Nemko Test Report:	128252-1TRFWL
Applicant:	BelAir Networks Inc. 603 March Road, Ottawa, ON K2K 2M5
Apparatus:	2.3 GHz WiFi Radio Module
FCC ID:	RAR20100520
In Accordance With:	FCC Part 27 Miscellaneous Wireless Communications Services
Authorized By:	Sim Jagpal, Production Manager
Date:	June 30, 2009
Total Number of Pages:	44

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Section 1 : Report Summary

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 27. Conducted measurements were performed in accordance with TIA-603-B-2002. Radiated tests were conducted in accordance with ANSI C63.4-2003.

The assessment summary is as follows:

Apparatus Assessed:	2.3 GHz WiFi Radio Module
Specification:	FCC Part 27
Compliance Status:	Complies
Exclusions:	None
Non-compliances:	None
Report Release History:	Original Release
Test Location:	Nemko Canada Inc. 303 River Road Ottawa, Ontario K1V 1H2
Registration Number:	176392 (3 m Semi-Anechoic Chamber)
Tests Performed By:	Andrey Adelberg
Test Dates:	May 26, 2009 to June 8, 2009

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025. All results contain in this report are within Nemko Canada's ISO/IEC 17025 accreditation.

Section 2 : Equipment Under Test

2.1 Identification of Equipment Under Test (EUT)

The following information identifies the EUT under test:

Type of Equipment:	2.3 GHz WiFi module
Brand Name:	BelAir
Model Name or Number:	MaxR-520
Serial Number:	95MaxR520000030
Nemko Sample Number:	1
FCC ID:	RAR20100520
Date of Receipt:	May 22, 2009

2.2 Accessories

The following information identifies accessories used to exercise the EUT during testing:

Description:	Host Unit
Brand Name:	BelAir
Model Name or Number:	BelAir100T
Serial Number:	BELAF2398
Nemko Sample Number:	1
Connection Port:	PCI connection

Description:	Ethernet Hub
Brand Name:	Airlink
Model Name or Number:	ASW105/A4
Serial Number:	0526A4A20149
Nemko Sample Number:	2
Connection Port:	Ethernet

Description:	Laptop
Brand Name:	Toshiba
Model Name or Number:	Satellite A10 PSA10C-00REH
Serial Number:	63042093J
Nemko Sample Number:	3
Connection Port:	Ethernet connection through Ethernet Hub

2.3 EUT Description

The EUT is a WiFi module designed to operate in the 2305–2320 MHz and 2345–2360 MHz bands.

2.4 Technical Specifications of the EUT

Operating Band: 2305–2320 MHz and 2345–2360 MHz

Operating Frequency:

5 MHz BW:
A1: 2307.5 MHz
B1: 2312.5 MHz
A2: 2352.5 MHz
B2: 2357.5 MHz
2.5 MHz BW:
A1L: 2306.25 MHz
A1U: 2308.75 MHz
B1L: 2311.25 MHz
B1U: 2313.75 MHz
C: 2316.25 MHz
D: 2348.75 MHz
A2L: 2351.25 MHz
A2U: 2353.75 MHz
B2L: 2356.25 MHz
B2U: 2358.75 MHz

Modulation: 802.11g (OFDM)

Occupied Bandwidth:

5 MHz channel: 4.215 MHz
2.5 MHz channel: 2.147 MHz

Emission Designator:

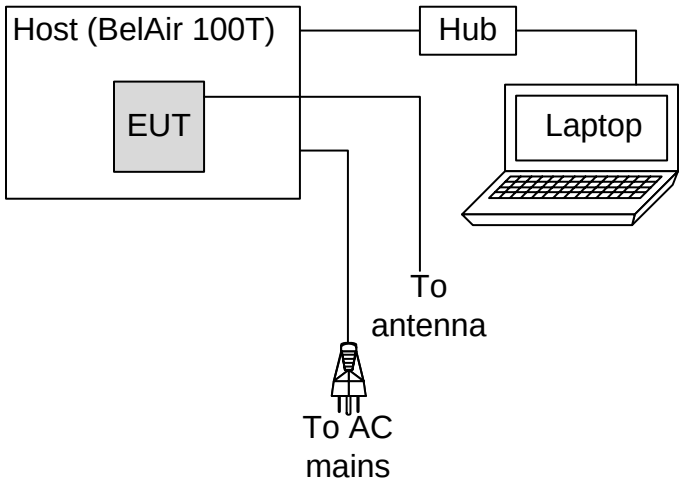
5 MHz channel: 4M22W7D
2.5 MHz channel: 2M15W7D

Antenna Data:

BelAir BMHG50002-A, MT-342018/SV, 8 dBi
MTi MT-344026/N, 15.5 dBi
Maxrad, MFBW23008, 8 dBi
BNCKG0071, 3 dBi

Power Supply Requirements: 100–230 VAC, 50–60 Hz

2.5 EUT Setup diagram



2.6 Operation of the EUT during testing

The EUT was controlled to transmit at desired frequency from laptop.

2.7 Modifications incorporated in the EUT

There were no modifications performed to the EUT during this assessment.

Section 3 : Test Conditions

3.1 Specifications

The apparatus was assessed against the following specifications:

FCC Part 2 Subpart J, Equipment Authorization Procedures
FCC Part 27 Miscellaneous Wireless Communications Services

3.2 Deviations From Laboratory Test Procedures

No deviations were made from laboratory test procedures.

3.3 Test Environment

All tests were performed under the following environmental conditions:

Temperature range	:	15–30 °C
Humidity range	:	20–75 %
Pressure range	:	86–106 kPa
Power supply range	:	±5 % of rated voltages

3.4 Measurement Uncertainty

Nemko Canada measurement uncertainty has been calculated using guidance of UKAS LAB 34:2003 and TIA-603-B Nov 7, 2002. All calculations have been performed to provide a confidence level of 95 % and can be found in Nemko Canada document MU-003.

3.5 Test Equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Cal. Date	Next Cal.
3 m EMI Test Chamber	TDK	SAC-3	FA002047	May 06/09	May 06/10
Bilog	Sunol	JB3	FA002108	Jan. 27/09	Jan. 27/10
Flush Mount Turntable	Sunol	FM2022	FA002082	NCR	NCR
Controller	Sunol	SC104V	FA002060	NCR	NCR
Mast	Sunol	TLT2	FA002061	NCR	NCR
International Power Supply	California Inst.	3001i	FA001021	Jan. 13/09	Jan. 13/10
Receiver/Spectrum Analyzer	Rohde & Schwarz	ESU 26	FA002043	Dec. 16/08	Dec. 16/09
Horn Antenna #2	EMCO	3115	FA000825	Jan. 21/09	Jan. 21/10
1 – 18 GHz Amplifier	JCA	JCA118-503	FA002091	Oct 2/08	Oct 2/09
Receiver/Spectrum Analyzer	Rohde & Schwarz	ESU 40	FA002071	Nov. 25/08	Nov. 25/09
Horn 18 – 26.5 GHz	Electro-Metrics	SH-50/60-1	FA000479	COU	COU
18.0 – 26.0 GHz Amplifier	NARDA	BBS-1826N612	FA001550	COU	COU
Frequency Counter	HP	5352B	FA001915	Jan 08/09	Jan 08/10
Temperature Chamber	Thermotron	SM-16C	FA001030	NCR	NCR
Multimeter	Fluke	16	FA001831	Jan 13/09	Jan 13/10
Air probe	Fluke	None	FA001248	NCR	NCR
Attenuator	Narda	776B-20	FA001153	COU	COU

COU – Calibrate on Use
NCR – No Calibration Required

Section 4 : Results Summary

This section contains the following:

FCC Part 27 : Test Results

The column headed 'Required' indicates whether the associated clauses were invoked for the apparatus under test. The following abbreviations are used:

N No : not applicable / not relevant.

Y Yes : Mandatory i.e. the apparatus shall conform to these tests.

N/T Not Tested, mandatory but not assessed. (See Report Summary)

4.1 FCC Part 27 : Test Results

Clause	Test Method	Test Description	Required	Result
27.50(a)	2.1046	Equivalent isotropically radiated power	Y	PASS
27.53(a)	2.1049	Occupied bandwidth	Y	PASS
27.53(a)	2.1051	Spurious emissions at the antenna terminal	Y	PASS
27.53(a)	2.1053	Field strength of spurious radiation	Y	PASS
27.54	2.1055	Frequency stability	Y	PASS

Appendix A : Test Results

Clause 27.50(a) Equivalent Isotropically Radiated Power

(a) The following power limits apply to the 2305–2320 MHz and 2345–2360 MHz bands:

1) Fixed, land, and radiolocation land stations transmitting are limited to 2000 watts peak equivalent isotropically radiated power (EIRP).

Test Results: Pass

For 8 dBi antennas:

Channel	Peak Power dBm	Average Power dBm	Antenna Gain dBi	Peak EIRP dBm	Average EIRP dBm	Peak Limit dBm	Margin dB
A1	19.70	13.37	8.00	27.70	21.37	63.00	35.30
B1	20.01	13.56	8.00	28.01	21.56	63.00	34.99
A2	21.05	14.53	8.00	29.05	22.53	63.00	33.95
B2	23.44	16.96	8.00	31.44	24.96	63.00	31.56
A1L	19.75	12.55	8.00	27.75	20.55	63.00	35.25
B1L	21.21	13.89	8.00	29.21	21.89	63.00	33.79
C	18.67	11.37	8.00	26.67	19.37	63.00	36.33
D	21.12	13.75	8.00	29.12	21.75	63.00	33.88
A2U	22.58	15.22	8.00	30.58	23.22	63.00	32.42
B2U	23.12	15.75	8.00	31.12	23.75	63.00	31.88

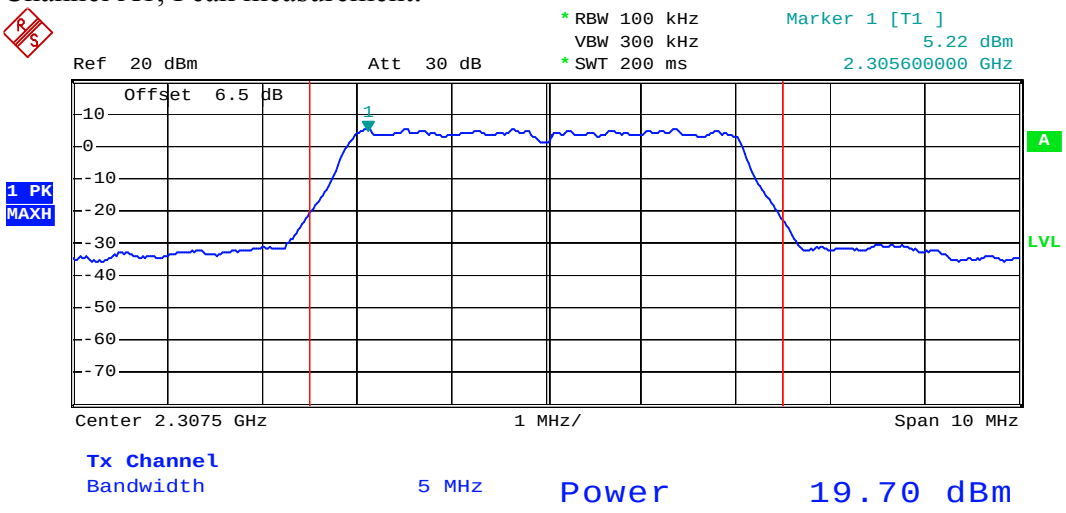
For 15.5 dBi antenna:

Channel	Peak Power dBm	Average Power dBm	Antenna Gain dBi	Peak EIRP dBm	Average EIRP dBm	Peak Limit dBm	Margin dB
A1	19.70	13.37	15.50	35.20	28.87	63.00	27.80
B1	20.01	13.56	15.50	35.51	29.06	63.00	27.49
A2	21.05	14.53	15.50	36.55	30.03	63.00	26.45
B2	23.44	16.96	15.50	38.94	32.46	63.00	24.06
A1L	19.75	12.55	15.50	35.25	28.05	63.00	27.75
B1L	21.21	13.89	15.50	36.71	29.39	63.00	26.29
C	18.67	11.37	15.50	34.17	26.87	63.00	28.83
D	21.12	13.75	15.50	36.62	29.25	63.00	26.38
A2U	22.58	15.22	15.50	38.08	30.72	63.00	24.92
B2U	23.12	15.75	15.50	38.62	31.25	63.00	24.38

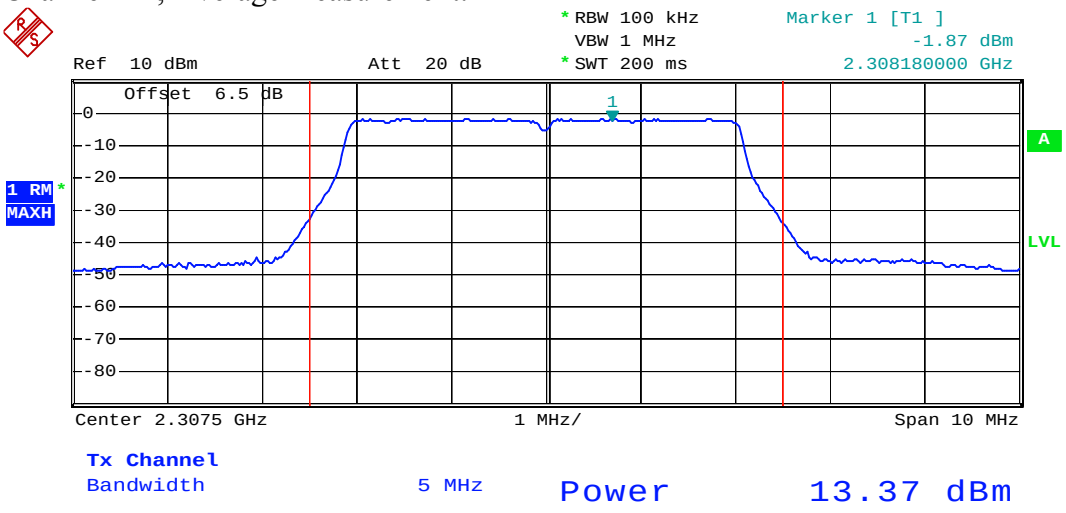
For 3 dBi antenna:

Channel	Peak Power dBm	Average Power dBm	Antenna Gain dBi	Peak EIRP dBm	Average EIRP dBm	Peak Limit dBm	Margin dB
A1	19.70	13.37	3.00	22.70	16.37	63.00	40.30
B1	20.01	13.56	3.00	23.01	16.56	63.00	39.99
A2	21.05	14.53	3.00	24.05	17.53	63.00	38.95
B2	23.44	16.96	3.00	26.44	19.96	63.00	36.56
A1L	19.75	12.55	3.00	22.75	15.55	63.00	40.25
B1L	21.21	13.89	3.00	24.21	16.89	63.00	38.79
C	18.67	11.37	3.00	21.67	14.37	63.00	41.33
D	21.12	13.75	3.00	24.12	16.75	63.00	38.88
A2U	22.58	15.22	3.00	25.58	18.22	63.00	37.42
B2U	23.12	15.75	3.00	26.12	18.75	63.00	36.88

Channel A1, Peak measurement:



Channel A1, Average measurement:



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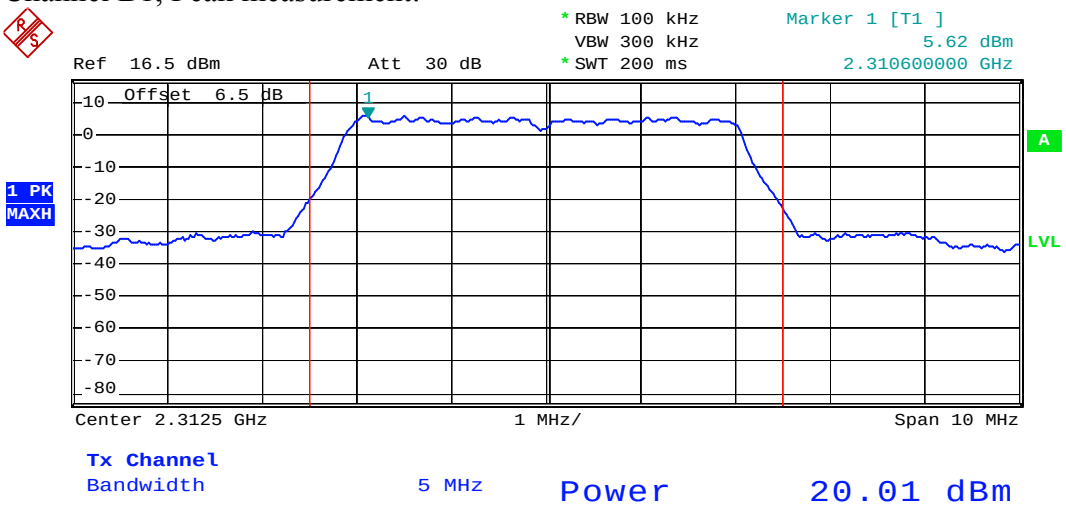

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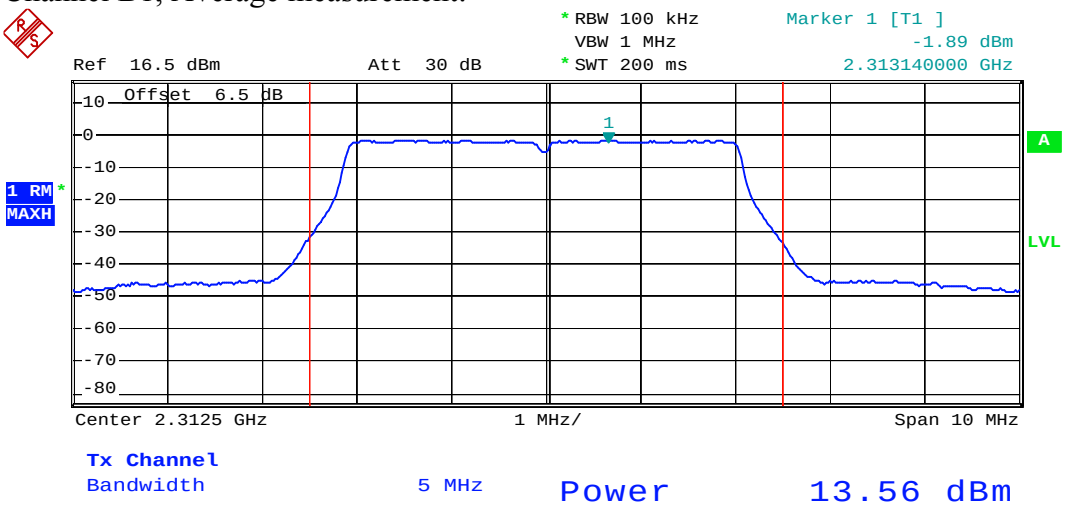

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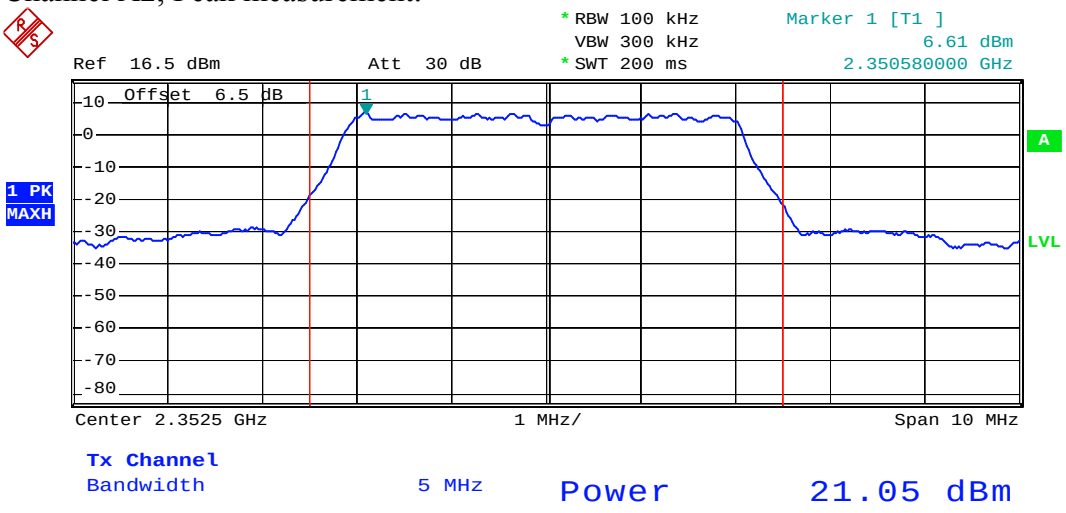

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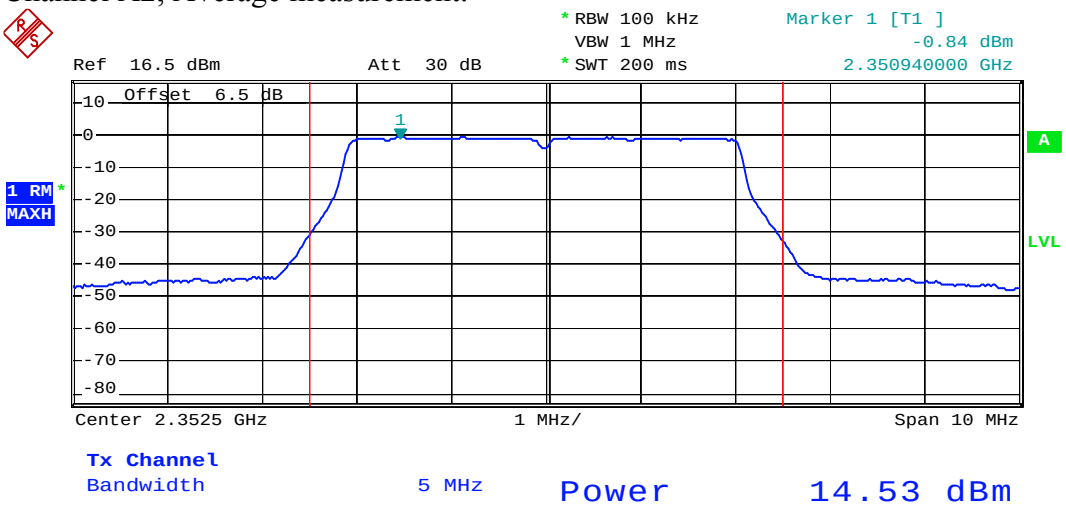

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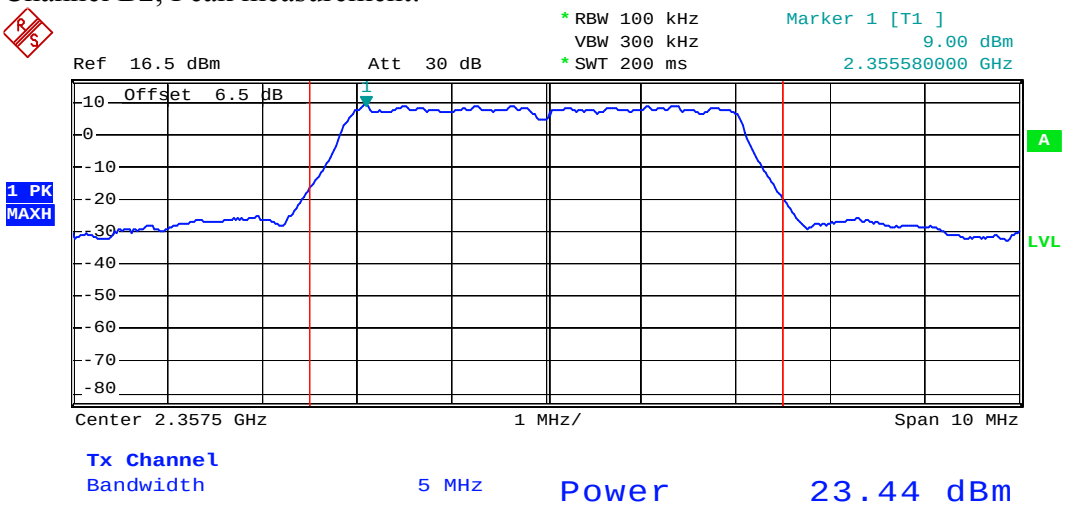

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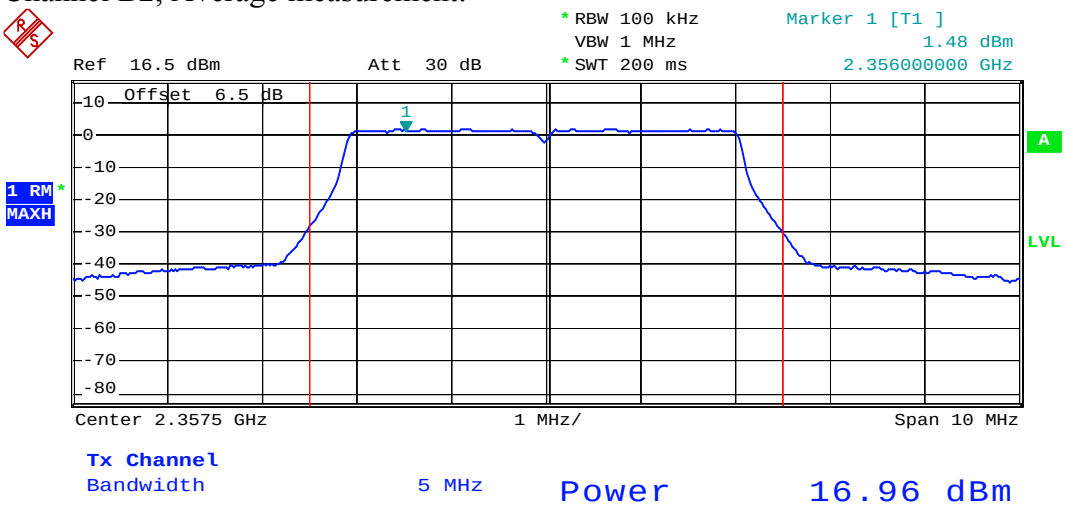

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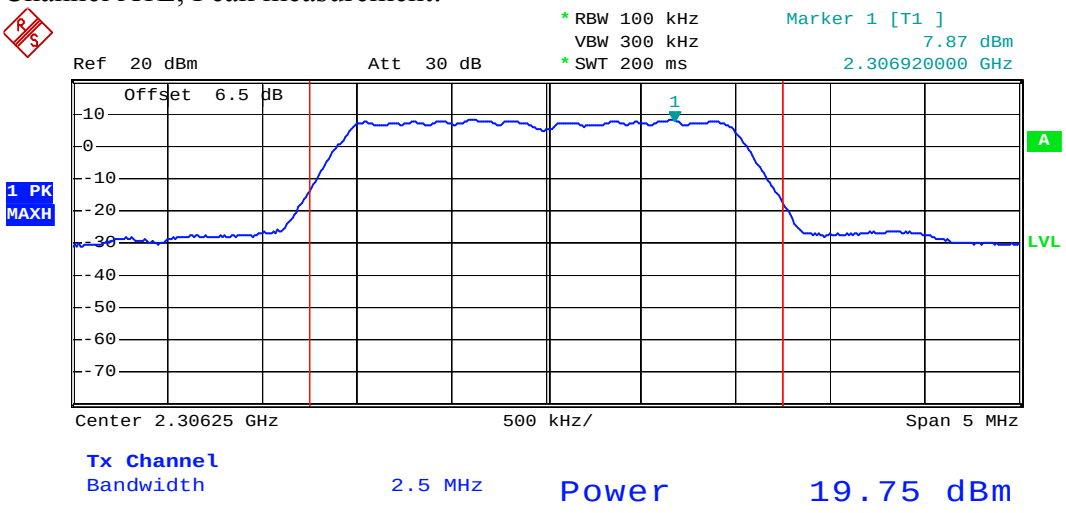

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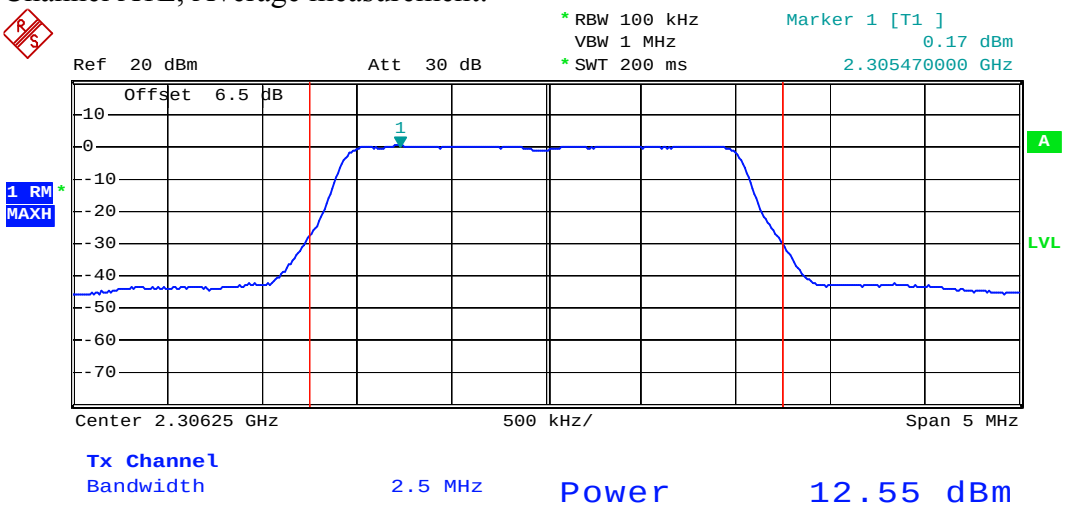

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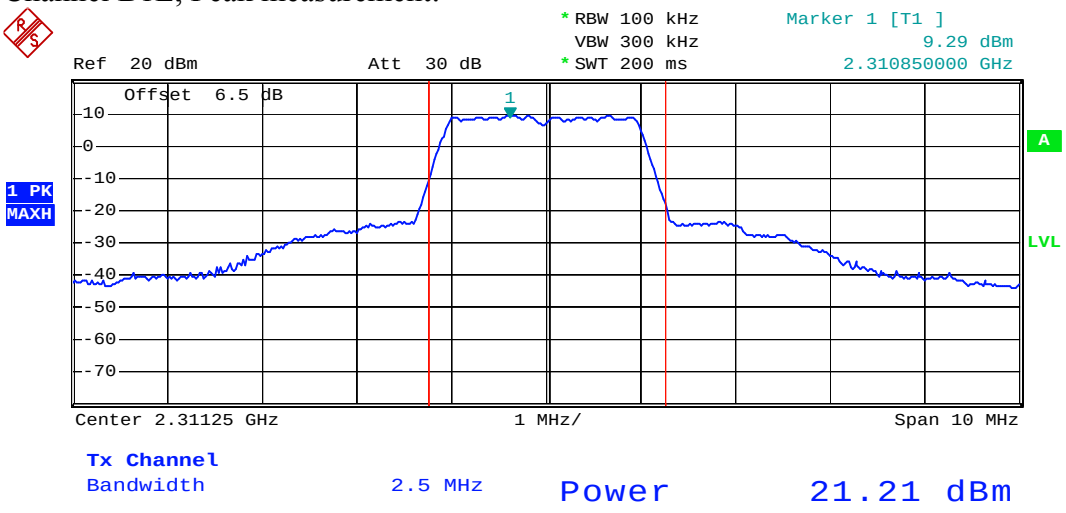

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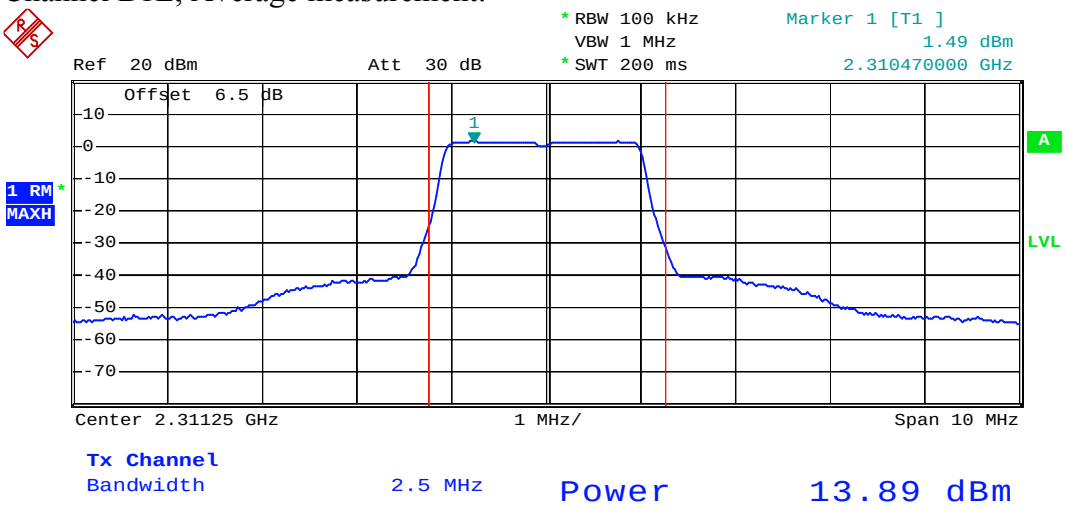
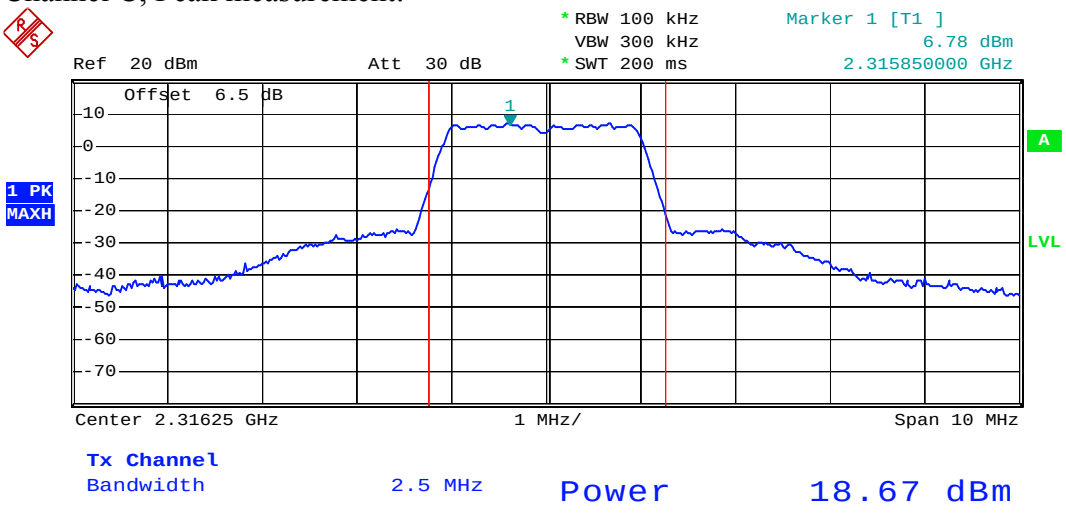


Channel C, Peak measurement:



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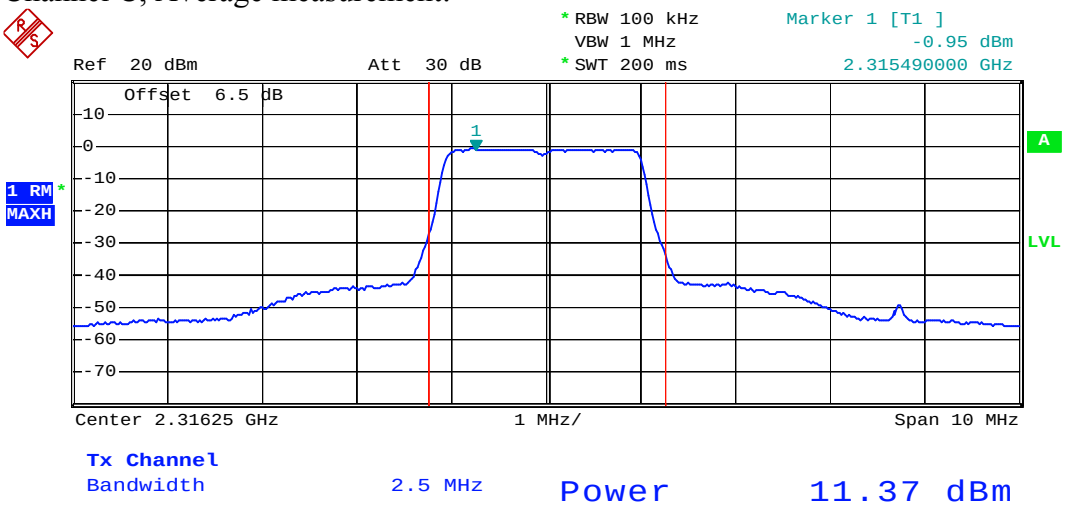

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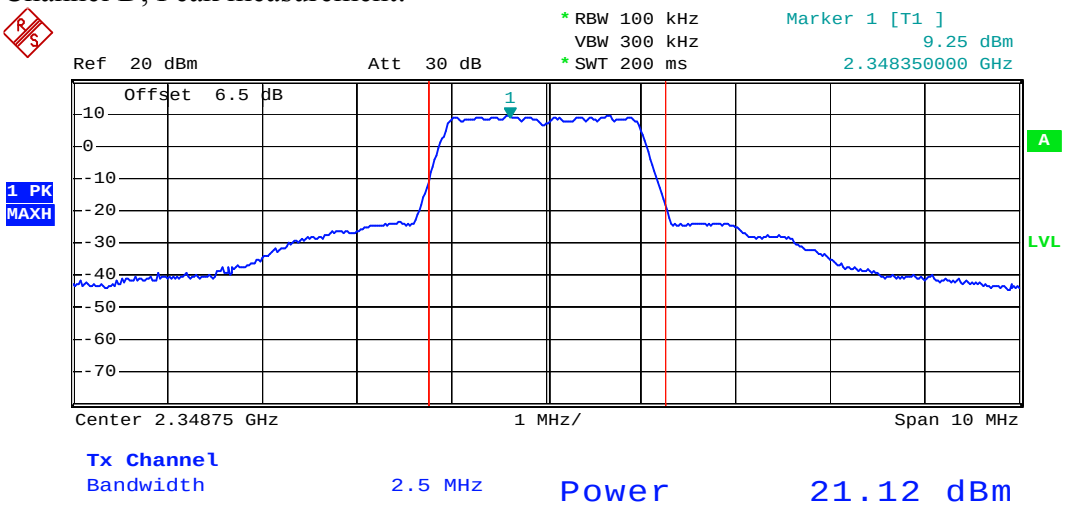

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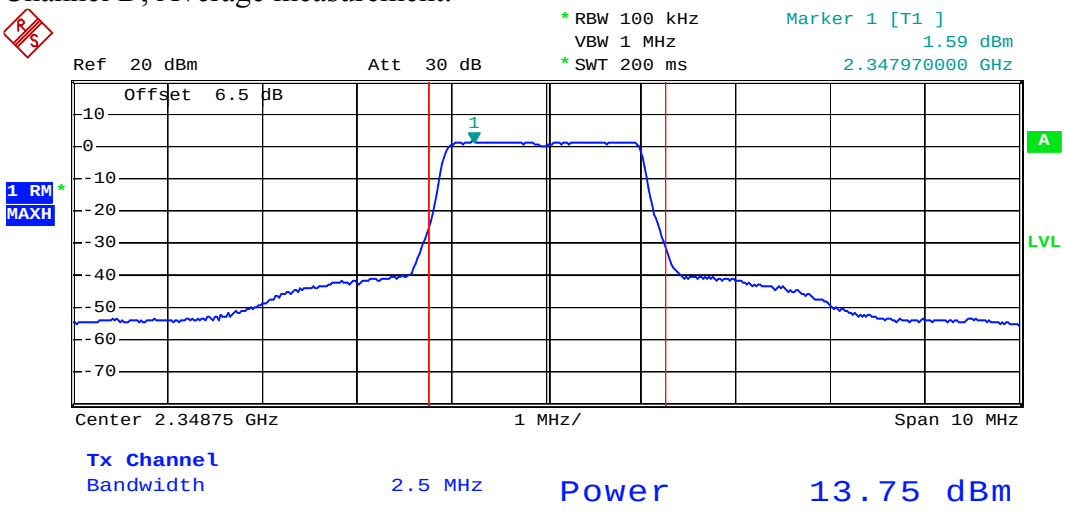

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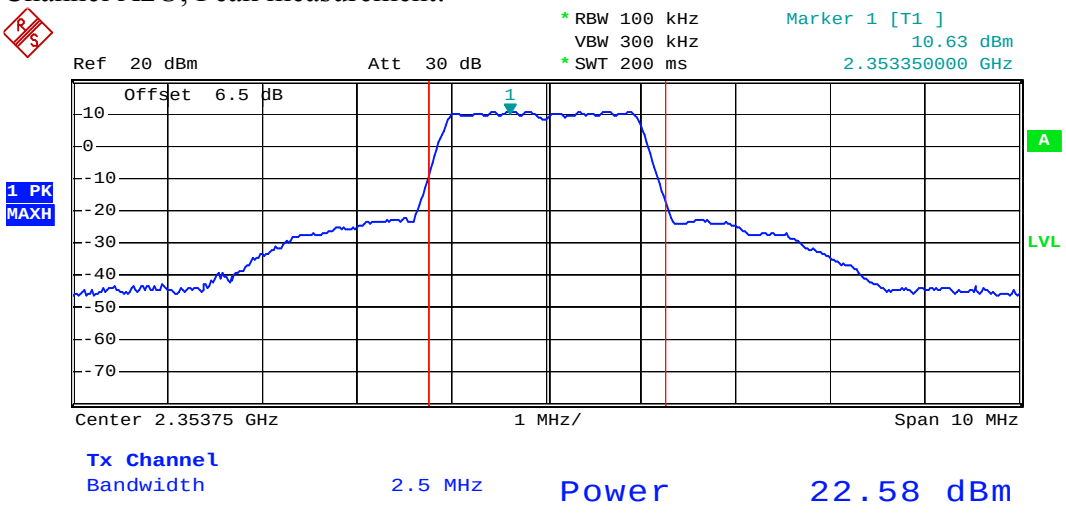

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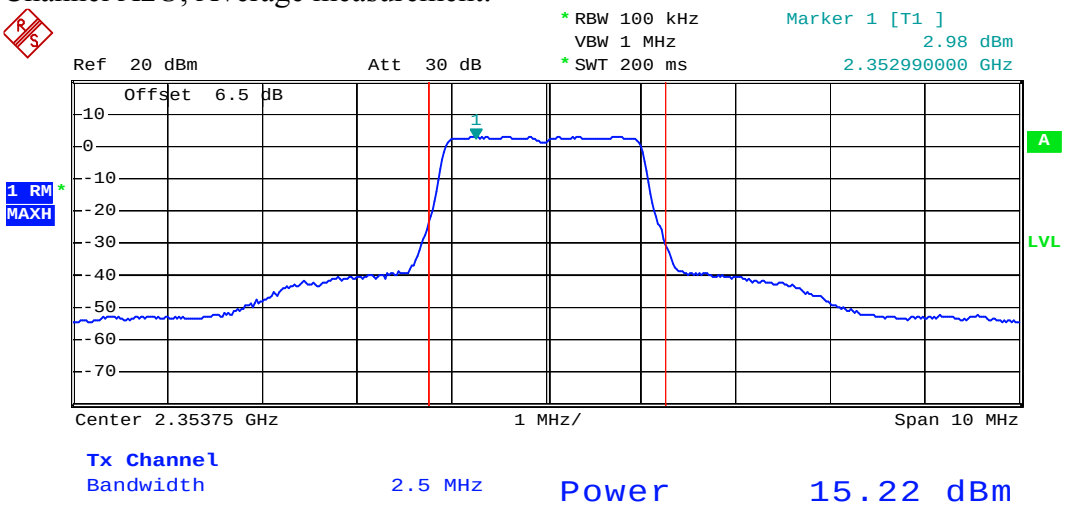

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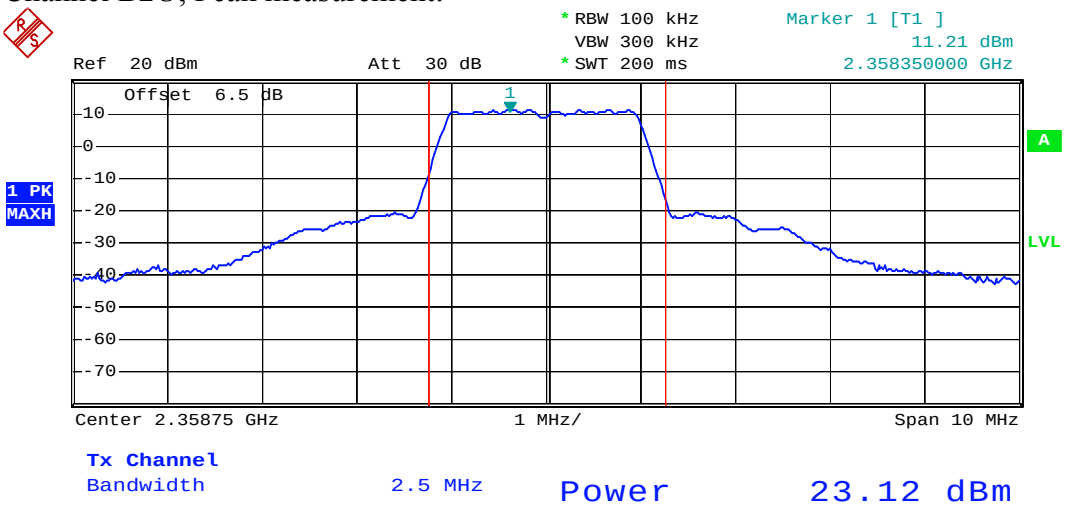

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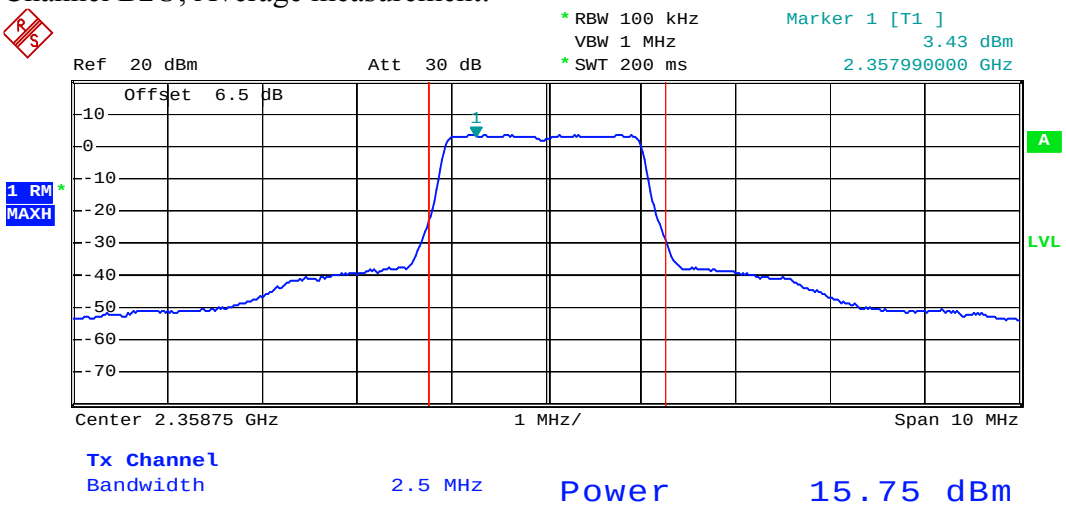


Clause 27.53(a)(4) Occupied Bandwidth

§ 2.1049. The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission

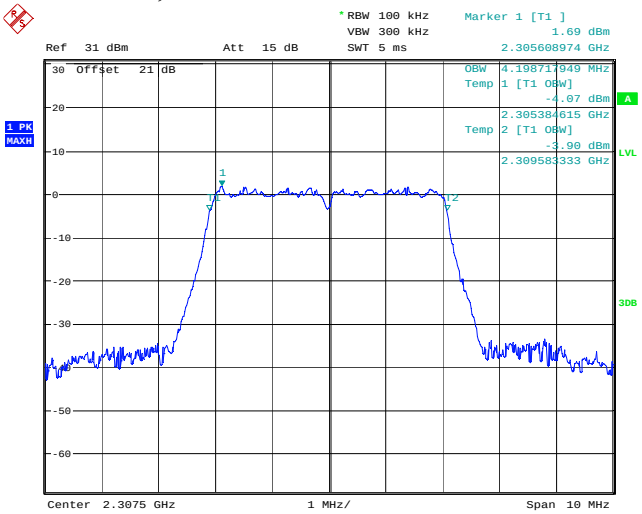
Test Results: Pass

Additional Observations:

99 % Bandwidth measurements:

Channel	99 % BW MHz
A1	4.198717949
B1	4.214743590
A2	4.214743590
B2	4.214743590
A1L	2.147435897
B1L	2.139426077
C	2.147435897
D	2.147435897
A2L	2.135448718
B2L	2.135448718

Channel A1, 99 % Bandwidth



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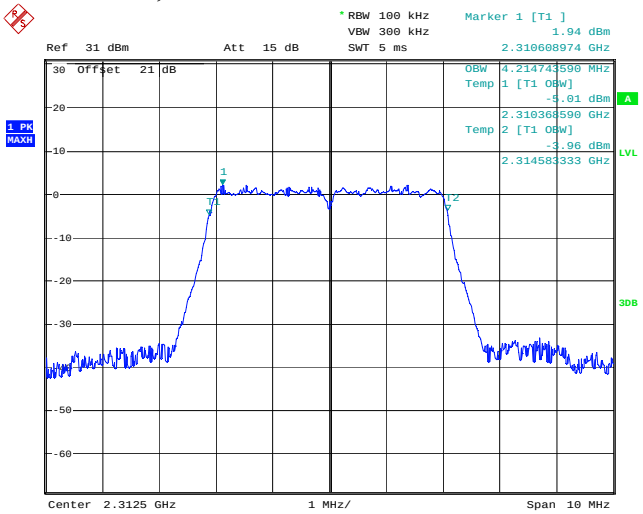
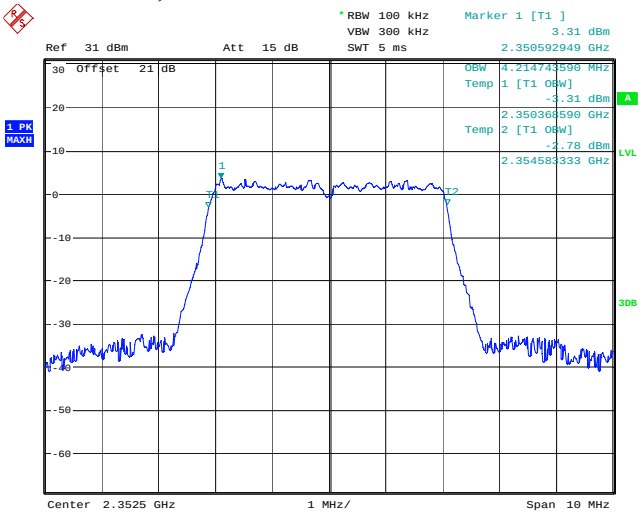


Channel A2, 99 % Bandwidth



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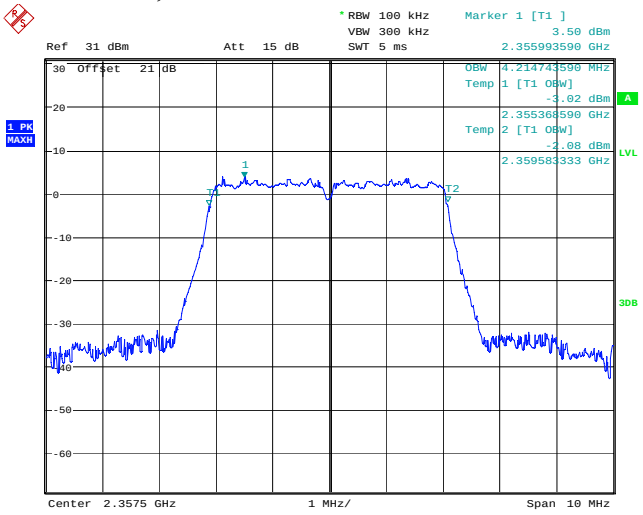
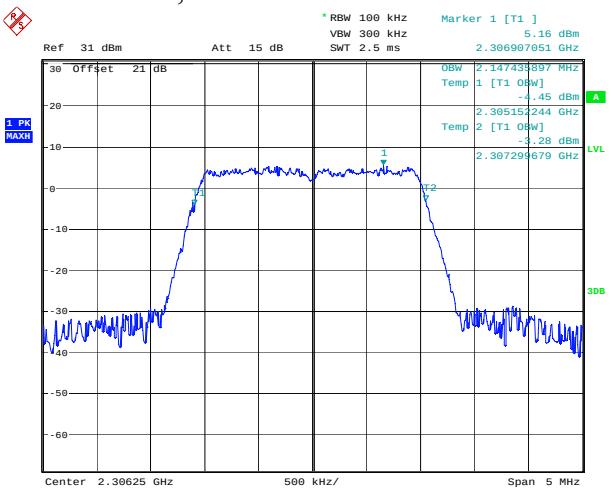


Channel A1L, 99 % Bandwidth



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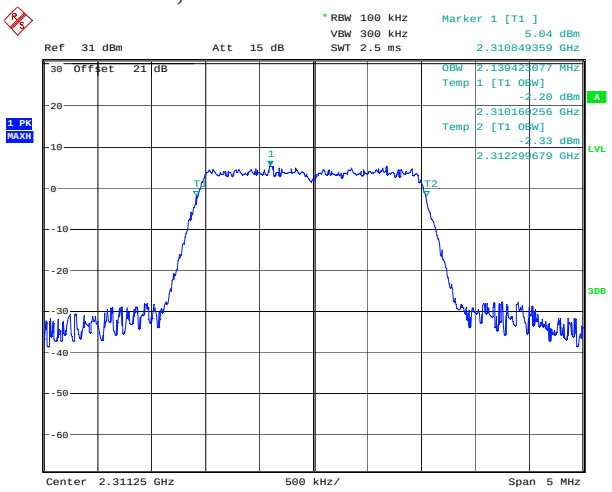
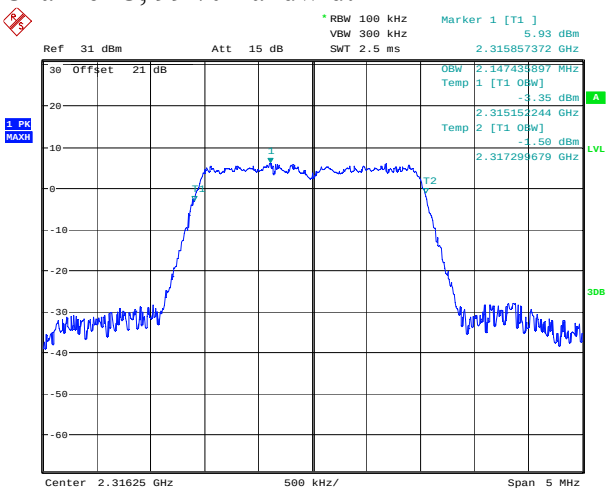
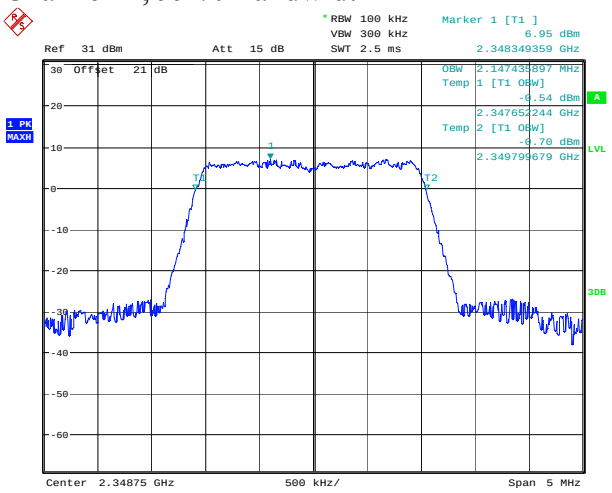


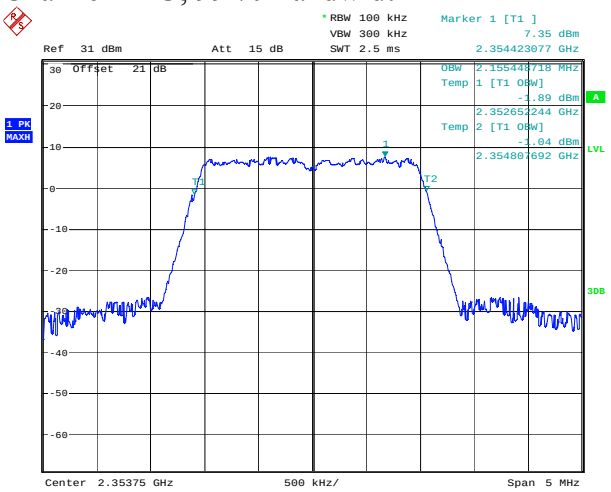
Channel C, 99 % Bandwidth



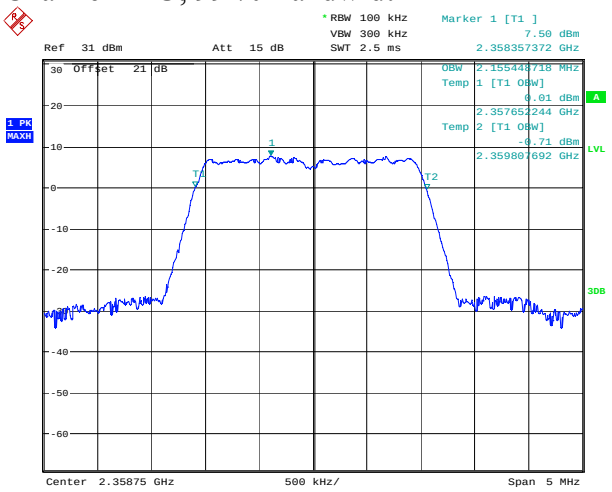
Channel D, 99 % Bandwidth



Channel A2U, 99 % Bandwidth



Channel B2U, 99 % Bandwidth



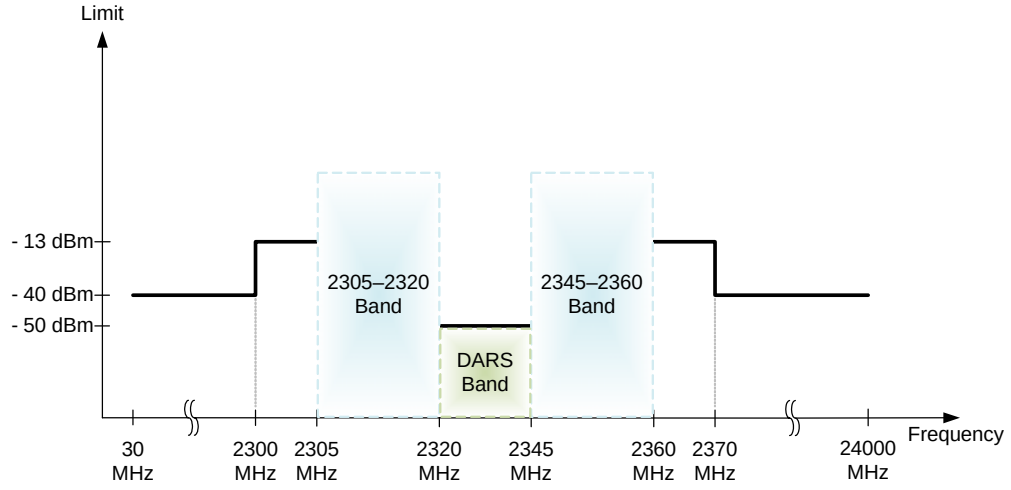
Clause 27.53(a) Spurious emissions at the antenna terminal

a) For operations in the bands 2305–2320 MHz and 2345–2360 MHz, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by the following amounts:
(1) For fixed, land, and radiolocation land stations: By a factor not less than 80 + 10 log (p) dB on all frequencies between 2320 and 2345 MHz;

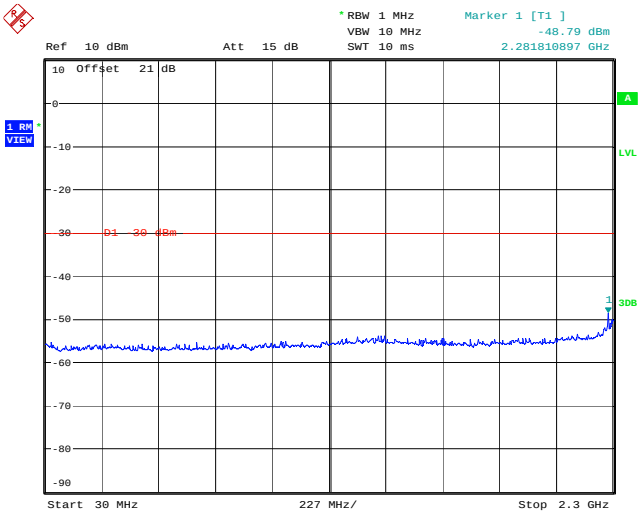
(3) For fixed, land, mobile, radiolocation land and radiolocation mobile stations: By a factor not less than 70 + 10 log (p) dB on all frequencies below 2300 MHz and on all frequencies above 2370 MHz; and not less than 43 + 10 log (p) dB on all frequencies between 2300 and 2320 MHz and on all frequencies between 2345 and 2370 MHz that are outside the licensed bands of operation;
(4) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth;
(5) In complying with the requirements in §27.53(a)(1) and §27.53(a)(2), WCS equipment that uses opposite sense circular polarization from that used by Satellite DARS systems in the 2320–2345 MHz band shall be permitted an allowance of 10 dB;
(6) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the edges, both upper and lower, of the licensee's bands of operation as the design permits;
(7) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power;
(8) Waiver requests of any of the out-of-band emission limits in paragraphs (a)(1) through (a)(7) of this section shall be entertained only if interference protection equivalent to that afforded by the limits is shown;

Test Results: Pass

Frequency scan started from 30 MHz to 10th Harmonic. The measurement was performed using RMS detector with 1 MHz/3 MHz RBW/VBW settings.
To measure the emission level at some 1 MHz bands immediately outside the frequency band**,** RBW/VBW in the spectrum analyzer was set up as 100 kHz/300 kHz, which is more than 1 % of the emission bandwidth. RMS detector was applied. The measured energy was integrated over 1 MHz bandwidth.

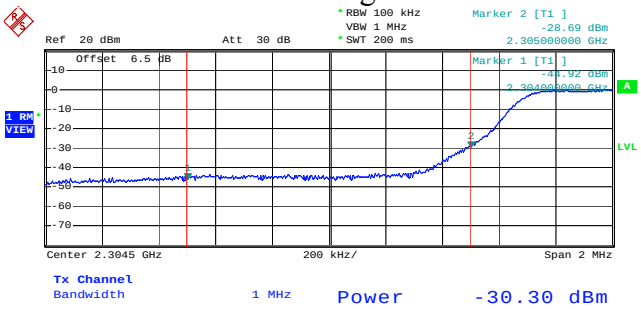


Channel A1L, 30–2300 MHz



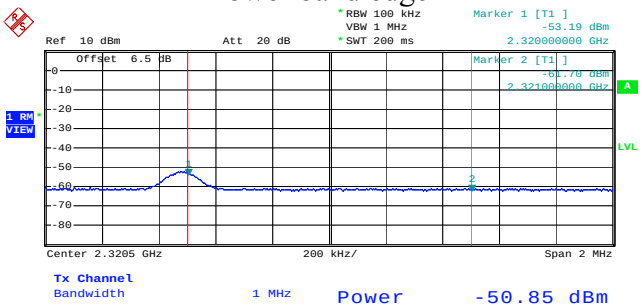
Note: the limit in this band is −40 dBm

Channel A1L, 2304–2405 MHz; Band A, lower band edge



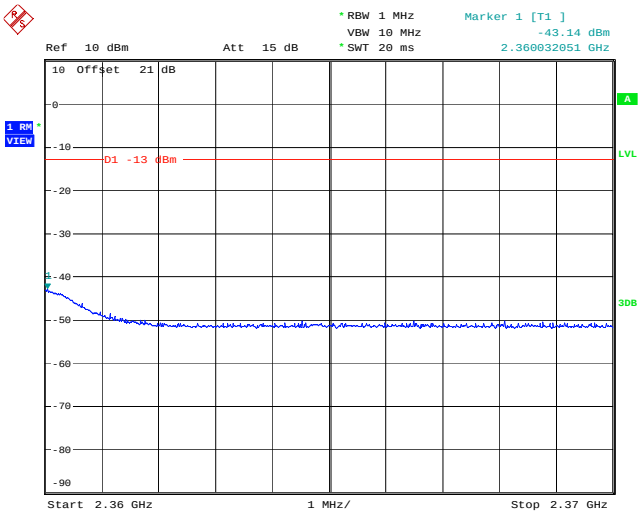
Note: the limit in this band is −13 dBm

Channel A1L, 2320–2321 MHz; DARS band lower band edge

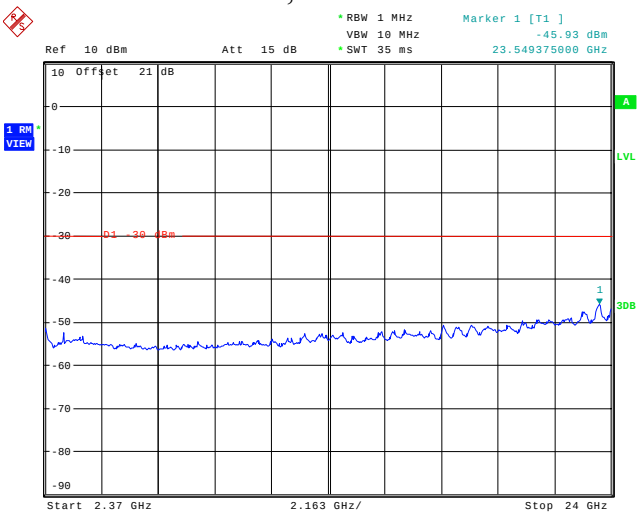


Note: the limit in this band is −50 dBm

Channel A1L, 2360–2370 MHz

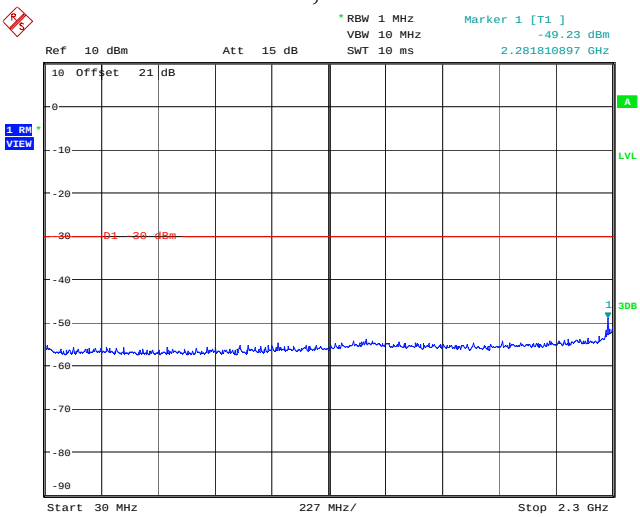


Channel A1L, 2370–24000 MHz



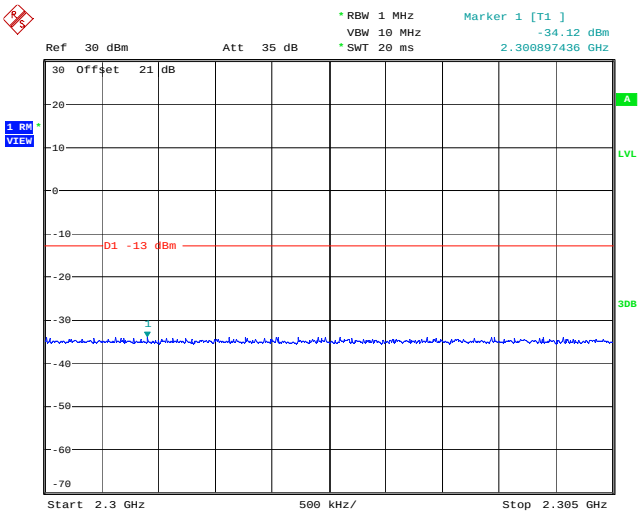
Note: the limit in this band is −40 dBm

Channel A2U, 30–2300 MHz

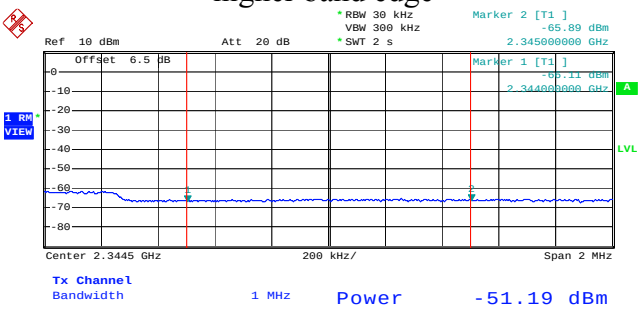


Note: the limit in this band is −40 dBm

Channel A2U, 2300–2305 MHz

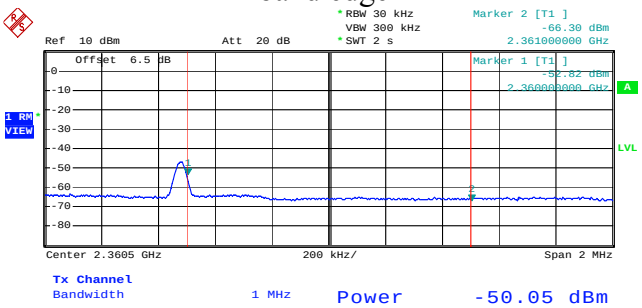


Channel A2U, 2344–2345 MHz; DARS band higher band edge



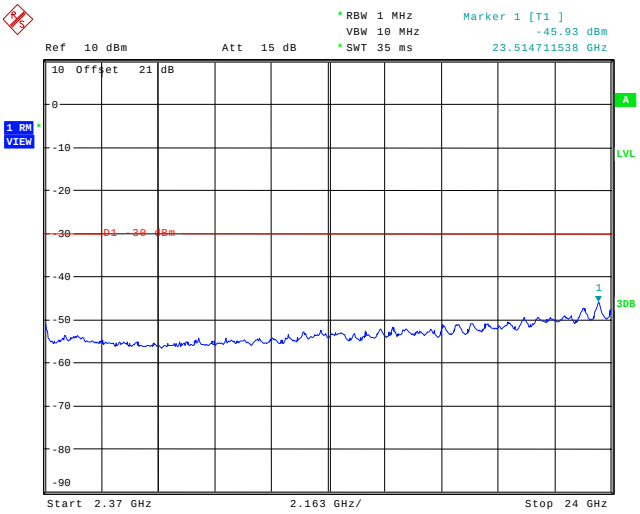
Note: the limit in this band is −50 dBm

Channel A2U, 2360–2361 MHz; Band B, upper band edge



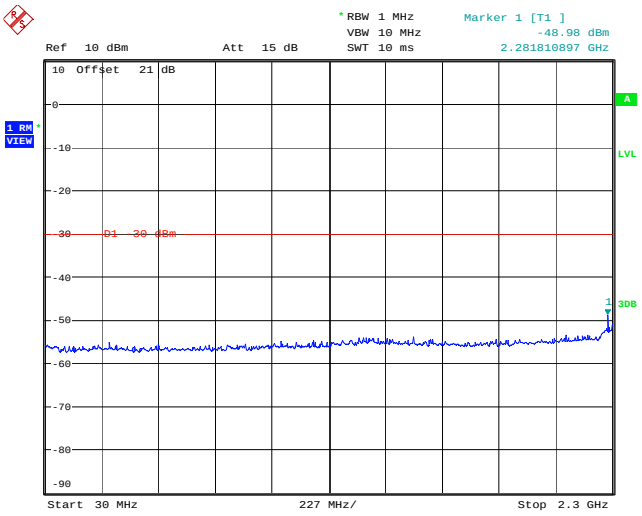
Note: the limit in this band is −13 dBm

Channel A2U, 2370–24000 MHz



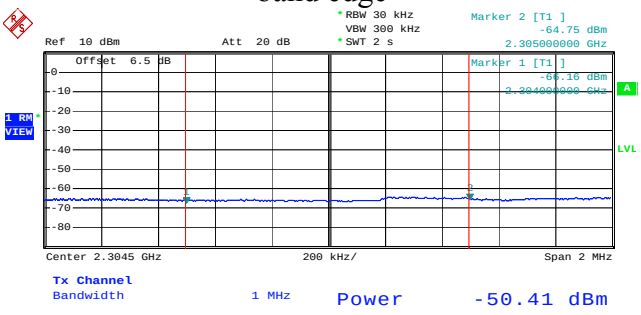
Note: the limit in this band is −40 dBm

Channel B1L, 30–2300 MHz



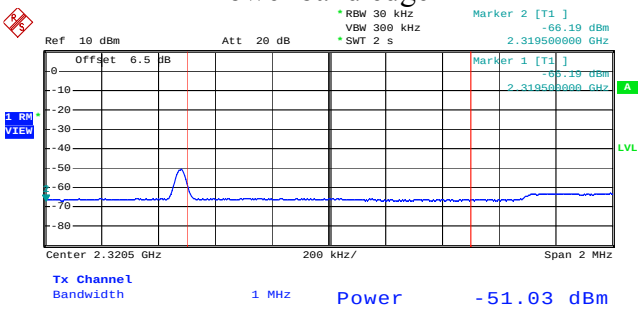
Note: the limit in this band is −40 dBm

Channel B1L, 2304–2305 MHz; Band A, lower band edge



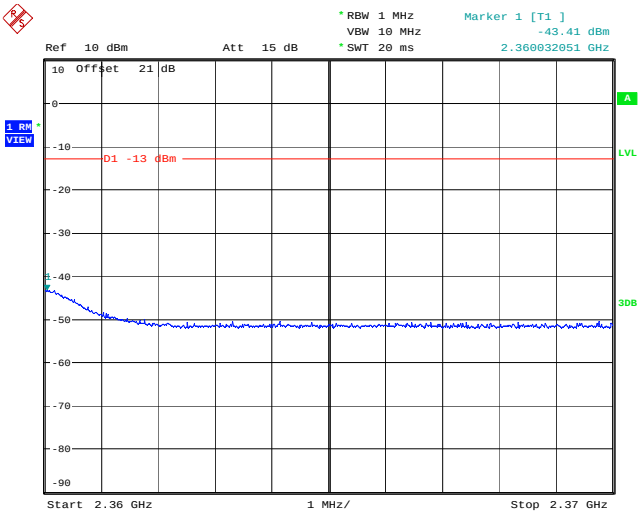
Note: the limit in this band is −13 dBm

Channel B1L, 2320–2321 MHz; DARS band lower band edge

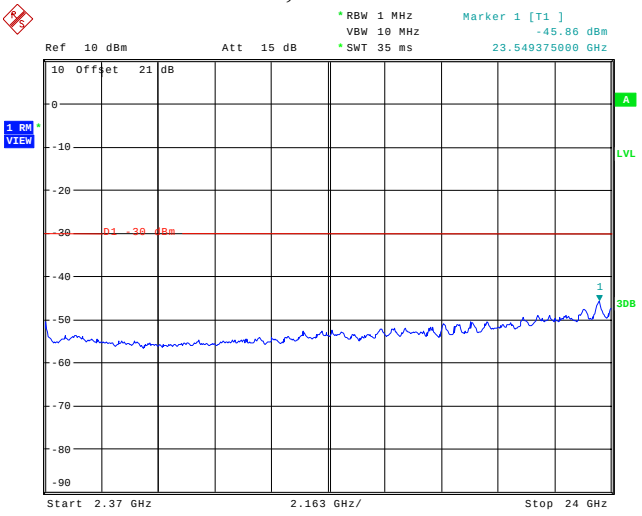


Note: the limit in this band is −50 dBm

Channel B1L, 2360–2370 MHz

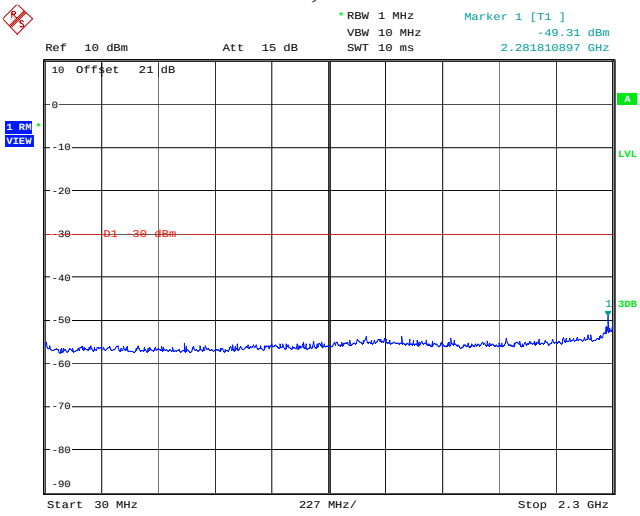


Channel B1L, 2370–24000 MHz



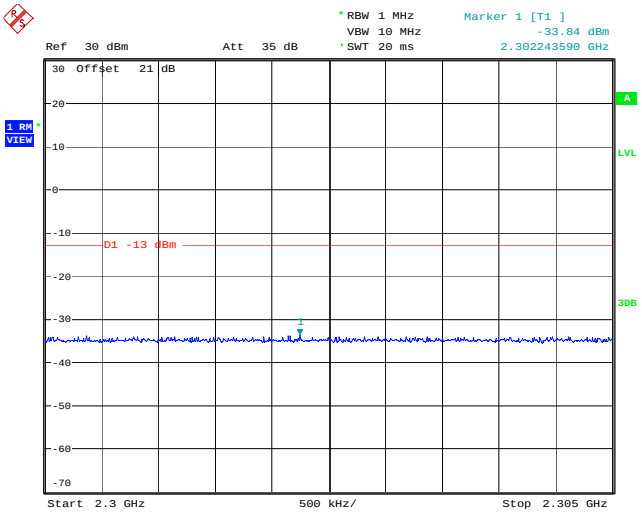
Note: the limit in this band is −40 dBm

Channel B2U, 30–2300 MHz

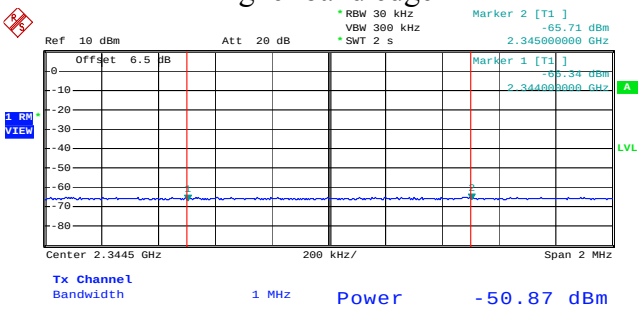


Note: the limit in this band is −40 dBm

Channel B2U, 2300–2305 MHz

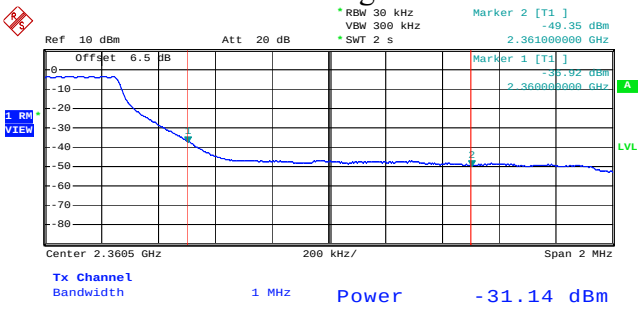


Channel B2U, 2344–2345 MHz; DARS band higher band edge



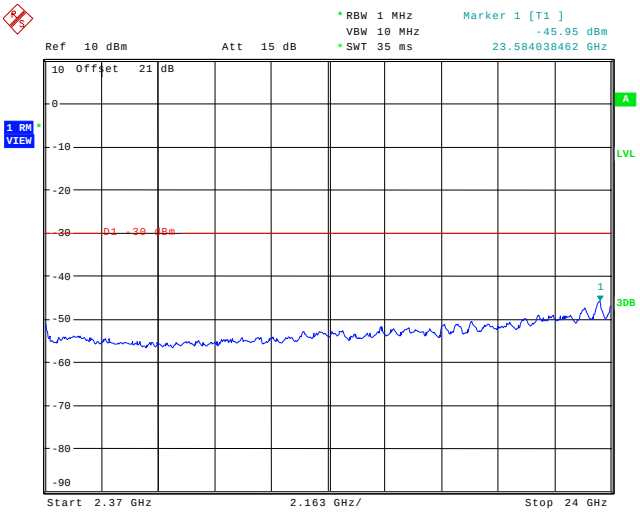
Note: the limit in this band is −50 dBm

Channel B2U, 2360–2361 MHz; Band B, upper band edge



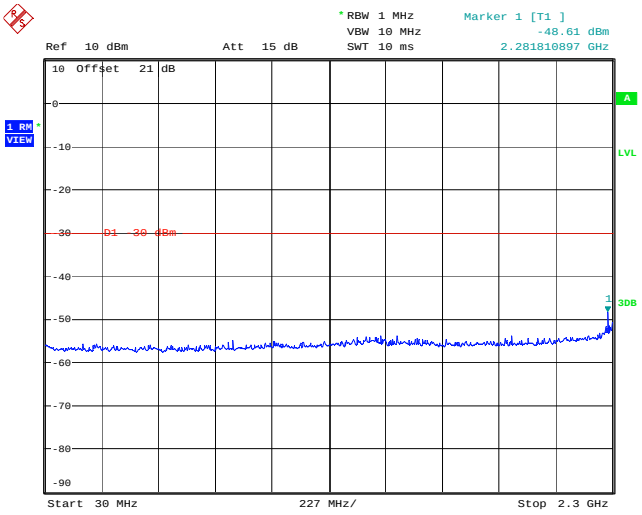
Note: the limit in this band is −13 dBm

Channel B2U, 2370–24000 MHz



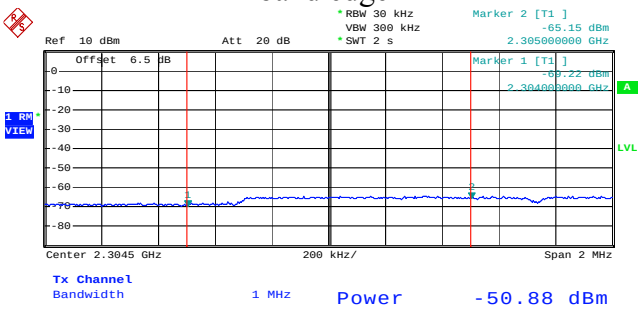
Note: the limit in this band is −40 dBm

Channel C, 30–2300 MHz



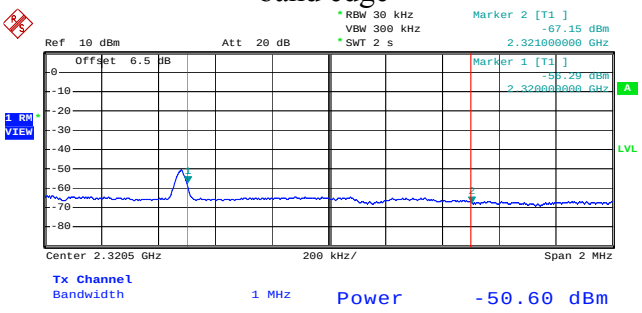
Note: the limit in this band is −40 dBm

Channel C, 2304–2305 MHz; Band A, lower band edge



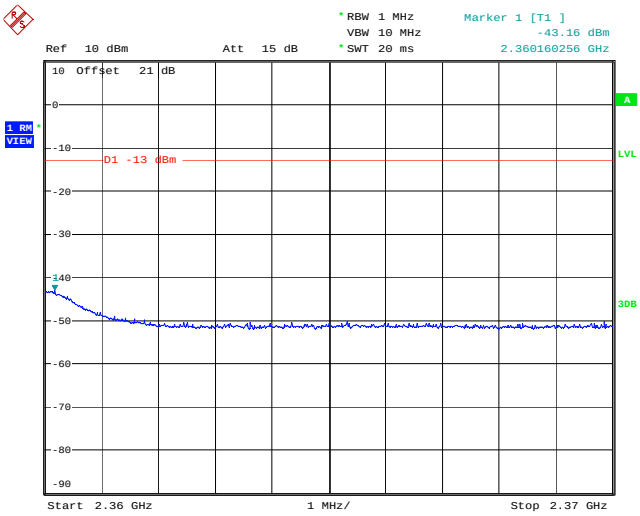
Note: the limit in this band is −13 dBm

Channel C, 2320–2321 MHz; DARS band lower band edge

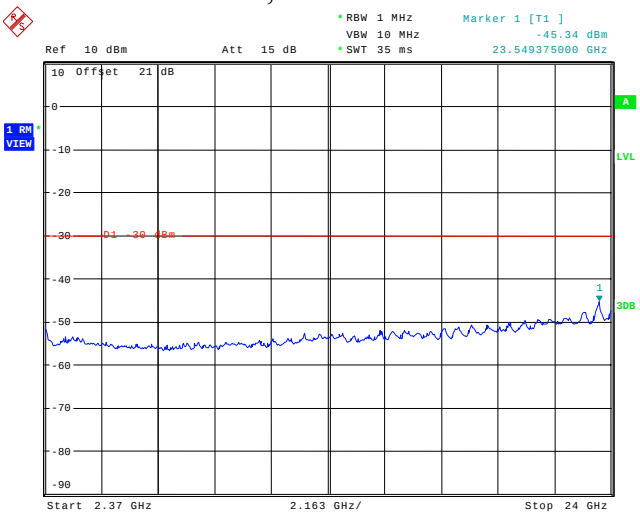


Note: the limit in this band is −50 dBm

Channel C, 2360–2370 MHz

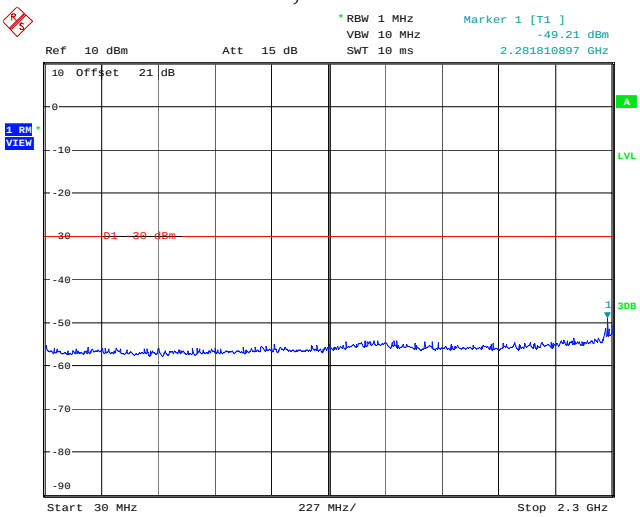


Channel C, 2370–24000 MHz



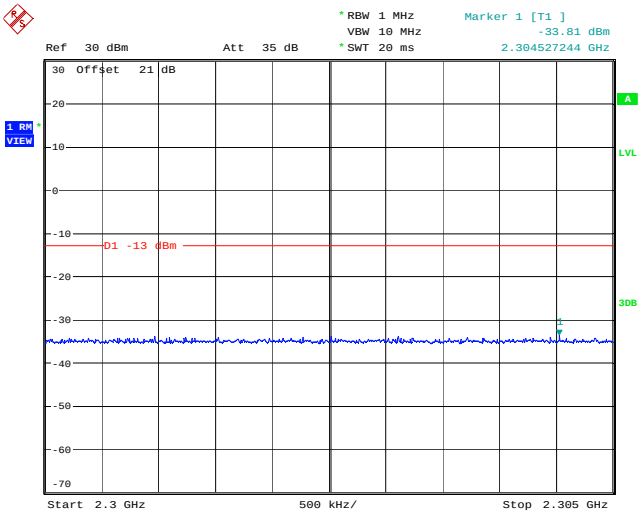
Note: the limit in this band is −40 dBm

Channel D, 30–2300 MHz

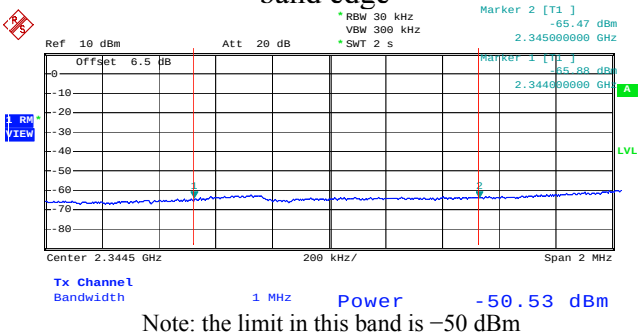


Note: the limit in this band is −40 dBm

Channel D, 2300–2305 MHz

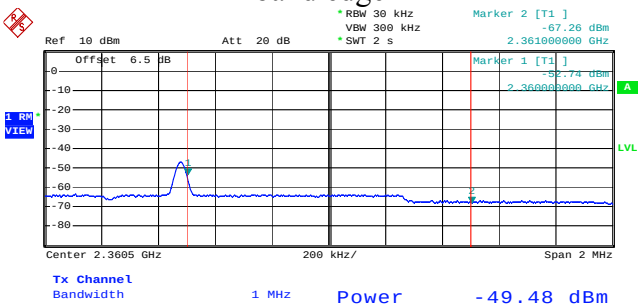


Channel D, 2344–2345 MHz; DARS band higher band edge



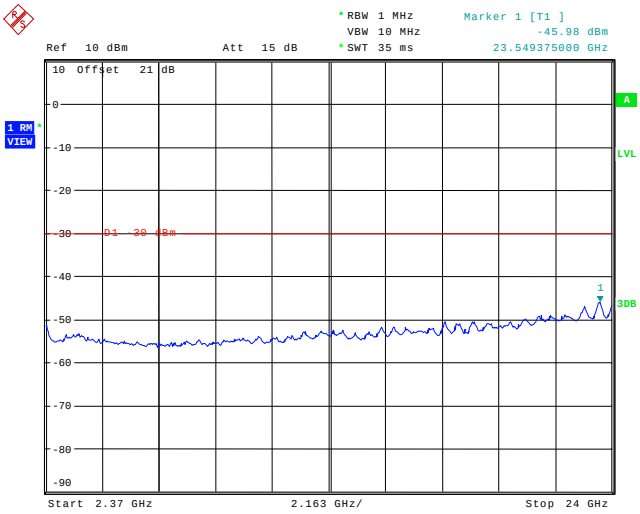
Note: the limit in this band is −50 dBm

Channel D, 2360–2361 MHz; Band B, upper band edge



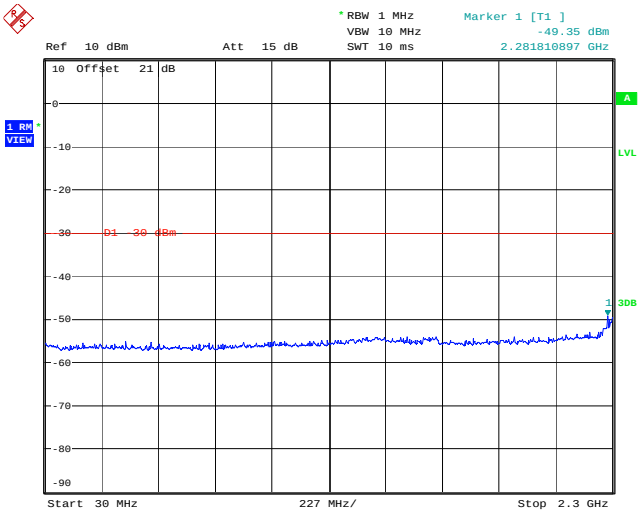
Note: the limit in this band is −13 dBm

Channel D, 2370–24000 MHz



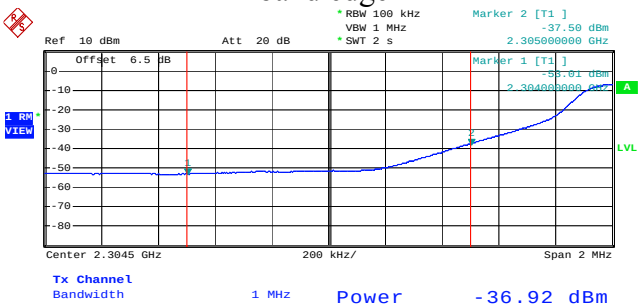
Note: the limit in this band is −40 dBm

Channel A1, 30–2300 MHz



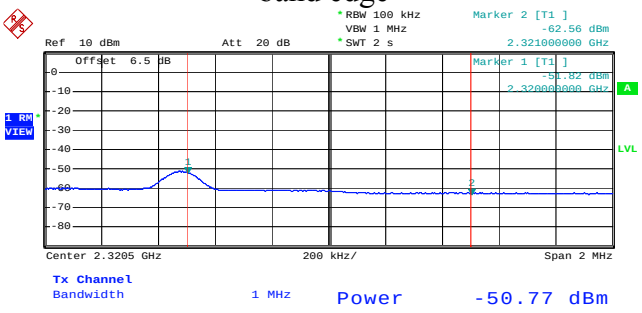
Note: the limit in this band is −40 dBm

Channel A1, 2304–2305 MHz; Band A, lower band edge



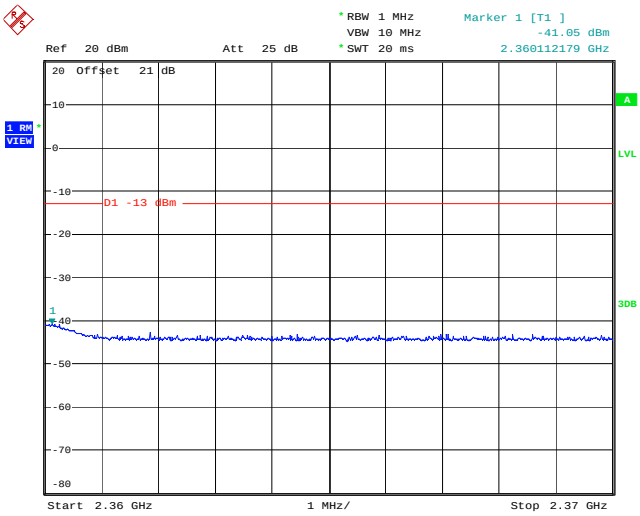
Note: the limit in this band is −13 dBm

Channel A1, 2320–2321 MHz; DARS band lower band edge

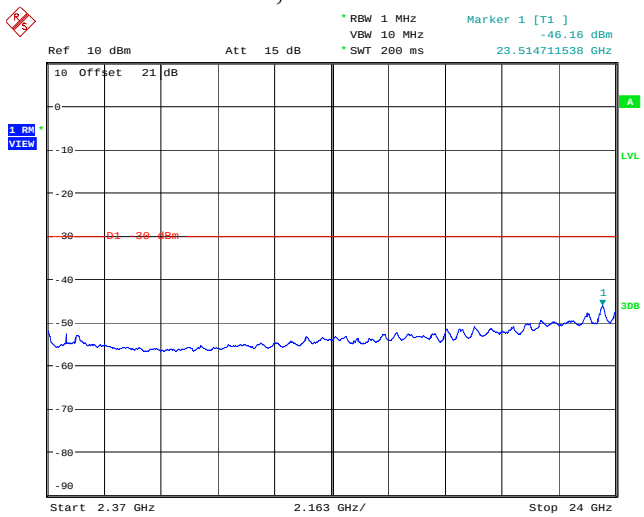


Note: the limit in this band is −50 dBm

Channel A1, 2360–2370 MHz

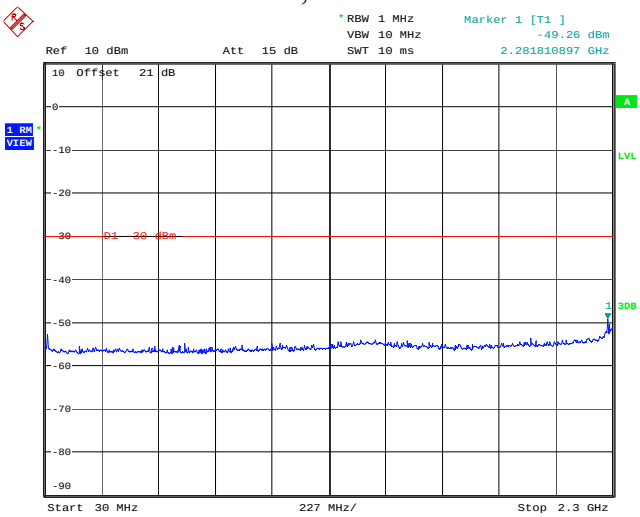


Channel A1, 2370–24000 MHz



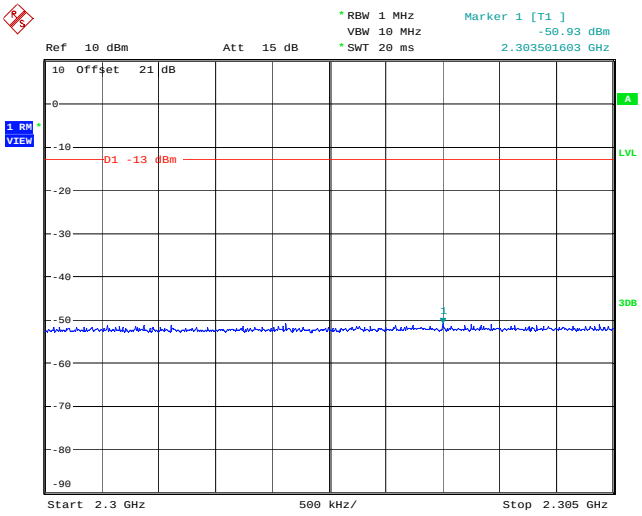
Note: the limit in this band is −40 dBm

Channel A2, 30–2300 MHz

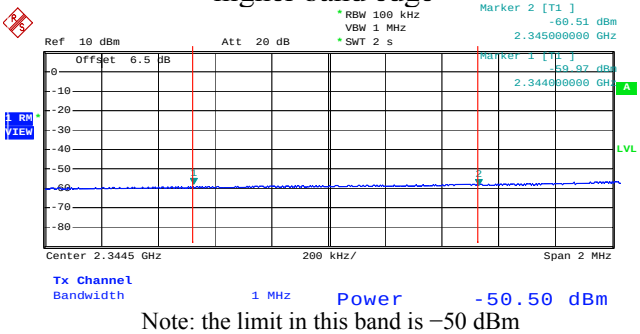


Note: the limit in this band is −40 dBm

Channel A2, 2300–2305 MHz

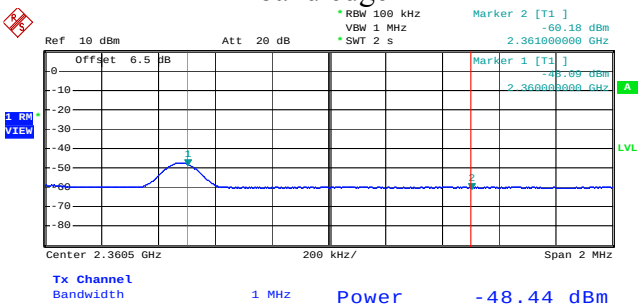


Channel A2, 2344–2345 MHz; DARS band higher band edge



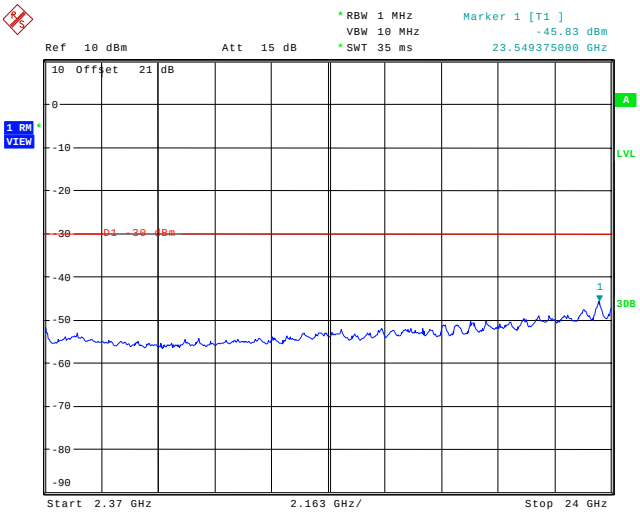
Note: the limit in this band is −50 dBm

Channel A2, 2360–2361 MHz; Band B, upper band edge



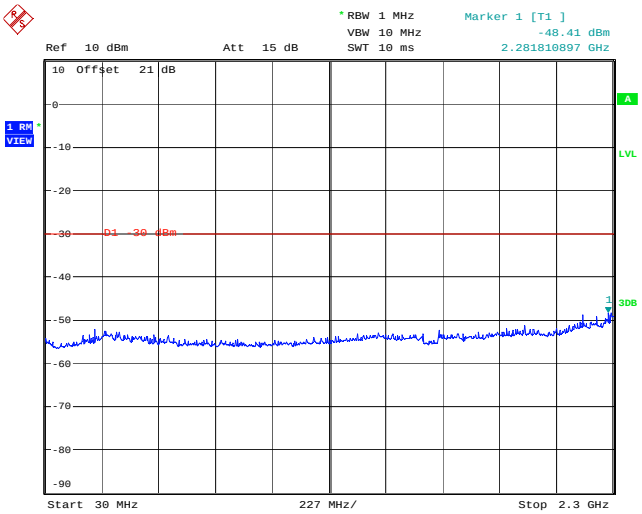
Note: the limit in this band is −13 dBm

Channel A2, 2370–24000 MHz



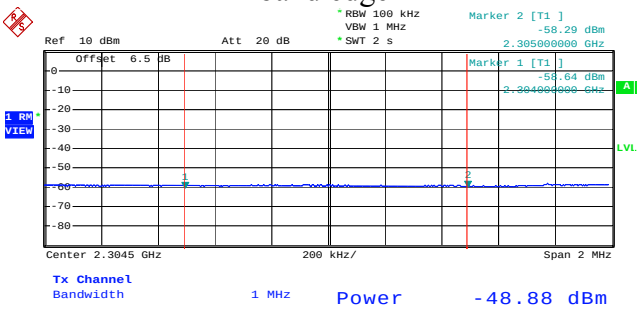
Note: the limit in this band is −40 dBm

Channel B1, 30–2300 MHz



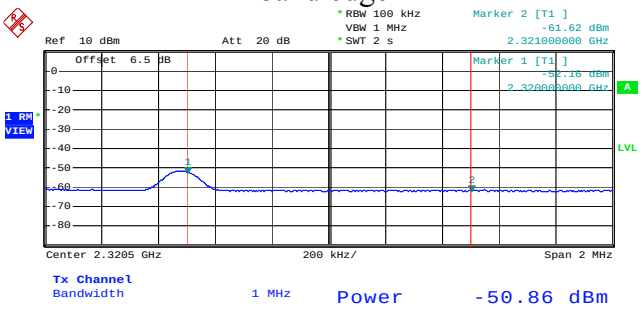
Note: the limit in this band is −40 dBm

Channel B1, 2304–2305 MHz; Band A, lower band edge



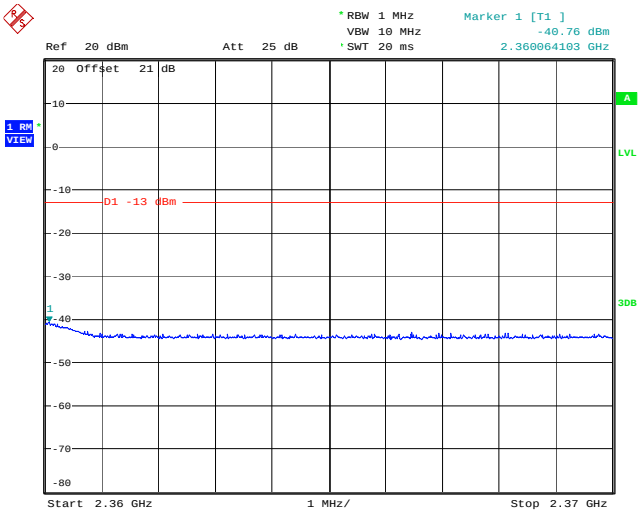
Note: the limit in this band is −13 dBm

Channel B1, 2320–2321 MHz; DARS band lower band edge

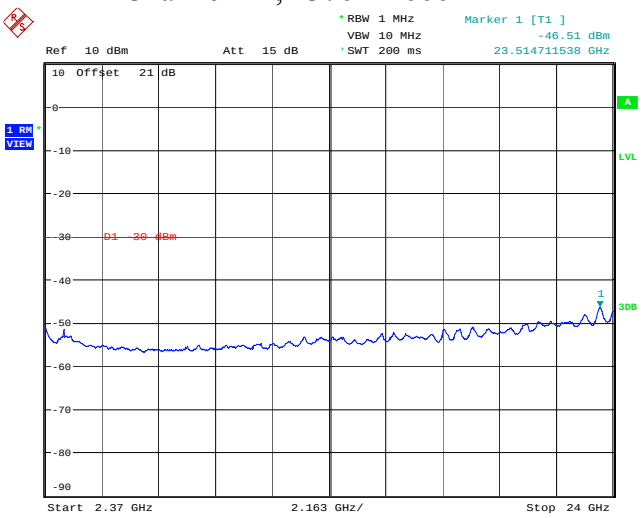


Note: the limit in this band is −50 dBm

Channel B1, 2360–2370 MHz

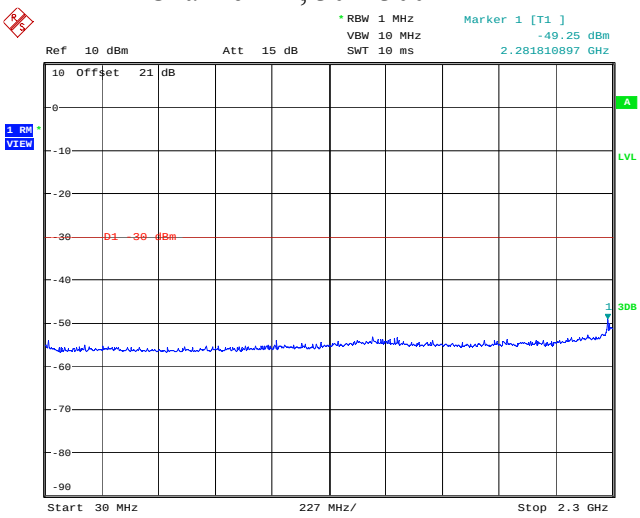


Channel B1, 2370–24000 MHz



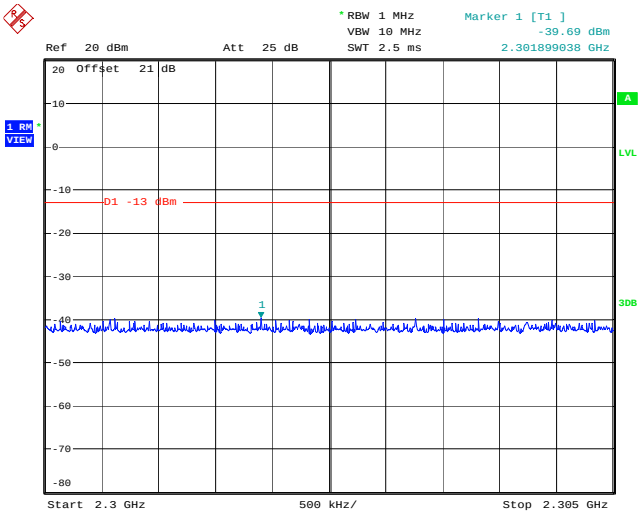
Note: the limit in this band is −40 dBm

Channel B2, 30–2300 MHz

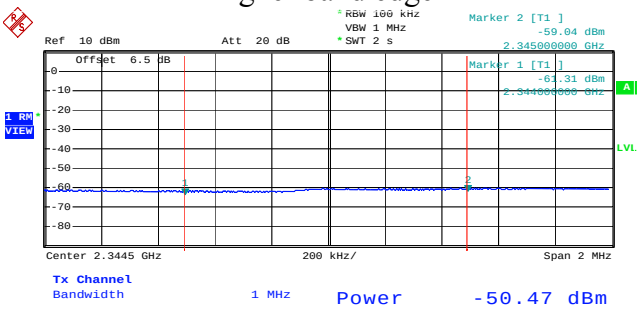


Note: the limit in this band is −40 dBm

Channel B2, 2300–2305 MHz

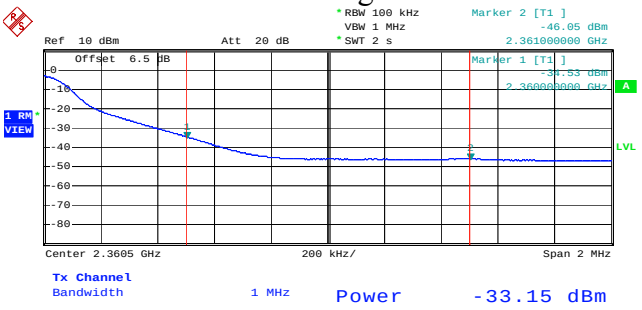


Channel B2, 2344–2345 MHz; DARS band higher band edge



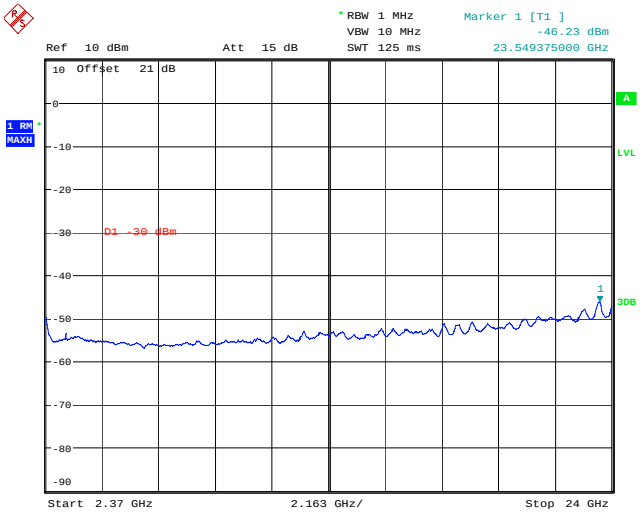
Note: the limit in this band is −50 dBm

Channel B2, 2360–2361 MHz; Band B, upper band edge



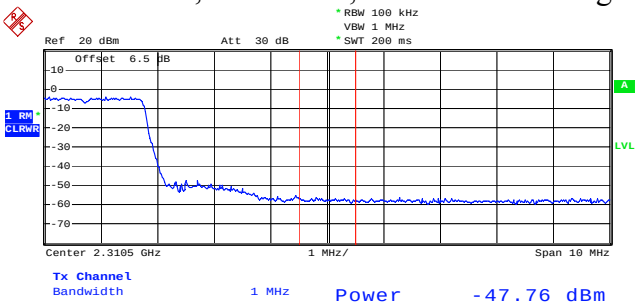
Note: the limit in this band is −13 dBm

Channel B2, 2370–24000 MHz

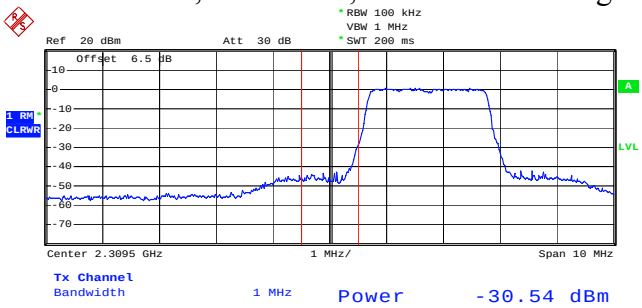


Note: the limit in this band is −40 dBm

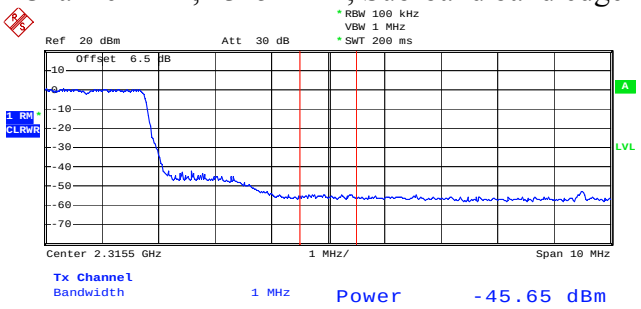
Channel A1L, 2310 MHz; Sub-band band edge



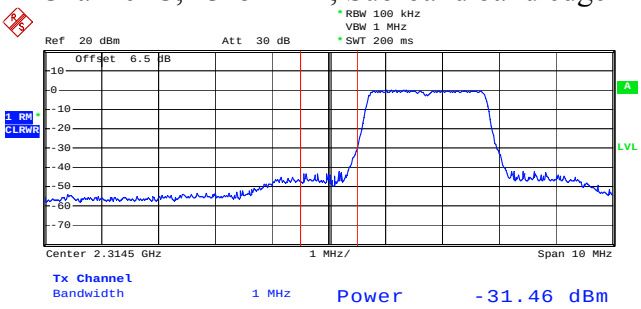
Channel B1L, 2310 MHz; Sub-band band edge



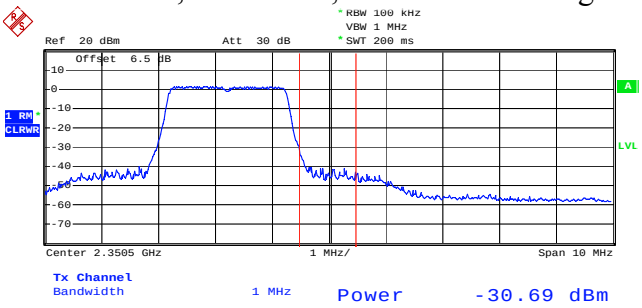
Channel B1L, 2315 MHz; Sub-band band edge



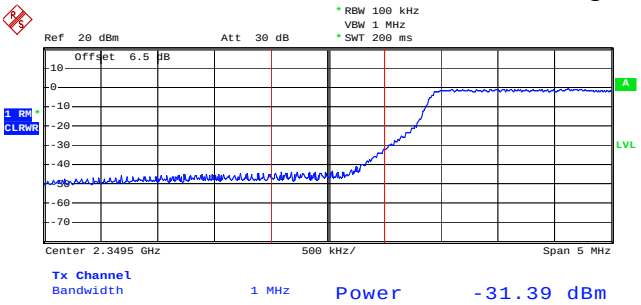
Channel C, 2315 MHz; Sub-band band edge



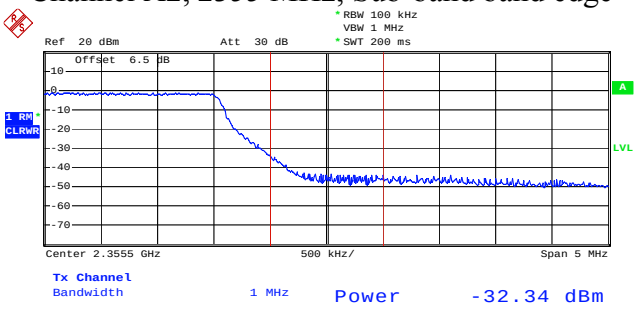
Channel D, 2350 MHz; Sub-band band edge



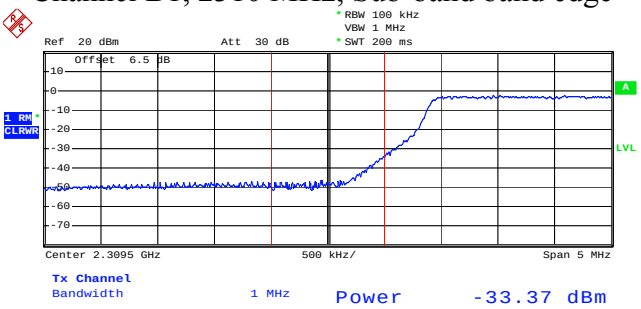
Channel A2, 2350 MHz; Sub-band band edge



Channel A2, 2355 MHz; Sub-band band edge

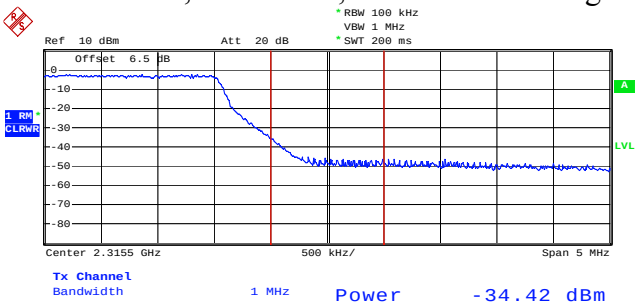


Channel B1, 2310 MHz; Sub-band band edge

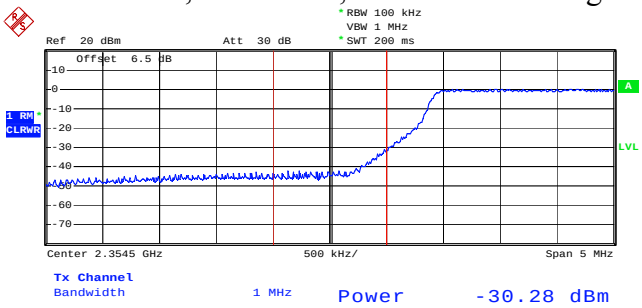


Note: the limit in these bands is −13 dBm

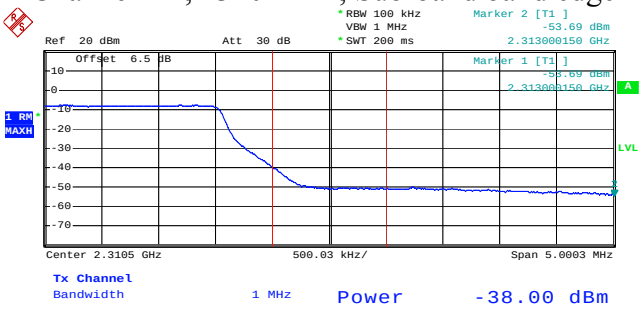
Channel B1, 2315 MHz; Sub-band band edge



Channel B2, 2355 MHz; Sub-band band edge



Channel A1, 2310 MHz; Sub-band band edge



Note: the limit in these bands is −13 dBm

Clause 27.53(a) Field Strength of Spurious emissions

a) For operations in the bands 2305–2320 MHz and 2345–2360 MHz, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by the following amounts:
(1) For fixed, land, and radiolocation land stations: By a factor not less than 80 + 10 log (p) dB on all frequencies between 2320 and 2345 MHz;

(3) For fixed, land, mobile, radiolocation land and radiolocation mobile stations: By a factor not less than 70 + 10 log (p) dB on all frequencies below 2300 MHz and on all frequencies above 2370 MHz; and not less than 43 + 10 log (p) dB on all frequencies between 2300 and 2320 MHz and on all frequencies between 2345 and 2370 MHz that are outside the licensed bands of operation;
(4) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth;
(5) In complying with the requirements in §27.53(a)(1) and §27.53(a)(2), WCS equipment that uses opposite sense circular polarization from that used by Satellite DARS systems in the 2320–2345 MHz band shall be permitted an allowance of 10 dB;
(6) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the edges, both upper and lower, of the licensee's bands of operation as the design permits;
(7) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power;
(8) Waiver requests of any of the out-of-band emission limits in paragraphs (a)(1) through (a)(7) of this section shall be entertained only if interference protection equivalent to that afforded by the limits is shown;

Test Results: Pass

Additional Observations:

The Spectrum was searched from 30 MHz to the 10th Harmonic.

All measurements were performed using a Peak Detector with 100 kHz RBW/300 kHz VBW below 1 GHz and a 1 MHz RBW/3 MHz VBW above 1 GHz at a distance of 3 m.

No spurious emissions were observed within 20 dB below the limit.

Clause 27.54 Frequency Stability

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

FCC Clause 2.1055 Frequency Stability

(a) The frequency stability shall be measured with variation of ambient temperature as follows:
(1) From −30 °C to +50 °C for all equipment except that specified in paragraphs (a)(2) and (3) of this section
(b) Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10° centigrade through the range.

(d) The frequency stability shall be measured with variation of primary supply voltage as follows:
(1) Vary primary supply voltage from 85 to 115 % of the nominal value for other than hand carried battery equipment.

Test Results: Pass

The EUT was operating at the un-modulated mode.

Condition	Frequency (Hz)	Offset (ppm)
+50 °C	2307482037	−0.213
+40 °C	2307491181	3.750
+30 °C	2307485850	1.439
+20 °C, +15 % voltage	2307482613	0.036
+20 °C	2307482529	——
+20 °C, −15 % voltage	2307482321	−0.090
+10 °C	2307483321	0.343
0 °C	2307484113	0.686
−10 °C	2307484888	1.022
−20 °C	2307487114	1.987
−30 °C	2307487875	2.317

Frequency offset calculation:

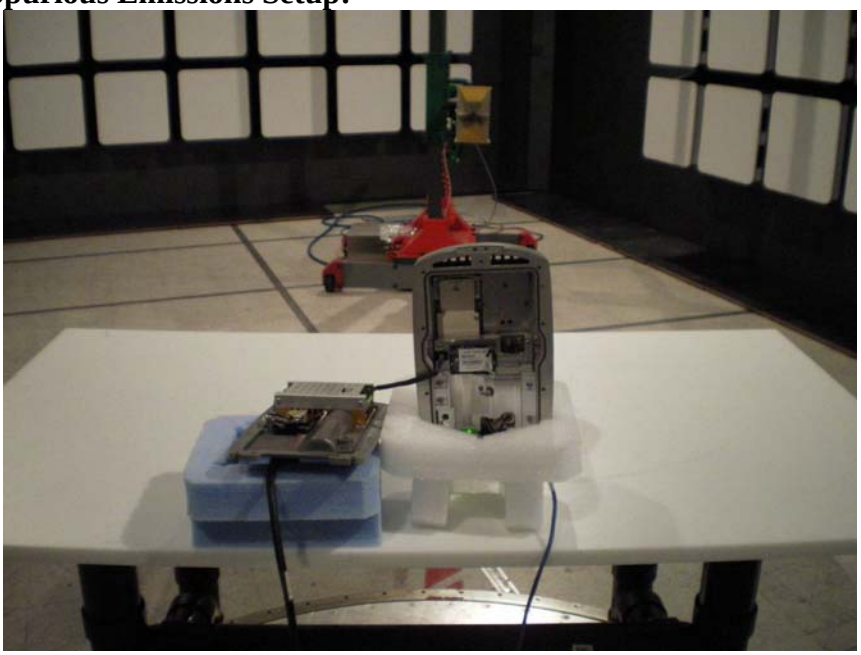
$$Offset[ppm] = \left(\frac{f - f_0}{f_0} \right) \times 1\,000\,000$$

f = tested frequency

f_0 = reference frequency (at +20 °C, nominal voltage)

Appendix B : Setup Photographs

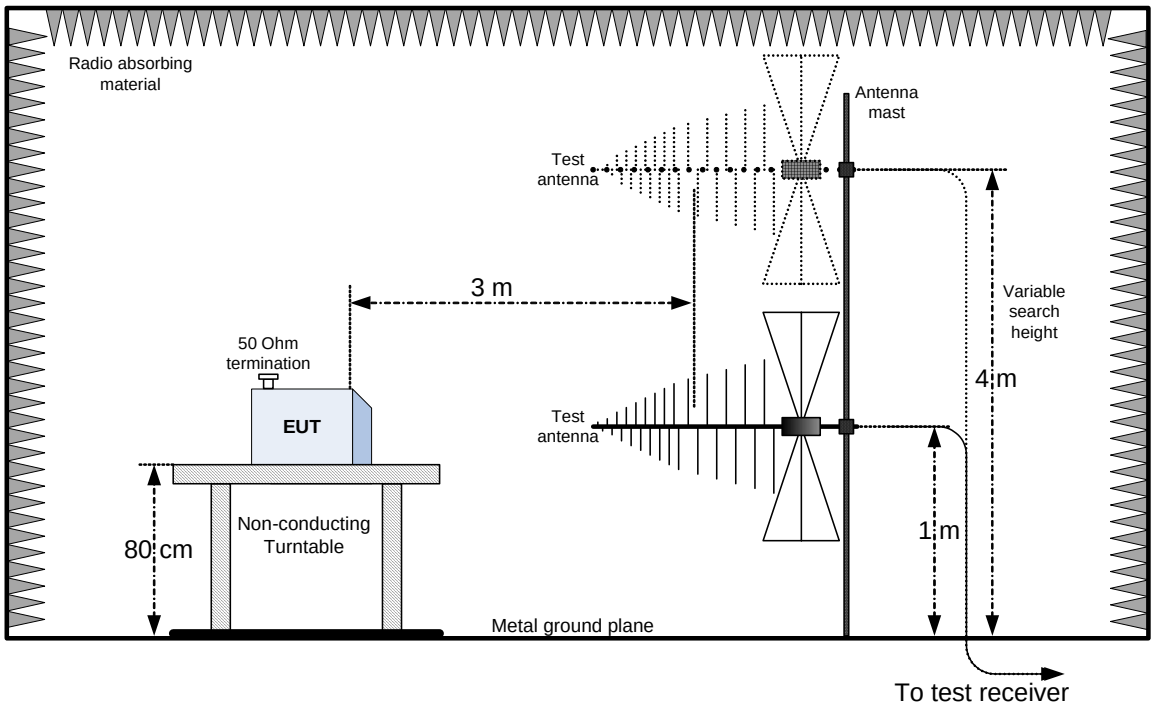
Radiated Spurious Emissions Setup:



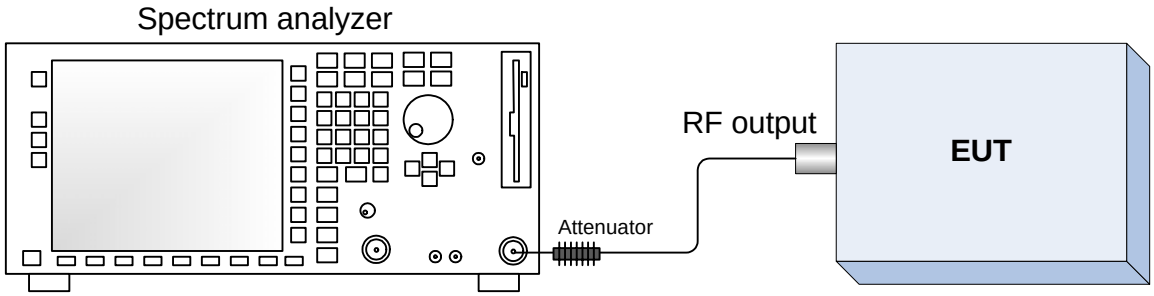
Temperature Chamber Setup:

Appendix C : Block Diagram of Test Setups

Test Site For Radiated Emissions



Conducted Emissions, Output power, Occupied Bandwidth



Frequency Stability