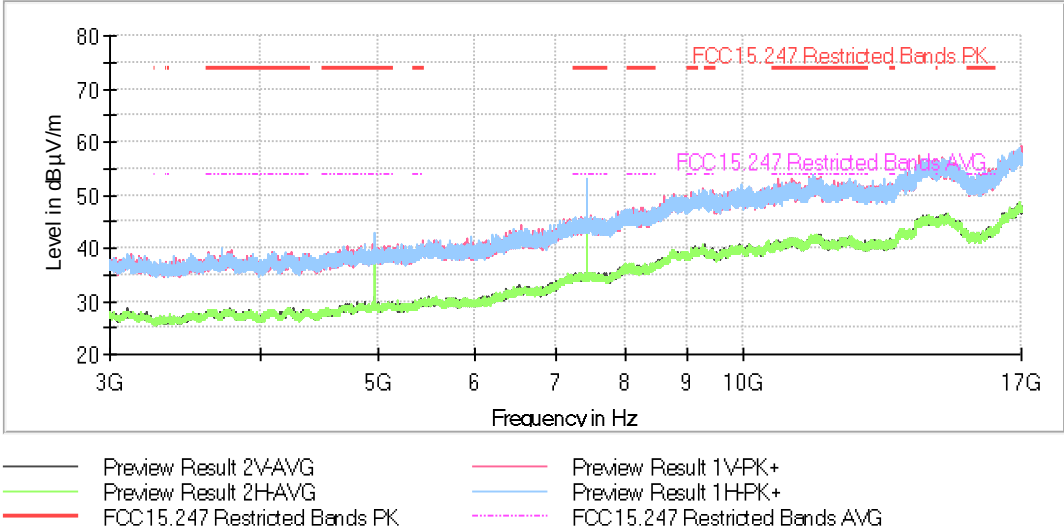
Resource Unit Tone/Index = -

Frequency Range GHz = [3, 17]

Frequency MHz = 2480.00000

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [17, 26]

Equipment Type = Digital Transmission System (DTS)

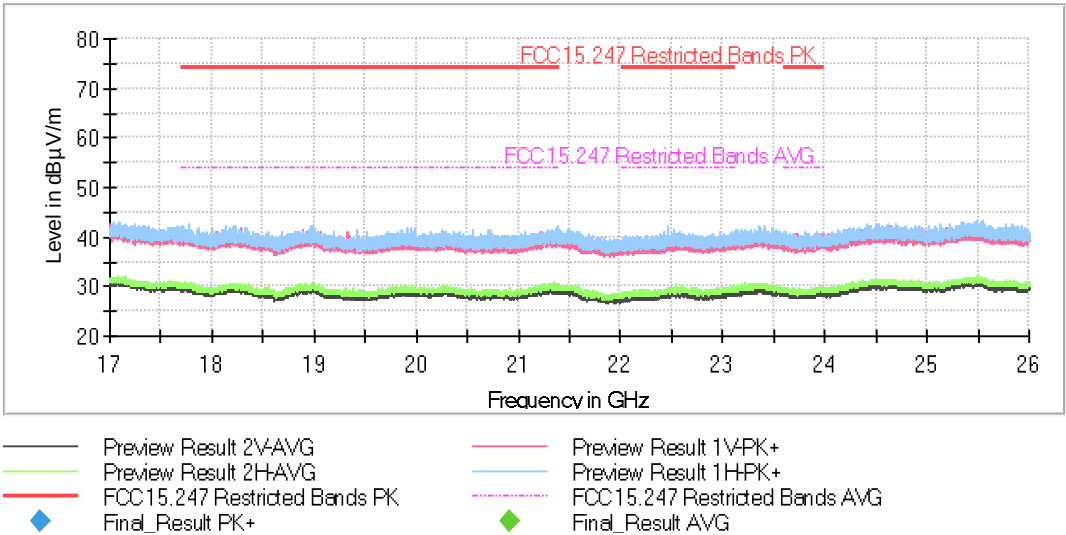
Frequency MHz = 2480.00000

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

S/06

The worst case found based on preliminary tests in the laboratory for this sample has been:

- BTLE (GFSK 1 Mbit/s)
- CH High

Results

Range 30MHz-1GHz

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

Range 1GHz-3GHz

Freq Rng (GHz)	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB/m)	Raw Rec (dBµV)
[1, 3]	2480.00000	2483.667	60.45	H	PK	4.18	0.00	27.62	60.45
			49.13	H	AVG	4.18	0.00	27.62	49.13

Range 3GHz-17GHz

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

Range 17GHz-26GHz

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

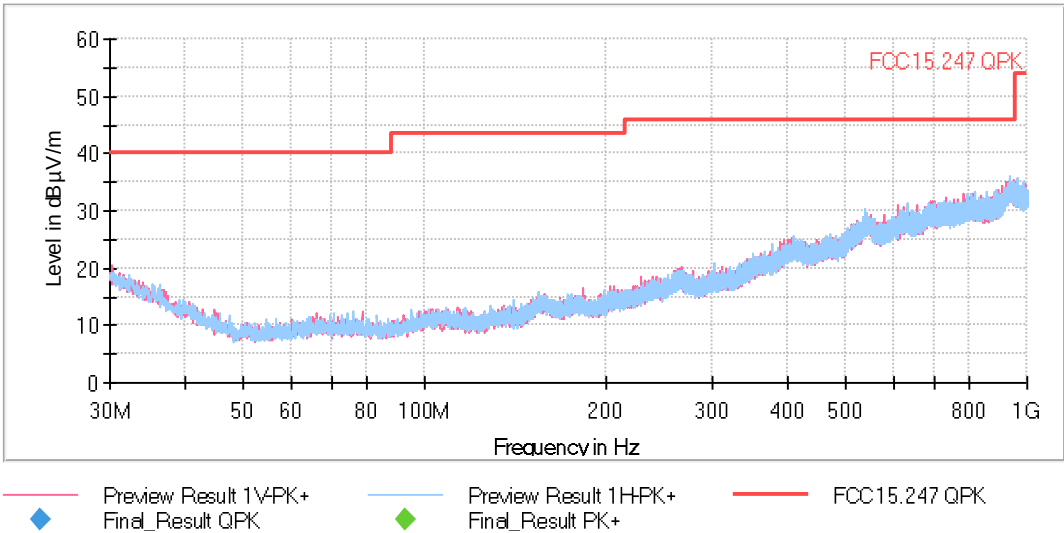
Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5] Frequency Range GHz = [0.03, 1]
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	0 dB

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [1, 3]

Equipment Type = Digital Transmission System (DTS)

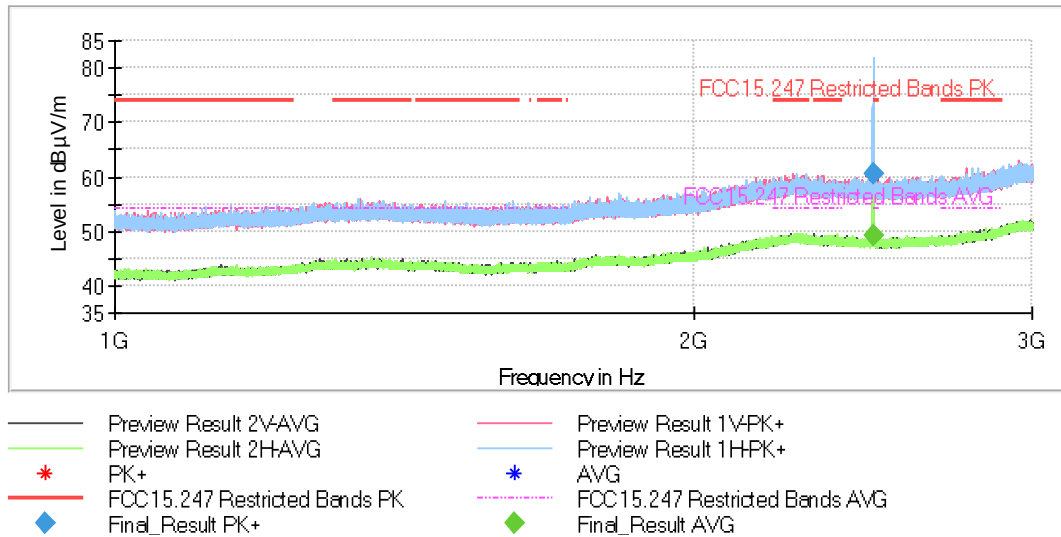
Frequency MHz = 2480.00000

Active Port = 1

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

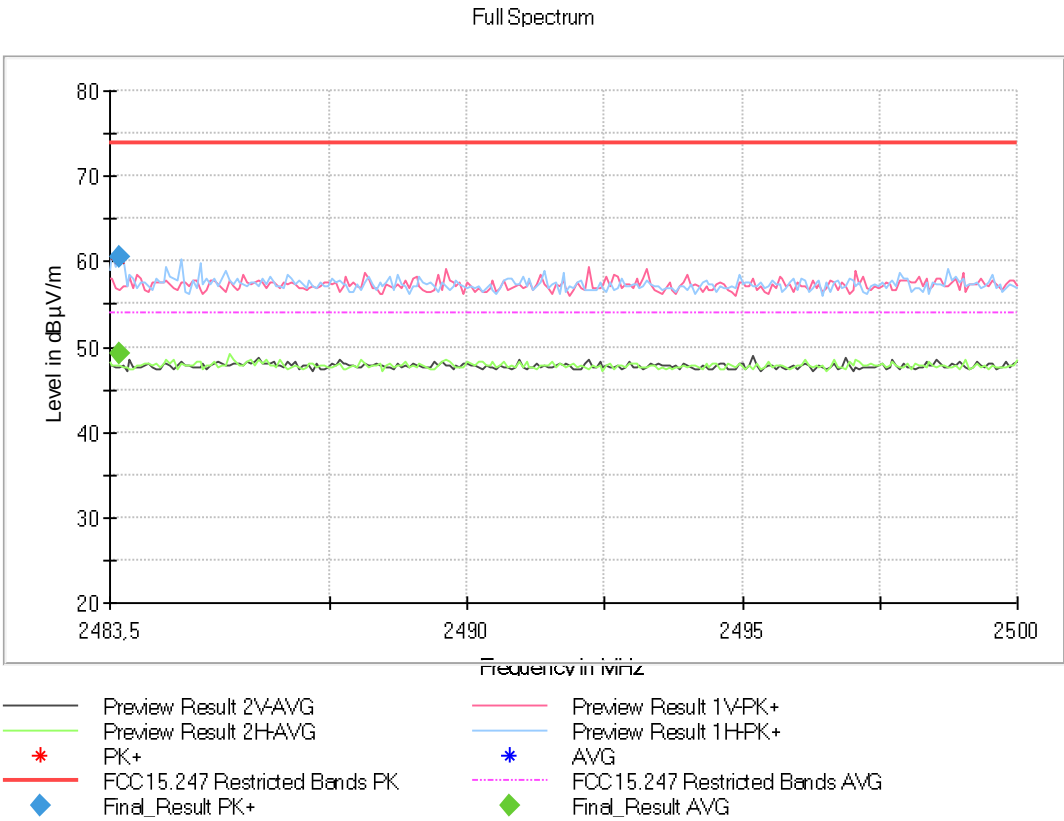
Resource Unit Tone/Index = -

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

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

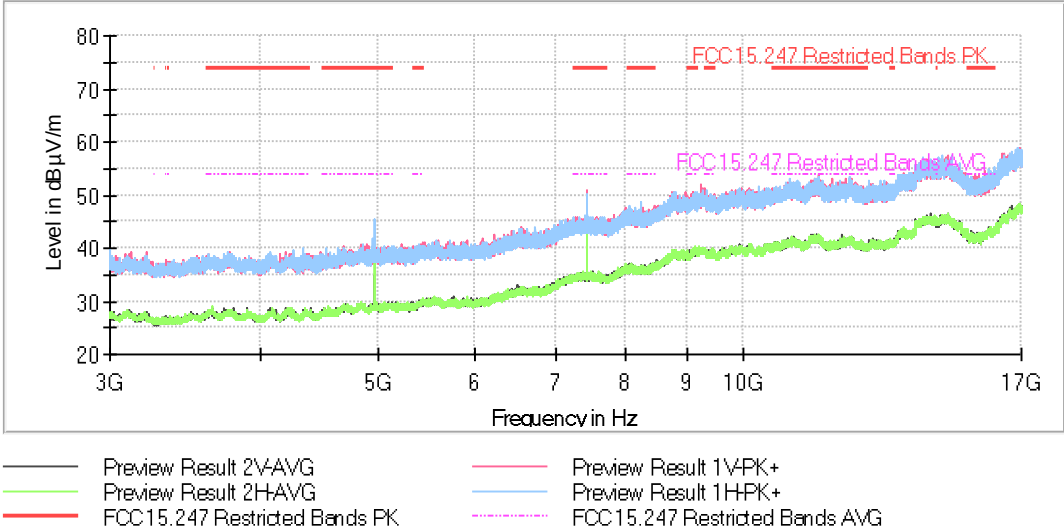
Resource Unit Tone/Index = -

Frequency Range GHz = [3, 17]

Frequency MHz = 2480.00000

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

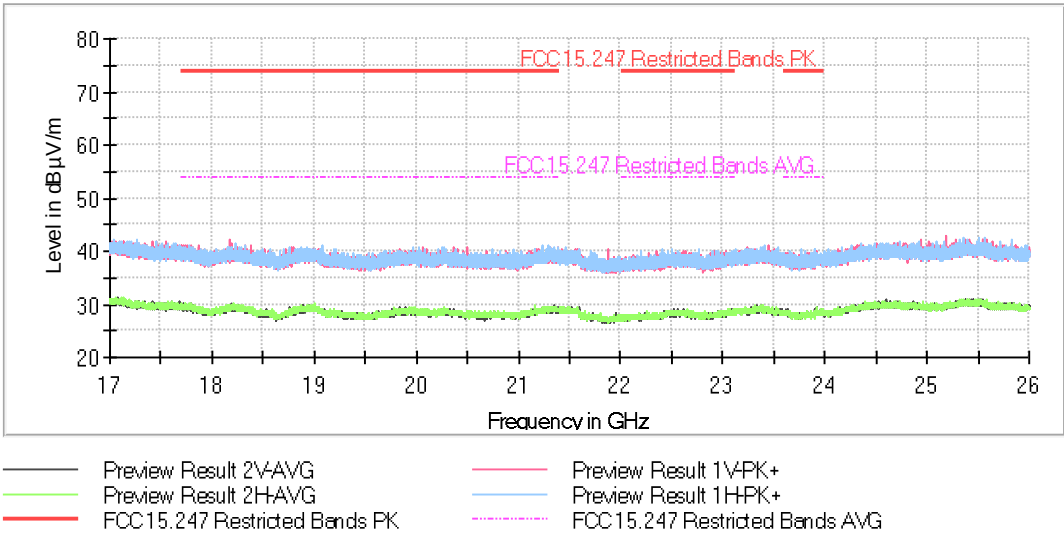
Resource Unit Tone/Index = -

Frequency Range GHz = [17, 26]

Frequency MHz = 2480.00000

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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

S/07

The worst case found based on preliminary tests in the laboratory for this sample has been:

- BTLE (GFSK 1 Mbit/s)
- CH High

Results

Range 30MHz-1GHz

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

Range 1GHz-3GHz

Freq Rng (GHz)	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector	Sig Path (dB)	Preamp (dB)	Trd Corr. (dB/m)	Raw Rec (dBµV)
[1, 3]	2480.00000	2483.533	63.63	H	PK	4.18	0.00	27.62	31.83
			50.41	H	AVG	4.18	0.00	27.62	18.61

Range 3GHz-17GHz

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

Range 17GHz-26GHz

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

Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [0.03, 1]

Equipment Type = Digital Transmission System (DTS)

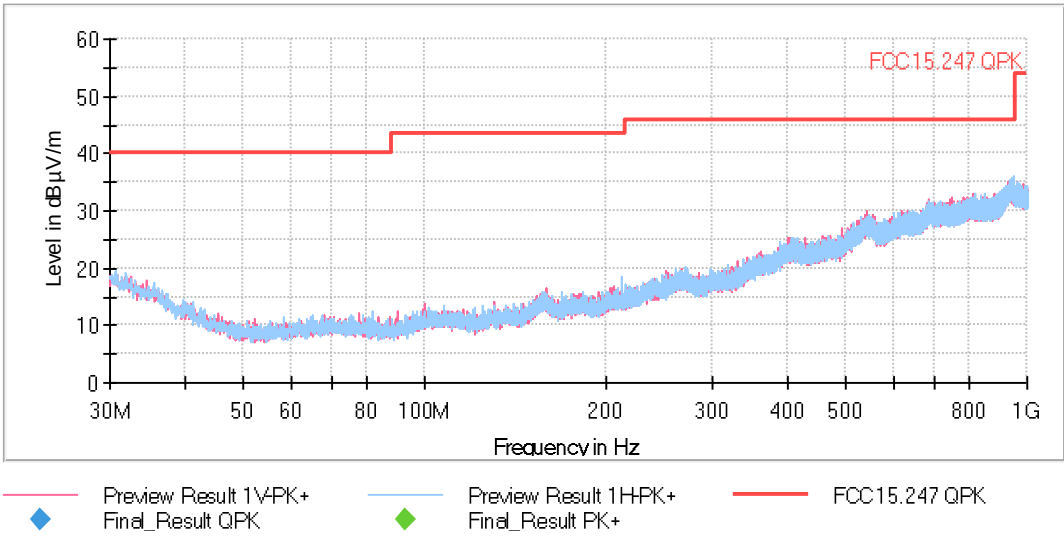
Frequency MHz = 2480.00000

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	0 dB

Operation Band MHz = [2400, 2483.5]

Frequency Range GHz = [1, 3]

Equipment Type = Digital Transmission System (DTS)

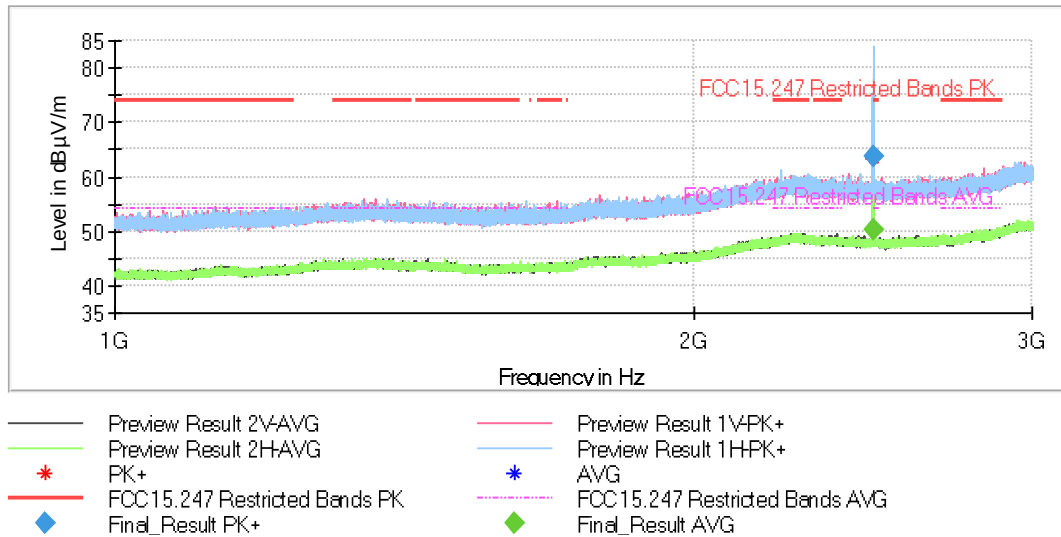
Frequency MHz = 2480.00000

Active Port = 1

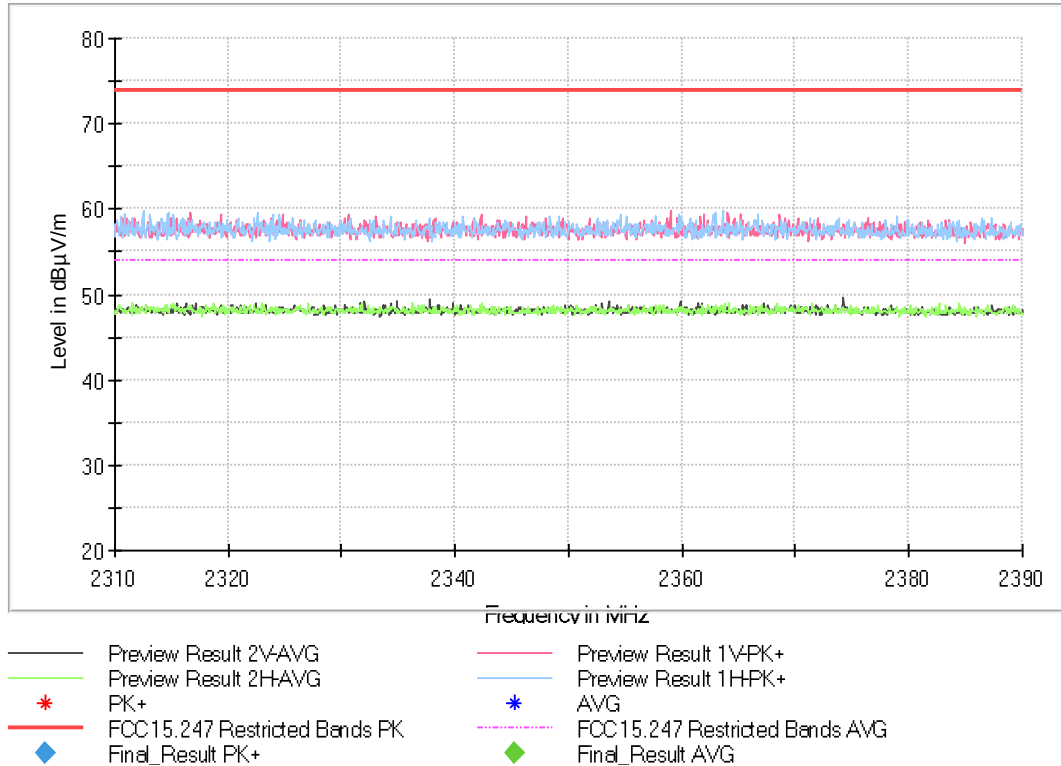
Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

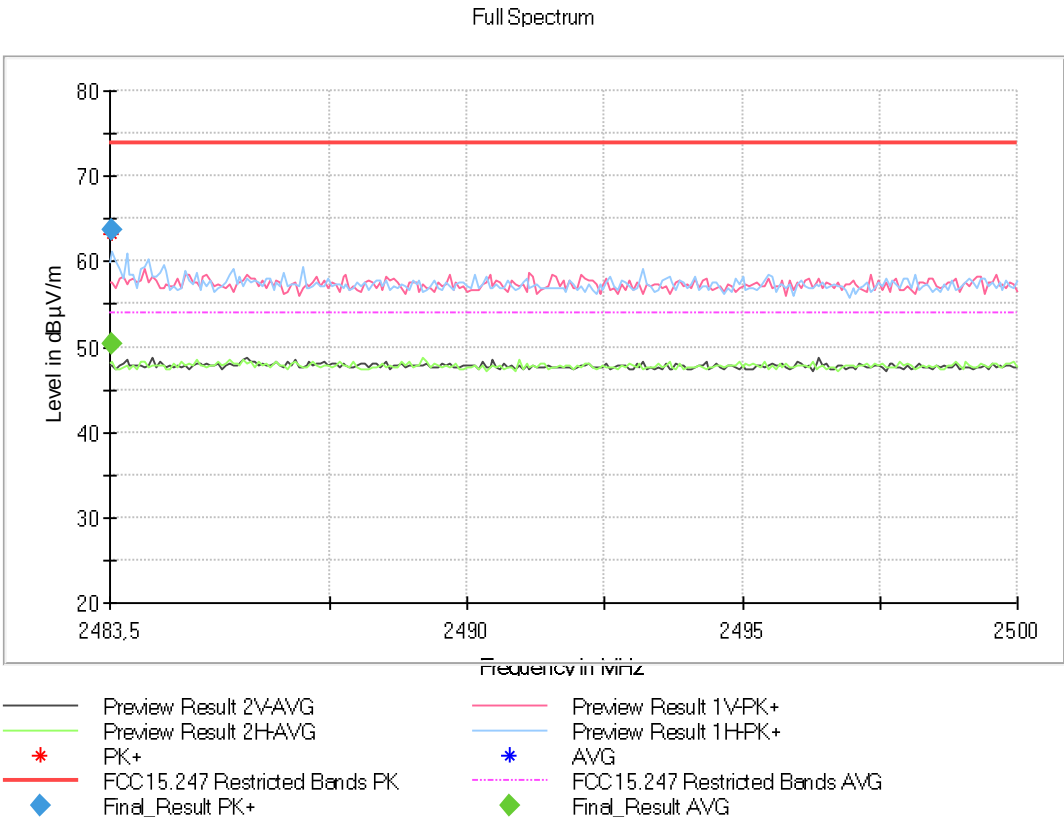
Resource Unit Tone/Index = -

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

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

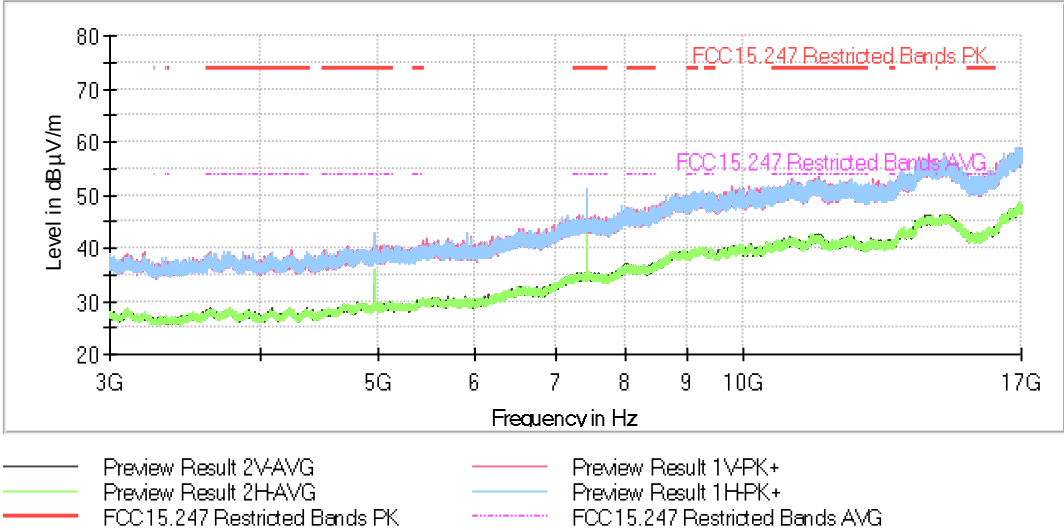
Resource Unit Tone/Index = -

Frequency Range GHz = [3, 17]

Frequency MHz = 2480.00000

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

Active Port = 1

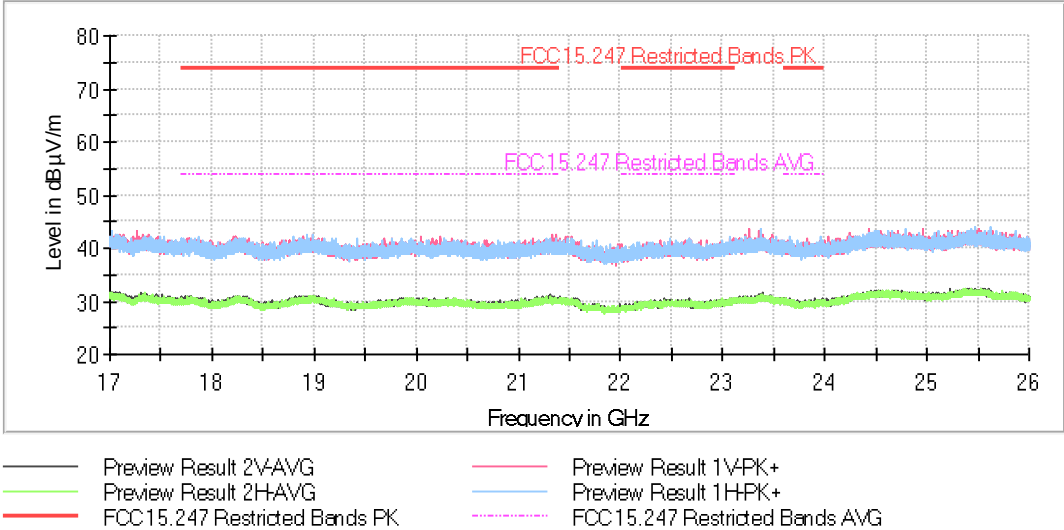
Resource Unit Tone/Index = -

Frequency Range GHz = [17, 26]

Frequency MHz = 2480.00000

Modulation = BTLE 5.0 (GFSK 1 Mbit/s)

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