



FCC LISTED, REGISTRATION
NUMBER: 2764.01

ISED LISTED REGISTRATION
NUMBER: 23595-1

Test report No:
5867ERM.006A1

Test report

USA FCC 15.231

CANADA RSS-210, RSS-Gen

(*) Identification of item tested	SK CTO
(*) Trademark	Lear
(*) Model and /or type reference	FOBU4
Other identification of the product	FCC ID: KOBJXF23B IC: 3521A-JXF23B
(*) Features	UHF – Transmit: 315 MHz / UWB – Transmit + Receive: 3993.6 ±499.2 MHz (CH2)
(*) Manufacturer	Lear Corporation 21557 Telegraph Road, Building 100 Southfield, Michigan, 48033
Test method requested, standard	FCC CFR Title 47 Part 15 Subpart C CANADA RSS-210 Issue 11 (June 2024). CANADA RSS-Gen Issue 5 Amendment 2 (February 2021). ANSI C63.10-2020/Cor1-2023+C63.10a-2024+Errata to C63.10a-2024: American National Standard for Testing Unlicensed Wireless Devices.
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Domingo Galvez EMC&RF Lab Manager
Date of issue	07-10-2026
Report template No	FDT08_25 (*) "Data provided by the client"

Index

Competences and guarantees 3

General conditions 3

Uncertainty 3

Data provided by the client 4

Usage of samples 4

Test sample description 5

Identification of the client 6

Testing period and place 6

Document history 6

Environmental conditions 7

Remarks and comments 7

Testing verdicts 8

Summary 8

List of equipment used during the test 9

Appendix A: Test results 10

Competences and guarantees

DEKRA Certification Inc. is a testing laboratory accredited by A2LA (The American Association for Laboratory Accreditation), to perform the tests indicated in the Certificate 2764.01

DEKRA Certification Inc. is a testing laboratory competent to carry out the tests described in this report.

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

DEKRA Certification Inc. 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 Certification at the time of performance of the test.

DEKRA Certification Inc. 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.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA Certification Inc.

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 Certification Inc.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA Certification Inc. and the Accreditation Bodies.

Uncertainty

Uncertainty (factor $k=2$) was calculated according to the DEKRA Certification internal document PODT000.

Test case	Frequency (MHz)	U ($k=2$)	Units
Occupied Bandwidth	315	1.87	%
Conducted Spurious Emission	30 - 1000	0.48	dB
	1000 - 40000	0.94	dB
Radiated Spurious Emission	30-180	4.27	dB
	180-1000	3.14	dB
	1000-18000	3.30	dB
	18000-40000	3.49	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 is a vehicle security device.

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

Usage of samples

Samples used for testing have been selected by: The client.

Samples S/01 are composed of the following elements and accessories:

Id	Control N°	Description	Model	Serial N°	Date of reception	Application
S/01	5867/16	Vehicle Wireless Key fob	FOBU4	--	2026-03-13	Element Under Test

Notes referenced to samples during the project.

Id	Note
S/01	Sample S/01, was used for the following test(s): All the tests indicated in appendix A

Test sample description

Ports..... :	Port name and description		Cable				
			Specified max length [m]	Attached during test	Shielded	Coupled to patient ⁽³⁾	
	No Data Provided			[]	[]	[]	
				[]	[]	[]	
				[]	[]	[]	
				[]	[]	[]	
				[]	[]	[]	
				[]	[]	[]	
Supplementary information to the ports..... :	No Data Provided						
Rated power supply	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	[]	AC:	[]	[]	[]	[]	[]
	[]	AC:	[]	[]	[]	[]	[]
	[X]	DC: 3V DC (CR232H battery))					
	[]	DC:					
Rated Power	No data provided						
Clock frequencies	Main Micro: 27.6 MHz crystal, UWB IC: 38.4 MHz						
Other parameters.....	N/A						
Software version	FOBU4						
Hardware version.....	FOBU4						
Dimensions in cm (W x H x D)	No Data Provided						
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		
	No Data Provided						
							
							
							
Accessories (not part of the test item)..... :	Description		Type		Manufacturer		
	No Data Provided						
							
							
							
							

Documents as provided by the applicant.....:	Description	File name	Issue date
	Declaration Equipment Data	FDT30_18 Declaration Equipment Data.pdf	2026-03-20
Copy of marking plate:			
No marking label			

Identification of the client

DEKRA Certification Inc.
47603 Halyard Drive, Plymouth
Michigan, 48170
USA

Testing period and place

Test Location	DEKRA Certification Inc.
Date (start)	05-15-2026
Date (finish)	05-23-2026

Document history

Report number	Date	Description
5867ERM.006	06-09-2026	First release.
5867ERM.006A1	07-10-2026	Second release. The TX/RX frequency information for the UWB operation (3993.6 ± 499.2 MHz, CH2) and the standard information were added to Page 1; The nominal voltage and antenna gain information were updated on Page 12; Some Radiated emission tests were updated. This modified test report cancels and replaces the test report 5867ERM006.

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. = 30 % Max. = 75 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar

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

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar

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. = 30 % Max. = 60 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar

Remarks and comments

The tests have been performed by the technical personnel: Prudhvi Kothapalli, Kevin Kapllaj and Yuri Barone.

Testing verdicts

Not applicable :	N/A
Pass :	P
Fail :	F
Not measured :	N/M

Summary

FCC PART 15.519 /15.521					
Section	FCC Spec Clause	RSS Spec Clause	Test Description	Verdict	Remark
	§ Section 15.207	RSS-GEN Clause 8.8	Conducted Emission	N/A	Refer 1
A.1	§ Section 15.203	RSS GEN	Antenna Requirement	P	N/A
A.2	§ Section 15.205, §15.209, 15.35 (c), §15.231 (b)	RSS-210 Annex A.1.3	Radiated Emission	P	N/A
A.3	§ Section 15.231 (c)	RSS-210 Annex A.1.4	20 dB Bandwidth	P	N/A
A.4	§Section 15.231 (a)	RSS-210 Annex A.1.2	Periodic Operation	P	N/A
Supplementary information and remarks: 1) According with the requirements of FCC Rules and Regulations, title 47, Chapter I, Subchapter A, Part 15, Subpart B & C, §15.107 & §15.207 Conducted limits, (d) & (c), Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation, and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provision for, the use of battery chargers which permit operating while charging, AC adaptors or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits. According to ISSED requirements, as specified in RSS-Gen Issue 5, Section 8.8 – AC power-line conducted emissions limits, conducted emission measurements are applicable only to radio apparatus designed to be connected to the public utility AC power network. Therefore, since the EUT is powered only by battery and has no provision for operation while connected to AC mains, conducted emission testing is not required.					

List of equipment used during the test

Conducted Measurements

CONTROL NUMBER	DESCRIPTION	MANUFACTURER	MODEL	LAST CALIBRATION	NEXT CALIBRATION
1039	Spectrum analyzer	Rohde & Schwarz	FSV40	2025/07	2026/07

Radiated Measurements

CONTROL NUMBER	DESCRIPTION	MANUFACTURER	MODEL	LAST CALIBRATION	NEXT CALIBRATION
1012	EMI Test Receiver	Rohde & Schwarz	ESR26	2025/01	2027/01
1014	Spectrum analyzer	Rohde & Schwarz	FSV40	2024/10	2026/10
1055	Double-Ridged Waveguide Horn Antennas	ETS Lindgren	3116C	2024/02	2027/02
1057	Double Ridged Waveguide Horn Antenna	ETS Lindgren	3115	2023/05	2026/07
1065	Biconical Log antenna	ETS Lindgren	3142E	2025/02	2028/02
1108	Ethernet SNMP Thermometer- CR Room	HW Group	HWg-STE Plain	2025/10	2026/10
1111	Ethernet SNMP Thermometer- SAC	HW Group	HWg-STE Plain	2025/10	2026/10
1179	Semi anechoic Absorber Lined Chamber"	Frankonia	SAC 3 plus L	N/A	N/A
1314	EMC measurement Software	Rohde & Schwarz	EMC32	N/A	N/A
1461	Low Noise Preamplifier	BONN ELECKTRONIK	BLMA0118-2A	2024/06	2026/06

Appendix A: Test results

Appendix A Content

PRODUCT INFORMATION..... 12

DESCRIPTION OF TEST CONDITIONS..... 12

TEST A.1: ANTENNA REQUIRMENT 13

TEST A.2: RADIATED EMISSION 14

TEST A.3: 20 DB BANDWIDTH 23

TEST A.4: PERIODIC OPERATION..... 25

PRODUCT INFORMATION

The following information is provided by the client

Information	Description
Operating Frequency Band or Bands	UHF – Transmit – 315 MHz
Operating Voltage range	2.6 – 3.8 V DC
- Nominal Voltage	3 V DC
Antenna gain	-20 dBi
Type of Antenna	Integral – PCB trace loop antenna

DESCRIPTION OF TEST CONDITIONS

TEST CONDITIONS	DESCRIPTION
TC/01	<u>Power supply (V):</u> $V_{\text{nominal}} = 3\text{ V DC}$ <u>Channel Bandwidth:</u> 200 KHz <u>Test Frequency band / range:</u> Test frequencies: Lowest channel: 314.69 MHz Middle channel: 315.00 MHz Highest channel: 315.32 MHz

TEST A.1: ANTENNA REQUIREMENT

LIMITS:	Product standard:	FCC § Section 15.203 and RSS-Gen
	Test standard:	ANSI C63.10-2020/Cor1-2023+C63.10a-2024+Errata to C63.10a-2024

LIMITS

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

RSS-Gen

According to the antenna requirements of RSS-Gen, the equipment shall use either a permanently attached antenna or a unique antenna connector, such that no antenna other than that furnished or approved by the responsible party can be used with the device.

Result:

The EUT has an integral antenna; it is permanently attached to the PCB. The maximum gain is -20 dBi.

Verdict:

PASS

TEST A.2: RADIATED EMISSION

LIMITS:	Product standard:	Part 15 Subpart C §15.205, §15.209, 15.35(c), §15.231 (b) and RSS-210 Annex A.1.3
	Test standard:	ANSI C63.10-2024 Section 6.3, 6.4, 6.5, 6.6, 10.2 and 10.3

LIMITS

Part 15 Subpart C §15.231 (b)

The field strength of emissions from intentional radiators operated under this section shall not exceed the following:

Frequency (MHz)	Field strength of fundamental (microvolts/meter)	Field strength of spurious emissions (microvolts/meter)
40.66-40.70	2250	225
70-130	1250	125
130-174	¹ 1,250 to 3,750	¹ 125 to 375
174-260	3750	375
260-470	¹ 3,750 to 12,500	¹ 375 to 1250
Above 470	12,500	1,250

¹ Linear interpolations.

LIMITS

RSS-210 Annex A.1.2

A.1.3 Field strength limits

The device shall meet the following field strength requirements:

- The field strength of emissions from momentarily operated intentional radiators shall not exceed the limits in table A1, based on the average value of the measured emissions. The requirements of the "Pulsed Operation" section of RSS-Gen apply for averaging pulsed emissions and limiting peak emissions.

Alternatively, compliance with the limits in table A1 may be based on the use of a CISPR quasi-peak detector.

- Unwanted emissions shall be 10 times below the fundamental emissions field strength limits in table A1 or comply with the limits specified in RSS-Gen, whichever is less stringent.

Fundamental frequency (MHz), excluding restricted frequency bands specified in RSS-Gen	Field strength of the fundamental emissions (μV/m at 3 m)
70-130	1250
130-174	1250 to 3750
174-260	3750
260-470	3750 to 12500
Above 470	12500

*Linear interpolation with frequency, f, in MHz:

- for 130-174 MHz: field strength ($\mu\text{V/m}$) = $(56.81818 \times f) - 6136.3636$
- for 260-470 MHz: field strength ($\mu\text{V/m}$) = $(41.6667 \times f) - 7083.3333$

**Frequency bands 225-328.6 MHz and 335.4-399.9 MHz are designated for use by the Government of Canada. Manufacturers should be aware of possible harmful interference and degradation of their license-exempt radio equipment in these frequency bands.

All radiated tests were performed in a semi-anechoic chamber. The measurement antenna is situated at 3 m for the frequency range 30-960 MHz (Bi-log antenna) and at 1 m for the frequency range of 960 MHz - 6 GHz (Double ridge horn antenna).

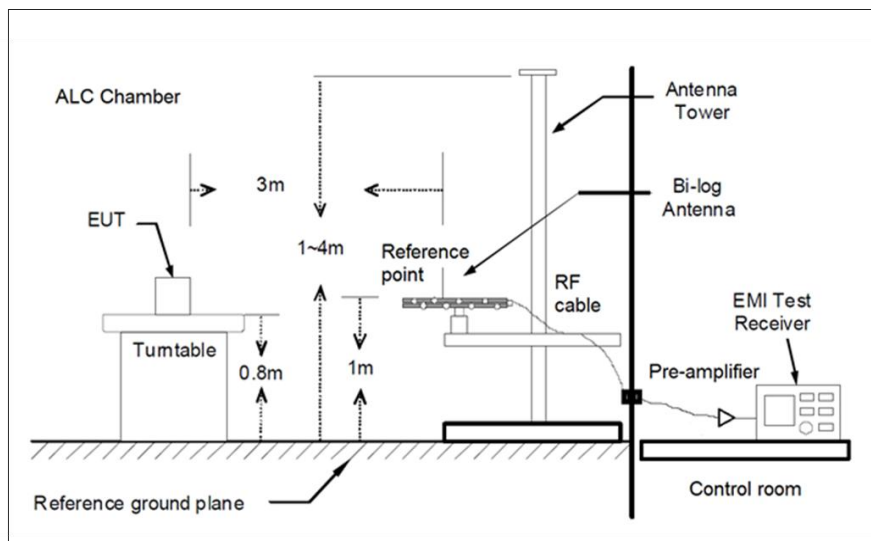
For radiated emissions in the range 960 MHz - 40 GHz that is performed at a distance closer than the specified distance, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

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 was varied from 1 to 4 meters to find the maximum radiated emission.

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

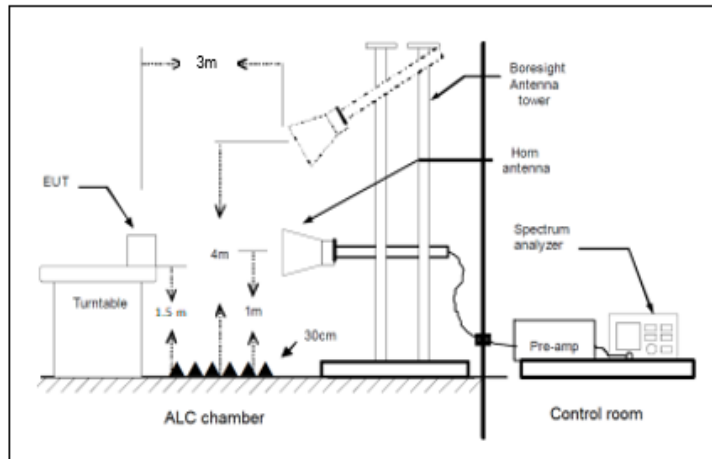
The field strength is calculated by adding correction factor to the measured level from the spectrum analyzer. This correction factor includes antenna factor, cable loss and pre-amplifiers gain

Radiated measurements Setup 30 MHz to 1 GHz



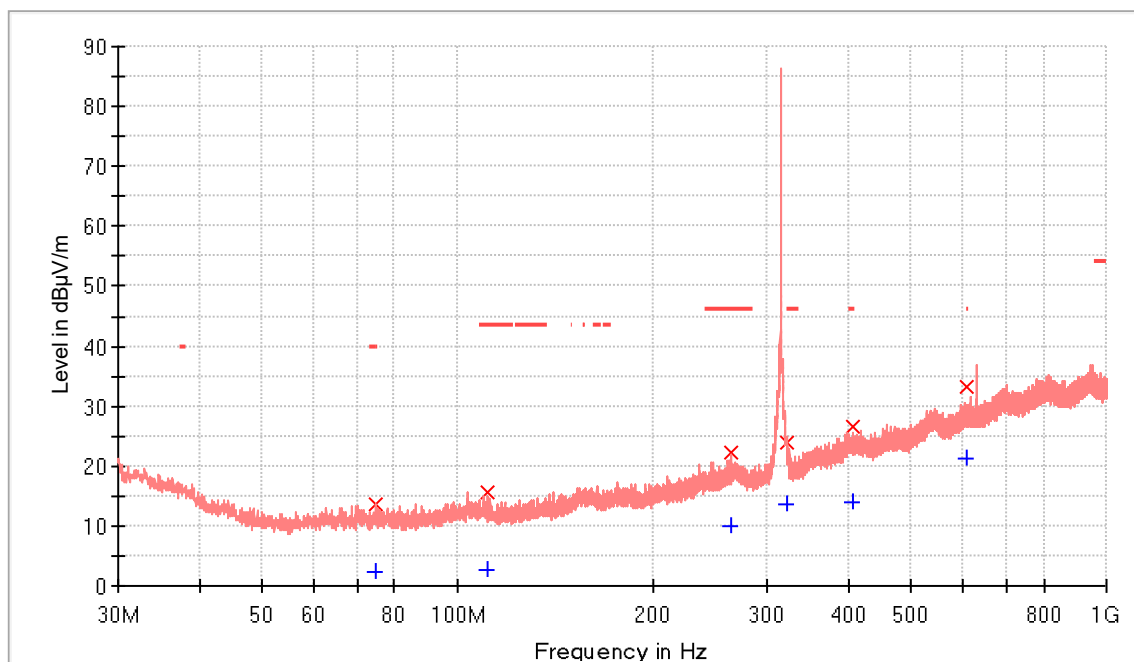
TEST SETUP:

Radiated measurements setup $f < 6$ GHz



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC/01
TEST RESULTS	PASS
FREQUENCY RANGE	30 - 1 GHz

Low Channel:



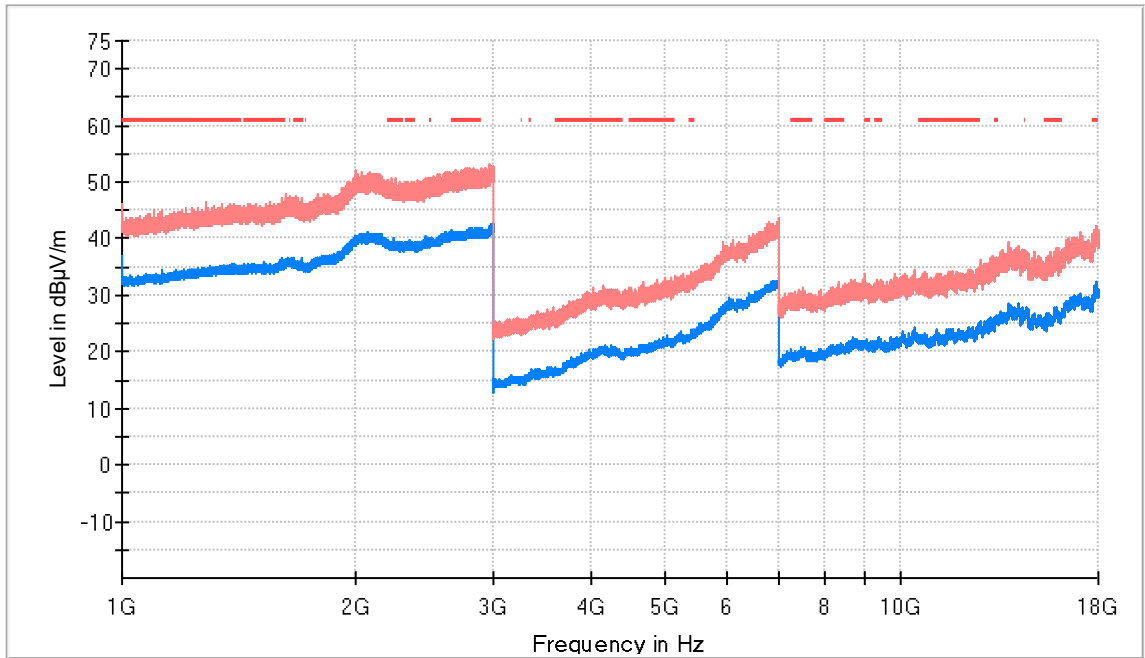
- × MaxPeak-PK+ (Single)
- PK+_MAX H
- TX limits to Spurious Emission FCC15.209 (30MHz to 1GHz) Restricted Bands QPK Limit
- + QuasiPeak-QPK (Single)

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Pol	Margin – QPK+ (dB)	Limit – QPK+ (dBµV/m)	Comment
74.911000	13.8	2.4	V	37.6	40.0	
111.480000	15.6	2.5	H	41.0	43.5	
263.721500	22.1	10.0	V	36.0	46.0	
314.695000	86.2	--	--	--	--	Fundamental
322.309500	24.0	13.8	V	32.2	46.0	
405.390000	26.7	14.1	V	31.9	46.0	
609.041500	33.2	21.1	H	24.9	46.0	

FREQUENCY RANGE

1 GHz – 18 GHz

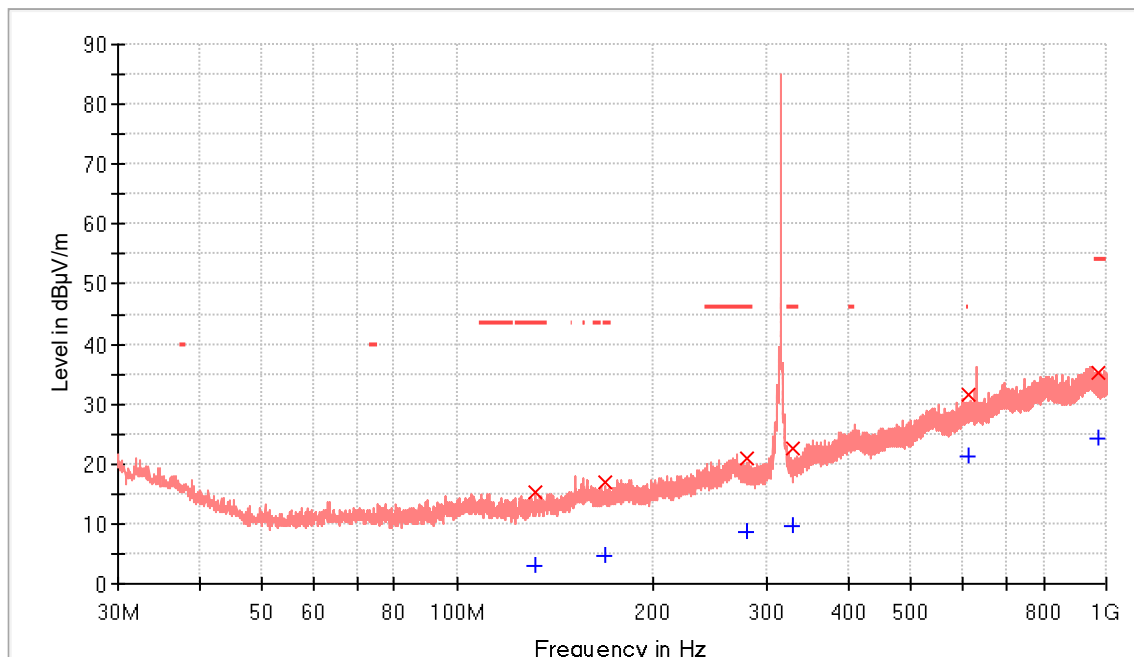
RF_FCC_15.247_E Field_1GHz_18GHz



— AVG_MAXH
 — PK+_MAXH
 — TX limits to Spurious Emission FCC15.231 Restricted Bands PK Limit

Frequency (MHz)	PK+_MAXH (dBµV/m)	AVG_MAXH (dBµV/m)	Pol	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
2792.500000	52.6	40.5	V	8.2	60.8
15955.781250	38.5	27.0	V	22.3	60.8

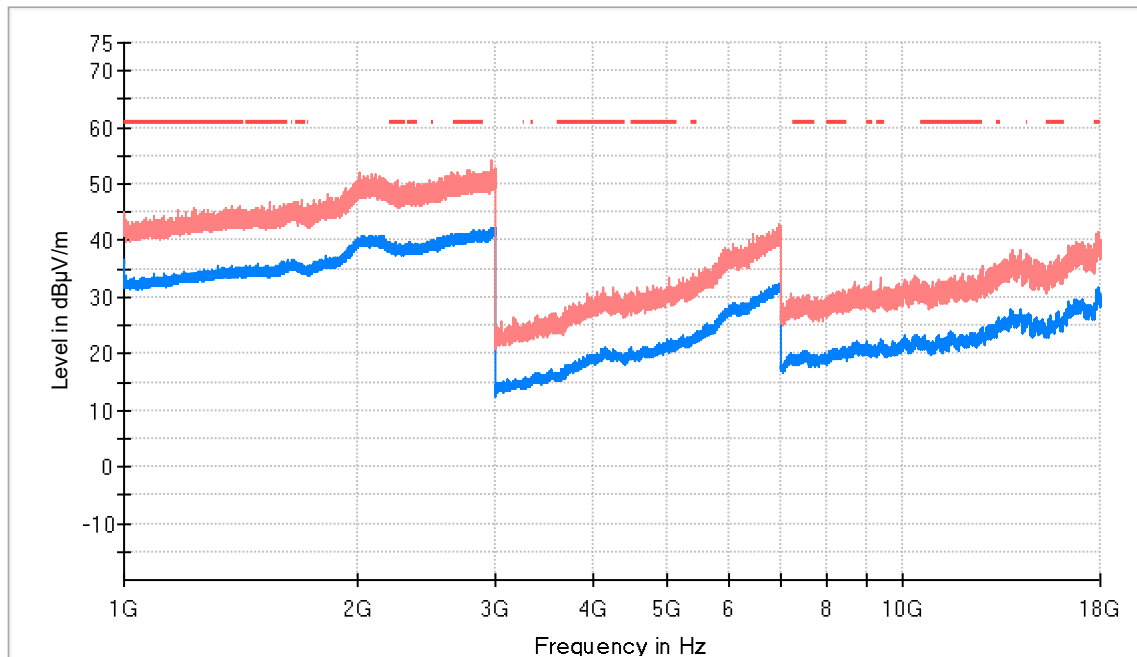
Mid Channel:



- PK+_MAXH
- x MaxPeak-PK+ (Single)
- TX limits to Spurious Emission FCC15.209 (30MHz to 1GHz) Restricted Bands QPK Limit
- + QuasiPeak-QPK (Single)

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Pol	Margin – QPK+ (dB)	Limit – QPK+ (dBµV/m)	Comment
132.044000	15.4	3.0	V	40.5	43.5	
168.855500	17.1	4.5	V	39.0	43.5	
278.417000	21.1	8.7	V	37.4	46.0	
314.986000	84.9	--	--	--	--	Fundamental
328.663000	22.6	9.5	V	36.5	46.0	
613.552000	31.4	21.2	V	24.8	46.0	
974.731500	35.2	24.2	V	29.8	54.0	

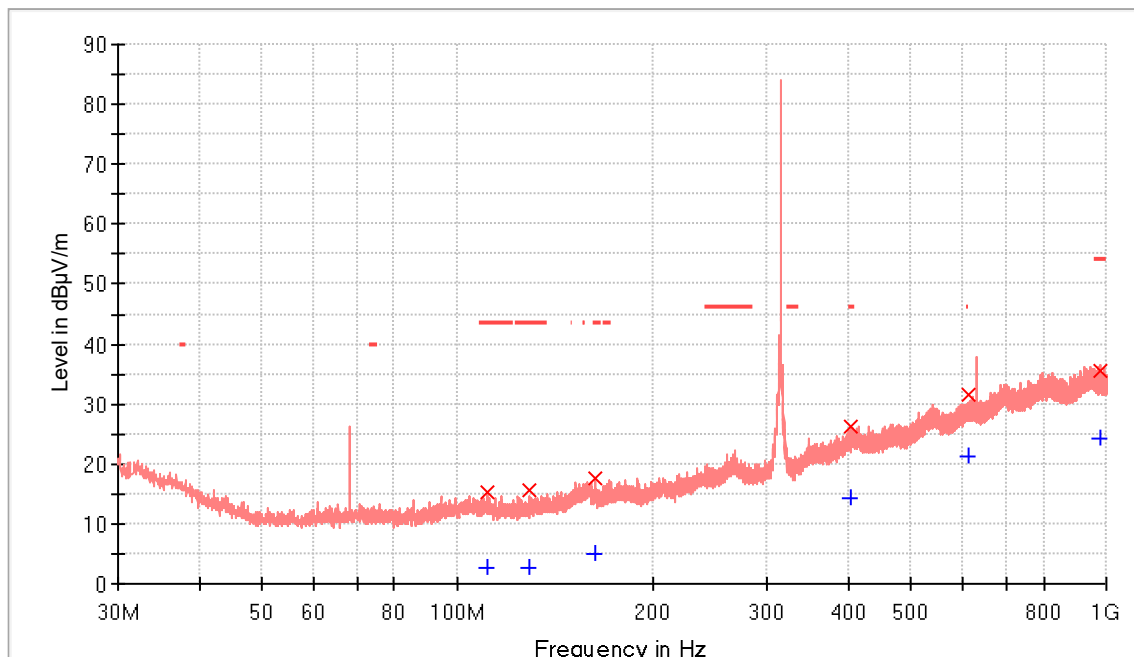
RF_FCC_15.247_E Field_1GHz_18GHz



— AVG_MAXH
— PK+_MAXH
--- TX limits to Spurious Emission FCC15.231 Restricted Bands PK Limit

Frequency (MHz)	PK+_MAXH (dBµV/m)	AVG_MAXH (dBµV/m)	Pol	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
2774.000000	52.6	40.2	V	8.2	60.8
17875.781250	41.5	30.9	H	19.3	60.8

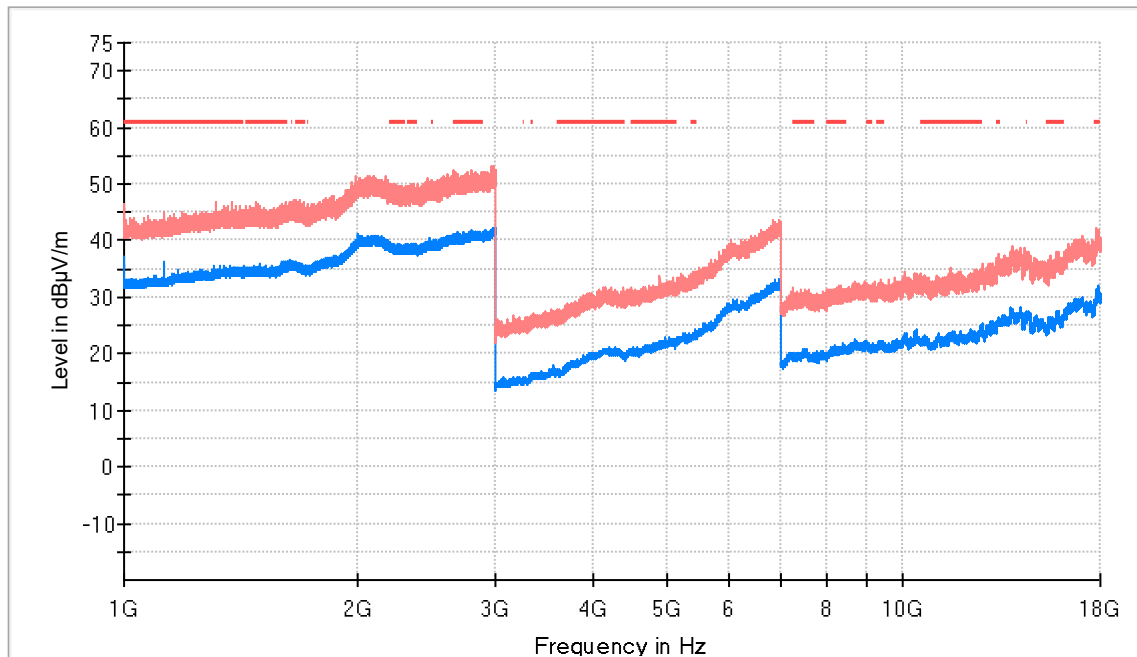
High Channel:



- PK+_MAXH
- × MaxPeak-PK+ (Single)
- TX limits to Spurious Emission FCC15.209 (30MHz to 1GHz) Restricted Bands QPK Limit
- + QuasiPeak-QPK (Single)

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Pol	Margin – QPK+ (dB)	Limit – QPK+ (dBµV/m)	Comment
111.383000	15.2	2.5	H	41.0	43.5	
128.794500	15.8	2.7	V	40.8	43.5	
162.793000	17.6	4.9	H	38.6	43.5	
315.325000	83.9	--	--	--	--	Fundamental
403.983500	26.3	14.3	H	31.7	46.0	
613.018500	31.4	21.2	H	24.8	46.0	
976.817000	35.6	24.2	H	29.8	54.0	

RF_FCC_15.247_E Field_1GHz_18GHz



AVG_MAXH
PK+_MAXH
TX limits to Spurious Emission FCC15.231 Restricted Bands PK Limit

Frequency (MHz)	PK+_MAXH (dBμV/m)	AVG_MAXH (dBμV/m)	Pol	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
2802.562500	52.3	40.9	H	8.5	60.8
17820.937500	42.1	31.3	H	18.7	60.8

TEST A.3: 20 DB BANDWIDTH

LIMITS:

Product standard:	Part 15 Subpart C § 15.231 (c) and RSS 210 Annex A.1.4
Test standard:	ANSI C63.10-2024 Section 6.6, 10.3.7 and 10.3.10

LIMITS

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

RSS-210: Annex A.1.4

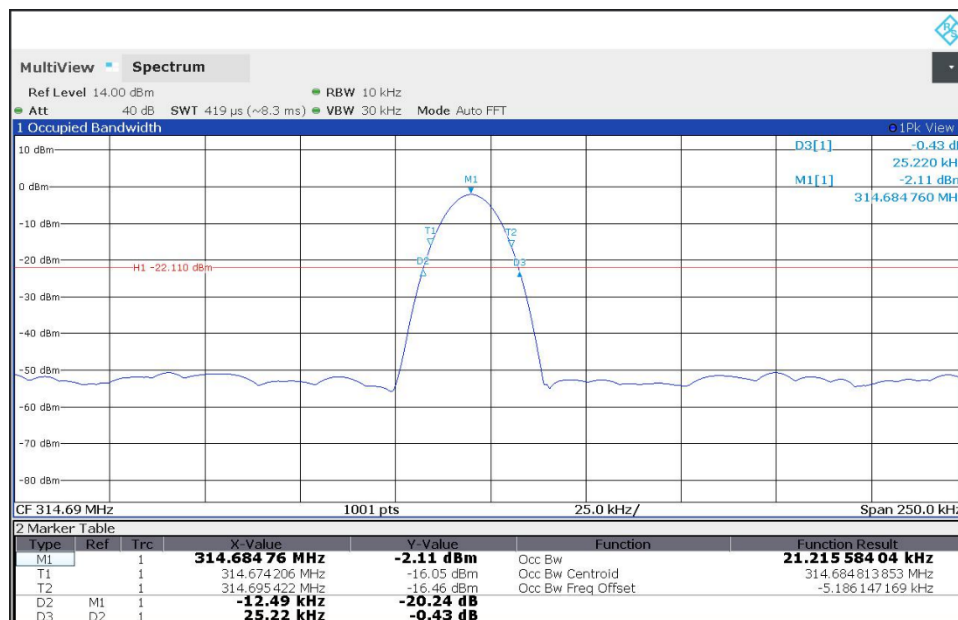
The occupied bandwidth of momentarily operated devices shall be less than or equal to 0.25% of the centre frequency for devices operating between 70 MHz and 900 MHz. For devices operating above 900 MHz, the occupied bandwidth shall be less than or equal to 0.5% of the centre frequency.

Note: 20 dB Bandwidth Limit = 0.25 % centre frequency = 0.25 * 315 = 787.5 KHz

Results:

Low Channel:

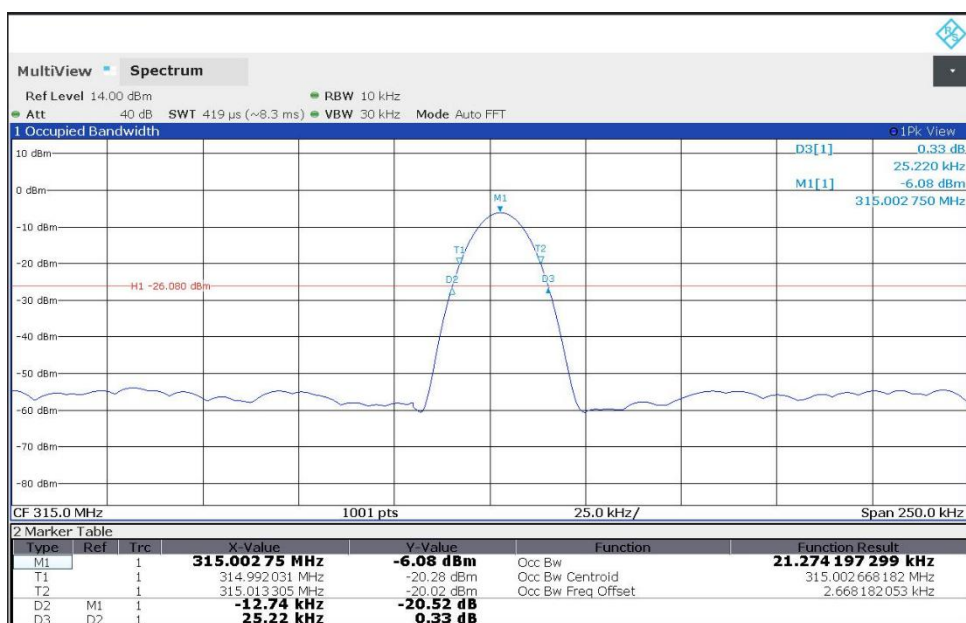
Frequency (MHz)	20 dB Bandwidth (KHz)	Limit (KHz)	99% OBW (KHz)
314.69	25.22	787.5	21.21



TEST CONT.

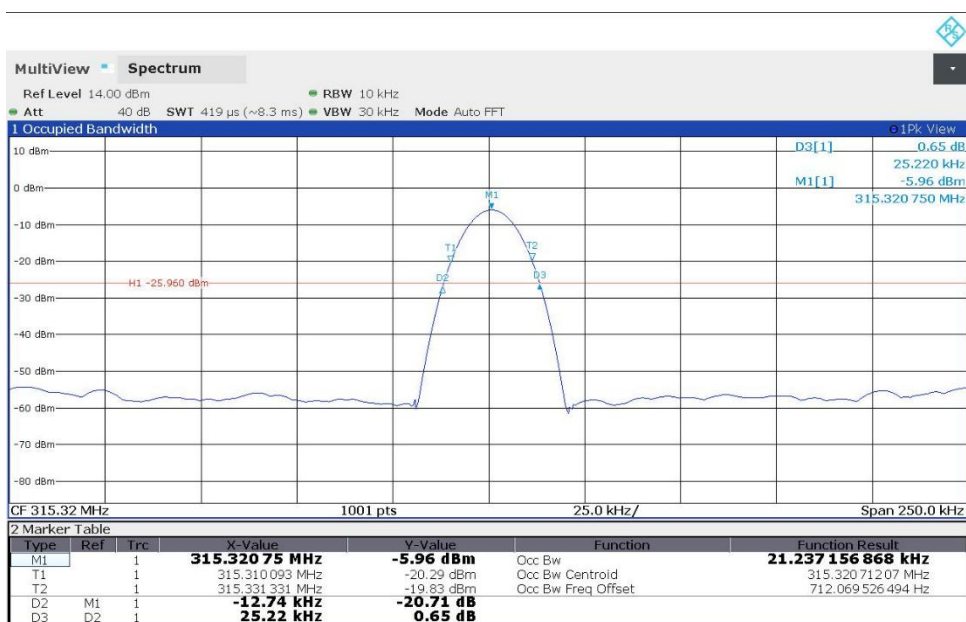
Mid Channel:

Frequency (MHz)	20 dB Bandwidth (KHz)	Limit (KHz)	99% OBW (KHz)
315	25.22	787.5	21.27



High Channel:

Frequency (MHz)	20 dB Bandwidth (KHz)	Limit (KHz)	99% OBW (KHz)
315.32	25.22	787.5	21.23



TEST A.4: PERIODIC OPERATION

LIMITS:

Product standard:	Part 15 Subpart F § 15.231 (a) and RSS 210 Annex A.1.2
Test standard:	ANSI C63.10-2024

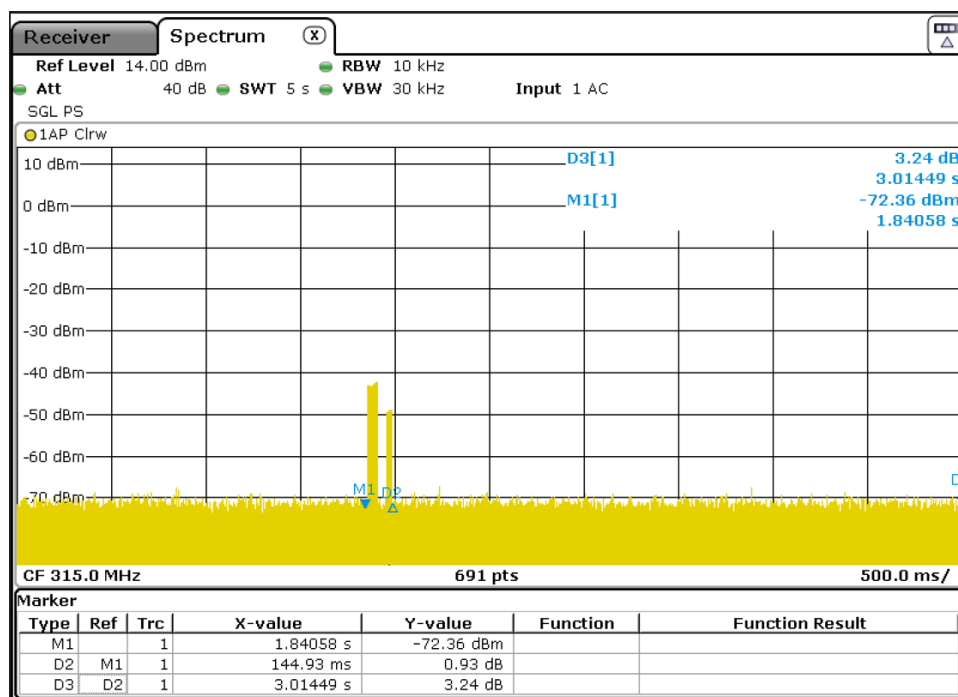
LIMITS

FCC 15.231 (a)(1)

A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

RSS Annex A.1.2:

A manually operated transmitter shall be equipped with a push-to-operate switch and be under manual control at all times during transmission. When released, the transmitter shall cease transmission within no more than 5 seconds of being released.



Frequency (MHz)	Measurement result (sec):	Limit (sec)	Test Result
315	0.144	5	P

M1: Transmitter button pressed.

D2: Transmitter button released, and the transmission stopped immediately.