

ISED CABid: ES1909

Test Report No:
72872RRF.004A1

Test Report

USA FCC Part 15.247, 15.209

CANADA RSS-247, RSS-Gen

| | |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (*) Identification of item tested | GWL-SVK 1C |
| (*) Trademark | Verisure |
| (*) Model and /or type reference | GWL-SVK |
| Other identification of the product | FCC ID: 2AGMK-GWL-SVK IC: Not provided |
| (*) Features | SRD 915MHz, DECT and NFC HW version: 1C SW version: 4.7 |
| Applicant | Telecom Design S.A. 2 bis rue Nully de Harcourt CANEJAN France |
| Test method requested, standard | USA FCC Part 15.247 (10-1-21 Edition): Operation within the bands 902 - 928 MHz, 2400 -2483.5 MHz, and 5725 - 5850 MHz. USA FCC Part 15.209 (10-1-21 Edition): Radiated emission limits; general requirements. CANADA RSS-247 Issue 2 (February 2017). CANADA RSS-Gen Issue 5 amendment 1 (March 2019). Guidance for Performing Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid Systems Devices Operating Under Section 15.247 of the FCC Rules. 558074 D01 Meas Guidance v05r02 dated April 2, 2019. ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices. |
| Summary | IN COMPLIANCE |
| Approved by (name / position & signature) | José Manuel Gómez Galván EMC Consumer & RF Lab. Manager |
| Date of issue | 2023-09-05 |
| Report template No | FDT08_24 (*) "Data provided by the client" |

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Acronyms

| Acronym ID | Acronym Description |
|----------------|-------------------------------|
| # of Tx Chains | Number of Transmission Chains |
| Detector | Detector used |
| Equipment | Equipment Type |
| Freq | Frequency |
| Freq Rng | Frequency Range |
| MP | Measurement Point |
| Mod | Modulation |
| Pol | Polarization |
| Port | Active Port |
| Unwanted Freq | Unwanted Emissions Frequency |
| Unwanted Lvl | Unwanted Emissions Level |

Competences and guarantees

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

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

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

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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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 10 GHz is:
Measurement uncertainty $\leq \pm 4,32$ dB with factor (k = 2).

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

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

RF Average Output Power: Measurement uncertainty $\leq \pm 0,99$ dB

Power Spectral Density: Measurement uncertainty $\leq \pm 0,99$ dB

6dB Bandwidth: Measurement uncertainty $\leq \pm 2,84$ %

Occupied Channel Bandwidth: Measurement uncertainty $\leq \pm 1,17$ %

Conducted Band-edge spurious emissions: Measurement uncertainty $\leq \pm 1,76$ dB

Data provided by the client

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 GWL-SVK 1C. Verisure Keypad with SRD, DECT and NFC capabilities.
3. Equipment supports frequency sharing techniques.

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

Usage of samples

Samples undergoing test have been selected by: The client.

| Id | Control Number | Description | Model | Serial Nº | Date of Reception | Application |
|------|----------------|---------------------------|---------|-----------|-------------------|--------------------|
| S/01 | 72872C_24.1 | GWL-SVK 1C (radiated) | GWL-SVK | 3N4S GZZJ | 2022-12-13 | Element Under Test |
| S/02 | 72872C_27.1 | GWL-SVK 1C (conducted) | GWL-SVK | 3N4S GVR3 | 2022-12-13 | Element Under Test |

Notes referenced to samples during the project:

| Id | Type |
|------|-----------------------------------------|
| S/01 | Test samples used for Radiated testing |
| S/02 | Test samples used for Conducted testing |

Test sample description

| Ports.....: | Port name and description | Cable | | | | |
|-----------------------------------------------|---------------------------|--------------------------------|----------------------|-----------|-----------------------------------|---|
| | | Specified max length [m] | Attached during test | Shielded | Coupled to patient ⁽³⁾ | |
| | <i>PORt1 = SRD</i> | 0.1 | [X] | [] | [] | |
| | <i>PORt 2 = DECT</i> | 0.1 | [X] | [X] | [] | |
| | <i>PORt 3 = NFC</i> | 0.1 | [X] | [] | [] | |
| Supplementary information to the ports.....: | | | | | | |
| Rated power supply | Voltage and Frequency | | Reference poles | | | |
| | | | L1 | L2 | L3 | N |
| | [X] | DC: 3.0V to 4.5V | | | | |
| Rated Power | 5W | | | | | |
| Clock frequencies.....: | 26 MHz | | | | | |
| Other parameters | | | | | | |
| Software version | 4.7 | | | | | |
| Hardware version | 1C | | | | | |
| Dimensions in cm (W x H x D): | | | | | | |
| Mounting position | [] | Table top equipment | | | | |
| | [X] | Wall/Ceiling mounted equipment | | | | |
| | [] | Floor standing equipment | | | | |
| | [] | 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 | |
| | | | | | | |

⁽³⁾ Only for Medical Equipment

Identification of the client

Verisure Innovation
Nordenskiöldsgatan 11A 211 19 Malmö Sweden

Testing period and place

| | |
|----------------------|----------------------------------------|
| Test Location | DEKRA Testing and Certification S.A.U. |
| Date (start) | 2023-01-05 |
| Date (finish) | 2023-01-27 |

Document history

| Report number | Date | Description |
|----------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 72872RRF.004 | 2023-05-04 | First release. |
| 72872RRF.004A1 | 2023-09-05 | Second release. New information is added in Appendix A, Test Conditions and the value of the antenna gain is modified. This modification test report cancels and replaces the test report 72872RRF.004. |

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 % |

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

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

Remarks and comments

The tests have been performed by the technical personnel: Miguel Manuel López Guzmán and Rafael Fernández.

Used instrumentation:

| Control No. | Equipment | Model | Manufacturer | Next Calibration |
|-------------|-----------------------------------------|----------------|-----------------------------|------------------|
| 4578 | HYBRID BILOG ANTENNA 30MHz-6GHz | 3142E | ETS LINDGREN | 2023-04-30 |
| 6142 | PRE-AMPLIFIER G>38dB 30MHz-6GHz | BLNA 0360-01N | BONN ELEKTRONIK | 2023-06-16 |
| 6165 | EMI TEST RECEIVER 9kHz-7GHz | ESR7 | ROHDE AND SCHWARZ | 2023-11-08 |
| 4611 | HORN ANTENNA 1-18GHz | BBHA 9120 D | SCHWARZBECK MESS-ELEKTRONIK | 2026-01-16 |
| 5705 | PRE-AMPLIFIER G>40dB 1-18 GHz | BLMA 0118-1M | BONN ELEKTRONIK | 2023-07-21 |
| 4657 | HORN ANTENNA 18-40GHz | BBHA 9170 | SCHWARZBECK | 2023-05-05 |
| 8856 | PRE-AMPLIFIER G>30dB 18-40GHz | BLMA 1840-4A | BONN ELEKTRONIK | 2023-11-02 |
| 4716 | SIGNAL AND SPECTRUM ANALYZER 2Hz-50GHz | FSW50 | ROHDE AND SCHWARZ | 2024-08-12 |
| 4825 | SEMIANCHOIC ABSORBER LINED CHAMBER | FACT 3 200 STP | ETS LINDGREN | N/A |
| 6793 | SHIELDED ROOM | S101 | ETS LINDGREN | N/A |
| 7794 | SIGNAL AND SPECTRUM ANALYZER 10Hz-40GHz | FSV40 | ROHDE AND SCHWARZ | 2023-02-26 |
| 4848 | SOFTWARE FOR EMC/RF TESTING | EMC32 | ROHDE AND SCHWARZ | N/A |

Testing verdicts

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

Summary

SRD 915 MHz

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

Appendix A: Test results. SRD 915 MHz

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| RSS-247 5.5 / FCC 15.247 (d) [RSE] Emission limitations radiated (Transmitter) | 38 |

TEST CONDITIONS

(*): Data provided by the client.

POWER SUPPLY (*):

V_{nominal}: 4.5 V
Type of Power Supply: Battery

ANTENNA (*):

Type of Antenna: Integrated whip antenna
Maximum Declared Antenna Gain: +0.23 dBi

FREQUENCY BAND RANGE (*): 915.5 - 927.5 MHz

TEST FREQUENCIES (*):

2GFSK Modulation:

Low Channel: 915.5 MHz
Middle Channel: 919.5 MHz
High Channel: 925.5 MHz

4GFSK Modulation:

Single Channel: 927.5 MHz

CHANNEL BANDWIDTH (*): 684 kHz

CONDUCTED MEASUREMENTS:

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



RADIATED MEASUREMENTS:

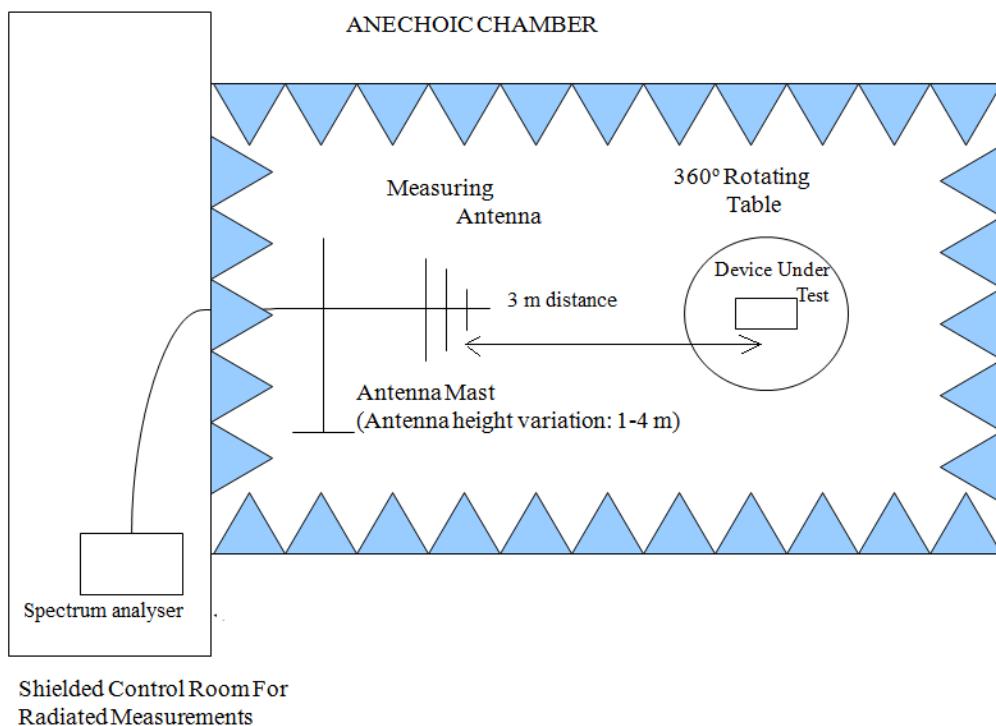
All radiated tests were performed in a semi-anechoic chamber. The measurement antenna (Bilog antenna for the range between 30 MHz to 1000 MHz and 1 GHz-17 GHz Double ridge horn antenna) is situated at a distance of 3 m.

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.

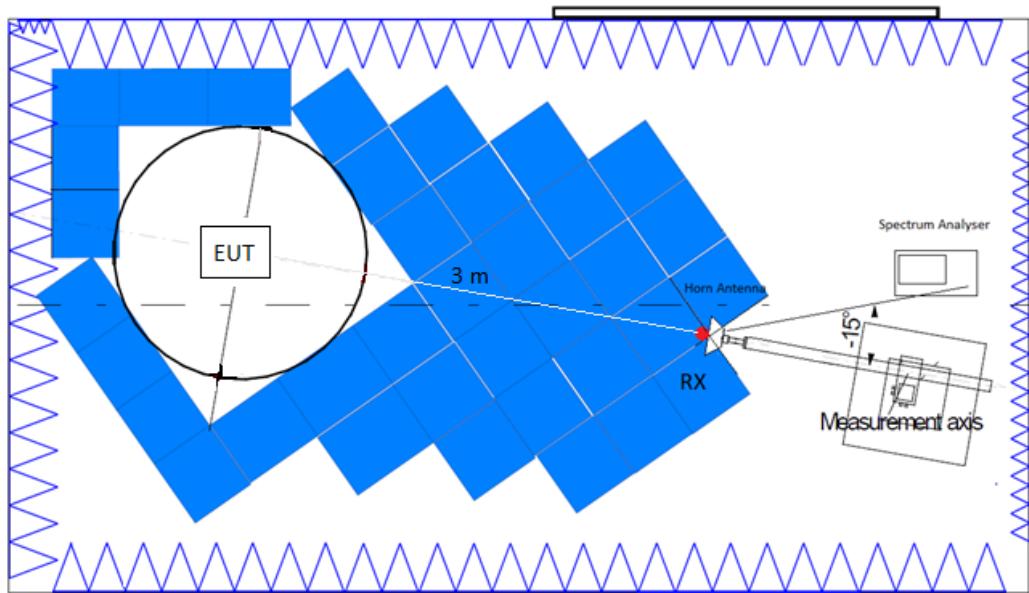
Measurements were made in both horizontal and vertical planes of polarization.

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 10 GHz:



TEST CASES DETAILS

Occupied Bandwidth

Modulation: 2GFSK

| Freq (MHz) | Occ Ch BW (kHz) |
|------------|-----------------|
| 915.50 | 562.00 |
| 919.50 | 562.00 |
| 925.50 | 561.60 |

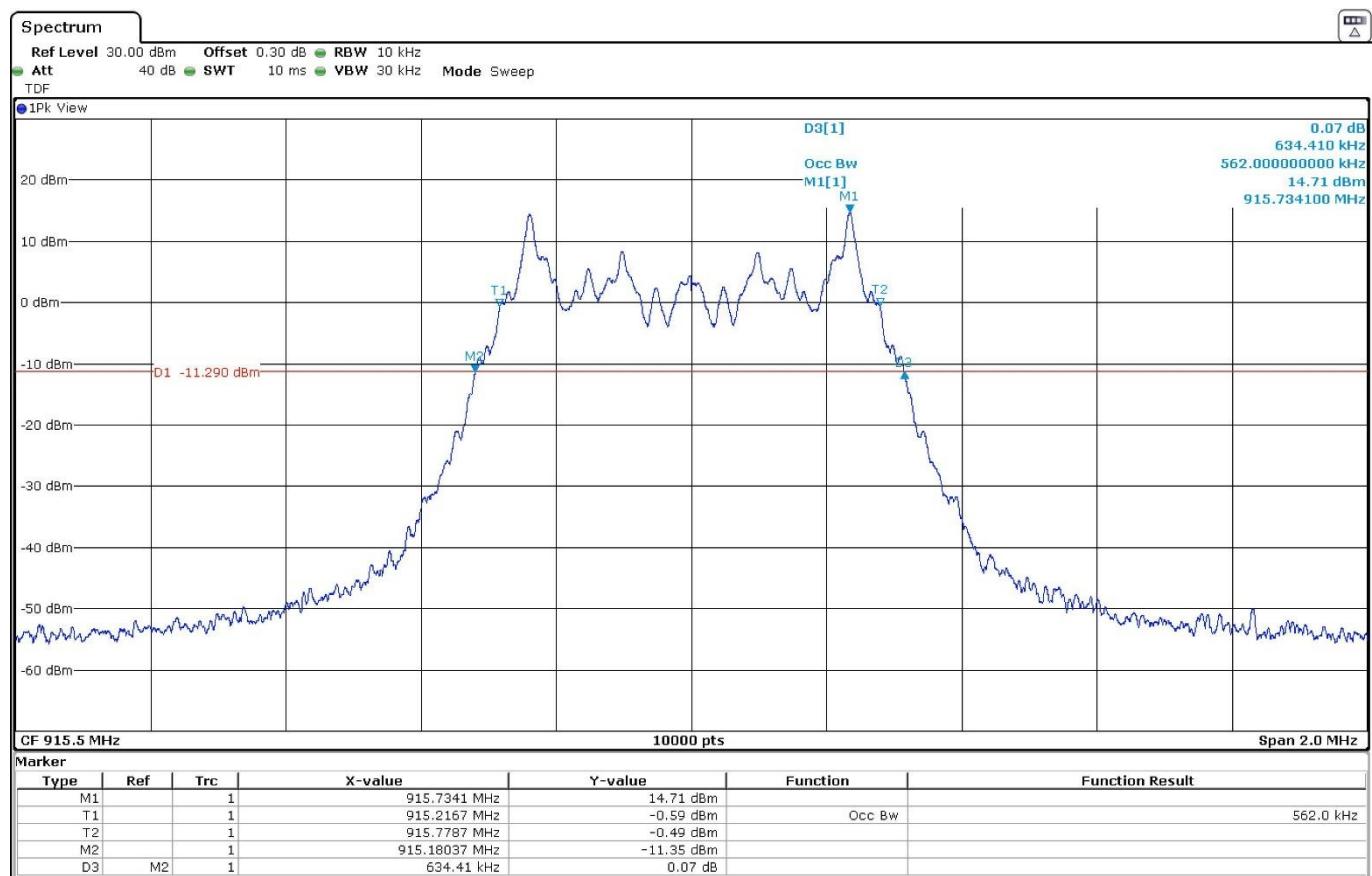
Modulation: 4GFSK

| Freq (MHz) | Occ Ch BW (kHz) |
|------------|-----------------|
| 927.50 | 577.00 |

Attachments

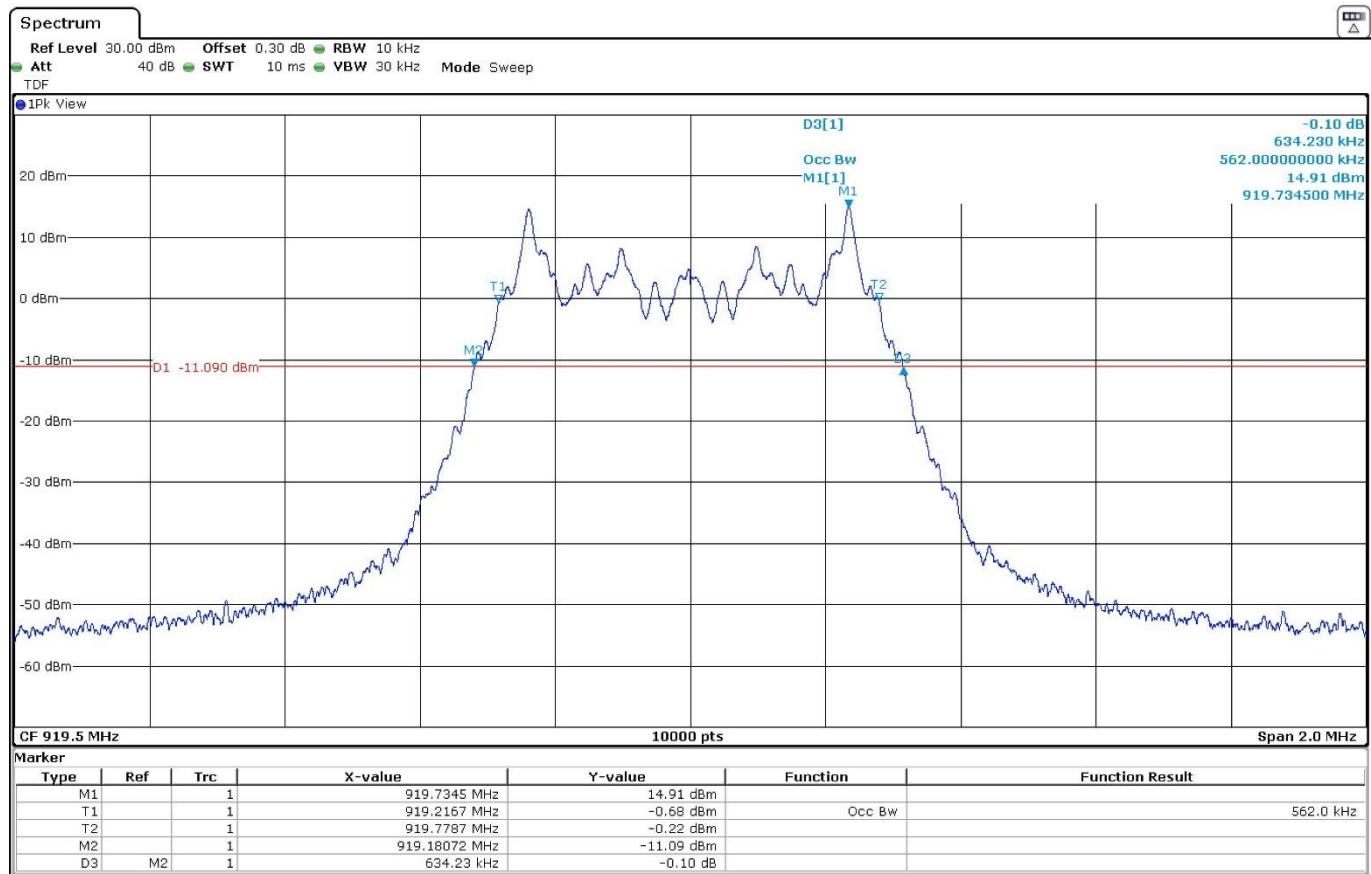
Frequency MHz = 915.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



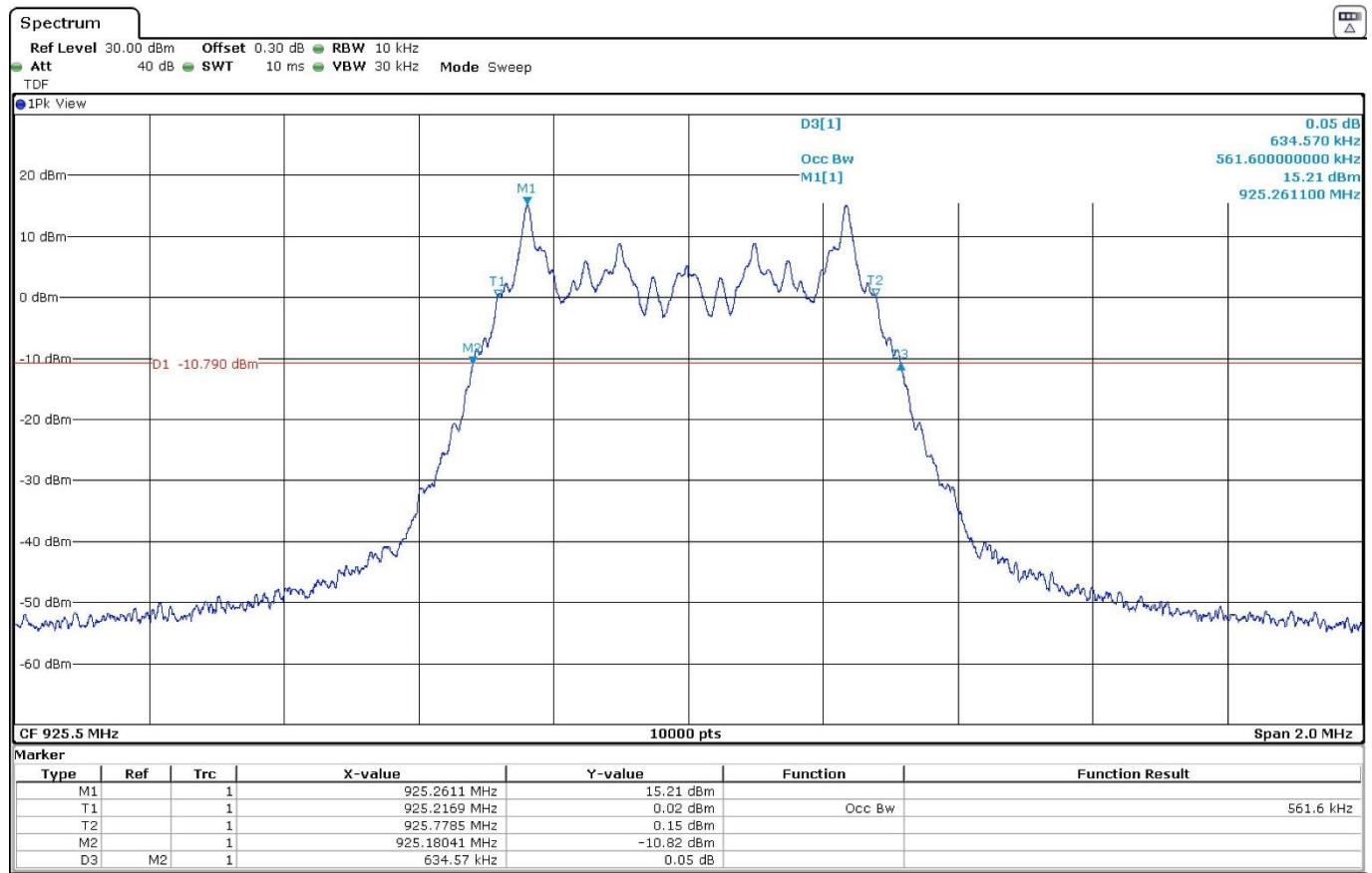
Frequency MHz = 919.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



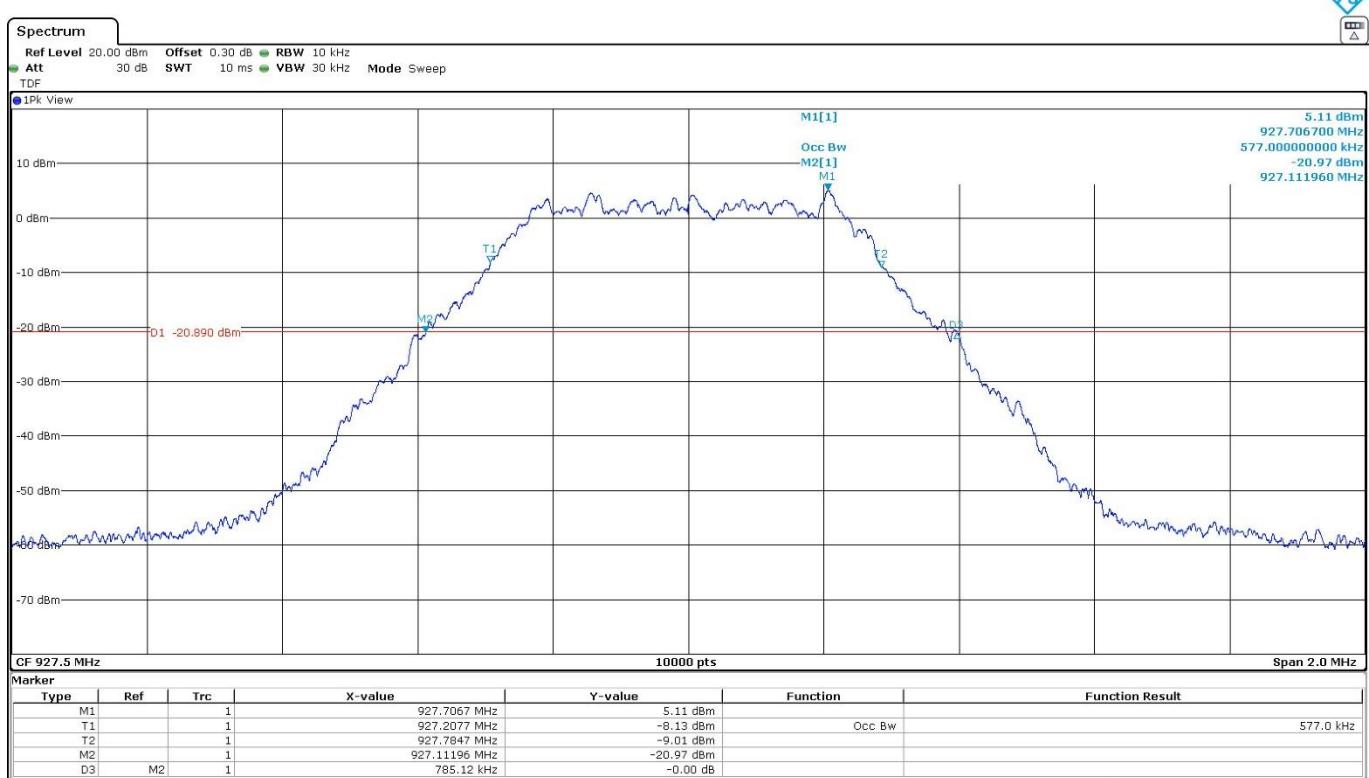
Frequency MHz = 925.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



Frequency MHz = 927.5; Equipment Type = Digital Transmission System (DTS); Modulation = 4GFSK.

Images:



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

Limits

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

Results

Modulation: 2GFSK

| Freq (MHz) | Ebw (kHz) |
|-------------------|------------------|
| 915.50 | 644.00 |
| 919.50 | 643.40 |
| 925.50 | 642.60 |

Modulation: 4GFSK

| Freq (MHz) | Ebw (kHz) |
|-------------------|------------------|
| 927.5 | 625.6 |

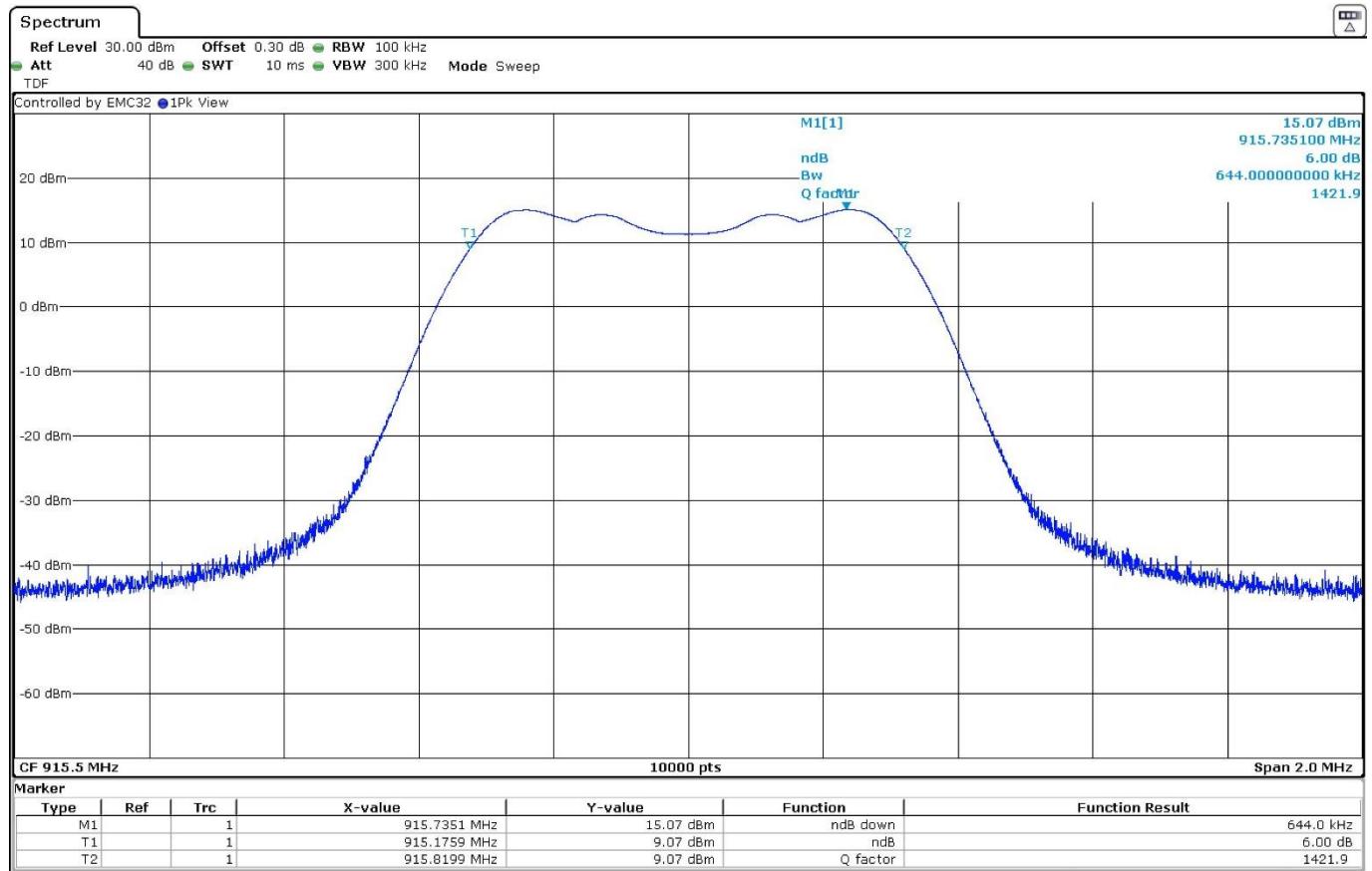
Verdict

Pass

Attachments

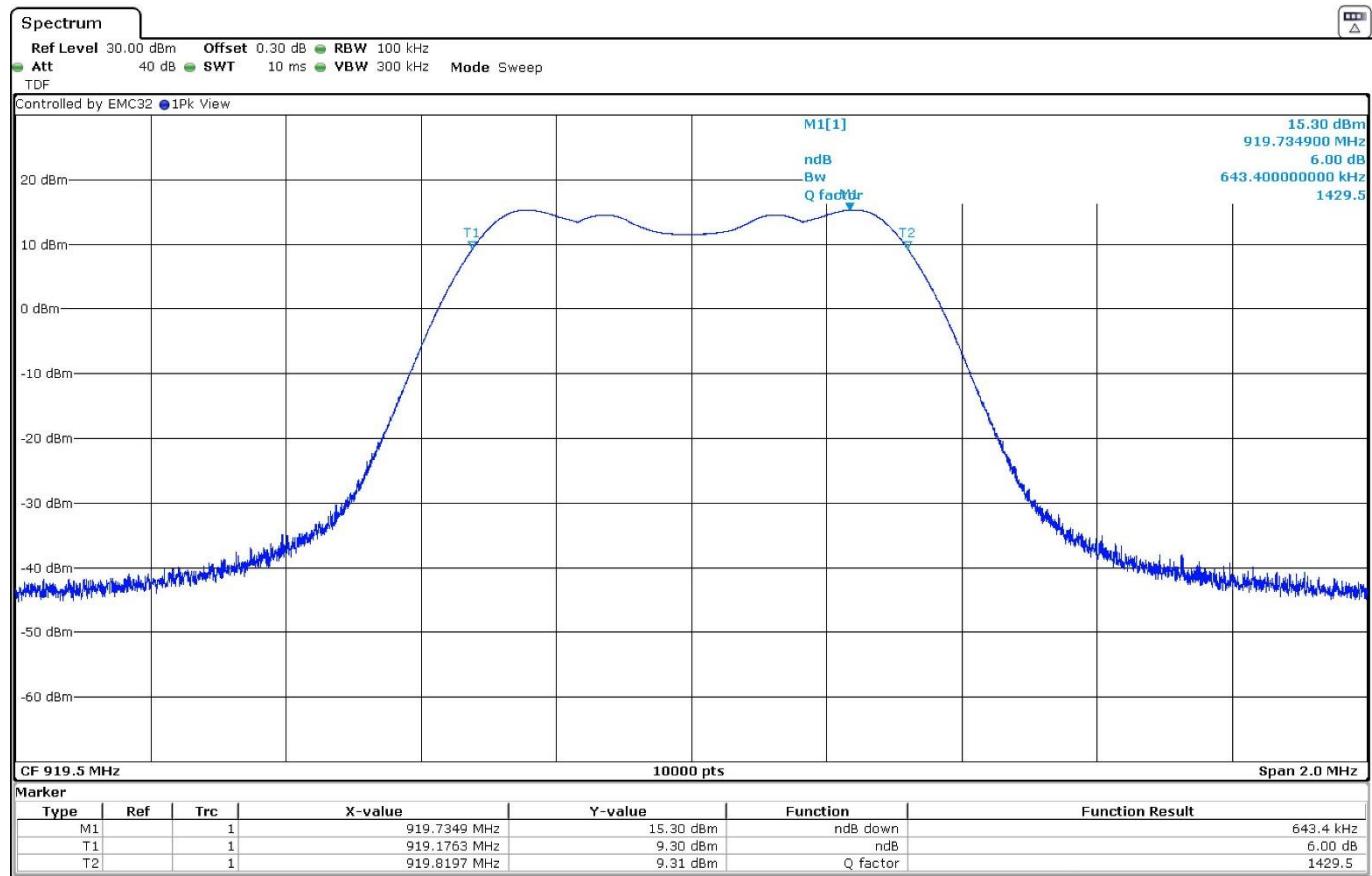
Frequency MHz = 915.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



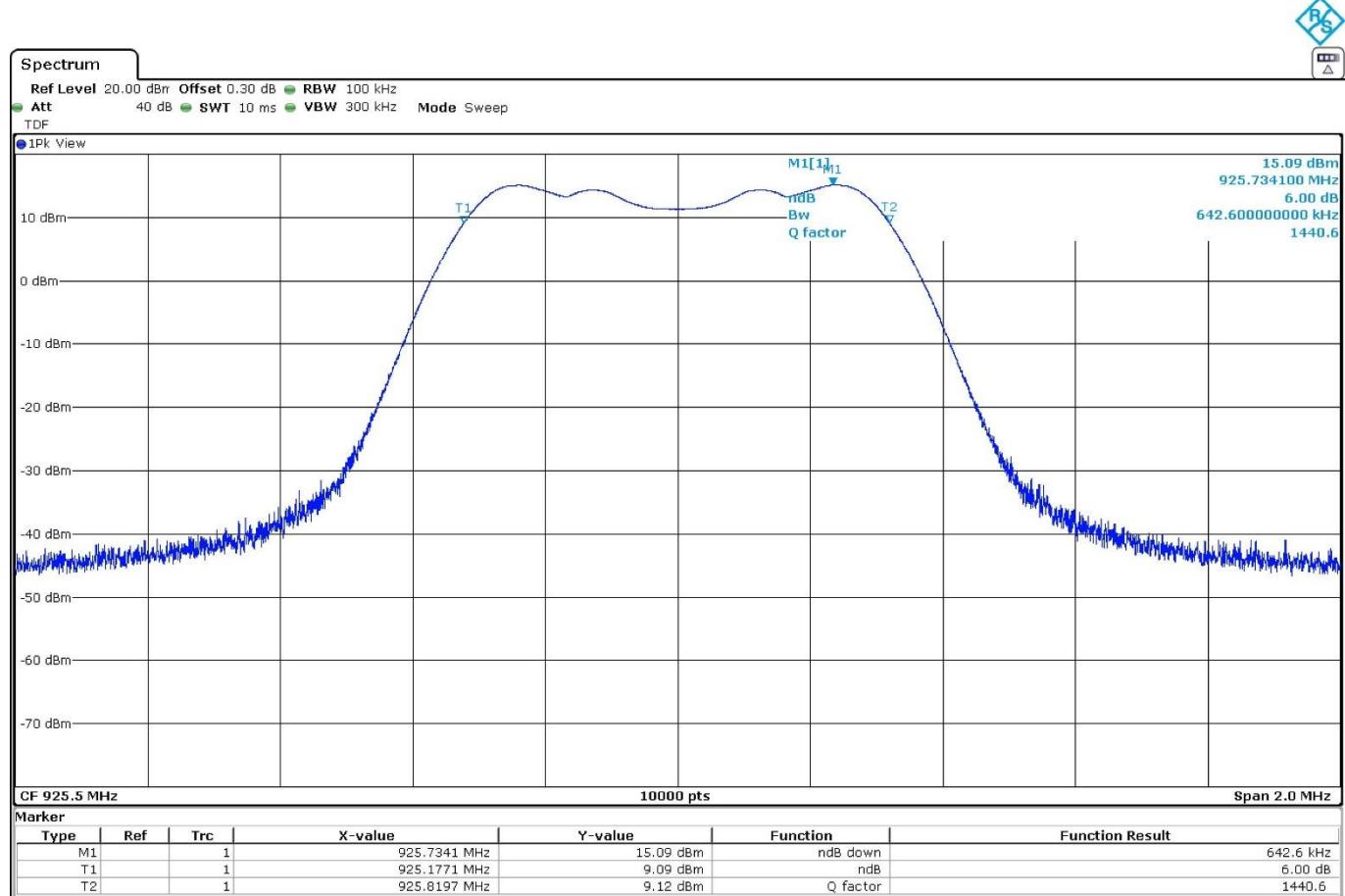
Frequency MHz = 919.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



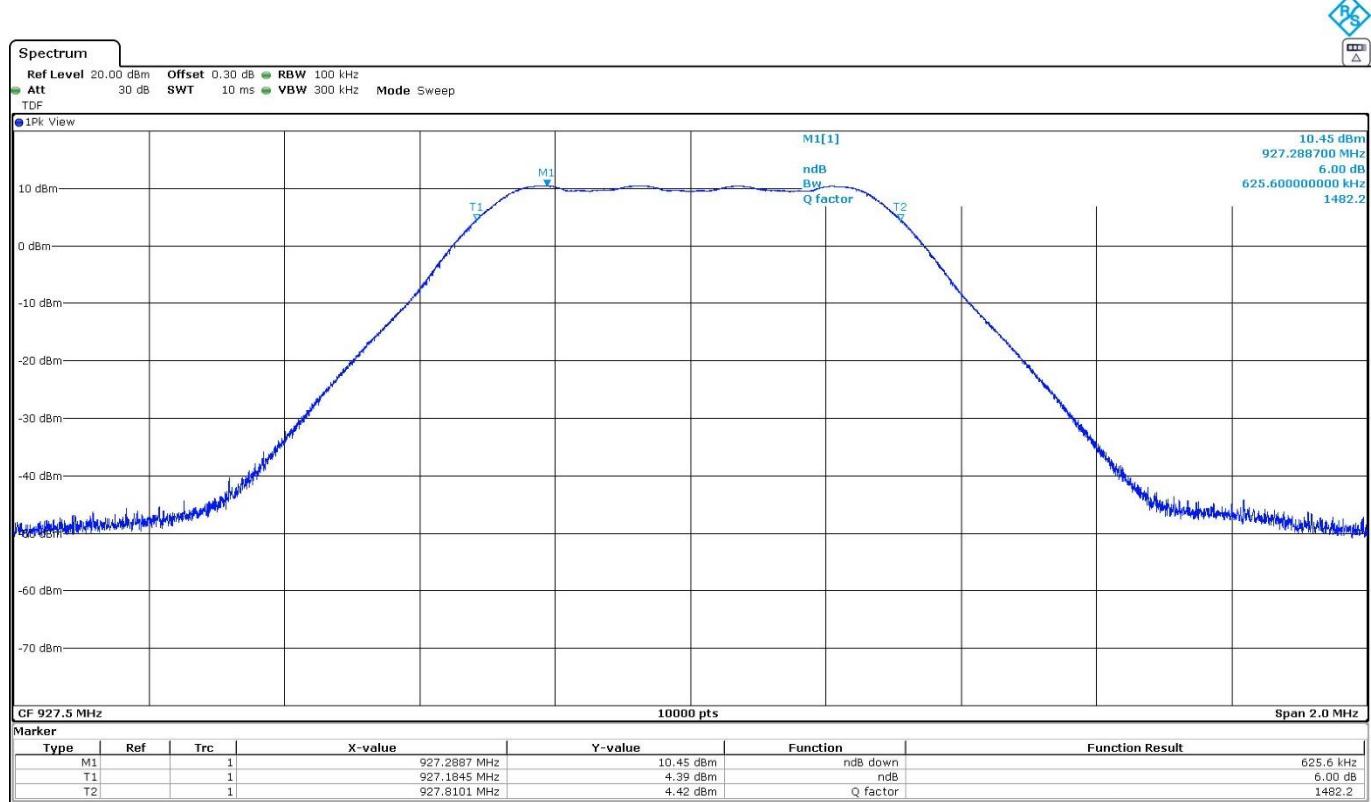
Frequency MHz = 925.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



Frequency MHz = 927.5; Equipment Type = Digital Transmission System (DTS); Modulation = 4GFSK.

Images:



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

Limits

For systems using digital modulation in the 902-928 MHz band: 1 watt (30 dBm).
The e.i.r.p. shall not exceed 4 W (36 dBm) (Canada).

Results

The maximum conducted output power was measured using the method according to point “11.9.2.2.2 Method AVGSA-1” of ANSI C.63.10-2013.

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

Maximum Declared Antenna Gain: +0.23 dBi

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

Modulation: 2GFSK

| Freq (MHz) | Avg Power (dBm) | E.I.R.P. (dBm) |
|------------|-----------------|----------------|
| 915.50 | 14.92 | 15.15 |
| 919.50 | 15.17 | 15.40 |
| 925.50 | 15.62 | 15.85 |

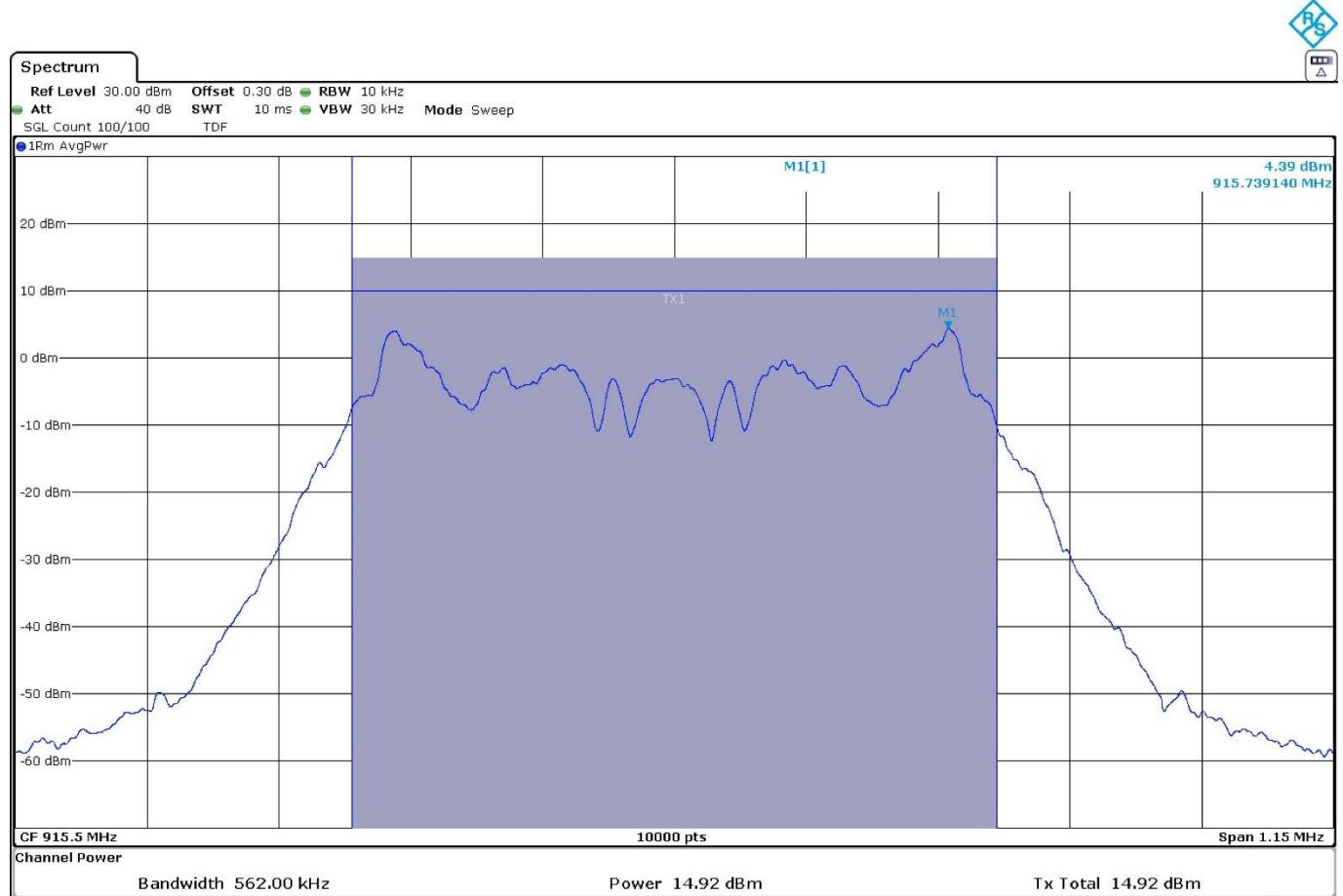
Verdict

Pass

Attachments

Frequency MHz = 915.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

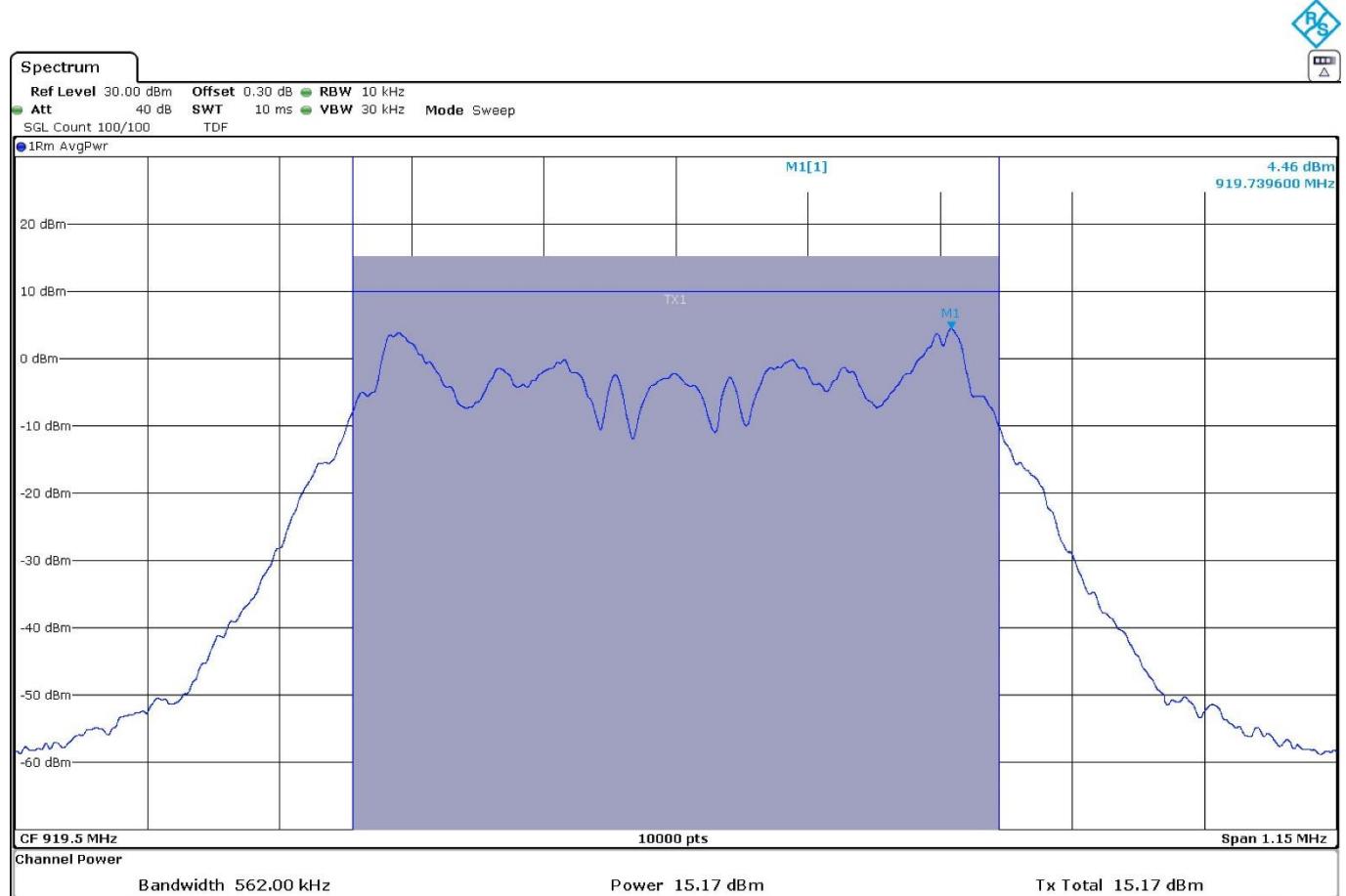
Images:



Attachments

Frequency MHz = 919.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

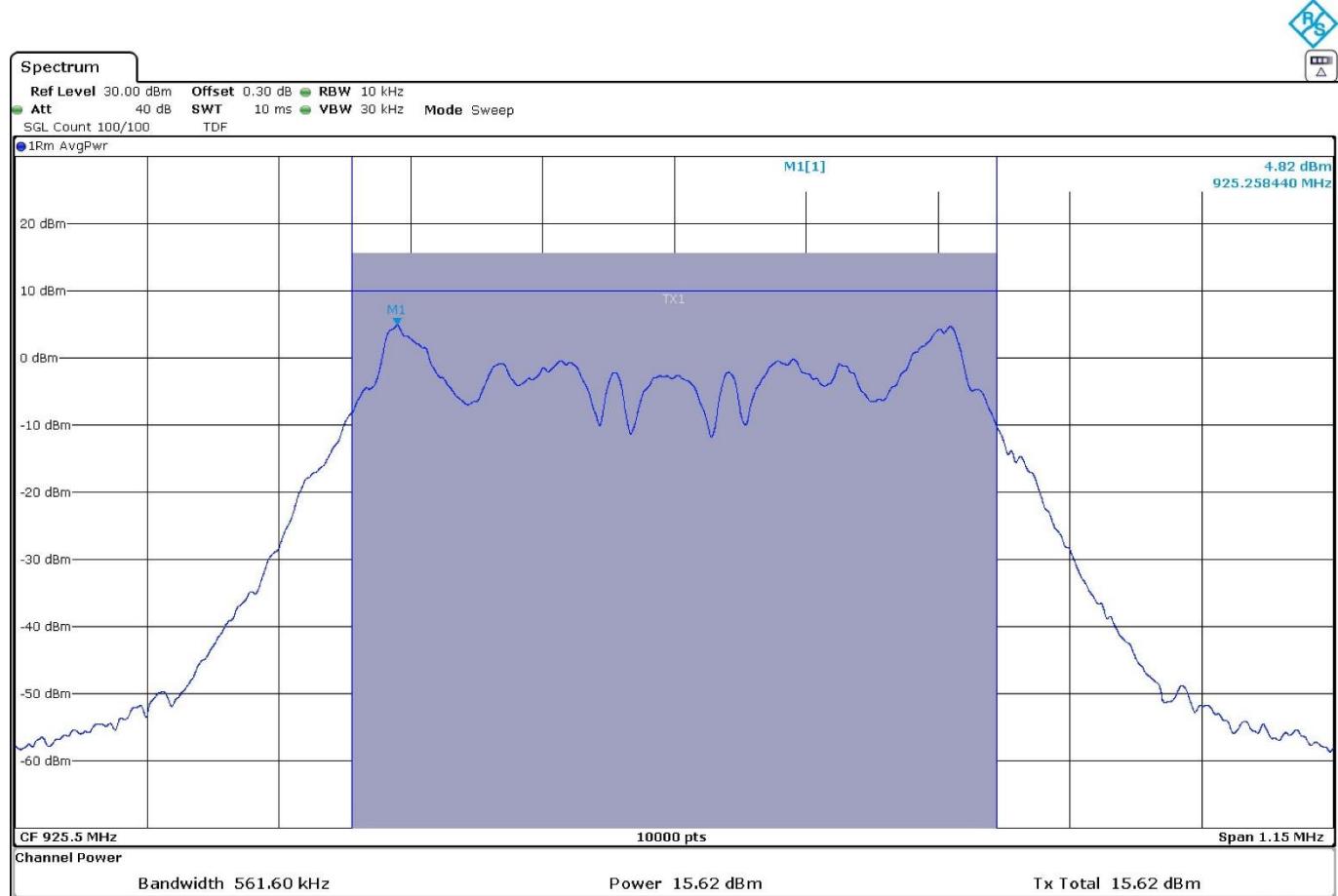
Images:



Attachments

Frequency MHz = 925.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



Results

The maximum peak conducted output power level was measured using the method according to clause "11.9.1.1. RBW \geq DTS bandwidth" of ANSI C.63.10-2013.

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

Maximum Declared Antenna Gain: +0.23 dBi

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

Modulation: 4GFSK

| Freq (MHz) | Peak Power (dBm) | E.I.R.P. (dBm) |
|------------|------------------|----------------|
| 927.50 | 10.51 | 10.74 |

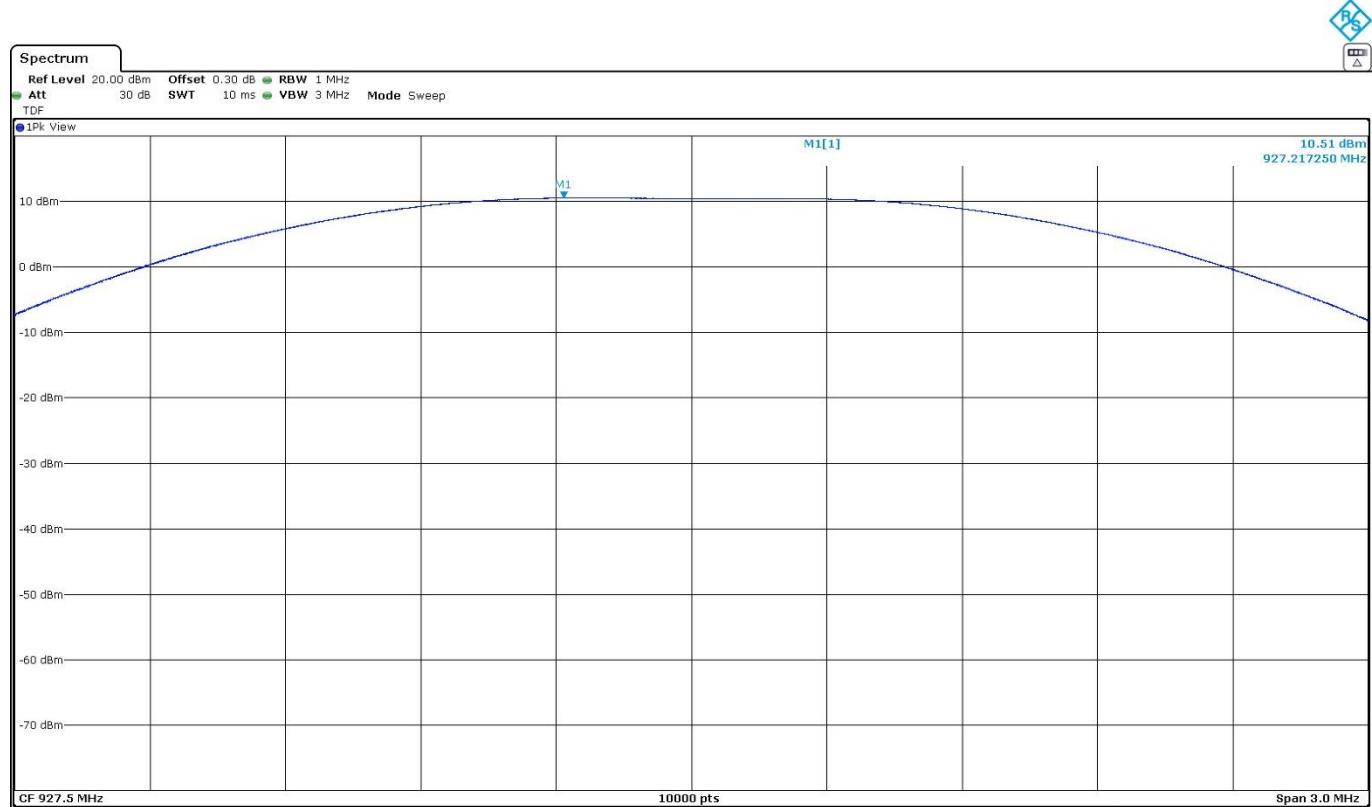
Verdict

Pass

Attachments

Frequency MHz = 927.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



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

Limits

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

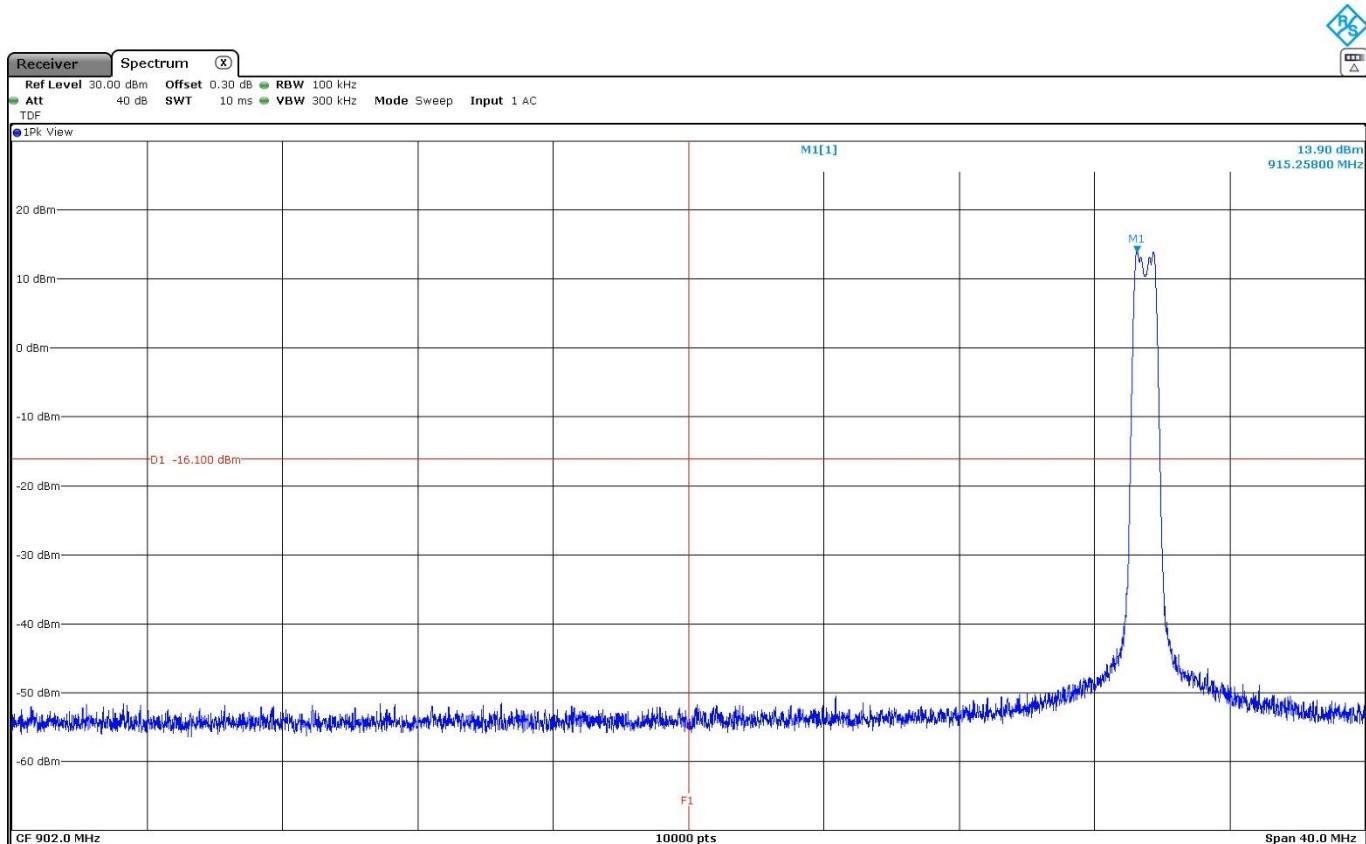
Results

Modulation: 2GFSK

Attachments

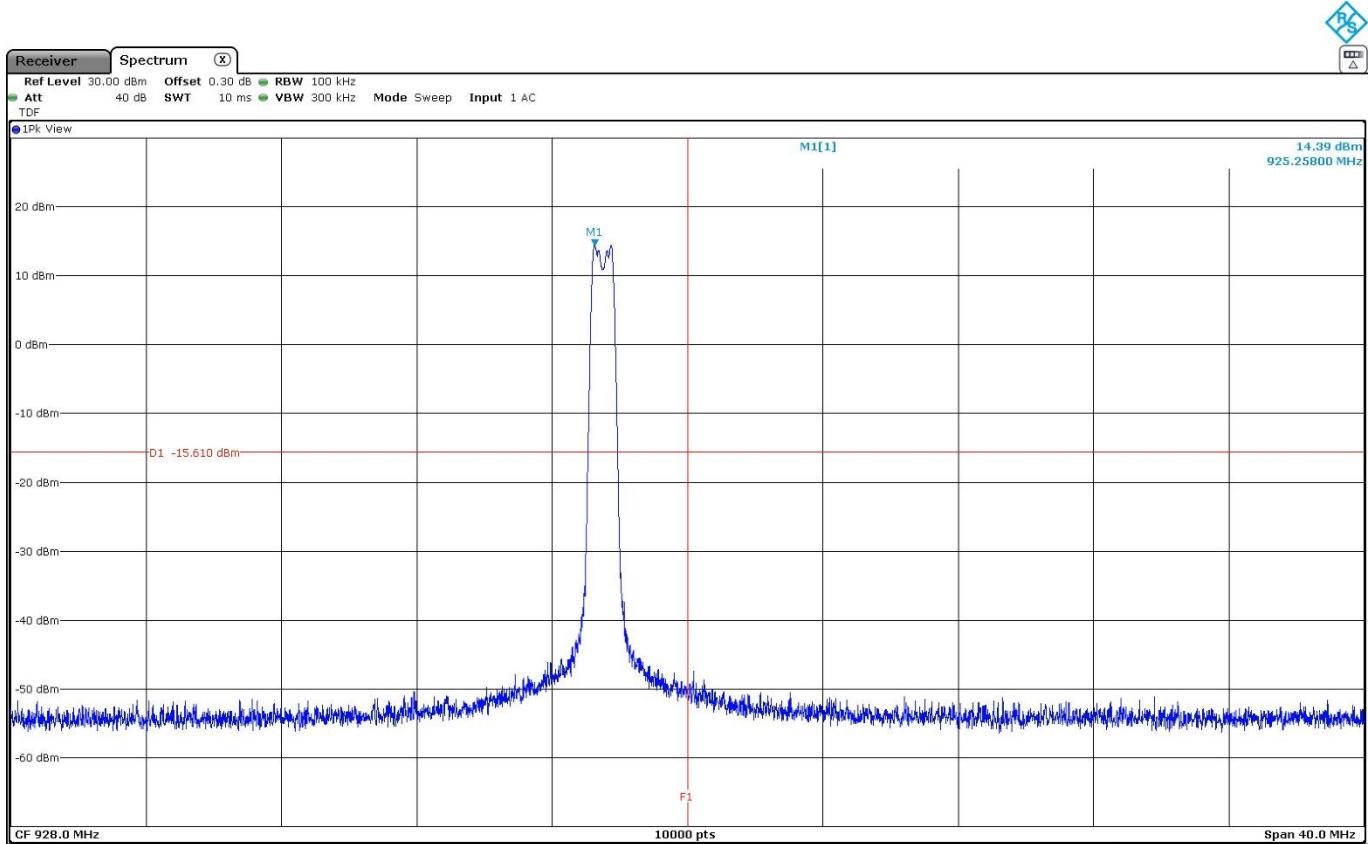
Frequency MHz = 915.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



Frequency MHz = 925.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



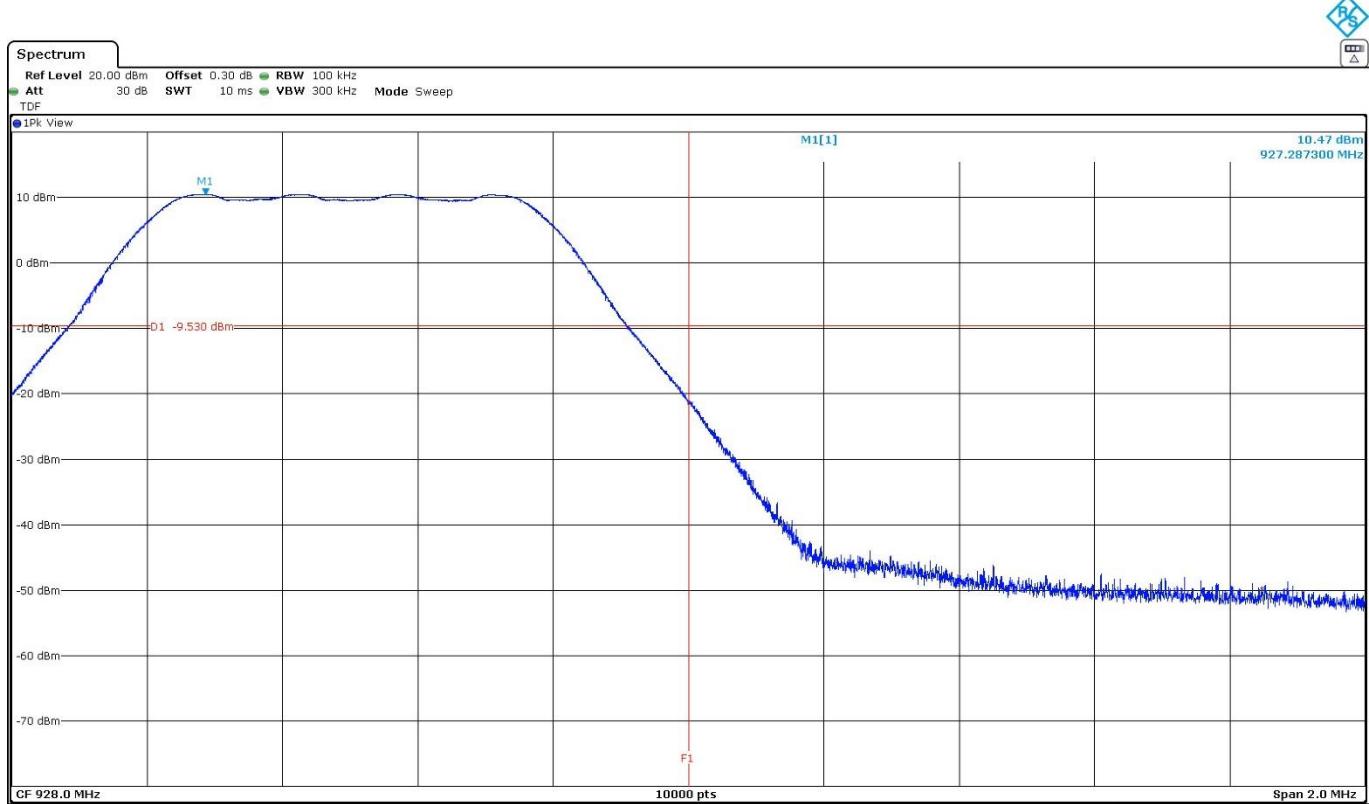
Verdict

Pass

Modulation: 4GFSK

Frequency MHz = 927.5; Equipment Type = Digital Transmission System (DTS); Modulation = 4GFSK.

Images:



Verdict

Pass

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

Limits

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

Results

The power spectral density was measured using the method according to point 11.10.3 "Method AVGPSD-1" of ANSI C.63.10-2013.

Modulation: 2GFSK

| Freq (MHz) | Avg PSD (dBm) |
|------------|---------------|
| 915.50 | 0.23 |
| 919.50 | 1.18 |
| 925.50 | 0.52 |

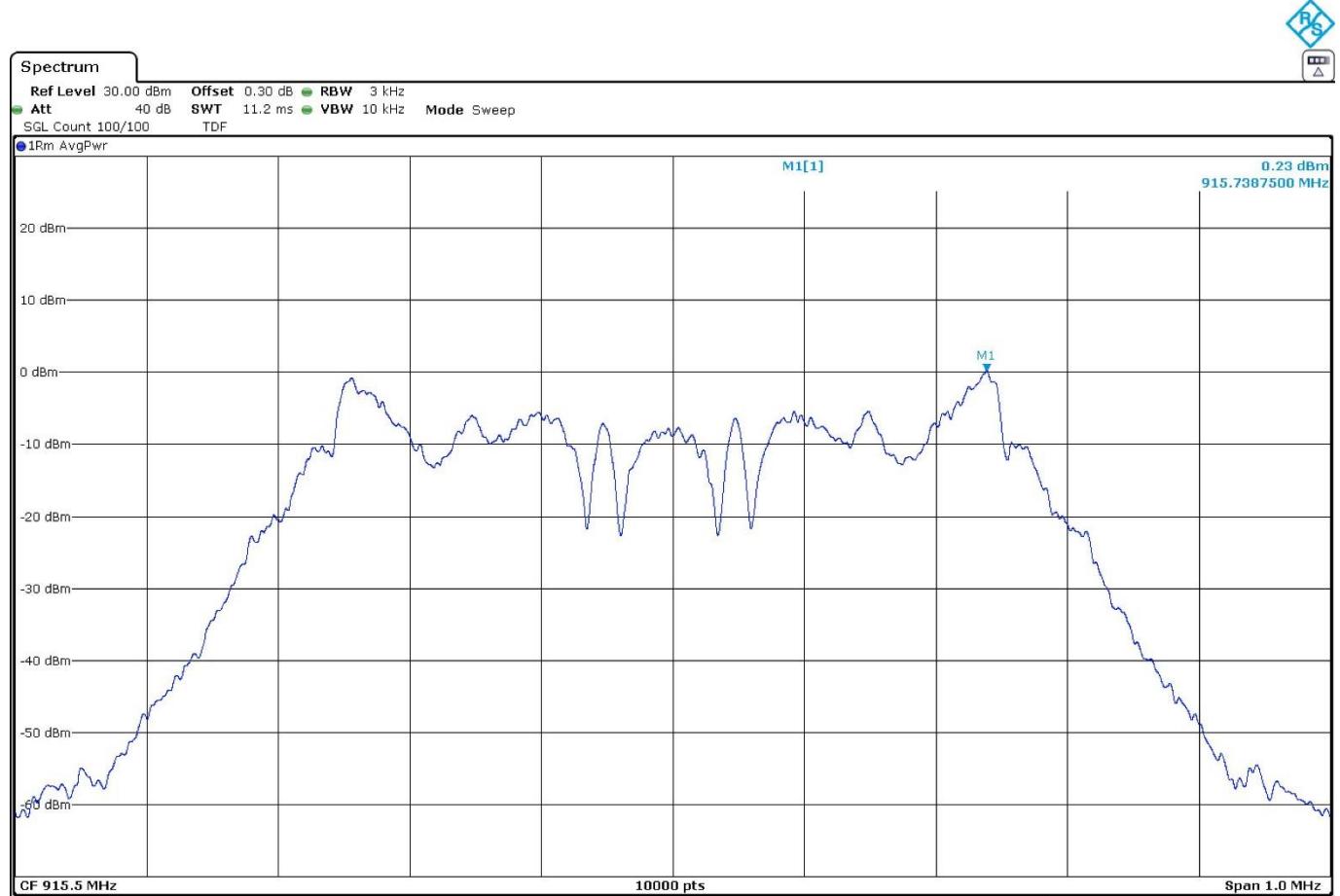
Verdict

Pass

Attachments

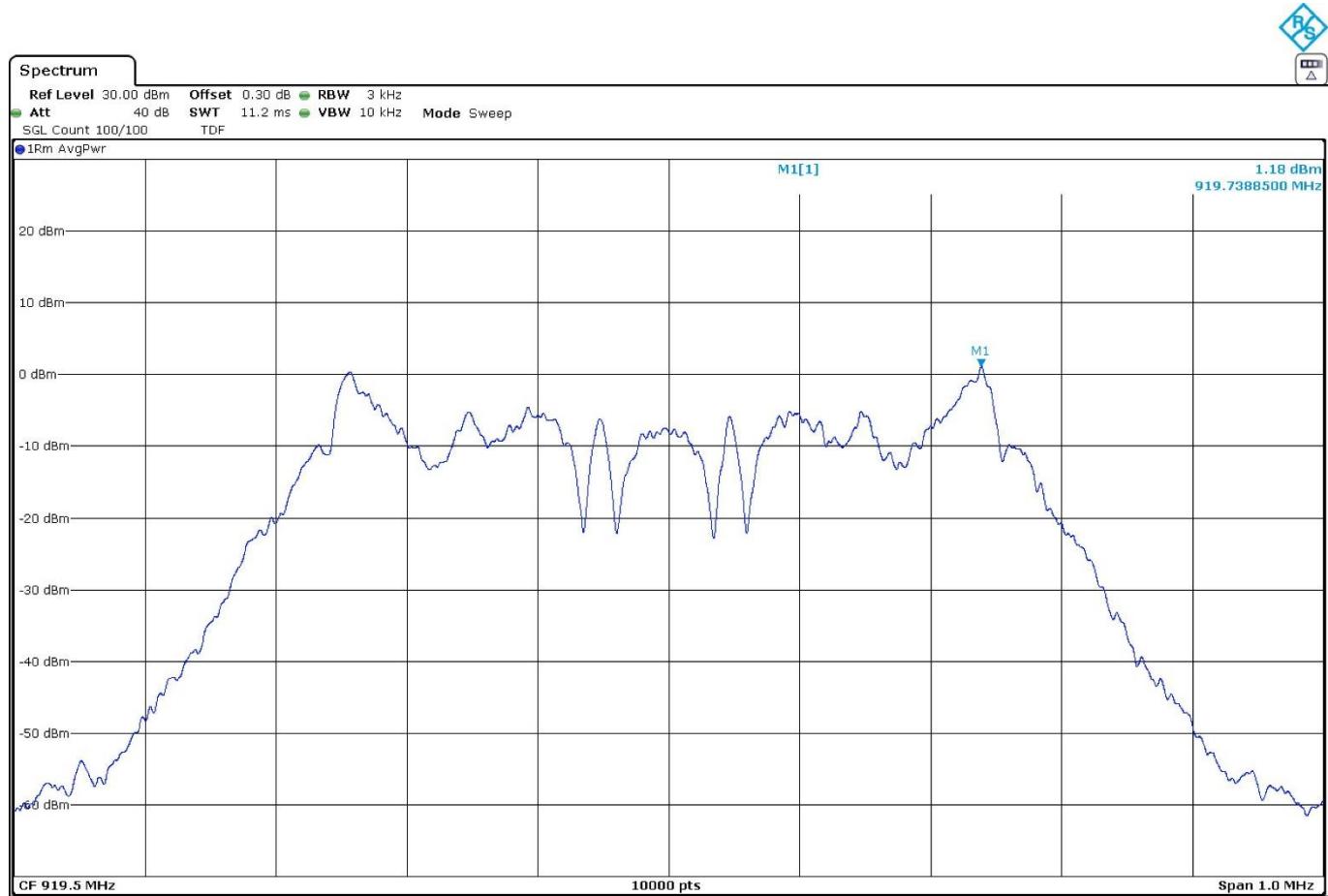
Frequency MHz = 915.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



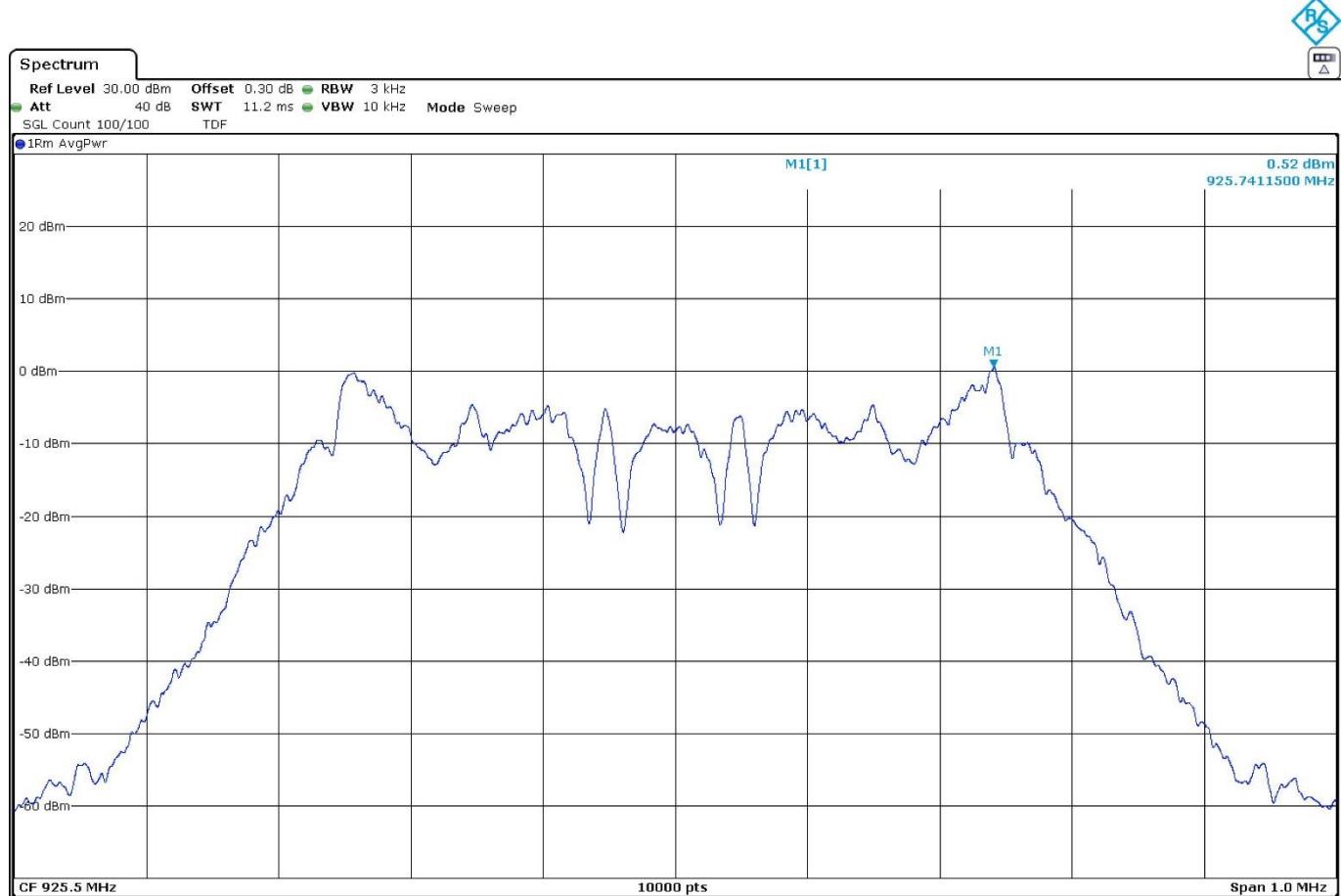
Frequency MHz = 919.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



Frequency MHz = 925.5; Equipment Type = Digital Transmission System (DTS); Modulation = 2GFSK.

Images:



Results

The power spectral density was measured according to clause "11.10.2 Method PKPSD (peak PSD)" of ANSI C.63.10-2013.

Modulation: 4GFSK

| Freq (MHz) | Peak PSD (dBm) |
|------------|----------------|
| 927.50 | 4.99 |

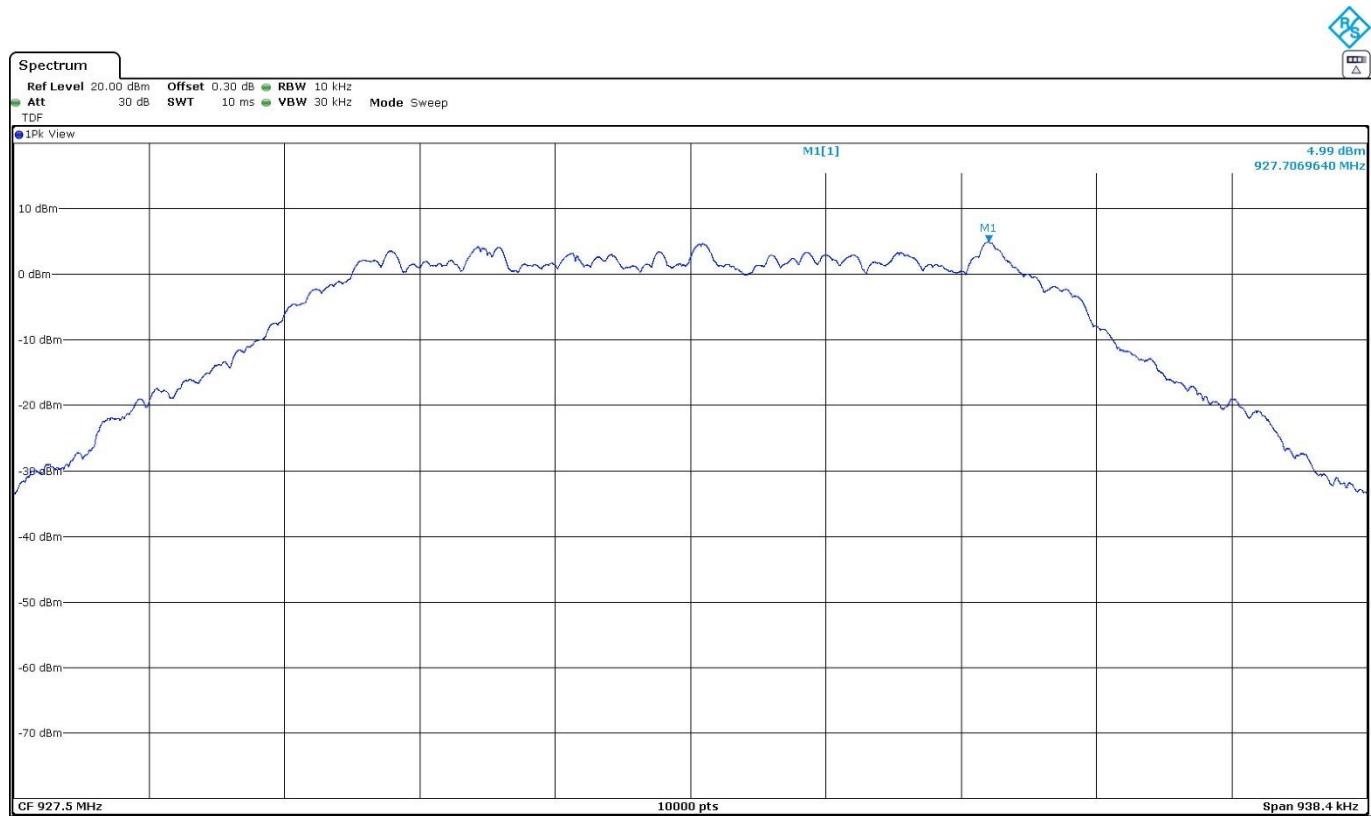
Verdict

Pass

Attachments

Frequency MHz = 915.5; Equipment Type = Digital Transmission System (DTS); Modulation = 4GFSK.

Images:



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 (μ V/m) | Field strength (dB μ 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.

Modulation: 2GFSK

Results

| Freq (MHz) | Freq Rng (GHz) | Unwanted Freq (MHz) | Unwanted Lvl (dB μ V/m) | Pol | Detector |
|------------|----------------|---------------------|-----------------------------|-----|----------|
| 915.50 | [3, 10] | 3661.640 | 54.87 | V | PK |
| | | | 51.11 | | AVG |
| | | 4576.120 | 45.43 | V | PK |
| | | 5493.680 | 55.12 | V | PK |
| | | 7321.940 | 45.73 | V | PK |
| | | 3677.320 | 53.69 | V | PK |
| | | 4598.660 | 46.05 | H | PK |
| | | 5515.660 | 54.05 | V | PK |
| 919.50 | [1, 3] | 7356.100 | 45.60 | V | PK |
| | | 2777.138 | 57.58 | V | PK |
| | | 3701.120 | 54.06 | V | PK |
| | | | 52.03 | | AVG |
| | | 4627.780 | 46.23 | V | PK |
| 925.50 | [3, 10] | 7402.160 | 47.33 | V | PK |

Verdict

Pass

Attachments

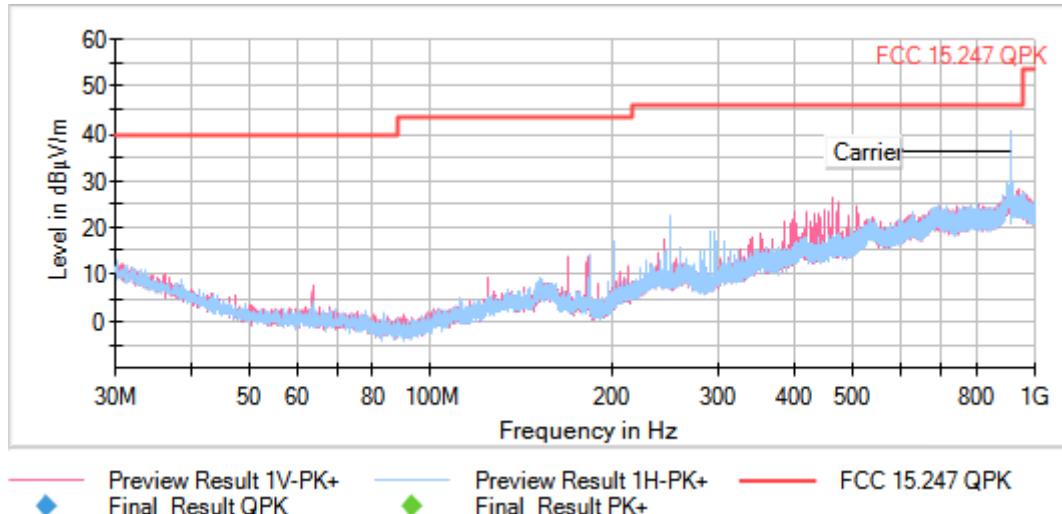
Frequency MHz = 915.50000 Equipment Type = Digital Transmission System (DTS)

Modulation = 2GFSK Frequency Range GHz = [0.03, 1]

Number of Transmission Chains = 1 Measurement Point = 1

Active Port = 1

Images:



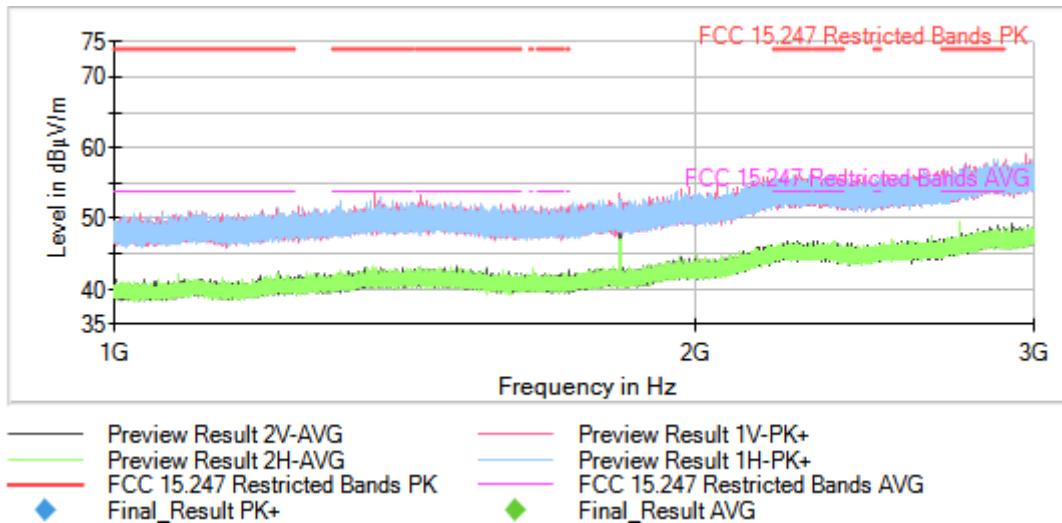
Tables:

Spectrum Analyzer Parameters

| | Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamp |
|-------------------|------------|-----------|-----------|-----------|------------|--------|
| Receiver: [ESR 7] | | | | | | |
| 30 MHz - 1 GHz | 30,312 kHz | PK+ | 100 kHz | 1 s | 0 dB | |

Frequency MHz = 915.50000 Equipment Type = Digital Transmission System (DTS)
Modulation = 2GFSK Frequency Range GHz = [1, 3]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



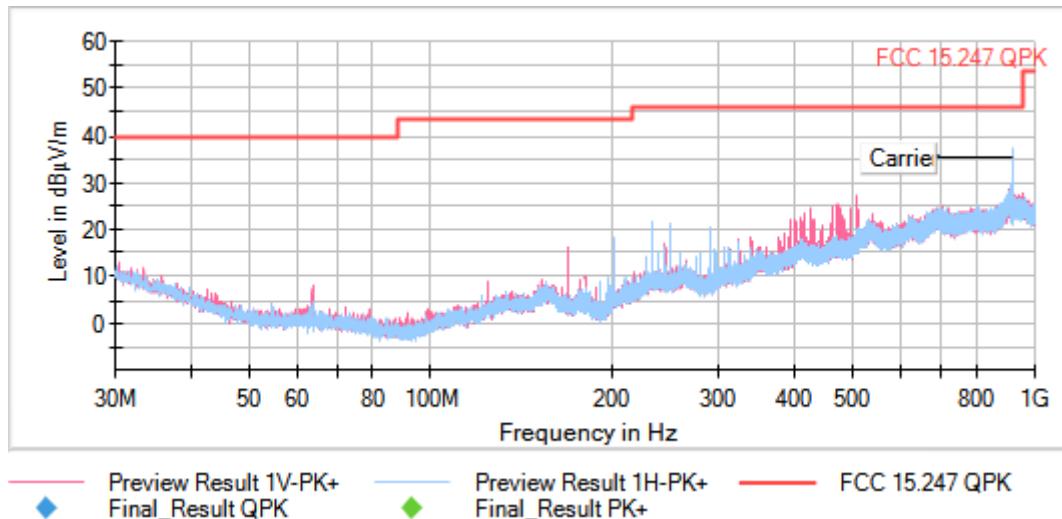
Tables:

Spectrum Analyzer Parameters

| | Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamplifier |
|--|--------------------|------------|-----------|-----------|------------|--------------|
| | Receiver: [FSW 50] | | | | | |
| | 1 GHz - 3 GHz | 30,769 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |

Frequency MHz = 919.50000 Equipment Type = Digital Transmission System (DTS)
Modulation = 2GFSK Frequency Range GHz = [0.03, 1]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



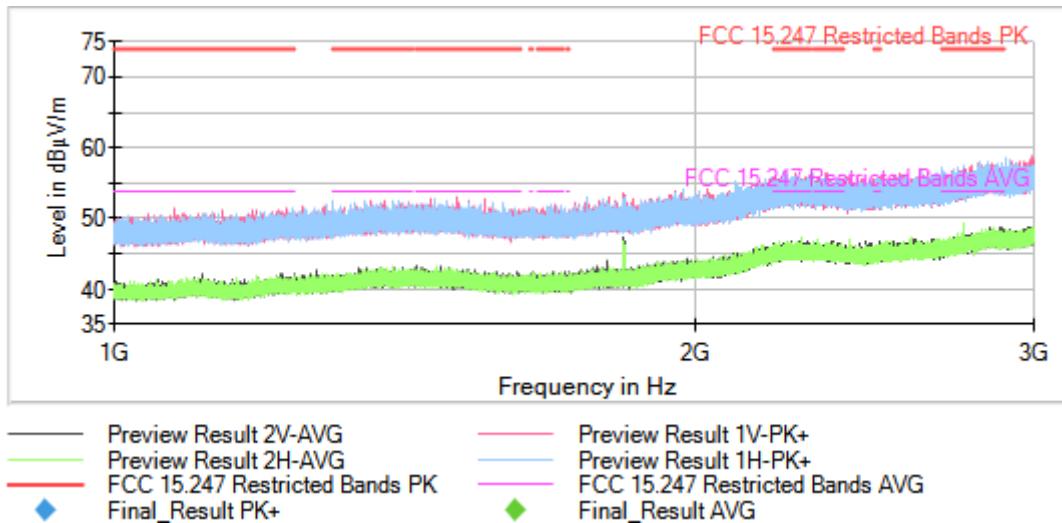
Tables:

Spectrum Analyzer Parameters

| | Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamplifier |
|-------------------|------------|-----------|-----------|-----------|------------|--------------|
| Receiver: [ESR 7] | | | | | | |
| 30 MHz - 1 GHz | 30,312 kHz | PK+ | 100 kHz | 1 s | 0 dB | |

Frequency MHz = 919.50000 Equipment Type = Digital Transmission System (DTS)
Modulation = 2GFSK Frequency Range GHz = [1, 3]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



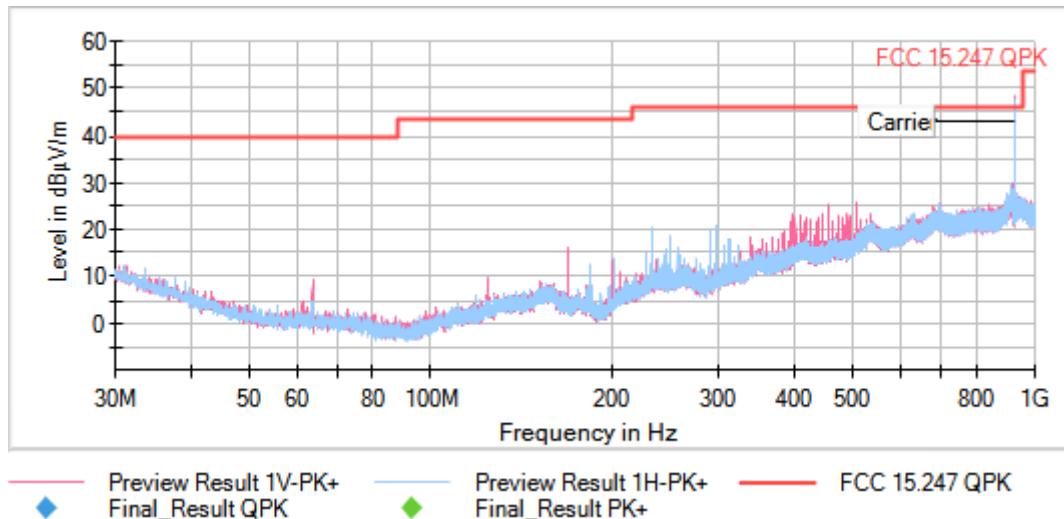
Tables:

Spectrum Analyzer Parameters

| | Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamplifier |
|--|--------------------|------------|-----------|-----------|------------|--------------|
| | Receiver: [FSW 50] | | | | | |
| | 1 GHz - 3 GHz | 30,769 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |

Frequency MHz = 925.50000 Equipment Type = Digital Transmission System (DTS)
Modulation = 2GFSK Frequency Range GHz = [0.03, 1]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



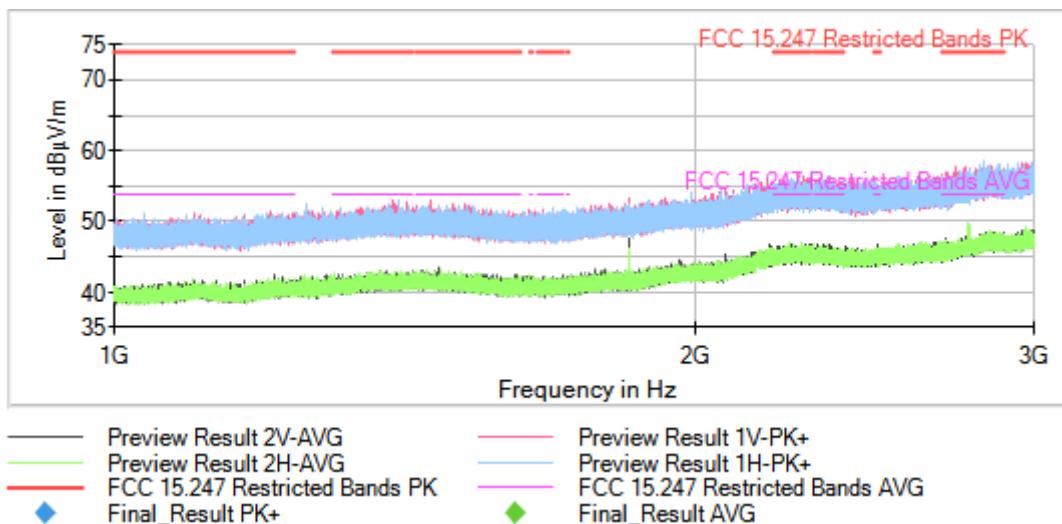
Tables:

Spectrum Analyzer Parameters

| | Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamplifier |
|-------------------|------------|-----------|-----------|-----------|------------|--------------|
| Receiver: [ESR 7] | | | | | | |
| 30 MHz - 1 GHz | 30,312 kHz | PK+ | 100 kHz | 1 s | 0 dB | |

Frequency MHz = 925.50000 Equipment Type = Digital Transmission System (DTS)
Modulation = 2GFSK Frequency Range GHz = [1, 3]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



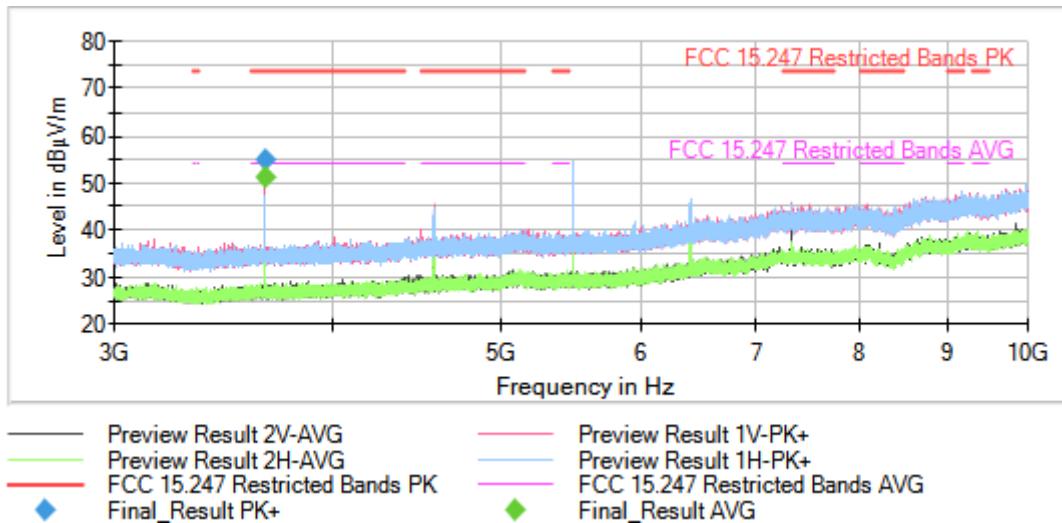
Tables:

Spectrum Analyzer Parameters

| | Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamp |
|--|--------------------|------------|-----------|-----------|------------|--------|
| | Receiver: [FSW 50] | | | | | |
| | 1 GHz - 3 GHz | 30,769 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |

Frequency MHz = 915.50000 Equipment Type = Digital Transmission System (DTS)
 Modulation = 2GFSK Frequency Range GHz = [3, 10]
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

Images:



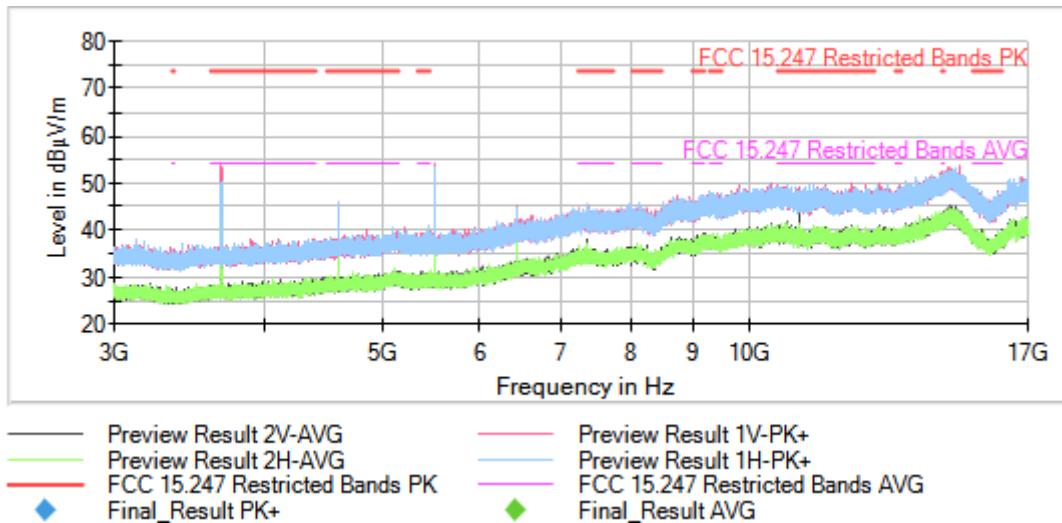
Tables:

Spectrum Analyzer Parameters

| | Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamplifier |
|--|--------------------|-----------|-----------|-----------|------------|--------------|
| | Receiver: [FSW 50] | | | | | |
| | 3 GHz - 10 GHz | 140 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |

Frequency MHz = 919.50000 Equipment Type = Digital Transmission System (DTS)
Modulation = 2GFSK Frequency Range GHz = [3, 10]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



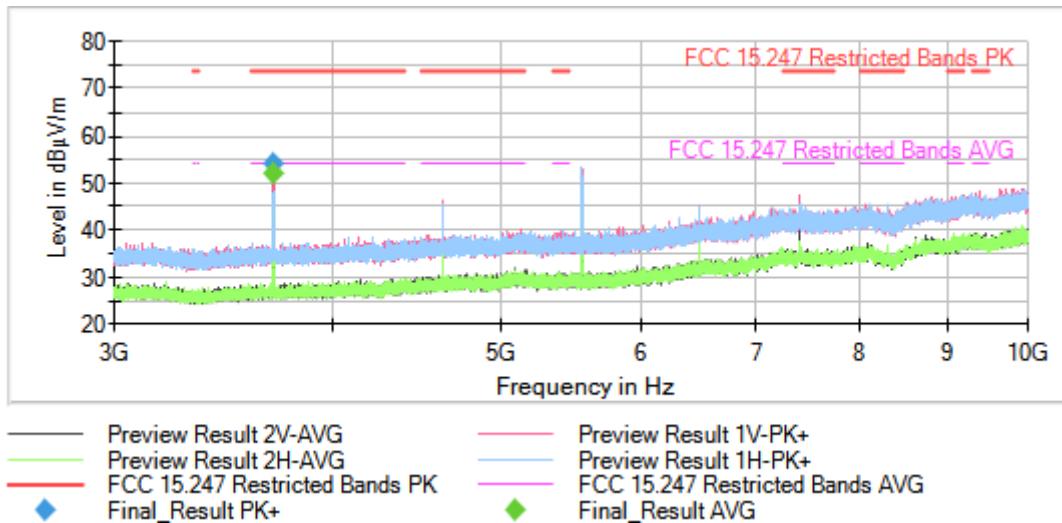
Tables:

Spectrum Analyzer Parameters

| | Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamplifier |
|--|--------------------|-----------|-----------|-----------|------------|--------------|
| | Receiver: [FSW 50] | | | | | |
| | 3 GHz - 10 GHz | 140 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |

Frequency MHz = 925.50000 Equipment Type = Digital Transmission System (DTS)
Modulation = 2GFSK Frequency Range GHz = [3, 10]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



Tables:

Spectrum Analyzer Parameters

| | Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamplifier |
|--|--------------------|-----------|-----------|-----------|------------|--------------|
| | Receiver: [FSW 50] | | | | | |
| | 3 GHz - 10 GHz | 140 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |

Modulation: 4GFSK

Results

| Freq (MHz) | Freq Rng (GHz) | Unwanted Freq (MHz) | Unwanted Lvl (dB μ V/m) | Pol | Detector |
|------------|----------------|---------------------|-----------------------------|-----|----------|
| 927.50 | [3, 10] | 3710.080 | 54.53 | V | PK |
| | | | 51.73 | | AVG |
| | | 4636.040 | 46.58 | V | PK |
| | | 7419.520 | 45.04 | | H |

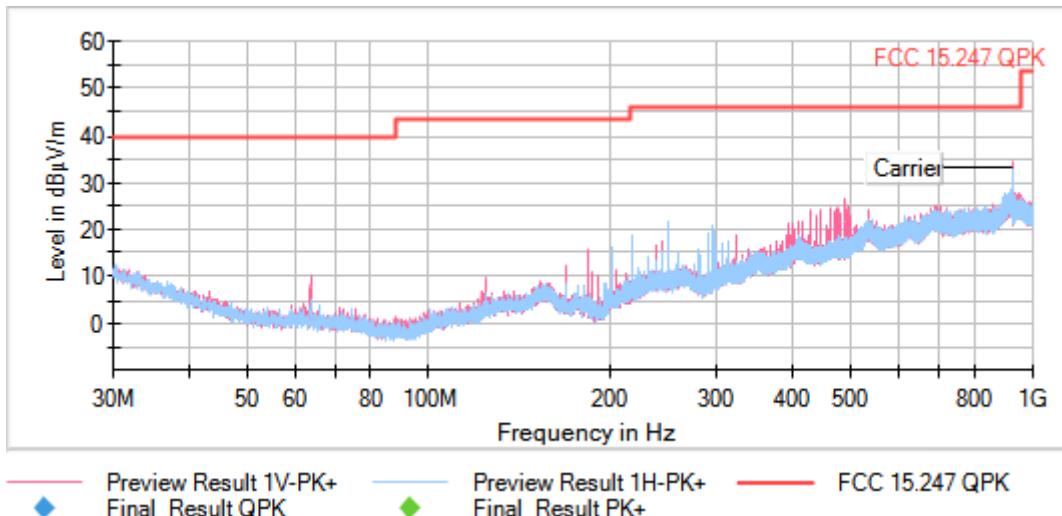
Verdict

Pass

Attachments

Frequency MHz = 927.50000 Equipment Type = Digital Transmission System (DTS)
Modulation = 4GFSK Frequency Range GHz = [0.03, 1]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



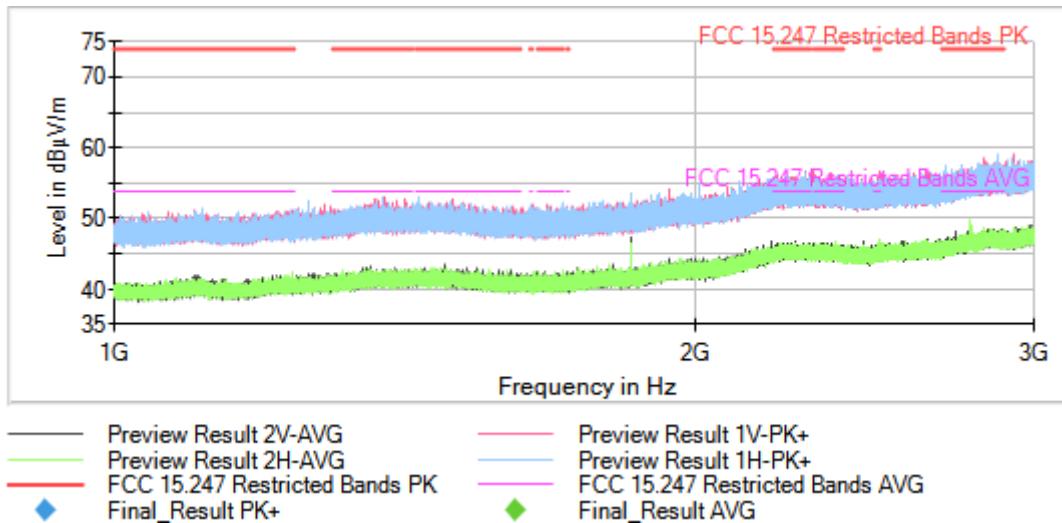
Tables:

Spectrum Analyzer Parameters

| | Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamp |
|-------------------|------------|-----------|-----------|-----------|------------|--------|
| Receiver: [ESR 7] | | | | | | |
| 30 MHz - 1 GHz | 30,312 kHz | PK+ | 100 kHz | 1 s | 0 dB | |

Frequency MHz = 927.50000 Equipment Type = Digital Transmission System (DTS)
Modulation = 4GFSK Frequency Range GHz = [1, 3]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



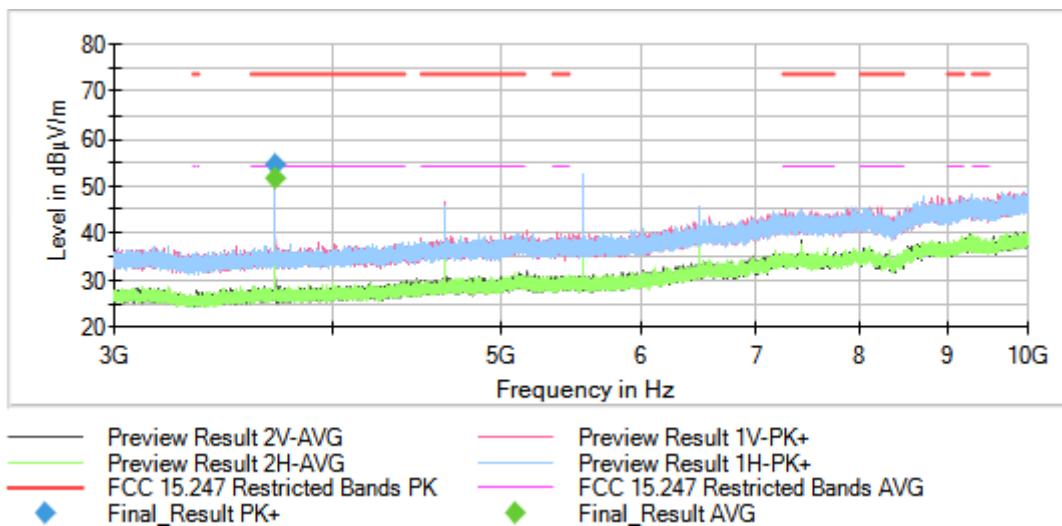
Tables:

Spectrum Analyzer Parameters

| | Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamp |
|--|--------------------|------------|-----------|-----------|------------|--------|
| | Receiver: [FSW 50] | | | | | |
| | 1 GHz - 3 GHz | 30,769 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |

Frequency MHz = 927.50000 Equipment Type = Digital Transmission System (DTS)
Modulation = 4GFSK Frequency Range GHz = [3, 10]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



Tables:

Spectrum Analyzer Parameters

| | Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamplifier |
|--|--------------------|-----------|-----------|-----------|------------|--------------|
| | Receiver: [FSW 50] | | | | | |
| | 3 GHz - 10 GHz | 140 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |